CLEAN AIR METALS INC

NI 43-101 TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE FOR THE THUNDER BAY NORTH PROJECT, THUNDER BAY, ONTARIO

PREPARED FOR: Clean Air Metals Inc. REPORT EFFECTIVE DATE: January 20, 2021

NORDMIN RESOURCE & INDUSTRIAL ENGINEERING

Prepared by: Nordmin Engineering Ltd.

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AND
MINERAL RESOURCE ESTIMATE

THUNDER BAY NORTH PROJECT
THUNDER BAY, ONTARIO

Prepared for:

Clean Air Metals Inc.

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FORWARD-LOOKING STATEMENT

This document includes certain "forward-looking statements." All statements, other than statements of historical facts constitute forward-looking statements. Forward-looking statements include estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Forward-looking statements may be identified by such terms as "believes", "anticipates", "expects", "estimates", "may", "will", "could", "would", "if", "yet", "potential", "undetermined", "objective", "plan" or similar expressions. Since forward-looking statements are based on assumptions and estimates and address future events and conditions, by their very nature, they involve inherent risk, and uncertainties. Although these statements are based on information currently available to the Company, the Company provides no assurance that actual results will meet the Company's or management's expectations. Risks, uncertainties and other factors, known and unknown, involved with forward-looking statements could cause actual events, results, performance, prospects, and opportunities to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements in this Technical Report include, but are not limited to, the Company's objectives, goals, future plans, statements, exploration results, potential mineralization, estimation of Mineral Resources, exploration, and mine development plans, the timing of the commencement of operations and estimates of market conditions. Factors that could cause actual results to differ materially from such forward-looking statements include, but are not limited to the failure to identify Mineral Resources, failure to convert estimated Mineral Resources to reserves, the inability to complete a feasibility study which recommends a production decision, the preliminary nature of metallurgical test results, geotechnical challenges, delays in obtaining or failures to obtain required governmental, environmental, or other project approvals, political risks, inability to fulfill the duty to accommodate First Nations and other Indigenous peoples, uncertainties relating to the availability and costs of financing needed in the future, changes in equity markets, inflation, changes in foreign currency exchange rates, fluctuations in commodity prices, delays in the development of projects, capital and operating costs varying significantly from estimates and the other risks involved in the mineral exploration and development industry, and those risks set out in the Company's public documents filed on the System for Electronic Document Analysis and Retrieval ("SEDAR"). Although the Company believes that the assumptions and factors used in preparing the forward-looking statements in this Technical Report are reasonable, undue reliance should not be placed on such forward-looking statements, which only apply as of the date of this Technical Report, and no assurance can be given that such events will occur in the disclosed time frames or at all. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, other than as required by law.

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This Technical Report uses the terms "Measured" and "Indicated" Mineral Resources and "Inferred" Mineral Resources. The Company advises U.S. investors that, while these terms are recognized by the U.S. Securities and Exchange Commission ("SEC") under Regulation S-K subpart 1300, there are differences between the definitions ascribed to such terms under Regulation S-K subpart 1300 and the Canadian Institute of Mining ("CIM") Standards.

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Under Canadian rules, estimates of "Inferred Mineral Resources" may not form the basis of feasibility studies, prefeasibility studies, or other economic studies, except in prescribed cases, such as in a preliminary economic assessment under certain circumstances. Under SEC rules, estimates of "Inferred Mineral Resources" may not be considered when assessing the economic viability of a mining project, and may not be converted to a Mineral Reserve. Under U.S. standards, mineralization may not be classified as a "Mineral Reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that any part or all of a "Measured," "Indicated," or "Inferred" Mineral Resource exists or is economically or legally mineable. Information concerning descriptions of mineralization and resources contained herein may not be comparable to information made public by U.S. companies subject to the reporting and disclosure requirements under the SEC's Regulation S-K subpart 1300.

Contents

1. SUMMARY ... 17
   1.1 Terms of Reference ... 17
   1.2 Principal Outcomes ... 17
   1.3 Property Description and Ownership ... 19
   1.4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography ... 19
   1.5 History ... 20
   1.6 Geological Setting, Mineralization, and Deposit Types ... 20
   1.7 Exploration, Drilling, and Analytical Data Collection in Support of Mineral Resource Estimation ... 21
   1.8 Mineral Processing and Metallurgical Testing ... 21
   1.9 Mineral Resources ... 22
   1.10 Interpretations and Conclusions ... 23
   1.11 Recommendations ... 23
   1.12 Phase 1 Recommendations – Current Lake Deposit Preliminary Economic Assessment (“PEA”) ... 23
   1.13 Phase 2 Recommendations – Current Lake Deposit Prefeasibility Study (“PFS”) ... 23
2. INTRODUCTION ... 24
   2.1 Terms of Reference ... 24
   2.2 Qualified Persons ... 24
   2.3 Effective Dates ... 25
   2.4 Information Sources and References ... 25
   2.5 Previous Reporting ... 26
      2.5.1 Previous Mineral Resource Estimates ... 26
      2.5.2 Previous Mineral Reserve Estimates ... 26
   2.6 Acknowledgements ... 27
   2.7 Units of Measure ... 27
3. RELIANCE ON OTHER EXPERTS ... 28
   3.1 Mineral Tenure, Surface Rights, Property Agreements, and Royalties ... 28
   3.2 Environmental, Permitting, and Liability Issues ... 28
4. PROPERTY DESCRIPTION AND LOCATION ... 29
   4.1 Property Land Tenure ... 29
      4.1.1 Current Lake Property ... 29
      4.1.2 Escape Lake Property ... 29
   4.2 Underlying Agreements ... 30
      4.2.1 The Rio Tinto Option Agreement – Escape Lake Claims ... 30

4.2.2 The Panoramic Share Purchase Agreement – Current Lake Deposit and Surrounding Claims 31
4.2.3 The Benton Option Agreement 31
4.2.4 Project Royalties – Escape Lake and Current Lake 32
4.2.5 Permits and Authorization 32
4.2.6 Environmental Considerations 33
4.2.7 Mining Rights in Ontario 33
5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY 34
5.1 Accessibility 34
5.2 Local Resources and Infrastructure 34
5.3 Climate 35
5.4 Vegetation and Wildlife 35
5.5 Physiography 35
6. HISTORY 36
6.1 Historical Exploration 36
6.2 Previous Mineral Resource Estimates 44
6.2.1 September 29, 2009 SRK Consulting Ltd. Resource Estimate 44
6.2.1 February 2012, Magma Metals (Canada) Limited Mineral Resource Estimate (Beaver Lake East Only) .. 46
6.2.2 March 17, 2011, AMEC Resource Estimate 46
6.3 Historical Mineral Reserve Estimate 50
6.4 Past Production 50
7. GEOLOGICAL SETTING AND MINERALIZATION 51
7.1 Regional Geology 51
7.2 Thunder Bay North Project Geology 53
7.3 Property Mineralization 56
7.3.1 Current Lake Deposit 57
7.3.1.1 Upper Current/Current Zone 57
7.3.1.2 Bridge Zone 57
7.3.1.3 Cloud Zone 58
7.3.1.4 Beaver Lake Zone 58
7.3.1.5 437/SEA Zone 59
7.3.2 Escape Lake Deposit 59
7.3.2.1 Steepledge North 59
7.3.2.2 Steepledge South 59
7.3.2.3 Escape South 60
7.3.3 Satellite Occurrences 61

7.3.3.1 Lone Island Lake South Intrusion ... 61
7.3.3.2 025 Intrusion ... 61
8. DEPOSIT TYPES ... 62
8.1 Orthomagmatic Sulphide Deposits ... 62
8.1.1 Cu-Ni-(PGE) Dominant Orthomagmatic Sulphide Deposits ... 62
8.1.2 PGE-Dominant Orthomagmatic Sulphide Deposits ... 63
9. EXPLORATION ... 64
9.1 Borehole Orientation and Collar Location Surveys (2020) ... 64
9.2 Diamond Drilling (2020) ... 64
9.2.1 Escape Lake Property Drilling ... 64
9.2.2 Current Lake Property Drilling ... 70
9.3 Geochemistry and Metallurgy (2020) ... 72
9.3.1 Current Lake Property ... 72
9.3.2 Escape Lake Property ... 72
9.4 Borehole Geophysics (2020) ... 72
9.5 Linecutting and Ground Geophysics (2020) ... 72
9.6 Petrography (2020) ... 73
9.7 Preliminary Synchrotron Cluster Results (2020) ... 74
9.7.1 Mineralogical Analysis ... 74
9.7.1.1 Mineral Cluster Analysis Dendogram ... 76
10. DRILLING ... 78
10.1 Current Lake Deposit Drilling ... 78
10.1.1 Escape Lake Deposit Drilling ... 78
10.2 Core Logging ... 79
10.3 Thunder Bay North Project Specific Gravity Measurements ... 80
10.4 Comments on Section 10 ... 82
11. SAMPLE PREPARATION, ANALYSES, AND SECURITY ... 83
11.1 Assay Sample Preparation and Analysis ... 83
11.1.1 Clean Air Metals Inc. Core Sample Preparation and Analysis (2020) ... 83
11.1.2 Historic Core Assay Sample Preparation and Analysis ... 85
11.1.2.1 Accurassay Laboratories ... 85
11.1.2.2 ALS Chemex ... 85
11.2 Specific Gravity Sampling ... 86
11.2.1 Current Lake Deposit ... 86
11.2.2 Escape Lake Deposit ... 86

11.3 Quality Assurance/Quality Control Programs ... 86
11.3.1 Current Lake Deposit ... 86
11.3.1.1 Standards ... 86
11.3.1.2 Blanks ... 93
11.3.1.3 Field and Laboratory Duplicates ... 101
11.3.2 Escape Lake Deposit ... 109
11.3.2.1 Standards ... 109
11.3.2.2 Blanks ... 114
11.3.2.3 Field and Laboratory Duplicates ... 118
11.3.2.4 Lab Inserted Standards With No Accepted Values or Certificates ... 126
11.4 Security and Storage ... 126
11.5 Qualified Person's Opinion on the Adequacy of Sample Preparation, Security, and Analytical Procedures ... 127
12. DATA VERIFICATION ... 128
12.1 Nordmin Site Visit 2020 ... 128
12.1.1 Field Collar Validation ... 129
12.1.2 Core Logging, Sampling, and Storage Facilities ... 134
12.1.3 Independent Sampling ... 135
12.2 Database Validation ... 146
12.3 Review of the Company's QA/QC ... 146
12.4 QP's Opinion ... 146
13. MINERAL PROCESSING AND METALLURGICAL TESTING ... 147
13.1 Sample Selection and Head Characterization ... 147
13.2 Grindability ... 148
13.3 Metallurgical Testwork ... 148
13.3.1 Flotation Development ... 148
13.3.2 Variability Testing ... 149
13.3.3 Future Work ... 151
14. MINERAL RESOURCE ESTIMATE ... 152
14.1 Drill Hole Database ... 152
14.2 Domaining ... 153
14.2.1 Geological Domaining ... 153
14.2.2 Grade Domaining ... 156
14.3 Exploratory Data Analysis ... 159
14.4 Data Preparation ... 163
14.4.1 Non-Assayed Assay Intervals ... 163

14.4.2 Outlier Analysis and Capping 163
14.4.3 Compositing 166
14.4.4 Specific Gravity 167
14.4.5 Block Model Strategy and Analysis 167
14.4.6 Assessment of Spatial Grade Continuity 168
14.4.7 Block Model Definition 170
14.4.8 Interpolation Method 171
14.4.9 Search Strategy 171
14.5 Block Model Validation 173
14.5.1 Visual Comparison 173
14.5.2 Swath Plots 182
14.5.3 Interpolation Comparison 184
14.6 Equivalency 187
14.7 Mineral Resource Classification 188
14.8 Reasonable Prospects of Eventual Economic Extraction 192
14.8.1 Input Parameters for Resource Calculation 193
14.9 Mineral Resource Estimate 193
14.9.1 Current Lake Deposit by Geological Domain 197
14.9.2 Escape Lake Deposit by Geological Domain 199
14.10 Cautionary Statement Regarding Mineral Resource Estimates 200
14.11 Mineral Resource Sensitivity to Reporting Cutoff 200
14.12 Comparison with the Previous Resource Estimate 203
14.13 Factors That May Affect the Mineral Resources 205
14.14 Comments on Section 14 205
15. MINERAL RESERVE ESTIMATE 206
16. MINING METHODS 206
17. RECOVERY METHODS 206
18. PROJECT INFRASTRUCTURE 206
19. MARKET STUDIES AND CONTRACTS 206
20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT 206
21. CAPITAL AND OPERATING COSTS 206
22. ECONOMIC ANALYSIS 206
23. ADJACENT PROPERTIES 206
24. OTHER RELEVANT DATA AND INFORMATION 206
25. INTERPRETATION AND CONCLUSIONS 207

25.1 Introduction 207
25.2 Mineral Tenure, Surface Rights, Royalties, and Agreements 207
25.3 Geology and Mineral Resource 207
25.4 Exploration, Drilling, and Analytical Data Collection in Support of Mineral Resource Estimation 208
25.5 Processing and Metallurgical Testing 208
25.5.1 Flotation Development 209
25.5.2 Variability Testing 209
25.6 Mineral Resource Estimate 209
25.7 Conclusions 210
26. RECOMMENDATIONS 211
26.1 Phase 1 Recommendations – Current Lake Deposit PEA 211
26.1.1 Recommended Metallurgical Work 211
26.2 Phase 2 Recommendations – Current Lake Deposit PFS 212
27. REFERENCES 213
28. GLOSSARY 215
28.1 Mineral Resource 215
28.2 Mineral Reserve 215
28.3 Definition of Terms 216
28.4 Abbreviations & Symbols 218

Appendices

Appendix A: QP Certificates of Authors
Appendix B: Claims List
Appendix C: QA/QC Charts for the Standards and Blanks
Appendix D: EDA Probability Plots and Histograms
Appendix E: Visual Comparison of Block Model Elements
Appendix F: Grade Distribution Swath Plots

List of Figures

Figure 4-1: Project location map 29
Figure 4-2: Thunder Bay North Project, comprised of the Current Lake Property and the Escape Lake Property. 30
Figure 4-3: Project tenure, claims, NSR, and operational alienations 32
Figure 7-1: Regional geology (after Stott et al. 2007) 51
Figure 7-2: Thunder Bay North Project geology map 54
Figure 7-3: Mineralized zones and location within the Current Lake Deposit and Escape Lake Deposit 56
Figure 7-4: Plan View of Escape Lake Deposit and Current Lake Deposit with diamond drilling 57
Figure 9-1: Escape Lake Property 2020 drill hole location map 66
Figure 9-2: Longitudinal section through the HGZ showing assay grades, drill hole traces, and the mineralized zone generated by implicit modelling; view of the section is toward 2500 Azimuth. 67
Figure 9-3: Current Lake Property 2020 drill hole location map 71
Figure 9-4: Magnetotelluric survey pseudo-sections for the six lines surveyed in the Escape Lake and Current Lake areas in August 2020 73
Figure 9-5: Dendogram display of diffractogram cluster analysis for the Current Lake Deposit and Escape South HGZ samples 77
Figure 11-1: Purpose-designed Vancon diamond-bladed core saw with pre-marked sample bags 84
Figure 11-2: Current Lake Deposit Standard AMIS008 Pt (g/t) 90
Figure 11-3: Current Lake Deposit Standard AMIS0008 Pd (g/t) 90
Figure 11-4: Current Lake Deposit Standard AMIS0073 Cu (g/t) 91
Figure 11-5: Current Lake Deposit Standard AMIS0073 Ni (g/t) 91
Figure 11-6: Current Lake Deposit Standard Oreas 19 a Au (g/t) 92
Figure 11-7: Current Lake Deposit Standard Oreas-15 g Au (g/t) 92
Figure 11-8: Current Lake Deposit Standard Oreas 682 Rh (g/t) 93
Figure 11-9: ALS Pt (g/t) results for the Current Lake Deposit marble coarse blanks 94
Figure 11-10: ALS Pd (g/t) results for the Current Lake Deposit marble coarse blanks 94
Figure 11-11: ALS Cu (g/t) results for the Current Lake Deposit marble coarse blanks 95
Figure 11-12: ALS Ni (g/t) results for the Current Lake Deposit marble coarse blanks 95
Figure 11-13: ALS Co (g/t) results for the Current Lake Deposit marble coarse blanks 96
Figure 11-14: ALS Ag (g/t) results for the Current Lake Deposit marble coarse blanks 96
Figure 11-15: ALS Au (g/t) results for the Current Lake Deposit marble coarse blanks 97
Figure 11-16: ALS Pt (g/t) results for the Current Lake Deposit silica coarse blanks 97
Figure 11-17: ALS Pd (g/t) results for the Current Lake Deposit silica coarse blanks 98
Figure 11-18: ALS Cu (g/t) results for the Current Lake Deposit silica coarse blanks 98
Figure 11-19: ALS Ni (g/t) results for the Current Lake Deposit silica coarse blanks 99
Figure 11-20: ALS Co (g/t) results for the Current Lake Deposit silica coarse blanks 99
Figure 11-21: ALS Ag (g/t) results for the Current Lake Deposit silica coarse blanks 100

Figure 11-22: ALS Au (g/t) results for the Current Lake Deposit silica coarse blanks 100
Figure 11-23: Current Lake Deposit field duplicates for Pt (g/t) 101
Figure 11-24: Current Lake Deposit field duplicates for Pd (g/t) 102
Figure 11-25: Current Lake Deposit field duplicates for Cu (g/t) 102
Figure 11-26: Current Lake Deposit field duplicates for Ni (g/t) 103
Figure 11-27: Current Lake Deposit field duplicates for Co (g/t) 103
Figure 11-28: Current Lake Deposit field duplicates for Ag (g/t) 104
Figure 11-29: Current Lake Deposit field duplicates for Au (g/t) 104
Figure 11-30: Current Lake Deposit lab duplicates for Pt (g/t) 105
Figure 11-31: Current Lake Deposit lab duplicates for Pd (g/t) 105
Figure 11-32: Current Lake Deposit lab duplicates for Cu (g/t) 106
Figure 11-33: Current Lake Deposit lab duplicates for Ni (g/t) 106
Figure 11-34: Current Lake Deposit lab duplicates for Co (g/t) 107
Figure 11-35: Current Lake Deposit lab duplicates for Ag (g/t) 107
Figure 11-36 Current Lake Deposit lab duplicates for Au (g/t) 108
Figure 11-37: Current Lake Deposit lab duplicates for Rh (g/t) 108
Figure 11-38: Escape Lake Deposit Standard Oreas 684 Pt (g/t) 111
Figure 11-39: Escape Lake Deposit Standard Oreas 684 Pd (g/t) 111
Figure 11-40: Escape Lake Deposit Standard AMIS0073 Cu (g/t) 112
Figure 11-41: Escape Lake Deposit Standard AMIS0073 Ni (g/t) 112
Figure 11-42: Escape Lake Deposit Standard Oreas 684 Rh (g/t) 113
Figure 11-43: ALS Pt (g/t) results for the Escape Lake Deposit gabbro coarse blanks 114
Figure 11-44: ALS Pd (g/t) results for the Escape Lake Deposit gabbro coarse blanks 115
Figure 11-45: ALS Cu (g/t) results for the Escape Lake Deposit gabbro coarse blanks 115
Figure 11-46: ALS Ni (g/t) results for the Escape Lake Deposit gabbro coarse blanks 116
Figure 11-47: ALS Co (g/t) results for the Escape Lake Deposit gabbro coarse blanks 116
Figure 11-48: ALS Ag (g/t) results for the Escape Lake Deposit gabbro coarse blanks 117
Figure 11-49: ALS Au (g/t) results for the Escape Lake Deposit gabbro coarse blanks 117
Figure 11-50: Escape Lake Deposit field duplicates for Pt (g/t) 118
Figure 11-51: Escape Lake Deposit field duplicates for Pd (g/t) 119
Figure 11-52: Escape Lake Deposit field duplicates for Cu (g/t) 119
Figure 11-53: Escape Lake Deposit field duplicates for Ni (g/t) 120
Figure 11-54: Escape Lake Deposit field duplicates for Co (g/t) 120
Figure 11-55: Escape Lake Deposit field duplicates for Ag (g/t) 121
Figure 11-56: Escape Lake Deposit field duplicates for Au (g/t) 121
Figure 11-57: Escape Lake Deposit lab duplicates for Pt (g/t) 122
Figure 11-58: Escape Lake Deposit lab duplicates for Pd (g/t) 122

Figure 11-59: Escape Lake Deposit lab duplicates for Cu (g/t) 123
Figure 11-60: Escape Lake Deposit lab duplicates for Ni (g/t) 123
Figure 11-61: Escape Lake Deposit lab duplicates for Co (g/t) 124
Figure 11-62: Escape Lake Deposit lab duplicates for Ag (g/t) 124
Figure 11-63: Escape Lake Deposit lab duplicates for Au (g/t) 125
Figure 11-64: Secure core yard storage 127
Figure 12-1: DDH BL-09-159 collar 129
Figure 12-2: Validated drill hole collars versus all drill holes 130
Figure 12-3: Current Lake Deposit validated drill holes versus all drill holes 132
Figure 12-4: Escape Lake Deposit validated drill holes versus all drill holes 133
Figure 12-5: Escape Lake Deposit scatter plot comparison of Ag (g/t) verification samples 133
Figure 12-6: The Company core logging facility 134
Figure 12-7: The Company core cutting facility 134
Figure 12-8: Core cutter bringing samples outside to be shipped 136
Figure 12-9: Current Lake Deposit scatter plot comparison of Pt (ppm) verification samples 139
Figure 12-10: Current Lake Deposit scatter plot comparison of Pd (ppm) verification samples 139
Figure 12-11: Current Lake Deposit scatter plot comparison of Ni (%) verification samples 140
Figure 12-12: Current Lake Deposit scatter plot comparison of Cu (%) verification samples 140
Figure 12-13: Current Lake Deposit scatter plot comparison of Au (ppm) verification samples 141
Figure 12-14:Current Lake Deposit scatter plot comparison of Ag (ppm) verification samples 141
Figure 12-15: Escape Lake Deposit scatter plot comparison of Pt (ppm) verification samples 143
Figure 12-16: Escape Lake Deposit scatter plot comparison of Pd (ppm) verification samples 143
Figure 12-17: Escape Lake Deposit scatter plot comparison of Ni (%) verification samples 144
Figure 12-18: Escape Lake Deposit scatter plot comparison of Cu (%) verification samples 144
Figure 12-19: Escape Lake Deposit scatter plot comparison of Au (ppm) verification samples 145
Figure 12-20: Escape Lake Deposit scatter plot comparison of Ag (ppm) verification samples 145
Figure 13-1: Process plant conceptual flowsheet 150
Figure 14-1: Plan view of Escape Lake and Current Lake Deposits with diamond drilling 152
Figure 14-2: Geological domains 153
Figure 14-3: Structural details 154
Figure 14-4: Plan view showing the Current Lake Deposit and Escape Lake Deposit including geological domains 155
Figure 14-5: Current Lake Deposit long section showing geological domains and PtEq grade distribution 155
Figure 14-6: Escape Lake Deposit long section showing geological domains and PtEq grade distribution 156
Figure 14-7: Plan view of the mineralogical domains for Escape Lake Deposit and Current Lake Deposit 158
Figure 14-8: Plan view of the mineralogical domains for Current Lake Deposit 158
Figure 14-9: Long Section View of the mineralogical domains for Current Lake Deposit 159
Figure 14-10: Plan view of the mineralogical domains for Escape Lake Deposit 159

Figure 14-11: Log probability plot and histogram Pd/Pt (g/t), BG domain Current Lake Deposit 161
Figure 14-12: Log probability plot and histogram Pd/Pt (g/t), LG domain Current Lake Deposit........................ 161
Figure 14-13: Log probability plot and histogram Pd/Pt (g/t), BG domain Escape Lake Deposit 162
Figure 14-14: Log probability plot and histogram Pt/Pd (g/t), LG domain Escape Lake Deposit......................... 162
Figure 14-15: Current Lake Deposit cross section Pt (g/t) 174
Figure 14-16: Current Lake Deposit cross section Pd (g/t).. 175
Figure 14-17: Current Lake Deposit cross section Pd (g/t).. 176
Figure 14-18: Current Lake Deposit cross section Pd (g/t).. 177
Figure 14-19: Current Lake Deposit cross section Cu (%)... 177
Figure 14-20: Current Lake Deposit cross section Ni (%) 177
Figure 14-21: Current Lake Deposit cross section Rh (g/t).. 178
Figure 14-22: Current Lake Deposit cross section Co (g/t).. 178
Figure 14-23: Escape Lake Deposit cross section Pt (g/t).. 179
Figure 14-24: Escape Lake Deposit cross section Pd (g/t) 179
Figure 14-25: Escape Lake Deposit cross section Pd (g/t) 180
Figure 14-26: Escape Lake Deposit cross section Cu (%) 180
Figure 14-27: Escape Lake Deposit cross section Ni (%).. 181
Figure 14-28: Escape Lake Deposit cross section Rh (g/t) 181
Figure 14-29: Escape Lake Deposit cross section Co (g/t) 182
Figure 14-30: Swath plots in X, Y, Z direction, Current Lake Deposit, Pt... 183
Figure 14-31: Swath plots in X, Y, Z direction, Escape Lake Deposit, Pt 183
Figure 14-32: Swath plots in X, Y, Z direction, Current Lake Deposit, Pd.. 184
Figure 14-33: Swath plots in X, Y, Z direction, Escape Lake Deposit, Pd 184
Figure 14-34: Cross section of the Current Lake Deposit, Pt KV 189
Figure 14-35: Cross section of the Escape Lake Deposit, Pt KV.. 189
Figure 14-36: Plan section showing the Current Lake Deposit categorizations 190
Figure 14-37: Cross section showing the Current Lake Deposit categorizations 190
Figure 14-38: Plan view showing Escape Lake Deposit categorizations... 191
Figure 14-39: Cross section showing Escape Lake Deposit categorization 192
Figure 14-40: Long section of the Current Lake Deposit looking NE outlining the amount of mineralization within the top 425 m from surface.. 196
Figure 14-41: Long section of the Escape Lake Deposit looking NE outlining the amount of mineralization within the top 425 m from surface.. 196
Figure 14-42: Long section view of the 2021 Current Lake Deposit geological domains and the 2011 conceptual open pit 203

List of Tables

Table 1-1: Thunder Bay North Project Mineral Resource Estimate, Grade, and Tonnage 18
Table 1-2: Commodity Prices Used in the Resource Calculation 19
Table 2-1: QP Section Responsibility 25
Table 6-1: Project Exploration 1976 - 2005 36
Table 6-2: Previous Project Exploration by Magma/Panoramic/RTEC 2006 to 2018 37
Table 6-3: Consolidated Mineral Resource Statement*, SRK Consulting, September 7, 2009 45
Table 6-4: East Beaver Lake Mineral Resources 46
Table 6-5: March 17, 2011, AMEC Open Pit Mineral Resource Statement 48
Table 6-6: March 17, 2011, AMEC Underground Mineral Resource Statement 49
Table 9-1: Escape Lake Property 2020 Diamond Drilling Summary 65
Table 9-2: Selected Assay Intervals – Escape Lake Property 2020 Diamond Drilling Program 69
Table 9-3: Current Lake Property 2020 Diamond Drilling Summary 70
Table 10-1: Current Lake Deposit Drill Hole Summary 78
Table 10-2: Escape Lake Deposit Drill Hole Summary 79
Table 10-3: Current Lake Deposit Specific Gravity Measurements 80
Table 10-4: Escape Lake Deposit Specific Gravity Measurements 81
Table 11-1: ICP-AES Method Detection Limit Elements and Ranges in ppm for ME-ICP61 84
Table 11-2: Current Lake Deposit CRM Result Summary from Geologist Inserted CRMs 88
Table 11-3: Current Lake Deposit CRM Result Summary from Lab Inserted CRMs 89
Table 11-4: Escape Lake Deposit CRM Result Summary from the Company 110
Table 11-5: Escape Lake Deposit CRM Result Summary from the Lab 110
Table 11-6: Lab Inserted Standards with no Accepted Values or Certificates 126
Table 12-1: Current Lake Deposit Drill Hole Collar Comparison 131
Table 12-2: Escape Lake Deposit Drill Hole Collar Comparison 132
Table 12-3: Current Lake Deposit Drill Intervals Selected for Verification Sampling 135
Table 12-4: Escape Lake Deposit Drill Intervals Selected for Verification Sampling 136
Table 12-5: Current Lake Deposit Quarter Core Sampling Conducted by Nordmin, October 2020 138
Table 12-6: Escape Lake Deposit Quarter Core Sampling Conducted by Nordmin, October 2020 142
Table 13-1 Main Composite Head Analysis 147
Table 13-2 Summary of Grindability Results 148
Table 13-3: Locked Cycle Flotation Test Results, Test #23 148
Table 13-4: Bulk Concentrate Minor Element Analysis, Test #23 149
Table 13-5: Head Assays for the Variability Composites 150
Table 14-1: Drill Hole Count Summary 152
Table 14-2: Mineral Resource Estimate Number of Assays by Deposit 153

Table 14-3: Current Lake Deposit and Escape Lake Deposit Geological Domains 154
Table 14-4: Current Lake Deposit and Escape Lake Deposit Assay Counts by Grade Domain 160
Table 14-5: Summary of the Assay Database for the Current Lake and Escape Lake Deposits 163
Table 14-6: Assays at Minimum Detection Limits 163
Table 14-7: Current Lake Deposit Capping Analysis 164
Table 14-8: Escape Lake Deposit Capping Analysis 165
Table 14-9: Composite Analysis 166
Table 14-10: Specific Gravity 167
Table 14-11: Current Lake Deposit Variography Parameters 169
Table 14-12: Escape Lake Deposit Variography Parameters 170
Table 14-13: Current Lake Deposit Block Model Definition Parameters 170
Table 14-14: Escape Lake Deposit Block Model Definition Parameters 171
Table 14-15: Search Parameters 173
Table 14-16: Current Lake Deposit Interpolation Comparison 185
Table 14-17: Escape Lake Deposit Interpolation Comparison 186
Table 14-18: Commodity Prices Used in the Resource Calculation 192
Table 14-19: Contained Metals Parameters of Mineral Resource Cutoff Grade Calculations 193
Table 14-20: Thunder Bay North Project Mineral Resource Estimate, Grade, and Tonnage 194
Table 14-21: Thunder Bay North Project Mineral Resource Estimate, Contained Metal 195
Table 14-22: Current Lake Deposit Mineral Resource Estimate, Grade, and Tonnage Summary by Geological Domain .. 197
Table 14-23: Current Lake Deposit Mineral Resource Estimate, Contained Metal by Geological Domain 198
Table 14-24: Escape Lake Deposit Mineral Resource Estimate, Grade, and Tonnage Summary by Geological Domain ... 199
Table 14-25: Escape Lake Deposit Mineral Resource Estimate, Contained Metal by Geological Domain 199
Table 14-26: Mineral Resource Sensitivity to Reporting Cutoff, Indicated 201
Table 14-27: Mineral Resource Sensitivity to Reporting Cutoff, Inferred 202
Table 14-28: 2011 Open Pit Mineral Resource Estimate Compared to the 2021 Mineral Resource Estimate Cutoff with the Same Open Pit Wireframe, both at a Historical Pt Equivalency Cutoff of 0.59 g/t Pt Eq 204
Table 14-29: 2011 Underground Mineral Resource Estimate at a Historical Pt Equivalency Cutoff of 1.94 g/t Pt Eq....... 204
Table 26-1: Recommended Current Lake Deposit PEA Budget 211
Table 26-2: Recommended Current Lake Deposit PFS Budget 212
Table 28-1: Definition of Terms 216
Table 28-2: Abbreviations and Symbols Used in this Technical Report 218

1. SUMMARY

Nordmin Engineering Ltd. ("Nordmin") was retained by Clean Air Metals Inc. ("Clean Air" or "the Company") to prepare a Canadian National Instrument 43-101 ("NI 43-101") Technical Report ("Technical Report") and Mineral Resource Estimate for the Thunder Bay North Project ("the Project"), situated approximately 50 km northeast of the city of Thunder Bay, ON, Canada.

1.1 Terms of Reference

This Technical Report supports the disclosure of Mineral Resources for the Project in the Company news release of January 20, 2021, titled "Clean Air Metals Announces a Mineral Resource for the Thunder Bay North Project including a total Indicated Resource of 16,285,396 tonnes at an average grade of 3.5 g/t palladium equivalency ("PdEq") containing 1,834,158 ounces PdEq and a total Inferred Resource of 9,852,138 tonnes at an average grade of 2.1 g/t PdEq containing 663,660 ounces PdEq".

All measurement units used in this Technical Report are metric unless otherwise noted. Currency is expressed in Canadian ("CAD") dollars (C$). The Technical Report uses Canadian English.

Mineral Resources are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019; 2019 CIM Best Practice Guidelines).

1.2 Principal Outcomes

The Mineral Resources were classified using the 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines and has an effective date of January 18, 2021. The Current Lake Deposit contains an Indicated Mineral Resource of 11,997,177 tonnes grading 3.44 g/t PdEq and an Inferred Mineral Resource of 6,406,960 tonnes grading 2.02 g/t PdEq. The Escape Lake Deposit contains an Indicated Mineral Resource of 4,286,220 tonnes grading 3.67 g/t PdEq and an Inferred Mineral Resource of 3,445,179 tonnes grading 2.23 g/t PdEq (Table 1-1).

Table 1-1: Thunder Bay North Project Mineral Resource Estimate, Grade, and Tonnage

Category	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Current Lake Deposit	11,999,177	1.48	1.40	0.07	1.32	0.04	137	0.28	0.17	5.79	3.44
Indicated Escape Lake Deposit	4,286,220	0.92	1.18	0.12	2.45	0.06	209	0.52	0.28	6.16	3.67
TOTAL INDICATED RESOURCE	**16,285,396**	**1.33**	**1.34**	**0.08**	**1.62**	**0.05**	**156**	**0.34**	**0.20**	**5.89**	**3.50**
Inferred Current Lake Deposit	6,406,960	0.68	0.65	0.06	0.95	0.01	123	0.30	0.14	3.40	2.02
Indicated Escape Lake Deposit	3,445,179	0.64	0.73	0.07	1.13	0.00	173	0.33	0.18	3.75	2.23
TOTAL INFERRED RESOURCE	**9,852,138**	**0.67**	**0.68**	**0.07**	**1.01**	**0.01**	**140**	**0.31**	**0.15**	**3.52**	**2.10**

Reasonable prospects assumptions include:

- The Independent and Qualified Person responsible for the Mineral Resource Estimate is Glen Kuntz, P.Geo. of Nordmin Engineering Ltd., Thunder Bay, Ontario, and the effective date of the estimate is January 18, 2021.
- CIM Definition Standards on Mineral Resources and Reserves were used for the Thunder Bay North Project Mineral Resource Estimate.
- 3-year trailing average prices were used for all calculations with the exception of cobalt which used a 2-year trailing average price as itemized in Table 1-2.
- Resource excludes all material immediately below Current Lake, above a minimum crown pillar thickness of 20 m which is assumed to be not recoverable by underground methods.
- 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, marketing, or other relevant issues.
- Minor variations may occur during the addition of rounded numbers.

Table 1-2: Commodity Prices Used in the Resource Calculation

Commodity	Units	Assumption (USD$)
Palladium (“Pd”)	per oz	$1,516.82
Platinum (“Pt”)	per oz	$902.38
Silver (“Ag”)	per oz	$17.35
Gold (“Au”)	per oz	$1,469.60
Copper (“Cu”)	per lb	$2.87
Nickel (“Ni”)	per lb	$6.15
Cobalt (“Co”)	prt tonne	$34,839.16
Rhodium (“Rh”)	per oz	$4,910.67

1.3 Property Description and Ownership

The Project is situated approximately 50 km northeast of the city of Thunder Bay, within the Thunder Bay Mining Division, Ontario, Canada. The Project centroids are approximately latitude 48º45’ N, and longitude 88º56’W and is comprised of the Current Lake Property and the Escape Lake Property.

The Project consists of 344 unpatented, single cell, multicell, and partial cell border claims (1456 cell units) covering an aggregate area of approximately 29,725 ha. All claims and underlying agreements are in good standing.

The Company's exploration activities are located on lands which Fort William First Nation, Red Rock Indian Band and the Biinjitiwaabik Zaaging Anishinaabek (collectively the "Cooperating Participants") assert are part of their traditional territory and in which the Participating First Nations assert their members hold and exercise Aboriginal and/or Treaty rights (the "Rights"). The Company and the Cooperating Participants signed a Memorandum of Agreement ("MOA") effective as of January 9, 2021.

1.4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The Project is accessible using a series of intermittently maintained logging roads branching from Armstrong Highway 527, which in turn branches from the Trans-Canada Highway 11-17 a short distance east of the city of Thunder Bay.

The Company's exploration activities are located on lands which the Cooperating Participants assert are part of their traditional territory and in which the Participating First Nations assert their members hold and exercise Rights. The Company and the Cooperating Participants signed a MOA effective as of January 9, 2021.

The climate is continental with a temperate marine influence from the close proximity of Lake Superior. Temperatures generally range from winter lows of about -35°C to summer highs of about 35°C. Average winter temperatures are in the range of -15°C to -20°C, and average summer temperatures are in the range of 20°C to 25°C.

Annual rainfall is approximately 70 cm with 55 cm to 60 cm of rain and 200 cm to 300 cm of snow annually. Average winter snow depths in the region are about 100 cm to 150 cm.

The area is characterized by low relief (less than 20 m) with a mixture of muskeg and mature spruce forests. The claims are covered by typical northern boreal forest comprising spruce and jack pine. Local fauna includes moose, wolf, black bear, marten, hare, and several species of birds.

Project elevations vary by about 40 m, from 470 metres above sea level (masl) to about 510 masl, averaging approximately 485 masl.

Outcrop is locally rare. Glacial overburden depth is generally shallow, rarely exceeds 20 m, and primarily consists of ablation till, minor basal till, and moderate expanses of outwash sand and gravel.

Exploration activities can be curtailed by snowmelt conditions. It is expected that any future mining operations will be able to be conducted year-round.

At present, there is no significant infrastructure in the area. A 230 kW powerline is in the process of being built between Thunder Bay and Wawa, ON. This powerline will cross the southeast corner of the Project where, at the point of closest approach, it is located approximately 6 km southeast from the centre of the Current Lake Deposit.

The land holdings are sufficient to allow for exploration and development. The potential surface rights holdings, that can be triggered when the claims go to lease, are sufficient for development of infrastructure to sustain a mining operation.

Sufficient skilled mining labour is present in Thunder Bay and surrounding communities.

1.5 History

Initial exploration in the general region was for uranium and was concentrated in the area of the Christianson uranium showing, discovered in 1949, and located about 5 km east of Current Lake near the western shoreline of Greenwich Lake.

The Current Lake area was explored for diamonds by Dr. Graham Wilson and Dr. Gerald Harper et al between 1993 to 2000. This led to the discovery of mineralized ultramafic (peridotite) boulders containing elevated grades of Pt-Pd-Cu-Ni along the western shoreline of Current Lake.

Magma Metals (Canada) Limited optioned the Current Lake property in 2005. Kennecott staked the Escape Lake claim (a single 15-unit claim) in 2006. Magma Metals (Canada) Limited was taken over by Panoramic Resources Limited in June 2012. Since the acquisition of Kennecott by Rio Tinto in 2015, there has been extensive exploration activities by the various operators through to the current operator (Clean Air) (Section 6).

1.6 Geological Setting, Mineralization, and Deposit Types

Mineralization discovered on the Project to date is considered to be somewhat atypical of orthomagmatic Ni-Cu sulphide deposits, in particular part of the sub-class of deposits associated with rift and flood basalts and their associated magmatic conduits (Noril'sk type) (Naldrett 2004).

The Current Lake Deposit Mineral Resource Estimate benefits from approximately 162,997 m of diamond drilling in 730 drill holes spanning from 2006 until 2020. The Escape Lake Deposit Mineral Resource Estimate benefits from approximately 40,855 m of diamond drilling in 122 drill holes spanning from 2008 until 2020. Collectively this drilling by the Company and its predecessors has led to the delineation of the Current Lake and Escape Lake Mineral Resource Estimates.

Mineralization within the Current Lake Deposit and Escape Lake Deposit are hosted within magmatic conduits comprised of melanocratic gabbro and ultramafic peridotites. Mineralization is strongly associated with sulphide abundance with the exception of the Cloud Zone within the Current Lake Deposit.

Nordmin examined and modelled the grade distributions for each of the elements. Grade distributions were created for Pd, Pt, Au, Ag, Cu, Ni, Co, and Rh. The analysis confirmed that the changes in mineralization and corresponding grade within the various conduits appear to be caused by preferential magma/fluid mixing. The higher-grade mineralization is largely settled near the lower portions of the conduits due to the high sulphide content associated with the different metals. The settling created a scenario in which the high grade mineralization is "pod"-like in nature and relatively equally spaced along the lower contact of each conduit. The material between the higher-grade pods is mineralized but with lower grades. Therefore, the higher-grade pods are connected within a lower grade matrix. As such, Nordmin created wireframe grade shells for each of the eight commodities to reflect the lithological and geochemical differences, along with sulphide abundance for the purpose of grade concentration and isolation of composites.

Mineralization wireframes were initially created on 10 m to 20 m sections and plans and adjusted between various views to edit and smooth each wireframe where required. The wireframes were permitted to follow lithological boundaries and trends where applicable. When not cutoff by drilling, the wireframes terminate at the contact of the conduit; lack of drilling or a or significant change in grade distribution, whichever was most appropriate. No wireframe overlapping exists within a given grade domain. The mineralization domain wireframes were modelled for eight grade elements, including Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh. Structural and mineralization trends were used in the interpretation and selection of block modelling parameters. A block model was built by estimating and combining block models for each domain, and the final block model has been fully validated with no material bias identified.

The use of explicit modelling allows for mineralization in context with the deposit geology and associated geochemistry to be considered.

The geological understanding of the setting (lithologies and structural) and alteration controls on mineralization is sufficient to support the estimation of Mineral Resources.

1.7 Exploration, Drilling, and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed by the Company and previous operators are appropriate for the deposit style. The programs have delineated the Current Lake and Escape Lake Deposits, as well as a number of exploration targets. Geophysical interpretations and regional surface exploration indicate the potential to discover further targets that warrant further investigation.

The quantity and quality of the lithological, collar and downhole survey data collected in the various exploration programs by various operators are sufficient to support the Mineral Resource Estimate. The collected sampling is representative of the Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh grades in the deposit, reflecting areas of higher, and lower grades. The analytical laboratories used for legacy and current assaying are well known in the industry, produce reliable data, are properly accredited, and widely used within the industry.

Nordmin is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results. In Nordmin's opinion, the drilling, core handling, logging, and sampling procedures meet, or exceed industry standards, and are adequate for the purpose of Mineral Resource Estimation.

Nordmin considers the quality assurance ("QA")/quality control ("QC") protocols in place for the Project to be acceptable and in line with standard industry practice. Based on the data validation and the results of the standard, blank, and duplicate analyses, Nordmin is of the opinion that the assay and bulk density databases are of sufficient quality for Mineral Resource Estimation for the Project.

1.8 Mineral Processing and Metallurgical Testing

Metallurgical testwork was conducted at G&T Metallurgical Services Ltd. ("G&T") in 2010 on a composite generated from samples obtained during the 2010-2011 work program. The composite graded 1.12 g/t Pd, 0.95 g/t Pt, 0.22% Ni, 0.31% Cu, 180 g/t Co, 0.11 g/t Au, and 2.6 g/t Ag. Mineralogical study of the composite by Qemscan indicated that Ni was present primarily as pentlandite, but also in pyrrhotite, and olivine. Cu was found to be present as chalcopyrite.

A flowsheet was developed that recovered Pt, Pd, Cu, Ni, Co, Au, and Ag to a bulk sulphide concentrate. Locked cycle testing of the flowsheet produced a projected final product grading 45 g/t Pd+Pt, 5.7 % Cu, and 1.9 % Ni. The metal grades were limited by the presence of iron sulphide gangue (pyrrhotite, pyrite) and talc, with the final concentrate grading 28.9 % sulphur and 7.8% (“MgO”).

Hardness testing by the standardized Bond Ball Work Index (“BBWI”) method indicated that samples from the deposits are moderately hard, with an index of ~18 kWh/t at a closing size of 150 mesh. Conversely, Abrasion Index testing revealed that the composite was only mildly abrasive.

Additional metallurgical testwork currently underway is aimed at further characterizing variability in the deposits, as well as the potential for the flotation of separate Cu and Ni concentrate products. Recommendations for additional study include mineralogical characterization of variability samples and selected test products to better understand the deportment of platinum group metals (PGM) and base metals in the deposits.

1.9 Mineral Resources

The Mineral Resource Estimate for the Project conforms to industry best practices and is reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves and 2019 CIM Best Practice Guidelines.

Mineral Resources were classified into Measured, Indicated, and Inferred Resource categories based on geological and grade continuity, drill hole spacing, and reviewing kriging variance. The Mineral Resource Estimate has been defined based on an applied PdEq cutoff grade to reflect processing methodology and assumed revenue streams from Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh.

The Mineral Resource Estimate is based on underground mining methods and milling and flotation/cyanidation concentration processing method. Areas of uncertainty that may materially impact the Mineral Resource Estimate include:

- Changes to long-term metal price assumptions.
- Changes to the input values for mining, processing, and general and administrative (“G&A”) costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.
- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social licence assumptions.

There is potential for an increase in the Mineral Resource Estimate if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories and if any categorized mineralization within the various deposits can be expanded.

1.10 Interpretations and Conclusions

Under the assumptions presented in this Technical Report, and based on the available data, the Mineral Resources meet the 2014 CIM Definition Standards, the 2019 CIM Best Practice Guidelines and show reasonable prospects of eventual economic extraction. Exploration activities have shown the Current Lake Deposit and Escape Lake Deposit to have significant potential to expand the Mineral Resources, and additional exploration is warranted.

1.11 Recommendations

1.12 Phase 1 Recommendations – Current Lake Deposit Preliminary Economic Assessment (“PEA”)

The recommended PEA of the Current Lake Deposit is predicated on incorporating both Indicated and Inferred Mineral Resources material, metallurgical test work, mine planning and a discounted cash flow model to develop a project net asset value (“NAV”) and internal rate of return (“IRR”).

The Phase 1 PEA recommendations are anticipated to require a budget of C$2,849,000.

1.13 Phase 2 Recommendations – Current Lake Deposit Prefeasibility Study (“PFS”)

The Phase 2 recommendations are contingent upon the completion of the Phase 1 recommendations and subject to minimum NAV and IRR outcomes from the Phase 1 program and Company approval. Phase 2 recommends a PFS on the Current Lake Deposit that is predicated on additional infill drilling to finalize an Indicated Mineral Resource, metallurgical test work, mine planning and related trade-off studies and a discounted cash flow model.

The contingent Phase 2 PFS recommendations are anticipated to require a budget of C$4,158,000.

2. INTRODUCTION

2.1 Terms of Reference

This Technical Report was prepared as a NI 43-101 Technical Report and Mineral Resource Estimate for the Company by Nordmin for the Project situated approximately 50 km northeast of the city of Thunder Bay, ON, Canada.

The Mineral Resources are considered effective as of January 18, 2021. This Technical Report supersedes all prior technical reports, Mineral Resource Estimates, and PEAs prepared for the Project. As of the date of this report, the Company anticipates using these Mineral Resources for future drill targeting and Mineral Resource upgrades.

The Company is a junior mineral exploration company listed on the TSX Venture Exchange (TSXV: AIR) with their head office located at:

217 Queen St. West (c/o Irwin Lowy)
Toronto, ON M5V-0R2

The quality of information, conclusions, and estimate contained herein are consistent with the level of effort involved in Nordmin's services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications outlined in this Technical Report.

This Technical Report is intended for use by the Company subject to the terms and conditions of its contract with Nordmin and relevant securities legislation. The contract permits the Company to file this Technical Report as a Technical Report with Canadian securities regulatory authorities pursuant to NI 43-101, Standards of Disclosure for Mineral Projects. Nordmin understands that the Company may use the Technical Report for a variety of corporate purposes. Except for the purposes legislated under provincial securities law, any other uses of this Technical Report by any third party is at that party's sole risk. The responsibility for this disclosure remains with the Company. The user of this document should ensure that this is the most recent Technical Report for the Project as it is not valid if a new Technical Report has been issued.

This Technical Report provides a Mineral Resource, and a classification of the resource prepared in accordance with the CIM, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014 (CIM, 2014).

2.2 Qualified Persons

The consultants preparing this Technical Report are specialists in the fields of geology, exploration, mineral processing, metallurgical testing, and Mineral Resource, and Mineral Reserve estimation, and classification.

Nordmin nor any associates employed in the preparation of this Technical Report are insiders, associates, affiliates, or has any beneficial interest in the Company. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between the Company and Nordmin. Nordmin is being paid a fee for the work in accordance with reasonable professional consulting practices.

This Technical Report was prepared by the QPs listed in Table 2-1, and their responsibilities for each section are indicated. These individuals, by virtue of their education, experience and professional association, are considered a Qualified Persons (“QP”) as defined in the NI 43-101 standard, for this

Technical Report, and are a member in good standing of a relevant professional institution. QP Certificates of the Authors are provided in Appendix A of this Technical Report.

Table 2-1: QP Section Responsibility

Section and Title	Qualified Person	Company
1: Summary	Glen Kuntz, P.Geo	Nordmin
2: Introduction	Glen Kuntz, P.Geo	Nordmin
3: Reliance on Other Experts	Glen Kuntz, P.Geo	Nordmin
4: Property Description and Location	Glen Kuntz, P.Geo	Nordmin
5: Accessibility, Climate, Local Resources, Infrastructure, and Physiography	Glen Kuntz, P.Geo	Nordmin
6: History	Glen Kuntz, P.Geo	Nordmin
7: Geological Setting and Mineralization	Glen Kuntz, P.Geo	Nordmin
8: Deposit Types	Glen Kuntz, P.Geo	Nordmin
9: Exploration	Glen Kuntz, P.Geo	Nordmin
10: Drilling	Glen Kuntz, P.Geo	Nordmin
11: Sample Preparation, Analyses, and Security	Glen Kuntz, P.Geo	Nordmin
12: Data Verification	Glen Kuntz, P.Geo	Nordmin
13: Mineral Processing and Metallurgical Testing	Lyn Jones P. Eng.	Blue Coast / M. Plan International Ltd.
14: Mineral Resource Estimate	Glen Kuntz, P.Geo	Nordmin
15: Mineral Reserve Estimate	N/A	N/A
16: Mining Methods	N/A	N/A
17: Recovery Methods	N/A	N/A
18: Project Infrastructure	N/A	N/A
19: Market Studies and Contracts	N/A	N/A
20: Environmental Studies, Permitting, and Social, or Community Impact	N/A	N/A
21: Capital and Operating Costs	N/A	N/A
22: Economic Analysis	N/A	N/A
23: Adjacent Properties	Glen Kuntz, P.Geo	Nordmin
24: Other Relevant Data and Information	Glen Kuntz, P.Geo	Nordmin
25: Interpretation and Conclusions	Glen Kuntz, P.Geo	Nordmin
26: Recommendations	Glen Kuntz, P.Geo	Nordmin
27: References	Glen Kuntz, P.Geo	Nordmin
28: Glossary	Glen Kuntz, P.Geo	Nordmin

The following summarizes the dates of the QP site visit to the Project:

- Glen Kuntz, P.Geo., completed one site visit between October 20 and October 21, 2020.

2.3 Effective Dates

The effective date of the Mineral Resource Estimate is January 18, 2021. The effective date of the Technical Report is January 20, 2021.

2.4 Information Sources and References

This Technical Report has been prepared by independent consultants who are QP's under NI 43-101 and prepared in accordance with NI 43-101, Form 43-101F1, and Companion Policy 43-101CP. Subject to the conditions and limitations set forth herein, the independent consultants believe that the qualifications, assumptions, and the information used by them is reliable, and efforts have been made to confirm this to the extent practicable. However, none of the consultants involved in this study can guarantee the accuracy of all information in this Technical Report.

This Technical Report is based, in part, on internal company technical reports and maps, published government reports, company letters and memoranda, and public information as listed in Section 27. Several sections from reports authored by other consultants have been directly quoted or summarized in this Technical Report and are so indicated where appropriate.

A draft copy of this Technical Report has been reviewed for factual errors by the Company regarding the Company, history of the Project, and the Mineral Resource Estimate prepared by Nordmin.

Nordmin has relied on the Company's historical and current knowledge of the Project and work performed thereon. Any 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 date of this Technical Report.

2.5 Previous Reporting

2.5.1 Previous Mineral Resource Estimates

The Mineral Resource Estimate (effective date of January 18, 2021) discussed herein (Section 14.9) supersedes historical and past Mineral Resource Estimates presented in this section.

The following historical information is relevant to provide context but is not current and should not be relied upon. The QPs responsible for the preparation of this Technical Report have not done sufficient work to classify the historical estimate as current Mineral Resources or Mineral Reserves, and the Company is not treating any historical estimates as Mineral Resource Estimates.

- Cole, G., and El-Rassi, D., 2009: Mineral Resource Evaluation, Thunder Bay North Polymetallic Project, Ontario, Canada: Technical Report prepared by SRK Consulting Ltd. for Magma Metals (Canada) Ltd., effective date 7 September 2009.
- Thomas, D.G., Melnyk, J., Gormely, L., Searston, S., Kulia, G. 2011: Magma Metals Limited, Thunder Bay North Polymetallic Project Ontario, Canada, NI 43-101 Technical Report. Project No. 164115. Effective Date: 6 October 2010.
- Searston, S., 2011: Magma Metals Limited, Preliminary Assessment Report Thunder Bay Project, Ontario, Canada. Project No. 164115 [unpublished]. Internal report dated February 2011.
- Thomas, D.G., Melnyk, J., Gormely, L., Searston, S., Kulia, G. 2011: Magma Metals Limited, Thunder Bay North Polymetallic Project Ontario, Canada, NI 43-101 Technical Report on Preliminary Assessment. Project No. 164115. Effective Date: 17 March 2011 in support of a press release dated 7 February 2011, entitled "Positive Scoping Study for Thunder Bay North Project: Considerable upside potential to further enhance the economics of the project."
- Leon, G., MacTavish, A., Heggie, G., Magma Metals Limited 2012: Mineral Resource Estimate for the East Beaver Lake Zone Extension [unpublished]. Internal report.

2.5.2 Previous Mineral Reserve Estimates

There are no historical Mineral Reserve estimates calculated for the Project.

2.6 Acknowledgements

Nordmin would like to thank and acknowledge the following people who have contributed to the preparation of this report and the underlying studies under the supervision of the QPs:

Nordmin Personnel

Christian Ballard, P.Geo, Senior Geologist, Stan Emms, Consulting Specialist – Mining, Brett Stewart, Technical Design Specialist, Annika Van Kessel, G.I.T., Sirena Jacobsen, Geological Technician, Kurt Boyko, P.Eng., Consulting Specialist – Mechanical Systems and Richard Jundis, P.Eng., Associate Mine Engineer.

Clean Air Employees and Consultants

Abraham Drost, M.Sc., P.Geo., CEO & Director, Jim Gallagher, P.Eng., Executive Chairman, Allan MacTavish, M.Sc., P.Geo., Vice President Project Manager, Andrey Zagoskin, M.Sc, P.Geo, Database/GIS Geologist, Derek Wilton, PhD, P.Geo., Senior Geological Advisor, Carson Phillips, M.Eng., VP Corporate Development, Kris Tuttila, A.Sc.T., P.Geo.(Limited), Regional Manager, Senior Associate of DST Consulting Engineers Inc., Dr. Neil Banerjee, Associate Professor of Earth Sciences, Western University and Dr. Lisa Van Loon, Ph.D. Chemistry, President of LISA CAN Analytical Solutions Inc., Nichola McKay, P.Geo., Geometallurgy Manager of Blue Coast Metallurgy & Research, Lyn Jones, P. Eng., Senior Consultant of M.Plan International Limited.

2.7 Units of Measure

Unless otherwise noted, the following measurement units, formats, and systems are used throughout this Technical Report.

- Measurement Units: all references to measurement units use the International System of Units (“SI,” or metric) for measurement. The primary linear distance unit, unless otherwise noted, are metres (“m”).
- General Orientation: unless otherwise stated, all references to orientation, and coordinates in this Technical Report are presented as UTM in metres.
- Currencies outlined in the Technical Report are stated in Canadian dollars (“C$”) unless otherwise noted.

The symbols and abbreviations used in this Technical Report are outlined in Section 28.4.

3. RELIANCE ON OTHER EXPERTS

Nordmin’s opinion contained herein is based on information provided to Nordmin by the Company throughout the course of Nordmin’s investigations. Nordmin has relied upon the work of other consultants for the Project in support of this Technical Report.

In each case, the QP hereby disclaims responsibility for such information to the extent of their reliance on such reports, opinions, or statements.

Nordmin used their experience to determine if the information from previous reports was suitable for inclusion in this Technical Report and adjusted information that required amending. This Report includes technical information, which required subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, Nordmin does not consider them to be material.

These items have not been independently reviewed by Nordmin and Nordmin did not seek an independent legal opinion of these items.

3.1 Mineral Tenure, Surface Rights, Property Agreements, and Royalties

Copies of the tenure documents, operating licences, permits, and work contracts were reviewed by Nordmin; an independent verification of land title and tenure reported in Section 4, was not performed. Nordmin did not independently verify the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties, but has instead relied on the Company to have conducted the proper legal due diligence.

3.2 Environmental, Permitting, and Liability Issues

The QP has fully relied upon on the Company and their consultant, Kris Tuttila, A.Sc.T., P.Geo. (Limited), Regional Manager, Senior Associate of DST Consulting Engineers Inc., concerning the Project environmental, socioeconomic, and permitting matters relevant to the Technical Report.

4. PROPERTY DESCRIPTION AND LOCATION

The Project is situated approximately 50 km northeast of the city of Thunder Bay, within the Thunder Bay Mining Division, Ontario, Canada (Figure 4-1). The Project centroids are approximately latitude 48º45' N, and longitude 88º56'W.

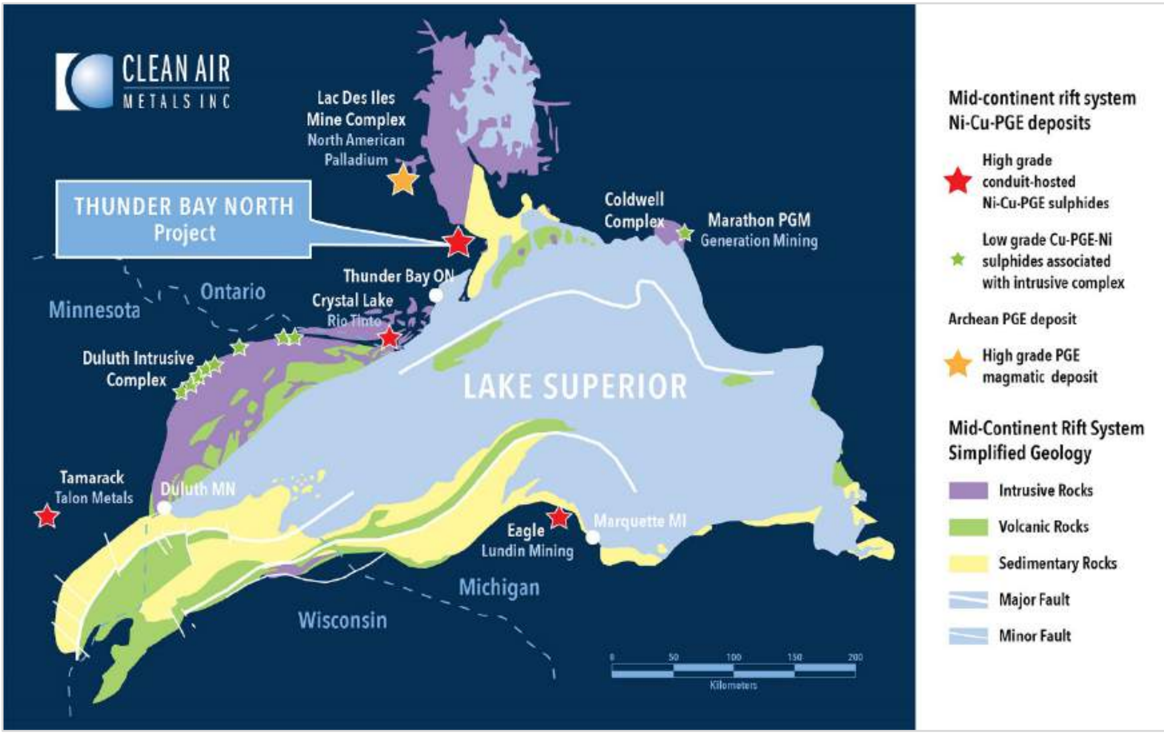


Figure 4-1: Project location map

4.1 Property Land Tenure

The Project is comprised of the Current Lake Property and the Escape Lake Property (Figure 4-2).

4.1.1 Current Lake Property

The Current Lake Property hosts the Current Lake Deposit and is comprised of:

- Upper Current Zone/Current Zone,
- Bridge Zone,
- Beaver Lake West Zone,
- Beaver Lake Zone,
- Cloud Zone,
- 437/ South East Anomaly ("SEA"), and
- two satellite occurrences know as the Lone Island Lake South Intrusion Occurrence and the 025 Intrusion Occurrence.

4.1.2 Escape Lake Property

The Escape Lake Property hosts the Escape Lake Deposit and is comprised of:

- Steepledge North,

- Steepledge South,
- Ribbon Zone, and
- Escape South High Grade Zone ("HGZ")/Escape South Perimeter.

The Project consists of 344 unpatented, single cell, multicell, and partial cell border claims (1456 cell units) covering an aggregate area of approximately 29,725 ha (Figure 4-2, Appendix B).

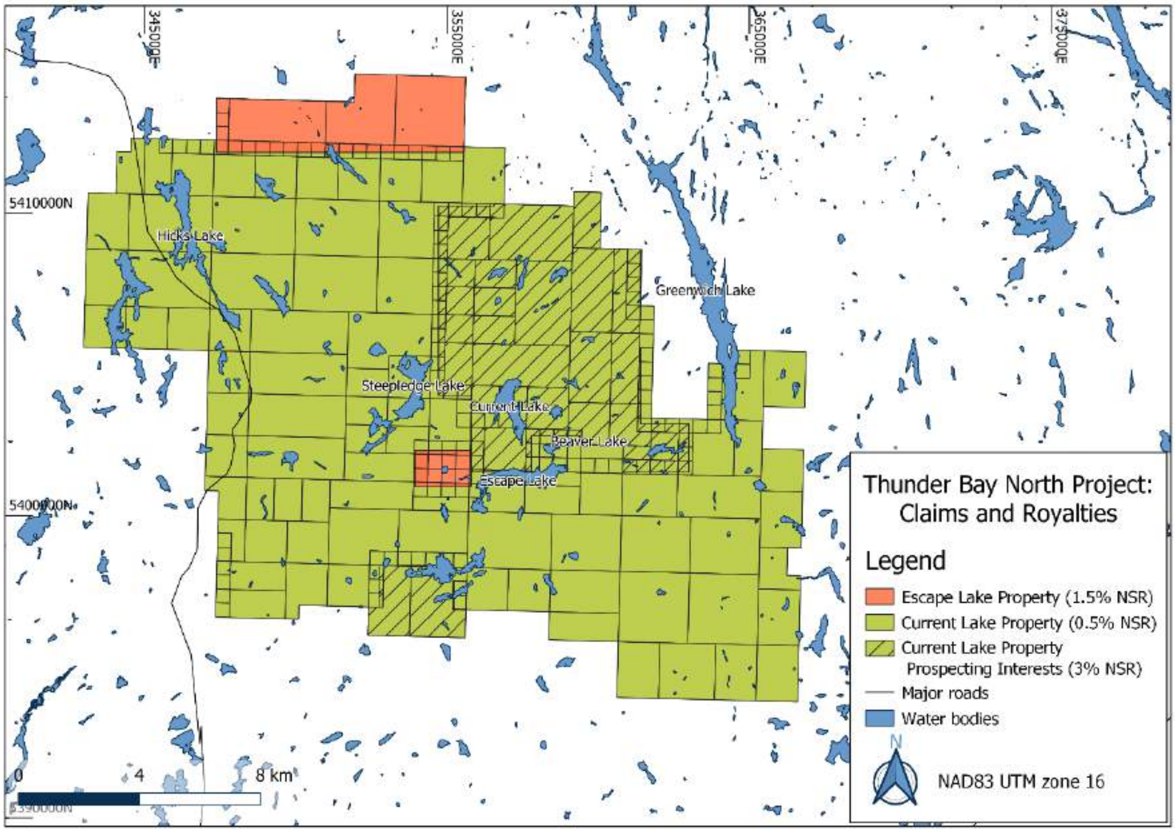


Figure 4-2: Thunder Bay North Project, comprised of the Current Lake Property and the Escape Lake Property

The claims have not been legally surveyed. The government of Ontario requires expenditures of $400 per year per unit, prior to expiry, to keep the claims in good standing for the following year. All claims are currently in good standing with ample credits to keep them in good standing for many years.

The Company's exploration activities are located on lands which the Cooperating Participants assert are part of their traditional territory and in which the Participating First Nations assert their members hold and exercise Rights. The Company and the Cooperating Participants signed a MOA effective as of January 9, 2021.

4.2 Underlying Agreements

4.2.1 The Rio Tinto Option Agreement – Escape Lake Claims

Prior to entering into an agreement with Clean Air through its predecessor Regency Gold Corp. ("Regency"), Benton Resources Inc. (TSXV: BEX; "Benton") entered into a 3-year, C$6 million option agreement with RTEC for the Escape Lake and Escape North properties (the "RTEC option"). RTEC will retain a 1% Net Smelter Royalty ("NSR") on the properties optioned to Benton (and ultimately optioned to Clean Air) (Figure 4-3).

Benton paid RTEC C$3 million on signing of the option agreement on October 9, 2019 and is obligated to pay an additional C$3 million in equal instalments each October 8 of 2020, 2021, and 2022, or as a lump sum remaining balance at any time. Clean Air assumed Benton's financial obligation under the RTEC option agreement by entering into a subsequent option agreement with Benton (the "Benton option") which closed on May 14, 2020.

Clean Air Metals made the first anniversary payment of $1M to RTEC on or about October 1, 2020.

4.2.2 The Panoramic Share Purchase Agreement – Current Lake Deposit and Surrounding Claims

Through the Benton option agreement, Regency also entered directly into a formal binding share purchase agreement with Panoramic Resources Inc. dated January 6, 2020 ("Pan Agreement"). Under the Pan Agreement, Clean Air acquired a 100% ownership interest in the Panoramic subsidiary, Panoramic PGMs (Canada) Limited ("Panoramic"), that holds certain mining claims that protect the Current Lake Deposit area of the Thunder Bay North Project, subject to a registered security interest by Panoramic (Figure 4-3).

Terms of the purchase include an aggregate payment of C$9 million to Panoramic Resources Inc. over a three-year period, including a C$4.5 million down payment on closing which was completed May 14, 2020. Clean Air is obligated to pay an additional C$4.5 million in equal instalments by each May 13 of 2021, 2022, and 2023, or as a lump sum remaining balance at any time. Completion of the payments to Panoramic is an accompanying condition of the Benton option. Panoramic Resources Inc. retains no royalty on the Project.

4.2.3 The Benton Option Agreement

Regency, the public company shell and predecessor to Clean Air, entered into the Benton option on January 6, 2020 (the "Benton option"), pursuant to which Benton assigned its option agreement obligations with RTEC to Regency, with RTEC's permission. Subject to the satisfaction of certain conditions precedent mainly involving the completion of all payments on Benton's behalf to fully exercise the underlying RTEC option and Panoramic Resources Inc. share purchase agreements, Regency, (now Clean Air) would fully acquire 100% right, title and interest in the Escape Lake and Escape Lake North Properties (now Escape Lake Property) and Current Lake claims and accompanying release of the Panoramic Resources Inc. security interest (Figure 4-3).

Regency Gold Corp. formally changed its name to Clean Air Metals Inc. in February 2020 after the reverse takeover of the Regency Board of Directors by the Clean Air management team. The Benton option agreement closed concurrently on May 14, 2020 prior to the resumption of trading of Clean Air (now TSXV: AIR) on May 22, 2020. Escape Lake claims will continue to be listed in the name of Benton Resources Inc. authorizing Clean Air as Agent, until the full vesting of the Benton option, when the claims will be transferred to Clean Air.

Regency issued 24,615,884 common shares of the company to Benton, which are now shares of Clean Air on a 1:1 basis. Clean Air is obligated make the payments to fulfill the terms of the RTEC option between Benton and RTEC and the Pan Agreement in order to fully exercise the Benton option.

4.2.4 Project Royalties – Escape Lake and Current Lake

In addition to the RTEC 1% NSR on the Escape Lake Property optioned to Benton, Benton Resources Inc. will retain a 0.5% NSR on all Escape Lake claims as well as a 0.5% NSR on the previous Panoramic claims which do not already have a pre-existing royalty encumbrance (Figure 4-3).

A portion of the Panoramic claims protecting the Current Lake Deposit have an existing 3% NSR to Drs. Graham Wilson and Gerald Harper, the prospectors that discovered the original PGE-Cu-Ni boulder occurrence at the north end of Current Lake. The 3% NSR occurs on the northeast portion of the Property and includes the Current Zone as well as another block at the southern extent of the Property. The royalty includes a prepayment (advance royalty) totalling $50,000 paid annually and divided equally between the prospectors. Under the terms of the original option agreement with the prospectors and Magma Metals (Canada) Limited (predecessor to Panoramic Resources and Clean Air) Clean Air may reduce the royalty to a 2% NSR on payment of C$1 million at any time. Clean Air also enjoys a Right of First Refusal period of 60 days to match any commercial offer to purchase and retire the remaining royalty.

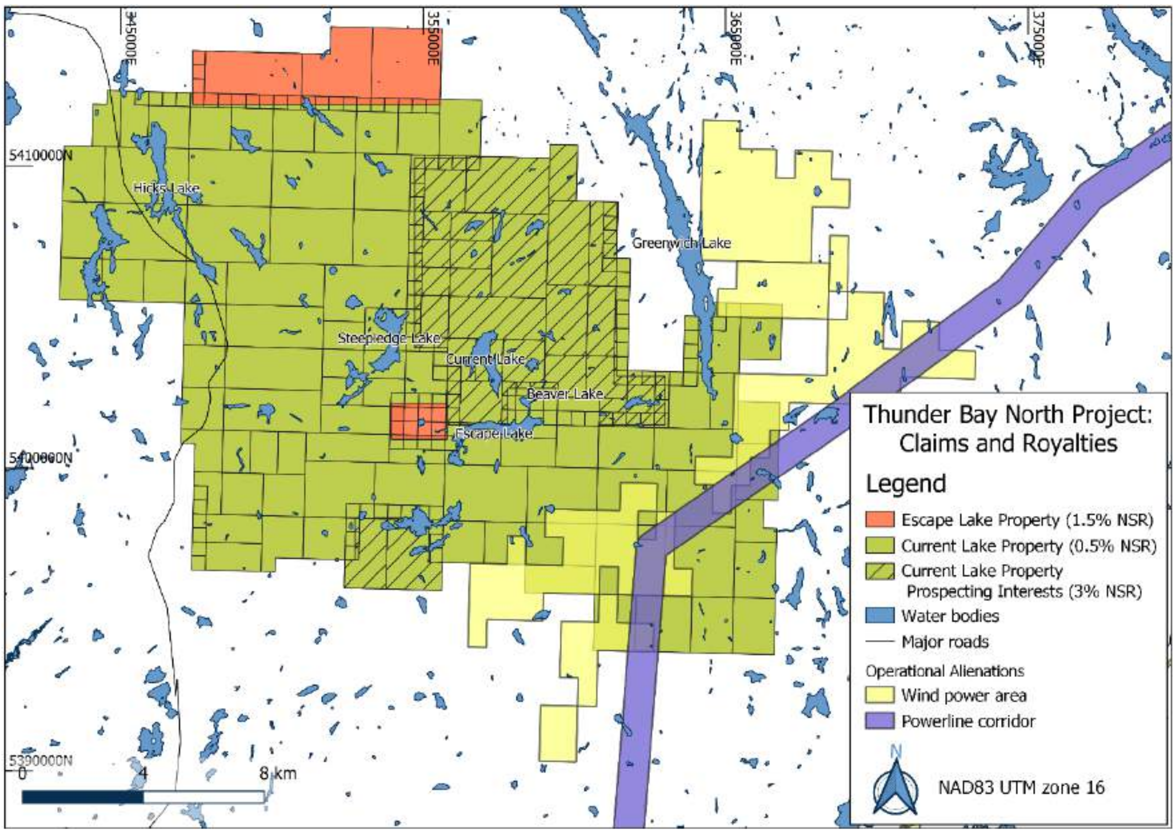


Figure 4-3: Project tenure, claims, NSR, and operational alienations

4.2.5 Permits and Authorization

There are valid Ministry of Natural Resources and Forestry Land Use permits on the Project authorizing an exploration camp and septic system. The Company, under its subsidiary Panoramic also holds a crushed aggregate quarry permit to take crushed rock to use as aggregate from a pit on the Property. The Project does not hold the surface rights on the properties.

The Ontario Mining Act requires Ministry of Energy, Northern Development and Mines ("MENDM") issued Exploration Permits or Plans for exploration on Crown Lands. The nominal processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by MENDM and presented to the Indigenous communities whose traditional lands will be impacted by the work. The Company discussed the exploration plans with both the MENDM and local communities and has obtained the required three-year Exploration Permits for the Project.

4.2.6 Environmental Considerations

There are no known environmental liabilities associated with the Property. Permits are required if, during the course of exploration, waterways are affected. No other significant factors or risks exist which may affect access, title, or the right, or ability to perform work on the Property.

4.2.7 Mining Rights in Ontario

The Project is located in the province of Ontario, a jurisdiction that has a well-established permitting process. This process is coordinated between the municipal, provincial, and federal regulatory agencies. As is the case for similar mine developments in Canada, the Project is subject to federal and provincial environmental assessment process. Due to the complexity and size of such projects, various federal, and provincial agencies have jurisdiction to provide authorizations or permits that enable Project construction to proceed.

Federal agencies that have significant regulatory involvement include the Canadian Environmental Assessment Agency, Environment, and Climate Change Canada, Natural Resources Canada, and Fisheries, and Oceans Canada.

On the Ontario provincial agency side, the Ministry of Northern Development and Mines, Ministry of Environment, and Climate Change, Ministry of Transportation, and the Ministry of Natural Resources and Forestry each have key project development permit responsibilities.

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

5.1 Accessibility

The Project is accessible using a series of intermittently maintained logging roads branching from Armstrong Highway 527, which in turn branches from the Trans-Canada Highway 11-17 a short distance east of the city of Thunder Bay.

Access to the Current Lake Property from Thunder Bay is as follows:

- 10 km east of Thunder Bay along Highway 11/17 to Highway 527;
- 22.7 km north on Highway 527 to the Escape Lake logging road;
- 17.2 km east on the Escape Lake road to the Shallownest East logging road;
- 5.3 km north on the Shallownest East road to the Steepledge logging road that branches to the west;
- 3.5 km west along the Steepledge road to a road junction; and
- 0.65 km south to the immediate vicinity of the Current Lake Deposit (immediately above the Beaver Lake West/Bridge Zone).

Access to the Escape Lake Property from the junction of Highway 527 and the Escape Lake Road is as follows:

- 1.8 km east along the Escape Lake road to the Finn road;
- 16.9 km north along the Finn road to the Shark road;
- 2.4 km south along the Shark road to a recent drill access trail leading approximately 500 m west to the vicinity of the Escape South HGZ.

The Escape Lake, Finn, and Shallownest East logging roads are intermittently maintained by local logging contractors if they have active logging activities in the area.

5.2 Local Resources and Infrastructure

The Company's exploration activities are located on lands which the Cooperating Participants assert are part of their traditional territory and in which the Participating First Nations assert their members hold and exercise Rights.

The Company and the Cooperating Participants signed a MOA effective as of January 9, 2021. The MOA confirms a framework for a mutually beneficial relationship between the Cooperating Participants regarding the Project, based on the relationship set out in a November 2011 Memorandum of Agreement and Communication Protocol among the Cooperating Participants, which remains in effect. The MOA establishes a foundation for collaborative and respectful communications between the Cooperating Participants to facilitate the Company's consultation with the Participating First Nations to identify:

- potential impacts of the Project on the Participating First Nations interests and Rights;
- the appropriate measures to mitigate and avoid any adverse effects; and
- opportunities to enhance positive impacts and benefits.

At present, there is no significant infrastructure in the area. A 230 kW powerline is in the process of being built between Thunder Bay and Wawa, ON. This powerline will cross the southeast corner of the Project where, at the point of closest approach, it is located approximately 6 km southeast from the centre of the Current Lake Deposit.

The land holdings are sufficient to allow for exploration and development. The potential surface rights holdings, that can be triggered when the claims go to lease, are sufficient for development of infrastructure to sustain a mining operation.

Sufficient skilled mining labour is present in Thunder Bay and surrounding communities.

5.3 Climate

The climate is continental with a temperate marine influence from the close proximity of Lake Superior. Temperatures generally range from winter lows of about -35°C to summer highs of about 35°C. Average winter temperatures are in the range of -15°C to -20°C, and average summer temperatures are in the range of 20°C to 25°C.

Annual rainfall is approximately 70 cm with 55 cm to 60 cm of rain and 200 cm to 300 cm of snow annually. Average winter snow depths in the region are about 100 cm to 150 cm.

Exploration activities can be curtailed by snowmelt conditions. It is expected that any future mining operations will be able to be conducted year-round.

5.4 Vegetation and Wildlife

Swamps, marshes, small streams, and small to moderate-size lakes are common. Drainage is provided by the numerous, usually unnamed streams that lead to the Current and MacKenzie rivers, located to the northwest, and the southeast, respectively. Both rivers drain directly into Lake Superior, which is situated about 25 km to the south of the centre of the Project.

Primary vegetation comprises boreal forest of black spruce, jack pine, trembling aspen, and white birch. Large swathes of the Project have been clear-cut logged and are re-generating after tree re-planting programs performed by the logging companies.

The forest around the Project currently provides habitat for wildlife species that are common to mixed boreal forests in Ontario.

The area is characterized by low relief (less than 20 m) with a mixture of muskeg and mature spruce forests. The claims are covered by typical northern boreal forest comprising spruce and jack pine. Local fauna includes moose, wolf, black bear, marten, hare, and several species of birds.

5.5 Physiography

Project elevations vary by about 40 m, from 470 metres above sea level (“masl”) to about 510 masl, averaging approximately 485 masl.

Outcrop is locally rare. Glacial overburden depth is generally shallow, rarely exceeds 20 m, and primarily consists of ablation till, minor basal till, and moderate expanses of outwash sand and gravel.

6. HISTORY

The extensive history of exploration activities on the Project has been described in detail in two previous reports prepared by AMEC, February 2011, and Clark Exploration Consulting, January 2020. Excerpts of this Information are provided in this Section.

Initial exploration in the general region was for uranium and was concentrated in the area of the Christianson uranium showing, discovered in 1949, and located about 5 km east of Current Lake near the western shoreline of Greenwich Lake. A forerunner of RTEC acquired the area that contained the Christianson uranium showing in 1976.

The area was explored for diamonds by Dr. Graham Wilson and Dr. Gerald Harper et al between 1993 and 2000. This led to the discovery of mineralized ultramafic (peridotite) boulders containing elevated grades of Pt-Pd-Cu-Ni along the western shoreline of Current Lake. Pacific North West Capital Corporation optioned the property in 2001; however, they did not conclude the option.

Magma Metals (Canada) Limited then optioned the claims comprising the Current Lake property in 2005. At that stage the Project comprised 26 contiguous mining claims. In 2006, the three Beaver Lake claims were optioned, and in 2007 an additional option on the CasRon property was acquired.

Kennecott staked the Escape Lake claim (a single, pre-2018 15 unit claim) in 2006.

Magma Metals (Canada) Limited was taken over by Panoramic Resources Limited in June 2012 and the Current Lake claims were transferred to Panoramic PGMs (Canada) Limited.

An Earn-In to Joint Venture Agreement was signed between RTEC and Panoramic in mid-2014. RTEC acquired all assets of Kennecott in 2015 including the 15-unit Escape Lake claim.

Benton signed the Benton option on the Escape Lake Property with RTEC on October 9, 2019.

Regency, the public company shell and predecessor to Clean Air, completed a reverse takeover of the Board of Regency on February 12, 2020 and formally changed its name to Clean Air Metals Inc. at the onset of trading on May 22, 2020 under symbol AIR: TSXV.

Benton, with RTEC's permission, assigned its interest in the Escape Lake Property claims to Clean Air in the Benton option agreement dated May 14, 2020. Under additional terms of the same Benton Option, Clean Air also acquired a 100% interest in the Panoramic PGMs (Canada) Limited by a share purchase agreement, subject to a security interest.

6.1 Historical Exploration

The 2020 report prepared by Clark Exploration Consulting presented the exploration work completed from 1976 – 2005) within Table 6-1.

Table 6-1: Project Exploration 1976 - 2005

Activity	Operator
1976	
Field mapping and core drilling	RTEC
1991	
Airborne magnetic and electromagnetic geophysical surveys	Ontario Geological Survey

1993 to 2000	
Rock chip sampling, prospecting, and petrographic, and geochemical research within the Onion Lake, Tartan Lake, and Greenwich Lake areas. In 1999–2000, prospecting, lithogeochemistry, soil sampling, and ground magnetic surveys were conducted in the Current Lake vicinity.	Original prospectors and discoverers, Dr. Gerald Harper, Dr. Graham Wilson, and Francis Mann.
2001	
Discovery of mineralized ultramafic (peridotite) boulders along the western shoreline of Current Lake that contained elevated Pt-Pd-Cu-Ni grades.	Dr. Graham Wilson
2001 to 2002	
Ground magnetic and electromagnetic surveys and a six-hole core drill program, totalling 813.5 m; no mineralized ultramafic rocks were encountered.	Pacific North West Capital Corporation
2002 to 2005	
No known work was done until mid-2005 when the then Thunder Bay North claims (centred on Current Lake) were optioned to Magma Metals Limited of Perth, Western Australia.	Dr. Gerald Harper, Dr. Graham Wilson

The internal 2011 AMEC PEA prepared for Magma Metals (Canada) Limited presented the exploration work completed by Magma Metals (Canada) Limited and Panoramic (2006 – 2018) within Table 6-2. Exploration activities from 2019 through 2020 are summarized in Section 9.

Table 6-2: Previous Project Exploration by Magma/Panoramic/RTEC 2006 to 2018

Activity	Duration Date	Performed By
2006		
Prospecting, Geological Mapping, Petrography	14/05/2006–17/05/2006	Turnstone Geological Consulting
Helicopter-borne Magnetic/Radiometric Survey	07/07/2006–11/07/2006	McPhar Geosurveys
Phase 1 Current Lake Diamond Drilling (Diamond Drilling), 6 holes (1,590.5 m)	08/12/2006–04/04/2006	Turnstone Geological Consulting
2007		
Helicopter-borne vertical time domain electromagnetic (“VTEM”) Survey	27/02/2007–03/03/2007	Geotech Limited
Induced Polarization (“IP”)/Resistivity Survey	09/03/2007–18/03/2007	Abitibi Geophysique
Phase 2 Current Lake Diamond Drilling, 28 holes (3,078.3 m)	16/04/2007–21/10/2007	Magma Metals (Canada) Limited
Phase 1 Beaver Lake Diamond Drilling, 1 core hole, (500 m)	04/09/2007–21/09/2007	Magma Metals (Canada) Limited
Boat Magnetic Surveys	05/07/2007–06/07/2007	Mtec Geophysics
Phase 2 Beaver Lake Diamond Drilling, 6 holes (2,014.5 m)	22/11/2007–14/12/2007	Magma Metals (Canada) Limited

Activity	Duration Date	Performed By
Lone Island Lake Diamond Drilling, 1 hole (387 m)	22/11/2007–14/12/2007	Magma Metals (Canada) Limited
Borehole Pulse Electromagnetic (EM) Survey	10/12/2007–21/12/2007	Crone Geophysics & Exploration Ltd.
2008		
Drill Core Physical Property Tests	12/01/2008–13/01/2008	Southern Geoscience Consultants
Borehole Pulse EM Survey	22/01/2008–02/02/2008	Crone Geophysics & Exploration Ltd.
Phase 3 Current Lake Ice Diamond Drilling, 23 holes (1,834 m)	21/02/2008–16/03/2008	Magma Metals (Canada) Limited
Resistivity/IP Survey	21/02/2008–13/03/2008	Abitibi Geophysique
Phase 3 Beaver Lake Diamond Drilling, 26 holes (8,008.5 m)	11/02/2008–26/06/2008	Magma Metals (Canada) Limited
RTEC Phase I Escape Lake Drilling, 1 hole (500 m)	01/03/2008-08/03/2008	RTEC
TBNP Airborne Magnetic Survey	03/03/2008–05/03/2008	Aeroquest Limited
Petrography and Mineralogy	09/03/2008–12/03/2008	Magma Metals (Canada) Limited
Regional Airborne Magnetic Survey	07/05/2008–15/05/2008	Aeroquest Limited
Phase 4 Current Lake Barge Diamond Drilling, 67 holes (5,571.5 m)	23/06/2008–08/11/2008	Magma Metals (Canada) Limited
Phase 4 Beaver Lake Diamond Drilling, 40 holes (13,089.7 m)	29/06/2008–19/12/2008	Magma Metals (Canada) Limited
Boat Magnetic Surveys, Current, and Steepledge Lakes	08/08/2008–09/08/2009	Mtec Geophysics
Petrography and Mineralogy	06/09/2008–10/09/2008	Turnstone Geological Consulting
Petrology and Lithogeochemistry	15/09/2009–19/09/2008	R. Sproule, GeoDiscovery Group
Geological Mapping	12/10/2008–27/10/2009	Turnstone Geological Consulting
Reconnaissance Diamond Drilling, 7 holes (2,765 m); completed at SEA, Steepledge, and Lone Island Lake areas	17/10/2008–13/12/2008	Magma Metals (Canada) Limited
Structural Study	10/11/2008–13/11/2008	SRK Consulting Ltd. ("SRK")
2009		
Phase 5 Current Lake Ice Diamond Drilling, 86 holes, (6,726 m)	23/01/2009–24/03/2009	Magma Metals (Canada) Limited
Lake Ice Magnetic Survey, Steepledge Lake	25/02/2009–26/02/2009	Mtec Geophysics
Helicopter-borne VTEM Survey	15/02/2009–23/02/2009	Geotech Limited

Activity	Duration Date	Performed By
Helicopter-borne Follow-up VTEM Survey	28/03/2009	Geotech Limited
Fixed Loop transient electromagentic ("TEM") Survey, Current Lake	05/03/2009–17/03/2009	Crone Geophysics & Exploration Ltd.
HT SQUID Fixed Loop TEM Survey	10/03/2009–21/03/2009	Crone Geophysics & Exploration Ltd.
Phase 5 Beaver Lake Diamond Drilling, 38 holes, (7,989.5 m)	24/03/2009–20/06/2009	Magma Metals (Canada) Limited
Borehole Pulse EM Survey	22/03/2009–09/04/2009	Crone Geophysics & Exploration Ltd.
Triple Parameter Probe Survey	06/2009	Crone Geophysics & Exploration Ltd.
Magnetometric Resistivity ("MMR") Downhole Test Survey	21/05/2009-31/05/2009	Crone Geophysics & Exploration Ltd.
Geological Mapping	26/05/2009–26/10/2009	Magma Metals (Canada) Limited
Phase 6 Beaver Lake Diamond Drilling, 45 holes (12,460.8 m)	21/06/2009–31/10/2009	Magma Metals (Canada) Limited
Borehole Pulse EM Surveys	03/06/2009–23/06/2009	Crone Geophysics & Exploration Ltd.
Phase 1 Steepledge Lake Barge Diamond Drilling, 32 holes, (6,212 m)	24/06/2009–07/10/2009	Magma Metals (Canada) Limited
Borehole MMR Test Surveys	24/05/2009–30/06/2009	Crone Geophysics & Exploration Ltd.
Borehole Pulse EM Surveys	25/07/2009–08/08/2009	Crone Geophysics & Exploration Ltd.
Borehole Pulse EM Surveys	25/08/2009–02/09/2009	Crone Geophysics & Exploration Ltd.
Test Heavy Mineral Concentrate ("HMC") Geochemistry Survey	20/09/2009–28/09/2009	Magma Metals (Canada) Limited
Test Lake Sediment Geochemistry Survey	07/10/2009–19/10/2009	Magma Metals (Canada) Limited
Phase 2 Steepledge Lake Helicopter Diamond Drilling, 7 core holes, (2,217 m)	15/10/2009–10/12/2009	Magma Metals (Canada) Limited
Geophysical Data Review	20/10/2009–13/11/2009	W. Hughes, WHEM Consulting
Borehole Pulse EM Surveys	25/10/2009–04/11/2009	Crone Geophysics & Exploration Ltd.
Airborne Light Detection and Ranging ("LIDAR") Survey (DTM	16/11/2009-17/11/2009	Terrapoint Aerial Services
Structural Study	01/11/2009-05/11/2009	Taloumba Inc.
Phase 7 Beaver Lake Diamond Drilling, 22 holes, (4,195.5 m)	01/11/2009–17/12/2009	Magma Metals (Canada) Limited

Activity	Duration Date	Performed By
2010		
Lithogeochemistry Study	12/01/2010–02/07/2010	Taloumba Inc.
Phase 8 Beaver Lake Diamond Drilling, 128 holes, (30,519.5 m)	16/01/2010–27/04/2010	Magma Metals (Canada) Limited
Borehole Pulse EM Surveys	19/01/2010–17/02/2010	Crone Geophysics & Exploration Ltd.
RTEC Phase II Escape Lake Drilling, 3 holes (1599 m)	11/02/2010-01/03/2010	RTEC
Phase 3 Steepledge Lake Diamond Drilling, 14 holes, (2,242.0 m)	14/02/2010–14/03/2010	Magma Metals (Canada) Limited
Borehole MMR Survey	18/02/2010–26/03/2010	Crone Geophysics & Exploration Ltd.
Physical Properties and North Seeking Gyro Survey	02/2010-03/2010	DGI Geoscience Inc.
Moving Loop/Fixed Loop Ground EM Surveys	23/03/2010–10/05/2010	Crone Geophysics & Exploration Ltd.
Cesium Vapour Ground Magnetic Survey	27/03/2010–18/04/2010	Crone Geophysics & Exploration Ltd.
Borehole Physical Rock Properties Survey	20/02/2010–03/03/2010	DGI Geoscience Inc.
Borehole Pulse EM Surveys	11/05/2010–08/06/2010	Crone Geophysics & Exploration Ltd.
Gravity Ground Test Survey	12/05/2010–21/05/2010	Eastern Geophysics Ltd.
Current Lake Follow-up Diamond Drilling, 4 holes, (661 m)	28/04/2010–13/06/2010	Magma Metals (Canada) Limited
Reconnaissance Mapping and Sampling Program, Hicks Lake Area	17/05/2010-08/07/2010	Magma Metals (Canada) Limited
Phase 3 Lone Island Lake Reconnaissance Diamond Drilling, 12 holes (4,249.5 m)	06/05/2010–21/07/2010	Magma Metals (Canada) Limited
Phase 9 Beaver Lake Diamond Drilling, 28 holes, (5,843.9 m)	07/05/2010–21/07/2010	Magma Metals (Canada) Limited
Phase 2 SEA Diamond Drilling, 5 holes, (1,429 m)	06/06/2010–29/07/2010	Magma Metals (Canada) Limited
Cesium Vapour Ground Magnetic Survey	09/06/2010–14/07/2010	Crone Geophysics & Exploration Ltd.
Gravity Ground Survey	03/07/2010–18/07/2010	Eastern Geophysics Limited
HMC Geochemistry Survey	17/06/2010-02/09/2010	Magma Metals (Canada) Limited
Lake Sediment Geochemistry Survey	03/08/2010-05/10/2010	Magma Metals (Canada) Limited
Falcon Airborne Gravity Gradiometer Survey	14/08/2010–27/08/2010	Fugro Airborne Surveys
Borehole Pulse EM and 3-axis Magnetic Survey	23/08/2010–03/09/2010	Crone Geophysics & Exploration Ltd.

Activity	Duration Date	Performed By
Gravity Anomaly Follow-up Diamond Drilling, 2 holes (2229.0 m)	09/09/2010-21/11/2010	Magma Metals (Canada) Limited
Phase 10 Beaver Lake Diamond Drilling, 37 holes (8853.0 m)	08/09/2010-13/12/2010	Magma Metals (Canada) Limited
Surface MMR test survey (15 holes, Beaver Lake area)	04/2010-062010	Crone Geophysics & Exploration Ltd.
UTEM Inductive Source Resistivity ("ISR") Test Survey (Beaver Lake and SEA Areas)	01/10/2010-10/10/2010	Lamontagne Geophysics Ltd.
Sulphide Fractionation Study	01/10/2010-12/11/2010	Dr. A.E. Beswick
2011		
Borehole Pulse EM and 3-axis Magnetic Survey (Beaver Lake and SEA Series Diamond Drilling holes)	09/01/2011–27/03/2011	Crone Geophysics & Exploration Ltd.
Cesium vapour ground magnetic survey, Shallownest Lake Grid	01/02/2011-06/02/2011	Crone Geophysics & Exploration Ltd.
RTEC Phase III Escape Lake Drilling, 4 holes (2443.26 m)	15/01/2011-05/03/2011	RTEC
Phase 4 SEA Diamond Drilling, 5 holes (555.0 m)	20/01/2011-03/02/2011	Magma Metals (Canada) Limited
Phase 4 Lone Island Lake Recon, 2 holes (333.0 m)	01/02/2011-05/02/2011	Magma Metals (Canada) Limited
Cesium vapour ground magnetic survey, Escape Lake Grid	08/02/2011-19/02/2011	Crone Geophysics & Exploration Ltd.
Escape Lake Diamond Drilling, 3 holes (601.3 m)	09/02/2011-17/02/2011	Magma Metals (Canada) Limited
Phase 7 Current Lake Diamond Drilling, 25 holes (2380 m)	03/02/2011-12/03/2011	Magma Metals (Canada) Limited
Phase 11 Beaver Lake Diamond Drilling, 10 holes (2943.0 m)	04/02/2011-27/03/2011	Magma Metals (Canada) Limited
Ground Gravity Survey, Escape, and Beaver Lake grids	10/02/2011-12/03/2011	Eastern Geophysics Ltd.
Phase 4 Steepledge Winter Recon Diamond Drilling, 9 holes (3296.5 m)	27/02/2011-09/05/2011	Magma Metals (Canada) Limited
Cesium vapour ground magnetic survey, northern Current Lake	07/03/2011-12/03/2011	Crone Geophysics & Exploration Ltd.
Borehole Pulse EM and 3-axis Magnetic Survey, Steepledge Lake	28/03/2011–12/04/2011	Crone Geophysics & Exploration Ltd.
Z-TEM Airborne Survey (629 line-km oriented at 060^0, Current, Steepledge, and Lone Island lakes, and SEA areas)	24/05/2011-05/06/2011	GeoTech Limited
Phase 12 Beaver Lake Diamond Drilling, 37 holes (14,475.0 m)	11/05/2011-11/08/2011	Magma Metals (Canada) Limited

Activity	Duration Date	Performed By
Dynamic Textures, Fabrics, and Geochemistry Study	13/06/2011-31/10/2011	R.J.F. Scoates, Magma Metals (Canada) Limited
Borehole Pulse EM and 3-axis Magnetic Survey, Beaver Lake, and SEA areas	25/06/2011–31/07/2011	Crone Geophysics & Exploration Ltd.
Reconnaissance Mapping and Sampling, Hicks Lake Area	06/09/2011-12/09/2011	Magma Metals (Canada) Limited
Reconnaissance geological mapping, Lone Island Lake Area	13/09/2011-17/09/2011	Magma Metals (Canada) Limited
Phase 13 Beaver Lake Diamond Drilling, 17 holes (10,866.0 m)	06/09/2011-17/12/2011	Magma Metals (Canada) Limited
Borehole Pulse EM and 3-axis Magnetic Survey, Beaver Lake	21/10/2011–13/11/2011	Crone Geophysics & Exploration Ltd.
3D Downhole IP Test Survey	15/11/2011-16/12/2011	JVX Geophysics
Borehole Pulse EM and 3-axis Magnetic Survey, Beaver Lake	15/12/2011–22/12/2011	Crone Geophysics & Exploration Ltd.
2012		
Borehole Pulse EM and 3-axis Magnetic Survey	03/01/2012–25/01/2012	Crone Geophysics & Exploration Ltd.
RTEC Phase IV Escape Lake Drilling, 4 holes (2370 m)	07/02/2012-15/03/2012	RTEC
Phase 5 Lone Island Lake South Recon, 2 holes (519.0 m)	25/02/2012-24/03/2012	Magma Metals (Canada) Limited
Deep ZTEM Diamond Drilling, 1 hole (1122.0 m)	04/03/2012-07/04/2012	Magma Metals (Canada) Limited
Borehole Pulse EM and 3-axis Magnetic Survey	29/05/2012–07/06/2012	Crone Geophysics & Exploration Ltd.
Phase 5 Steepledge Winter Diamond Drilling, 2 holes (450.0 m)	27/04/2012-07/05/2012	Magma Metals (Canada) Limited
Early Mid-continent Rift ("MCR") Corridor Reconnaissance Lakeshore Mapping and Sampling Program (Central and Northern Thunder Bay North Project)	30/05/2012-14/07/2012	Panoramic
Soil Gas Hydrocarbon Test Survey over Bridge Zone Mineralization	11/08/2012-14/08/2012	Ontario Geological Survey
Ray Lake Diamond Drilling, 1 core hole (351.0 m)	11/04/2012-19/05/2012	Panoramic
Phase 14 Beaver Lake Diamond Drilling, 15 holes (12,220.0 m)	20/08/2012-04/12/2012	Panoramic
Airborne Magnetic Anomaly Field Check of marginal Thunder Bay North Claims	25/08/2012-16/11/2012	Panoramic
Borehole Pulse EM and 3-axis Magnetic Survey, SEA Area	31/10/2012–12/12/2012	Crone Geophysics & Exploration Ltd.

Activity	Duration Date	Performed By
2013		
Reconnaissance geological mapping, Steepledge Lake, Lone Island Lake, Current Lake, and Hicks Lake areas	04/06/2013-09/10/2013	Panoramic
Synoptic and Infill geological mapping, various locations in central part of property	04/06/2013-13/08/2013	Panoramic
Soil Gas Hydrocarbon Geochemical Survey, Beaver Lake East, and SEA Intrusion Grid	04/06/2013-14/06/2013	Panoramic
Soil Gas Hydrocarbon Geochemical Survey, Steepledge South Grid	17/06/2013-24/06/2013	Panoramic
Soil Gas Hydrocarbon Geochemical Survey, Lone Island Lake South Grid	25/06/2013-28/06/2013	Panoramic
2014		
Cesium vapour ground magnetic survey, Steepledge South Grid	19/02/2014-24/02/2014	Panoramic
Cesium vapour ground magnetic survey, 025 Intrusion area	25/03/2014-28/03/2014	Panoramic
Thunder Bay North North Reconnaissance Geological Mapping Program	04/06/2014-24/10/2014	Panoramic
Thunder Bay North South Reconnaissance and Synoptic Geological Mapping Program	06/06/2014-30/07/2014	Panoramic
Prospecting of Late Magnetic Granitoid Stocks, Southeastern Thunder Bay North	21/07/2014-25/07/2014	Panoramic
2015		
Thunder Bay North West Reconnaissance Geological Mapping Program	23/06/2015-11/11/2015	Panoramic
Thunder Bay North Reconnaissance Geological Mapping Program, southeast Thunder Bay North, 025 Intrusion area	24/06/2015-10/09/2014	Panoramic
RTEC Phase V Escape Lake/Thunder Bay North Drilling, 5 holes (2738.16 m)	25/07/2015-25/11/2015	RTEC
2016		
RTEC Phase VI Escape Lake/Thunder Bay North Drilling, 11 holes (4287.88 m)	17/01/2016-12/03/2016	RTEC
Thunder Bay North Reconnaissance Geological Mapping, southeast Thunder Bay North, 025 Intrusion area	11/05/2015-25/07/2014	Panoramic
RTEC Gravity Survey, 025 Intrusion	21/09/2016-27/09/2016	Discovery International Geophysics

Activity	Duration Date	Performed By
RTEC Semi-Airborne HeliSAM Survey, Thunder Bay North/Escape Lake	19/09/2016-12/10/2016	Discovery International Geophysics
2017		
Thunder Bay North Reconnaissance Geological Mapping, Hilltop, and 025 Intrusion areas	17/05/2017-08/06/2017	Panoramic
2018		
Thunder Bay North Reconnaissance Geological Mapping, 025 Intrusion area	05/06/2017	Panoramic

6.2 Previous Mineral Resource Estimates

The Mineral Resource Estimate (effective date of January 18, 2021) discussed herein (Section 14.9) supersedes historical and past Mineral Resource Estimates presented in this section.

The following historical information is relevant to provide context but is not current and should not be relied upon. The QPs responsible for the preparation of this Technical Report have not done sufficient work to classify the historical estimate as current Mineral Resources or Mineral Reserves, and the Company is not treating any historical estimates as Mineral Resource Estimates.

Three previous, historic Mineral Resource Estimates were calculated for the Current Lake Deposit. The first two and were documented by NI43-101 Technical Reports, the third was reported in a Magma Metals (Canada) Limited February 23, 2012 Press Release that was issued after a takeover bid was made for Magma Metals Limited (and its Canadian subsidiary) by Panoramic Resources Limited.

6.2.1 September 29, 2009 SRK Consulting Ltd. Resource Estimate

The September 29, 2009 SRK estimate comprised the first resource calculation for the Current Lake Deposit and considered 333 holes (50,416 m) drilled by Magma Metals (Canada) Limited between 2007 and 2009. It was also the first Mineral Resource calculated within the Project boundaries. The effective date of this Mineral Resource Estimate was September 7, 2009.

The database used at the time included downhole survey records for 3,810 intervals, 3,940 stratigraphic intervals and 19,518 sample intervals with assay results for Au (ppm), Pt (ppm), Pd (ppm) and Ag g/t and multi-element inductively coupled plasma scans (“ICP”), for which only Cu (ppm), Ni (ppm) and Co (ppm) were considered for resource estimation. The resource database also included 559 specific gravity (“SG”) measurements performed by pycnometry and 469 specific gravity measurements on drill core collected by the water displacement method. Only the core SG data were considered for resource estimation. A linear regression established between core SG data and Ni assays was used to assign a SG value to resource blocks.

SRK constructed a series of 3D wireframes for various lithologies and the polymetallic sulphide mineralization (using a platinum equivalent threshold). The interpretation of final shape and extent of the sulphide mineralization was a collaborative effort between Magma Metals (Canada) Limited and SRK staff.

After review SRK composited all assay data to one metre lengths and subdivided the sulphide mineralization into six grade sub-domains for geostatistical analysis and grade estimation and seven sub-domains for variography. Appropriate top cuts were selected after review of log normal distributions. Multivariate variography was conducted for each of the seven metals in each sub-domain, considering the excellent correlation existing between the metals. Variography was completed on raw composited data to produce single structure multivariate omni-directional downhole semi-variograms. Pt, Pd, Ni, Au, Cu, Ag, and Co grades were estimated in each of the domains separately using ordinary kriging and estimation parameters derived from variography. Two estimation passes were used for assigning grades to each domain, considering appropriate estimation parameters, and search neighbourhood sizing.

Two block models, aligned with the local UTM grid, were created for each of the mineralized zones within the Current Lake Deposit. Block size was set at ten by ten by five metres based primarily on density of sampling. The block model (percentage model) was populated with percentages from the wireframe intersection, grades, slope of regression, standard deviation, the number of informing points, block variance, SG, and the domain codes.

The open pit Mineral Resources are reported at a cutoff grade of 1.0 g/t platinum equivalency (“PtEq”), whereas underground Mineral Resources are reported at a cutoff grade of 2.0 g/t PtEq. The Mineral Resource Statement is summarized in Table 6-3.

Table 6-3: Consolidated Mineral Resource Statement*, SRK Consulting, September 7, 2009

	Quantity	Grade								Contained Metal							
	Tonnage	Pt	Pd	Au	Ag	Cu	Ni	Co	PtEq	Pt	Pd	Au	Ag	PtEq	Cu	Ni	Co
Class	[000’t]	[g/t]				[%]	[%]	[ppm]	[g/t]	[000’oz]					[tonnes]		
Open Pit Resources†																	
Indicated	4,295	1.33	1.26	0.08	1.88	0.32	0.21	149	2.83	184	173	12	259	391	13,633	9,081	639
Inferred	3,033	0.99	0.94	0.06	1.54	0.25	0.19	147	2.16	97	91	6	151	210	7,632	5,623	446
Underground Resources†																	
Indicated	286	1.66	1.52	0.10	2.42	0.42	0.28	182	3.67	15	14	1	22	34	1,193	798	52
Inferred	563	1.44	1.35	0.09	2.02	0.32	0.23	167	3.02	26	24	2	37	55	1,790	1,296	94
Combined Open Pit & Underground																	
Indicated	4,581	1.35	1.27	0.08	1.91	0.32	0.22	151	2.88	199	187	13	281	425	14,826	9,879	691
Inferred	3,596	1.06	1.00	0.07	1.62	0.26	0.19	150	2.29	123	115	8	188	265	9,422	6,919	540

* Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. The cutoff grades are based on metal price assumptions of US$1,200 per troy ounce platinum, US$250 per troy ounce palladium, US$930 per troy ounce gold, US$13 per troy ounce silver, and US$2.30 per pound copper, US$7.00 per pound nickel and US$15.00 per pound cobalt. Mineral Resources are reported at two platinum equivalent cutoff grades considering conceptual metallurgical recoveries of 75% for platinum and palladium, 50% for gold, 65% for silver, and 90% for copper, nickel, and cobalt sulphides.

† Open pit Mineral Resources are reported at a cutoff grade or of 1.0 gram of platinum equivalent per tonne, whereas underground Mineral Resources are reported at a cutoff of 2.0 of platinum equivalent per tonne.

\# Current Lake includes the “Bridge Zone.”

6.2.1 February 2012, Magma Metals (Canada) Limited Mineral Resource Estimate (Beaver Lake East Only)

An internal geostatistical Mineral Resource Estimate (Leon, G., et. al, 2012) was compiled from drilling information over a 450 m strike length of the Current Lake Intrusion immediately east of, and in addition to, the underground Mineral Resources estimated by AMEC in 2010.

The Mineral Resource Estimate was based on 43 diamond drill holes (16,898 m), the majority of which were completed between May and August 2011. These holes were mostly drilled on 100 m spaced sections with holes spaced 50 m apart along each section.

The internal Mineral Resource Estimate of the East Beaver Lake Zone was constrained by the same technical and financial parameters as the previous AMEC estimates, including cutoff grades, and metal prices. The Mineral Resource Estimate for this area is summarized in Table 6-4.

The mineralization in the resource extension is mainly located at or near the base of the intrusion at depths ranging from 390 m in the western part to 450 m in the eastern part. At the time, the underground Mineral Resource was open to the east.

Table 6-4: East Beaver Lake Mineral Resources

	Tonnage (000's t)	Grade								
		PtEq	Pt	Pd	Rh	Au	Ag	Cu	Ni	Co
		(g/t)						(%)		
Indicated	339	4.25	1.71	1.64	0.08	0.11	3.3	0.55	0.26	0.011
Inferred	260	2.95	1.26	1.22	0.06	0.09	2.2	0.38	0.15	0.007
		Contained Metal								
		PtEq	Pt	Pd	Rh	Au	Ag	Cu	Ni	Co
		Ounces (000's)						Tonnes (000's)		
Indicated		46	19	18	1	1	36	2	1	-
Inferred		25	11	10	-	1	19	1	-	-

6.2.2 March 17, 2011, AMEC Resource Estimate

The AMEC March 17, 2011 Resource Estimate was based on 528 drill holes (97,676 m) and 22,698 core samples (Table 6-5 and Table 6-6). AMEC created two block models for the Current Lake Deposit comprising one for potential open pit mineralization and one for potential underground mineralization. The block models produced were regular models without sub-blocks or percent models. Wireframe models representing topographical, geological, and grade shell boundaries were generated in GEOVIA GEMS™ ("GEMS") and MineSight software from available drill hole data and digitized geological cross section interpretations provided by Magma Metals (Canada) Limited staff. The topographic surface was modelled as a wireframe in GEMS from a 2009 LIDAR digital elevation model provided by Magma Metals.

The original drill core samples were composited to 1 m standard lengths for outlier analysis and grade capping studies. The 1 m composites were subsequently composited to 2 m for exploratory data analysis, continuity analysis (variography), and interpolation.

AMEC conducted outlier studies on the composited grade data for nine grade elements and compounds: Ag, Au, Co, Cu, MgO, Ni, Pd, Pt, and sulphur ("S"). High grade outliers in the low grade shell were capped; no additional special treatment or restrictions were accorded to the capped 2 m composites during interpolation in the low grade shells. The high grade outliers in the high grade shell were not capped; instead, a restricted interpolation search strategy was used to reduce the predicted metal indicated by the capping study targets. Outlier restriction for 2 m composites in the high grade shell plus near-massive to massive sulphides was implemented during grade interpolation by limiting the search distance to a specified maximum for composites with grades above a selected threshold. Beyond the maximum distance, the composites above the threshold were not used for grade interpolation.

Variography was performed to establish continuity ranges. Unit sill variograms (correlograms) were calculated and modelled for Pt, Pd, Cu, Ni, and MgO.

To account for a portion of the Ni and Co occurring as silicate minerals, Ni, and Co in sulphide were estimated by linear regression of MgO to total Ni and total Co, respectively. The portion of metal occurring in silicates is unrecoverable and therefore, must be accounted for. In ultramafic rocks where the dominant silicate minerals are olivine and orthopyroxene, the amount of MgO provides an indication of the amount of unrecoverable Ni and Co.

AMEC also reviewed the potential for deriving a regression equation to estimate rhodium ("Rh") content. AMEC cautions that the Rh regression should only be considered to be appropriate to provide order-of-magnitude results that cannot be relied upon for mine planning or detailed revenue estimates.

SG (density) was estimated by linear regression of the estimated gram per tonne Pt + Pd grades in the open pit and underground block models.

Ordinary kriging ("OK") and inverse-distance weighting to the first power ("IDW") were used for grade interpolation for the Mineral Resource Estimate. Ordinary kriging was used as the estimator for Cu, MgO, Ni, Pd, and Pt. Inverse-distance weighting to the first power was used for Ag, Au, Co, and S. A nearest neighbour ("NN") interpolated block model was used as a means of creating declustered statistics for block model estimation validation.

Estimates were verified by a combination of model volume checks, verification of global statistics, Herco, and swath plots. No errors were noted with the estimations.

Classification of Mineral Resources was based on a combination of grade and geological continuity, and distances to the nearest drill hole.

Table 6-5: March 17, 2011, AMEC Open Pit Mineral Resource Statement

Category	Quantity Tonnage (t x 1,000)	Grade									Contained Metal								
		Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co (g/t)	PtEq (g/t)	Pt (oz x 1,000)	Pd (oz x 1,000)	Rh (oz x 1,000)	Au (oz x 1,000)	Ag (oz x 1,000)	Cu (t x 1,000)	Ni (t x 1,000)	Co (t x 1,000)	PtEq (oz x 1,000)
Indicated	8,460	1.04	0.98	0.04	0.07	1.5	0.25	0.18	140	2.13	282	266	12	18	411	21	15	1	580
Inferred	53	0.96	0.89	0.04	0.07	1.6	0.22	0.18	142	2.00	2	2	—	—	3	—	—	—	3

Notes to accompany Open Pit Mineral Resource Table

1. The Mineral Resource categories under Joint Ore Reserves Committee (“JORC”) Code (2004) are the same as the equivalent categories under CIM Definition Standards for Mineral Resources and Mineral Reserves (2010).
2. The portion of the Mineral Resource underlying Current Lake is assumed to be accessible and that necessary permission and permitting will be acquired.
3. Strip ratio (waste to ore) of 9:1.
4. The open pit Mineral Resource is reported at a cutoff grade of 0.59 g/t PtEq within a Lerchs-Grossman resource pit shell optimized on PtEq.
5. The contained metal figures shown are in situ.
6. No assurance can be given that the estimated quantities will be produced.
7. The PtEq formula is based on assumed metal prices and overall recoveries.
8. All figures have been rounded; summations within the tables may not agree due to rounding. Tonnages and contained metal values are rounded to the nearest 1,000 tonnes, grades are rounded to two decimal places;
9. Tonnage and grade measurements are in metric units. Contained ounces are reported as troy ounces.

Table 6-6: March 17, 2011, AMEC Underground Mineral Resource Statement

Category	Quantity Tonnage (t x 1,000)	Grade									Contained Metal								
		Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co (g/t)	PtEq (g/t)	Pt (oz x 1,000)	Pd (oz x 1,000)	Rh (oz x 1,000)	Au (oz x 1,000)	Ag (oz x 1,000)	Cu (t x 1,000)	Ni (t x 1,000)	Co (t x 1,000)	PtEq (oz x 1,000)
Indicated	1,030	1.63	1.51	0.08	0.11	2.4	0.39	0.24	172	3.48	54	50	2	4	80	4	3	—	115
Inferred	212	1.40	1.29	0.06	0.09	1.9	0.34	0.23	158	3.00	10	9	—	1	13	1	—	—	20

Notes to accompany Underground Mineral Resource Table

1. Mineral Resources are reported to commodity prices of US$875/oz Au, US$14.30/oz Ag, US$13/lb Co, US$2.10/lb Cu, US$7.30/lb Ni, US$400/oz Pd, US$1,470/oz Pt and US$4,000/oz Rh;
2. Mineral Resources are defined within mineable underground shapes;
3. Underground Mineral Resources are reported to a PtEq value of 1.94 g/t;
4. Tonnages and contained metal values are rounded to the nearest 1,000 tonnes, grades are rounded to two decimal places;
5. Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content;
6. Tonnage and grade measurements are in metric units. Ounces are reported as troy ounces.

6.3 Historical Mineral Reserve Estimate

There are no historical Mineral Reserve estimates calculated for the Project.

6.4 Past Production

There is no past production of the Project.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Project is hosted within the Quetico Terrane (Subprovince) of the Superior Province of the Canadian Precambrian Shield (Figure 7-1). The Quetico Terrane is interpreted as a fore-arc accretionary prism deposited during and after peak volcanic activity within the adjacent Wawa, Wabigoon, and Abitibi Terranes between 2,698 and 2,688 million years ago. The terrane is about 70 km wide and forms a linear strip of moderately to strongly metamorphosed and deformed clastic metasedimentary rocks and their melt equivalents.

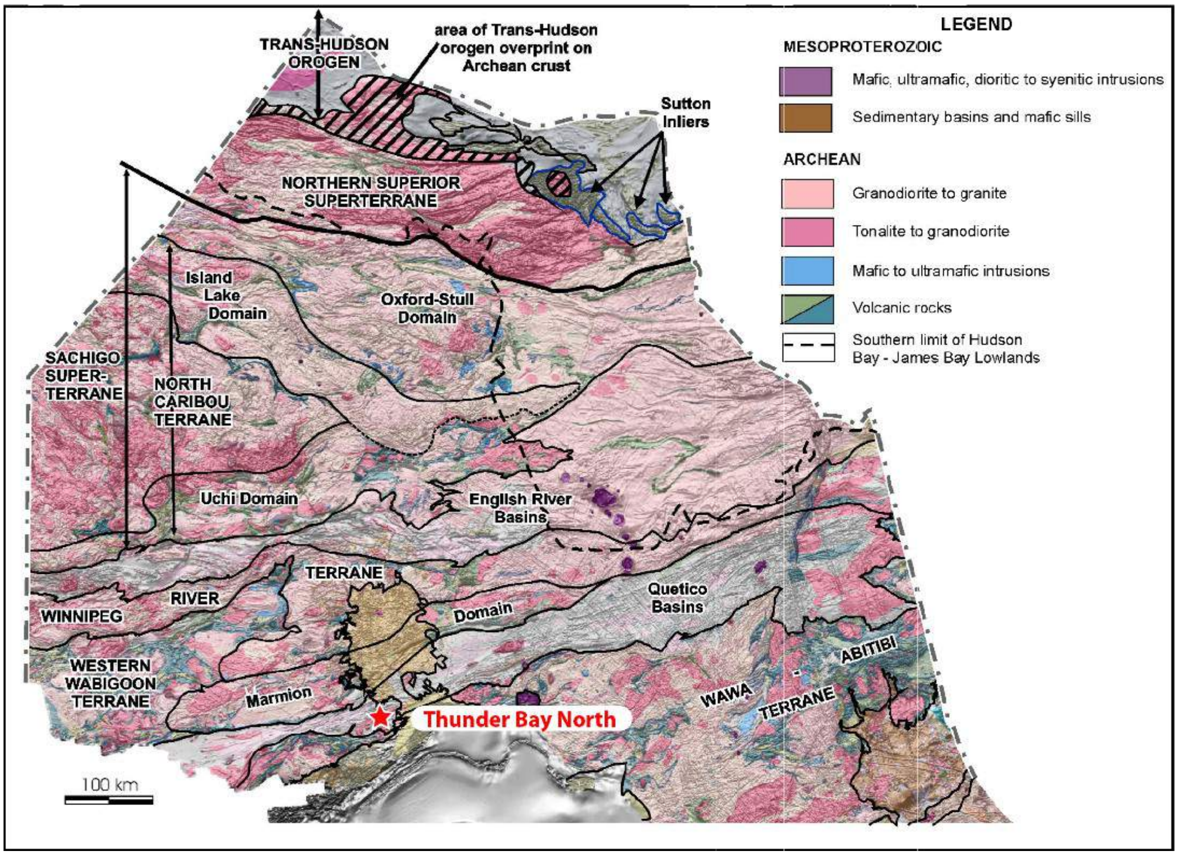


Figure 7-1: Regional geology (after Stott et al. 2007)

Sedimentary rocks that have been identified include turbiditic greywacke and siltstone with rare iron formation, pelite (mudstone), and conglomerate, which were deposited within a large, laterally extensive, submarine basin. Volcanic rocks are extremely rare; however, intrusive rocks are common. These comprise biotite–hornblende–magnetite granitoid bodies of mixed felsic and mafic composition with volumetrically minor ultramafic units; and one- and two-mica granitoids. The igneous activity is interpreted to have occurred some five million years to 20 million years after the accumulation of the sedimentary pile.

Overlying the Quetico Terrane rocks in the Lake Superior region are sediments of the 1,860 mega annum (“Ma”), Paleoproterozoic Animikie Group. These rocks, in the Thunder Bay area, rest unconformably upon Archaean basement and form a homoclinal sedimentary sequence consisting of Gunflint Formation chemical sediments and argillites overlain by Rove Formation shales and greywackes.

At about 1,590 Ma, the Mesoproterozoic Badwater Intrusion was emplaced, followed, at about 1,537 Ma, by the intrusion of the English Bay igneous complex.

Sediments of the Sibley Group unconformably overlie the Animikie Group south of Lake Nipigon, and consist of quartz arenite, argillaceous dolomite, and mudstones. These have an age date range of 1,670 Ma to 1,450 Ma.

The final Proterozoic event was deposition of the Mesoproterozoic (1,140 Ma to 1,090 Ma) Keweenawan Supergroup, comprising a thick edifice of subaerial lava flows, local concentrations of intrusive rocks, and an upper sequence of sedimentary rocks that were deposited within normal, fault-bounded, and asymmetric grabens, developed within and marginal to the Mid-Continent (Keweenawan) Rift.

The rift, now largely beneath Lake Superior, contains as much as 30 km of fill, with volcanic rocks comprising about two-thirds of the total (Miller, 2007). Geophysical data also suggest that a volume of magma nearly equivalent to that filling the rift underplated the crust (Miller, 2007). Considering the rift fill, the volume of underplated material, and the unknown amount of eroded material, the MCR is one of the world's largest Large Igneous Provinces and is an important emerging Cu-Ni–PGE province.

Mafic to ultramafic intrusive rocks in Ontario and Minnesota, related to the formation of the Keweenawan Supergroup, include:

- Voluminous, laterally extensive diabase sills and associated dykes (Nipigon, Logan, and Pigeon River Sills)
- Moderate to very large-size composite and layered mafic intrusions (Duluth Complex, Crystal Lake Gabbro)
- Layered and differentiated ultramafic intrusions (Seagull, Hele, Kitto, and Disraeli Intrusions)
- Volumetrically minor, ultramafic, conduit-like intrusive complexes (Thunder Bay North Intrusive Complex)

The layered and differentiated Seagull, Hele, Kitto, and Disraeli ultramafic intrusions that are hosted within and adjacent to the Nipigon Basin (one arm of the failed MCR valley extended north to Lake Nipigon in Ontario, forming the Nipigon Embayment or Basin) are recognized as hosting disseminated Ni, Cu, and platinum group element ("PGE") sulphide mineralization. The intrusions appear to be primarily sill-like with the exception of the Seagull Intrusion, which has a distinct lopolithic form. Intrusion emplacement appears to have been fault controlled, but no distinct magma feeder zones to the intrusions have been identified.

The Duluth Complex and Crystal Lake gabbro also host low grade Cu-Ni-PGE mineralization. The Duluth Complex consists of a large composite intrusion of primarily anorthosite, troctolite, and gabbro derived from periodic tapping of an evolving magma source. The complex formed from up to 40 separate sheet-like and cone-shaped sub-intrusions. Low–medium-grade Cu-Ni sulphide mineralization that locally contains anomalous PGE concentrations were identified in the basal zones of the Partridge River and South Kawishiwi intrusions near the northwestern contact of the Complex. At least nine deposits have been delineated in the basal 100 m to 300 m of both intrusions. At Crystal Lake, PGE-bearing sulphide Ni mineralization is associated with taxitic textures in a medium- to coarse-grained gabbro.

The conduit-like intrusion hosting PGE-rich Cu and Ni, sulphide mineralization at the Current Lake Deposit is the first of that type recognized in the province. The Current Lake Deposit is just one of at least five intrusions, or groups of intrusions comprising the Thunder Bay North Intrusive Complex and is part of a network of magma conduits or chonoliths formed in association with the Keweenawan-age MCR. The Current Lake Deposit has been precisely dated by the Geological Survey of Canada at 1106.6 ± 1.6 MY using the U-Pb zircon dating method (Bleeker, 2020).

7.2 Thunder Bay North Project Geology

Within the Project area the main rock types are Archean-age granitoid and metasedimentary rocks of the Quetico Terrane, and Mesoproterozoic-age Keweenawan Supergroup mafic to ultramafic intrusive rocks and related intermediate to mafic hybrid intrusive rocks of the MCR. The MCR-related intrusive rocks exhibit PGE-Cu-Ni mineralization to some extent (Figure 7-2). The Current Lake, Steepledge-Escape, and Lone Island Lake North and South intrusions appear to be connected by the diffuse East West Complex which consists of a series of moderately-dipping hybrid sills and dykes that are confined to the Escape Lake Fault Zone which comprises the southernmost part of the Quetico Fault system. The Lone Island Lake South Intrusion is locally mineralized, whereas the Lone Island Lake North Intrusion is not. The 025 Intrusion is located 3 km north-northwest of Current Lake and is the only mineralized intrusion within the Thunder Bay North Complex that is not directly associated with the Quetico Fault Zone and is the only intrusion within the complex where peridotite is exposed in outcrop. To date significant quantities of mineralization have only been identified within the Current Lake and Steepledge-Escape intrusions. The Current Lake Deposit is hosted within the Current Lake Intrusion and the Escape Lake HGZ, Ribbon, and Steepledge North, and Steepledge South mineralized zones are hosted by the Steepledge-Escape Intrusion.

Rock types present within the Project consist of (from oldest to youngest):

- Voluminous, laterally extensive diabase sills and associated dykes (Nipigon, Logan, and Pigeon River Sills);
- A variety of variably deformed Archean-age felsic to intermediate granitoid rocks including granodiorite, diorite, tonalite, and pegmatitic leucogranite;
- Strongly deformed and metamorphosed Archean-age clastic metasedimentary rocks identified as wacke, siltstone, rarely pelite (mudstone), and paragneiss;
- Relatively undeformed discrete, late, Archean-age intrusions composed of magnetic granodiorite, monzonite, and rarely granite; and
- Mesoproterozoic diabase dykes, and occasionally sills of several swarms, mainly the Nipigon swarm.
- Relatively undeformed, practically unmetamorphosed mafic to ultramafic intrusive rocks of the various intrusions comprising the Thunder Bay North Intrusive Complex including varitextured and layered gabbro, olivine melagabbro, feldspathic lherzolite, and lherzolite; these rocks are closely associated with a variety of earlier, genetically related, hybridized, intermediate to mafic intrusive rocks that comprise the initial (preparatory) intrusive phases for the complex.

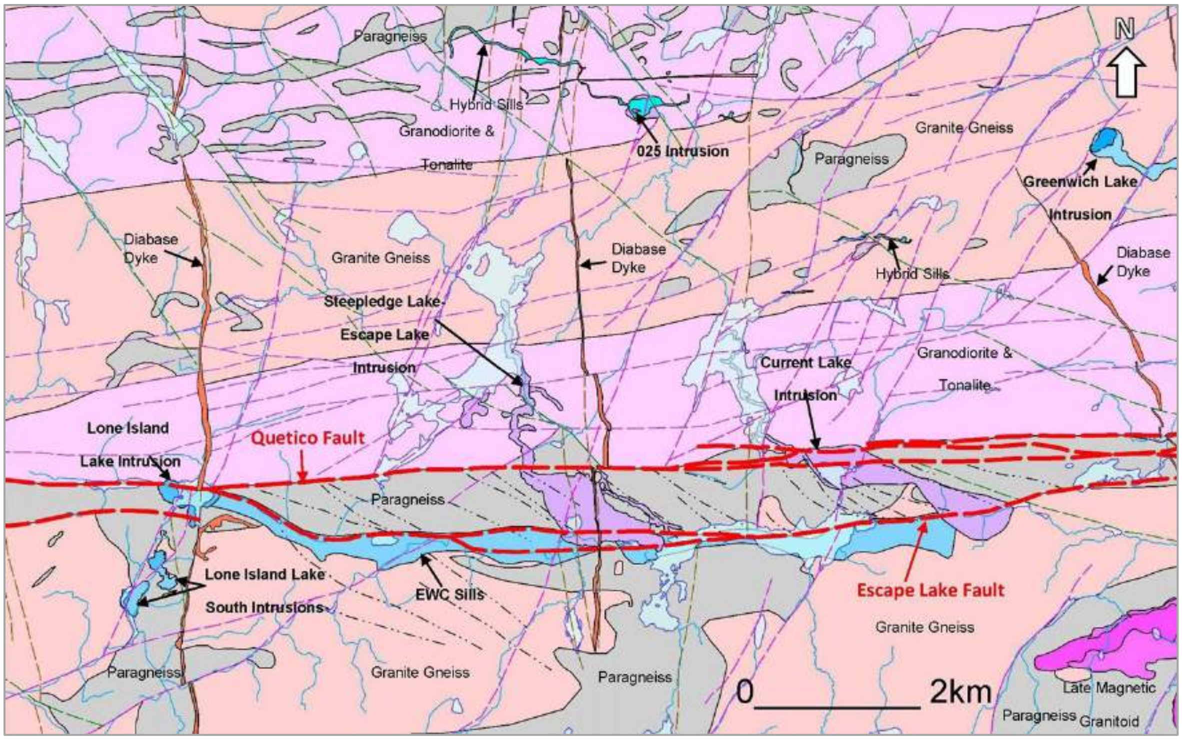


Figure 7-2: Thunder Bay North Project geology map

Most of the presently known mineralization is hosted in both the Current Lake and Steepledge-Escape intrusions, which are just two of at least five Keweenawan (Mesoproterozoic) age magmatic conduits that formed within the Project boundaries along the failed continental margin rift that comprises the MCR system. This group of related intrusions were collectively referred to by Magma Metals (Canada) Limited/Panoramic as the Thunder Bay North Intrusive Complex. There are several distinct, but genetically related rock-type phases present within the various intrusions comprising the complex.

The initial, preparatory phase of the both the Current Lake and Steepledge-Escape intrusions is the lithologically complex and hybridized sequence called hybridized mafic intrusions (the "Hybrid") that contain large quantities of incorporated country rock. Within the Current Lake Intrusion, the composition of the Hybrid in close proximity to the Current Lake Deposit, where it is relatively thin, is a variable mixture of leucogabbro, leucotroctolite, and monzonite. The Hybrid begins to thicken over the Beaver Lake East Zone of the Current Lake Deposit and continues to thicken to the southeast where it forms a saucer-shaped, well-fractionated mafic to intermediate intrusion composed of monzonite, diorite, leucogabbro, gabbro, ferro-gabbro, and oxide gabbro. The Hybrid was forcefully intruded along flat-lying structures and up-dip along the faulted east-trending granitoid–metasedimentary rock contact. It consists of red (hematized, upper) and grey (non-hematized, lower) varieties that usually contain amygdules (infilled gas bubbles) or ocellae (immiscible liquids drops) of calcium carbonate. The red hybrid often contains subround to subangular inclusions of silica which may represent the immiscible remnants of assimilated country rock. Locally the hybrid phases form intrusion breccias containing fragments of the local country rocks. This fractionated, often complex sequence of rocks occurs stratigraphically above the mineralized olivine-bearing to olivine-rich phases and is never mineralized. Thicker intervals of the Hybrid are obviously fractionated and appear to have been primarily static after emplacement with little to no evidence identifiable evidence of sustained flow.

The contact between mafic to intermediate Hybrid phases and ultramafic olivine melagabbro to lherzolite phases, the second intrusive event within the Current Lake Intrusion, is typically sharp, but locally can be gradational over one to two metres. The olivine melagabbro-lherzolite body forms the shallowly southeast plunging mineralized magmatic conduit hosting the Current Lake, Bridge, Beaver Lake West, Beaver Lake, Beaver Lake East, and 437 Zones within the Current Lake Intrusion. The ultramafic portion of the Current Lake conduit does not vary much along its traced strike length of over 5 km. The rocks usually exhibit a magmatic foliation defined by elongated olivines; however, there are no internal contacts within the olivine melagabbro-lherzolite and the only change noted is an inward decrease of plagioclase from the contacts to the centre of the intrusion. There is localized evidence within the Current Zone that there were once two active conduits, one above the other, that eventually merged together. However, to the southeast within the same Current Lake Intrusion, there is no evidence for two conduits.

The Steepledge-Escape Intrusion exhibits a shallow, south- to southeast plunge, is larger and more lithologically complex than the Current Lake Intrusion, and changes dramatically from north to south. The northern portion of the intrusion is a tall hourglass- shaped tube (chonolith) exhibiting ample evidence of the presence of two, possibly three merged conduits and is primarily ultramafic in composition (olivine melagabbro to peridotite). Disseminated mineralization can occur anywhere within the northern ultramafic part of the body. South of the Quetico Fault the intrusion begins to change from a multi-level tube to a tabular body with a fluted top and bottom. Unlike the Current Lake Intrusion, the Steepledge-Escape Intrusion, particularly within the Escape Lake Property has lithologically distinct upper and lower portions and locally contains gabbroic autoliths. The lower part of the intrusion is similar to Current Lake with magmatically foliated olivine melagabbro in contact with a peridotite inward and with depth with an olivine pyroxenite occurring at the base of the body as well as locally at the contact with the upper half of the intrusion. The upper part of the intrusion is a locally vari-textured, locally rhythmically layered gabbro, and olivine gabbro. Mineralization occurs mainly within the upper gabbroic portion in the north, but in the south mineralization generally occurs within the ultramafic portion.

The mineralized portion of both the Current Lake Intrusion and the Steepledge-Escape Intrusion comprise active conduits where there was long-term magma flow and primarily consist of olivine-bearing to olivine-rich mafic to ultramafic intrusive rocks that physically and stratigraphically underlie the hybrid phases and are in sharp contact with it.

- Within the Current Lake Intrusion, the mineralized rocks consist of olivine-bearing to olivine-rich, fine-grained plagioclase-rich two-pyroxene peridotite (at the margins of the intrusion) that grades into plagioclase-bearing to plagioclase-poor (feldspathic), two-pyroxene peridotite (lherzolite containing both clinopyroxene and orthopyroxene) at the core of the intrusion. This plagioclase-rich rock is referred to in Magma Metals (Canada) Limited/Panoramic drill logs as olivine melagabbro and the term, even though describing a rock that is essentially a feldspar-rich lherzolite, has been retained for continuity. All contacts between these two olivine-rich rocks within the intrusion are gradational over metres to tens of metres.
- Within the Steepledge-Escape Intrusion the olivine-bearing to olivine-rich phases are texturally different and are arranged in a more complex manner than similar phases within the Current Lake Intrusion. The upper portion of the olivine-bearing phases consist of a fine-grained olivine gabbro to olivine melagabbro which directly overlies, and is in sharp contact with, a medium-grained feldspathic peridotite which preliminary petrographic work suggests is a wehrlite (a peridotite containing only clinopyroxene and no orthopyroxene).

As is observed in the Current Lake Deposit only the olivine-bearing phases contain mineralization. Fine-grained olivine gabbro to melagabbro often underlies the medium-grained peridotitic phase.

7.3 Property Mineralization

Mineralization discovered within the Property to date is considered to be somewhat atypical of orthomagmatic Cu-Ni sulphide deposits, in particular part of the sub-class of deposits associated with rift and flood basalts and their associated magmatic conduits (Noril'sk type) (Naldrett 2004). What makes the conduit-hosted mineralization identified to date within the Property is the PGE- and Cu-rich nature and lack of large Ni-rich massive sulphide deposits such as those observed at Voisey's Bay and Noril'sk. There still remains the potential for large massive sulphide bodies within both the Current Lake and Steepledge-Escape intrusions.

Most of the presently known mineralization is hosted within the Current Lake and Steepledge-Escape intrusions, although disseminated Pt-Pd-Cu-Ni mineralization has also been observed within the Lone Island Lake and 025 intrusions. These intrusions comprise four of the at least five Keweenawan (Mesoproterozoic) age magmatic conduits present along the northwestern edge of the MCR system within the Project boundaries. This group of related intrusions have been collectively termed the Thunder Bay North Intrusive Complex (Figure 7-3).

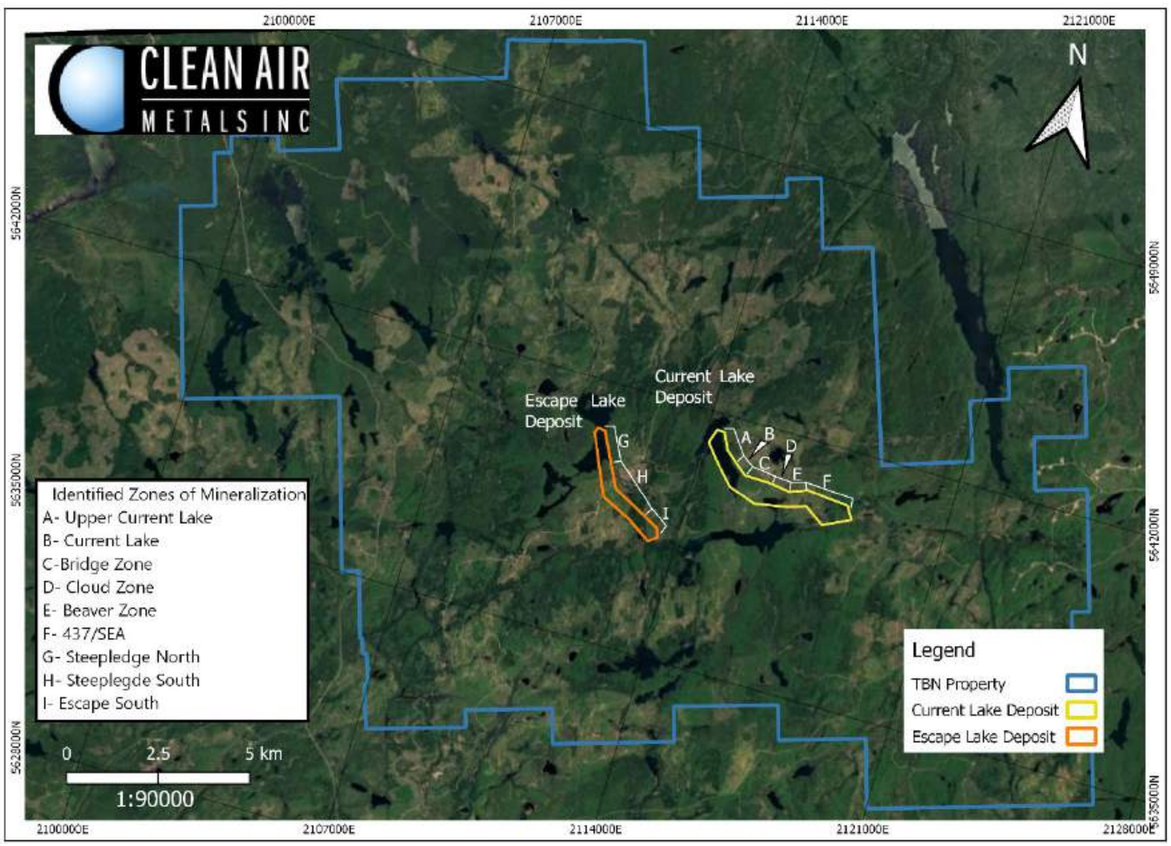


Figure 7-3: Mineralized zones and location within the Current Lake Deposit and Escape Lake Deposit

7.3.1 **Current Lake Deposit**

The Current Lake Deposit has six well defined zones of mineralization and the Escape Lake Deposit has three well defined zones of mineralization that were used within the current Mineral Resource Estimate.

In almost all cases, mineralization within both deposits, and corresponding zones are hosted by variably felspathic lherzolite and olivine melagabbro. The drill-defined length of the Current Lake Deposit is approximately 4.0 km and the drill-defined strike length of the Escape Lake Deposit is approximately 3.6 km (Figure 7-4).

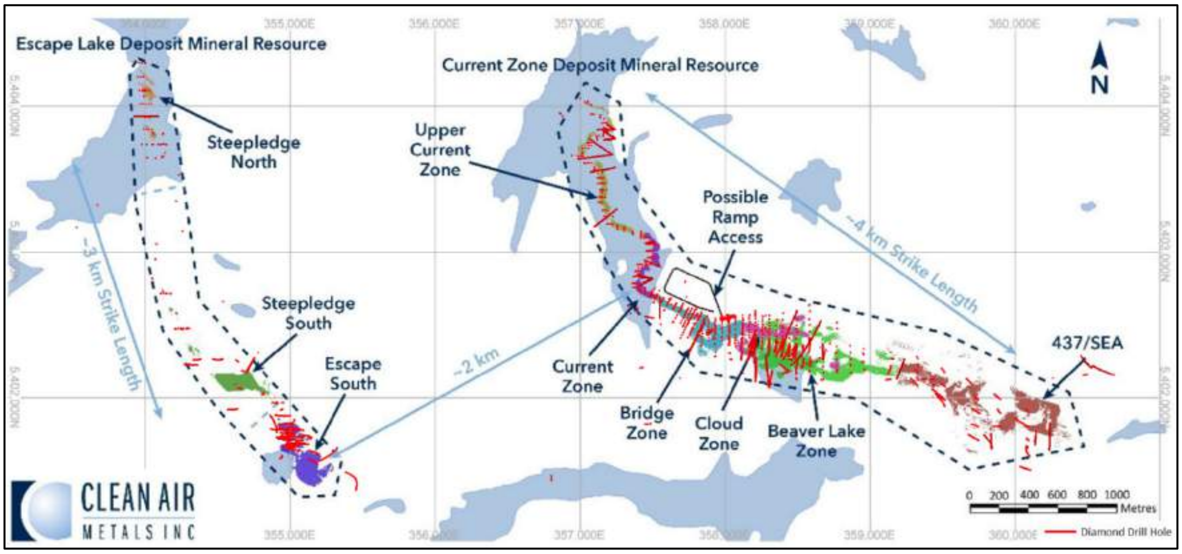


Figure 7-4: Plan View of Escape Lake Deposit and Current Lake Deposit with diamond drilling

Other zones do exist within both of the intrusions and are discussed in this Section; however, they are not part of the current Mineral Resource Estimate.

7.3.1.1 Upper Current/Current Zone

The Current Zone, discovered in late 2006 by Magma Metals, is hosted within a sub-horizontal to gently south-southeast plunging, narrow, oval to bell-shaped magmatic conduit (or chonolith), which is part of the Current Lake Intrusion. The zone ranges from 30 m to 50 m in width and up to 70 m in height, mainly underlying Current Lake. The Current Zone is hosted within medium- to coarse-grained S-type granitoid rocks of Archean (Quetico) age. The olivine melagabbro to feldspathic lherzolite comprising the conduit contains sulphide mineralization consisting of a few percent to locally greater than 25%, predominantly finely disseminated pyrrhotite, pentlandite, chalcopyrite, pyrite, and rare cubanite, and violarite that are interstitial to the silicate gangue.

7.3.1.2 Bridge Zone

The Bridge Zone comprises the eastern portion of the Current Zone before the tube-like conduit begins to transition into a tabular body within the Beaver Lake West Zone. Mineralization is generally similar to that observed within the Current Zone; however, there are several small, elongated, limited strike-extent net-textured to massive sulphide pools present locally. This zone becomes increasingly bottom-loaded to the east where it joins with the Beaver Lake West Zone.

7.3.1.3 Cloud Zone

The Cloud Zone was discovered in 2008 and is a distinct low sulphide, high-tenor zone that occurs near the roof of the Beaver Lake part of the Current Lake Intrusion and transitions to the west into the upper part of the Beaver Lake West Zone. It comprises a diffuse, irregular cloud of <1% very finely disseminated chalcopyrite and some pyrrhotite that is often very difficult to see visually. This zone is often so subtle that the sulphides comprising it cannot be distinguished in hand specimen until they tarnish after several weeks exposure to the air. The Cloud Zone may continue to the east and southeast from where it has been presently defined, but it has not been drilled off enough to confirm this supposition.

7.3.1.4 Beaver Lake Zone

The Beaver Lake Zone was also discovered in late 2007 by Magma Metals (Canada) Limited and occurs within the larger, tabular, Beaver Lake part of the intrusion. It exhibits a shallow east–southeasterly plunge and increases from a width of 100 m and a thickness of 15 m to a width of 550 m and a thickness of 150 m to 175 m in the east. Mineralization is primarily developed in the basal portions of the intrusion (bottom-loaded) within variably feldspathic lherzolite. The sulphide mineralogy is similar to that of the Current Zone and includes pyrrhotite, pentlandite, chalcopyrite, pyrite, and rare cubanite. Sulphide mineralization is primarily finely disseminated to locally finely net-textured, ranging from a few percent to >25% sulphides, and is also interstitial to the silicate gangue. Rarely, small massive sulphide pods of limited strike-extent or thickness occur locally.

7.3.1.4.1 Beaver Lake West Zone

The Beaver Lake West Zone, discovered in late 2007 by Magma Metals, is the eastern part of what AMEC Americas called the Bridge Zone in their 2010 and 2011 Reports. This zone has been kept as a separate zone because it contains several different mineralization trends (at least 2, possibly 3) with directions differing greatly from the mineralized trends observed within other parts of the Current Lake system. When examined closely the mineralization within the Beaver Lake West Zone forms an interlocking mesh partially contained within depressions within the floor of the intrusion. The azimuths of the two main trends are 110° to 120° and 045° to 055°. A possible third trend is at 030° to 040°. This part of the Current Lake Deposit is mostly contained within the Quetico-age metasedimentary rocks located immediately south of the Quetico Fault. It is roughly triangular in shape and forms the transition zone between the Bridge and Beaver Lake zones. It is characterized by a narrow southeast entrance and an even narrower northwest exit and is located immediately east of where the Bridge Zone tube transitions into a tabular body as it crosses over the Quetico Fault. The thickness of the intrusion hosting the Beaver Lake West Zone is quite variable with an irregular floor hosting several thermally-eroded depressions that sometimes host small, linear massive sulphide pools overlain by variable thicknesses of net-textured sulphides (greater than 25%) grading upward into finely disseminated sulphides. Sulphide mineralogy is similar to that of the Current Lake and Bridge Zones and includes pyrrhotite, pentlandite, chalcopyrite, pyrite, and rare cubanite. The Beaver Lake West Zone is probably the best mineralized portion of the mineralized Current Lake intrusive system and is host to the greatest proportion of the massive sulphide concentrations intersected during drilling by Magma Metals.

7.3.1.4.2 Beaver Lake East Zone

The Beaver Lake East Zone comprises the southeasterly extension of the Beaver Lake Zone past that portion of the system that was included within the 2010 AMEC historic Mineral Resource Estimate and it is essentially continuous with the Beaver Lake Zone. The intrusion in this area is up to 200 m thick and about 550 m in width. This zone exhibits the same shallow plunge and extends the Beaver Lake mineralization a further 630 m to the east-southeast. Mineralization is finely disseminated, ranging from a few percent to >25% sulphides, is interstitial to the gangue, and primarily occurs within linear, thermally-eroded depressions within the base of the Beaver Lake portion of the Current Lake Intrusion.

7.3.1.5 437/SEA Zone

The relatively deep (approximately 650 m below surface), poorly defined 437 Zone was discovered in late 2011 and comprises a separate and distinct mineralized zone located approximately 300 m southeast of the Beaver Lake East Zone. It occurs within the western part of the Current Lake Intrusion where the intrusion consists of a moderately southwest-dipping sill that is between 10 m and 30 m in thickness. This sill is host to at least one channelized conduit that contains the observed few percent to about 25% disseminated mineralization that is essentially identical as that observed within the Beaver Lake and Beaver Lake East zones.

Finally, the 437 Zone is a deep, presently poorly defined zone of mineralization that does not appear to be physically connected to the Beaver Lake/Beaver Lake East zone and occurs at, and to the southeast of, a constriction located at the eastern end of the Beaver Lake body.

7.3.2 Escape Lake Deposit

The Steepledge-Escape Intrusion was tested by 121 holes drilled between 2008 and 2020 and is much less well defined compared to the Current Lake Deposit (708 holes). This intrusion has a drill and magnetically-defined strike length of approximately 4.6 km. There are presently three mineralized zones defined within the Steepledge-Escape Intrusion, which are from north to south: Steepledge North; Steepledge South; and the Escape Lake HGZ. A fourth zone is the variably disseminated mineralization intersected between the Steepledge South and the Escape South HGZ by drill holes from both RTEC and Clean Air. This diffuse, relatively narrow, sub-horizontal band of disseminated variable-grade mineralization is hereby termed the Ribbon Zone.

7.3.2.1 Steepledge North

The Steepledge North was discovered by Magma Metals (Canada) Limited in late 2008 and consists of a poorly defined, approximately roughly 200 m long, weakly to locally moderately mineralized zone located beneath the central and southern portions of Steepledge Lake. In this area the mineralization and the conduit are similar to that observed within the Current Zone 3 km to the east; however, the grades are much lower, and the conduit is wider and thicker (50 m to 75 m wide and up to 100 m in height). Mineralization is finely disseminated, ranging from a few percent to <5% sulphides (pyrrhotite and chalcopyrite), and is interstitial to gangue minerals.

7.3.2.2 Steepledge South

The Steepledge South was discovered in 2010 and comprises a roughly approximately 300 m long, poorly drill-defined, irregular zone that is located within a geologically complex portion of the conduit where it transitions from an elongated, hourglass-shaped tube into complex tabular body. Where drill density allows, it is evident that the intrusion in this area consists of at least two, possibly more, separate conduits that have merged together. Mineralization is observed in multiple levels within the merged conduit. This zone is located directly north of the Company’s Escape Lake Property and may be a northward extension of the Ribbon Zone. Mineralization is finely disseminated to locally finely stringered pyrrhotite and chalcopyrite, ranging from a few percent to 10 to 15% sulphides, and is interstitial to gangue minerals.

7.3.2.2.1 Ribbon Zone

The Ribbon Zone was discovered by RTEC in early 2008 and presently comprises a roughly approximately 350 m long, poorly drill-defined, elongate, relatively narrow, sub-horizontal, band of disseminated mineralization, similar to the more diffuse portions of the Beaver Lake Zone within the Current Lake Deposit. Several RTEC and Clean Air holes have tested this zone; however, its actual shape and dimensions are not yet known. This zone most probably connects the Steepledge South and the Escape Lake HGZ. Mineralization mainly consists of finely disseminated chalcopyrite and pyrrhotite ranging from a few percent to approximately 10% and occurs interstitial to gangue minerals.

7.3.2.3 Escape South

The Escape South Zone is a very well-mineralized, relatively flat-lying (sub-horizontal), elongated disk-like zone exhibiting an overlying and connected central sail and an underlying, discontinuous central keel. This mineralization overlies a localized, deep, steep-sided, thermally-eroded depression within the floor of the intrusion. The Escape South Zone was initially discovered by RTEC in 2011 who, by the end of 2012, had drilled seven holes into the central part of the zone. Drilling by the Company during 2020 showed that the zone consists of two distinct sub-zones:

1. Escape South HGZ; and
2. Escape South Perimeter Zone (Perimeter).

7.3.2.3.1 Escape South HGZ

The Escape South HGZ comprises a 200 m long, 100 m wide, and 10 m to 90 m thick heavily disseminated to net-textured zone that is located within a geologically complex portion of the southern Steepledge-Escape Intrusion. It is a tabular, sub-horizontal, relatively high grade sulphide body with an upper “fin” shape (sail) and a discontinuous lower "keel” shape that is always situated over, but not at the base of, a pronounced, localized, steep-sided, thermally-eroded depression in the floor of the intrusion. This zone represents the furthest south zone of identified mineralization in the Steepledge-Escape Intrusion and is situated proximal and to the north of the east-trending Escape Lake Fault Zone, which forms the southern margin of the regional, crustal-scale Quetico Fault Zone. The HGZ contains moderate to high grade Pt-Pd-Cu-Ni mineralization and is hosted within a medium-grained peridotite unit (variety wehrlite) which is usually in sharp contact with an overlying fine-grained olivine melagabbro and in sharp contact in places with an underlying fine-grained olivine melagabbro. The host peridotite is coarser-grained and more texturally variable than the fine-grained, relatively homogeneous lherzolite hosting the mainly disseminated mineralization in the Current Lake area. Mineralization mainly consists of heavily disseminated to net-textured pyrrhotite and chalcopyrite ranging from 15% at the margins of the zone up to about approximately 40% within the bulk of the zone.

7.3.2.3.2 Escape South Perimeter

The Escape South Perimeter Zone consists of finely disseminated, sub-horizontal wings of mineralization that extend outward in all directions from the Escape Lake South HGZ Zone. This zone is thinner (generally between 5 m to 15 m thick) and contains 3% to 15%, usually higher tenor, finely disseminated sulphides (pyrrhotite and chalcopyrite) when compared to the usually net-textured HGZ that it encloses.

7.3.3 Satellite Occurrences

7.3.3.1 Lone Island Lake South Intrusion

There is localized, finely disseminated pyrrhotite and chalcopyrite mineralization that is contact-proximal and is exposed at surface at the Lone Island Lake South Intrusion. However, no distinct mineralized zones have been identified by surface sampling or limited diamond drilling. The lack of olivine-bearing phases and the general S-undersaturated nature of the rocks comprising the intrusion suggest that this intrusion is not prospective.

7.3.3.2 025 Intrusion

The 025 Intrusion is the only location within the Project where a magma conduit is exposed in outcrop at surface. The fine-grained peridotite comprising most of the multi-outcrop exposure is very similar in appearance to that observed in boulders and drill core at Current Lake Intrusion. The first of the three holes drilled the vicinity of the exposed conduit by RTEC in 2015 targeted the centre of the exposure with a vertical hole and intersected low grade mineralization. This mineralization consisted of approximately 1% finely disseminated pyrrhotite and chalcopyrite within fine-grained peridotite. The low percentage of sulphides present within an interval that contained up to 0.617 g/t Pd, 0.533 g/t Pt, 2130 ppm Cu, and 2110 ppm Ni suggests that the tenor of the sulphides was relatively high. Therefore, it remains an exploration target.

8. DEPOSIT TYPES

The descriptions provided within Section 8.1 and its subsections was summarized from several technical publications including Naldrett (2004) and Eckstrand et. al. (2007), and observations made by Allan MacTavish of Clean Air (and historical operators; Magma Metals (Canada) Limited and Panoramic).

8.1 Orthomagmatic Sulphide Deposits

Orthomagmatic sulphide deposits are sulphide mineral concentrations derived from immiscible sulphide liquids contained within mafic and ultramafic igneous rocks. When formed the immiscible sulphide liquid droplets move and eventually settle gravitationally through less dense silicate magma with the sulphide liquid acting as a "collector" for Co, Cu, Ni, PGE, and to a lesser degree iron ("Fe"). Due to the greater abundance of Fe most immiscible sulphide liquid is Fe-rich.

Orthomagmatic deposits occur in predominantly mafic to ultramafic igneous rocks in many different geological settings, including deformed greenstone belts, and calc- alkaline batholiths associated with convergent plate margins; ophiolite complexes that formed at constructive plate margins; intraplate magmatic provinces associated with flood basalt type magmatism; and passively rifted continental margins. Occasionally significant mineralization will occur below the host intrusion within diverse footwall country rocks comprising a wide variety of compositions.

Cu-Ni–PGE deposits can occur as individual sulphide bodies or as groups of sulphide bodies associated with one or more related mafic-ultramafic magmatic bodies in areas or belts up to tens, even hundreds, of kilometres in length.

Orthomagmatic sulphide deposits as a group are typically associated with:

- Major lithological changes; reversals or changes in crystallization order; discontinuities in mineral fractionation patterns and cyclic units; and abrupt changes in host intrusion morphology (i.e., sharp bends or widening in a conduit or channelized ultramafic flow);
- Within structurally low areas at the base of intrusions or flows;
- Rocks near the lower contact of an intrusion that may contain country rock xenoliths and may be characterized by irregular variations in grain size, mineralogy, and texture;
- Rocks near the base of an ultramafic volcanic flow that are down-flow from a sulphide source; and
- Pegmatoids and rocks enriched in minerals that crystallize late from silicate magmas.

The location of sulphide concentrations in conduits at Noril'sk-Talnakh and Voisey's Bay, and within, or near channelized flows in many komatiitic deposits, suggests that sulphides accumulated where the flow rate of magma was reduced and the entrained sulphides were able to settle gravitationally to form rich basal concentrations.

There two main subsets of orthomagmatic sulphide deposits are:

8.1.1 Cu-Ni-(PGE) Dominant Orthomagmatic Sulphide Deposits

Cu-Ni-dominant sulphide deposits are generally high sulphide percentage deposits with Ni and Cu usually as the main economic metals. Ni usually constitutes the main economic commodity with Cu as either a co-product or by-product, and with Co, the PGE, and Au as common by-products. The magma containing sulphides that collect to form deposits entered the host intrusion already saturated in sulphide droplets that formed outside of the host intrusion and were then brought into the intrusion. This deposit subset can be subdivided into four subtypes:

- A meteorite-impact mafic melt sheet containing massive basal sulphide deposits (Sudbury, Ontario is the only known example).
- Rift and continental flood basalt-associated mafic sills, dyke-like bodies, and chonoliths (Noril'sk–Talnakh, Russia; Jinchuan, China; Duluth Complex, Minnesota; Eagle, Michigan; Voisey's Bay, Labrador; Current Lake, Ontario).
- Komatiite (magnesium-rich) ultramafic volcanic flows and related sill-like intrusions (Thompson, Manitoba; Raglan, Quebec; Kambalda and Agnew, Australia).
- Other mafic/ultramafic intrusions (Kotalahti, Finland; Råna, Norway; and Selebi-Phikwe, Botswana).

The Current Lake Deposit and the mineralization hosted within the various mafic-ultramafic intrusions comprising the Thunder Bay North Intrusive Complex are considered to be examples of this subset, in particular the subtype associated with magmatic conduits (chonoliths) in close association with continental rifts and flood basalts (Noril'sk- Talnakh, Voisey's Bay, and Eagle deposits).

8.1.2 PGE-Dominant Orthomagmatic Sulphide Deposits

PGE-dominant, low sulphide deposits, with the PGE's associated with low percentages of disseminated Cu-Ni-Fe sulphides (<3%), usually occur within very large to medium- sized, mafic/ultramafic layered intrusions. Within this subset the magma entering the host intrusion is undersaturated in sulphides (i.e., the sulphur used to form sulphide droplets was still in solution within the magma). The sulphur exsolved out of solution to form sulphide droplets after exsolution was triggered by one or more of: magma fractionation; magma contamination by assimilation of silicate-rich or sulphide-rich wall-rocks; or magma mixing with a new pulse of magma entering the chamber. The sulphide droplets then settle through the magma to a level where they collect, usually well-up in the stratigraphy of the host intrusion.

There are two main subtypes of PGE-dominant magmatic sulphide deposits associated with mafic/ultramafic intrusions:

- Reef-type Stratiform PGE deposits which occur within well-layered mafic/ ultramafic intrusions (i.e., Bushveld Complex, South Africa; Stillwater Complex, Montana)
- Magmatic breccia/contact type deposits that occur in stock-like or layered mafic/ultramafic intrusions (Platreef in South Africa; Lac des Iles and River Valley, Ontario).

The Lac des Iles Deposit in Northwestern Ontario does not appear fit into either of the main subtypes described above and may form its own subtype since it is not a reef and even though one of its zones was a breccia it does not appear to fit into the magmatic breccia/contact type.

Cu-Ni dominant (generally massive) and PGE-dominant (sulphide-poor) deposits rarely occur within the same mafic/ultramafic intrusion. Channelized komatiitic flows occasionally host low sulphide percentage, disseminated Ni±Cu deposits (i.e., Mount Keith in Western Australia) that do not form like PGE-dominant deposits, but are a rare subset of Cu-Ni dominant deposit type.

9. EXPLORATION

The Company commenced exploration of the Property on May 10, 2020. This work was the first exploration by the Company on the Property after the acquisition of Panoramic from Panoramic Resources Limited which closed on May 14, 2020. Exploration was continuous from May 10, 2020 until December 22, 2020, and consisted of diamond drilling, historic drill core, and drill core reject re-analysis, borehole geophysics, line cutting, and ground geophysical surveys. The work was concentrated in the Escape Lake and Current Lake properties of the Project which are located approximately 3 km apart.

9.1 Borehole Orientation and Collar Location Surveys (2020)

Reflex North America (Imdex Limited) was contracted to complete north seeking gyro orientation surveys of all previously-drilled RTEC holes completed between 2008 and 2016 in the Escape Lake Property. This work was completed in late May 2020.

Also, Ontario Land Surveyor J.D. Barnes Limited surveyed the locations of the same Escape Lake RTEC holes on May 14, 2020. Later, in mid-December 2020, J.D. Barnes Limited also surveyed the locations of all holes drilled by the Company in 2020.

9.2 Diamond Drilling (2020)

A total of 39 diamond drill holes, totalling 19,903.90 m were completed on the Property between May 10, 2020 and December 23, 2020. Most of the holes (34) were drilled on the Escape Lake Property with the remaining five holes drilled on the Current Lake Property approximately 3 km to the east. Initially the drilling utilized one drill; however, a second drill was added to the project on June 30, 2020.

9.2.1 Escape Lake Property Drilling

A total of 34 Escape Lake Property holes (Table 9-1) were completed in 2020 (ELR20-001 to 034, inclusive) and a further seven holes were abandoned due to excessive deviation or jammed rods. These holes totalled 18,338.90 m drilled and were completed between May 10, 2020 and December 6, 2020 using two drills. The drilling targeted the Escape Lake HGZ and the southern portion of the Ribbon Zone located just north of the HGZ (Figure 9-1).

Table 9-1: Escape Lake Property 2020 Diamond Drilling Summary

Drill Hole	Start Date	End Date	UTM_E (m)	UTM_N (m)	Azimuth (°0)	Dip (°)	Length (m)
ELR20-001 (abandoned)	May 8, 2020	May 10, 2020	355112.0	5401537.0	360	-90	146.0
ELR20-002	May 10, 2020	May 18, 2020	355113.3	5401535.9	360	-90	595.0
ELR20-003	May 18, 2020	May 26, 2020	355167.6	5401532.7	270	-85	599.0
ELR20-004	May 26, 2020	June 4, 2020	355159.6	5401485.1	270	-85	602.0
ELR20-005	June 4, 2020	June 12, 2020	355166.0	5401459.0	270	-85	596.0
ELR20-006	June 13, 2020	June 21, 2020	355197.6	5401433.1	270	-85	575.0
ELR20-007	June 21, 2020	June 30, 2020	366208.2	5401483.0	270	-85	614
ELR20-008	June 30, 2020	July 11, 2020	355146.7	5401584.5	270	-85	527.0
ELR20-009	June 30, 2020	July 13, 2020	355257.3	5401480.5	270	-85	629.0
ELR20-010	July 12, 2020	July 18, 2020	355224.4	5401583.5	270	-81	582.0
ELR20-011	July 15, 2020	July 28, 2020	355207.6	5401530.9	270	-85	584.9
ELR20-012	July 19, 2020	July 29, 2020	355098.4	5401584.0	270	-85	581.0
ELR20-013 (Abandoned)	July 28, 2020	July 29, 2020	355263.0	5401536.0	270	-85	26.0
ELR20-013 A	July 29, 2020	August 7, 2020	355272.4	5401538.9	270	-85	557.0
ELR20-014	July 30, 2020	August 8, 2020	355098.2	5401584.1	270	-79	590.0
ELR20-015	August 8, 2020	August 14, 2020	355141.2	5401631.4	270	-85	476.0
ELR20-016 (Abandoned)	August 11, 2020	August 28, 2020	355105.0	5401535.0	270	-79	224.0
ELR20-017 (Abandoned)	August 14, 2020	August 15, 2020	355085.0	5401635.0	270	-85	38.0
ELR20-017 A	August 15, 2020	August 22, 2020	355098.6	5401631.1	270	-85	560.0
ELR20-018	August 15, 2020	August 28, 2020	355117.7	5401533.7	270	-83	596.0
ELR20-019 (Abandoned)	August 22, 2020	August 22, 2020	355122.3	5401693.1	270	-85	26.0
ELR20-019 A	August 23, 2020	August 30, 2020	355122.4	5401691.6	270	-85	497.0
ELR20-020 (Abandoned)	August 28, 2020	August 29, 2020	355134.0	5401509.1	270	-85	59.0
ELR20-020 A	August 30, 2020	September 8, 2020	355134.4	5401509.1	270	-85	590.0
ELR20-021	August 30, 2020	September 8, 2020	355023.2	5401787.5	270	-90	506.0
ELR20-022	September 9, 2020	September 19, 2020	355114.7	5401561.1	270	-90	591.0
ELR20-023	September 9, 2020	September 17, 2020	354994.2	5401788.5	270	-90	557.0
ELR20-024	September 17, 2020	September 27, 2020	355071.7	5401785.5	270	-85	539.0
ELR20-025	September 19, 2020	September 27, 2020	355154.2	5401561.7	270	-85	572.0
ELR20-026 (Abandoned)	September 27, 2020	September 28, 2020	355181.0	5401510.0	270	-85	29.0
ELR20-026 A (Abandoned)	September 28, 2020	September 29, 2020	355181.3	5401510.0	270	-85	29.0
ELR20-027	September 28, 2020	October 7, 2020	355065.0	5401740.3	270	-90	516.0
ELR20-028	September 29, 2020	October 10, 2020	355217.0	5401509.9	270	-82	605.0
ELR20-029	October 7, 2020	October 16, 2020	355066.1	5401691.5	270	-90	518.0
ELR20-030 (Abandoned)	October 11, 2020	October 12, 2020	355179.0	5401583.7	270	-85	31.0
ELR20-030 A	October 11, 2020	October 21, 2020	355179.5	5401583.1	270	-85	551.0
ELR20-031	October 16, 2020	October 25, 2020	355072.9	5401689.1	270	-85	572.0
ELR20-032	October 21, 2020	November 5, 2020	355196.0	5401483.3	270	-85	614.0
ELR20-033	November 6, 2020	November 19, 2020	355230.6	5401487.8	270	-85	587.0
ELR20-034	November 22, 2020	December 6, 2020	355336.4	5401405.6	290	-85	743.0

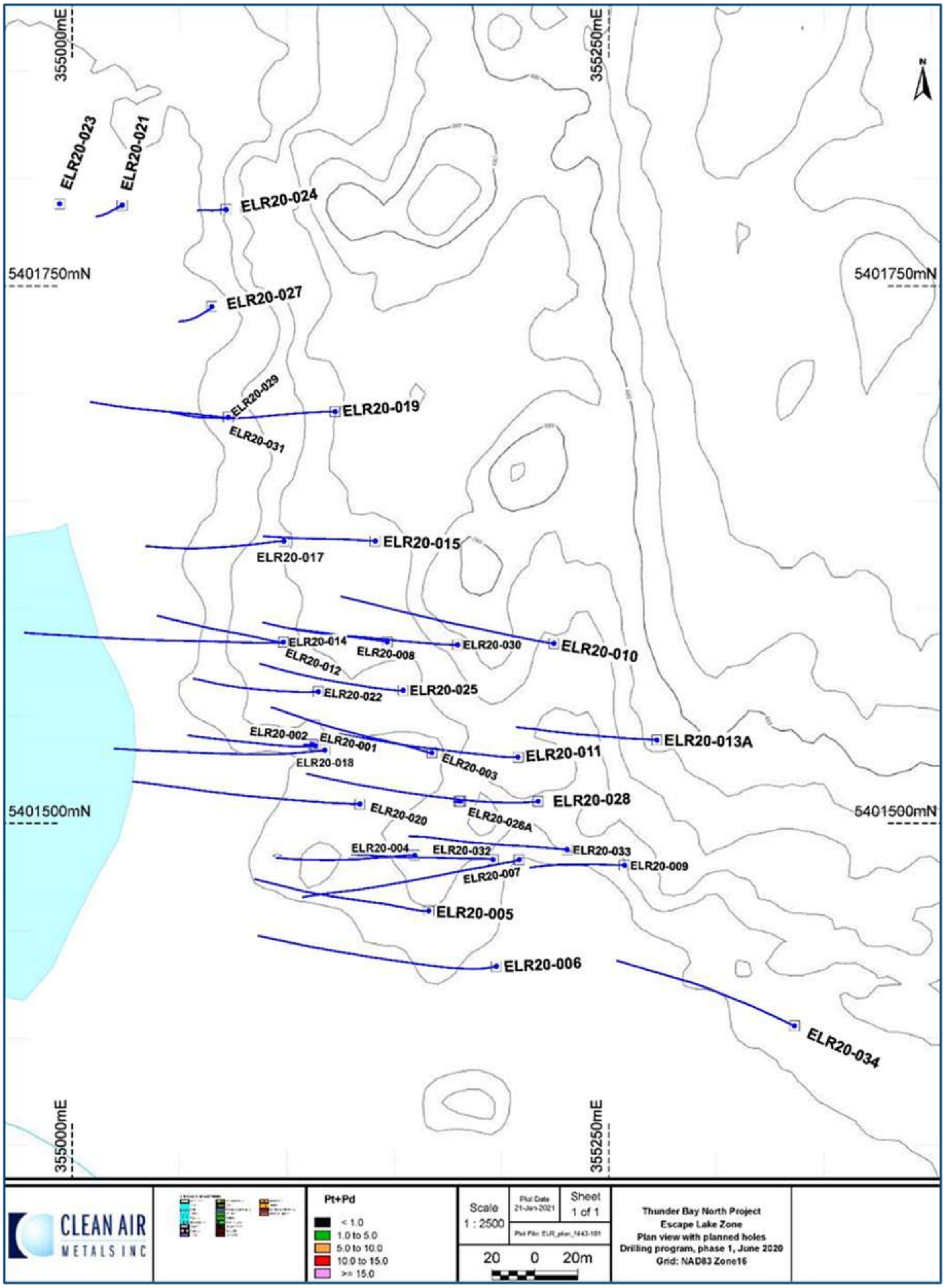


Figure 9-1: Escape Lake Property 2020 drill hole location map

These were the first holes drilled in the Escape Lake Property since RTEC completed 11 holes (4287.88 m) in early 2016. Most of the holes were spaced 50 m apart on 50 m spaced, east west-oriented drill fences. Several infill holes were drilled midway between the 50 m spaced fences in the HGZ to show continuity of mineralization. Localized infill drilling on the main drill fences was completed in a few areas of the HGZ in order to achieve an approximate 25 m spacing within the mineralization at depth. The enclosing Archean country rocks, usually Quetico-age metasedimentary rocks, were often variably fractured and portions of most of the holes drilled had to be cemented to stabilize the holes for later borehole geophysical surveys. This cementing greatly decreased overall production, but was essential to completing the holes.

High Grade Zone

The HGZ drilling (21 holes) defined the margins and the core of the zone with enough detail to achieve Indicated status within the resource calculation. The drilling showed that the HGZ primarily consists of a sub-horizontal zone of net-textured to heavily disseminated pyrrhotite, chalcopyrite, and pentlandite usually contained within medium-grained feldspathic peridotite. Detailed petrography by Dr. James Miller (Section 9.6) has shown that this peridotite is specifically a feldspathic wehrlite. The HGZ is approximately 215 m long and 125 m in width and is oriented north-northwest ("NNW") to south-southeast ("SSE"). The zone varies greatly in thickness from about 15 m on its margins to up to 98 m in its core (Figure 9-2). The core mineralization forms a prominent NNW-SSE-oriented sail with a less prominent, similarly-oriented keel of an elongated and distorted, sub-horizontal mineralized disc. The rim of the disc is located at about 390 m to 400 m vertical depth below surface. The bulk of the metal within the Escape Lake Deposit is presently contained within the HGZ. The HGZ mineralization responds very well to borehole EM surveys and can be detected from a considerable distance away.

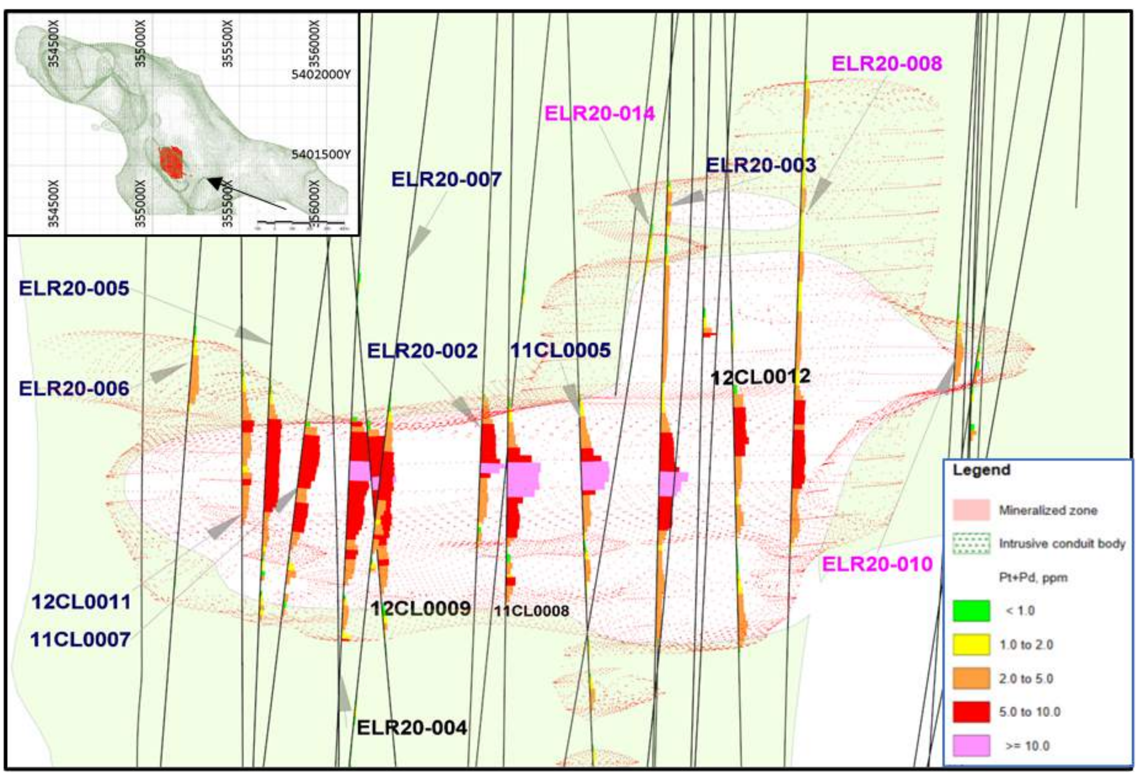


Figure 9-2: Longitudinal section through the HGZ showing assay grades, drill hole traces, and the mineralized zone generated by implicit modelling; view of the section is toward 2500 Azimuth.

Ribbon Zone South

A further 12 holes were drilled to test the southern portion of the Ribbon Zone immediately to the north of the HGZ (Table 9-2). The mineralization within this area consists of up to three diffuse, sub-horizontal, possibly anastomosing mineralized streams composed of 3% to 10% finely disseminated pyrrhotite and chalcopyrite contained within medium-grained feldspathic peridotite (wehrlite). Presently the width of the zone is difficult to determine and more extensive drilling to the west and sometimes to the east will be required to place definite limits on the width. Existing drilling exposes widths of greater than 35 m in the north and 75 m in the south where the zone is always open to the west and sometimes open to the east. Zone thickness presently varies between 5 m and 45 m and in some sections comprises as many as three closely separated mineralized zones. There is a slight, apparently southerly tilt to the Ribbon Zone with the southern portion of the mineralization apparently continuous with the disseminated margins of the HGZ at a similar stratigraphic level (390 m to 400 m depth). The northern portion of the zone, at the limit of present Company drilling, consists of three mineralized levels occurring at between 300 m and 370 m depth. Analytical results of samples collected from the Ribbon Zone suggest that the metals tenor of the sulphides intersected is higher than that observed within the HGZ. The zone is very difficult to detect using standard borehole EM techniques and presently seems to be impossible to detect using most surface geophysical techniques. The mineralized zone has been detected as an early-time response using Crone's borehole EM system and early 2021 follow-up drilling has been planned to test two plates modelled from Borehole Electromagnetic ("BHEM") data collected in late 2020.

Table 9-2: Selected Grade-Thickness Assay Intervals on the Escape Lake Property - 2020 Diamond Drilling Program

Drill Hole Number	From (m)	To (m)	Total Width (m)	Pt (ppm)	Pd (ppm)	Cu (ppm)	Ni (ppm)	Pt + Pd (ppm)	Pt:Pd Ratio	Cu:Ni Ratio	Grade-Thickness (Pt + Pd) x m
ELR20-025	324.4	423.25	98.85	1.397	1.892	6888	3544	3.289	0.74	1.94	325
including	392.54	411.76	19.22	2.900	4.090	14177	7536	6.990	0.71	1.88	
ELR20-003	359.45	438.37	78.92	1.663	2.174	7960	4068	3.837	0.76	1.96	303
including	395.45	415.45	20.00	3.388	4.670	15417	8356	8.058	0.73	1.85	
including	403.45	408.45	5.00	5.068	6.442	21540	8782	11.510	0.79	2.45	
ELR20-028	350.80	434.10	83.30	1.466	1.912	7263	4092	3.378	0.77	1.77	281
including	398.1	419.8	21.70	3.697	3.488	13974	8907	7.185	1.06	1.57	
ELR20-008	326.84	422.84	96.00	1.220	1.626	6053	3427	2.846	0.75	1.77	273
including	391.84	409.84	18.00	2.294	3.195	11717	7557	5.489	0.72	1.55	
ELR20-004	391.58	424.5	32.92	3.164	4.325	15523	8122	7.489	0.73	1.91	247
including	399.58	403.5	3.92	5.103	7.083	24518	12698	12.186	0.72	1.93	
ELR20-005	386.7	424.7	38.00	1.821	2.457	9249	6281	4.278	0.74	1.47	163
including	391.7	410.7	19.00	2.624	3.684	14011	10009	6.308	0.71	1.40	
ELR20-002	386.15	416.15	30.00	2.070	2.688	9592	4868	4.757	0.77	1.97	143
including	391.15	402.15	11.00	3.227	4.272	15204	7770	7.499	0.76	1.96	
including	399.15	401.15	2.00	5.020	6.155	23400	5915	11.175	0.82	3.96	
ELR20-032	379	414.07	35.07	1.640	2.234	7963	4106	3.874	0.73	1.94	136
including	395.14	405.07	9.93	2.725	3.774	12932	6628	6.499	0.72	1.95	
ELR20-007	388.5	421	32.50	1.691	2.161	7510	3451	3.853	0.78	2.18	125
including	396.5	406.5	10.00	2.618	3.312	10857	4735	5.930	0.79	2.29	
ELR20-022	386.45	410	23.55	2.180	2.824	9559	5011	5.004	0.77	1.91	118
including	392.2	401.75	9.55	3.055	3.932	13089	6659	6.987	0.78	1.97	
ELR20-020	391.74	411.74	20.00	2.021	2.623	8784	4496	4.644	0.77	1.95	93
including	392.74	398.74	6.00	2.645	3.722	12508	8710	6.367	0.71	1.44	
ELR20-011	389.69	414.69	25.00	1.577	1.966	6437	2825	3.542	0.80	2.28	89
including	398.69	400.69	2.00	2.330	3.250	11200	6090	5.580	0.72	1.84	
including	403.69	408.69	5.00	2.356	2.872	9108	2722	5.228	0.82	3.35	

Escape Lake Deposit Magnetotelluric (“MT”) Anomaly Follow-up

The last hole of the 2020 drill program was a 743 m hole (ELR20-034) drilled southeast of the HGZ (Figure 9-1). It was the first of five holes planned to test an MT anomaly defined by a survey completed by Quantec Geoscience in August 2020 (Section 9.5). No mineralization other than low amounts of finely disseminated pyrrhotite and chalcopyrite were intersected. To the north-northwest this anomaly is coincident with the Steepledge-Escape Intrusion and the portion of the anomaly to the southeast is interpreted to be the extension of the intrusion. The five planned holes are primarily designed as BHEM platforms to geophysically examine the surrounding rock for mineralization.

9.2.2 Current Lake Property Drilling

Drilling at the Current Lake Property consisted of five holes, totalling 1565 m (Table 9-3), that were completed adjacent to and east of Current Lake between October 27, 2020 and December 22, 2020 (Figure 9-3). One of the holes tested a geophysical target (CL20-001) while the other four (CLM21-001 to 004, inclusive) were drilled to obtain mineralized samples of the Current Lake Deposit for metallurgical purposes.

Table 9-3: Current Lake Property 2020 Diamond Drilling Summary

Drill Hole	Start Date	End Date	UTM_E (m)	UTM_N (m)	Azimuth (°0)	Dip (°)	Length (m)
CL20-001	October 27, 2020	December 6, 2020	360758.0	5402086.0	270	-90	770.0
CLM20-001	December 6, 2020	December 13, 2020	358047.0	5402501.0	270	-90	200.0
CLM20-002	December 13, 2020	December 16, 2020	357553.0	5402662.0	270	-90	140.0
CLM20-003	December 14, 2020	December 17, 2020	358372.0	5402430.0	270	-90	269.0
CLM20-004	December 18, 2020	December 22, 2020	357870.0	5402530.0	270	-90	186.0

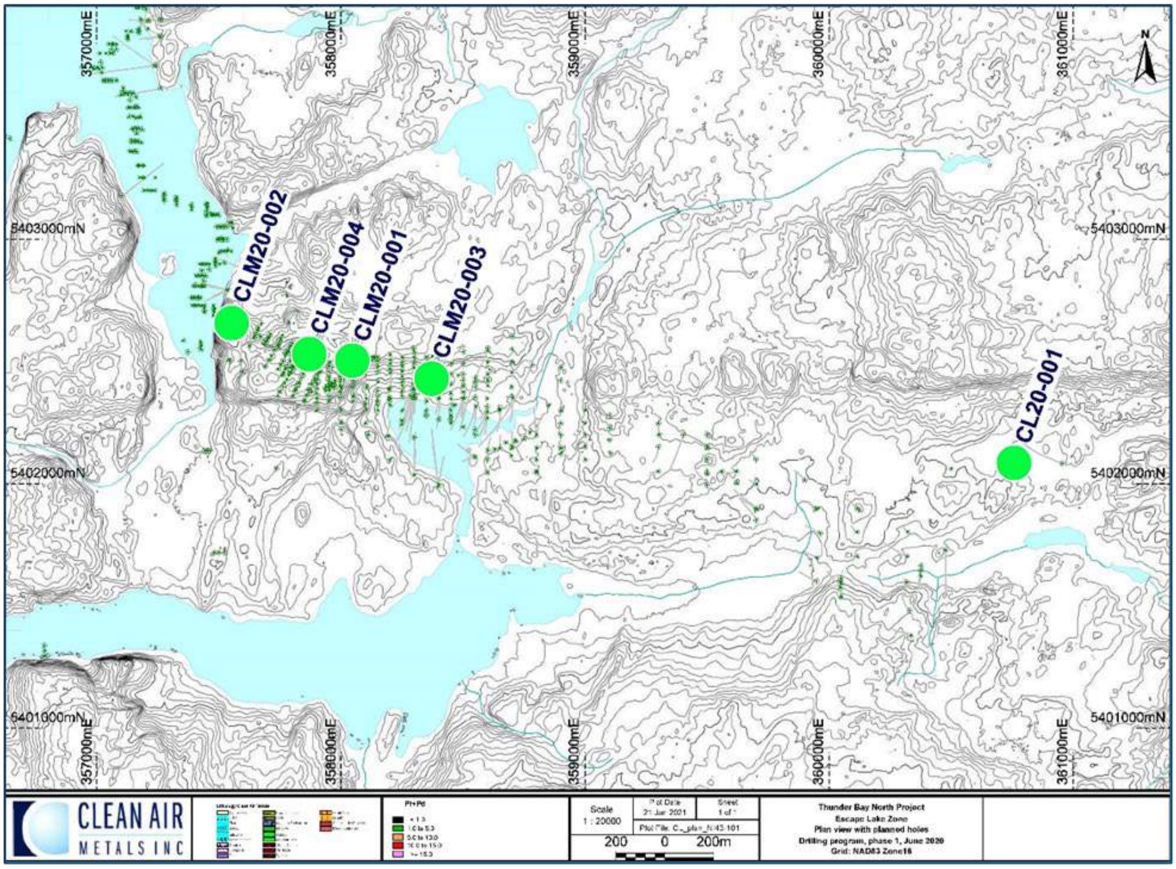


Figure 9-3: Current Lake Property 2020 drill hole location map

Current Lake Deposit MT Anomaly Follow-up

A single 770 m hole (CL20-001) planned as initial follow-up to the Quantec Geoscience MT survey described in Section 9.5, was completed between October 27, 2020 and December 6, 2020 (Figure 9-3). The hole did not intersect a mafic to ultramafic intrusive chonolith/conduit, but did intersect several Keweenawan-age mafic sills and some epidote sericite alteration flanking the target depth of about 600 m. Epidote sericite alteration is a common feature above and adjacent to the Beaver Lake portion of the Current Lake Intrusion and similar alteration within this hole near the target is encouraging. A borehole EM survey of the hole unfortunately did not detect any off-hole anomalies. Other holes are planned to test the MT anomaly in 2021 once the expanded MT survey is completed early in 2021.

Large Diameter Metallurgical Holes

Four larger diameter (HQ-size) holes, totalling 795 m (CLM20-001 to 004, inclusive) were drilled between December 6, 2020 and December 22, 2020 (Figure 9-3). The placement of these holes was designed to recover additional, unoxidized mineralization for metallurgical studies from the known Current Lake mineralized zones. The drill core recovered was obtained and utilized as per:

1. A 15 cm segment of full core was collected every 3 m from the intrusive rocks of the conduit and a short distance into the country rocks of the hanging wall and footwall. Each of these pieces were cut in half with half retained. From one-half segment a representative polished thin section was prepared with the other half analyzed at ALS Geochemistry [ALS]. The polished thin section will be reviewed by Dr. Derek Wilton at the Memorial University of

Newfoundland ("MUN") where it will be analyzed using the Scanning Electron Microscopy - Mineral Liberation Analysis ("SEM-MLA") facility at the MUN Core Research Equipment and Instrument Training ("CREAIT") Network labs.

2. After the 15 cm samples were taken the bulk of the core was cut in half with one-half wrapped in plastic wrap (to slow oxidation of sulphides) and shipped to Blue Coast Metallurgy and Research in Parksville, BC for metallurgical testing during Q1 of 2021. The remaining half was again cut in half with one-quarter sent to ALS for analysis and the other quarter retained by the Company.

9.3 Geochemistry and Metallurgy (2020)

9.3.1 Current Lake Property

A large number of historic Current Lake Project coarse drill core sample rejects were pulled from storage and submitted to ALS for re-analysis to determine their Rh content.

Also, mineralized core from numerous historic Current Lake Deposit drill holes were re-sampled (1/2 core was quartered) and submitted to Blue Coast Metallurgy and Research, along with stored sample rejects, for metallurgical analysis.

9.3.2 Escape Lake Property

All mineralized pulps from drill core samples taken from holes drilled in the HGZ in 2020 that contained greater than 1 g/t Pt+Pd were re-analyzed for their Rh content. All drill core samples of mafic and ultramafic intrusive rocks intersected are now being routinely analyzed for Rh.

9.4 Borehole Geophysics (2020)

All drill holes completed at the Escape Lake Property (excepting ELR20-034) and the MT-follow-up hole at the Current Lake Property were surveyed by Crone Geophysics and Exploration using their borehole pulse EM system. All data were reprocessed and then modelled by Consulting Geophysicist Brian Bengert of B-Field Geophysics for follow-up drill targets generation.

9.5 Linecutting and Ground Geophysics (2020)

A 2-phase, 38.75 line-km grid was cut over the Current and Escape Intrusions as control for a Quantec Geoscience MT survey.

Cutting of the first 14.40 line-km stage of the grid commenced on August 2, 2020 and was completed on August 22, 2020. The Quantec MT survey commenced on August 7, 2020 (while the grid was being cut) and was completed on August 31, 2020 (Figure 9.4).

The excellent results of the MT survey completed in August prompted an expansion of the survey which required cutting another 24.35 line-km of grid between October 8 and November 20, 2020.

The additional gridlines are now in the process of being surveyed by Quantec Geoscience.

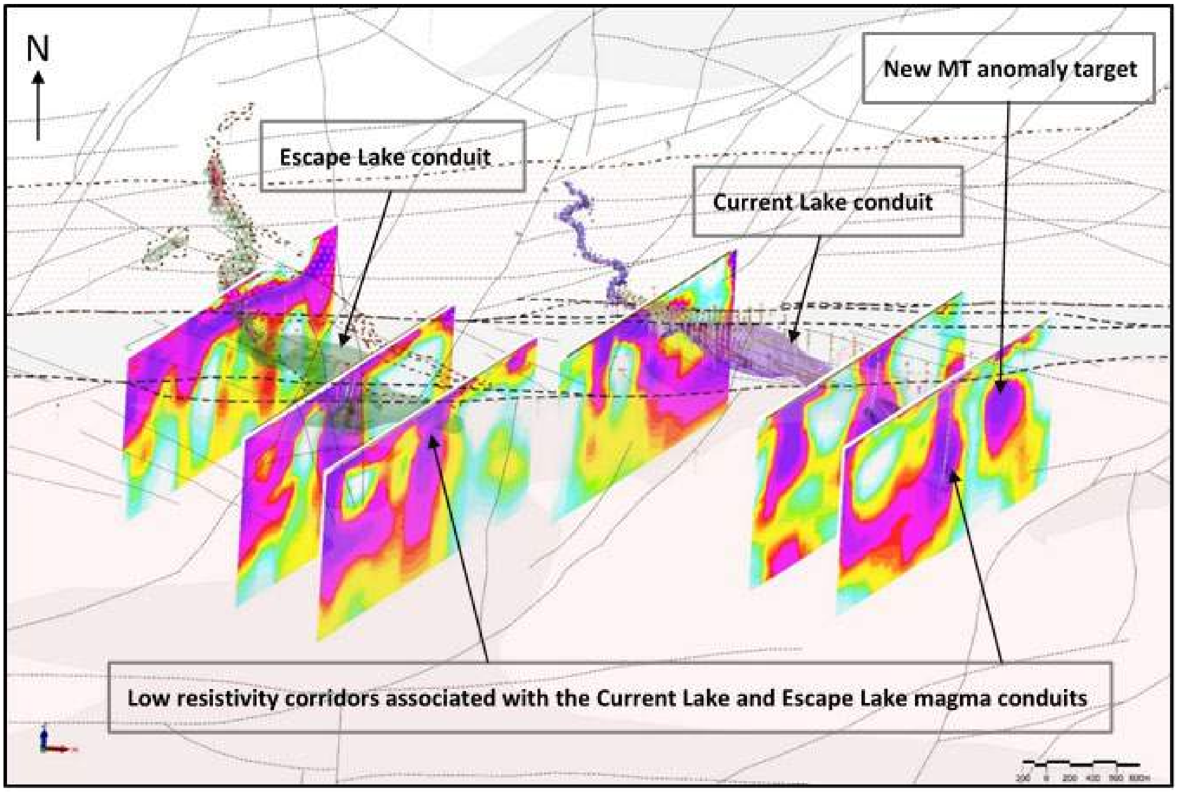


Figure 9-4: Magnetotelluric survey pseudo-sections for the six lines surveyed in the Escape Lake and Current Lake areas in August 2020

9.6 Petrography (2020)

Thin and polished thin sections were prepared from 31 samples systematically taken from the mafic to ultramafic intrusive rocks comprising the Steepledge-Escape Intrusion within drill hole ELR20-004. The samples were collected by, and subsequently examined by, Dr. James Miller, formerly a Professor of Geology at the University of Minnesota in Duluth, MN and now a Consulting Geoscientist and an Adjunct Professor of Geology at Lakehead University, in Thunder Bay, ON. The 31 thin sections were examined in detail during the last half of 2020 and two reports documenting those examinations have been written. The opaque minerals highlighted within the polished thin sections were in the process of being examined at the time of the writing of this report.

Dr. Miller's examination determined that the rocks of the Steepledge-Escape Intrusion differ from those observed within the Current Lake Intrusion (located 3 km to the east) in texture, in overall complexity, and the lack of orthopyroxene within the mafic and ultramafic rock types. The rocks comprising the Escape Lake Intrusion are considerably more complex than those observed within the Current Lake Intrusion. The bulk of the mineralization within both intrusions occurs within feldspathic peridotite (a rock that contains greater than 40% olivine, variable amounts of pyroxene, and up to 20% plagioclase feldspar); however, the peridotite at Current Lake Intrusion is a fine-grained feldspathic lherzolite containing both orthopyroxene and clinopyroxene, whereas the peridotite at Escape Lake Intrusion is a medium-grained feldspathic wehrlite containing only clinopyroxene as its pyroxene phase.

9.7 Preliminary Synchrotron Cluster Results (2020)

During mid-2020, and on the advice of Nordmin, the Company embarked on a program of Synchrotron Spectroscopy analyses on 94 samples taken from the Current Lake Deposit (79) and the Escape South HGZ (15). This, and subsequent work should strongly aid in the characterization of the various mineralized zones comprising the Current Lake Deposit, in particular, and the aid in the preliminary characterization of the Escape Lake HGZ.

This work was completed by Dr. Lisa Van Loon of LISA CAN Analytical Solutions Inc. and Dr. Neil Banerjee of Western University, Ontario in partnership with the Nordmin. Dr. Van Loon and Dr. Banerjee describe synchrotron mineral cluster analysis as a multivariate analysis whose goal is to classify a suite of samples into different groups such that similar subjects are placed in the same group. This work was specifically done without any prior knowledge of the mineralogy or geochemistry of the samples submitted by the Company.

The Current Lake Deposit samples consisted of coarse rejects of core samples originally taken by Magma Metals (Canada) Limited/Panoramic between 2007 and 2012. The Escape South HGZ samples consisted of samples pulps of core samples taken during the Company's 2020 diamond drilling program.

9.7.1 Mineralogical Analysis

Synchrotron Spectroscopy analysis was performed on 94 samples and identified eight mineralogical domains. As described in various sections above the Current Lake and Escape Lake Deposits are hosted by two separate, but closely-related (lithologically and chemically) intrusions that are of almost identical age, even though separated by a distance of 3 km. They are both part of a distinct intrusive "family" and because of this relationship their samples were not split apart and were analyzed together as a single group. Work on the data obtained is ongoing and the presence of the various mineral species continues to be updated and refined. The mineral species stated were determined from the synchrotron spectra and were not directly observed.

- ***Domain 1:*** This domain was defined using 18 samples where 11 were from the Current Lake Deposit and seven were from the Escape Lake HGZ. Sample L013391 was the most representative.

  The Domain 1 samples contained:

  Sulphides: Chalcopyrite pentlandite, troilite, and minor pyrite.

  Silicates: Olivine; both clino- and orthopyroxenes; plagioclase feldspar; the phylosilicates talc, chlorite, and biotite; the serpentine minerals chrysotile and lizardite; and quartz.

  Oxides: Magnetite.

  This domain corresponds with high grade mineralization present at the base of the conduit portion of the Current Lake Intrusion and the high grade core of the Escape Lake HGZ.

- ***Domain 2:*** This domain is the most dominant and physically, and lithologically widespread group, and was defined by 59 samples, where 54 were from the Current Lake Deposit and five were from the Escape Lake HGZ. Sample L013386 was the most representative sample.

  The Domain 2 samples contained:

  Sulphides: Chalcopyrite, troilite, some pentlandite, and in a few samples some pyrite.

Silicates: Olivine; both clino- and orthopyroxenes; plagioclase feldspar; the phylosilicates talc, chlorite, and biotite; and in some samples the serpentine minerals chrysotile and lizardite.

Oxides: Magnetite.

Carbonates: Calcite.

This domain corresponds with the bulk of the moderate to high grade disseminated portions comprising the Current Lake Deposit, including part of the Cloud Zone, and the moderate grade portion of the Escape South HGZ outside of the high grade core. The various silicate minerals identified correspond quite well with visual observations of the domain in drill core.

- ***Domain 3:*** This domain only consists of two essentially unmineralized samples taken from Escape South HGZ and located stratigraphically above the HGZ.

  The Domain 3 samples only contained:

  Silicates: Olivine; clinopyroxene; the phylosilicates talc and chlorite; and some quartz.

- ***Domain 4:*** Like Domain 3 above this domain consists of only two samples.

  Domain 4 samples contained:

  Sulphides: Chalcopyrite, pyrite.

  Silicates: Olivine; plagioclase; the phylosilicates talc and chlorite; and some quartz.

  Oxides: Magnetite.

  These samples were obtained from the basal portion of the western Beaver Lake Zone of the Current Lake Deposit and are high grade in nature.

- ***Domain 5:*** This domain was determined using only one sample from the Current Lake Deposit.

  The Domain 5 sample only contained:

  Sulphides: Chalcopyrite, pyrite.

  Silicates: Plagioclase; the phylosilicate chlorite (alteration of clinopyroxene?); and some quartz.

  This sample was obtained from the basal portion of the western Beaver Lake Zone a short distance east of the narrow entrance to the Beaver Lake West sub-chamber. The minerals present strongly suggest that the sample was taken from a grey hybrid sill located below the basal contact of the Current Lake Intrusion.

- ***Domain 6:*** This domain was determined using 2 samples from the Current Lake Deposit.

  The Domain 6 samples contained:

  Sulphides: Chalcopyrite, pyrrhotite, and pyrite.

  Silicates: The phylosilicates talc and chlorite.

  Oxides: Magnetite.

  These two samples were obtained from within the high grade, possibly net-textured basal mineralization located a short distance inside Beaver Lake West sub-chamber and adjacent to the sub-chamber’s northern margin (eastern Bridge Zone). The lack of silicate phases and the high grade nature of the mineralization (approximately 30 g/t Pt+Pd) strongly suggests that sulphides are the dominant phase and there are few silicates present.

- ***Domain 7:*** This domain was determined using nine samples with eight samples taken from the Current Lake Deposit and one sample taken from the Escape Lake HGZ.

  The Domain 7 samples contained:

  Sulphides: Pyrite and some chalcopyrite.

  Silicates: Albite and plagioclase feldspar; occasional pyroxene; the phylosilicates chlorite, biotite, muscovite, and talc; and quartz.

  Oxides: Magnetite.

  Carbonates: Calcite.

  This domain probably represents the various red and grey hybrid phases that occur both stratigraphically above and sometimes below (grey hybrid only) the active, olivine-bearing portions of both intrusions. The rocks within the hybrid phases are lithologically complex, variably altered, rarely mineralized, and sometimes contain inclusions of mineralized ultramafic intrusive material.

- ***Domain 8:*** This domain was determined using only one sample from the Current Lake Deposit.

  The Domain 8 sample contained:

  Sulphides: Chalcopyrite, pyrrhotite, and pyrite.

  Silicates: The phylosilicate chlorite (alteration of clinopyroxene?) and minor quartz.

  Oxides: Magnetite.

  The very high grade nature of this sample (>90 g/t Pt+Pd) and the lack of silicate phases strongly suggests that it was taken from one of the massive sulphide pods occurring within the Beaver Lake West sub-chamber (Bridge Zone), possibly the one intersected within drill hole BL09-197.

9.7.1.1 Mineral Cluster Analysis Dendogram

The dendogram display of diffractogram cluster analysis for the eight Current Lake Deposit and Escape South HGZ domains are shown in Figure 9-5 with Domain 1 (red), Domain 2 (blue), Domain 3 (green), and Domain 4 (purple), Domain 5 (orange), Domain 6 (cyan), Domain 7 (brown), and Domain 8 (black). It is important to note the following:

- the domains are relative;
- the domains were established post-synchrotron results;
- the dendrogram is a tree diagram in which each terminal is representative of a single sample;
- the samples are joined together by a series of lines; and
- the further along the distance axis (x-axis) that the patterns are joined the less similar they are.

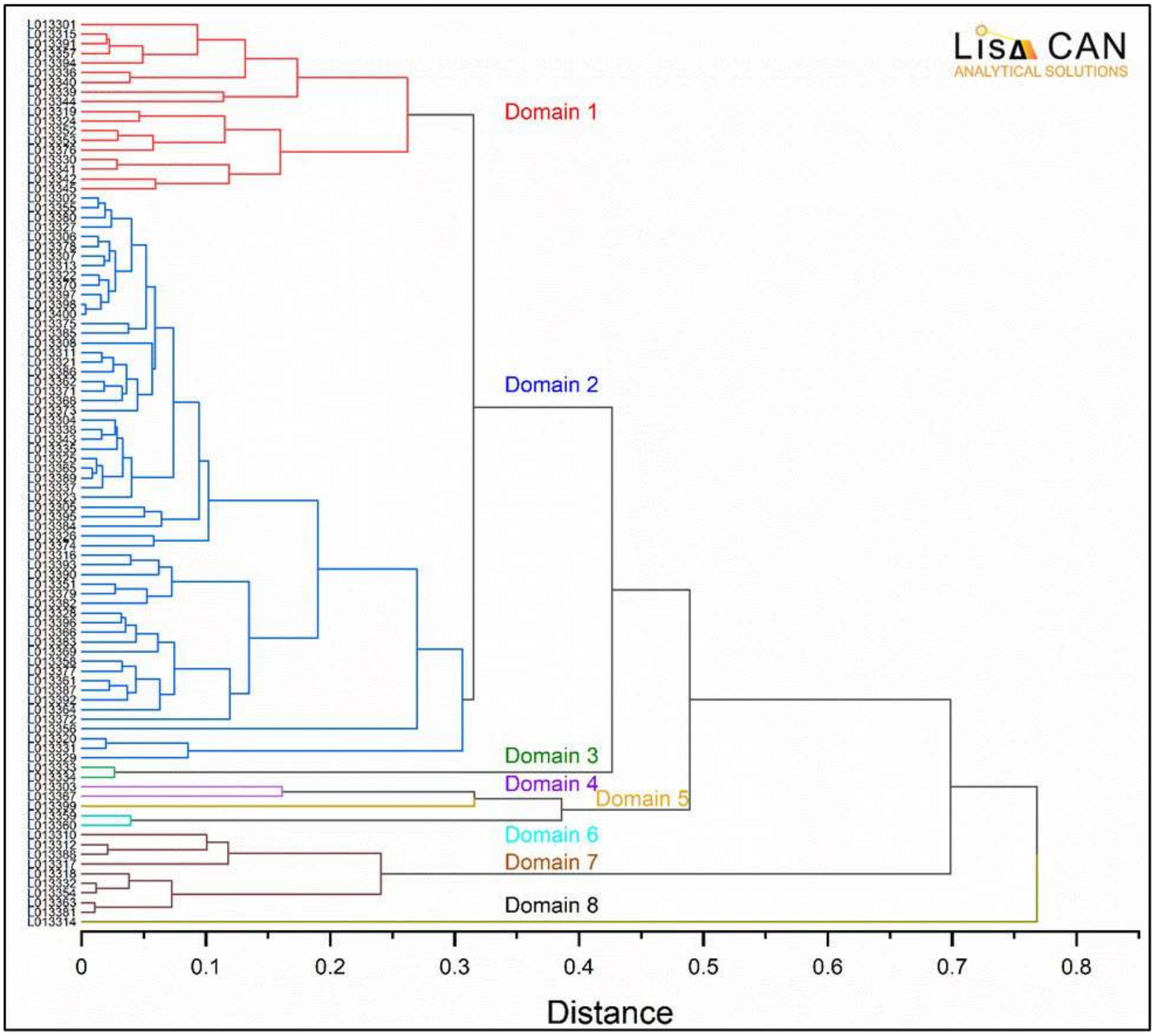


Figure 9-5: Dendogram display of diffractogram cluster analysis for the Current Lake Deposit and Escape South HGZ samples

10. DRILLING

10.1 Current Lake Deposit Drilling

The Current Lake Deposit diamond drilling consists of 162,742 m of core from NQ drill holes completed between 2006 and 2012. Table 10-1 provides a summary of the drill campaigns by year and operator.

Table 10-1: Current Lake Deposit Drill Hole Summary

Year	Operator	Hole Prefix	Number of Holes	Hole Diameter	Total Length (m)
2006	Magma Metals (Canada) Ltd.	CL	2	NQ	375
2007	Magma Metals (Canada) Ltd.	BL, CL	38	NQ	6805
2008	Magma Metals (Canada) Ltd.	BL, CL, SEA	169	NQ	30777
2009	Magma Metals (Canada) Ltd.	BL, CL	191	NQ	31424
2010	Magma Metals (Canada) Ltd.	BL, CL, SEA	207	NQ	48737
2011	Magma Metals (Canada) Ltd.	BL, CL, SEA	102	NQ	31297
2012	Magma Metals (Canada) Ltd.	BL	19	NQ	13327

All drill holes were sited using a differential global positioning system (DGPS). Drilling is normally perpendicular to the strike of the mineralization. Depending on the dip of the drill hole and the dip of the mineralization, inclined drill intercept widths are typically greater than true widths. For the Current Lake Deposit, the drilling has been completed along 50 m spaced section lines with core holes spaced at 10 m intervals on each section. The average drill section and spacing in the Current Lake Deposit is 50 m and varies between approximately 30 m and 60 m.

10.1.1 Escape Lake Deposit Drilling

Diamond drilling at the Escape Lake Trend consists of 39,773 m of core from NQ drill holes completed between 2008 and 2020. Table 10-2 provides a summary of the drill campaigns by year and operator.

Table 10-2: Escape Lake Deposit Drill Hole Summary

Year	Operator	Hole Prefix	Number of Holes	Hole Diameter	Total Length (m)
2008	Boart Longyear (RTX database), Magma Metals (Canada) Ltd.	ELR, SL	3	NQ	500
2009	Magma Metals (Canada) Ltd	SL	39	NQ	8405
2010	Boart Longyear (RTX database), Magma Metals (Canada) Ltd.	ELR, SL	17	NQ	3874
2011	Team Drilling (RTX database), Magma Metals (Canada) Ltd.	ELR, SL	13	NQ	5737
2012	Downing Drilling (RTX database), Magma Metals (Canada) Ltd.	ELR, SL	5	NQ	2820
2015	Downing Drilling (RTX database)	ELR	11	NQ	4955
2016	Downing Drilling (RTX database)	ELR	13	NQ	4851
2020	Clean Air Metals Inc.	ELR	15	NQ	8181

All drill holes have been sited using a DGPS. The drilling followed the Escape Lake Deposit with approximate spacing between 30 m and 60 m.

10.2 Core Logging

The Company's geological logging included recording lithology, alteration, mineralization, structure, and magnetic susceptibility. The current database has 101 unique lithology types with 41 lithological qualifier units, 69 lithological textures, and 61 lithological structures. The alteration database has 20 unique alteration codes. Chlorite, hematite, silica, and serpentine are the most common logged alteration types. There are 33 unique minerals recorded in the current database, including chalcopyrite, pentlandite, and malachite.

10.3 Thunder Bay North Project Specific Gravity Measurements

The Company has collected 70,236 SG measurements for the Thunder Bay North Project, of these 57,925 are for the Current Lake Deposit (Table 10-4) and 12,311 are for the Escape Lake Deposit (Table 10-5). SG was measured using water dispersion method. The samples were weighed in air, and then the uncoated sample was placed in a basket suspended in water and weighed again. All SG's were estimated as all other grades.

Table 10-3: Current Lake Deposit Specific Gravity Measurements

Lithology	Count of SG	Average of SG
Felsic Rock, Undivided	21	2.626
Granite - Undifferentiated	2408	2.651
Granodiorite	1540	2.629
Alkali Feldspar Granite	162	2.626
Monzonite	17	2.661
Quartz Monzonite	70	2.545
Granite	1424	2.644
Tonalite	317	2.656
Hem Altered and Partial Melt Granitoid	162	2.631
Hybrid Grey	2233	2.839
Hybrid Classic Red	3640	2.708
Mafic Undifferentiated	233	2.865
Diabase	56	2.964
Gabbro	703	3.003
Gabbro - Altered	19	2.717
Gabbro - Leucocratic	59	2.852
Gabbro - Melanocratic	5338	2.995
Gabbro - Noritic	19	3.000
Oxide Gabbro	209	3.013
Gabbro - VariTextured	57	2.809
Massive Sulphides	23	3.825
Overburden - Glacial	545	2.968
Overburden - Mud	289	3.052
Overburden - Water	58	2.951
Peridotite	23307	3.010
Pyroxenite	73	3.000
Sedimentary Rocks - Undifferentiated	2302	2.764
Sedimentary Gneiss	85	2.704
Mudstone	10	2.735
Sandstone	650	2.706
Siltstone	6917	2.739
Schist	655	2.775
Sandstone to Siltstone	3536	2.749
Ultramafic - Undifferentiated	47	3.390
Vein	16	3.067
Mixed Intrusion Breccia	495	2.653
Interfingered Mafic/Felsic	230	2.741

Table 10-4: Escape Lake Deposit Specific Gravity Measurements

Lithology	Count of SG	Average of SG
Breccia	15	2.690
Felsic Rock, Undivided	23	2.626
Granite - Undifferentiated	885	2.651
Granodiorite	313	2.629
Alkali Feldspar Granite	464	2.626
Monzonite	45	2.661
Granite	318	2.644
Tonalite	174	2.656
Hem Altered and Partial Melt Granitoid	54	2.631
Felsic Breccia	15	2.719
Gabbro	1229	2.853
Granite	91	2.617
Hybrid Grey	434	2.839
Hybrid Classic Red	424	2.708
BrecciaIntrusive	89	2.665
Mafic Undifferentiated	100	2.865
Diabase	313	2.964
Gabbro	198	3.003
Gabbro - Leucocratic	10	2.852
Oxide Gabbro	89	3.013
Gabbro - VariTextured	16	2.809
Diorite	69	2.877
Overburden	100	2.828
Overburden - Glacial	104	2.968
Overburden - Mud	40	3.052
Overburden - Water	47	2.951
Pyroxenite	9	3.000
Sedimentary Rocks - Undifferentiated	192	2.764
Siltstone	2415	2.753
Sedimentary Gneiss	57	2.704
Mudstone	146	2.735
Sandstone	84	2.706
Siltstone	1042	2.739
Schist	225	2.775
Sandstone to Siltstone	161	2.749
Breccia	80	2.666
Ultramafic - Undifferentiated	62	3.390
Peridotite	2052	2.947
Pyroxenite	91	2.905
Vein	14	3.067
Mixed Intrusion Breccia	22	2.653

10.4 Comments on Section 10

In the opinion of the QP, the quantity, and quality of the lithological, collar, downhole survey, and SG data collected in the exploration programs are sufficient to support the Mineral Resource Estimate.

- Core logging completed by the Company and previous operators meet industry standards for exploration on replacement and porphyry deposits,
- Collar surveys and downhole surveys were performed using industry-standard instrumentation,
- Drill hole orientations are appropriate for the mineralized style, and
- Drill hole intercepts demonstrate that sampling is representative.

No other factors were identified with the data collected from the drill programs that could significantly affect the Mineral Resource Estimate.

11. SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Assay Sample Preparation and Analysis

Between December 2006 and September 2007 all Magma Metals (Canada) Limited samples were sent to the Accurassay Laboratories facility (“Accurassay”) located in Thunder Bay, Ontario. At the time Accurassay was a well-established and recognized assay and geochemical analytical services company, and was independent of Magma Metals. The Thunder Bay Accurassay analytical facility (since closed) held ISO-17025 registration. Accurassay was also used in 2006 to prepare a limited amount of standard reference material (“SRM”) based on local boulder material.

Between September 2007 and December 2020 all sample preparation and analysis of Magma Metals (Canada) Limited (September 2007 to June 2012), Panoramic (June 2012 to December 2012), and the Company (after May 2020) were completed at the ALS Chemex (later ALS Geochemistry) preparation facility in Thunder Bay and then shipped to the ALS primary assay laboratory in Vancouver, B.C. for analysis. ALS is a well-established and recognized assay and geochemical analytical services company certified to international standards and is independent of Magma Metals, Panoramic, and the Company. The Thunder Bay laboratory holds ISO-9000 accreditation; the Vancouver facility holds ISO-17025 registration.

11.1.1 Clean Air Metals Inc. Core Sample Preparation and Analysis (2020)

The diamond drill core from the Escape Lake and Current Lake properties, as sampled by the Company in 2020, under the direct supervision of Justin Johnson, P.Geo. (May 10 to November 20, 2020) and then by Adam Richardson, P. Geo. (November 20 and December 23, 2020), was cut in half with a purpose-designed Vancon diamond-bladed core saw (Figure 11-1). One-half of the cut core was placed in a pre-marked plastic sample bag, and the other half returned to the core box. Sample bags were sealed with zip ties to ensure sample integrity. All samples were taken directly from the Company core cutting facility to the ALS Thunder Bay Preparation Lab in a Company vehicle driven by a Company employee and given directly to an employee of the ALS lab to ensure and uninterrupted chain of custody.

All samples taken during the 2020 diamond drilling program were prepared at the ALS Preparation Lab in Thunder Bay, Ontario, and then shipped to, and analyzed at the ALS primary laboratory in Vancouver. The samples were crushed and then pulverized at the Thunder Bay lab from split core to prepare a total sample of up to 250 g 85% passing 75 microns (“µm”). After sample pulp preparation had been completed the pulps were then shipped directly to the ALS primary analytical laboratory in Vancouver, B.C. and analyzed in the following manner:

- All samples were analyzed for Au, Pt, and Pd using fire assay (“FA”) with an inductively coupled plasma mass spectrometry (ICP-MS) finish (ALS method code: PGM-ICPMS23). Detection limits for this method are Au: 0.001 ppm to 1 ppm; Pt: 0.0005 ppm to 1 ppm; and Pd 0.001 ppm to 1 ppm.
- Au, Pt, and Pd samples with grades above the optimal ICP-MS detection limits (as directly stated above) were re-analyzed using an optical emission spectroscopy method (ICP-OES; method code PGM-ICP27 “ore grade”). Detection limits for this method are Au: 0.03 ppm to 100 ppm; Pt: 0.03 ppm to 100 ppm; and Pd 0.03 ppm to 100 ppm.

- All samples were analyzed for multi-elements and base metals using a multi-element atomic emission spectroscopy (ICP-AES; method code ME-ICP61) technique following four-acid digest of the sample. This analytical method reports 33 elements, including Ag, chromium ("Cr"), Cu, Ni, and Co. The detection limits for method code ME-ICP61 are listed in Table 11-1.
- Commencing in late 2020 all core samples were also analyzed for Rh using the Rh-MS25 method. Prior to this all samples containing greater than 1 g/t Pt+Pd were re-analyzed for Rh.

Figure 11-1: Purpose-designed Vancon diamond-bladed core saw with pre-marked sample bags

Table 11-1: ICP-AES Method Detection Limit Elements and Ranges in ppm for ME-ICP61

Element	Range	Element	Range	Element	Range	Element	Range
Ag	0.05–100	Co	1–10000	Mo	1–10000	Sr	1–10000
Al	0.01–50%	Cr	1–10000	Na	0.01–10%	Th	20–10000
As	5–10000	Cu	1–10000	Ni	1–10000	Ti	0.01–10%
Ba	10–10000	Fe	0.01–50%	P	10–10000	Tl	10–10000
Be	0.5–1000	Ga	10–10000	Pb	2–10000	U	10–10000
Bi	2–10000	K	0.01–10%	S	0.01–10%	V	1–10000
Ca	0.01–50%	La	10–10000	Sb	5–10000	W	10–10000
Cd	0.5–1000	Mg	0.01–50%	Sc	1–10000	Zn	2–10000
		Mn	5–10000				

11.1.2 Historic Core Assay Sample Preparation and Analysis

Historic diamond drill core samples taken between December 2006 and December 2012 taken from the Current Lake Deposit were analyzed at two separate facilities:

11.1.2.1 Accurassay Laboratories

Between December 2006 and September 2007, the Current Lake Property core sample preparation and analysis was completed in Thunder Bay by Accurassay Laboratories on Magma Metals (Canada) Limited Current Lake diamond drill holes TBND001 to TBND034. All samples were dried prior to any sample preparation. Once dry, samples were crushed to 90% -8 mesh, split into 250 g to 500 g sub-samples using a Jones Riffler and then pulverized to 90% -150 mesh using a ring and puck pulverizer. Prior to analysis, samples were homogenized. Silica cleaning was completed between each sample to prevent cross-contamination.

Sample analysis completed by Accurassay comprised:

- Method Code AL4APP: Fire assay with atomic absorption ("AA") finish for Au, Pt, Pd with detection limits of 5 ppb, 15 ppb, and 10 ppb, respectively.
- Method Code AL4CNC: Aqua regia digest with AA-finish for Cu, Ni, Co with detection limits of 1 ppm each.

All samples were taken directly from the Magma Metals (Canada) Limited core cutting facility to the ALS Chemex Thunder Bay preparation lab by a Magma Metals (Canada) Limited employee and given directly to an employee of the ALS Chemex lab to ensure uninterrupted chain of custody.

11.1.2.2 ALS Chemex

Between September 2007 to December 2012, all core samples were prepared at the ALS Chemex Preparation Laboratory located in Thunder Bay. All samples were bar coded on arrival at the lab for entry in the ALS Laboratory Information Management System ("LIMS"). This system provides complete chain of custody records for every stage in the sample preparation and analytical process from the moment that a sample arrives at the laboratory.

On receipt, the samples were weighed, dried at 110°C to 120°C, crushed using a jaw crusher to >50% passing 1 mm, riffle split to generate a 250 g sub-sample, and pulverized to >85 percent less than 75 µm.

Au, Pt and Pd were analyzed using fire assay with an inductively coupled plasma mass spectrometry (ICP-MS) finish (method code: PGM-ICPMS23). Detection limits were Au: 0.001 ppm to 1 ppm; Pt: 0.0005 ppm to 1 ppm; and Pd 0.001 ppm to 1 ppm. Samples that exhibited grades above the optimal ICP-MS detection limits were analyzed using an optical emission spectroscopy method (ICP-OES; method code PGM-ICP27 "ore grade"). Detection limits for this method are Au: 0.03 ppm to 100 ppm; Pt: 0.03 ppm to 100 ppm; and Pd 0.03 ppm to 100 ppm.

Multi-element and base metals are analyzed using a multi-element atomic emission spectroscopy (ICP-AES; method code ME-ICP61) technique following four-acid digest of the sample. This analytical method reports 33 elements, including Ag, Cr, Cu, Ni, and Co.

All samples were taken directly from the Magma Metals (Canada) Limited core cutting facility to the ALS Chemex Thunder Bay preparation lab by a Magma Metals (Canada) Limited employee and given directly to an employee of the ALS Chemex lab to ensure uninterrupted chain of custody.

11.2 Specific Gravity Sampling

11.2.1 Current Lake Deposit

A total of 6,476 SG measurements for the Current Lake Deposit were provided from on site drill measurements. SG measurements were taken from representative core sample intervals (approximately 0.1 m to 0.2 m long). SG was measured using a water dispersion method. The samples were weighed in air, and then the uncoated sample was placed in a basket suspended in water and weighed again. SG is calculated by using the weight in air versus the weight in water method (Archimedes), by applying the following formula:

$$Specific\ Gravity = \frac{Weight\ in\ Air}{(Weight\ in\ Air - Weight\ in\ Water)}$$

11.2.2 Escape Lake Deposit

A total of 1,091 SG measurements for the Escape Lake Deposit were provided from on site drill measurements. SG measurements were taken from representative core sample intervals (approximately 0.1 m to 0.2 m long). SG was measured using a water dispersion method. The samples were weighed in air, and then the uncoated sample was placed in a basket suspended in water and weighed again. SG is calculated by using the weight in air versus the weight in water method (Archimedes).

Nordmin determined that the required amount and distribution of SG measurements did not exist for direct estimation of the entire block model. All SG's are estimated as all other grades.

11.3 Quality Assurance/Quality Control Programs

QC measures were set in place to ensure the reliability and trustworthiness of exploration data. These measures include written field procedures and independent verifications of aspects such as drilling, surveying, sampling, assaying, data management, and database integrity. Appropriate documentation of QC measures and regular analysis of QC data is essential as a safeguard for Project data and form the basis for the QA program implemented during exploration.

Analytical QC measures typically involve internal and external laboratory procedures implemented to monitor the precision and accuracy of the sample preparation and assay data. These measures are also important to identify potential sample sequencing errors and to monitor for contamination of samples.

Sampling and analytical QA/QC protocols typically involve taking duplicate samples and inserting QC samples (certified reference material [CRM] and blanks) to monitor the assay results' reliability throughout the drill program. Umpire check assays are typically performed to evaluate the primary lab for bias and involve re-assaying a set proportion of sample rejects and pulps at a secondary umpire laboratory.

11.3.1 Current Lake Deposit

11.3.1.1 Standards

The Company submitted seven different CRM as part of its QA/QC process with a total of 10,556 CRM between 2006 and 2020 (Table 11-2). The review of CRM results identified 492 sample swaps or laboratory failures that have been incorrectly identified as members of a different population. AMIS0008 fell within the range of mean +/- two standard deviations for Pt and Pd (Figure 11-2 and

Figure 11-3). AMIS0073 shows high variability and has outliers for the mean +/- two standard deviations for Cu and Ni (Figure 11-4 and Figure 11-5).The Lab submitted 16 different CRM as part of its QA/QC process with a total of 16,531 CRM between 2006 and 2020 (Table 11-3). Oreas 19 a largely fell within the range of mean +/- two standard deviations for Au, however there are some outliers for Oreas 15 a (Figure 11-6 and Figure 11-7). Oreas 682 falls within the range of mean +/- two standard deviations for Rh (Figure 11-8). The process performance and moving range charts for all other standards listed in Table 11-2 and Table 11-3 can be found in Appendix C.

Table 11-2: Current Lake Deposit CRM Result Summary from Geologist Inserted CRMs

Standard	Count	Best Value Pt (g/t)	Mean Value Pt (g/t)	Bias (%)	Best Value Pd (g/t)	Mean Value Pd (g/t)	Bias (%)	Best Value Cu (g/t)	Mean Value Cu (g/t)	Bias (%)	Best Value Ni (g/t)	Mean Value Ni (g/t)	Bias (%)	Best Value Co (g/t)	Mean Value Co (g/t)	Bias (%)
AMIS0008	96	8.660	8.980	-0.320	4.360	4.420	-0.060									
AMIS0056	112	0.810	0.820	-0.010	0.880	0.880	0.000									
AMIS0060	2253							3308.000	3413.000	-105.000	2909.000	3007.000	-98.000			
AMIS0064	4885	1.240	0.650	0.590	0.580	0.140	0.440									
AMIS0073	1162	0.330	0.345	-0.015	0.890	0.906	-0.016	2414.000	2478.73	-64.73	5459.000	5262.550	196.450	277.000	273.000	4.000
AMIS0093	294	0.110	0.107	0.003	0.470	0.466	0.004	2958.000	3010.000	-52.000	2722.000	2629.000	93.000	173.000	163.000	10.000
AMIS0124	1754	0.840	0.842	-0.002	0.870	0.877	-0.007	1324.000	1373.000	-49.000	1917.000	1886.000	31.000			

Table 11-3: Current Lake Deposit CRM Result Summary from Lab Inserted CRMs

Standard	Count	Best Value Pt (g/t)	Mean Value Pt (g/t)	Bias (%)	Best Value Pd (g/t)	Mean Value Pd (g/t)	Bias (%)	Best Value Cu (g/t)	Mean Value Cu (g/t)	Bias (%)	Best Value Ni (g/t)	Mean Value Ni (g/t)	Bias (%)	Best Value Co (g/t)	Mean Value Co (g/t)	Bias (%)	Best Value Ag (g/t)	Mean Value Ag (g/t)	Bias (%)	Best Value Au (g/t)	Mean Value Au (g/t)	Bias (%)
GBM306-12	76							14902	14820	82	9513	9430	83									
GBM398-4c	284							3891	3709	182	4071	3982	89									
GBM399-5	4463							29424	665	28759	24412	181	24231									
GBM908-10	852							3601	3579	22	2241	2179	62	23	25	-2	2.9	2.98	-0.08			
OREAS 19 a	57																			5.49	5.42	6
Oreas 15 g	147																			0.527	0.512	0.015
Oreas 24P	120							52	52.72	-0.72	141	147.7	-6.7									
Oreas 45c	1376	0.065	0.064	0.001	0.047	0.046	0.001															
Oreas 45P	8435	0.077	0.075	0.002	0.055	0.054	0.001	749	738	11	385	364	21							0.055	0.072	-0.017
Oreas 904	99																			0.045	0.044	0.001
PGMS 9	699	0.71	0.4	0.31	2.6	1.51	1.09													1.04	0.7	0.34
PGMS 13	735	1.25	1.26	-0.01	4.51	4.46	0.05													1.41	1.38	0.03
PGMS 14	1830	0.119	0.12	-0.001	0.451	0.448	0.003													0.259	0.257	0.002
PGMS 15	1180	0.098	0.101	-0.003	0.428	0.429	-0.001													0.41	0.4	0.01
PGMS 16	790	1.23	0.799	0.431	4.66	3.71	0.95													1.12	0.71	0.41
PGMS 17	1152	0.998	1	-0.002	4.3	4.36	-0.06													0.927	0.91	0.017
PGMS 19	54	0.108	0.111	-0.003	0.476	0.48	-0.004													0.23	0.223	0.007
AMIS0160	3							2.06	2.06	0.23				3.160	3.160	0.31						
AMIS0281	3	0.54	0.54	0.06	1.50	1.50	0.08															
CCU-1c	5							25.62	25.62	0.07												
CCU-1 d	2							23.9	23.9	0.29												
CCU-1e	9							22.88	22.88	0.24												

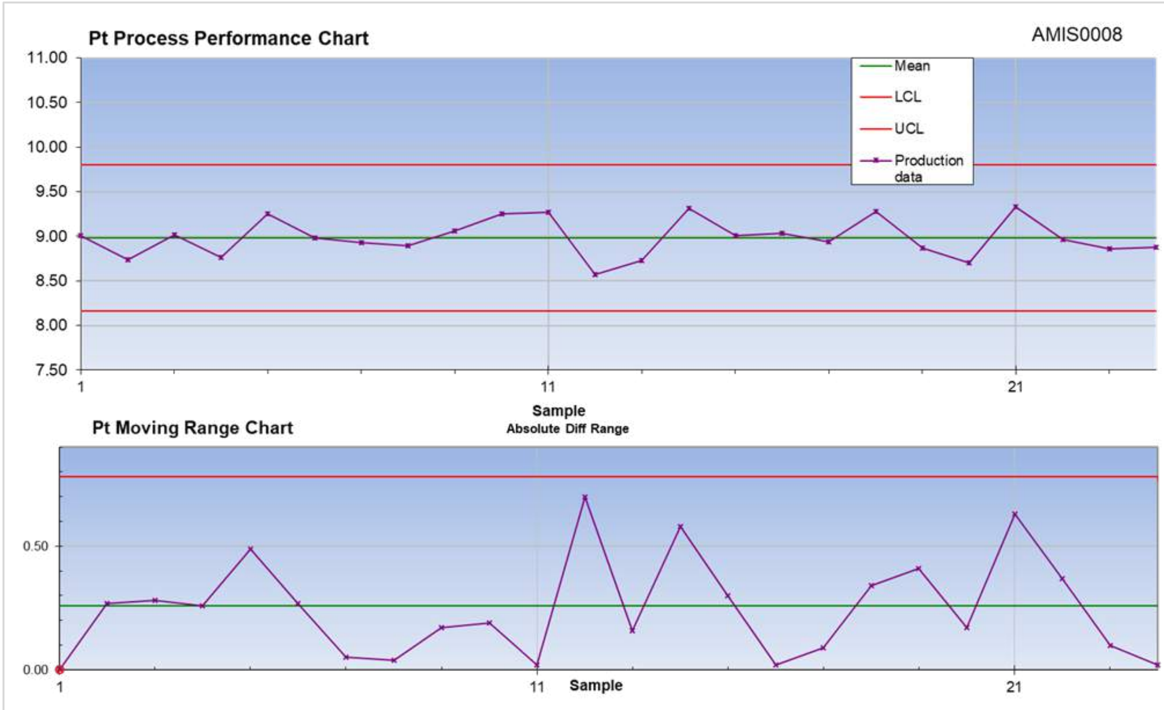


Figure 11-2: Current Lake Deposit Standard AMIS008 Pt (g/t)

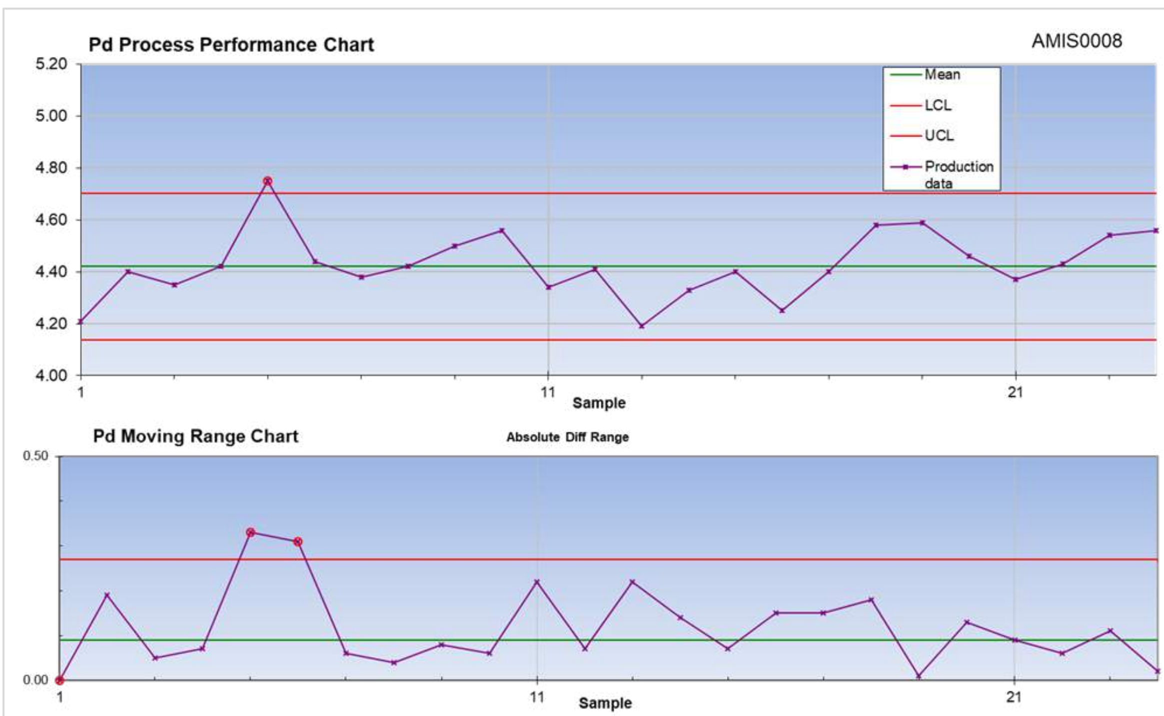


Figure 11-3: Current Lake Deposit Standard AMIS0008 Pd (g/t)

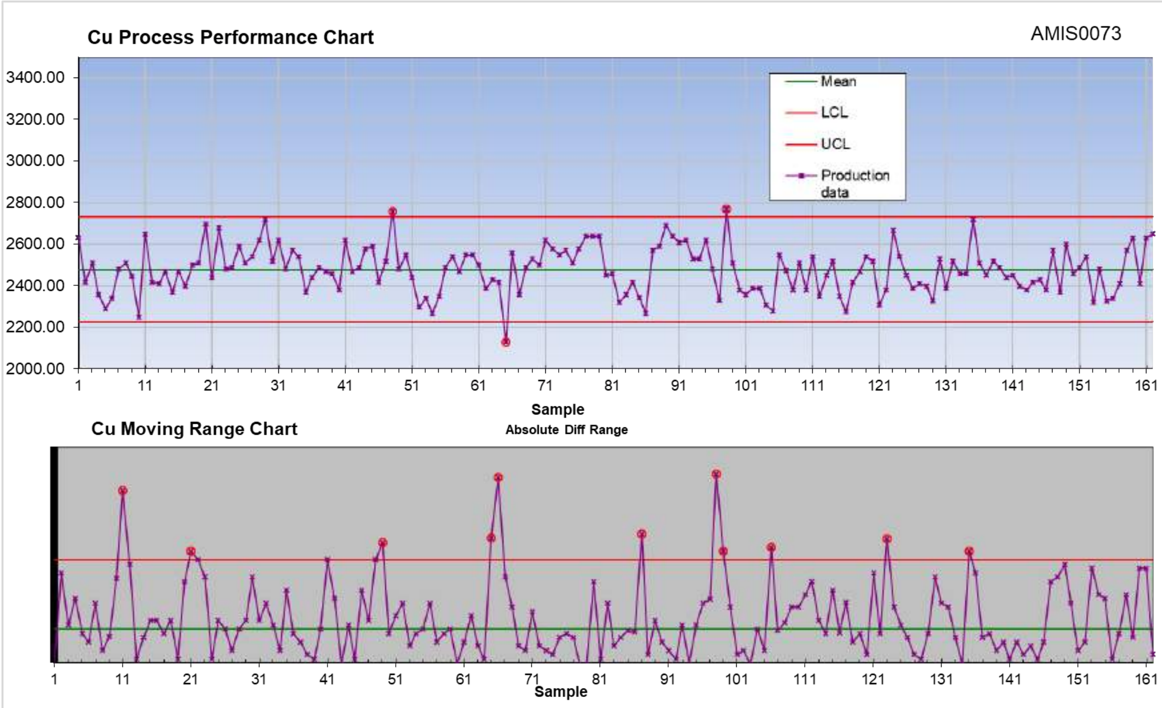


Figure 11-4: Current Lake Deposit Standard AMIS0073 Cu (g/t)

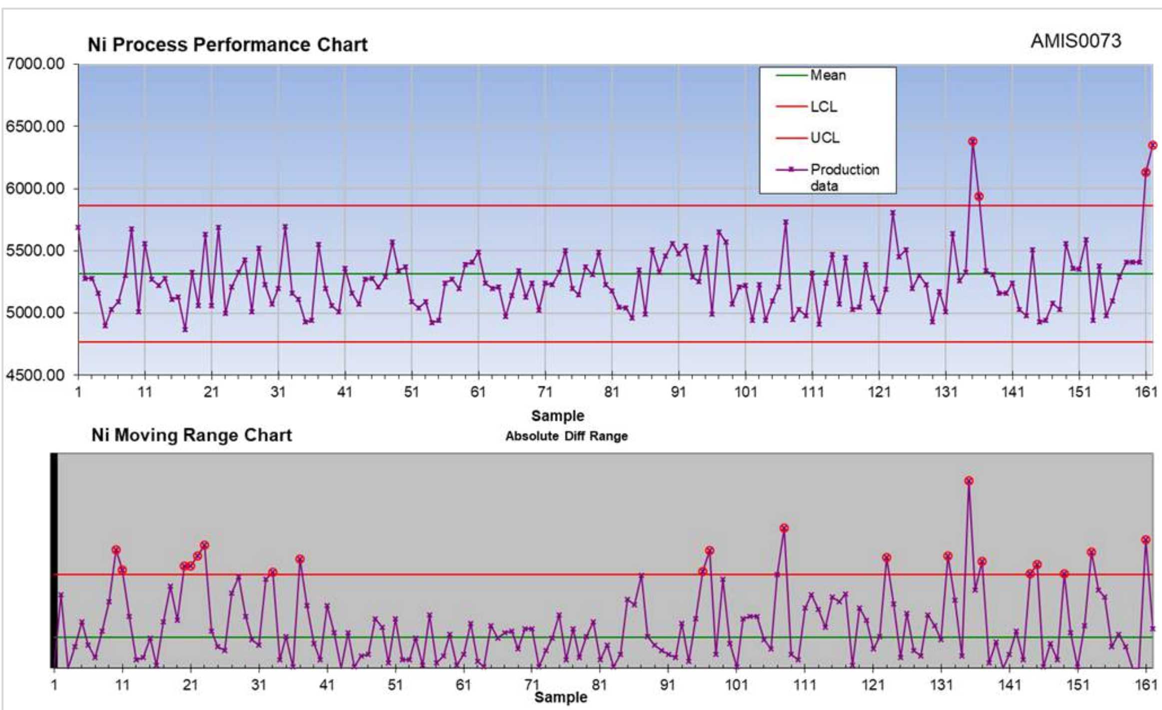


Figure 11-5: Current Lake Deposit Standard AMIS0073 Ni (g/t)

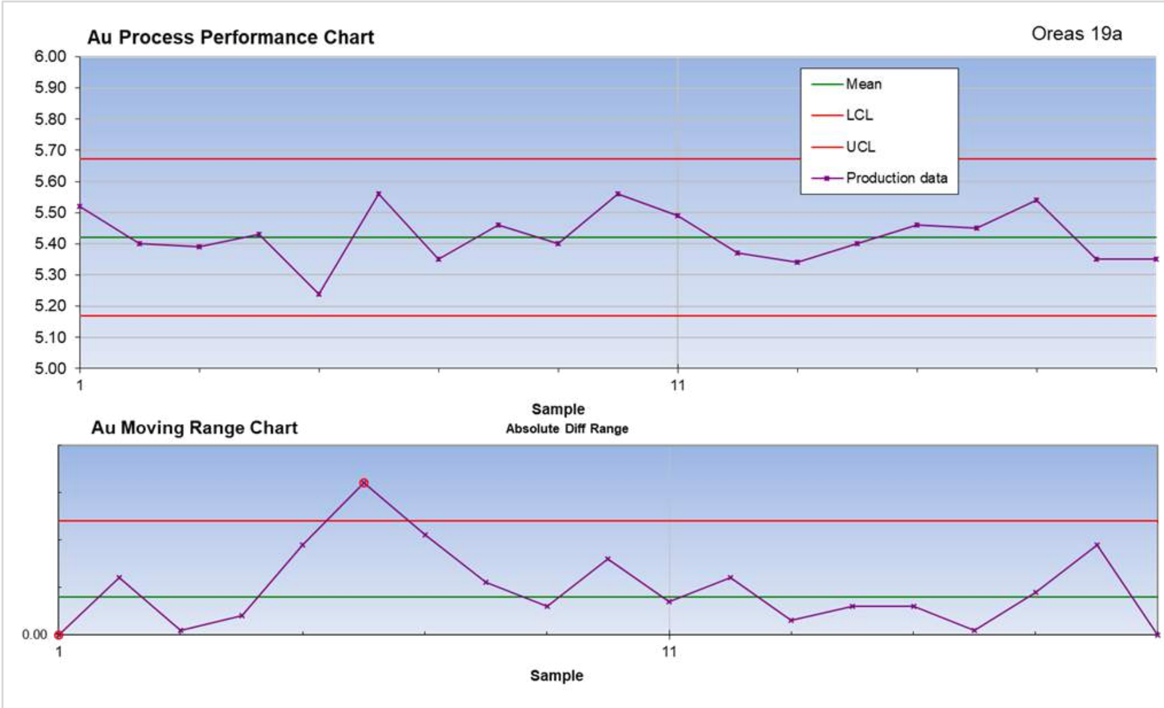


Figure 11-6: Current Lake Deposit Standard Oreas 19 a Au (g/t)

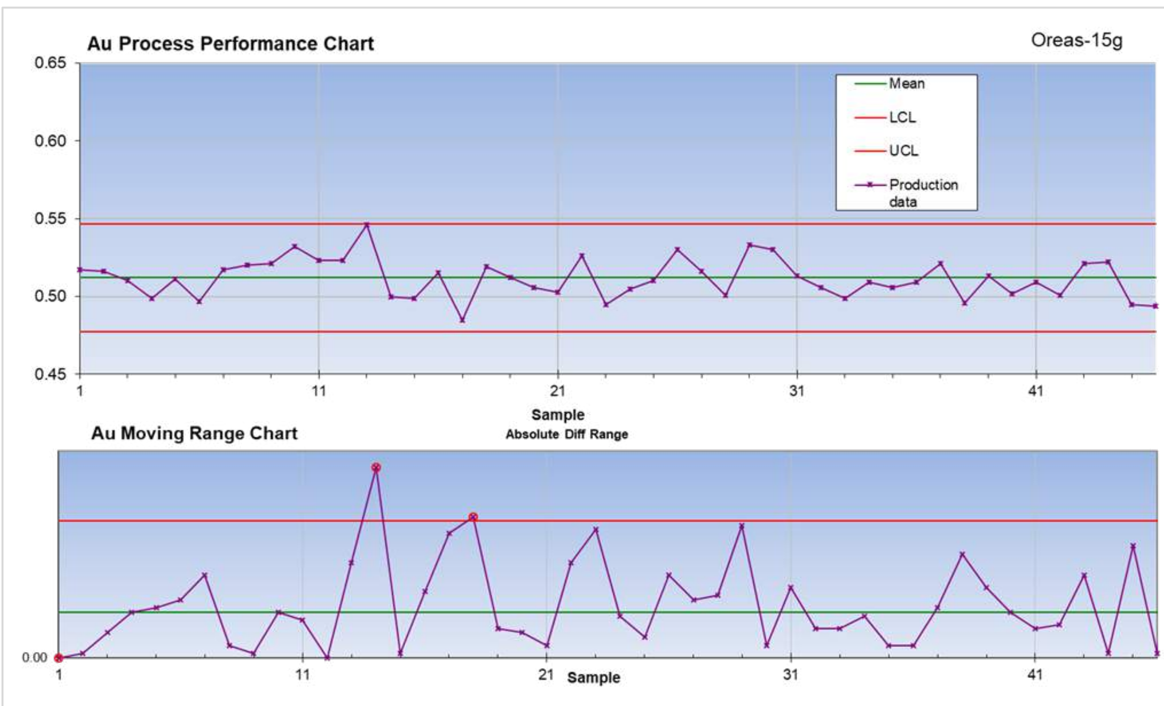


Figure 11-7: Current Lake Deposit Standard Oreas-15 g Au (g/t)

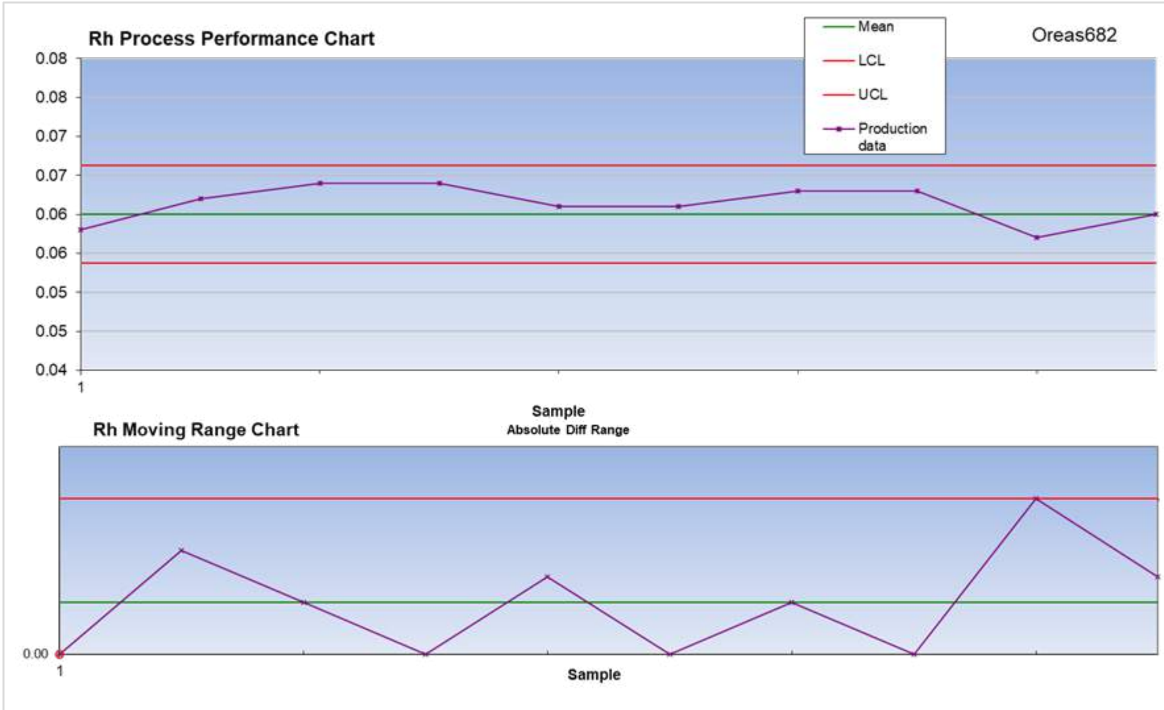


Figure 11-8: Current Lake Deposit Standard Oreas 682 Rh (g/t)

11.3.1.2 Blanks

The Company submitted 6,663 coarse blanks between 2006 and 2020 as part of its QA/QC process. Five different blanks were used with the corresponding amount in brackets BL08 (2637), BL09 (1967), BL12 (722), Marble (1337) (Figure 11-9 through Figure 11-15) and Silica (3546) (Figure 11-16 through Figure 11-22). The Lab submitted 24,191 blanks between 2006 and 2020 as part of its QA/QC process. One blank was used labelled as Blank. The charts not presented in this section are available in Appendix C. No significant carryover of elevated metals is evident. This does not impact the Mineral Resource Estimate.

The blanks contain measurable quantities of Pt, Pd, Cu, Ni, Co, Ag, Au, and Rh. There was no obvious correlation between the blank values and those samples immediately preceding.

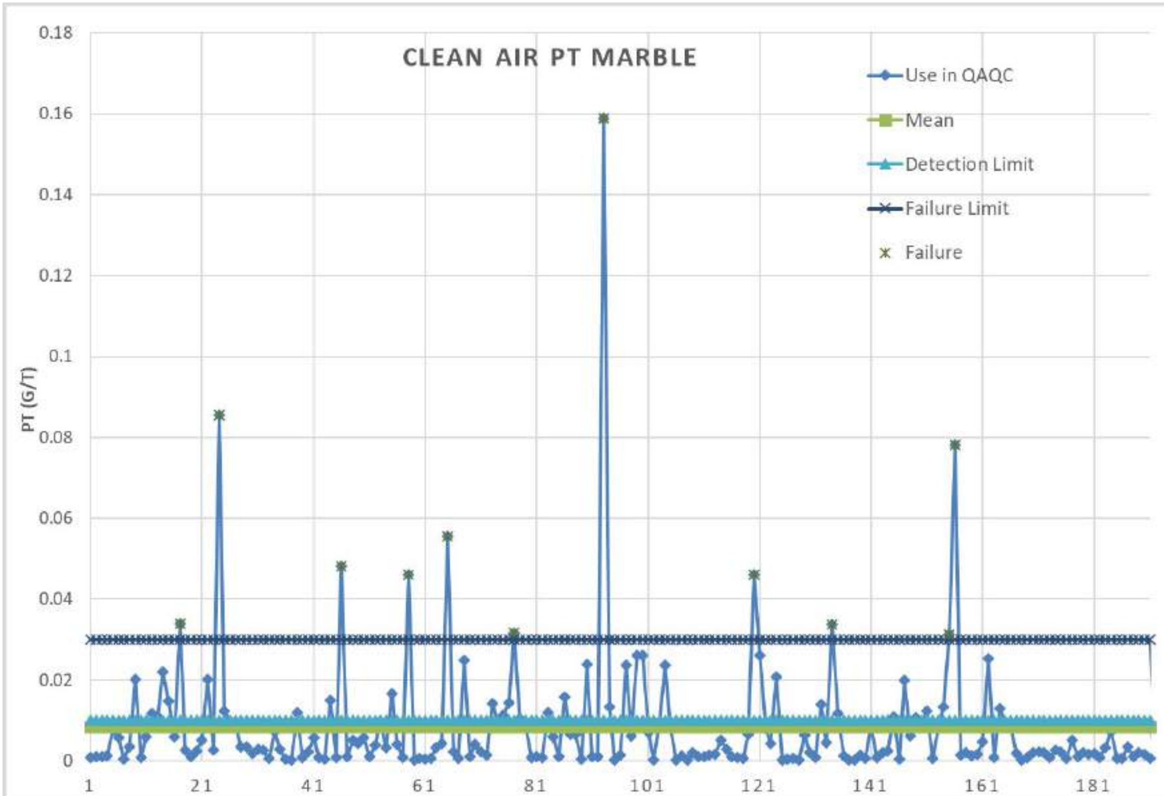


Figure 11-9: ALS Pt (g/t) results for the Current Lake Deposit marble coarse blanks

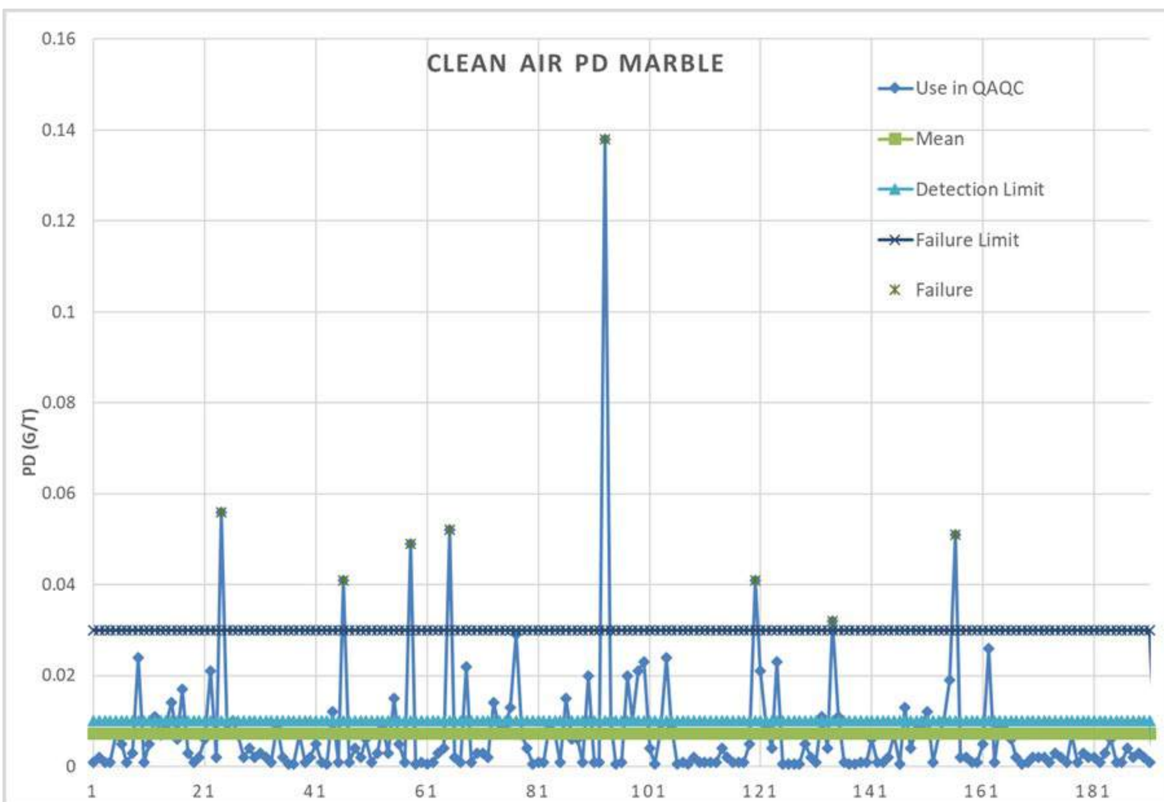


Figure 11-10: ALS Pd (g/t) results for the Current Lake Deposit marble coarse blanks

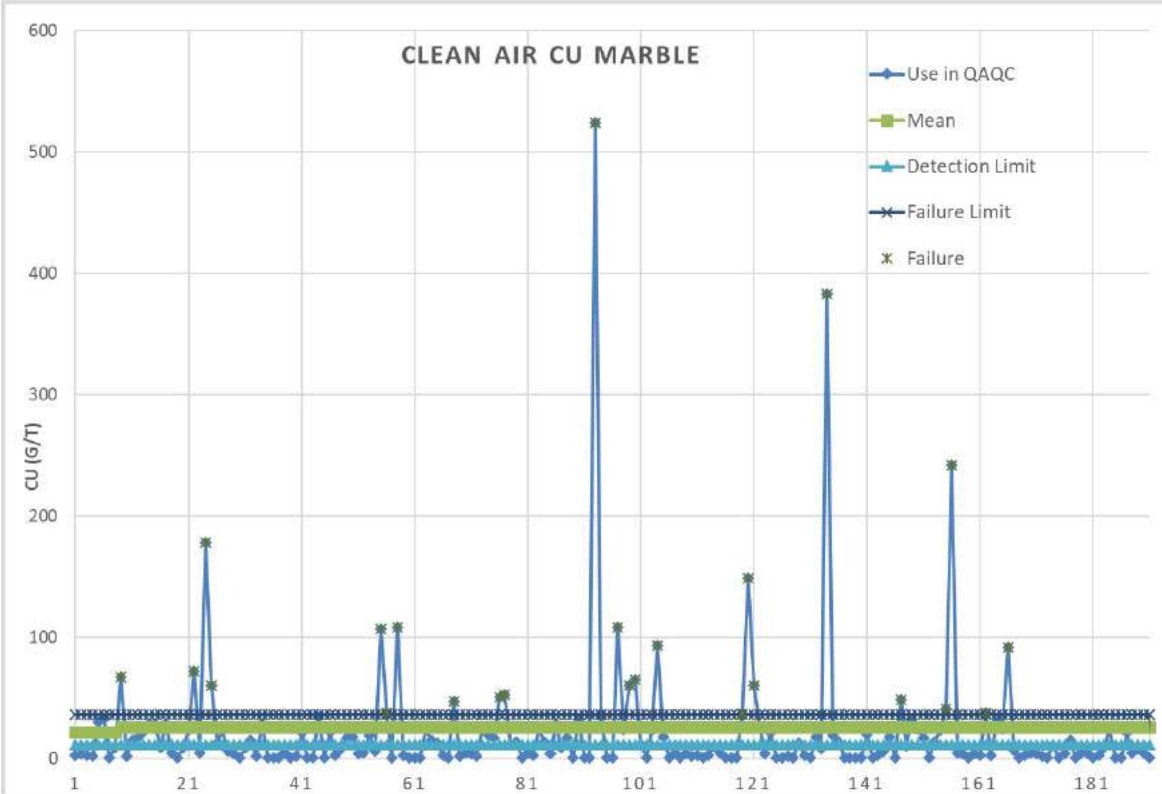


Figure 11-11: ALS Cu (g/t) results for the Current Lake Deposit marble coarse blanks

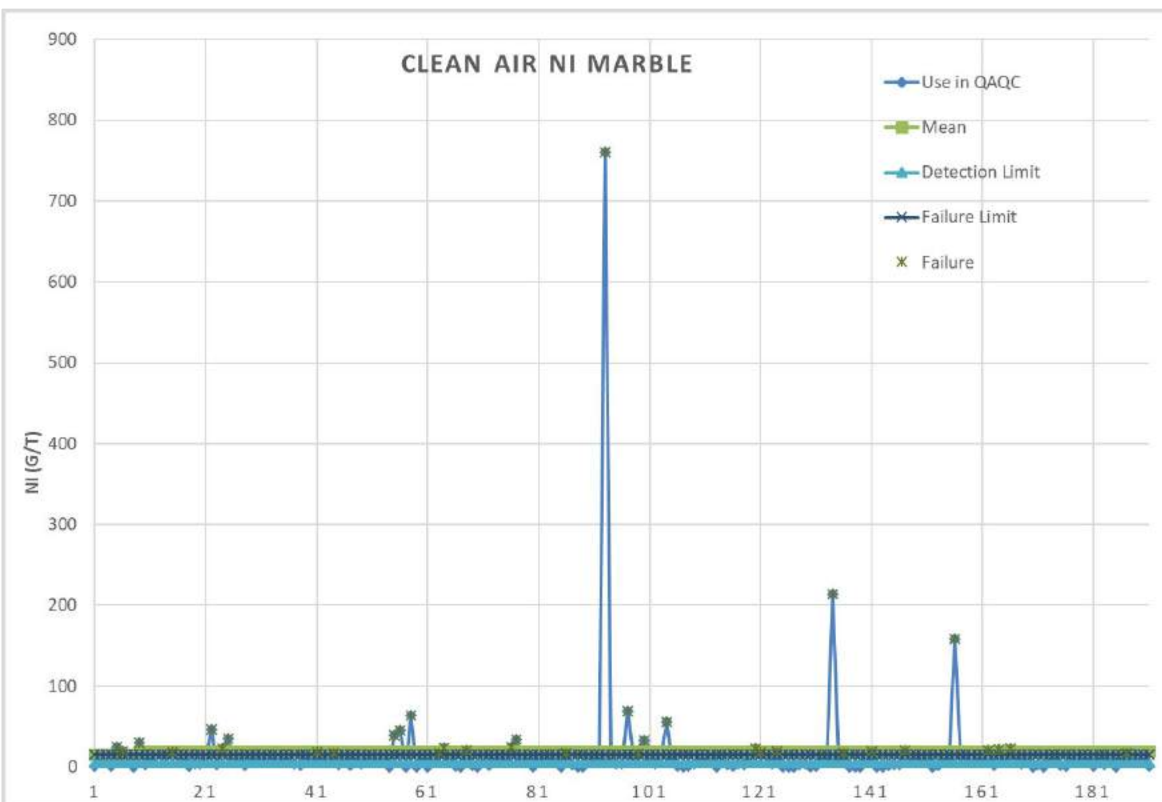


Figure 11-12: ALS Ni (g/t) results for the Current Lake Deposit marble coarse blanks

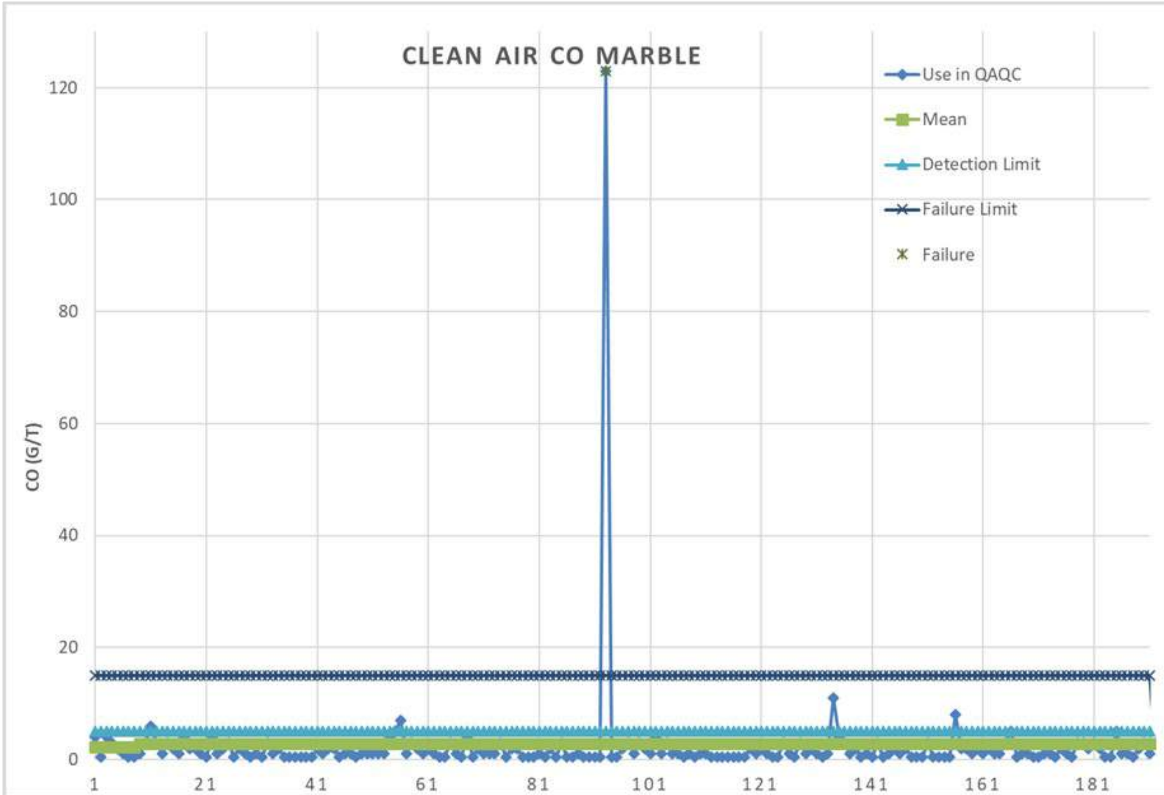


Figure 11-13: ALS Co (g/t) results for the Current Lake Deposit marble coarse blanks

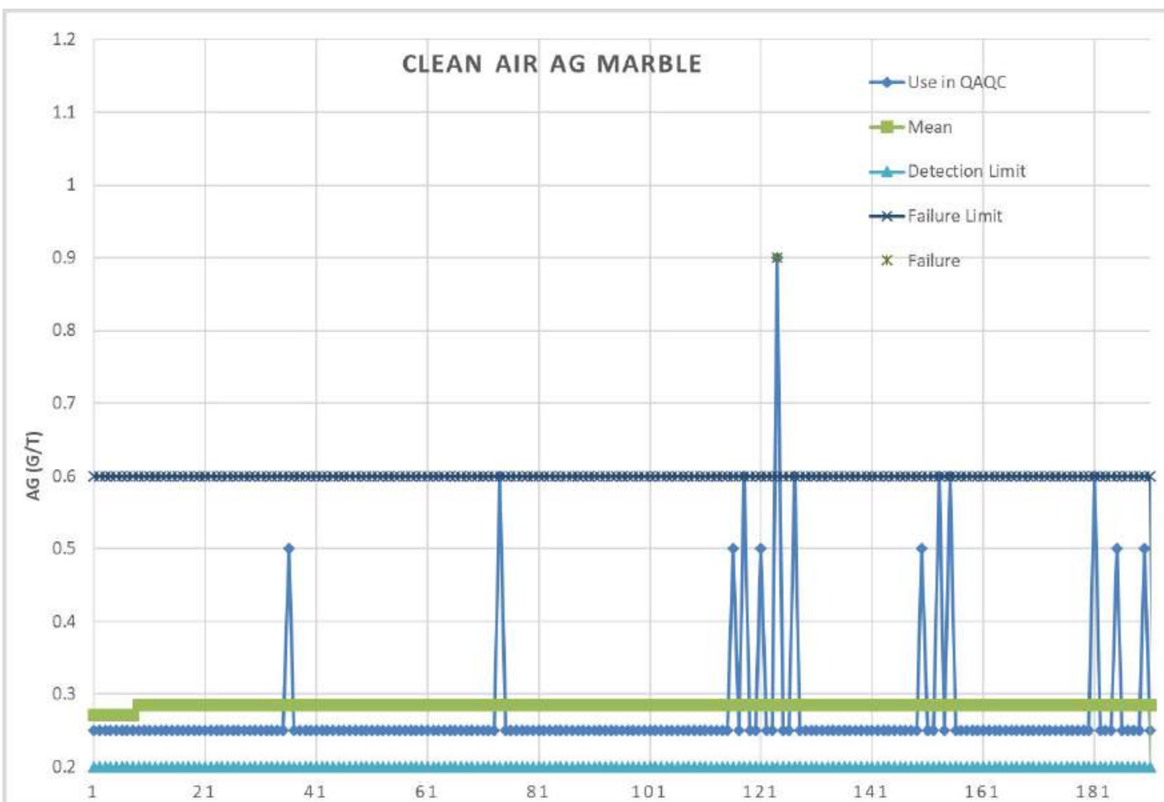


Figure 11-14: ALS Ag (g/t) results for the Current Lake Deposit marble coarse blanks

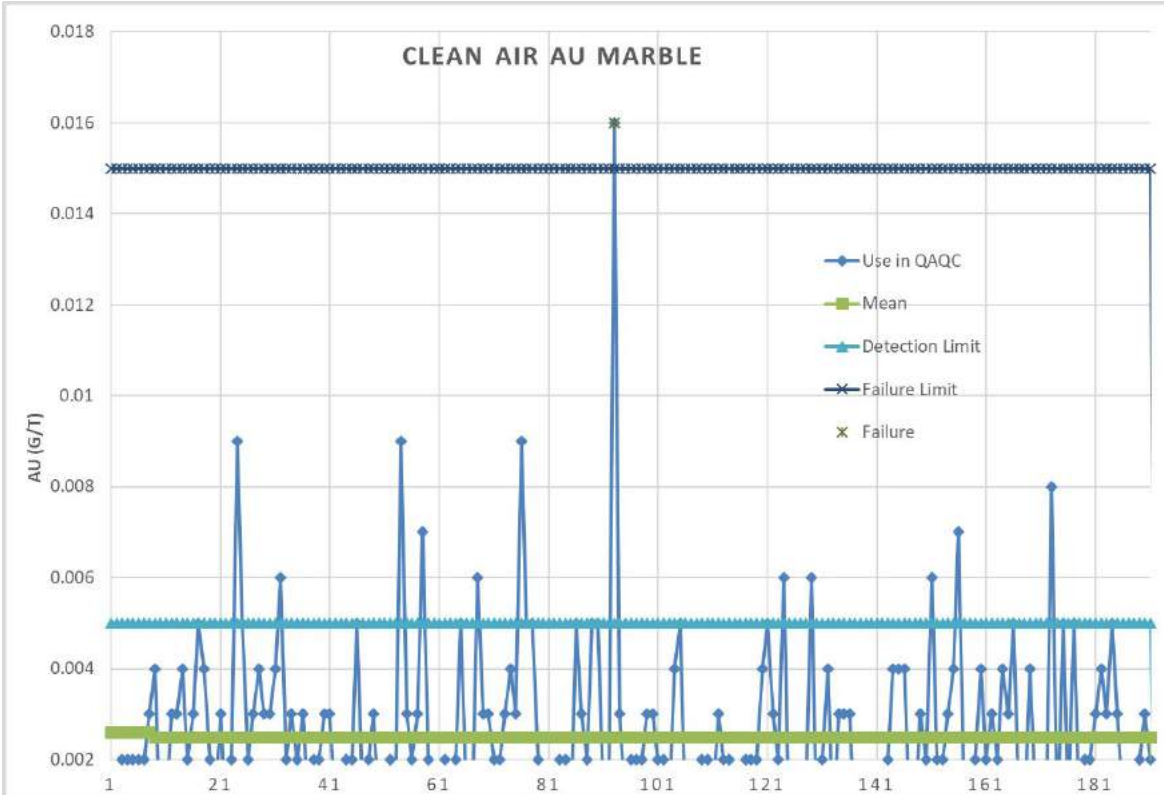


Figure 11-15: ALS Au (g/t) results for the Current Lake Deposit marble coarse blanks

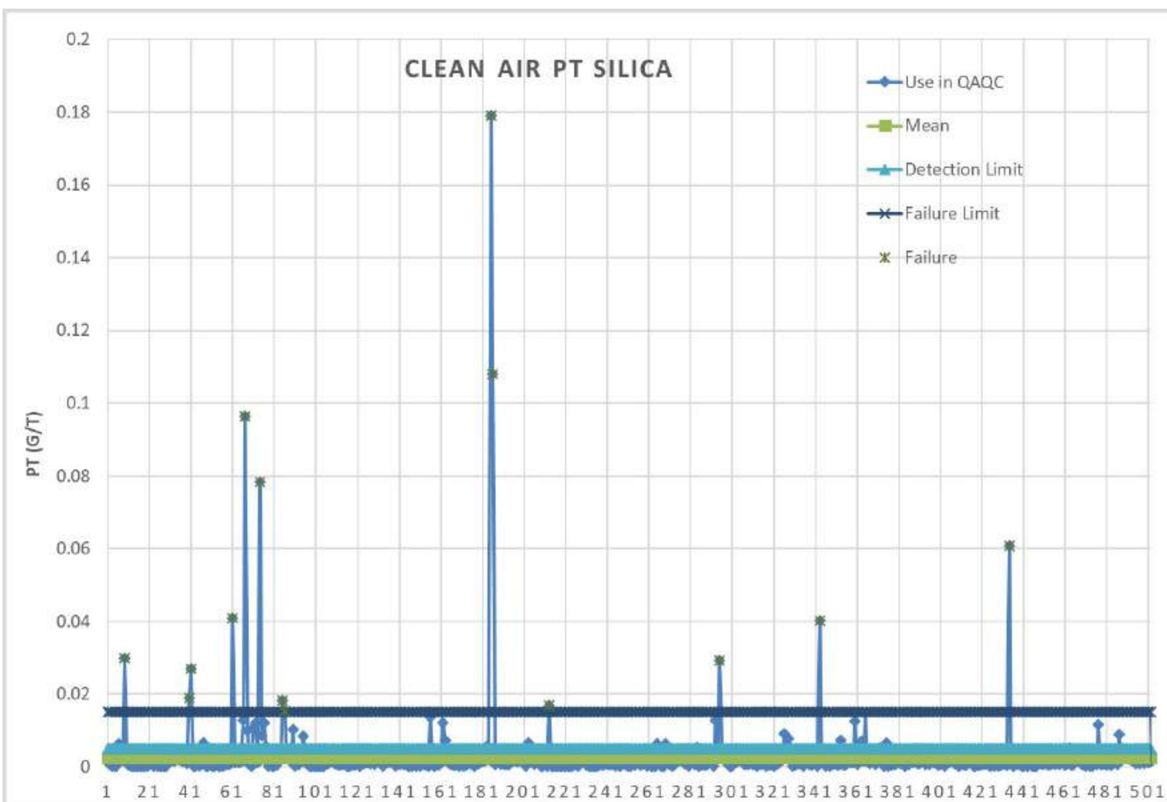


Figure 11-16: ALS Pt (g/t) results for the Current Lake Deposit silica coarse blanks

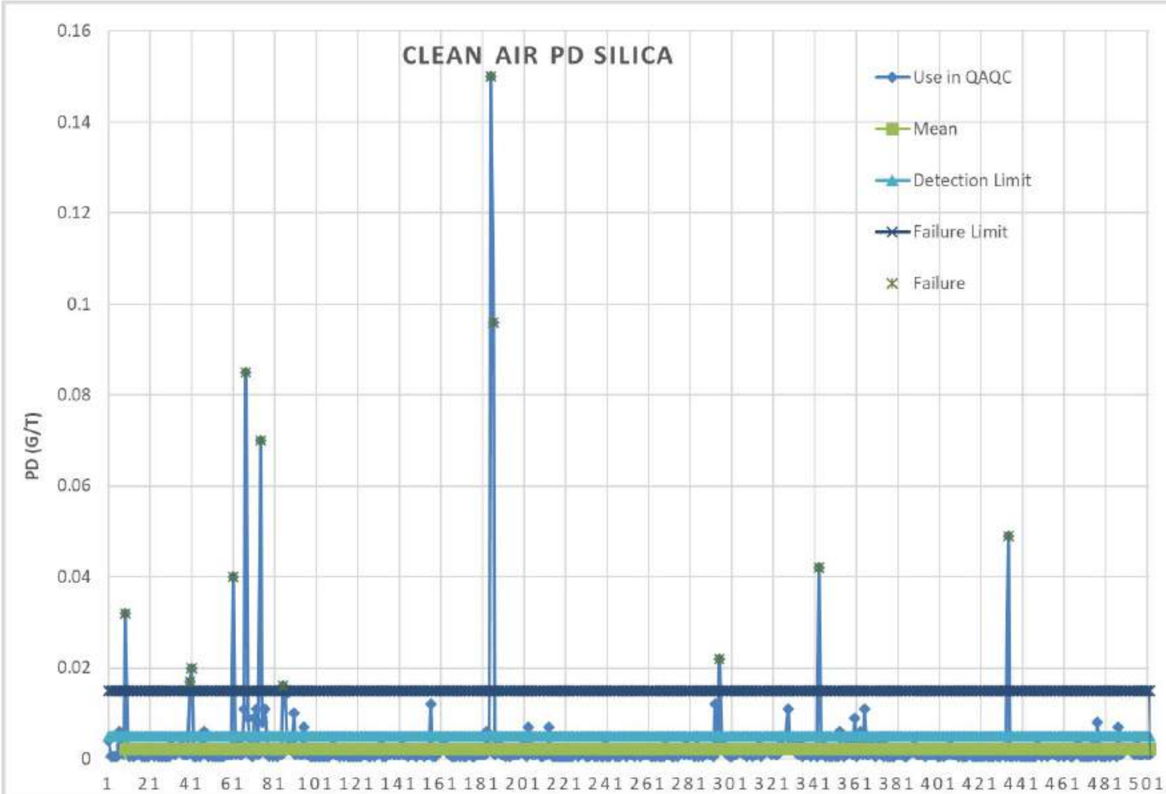


Figure 11-17: ALS Pd (g/t) results for the Current Lake Deposit silica coarse blanks

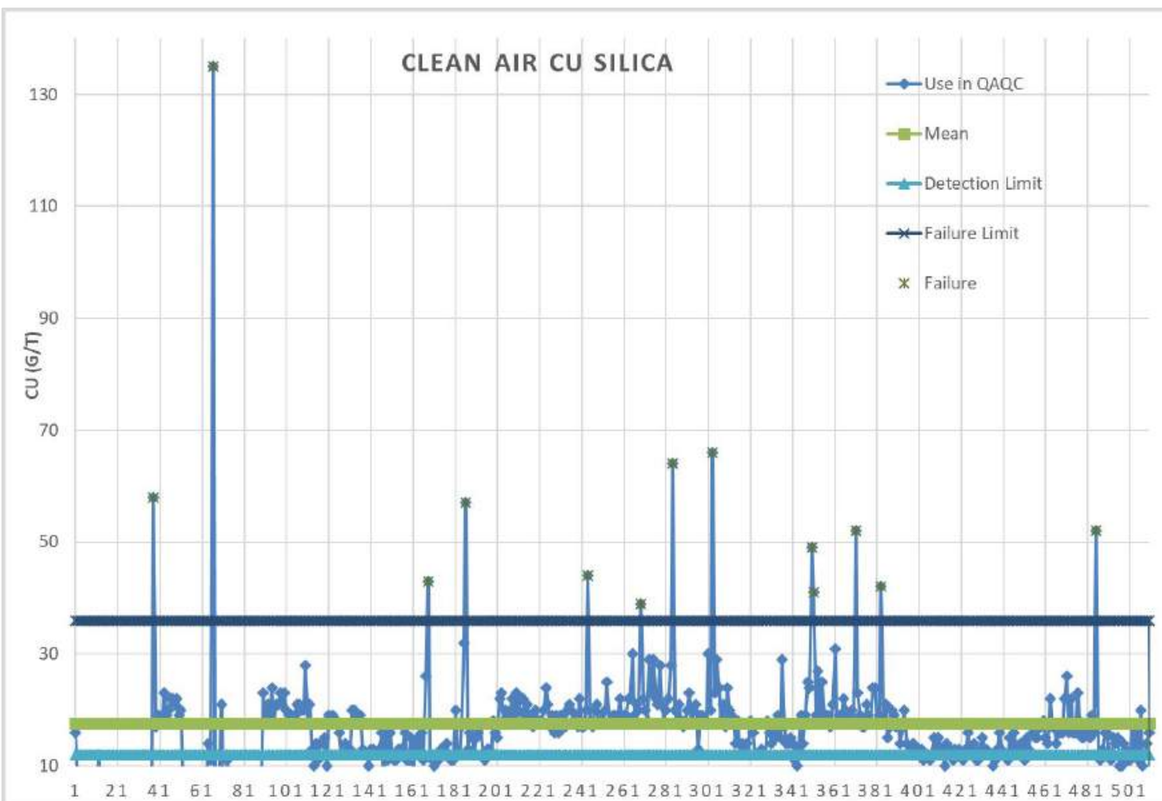


Figure 11-18: ALS Cu (g/t) results for the Current Lake Deposit silica coarse blanks

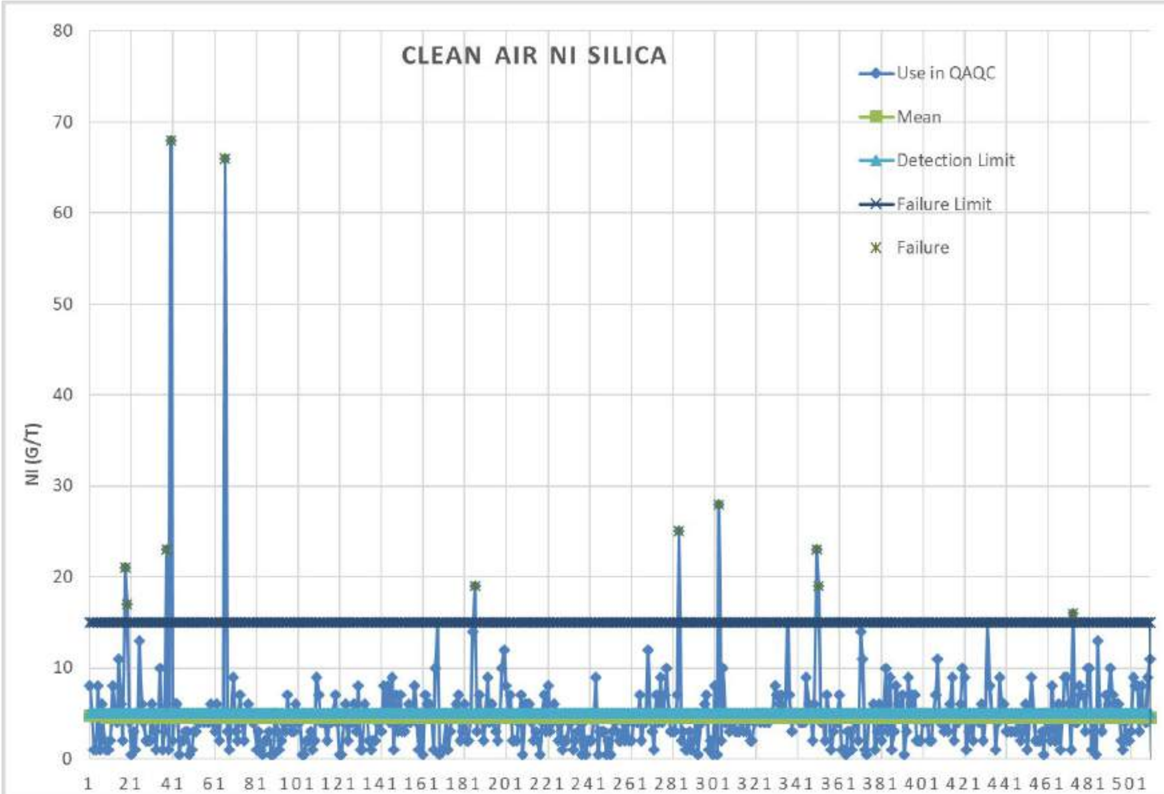


Figure 11-19: ALS Ni (g/t) results for the Current Lake Deposit silica coarse blanks

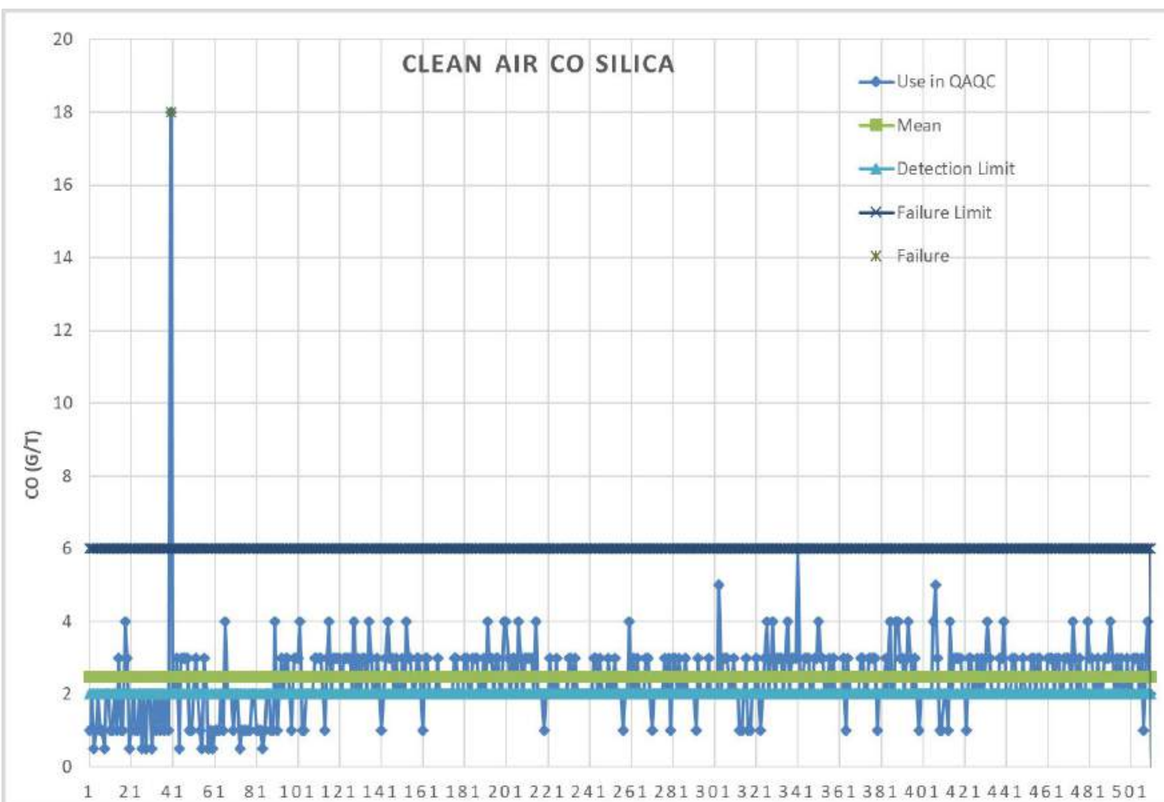


Figure 11-20: ALS Co (g/t) results for the Current Lake Deposit silica coarse blanks

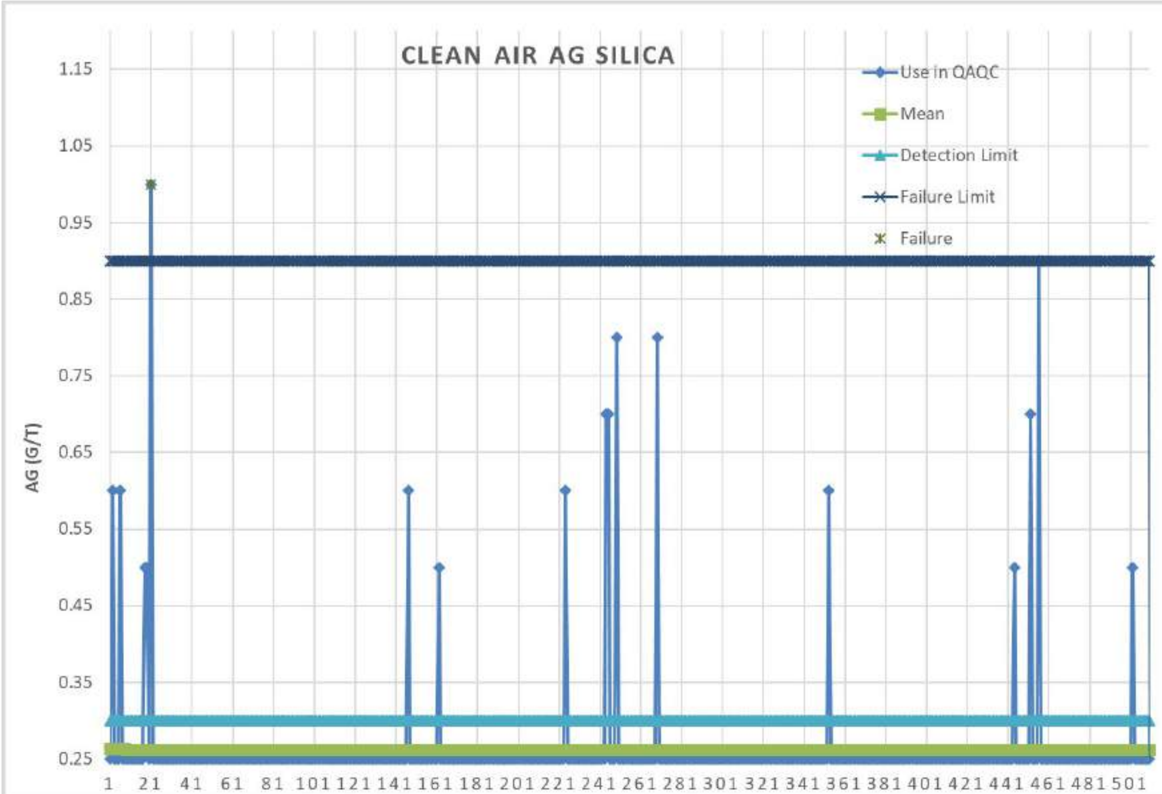


Figure 11-21: ALS Ag (g/t) results for the Current Lake Deposit silica coarse blanks

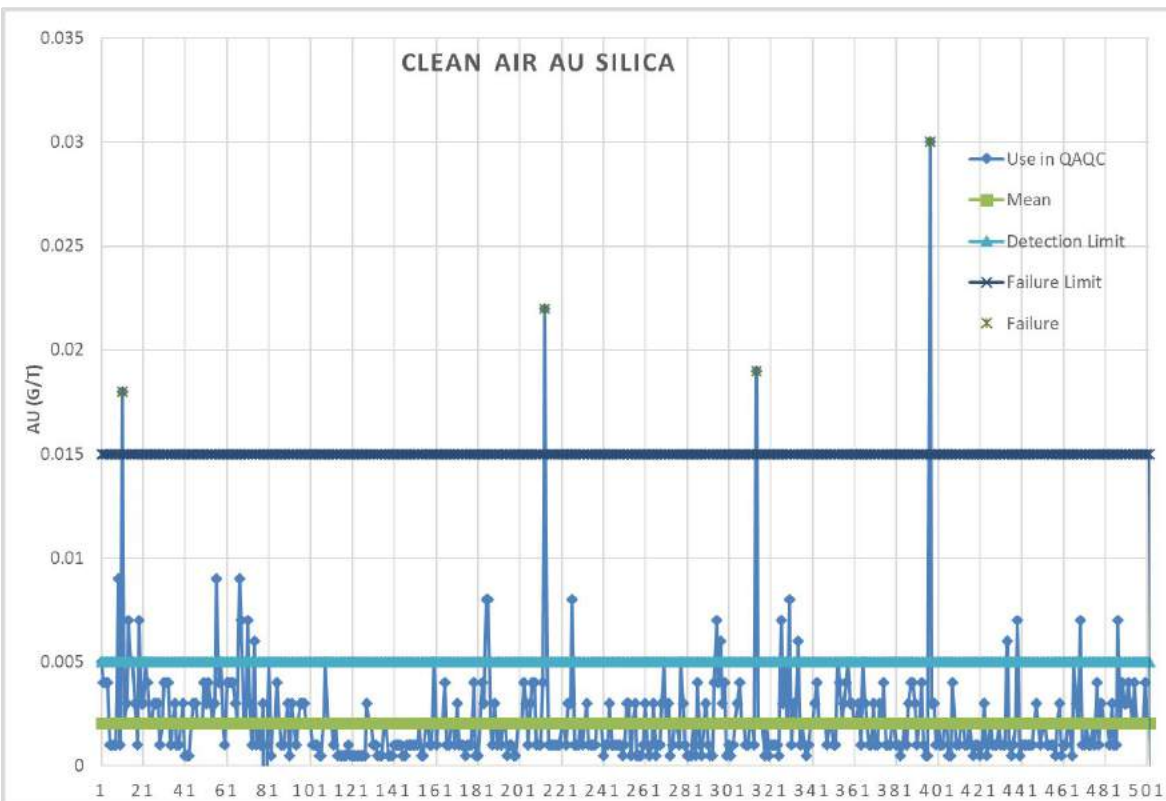


Figure 11-22: ALS Au (g/t) results for the Current Lake Deposit silica coarse blanks

11.3.1.3 Field and Laboratory Duplicates

The Company submitted 770 core and pulp duplicates and the lab submitted 22,840 laboratory duplicates as part of their QA/QC process between 2006 and 2020. The Pt, Pd, Cu, Ni, Ag, Au, and Rh field duplicates demonstrate good agreement however Co shows variability (Figure 11-23 and Figure 11-29). The lab duplicates for Pt, Pd, Cu, Ni, Co, Ag, and Rh show good agreement while the Au results show high variability for Au results (Figure 11-30 and Figure 11-37).

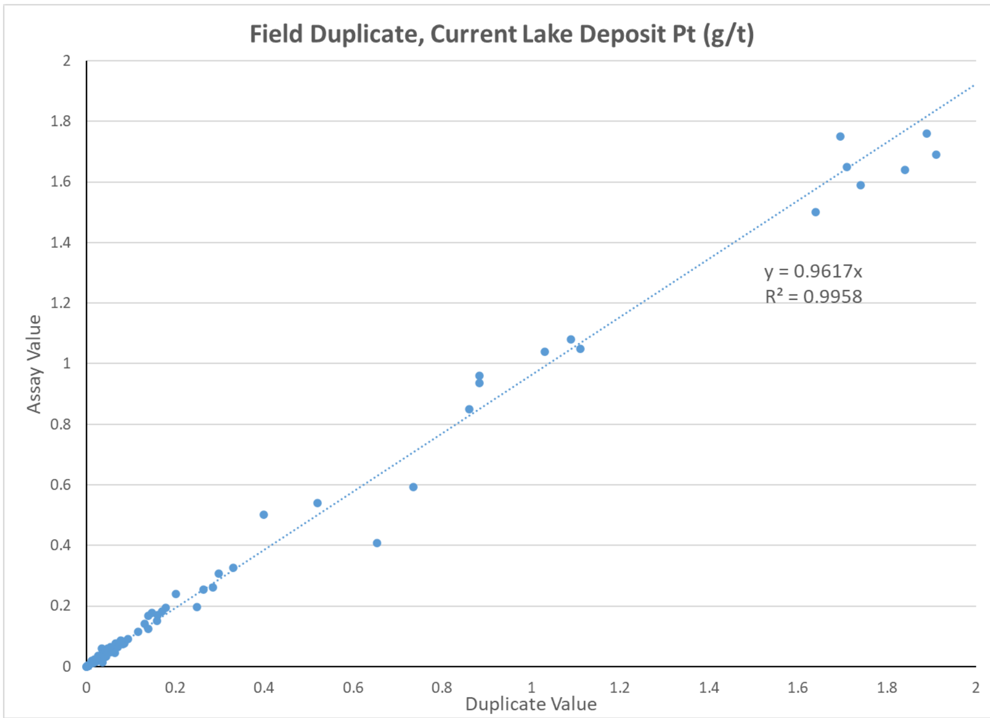


Figure 11-23: Current Lake Deposit field duplicates for Pt (g/t)

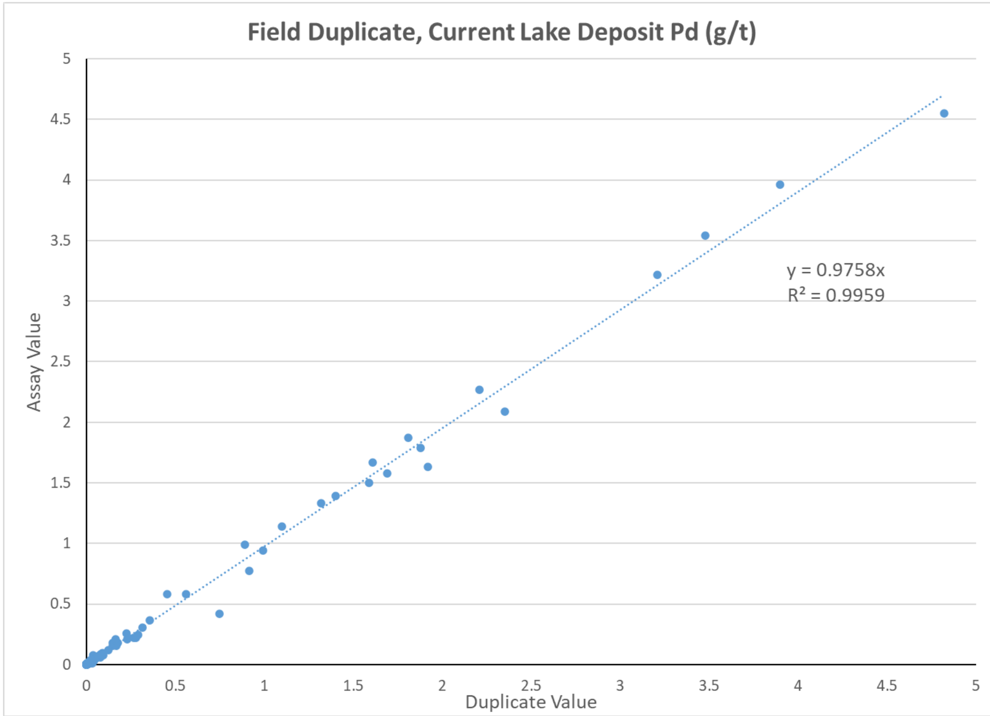


Figure 11-24: Current Lake Deposit field duplicates for Pd (g/t)

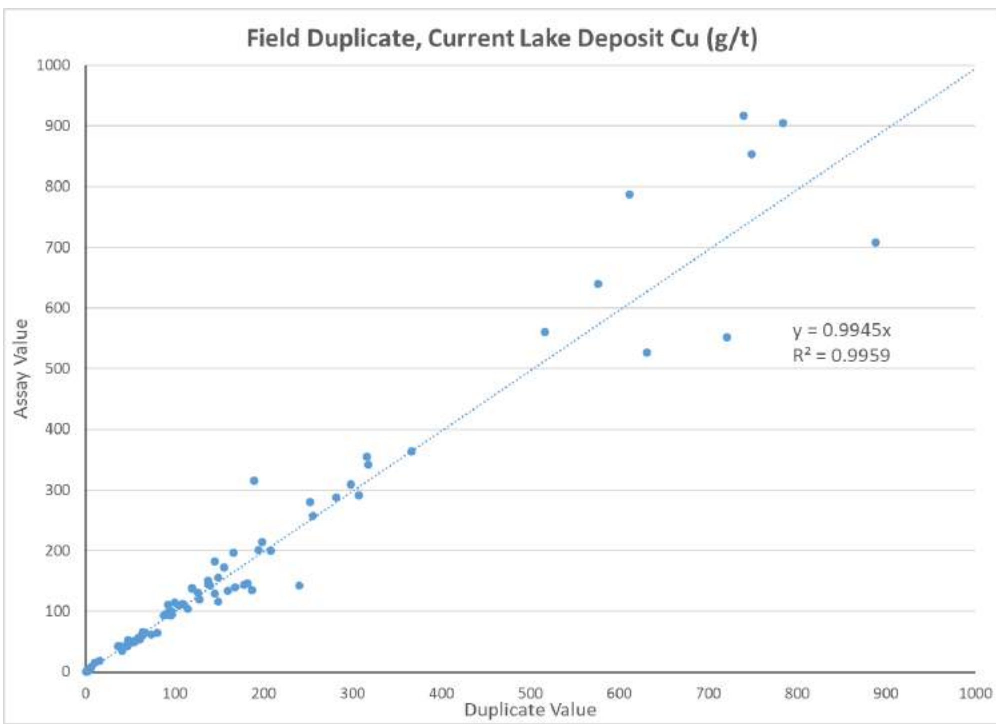


Figure 11-25: Current Lake Deposit field duplicates for Cu (g/t)

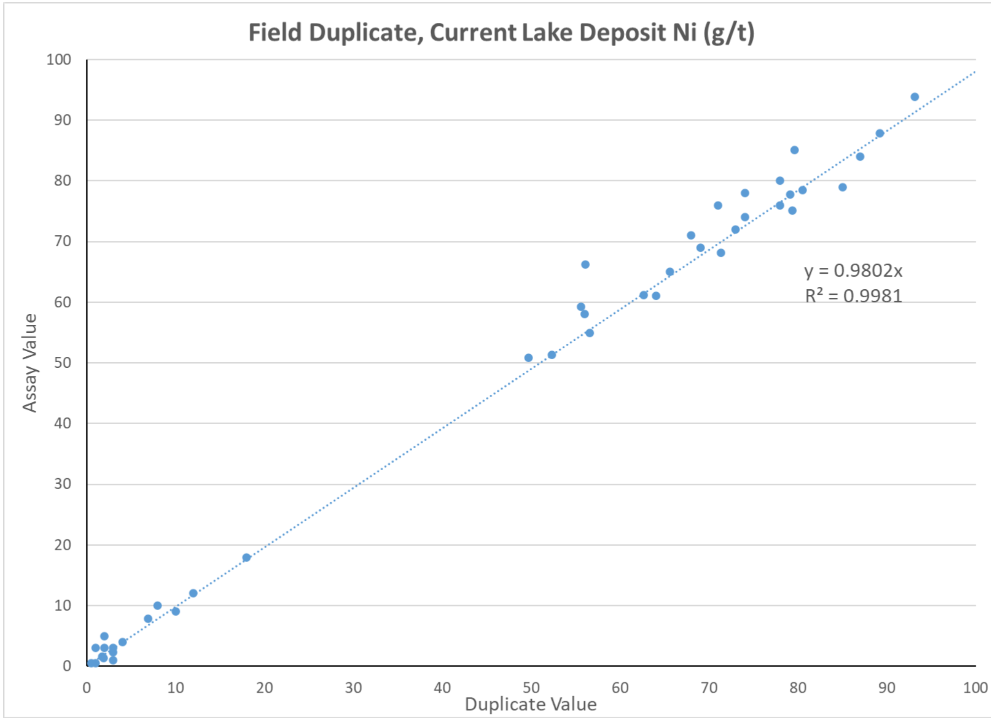


Figure 11-26: Current Lake Deposit field duplicates for Ni (g/t)

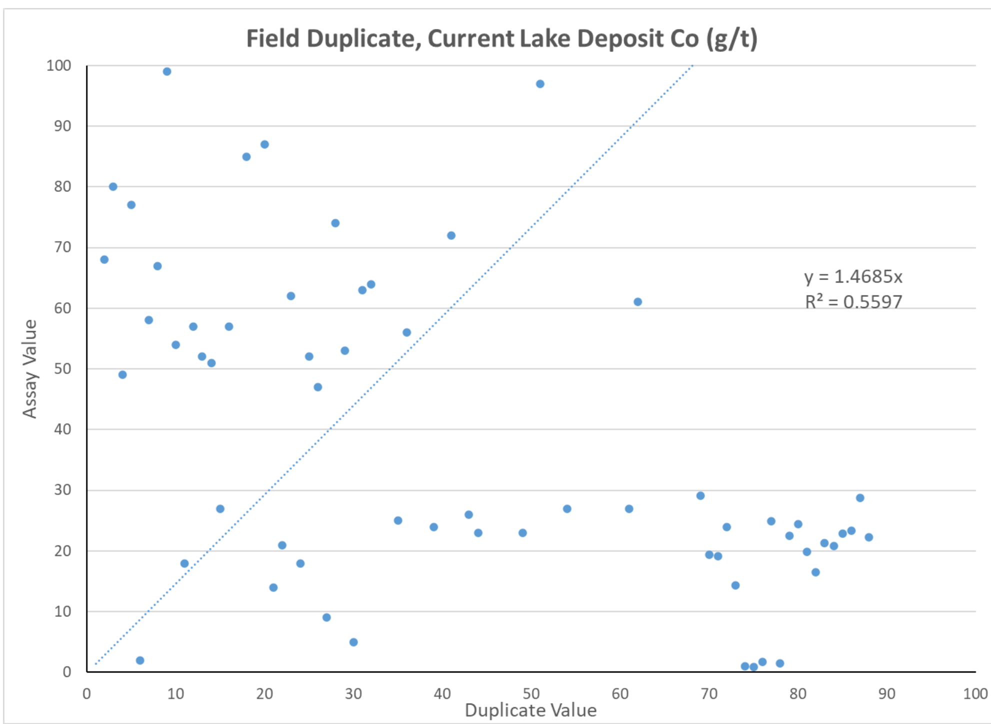


Figure 11-27: Current Lake Deposit field duplicates for Co (g/t)

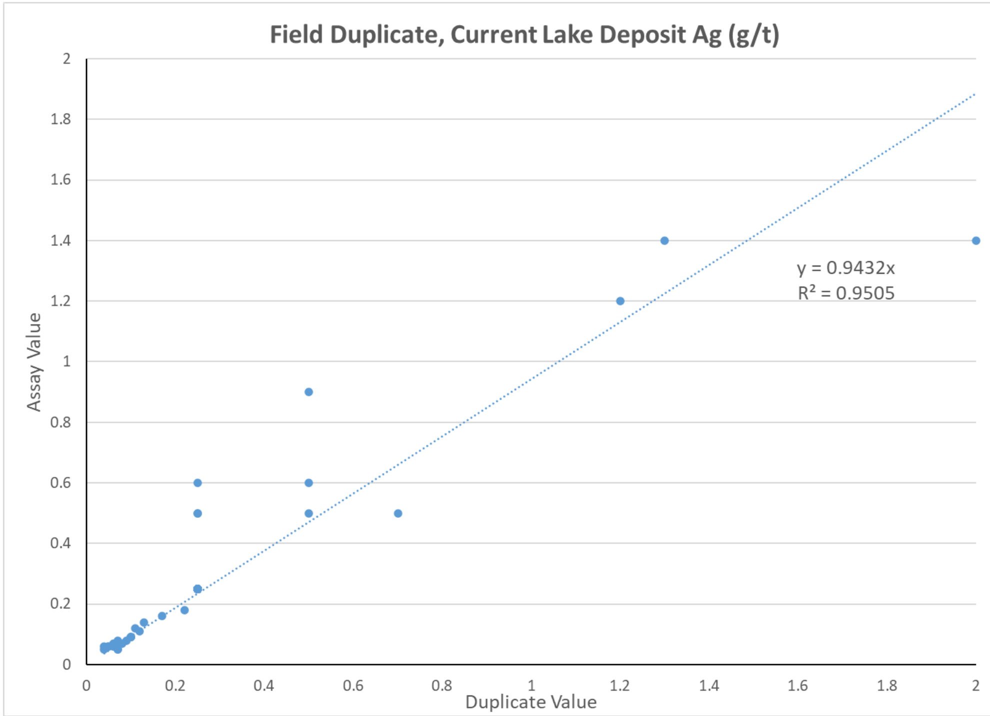


Figure 11-28: Current Lake Deposit field duplicates for Ag (g/t)

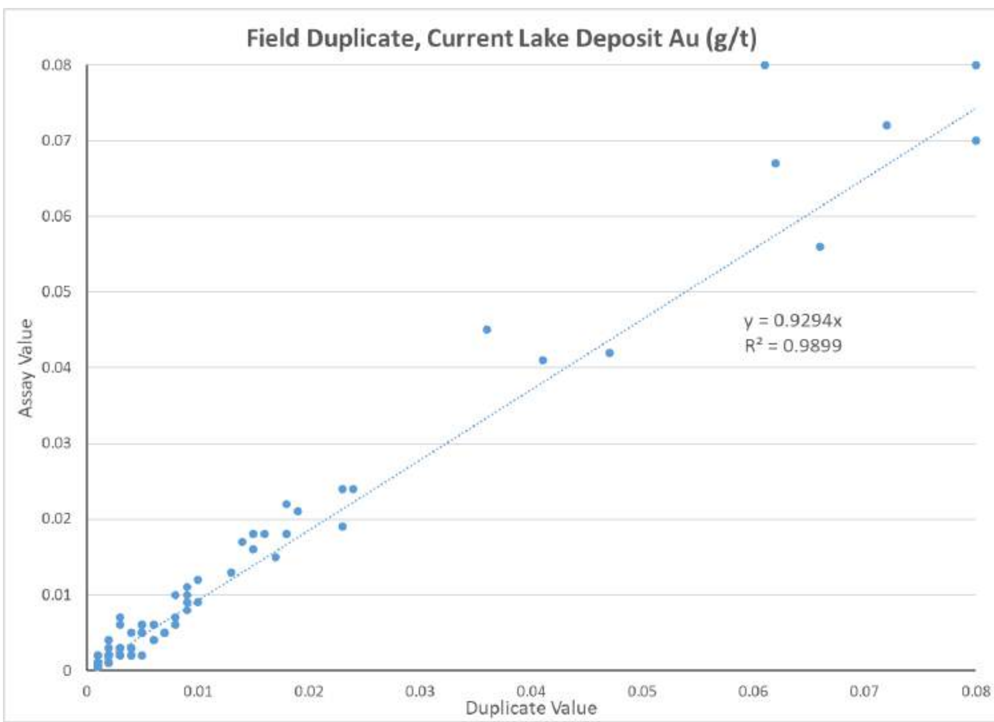


Figure 11-29: Current Lake Deposit field duplicates for Au (g/t)

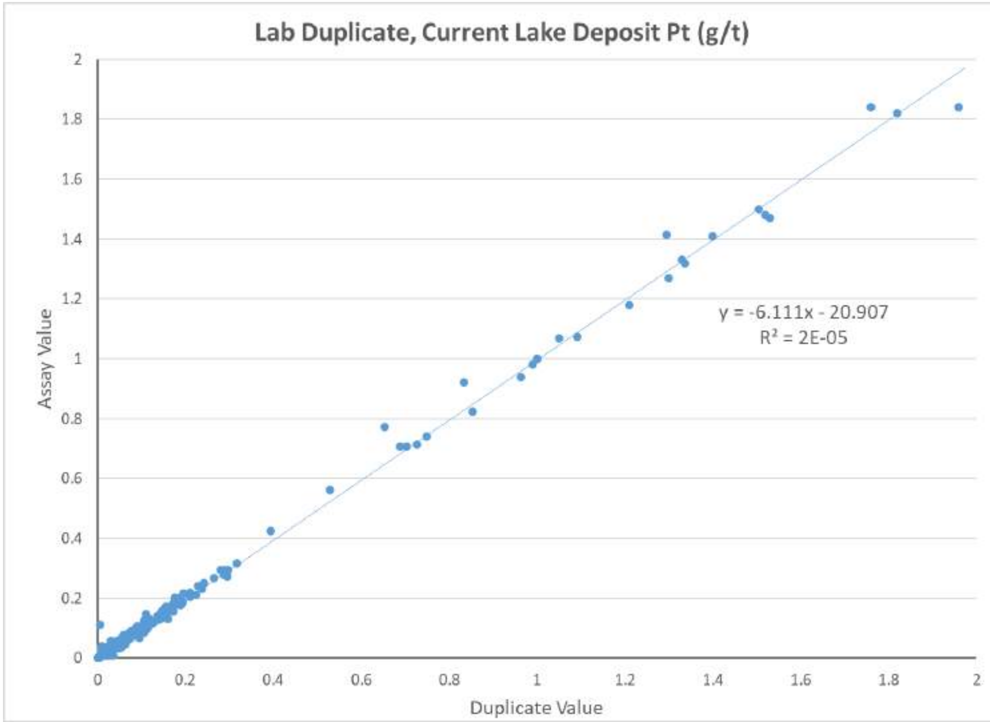


Figure 11-30: Current Lake Deposit lab duplicates for Pt (g/t)

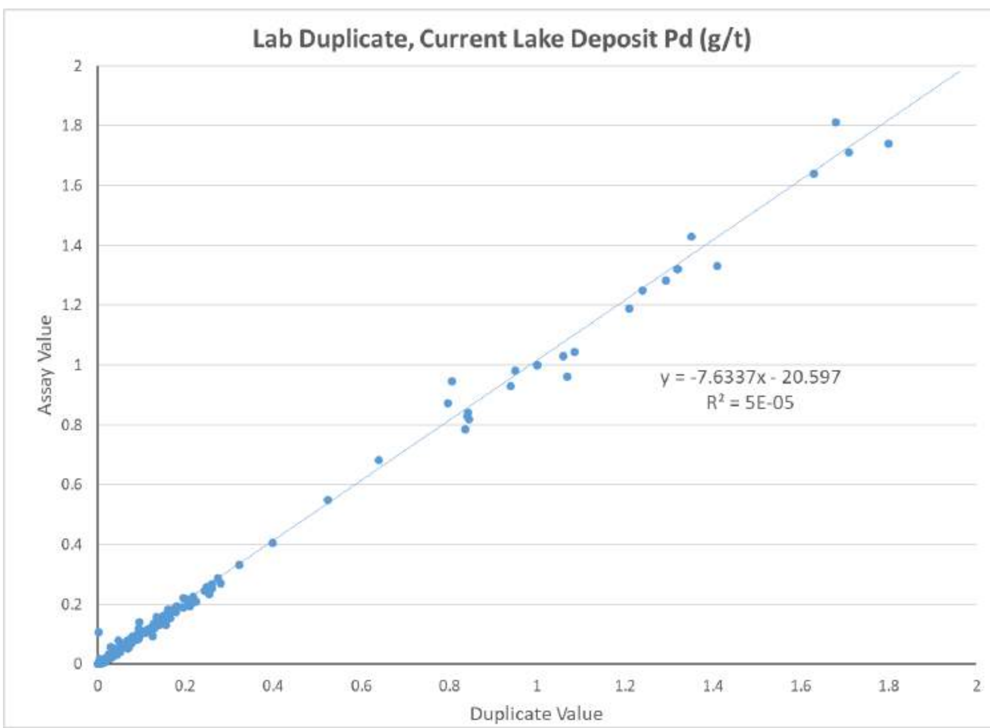


Figure 11-31: Current Lake Deposit lab duplicates for Pd (g/t)

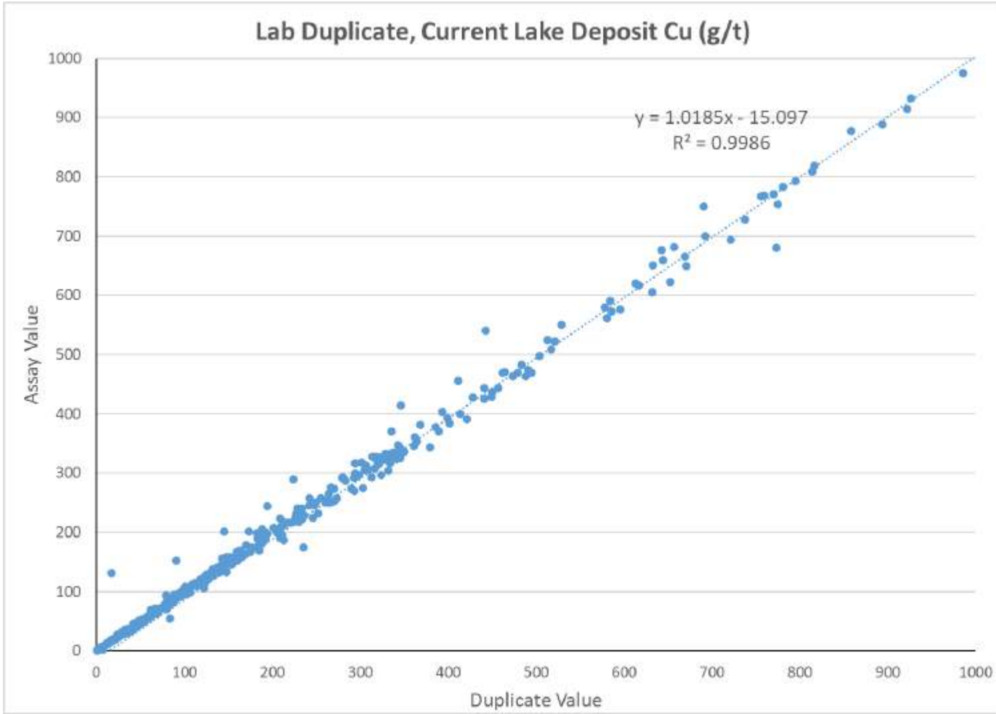


Figure 11-32: Current Lake Deposit lab duplicates for Cu (g/t)

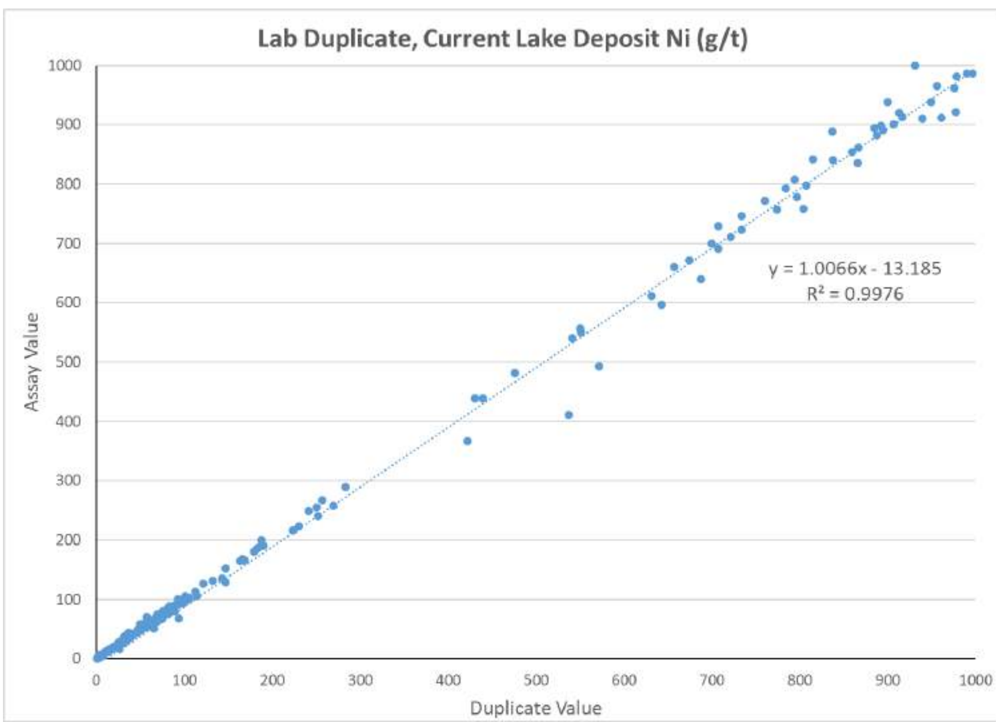


Figure 11-33: Current Lake Deposit lab duplicates for Ni (g/t)

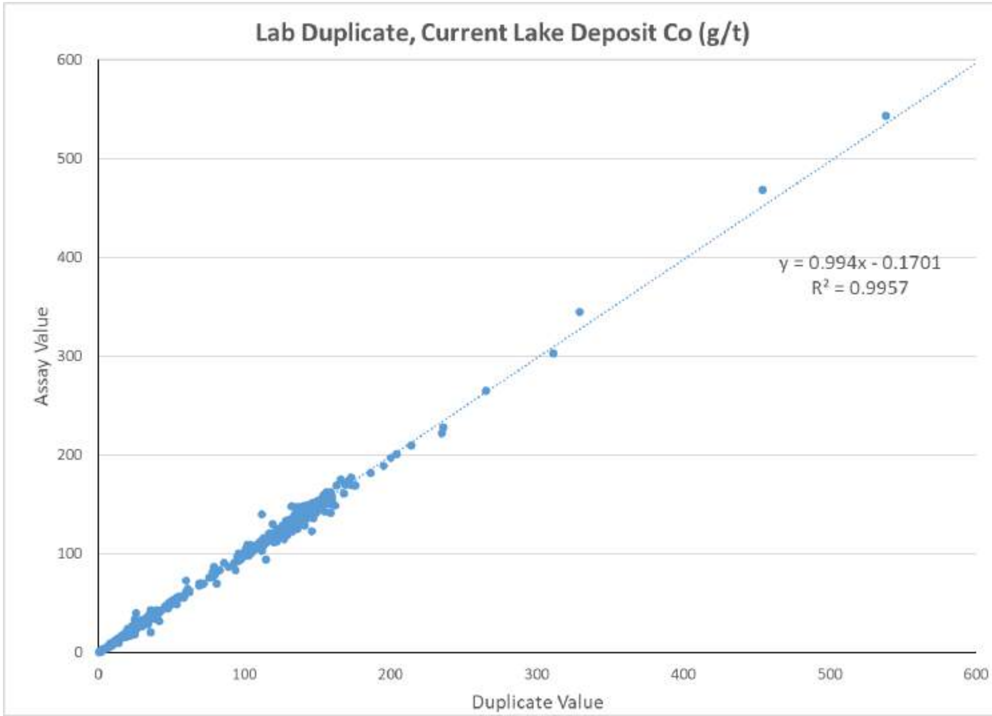


Figure 11-34: Current Lake Deposit lab duplicates for Co (g/t)

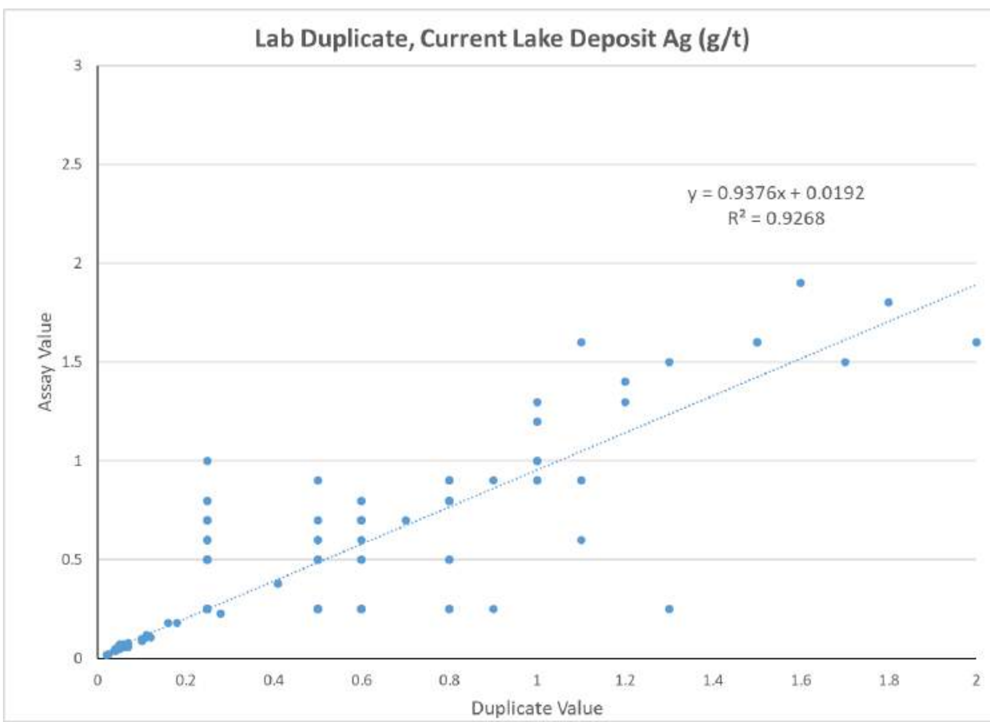


Figure 11-35: Current Lake Deposit lab duplicates for Ag (g/t)

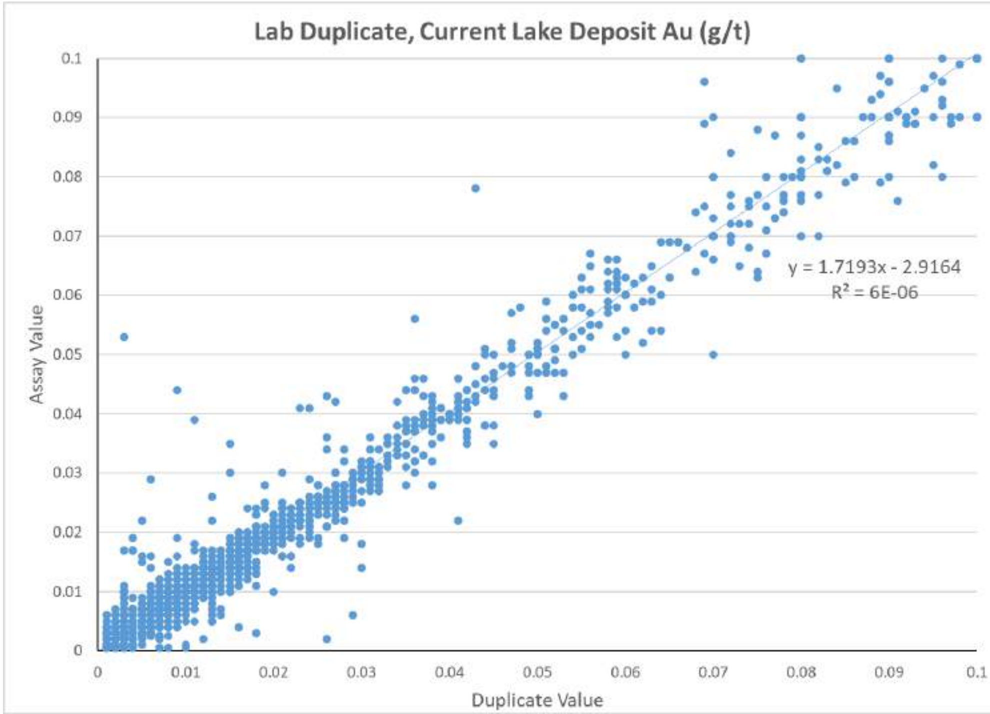


Figure 11-36 Current Lake Deposit lab duplicates for Au (g/t)

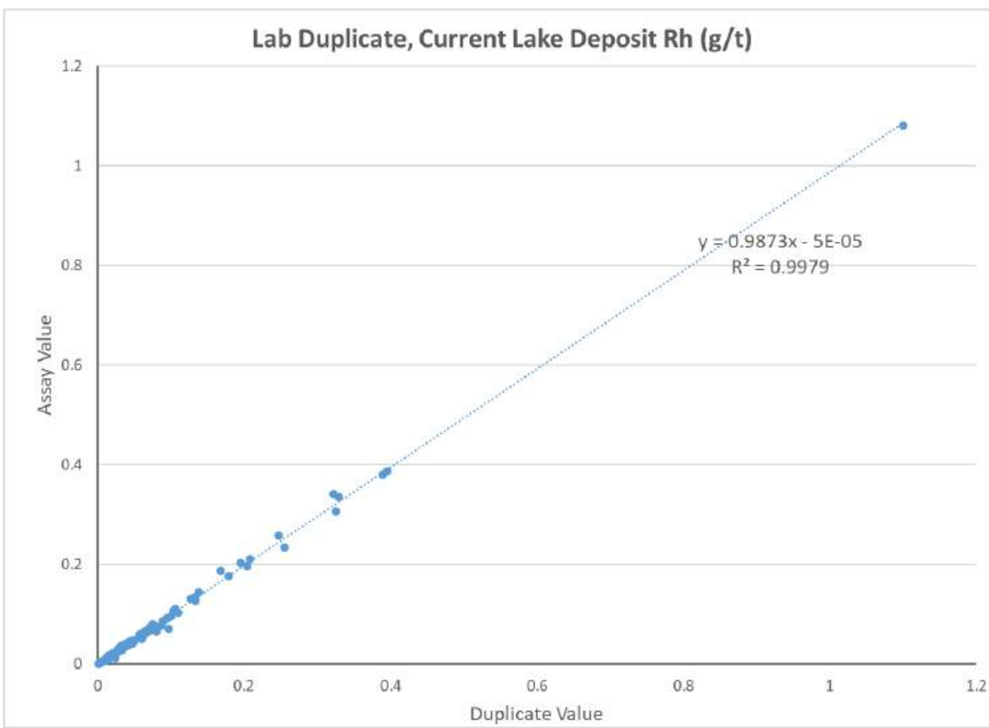


Figure 11-37: Current Lake Deposit lab duplicates for Rh (g/t)

11.3.2 Escape Lake Deposit

11.3.2.1 Standards

The Company submitted four different CRM's as part of its QA/QC process with a total of 677 CRM's (Table 11-3). The review of CRM results identified 21 sample swaps or laboratory failures that have been incorrectly identified as members of a different population. AMIS0073 shows high variability and has outliers for the mean +/- two standard deviations for Cu and Ni (Figure 11-40 and Figure 11-41). The Lab submitted two different CRM's as part of its QA/QC process with a total of 216 CRM's (Table 11-4). Oreas 684 fell within the range of mean +/- two standard deviations for Pt and Pd (Figure 11-38 and Figure 11-39). Oreas 684 fell largely into the range of mean +/- two standard deviations for Rh (Figure 11-25). The process performance and moving range charts for all other standards listed in Table 11-4 and Table 11-5 can be found in Appendix C.

Table 11-4: Escape Lake Deposit CRM Result Summary from the Company

Standard	Count	Best Value Pt (g/t)	Mean Value Pt (g/t)	Bias (%)	Best Value Pd (g/t)	Mean Value Pd (g/t)	Bias (%)	Best Value Cu (g/t)	Mean Value Cu (g/t)	Bias (%)	Best Value Ni (g/t)	Mean Value Ni (g/t)	Bias (%)	Best Value Co (g/t)	Mean Value Co (g/t)	Bias (%)
AMIS0060	196							3308.00	3477.000	-169.000	2909.000	3298.000	-389.000			
AMIS0064	90	1.240	1.240	0.000	0.580	0.560	0.020									
AMIS0073	188	0.330	0.349	-0.019	0.890	0.917	-0.027	2414.000	2487.000	-73.000	5459.000	5776.000	-317.000	277.000	288.000	-11.000
AMIS0093	203	0.11	0.105	0.005	0.470	0.470	0.000	2958.000	3006.000	-48.000	2722.000	2804.000	-82.000	173.000	171.000	2.000

Table 11-5: Escape Lake Deposit CRM Result Summary from the Lab

Standard	Count	Best Value Pt (g/t)	Mean Value Pt (g/t)	Bias (%)	Best Value Pd (g/t)	Mean Value Pd (g/t)	Bias (%)	Best Value Cu (g/t)	Mean Value Cu (g/t)	Bias (%)	Best Value Ni (g/t)	Mean Value Ni (g/t)	Bias (%)	Best Value Co (g/t)	Mean Value Co (g/t)	Bias (%)	Best Value Au (g/t)	Mean Value Au (g/t)	Bias (%)
Oreas 602	108							5170	5152	18	60	62.2	-2.2	9.72	9.88	-0.16			
Oreas 684	108	3.870	3.900	-0.030	1.720	1.740	-0.020										0.248	0.255	-0.007

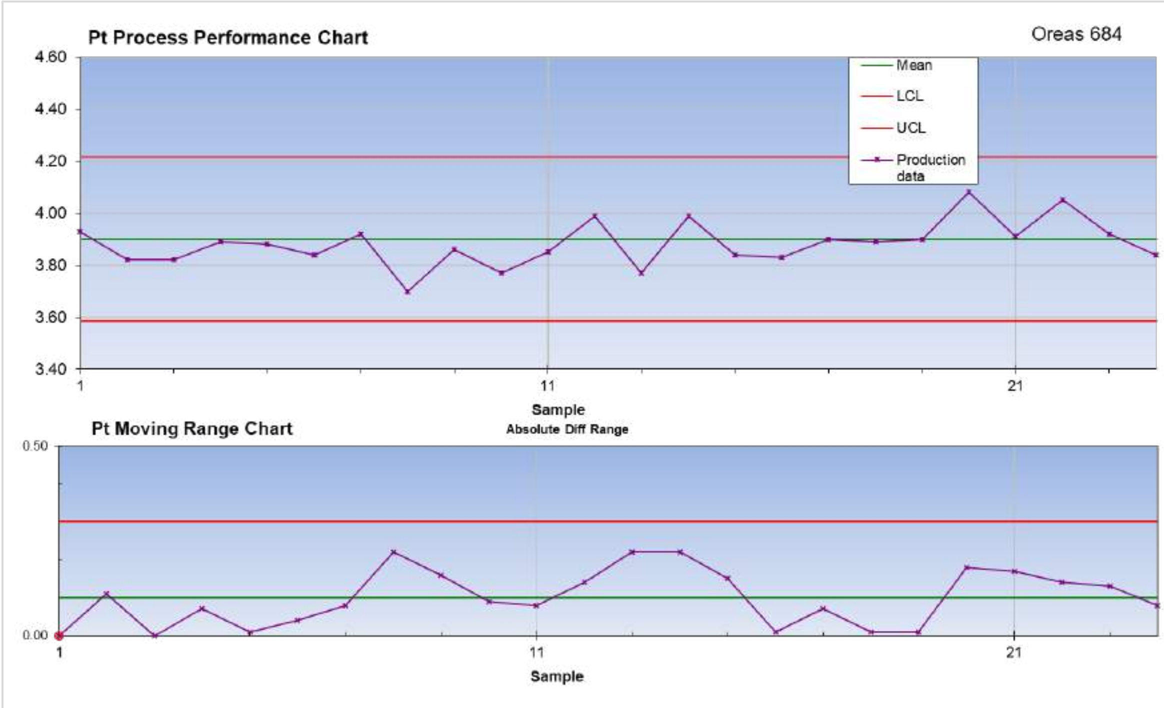


Figure 11-38: Escape Lake Deposit Standard Oreas 684 Pt (g/t)

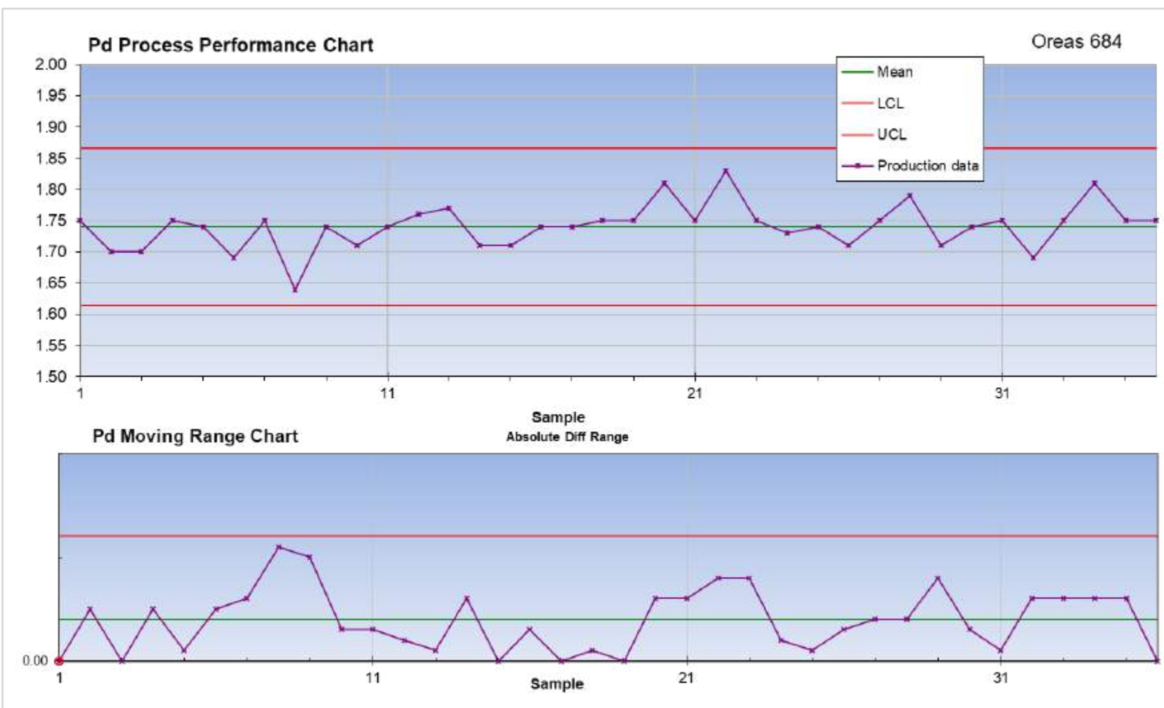


Figure 11-39: Escape Lake Deposit Standard Oreas 684 Pd (g/t)

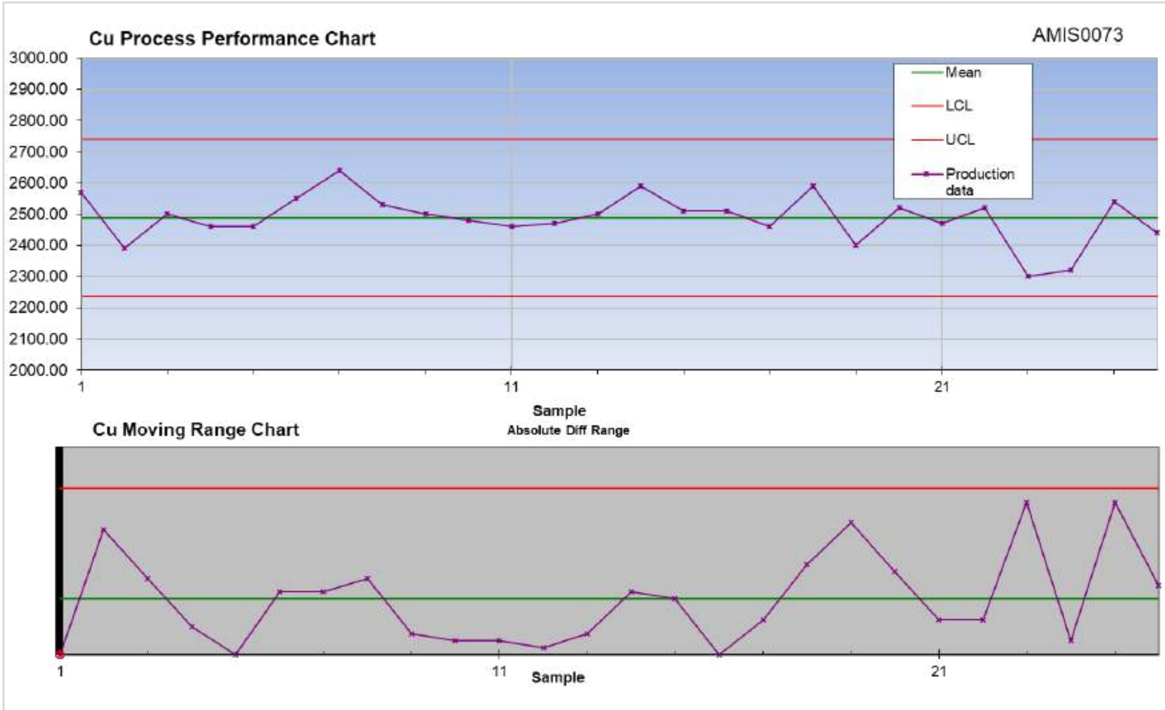


Figure 11-40: Escape Lake Deposit Standard AMIS0073 Cu (g/t)

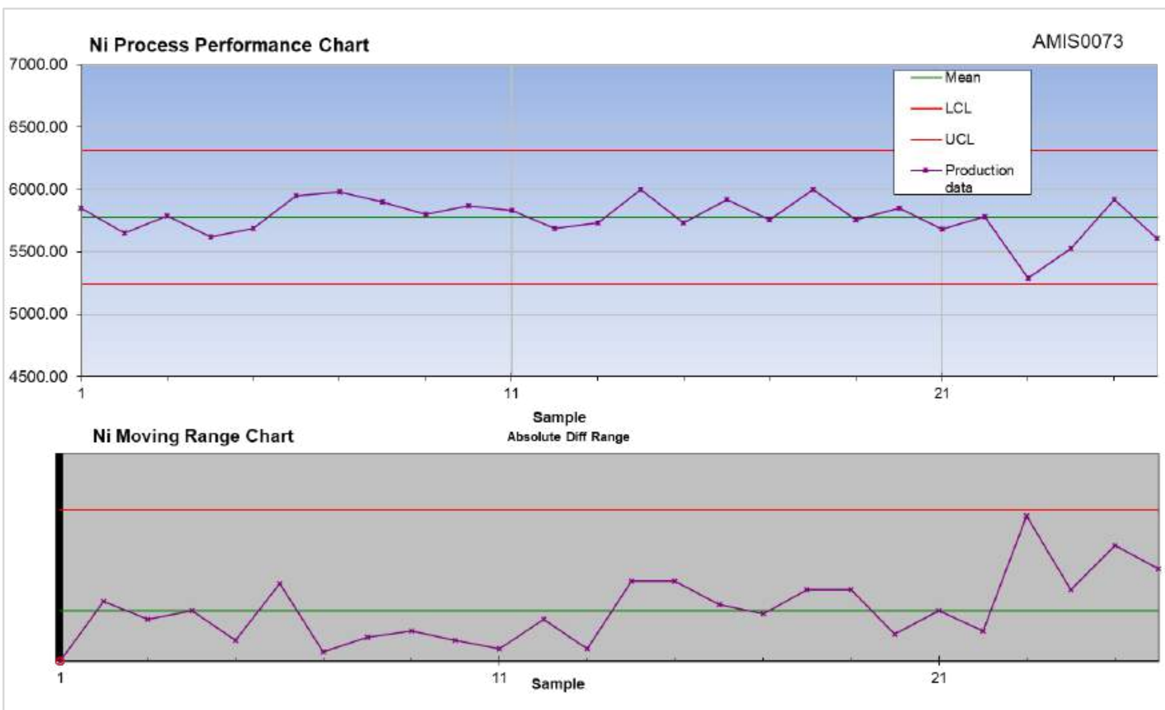


Figure 11-41: Escape Lake Deposit Standard AMIS0073 Ni (g/t)

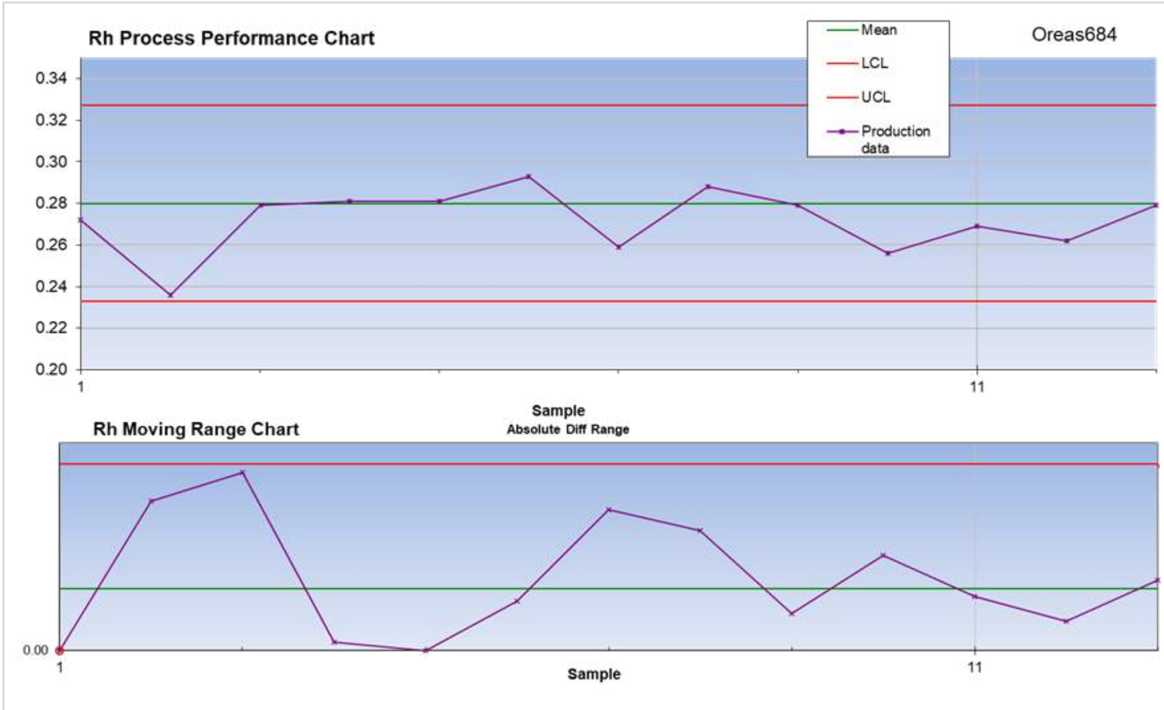


Figure 11-42: Escape Lake Deposit Standard Oreas 684 Rh (g/t)

11.3.2.2 Blanks

The Company submitted 1,221 coarse blanks between 2006 and 2020 as part of its QA/QC process. Two different blanks were used with the corresponding amount in brackets BL114 (420),and Gabbro (791) (Figure 11-43 through Figure 11-49). The lab submitted 2403 blanks all as one blank labelled as blanks. The charts not presented in this section are available in Appendix C. No significant carryover of elevated metals is evident. This does not impact the Mineral Resource Estimate.

The blanks contain measurable quantities of Pt, Pd, Cu, Ni, Co, Ag, Au, and Rh. There was no obvious correlation between the blank values and those samples immediately preceding.

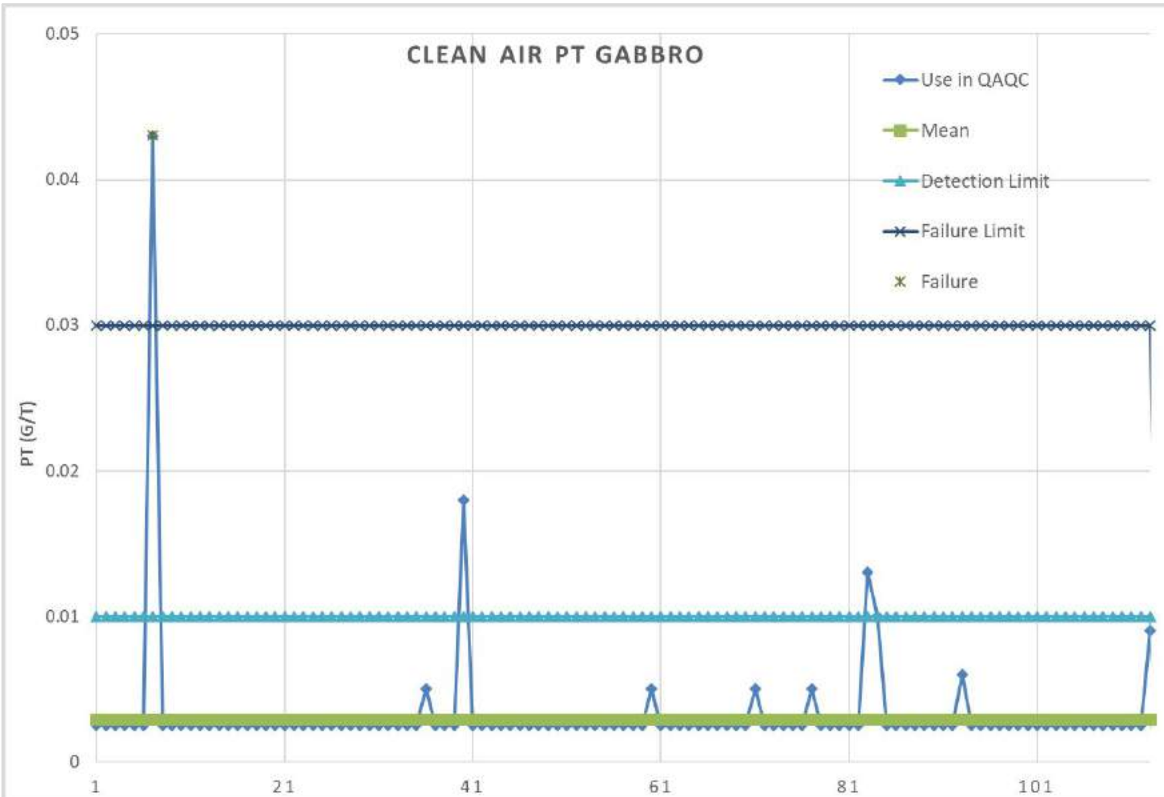


Figure 11-43: ALS Pt (g/t) results for the Escape Lake Deposit gabbro coarse blanks

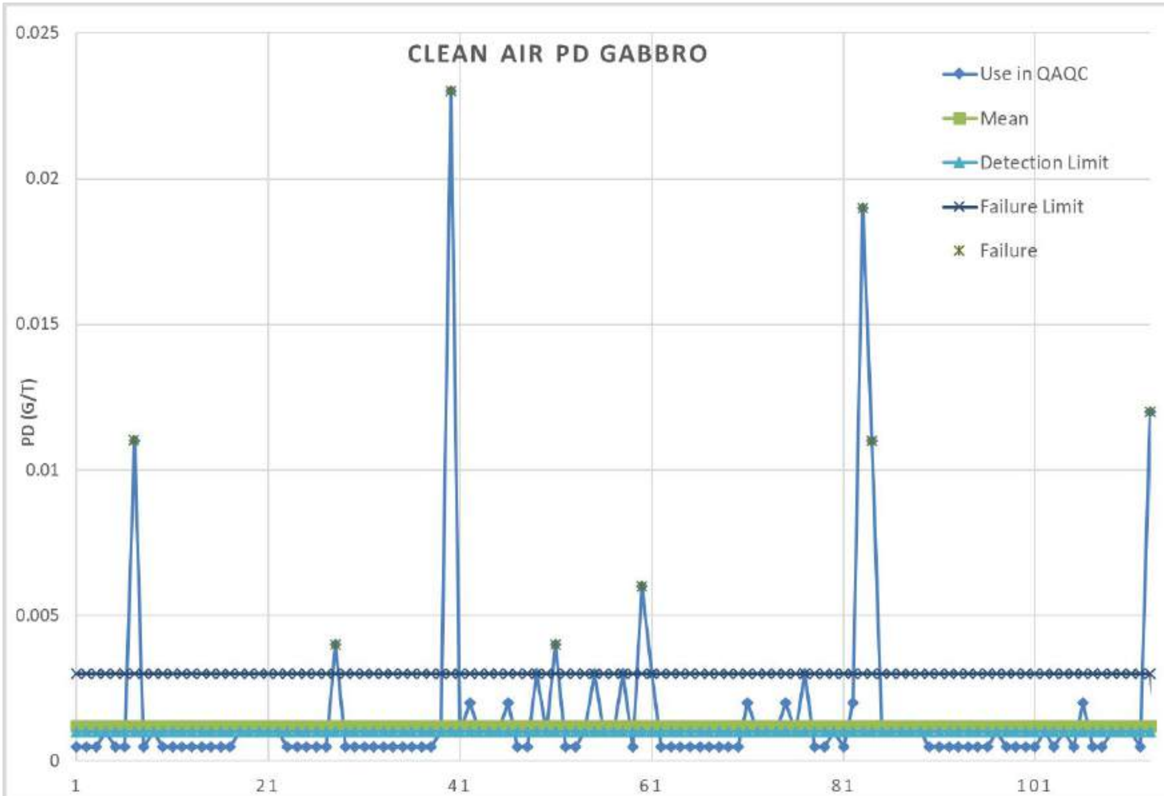


Figure 11-44: ALS Pd (g/t) results for the Escape Lake Deposit gabbro coarse blanks

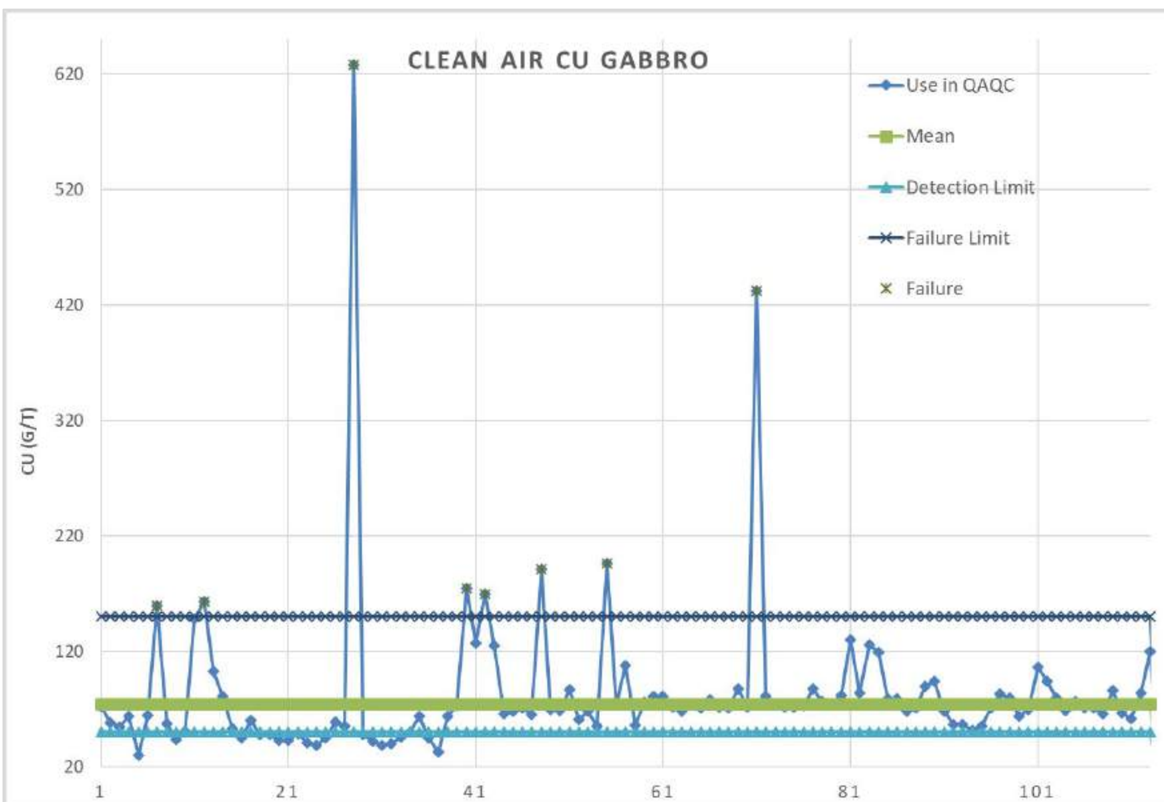


Figure 11-45: ALS Cu (g/t) results for the Escape Lake Deposit gabbro coarse blanks

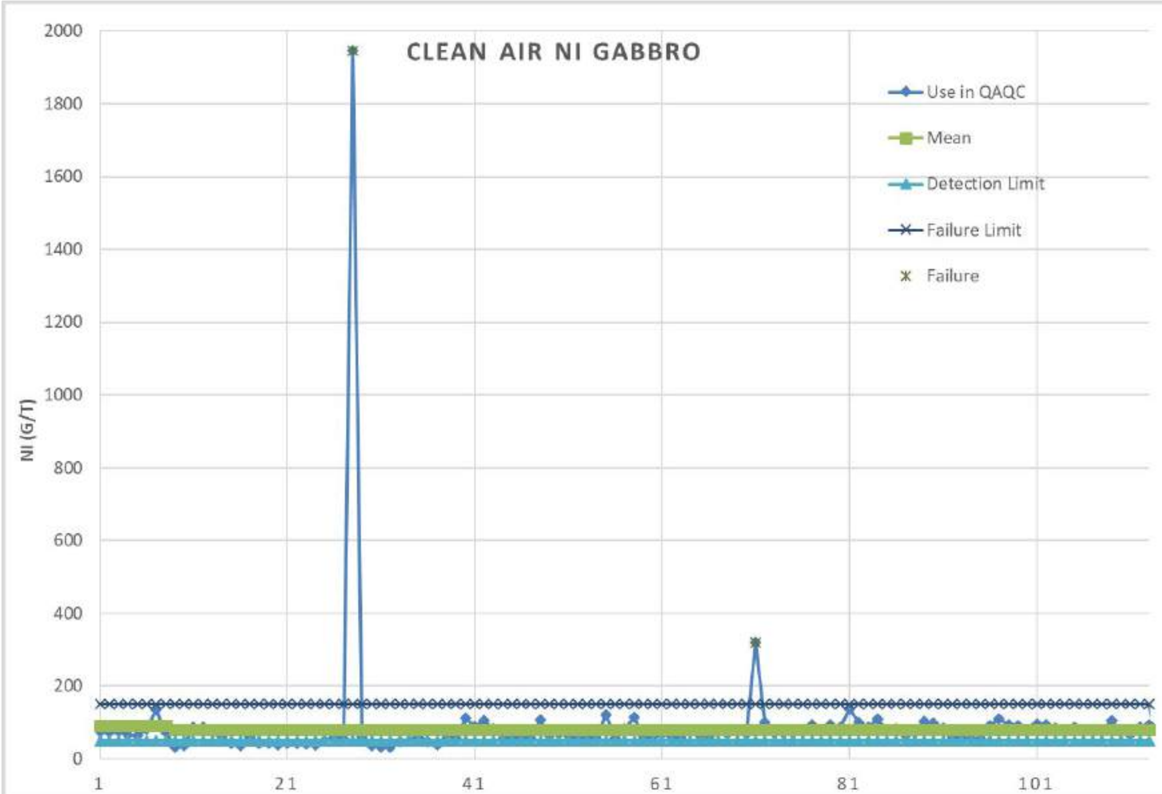


Figure 11-46: ALS Ni (g/t) results for the Escape Lake Deposit gabbro coarse blanks

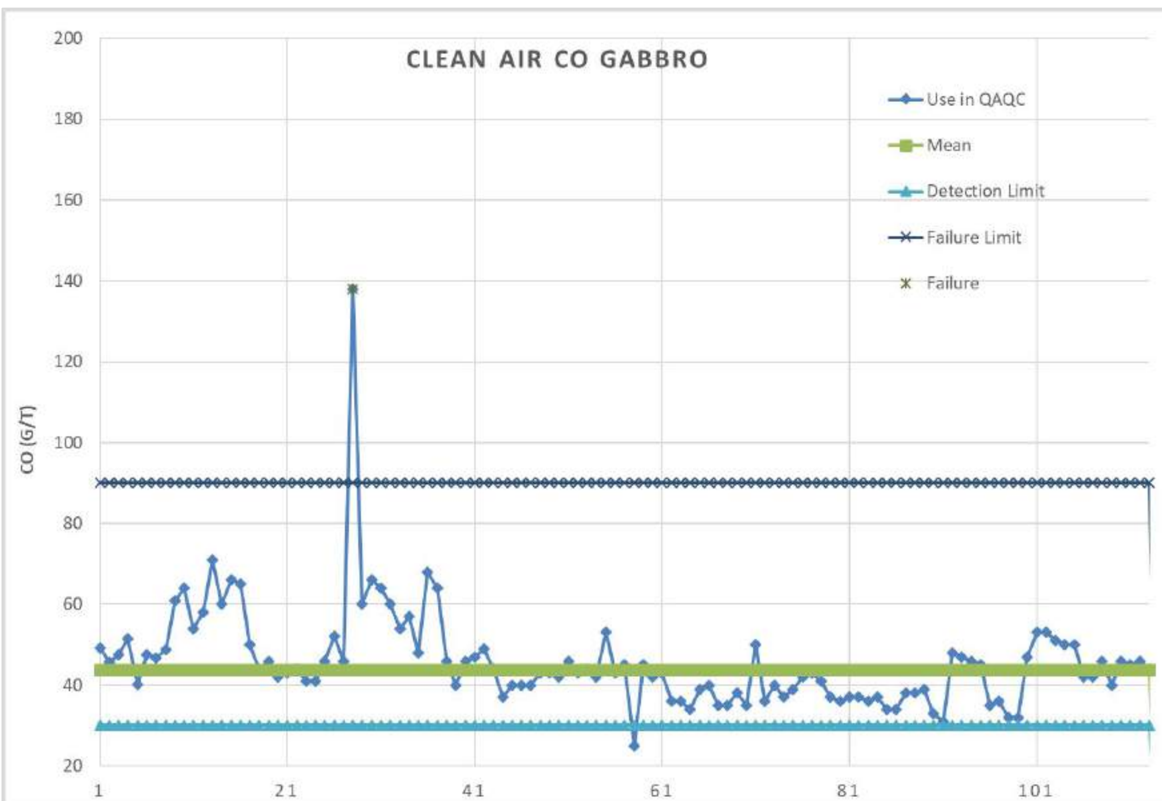


Figure 11-47: ALS Co (g/t) results for the Escape Lake Deposit gabbro coarse blanks

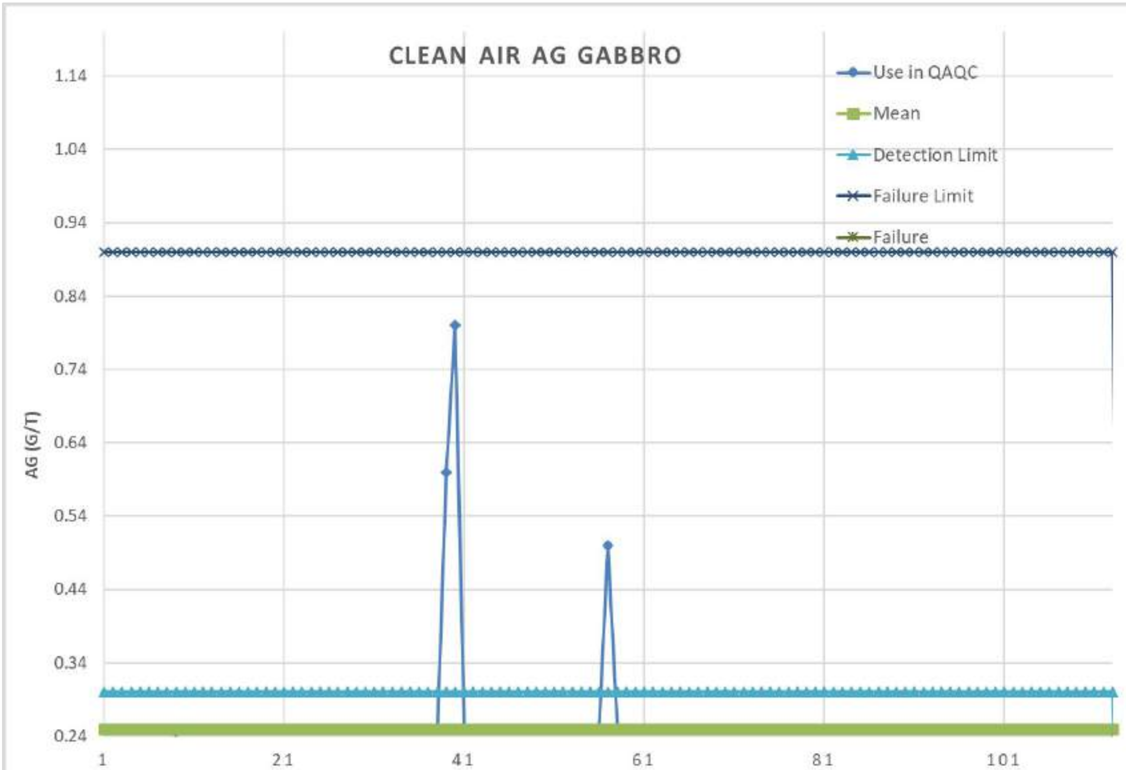


Figure 11-48: ALS Ag (g/t) results for the Escape Lake Deposit gabbro coarse blanks

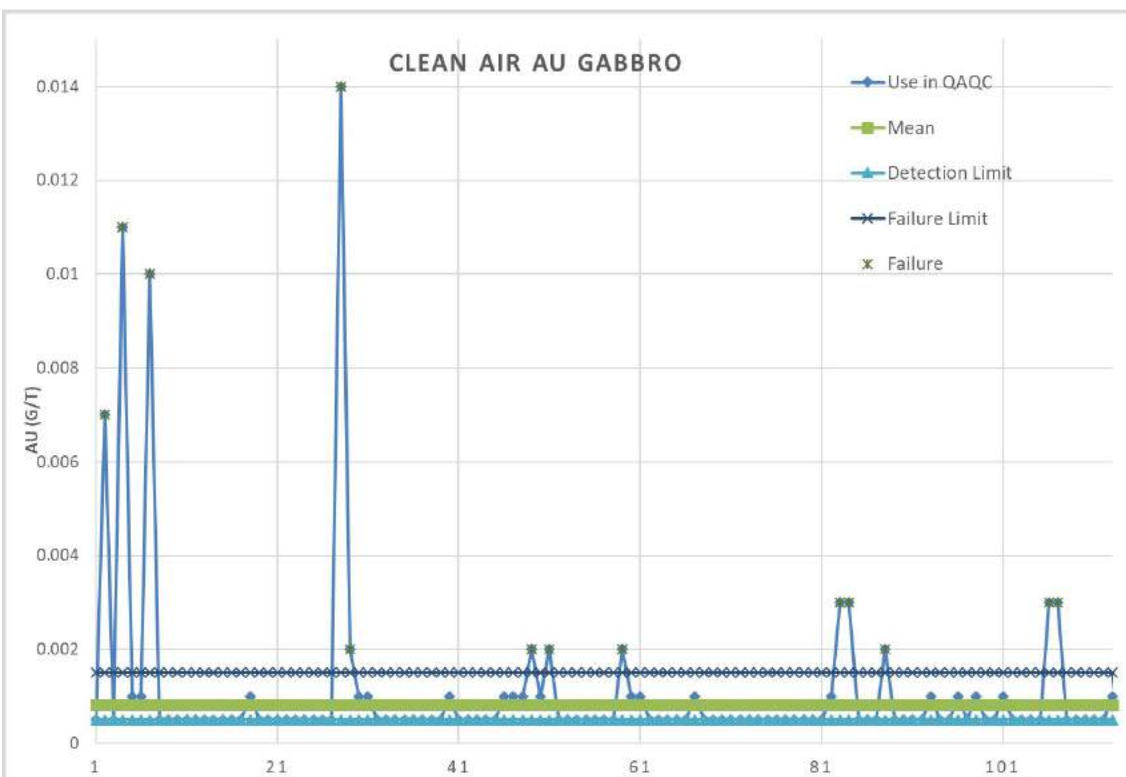


Figure 11-49: ALS Au (g/t) results for the Escape Lake Deposit gabbro coarse blanks

11.3.2.3 Field and Laboratory Duplicates

The Company submitted 1,135 core and pulp duplicates and the lab submitted 1,139 laboratory duplicates as part of their QA/QC process. The Pt, Pd, Cu, Ni, Co, Ag and Au field duplicates demonstrate good agreement (Figure 11-50 through Figure 11-56). The lab duplicates for Cu, Ni, Co, and Ag, show good agreement while Pt, Pd and Au do not show good agreement (Figure 11-57 through Figure 11-63).

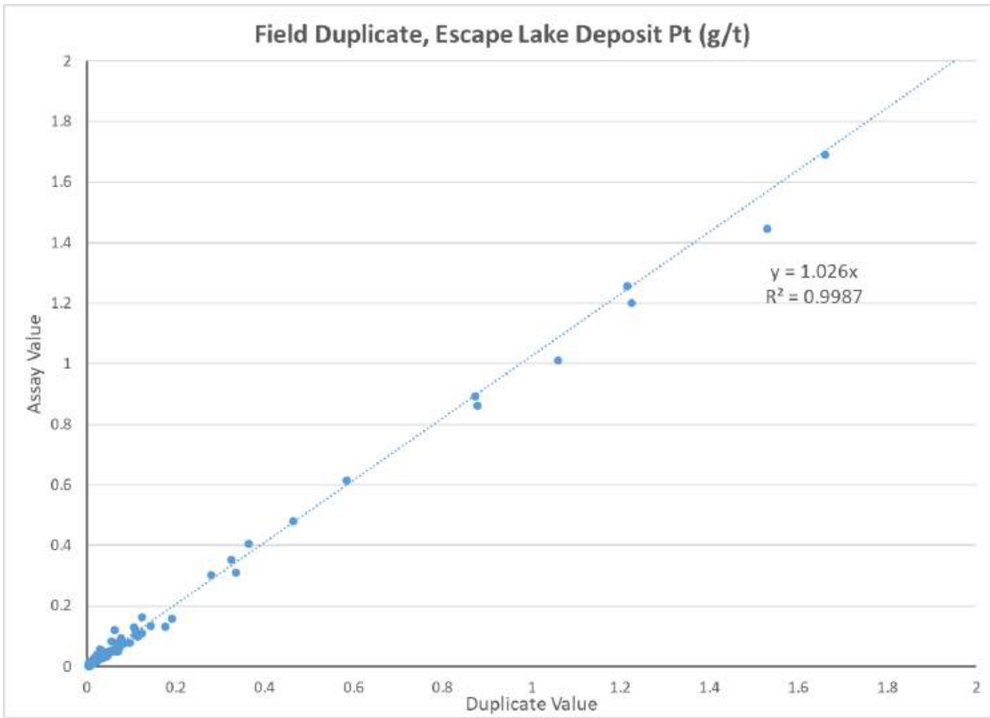


Figure 11-50: Escape Lake Deposit field duplicates for Pt (g/t)

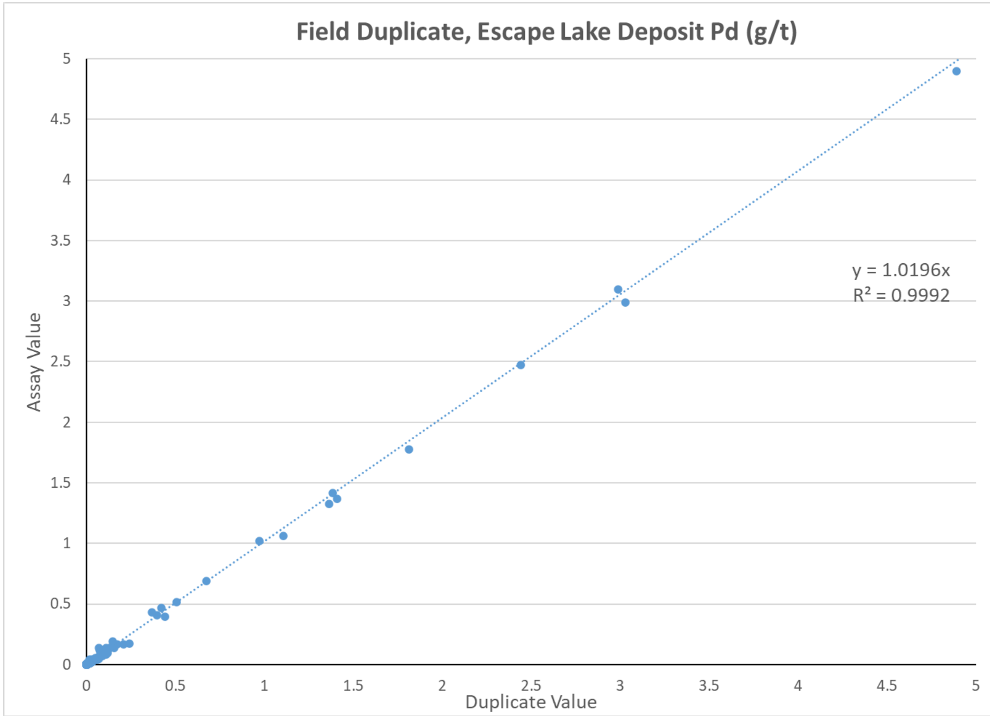


Figure 11-51: Escape Lake Deposit field duplicates for Pd (g/t)

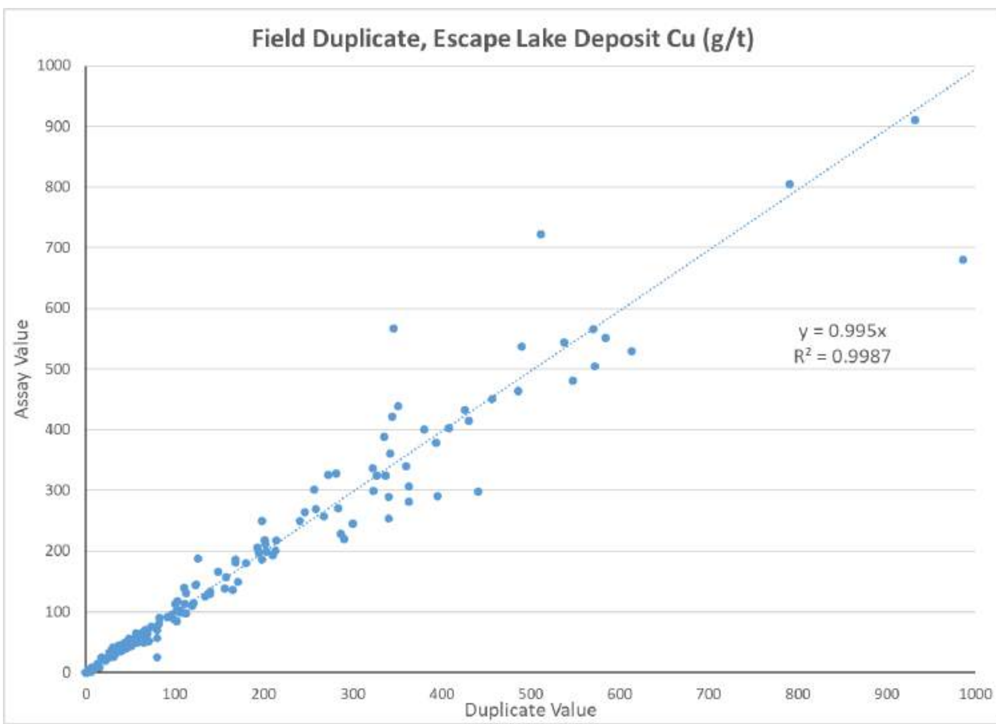


Figure 11-52: Escape Lake Deposit field duplicates for Cu (g/t)

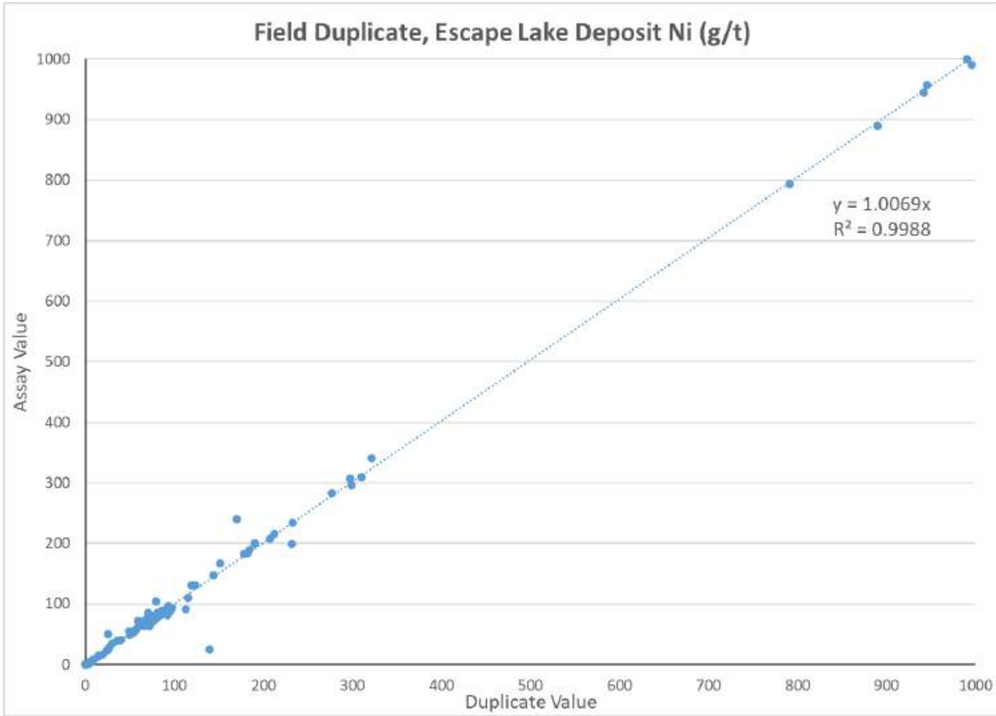


Figure 11-53: Escape Lake Deposit field duplicates for Ni (g/t)

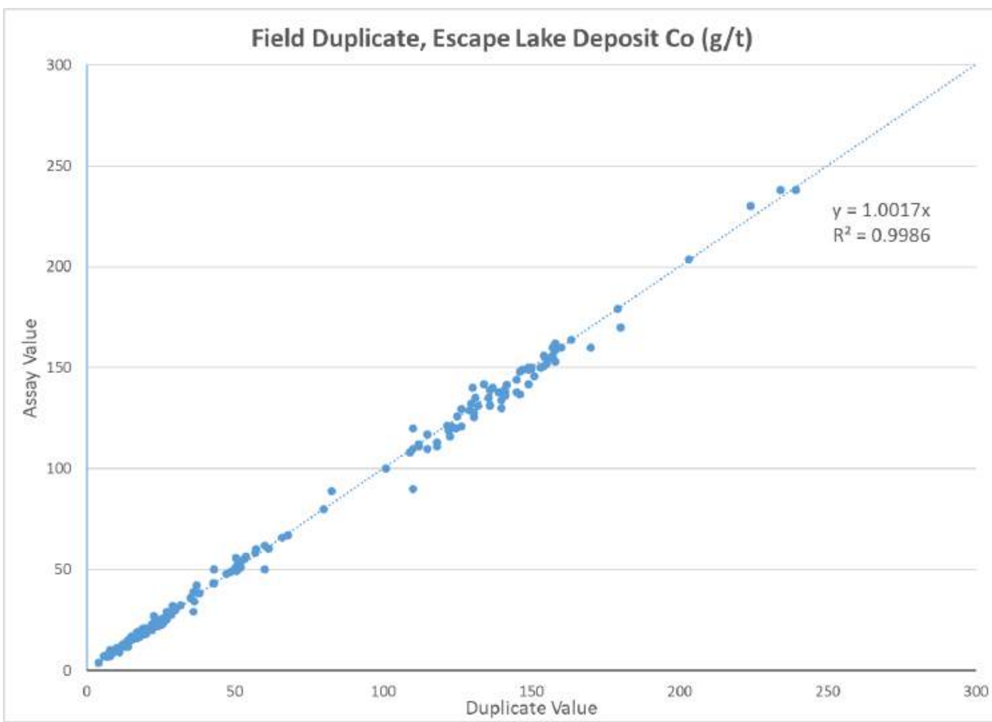


Figure 11-54: Escape Lake Deposit field duplicates for Co (g/t)

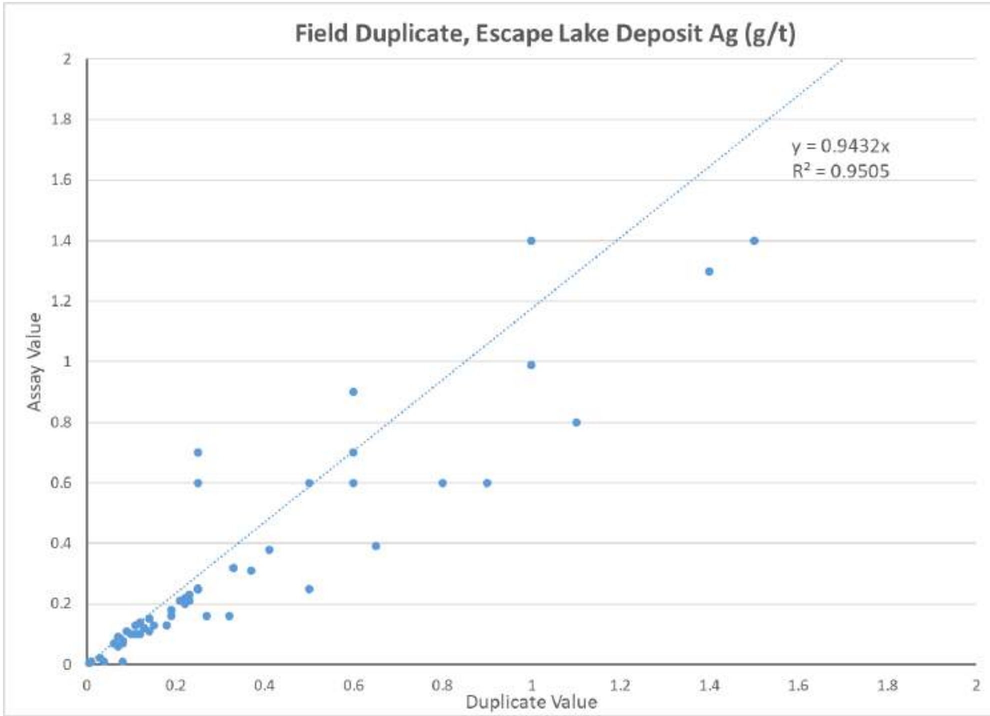


Figure 11-55: Escape Lake Deposit field duplicates for Ag (g/t)

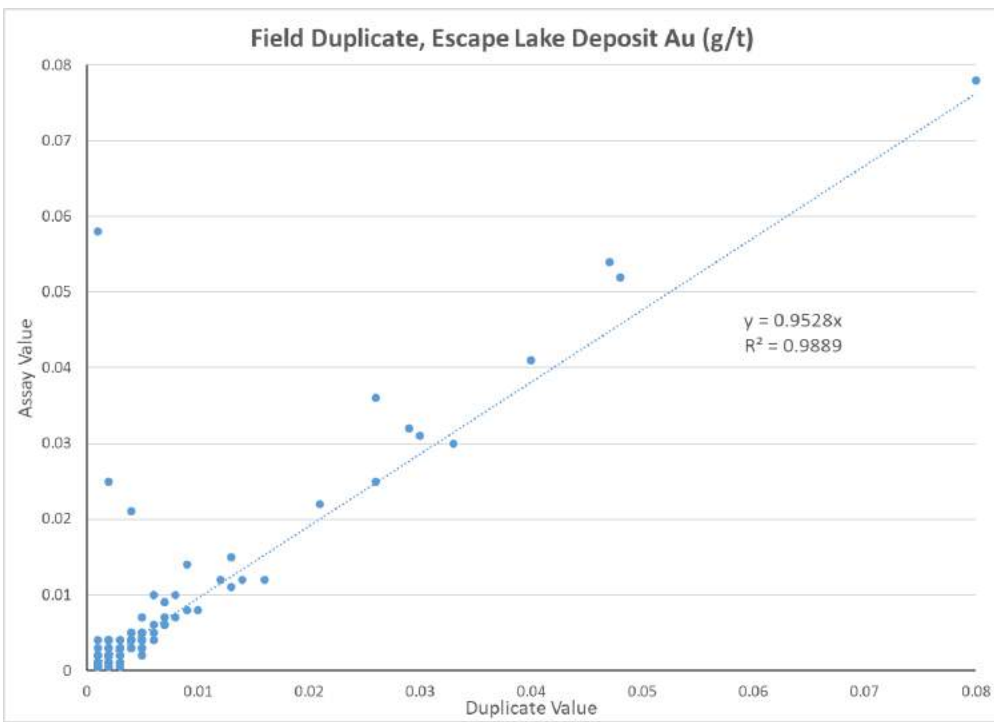


Figure 11-56: Escape Lake Deposit field duplicates for Au (g/t)

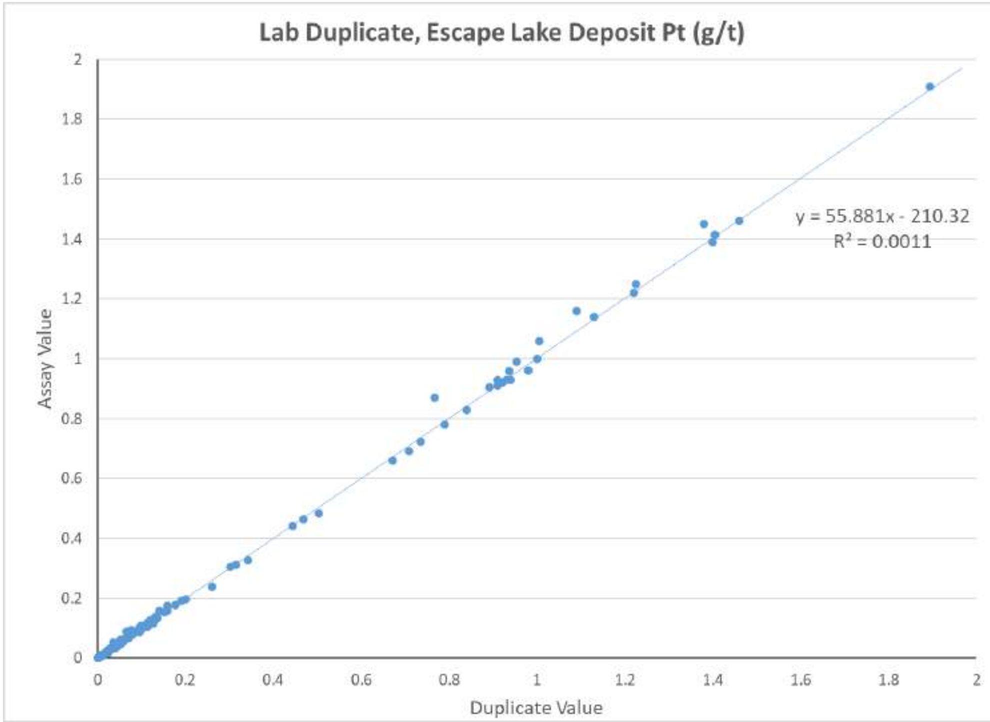


Figure 11-57: Escape Lake Deposit lab duplicates for Pt (g/t)

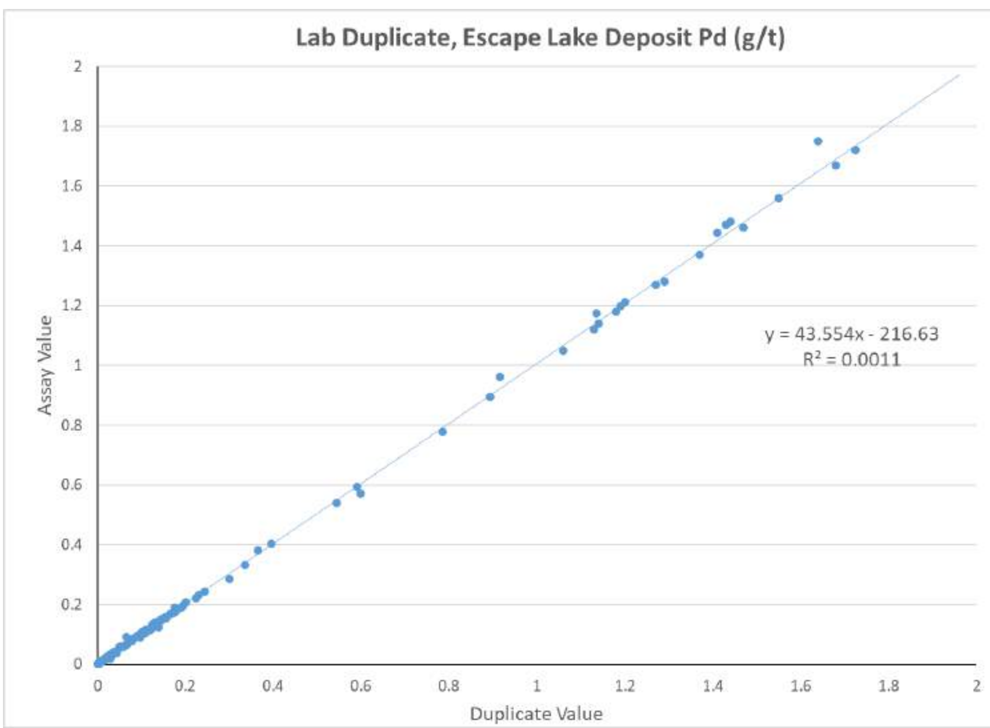


Figure 11-58: Escape Lake Deposit lab duplicates for Pd (g/t)

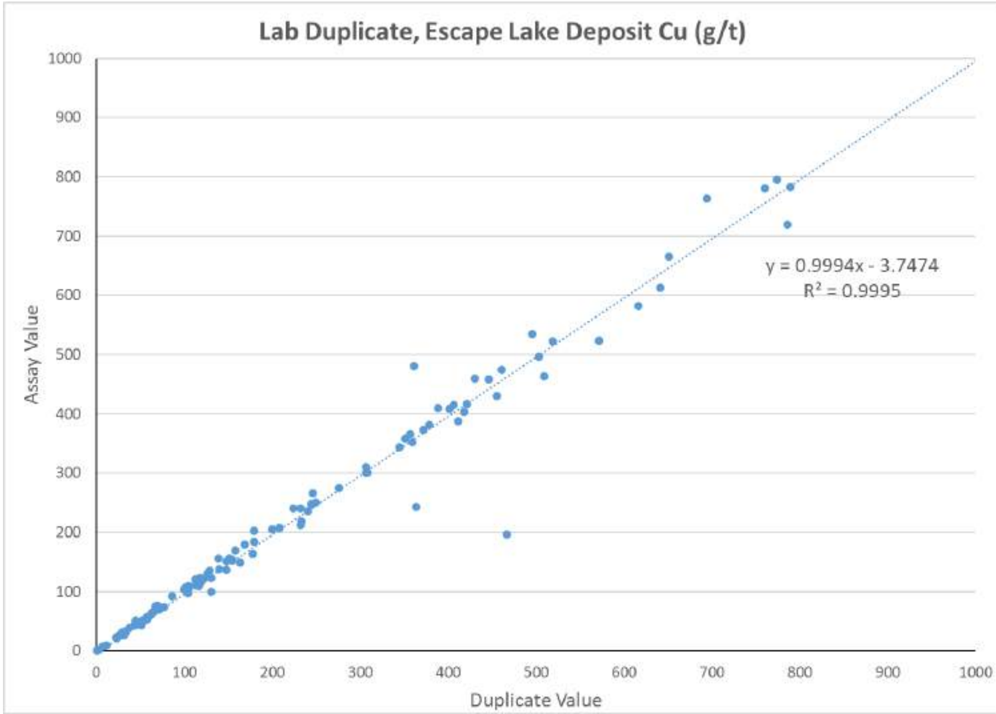


Figure 11-59: Escape Lake Deposit lab duplicates for Cu (g/t)

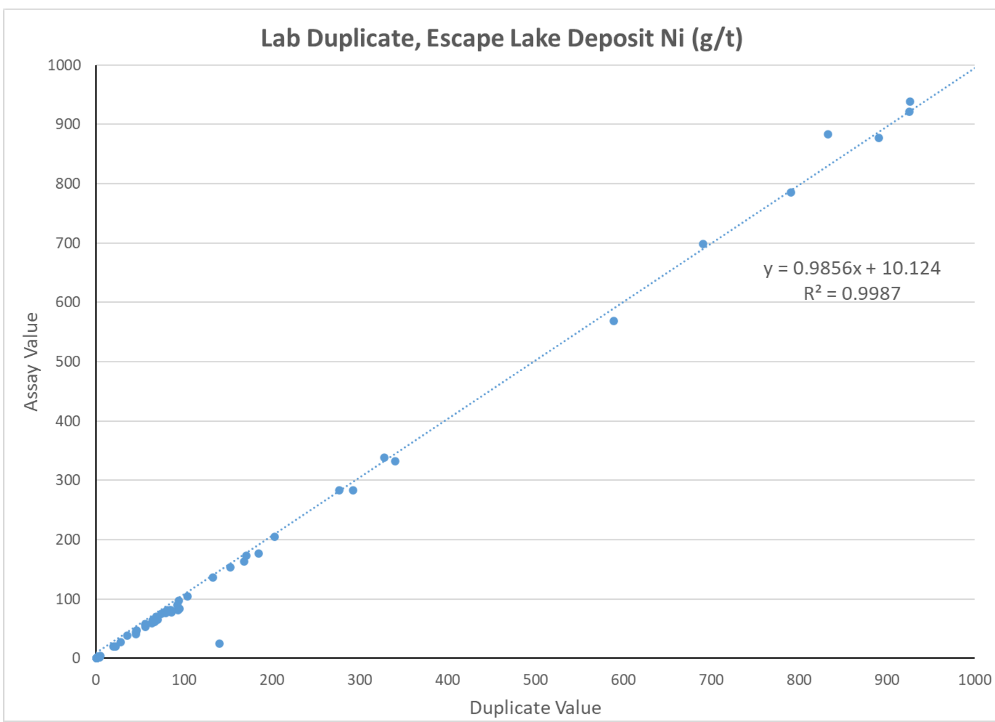


Figure 11-60: Escape Lake Deposit lab duplicates for Ni (g/t)

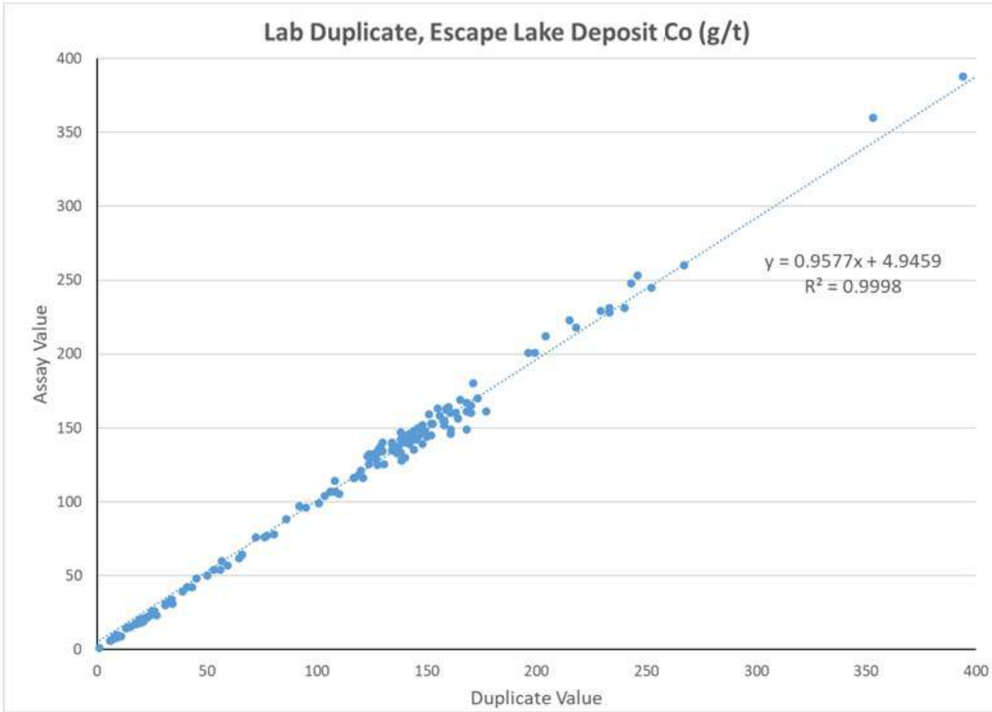


Figure 11-61: Escape Lake Deposit lab duplicates for Co (g/t)

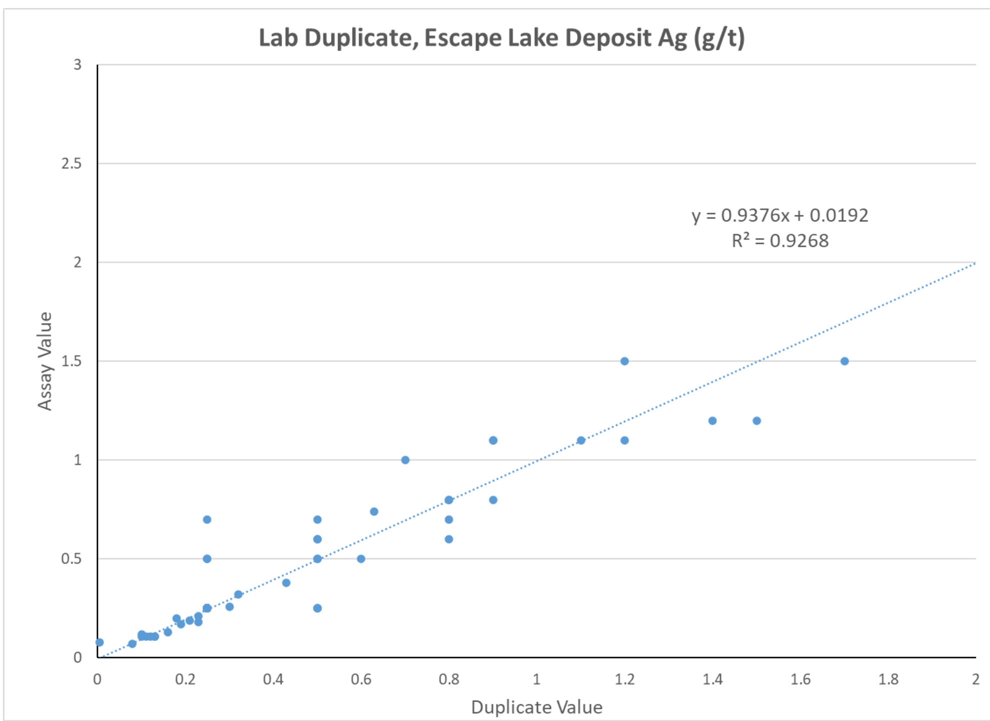


Figure 11-62: Escape Lake Deposit lab duplicates for Ag (g/t)

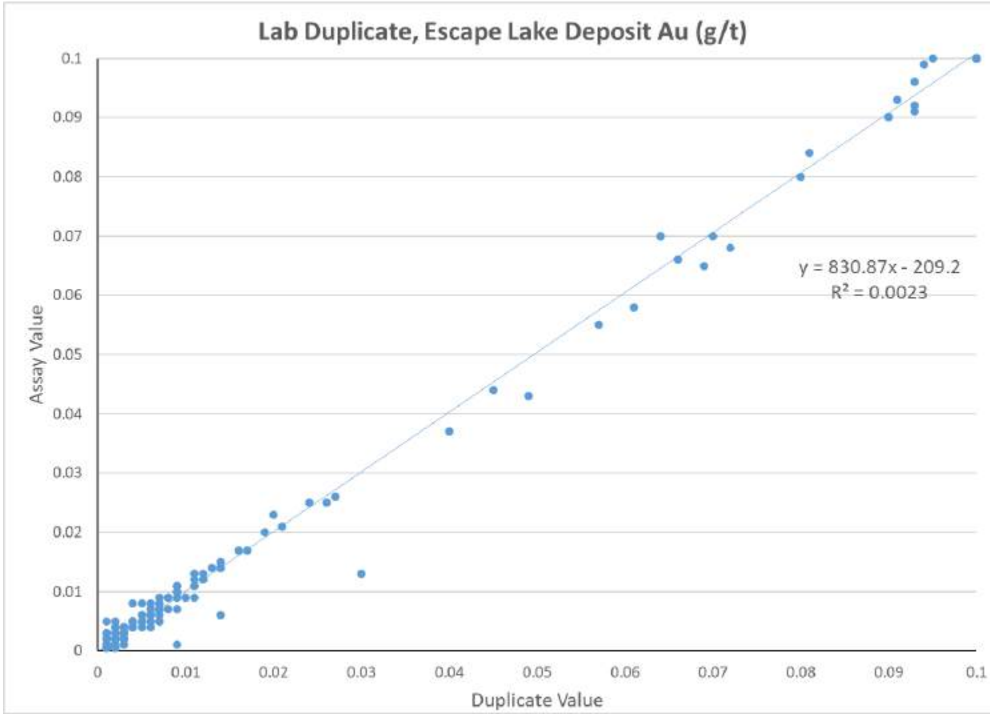


Figure 11-63: Escape Lake Deposit lab duplicates for Au (g/t)

11.3.2.4 Lab Inserted Standards With No Accepted Values or Certificates

Two lab standards were inserted that have no accepted values or certificates; they are listed in Table 11-6. In total they comprise 47% of total inserted CRMs and 18% of all samples for both Current Lake and Escape Lake Deposits, including QA/QC standard, blanks, and duplicates.

Table 11-6: Lab Inserted Standards with no Accepted Values or Certificates

Standard	Count		Standard	Count		Standard	Count
BP-13	120		GMN-04	1		OxN92	30
BM-197	51		GLG307-4	723		OxP50	2
BM-44	48		GPP-01	619		OGGE008	2516
APG6	1115		GPP-02	6855		PD1	515
CL-HG	21		GPP-*04*	66		PG119	2130
CL-LG	637		GPP-05	18		PG121	156
CL-MG	98		GPP-14	108		PK2	426
D1	534		GXR-1	32		SARM7B	168
D-10	18		GXR-2	32		SJ32	26
D-11	51		GXR-4	32		SJ39	4
D-12	24		GXR-6	32		SRM88B	12
D2	6		LDI-2	1678		ST-252	9
D4	31		LKSD-2	8		ST-327	1
D-5	18		OxA59	12		SU-1b	29
D-6	12		OxA71	168		SY-4	16
DL-1	8		OxA89	3		TAM26	7
DNC-1	28		OXD57	14		TAM27	63
EA-01	172		OXD73	48		TAM28	271
EA-02	32		OxF53	3		TAM29	1029
EA-03	7		OxJ111	120		TRHB	12
EMOG-17	148		OxK95	96		UTS-3	8
ESB-A	260		OXL17	4		WGB-1	29
ESB-B	1474		OxN62	34		WPR-1	55
ESB-C	1725		OxN77	54			

11.4 Security and Storage

The Project core is stored in wooden core boxes and transported to the core logging shack. After being logged the core boxes are stacked outside where they get strapped and tarped onto a flat bed. The flat bed ships the core to a secure core yard on a regular basis for permanent storage (Figure 11-64).

Figure 11-64: Secure core yard storage

11.5 Qualified Person's Opinion on the Adequacy of Sample Preparation, Security, and Analytical Procedures.

Nordmin has been supplied with all raw QA/QC data and has reviewed and completed an independent check of the results for all of the Project sampling programs. It is Nordmin's opinion that the sample preparation, security, and analytical procedures used by all parties are consistent with standard industry practices and that the data is suitable for the 2021 Mineral Resource Estimate. Nordmin identified further recommendations to the Company to ensure the continuation of a robust QA/QC program but has noted that there are no material concerns with the geological or analytical procedures used or the quality of the resulting data.

12. DATA VERIFICATION

Nordmin completed several data validation checks throughout the duration of the 2021 Mineral Resource Estimate. The verification process included a two-day site visit to the Project by the QP to review surface geology, drill core geology, geological procedures, chain of custody of drill core and for the collection of independent samples for metal verification. The data verification included:

- a survey spot check of drill collars;
- a spot check comparison of assays from the drill hole database against original assay records (lab certificates);
- a spot check of drill core lithologies recorded in the database versus the core located in the core farm; and
- a review of the QA/QC performance of the drill programs.

Nordmin has also completed additional data analysis and validation, as outlined in Section 11.

12.1 Nordmin Site Visit 2020

A site visit to the Project was carried out across October 20 and October 21, 2020, by Nordmin personnel; Glen Kuntz, P.Geo., QP for Mineral Resources, Christian Ballard, P.Geo., Annika Van Kessel, GIT, and Sirena Jacobsen, G.Tech. Nordmin was accompanied by the Company's VP Project Manager, Allan MacTavish, P.Geo. who has been involved with the Project for several years and the Project Geologist, Ethan Beardy, GIT who has been involved with the Project since May 2020.

Activities during the site visit included the:

- Review of the geological and geographical setting of the Project.
- Review and inspection of the site geology, mineralization, and structural controls on mineralization.
- Review of the drilling, logging, sampling, analytical and QA/QC procedures.
- Review of the chain of custody of samples from the field to the assay lab.
- Review of the drill logs, drill core, storage facilities, and independent assay verification on selected core samples.
- Confirmation of a variety of drill hole collar locations.
- Review of the structural measurements recorded within the drill logs and how they are utilized within the 3D structural model.
- Validation of a portion of the drill hole database.

The Company geologists completed the geological mapping, core logging, and sampling associated with each drill location. Therefore, Nordmin relied on the Company's database to review the core logging procedures, the collection of samples, and the chain of custody associated with the drilling programs. The Company provided Nordmin with digital and paper copies of the logging and assay reports. All drilling data, including collars, logs, and assay results, were provided to Nordmin prior to the site visit.

No significant issues were identified during the site visit.

The Company employs a rigorous QA/QC protocol, including the routine insertion of field duplicates, blanks, and certified reference standards. Nordmin was provided with an excerpt from the database for review.

The collection and use of the structural information were reliable and representative of the drilled structure features.

The geological data collection procedures and the chain of custody were found to be consistent with industry standards and following the Company's internal procedural documentation; and Nordmin was able to verify the quality of geological and sampling information and develop an interpretation of PGE (Pt/Pd) and precious/base metal (Au, Ag, Cu, Ni, Co, Rh) grade distributions appropriate for the Mineral Resource Estimate.

12.1.1 Field Collar Validation

The QP confirmed the collar locations of 41 Current Lake Deposit, eight Escape Lake Deposit drill holes used within the Resource Estimate.

The collars were collected using a Garmin handheld GPS unit. Each drill hole was capped and labelled; they were made very visible in the field. The collars taken by Nordmin are very similar if not exact to what the Company had for collar locations.

The validation work is documented in Figure 12-1 through Figure 12-5, Table 12 1 and Table 12-2.

Figure 12-1: DDH BL-09-159 collar

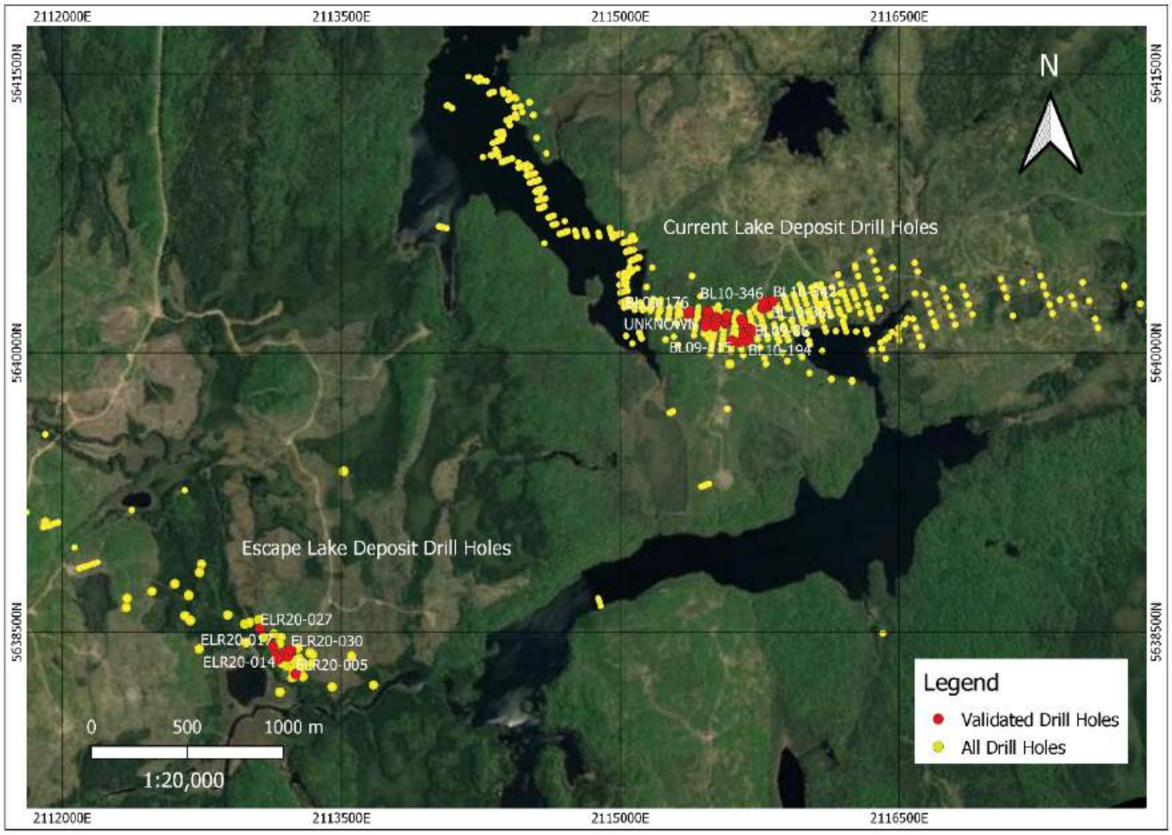


Figure 12-2: Validated drill hole collars versus all drill holes

Table 12-1: Current Lake Deposit Drill Hole Collar Comparison

Hole ID	Nordmin Northing	Nordmin Easting	Nordmin Elevation	Original Northing	Original Easting	Original Elevation	Differences-Northing	Differences-Easting	Differences-Elevation
BL10-377	357937.000	5402400.000	502.231	357938.070	5402400.000	504.933	0.125	0.145	2.702
BL10-279	357950.000	5402408.000	503.182	357950.730	5402407.000	504.55	0.594	1.371	1.368
BL10-198	357950.000	5402420.000	501.404	357951.080	5402419.400	503.834	0.286	0.217	2.430
BL10-369	357963.000	5402416.000	502.122	357963.740	5402413.900	504.351	0.051	2.031	2.229
BL10-373	357974.000	5402421.000	502.499	357975.350	5402421.100	503.673	0.909	0.317	1.174
BL10-363	357974.000	5402410.000	502.708	358088.130	5402528.400	495.288	113.381	118.016	-7.420
BL09-86	357997.000	5402401.000	500.830	357997.640	5402400.900	501.760	0.119	0.493	0.930
BL10-195	357952.000	5402380.000	504.756	357952.420	5402378.600	505.105	0.0467	1.846	0.349
BL10-375	357936.000	5402381.000	506.008	357937.870	5402380.100	505.823	1.523	0.533	0.185
BL10-374	357934.000	5402392.000	504.179	357936.110	5402390.600	505.349	1.432	1.608	1.170
BL10-194	357950.000	5402360.000	504.095	357950.530	5402358.800	504.037	0.358	1.510	0.058
BL10-193	357900.000	5402370.000	503.623	357900.210	5402368.700	504.375	0.121	1.045	0.752
BL09-115	357870.000	5402389.000	505.347	357870.680	5402387.400	506.790	0.056	1.257	1.443
BL09-154	357864.000	5402486.000	507.243	357865.370	5402485.600	508.540	0.683	0.798	1.297
BL10-206	357870.000	5402495.000	507.175	357870.450	5402493.700	508.807	0.410	0.829	1.632
BL09-153	357876.000	5402504.000	508.590	357875.830	5402502.800	510.978	0.395	1.195	2.388
BL10-207	357880.000	5402514.000	509.164	357880.420	5402512.500	511.260	0.101	1.597	2.095
BL09-151	357885.000	5402521.000	509.399	357885.370	5402520.500	511.966	0.197	0.632	2.567
BL09-110	357832.000	5402531.000	506.021	357832.110	5402529.300	508.240	0.254	1.818	2.219
BL09-89	357828.000	5402522.000	506.021	357828.070	5402520.000	507.512	0.674	1.140	1.491
BL09-162	357807.000	5402539.000	508.442	357807.700	5402537.600	508.574	0.006	1.154	0.132
BL09-161	357799.000	5402523.000	509.035	357799.680	5402521.600	509.228	0.185	1.271	0.193
BL09-164	357789.000	5402558.000	506.037	357790.160	5402556.700	506.298	0.443	0.969	0.261
BL10-233	357794.000	5402567.000	505.524	357794.710	5402567.000	505.415	0.710	0.296	0.109
BL09-165	357799.000	5402575.000	504.400	357800.130	5402574.600	504.755	0.769	0.686	0.355
BL09-160	357779.000	5402539.000	505.903	357780.020	5402537.700	506.822	0.542	1.648	0.919
BL10-231	357777.000	5402532.000	507.007	357777.180	5402530.700	506.689	0.105	0.811	0.318
BL09-159	357772.000	5402522.000	507.109	357771.410	5402521.300	507.061	-0.795	1.049	0.048
BL09-158	357762.000	5402504.000	504.991	357761.840	5402502.900	506.376	-0.259	1.040	1.385
BL09-176	357703.000	5402603.000	492.404	357704.990	5402603.000	493.144	1.107	0.163	0.740
BL-10-221	357950.000	5402480.000	501.879	357951.080	5402478.700	501.492	0.233	0.946	0.387
BL10-220	357952.000	5402460.000	501.306	357951.010	5402458.100	501.949	-1.401	2.032	0.643
BL10-360	358073.000	5402501.000	490.183	358075.370	5402499.000	496.041	2.138	1.989	5.858
BL10-349	358087.000	5402499.000	493.743	358087.650	5402498.600	494.764	0.274	0.412	1.021
BL10-303	358100.000	5402509.000	492.350	358100.280	5402510.500	494.38	0.223	1.497	2.030
BL08.49/50	358102.000	5402499.000	492.369	358102.400	5402498.500	493.818	0.164	0.523	1.449
BL10-344	358112.000	5402510.000	492.616	358113.420	5402509.300	493.575	0.753	1.092	0.959
BL10-361	358125.000	5402511.000	493.246	358125.790	5402509.100	493.313	0.170	1.617	0.067
BL10-362	358124.000	5402520.000	494.631	358124.610	5402518.500	493.992	0.016	1.215	0.639
BL10-342	358138.000	5402518.000	496.092	358138.540	5402519.200	493.927	0.383	1.415	2.164
BL10-346	358088.000	5402526.000	497.117	358088.110	5402526.000	495.834	-0.028	0.212	1.283

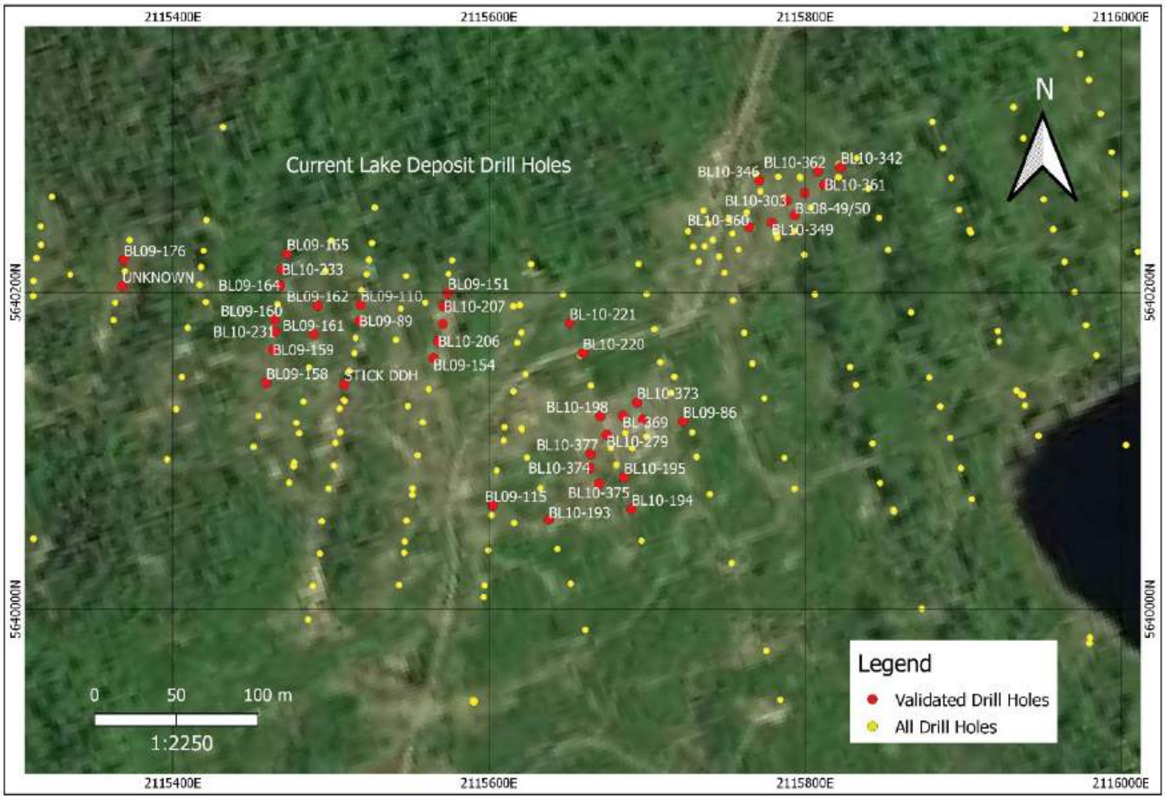


Figure 12-3: Current Lake Deposit validated drill holes versus all drill holes

Table 12-2: Escape Lake Deposit Drill Hole Collar Comparison

Hole ID	Nordmin Northing	Nordmin Easting	Nordmin Elevation	Original Northing	Original Easting	Original Elevation	Differences -Northing	Differences -Easting	Differences -Elevation
ELR20-005	355164.000	5401459.000	472.052	355164.500	5401459.250	472.052	0.510	0.246	0.000
ELR20-008	355147.000	5401584.000	473.700	355147.600	5401584.270	473.700	0.582	0.273	0.000
ELR20-014/012	355095.000	5401585.000	471.347	355095.300	5401585.90	474.600	0.300	0.900	3.253
ELR20-017	355097.000	5401632.000	474.002	355097.300	5401632.150	474.002	0.263	0.152	0.000
ELR20-022	355105.000	5401560.000	470.227	355105.200	5401560.240	470.227	0.200	0.240	0.000
ELR20-025	355155.000	5401560.000	470.8426	355155.100	5401560.370	470.843	0.100	0.370	0.000
ELR20-027	355063.000	5401741.000	468.997	355063.700	5401741.270	468.997	0.700	0.270	0.000
ELR20-030	355180.000	540158.000	476.097	355180.200	540158.180	476.097	0.200	0.180	0.000

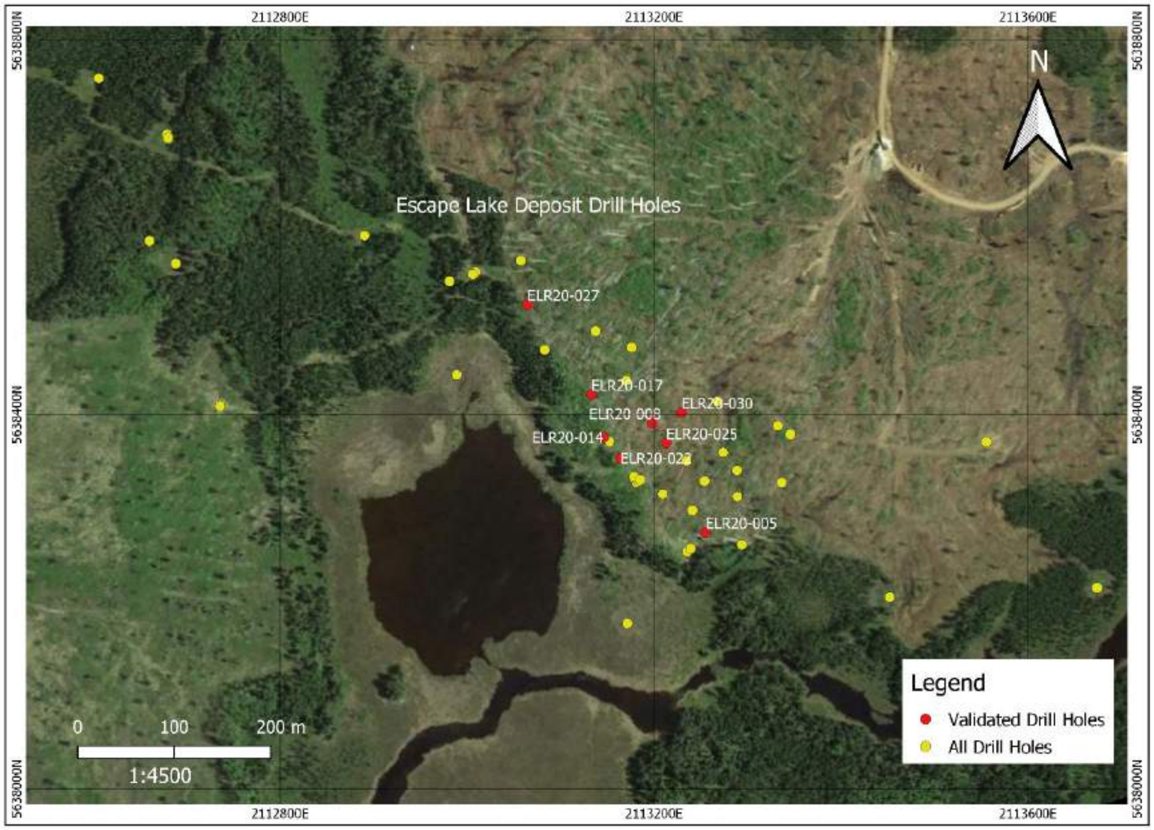


Figure 12-4: Escape Lake Deposit validated drill holes versus all drill holes

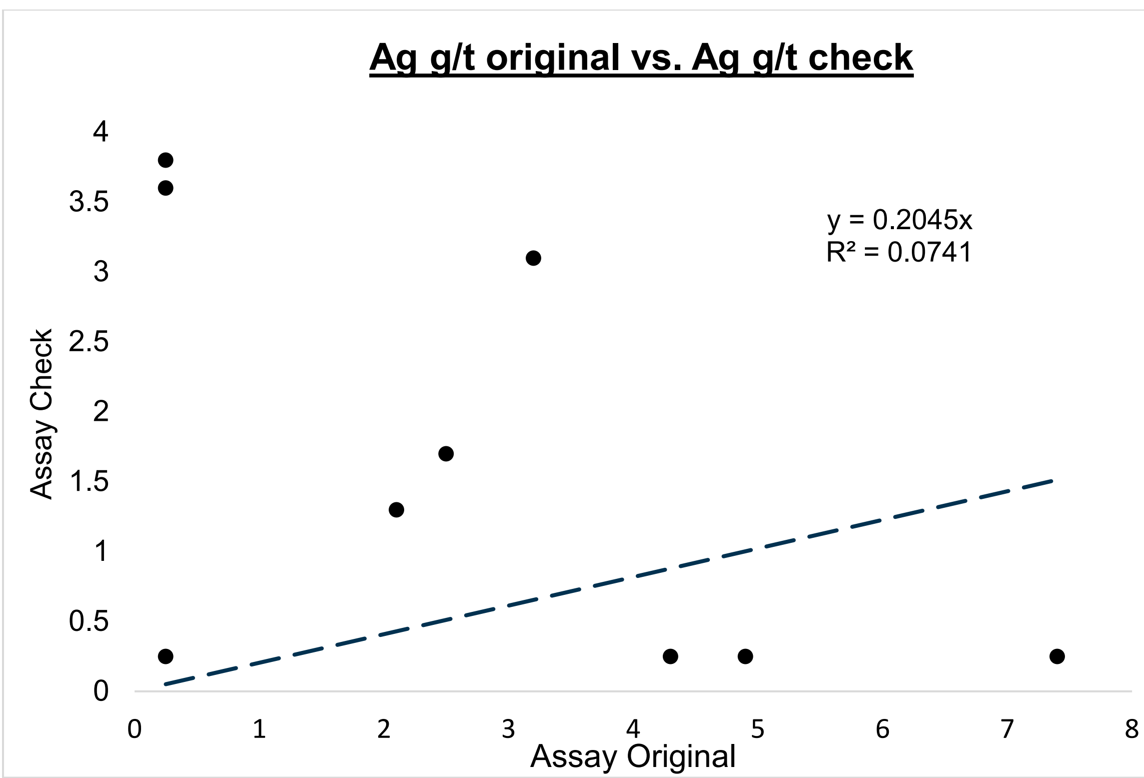


Figure 12-5: Escape Lake Deposit scatter plot comparison of Ag (g/t) verification samples

12.1.2 Core Logging, Sampling, and Storage Facilities

The Company drill holes were logged, photographed, and sampled on site at the core logging facility. Historic core is stored at the core yard, recently drilled core is currently being kept as cross-piles at the core logging facility. The core samples, pulps, and coarse rejects are kept at the core shack in multiple temporary buildings.

Figure 12-6: The Company core logging facility

Figure 12-7: The Company core cutting facility

12.1.3 Independent Sampling

The QP selected intervals from 21 Current Lake Deposit holes and ten Escape Lake Deposit holes. A total of 31 verification samples were collected (Table 12-3 and Table 12-4). Diamond drill core previously sampled (halved) was re-sampled by quartering within the original sample boundaries and assigned a new sample ID for analysis. The remaining quarter core was returned to the original core box, in sample sequence.

The Company uses unmineralized material, where values of ore minerals are below detection limits, or quartz gravel as sample blanks. Coarse blanks are crushed as normal samples within the sample stream so that contamination during sample preparation can be detected. Blanks are used to assess proper instrument cleaning and instrument detection limits and contaminations within the lab.

Table 12-3: Current Lake Deposit Drill Intervals Selected for Verification Sampling

Drill Hole ID	From (m)	To (m)	Old Sample	New Sample
BL11-399	242.60	243.00	J553935	L013411
BL11-399	310.60	312.00	J556622	L013412
BL11-399	393.20	395.20	J556667	L013413
BL11-401	250.85	252.00	J556772	L013414
TBND065	54.60	55.00	H090444	L013416
TBND065	51.70	52.00	H090438	L013417
TBND065	57.30	58.00	H090448	L013418
BL08-39	152.00	153.00	H087761	L013419
BL08-39	161.00	162.00	H087770	L013420
BL08-39	179.00	180.00	H087792	L013421
TBND134	83.00	84.00	H068169	L013422
TBND134	55.00	56.00	H068138	L013423
TBND134	39.00	40.00	H068126	L013424
BL10-357	149.40	149.90	E190257	L013425
BL10-357	149.90	150.00	E190258	L013426
BL10-357	174.00	174.25	E190276	L013427
BL10-236	127.00	128.00	E191136	L013428
BL10-236	129.00	130.00	E191138	L013429
BL10-236	144.00	144.85	E191153	L013430
BL10-305	182.00	183.00	E190911	L013431
BL10-305	171.00	172.00	E190898	L013432

Table 12-4: Escape Lake Deposit Drill Intervals Selected for Verification Sampling

Drill Hole ID	From (m)	To (m)	Old Sample	New Sample
ELR20-004	435.55	436.05	B605489	L013401
ELR20-004	473.37	474.37	B606531	L013402
ELR20-004	393.58	394.58	B605439	L013403
ELR20-004	347.40	349.40	B605411	L013404
ELR20-004	555.14	557.00	B606601	L013405
ELR20-008	394.84	395.00	B610102	L013406
ELR20-008	416.00	416.84	B610126	L013407
ELR20-008	292.70	293.00	B610001	L013408
ELR20-008	371.84	372.84	B610076	L013409
ELR20-008	323.00	323.84	B610025	L013410

The verification of individual sampling included placing individually cut pieces into a plastic bag where they are packed together in rice bags and sent to ALS Geochemistry in Thunder Bay, ON using the Company's analytical procedures (Figure 12-8).

Figure 12-8: Core cutter bringing samples outside to be shipped

The QP assay results were compared to the Company's database and summarized in the scatter plots for Ag, Au, Cu, Ni Pd, and Pt for Current Lake Deposit (Table 12-5 and Figure 12-9 through Figure 12-14) and Escape Lake Deposit (Table 12-6 and Figure 12-15 through Figure 12-20). Despite some significant sample variances in a few samples, most assays compared within reasonable tolerances for the deposit type and no material bias was evident.

Table 12-5: Current Lake Deposit Quarter Core Sampling Conducted by Nordmin, October 2020

Drill Hole ID	From (m)	To (m)	Length (m)	Half Core Pd (ppm)	Quarter Core Pd (ppm)	Half Core Pt (ppm)	Quarter Core Pt (ppm)	Half Core Ag (ppm)	Quarter Core Ag (ppm)	Half Core Au (ppm)	Quarter Core Au (ppm)	Half Core Cu (%)	Quarter Core Cu (%)	Half Core Ni (%)	Quarter Core Ni (%)
BL11-399	242.600	243.000	0.400	0.001	>1.000	0.002	>1.000	0.250	5.200	0.001	0.141	0.008	0.011	0.002	0.024
BL11-399	310.600	312.000	1.400	0.232	>1.000	0.238	>1.000	0.250	7.500	0.015	0.216	0.048	0.050	0.145	0.030
BL11-399	393.200	395.200	2.00	0.868	>1.000	0.897	>1.000	1.200	2.900	0.063	0.100	0.279	1.115	0.251	0.035
BL11-401	250.850	252.000	1.150	0.038	0.104	0.045	0.086	0.250	<0.500	0.005	0.007	0.016	0.050	0.098	0.041
TBND065	54.600	55.000	0.400	3.340	0.013	3.570	0.010	5.00	<0.500	0.230	0.002	0.741	0.064	0.392	0.046
TBND065	51.700	52.000	0.300	0.082	>1.000	0.092	>1.000	0.250	2.300	0.008	0.080	0.028	0.050	0.079	0.052
TBND065	57.300	58.000	0.700	0.910	>1.000	0.940	>1.000	1.700	3.700	0.060	0.134	0.285	0.060	0.206	0.057
BL08-39	152.000	153.000	1.000	1.100	0.015	1.200	0.011	1.400	<0.500	0.070	<0.001	0.201	0.127	0.189	0.152
BL08-39	161.000	162.000	1.000	0.705	>1.000	0.758	0.953	0.800	1.800	0.046	0.085	0.144	0.080	0.163	0.161
BL08-39	179.000	180.000	1.000	0.284	0.164	0.317	0.123	0.250	<0.500	0.019	0.010	0.051	0.515	0.138	0.179
TBND134	83.000	84.000	1.000	0.602	0.006	0.676	0.007	0.700	<0.500	0.050	<0.001	0.162	0.136	0.152	0.083
TBND134	55.000	56.000	1.000	1.150	0.242	1.300	0.255	1.700	<0.500	0.090	0.015	0.253	0.554	0.190	0.055
TBND134	39.000	40.000	1.000	0.082	0.909	0.092	0.928	0.250	1.400	0.007	0.059	0.020	0.012	0.075	0.039
BL10-357	149.400	149.900	0.500	1.850	0.452	1.900	0.485	3.600	0.800	0.120	0.031	0.602	0.120	0.258	0.149
BL10-357	149.900	150.000	0.100	1.900	>1.000	1.950	>1.000	3.700	2.300	0.110	0.127	0.606	0.850	0.267	0.150
BL10-357	174.000	174.250	0.250	0.021	0.127	0.016	0.139	0.250	<0.500	0.002	0.010	0.008	0.392	0.010	0.174
BL10-236	127.000	128.000	1.000	1.340	>1.000	1.410	>1.000	1.500	1.400	0.080	0.076	0.323	0.180	0.240	0.127
BL10-236	129.000	130.000	1.000	0.319	>1.000	0.339	>1.000	0.250	0.900	0.021	0.056	0.084	1.900	0.128	0.129
BL10-236	144.000	144.850	0.850	1.650	0.739	1.760	0.789	3.400	0.800	0.150	0.042	0.507	0.760	0.259	0.144
BL10-305	182.000	183.000	1.000	0.761	0.263	0.846	0.316	1.200	<0.500	0.067	0.017	0.256	0.492	0.212	0.182
BL10-305	171.000	172.000	1.000	0.161	0.698	0.160	0.761	0.250	1.100	0.014	0.053	0.044	0.111	0.139	0.171

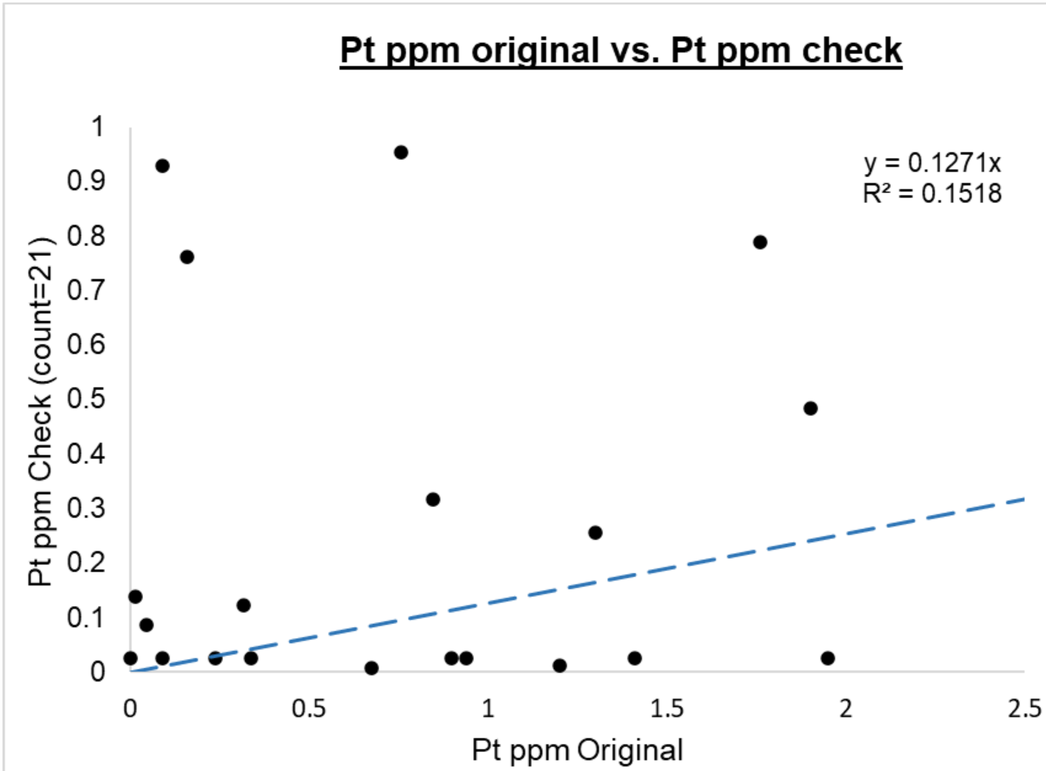


Figure 12-9: Current Lake Deposit scatter plot comparison of Pt (ppm) verification samples

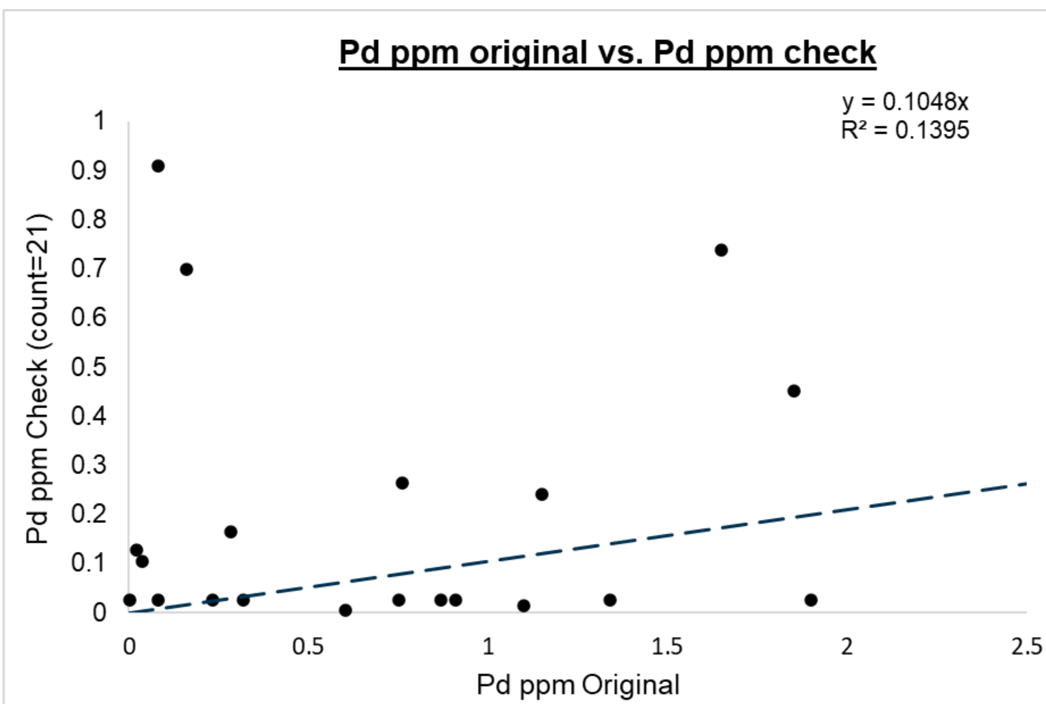


Figure 12-10: Current Lake Deposit scatter plot comparison of Pd (ppm) verification samples

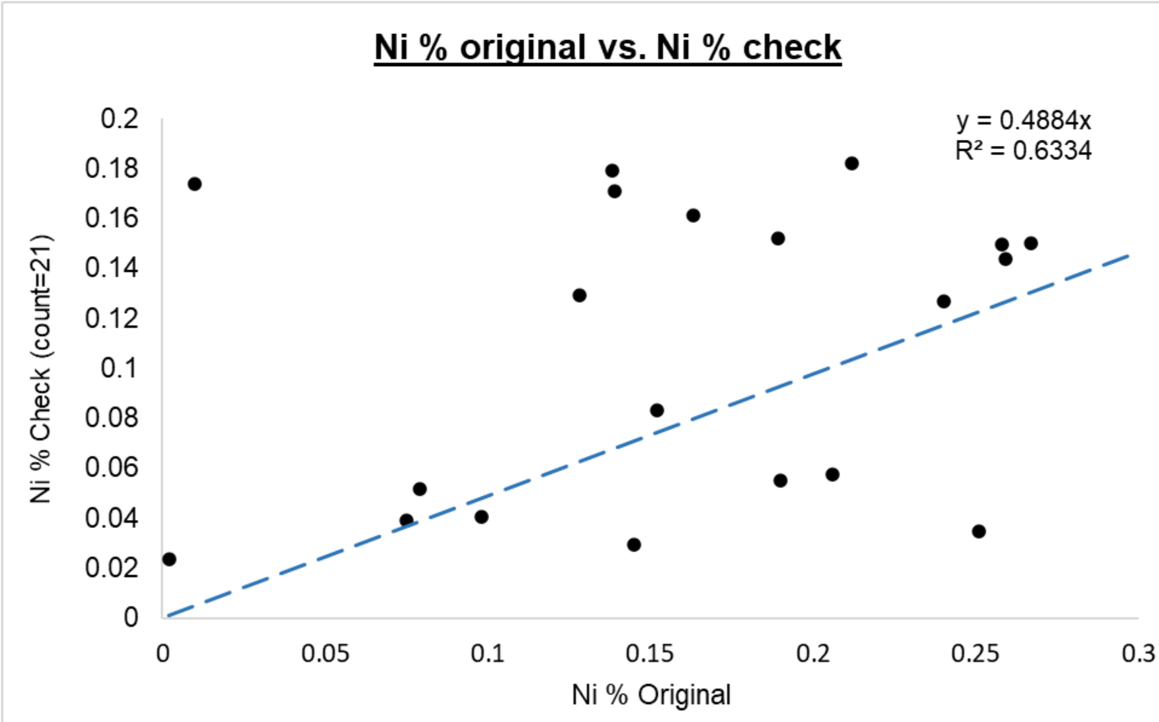


Figure 12-11: Current Lake Deposit scatter plot comparison of Ni (%) verification samples

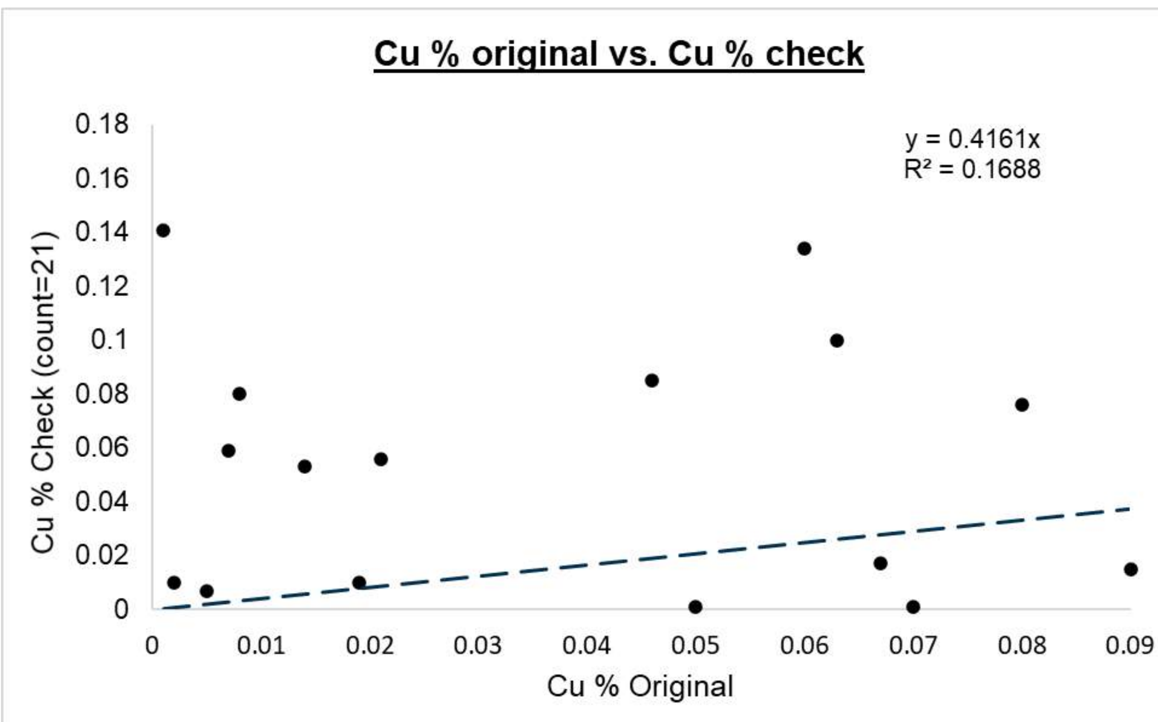


Figure 12-12: Current Lake Deposit scatter plot comparison of Cu (%) verification samples

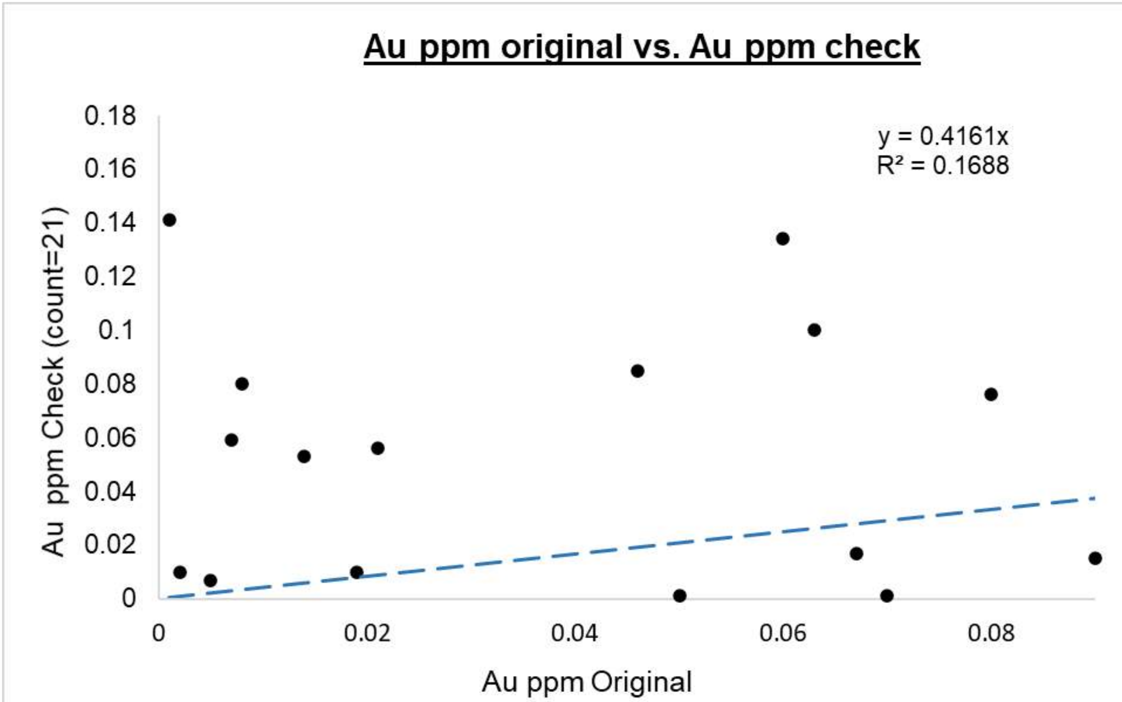


Figure 12-13: Current Lake Deposit scatter plot comparison of Au (ppm) verification samples

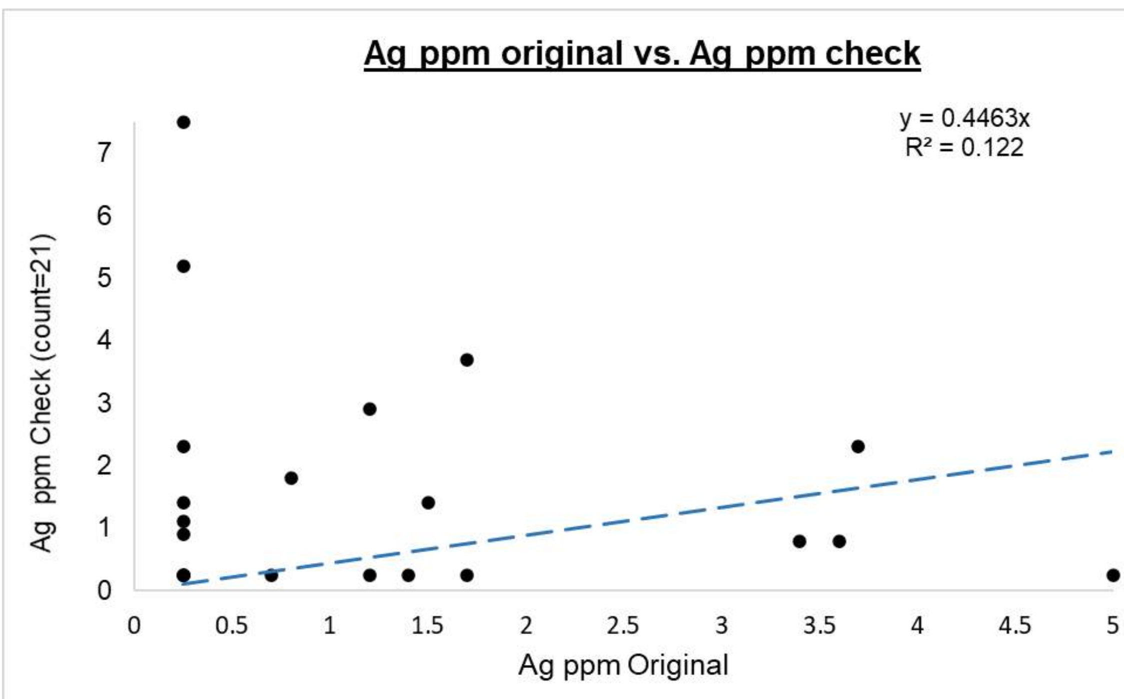


Figure 12-14:Current Lake Deposit scatter plot comparison of Ag (ppm) verification samples

Table 12-6: Escape Lake Deposit Quarter Core Sampling Conducted by Nordmin, October 2020

Drill Hole ID	From (m)	To (m)	Length (m)	Half Core Pd (ppm)	Quarter Core Pd (ppm)	Half Core Pt (ppm)	Quarter Core Pt (ppm)	Half Core Ag (ppm)	Quarter Core Ag (ppm)	Half Core Au (ppm)	Quarter Core Au (ppm)	Half Core Cu (%)	Quarter Core Cu (%)	Half Core Ni (%)	Quarter Core Ni (%)
ELR20-004	435.550	436.050	0.500	4.010	0.448	2.800	0.491	4.900	<0.500	0.130	0.033	1.470	1.020	0.989	0.436
ELR20-004	473.370	474.370	1.000	3.330	0.077	2.870	0.083	7.400	<0.500	0.220	0.006	1.570	0.174	0.753	0.473
ELR20-004	393.580	394.580	1.000	4.640	>1.000	3.140	>1.000	3.200	3.100	0.100	0.125	1.740	0.500	1.210	0.393
ELR20-004	347.400	349.400	2.000	0.097	>1.000	0.080	>1.000	0.250	3.600	0.008	0.103	0.033	0.340	0.149	0.347
ELR20-004	555.140	557.000	1.860	0.003	>1.000	0.002	>1.000	0.250	5.000	0.008	0.125	0.005	0.050	0.013	0.555
ELR20-008	394.840	395.000	0.160	3.020	>1.000	1.990	>1.000	2.500	1.700	0.090	0.076	1.190	3.320	0.982	0.394
ELR20-008	416.000	416.840	0.840	2.340	0.313	1.790	0.339	4.300	<0.500	0.140	0.021	0.819	0.854	0.570	0.416
ELR20-008	292.700	293.000	0.300	0.001	>1.000	0.001	>1.000	0.250	3.800	0.005	0.149	0.005	0.270	0.002	0.293
ELR20-008	371.840	372.840	1.000	1.100	0.745	0.830	0.781	2.100	1.300	0.090	0.065	0.420	0.140	0.187	0.372
ELR20-008	323.00	323.840	0.840	0.172	0.082	0.141	0.087	0.250	<0.500	0.012	0.006	0.058	0.288	0.137	0.323

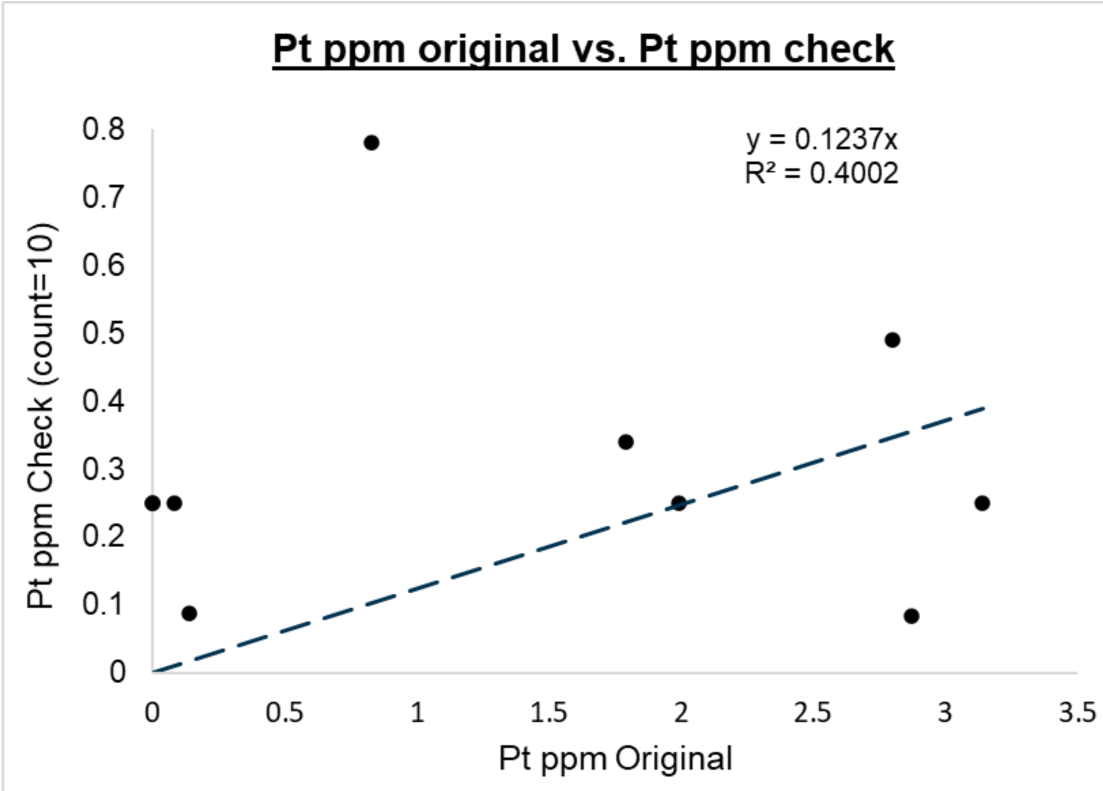


Figure 12-15: Escape Lake Deposit scatter plot comparison of Pt (ppm) verification samples

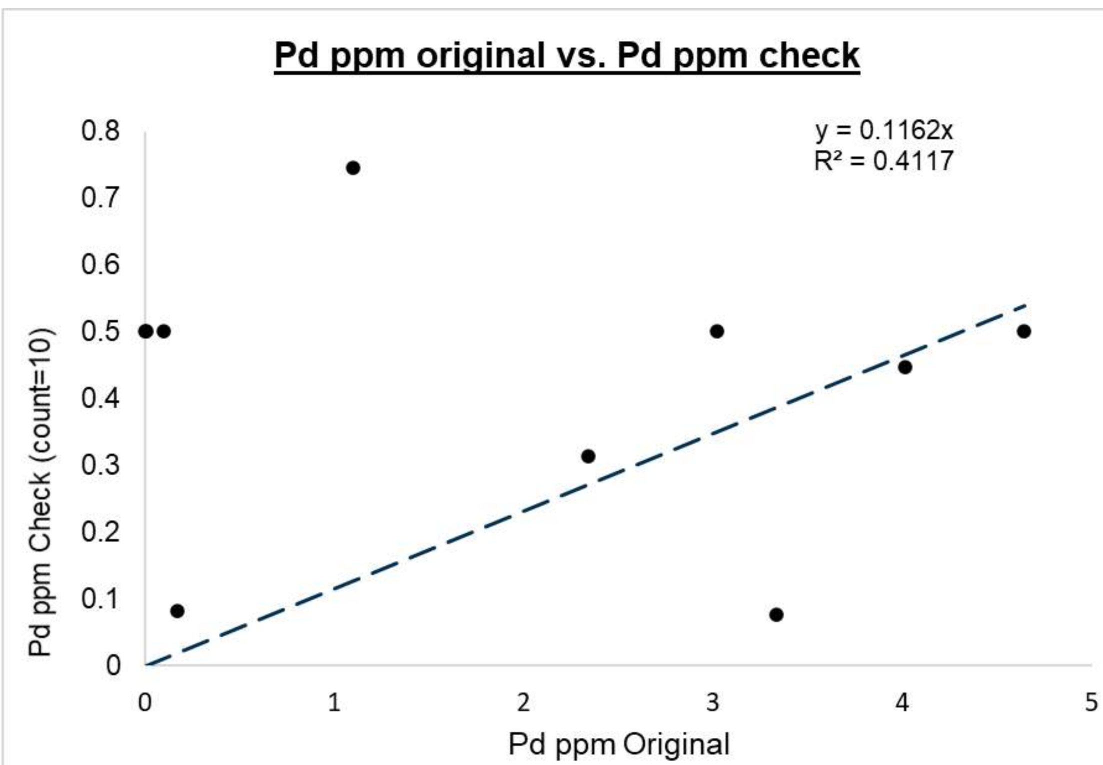


Figure 12-16: Escape Lake Deposit scatter plot comparison of Pd (ppm) verification samples

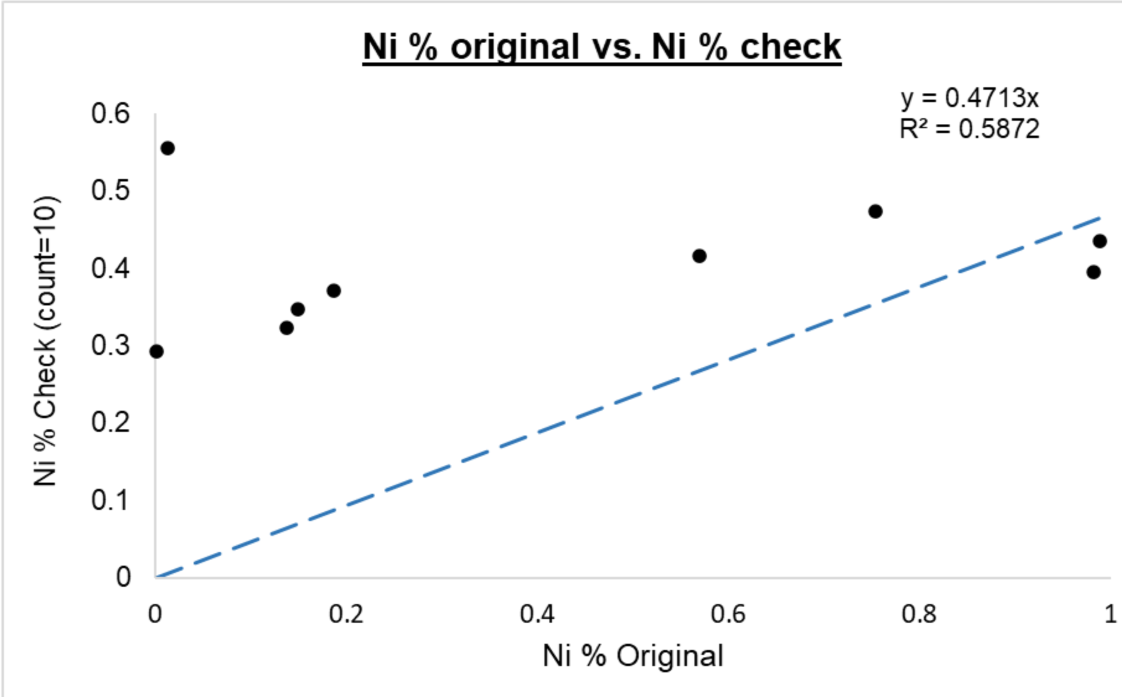


Figure 12-17: Escape Lake Deposit scatter plot comparison of Ni (%) verification samples

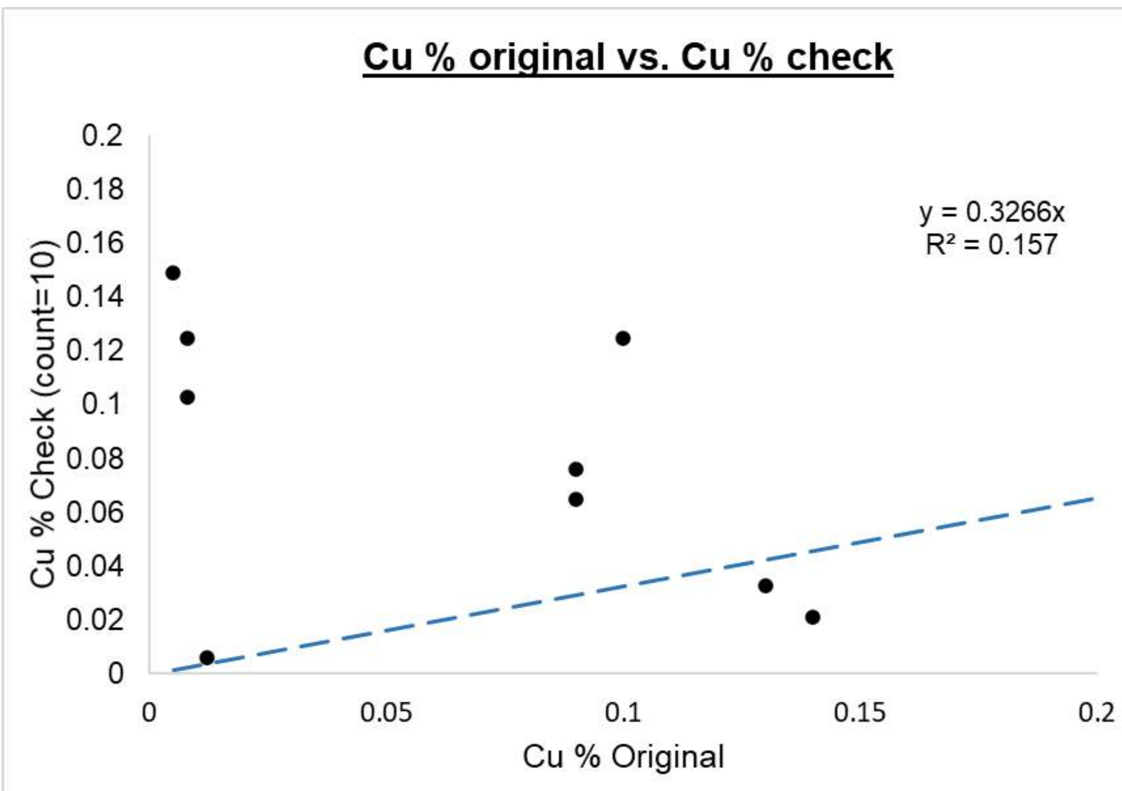


Figure 12-18: Escape Lake Deposit scatter plot comparison of Cu (%) verification samples

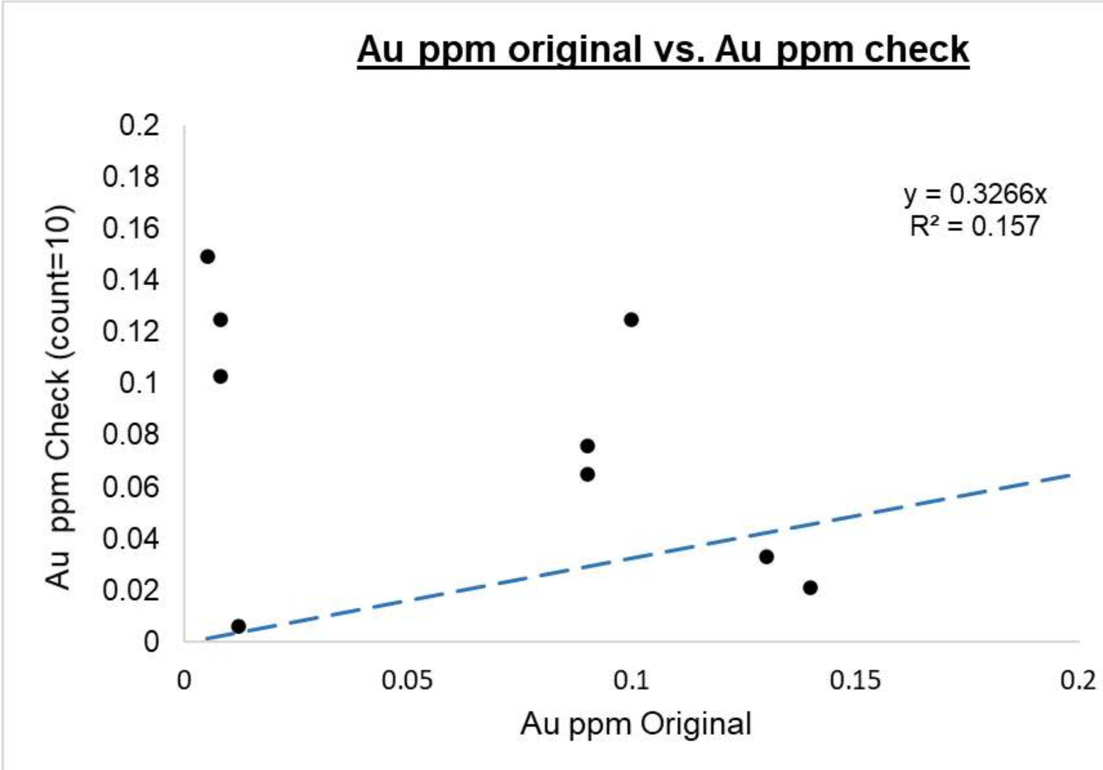


Figure 12-19: Escape Lake Deposit scatter plot comparison of Au (ppm) verification samples

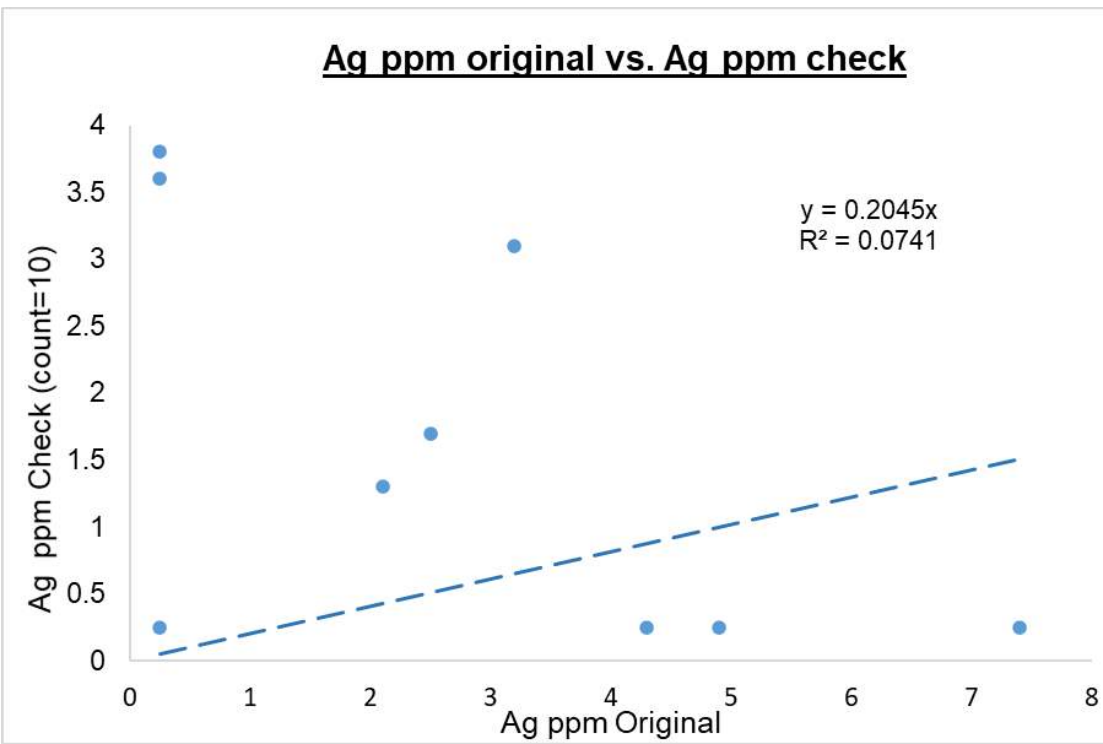


Figure 12-20: Escape Lake Deposit scatter plot comparison of Ag (ppm) verification samples

12.2 Database Validation

The QP completed a spot check verification of the following drill holes:

i. Current Lake Deposit – 52 (6%) of the lithologies, 3,184 (4%) of the geotechnical measurements, 3,992 (8%) of the assays.

ii. Escape Lake Deposit - 12 (10%) of the lithologies, 1,930 (15%) of the assays.

The geology was validated for lithological units from the Company's OCRIS logger. The geological contacts and lithology aligned with the core contacts and lithology and are acceptable for use.

Within the database there are 32 drill holes that did not have a collar associated with them; however, these specific drill holes are not associated with the Project and are negatable.

12.3 Review of the Company's QA/QC

The Company has a robust QA/QC process in place, as previously described in Section 11. The Company geologists actively monitor the assay results throughout the drill programs and summarize the QA/QC results, reporting weekly, and monthly. A number of failures for standard and blank reference materials were documented, resulting in re-assay of entire sample batches. Most of the CRMs performed as expected within tolerances of two to three standard deviations of the mean grade. Nordmin is satisfied that the QA/QC process performs as designed to ensure the assay data quality.

12.4 QP's Opinion

Upon completion of the data verification process, it is the QP's opinion that the geological data collection and QA/QC procedures used by the Company are consistent with standard industry practices and that the geological database is of suitable quality to support the Mineral Resource Estimate.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical testwork on samples obtained during the 2010-2011 work program was conducted at G&T (now ALS) in Kamloops, BC, and at SGS Mineral Services ("SGS") in Lakefield, ON. The main focus of the testwork has been the concentration of pay metals by froth flotation, but has also considered gravity recovery and magnetic separation, as well as downstream process options including the Platsol process in an effort to optimize the value of the final products.

Three reports form the basis of the technical information presented here:

- Xstrata Process Support ("XPS"); Mineralogical Report 5010809.00 for Magma Metals Limited, Qemscan Analysis of One Crushed Composite, June 8, 2010.
- G&T; Metallurgical Assessment of the Thunder Bay North Project, KM2533, Nov. 5, 2010.
- SGS"; Project #12372-001 for Magma Metals Limited, The Grindability Characteristics of Samples from the Thunder Bay North Project, April 30, 2010.

13.1 Sample Selection and Head Characterization

A sample described as "Main Composite" was one of six different composites prepared by G&T from 281 kg of quartered drill core in March 2010. Head analysis of the Main Composite is presented in Table 13-1.

Table 13-1 Main Composite Head Analysis

Element	Unit	Assay
Palladium	g/t	1.12
Platinum	g/t	0.95
Copper	%	0.31
Nickel	%	0.22
Cobalt	g/t	180
Gold	g/t	0.11
Silver	g/t	2.6
Iron	%	10.9
Sulphur	%	1.73

Source: G&T Report KM2533, Nov. 5, 2010

Electron probe micro-analysis ("EMPA") in the XPS study indicated that the Ni grade of serpentines and olivine in the composite is approximately 0.2%, and that non-sulphide Ni represents approximately 42% of the total Ni in the sample. In addition, an additional 6% of the Ni is contained in pyrite and pyrrhotite at grade of approximately 0.45% Ni.

Liberation analysis by MLA carried out at G&T revealed that at a P_{80} (80% passing size) of 86 µm Cu, as chalcopyrite, was found to be sufficiently liberated to achieve separation. At the same grind size pentlandite was not liberated and would be primarily associated with pyrite and pyrrhotite.

13.2 Grindability

Hardness testing was conducted at SGS on selected composite samples. Results are summarized in Table 13-2 and indicate that the samples tested here are hard compared to other deposits, but only mildly abrasive. The low Axb values suggest that the material may not be amenable to efficient semi-autogenous grinding ("SAG") milling, and a multi-stage crushing followed by ball milling may be more appropriate.

Table 13-2 Summary of Grindability Results

Sample Name	Relative Density	JK Parameters A x b	JK Parameters DWI	SPI® (Min)	CWI (kWh/t)	RWI (kWh/t)	BWI (kWh/t) 150M	BWI (kWh/t) 325M	AI (g)
Main Sample	2.89	30.9	9.28	135	–	17.0	18.7	23.4	0.052
Boulder Sample	2.97	31.8	9.38	–	15.8	–	17.8	–	–
Variability Sample	2.94	37.4	7.84	–	–	–	17.6	–	–

Source: SGS Report, 2010

13.3 Metallurgical Testwork

13.3.1 Flotation Development

Flotation testwork was carried out at G&T with the objective of developing a flotation process to recover pay metals to a saleable concentrate and reject penalty elements, including talc minerals.

Three main flotation flowsheet options were investigated: bulk concentrate production; recovery of separate Cu-Ni and pyrite (PGM) concentrates, and separate Cu and Ni/PGM concentrates. In addition to flowsheet configuration, low-air flotation, consisting of nitrogen sparged flotation in the early stages of rougher flotation to selectively recover pyrite and pyrrhotite over Cu and Ni minerals was also evaluated. The presence of talc minerals was identified in the mineralogical study and methods of control in the testwork included the addition of a talc pre-flotation step as well as the use of starch depressants.

The highest recoveries were achieved with a bulk concentrate flowsheet and locked cycle testing was conducted to evaluate the effect of recycle streams on final concentrate grades and recoveries. Table 13-3 presents the metallurgical projection for the bulk flowsheet including a pre-flotation step to control talc. The pre-float concentrate MgO grade was measured at 25.6%, and this stream would report to final tailings.

Table 13-3: Locked Cycle Flotation Test Results, Test #23

Flotation Stream	Wt.	Assay, % (Cu, Ni, Co) g/t (Pt, Pd, Au)						Distribution, %					
	%	Cu	Ni	Co	Pt	Pd	Au	Cu	Ni	Co	Pt	Pd	Au
Feed	100	0.30	0.20	0.02	1.30	1.32	0.08	100	100	100	100	100	100
Pre-float Concentrate	5.7	0.15	0.12	0.01	0.6	0.7	0.06	2.9	3.6	4.0	2.4	3.1	3.9
3rd Clnr Concentrate	4.6	5.73	1.91	0.09	23.3	22.2	1.12	87.2	44.7	28.4	80.9	77.6	60.8
Tailings	89.7	0.03	0.11	0.01	0.20	0.28	0.03	9.8	51.7	67.7	16.7	19.3	35.3

From G&T Report KM2533, Nov. 5, 2010

Minor element analysis of a 3rd cleaner concentrate sample from flotation test #23 is presented in Table 13-4. Despite the talc pre-flotation step and the use of depressants during flotation the concentrate still has appreciable MgO, 7.8%, which may attract a smelter penalty. No other penalty elements were identified.

Table 13-4: Bulk Concentrate Minor Element Analysis, Test #23

Element	Symbol	Unit	Technique	Assay
Aluminum	Al	%	WR ICP-OES	0.53
Antimony	Sb	g/t	2 Acid ICP-OES	20
Arsenic	As	g/t	2 Acid ICP-OES	98
Bismuth	Bi	g/t	2 Acid ICP-OES	2
Cadmium	Cd	g/t	AR FAAS	10
Calcium	Ca	%	WR ICP-OES	0.87
Cobalt	Co	%	AR FAAS	0.093
Copper	Cu	%	AR FAAS	5.73
Fluorine	F	g/t	Fusion ISE	198
Gold	Au	g/t	FA FAAS	1.12
Iron	Fe	%	AR FAAS	30.7
Lead	Pb	%	AR FAAS	0.011
Magnesium Oxide	MgO	%	WR ICP-OES	7.79
Manganese	Mn	%	WR ICP-OES	0.072
Mercury	Hg	g/t	LeForte rt CV-AAS	<1
Molybdenum	Mo	%	2 Acid FAAS	0.003
Nickel	Ni	%	AR FAAS	1.91
Palladium	Pd	g/t	FA ICP-OES	22.2
Phosphorus	P	g/t	3 Acid ICP-OES	406
Platinum	Pt	g/t	FA ICP-OES	23.3
Selenium	Se	g/t	ESHKA ICP-OES	182
Silicon	Si	%	Fusion ICP-OES	7.25
Sulphur	S	%	2 Acid-ICP-OES	28.9
Silver	Ag	g/t	AR FAAS	26
Zinc	Zn	%	AR FAAS	0.038

Source: G&T Report KM2533, Nov. 5, 2010

Additional testwork evaluated both gravity and magnetic separation as means to reject gangue, and to improve precious metals recovery and overall concentrate grade. Centrifugal gravity recovery using a Knelson concentrator followed by hand panning indicated that approximately 30% of the contained gold could be recovered to a low grade concentrate suitable for combining with the bulk concentrate. No other metals were observed to benefit from gravity concentration. Low intensity magnetic separation at a field strength of 1000 Gauss was investigated as a means to remove pyrrhotite from the bulk concentrate, but was not found to achieve an efficient separation.

13.3.2 Variability Testing

Five variability composites were prepared from the split core samples received at G&T. The samples represented discrete zones of varying geographical and geological properties. A summary of the head analysis for the variability samples is presented in Table 13-5. The composites varied widely in mineralization and metal grades. Total sulphur in the composites ranged from 0.8% to 17%, with pay metals varying in proportion to the sulphur.

Table 13-5: Head Assays for the Variability Composites

Sample	Cu	Ni	Co	S	MgO	Pd	Pt	Au	Ag
	%	%	%	%	%	g/t	g/t	g/t	g/t
Cloud	0.3	0.2	0.02	0.7	26.0	1.2	1.0	0.1	2.5
0.7 Diss	0.1	0.1	0.02	0.8	22.9	0.3	0.3	0.2	1.3
1.5 Diss	0.2	0.2	0.02	1.5	22.0	0.4	0.4	0.2	1.7
5 Diss	0.8	0.5	0.03	3.8	24.0	3.1	2.6	0.2	4.6
10 Matrix	1.2	0.6	0.03	3.9	23.1	4.9	4.9	0.3	6.6
20 Matrix	2.7	1.5	0.08	17.4	12.6	11.6	8.4	0.4	9.9

Rougher and cleaner flotation tests were carried out using the optimized conditions developed from the testwork on the Main Composite. Metallurgical response varied widely between composites driven largely by grade and sulphide content. Copper recoveries ranged from 68% to 89%, whereas Ni recovery was more sensitive to head grade, with recoveries ranging from 24% to 70%.

Based on the results of the G&T testwork, a conceptual flowsheet was developed (Figure 13-1). The flowsheet is based on the production of a bulk concentrate with the potential for additional recovery in the grinding circuit through gravity concentration.

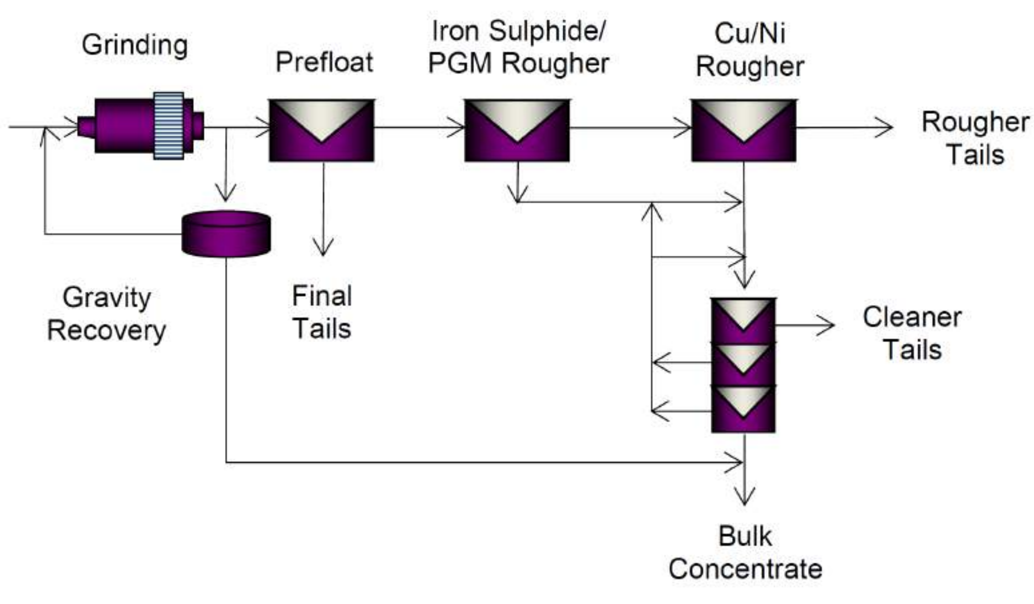


Figure 13-1: Process plant conceptual flowsheet

13.3.3 Future Work

A new metallurgical test program was initiated at Blue Coast Research in Parksville, BC in December 2020. The program will be representative of the deposits reported within the Mineral Resource Estimate presented in Section 14. The program will use coarse reject samples from previous drilling campaigns as well as split core material recovered from four new drill holes. The objective of the program is to advance the flowsheet development with a focus on optimizing grades and recoveries of final concentrates and providing baseline data for preliminary process engineering. Key elements of the work include:

- Mineralogical characterization of composite samples by automated Scanning Electron Microscope (“SEM”);
- Additional hardness testing to include Sag Mill Comminution (“SMC”), BBWI, and High Pressure Grinding Rolls (“HPGR”) amenability testing;
- Flotation and gravity development testwork; and,
- Characterization and flotation testing of geomet/variability composites.

14. MINERAL RESOURCE ESTIMATE

14.1 Drill Hole Database

The work on the 2021 Mineral Resource Estimate included a detailed geological and structural re-examination of the Current Lake and Escape Lake Deposits.

The Current Lake Deposit Mineral Resource Estimate benefits from approximately 162,997 m of diamond drilling in 730 drill holes spanning from 2006 until 2020. The Escape Lake Deposit Mineral Resource Estimate benefits from approximately 40,855 m of diamond drilling in 122 drill holes spanning from 2008 until 2020 (Figure 14-1).

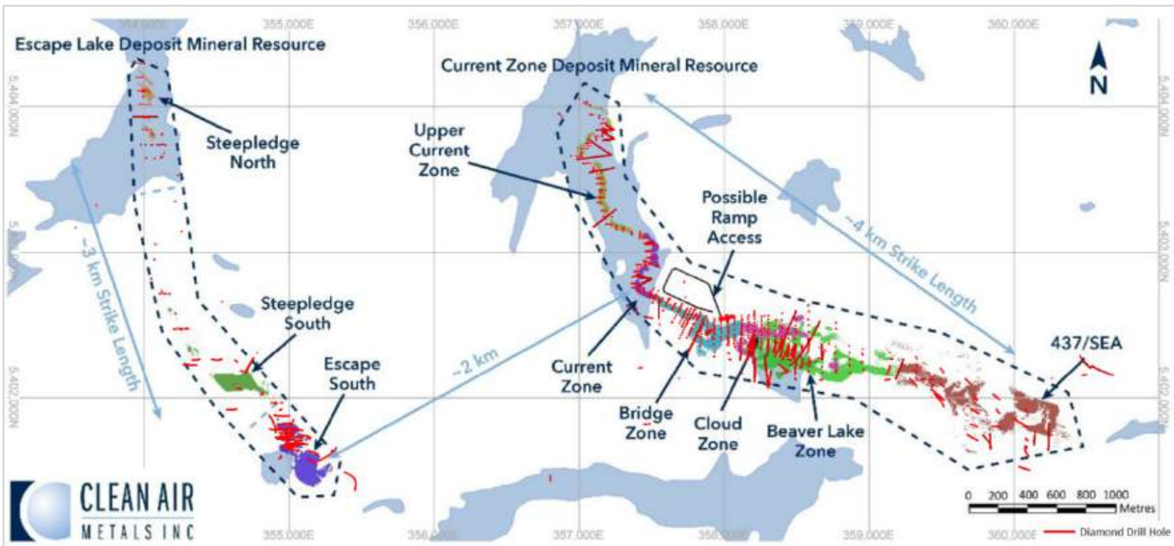


Figure 14-1: Plan view of Escape Lake and Current Lake Deposits with diamond drilling

Several assay suites were performed on different samples, including ME-XRF-06, ME-ICP06, and 6PGE (NSF01). All assays included in the Mineral Resource Estimate have been reviewed and validated based upon available information. Where sample intervals have been assayed multiple times with different methods, results have been vetted, and clarified through averaging when necessary. Drill hole counts are summarized in Table 14-1.

Table 14-1: Drill Hole Count Summary

Deposit	Total Drill Hole Count	Total Meterage (m)
Current Lake Deposit	730	162,997
Escape Lake Deposit	129	40,855

Table 14-2 summarizes the number of assays used within the Mineral Resource Estimate.

Table 14-2: Mineral Resource Estimate Number of Assays by Deposit

Element	Current Lake Deposit Assays	Escape Lake Deposit Assays
Pd	36,055	14,217
Pt	36,055	14,217
Au	36,054	14,216
Ag	35,145	13,611
Cu	36,016	12,913
Ni	35,900	13,710
Rh	1,541	1,042
Co	36,017	13,715

14.2 Domaining

14.2.1 Geological Domaining

Geological domains were developed within each of the deposit locations. The domains are dependent upon geographical, lithological, and mineralogical characteristics along with incorporating both regional and local structural information. Local Fault zones were created and/or extrapolated from surface mapping and core axis intervals within the drill core (Figure 14-2 and Table 14-3).

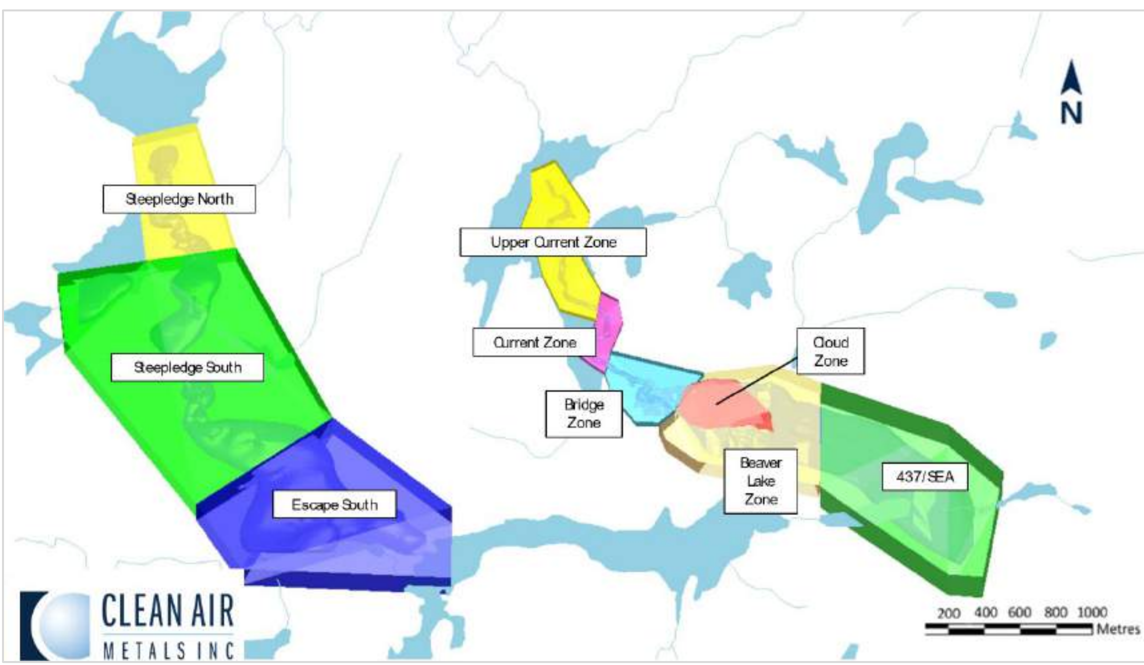


Figure 14-2: Geological domains

Table 14-3: Current Lake Deposit and Escape Lake Deposit Geological Domains

Current Lake Deposit	Escape Lake Deposit
Upper Current Lake	Steepledge North
Current Lake Zone	Steepledge South
Bridge Zone	Escape South
Beaver Zone	
Lake Zone	
Cloud Zone	
437/SE Anomaly	

The conduit is relatively younger in geological time when compared to its host rocks and therefore most of the local and regional faults do not penetrate the magmatic conduit nor the deposits. Lithology wireframes (sediment, granite, gabbro, ultramafic peridotites, and “hybrids” from the combination of surface mapping and underground drilling) were created for the rocks that host or surround the deposits (Figure 14-3, Figure 14-4, Figure 14-5 and Figure 14-6).

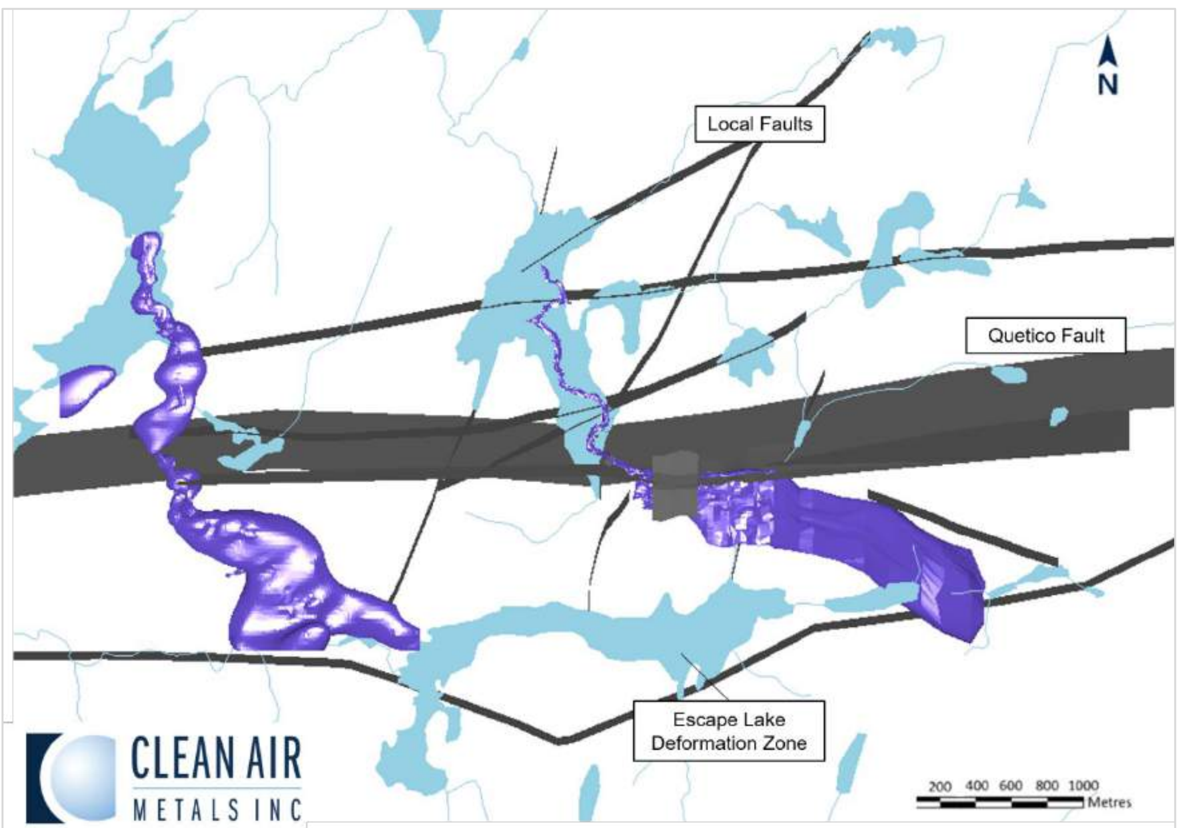


Figure 14-3: Structural details

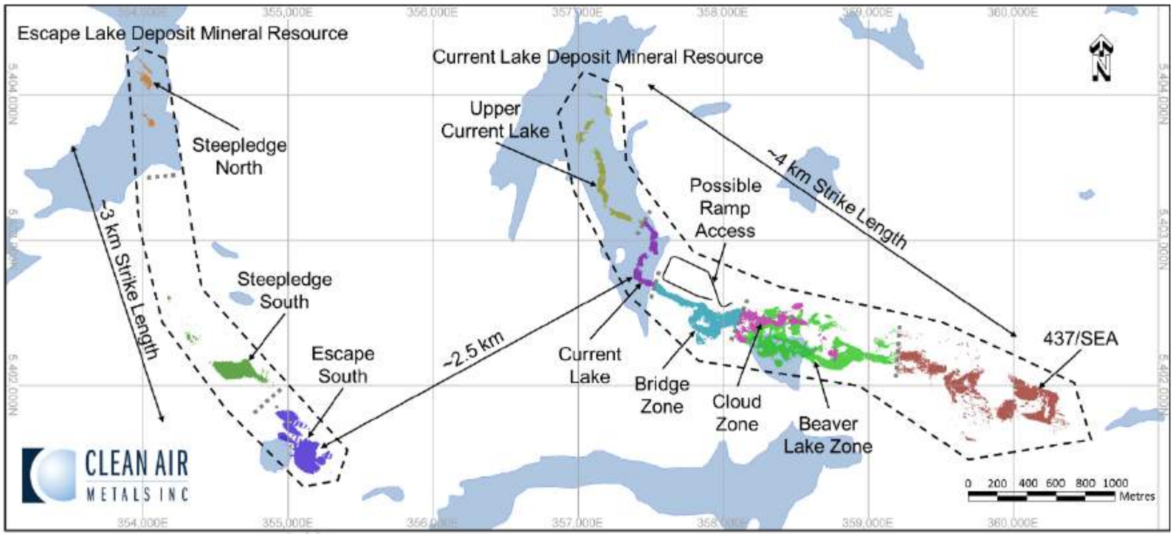


Figure 14-4: Plan view showing the Current Lake Deposit and Escape Lake Deposit including geological domains

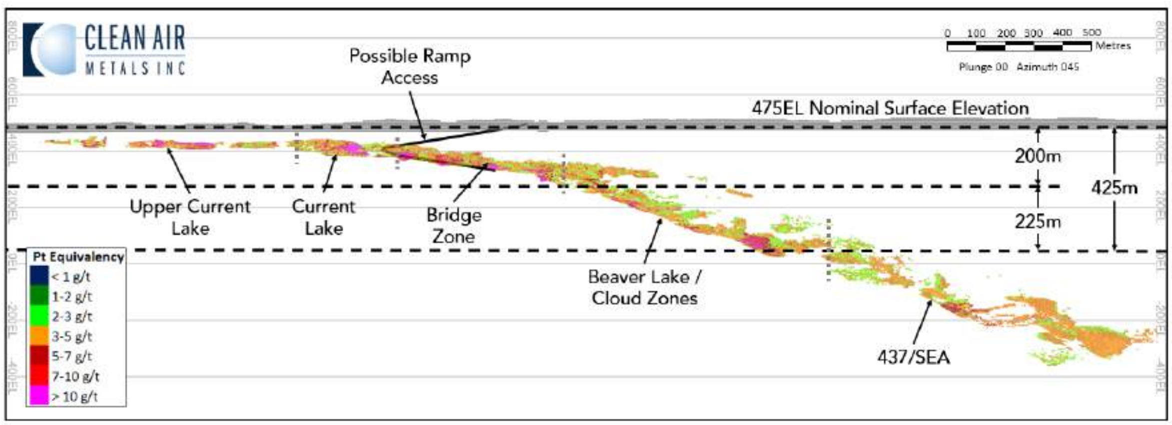


Figure 14-5: Current Lake Deposit long section showing geological domains and PtEq grade distribution

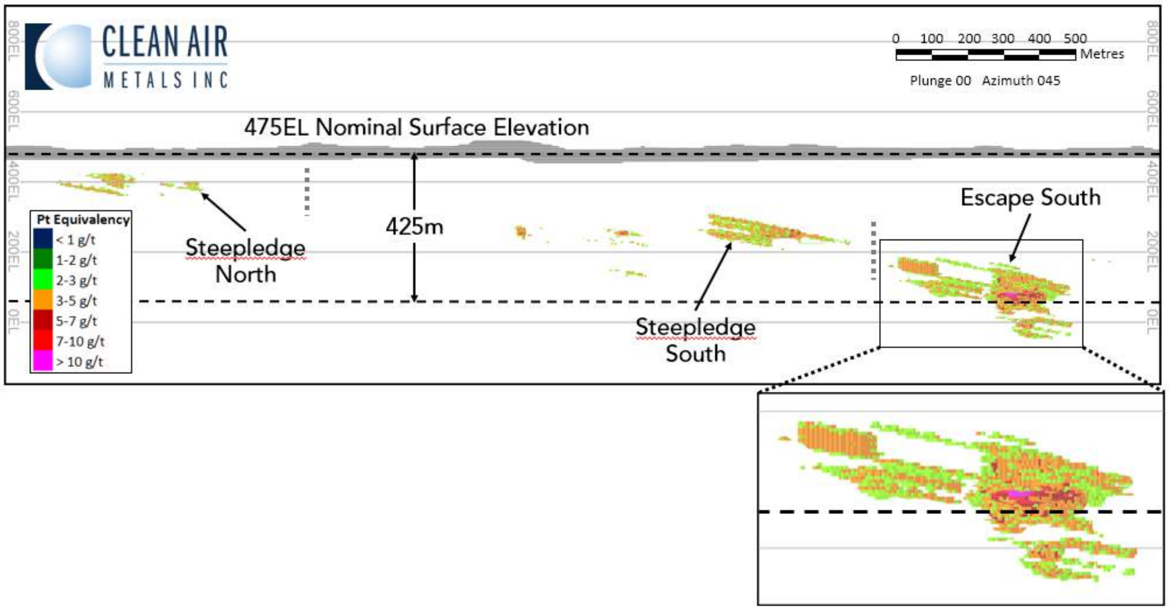


Figure 14-6: Escape Lake Deposit long section showing geological domains and PtEq grade distribution

14.2.2 Grade Domaining

Mineralization within the Current Lake Deposit and Escape Lake Deposit are hosted within magmatic conduits comprised of melanocratic gabbro and ultramafic peridotites. Mineralization is strongly associated with sulphide abundance with the exception of the Cloud Zone within the Current Lake Deposit.

Nordmin initially examined and modelled the grade distributions for each of the elements. Grade distributions were created for Pd, Pt, Au, Ag, Cu, Ni, Co, and Rh. The analysis confirmed that the changes in mineralization and corresponding grade within the various conduits appear to be caused by preferential magma/fluid mixing. The higher-grade mineralization is largely settled near the lower portions of the conduits due to the high sulphide content associated with the different metals. The settling created a scenario in which the high grade mineralization is “pod”-like in nature and relatively equally spaced along the lower contact of each conduit. The material between the higher-grade pods is mineralized but with lower grades. Therefore, the higher-grade pods are connected within a lower grade matrix. As such, Nordmin created wireframe grade shells for each of the eight commodities to reflect the lithological and geochemical differences, along with sulphide abundance for the purpose of grade concentration and isolation of composites.

Mineralization wireframes were initially created on 10 m to 20 m sections and plans and adjusted between various views to edit and smooth each wireframe where required. The wireframes were permitted to follow lithological boundaries and trends where applicable. When not cutoff by drilling, the wireframes terminate at the contact of the conduit; lack of drilling or a or significant change in grade distribution, whichever was most appropriate. No wireframe overlapping exists within a given grade domain. The use of explicit modelling allows for mineralization in context with the deposit geology and associated geochemistry to be considered. It is Nordmin’s opinion that the explicit modelling approach minimizes risks compared to using implicit modelling for this style of mineralization.

Grade domain wireframes were modelled for eight grade elements, including Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh. Each domain is based upon a grade bin using a combination of Background Grade (“BG”), Low Grade ("LG"), Medium Grade ("MG"), and High Grade ("HG"). BGs were isolated through applying the overall conduit wireframe.

The criteria used to create each of the grade domains is as follows:

Current Lake Deposit

1. Pt/Pd: Pt and Pt grades were summed, and the resulting total used to model grade domains for both Pt and Pd with the following criteria: BG Pt+Pt < 2.0 g/t, LG Pt+Pt 2.0 to 6.0 g/t, MG Pt+Pd 6.0 to 12.0 g/t, HG Pt+Pd > 12.0 g/t
2. Au: BG Au < 0.25 g/t, HG Au > 0.25 g/t
3. Ag: BG Ag < 5.0 g/t, HG Ag > 5.0 g/t
4. Cu: BG: < 1% Cu, LG 1 to 2% Cu, MG 2 to 4% Cu, HG > 4% Cu
5. Ni BG < 0.25% Ni, LG 0.25 to 0.5% Ni, MG 0.5 to 1% Ni, HG > 1% Ni
6. Co: BG Co < 250 g/t, LG Co 250 to 500 g/t, HG Co > 500 g/t
7. Rh: BG Rh < 0.25 g/t, LG Rh 0.25 to 0.5 g/t, MG Rh 0.5 to 1.0 g/t, HG Rh > 1.0 g/t

Escape Lake Deposit

1. Pt/Pd: Pt and Pt grades were summed and modelled together with the following criteria: BG Pt+Pt < 2.0 g/t, LG Pt+Pt 2.0 to 6.0 g/t, MG Pt+Pd 6.0 to 12.0 g/t, HG Pt+Pd > 12.0 g/t
2. Au: BG Au < 0.25 g/t, HG Au > 0.25 g/t
3. Ag: BG Ag < 2.5 g/t, LG Ag 2.5 to 5 g/t, HG Ag > 5 g/t
4. Cu: BG: < 1% Cu, LG 1 to 2% Cu, HG > 2% Cu
5. Ni BG < 0.25% Ni, LG 0.25 to 0.5% Ni, MG 0.5 to 1% Ni, HG > 1% Ni
6. Co: BG Co < 250 g/t, LG Co 250 to 500 g/t, HG Co > 500 g/t
7. Rh: BG Rh < 0.25 g/t, LG Rh 0.25 to 0.5 g/t, MG Rh 0.5 to 1.0 g/t, HG Rh > 1.0 g/t

Figure 14-7 displays all Pt/Pd mineral wireframes in both the Current Lake and Escape Lake Deposits.

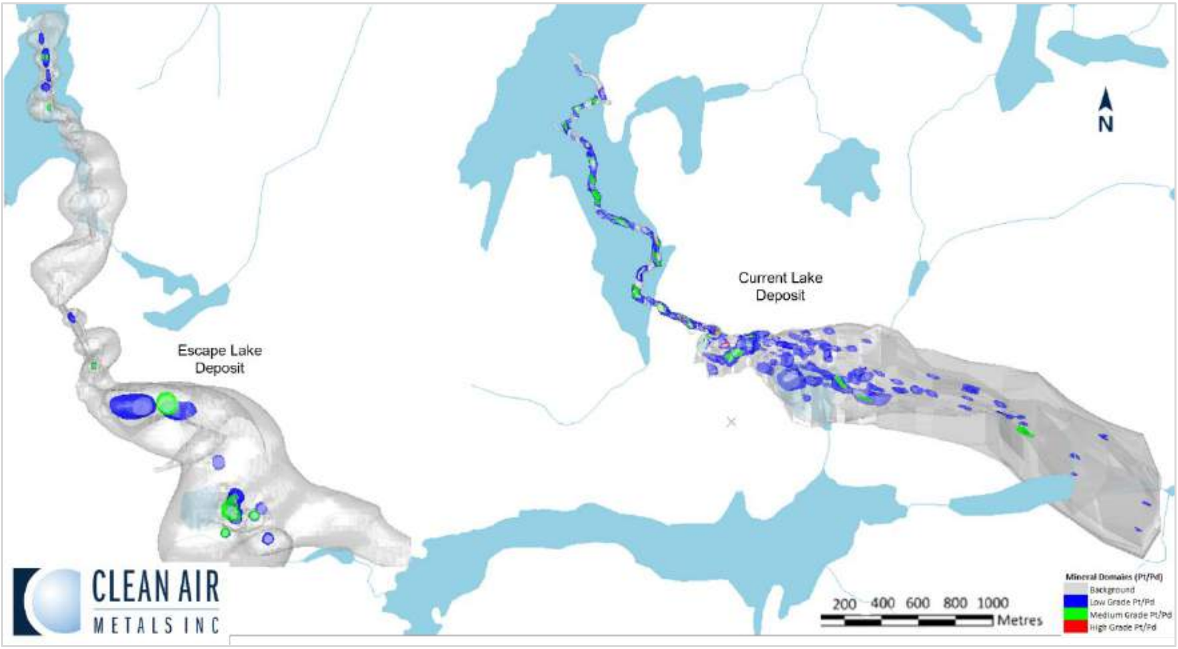


Figure 14-7: Plan view of the mineralogical domains for Escape Lake Deposit and Current Lake Deposit

Figure 14-8 and Figure 14-9 display the Current Lake Deposit Pt/Pd wireframes, and Figure 14-10 displays the Escape Lake Deposit Pt/Pd wireframes.

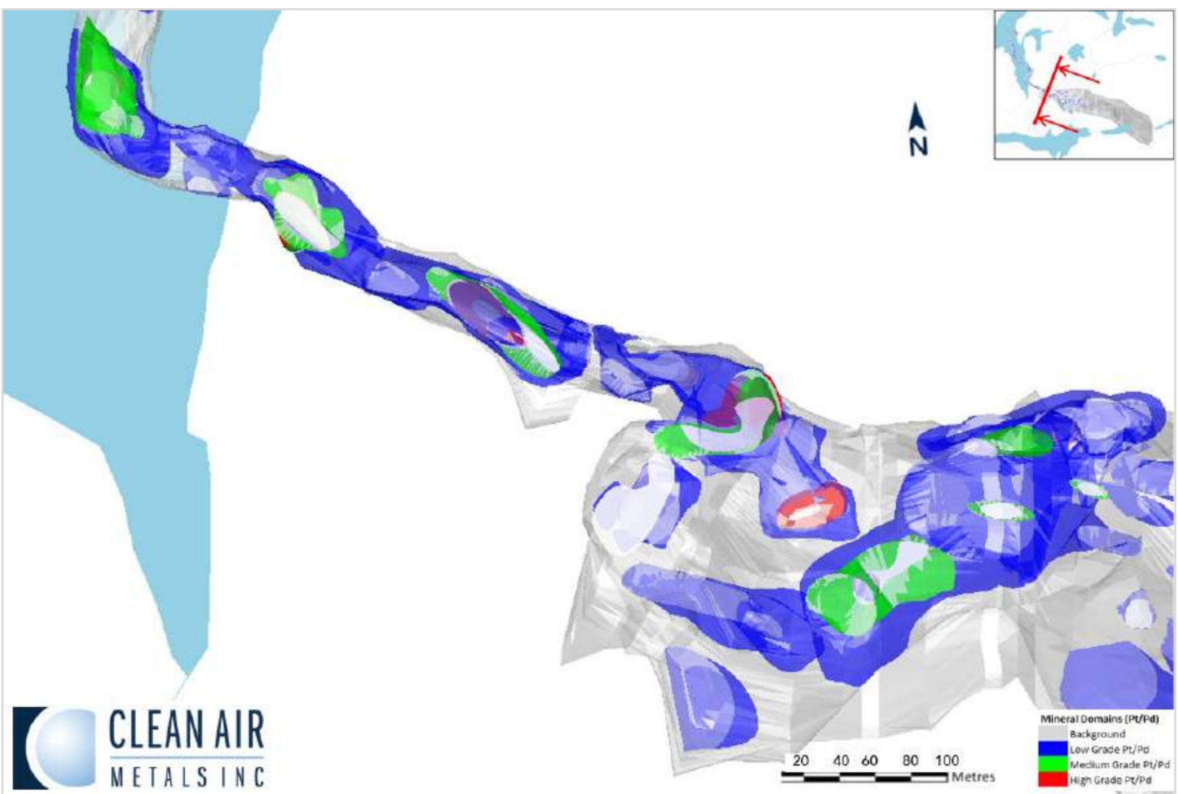


Figure 14-8: Plan view of the mineralogical domains for Current Lake Deposit

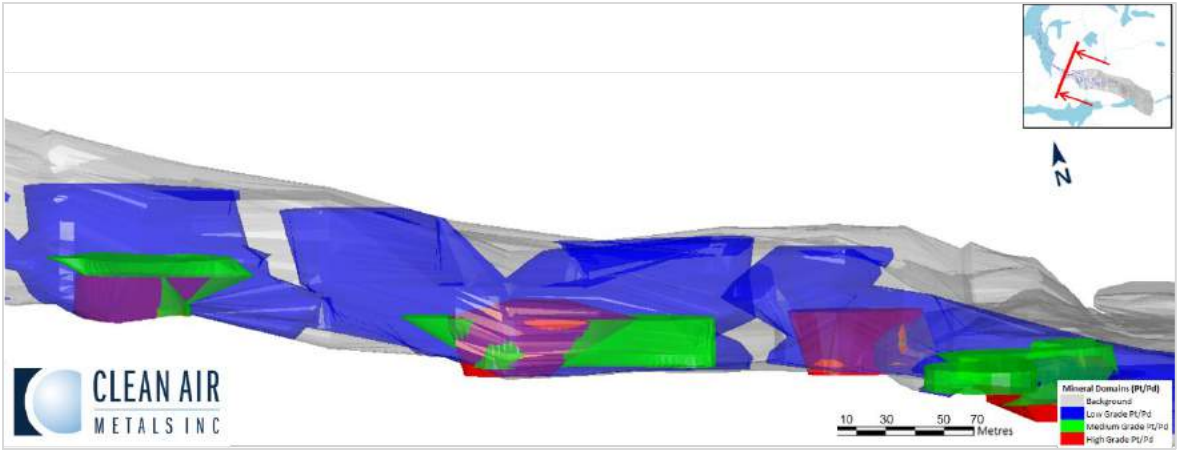


Figure 14-9: Long Section View of the mineralogical domains for Current Lake Deposit

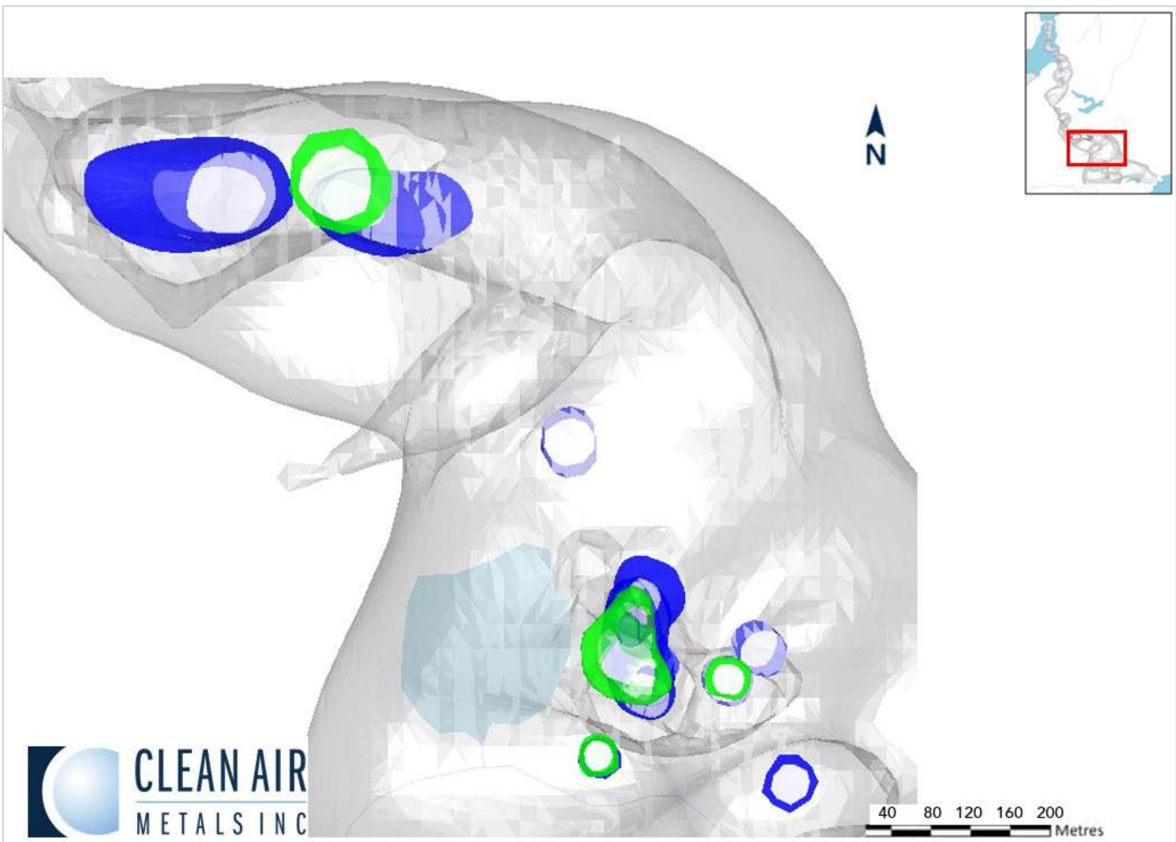


Figure 14-10: Plan view of the mineralogical domains for Escape Lake Deposit

14.3 Exploratory Data Analysis

The exploratory data analysis was conducted on raw drill hole data to determine the nature of the element distribution, correlation of grades within individual rock units, and the identification of high grade outlier samples. Nordmin used a combination of descriptive statistics, histograms, probability plots, and XY scatter plots to analyze the grade population data. The findings of the exploratory data analysis were used to help define modelling procedures and parameters used in the Mineral Resource Estimate.

Descriptive statistics were used to analyze the grade distribution of each sample population, determine the presence of outliers, and identify correlations between grade and rock types for each mineral zone.

Table 14-4 demonstrates the drill hole sample data by grade domain for Current Lake and Escape Lake Deposits.

Table 14-4: Current Lake Deposit and Escape Lake Deposit Assay Counts by Grade Domain

Domain		Current Lake Deposit Assay Count	Escape Lake Deposit Assay Count
Pt/Pd	BG	23,337	5,905
	LG	2,985	1,036
	MG	288	353
	HG	166	47
Au	BG	29,903	10,015
	HG	507	300
Ag	BG	27,153	3,859
	MG	n/a	662
	HG	3,039	849
Cu	BG	27,219	6,641
	LG	1,125	446
	MG	187	n/a
	HG	18	38
Ni	BG	25,130	6,383
	LG	1,197	445
	MG	1,124	299
	HG	105	101
Co	BG	7,895	4,791
	LG	966	361
	HG	83	165
Rh	BG	1,135	752
	LG	729	232
	MG	49	57
	HG	10	n/a

Figure 14-11 and Figure 14-12 provide the data analysis for the Pd/Pt BG and LG domains of the Current Lake Deposit. The data analysis for all seven grade domains within the Current Lake Deposit is available in Appendix D. Multiple inflections exist within the dataset for each domain indicating multiple phases of mineralization are present.

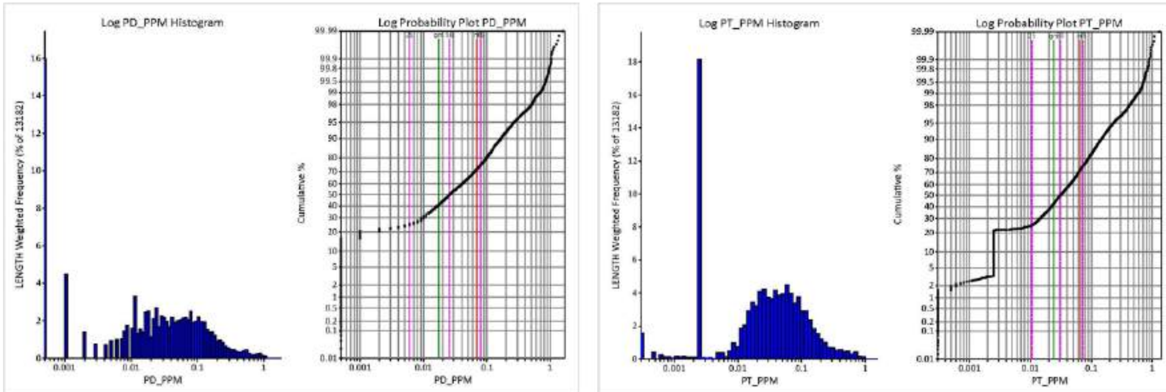


Figure 14-11: Log probability plot and histogram Pd/Pt (g/t), BG domain Current Lake Deposit

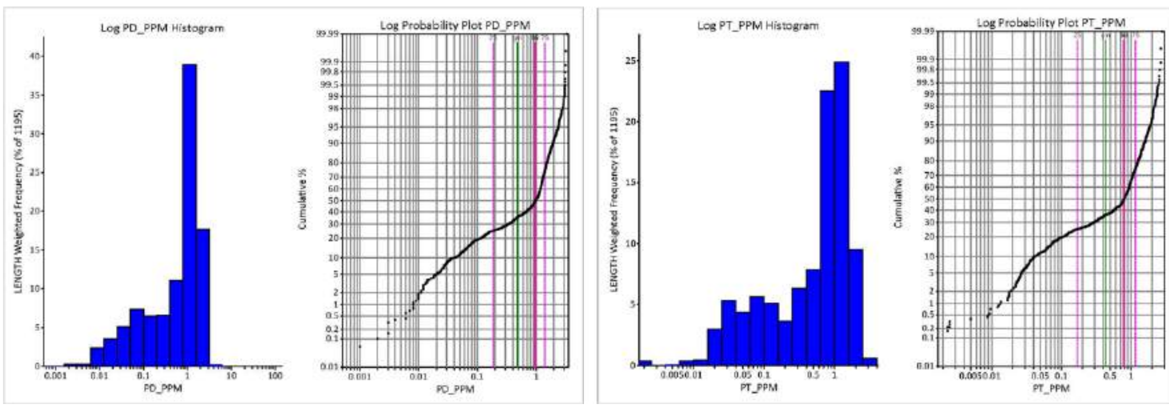


Figure 14-12: Log probability plot and histogram Pd/Pt (g/t), LG domain Current Lake Deposit

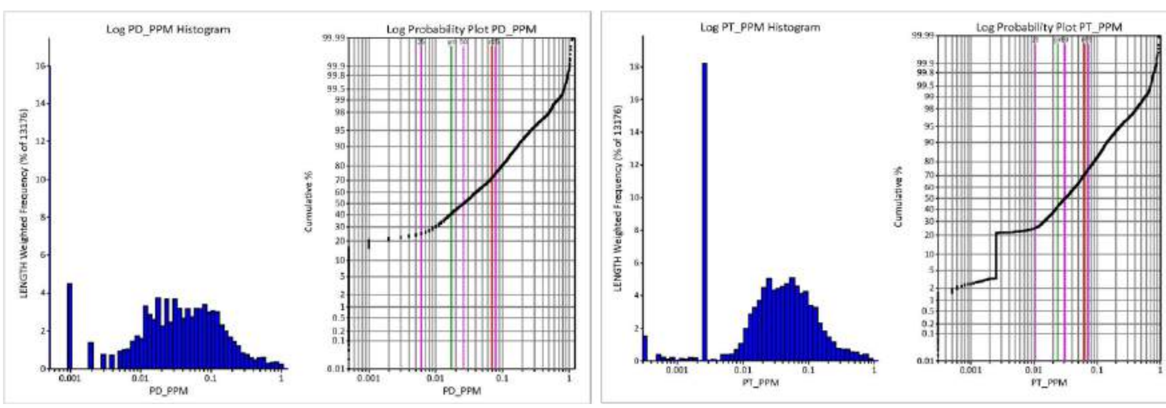


Figure 14-13 and

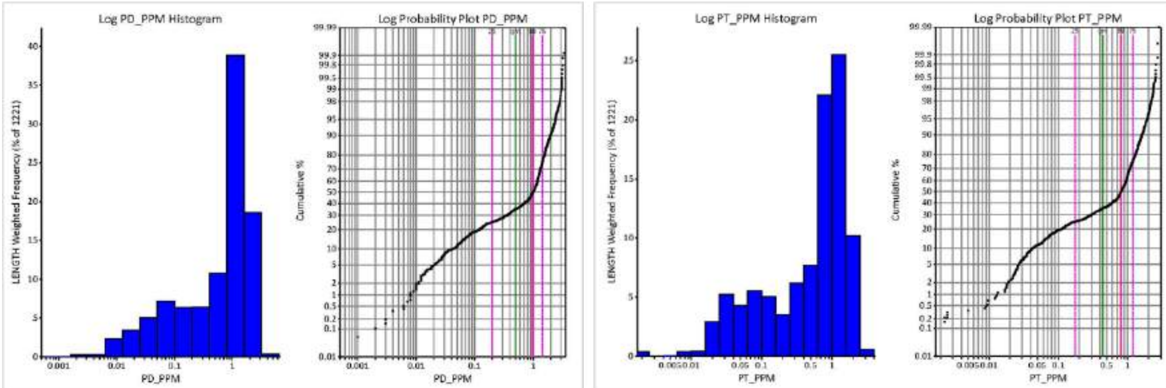


Figure 14-14 provide the data analysis for the seven grade domains within the Escape Lake Deposit. Multiple inflections exist within the dataset for each domain indicating multiple phases of mineralization are present.

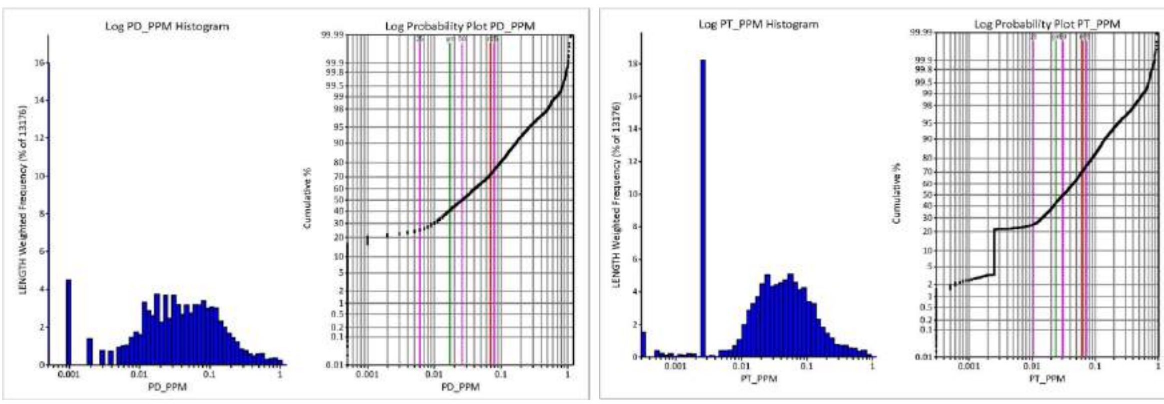


Figure 14-13: Log probability plot and histogram Pd/Pt (g/t), BG domain Escape Lake Deposit

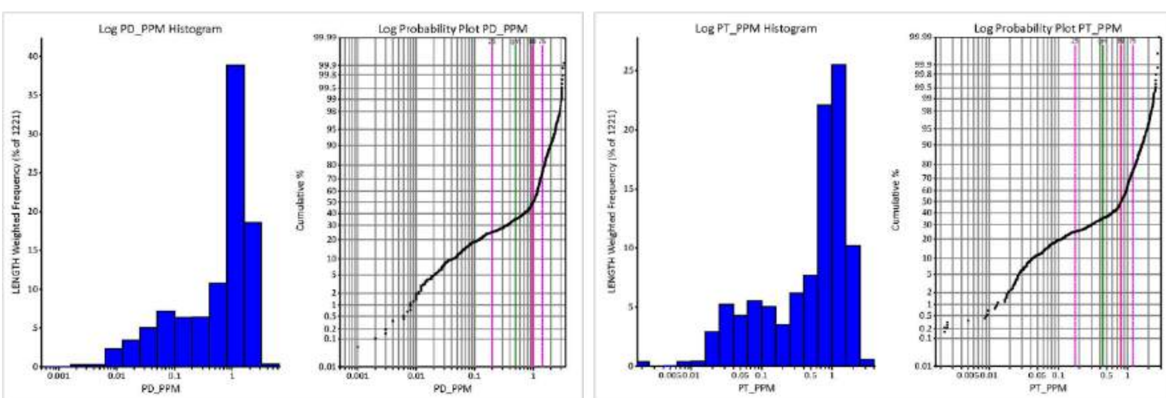


Figure 14-14: Log probability plot and histogram Pt/Pd (g/t), LG domain Escape Lake Deposit

14.4 Data Preparation

Prior to grade estimation, the data was prepared in the following matter:

- All drill hole assays that intersected a wireframe within each domain were assigned a set of codes representative of the domain, wireframe number, and mineralization type.
- High grade outlier assays in each domain were reviewed and if needed a top cut was applied.

14.4.1 Non-Assayed Assay Intervals

Table 14-5 summarizes the drill holes used in the resource model. The assay database provided to Nordmin by the Company contained appropriately-substituted minimum detection assay values (Table 14-6).

Table 14-5: Summary of the Assay Database for the Current Lake and Escape Lake Deposits

Type	Current Lake Deposit	Escape Lake Deposit
Number of drill holes	736	150
Number of survey records	19,303	3,106
Number of lithology records	10,225	2,875

Table 14-6: Assays at Minimum Detection Limits

	Current Lake Deposit			Escape Lake Deposit		
Field	Count	Count at Minimum Detection	% at Minimum Detection	Count	Count at Minimum Detection	% at Minimum Detection
Pd	36,684	1,437	3.9%	14,846	1,639	11.0%
Pt	36,684	1,106	3.0%	14,846	321	2.2%
Au	36,684	3,100	8.5%	14,241	10,295	72.3%
Ag	35,775	26,333	73.6%	14,241	4,241	29.8%
Cu	36,646	138	0.3%	14,345	233	1.6%
Ni	36,529	313	0.9%	14,339	394	2.7%
Co	36,647	42	0.1%	14,345	35	0.2%
Rh	2,026	2	0.0%	1,041	78	7.5%

14.4.2 Outlier Analysis and Capping

Grade outliers that are much higher than the general population of assays have the potential to bias (inflate) the quantity of metal estimated in a block model. Geostatistical analysis using XY scatter plots, cumulative probability plots, and decile analysis was used by Nordmin to analyze the raw drill hole assay data for each domain to determine appropriate grade capping. Statistical analysis was performed independently on all domains by the X10 Geo software package.

Table 14-7 and Table 14-8 provide the summary of the results from the capping analysis of each deposit.

Table 14-7: Current Lake Deposit Capping Analysis

			CAPPED								UNCAPPED			
Domain		Assay Count	Cap	Min	Max	Mean	Assays Capped	% Capped	% Metal Lost	CV	Min	Max	Mean	CV
Pd g/t	BG	24,317	5.00	0.0005	5.00	0.127	1	0.01	0.01	1.28	0.0009	5.73	0.127	1.28
	LG	7,769	15.00	0.0005	15.00	0.762	9	0.12	1.70	1.23	0.0005	47.80	0.766	1.37
	MG	1,133	No cap	0.0020	15.30	2.196	0	0.00	0.00	0.87	0.0020	15.30	2.196	0.87
	HG	833	No cap	0.0005	61.50	3.727	0	0.00	0.00	1.33	0.0005	61.50	3.727	1.33
Pt g/t	BG	24,317	5.00	0.0003	5.00	0.139	3	0.01	0.20	1.24	0.0003	9.56	0.139	1.26
	LG	7,769	20.00	0.0003	20.00	0.809	4	0.05	2.00	1.25	0.0003	71.00	0.813	1.45
	MG	1,133	No cap	0.0028	22.70	2.341	0	0.00	0.00	0.89	0.0028	22.7	2.341	0.89
	HG	833	60.00	0.0003	60.00	3.991	2	0.24	0.80	1.32	0.0003	90.00	4.012	1.38
Au g/t	BG	40027	No cap	0.0010	0.71	0.020	0	0.00	0.00	1.89	0.0010	0.71	0.020	1.89
	HG	847	5.00	0.0040	5.00	0.319	6	0.71	3.80	1.28	0.0040	9.28	0.324	1.48
Ag g/t	BG	29,058	10.00	0.2500	10.00	0.429	36	0.10	1.70	1.35	0.2500	54.40	0.434	1.72
	HG	4,380	100.00	0.2500	100.000	2.939	5	0.11	0.70	1.80	0.2500	139.00	2.973	2.01
Cu %	BG	29,538	4.00	0.0005	4.00	0.055	2	0.01	0.20	1.70	0.0005	6.26	0.055	1.73
	LG	281	16.00	0.0005	16.00	1.079	1	0.40	0.90	2.14	0.0005	20.40	1.086	2.18
	MG	946	No cap	0.0005	4.97	0.506	0	0.00	0.00	1.11	0.0005	4.97	0.506	1.11
	HG	281	No cap	0.0026	20.40	1.086	0	0.00	0.00	2.18	0.0026	20.40	1.086	2.18
Ni %	BG	26,642	No cap	0.001	0.77	0.115	0	0.00	0.00	0.38	0.001	0.77	0.115	0.38
	LG	3,818	No cap	0.001	1.05	0.174	0	0.00	0.00	0.56	0.001	1.05	0.174	0.56
	MG	2,518	No cap	0.001	3.76	0.246	0	0.00	0.00	0.79	0.001	3.76	0.246	0.79
	HG	502	No cap	0.038	3.82	0.570	0	0.00	0.00	1.01	0.038	3.82	0.570	1.01
Co g/t	BG	31,738	No cap	0.500	415.00	124.480	0	0.00	0.00	0.28	0.5	415.00	124.480	0.28
	LG	1,655	900.00	1.000	900.00	204.010	5	0.30	0.20	0.44	1.000	1160.00	204.15	0.44
	HG	206	1500.00	5.000	1500.00	384.900	1	0.49	0.50	0.75	5.000	1900.00	386.90	0.77
Rh g/t	BG	1,135	No cap	0.001	0.196	0.030	0	0.00	0.00	1.04	0.001	0.20	0.03	1.04
	LG	729	No cap	0.001	0.883	0.100	0	0.00	0.00	1.25	0.001	0.88	0.10	1.25
	MG	49	No cap	0.001	1.090	0.070	0	0.00	0.00	1.96	0.001	1.09	0.07	1.96
	HG	10	2.00	0.002	2.0	0.506	1	10.0	11.00	1.04	0.002	2.76	0.55	1.25

Table 14-8: Escape Lake Deposit Capping Analysis

Domain		Assay Count	CAPPED Cap	Min	Max	Mean	Assays Capped	% Capped	% Metal Lost	CV	UNCAPPED Min	Max	Mean	CV
Pd g/t	BG	9,474	No cap	0.000	1.14	0.069	0	0.00	0.00	1.78	0.0005	1.14	0.069	1.78
	LG	1,080	No cap	0.000	3.38	0.971	0	0.00	0.00	0.79	0.0005	3.38	0.971	0.79
	MG	368	No cap	0.006	6.75	2.752	0	0.00	0.00	0.52	0.0060	6.75	2.752	0.52
	HG	46	No cap	1.920	8.76	5.873	0	0.00	0.00	0.29	1.920	8.76	5.873	0.52
Pt g/t	BG	9,474	No cap	0.000	0.95	0.064	0	0.00	0.00	1.61	0.0003	0.95	0.064	1.61
	LG	1,080	No cap	0.002	2.82	0.793	0	0.00	0.00	0.77	0.0017	2.82	0.793	0.77
	MG	368	No cap	0.003	5.45	2.067	0	0.00	0.00	0.50	0.0025	5.45	2.067	0.50
	HG	46	No cap	1.695	7.43	4.473	0	0.00	0.00	0.33	1.695	7.43	4.473	0.33
Au g/t	BG	10,635	0.3	0.001	0.30	0.013	5	0.05	0.50	2.09	0.001	0.84	0.013	2.14
	HG	306	No cap	0.001	0.82	0.246	0	0.00	0.00	0.52	0.001	0.82	0.246	0.52
Ag g/t	BG	8,439	5.0	0.005	5.00	0.330	9	0.11	1.20	1.01	0.005	34.20	0.330	1.40
	LG	1,586	15.0	0.080	15.00	1.239	2	0.13	0.50	1.23	0.08	20.20	1.244	1.27
	HG	882	20.0	0.250	20.00	3.550	8	0.91	0.80	1.02	0.25	28.00	3.583	1.06
Cu %	BG	9,911	2.0	0.001	2.00	0.059	4	0.04	0.40	2.02	0.0005	3.88	0.059	2.06
	LG	458	No cap	0.006	2.96	0.936	0	0.00	0.00	0.54	0.0055	2.96	0.936	0.54
	HG	38	No cap	0.944	2.80	1.998	0	0.00	0.00	0.21	0.944	2.80	1.998	0.21
Ni %	BG	9,321	No cap	0.001	0.88	0.103	0	0.00	0.00	0.54	0.001	0.88	0.103	0.54
	LG	462	No cap	0.008	0.88	0.227	0	0.00	0.00	0.47	0.008	0.88	0.227	0.47
	MG	302	No cap	0.119	0.99	0.491	0	0.00	0.00	0.52	0.119	0.99	0.491	0.52
	HG	103	No cap	0.038	1.28	0.889	0	0.00	0.00	0.37	0.038	1.28	0.889	0.37
Co g/t	BG	10,415	No cap	0.500	462.00	107.660	0	0.00	0.00	0.45	0.500	462.00	107.660	0.45
	LG	361	No cap	31.000	496.00	253.800	0	0.00	0.00	0.35	31	496.00	253.800	0.35
	HG	165	No cap	61.000	740.00	484.930	0	0.00	0.00	0.26	61.000	740.00	484.930	0.26
Rh g/t	BG	752	No cap	0.001	0.210	0.024	0	0.00	0.00	1.07	0.001	0.210	0.024	1.07
	LG	232	No cap	0.001	0.531	0.127	0	0.00	0.00	0.92	0.001	0.531	0.127	0.92
	MG	57	No cap	0.005	0.731	0.424	0	0.00	0.00	0.47	0.005	0.731	0.424	0.47

14.4.3 Compositing

Compositing of assays is a technique used to give each assay a relatively equal length and therefore reduce the potential for bias due to uneven assay lengths; it prevents the potential loss of assay data and reduces the potential for grade bias due to the possible creation of short and potentially high grade composites that have a tendency to be situated along the zone contacts when using a fixed length.

The raw assay data was found to have a relatively narrow range of assay lengths. Assays captured within all zones were composited to 1.0 m regular intervals based on the observed modal distribution of assay lengths, which supports a 5.0 m x 5.0 m x 5.0 m block model (with sub-blocking). An option to use a slightly variable composite length was chosen to allow for backstitching shorter composites that are located along the edges of the composited interval. All composite assays were generated within each mineral lens with no overlaps along boundaries. The composite assays were validated statistically to ensure there was no loss of data or change to the mean grade of each assay population (Table 14-9).

Table 14-9: Composite Analysis

Domain		Current Lake Composite Count	Escape Lake Composite Count
Pt/Pd	BG	46,870	13,181
	LG	46,870	14,376
	MG	7,604	1,578
	HG	1,337	1,243
Au	BG	47,867	14,468
	LG	n/a	n/a
	HG	490	14,797
Ag	BG	48,032	11,706
	LG	n/a	13,621
	HG	3,237	2,927
Cu	BG	47,203	13,130
	LG	2,515	13,622
	MG	2,515	n/a
	HG	846	532
Ni	BG	38,296	12,237
	LG	38,296	12,779
	MG	5,236	875
	HG	2.107	449
Co	BG	46,702	14,141
	LG	47,810	14,522
	HG	1,212	552
Rh	BG	1,035	964
	LG	1,547	1,190
	MG	542	280
	HG	38	n/a

14.4.4 Specific Gravity

A total of 10,630 SG measurements from 557 diamond drill holes exist from the Current Lake Deposit, and 2,832 SG measurements from 117 diamond drill holes exist from the Escape Lake Deposit. Measurements were calculated using the weight in air versus the weight in water method (Archimedes), by applying the following formula:

$$Specific\ Gravity = \frac{Weight\ in\ Air}{(Weight\ in\ Air - Weight\ in\ Water)}$$

Nordmin determined that the required amount and distribution of SG measurements allowed for direct estimation of SG within the block model. NN, ID2, ID3, and OK estimations were completed, and OK was selected as the estimation the most appropriately representative for each deposit.

An SG summary can be found in Table 14-10.

Table 14-10: Specific Gravity

Deposit	Drill Hole Count	SG Count	Max.	Min.	Mean	Standard Deviation	Standard Error	Covariance
Current Lake	557	10,685	4.447	1.708	2.894	0.144	0.00139	0.0207
Escape Lake	117	2,887	6.736	1.809	2.914	0.237	0.00445	0.0562

14.4.5 Block Model Strategy and Analysis

A series of upfront test modelling was completed to define an estimation methodology to meet the following criteria:

- Representative of the Current Lake and Escape Lake geological and structural models.
- Accounts for the variability of grade, orientation, and continuity of mineralization.
- Controls the smoothing (grade spreading) of grades and the influence of outliers.
- Accounts for most of the mineralization within Current Lake and Escape Lake.
- Is robust and repeatable within the mineral domains.
- Supports multiple domains.

Multiple test scenarios were evaluated to determine the optimum processes and parameters to use to achieve the stated criteria. Each scenario was based on NN, inverse-distance squared ("ID2"), inverse-distance cubed ("ID3"), and OK interpolation methods.

All test scenarios were evaluated based on global statistical comparisons, visual comparisons of composite assays versus block grades, and the assessment of overall smoothing. Based on results of the testing, it was determined that the final resource estimation methodology would constrain the mineralization by using hard wireframe boundaries to control the spread of high to grade and low to grade mineralization. OK was selected as the interpolation method best representative of both the Current Lake and Escape Lake Deposits.

14.4.6 Assessment of Spatial Grade Continuity

Datamine and Sage 2001 was used to determine the geostatistical relationships of Current Lake and Escape Lake Deposits. Independent variography was performed on composite data for each domain. Experimental grade variograms were calculated from the capped/composited assay data for each element to determine the approximate search ellipse dimensions and orientations.

The analyses considered the following for each analysis:

- Downhole variograms were created and modelled to define the nugget effect.
- Experimental pairwise to relative correlogram variograms were calculated to determine directional variograms for the strike and down dip orientations.
- Variograms were modelled using an exponential with practical range.
- Directional variograms were modelled using the nugget defined in the downhole variography, and the ranges for the along strike, perpendicular to strike, and down dip directions.
- Variograms outputs were re-oriented to reflect the orientation of the mineralization.

Search parameters were applied using dynamic anisotropy. Dynamic anisotropy interpolation is an estimation method used in conjunction with “normal” estimation interpolation methods (NN, ID, OK, etc.) which takes into consideration the local variation of the domain orientation in the block estimation. Practically, this involves in a per-block inclusion and modification of the search parameters. This generally results in a lower number of search ellipsoids. Three search estimation passes were performed for all domains except rhodium, where only two were performed.

Two main search ellipsoids were applied to estimation, one specifically for rhodium estimation due to the relatively low numbers of assays and the presence of infill assaying. The variography used for each deposit is provided in Table 14-11 and Table 14-12. The search parameters used for the estimation are provided in Section 14.4.9. Some domains share variography parameters due to behaviour and/or lack of data.

Table 14-11: Current Lake Deposit Variography Parameters

Domain		Rotation Angles 1	Rotation Angles 2	Rotation Angles 3	Axes	Structure 1 Range 1	Structure 1 Range 2	Structure 1 Range 3	Structure 2 Range 1	Structure 2 Range 2	Structure 2 Range 3	Nugget
Pt	BG	-61	-3	16	Z-Y-Z	44	21	17	39	276	158	0.196
	LG	28	-4	-34	Z-Y-Z	17	11	5	140	11	14	0.104
	MG/HG	0	0	-28	Z-Y-Z	2	48	4	20	45	8.5	0.015
Pd	BG	-4	2	-12	Z-Y-Z	50	15	16	45	263	139	0.158
	LG	-16	-6	10	Z-Y-Z	19	9	5	141	10	13	0.129
	MG/HG	-44	1	-18	Z-Y-Z	5	5	3	47	13	8	0.007
Au	BG	6	1	37	Z-Y-Z	46	11	12	675	205	14	0.176
	HG	-1	88	-82	Z-Y-Z	3	5	27	575	133	29	0.000
Ag	BG	-81	88	89	Z-Y-Z	13	50	13	205	257	135	0.226
	HG	26	5	-28	Z-Y-Z	8	33	4	5	56	22	0.001
Cu	BG	-83	-1	93	Z-Y-Z	58	17	13	60	630	145	0.310
	LG/MG/HG	-1	-4	-26	Z-Y-Z	4	9	3	180	425	11	0.000
Ni	BG	-99	89	-3	Z-Y-Z	2	11	30	36	18	8.5	0.146
	LG	6	130	15	Z-Y-Z	5	5	7	4.5	12.5	79	0.000
	MG/HG	1	-1	4	Z-Y-Z	24	16	101	525	860	100	0.100
Co	BG	-143	-5	103	Z-Y-Z	35	1020	52	290	2800	1140	0.030
	LG	-87	-24	88	Z-Y-Z	832	69	34	3850	1650	312	0.050
	HG	-37	-89	96	Z-Y-Z	7	4	4	265	51	19	0.001
Rh	BG	18	-23	-61	Z-Y-Z	2	11	13	13	15	130	0.006
	LG/MG/HG	-81	0	-47	Z-Y-Z	7	4	4	920	200	28	0.300

Table 14-12: Escape Lake Deposit Variography Parameters

Domain		Rotation Angles 1	2	3	Axes	Structure 1 Range 1	Range 2	Range 3	Structure 2 Range 1	Range 2	Range 3	Nugget
Pt	BG	-80	-1	-37	Z-Y-Z	5.2	15.6	9.7	74	198	40	0.023
	LG	-76	0	25	Z-Y-Z	28.6	9.4	11	93	797	68	0.000
	MG	18	-8	-26	Z-Y-Z	19.4	26.2	8	16.4	272	389	0.000
	HG	-42	8	72	Z-Y-Z	16	62	10	15	288	670	0.031
Pd	BG	-33	-10	26	Z-Y-Z	5.4	18.9	9.7	73	202	41	0.032
	LG	-73	83	3	Z-Y-Z	13.3	11	24.6	101	694	63	0.021
	MG	-4	-15	-7	Z-Y-Z	21	42.2	10.4	16.8	320	454	0.000
	HG	-11	6	42	Z-Y-Z	16.2	49.9	10.5	16.3	345	935	0.000
Au	BG	-31	-5	23	Z-Y-Z	33.1	8	8.6	109	507	48	0.069
	HG	-17	56	-20	Z-Y-Z	5.1	32.4	5.4	7.3	370	11.2	0.000
Ag	BG	28	-8	-75	Z-Y-Z	86	10.9	16.1	190	21	12	0.156
	LG	-79	-6	-38	Z-Y-Z	27	12.5	7.9	20	506	249	0.003
	HG	-29	3	30	Z-Y-Z	24.3	14.7	5.5	86	517	24	0.061
Cu	BG	-21	20	-9	Z-Y-Z	30.7	5.6	31.8	30.7	5.6	32	0.112
	LG	-96	-2	4	Z-Y-Z	62.8	14.5	17	43.2	872	221	0.001
	HG	-26	-16	10	Z-Y-Z	14.4	22.9	7.3	12.5	108	227	0.000
Ni	BG	14	0	61	Z-Y-Z	207	26	30	1092	407	73	0.096
	LG	-85	88	-1	Z-Y-Z	24.2	24.2	133	696	335	74	0.009
	MG	-19	40	-17	Z-Y-Z	18.2	37.9	19.3	19.2	280	74	0.000
	HG	-18	-81	58	Z-Y-Z	378	27.6	86	29.4	391	1610	0.000
Co	BG	-104	-129	-90	Z-Y-Z	24.1	8.8	20	157	1252	85	0.000
	LG	-86	6	57	Z-Y-Z	23.2	8.2	12.2	155	822	78	0.006
	HG	-10	-22	42	Z-Y-Z	15.3	116	8.7	11.6	103	809	0.000
Rh	BG	-12	65	-21	Z-Y-Z	16	30	40	1700	50	40	0.015
	LG/MG/HG	-39	-87	60	Z-Y-Z	14.4	61	17	18	541	190	0.318

14.4.7 Block Model Definition

Block model shape and size is typically a function of the geometry of the deposit, the density of assay data, drill hole spacing, and the selected mining unit. Taking this into consideration, the block model was defined with parent blocks at 5.0 m x 5.0 m x 5.0 m (N-S x E-W x Elevation). The block model prototype parameters are listed in Table 14-13 and Table 14-14.

Table 14-13: Current Lake Deposit Block Model Definition Parameters

Item	Block Origin (m)	Block Max (m)	Block Dimension (m)	Number of Parent Blocks	Minimum Sub-block (m)
Easting	356,000	362,000	5	1200	0.625
Northing	5,400,000	5,405,000	5	1000	0.625
Elevation	-1,000	700	5	340	Variable

Table 14-14: Escape Lake Deposit Block Model Definition Parameters

Item	Block Origin (m)	Block Max (m)	Block Dimension (m)	Number of Parent Blocks	Minimum Sub-block (m)
Easting	348,000	362,000	5	2800	0.625
Northing	5,399,000	5,408,000	5	1800	0.625
Elevation	-1,000	700	5	340	Variable

All mineral zone volumes were filled with blocks using the parameters described in Table 14-13 and Table 14-14. Block volumes were compared to the mineral zone volumes to confirm there were no significant differences. Block volumes for all zones were found to be within reasonable tolerance limits for all mineral zone volumes. Sub-blocking was allowed to maintain the geological interpretation and accommodate the HG and LG zones (wireframes), the lithological SG, and the category application. Sub-blocking has been allowed to the following minimums:

- 5.0 m x 5.0 m x 5.0 m blocks are sub-blocked threefold to 0.25 m x 0.25 m in the N to S and E to W directions with a variable elevation calculated based on the other sizes.

The block models were not rotated but were clipped to topography. The resource estimation was conducted using Datamine Studio RM™ version 1.7.100.0 within the NAD 83 UTM Zone 16 N projection grid.

14.4.8 Interpolation Method

The Escape Lake Deposit and Current Lake Deposit block models were estimated using NN, ID2, ID3, and OK interpolation methods for global comparisons and validation purposes. The OK method was used for the Mineral Resource Estimate; it was selected over ID2, ID3, and NN as the OK method was the most representative approach to controlling the smoothing of grades.

14.4.9 Search Strategy

Zonal controls were used to constrain the grade estimates to within each LG and HG wireframes. These controls prevented the assays from individual domain wireframes from influencing the block grades of one another, acting as a “hard boundary” between the zones. For instance, the composites identified within the BG Pt/Pd wireframes were used to estimate the BG Pt/Pd wireframes, and all other composites were ignored during the estimation. There were circumstances where the addition of a “soft boundary” was used if limited composites were available. In these instances, a higher-grade lens was allowed to use composites from the LG lenses to help populate the block model. For example, the HG Pt/Pd wireframes were allowed to estimate with a combination of HG and MG Pt/Pd composites. These soft boundaries are as follows:

- BG: No soft boundary
- LG: Soft boundary with BG composites
- MG: Soft boundary with LG composites
- HG: Soft boundary with MG composites

Search orientations were used for estimation of the block model and were based on the shape of the modelled mineral domains. A total of three nested searches were performed on all zones. The search distances were based upon the variography ranges outlined in

Table 14-11 and Table 14-12. The search radius of the first search was based upon the first structure of the variogram, the second search is approximately two times the first search pass and the third search pass is 1.5 times the initial search. Search strategies for each domain used an elliptical search with a minimum and maximum number of composites defined in Error! Not a valid bookmark self-reference..

Unestimated blocks were left as absent and not reported in the Mineral Resource Estimate.

Table 14-15: Search Parameters

	Ellipsoid Rotation Angles			Ranges, Search Pass 1			Ranges, Search Pass 2			Ranges, Search Pass 3			Composites, Pass 1		Composites, Pass 2		Composites, Pass 3	
Domain	**1(X)**	**2(Z)**	**3(Y)**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
Pt/Pd, Au, Ag, Cu, Ni, Co	30	0	-10	50	20	10	100	40	20	150	60	30	3	8	3	8	2	8
Rh	30	0	-10	25	10	5	43.8	17.5	8.8	n/a	n/a	n/a	3	8	3	8	n/a	n/a

14.5 Block Model Validation

The block model validation process included visual comparisons between block estimates and composite grades in plan and section views, local versus global estimates for NN, ID2, ID3, and OK, and swath plots. Block estimates were visually compared to the drill hole composite data in all domains and corresponding zones to ensure agreement. No material grade bias issues were identified, and the block model grades compared well to the composite data.

14.5.1 Visual Comparison

The validation of the interpolated block model was assessed by using visual assessments and validation plots of block grades versus capped assay grades and composites. The review demonstrated a good comparison between local block estimates and nearby assays, without excessive smoothing in the block model. Figure 14-15 through Figure 14-22 provide the visual comparisons for select element of the Current Lake Deposit and Figure 14-23 to Figure 14-29 provide the visual comparisons for selected elements of the Escape Lake Deposit. Visual comparisons for all elements are available in Appendix E.

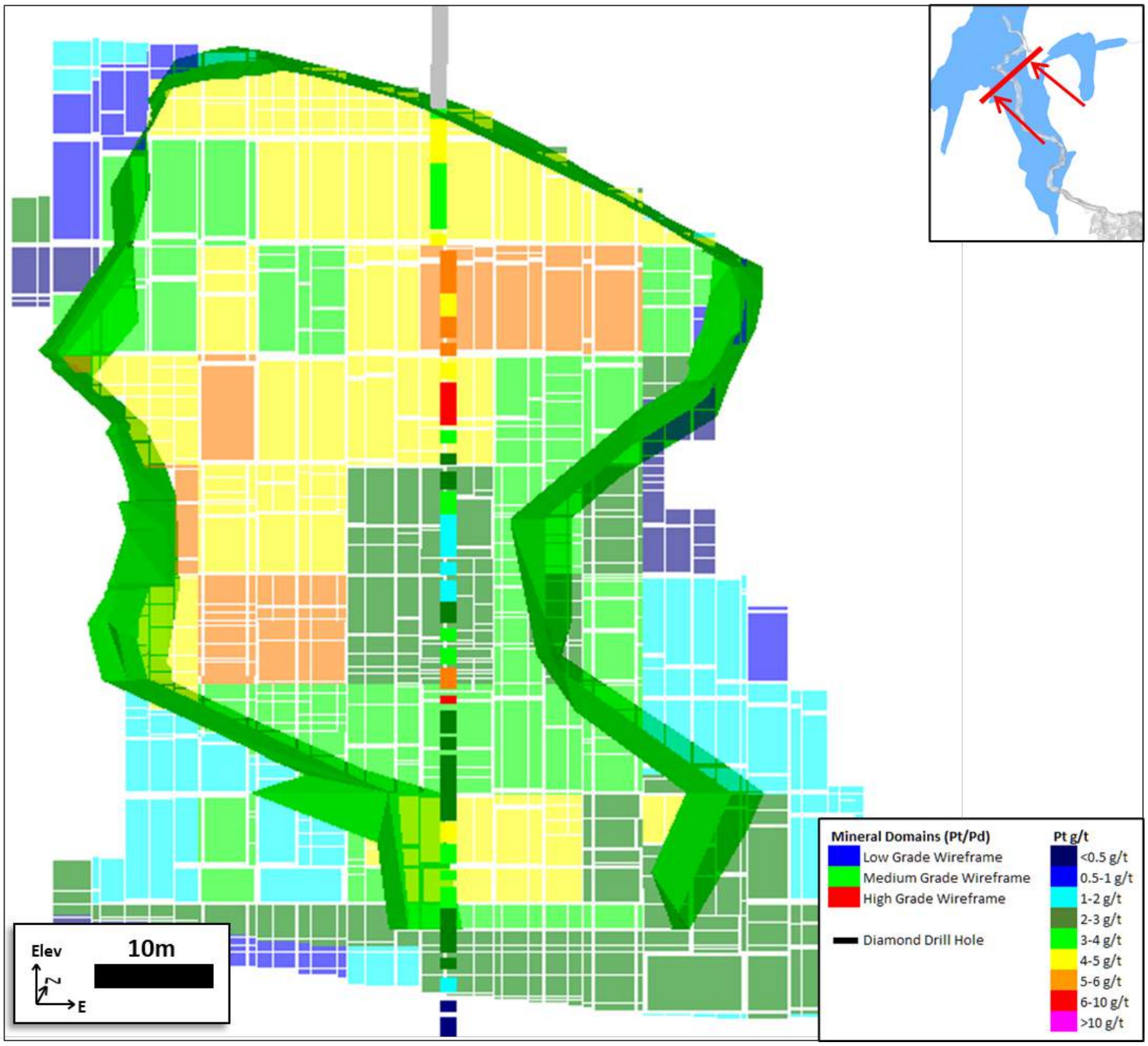


Figure 14-15: Current Lake Deposit cross section Pt (g/t)

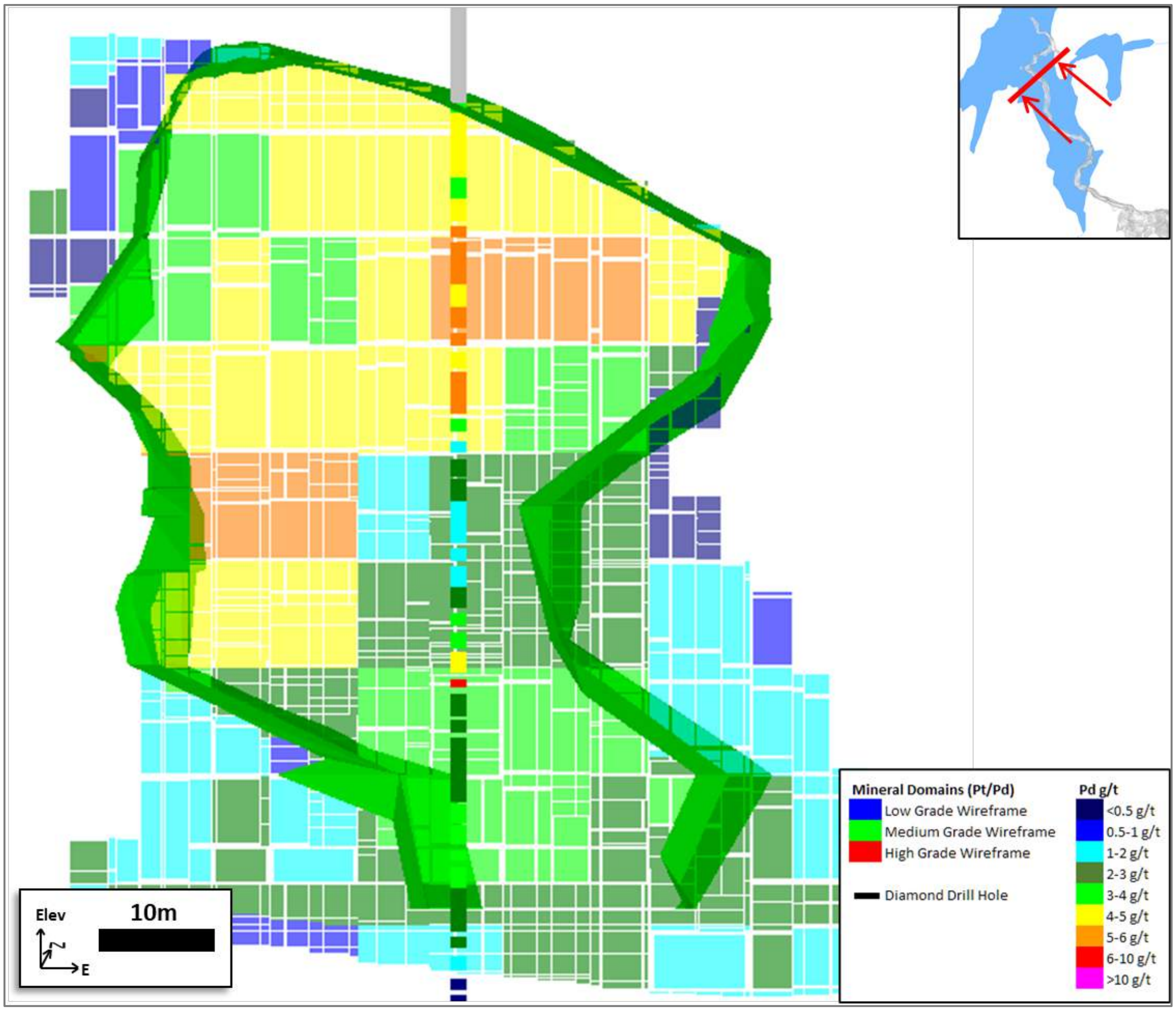


Figure 14-16: Current Lake Deposit cross section Pd (g/t)

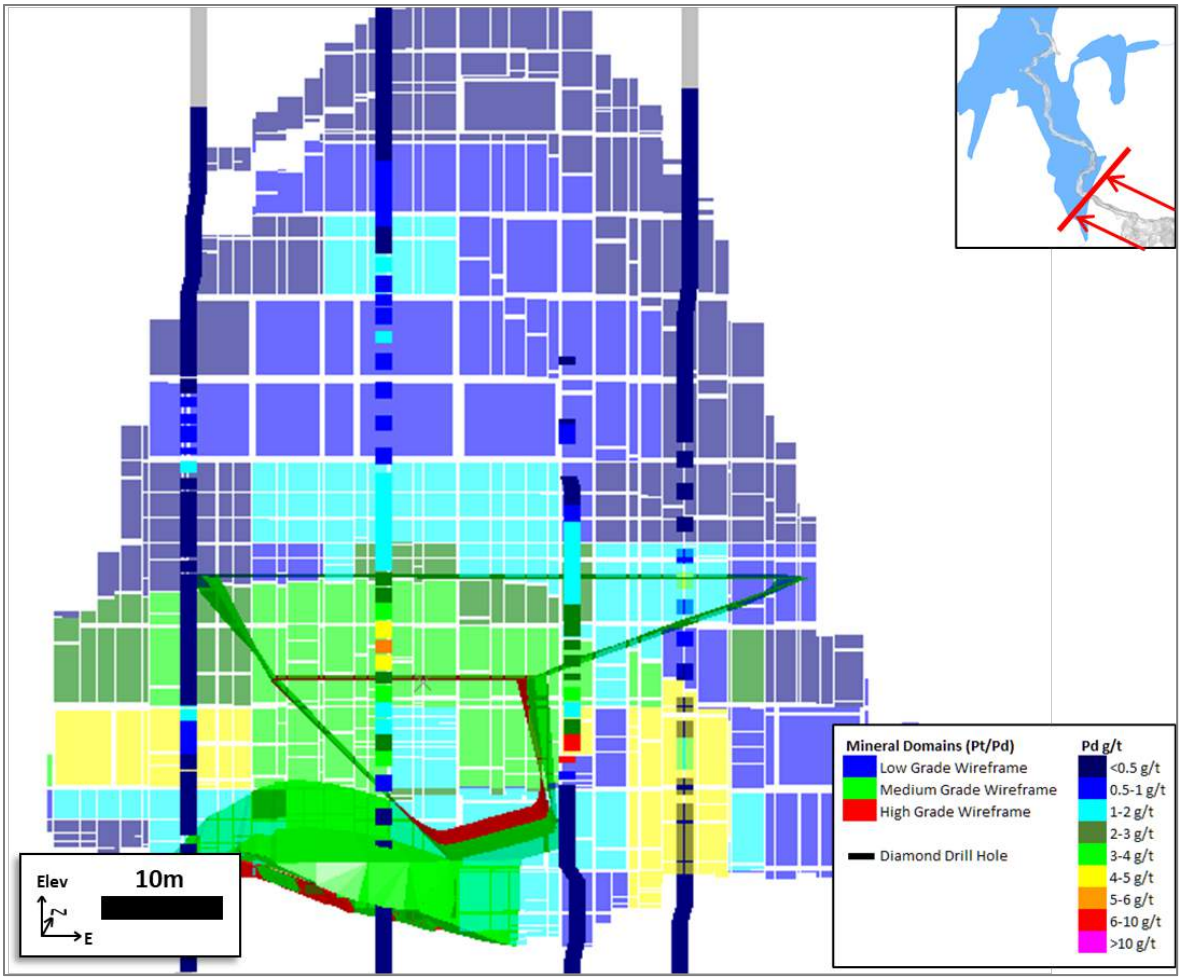


Figure 14-17: Current Lake Deposit cross section Pd (g/t)

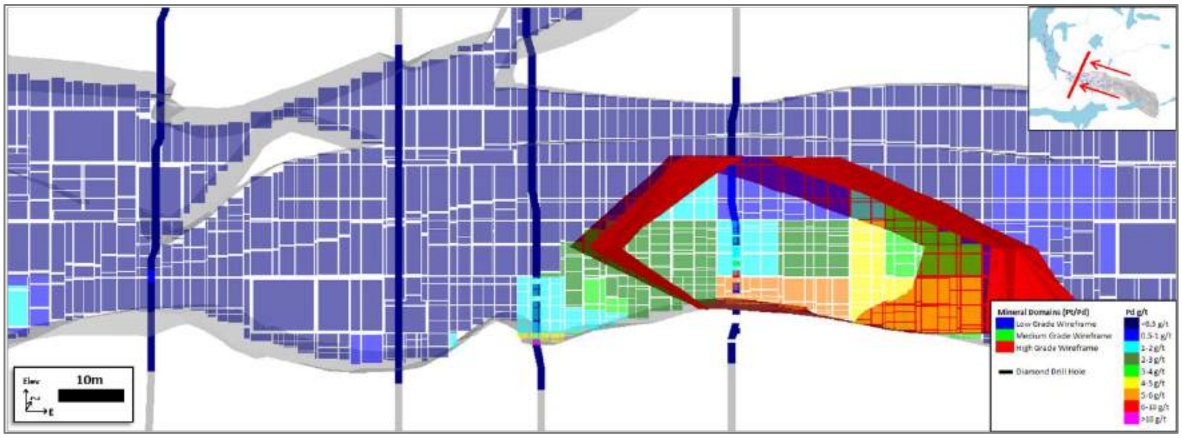


Figure 14-18: Current Lake Deposit cross section Pd (g/t)

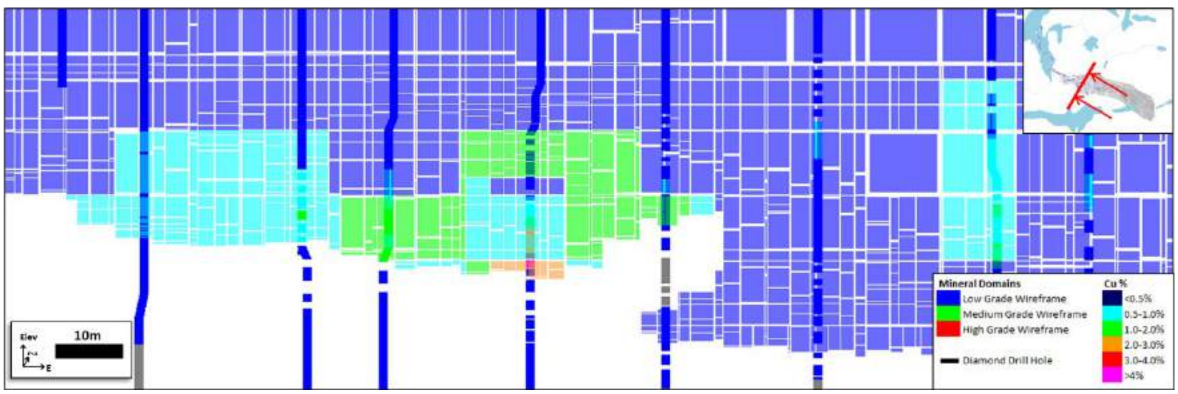


Figure 14-19: Current Lake Deposit cross section Cu (%)

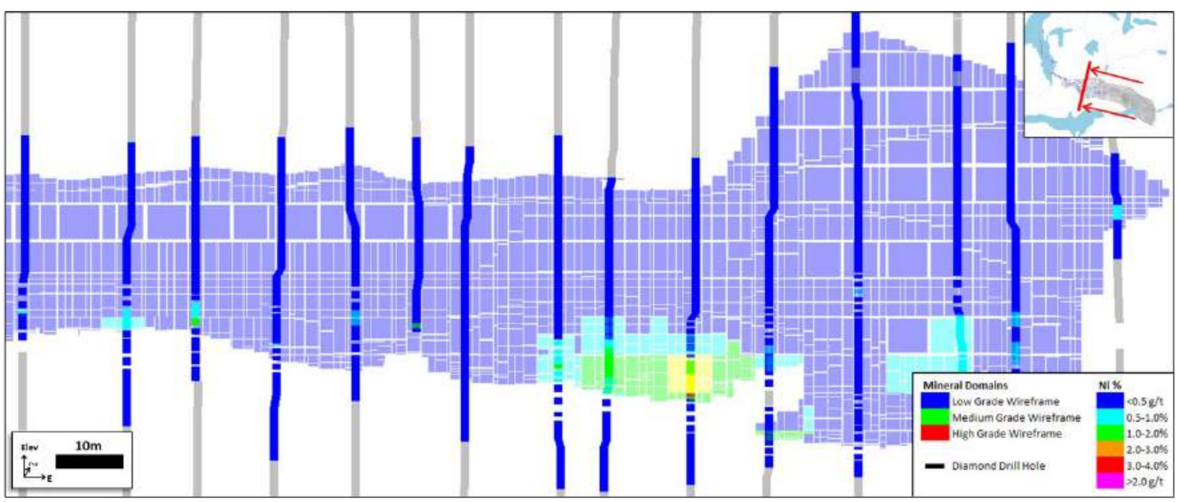


Figure 14-20: Current Lake Deposit cross section Ni (%)

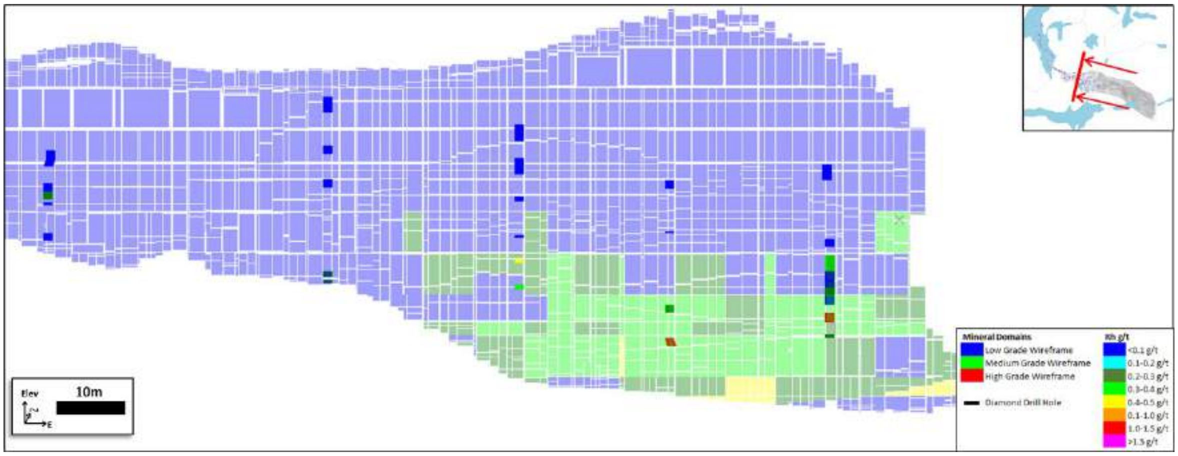


Figure 14-21: Current Lake Deposit cross section Rh (g/t)

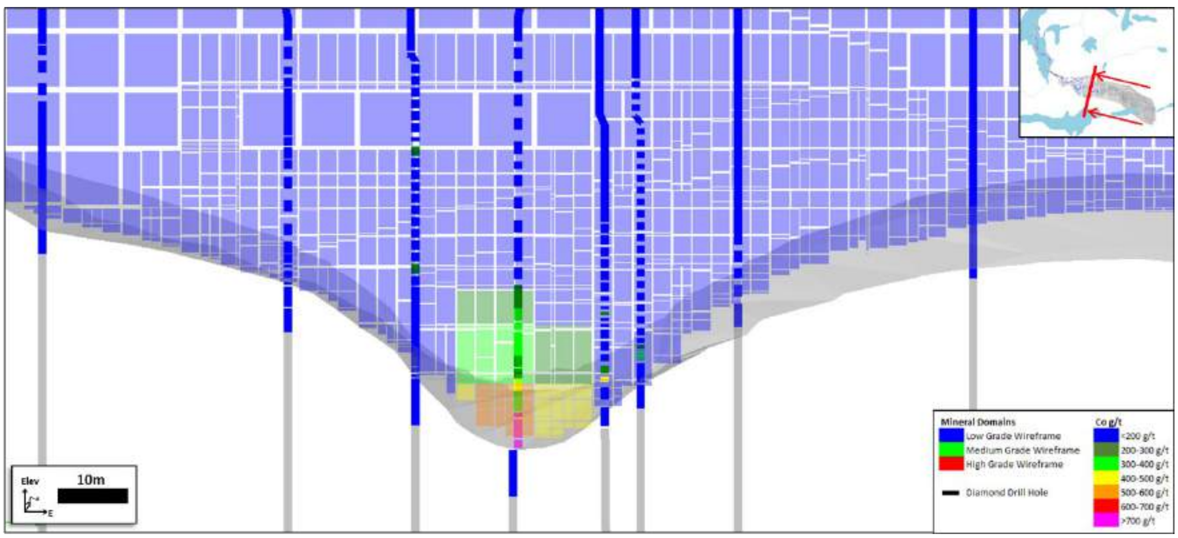


Figure 14-22: Current Lake Deposit cross section Co (g/t)

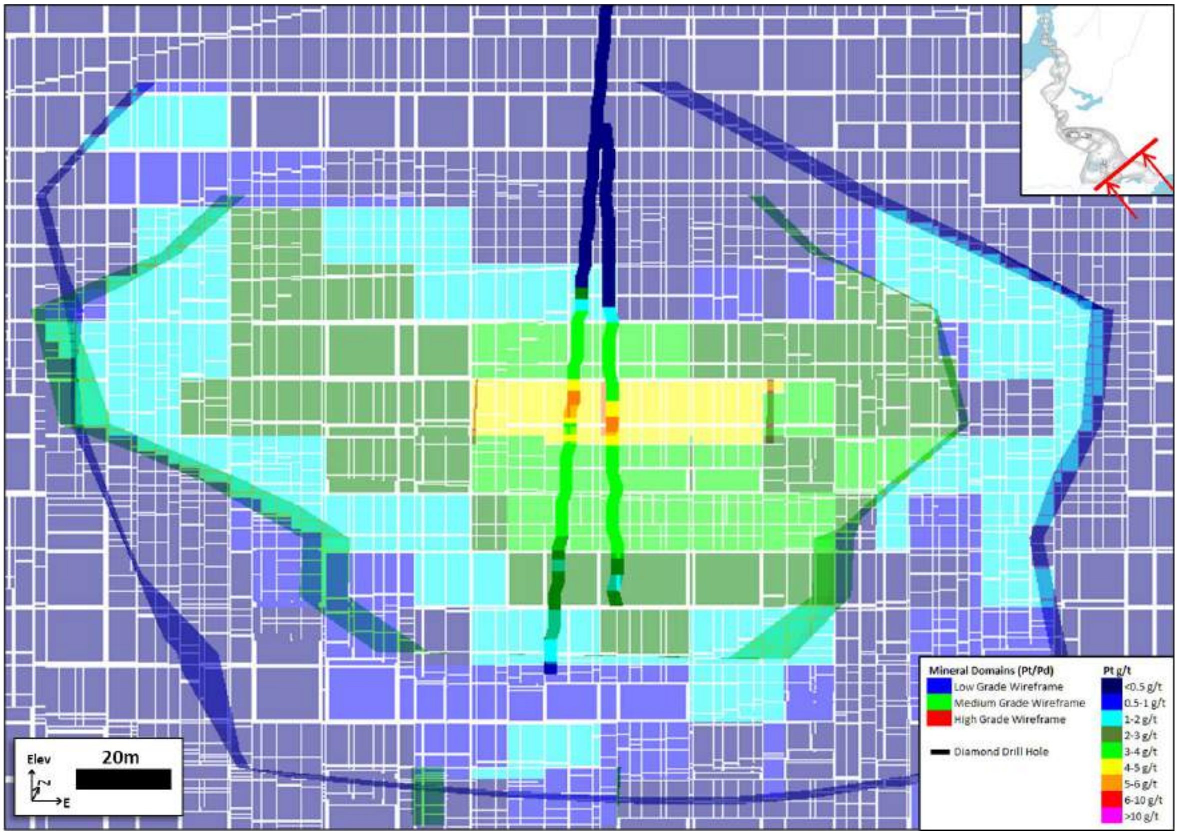


Figure 14-23: Escape Lake Deposit cross section Pt (g/t)

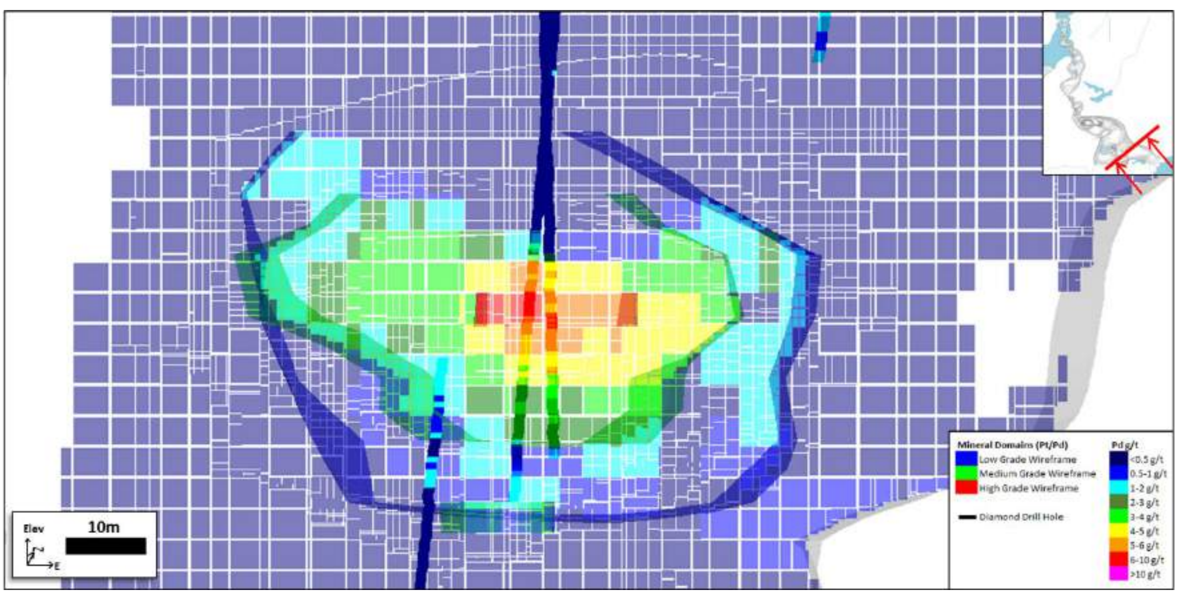


Figure 14-24: Escape Lake Deposit cross section Pd (g/t)

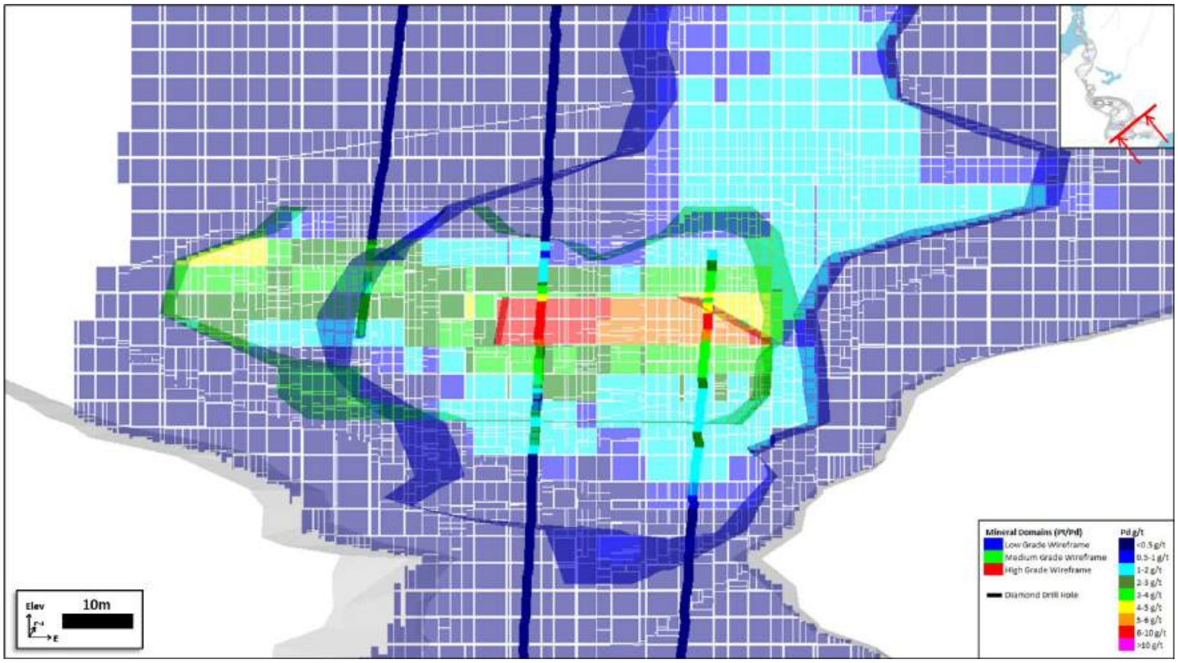


Figure 14-25: Escape Lake Deposit cross section Pd (g/t)

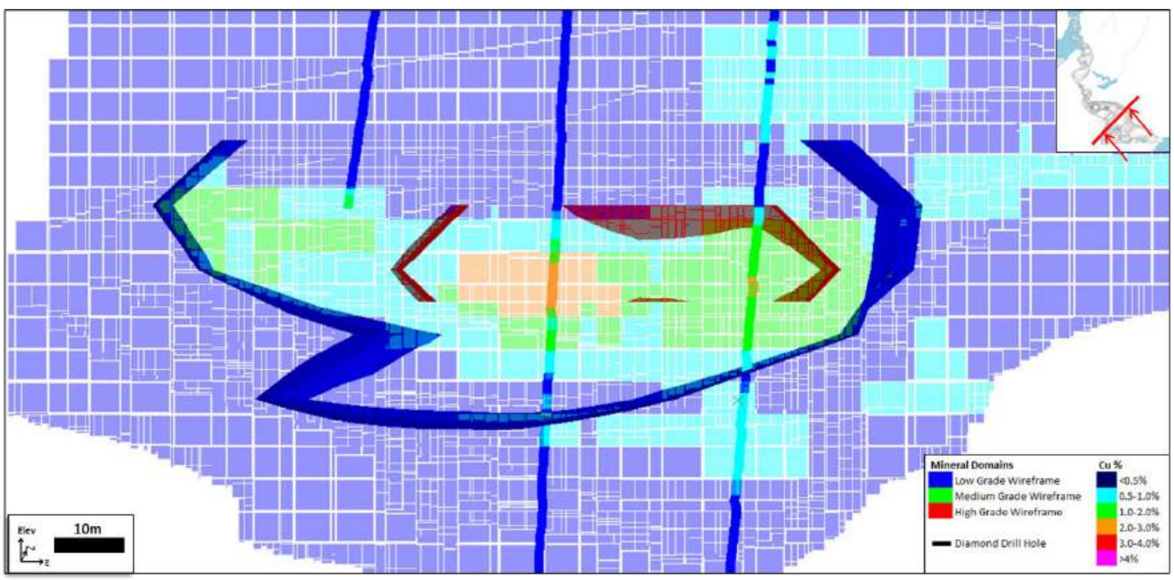


Figure 14-26: Escape Lake Deposit cross section Cu (%)

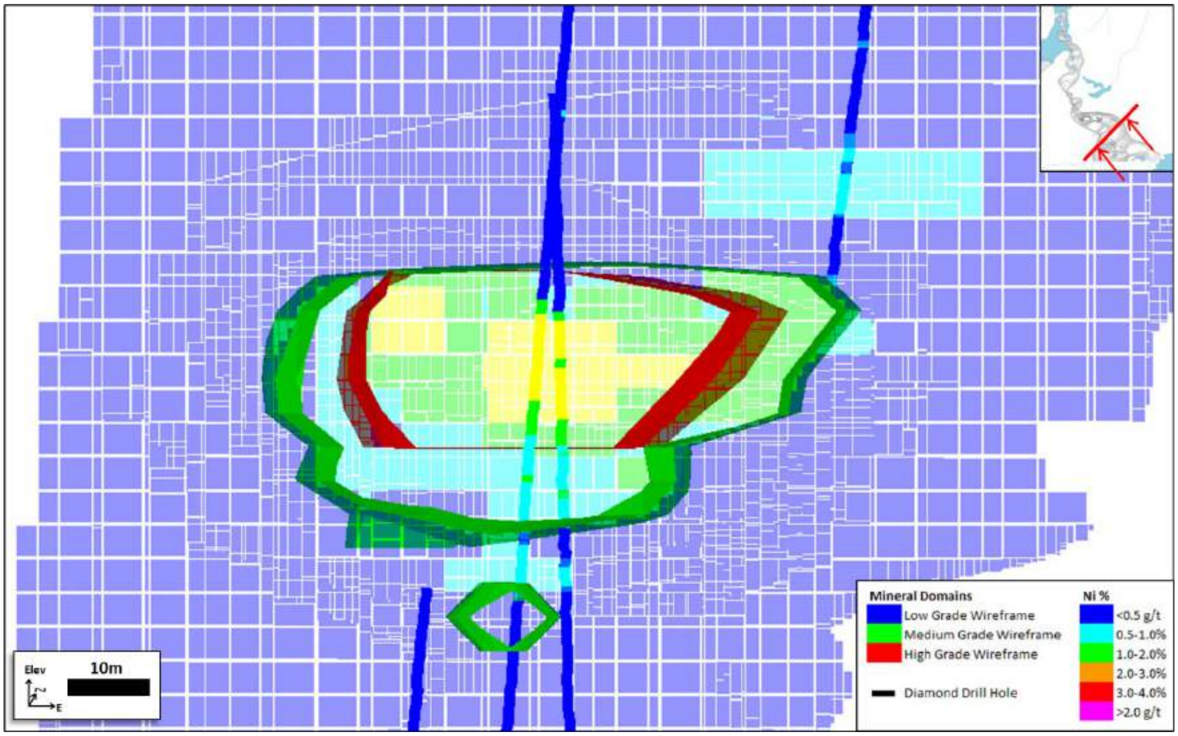


Figure 14-27: Escape Lake Deposit cross section Ni (%)

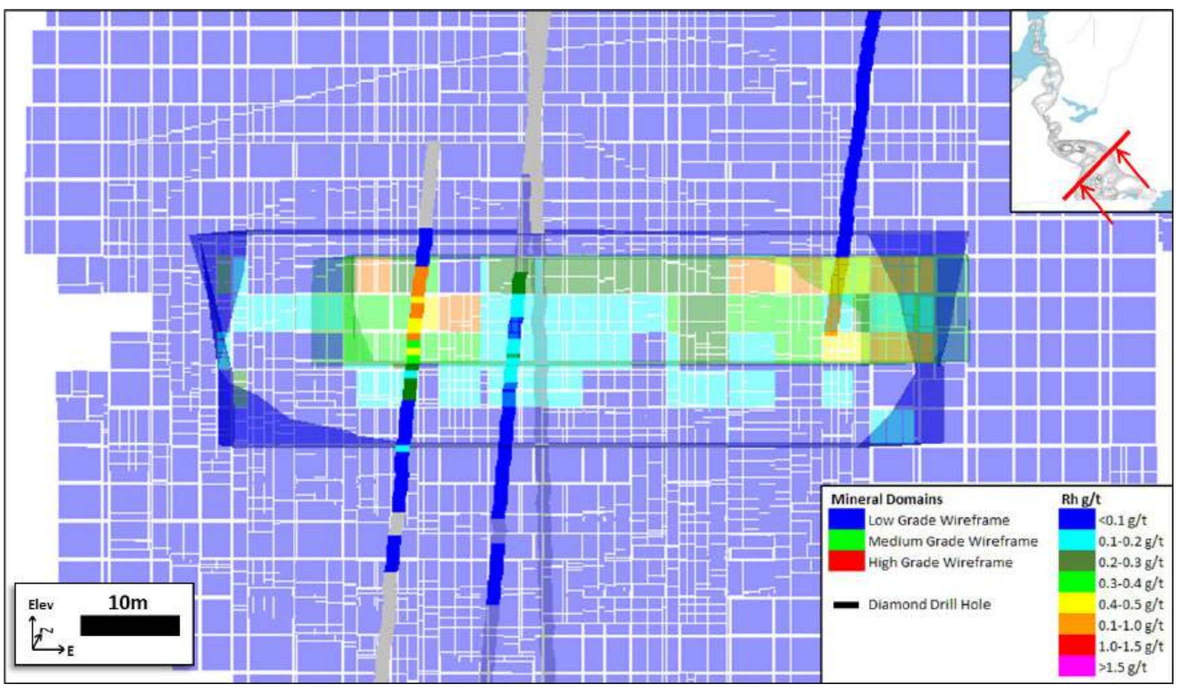


Figure 14-28: Escape Lake Deposit cross section Rh (g/t)

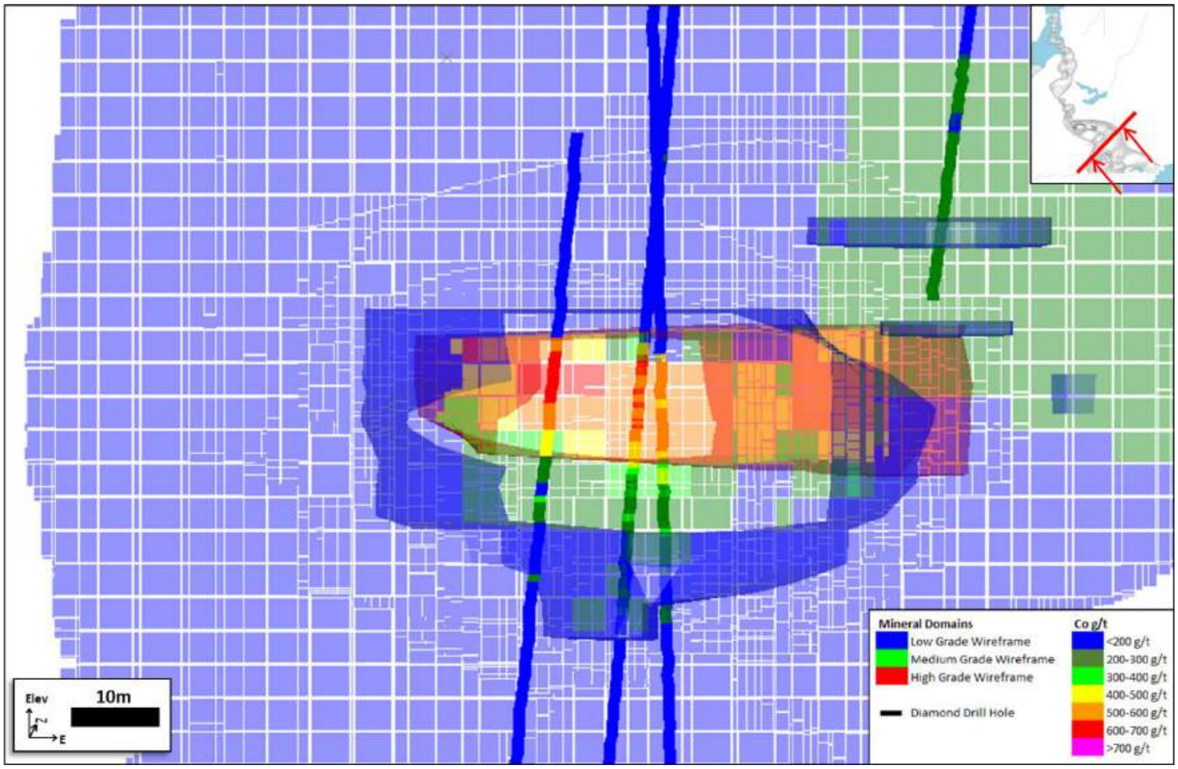


Figure 14-29: Escape Lake Deposit cross section Co (g/t)

14.5.2 Swath Plots

A swath plot is a graphical representation of grade distribution derived by a series of sectional "swaths." Swath plots were generated for Au from slices throughout each domain. They compare the block model grades for NN, ID2, ID3, and OK to the drill hole composite grades to evaluate any potential local grade bias. Review of the swath plots did not identify bias in the model that is material to the 2021 Mineral Resource Estimate, as there was a strong overall correlation between the block model OK grade and the capped composites used in the 2021 Mineral Resource Estimate, as demonstrated in Figure 14-30 through Figure 14-33 (additional figures are available in Appendix F). For these figures, the composite grade (S_XXCAP, where XX is the element being analyzed) is compared across swaths with the four estimation types from the block model.

Fields include (all are in g/t):

- M_TONNES: Block model tonnage
- NRECORDS: Number of records
- S_XXCAP: composite capped grade for XX
- M_XXOK: Block model estimated XX grade, OK
- M_XXID2: Block model estimated XX grade, ID2
- M_XXID3: Block model estimated XX grade, ID3
- M_XXNN: Block model estimated XX grade, NN

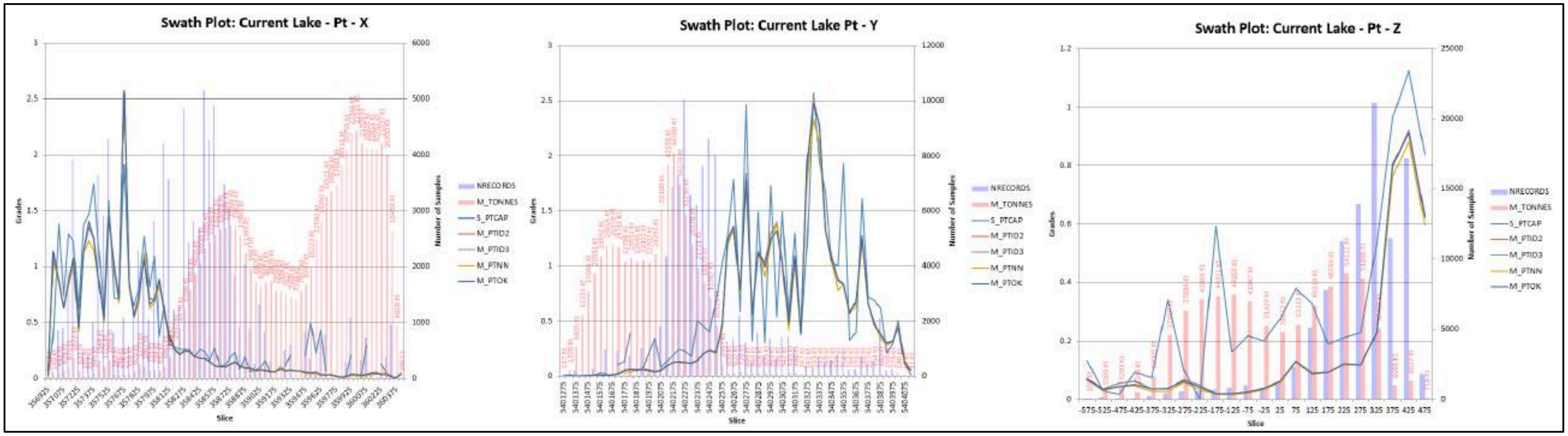


Figure 14-30: Swath plots in X, Y, Z direction, Current Lake Deposit, Pt

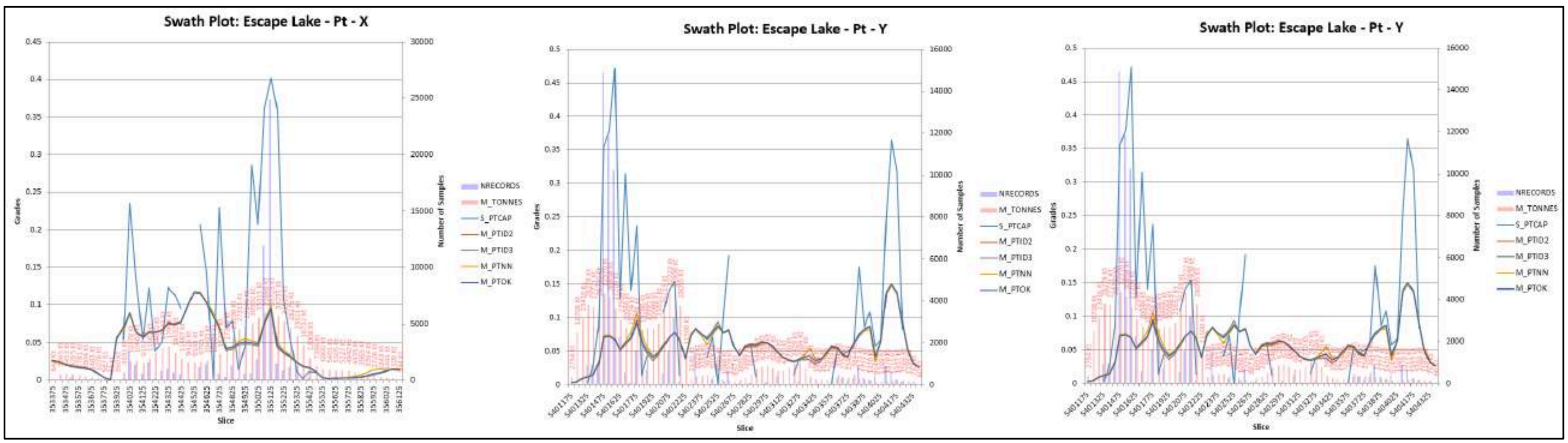


Figure 14-31: Swath plots in X, Y, Z direction, Escape Lake Deposit, Pt

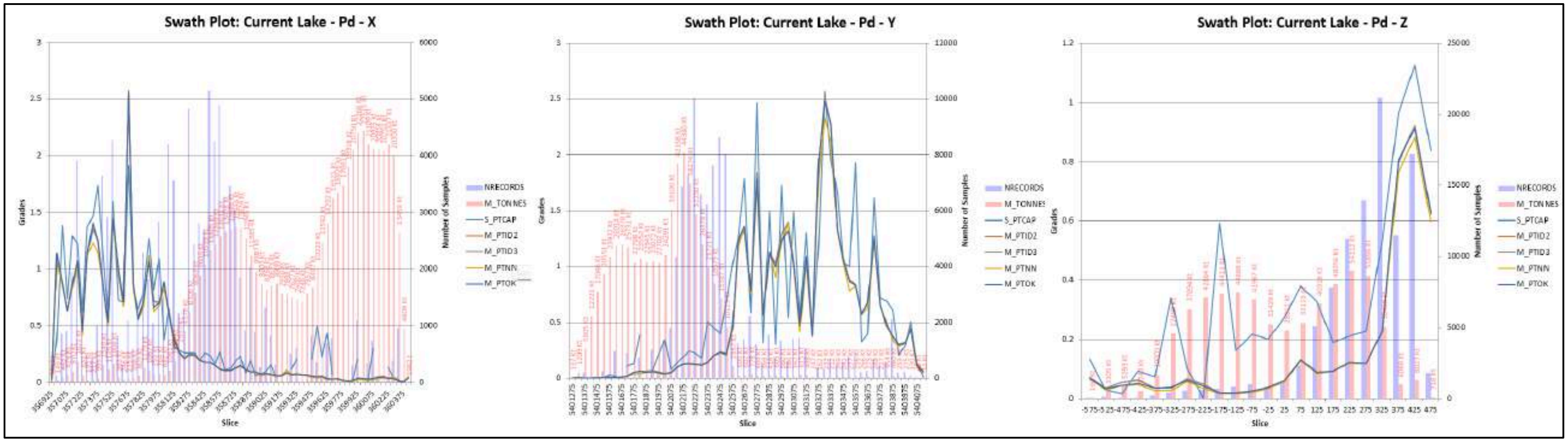


Figure 14-32: Swath plots in X, Y, Z direction, Current Lake Deposit, Pd

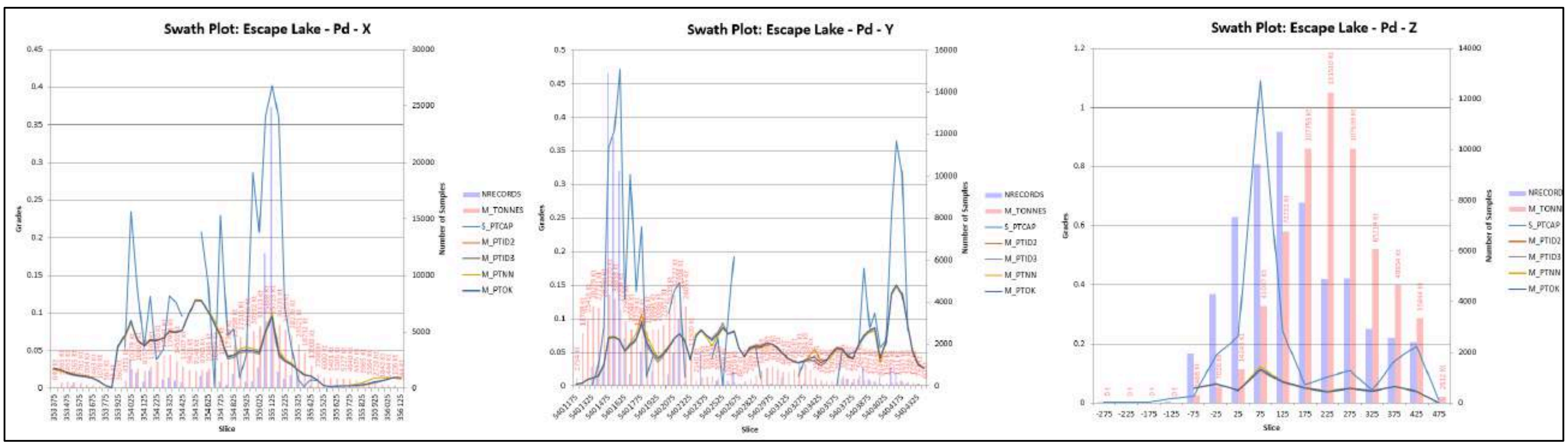


Figure 14-33: Swath plots in X, Y, Z direction, Escape Lake Deposit, Pd

14.5.3 Interpolation Comparison

Estimation was completed using NN, ID2, ID3, and OK interpolation methods. The results are presented in Table 14-16 and Table 14-17. The tonnage column includes all material that has been classified as Measured, Indicated, and Inferred.

Table 14-16: Current Lake Deposit Interpolation Comparison

Current Lake Deposit *Grades in g/t*

Classification	Domain	Tonnes	Pt NN	Pt ID2	Pt ID3	Pt OK	Pd NN	Pd ID2	Pd ID3	Pd OK	Au NN	Au ID2	Au ID3	Au OK	Ag NN	Ag ID2	Ag ID3	Ag OK
Indicated	Upper Current	1,089,212	1.54	1.60	1.60	1.60	1.44	1.50	1.49	1.50	0.08	0.08	0.08	0.08	1.67	1.71	1.71	1.72
	Current	1,534,911	2.07	2.16	2.16	2.10	1.91	2.01	2.00	1.96	0.10	0.11	0.11	0.11	2.25	2.24	2.24	2.25
	Bridge	3,355,050	1.69	1.73	1.72	1.72	1.61	1.66	1.65	1.67	0.08	0.08	0.08	0.08	1.54	1.47	1.47	1.49
	Beaver	4,481,507	1.17	1.23	1.23	1.23	1.08	1.14	1.14	1.14	0.05	0.05	0.05	0.05	1.00	1.00	1.00	1.00
	Cloud	1,538,497	0.91	0.92	0.92	0.93	0.86	0.88	0.87	0.89	0.04	0.04	0.04	0.04	0.65	0.66	0.66	0.66
Inferred	Beaver	1,735,331	0.82	0.78	0.78	0.80	0.76	0.74	0.74	0.75	0.05	0.05	0.05	0.05	0.78	0.80	0.79	0.79
	437/SE	4,671,629	0.54	0.61	0.61	0.64	0.52	0.57	0.57	0.61	0.06	0.07	0.07	0.07	0.93	0.98	0.98	1.01

Current Lake Deposit *Grades in g/t* *Grades in Percentage* *Grades in g/t*

Classification	Domain	Tonnes	Rh NN	Rh ID2	Rh ID3	Rh OK	Cu NN	Cu ID2	Cu ID3	Cu OK	Ni NN	Ni ID2	Ni ID3	Ni OK	Co NN	Co ID2	Co ID3	Co OK
Indicated	Upper Current	1,089,212	0.06	0.07	0.06	0.07	0.33	0.35	0.35	0.35	0.20	0.20	0.20	0.20	150	149	149	148
	Current	1,534,911	0.06	0.05	0.05	0.05	0.42	0.41	0.41	0.41	0.21	0.21	0.22	0.21	147	144	144	142
	Bridge	3,355,050	0.05	0.05	0.05	0.05	0.37	0.35	0.36	0.35	0.17	0.18	0.18	0.17	132	132	132	130
	Beaver	4,481,507	0.03	0.04	0.04	0.03	0.21	0.20	0.20	0.20	0.16	0.16	0.17	0.16	141	140	140	139
	Cloud	1,538,497	0.04	0.04	0.04	0.04	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	143	140	141	136
Inferred	Beaver	1,735,331	0.02	0.02	0.02	0.02	0.20	0.20	0.20	0.20	0.18	0.18	0.18	0.18	149	142	142	146
	437/SE	4,671,629	0.01	0.01	0.01	0.01	0.31	0.33	0.33	0.34	0.13	0.13	0.11	0.13	114	116	116	114

Table 14-17: Escape Lake Deposit Interpolation Comparison

Escape Lake Deposit *Grades in g/t*

Classification	Domain	Tonnes	Pt NN	Pt ID2	Pt ID3	Pt OK	Pd NN	Pd ID2	Pd ID3	Pd OK	Au NN	Au ID2	Au ID3	Au OK	Ag NN	Ag ID2	Ag ID3	Ag OK
Indicated	Steepledge North	135,650	0.71	0.71	0.75	0.71	0.82	0.83	0.87	0.81	0.06	0.06	0.06	0.06	1.29	1.30	1.52	1.28
	Steepledge South	45,180	0.88	0.88	0.87	0.87	1.04	1.04	1.02	1.02	0.06	0.06	0.06	0.05	1.16	1.16	1.25	1.14
	Escape South	4,105,390	0.94	0.94	0.97	0.93	1.20	1.20	1.24	1.19	0.13	0.13	0.12	0.13	2.54	2.54	2.57	2.51
Inferred	Steepledge North	148,609	0.42	0.43	0.50	0.44	0.50	0.50	0.59	0.52	0.05	0.05	0.05	0.05	0.54	0.54	0.54	0.53
	Steepledge South	2,287,589	0.77	0.77	0.76	0.74	0.87	0.87	0.86	0.84	0.07	0.07	0.06	0.07	1.25	1.25	1.27	1.15
	Escape South	1,008,981	0.43	0.43	0.48	0.43	0.52	0.52	0.56	0.51	0.08	0.08	0.09	0.08	1.17	1.18	1.25	1.16

Escape Lake Deposit *Grades in g/t* *Grades in Percentage* *Grades in g/t*

Classification	Domain	Tonnes	Rh NN	Rh ID2	Rh ID3	Rh OK	Cu NN	Cu ID2	Cu ID3	Cu OK	Ni NN	Ni ID2	Ni ID3	Ni OK	Co NN	Co ID2	Co ID3	Co OK
Indicated	Steepledge North	135,650	0.01	0.01	0.01	0.01	0.30	0.30	0.30	0.28	0.18	0.18	0.18	0.18	153	153	152	157
	Steepledge South	45,180	0.00	0.00	0.00	0.00	0.30	0.30	0.30	0.28	0.18	0.18	0.18	0.17	142	142	145	141
	Escape South	4,105,390	0.06	0.06	0.06	0.06	0.54	0.54	0.54	0.53	0.29	0.29	0.29	0.29	212	212	214	211
Inferred	Steepledge North	135,650	0.00	0.00	0.00	0.00	0.27	0.27	0.26	0.26	0.21	0.21	0.21	0.21	151	151	149	150
	Steepledge South	45,180	0.00	0.00	0.00	0.00	0.32	0.32	0.30	0.32	0.16	0.16	0.17	0.16	172	172	168	173
	Escape South	4,105,390	0.00	0.00	0.00	0.00	0.36	0.36	0.36	0.35	0.20	0.20	0.20	0.19	175	175	176	175

14.6 Equivalency

Equivalency formulas were calculated and used for reporting purposes. The derivation of the equivalency formulas is based on accepted industry practices. All equivalencies are reported as in situ grades.

Notes:

- *All percentage grades referenced in the formulas for Cu and Ni are numeral percentage rather than decimal percentages (i.e., 2% is 2.0, not 0.02).*
- *0.06857 is used for troy ounce and pound conversion.*
- *2204 is used for tonne and pound conversion.*
- *10,000 is used to convert from numerical percentage to grams.*

Platinum equivalency ("Pt Eq") and palladium equivalency ("Pd Eq") was calculated through the following formulas, using components from Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh.

<u>Platinum Equivalency</u>

- Pt Eq (g/t) = Pt Component + Pd Component + Au Component + Ag Component + Cu Component + Ni Component + Co Component + Rh Component
- Pt Eq g/t = (Pt g/t) + (Pd g/t * Pd Factor) + (Au g/t * Au Factor) + (Ag g/t * Ag Factor) + (Cu % * Cu Factor) + (Ni % * Ni Factor) + (Co g/t * Co Factor) + (Rh g/t * Rh Factor)
- $Pt\ \mathrm{Eq\ g/t} = \mathrm{Pt\ g/t} + \left(\mathrm{Pd\ g/t} \times \frac{Pd\ \$/oz}{Pt\ \$/oz}\right) + \left(\mathrm{Au\ g/t} \times \frac{Au\ \$/oz}{Pt\ \$/oz}\right) + \left(\mathrm{Ag\ g/t} \times \frac{Ag\ \$/oz}{Pt\ \$/oz}\right) + \left(\mathrm{Cu}\ \% \times \frac{Cu\ \$/t \times 10000 \times 0.06857 \div 2204}{Pt\ \$/oz}\right) + \left(\mathrm{Ni}\ \% \times \frac{Ni\ \$/t \times 10000 \times 0.06857 \div 2204}{Pt\ \$/oz}\right) + \left(\mathrm{Co\ g/t} \times \frac{Co\ \$/t \times 0.06857 \div 2204)}{Pt\ \$/oz}\right) + \left(\mathrm{Rh\ g/t} \times \frac{Rh\ \$/oz}{Pt\ \$/oz}\right)$
- $Pt\ Eq\ g/t = (Pt\ g/t) + \left(Pd\ g/t \times \frac{1516.82}{902.38}\right) + \left(Au\ g/t \times \frac{1469.60}{902.38}\right) + \left(Ag\ g/t \times \frac{17.35}{902.38}\right) + \left(Cu\ \% \times \frac{6325.48 \times 10000 \times 0.06857 \div 2204}{902.38}\right) + \left(Ni\ \% \times \frac{13543.01 \times 10000 \times 0.06857 \div 2204}{902.38}\right) + \left(Co\ g/t \times \frac{34839.16 \times 0.06857 \div 2204}{902.38}\right) + \left(Rh\ g/t \times \frac{4910.67}{902.38}\right)$
- $Pt\ Eq\ g/t = (Pt\ g/t) + (Pd\ g/t \times 1.680910) + (Au\ g/t \times 1.628582) + (Ag\ g/t \times 0.01922693) + (Cu\ \% \times 2.180854) + (Ni\ \% \times 4.669263) + (Co\ g/t \times 0.001201160) + (Rh\ g/t \times 5.441909)$

Palladium Equivalency

- Pd Eq g/t = Pd Component + Pt Component + Au Component + Ag Component + Cu Component + Ni Component + Co Component + Rh Component
- Pd Eq g/t = (Pd g/t) + (Pt g/t * Pt Factor) + (Au g/t * Au Factor) + (Ag g/t * Ag Factor) + (Cu % * Cu Factor) + (Ni % * Ni Factor) + (Co g/t * Co Factor) + (Rh g/t * Rh Factor)
- $Pd\ Eq\ g/t = (Pd\ g/t) + \left(Pt\ g/t \times \frac{902.38}{1516.82}\right) + \left(Au\ g/t \times \frac{1469.60}{1516.82}\right) + \left(Ag\ g/t \times \frac{17.35}{1516.82}\right) + \left(Cu\,\% \times \frac{6325.48 \times 10000 \times 0.06857 \div 2204}{1516.82}\right) + \left(Ni\,\% \times \frac{13543.01 \times 10000 \times 0.06857 \div 2204}{1516.82}\right) + \left(Co\ g/t \times \frac{34839.16 \times 0.06857 \div 2204}{1516.82}\right) + \left(Rh\ g/t\ \times \frac{4910.67}{1516.82}\right)$
- $Pd\ Eq\ g/t = (Pd\ g/t) + \left(Pt\ g/t \times \frac{902.38}{1516.82}\right) + \left(Au\ g/t \times \frac{1469.60}{1516.82}\right) + \left(Ag\ g/t \times \frac{17.35}{1516.82}\right) + \left(Cu\,\% \times \frac{6325.48 \times 10000 \times 0.06857 \div 2204}{1516.82}\right) + \left(Ni\,\% \times \frac{13543.01 \times 10000 \times 0.06857 \div 2204}{1516.82}\right) + \left(Co\ g/t \times \frac{34839.16 \times 0.06857 \div 2204}{1516.82}\right) + \left(Rh\ g/t\ \times \frac{4910.67}{1516.82}\right)$
- $Pd\ Eq\ g/t = (Pd\ g/t) + (Pt\ g/t\ \times\ 0.5949157) + (Au\ g/t\ \times\ 0.9688691) + (Ag\ g/t\ \times\ 0.001143840) + (Cu\,\%\ \times\ 1.297424) + (Ni\,\%\ \times\ 2.777818) + (Co\ g/t\ \times\ 0.0007145888) + (Rh\ g/t\ \times\ 3.237477)$

14.7 Mineral Resource Classification

The Mineral Resource Estimate was classified in accordance with the 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines. Mineral Resource classifications were assigned to regions of the block model based on the QPs confidence and judgment related to geological understanding, continuity of mineralization in conjunction with data quality, spatial continuity based on variography, estimation pass, data density, and block model representativeness, specifically drill and chip assay spacing and abundance, kriging variance ("KV"), and search volume block estimation assignment.

All resources must have "reasonable prospects for eventual economic extraction." A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable.

Wireframes were manually built for the purpose of classification (Measured, Indicated, and Inferred), which were applied to the block model. Classification wireframes were built based on the following criteria:

- Measured: No material was determined to classify as Measured for either deposit
- Indicated:
  - Within approximately 20 m of a moderate amount of drill sampling, and,
  - Area search volume block estimation equal to 1 or 2 (estimation occurs within the first or second search pass).
- Inferred: It was deemed appropriate to assign the classification of Inferred to all remaining blocks. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The KV is a quantitative measure of the smoothness of the kriging estimates where KV=0 indicates zero variance and KV=1 indicates total variance. Figure 14-34 and Figure 14-35 display the Pt KV in cross section.

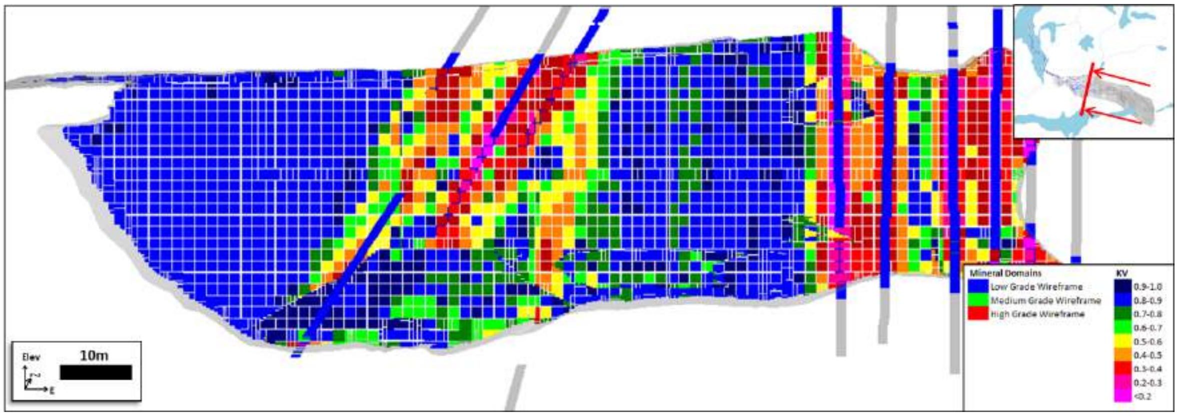


Figure 14-34: Cross section of the Current Lake Deposit, Pt KV

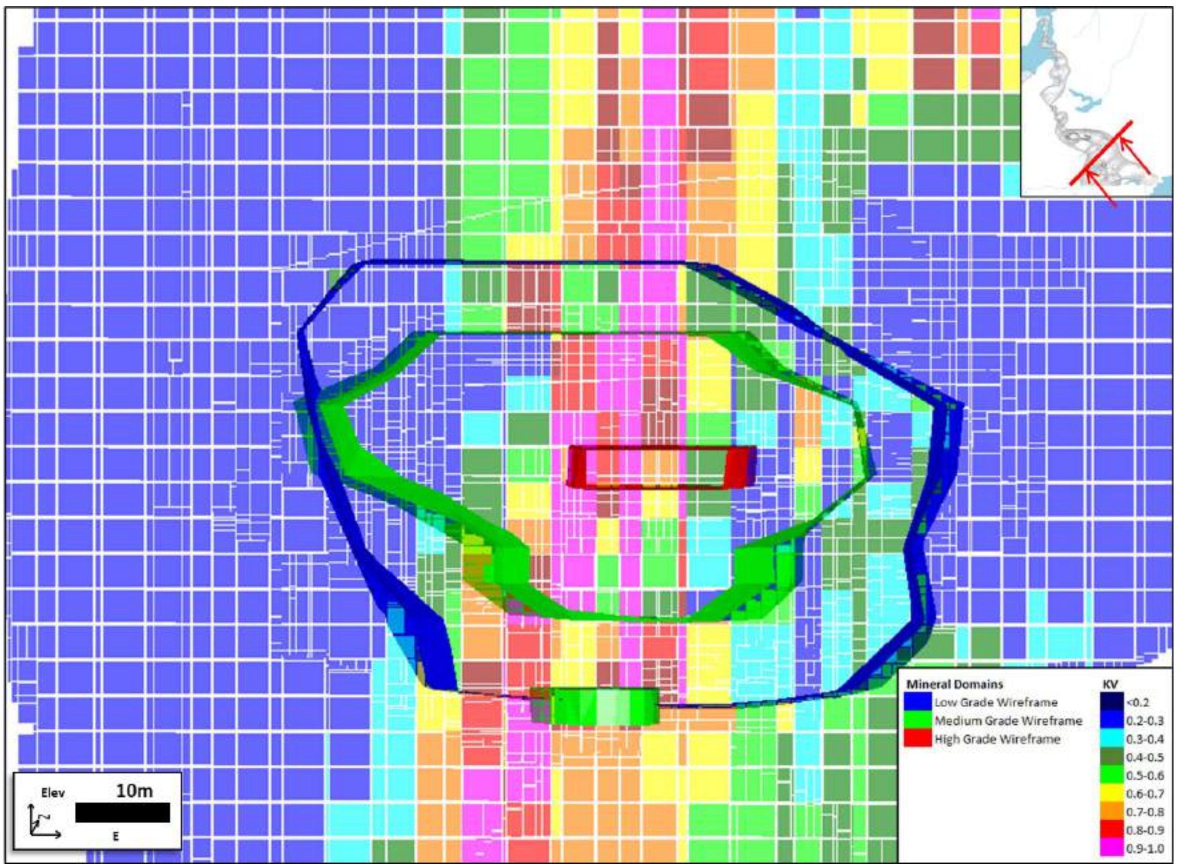


Figure 14-35: Cross section of the Escape Lake Deposit, Pt KV

Figure 14-36 and Figure 14-37 demonstrate classification for the Current Lake Deposit. Figure 14-38 and Figure 14-39 demonstrate classification for the Escape Lake Deposit.

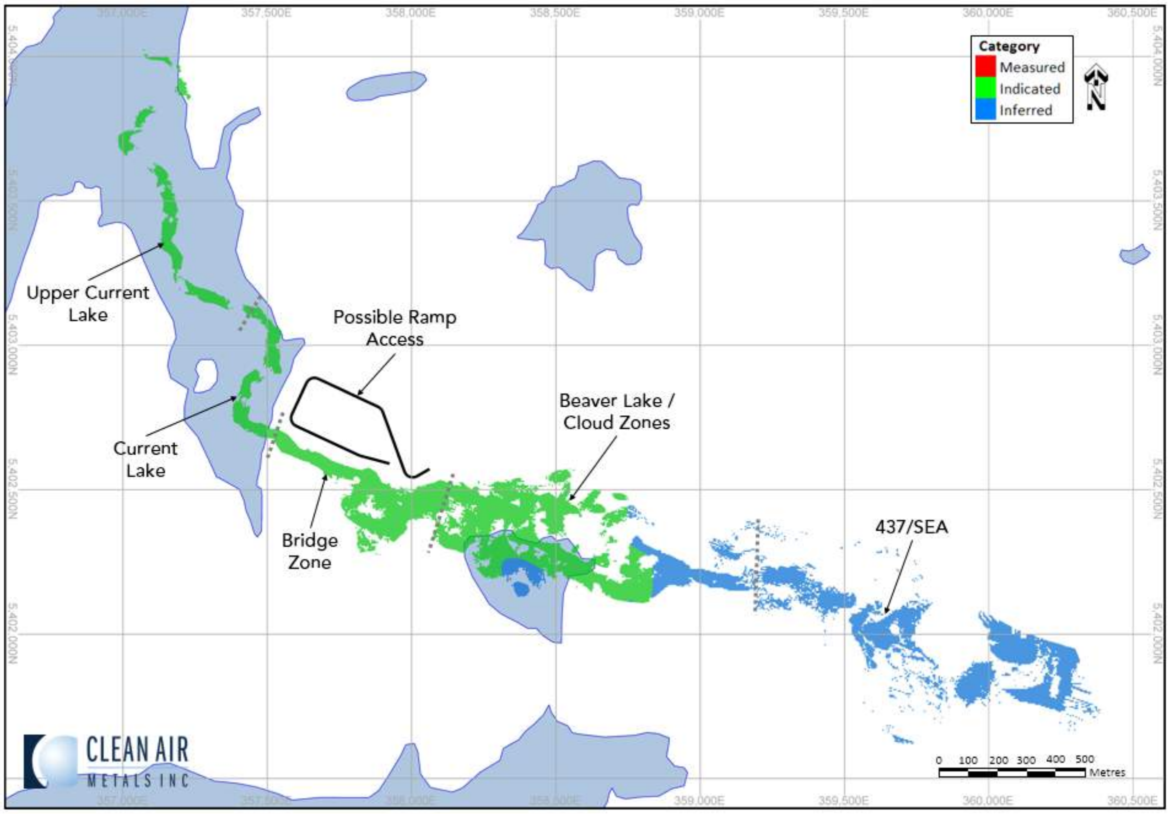


Figure 14-36: Plan section showing the Current Lake Deposit categorizations

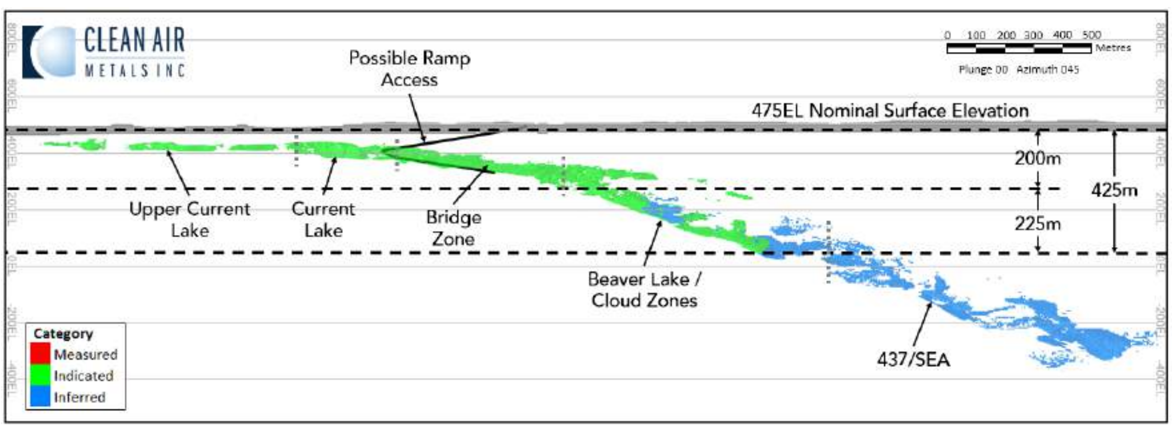


Figure 14-37: Cross section showing the Current Lake Deposit categorizations

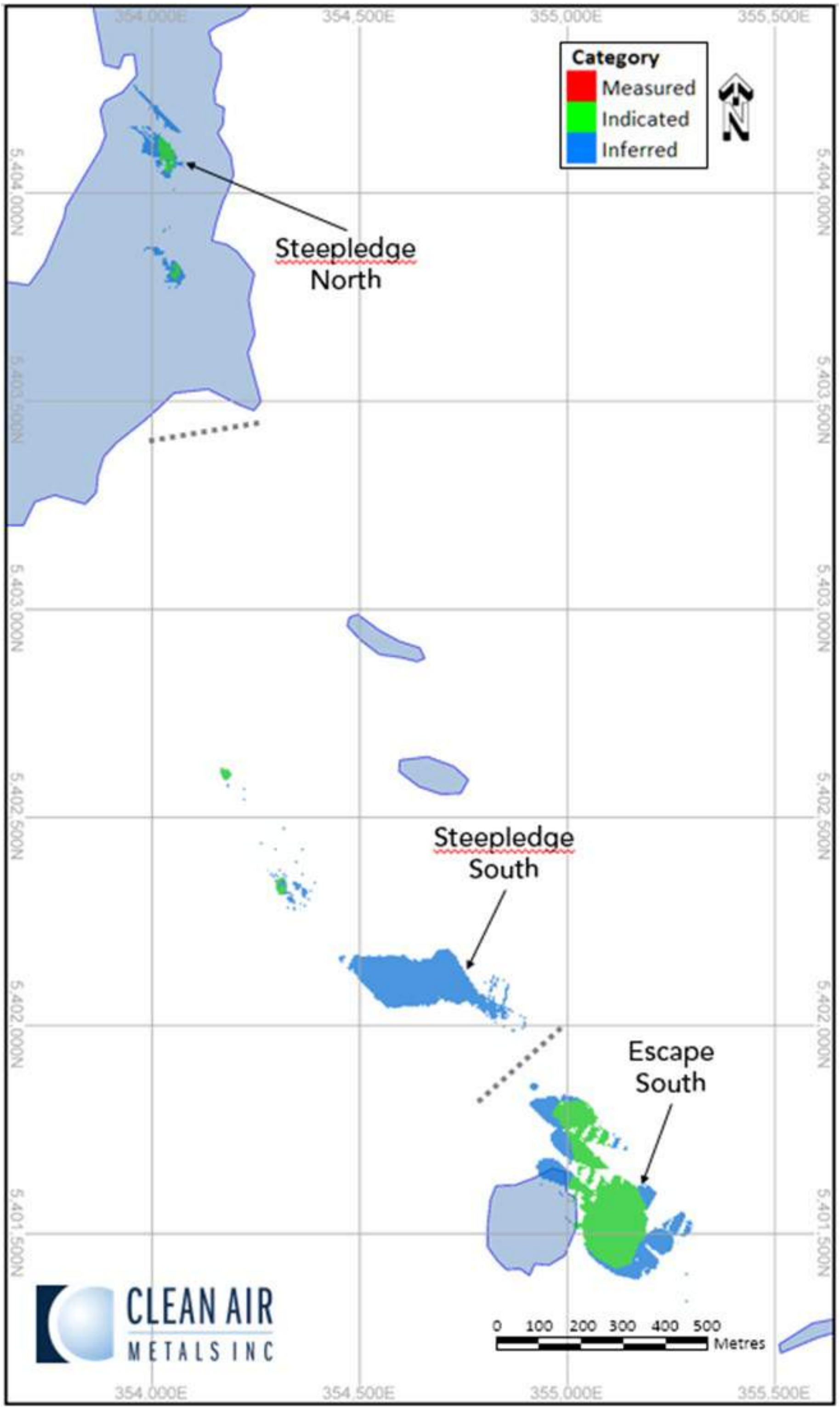


Figure 14-38: Plan view showing Escape Lake Deposit categorizations

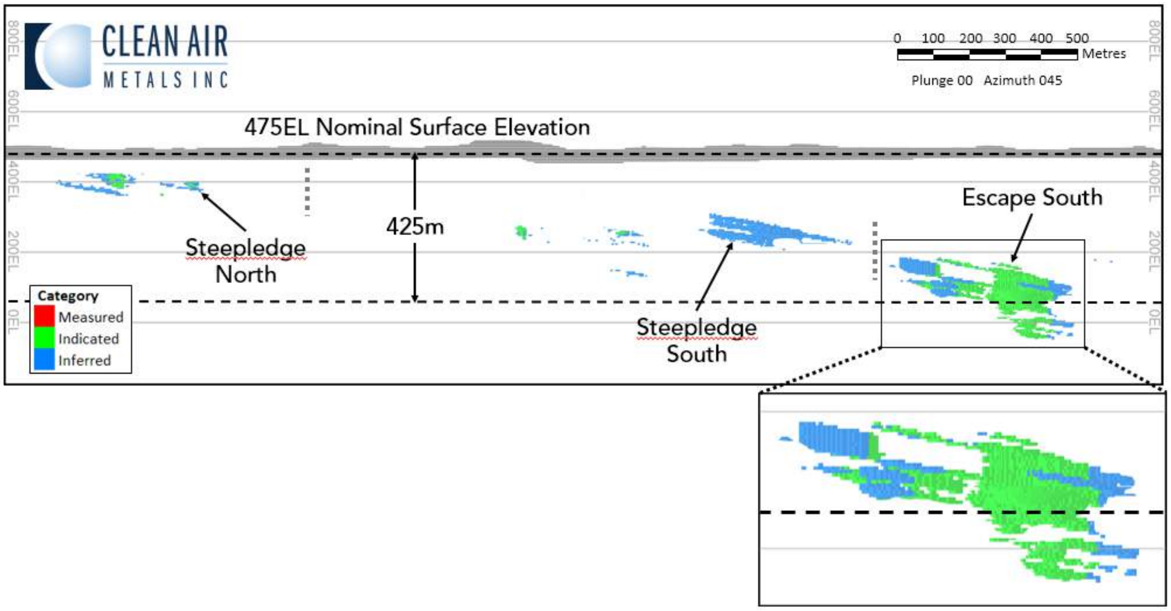


Figure 14-39: Cross section showing Escape Lake Deposit categorization

14.8 Reasonable Prospects of Eventual Economic Extraction

Reasonable prospects assumptions include:

- The Independent and Qualified Person responsible for the Mineral Resource Estimate is Glen Kuntz, P.Geo. of Nordmin Engineering Ltd., Thunder Bay, Ontario, and the effective date of the estimate is January 18, 2021.
- CIM Definition Standards on Mineral Resources and Reserves were used for the Thunder Bay North Project Mineral Resource Estimate.
- 3-year trailing average prices were used for all calculations with the exception of cobalt which used a 2-year trailing average price as itemized in Table 14-18.
- Resource excludes all material immediately below Current Lake, above a minimum crown pillar thickness of 20 m which is assumed to be not recoverable by underground methods.
- 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, marketing, or other relevant issues.
- Minor variations may occur during the addition of rounded numbers.

Table 14-18: Commodity Prices Used in the Resource Calculation

Commodity	Units	Assumption (USD$)
Pd	per oz	$1,516.82
Pt	per oz	$902.38
Ag	per oz	$17.35
Au	per oz	$1,469.60
Cu	per lb	$2.87
Ni	per lb	$6.15
Co	prt tonne	$34,839.16
Rh	per oz	$4,910.67

14.8.1 Input Parameters for Resource Calculation

Mining Cutoff Grade

The cutoff value used for the Mineral Resource is US$77/tonne (C$101/tonne) insitu contained value, 1.58 g/t PdEq (US$77/(US$1,516.82/31.10305)) or 2.65 g/t PtEq (US$77/ US$902.38/31.10305)). The cutoff value is calculated based on estimations as follows: direct mining operating cost, onsite milling operating cost, tailings management facility operating cost, indirect operating cost, G&A cost, onsite milling metal recoveries, offsite smelting metal recoveries, and smelter metal payable percentages. A total estimated operating cost of C$66.91/tonne of mill feed is comprised of;

- Direct mining operating cost for underground mining of C$35.88/tonne mill feed, consisting of the weighted average; 75% longhole open stope mining C$30.45/tonne mill feed and 25% drift and fill mining C$52.19/tonne mill feed,
- Onsite milling and tailings management facility operating cost of C$18.00/tonne mill feed,
- Total indirect operating cost and G&A cost of C$13.03/tonne mill feed.

Onsite estimated mill metal recoveries, offsite estimated smelting metal recoveries and estimated smelter payable percentages used for Mineral Resource cutoff grade calculations are summarized in Table 14-19. For resource cutoff calculation purposes, a mining recovery of 100.0% and 0.0% mining dilution were applied.

Table 14-19: Contained Metals Parameters of Mineral Resource Cutoff Grade Calculations

Parameter	Pd (%)	Pt (%)	Ag (%)	Au (%)	Cu (%)	Ni (%)	Co (%)	Rh (%)
Onsite Mill Metal Recoveries	75.0	75.0	50.0	50.0	90.0	90.0	90.0	75.0
Offsite Smelting Metal Recoveries	85.0	85.0	85.0	85.0	85.0	90.0	50.0	85.0
Smelter Payable Percentages	98.0	98.0	85.0	97.0	100.0	100.0	100.0	98.0

Source: Values taken from AMEC Technical Report dated 6 October 2010.

14.9 Mineral Resource Estimate

The Mineral Resources were classified using the 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines and has an effective date of January 18, 2021. The Current Lake Deposit contains an Indicated Mineral Resource of 11,997,177 tonnes grading 3.44 g/t PdEq and an Inferred Mineral Resource of 6,406,960 tonnes grading 2.02 g/t PdEq. The Escape Lake Deposit contains an Indicated Mineral Resource of 4,286,220 tonnes grading 3.67 g/t PdEq and an Inferred Mineral Resource of 3,445,179 tonnes grading 2.23 g/t PdEq (Table 14-20 and Table 14-21).

Table 14-20: Thunder Bay North Project Mineral Resource Estimate, Grade, and Tonnage

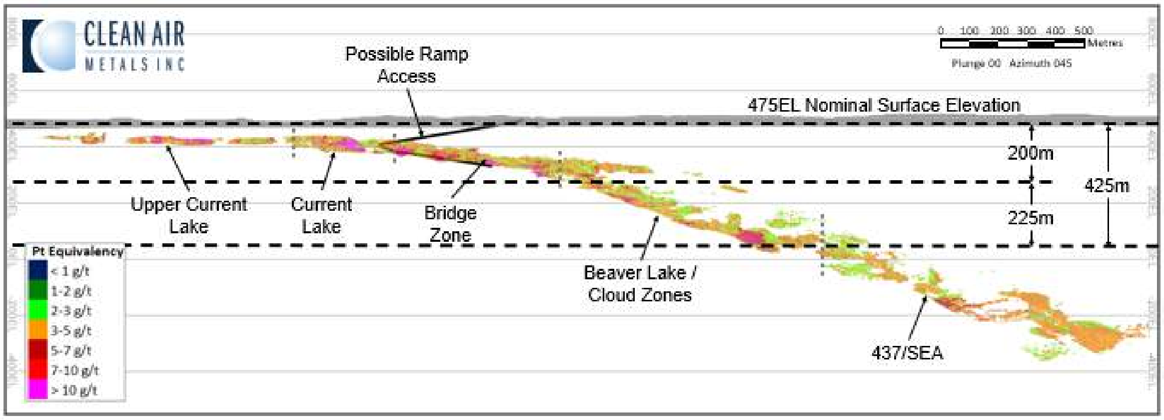
Category	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Current Lake Deposit	11,999,177	1.48	1.40	0.07	1.32	0.04	137	0.28	0.17	5.79	3.44
Indicated Escape Lake Deposit	4,286,220	0.92	1.18	0.12	2.45	0.06	209	0.52	0.28	6.16	3.67
TOTAL INDICATED RESOURCE	**16,285,396**	**1.33**	**1.34**	**0.08**	**1.62**	**0.05**	**156**	**0.34**	**0.20**	**5.89**	**3.50**
Inferred Current Lake Deposit	6,406,960	0.68	0.65	0.06	0.95	0.01	123	0.30	0.14	3.40	2.02
Indicated Escape Lake Deposit	3,445,179	0.64	0.73	0.07	1.13	0.00	173	0.33	0.18	3.75	2.23
TOTAL INFERRED RESOURCE	**9,852,138**	**0.67**	**0.68**	**0.07**	**1.01**	**0.01**	**140**	**0.31**	**0.15**	**3.52**	**2.10**

Table 14-21: Thunder Bay North Project Mineral Resource Estimate, Contained Metal

Category	Tonnes	Pt (oz)	Pd (oz)	Au (oz)	Ag (oz)	Rh (oz)	Co (Tonnes)	Cu (Tonnes)	Ni (Tonnes)	PtEq (oz)	PdEq (oz)
Indicated Current Lake Deposit	11,999,177	569,176	538,181	26,121	508,434	16,998	1,649	33,751	20,969	2,233,575	1,328,789
Indicated Escape Lake Deposit	4,286,220	127,090	162,337	16,928	337,946	8,009	896	22,390	12,016	849,481	505,369
TOTAL INDICATED RESOURCE	**16,285,396**	**696,266**	**700,517**	**43,050**	**846,380**	**25,008**	**2,544**	**56,141**	**32,985**	**3,083,056**	**1,834,158**
Inferred Current Lake Deposit	6,406,960	140,400	133,333	12,888	195,484	1,8360	785	19,155	9,113	700,621	416,810
Indicated Escape Lake Deposit	3,445,179	70,520	80,989	7,754	124,809	71	595	11,293	6,046	414,932	246,850
TOTAL INFERRED RESOURCE	**9,852,138**	**210,919**	**214,322**	**20,642**	**320,293**	**1,907**	**1,380**	**30,449**	**15,159**	**1,115,553**	**663,660**

Figure 14-40 is a long section of the Current Lake Deposit looking NE. The long section outlines the amount of mineralization that is within the top 425 m from surface. While Figure 14-41 is a long section of the Escape Lake Deposit looking NE. The long section outlines the amount of mineralization that is within the top 425 m from surface.

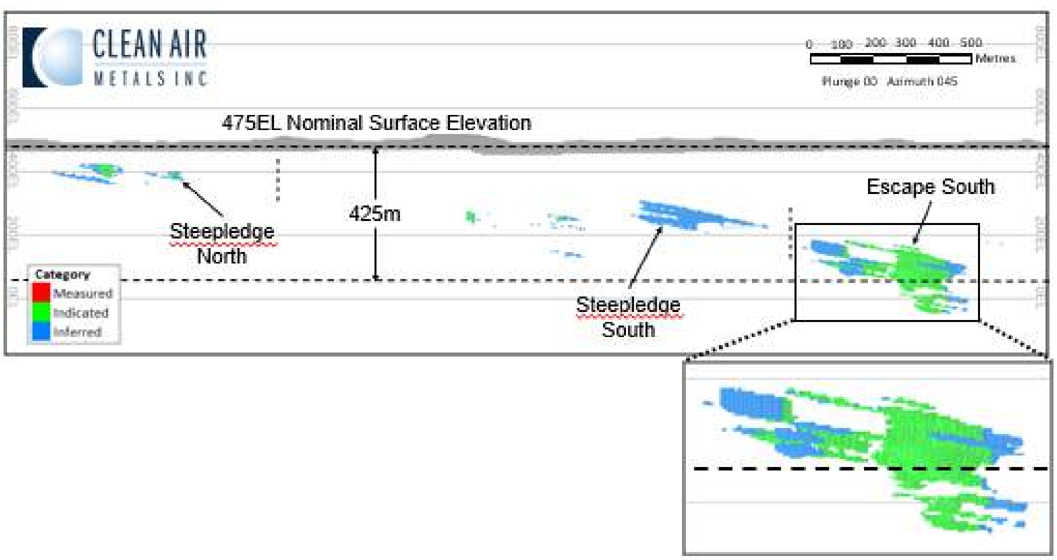
Current Lake – Looking NE – Grades, Area - 2.65 g/t Pt Eq Cut-Off, 20m Crown Pillar Removed



Category	Area	Tonnes	Pt Equiv. (g/t)	Pt Equiv. Oz t	Pd Equiv. (g/t)	Pd Equiv. Oz t
Indicated - Current Lake	Nominal Surface @ 475EL to 275EL (200m)	7,659,240	6.34	1,560,476	3.77	928,351
	275EL to 50EL (225m)	4,338,419	4.82	672,890	2.87	400,313
	Remaining Depth	1,518	4.29	210	2.56	125
TOTAL INDICATED RESOURCE		**11,999,177**	**5.79**	**2,233,575**	**3.44**	**1,328,789**
Inferred - Current Lake	Nominal Surface @ 475EL to 275EL (200m)	0	0	0	0	0
	275EL to 50EL (225m)	1,618,512	3.60	187,076	2.14	111,295
	Remaining Depth	4,788,447	3.34	513,544	1.98	305,516
TOTAL INFERRED RESOURCE		**6,406,960**	**3.40**	**700,621**	**2.02**	**416,810**

Figure 14-40: Long section of the Current Lake Deposit looking NE outlining the amount of mineralization within the top 425 m from surface

Escape Lake – Looking NE – Categories, Area - 2.65 g/t Pt Eq Cut-Off, 20m Crown Pillar Removed



Category	Area	Tonnes	Pt Equiv. (g/t)	Pt Equiv. Oz	Pd Equiv. (g/t)	Pd Equiv. Oz t
Indicated - Escape Lake	Nominal Surface @ 475EL to 50EL (425m)	3,803,382	6.42	785,440	3.82	467,270
	Remaining Depth	482,838	4.13	64,041	2.45	38,099
TOTAL INDICATED RESOURCE		**4,286,220**	**6.16**	**849,481**	**3.67**	**505,369**
Inferred - Escape Lake	Nominal Surface @ 475EL to 50EL (425m)	3,354,582	3.76	405,381	2.24	241,167
	Remaining Depth	90,597	3.28	9,551	1.95	5,682
TOTAL INFERRED RESOURCE		**3,445,179**	**3.75**	**414,932**	**2.23**	**246,850**

Figure 14-41: Long section of the Escape Lake Deposit looking NE outlining the amount of mineralization within the top 425 m from surface

14.9.1 Current Lake Deposit by Geological Domain

Table 14-21 and 14-22 outline the Mineral Resources for the Current Lake Deposit by geological domain.

Table 14-22: Current Lake Deposit Mineral Resource Estimate, Grade, and Tonnage Summary by Geological Domain

Category	Geological Domain	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Current Lake Deposit	Upper Current	1,089,212	1.60	1.50	0.08	1.72	0.07	148	0.35	0.20	6.50	3.87
	Current	1,534,911	2.10	1.96	0.11	2.25	0.05	142	0.41	0.21	7.97	4.74
	Bridge	3,355,050	1.72	1.67	0.08	1.49	0.05	130	0.35	0.17	6.67	3.97
	Beaver	4,481,507	1.23	1.14	0.05	1.00	0.03	139	0.20	0.16	4.82	2.87
	Cloud	1,538,497	0.93	0.89	0.04	0.66	0.04	136	0.17	0.16	4.00	2.38
	437-SE	0	-	-	-	-	-	-	-	-	-	-
TOTAL CURRENT LAKE DEPOSIT INDICATED RESOURCE		**11,999,177**	**1.48**	**1.40**	**0.07**	**1.32**	**0.04**	**137**	**0.28**	**0.17**	**5.79**	**3.44**
Inferred Current Lake Deposit	Upper Current	0	-	-	-	-	-	-	-	-	-	-
	Current	0	-	-	-	-	-	-	-	-	-	-
	Bridge	0	-	-	-	-	-	-	-	-	-	-
	Beaver	1,735,331	0.80	0.75	0.05	0.79	0.02	146	0.2	0.18	3.72	2.21
	Cloud	0	-	-	-	-	-	-	-	-	-	-
	437-SE	4,671,629	0.64	0.61	0.07	1.01	0.01	114	0.34	0.13	3.28	1.95
TOTAL CURRENT LAKE DEPOSIT INFERRED RESOURCE		**6,406,960**	**0.68**	**0.65**	**0.06**	**0.95**	**0.01**	**123**	**0.30**	**0.14**	**3.40**	**2.02**

Table 14-23: Current Lake Deposit Mineral Resource Estimate, Contained Metal by Geological Domain

Category	Geological Domain	Tonnes	Pt (oz)	Pd (oz)	Au (oz)	Ag (oz)	Rh (oz)	Co (Tonnes)	Cu (Tonnes)	Ni (Tonnes)	PtEq (oz)	PdEq (oz)
Indicated Current Lake Deposit	Upper Current	1,089,212	56,185	52,487	2,692	60,154	2,342	161	3,800	2,150	227,801	135,523
	Current	1,534,911	103,563	96,875	5,220	111,114	2,677	218	6,328	3,259	393,310	233,986
	Bridge	3,355,050	185,255	179,929	8,702	160,257	5,079	436	11,851	5,832	720,020	428,351
	Beaver	4,481,507	177,932	164,879	7,292	144,294	4,842	625	9,168	7,343	694,657	413,262
	Cloud	1,538,497	46,241	44,010	2,216	32,615	2,058	209	2,604	2,385	197,787	117,667
	437-SE	0	-	-	-	-	-	-	-	-	-	-
TOTAL CURRENT LAKE DEPOSIT INDICATED RESOURCE		**11,999,177**	**569,176**	**538,181**	**26,121**	**508,434**	**16,998**	**1,649**	**33,751**	**20,969**	**2,233,575**	**1,328,789**
Inferred Current Lake Deposit	Upper Current	0	-	-	-	-	-	-	-	-	-	-
	Current	0	-	-	-	-	-	-	-	-	-	-
	Bridge	0	-	-	-	-	-	-	-	-	-	-
	Beaver	1,735,331	44,527	41,708	2,718	44,020	1,031	253	3,446	3,203	207,495	123,442
	Cloud	0	-	-	-	-	-	-	-	-	-	-
	437-SE	4,671,629	95,873	91,625	10,170	151,464	806	533	15,709	5,910	493,125	293,368
TOTAL CURRENT LAKE DEPOSIT INFERRED RESOURCE		**6,406,960**	**140,400**	**133,333**	**12,888**	**195,484**	**1,836**	**785**	**19,155**	**9,113**	**700,621**	**416,810**

14.9.2 Escape Lake Deposit by Geological Domain

Table 14-23 and 14-24 outline the Mineral Resources for the Escape Lake Deposit by geological domain.

Table 14-24: Escape Lake Deposit Mineral Resource Estimate, Grade, and Tonnage Summary by Geological Domain

Category	Geological Domain	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Escape Lake Deposit	Steepledge North	135,650	0.71	0.81	0.06	1.28	0.01	157	0.28	0.18	3.87	2.30
	Steepledge South	45,180	0.87	1.02	0.05	1.14	0.00	141	0.28	0.17	4.25	2.53
	Escape South Perimeter	1,754,080	0.48	0.58	0.08	1.45	0.03	176	0.37	0.21	3.78	2.26
	Escape South HGZ	2,351,310	1.27	1.65	0.16	3.29	0.08	238	0.66	0.34	8.11	4.82
TOTAL ESCAPE LAKE DEPOSIT INDICATED RESOURCE		**4,286,220**	**0.92**	**1.18**	**0.12**	**2.45**	**0.06**	**209**	**0.52**	**0.28**	**6.16**	**3.67**
Inferred Escape Lake Deposit	Steepledge North	0.44	0.52	0.05	0.53	0.00	150	0.26	0.21	3.14	3.14	1.87
	Steepledge South	0.74	0.84	0.07	1.15	0.00	173	0.32	0.16	3.96	3.96	2.36
	Escape South Perimeter	0.43	0.53	0.08	1.13	0.00	173	0.35	0.19	3.35	3.35	1.99
	Escape South HGZ	0.43	0.34	0.09	1.45	0.01	191	0.38	0.20	3.29	3.29	1.96
TOTAL ESCAPE LAKE DEPOSIT INFERRED RESOURCE		**3,445,179**	**0.64**	**0.73**	**0.07**	**1.13**	**0.01**	**173**	**0.33**	**0.18**	**3.75**	**3.75**

Table 14-25: Escape Lake Deposit Mineral Resource Estimate, Contained Metal by Geological Domain

Category	Geological Domain	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Escape Lake Deposit	Steepledge North	135,650	3,087	3,545	266	5,577	43	21	383	238	16,897	10,053
	Steepledge South	45,180	1,258	1,485	79	1,653	0	6	125	76	6,175	3,673
	Escape South Perimeter	1,754,080	27,083	32,687	4,689	81,633	1,970	308	6,458	3,617	213,401	127,264
	Escape South HGZ	2,351,310	95,662	124,619	11,894	249,083	5,996	560	15,424	8,085	613,007	364,380
TOTAL ESCAPE LAKE DEPOSIT INDICATED RESOURCE			**4,286,220**	**127,090**	**162,337**	**16,928**	**337,946**	**8,009**	**896**	**22,390**	**12,016**	**849,481**
Inferred Escape Lake Deposit	Steepledge North	148,609	2,119	2,462	255	2,508	0	22	394	309	14,985	8,915
	Steepledge South	2,287,589	54,498	61,920	4,869	84,680	0	396	7,321	3,771	291,351	173,329
	Escape South Perimeter	915,422	12,884	15,314	2,353	33,246	42	158	3,226	1,775	98,690	58,709
	Escape South HGZ	93,559	1,019	1,293	276	4,375	29	18	353	190	9,905	5,896
TOTAL ESCAPE LAKE DEPOSIT INFERRED RESOURCE			**3,445,179**	**70,520**	**80,989**	**7,754**	**124,809**	**71**	**595**	**11,293**	**6,046**	**414,932**

14.10 Cautionary Statement Regarding Mineral Resource Estimates

The information contained herein contains "forward-looking statements" within the meaning of applicable securities legislation, including statements regarding the potential of the Project and the Escape Lake and Current Lake Deposits and timing of technical studies and Mineral Resource Estimates. Forward-looking statements relate to information that is based on assumptions of management, forecasts of future results, and estimates of amounts not yet determinable. Any statements that express predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance are not statements of historical fact and may be "forward-looking statements." Forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements, including, without limitation: political and regulatory risks associated with mining and exploration; risks related to the maintenance of stock exchange listings; risks related to environmental regulation and liability; the potential for delays in exploration or development activities or the completion of feasibility studies; the uncertainty of profitability; risks and uncertainties relating to the interpretation of drill results, the geology, grade, and continuity of mineral deposits; risks related to the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses; results of prefeasibility and feasibility studies, and the possibility that future exploration, development or mining results will not be consistent with the Company's expectations; risks related to commodity price fluctuations; and other risks and uncertainties related to the Company's prospects, properties and business detailed elsewhere in the Company's disclosure record. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements. Investors are cautioned against attributing undue certainty to forward-looking statements. These forward-looking statements are made as of the date hereof and the Company does not assume any obligation to update or revise them to reflect new events or circumstances, except in accordance with applicable securities laws. Actual events or results could differ materially from the Company's expectations or projection.

14.11 Mineral Resource Sensitivity to Reporting Cutoff

Reports on the block models were generated to reflect the Mineral Resource sensitivity to reporting cutoff, as seen in Table 14-26 (Indicated) and Table 14-27 (Inferred).

Table 14-26: Mineral Resource Sensitivity to Reporting Cutoff, Indicated

Category	Cutoff PtEq (g/t)	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Indicated Current Lake Deposit	2.35	13,976,763	1.39	1.31	0.07	1.31	0.05	136	0.27	0.17	5.53	3.29
	2.45	13,287,229	1.44	1.36	0.07	1.34	0.05	136	0.28	0.17	5.69	3.39
	2.55	12,607,503	1.49	1.41	0.07	1.38	0.05	137	0.29	0.18	5.85	3.48
	2.65	**11,999,177**	**1.48**	**1.40**	**0.07**	**1.32**	**0.04**	**137**	**0.28**	**0.17**	**5.79**	**3.44**
	2.75	11,430,015	1.58	1.50	0.07	1.46	0.05	138	0.30	0.18	6.17	3.67
	2.85	10,887,086	1.63	1.54	0.08	1.49	0.05	138	0.31	0.18	6.33	3.77
	2.95	10,374,775	1.68	1.59	0.08	1.53	0.05	139	0.32	0.18	6.49	3.86
Indicated Escape Lake Deposit	2.35	5,025,549	0.82	1.04	0.11	2.21	0.05	201	0.48	0.26	3.32	5.58
	2.45	4,758,080	0.85	1.08	0.12	2.28	0.05	203	0.49	0.27	3.43	5.76
	2.55	4,512,057	0.88	1.13	0.12	2.35	0.06	206	0.50	0.27	3.53	5.94
	2.65	**4,286,220**	**0.92**	**1.18**	**0.12**	**2.45**	**0.06**	**209**	**0.52**	**0.28**	**6.16**	**3.67**
	2.75	4,072,334	0.95	1.22	0.12	2.49	0.06	210	0.53	0.28	3.75	6.30
	2.85	3,856,141	0.99	1.27	0.13	2.57	0.06	212	0.54	0.29	3.86	6.50
	2.95	3,632,107	1.04	1.33	0.13	2.65	0.06	214	0.56	0.30	4.00	6.72
TOTAL INDICATED	2.35	19,002,312	1.24	1.24	0.08	1.55	0.05	153	0.33	0.19	4.95	3.90
	2.45	18,045,309	1.28	1.29	0.08	1.59	0.05	154	0.34	0.20	5.09	4.01
	2.55	17,119,560	1.33	1.34	0.08	1.64	0.05	155	0.35	0.20	5.24	4.13
	2.65	**16,285,396**	**1.33**	**1.34**	**0.08**	**162**	**0.05**	**156**	**0.34**	**0.20**	**5.89**	**3.50**
	2.75	15,502,349	1.41	1.43	0.08	1.73	0.05	157	0.36	0.21	5.53	4.36
	2.85	14,743,227	1.46	1.47	0.09	1.77	0.05	157	0.37	0.21	5.68	4.48
	2.95	14,006,882	1.51	1.52	0.09	1.82	0.05	158	0.38	0.21	5.84	4.60

Table 14-27: Mineral Resource Sensitivity to Reporting Cutoff, Inferred

Category	Cutoff PtEq (g/t)	Tonnes	Pt (g/t)	Pd (g/t)	Au (g/t)	Ag (g/t)	Rh (g/t)	Co (g/t)	Cu (%)	Ni (%)	PtEq (g/t)	PdEq (g/t)
Inferred Current Lake Deposit	2.35	8,427,309	0.63	0.59	0.06	0.89	0.01	123	0.27	0.14	3.18	1.89
	2.45	7,592,293	0.65	0.61	0.06	0.91	0.01	124	0.28	0.14	3.27	1.94
	2.55	6,809,243	0.67	0.64	0.06	0.94	0.01	123	0.29	0.14	3.35	2.00
	2.65	**6,406,960**	**0.68**	**0.65**	**0.06**	**0.95**	**0.01**	**123**	**0.30**	**0.14**	**3.40**	**2.02**
	2.75	5,998,835	0.69	0.66	0.06	0.96	0.01	122	0.31	0.14	3.45	2.05
	2.85	5,623,030	0.71	0.67	0.06	0.97	0.01	123	0.31	0.14	3.49	2.08
	2.95	5,337,278	0.71	0.68	0.07	0.99	0.01	123	0.32	0.14	3.52	2.10
Inferred Escape Lake Deposit	2.35	4,742,278	0.56	0.64	0.06	1.04	0.00	164	0.29	0.17	3.40	2.02
	2.45	4,329,102	0.58	0.67	0.07	1.06	0.00	166	0.30	0.17	3.50	2.08
	2.55	3,856,130	0.61	0.70	0.07	1.08	0.00	169	0.32	0.17	3.62	2.15
	2.65	**3,445,179**	**0.64**	**0.73**	**0.07**	**1.13**	**0.00**	**173**	**0.33**	**0.18**	**3.75**	**2.23**
	2.75	3,173,845	0.65	0.75	0.07	1.11	0.00	174	0.34	0.18	3.83	2.28
	2.85	2,844,300	0.68	0.78	0.07	1.12	0.00	177	0.35	0.18	3.94	2.35
	2.95	2,601,091	0.70	0.81	0.07	1.12	0.00	179	0.35	0.18	4.04	2.40
TOTAL INFERRED	2.35	13,169,587	0.60	0.61	0.06	0.94	0.01	138	0.28	0.15	3.26	1.94
	2.45	11,921,395	0.62	0.63	0.06	0.96	0.01	139	0.29	0.15	3.35	1.99
	2.55	10,665,373	0.65	0.66	0.06	0.99	0.01	140	0.30	0.15	3.45	2.05
	2.65	**9,840,927**	**0.70**	**0.64**	**0.42**	**0.65**	**0.01**	**140**	**0.31**	**0.15**	**2.99**	**2.62**
	2.75	9,172,680	0.68	0.69	0.06	1.01	0.01	140	0.32	0.15	3.58	2.13
	2.85	8,467,330	0.70	0.71	0.06	1.02	0.01	141	0.32	0.15	3.64	2.17
	2.95	7,938,369	0.71	0.72	0.07	1.03	0.01	141	0.33	0.15	3.69	2.20

14.12 Comparison with the Previous Resource Estimate

A historical Current Lake Mineral Resource Estimate was prepared by AMEC in February 2011, reported as an Open Pit Mineral Resource Statement and an Underground Mineral Resource Statement. No historical Mineral Resource Estimate exists for the Escape Lake Deposit. The 2011 Current Lake Open Pit Mineral Resource Estimate includes a portion of the 2021 domains (Upper Current, Current, and Bridge) (Figure 14-42). The 2011 Mineral Resource Estimate used two separate PtEq formulas, one for the Open Pit Mineral Resource Estimate and another for the Underground Mineral Resource Estimate. These two formulas were incorporated into the 2021 Current Lake block model to allow for a direct Pt Eq as a cutoff (Table 14-27) comparison between the 2011 and 2021 Mineral Resource Estimates. The 2011 Pt Eq cutoff grade was 0.59 g/t for the Open Pit Mineral Resource Estimate and 1.94 g/t for the Underground Mineral Resource Estimate.

The 2011 Current Lake Underground Mineral Resource Estimate incorporates the Beaver Lake, Cloud, and a portion of the 437/SE geological domain and was not compared to the 2021 Mineral Resource Estimate (Figure 14-42) due to the significant expansion of the Mineral Resource. The 2011 Underground Mineral Resource Estimate can be seen in Table 14-29.

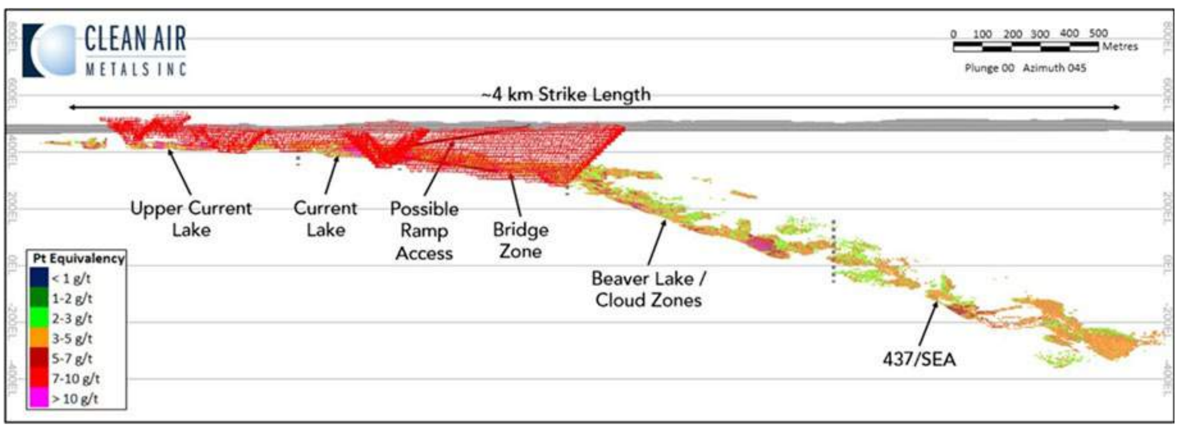


Figure 14-42: Long section view of the 2021 Current Lake Deposit geological domains and the 2011 conceptual open pit

Table 14-28: 2011 Open Pit Mineral Resource Estimate Compared to the 2021 Mineral Resource Estimate Cutoff with the Same Open Pit Wireframe, both at a Historical Pt Equivalency Cutoff of 0.59 g/t Pt Eq

2011 Open Pit Mineral Resource Estimate		Grade								Contained Metal							
Category @ Cutoff=0.59 g/t Historical Pt Eq	Tonnes (x1000)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co (g/t)	Historical Pt Eq (g/t)	Pt (koz)	Pd (koz)	Au (koz)	Ag (koz)	Cu (kt)	Ni (kt)	Co (kt)	Pt Eq (kt)
Indicated	8,460	0.98	1.04	0.07	1.5	0.25	0.18	140	2.13	282	266	18	411	21	15	1	580
Inferred	53	0.89	096	0.07	1.6	0.22	0.18	142	2.00	2	2	0	3	0	0	0	3
2020 Open Pit Mineral Resource Estimate		Grade								Contained Metal							
Category @ Cutoff=0.59 g/t Historical Pt Eq	Tonnes (x1000)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co (g/t)	Historical Pt Eq (g/t)	Pt (koz)	Pd (koz)	Au (koz)	Ag (koz)	Cu (kt)	Ni (kt)	Co (kt)	Pt Eq (kt)
Indicated	9,679	1.25	1.32	0.07	1.36	0.27	0.17	130	2.41	411	390	21	423	26	16	1	750
Inferred	0	n/a								0	0	0	0	0	0	0	0

Table 14-29: 2011 Underground Mineral Resource Estimate at a Historical Pt Equivalency Cutoff of 1.94 g/t Pt Eq

2011 Underground Mineral Resource Estimate		Grade								Contained Metal							
Category @ Cutoff=1.94 g/t Historical Pt Eq	Tonnes (x1000)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co (g/t)	Historical Pt Eq (g/t)	Pt (koz)	Pd (koz)	Au (koz)	Ag (koz)	Cu (kt)	Ni (kt)	Co (kt)	Pt Eq (kt)
Indicated	1,030	1.51	1.63	0.11	2.4	0.39	0.24	172	3.48	54	50	4	80	4	3	0	115
Inferred	212	1.29	1.40	0.09	1.9	0.34	0.23	158	3.00	10	9	1	13	1	0	0	20

14.13 Factors That May Affect the Mineral Resources

Areas of uncertainty that may materially impact the Mineral Resource Estimate include:

- Changes to long to term metal price assumptions.
- Changes to the input values for mining, processing, and general, and administrative costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.
- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social licence assumptions.

14.14 Comments on Section 14

The QP is not aware of any environmental, legal, title, taxation, socio to economic, marketing, political or other relevant factors that would materially affect the estimation of Mineral Resources that are not discussed in this Technical Report.

The QP is of the opinion that the Mineral Resources were estimated using industry to accepted practices and conform to the 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines. Technical and economic parameters and assumptions applied to the Mineral Resource Estimate are based on parameters received from the Company and reviewed within the Nordmin technical team to determine if they were appropriate.

15. MINERAL RESERVE ESTIMATE

This section is not relevant to this Technical Report.

16. MINING METHODS

This section is not relevant to this Technical Report.

17. RECOVERY METHODS

This section is not relevant to this Technical Report.

18. PROJECT INFRASTRUCTURE

This section is not relevant to this Technical Report.

19. MARKET STUDIES AND CONTRACTS

This section is not relevant to this Technical Report.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT

This section is not relevant to this Technical Report.

21. CAPITAL AND OPERATING COSTS

This section is not relevant to this Technical Report.

22. ECONOMIC ANALYSIS

This section is not relevant to this Technical Report.

23. ADJACENT PROPERTIES

This section is not relevant to this Technical Report.

24. OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this Technical Report.

25. INTERPRETATION AND CONCLUSIONS

25.1 Introduction

The QP's note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this Technical Report.

25.2 Mineral Tenure, Surface Rights, Royalties, and Agreements

The Project comprised of the Current Lake Property and the Escape Lake Property consists of 344 unpatented, single cell, multicell, and partial cell border claims (1456 cell units) covering an aggregate area of approximately 29,725 ha. The Project is subject to a 1.5% NSR on the Escape Lake Property, and a 0.5% and 3.0% NSR on portions of the Current Lake Property (Figure 4-3).

The Company, as part of the Project, has executed a definitive agreement with Benton to acquire its:

- Right to purchase 100% of Panoramic Resource's Thunder Bay North Property for C$9 million.
- Right to purchase 100% of Rio Tinto's Escape Lake Project for C$6 million.

The Company's exploration activities are located on lands which the Cooperating Participants assert are part of their traditional territory and in which the Participating First Nations assert their members hold and exercise Rights. The Company and the Cooperating Participants signed a MOA effective as of January 9, 2021.

All claims and underlying agreements are in good standing.

25.3 Geology and Mineral Resource

Mineralization discovered on the Project to date is considered to be somewhat atypical of orthomagmatic Cu-Ni sulphide deposits, in particular part of the sub-class of deposits associated with rift and flood basalts and their associated magmatic conduits (Noril'sk type) (Naldrett 2004).

The Current Lake Deposit Mineral Resource Estimate benefits from approximately 162,997 m of diamond drilling in 730 drill holes spanning from 2006 until 2020. The Escape Lake Deposit Mineral Resource Estimate benefits from approximately 40,855 m of diamond drilling in 122 drill holes spanning from 2008 until 2020. Collectively this drilling by the Company and its predecessors has led to the delineation of the Current Lake and Escape Lake Mineral Resource Estimates.

Mineralization within the Current Lake Deposit and Escape Lake Deposit are hosted within magmatic conduits comprised of melanocratic gabbro and ultramafic peridotites. Mineralization is strongly associated with sulphide abundance with the exception of the Cloud Zone within the Current Lake Deposit.

Nordmin examined and modelled the grade distributions for each of the elements. Grade distributions were created for Pd, Pt, Au, Ag, Cu, Ni, Co, and Rh. The analysis confirmed that the changes in mineralization and corresponding grade within the various conduits appear to be caused by preferential magma/fluid mixing. The higher-grade mineralization is largely settled near the lower portions of the conduits due to the high sulphide content associated with the different metals. The settling created a scenario in which the high grade mineralization is "pod"-like in nature and relatively equally spaced along the lower contact of each conduit. The material between the higher-grade pods is mineralized but with lower grades. Therefore, the higher-grade pods are connected within a lower grade matrix. As such, Nordmin created wireframe grade shells for each of the eight commodities to reflect the lithological and geochemical differences, along with sulphide abundance for the purpose of grade concentration and isolation of composites.

Mineralization wireframes were initially created on 10 m to 20 m sections and plans and adjusted between various views to edit and smooth each wireframe where required. The wireframes were permitted to follow lithological boundaries and trends where applicable. When not cutoff by drilling, the wireframes terminate at the contact of the conduit; lack of drilling or a or significant change in grade distribution, whichever was most appropriate. No wireframe overlapping exists within a given grade domain. The mineralization domain wireframes were modelled for eight grade elements, including Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh. Structural and mineralization trends were used in the interpretation and selection of block modelling parameters. A block model was built by estimating and combining block models for each domain, and the final block model has been fully validated with no material bias identified.

The use of explicit modelling allows for mineralization in context with the deposit geology and associated geochemistry to be considered.

The geological understanding of the setting (lithologies and structural) and alteration controls on mineralization is sufficient to support the estimation of Mineral Resources.

25.4 Exploration, Drilling, and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed by the Company and previous operators are appropriate for the deposit style. The programs have delineated the Current Lake and Escape Lake Deposits, as well as a number of exploration targets. Geophysical interpretations and regional surface exploration indicate the potential to discover further targets that warrant further investigation.

The quantity and quality of the lithological, collar and downhole survey data collected in the various exploration programs by various operators are sufficient to support the Mineral Resource Estimate. The collected sampling is representative of the Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh grades in the deposit, reflecting areas of higher, and lower grades. The analytical laboratories used for legacy and current assaying are well known in the industry, produce reliable data, are properly accredited, and widely used within the industry.

Nordmin is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results. In Nordmin's opinion, the drilling, core handling, logging, and sampling procedures meet, or exceed industry standards, and are adequate for the purpose of Mineral Resource Estimation.

Nordmin considers the QA/QC protocols in place for the Project to be acceptable and in line with standard industry practice. Based on the data validation and the results of the standard, blank, and duplicate analyses, Nordmin is of the opinion that the assay and bulk density databases are of sufficient quality for Mineral Resource Estimation for the Project.

25.5 Processing and Metallurgical Testing

Metallurgical testwork on samples obtained during the 2010-2011 work program was conducted at G&T Metallurgical Services (now ALS) in Kamloops, BC, and at SGS Mineral Services in Lakefield, ON. The main focus of the testwork has been the concentration of pay metals by froth flotation, but has also considered gravity recovery and magnetic separation, as well as downstream process options including the Platsol process in an effort to optimize the value of the final products.

Three reports form the basis of the technical information presented here:

- XPS; Mineralogical Report 5010809.00 for Magma Metals Limited, Qemscan Analysis of One Crushed Composite, June 8, 2010.
- G&T; Metallurgical Assessment of the Thunder Bay North Project, KM2533, Nov. 5, 2010.
- SGS; Project #12372-001 for Magma Metals Limited, The Grindability Characteristics of Samples from the Thunder Bay North Project, April 30, 2010.

25.5.1 Flotation Development

Flotation testwork was carried out at G&T with the objective of developing a flotation process to recover pay metals to a saleable concentrate and reject penalty elements, including talc minerals.

Three main flotation flowsheet options were investigated: bulk concentrate production; recovery of separate Cu-Ni and pyrite (PGM) concentrates, and separate Cu and Ni/PGM concentrates. In addition to flowsheet configuration, low-air flotation, consisting of nitrogen sparged flotation in the early stages of rougher flotation to selectively recover pyrite and pyrrhotite over Cu and Ni minerals was also evaluated. The presence of talc minerals was identified in the mineralogical study and methods of control in the testwork included the addition of a talc pre-flotation step as well as the use of starch depressants.

The highest recoveries were achieved with a bulk concentrate flowsheet and locked cycle testing was conducted to evaluate the effect of recycle streams on final concentrate grades and recoveries. Table 13-3 presents the metallurgical projection for the bulk flowsheet including a pre-flotation step to control talc. The pre-float concentrate MgO grade was measured at 25.6%, and this stream would report to final tailings.

25.5.2 Variability Testing

Five variability composites were prepared from the split core samples received at G&T. The samples represented discrete zones of varying geographical and geological properties. A summary of the head analysis for the variability samples is presented in Table 13-5. The composites varied widely in mineralization and metal grades. Total sulphur in the composites ranged from 0.8% to 17%, with pay metals varying in proportion to the sulphur.

25.6 Mineral Resource Estimate

The Mineral Resource Estimate for the Project conforms to industry best practices and is reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves and 2019 CIM Best Practice Guidelines.

Mineral Resources were classified into Measured, Indicated, and Inferred Resource categories based on geological and grade continuity, drill hole spacing, and reviewing KV. The Mineral Resource Estimate has been defined based on an applied PdEq cutoff grade to reflect processing methodology and assumed revenue streams from Pt, Pd, Au, Ag, Cu, Ni, Co, and Rh.

The Mineral Resource Estimate is based on underground mining methods and milling and flotation/cyanidation concentration processing method. Areas of uncertainty that may materially impact the Mineral Resource Estimate include:

- Changes to long-term metal price assumptions.
- Changes to the input values for mining, processing, and G&A costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.

- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social licence assumptions.

There is potential for an increase in the Mineral Resource Estimate if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories and if any categorized mineralization within the various deposits can be expanded.

25.7 Conclusions

Under the assumptions presented in this Technical Report, and based on the available data, the Mineral Resources show reasonable prospects of economic extraction. Exploration activities have shown that both the Current Lake and Escape Lake Deposits retain significant potential and additional infill drilling in the categories of Inferred and Indicated Resource is warranted.

26. RECOMMENDATIONS

26.1 Phase 1 Recommendations – Current Lake Deposit PEA

The recommended PEA of the Current Lake Deposit is predicated on incorporating both Indicated and Inferred Mineral Resources material, metallurgical test work, mine planning and a discounted cash flow model to develop a project NAV and IRR.

Table 26-1 tabulates the Phase 1 PEA recommendations which are anticipated to require a budget of C$2,849,000.

Table 26-1: Recommended Current Lake Deposit PEA Budget

Item	Units	Unit Cost	Cost (CDN $)
Approximately 5,000 m of infill/expansion drilling [1] (primarily used to support classification, metallurgy, geotechnical related work programs)	5000	$200	$1,000,000
Metallurgical and geotechnical studies including Cu-, Ni- concentrate flotation testing, PGE deportment, gravity recoverable PGE, lock cycle flotation testing, Slurry rheology and thickening (Section 26.1.1)	2	$100,000	$200,000
Environmental baseline studies (hydrogeology, water balance to support the waste management facility [“WMF”])	20	200	$250,000
Technical studies 43-101 (PEA)			$400,000
General support and administration costs, legal fees, professional fees, staff, fixed costs, etc.		40%	$740,000
Contingency (10%)		10%	$259,000
Total			**$2,849,000**

26.1.1 Recommended Metallurgical Work

A new metallurgical test program was initiated at Blue Coast Research in Parksville, BC in December 2020. The program will be representative of the Current Lake Deposit reported within the Mineral Resource Estimate presented in Section 14. The program will use a mini-bulk sample HQ split core material recovered from four new drill holes in the Bridge Zone and Beaver Lake Zone areas. The objective of the program is to advance the flowsheet development with a focus on optimizing grades and recoveries of final concentrates and providing baseline data for preliminary process engineering. Key elements of the work include:

- Mineralogical characterization of composite samples by automated SEM.
- Additional hardness testing to include SMC, BBWI, and HPGR amenability testing.
- Flotation and gravity development testwork.
- Characterization and flotation testing of geomet/variability composites.

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[1] Includes exploration drilling within the Thunder Bay North Project

26.2 Phase 2 Recommendations – Current Lake Deposit PFS

The Phase 2 recommendations are contingent upon the completion of the Phase 1 recommendations and subject to minimum NAV and IRR outcomes from the Phase 1 program and Company approval. Phase 2 recommends a PFS on the Current Lake Deposit that is predicated on additional infill drilling to finalize an Indicated Mineral Resource, metallurgical test work, mine planning and related trade-off studies and a discounted cash flow model.

Table 26-2 tabulates contingent Phase 2 PFS recommendations which are anticipated to require a budget of C$4,158,000.

Table 26-2: Recommended Current Lake Deposit PFS Budget

Item	Units	Unit Cost	Cost (CDN $)
Approximately 5,000 m of infill/expansion drilling [2](used for metallurgy, geotechnical, etc.)	5000	$200	$1,000,000
Environmental base line studies to support the environmental assessment			$150,000
WMF test work (water balance, dam location)			$250,000
Trade-off final concentrate testing			$100,000
Technical studies 43-101 (PFS)			$1,200,000
General support and administration costs, legal fees, professional fees, staff, fixed costs, etc.		40%	$1,080,000
Contingency (10%)		10%	$ 378,000
Total			**$4,158,000**

[2] Includes exploration drilling within the Thunder Bay North Project

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28. GLOSSARY

The Mineral Resources and Mineral Reserves have been classified according to CIM (CIM, 2014). Accordingly, the resources have been classified as Measured, Indicated or Inferred, the reserves have been classified as proven, and probable based on the Measured and Indicated Resources as defined below.

28.1 Mineral Resource

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

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.

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 Project. Geological evidence is derived from the 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.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade, or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the Project. Geological evidence is derived from the detailed and reliable exploration, sampling, and testing, and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

28.2 Mineral Reserve

A **Mineral Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at prefeasibility or feasibility-level as appropriate that include the application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a Mineral Reserve must be demonstrated by a prefeasibility study or feasibility study.

A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

A **Proven Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the modifying factors.

28.3 Definition of Terms

Table 28-1: Definition of Terms

Term	Definition
Assay	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure	All other expenditures not classified as operating costs.
Composite	Combining more than one sample result to give an average result over a larger distance.
Concentrate	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing	The initial process of reducing the ore particle size to render it more amenable for further processing.
Cutoff Grade (CoG)	The grade of mineralized rock, which determines as to whether or not it is economical to recover its gold content by further concentration.
Dilution	Waste, which is unavoidably mined with ore.
Dip	The angle of inclination of a geological feature/rock from the horizontal.
Fault	The surface of a fracture along which movement has occurred.
Footwall	The underlying side of an orebody or stope.
Gangue	Non-valuable components of the ore.
Grade	The measure of the concentration of gold within the mineralized rock.
Hanging wall	The overlying side of an orebody or slope.
Haulage	A horizontal underground excavation which is used to transport mined ore.
Igneous	Primary crystalline rock formed by the solidification of magma.
Kriging	An interpolation method of assigning values from samples to blocks that minimize the estimation error.
Level	A horizontal tunnel, the primary purpose is the transportation of personnel and materials.
Lithological	Geological description pertaining to different rock types.
LRP	Long Range Plan.
Material Properties	Mine properties.
Milling	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease	A lease area for which mineral rights are held.

Term	Definition
Mining Assets	The Material Properties and Significant Exploration Properties.
Ongoing Capital	Capital estimate of a routine nature, which is necessary for sustaining operations.
Ore reserve	See Mineral Reserve.
Pillar	Rock left behind to help support the excavations in an underground mine.
Sedimentary	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Shaft	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore, and waste.
Sill	A thin, tabular, horizontal to the sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Smelting	A high-temperature pyrometallurgical operation conducted in a furnace, in which the valuable metal is collected to a molten matte or dolt phase and separated from the gangue components that accumulate in a less dense molten slag phase.
Stope	The underground void created by mining.
Stratigraphy	The study of stratified rocks in terms of time and space.
Strike	The direction of the line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Sulphide	A sulphur-bearing mineral.
Tailings	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening	The process of concentrating solid particles in suspension.
Total Expenditure	All expenditures, including those of an operating and capital nature.
Variogram	A statistical representation of the characteristics (usually grade).

28.4 Abbreviations & Symbols

Table 28-2: Abbreviations and Symbols Used in this Technical Report

Abbreviation	Unit or Term
%	percent
<	less than
>	greater than
°	degree (degrees)
°C	degrees Celsius
µm	Micrometre or micron
AA	atomic absorption
AAS	Atomic absorption spectrometry
Actlabs	Activation Laboratories Ltd.
Ag	silver
Au	gold
BBWI	Bond Ball Work Index
BG	Background Grade
BHEM	Borehole Electromagnetic
BIF	banded-iron formation
CAPEX	capital expenditure
CIM	Canadian Institute of Mining, Metallurgy, and Petroleum
Clean Air or the Company	Clean Air Metals Inc.
cm	centimetre
CREAIT	Core Research Equipment and Instrument Training
CRM	certified reference material
Diamond Drilling	diamond drilling
DGPS	differential global positioning system
EBDZ	East Bay Deformation Zone
EIA	Environmental Impact Assessment
EM	electromagnetic
EMPA	electron microprobe analysis
ft	foot (feet)
ft^2	square foot (feet)
ft^3	cubic foot (feet)
g	gram
g/cm^3	grams per cubic centimetre
g/L	gram per litre
g/t	grams per tonne
g/t	grams per tonne
Ga	giga-annum (1 billion years)
gal	gallon
GEMS	GEOVIA GEMS™

Abbreviation	Unit or Term
g-mol	gram-mole
GPS	global positioning system
ha	hectare (10,000 m^2)
HGZ	High Grade Zone
HMC	heavy mineral concentrate
HPGR	High Pressure Grinding Rolls
ICP	induced couple plasma
ICP-AES	inductively coupled plasma atomic emission spectrometry
ID2	inverse-distance squared
ID3	inverse-distance cubed
IP	induced polarization
IRR	internal rate of return
ISR	inductive source resistivity
JORC	Joint Ore Reserves Committee
kg	kilogram
km	kilometre
km^2	square kilometre
kt	thousand tonnes
KV	kriging variance
L	litre
lb	pound
LG	Low Grade
LIDAR	light detection and ranging
m	metre
M	million
Ma	mega annum (1 million years)
MCR	Mid-continent rift
MENDM	Ministry of Energy, Northern Development and Mines
MG	Medium Grade
mg/L	milligrams/litre
MgO	magnesium oxide
mm	millimetre
mm^2	square millimetre
mm^3	cubic millimetre
MMR	magnetometric resistivity
MOA	Memorandum of Agreement
Moz	million troy ounces
Mt	million tonnes
MT	magnetotelluric
Mtpa	million tonnes per annum

Abbreviation	Unit or Term
MUN	Memorial University of Newfoundland
NI 43-101	Canadian National Instrument 43-101
NN	nearest neighbour
NNW	north-northwest
NSR	Net Smelter Royalty
OK	ordinary kriging
oz	troy ounce
Panoramic	Panoramic PGMs (Canada) Limited
Pb	lead
PFS	prefeasibility study
PGE	platinum group element
PGM	platinum group metal
ppb	parts per billion
ppm	parts per million
QA	quality assurance
QC	quality control
QP	Qualified Persons
Rh	rhodium
RQD	rock quality description
RTEC	Rio Tinto Exploration Canada
S	sulphur
SAG	semi-autogenous grinding
SEA	South East Anomaly
SEC	Securities and Exchange Commission
SEM-MLA	scanning electron microscopy - mineral liberation analysis
SG	specific gravity
SMC	SAG mill comminution
SRM	standard reference material
SSE	south-southeast
t	tonne (metric ton) (2,204.6 pounds)
t/d	tonnes per day
t/h	tonnes per hour
TEM	transient electromagentic
the Project	Thunder Bay North Project
US	United States
UTM	Universal Transverse Mercator
VTEM	vertical time domain electromagnetic
WMF	waste management facility
XPS	Xstrata Process Support

Appendix A: QP Certificates of Authors

CERTIFICATE OF QUALIFIED PERSON

I, Glen Kuntz, P. Geo., of Thunder Bay, Ontario do hereby certify:

1. I am the Consulting Specialist – Geology/Mining with Nordmin Engineering Ltd. with a business address at 160 Logan Ave., Thunder Bay, Ontario.
2. This certificate applies to the Technical Report titled "NI 43-101 Technical Report and Mineral Resource Estimate for the Thunder Bay North Project, Thunder Bay, Ontario" with a Mineral Resource Effective Date of January 18, 2021 (the "Technical Report").
3. I am a graduate of the University of Manitoba, 1991 with a Bachelor of Science in Geology.
4. I am a member in good standing of the Association of Professional Geoscientist of Ontario and registered as a Professional Geoscientist, license number 0475.
5. My relevant experience includes 30 years of experience in exploration, operations and resource estimations. I am a "Qualified Person" for the purposes of Canadian National Instrument 43-101 ("NI 43-101" or the "Instrument").
6. My most recent personal inspection of the Thunder Bay North Project, located 50 km northeast of the city of Thunder Bay, within the Thunder Bay Mining Division, Ontario, Canada was October 20 to October 21, 2020 inclusive.
7. I am responsible for the entirety of this Technical Report, excepting Section 13 and its related portion of Sections 1, 25 and 26.
8. I am independent of Clean Air Metals Inc., as defined by Section 1.5 of the Instrument.
9. I have read the NI 43-101 reporting requirements and the entirety of the Technical Report, for which I am responsible, has been prepared in accordance with the Instrument and Form 43-101F1.
10. As of the date of this certificate, to the best of my knowledge, information, and belief, the Sections of the Technical Report that I am responsible for, contain all scientific and technical information relating to the Thunder Bay North Project that is required to be disclosed to make the Technical Report not misleading.
11. I have no prior involvement with the Thunder Bay North Project that is the subject of the Technical Report.

Signed and dated this 3rd day of March 2021, at Thunder Bay, Ontario.

"Original document signed and stamped by Glen Kuntz, P.Geo."

*Glen Kuntz*______________________________

Glen Kuntz, P.Geo.
Consulting Specialist – Geology/Mining
Nordmin Engineering Ltd.

CERTIFICATE OF QUALIFIED PERSON

I, Lyn Jones, P. Eng., of Peterborough, Ontario do hereby certify:

1. I am the Senior Consultant with M.Plan International Limited with a business address at 900 – 390 Bay Street, Toronto, ON, M5H2Y2.
2. This certificate applies to the Technical Report titled "NI 43-101 Technical Report and Mineral Resource Estimate for the Thunder Bay North Project, Thunder Bay, Ontario" with a Mineral Resource Effective Date of January 18, 2021 (the "Technical Report").
3. I graduated from the University of British Columbia with a Bachelor's of Applied Science in 1996, and a Master's of Applied Science in 1998.
4. I am registered as a Professional Engineer in the province of Ontario (PEO licence #100067095).
5. I have practiced my profession continuously for 23 years. I have been directly involved with base and precious metals projects in the mining sector with experience including metallurgical testwork, flowsheet development, process engineering, and plant commissioning. I am a "Qualified Person" for the purposes of Canadian National Instrument 43-101 ("NI 43-101" or the "Instrument").
6. I have not visited the Thunder Bay North Project, located 50 km northeast of the city of Thunder Bay, within the Thunder Bay Mining Division, Ontario, Canada.
7. I am responsible for Section 13 of this Technical Report, and its related portion of Sections 1, 25 and 26.
8. I am independent of Clean Air Metals Inc., as defined by Section 1.5 of the Instrument.
9. I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.
10. As of the date of this certificate, to the best of my knowledge, information, and belief, Section 13 of the Technical Report that I am responsible for, contains all scientific and technical information relating to the Thunder Bay North Project that is required to be disclosed to make the Technical Report not misleading.
11. I have no prior involvement with the Thunder Bay North Project that is the subject of the Technical Report.

Signed and dated this 3rd day of March 2021, at Thunder Bay, Ontario.

"Original document signed and stamped by Lyn Jones, P. Eng."
Lyn Jones
Lyn Jones, P. Eng.
Senior Consultant
M.Plan International Limited

Appendix B: Claims List

Claim Number	Claim Type	Status	Anniversary	Holder	Property
101134	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101250	Boundary Cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101432	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101637	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101666	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101693	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
102927	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
102928	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116182	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116183	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116301	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116302	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116407	Boundary Cell	Active	2/22/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116425	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116691	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
116901	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
117612	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
117647	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
117705	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
117728	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
117800	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
118027	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
118029	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
121035	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
121768	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
121769	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
122345	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
123091	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
123102	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
123782	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
123805	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
124455	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
125096	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
125800	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
129668	Single Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
151708	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
151710	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
152257	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
152337	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
152410	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
159541	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
160892	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
160893	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
160960	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
161530	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
161570	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
165526	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
165634	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
166320	Boundary Cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
166844	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
166891	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
167524	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
167572	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
168268	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
168298	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
168344	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
178396	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
178969	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
178970	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181023	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181050	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181051	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181070	Boundary Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181116	Single Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
181131	Single Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
182507	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
183039	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
188462	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
189173	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
194216	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
194293	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
194299	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
195625	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
195640	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
196201	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
196219	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
196931	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
197514	Single Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
198238	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
198239	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
204958	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205601	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205643	Boundary Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205646	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205648	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205671	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
205703	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
206250	Single Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
206376	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
214782	Single Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
214856	Boundary Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
215006	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
215778	Single Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
216406	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
216430	Boundary Cell	Active	2/22/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
217117	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
224868	Single Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
225627	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
225654	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
227054	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
231661	Single Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
232906	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
232907	Single Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
232909	Boundary Cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
233597	Single Cell	Active	11/13/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
233669	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
234935	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
234975	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235021	Single Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235028	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235037	Single Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235042	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235578	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235602	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235617	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235620	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
235673	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
262217	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
262831	Boundary Cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
262834	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
263636	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264164	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264169	Boundary Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264218	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264280	Boundary Cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264289	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264846	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264865	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264867	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
264936	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
265645	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
265646	Boundary Cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
266305	Boundary Cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
268916	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
269002	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
269003	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
269557	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
269667	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
270278	Boundary Cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
270280	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
271564	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
271565	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
271614	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
271635	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
271682	Single Cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
272239	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
272279	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
280368	Single Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
280973	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
280974	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
283738	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284283	Boundary Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284317	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284318	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284351	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284355	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
284372	Boundary Cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
286362	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
289670	Single Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
289672	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
290396	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291094	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291102	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291104	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291661	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291663	Boundary Cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
291686	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
292364	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
293680	Boundary Cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
298270	Boundary Cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
298876	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
298877	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
320950	Boundary Cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
327471	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
328881	Single Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
328882	Single Cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
329443	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
329476	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
330252	Boundary Cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
330825	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
330854	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
330870	Boundary Cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
330893	Boundary Cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
341269	Single Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
343249	Boundary Cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
343299	Boundary Cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
343300	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
344610	Boundary Cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
345300	Boundary Cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538167	Multi-cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538168	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538169	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538170	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538171	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538172	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538173	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538174	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538175	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538176	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538177	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538178	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538179	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538180	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538181	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538182	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538183	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538184	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538185	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538192	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538193	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538194	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538195	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538196	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538197	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538198	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538199	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538200	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538201	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538202	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538234	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538235	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538236	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538237	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538238	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538239	Multi-cell	Active	10/7/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
538240	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538241	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538243	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538244	Multi-cell	Active	10/27/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538245	Multi-cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538246	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538247	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538248	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538249	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538250	Multi-cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538251	Multi-cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538252	Multi-cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538253	Multi-cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538254	Multi-cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538255	Multi-cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538256	Multi-cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538258	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538259	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538260	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538261	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538262	Multi-cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538263	Multi-cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538264	Multi-cell	Active	12/14/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538265	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538266	Multi-cell	Active	10/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538267	Multi-cell	Active	4/3/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538268	Multi-cell	Active	7/30/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538269	Multi-cell	Active	11/13/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538270	Multi-cell	Active	11/13/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538271	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538272	Multi-cell	Active	5/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538273	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538274	Multi-cell	Active	3/12/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538275	Multi-cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538276	Multi-cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538277	Multi-cell	Active	5/10/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538278	Multi-cell	Active	10/19/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538279	Multi-cell	Active	5/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538280	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538281	Multi-cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538282	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538283	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538284	Multi-cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538285	Multi-cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538286	Multi-cell	Active	10/23/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
538287	Multi-cell	Active	11/13/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538288	Multi-cell	Active	11/13/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538289	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538290	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538309	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538310	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538321	Multi-cell	Active	5/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538324	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538338	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538339	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538346	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538356	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538357	Multi-cell	Active	7/5/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538358	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538359	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538360	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538361	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538362	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538363	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538364	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538365	Multi-cell	Active	5/22/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538366	Multi-cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538392	Multi-cell	Active	1/31/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538393	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538394	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538395	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538396	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538397	Multi-cell	Active	5/28/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538398	Multi-cell	Active	11/26/2023	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
538399	Multi-cell	Active	2/7/2024	(100) PANORAMIC PGMS (CANADA) LIMITED	Current Lake Property
101168	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
117636	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
117637	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
123686	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
151693	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
151694	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
151695	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
181106	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
198196	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
205637	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
216993	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
235011	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
264188	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
264189	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
271671	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property

Claim Number	Claim Type	Status	Anniversary	Holder	Property
271672	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
284276	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
284277	Single Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
291084	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
342702	Boundary Cell	Active	8/18/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
117648	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
117726	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
118051	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
121742	Single Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
121743	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
123785	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
160876	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
166873	Single Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
168872	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
168898	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
181115	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
198206	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
207686	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
215058	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
217068	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
270235	Single Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
272284	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
291098	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
320906	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
330939	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
341268	Boundary Cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
538449	Multi-cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
538450	Multi-cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property
538451	Multi-cell	Active	2/20/2023	(100) BENTON RESOURCES INC.	Escape Lake Property

Appendix C: QA/QC Charts for the Standards and Blanks

List of Figures

CURRENT LAKE DEPOSIT 5

Standards 5

Figure 1: Current Lake Deposit standard AMIS056 Pt (g/t) 5

Figure 2: Current Lake Deposit standard AMIS056 Pd (g/t) 5

Figure 3: Current Lake Deposit standard AMIS056 Cu (g/t) 6

Figure 4: Current Lake Deposit standard AMIS056 Ni (g/t) 6

Figure 5: Current Lake Deposit standard AMIS064 Pt (g/t) 7

Figure 6: Current Lake Deposit standard AMIS064 Pd (g/t) 7

Figure 7: Current Lake Deposit standard AMIS073 Pt (g/t) 8

Figure 8: Current Lake Deposit standard AMIS073 Pd (g/t) 8

Figure 9: Current Lake Deposit standard AMIS073 Co (g/t) 9

Figure 10: Current Lake Deposit standard AMIS093 Pt (g/t) 9

Figure 11: Current Lake Deposit standard AMIS093 Pd (g/t) 10

Figure 12: Current Lake Deposit standard AMIS093 Cu (g/t) 10

Figure 13: Current Lake Deposit standard AMIS093 Ni (g/t) 11

Figure 14: Current Lake Deposit standard AMIS093 Co (g/t) 11

Figure 15: Current Lake Deposit standard AMIS0099 Rh (g/t) 12

Figure 16: Current Lake Deposit standard AMIS0124 Pt (g/t) 12

Figure 17: Current Lake Deposit standard AMIS0124 Pd (g/t) 13

Figure 18: Current Lake Deposit standard AMIS0124 Cu (g/t) 13

Figure 19: Current Lake Deposit standard AMIS0124 Ni (g/t) 14

Figure 20: Current Lake Deposit standard GBM306-12 Pt (g/t) 14

Figure 21: Current Lake Deposit standard GBM306-12 Ni (g/t) 15

Figure 22: Current Lake Deposit standard GBM398-4 Cu (g/t) 15

Figure 23: Current Lake Deposit standard GBM398-4 Ni (g/t) 16

Figure 24: Current Lake Deposit standard GBM908-10 Cu (g/t) 16

Figure 25: Current Lake Deposit standard GBM908-10 Ni (g/t) 17

Figure 26: Current Lake Deposit standard GBM908-10 Co (g/t) 17

Figure 27: Current Lake Deposit standard GBM908-10 Ag (g/t) 18

Figure 28: Current Lake Deposit standard Oreas 24P Cu (g/t) 18

Figure 29: Current Lake Deposit standard Oreas 24P Ni (g/t) 19

Figure 30: Current Lake Deposit standard Oreas 45c Pt (g/t) 19
Figure 31: Current Lake Deposit standard Oreas 45c Pd (g/t)........ 20
Figure 32: Current Lake Deposit standard Oreas 45P Pt (g/t) 20
Figure 33: Current Lake Deposit standard Oreas 45P Pd (g/t) 21
Figure 34: Current Lake Deposit standard Oreas 45P Cu (g/t) 21
Figure 35: Current Lake Deposit standard Oreas 45P Ni (g/t)........ 22
Figure 36: Current Lake Deposit standard Oreas 683 Rh (g/t) 22
Figure 37: Current Lake Deposit standard Oreas 684 Rh (g/t) 23
Figure 38: Current Lake Deposit standard Oreas 904 Au (g/t) 23
Figure 39: Current Lake Deposit standard PGMS-9 Pt (g/t) 24
Figure 40: Current Lake Deposit standard PGMS-9 Pd (g/t)........ 24
Figure 41: Current Lake Deposit standard PGMS-9 Au (g/t) 25
Figure 42: Current Lake Deposit standard PGMS-13 Pt (g/t) 25
Figure 43: Current Lake Deposit standard PGMS-13 Pd (g/t)........ 26
Figure 44: Current Lake Deposit standard PGMS-13 Au (g/t) 26
Figure 45: Current Lake Deposit standard PGMS-14 Pt (g/t) 27
Figure 46: Current Lake Deposit standard PGMS-14 Pd (g/t)........ 27
Figure 47: Current Lake Deposit standard PGMS-14 Au (g/t) 28
Figure 48: Current Lake Deposit standard PGMS-15 Pt (g/t) 28
Figure 49: Current Lake Deposit standard PGMS-15 Pd (g/t)........ 29
Figure 50: Current Lake Deposit standard PGMS-15 Au (g/t) 29
Figure 51: Current Lake Deposit standard PGMS-16 Pt (g/t) 30
Figure 52: Current Lake Deposit standard PGMS-16 Pd (g/t)........ 30
Figure 53: Current Lake Deposit standard PGMS-16 Au (g/t) 31
Figure 54: Current Lake Deposit standard PGMS-17 Pt (g/t) 31
Figure 55: Current Lake Deposit standard PGMS-17 Pd (g/t)........ 32
Figure 56: Current Lake Deposit standard PGMS-17 Au (g/t) 32
Figure 57: Current Lake Deposit standard PGMS-19 Pt (g/t) 33
Figure 58: Current Lake Deposit standard PGMS-19 Pd (g/t)........ 33
Figure 59: Current Lake Deposit standard PGMS-19 Au (g/t) 34
Blanks........35
Figure 60: Current Lake Deposit BL08 coarse blanks for Cu (g/t)........ 35
Figure 61: Current Lake Deposit BL08 coarse blanks for Ni (g/t) 35

Figure 62: Current Lake Deposit BL08 coarse blanks for Ag (g/t) 36
Figure 63: Current Lake Deposit BL08 coarse blanks for Au (g/t) 36
Figure 64: Current Lake Deposit BL09 coarse blanks for Cu (g/t) 37
Figure 65: Current Lake Deposit BL09 coarse blanks for Ni (g/t) 37
Figure 66: Current Lake Deposit BL09 coarse blanks for Ag (g/t) 38
Figure 67: Current Lake Deposit BL09 coarse blanks for Au (g/t) 38
Figure 68: Current Lake Deposit BL12 coarse blanks for Pt (g/t) 39
Figure 69: Current Lake Deposit BL12 coarse blanks for Pd (g/t) 39
Figure 70: Current Lake Deposit BL12 coarse blanks for Cu (g/t) 40
Figure 71: Current Lake Deposit BL12 coarse blanks for Ni (g/t) 40
Figure 72: Current Lake Deposit BL12 coarse blanks for Ag (g/t) 41
Figure 73: Current Lake Deposit BL12 coarse blanks for Au (g/t) 41
Figure 74: Current Lake Deposit Blank coarse blanks for Pt (g/t) 42
Figure 75: Current Lake Deposit Blank coarse blanks for Pd (g/t) 42
Figure 76: Current Lake Deposit Blank coarse blanks for Rh (g/t) 43
ESCAPE LAKE DEPOSIT 44
Standards 44
Figure 77: Escape Lake Deposit standard AMIS0060 Cu (g/t) 44
Figure 78: Escape Lake Deposit standard AMIS0060 Ni (g/t) 44
Figure 79: Escape Lake Deposit standard AMIS0064 Pt (g/t) 45
Figure 80: Escape Lake Deposit standard AMIS0064 Pd (g/t) 45
Figure 81: Escape Lake Deposit standard AMIS0073 Pt (g/t) 46
Figure 82: Escape Lake Deposit standard AMIS0073 Pd (g/t) 46
Figure 83: Escape Lake Deposit standard AMIS0073 Co (g/t) 47
Figure 84: Escape Lake Deposit standard AMIS0093 Pt (g/t) 47
Figure 85: Escape Lake Deposit standard AMIS0093 Pd (g/t) 48
Figure 86: Escape Lake Deposit standard AMIS0093 Cu (g/t) 48
Figure 87: Escape Lake Deposit standard AMIS0093 Ni (g/t) 49
Figure 88: Escape Lake Deposit standard AMIS0093 Co (g/t) 49
Figure 89: Escape Lake Deposit standard AMIS0099 Rh (g/t) 50
Figure 90: Escape Lake Deposit standard AMIS0499 Rh (g/t) 50
Figure 91: Escape Lake Deposit standard Oreas 602 Cu (g/t) 51
Figure 92: Escape Lake Deposit standard Oreas 602 Ni (g/t) 51

Figure 93: Escape Lake Deposit standard Oreas 602 Ni (g/t) 52
Figure 94: Escape Lake Deposit standard Oreas 681 Rh (g/t) 52
Figure 95: Escape Lake Deposit standard Oreas 682 Rh (g/t) 53
Blanks 54
Figure 96: Escape Lake Deposit BL114 coarse blanks Cu (g/t) 54
Figure 97: Escape Lake Deposit BL114 coarse blanks Ni (g/t) 54
Figure 98: Escape Lake Deposit BL114 coarse blanks Ag (g/t) 55
Figure 99: Escape Lake Deposit BL114 coarse blanks Au (g/t) 55
Figure 100: Escape Lake Deposit Blank coarse blanks Pt (g/t) 56
Figure 101: Escape Lake Deposit Blank coarse blanks Pd (g/t) 56
Figure 102: Escape Lake Deposit Blank coarse blanks Cu (g/t) 57
Figure 103: Escape Lake Deposit Blank coarse blanks Ni (g/t) 57
Figure 104: Escape Lake Deposit Blank coarse blanks Ag (g/t) 58
Figure 105: Escape Lake Deposit Blank coarse blanks Au (g/t) 58
Figure 106: Escape Lake Deposit Blank coarse blanks Rh (g/t) 59

CURRENT LAKE DEPOSIT

Standards

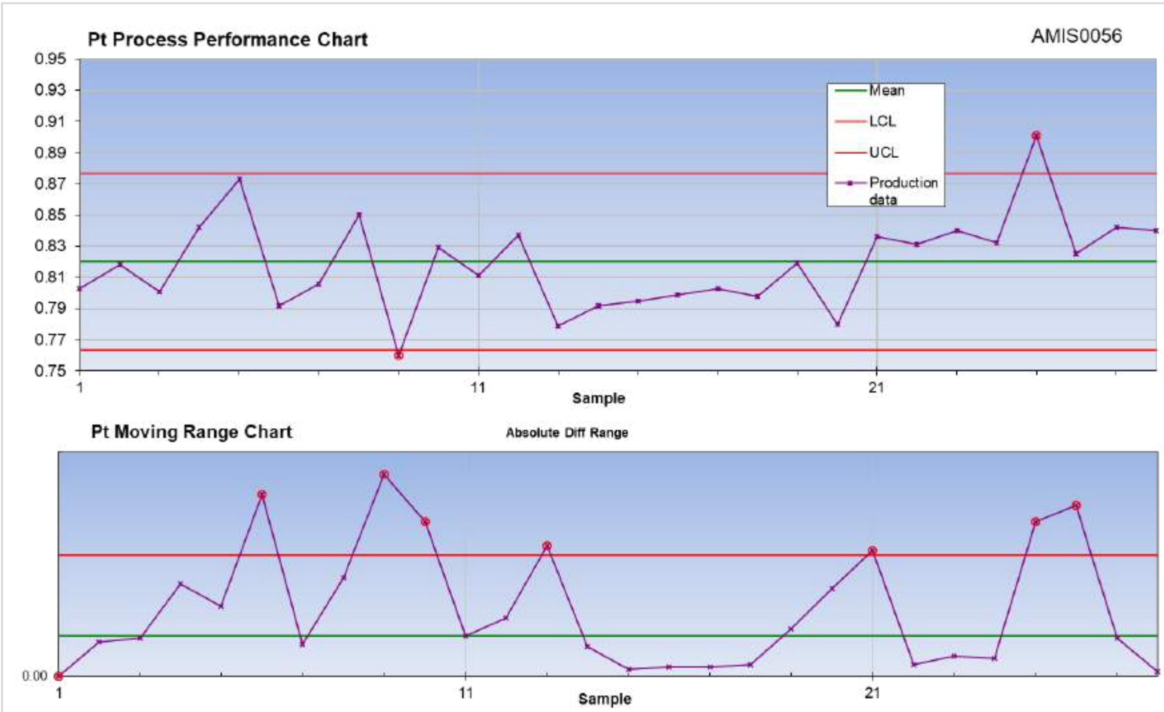


Figure 1: Current Lake Deposit standard AMIS056 Pt (g/t)

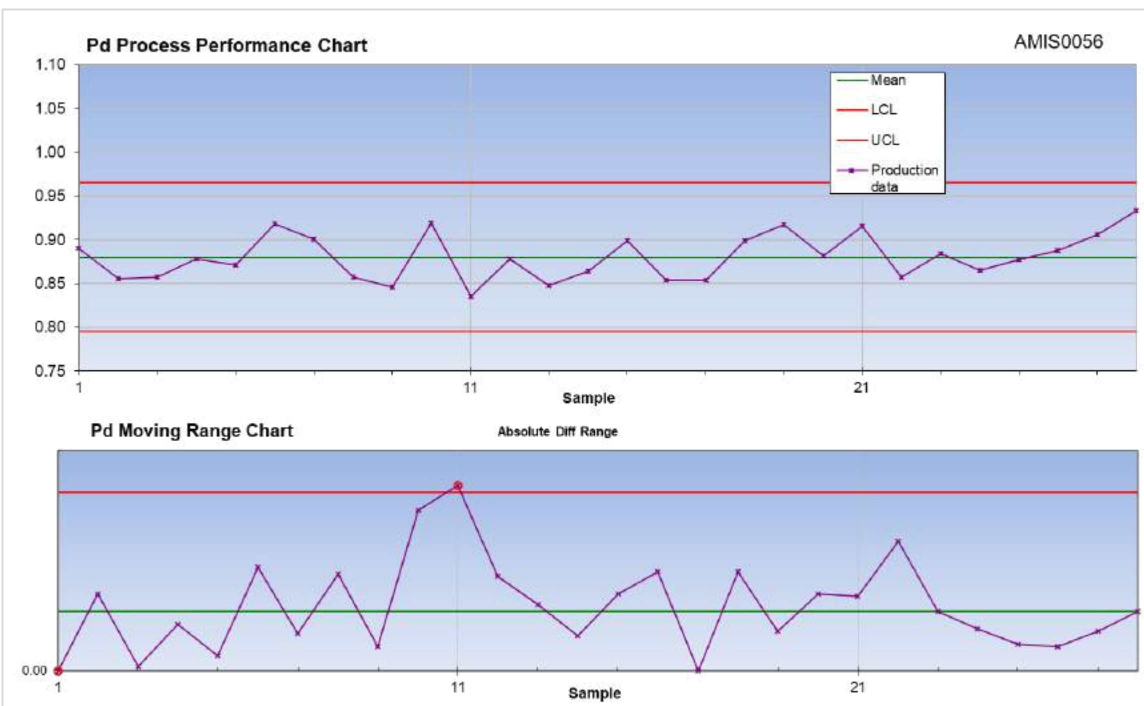


Figure 2: Current Lake Deposit standard AMIS056 Pd (g/t)

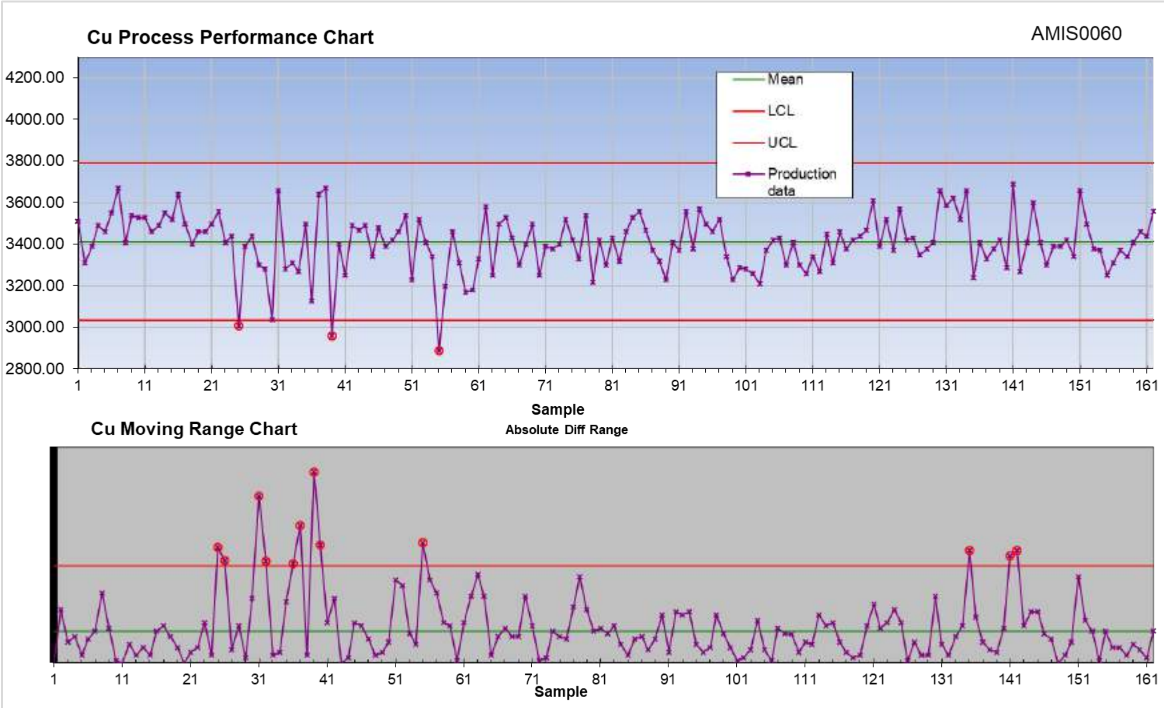


Figure 3: Current Lake Deposit standard AMIS056 Cu (g/t)

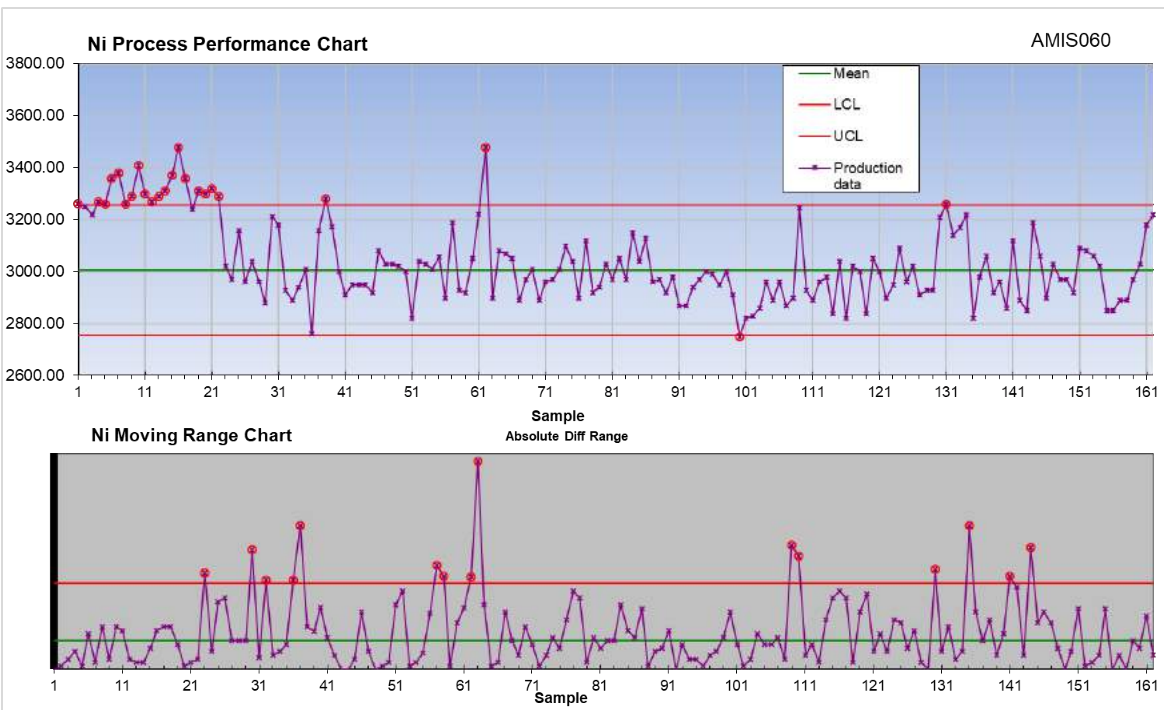


Figure 4: Current Lake Deposit standard AMIS056 Ni (g/t)

Figure 5: Current Lake Deposit standard AMIS064 Pt (g/t)

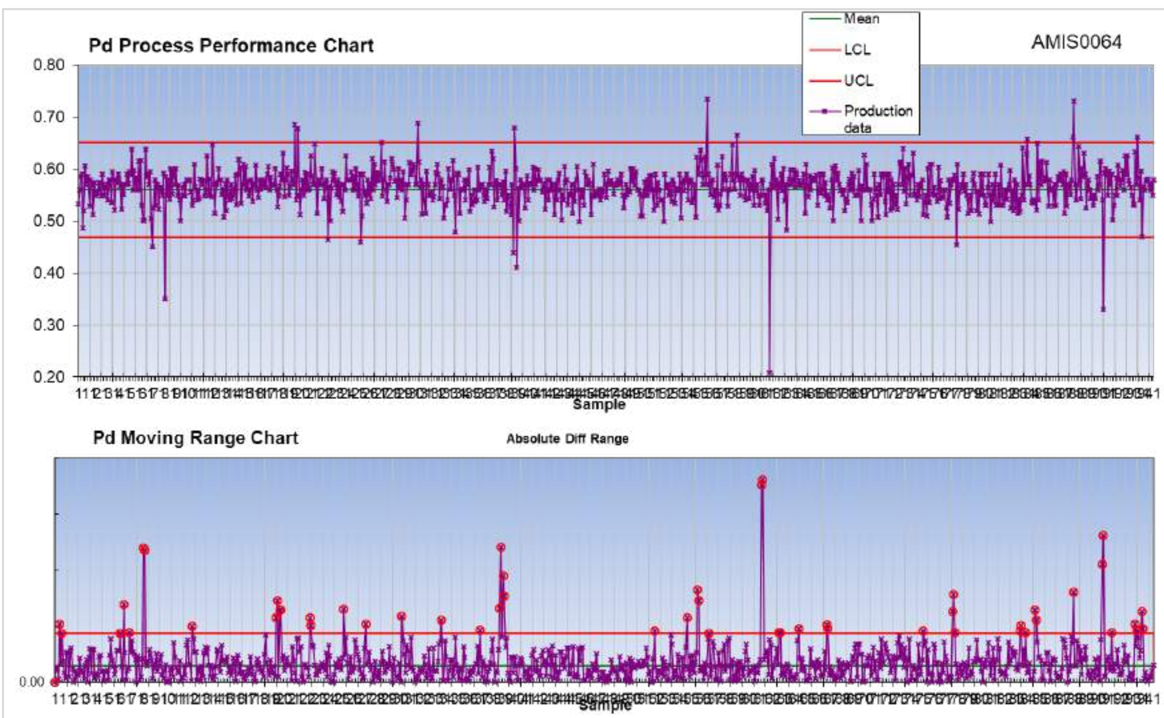


Figure 6: Current Lake Deposit standard AMIS064 Pd (g/t)

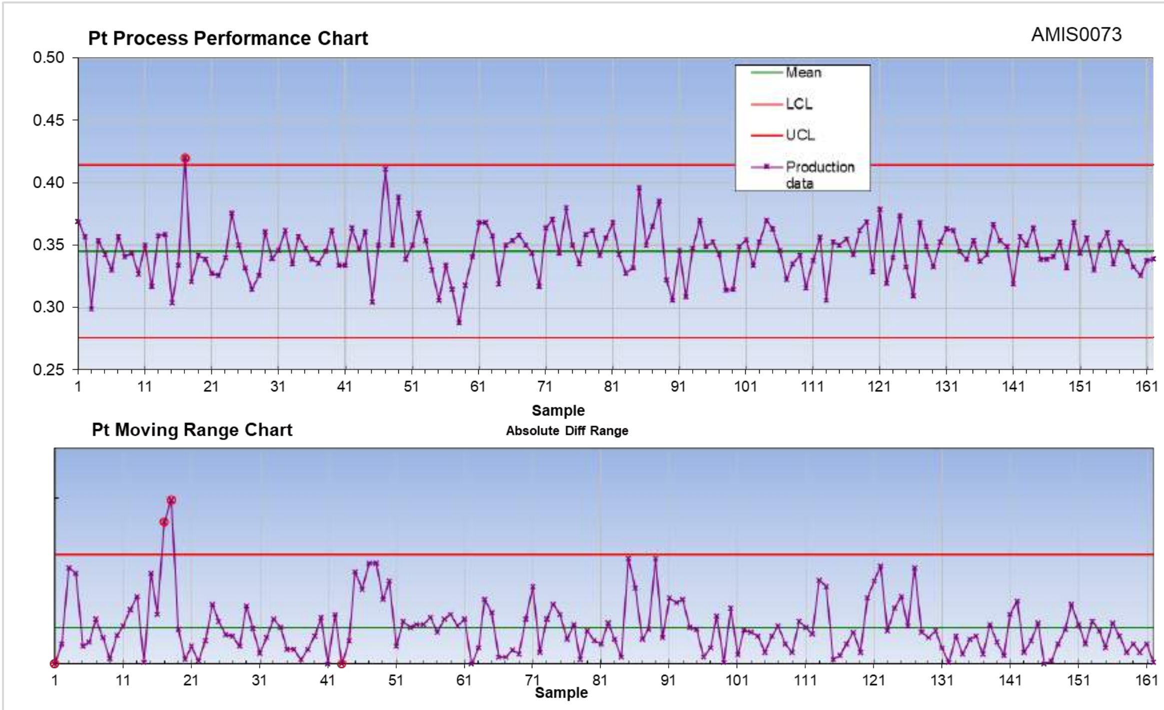


Figure 7: Current Lake Deposit standard AMIS073 Pt (g/t)

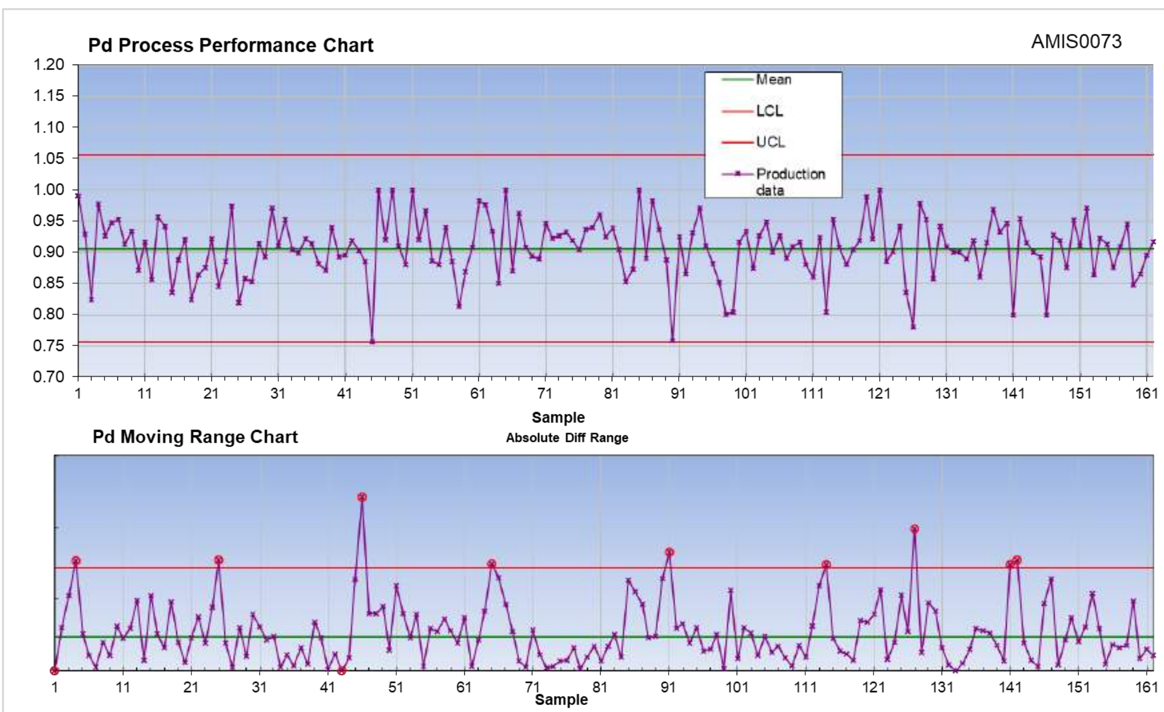


Figure 8: Current Lake Deposit standard AMIS073 Pd (g/t)

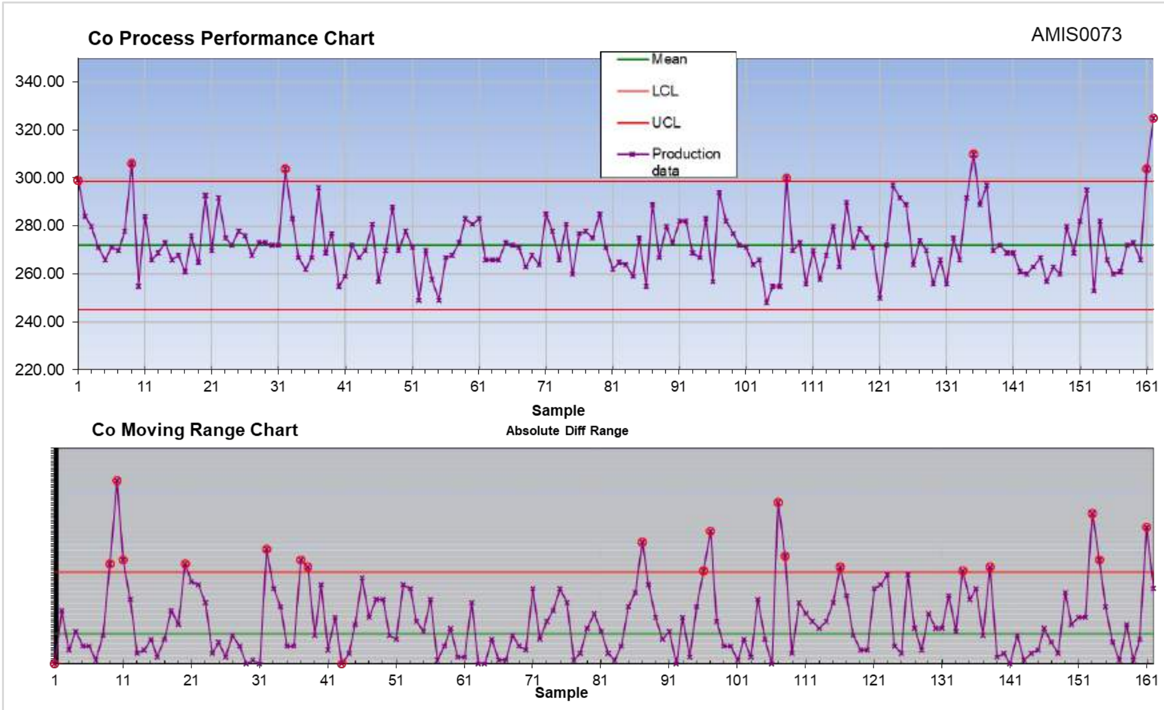


Figure 9: Current Lake Deposit standard AMIS073 Co (g/t)

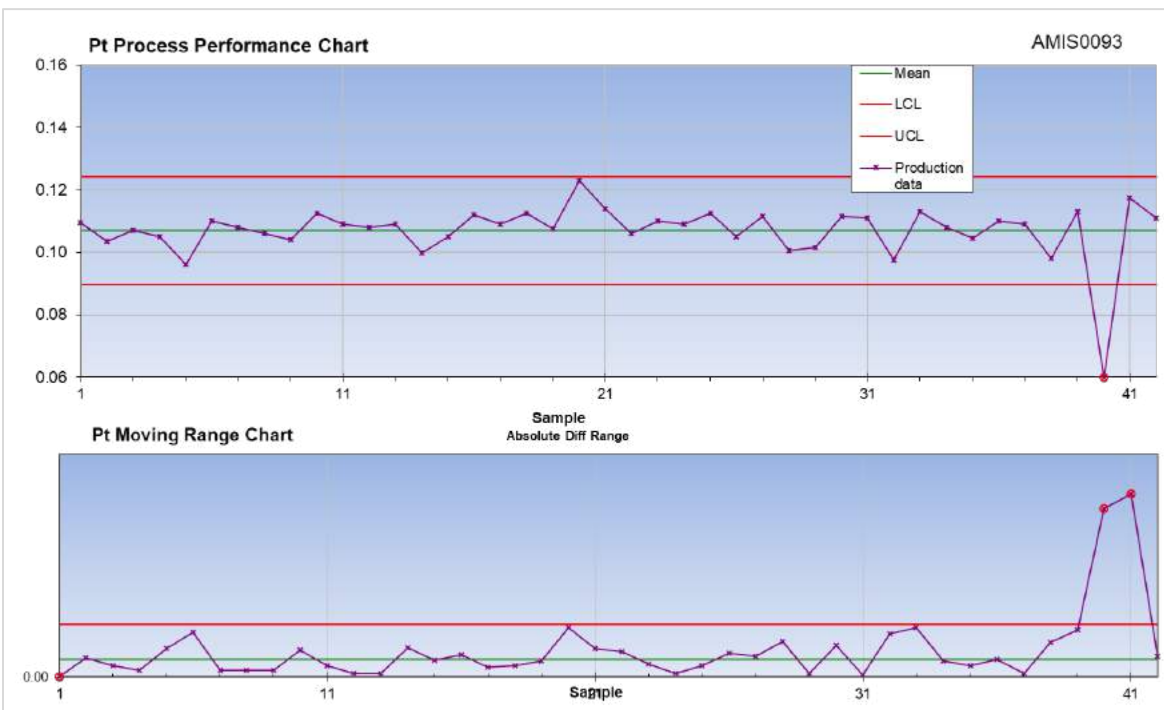


Figure 10: Current Lake Deposit standard AMIS093 Pt (g/t)

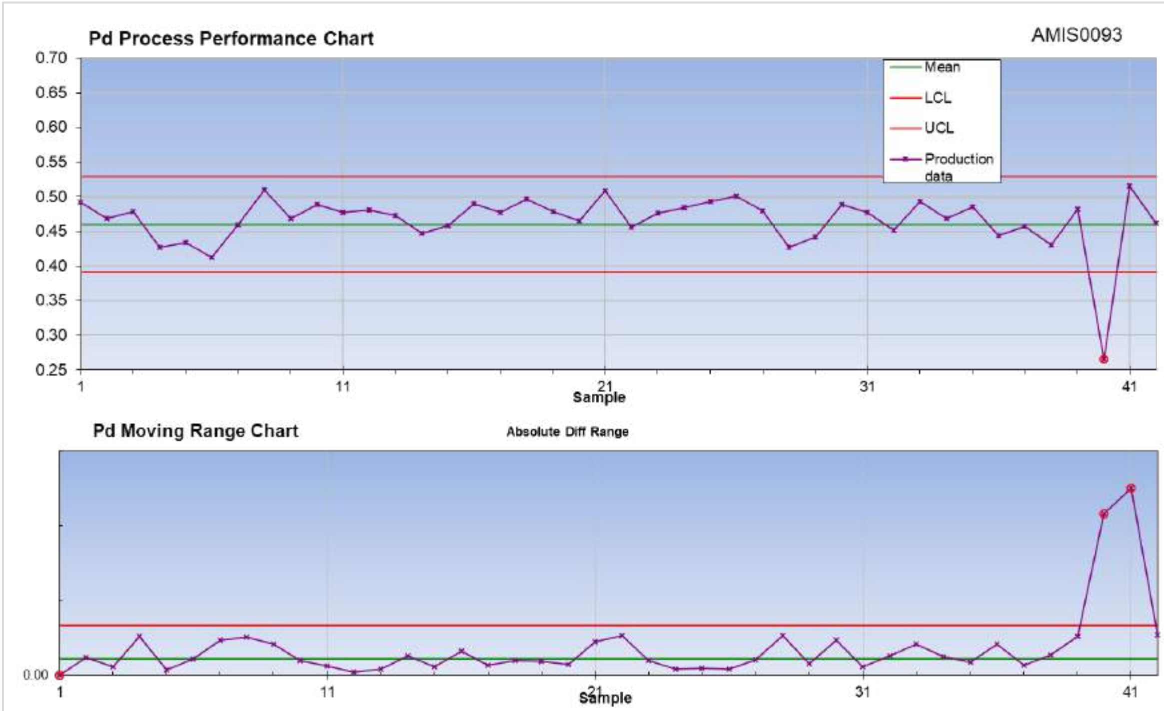


Figure 11: Current Lake Deposit standard AMIS093 Pd (g/t)

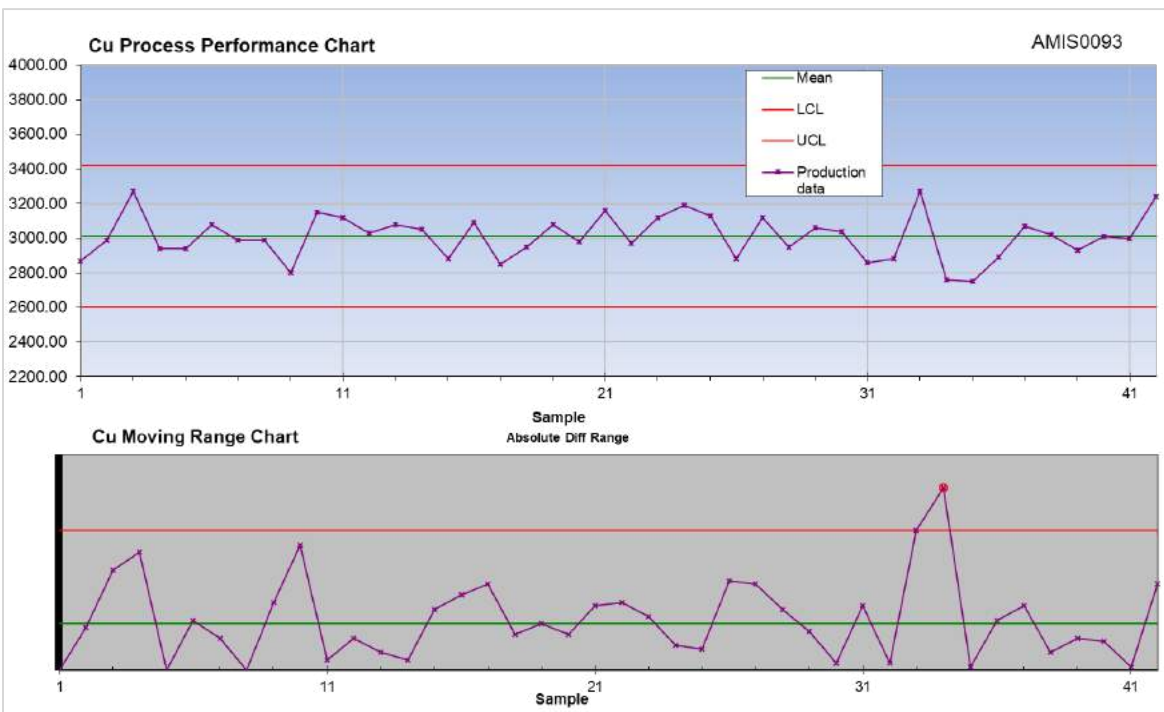


Figure 12: Current Lake Deposit standard AMIS093 Cu (g/t)

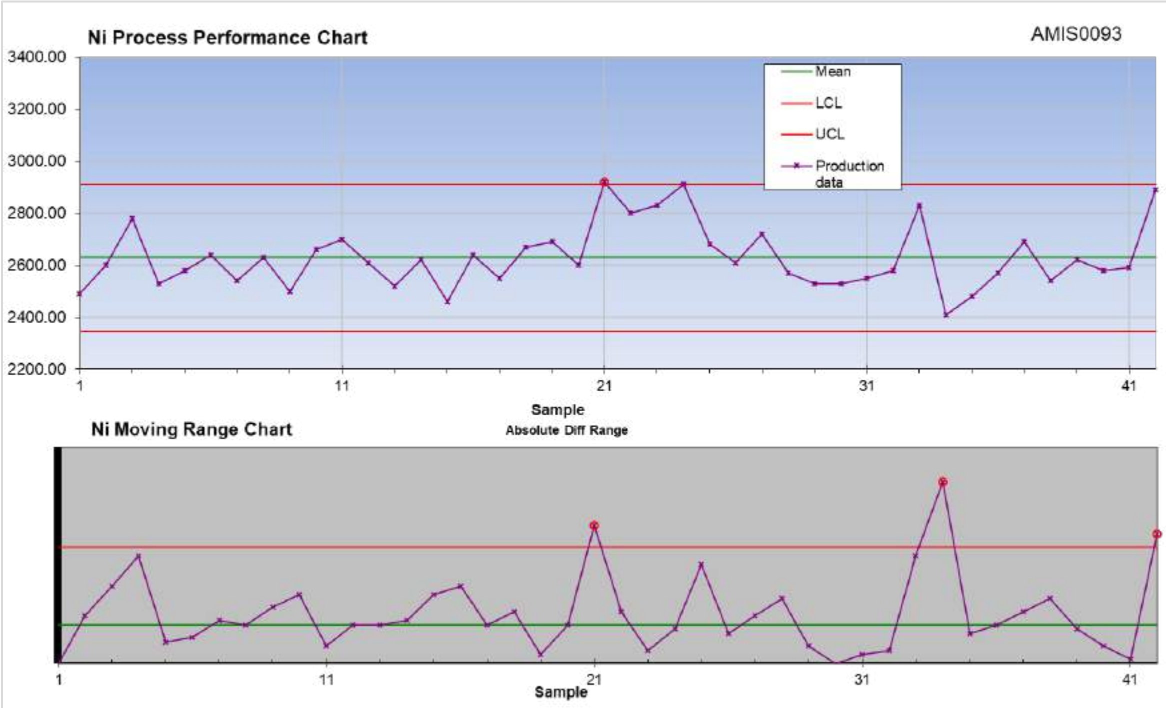


Figure 13: Current Lake Deposit standard AMIS093 Ni (g/t)

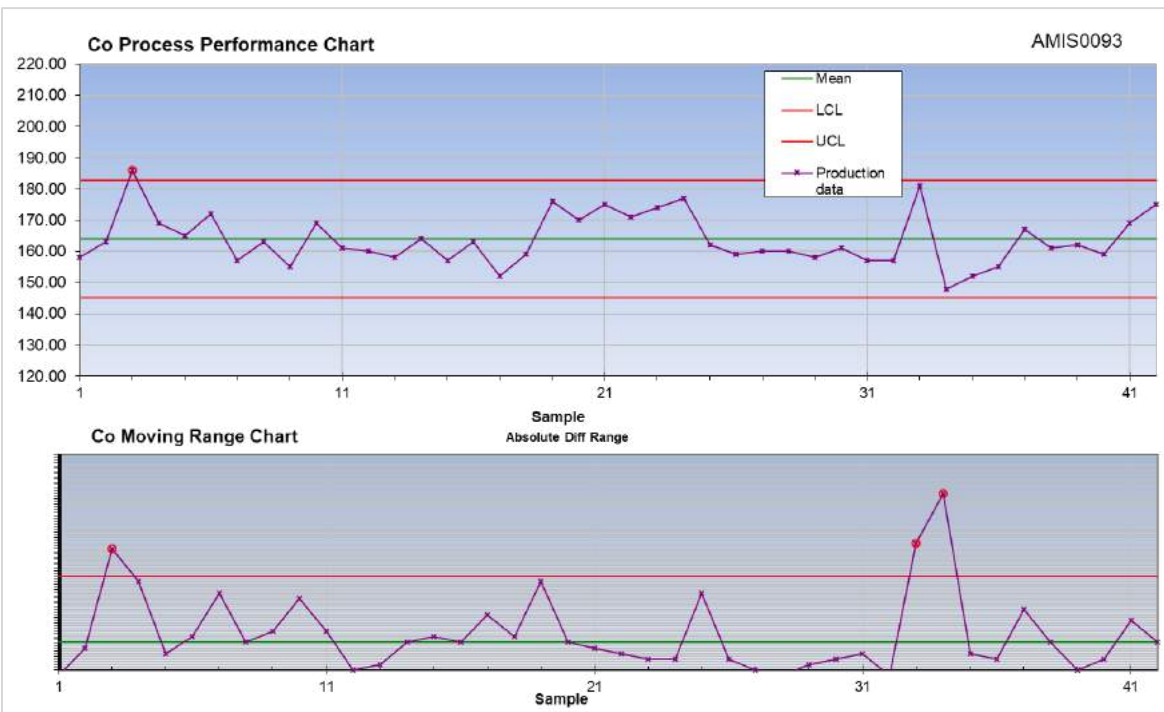


Figure 14: Current Lake Deposit standard AMIS093 Co (g/t)

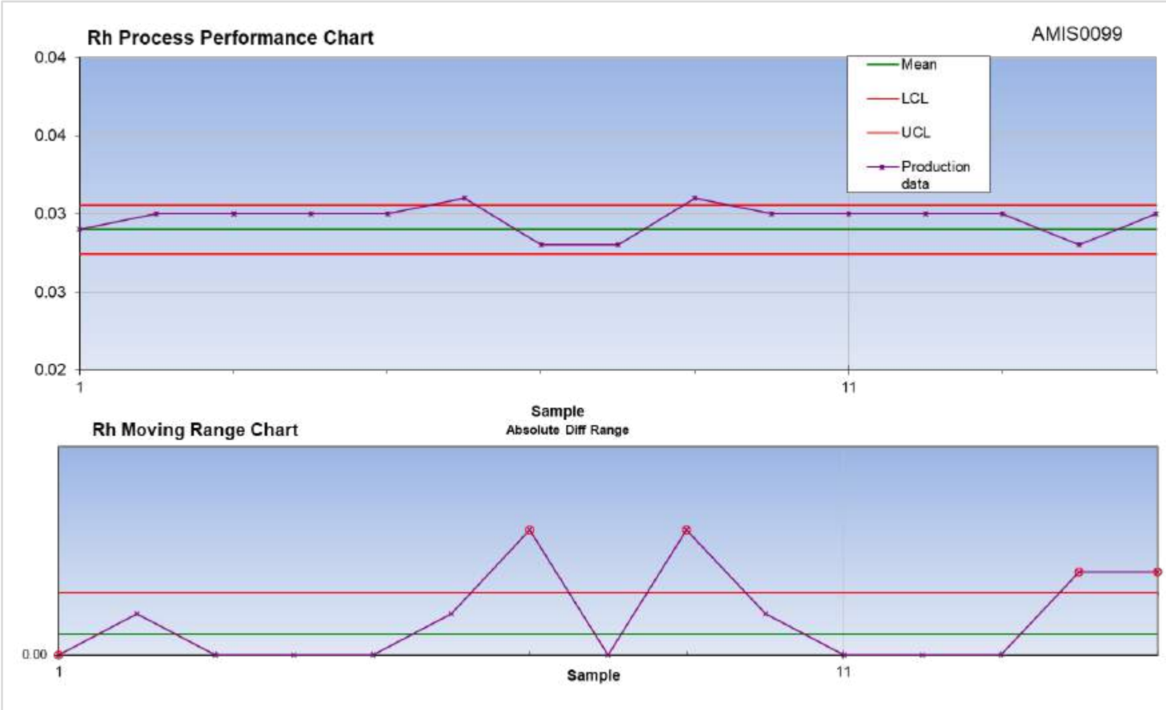


Figure 15: Current Lake Deposit standard AMIS0099 Rh (g/t)

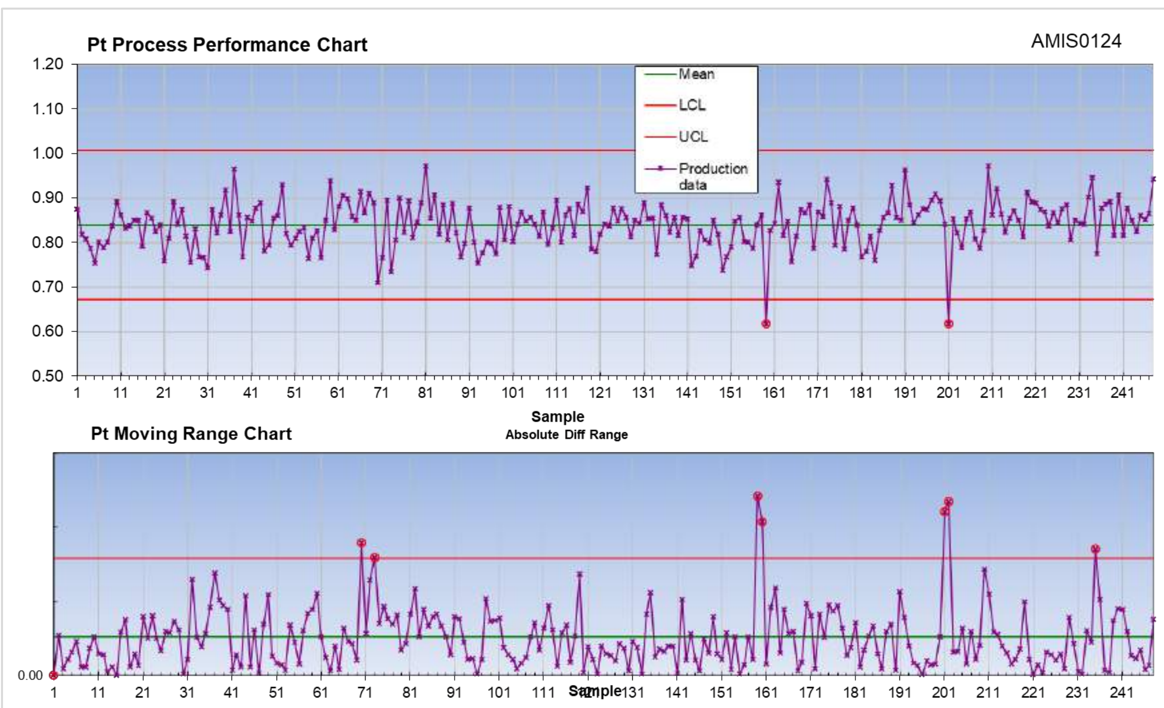


Figure 16: Current Lake Deposit standard AMIS0124 Pt (g/t)

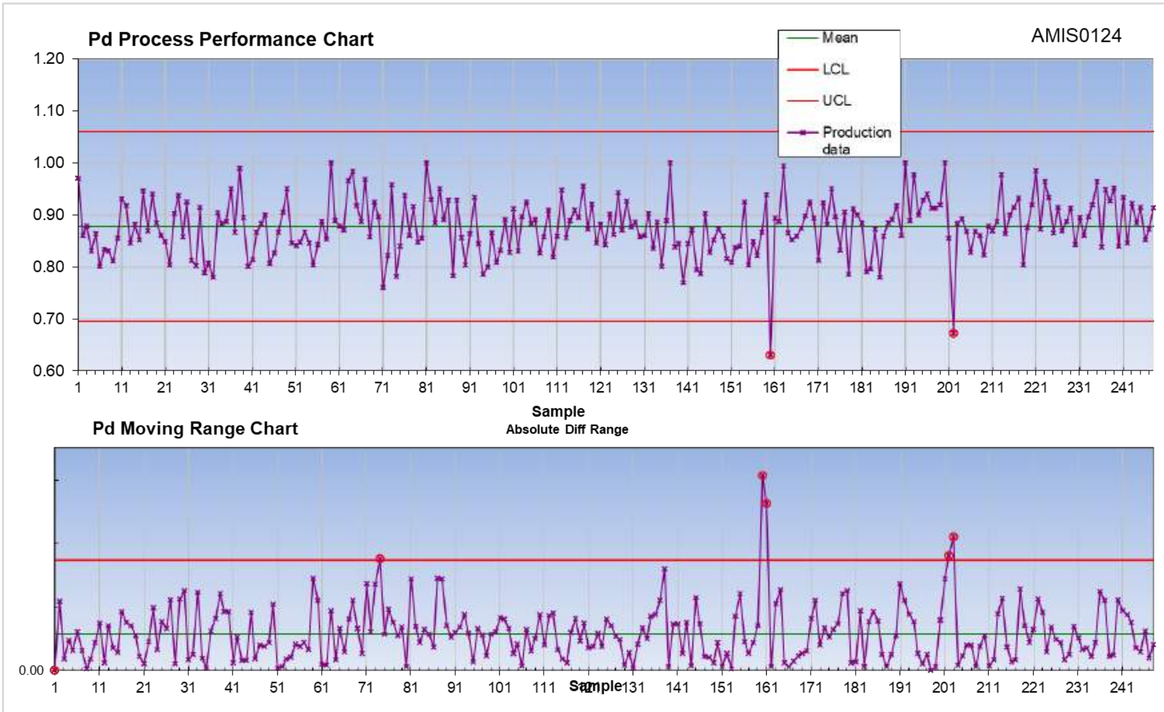


Figure 17: Current Lake Deposit standard AMIS0124 Pd (g/t)

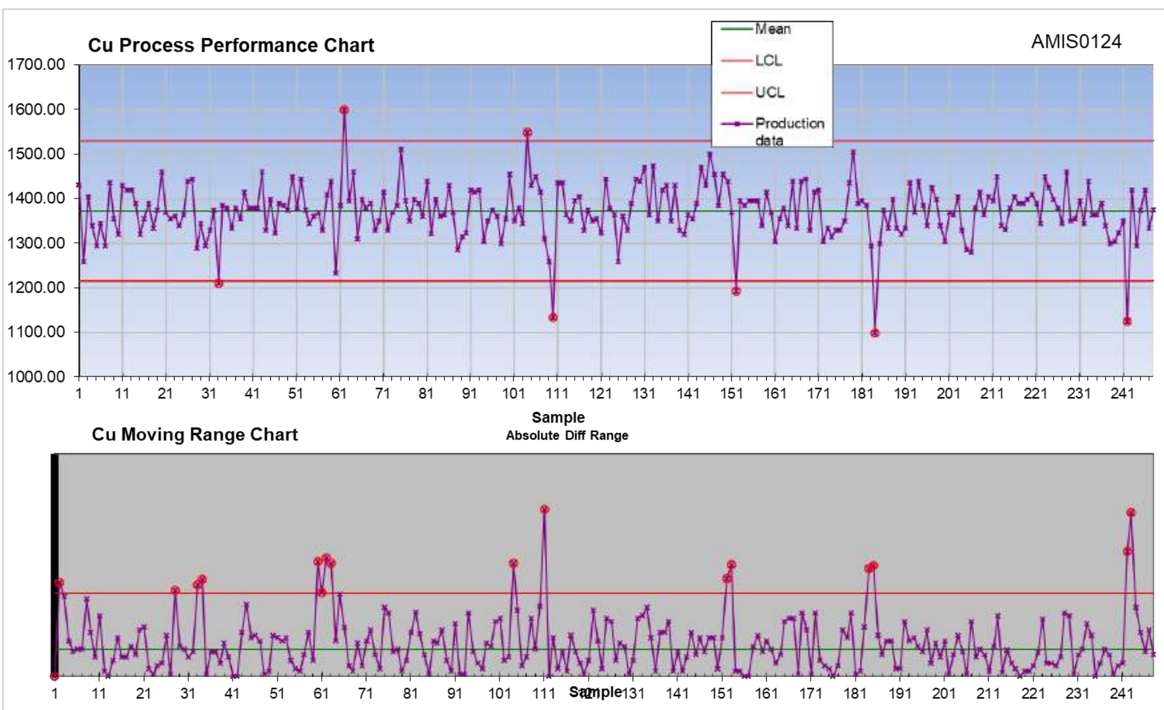


Figure 18: Current Lake Deposit standard AMIS0124 Cu (g/t)

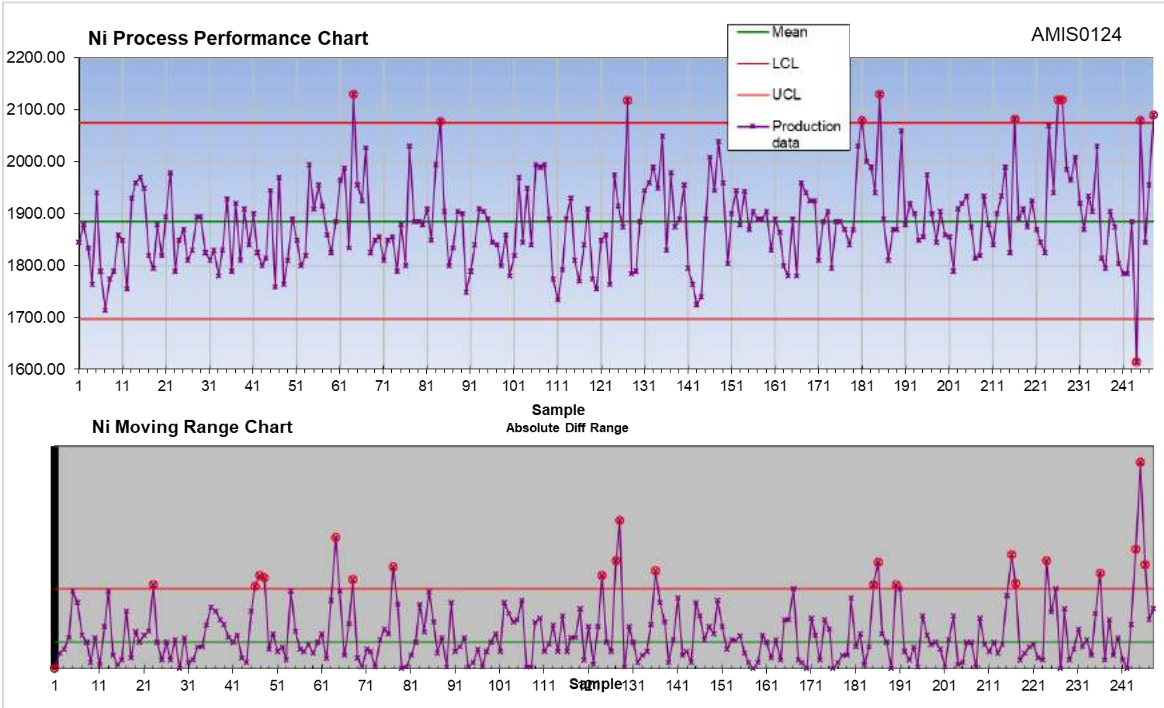


Figure 19: Current Lake Deposit standard AMIS0124 Ni (g/t)

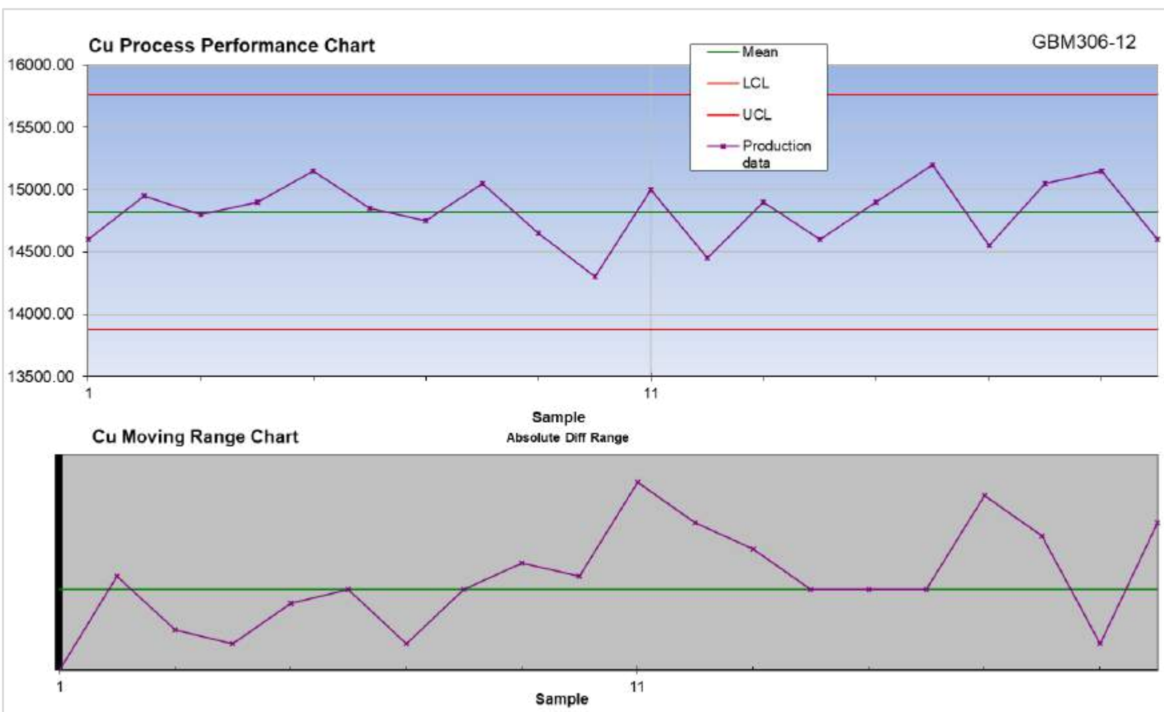


Figure 20: Current Lake Deposit standard GBM306-12 Pt (g/t)

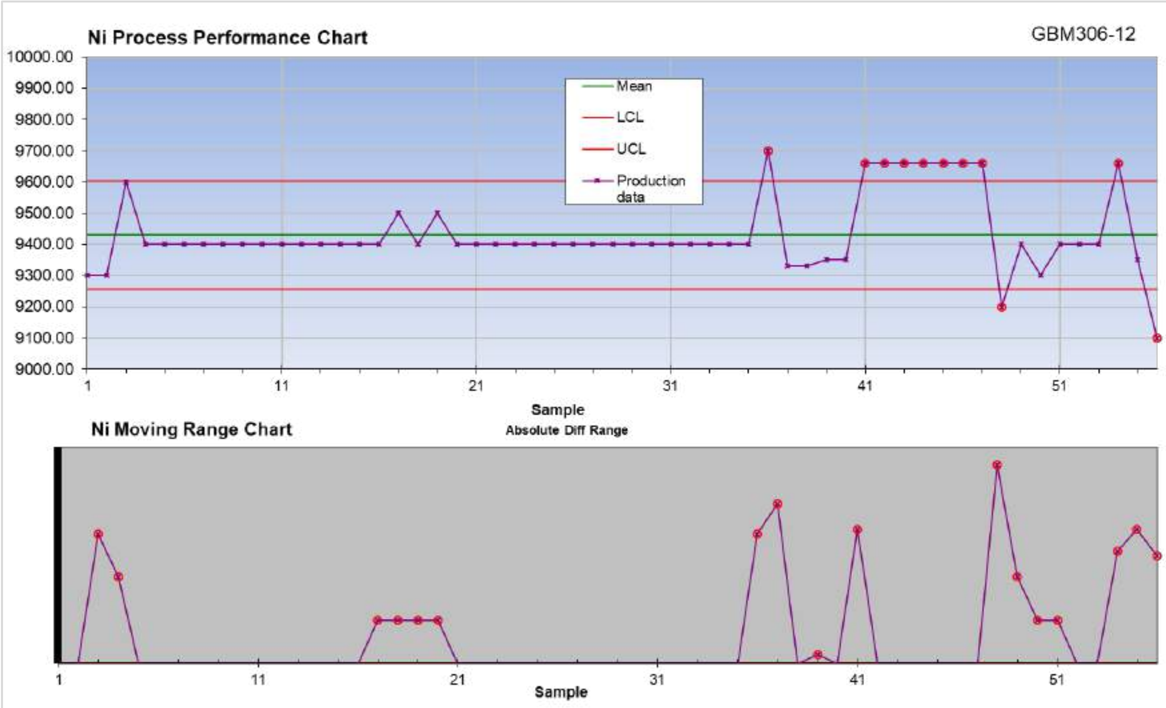


Figure 21: Current Lake Deposit standard GBM306-12 Ni (g/t)

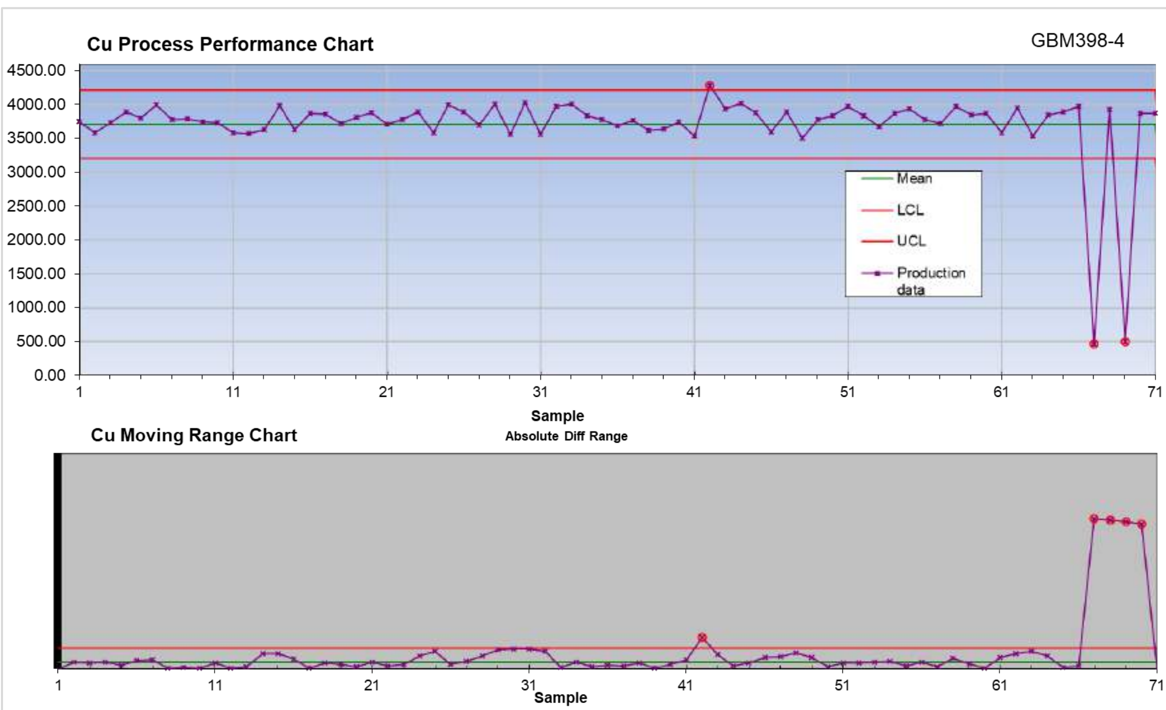


Figure 22: Current Lake Deposit standard GBM398-4 Cu (g/t)

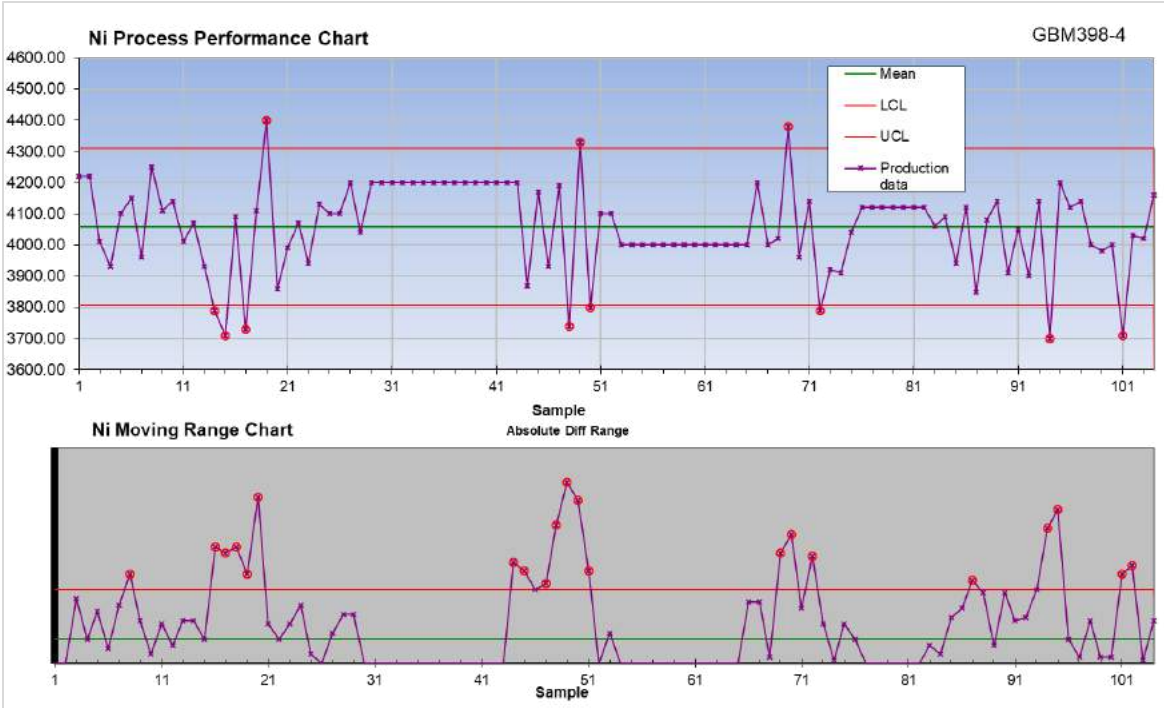


Figure 23: Current Lake Deposit standard GBM398-4 Ni (g/t)

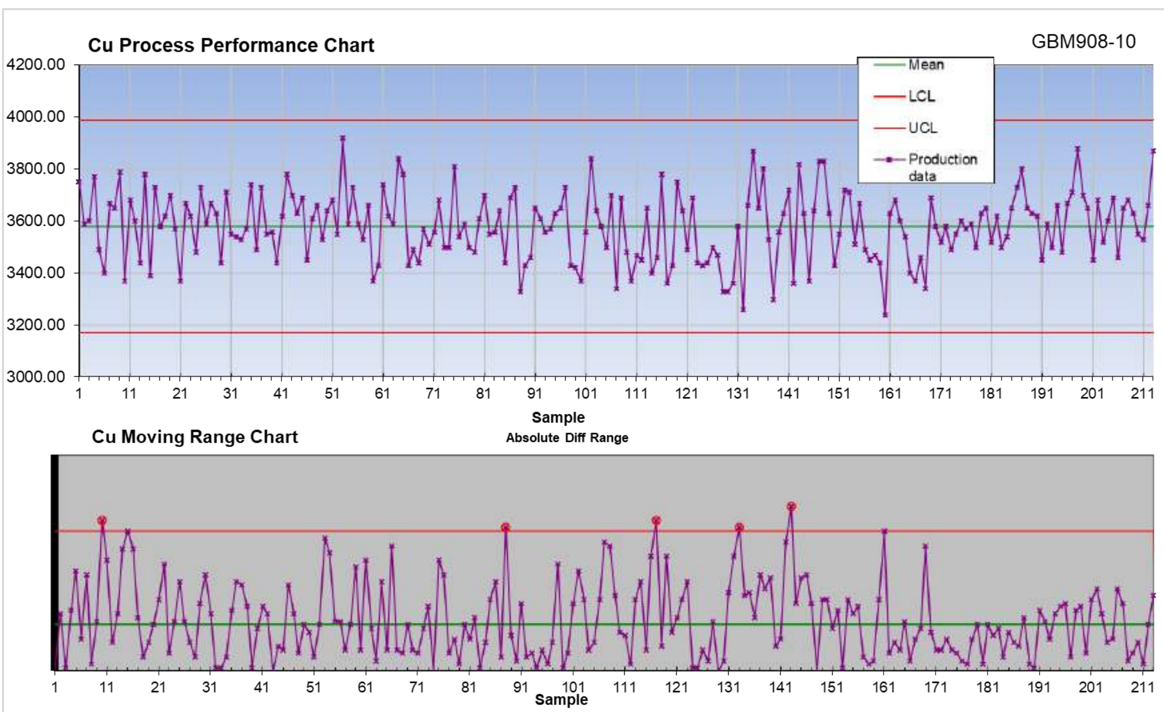


Figure 24: Current Lake Deposit standard GBM908-10 Cu (g/t)

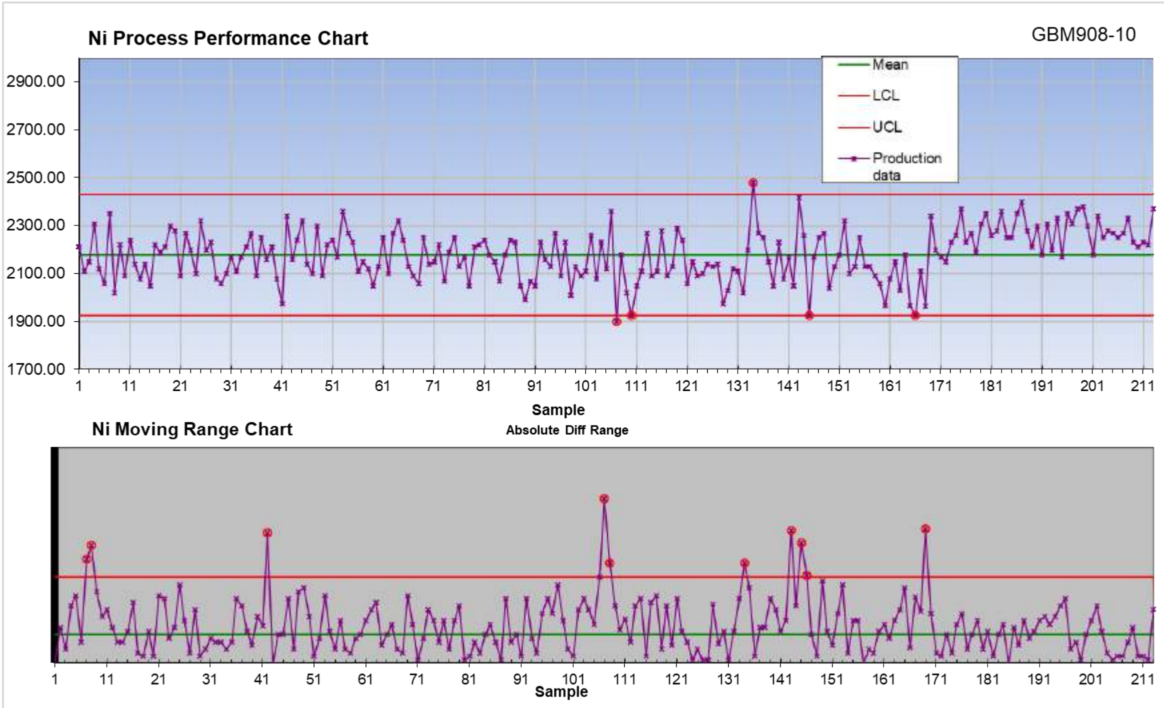


Figure 25: Current Lake Deposit standard GBM908-10 Ni (g/t)

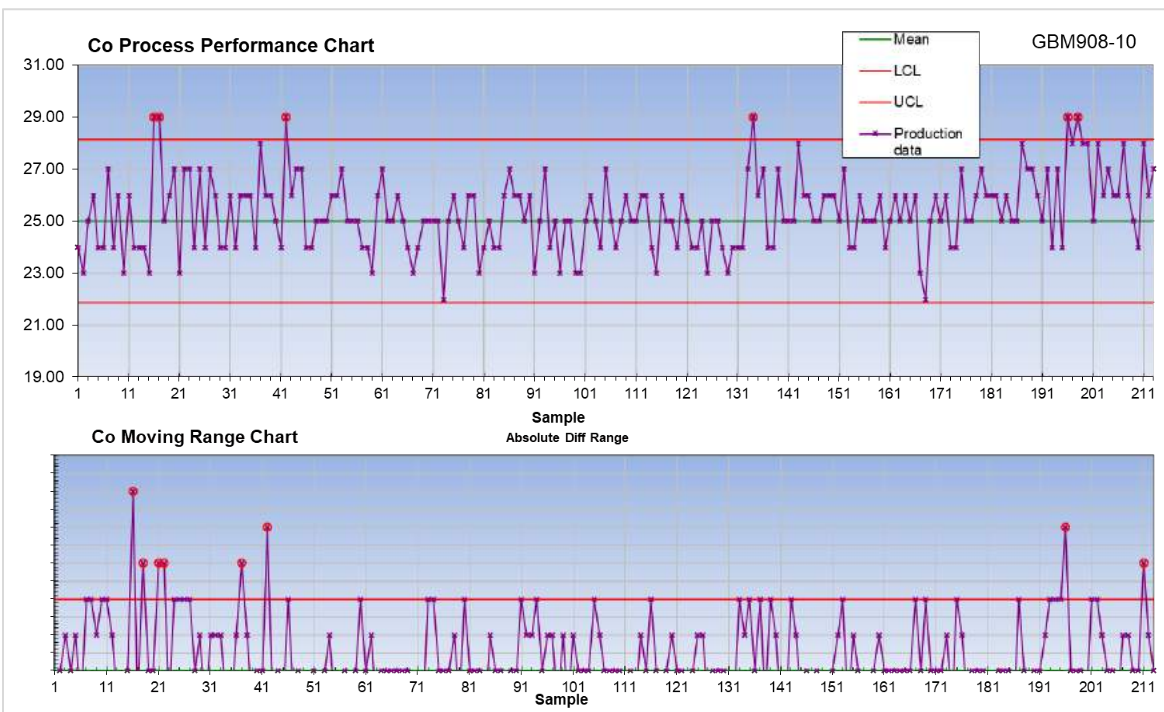


Figure 26: Current Lake Deposit standard GBM908-10 Co (g/t)

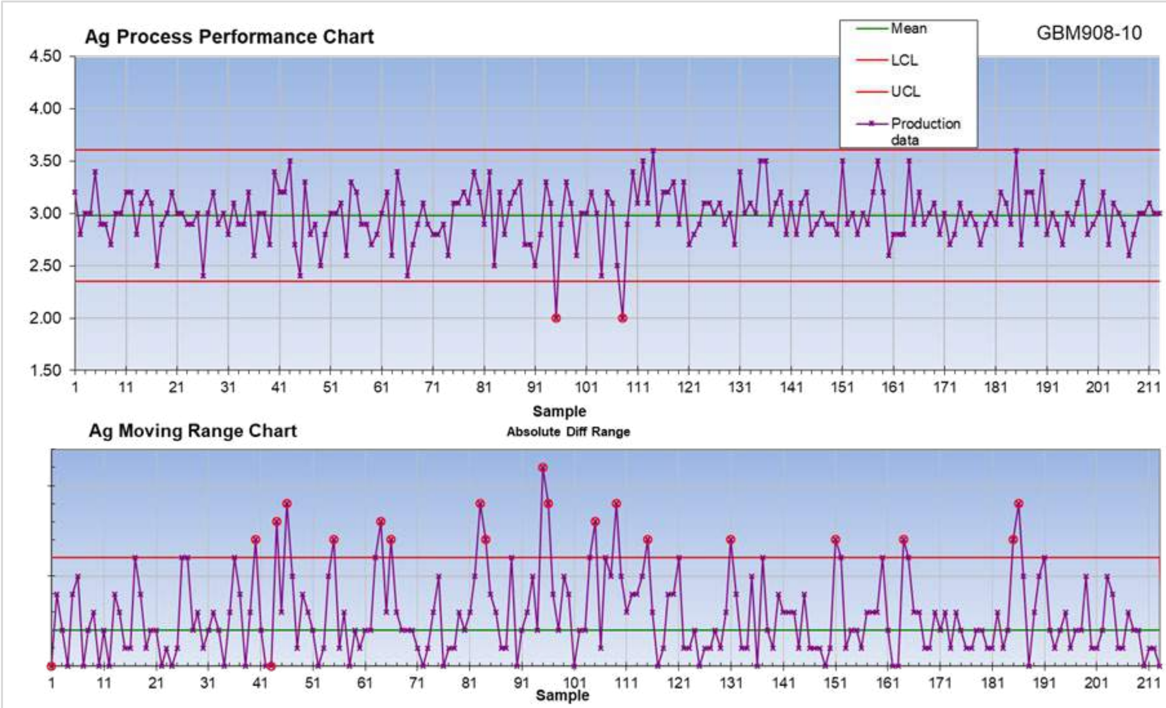


Figure 27: Current Lake Deposit standard GBM908-10 Ag (g/t)

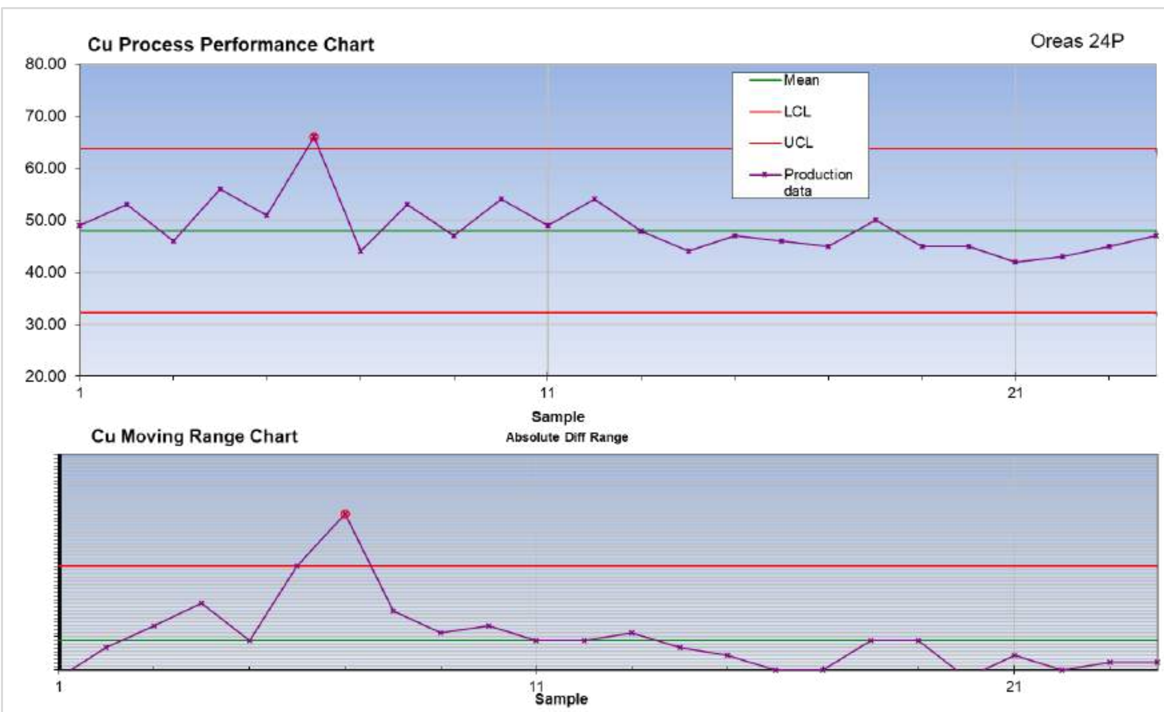


Figure 28: Current Lake Deposit standard Oreas 24P Cu (g/t)

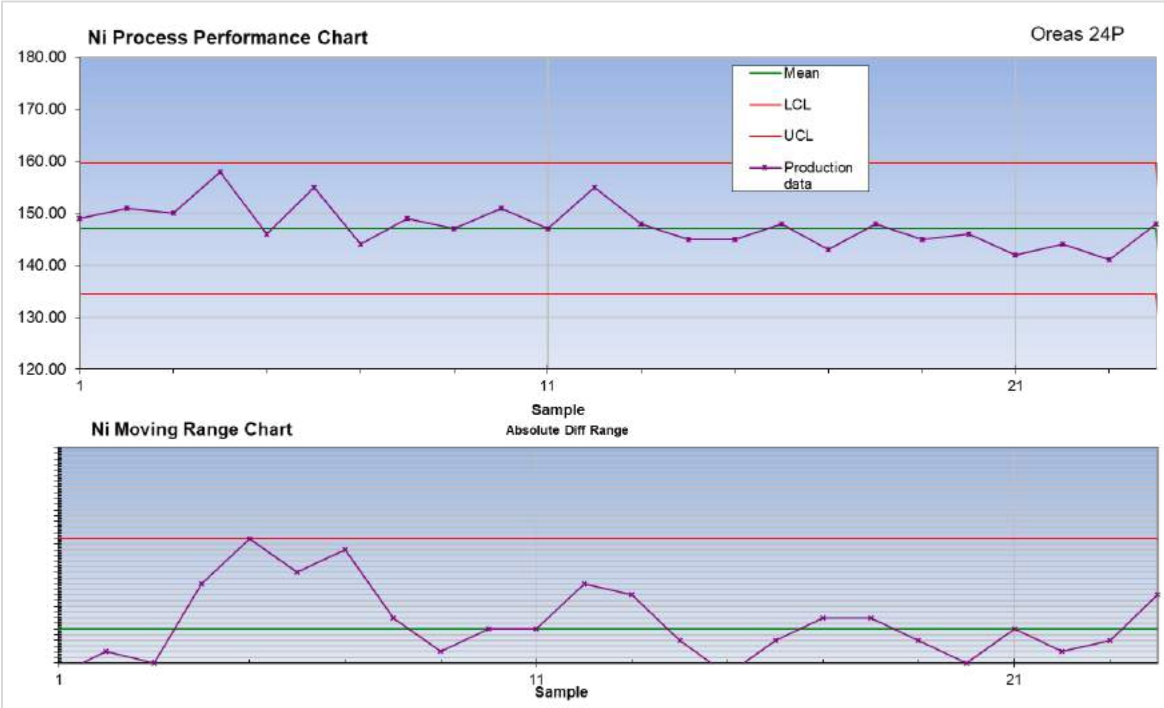


Figure 29: Current Lake Deposit standard Oreas 24P Ni (g/t)

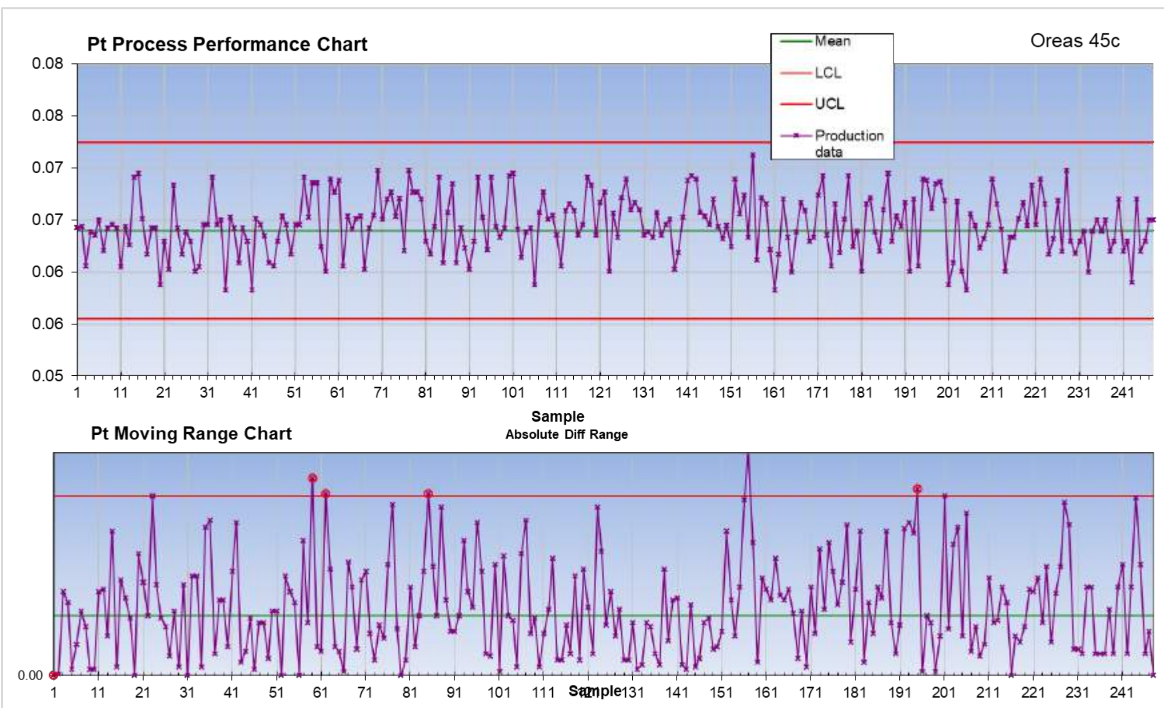


Figure 30: Current Lake Deposit standard Oreas 45c Pt (g/t)

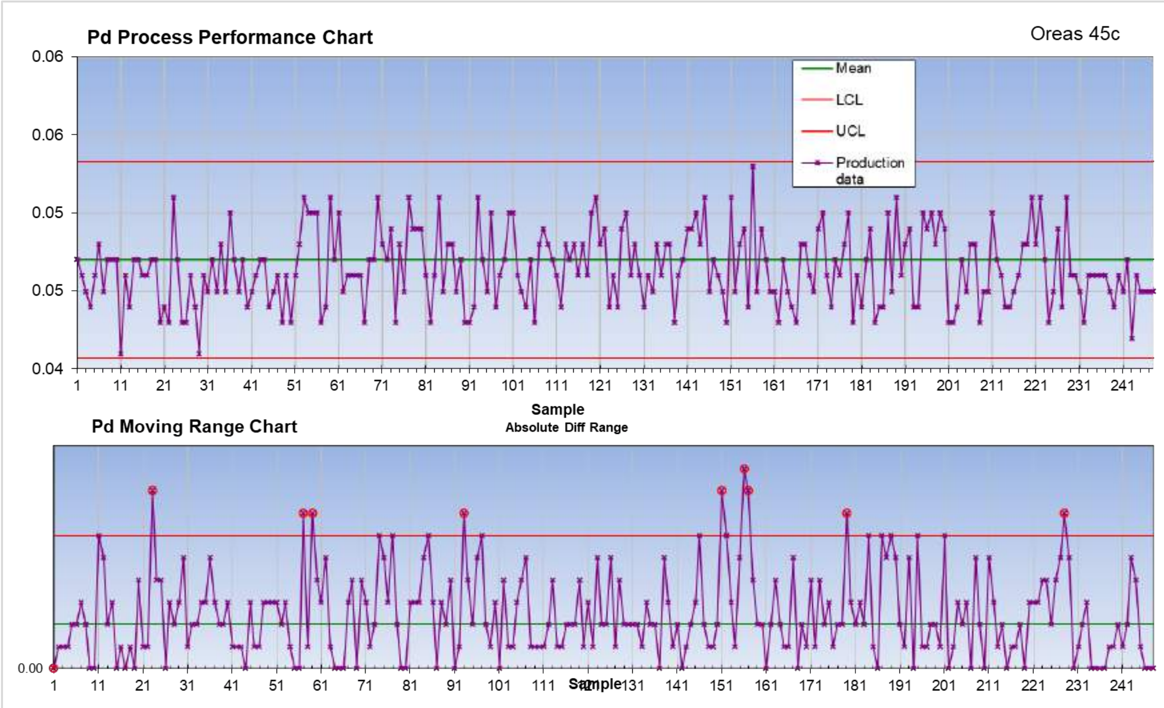


Figure 31: Current Lake Deposit standard Oreas 45c Pd (g/t)

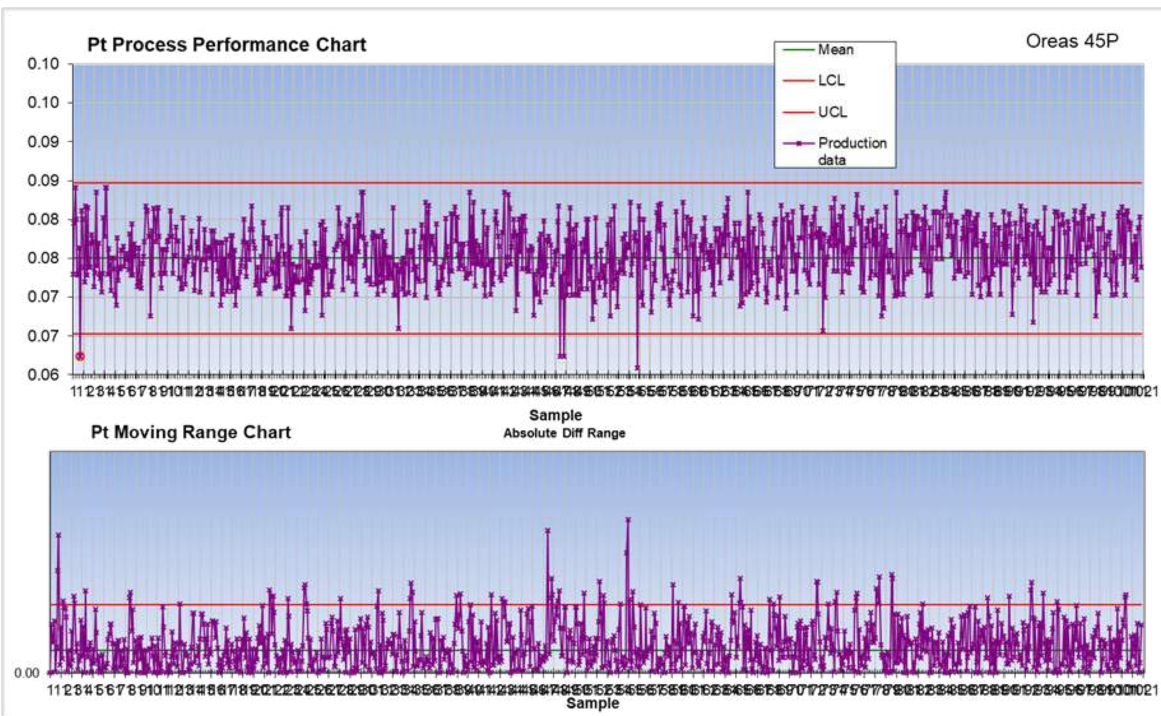


Figure 32: Current Lake Deposit standard Oreas 45P Pt (g/t)

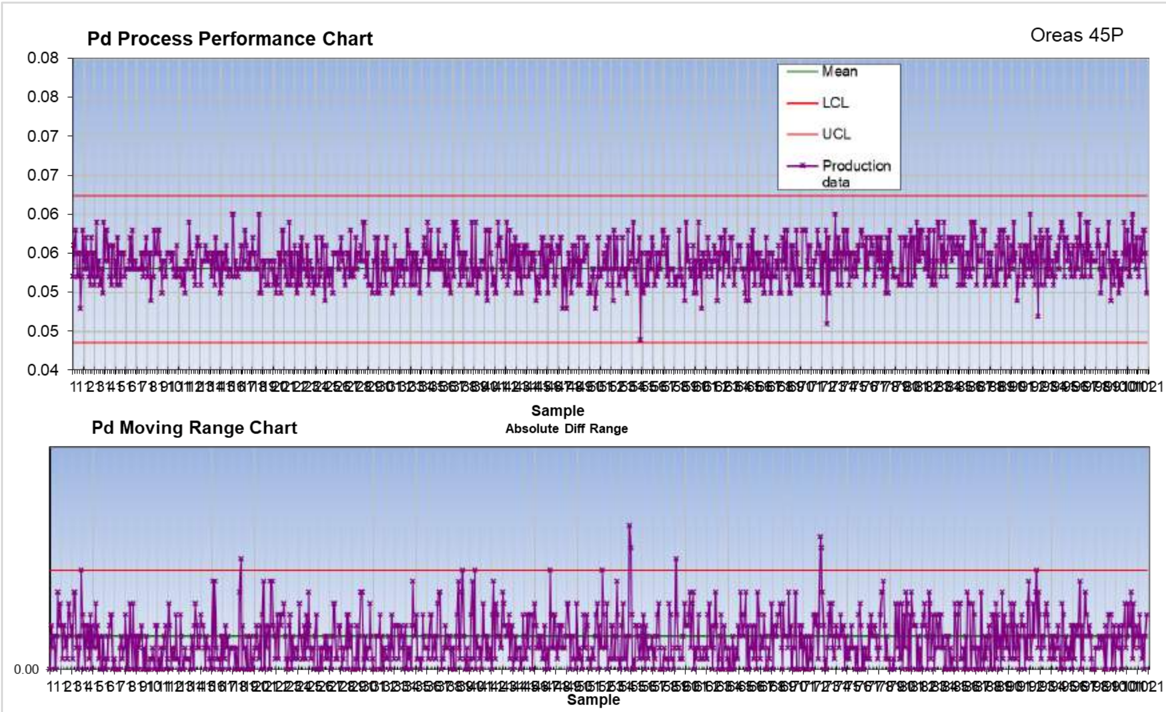


Figure 33: Current Lake Deposit standard Oreas 45P Pd (g/t)

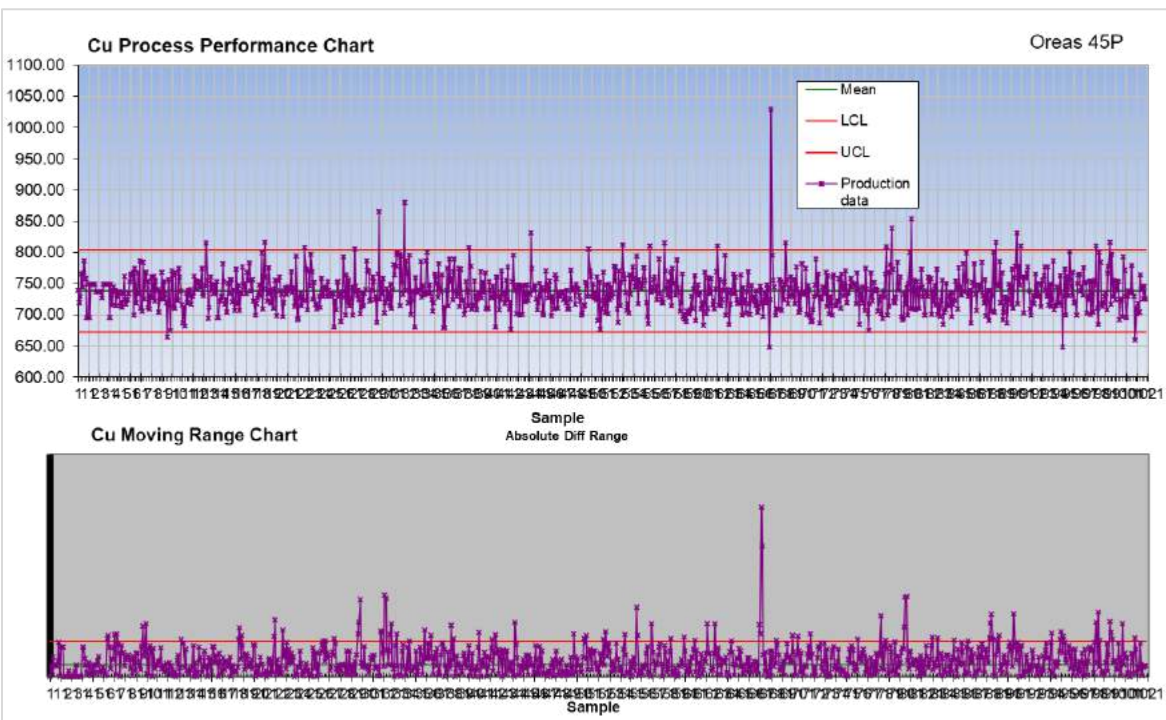


Figure 34: Current Lake Deposit standard Oreas 45P Cu (g/t)

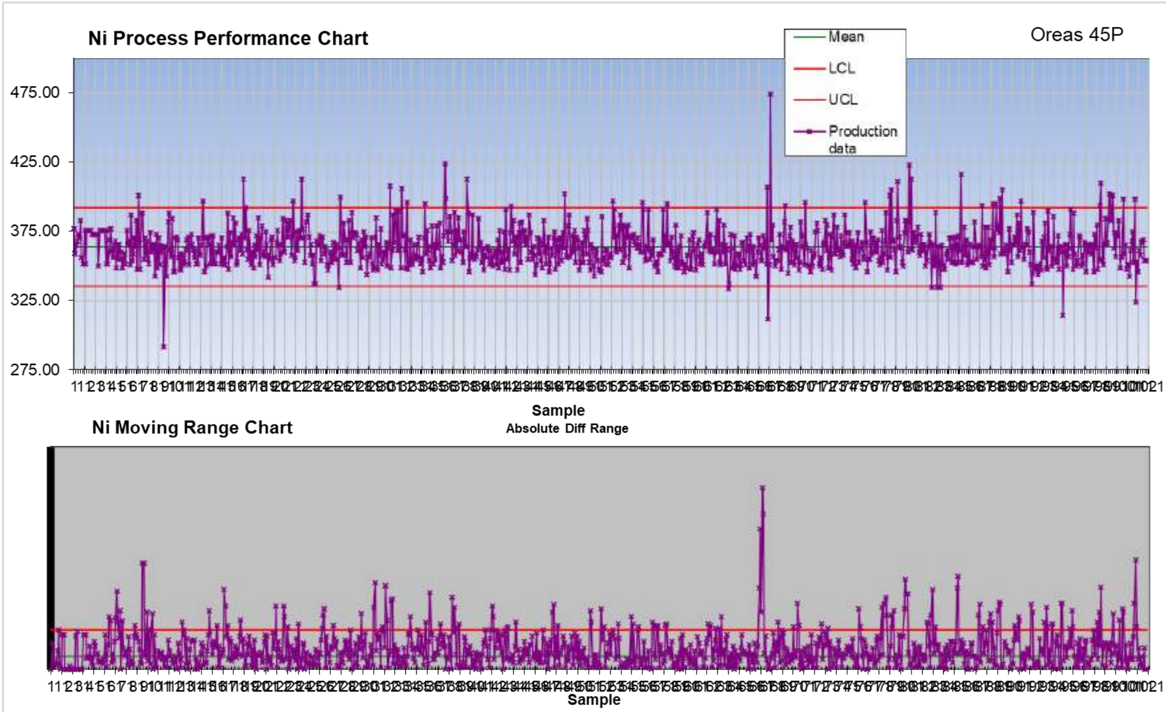


Figure 35: Current Lake Deposit standard Oreas 45P Ni (g/t)

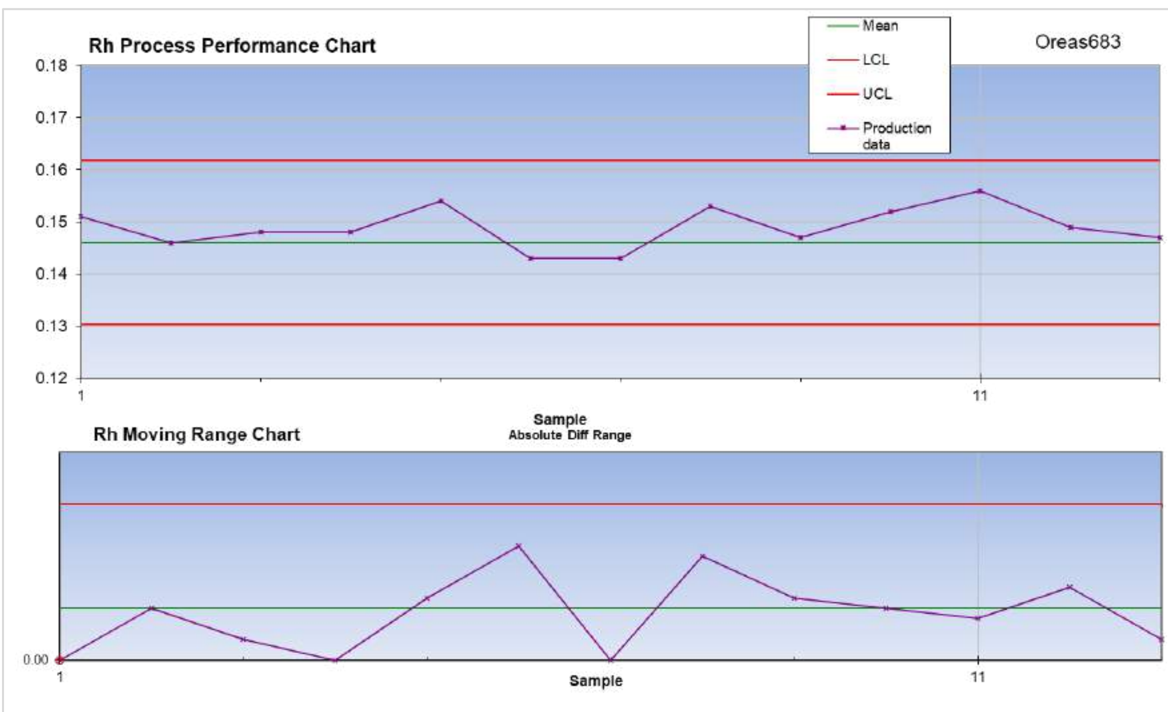


Figure 36: Current Lake Deposit standard Oreas 683 Rh (g/t)

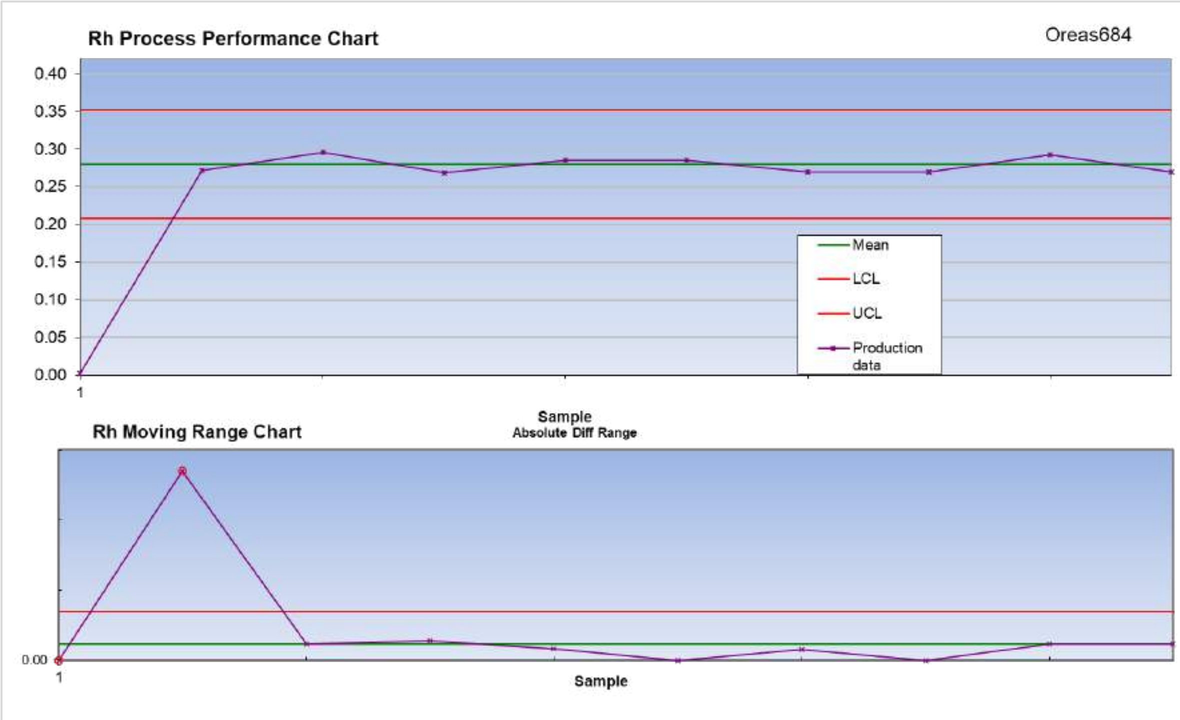


Figure 37: Current Lake Deposit standard Oreas 684 Rh (g/t)

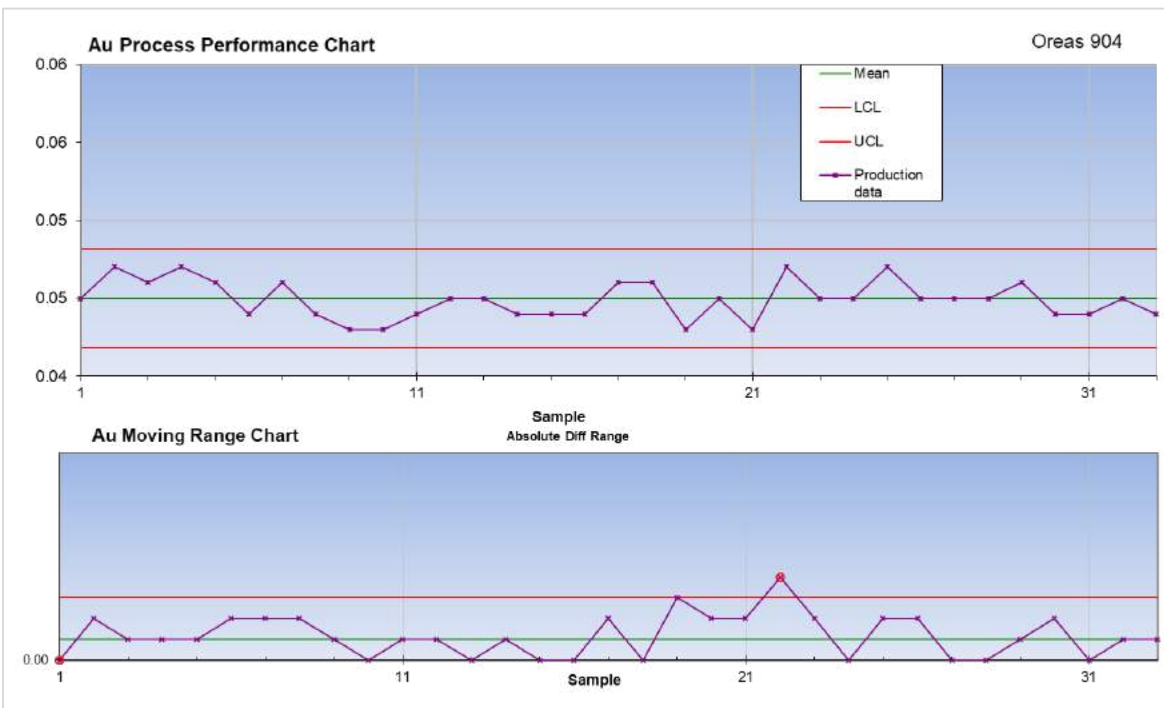


Figure 38: Current Lake Deposit standard Oreas 904 Au (g/t)

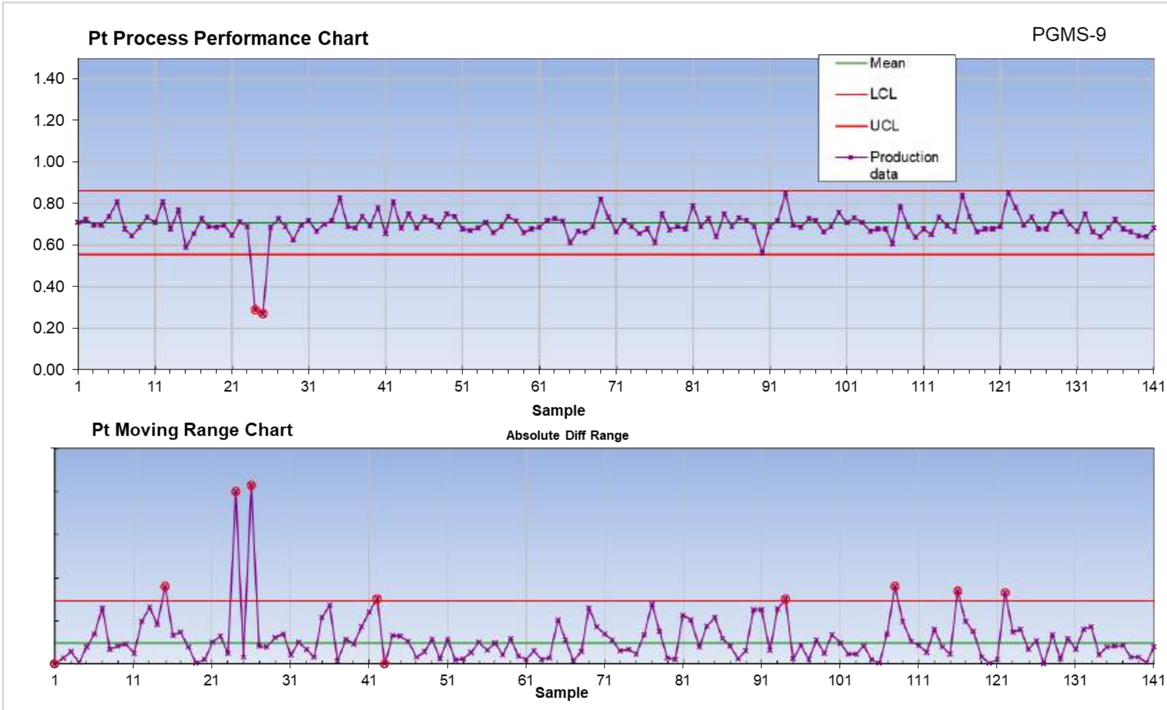


Figure 39: Current Lake Deposit standard PGMS-9 Pt (g/t)

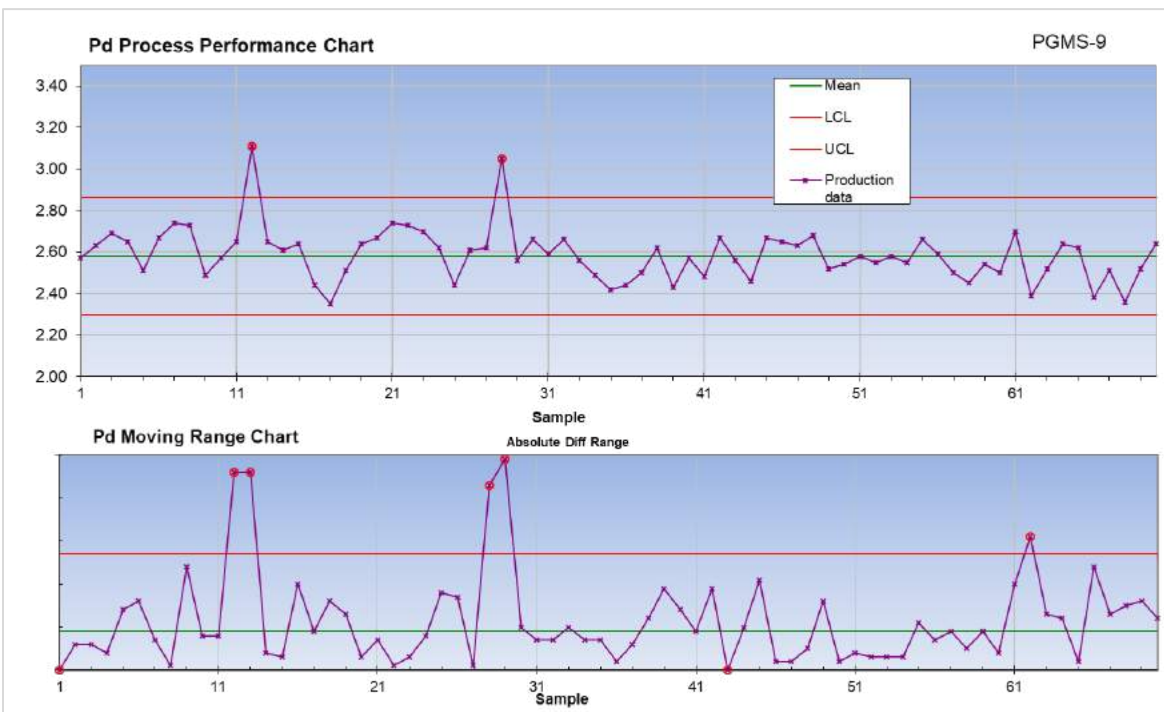


Figure 40: Current Lake Deposit standard PGMS-9 Pd (g/t)

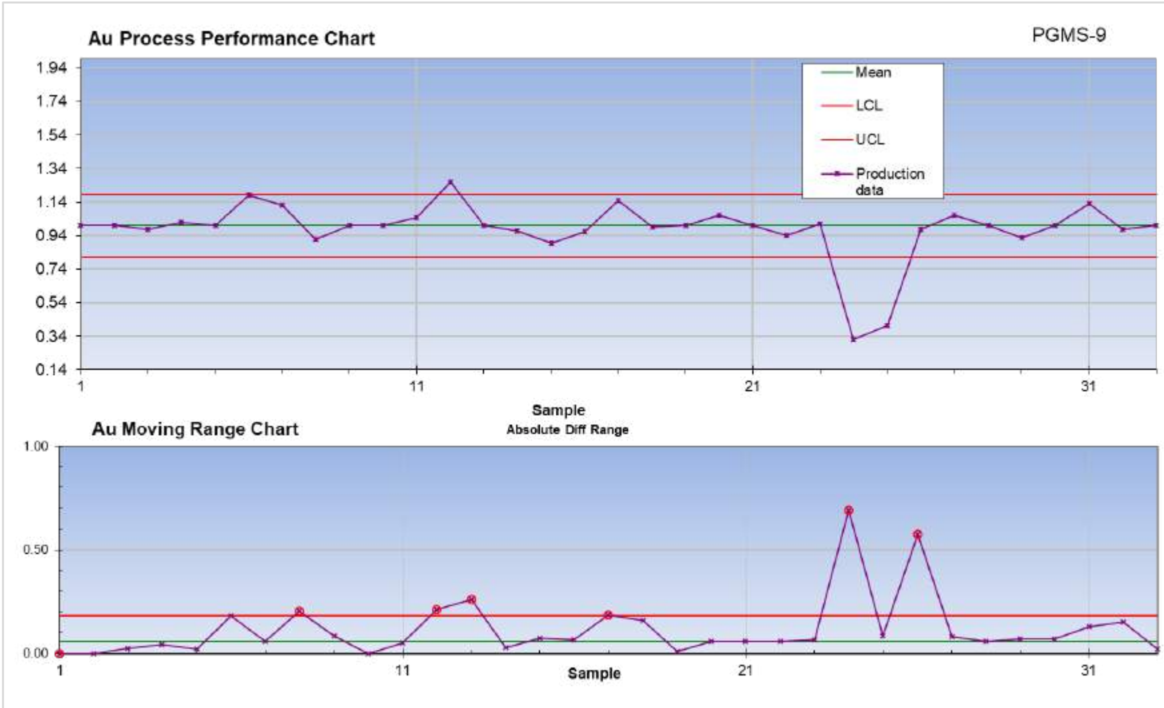


Figure 41: Current Lake Deposit standard PGMS-9 Au (g/t)

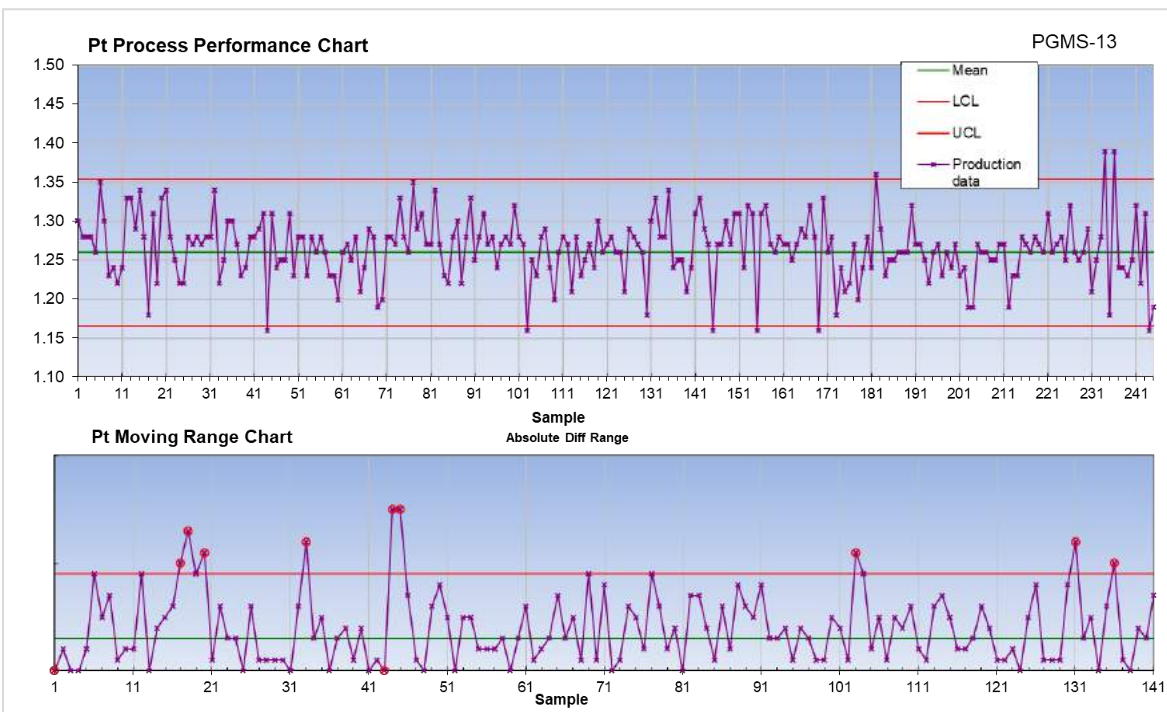


Figure 42: Current Lake Deposit standard PGMS-13 Pt (g/t)

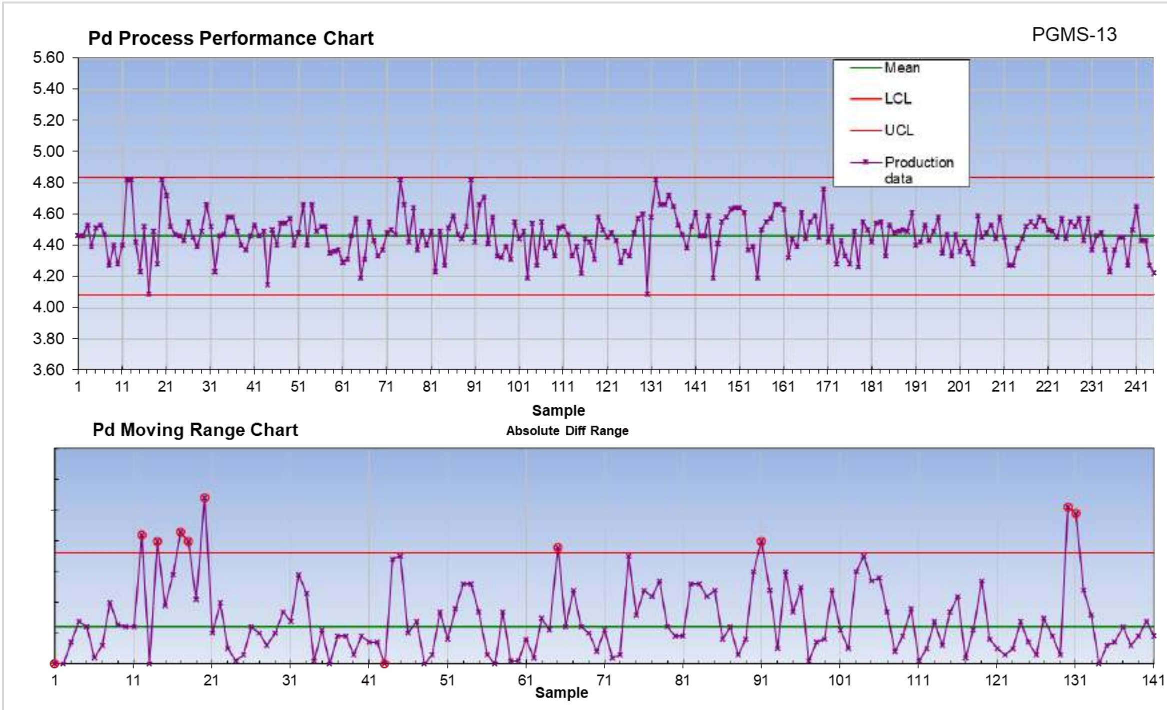


Figure 43: Current Lake Deposit standard PGMS-13 Pd (g/t)

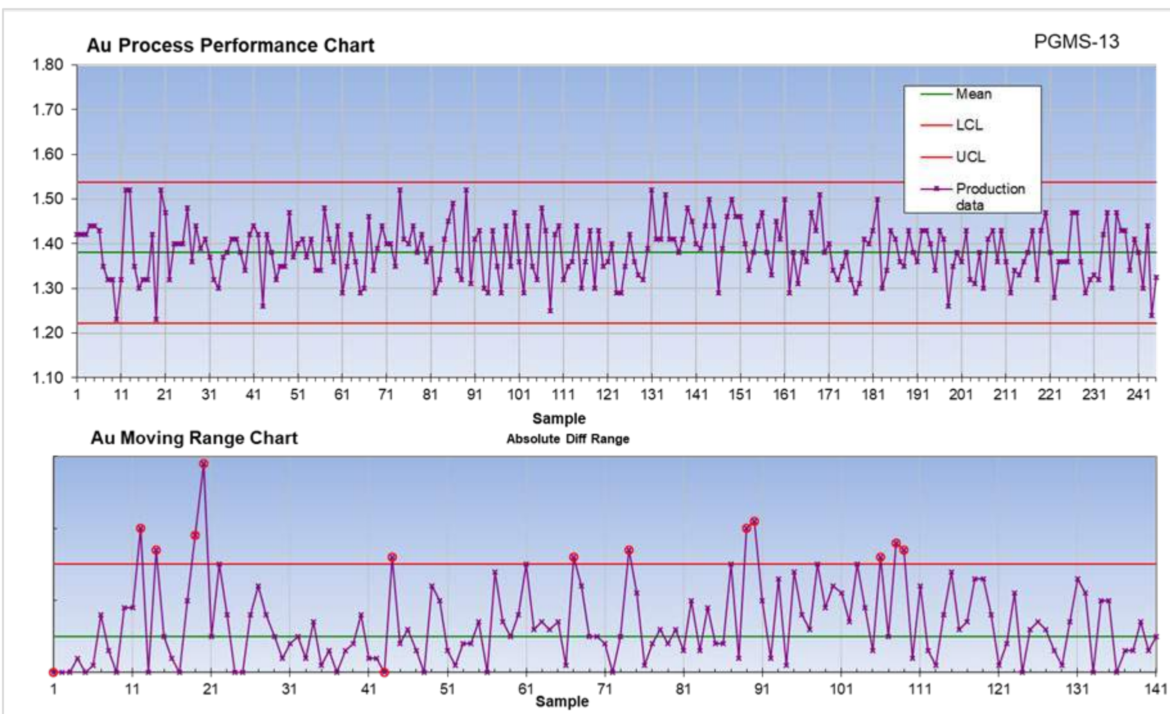


Figure 44: Current Lake Deposit standard PGMS-13 Au (g/t)

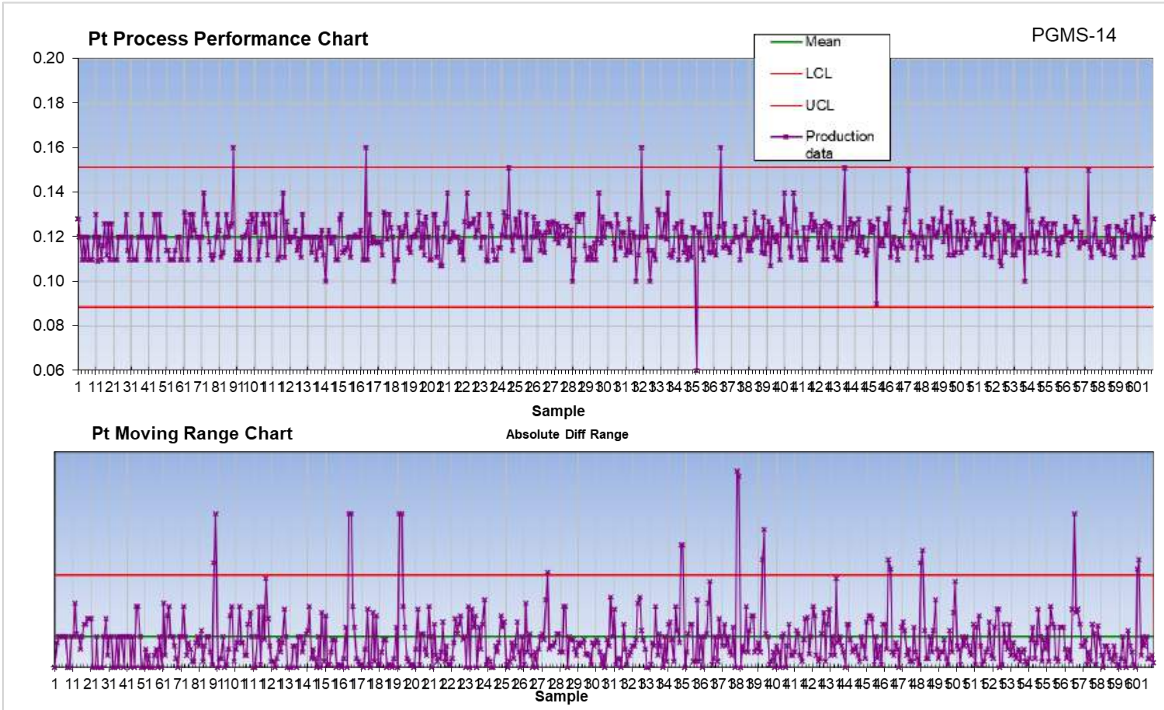


Figure 45: Current Lake Deposit standard PGMS-14 Pt (g/t)

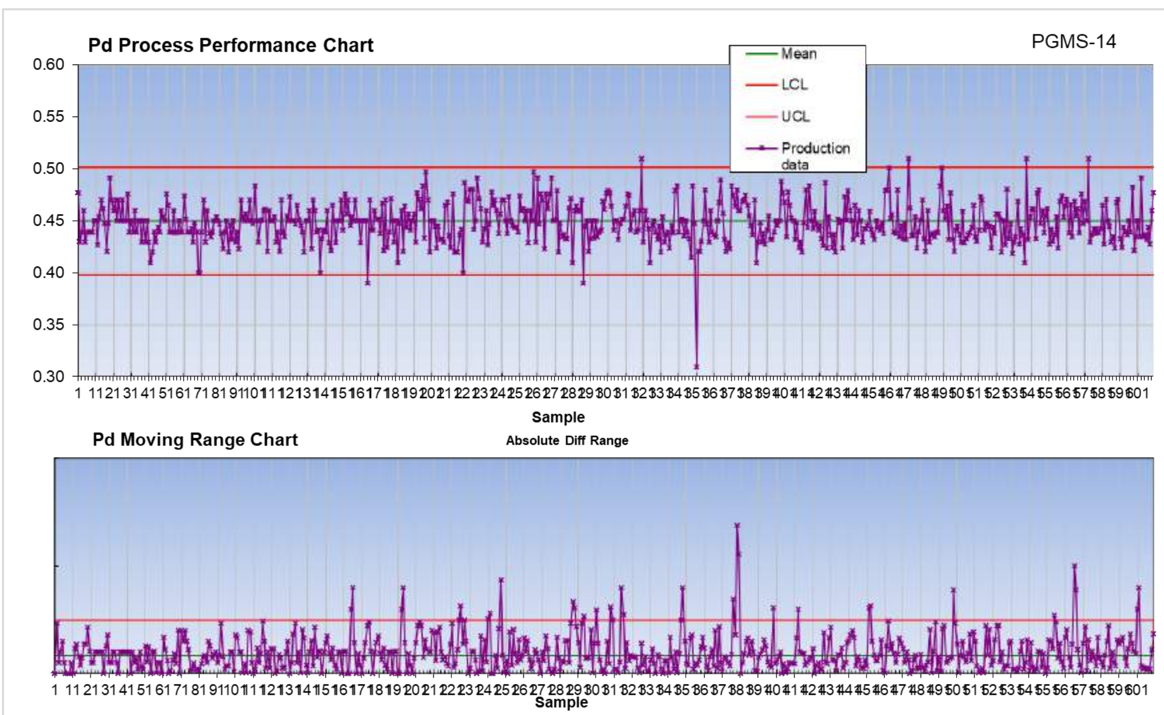


Figure 46: Current Lake Deposit standard PGMS-14 Pd (g/t)

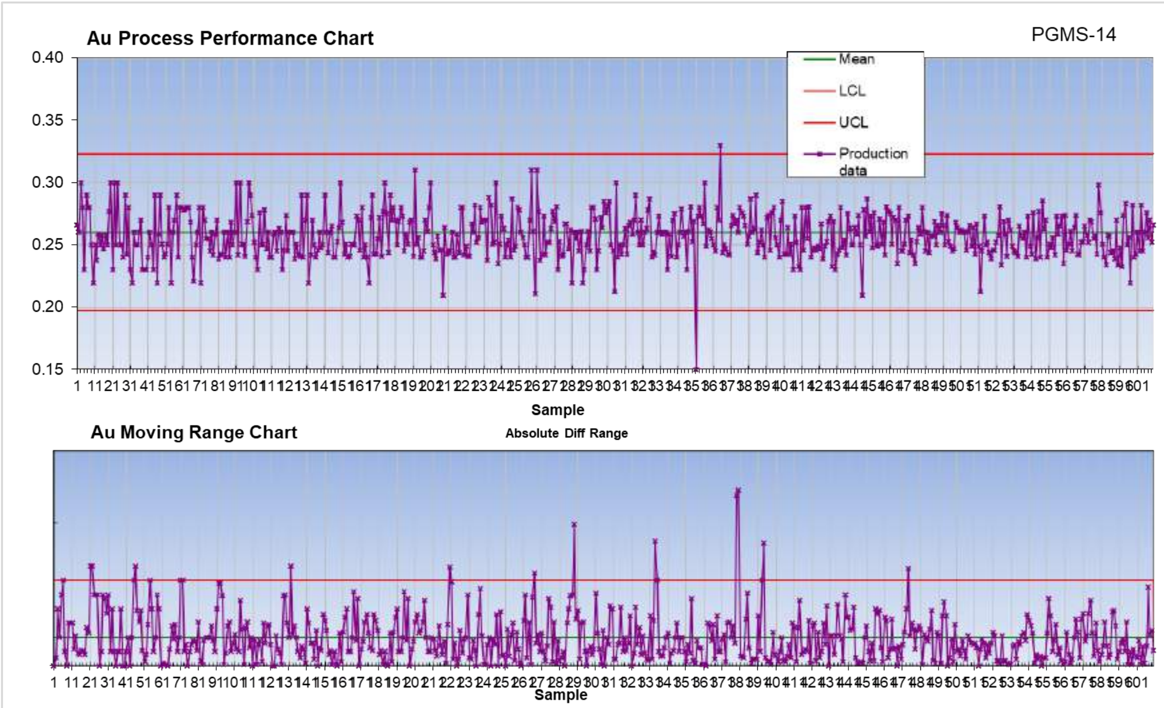


Figure 47: Current Lake Deposit standard PGMS-14 Au (g/t)

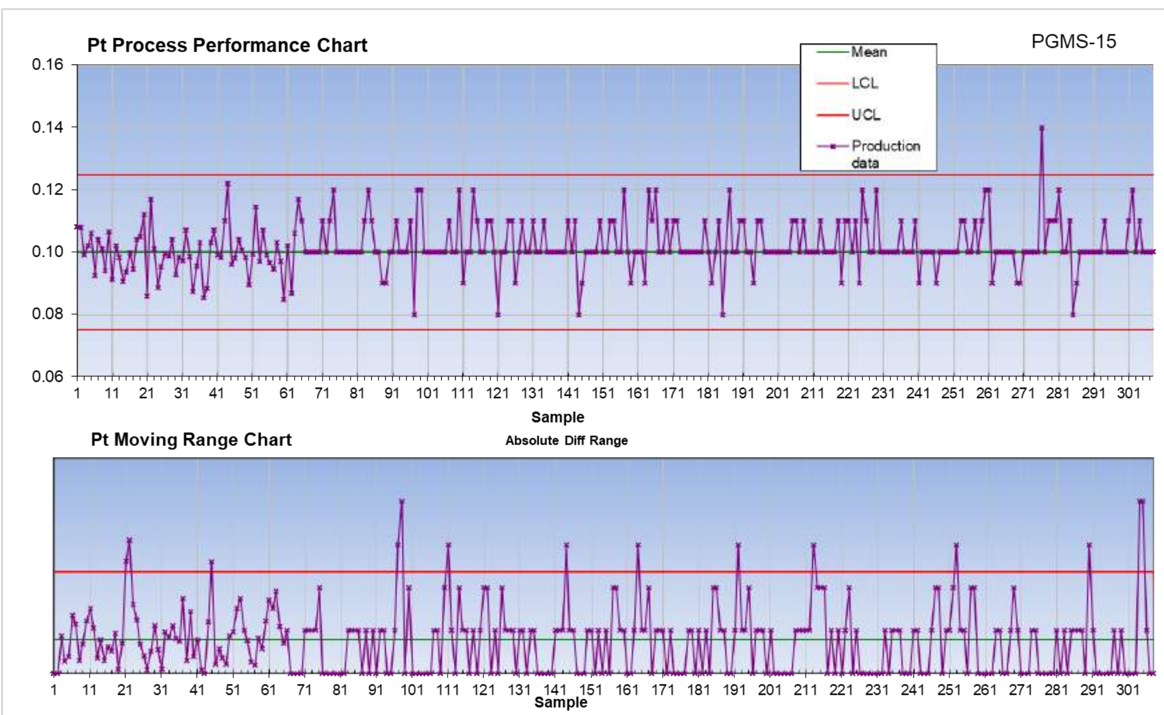


Figure 48: Current Lake Deposit standard PGMS-15 Pt (g/t)

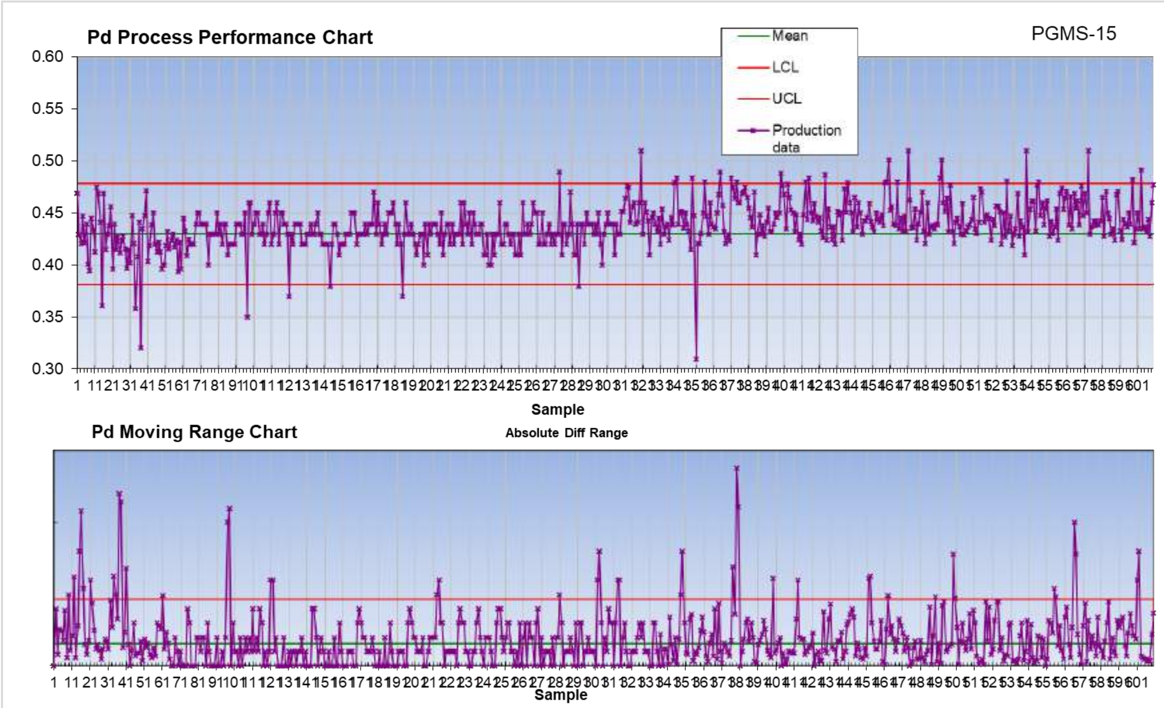


Figure 49: Current Lake Deposit standard PGMS-15 Pd (g/t)

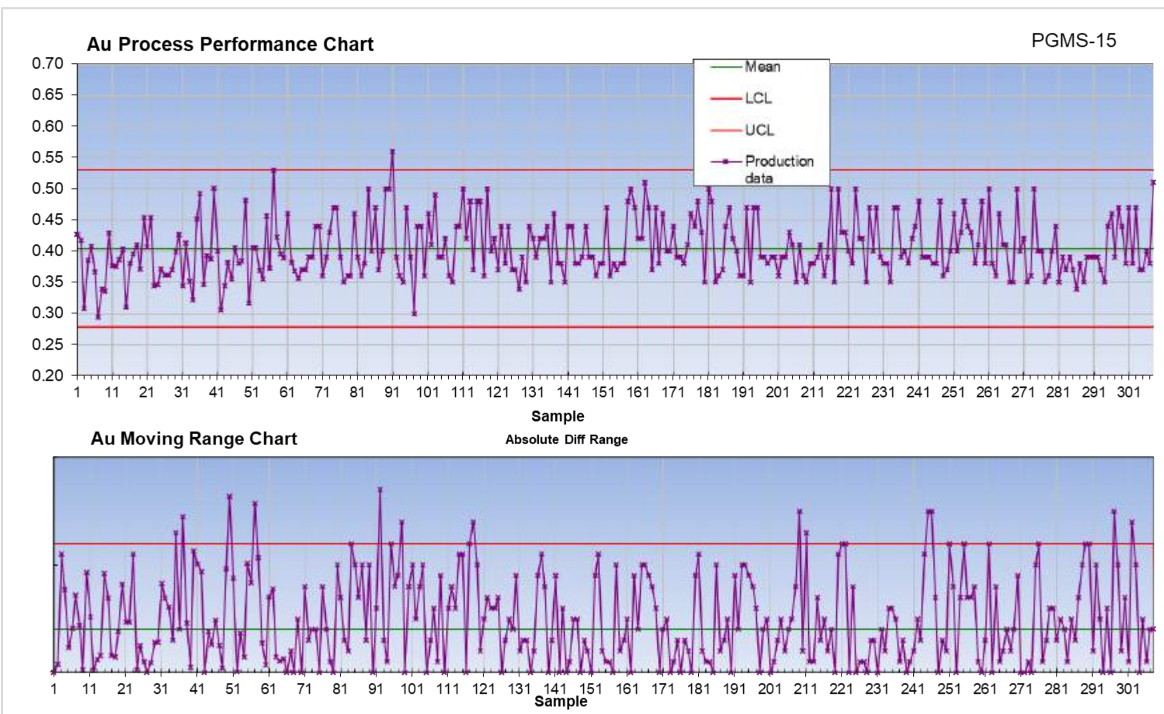


Figure 50: Current Lake Deposit standard PGMS-15 Au (g/t)

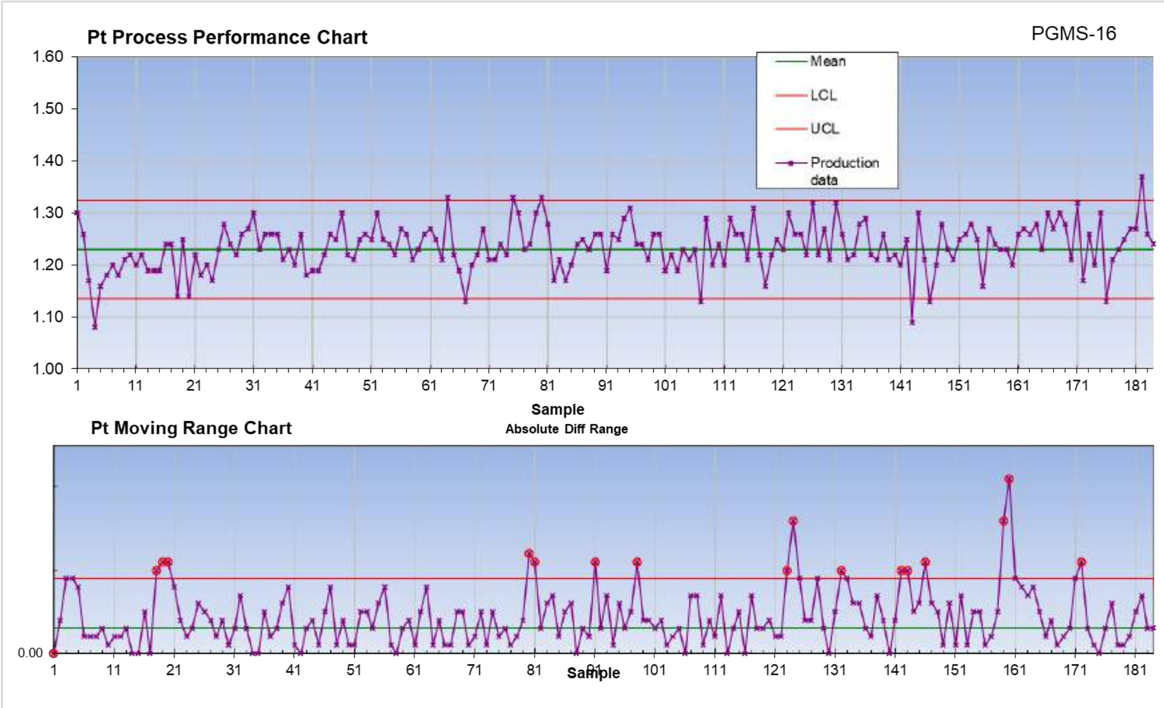


Figure 51: Current Lake Deposit standard PGMS-16 Pt (g/t)

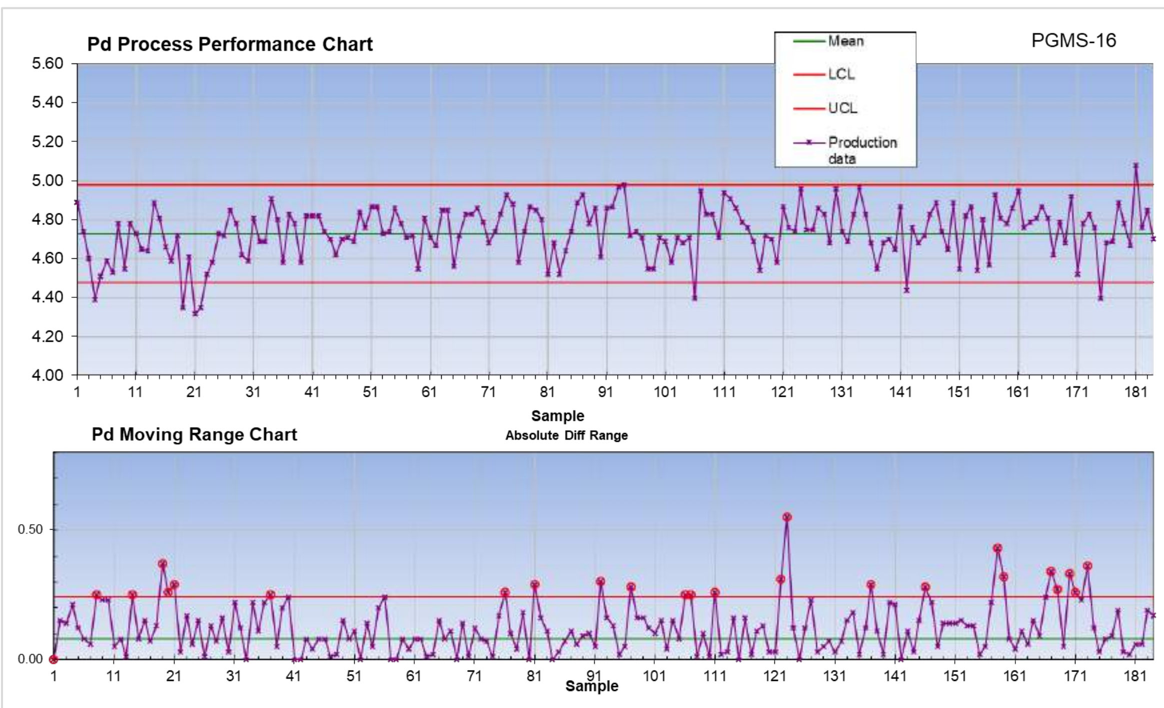


Figure 52: Current Lake Deposit standard PGMS-16 Pd (g/t)

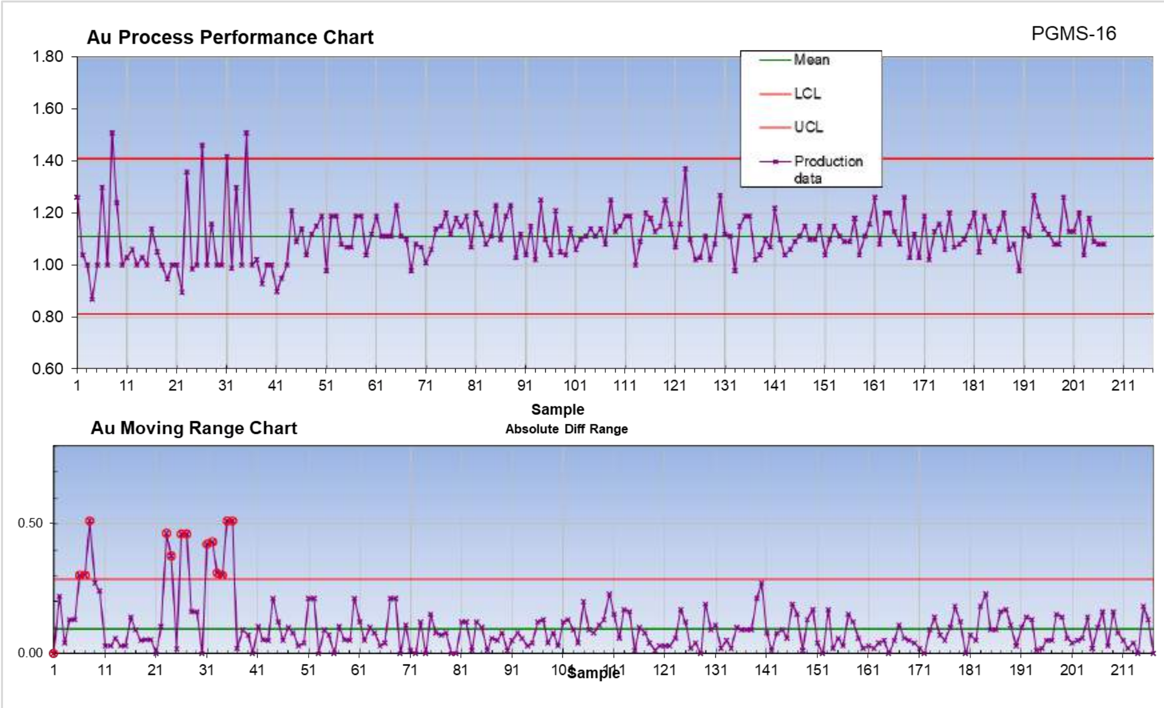


Figure 53: Current Lake Deposit standard PGMS-16 Au (g/t)

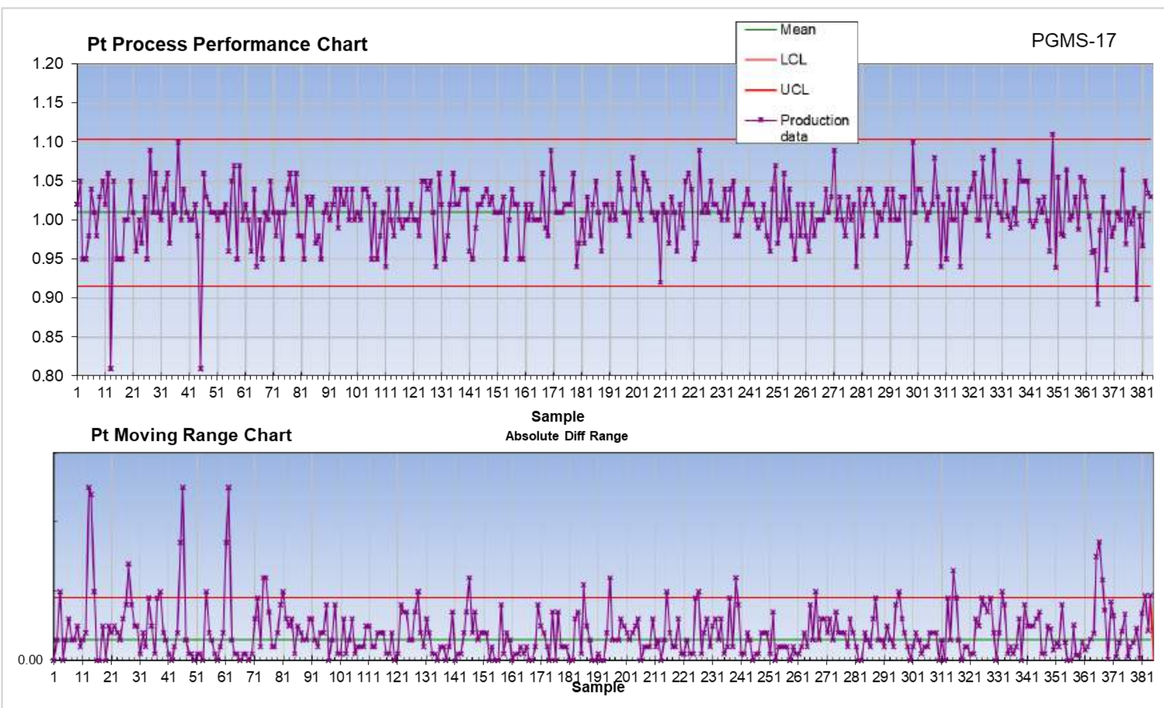


Figure 54: Current Lake Deposit standard PGMS-17 Pt (g/t)

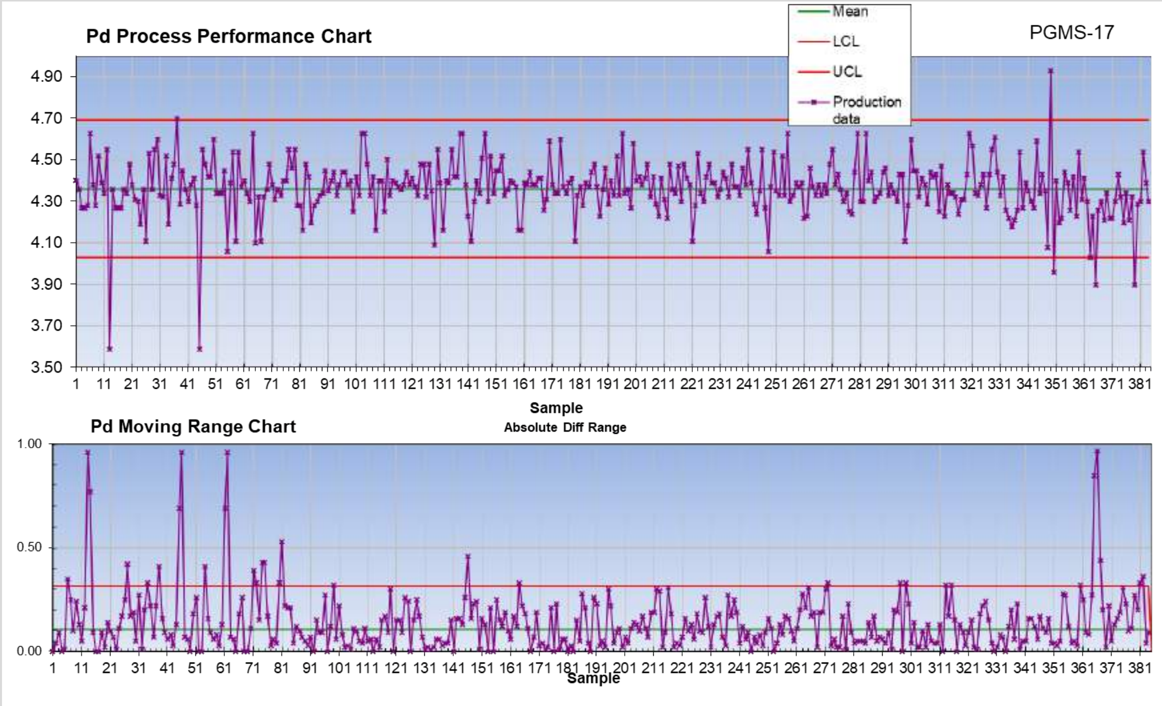


Figure 55: Current Lake Deposit standard PGMS-17 Pd (g/t)

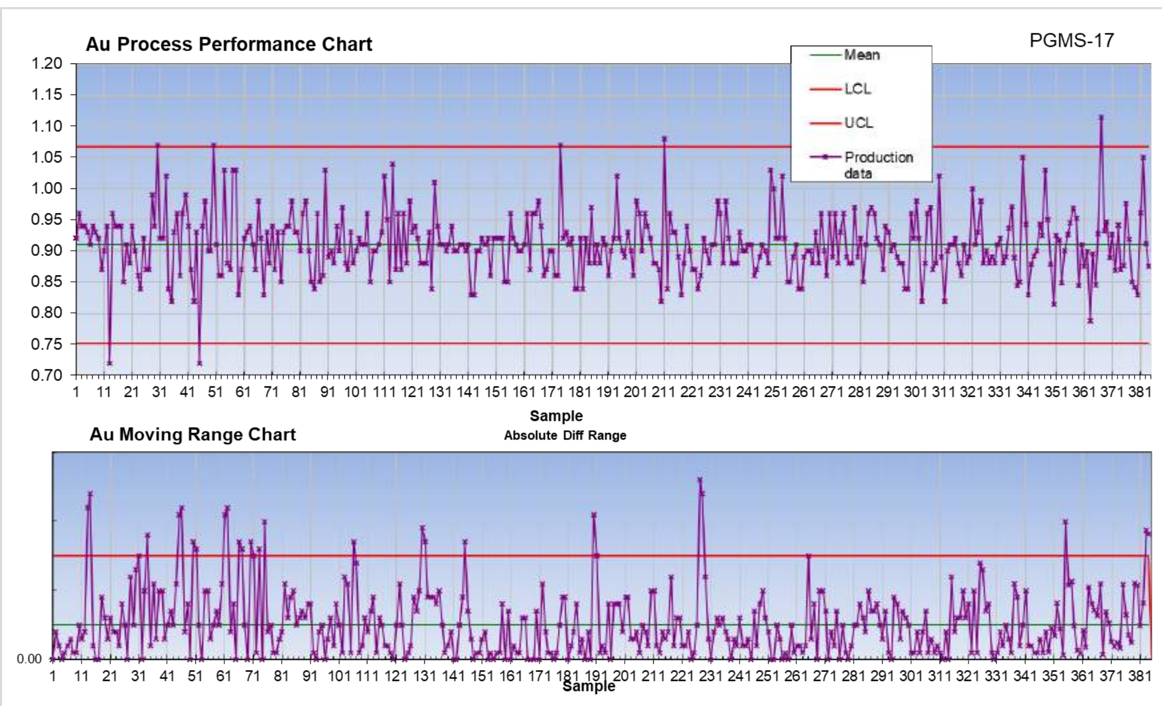


Figure 56: Current Lake Deposit standard PGMS-17 Au (g/t)

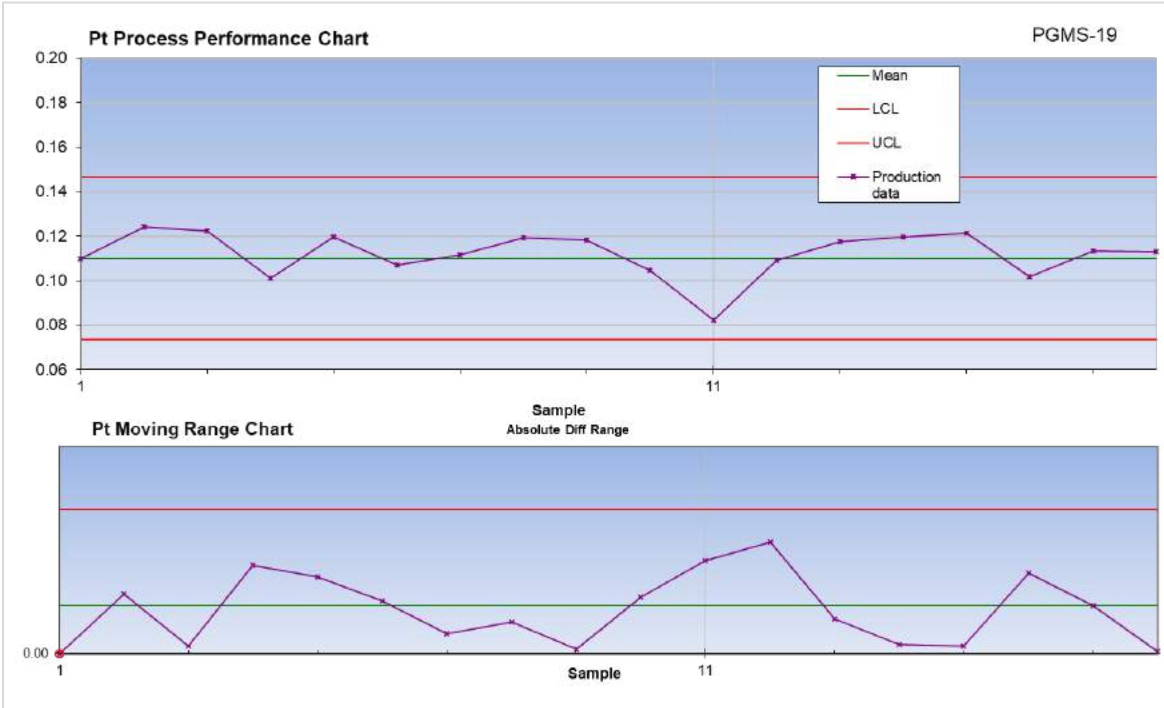


Figure 57: Current Lake Deposit standard PGMS-19 Pt (g/t)

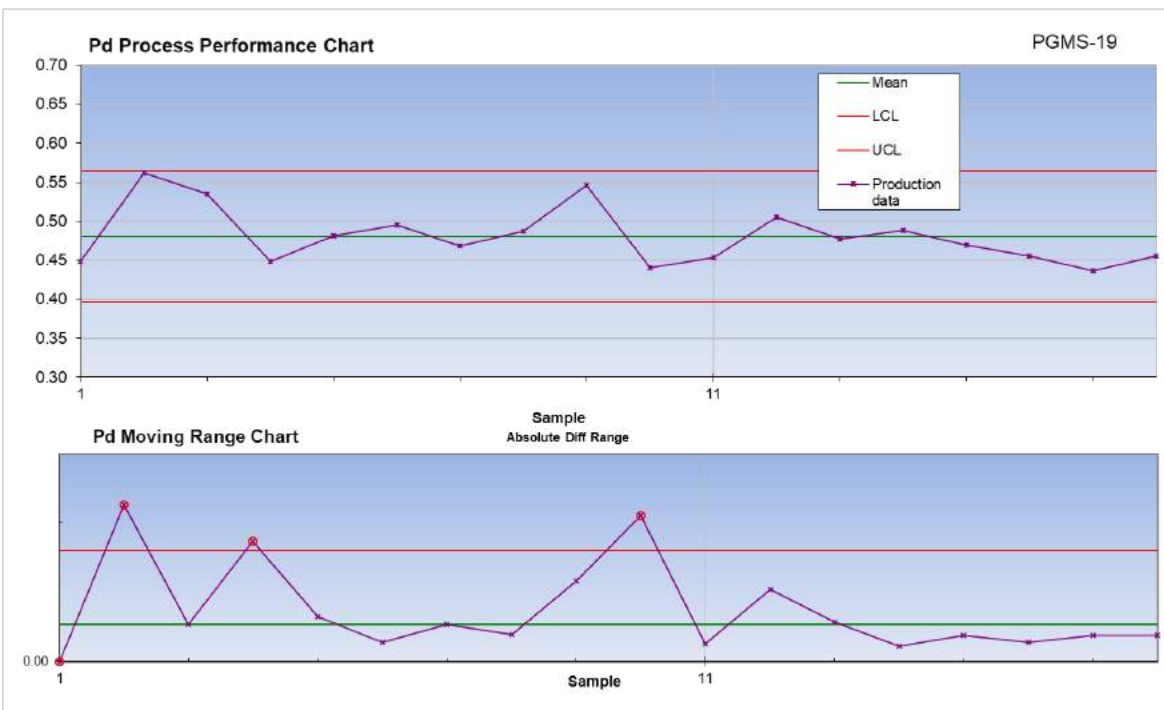


Figure 58: Current Lake Deposit standard PGMS-19 Pd (g/t)

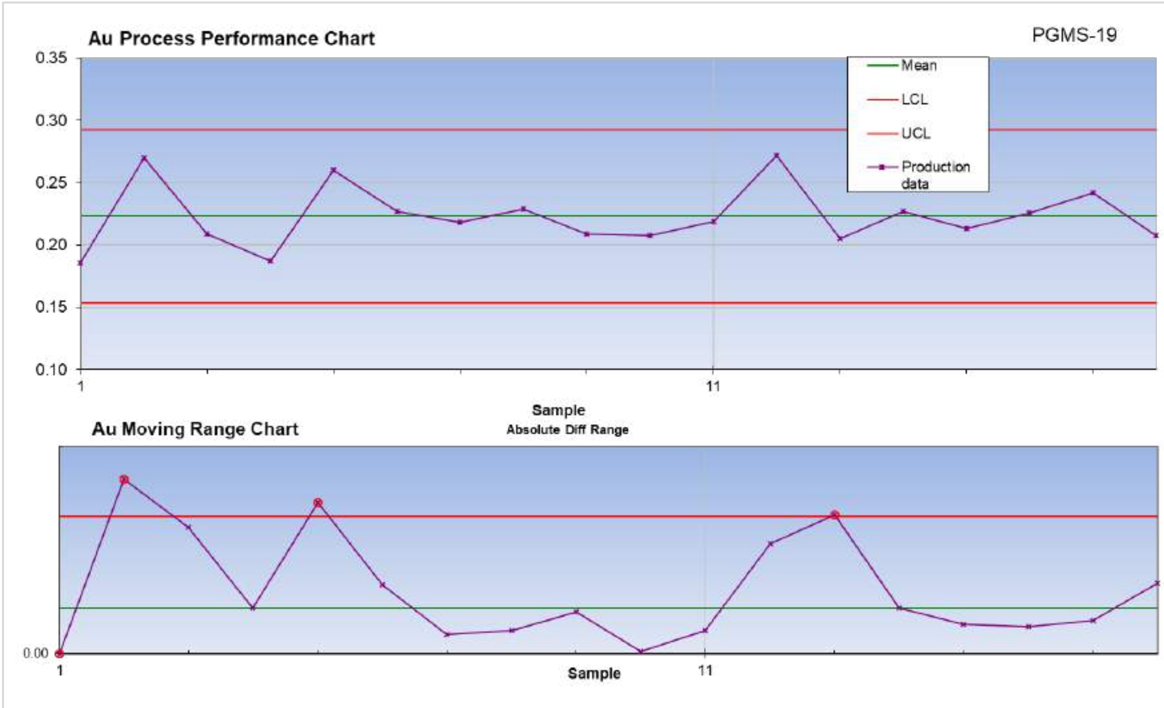


Figure 59: Current Lake Deposit standard PGMS-19 Au (g/t)

Blanks

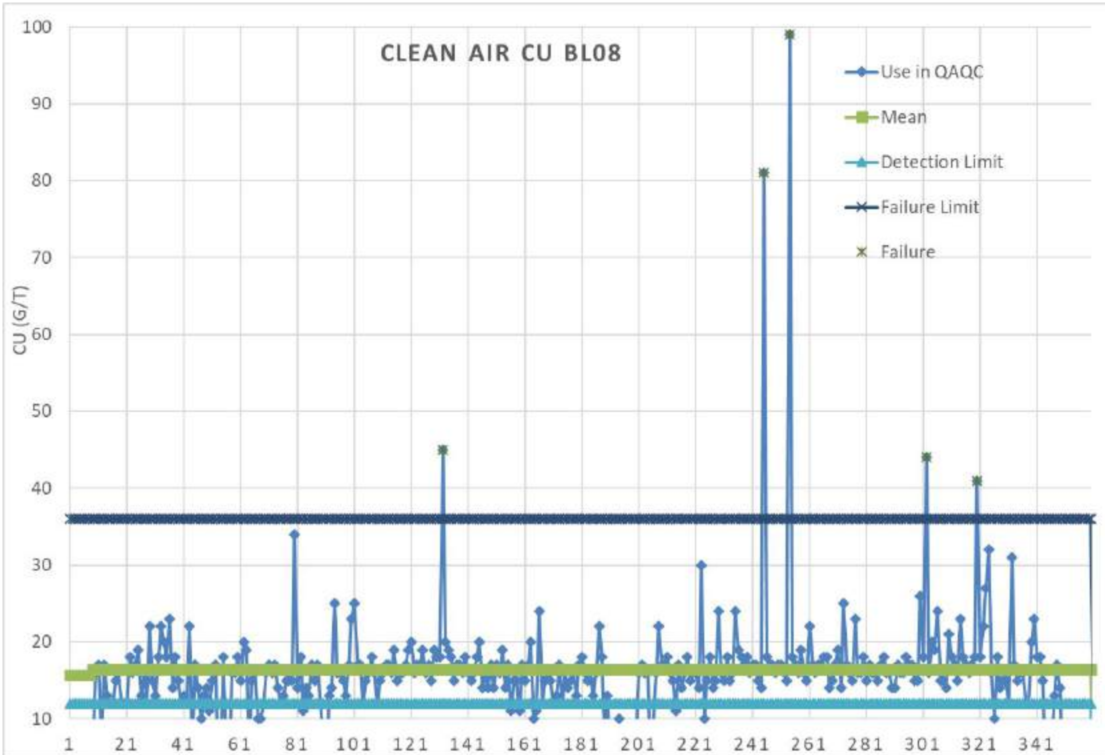


Figure 60: Current Lake Deposit BL08 coarse blanks for Cu (g/t)

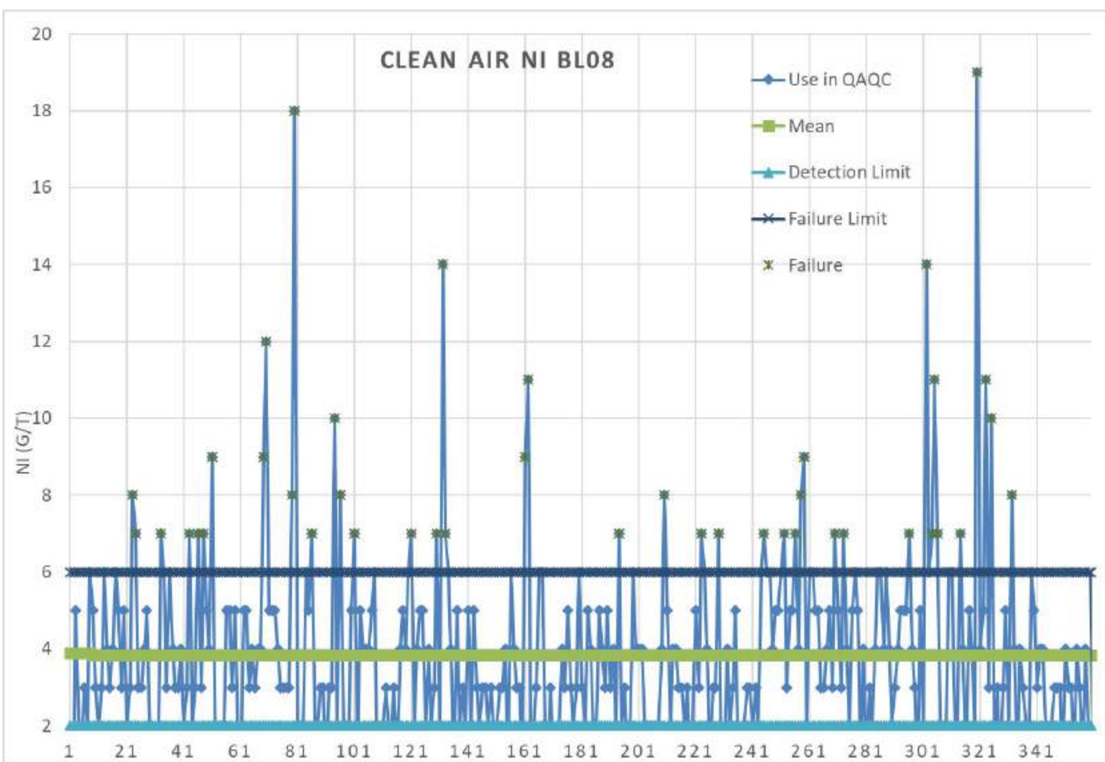


Figure 61: Current Lake Deposit BL08 coarse blanks for Ni (g/t)

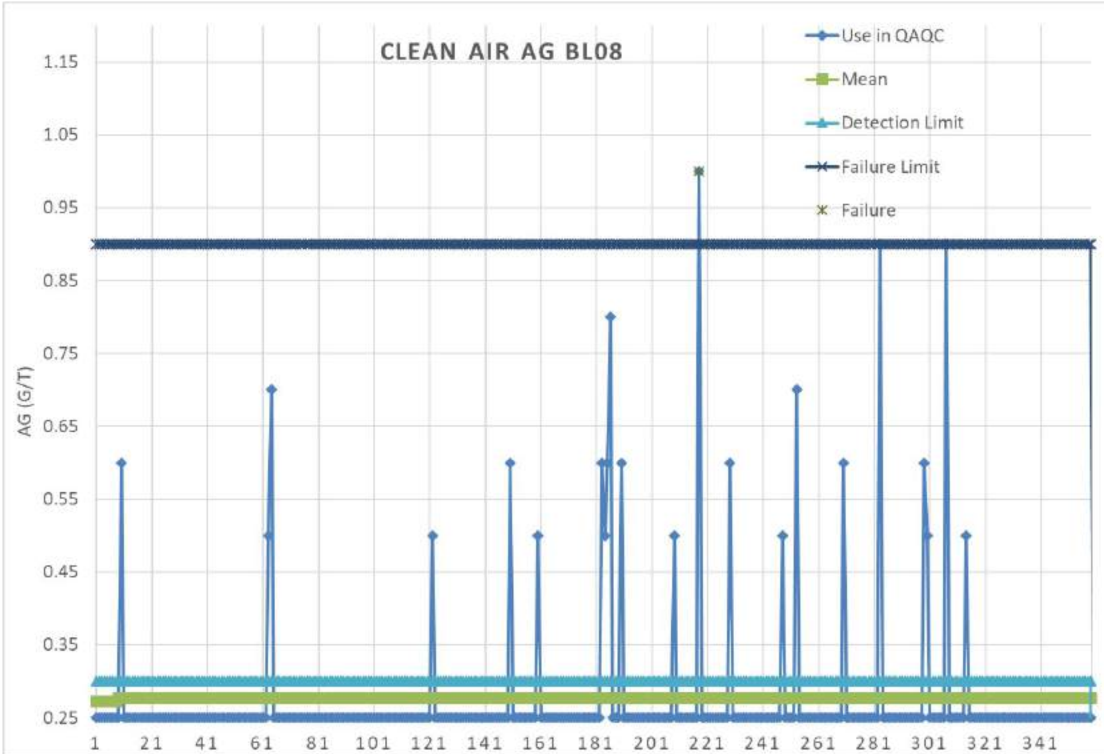


Figure 62: Current Lake Deposit BL08 coarse blanks for Ag (g/t)

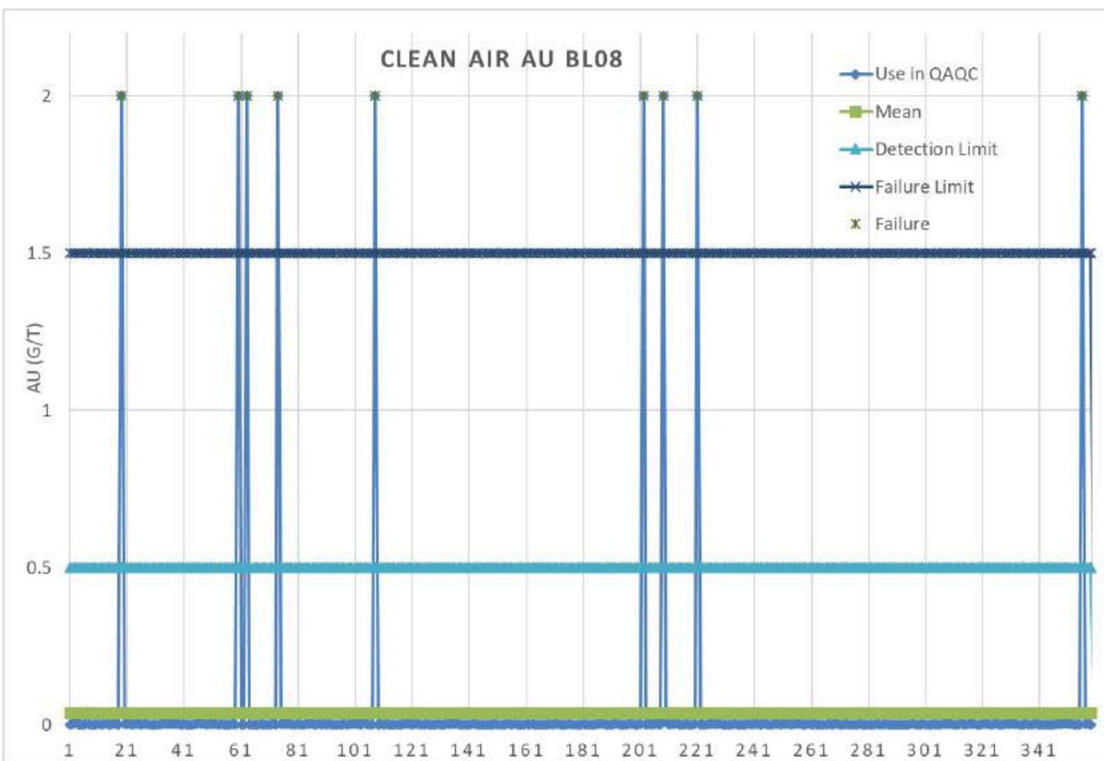


Figure 63: Current Lake Deposit BL08 coarse blanks for Au (g/t)

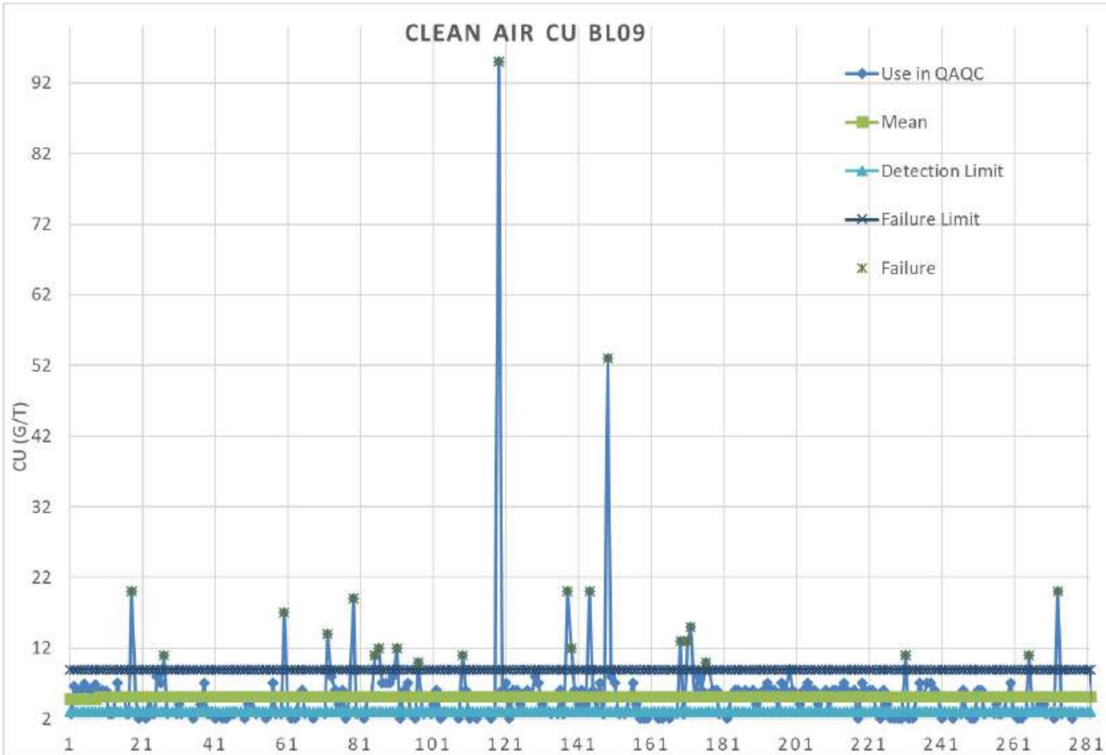


Figure 64: Current Lake Deposit BL09 coarse blanks for Cu (g/t)

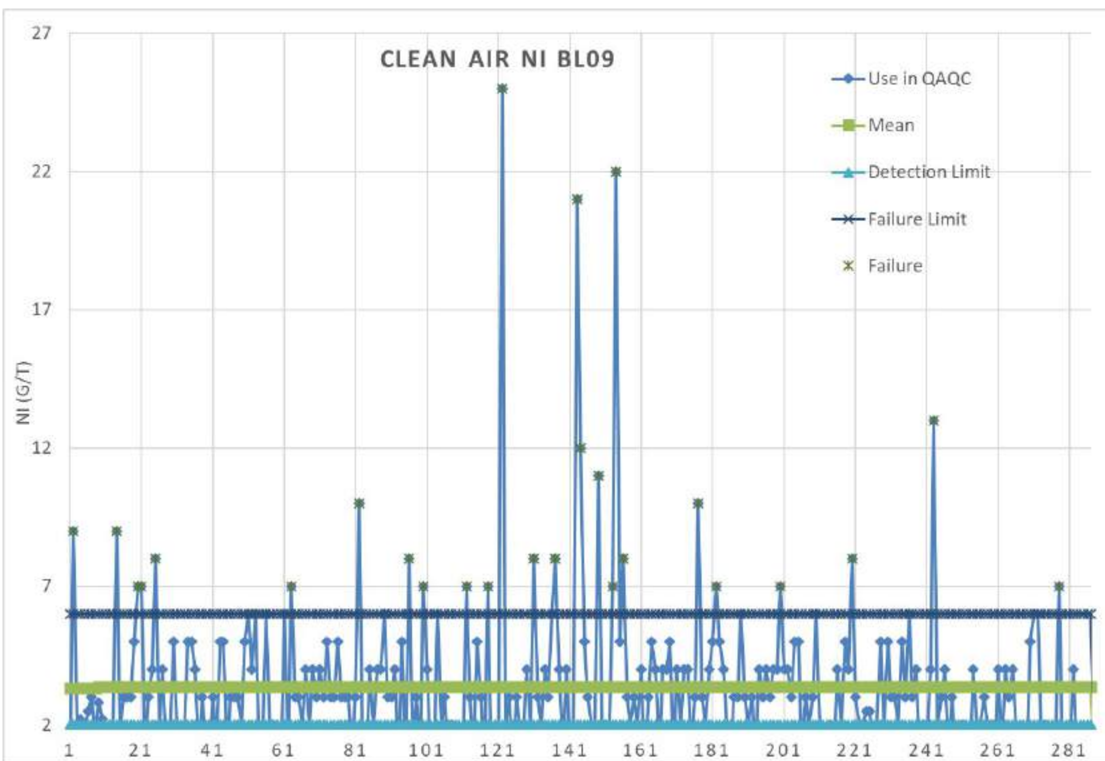


Figure 65: Current Lake Deposit BL09 coarse blanks for Ni (g/t)

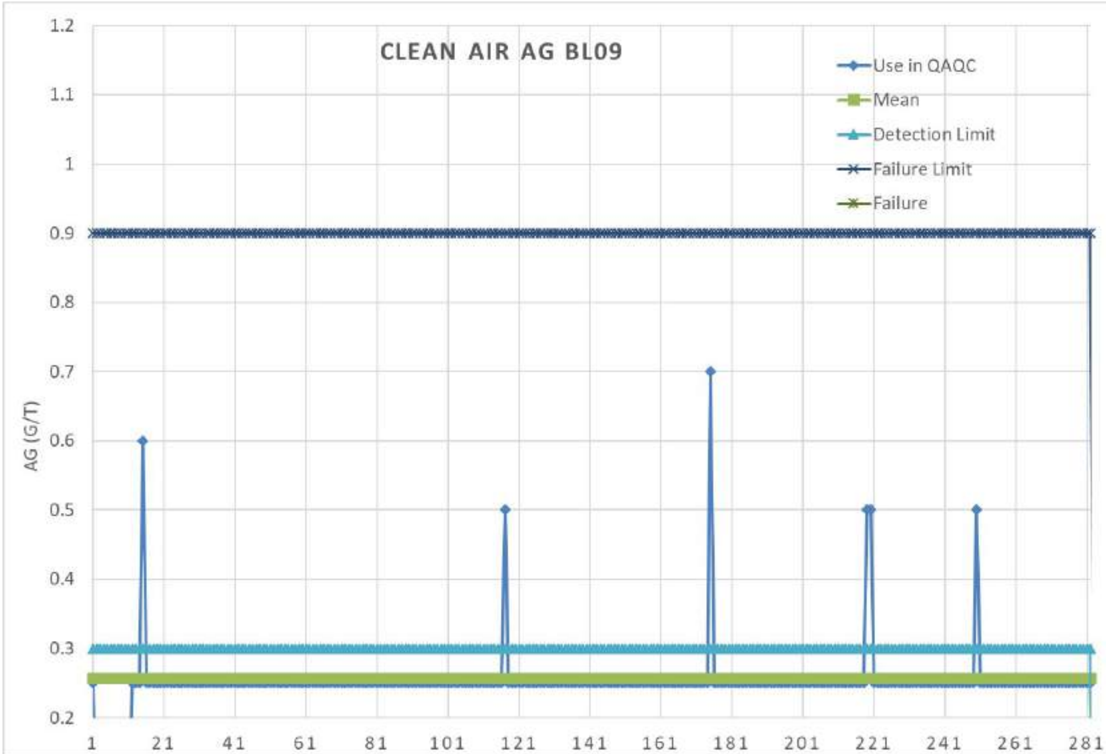


Figure 66: Current Lake Deposit BL09 coarse blanks for Ag (g/t)

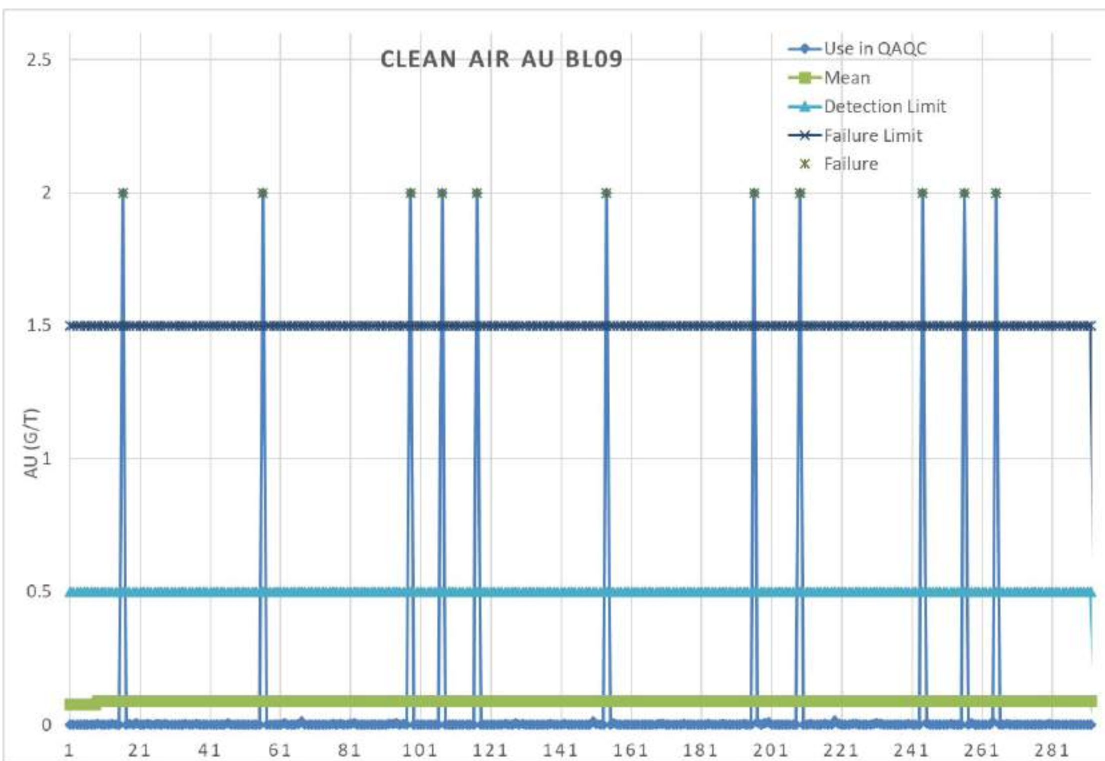


Figure 67: Current Lake Deposit BL09 coarse blanks for Au (g/t)

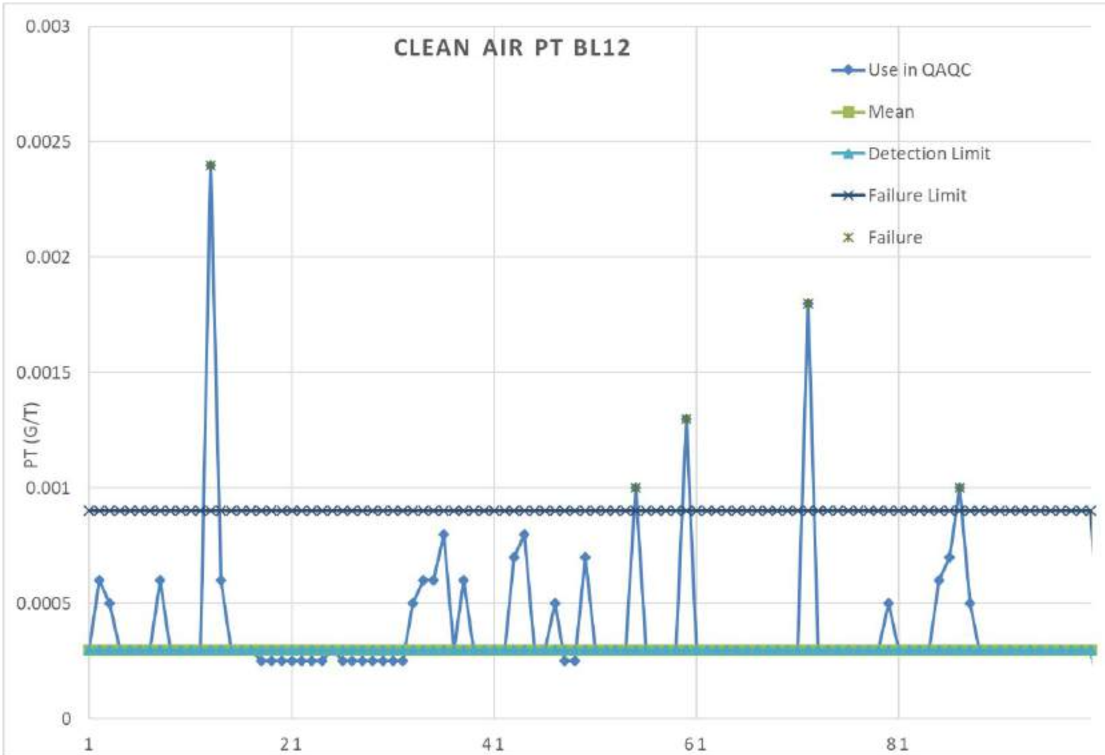


Figure 68: Current Lake Deposit BL12 coarse blanks for Pt (g/t)

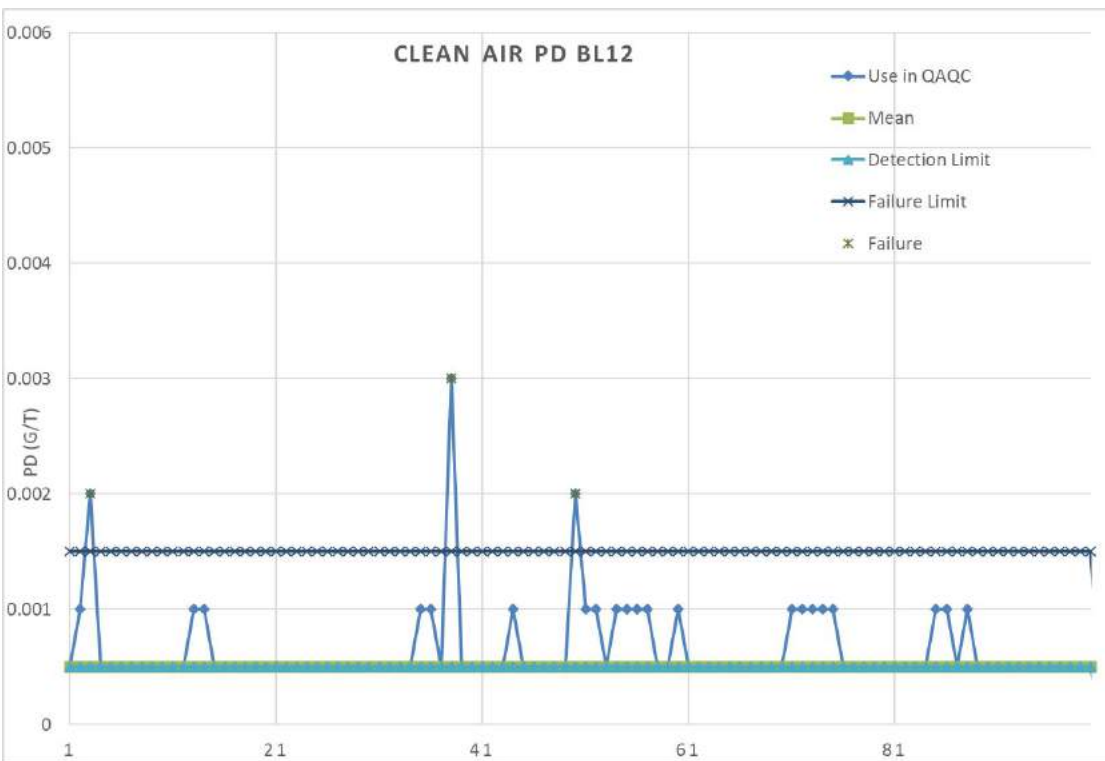


Figure 69: Current Lake Deposit BL12 coarse blanks for Pd (g/t)

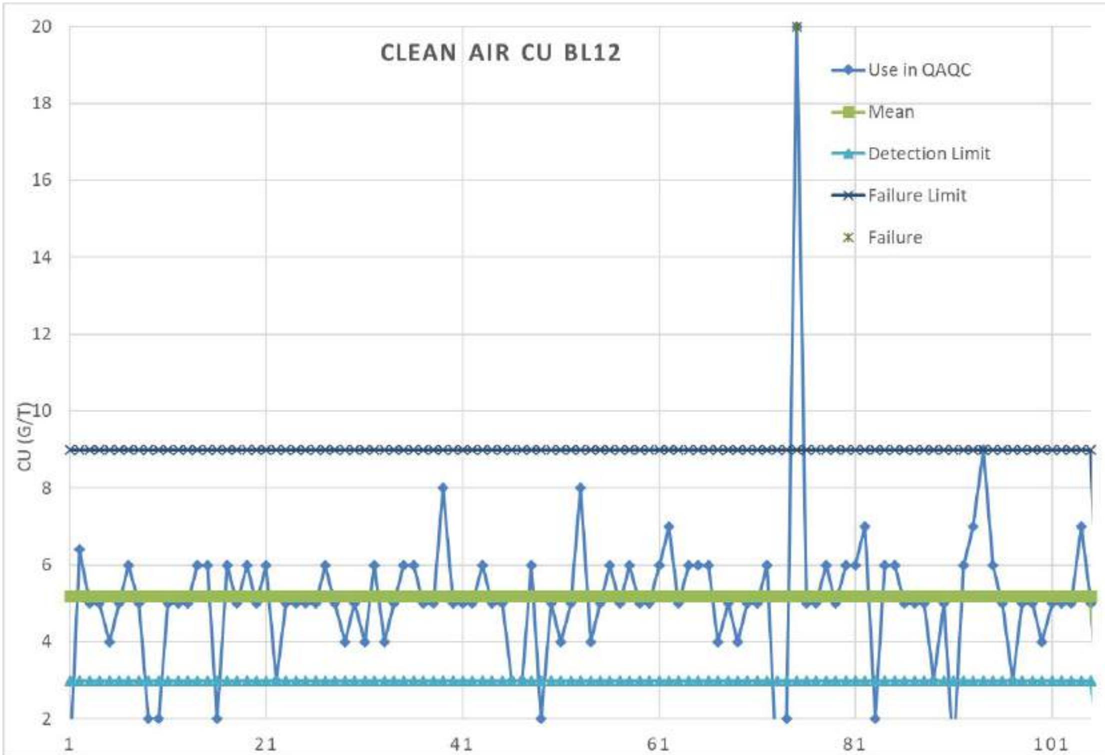


Figure 70: Current Lake Deposit BL12 coarse blanks for Cu (g/t)

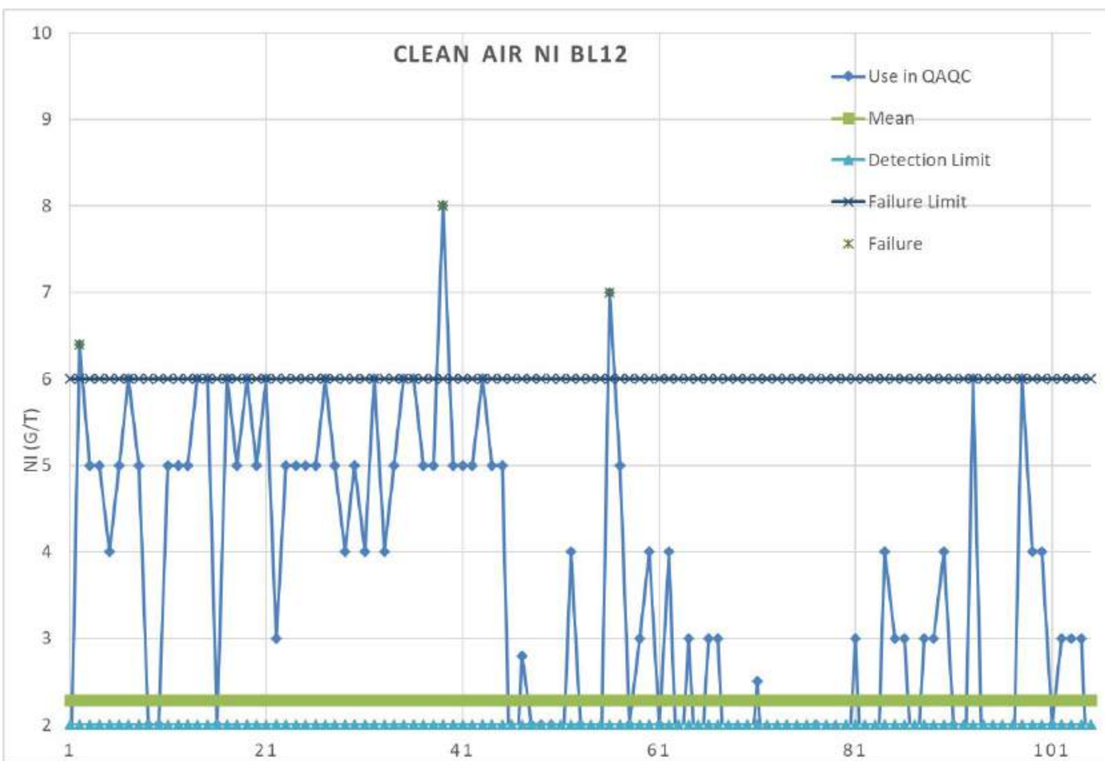


Figure 71: Current Lake Deposit BL12 coarse blanks for Ni (g/t)

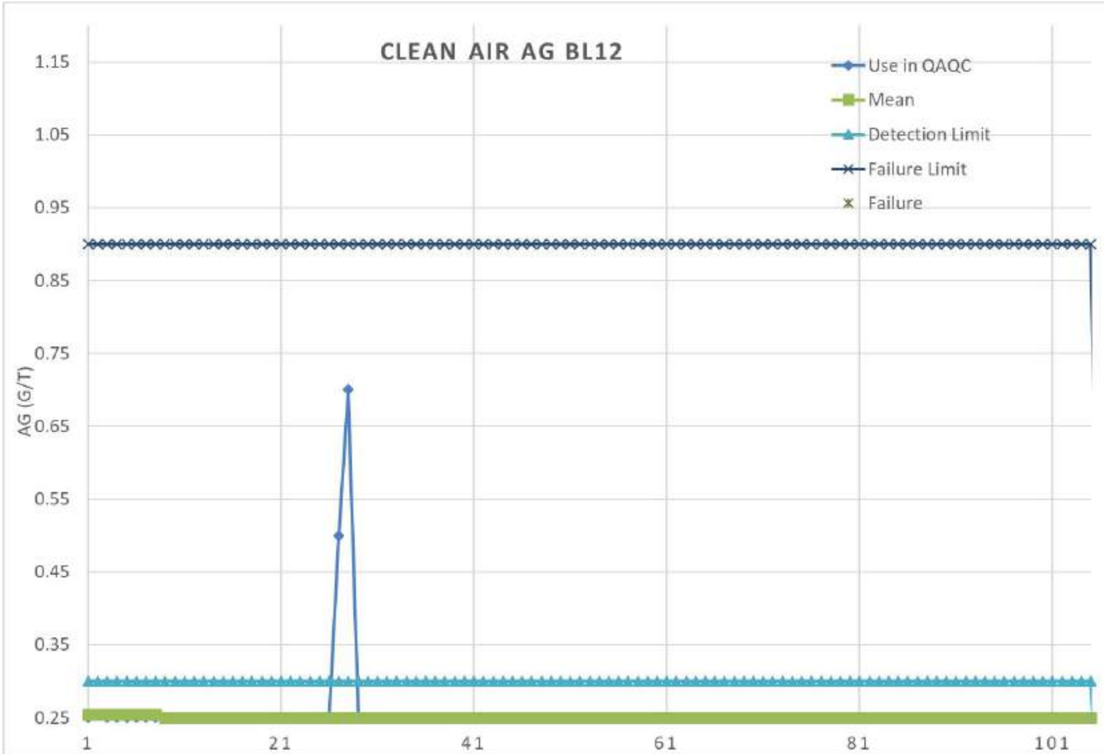


Figure 72: Current Lake Deposit BL12 coarse blanks for Ag (g/t)

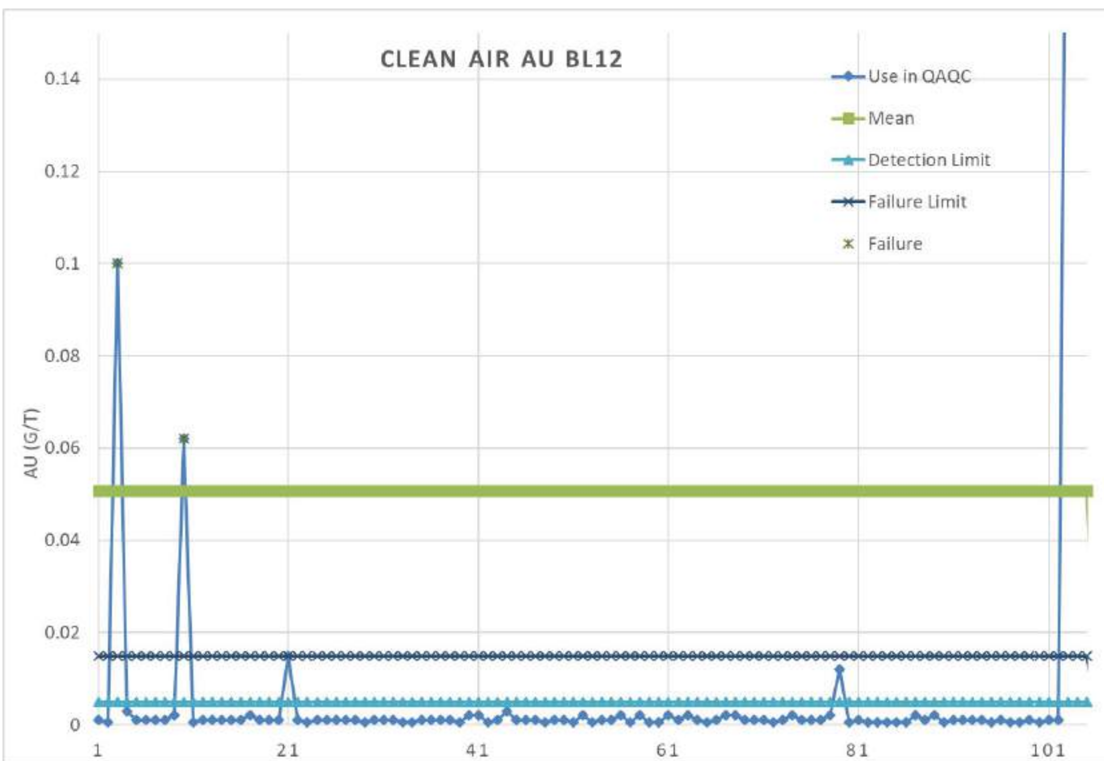


Figure 73: Current Lake Deposit BL12 coarse blanks for Au (g/t)

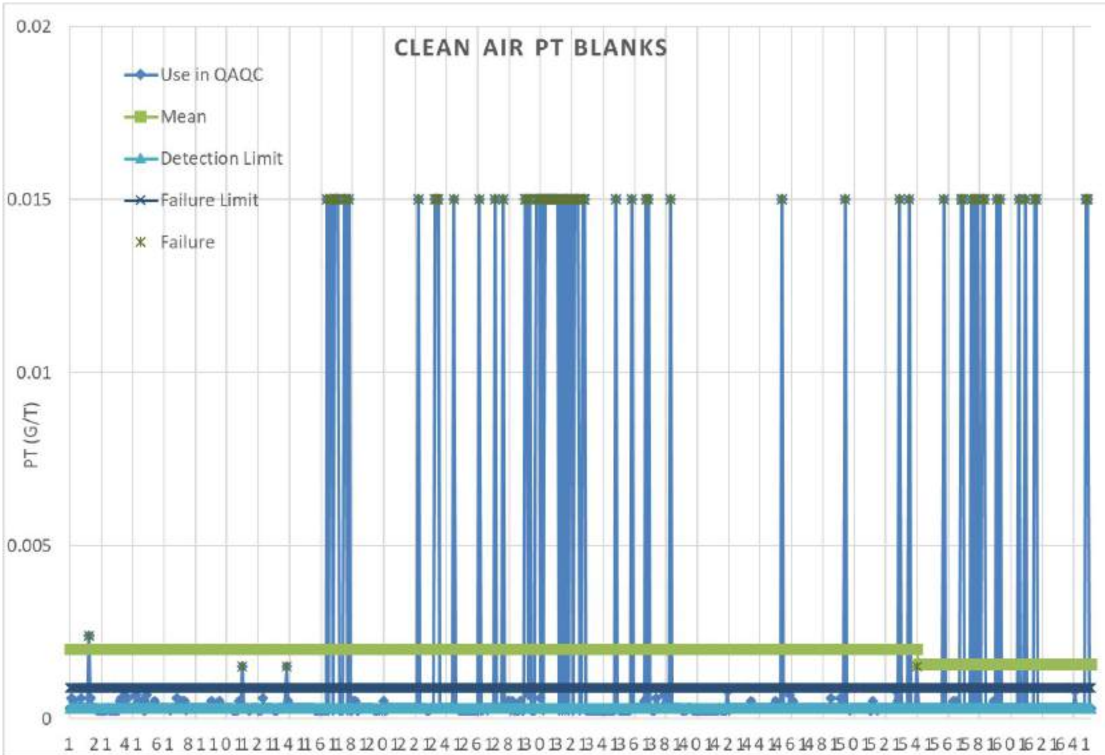


Figure 74: Current Lake Deposit Blank coarse blanks for Pt (g/t)

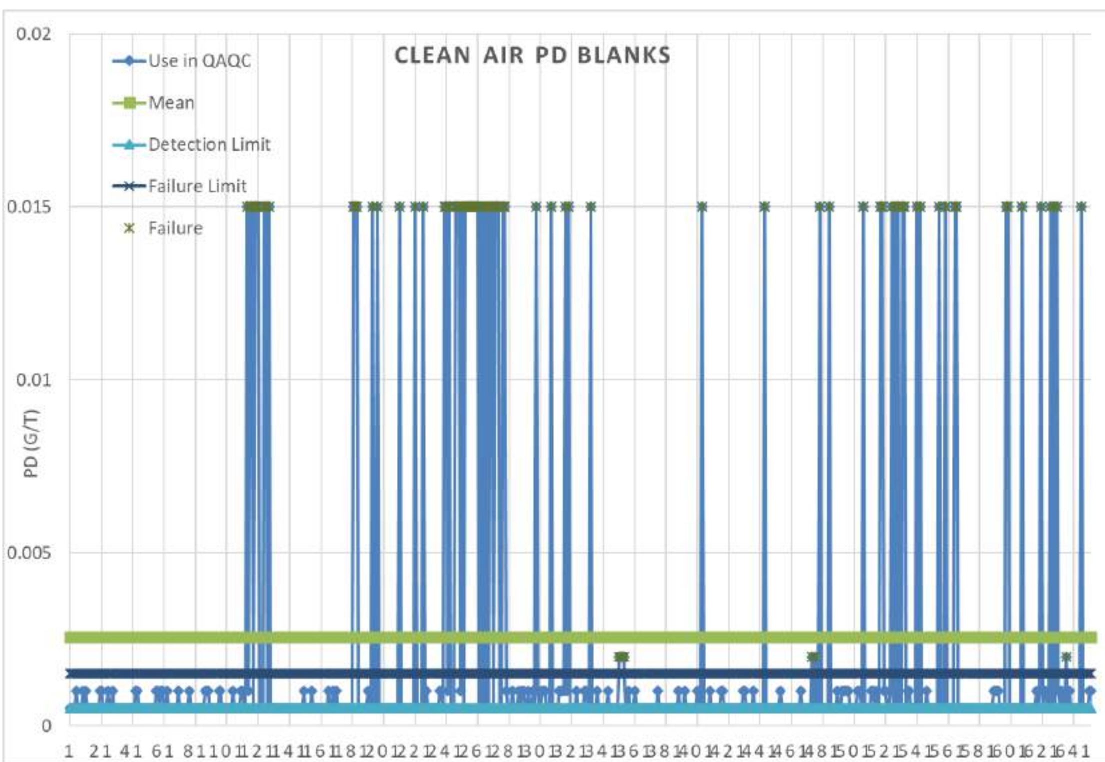


Figure 75: Current Lake Deposit Blank coarse blanks for Pd (g/t)

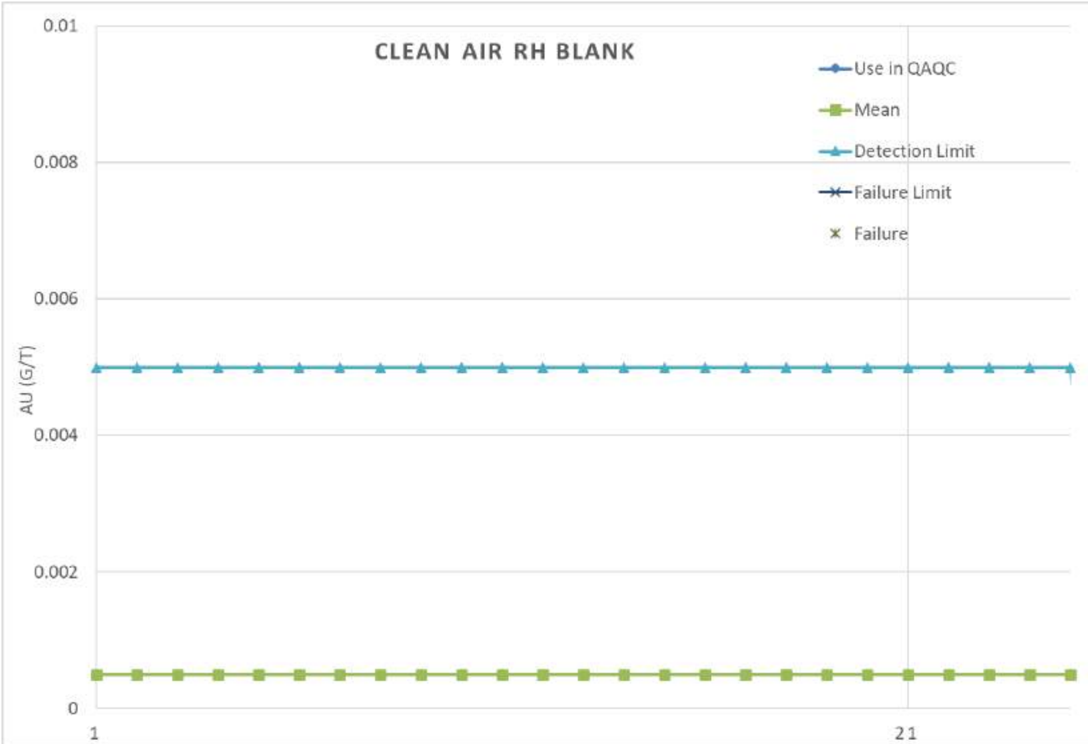


Figure 76: Current Lake Deposit Blank coarse blanks for Rh (g/t)

ESCAPE LAKE DEPOSIT

Standards

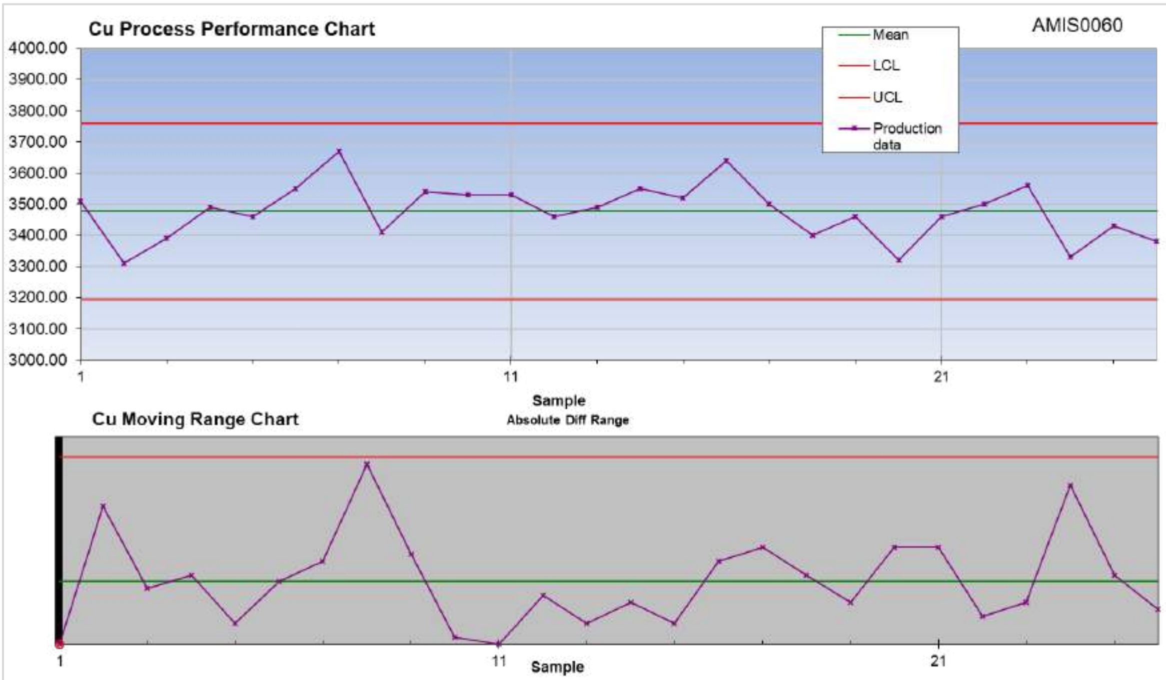


Figure 77: Escape Lake Deposit standard AMIS0060 Cu (g/t)

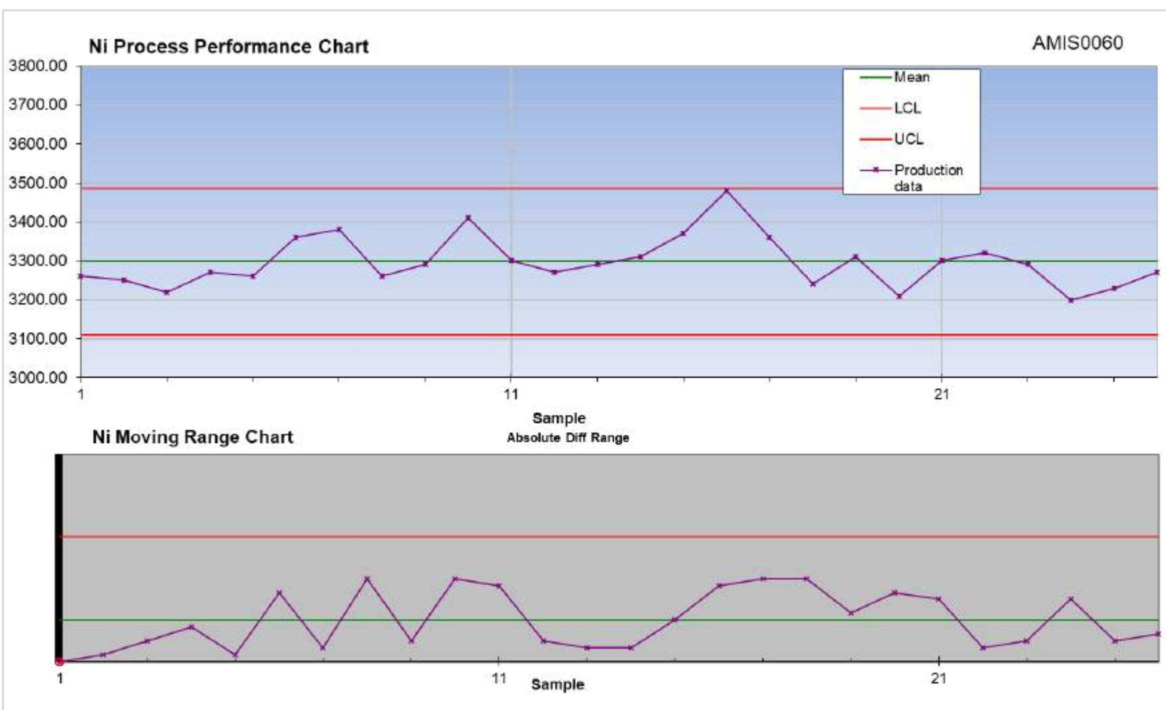


Figure 78: Escape Lake Deposit standard AMIS0060 Ni (g/t)

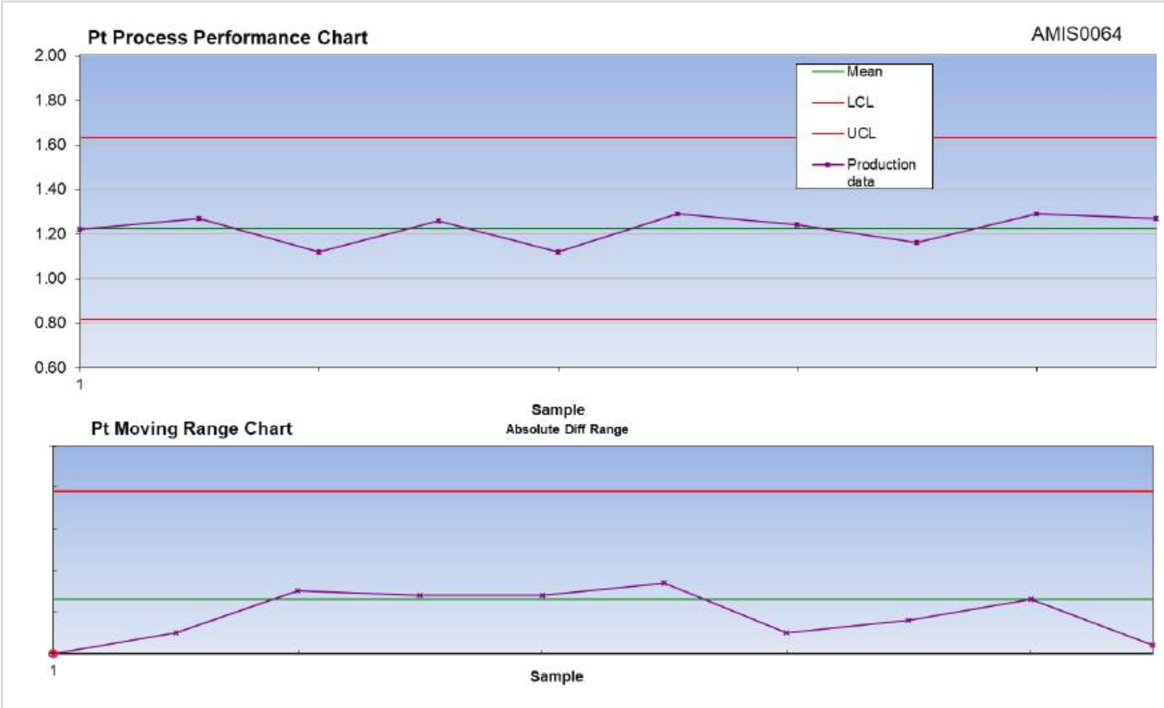


Figure 79: Escape Lake Deposit standard AMIS0064 Pt (g/t)

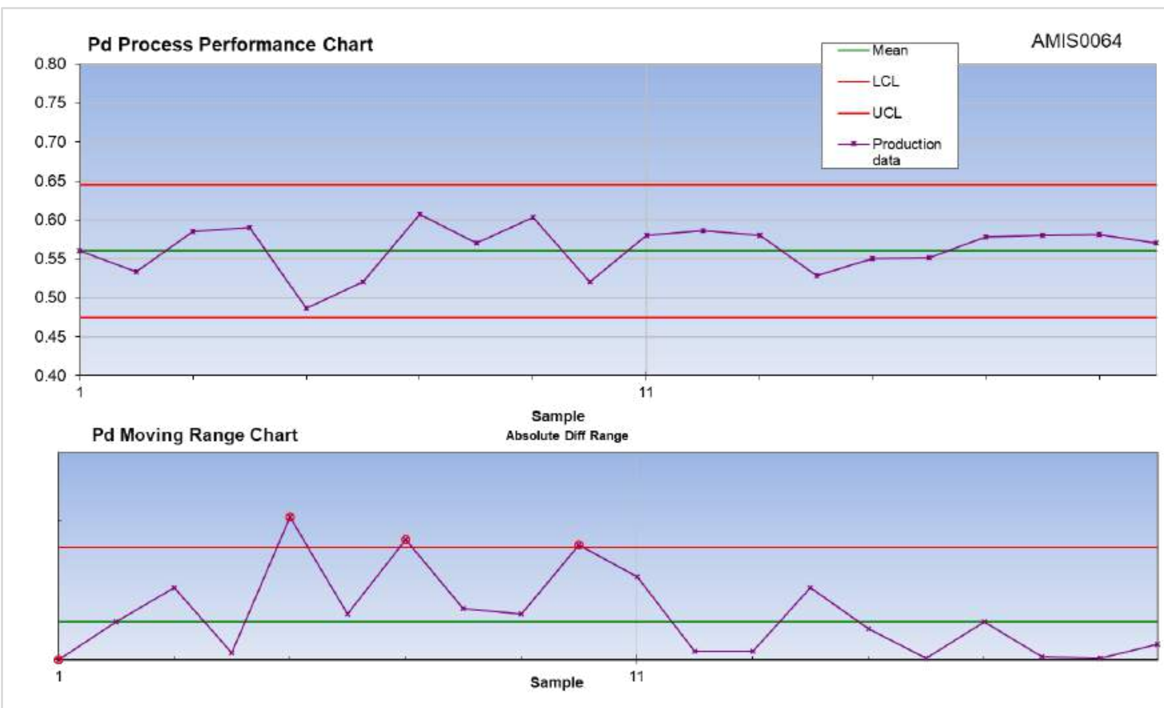


Figure 80: Escape Lake Deposit standard AMIS0064 Pd (g/t)

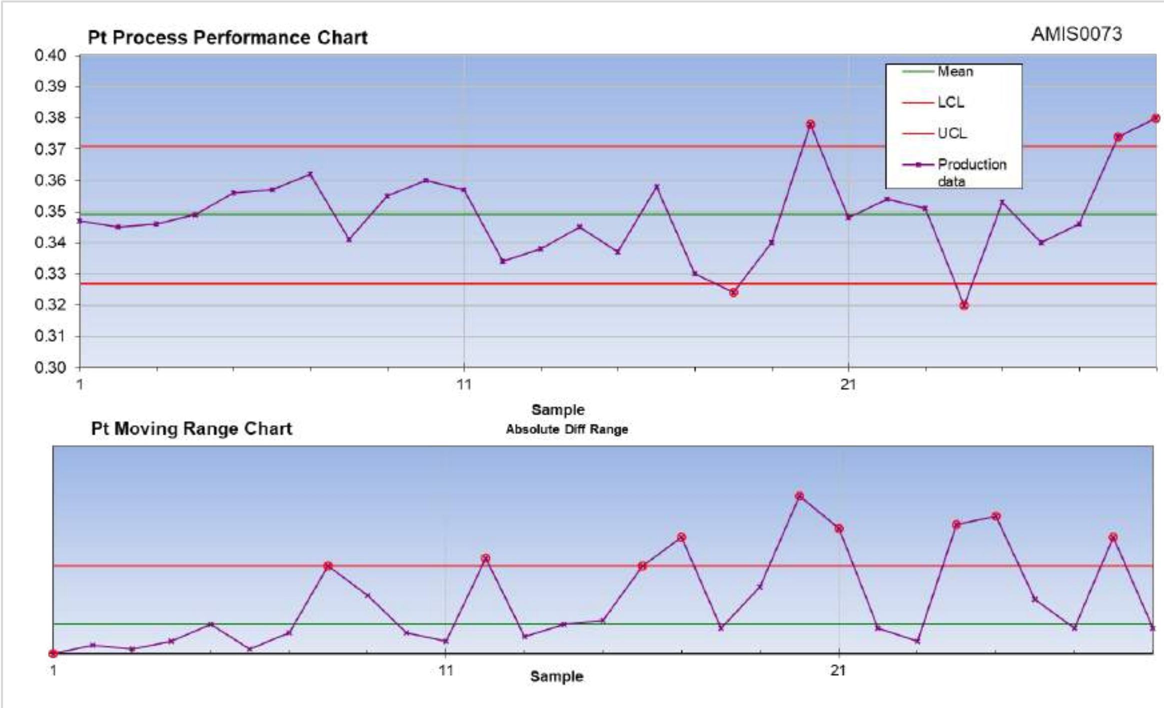


Figure 81: Escape Lake Deposit standard AMIS0073 Pt (g/t)

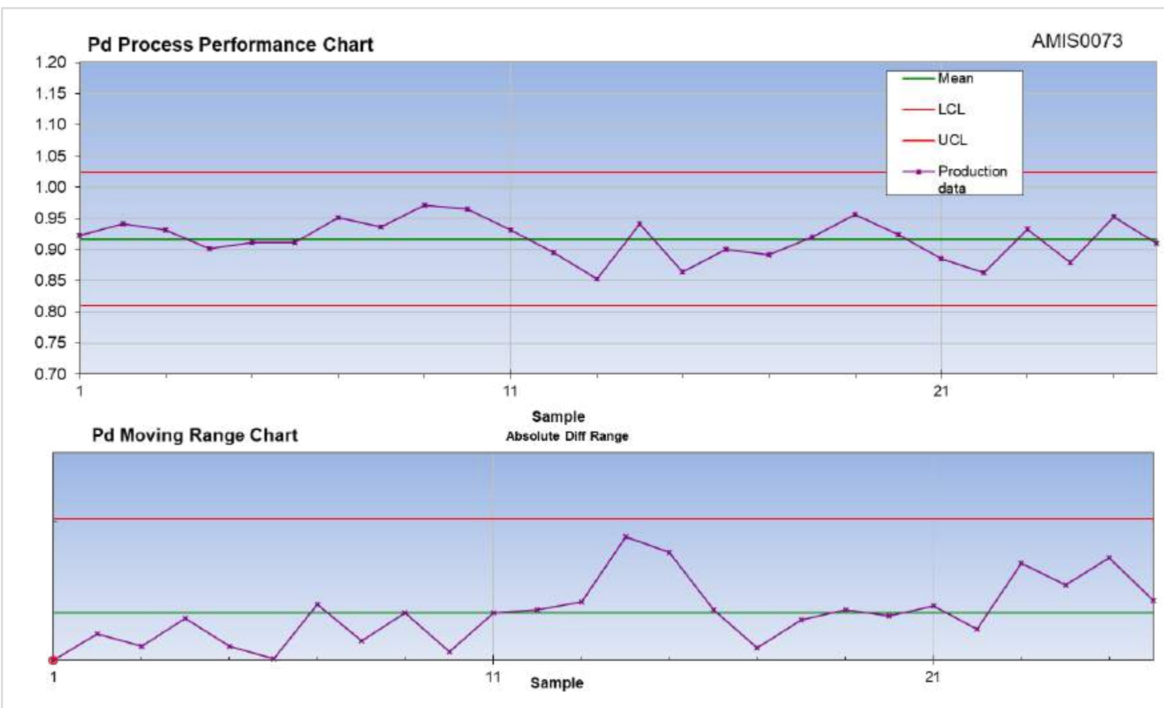


Figure 82: Escape Lake Deposit standard AMIS0073 Pd (g/t)

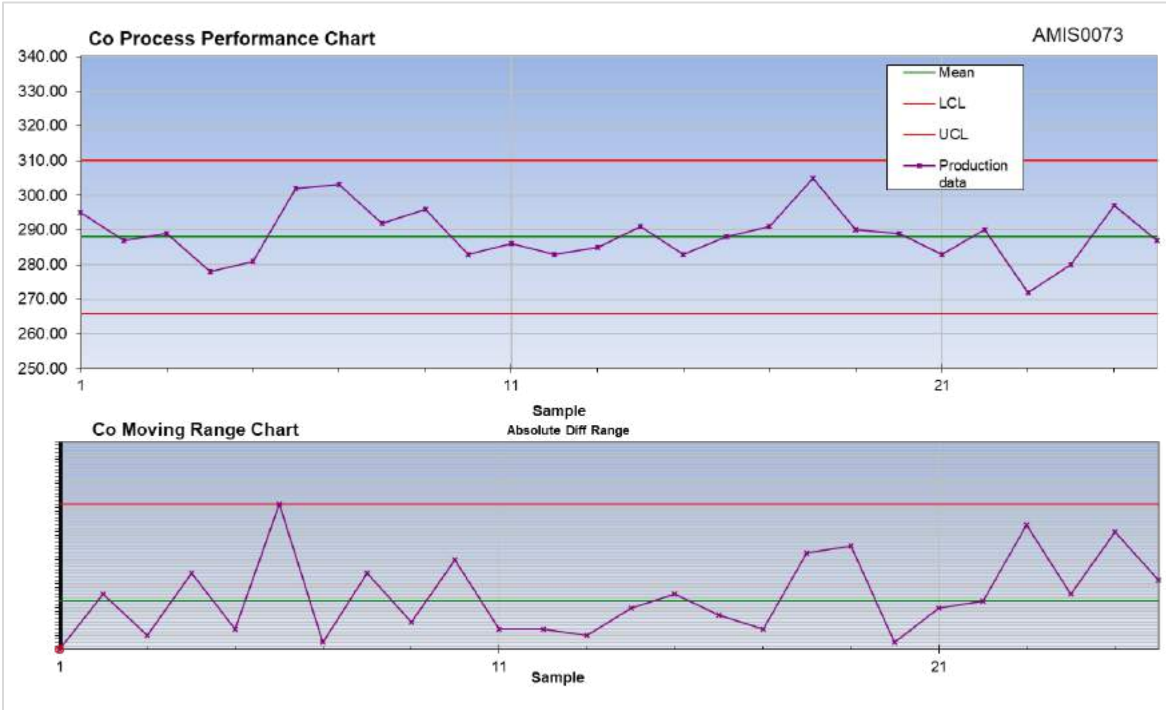


Figure 83: Escape Lake Deposit standard AMIS0073 Co (g/t)

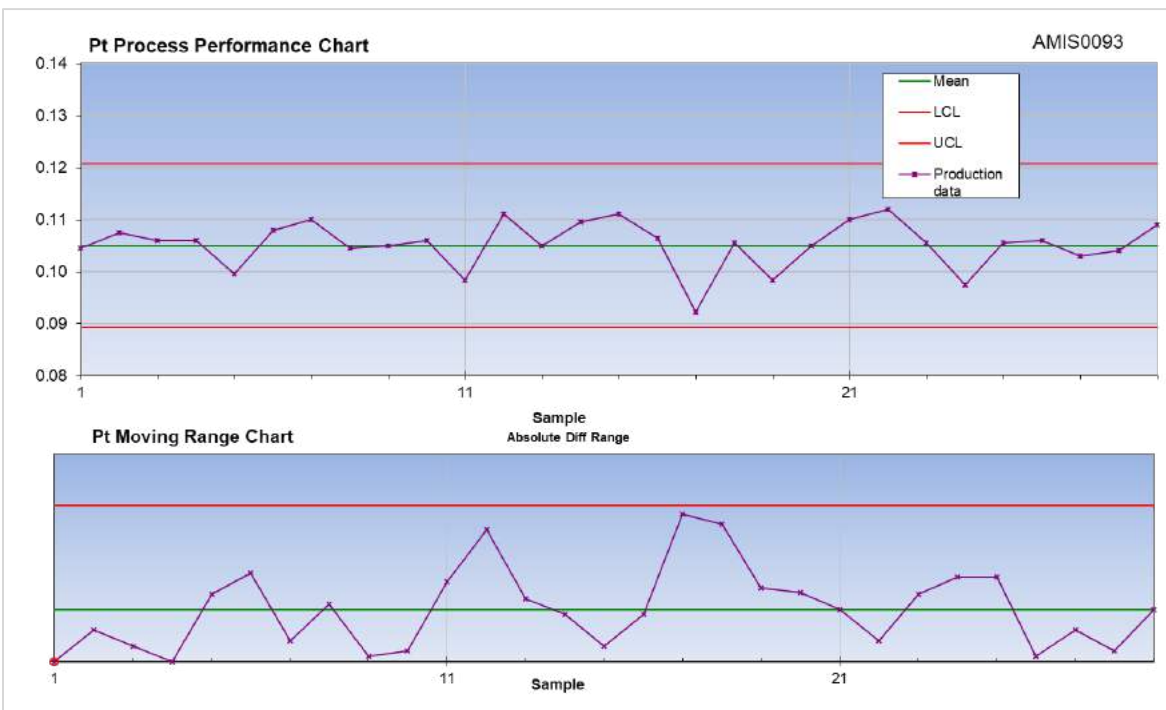


Figure 84: Escape Lake Deposit standard AMIS0093 Pt (g/t)

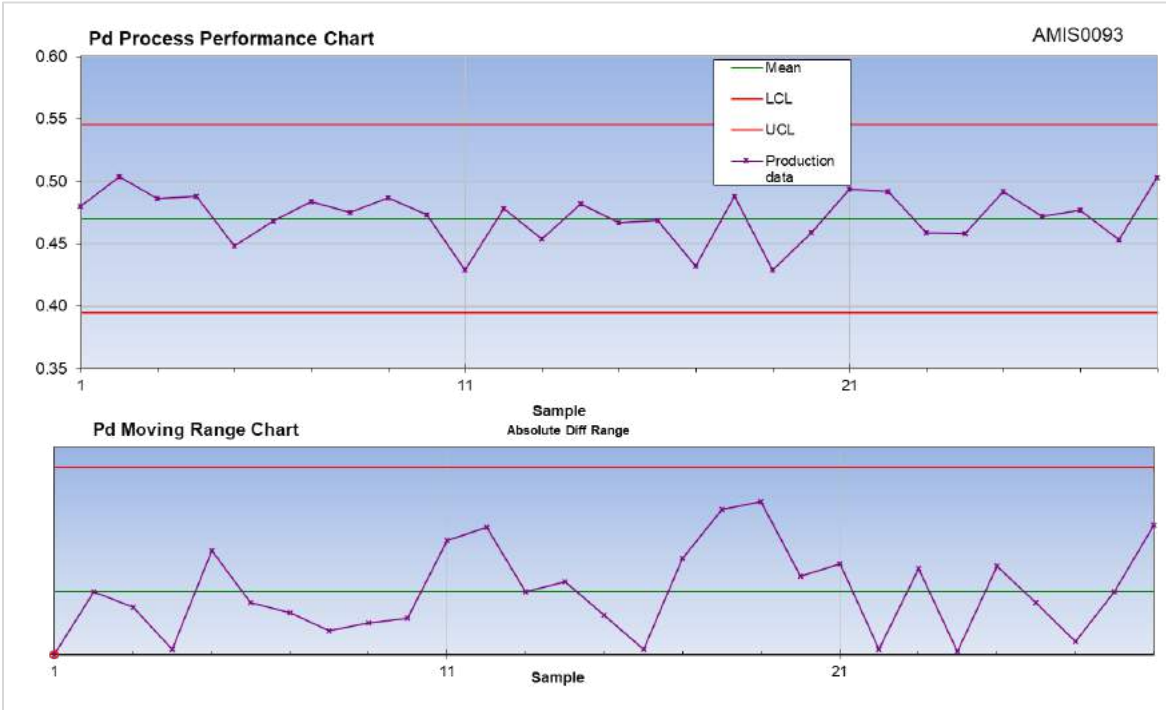


Figure 85: Escape Lake Deposit standard AMIS0093 Pd (g/t)

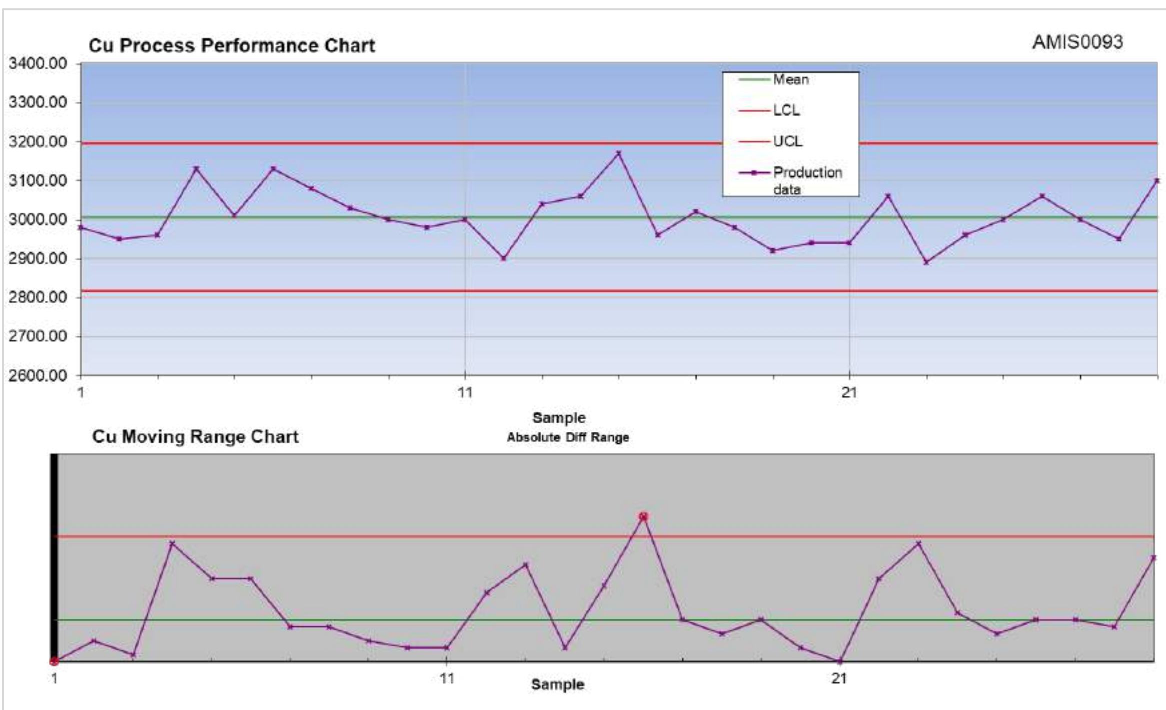


Figure 86: Escape Lake Deposit standard AMIS0093 Cu (g/t)

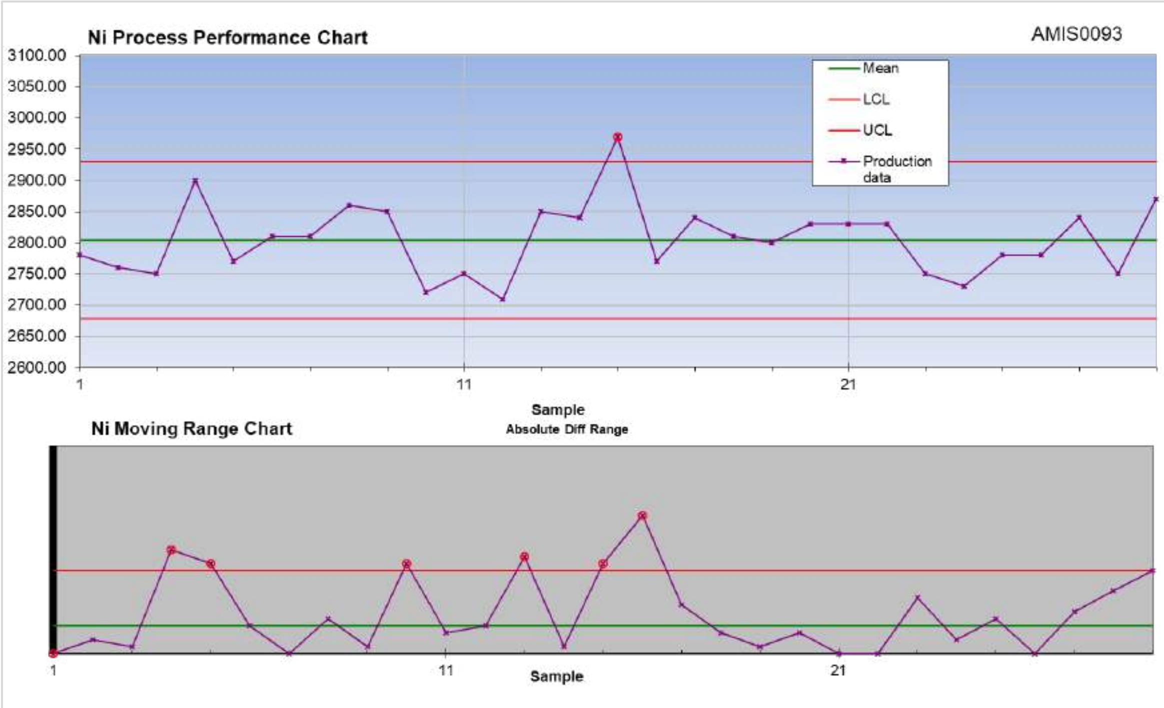


Figure 87: Escape Lake Deposit standard AMIS0093 Ni (g/t)

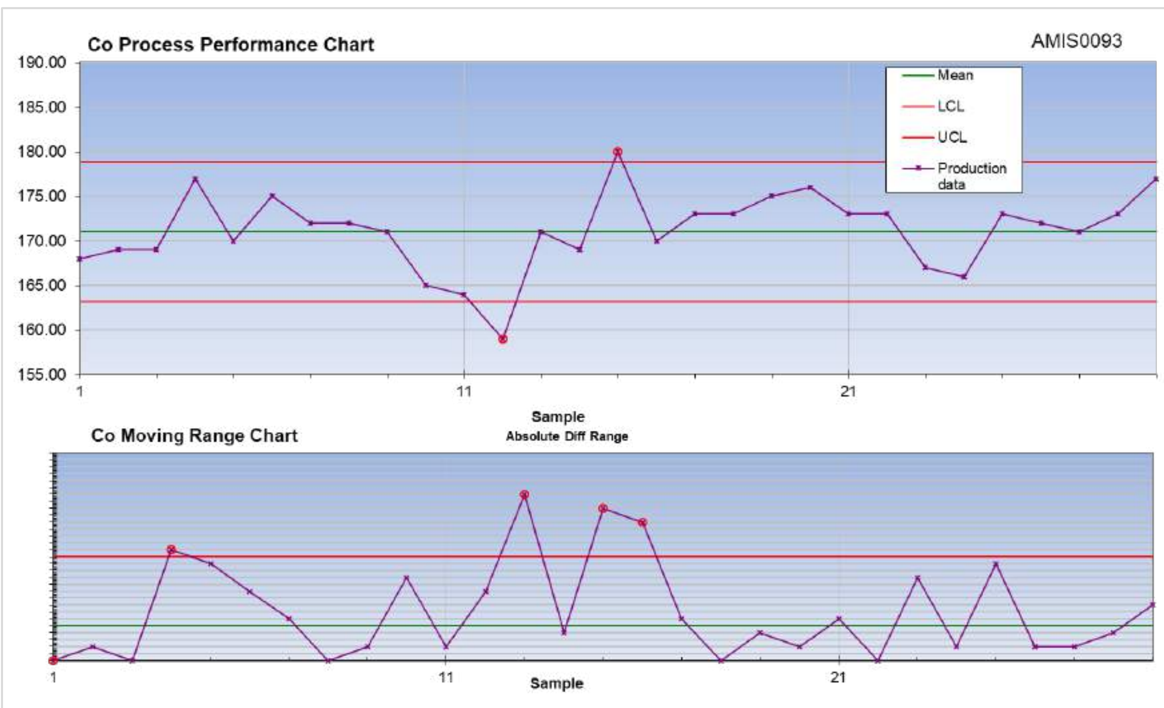


Figure 88: Escape Lake Deposit standard AMIS0093 Co (g/t)

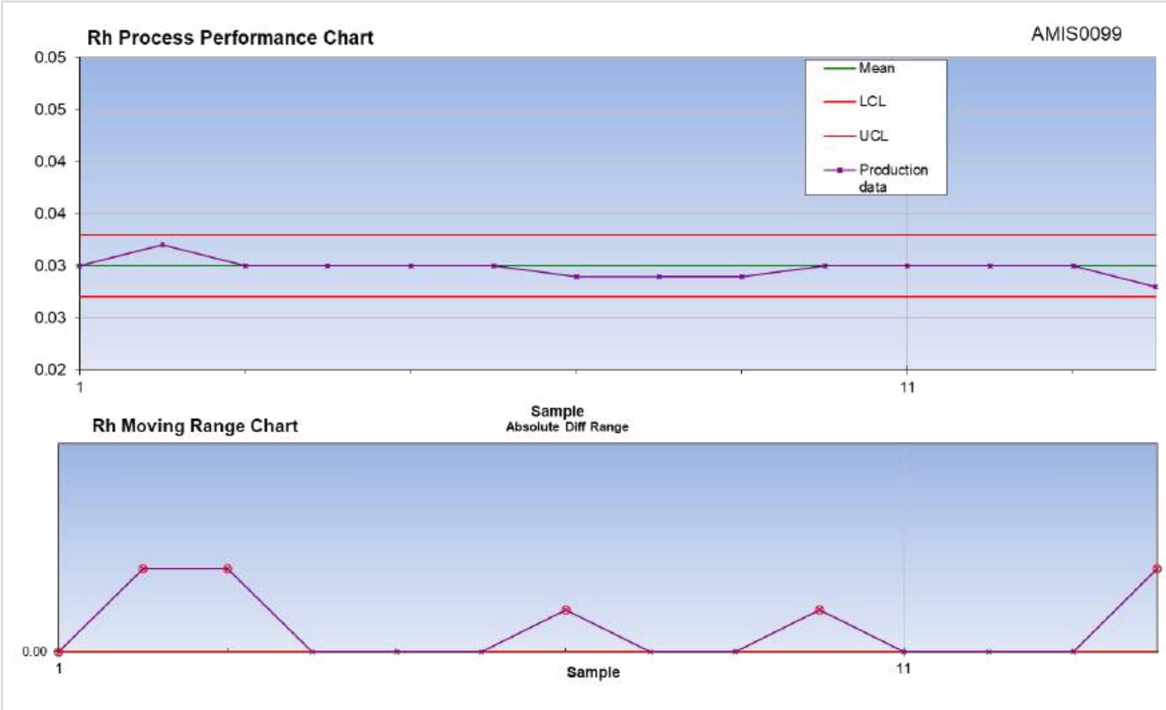


Figure 89: Escape Lake Deposit standard AMIS0099 Rh (g/t)

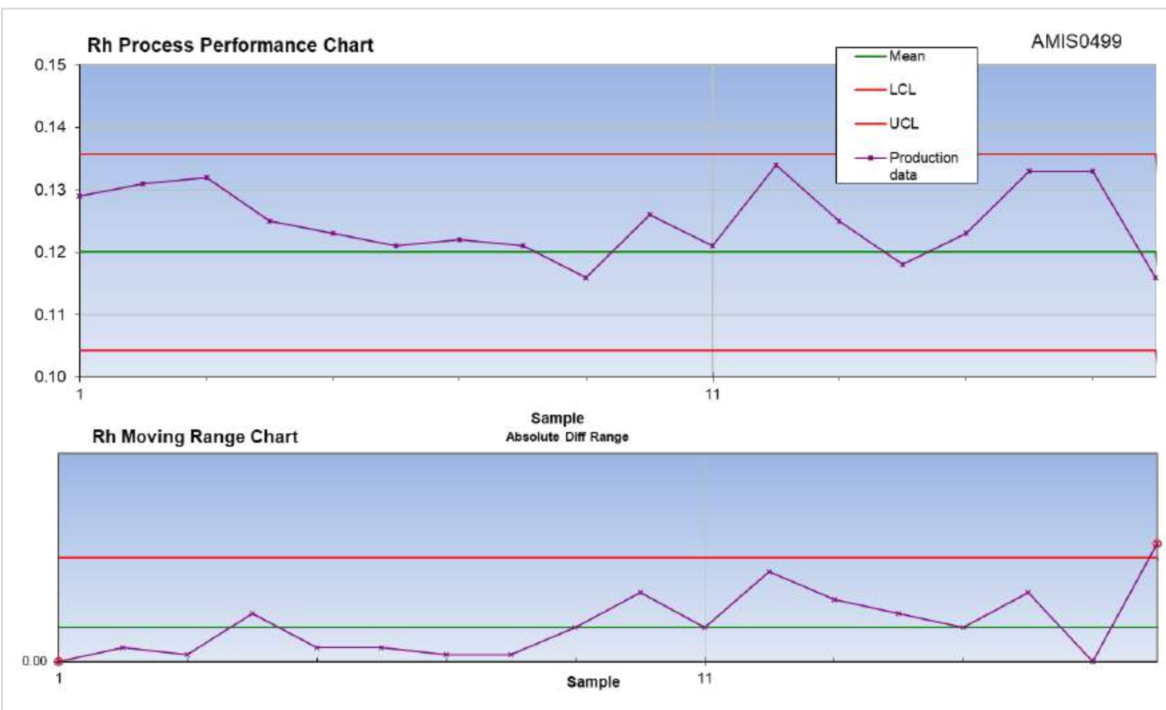


Figure 90: Escape Lake Deposit standard AMIS0499 Rh (g/t)

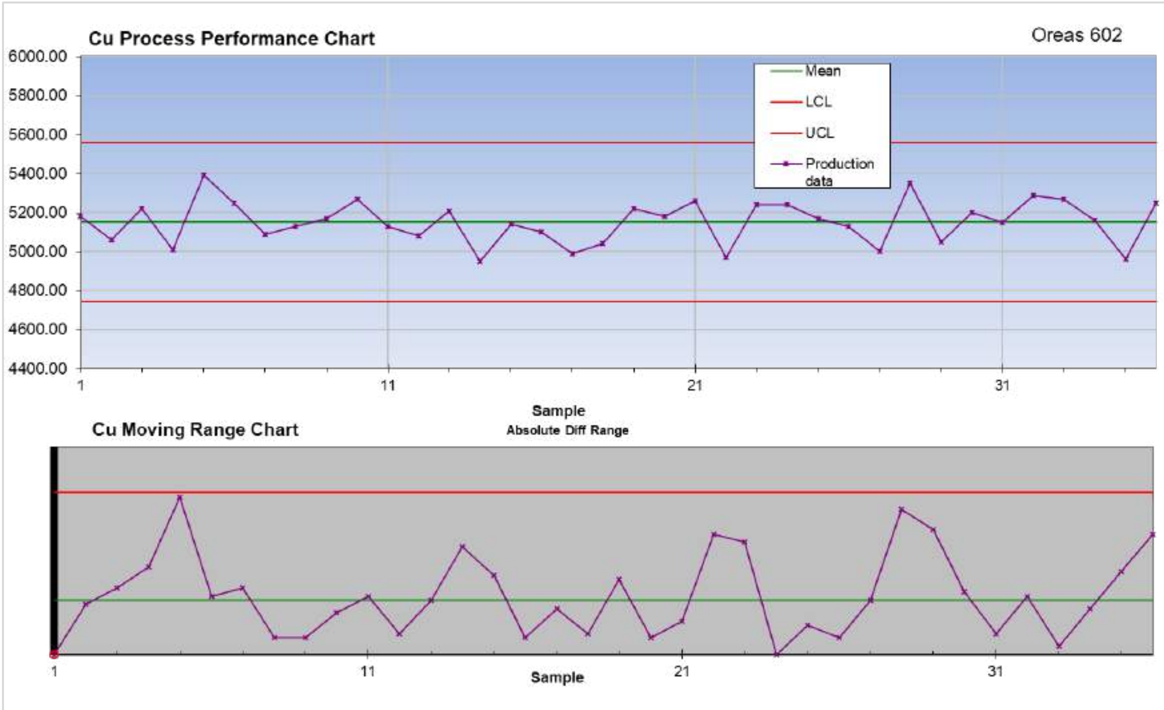


Figure 91: Escape Lake Deposit standard Oreas 602 Cu (g/t)

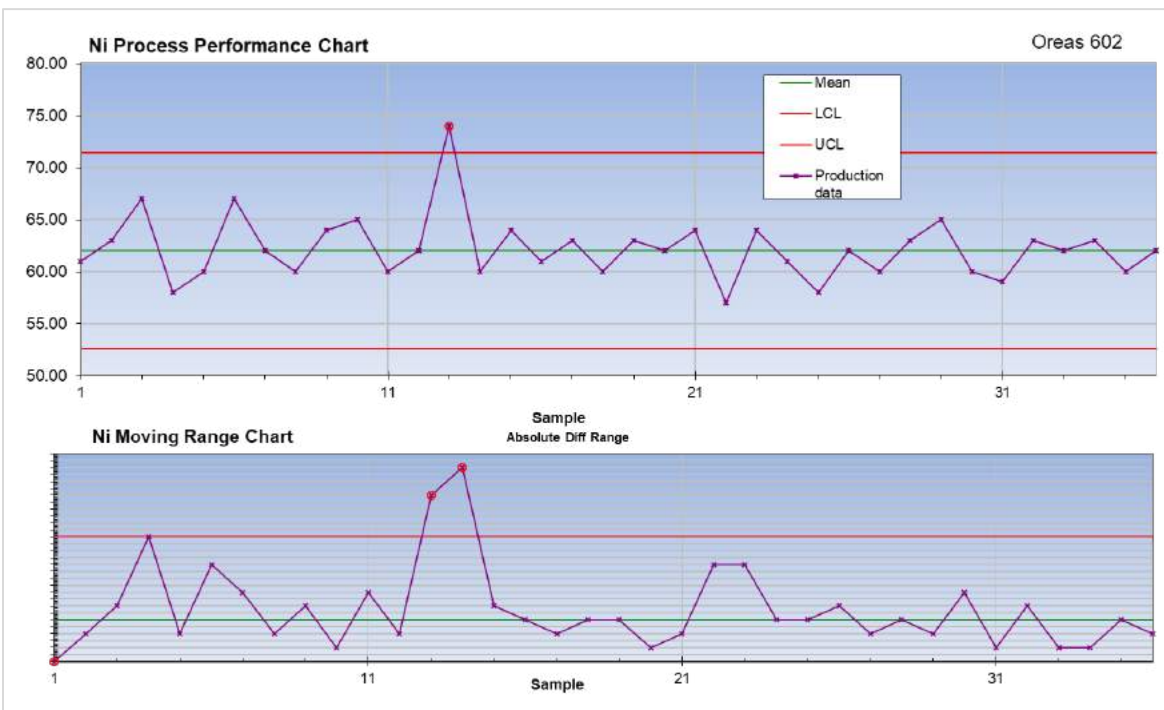


Figure 92: Escape Lake Deposit standard Oreas 602 Ni (g/t)

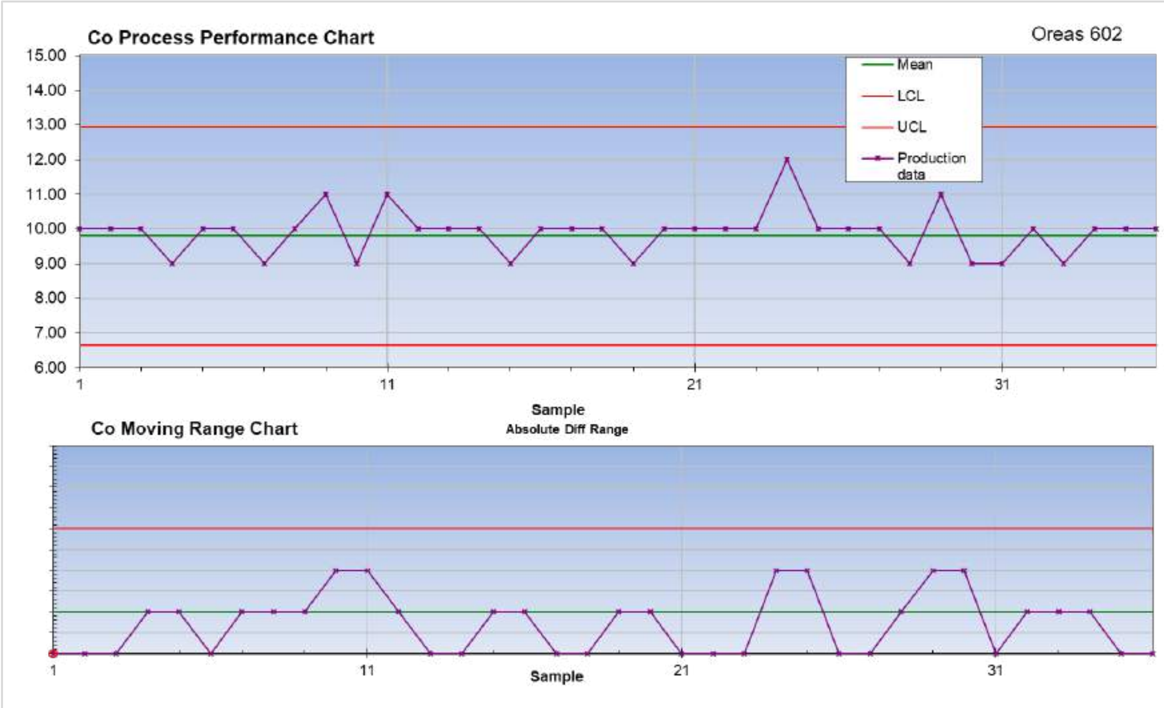


Figure 93: Escape Lake Deposit standard Oreas 602 Ni (g/t)

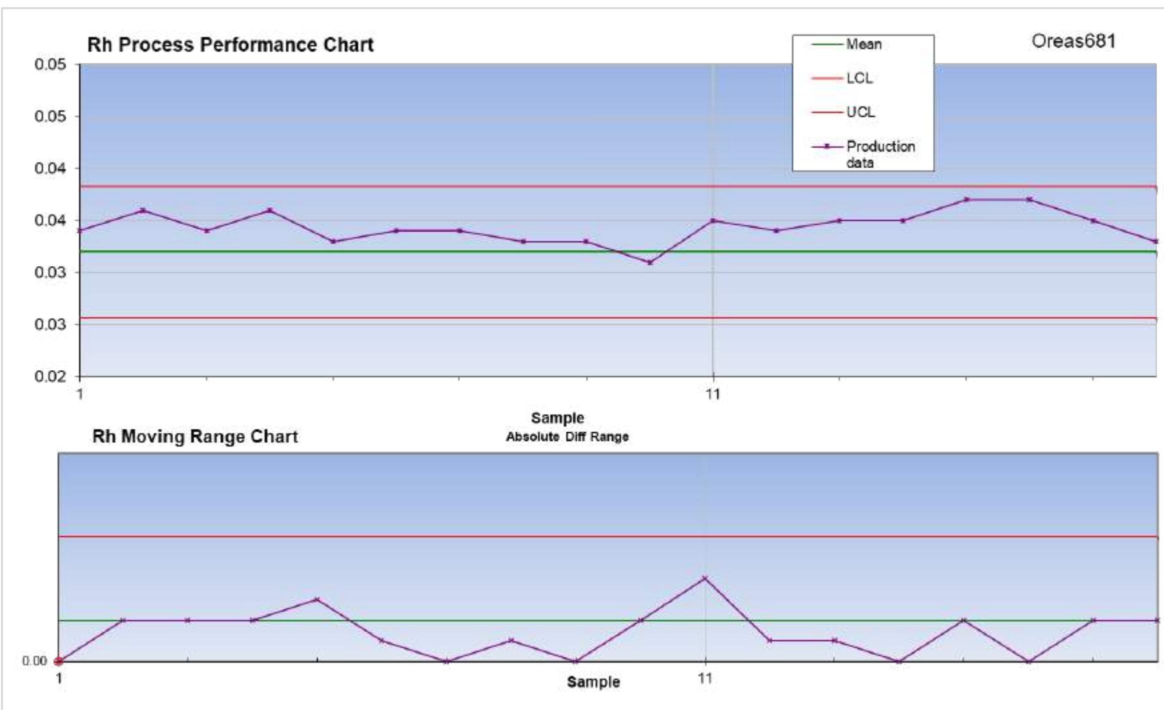


Figure 94: Escape Lake Deposit standard Oreas 681 Rh (g/t)

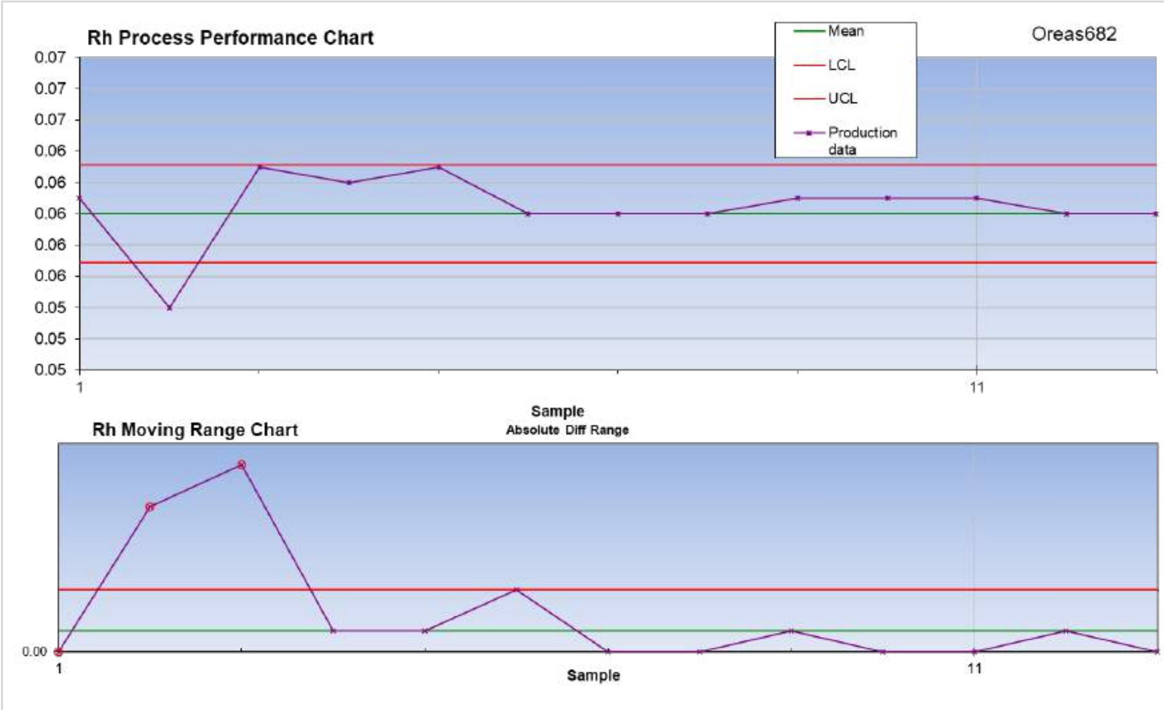


Figure 95: Escape Lake Deposit standard Oreas 682 Rh (g/t)

Blanks

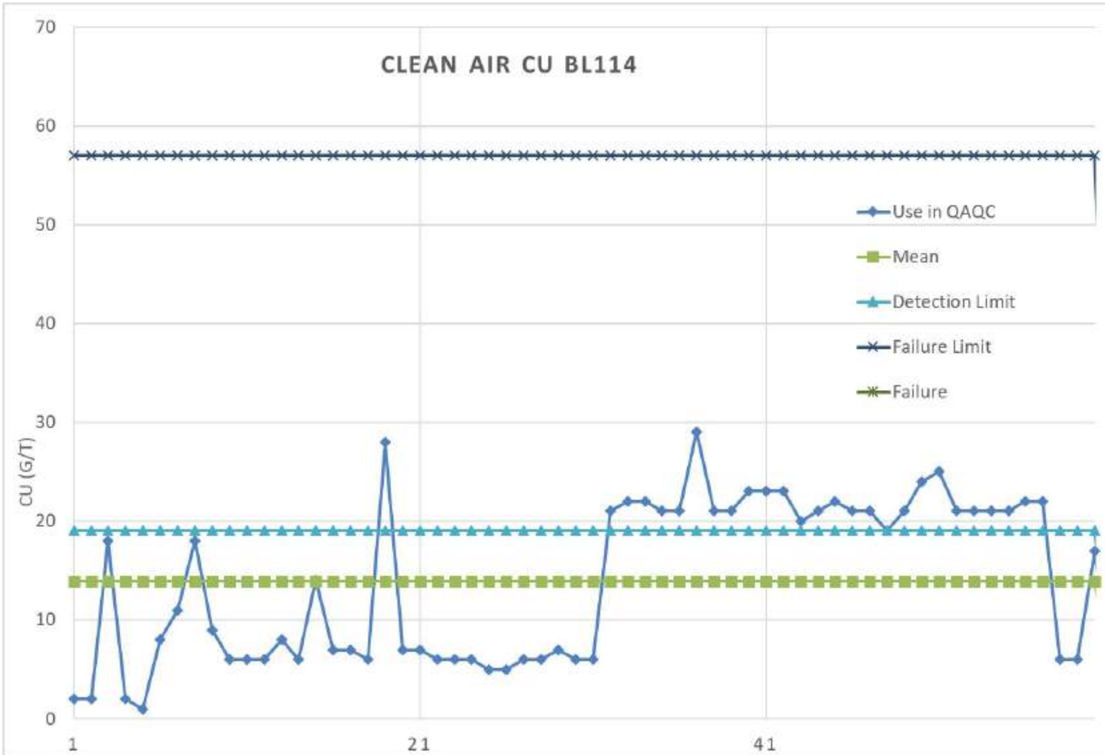


Figure 96: Escape Lake Deposit BL114 coarse blanks Cu (g/t)

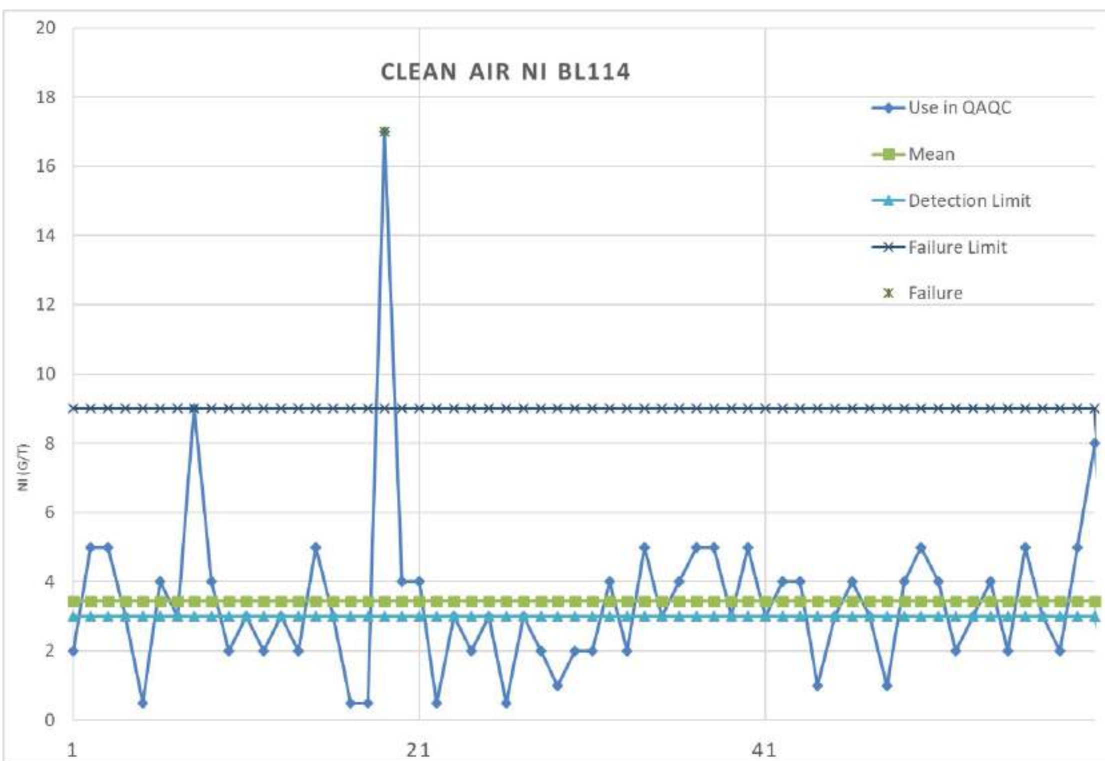


Figure 97: Escape Lake Deposit BL114 coarse blanks Ni (g/t)

Figure 98: Escape Lake Deposit BL114 coarse blanks Ag (g/t)

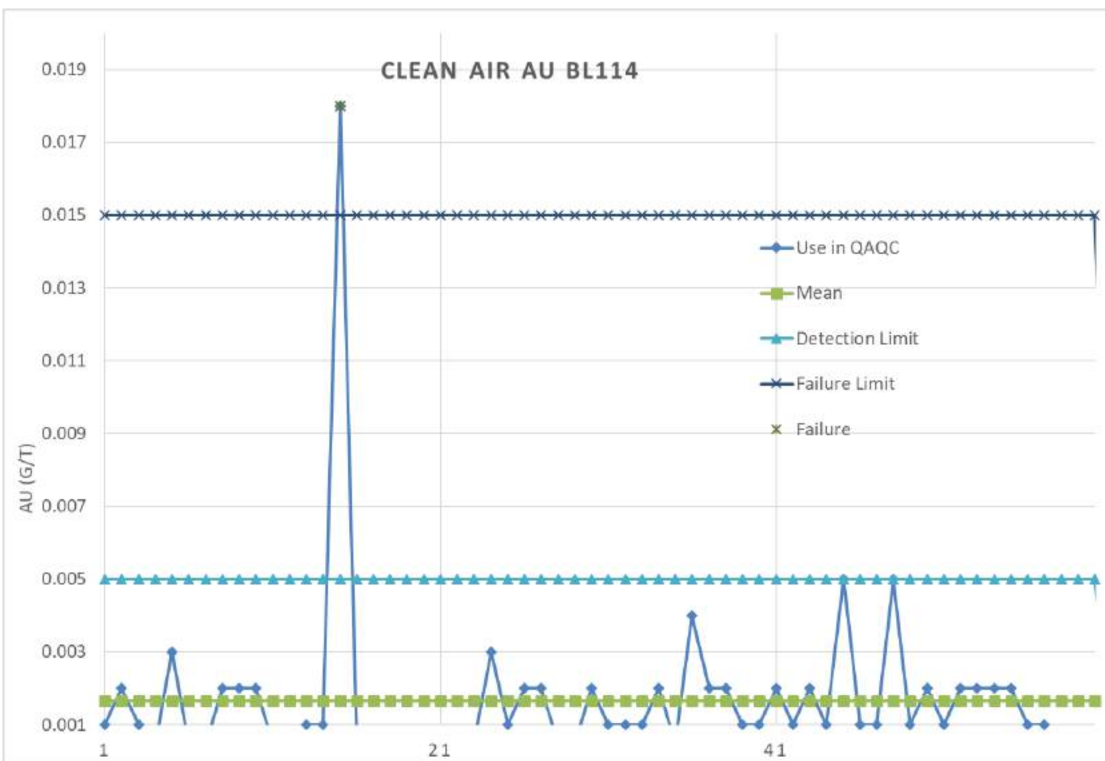


Figure 99: Escape Lake Deposit BL114 coarse blanks Au (g/t)

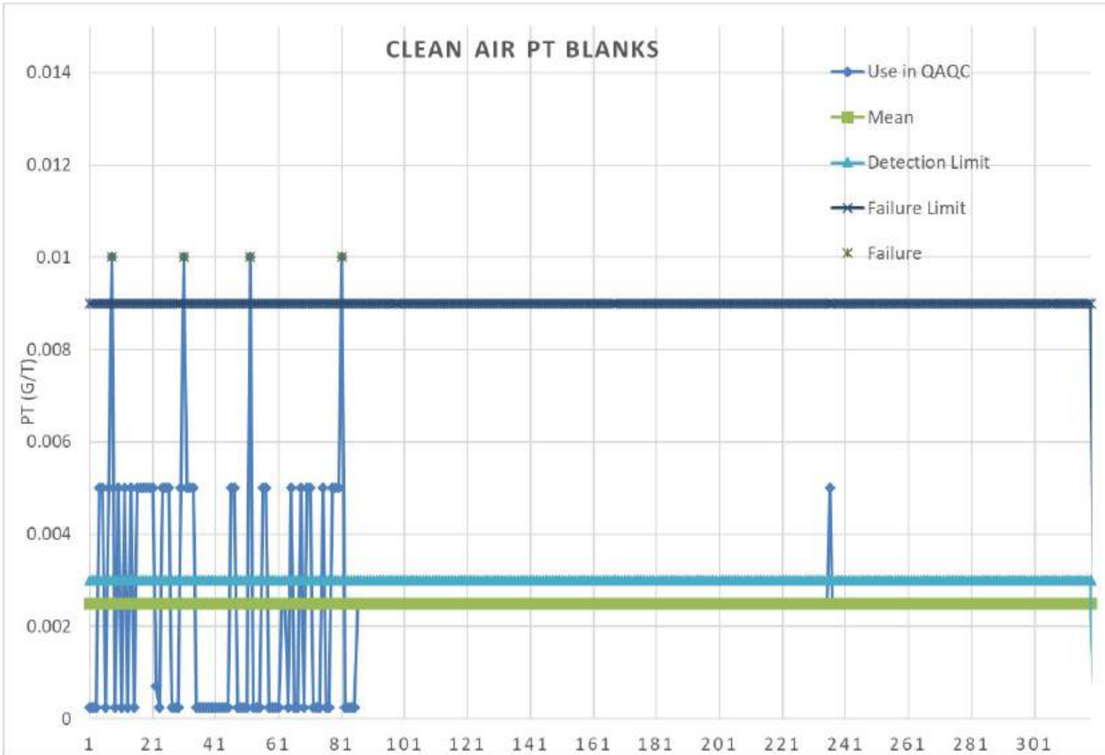


Figure 100: Escape Lake Deposit Blank coarse blanks Pt (g/t)

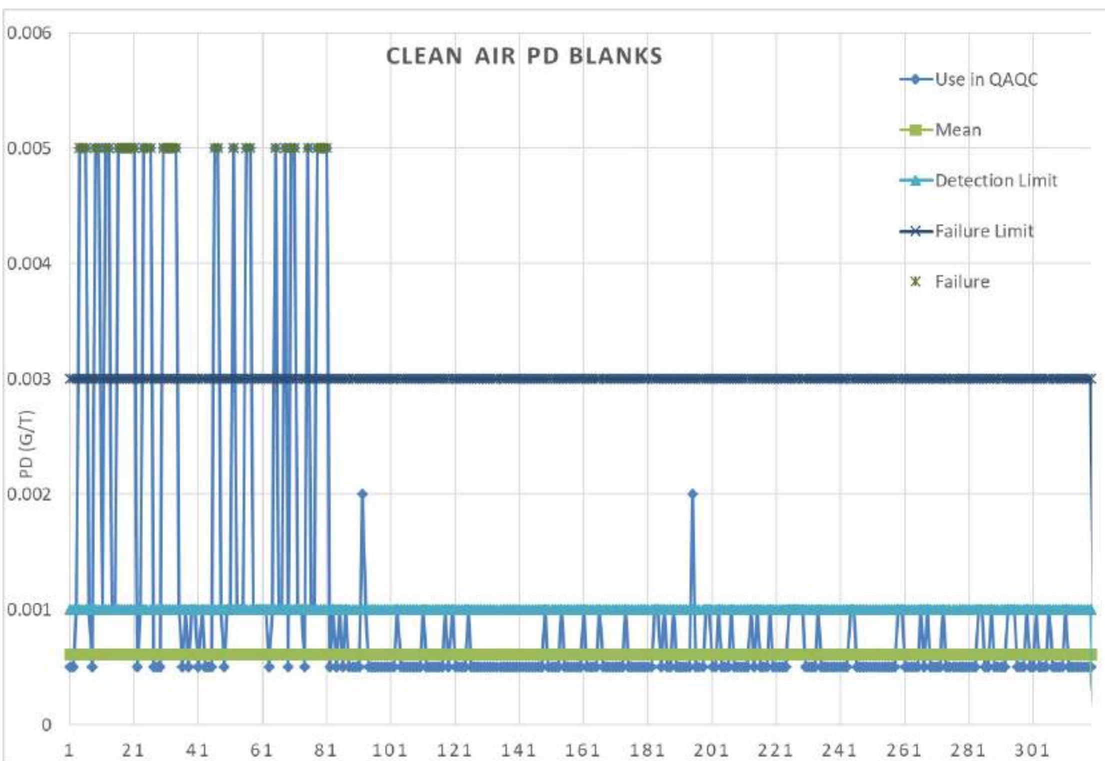


Figure 101: Escape Lake Deposit Blank coarse blanks Pd (g/t)

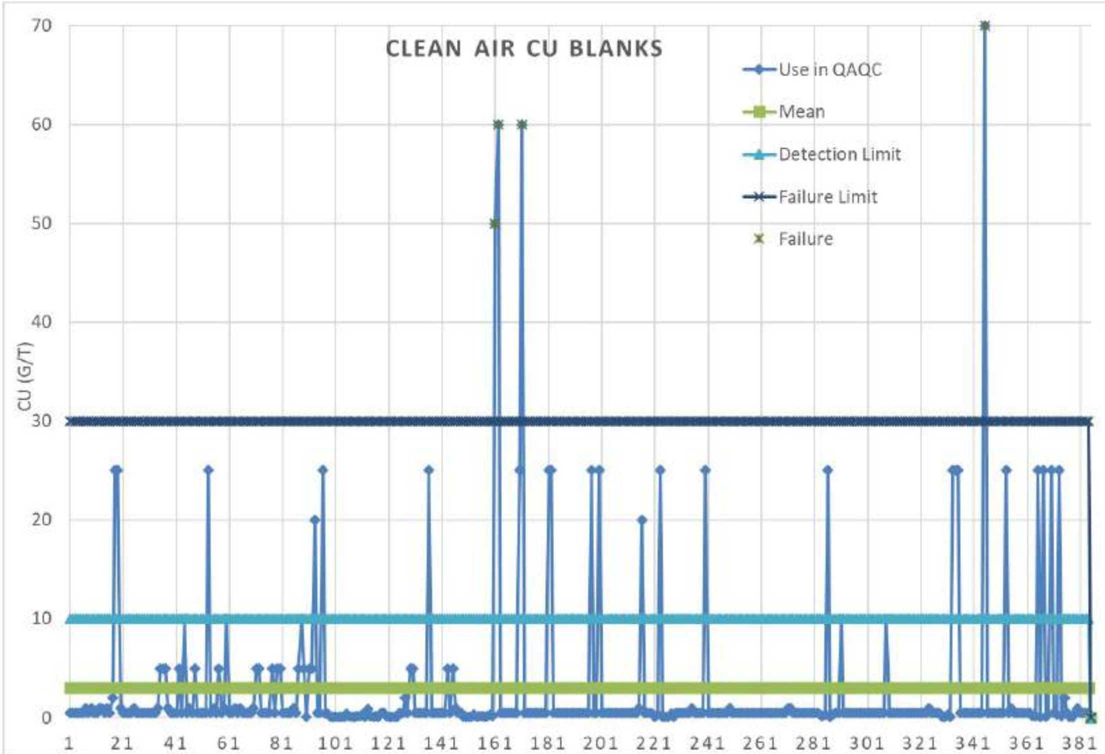


Figure 102: Escape Lake Deposit Blank coarse blanks Cu (g/t)

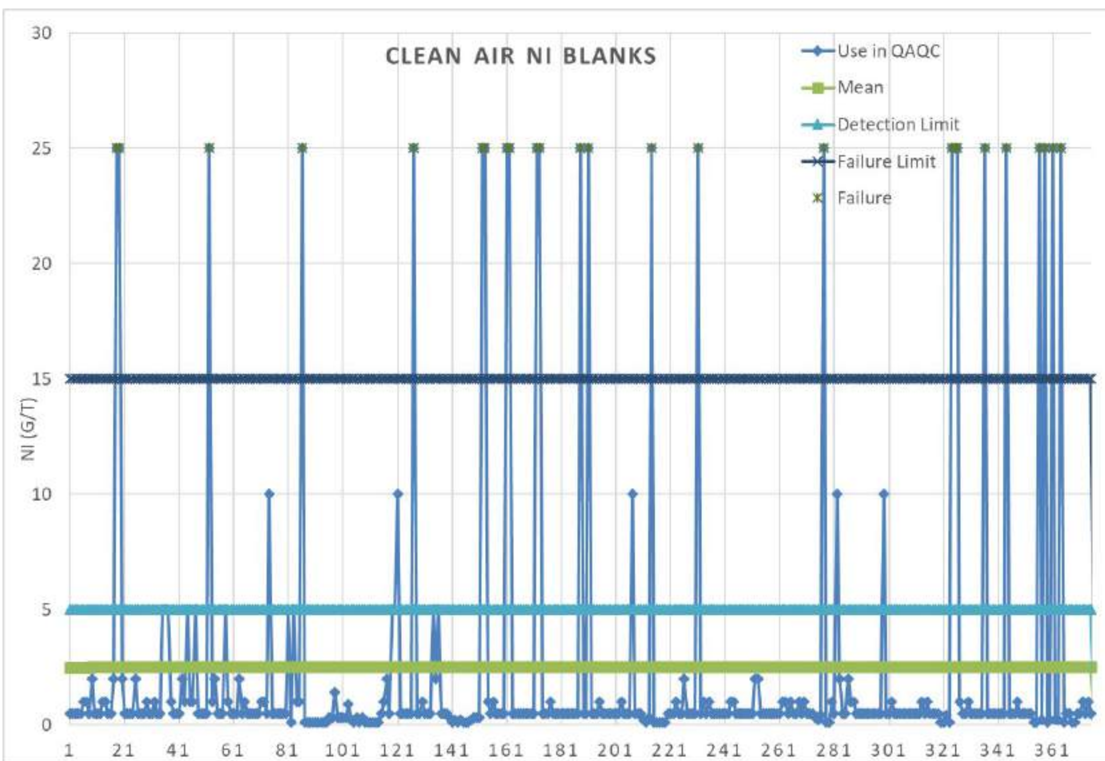


Figure 103: Escape Lake Deposit Blank coarse blanks Ni (g/t)

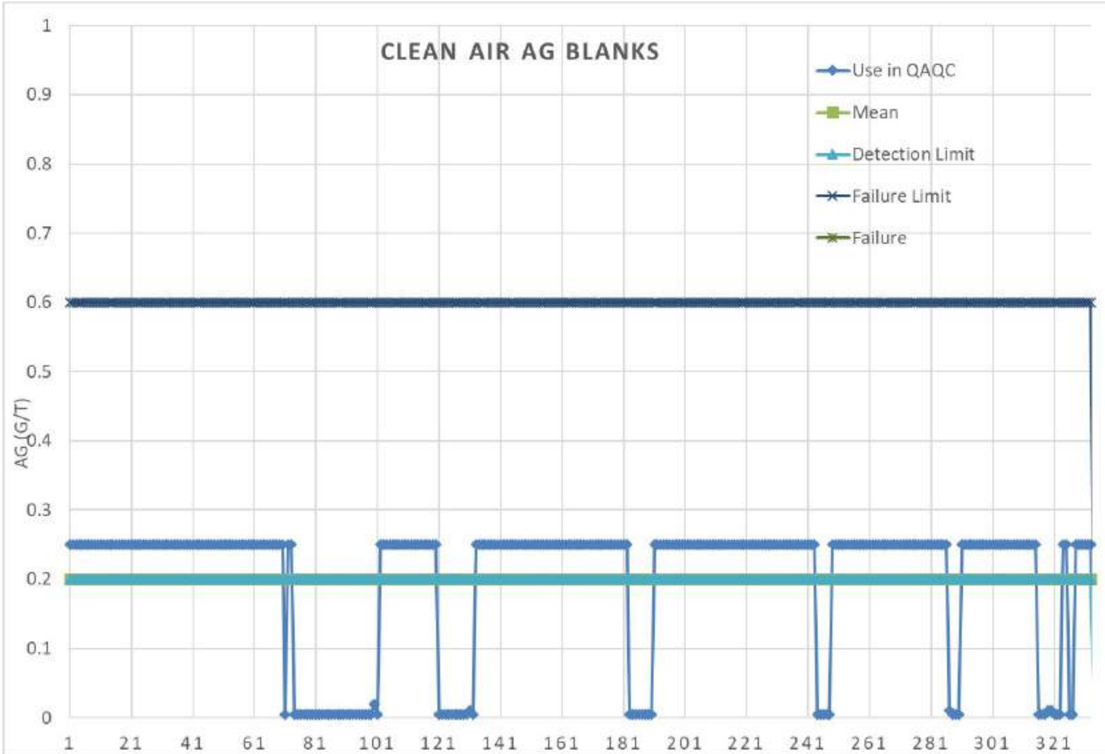


Figure 104: Escape Lake Deposit Blank coarse blanks Ag (g/t)

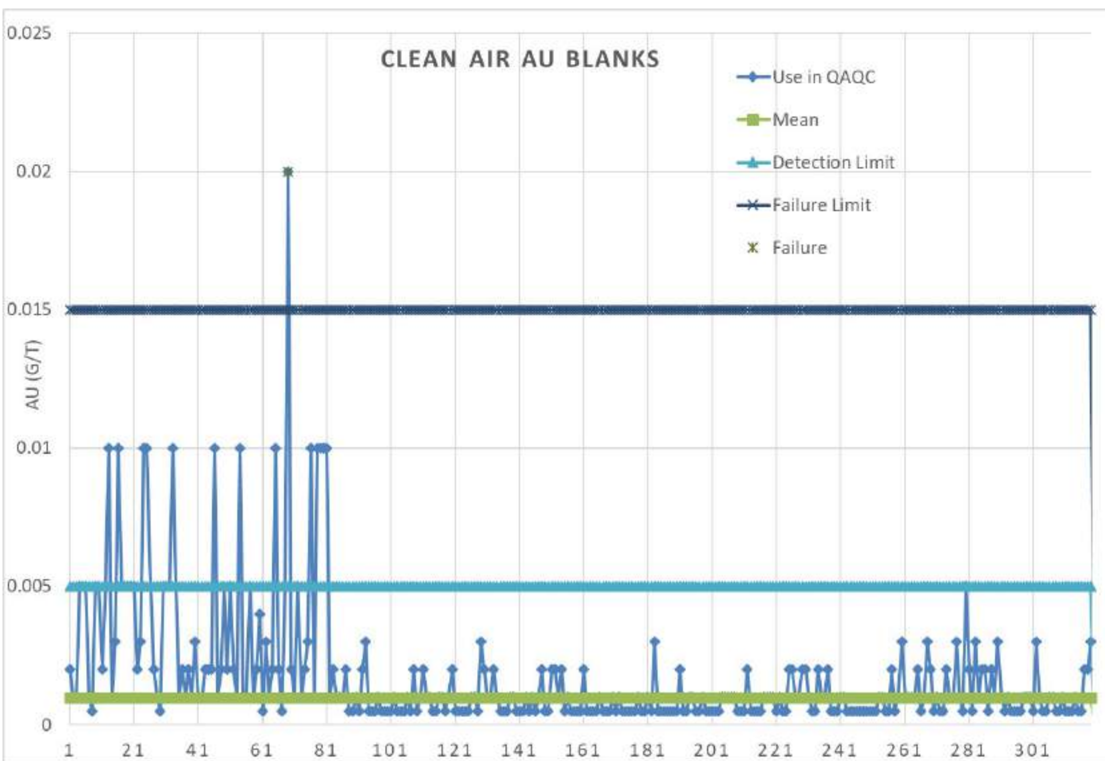


Figure 105: Escape Lake Deposit Blank coarse blanks Au (g/t)

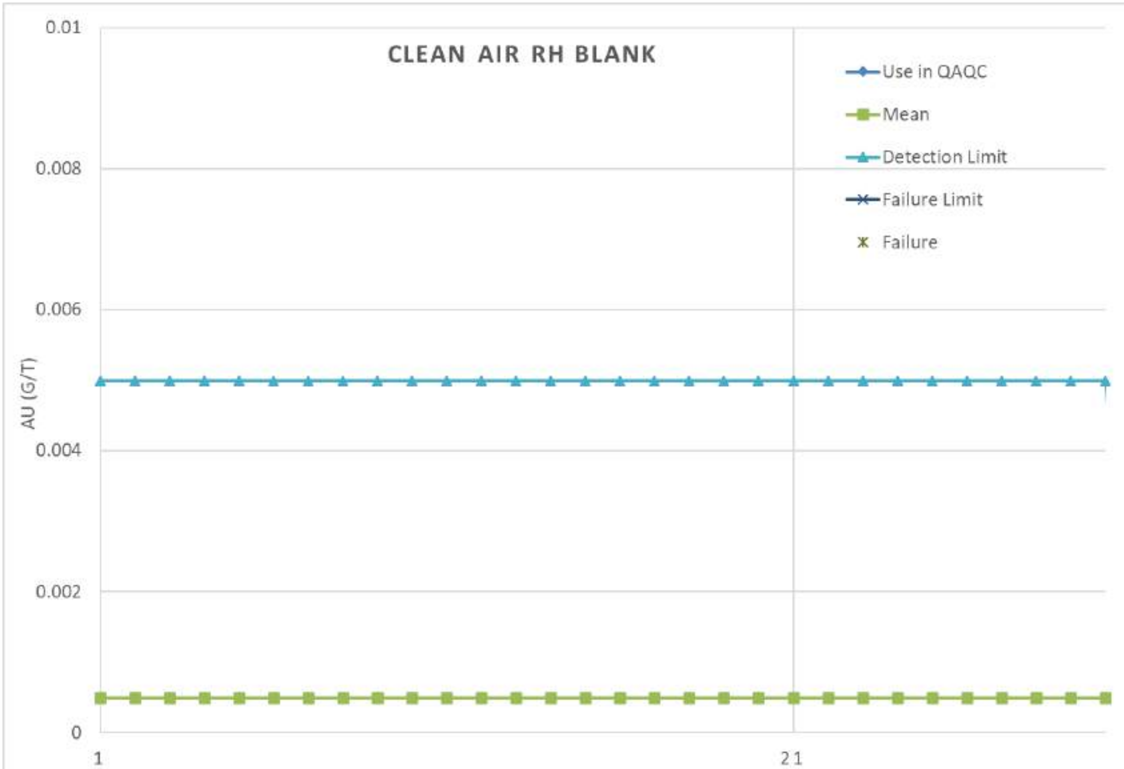
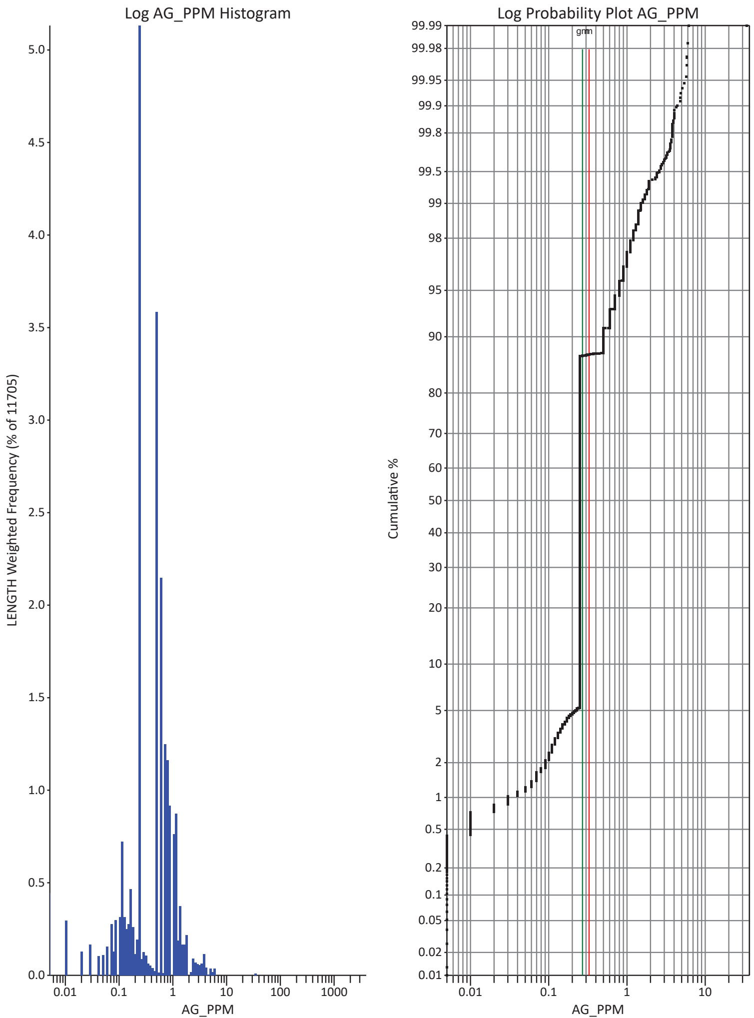


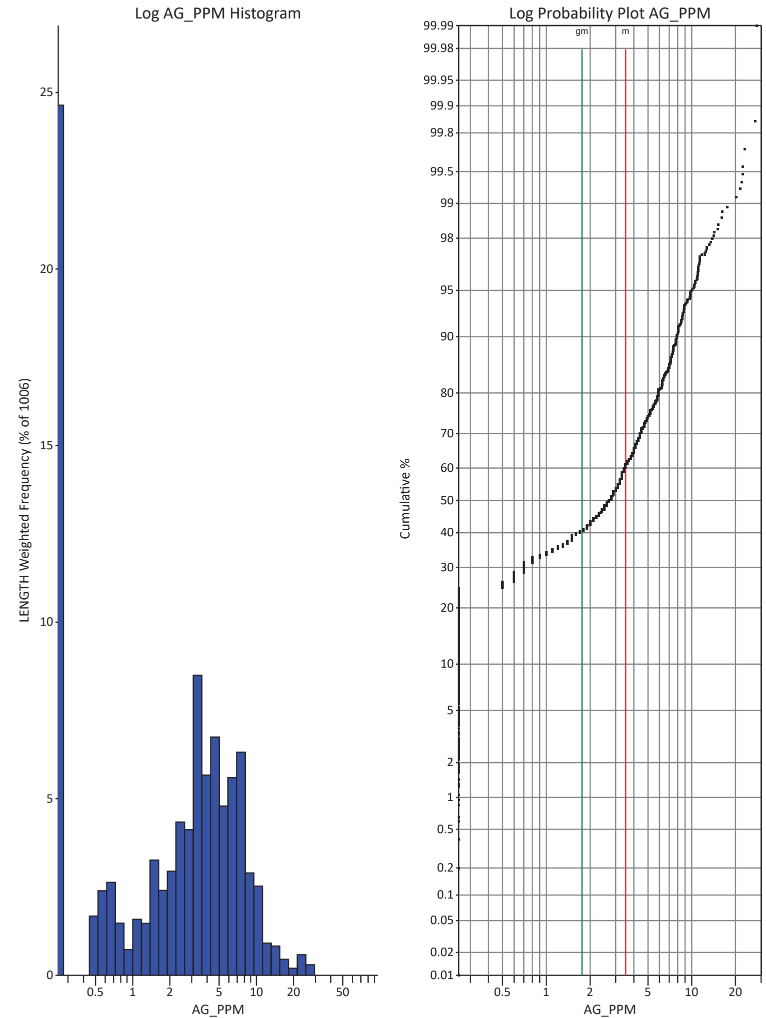
Figure 106: Escape Lake Deposit Blank coarse blanks Rh (g/t)

Appendix D: EDA Probability Plots and Histograms

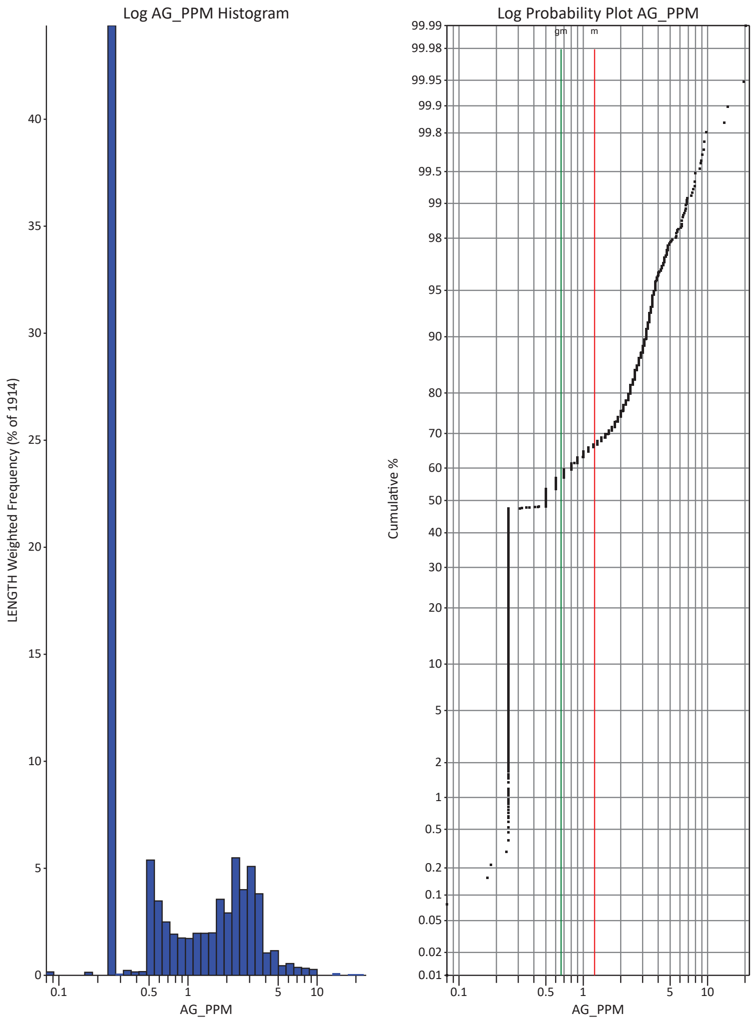
Current Lake Deposit



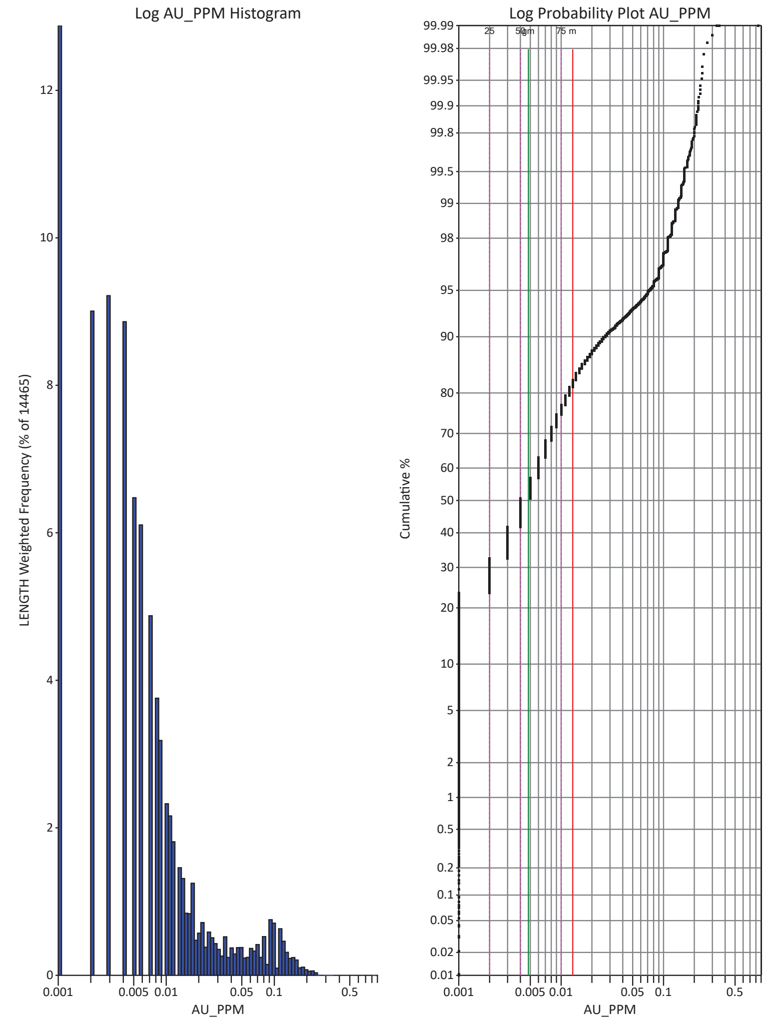
Log probability plot and histogram Ag (g/t), BG domain Current Lake Deposit



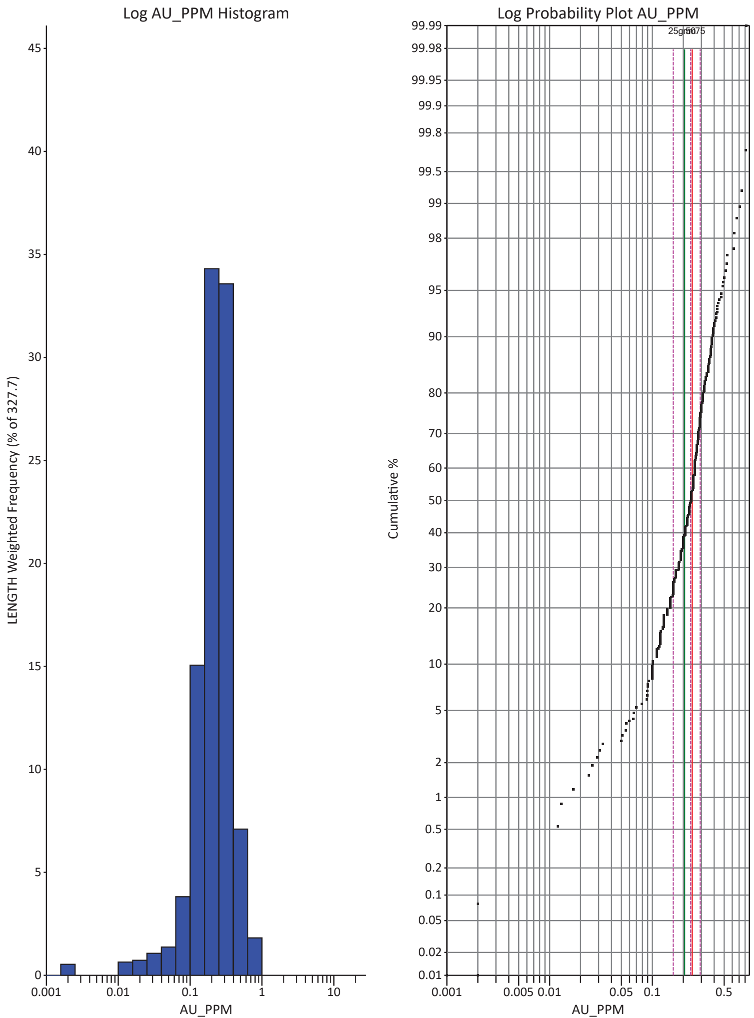
Log probability plot and histogram Ag (g/t), HG domain Current Lake Deposit



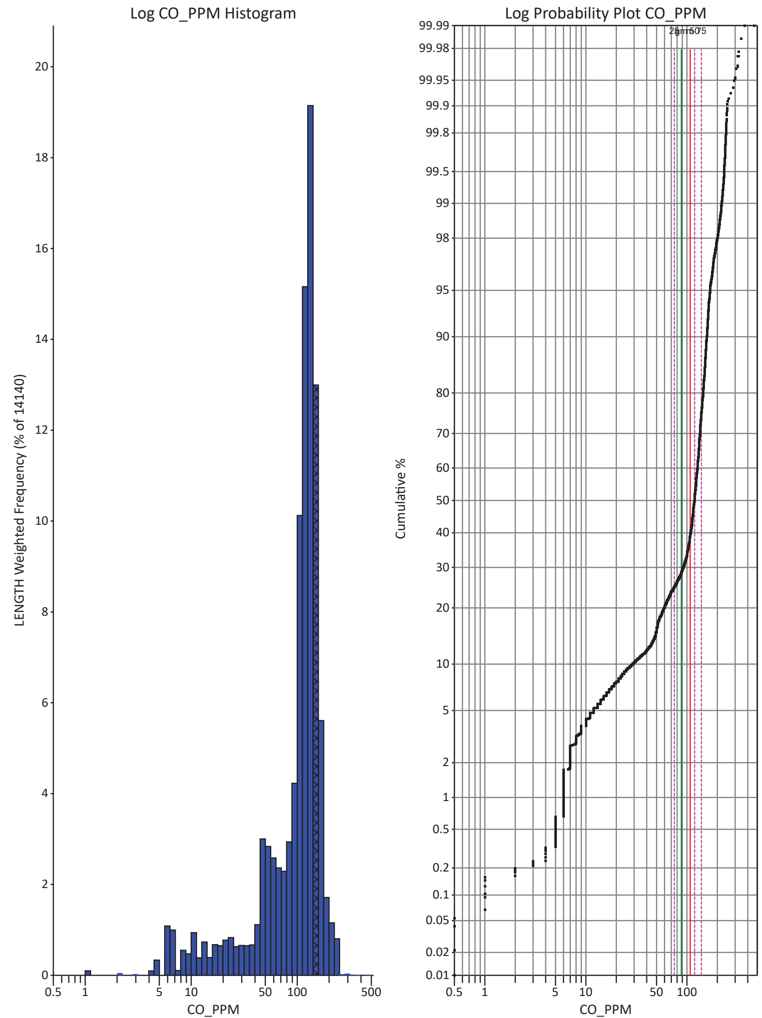
Log probability plot and histogram Ag (g/t), LG domain Current Lake Deposit



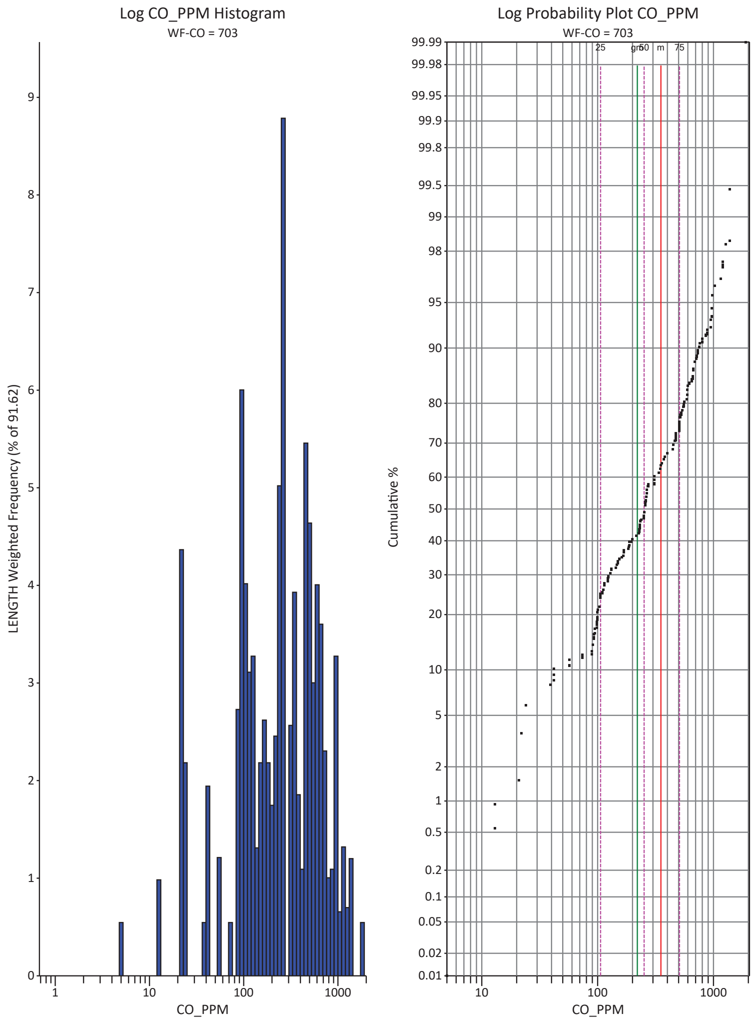
Log probability plot and histogram Au (g/t), BG domain Current Lake Deposit



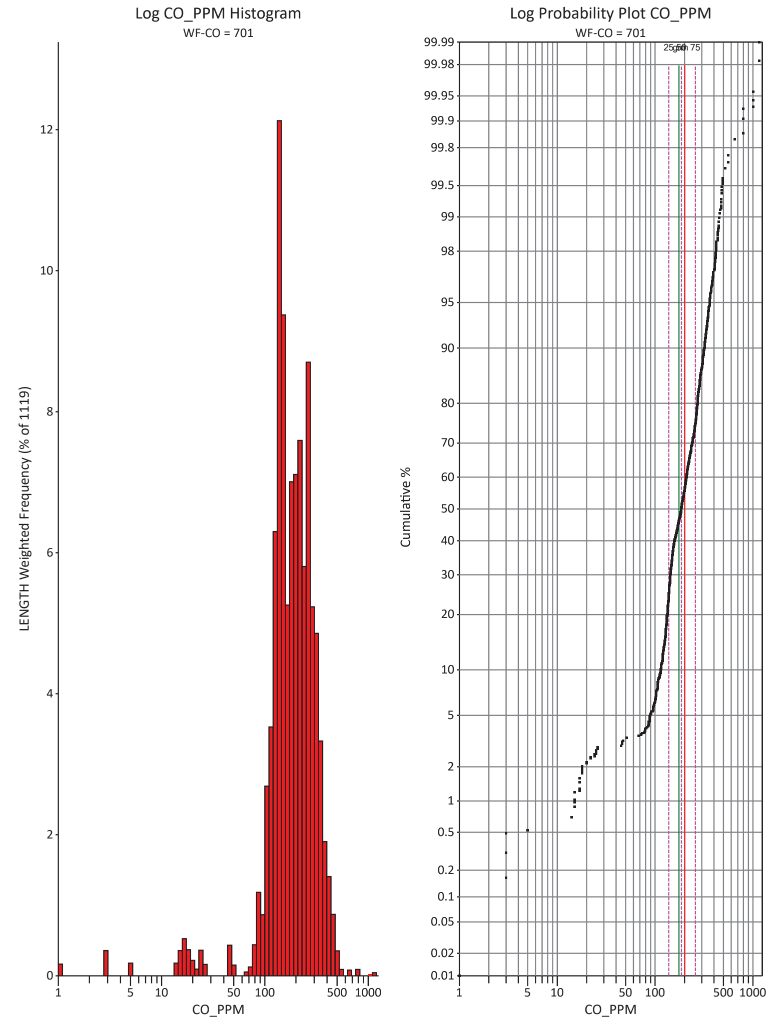
Log probability plot and histogram Au (g/t), HG domain Current Lake Deposit



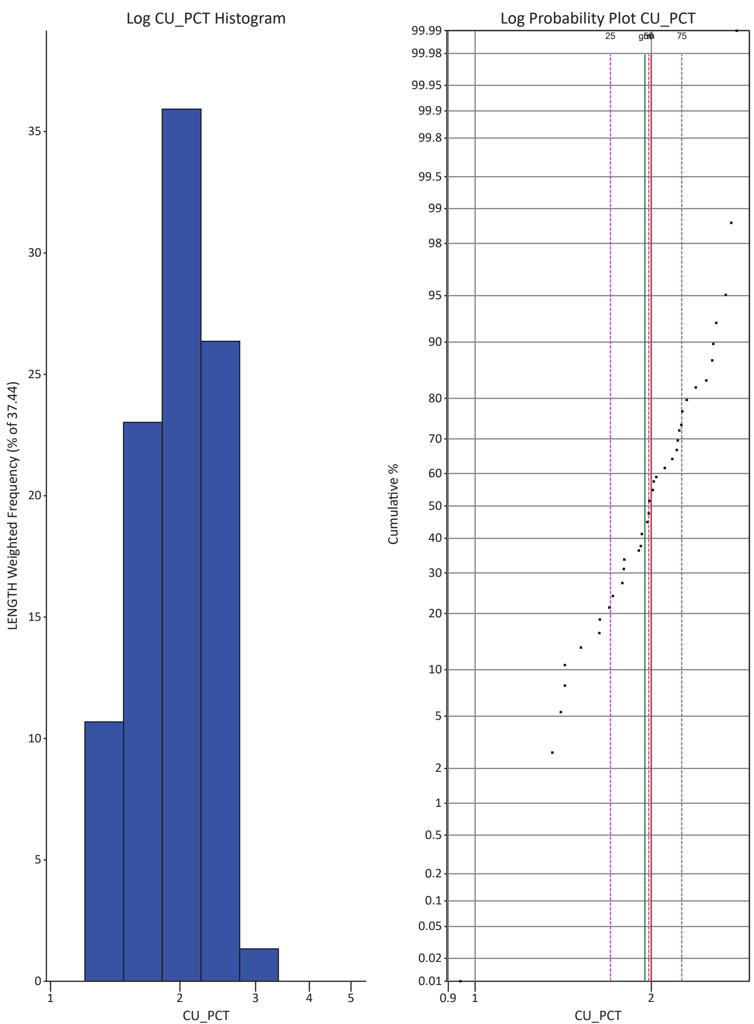
Log probability plot and histogram Co (g/t), BG domain Current Lake Deposit



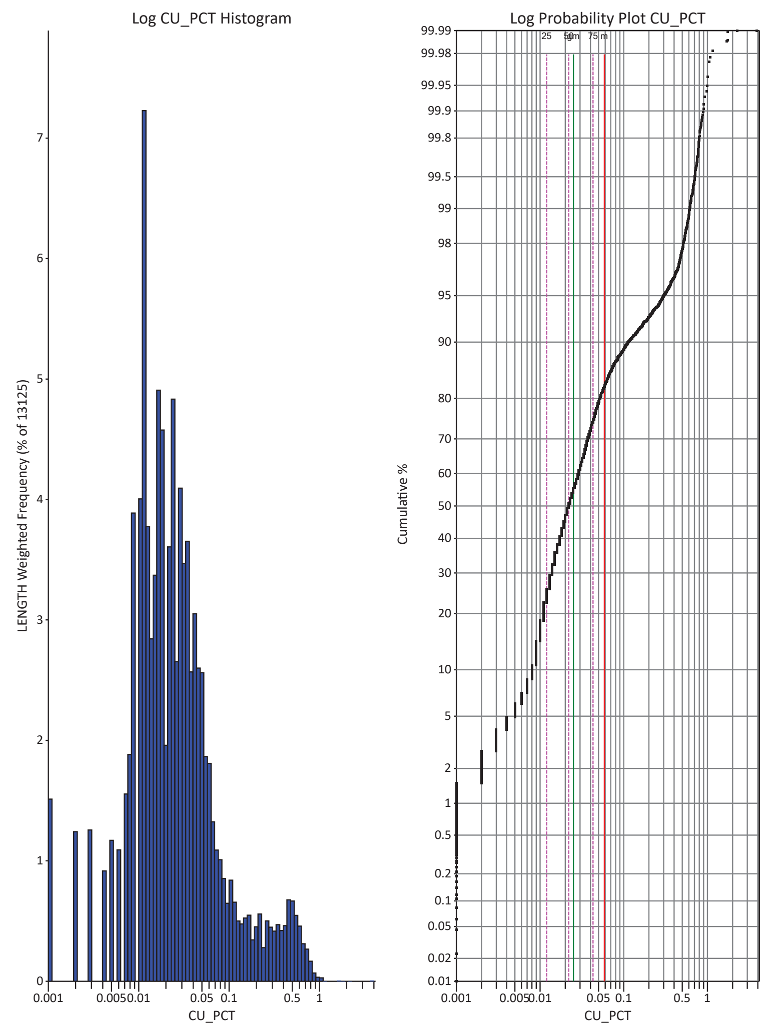
Log probability plot and histogram Co (g/t), HG domain Current Lake Deposit



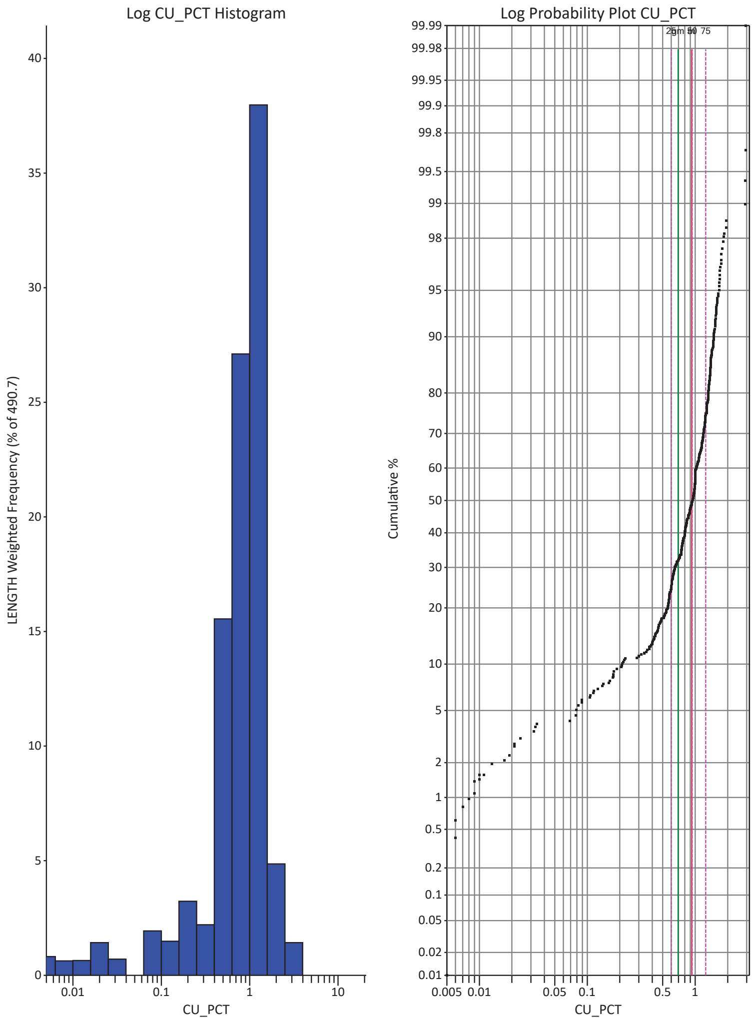
Log probability plot and histogram Co (g/t), LG domain Current Lake Deposit



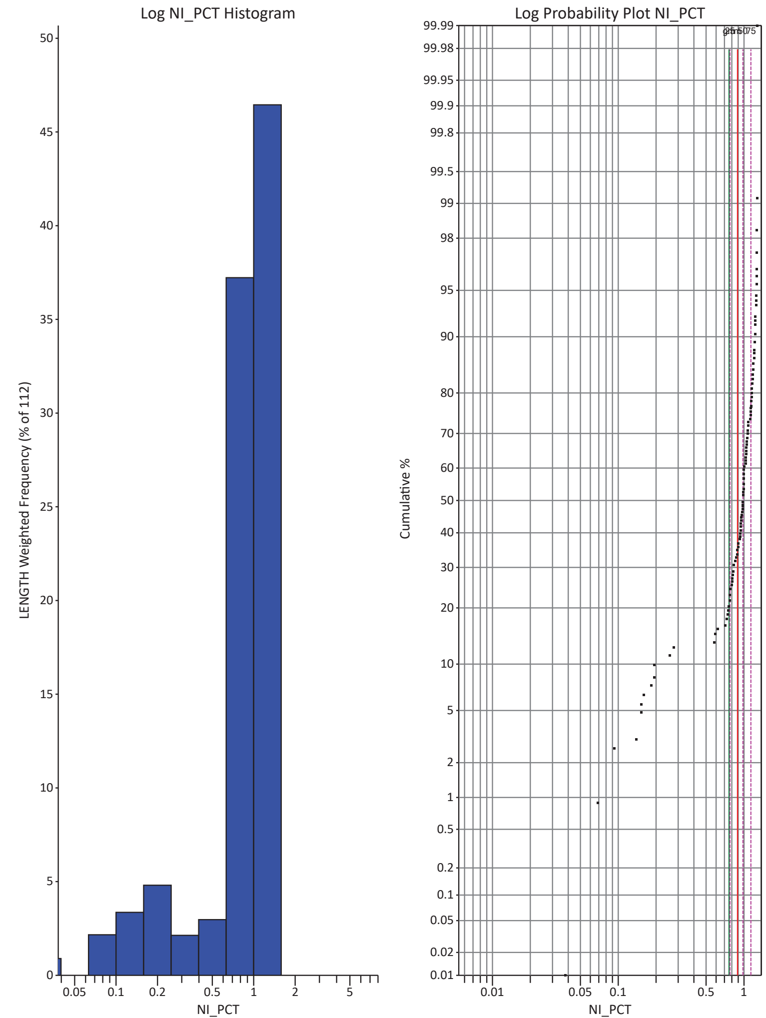
Log probability plot and histogram Cu (%), HG domain Current Lake Deposit



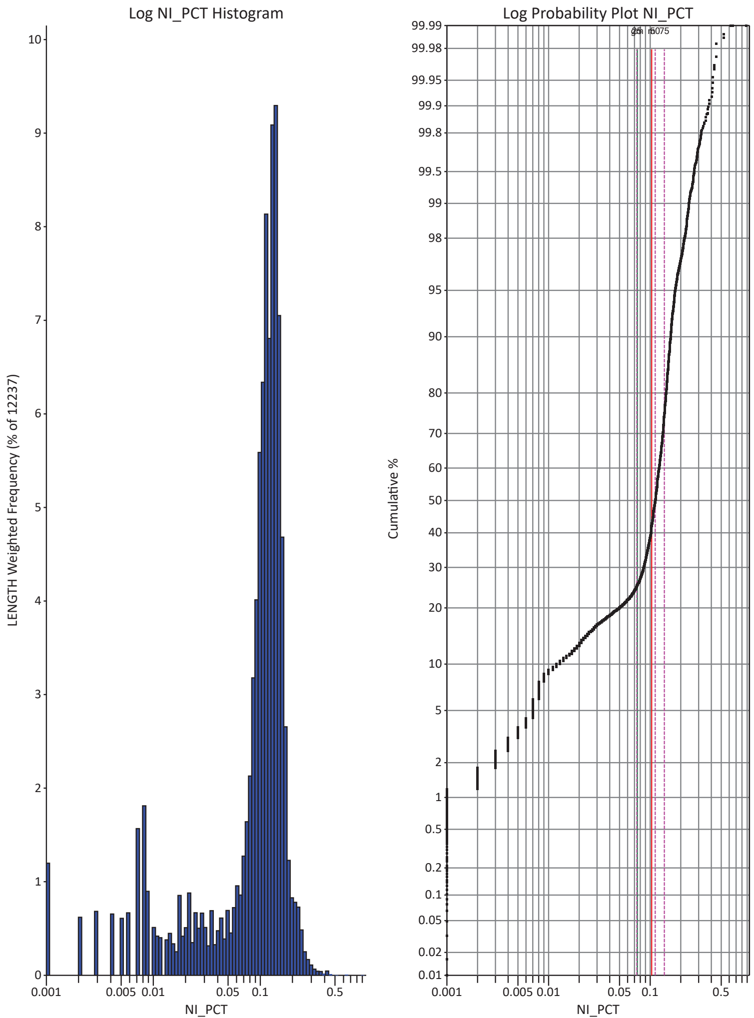
Log probability plot and histogram Cu (%), BG domain Current Lake Deposit



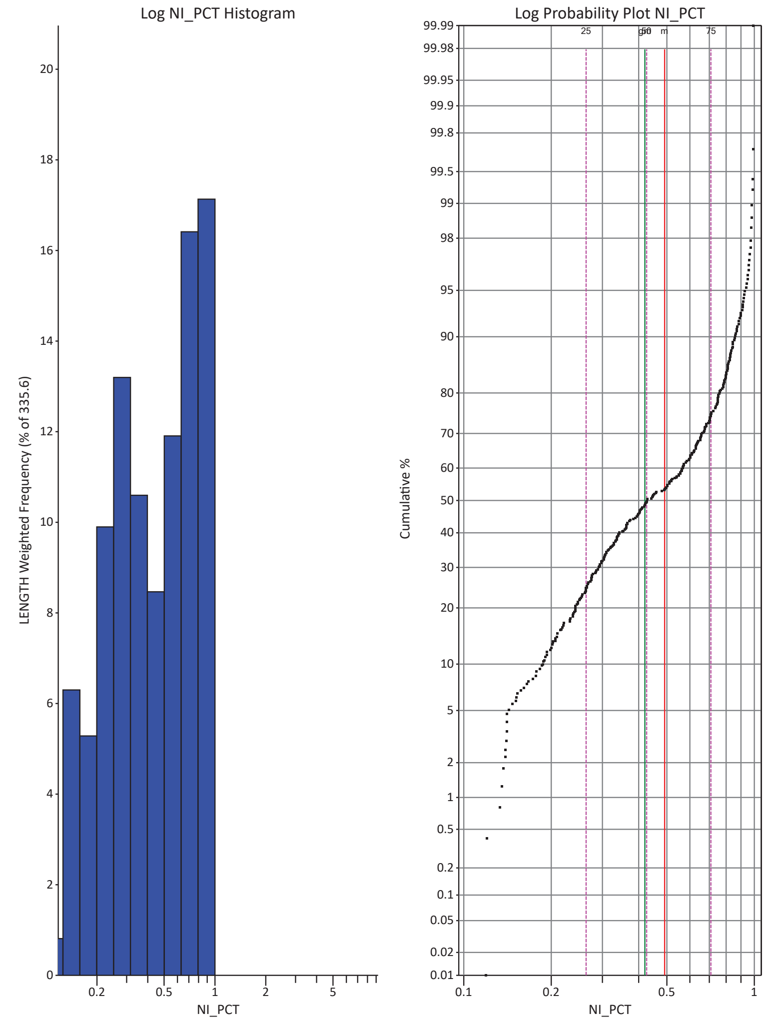
Log probability plot and histogram Cu (%), LG domain Current Lake Deposit



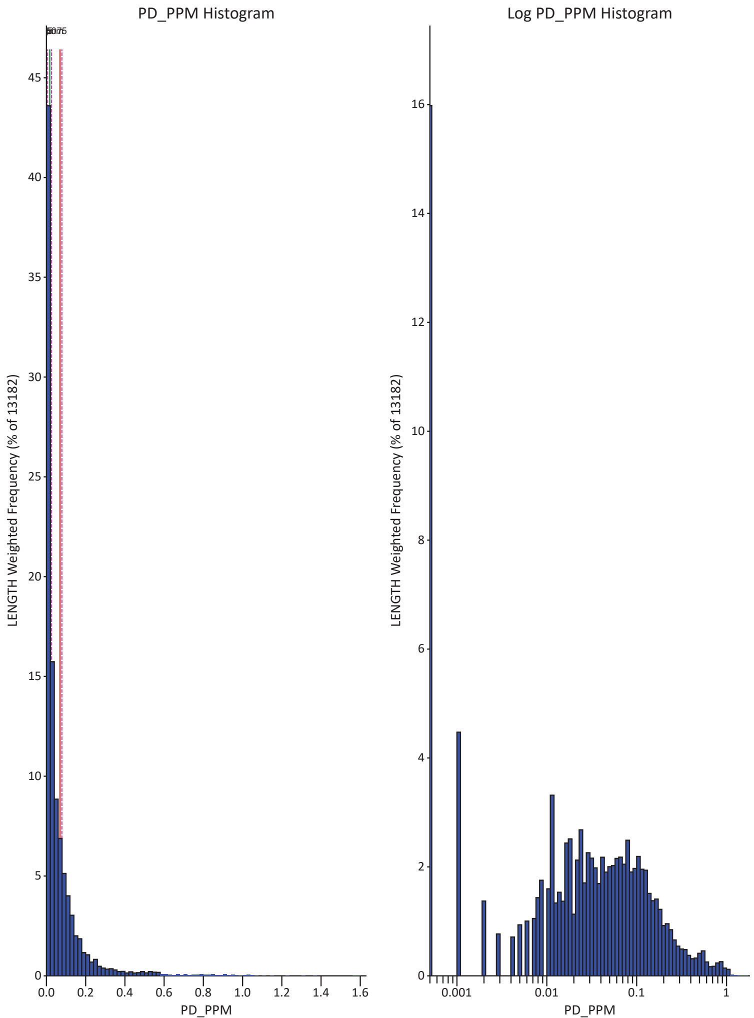
Log probability plot and histogram Ni (%), HG domain Current Lake Deposit



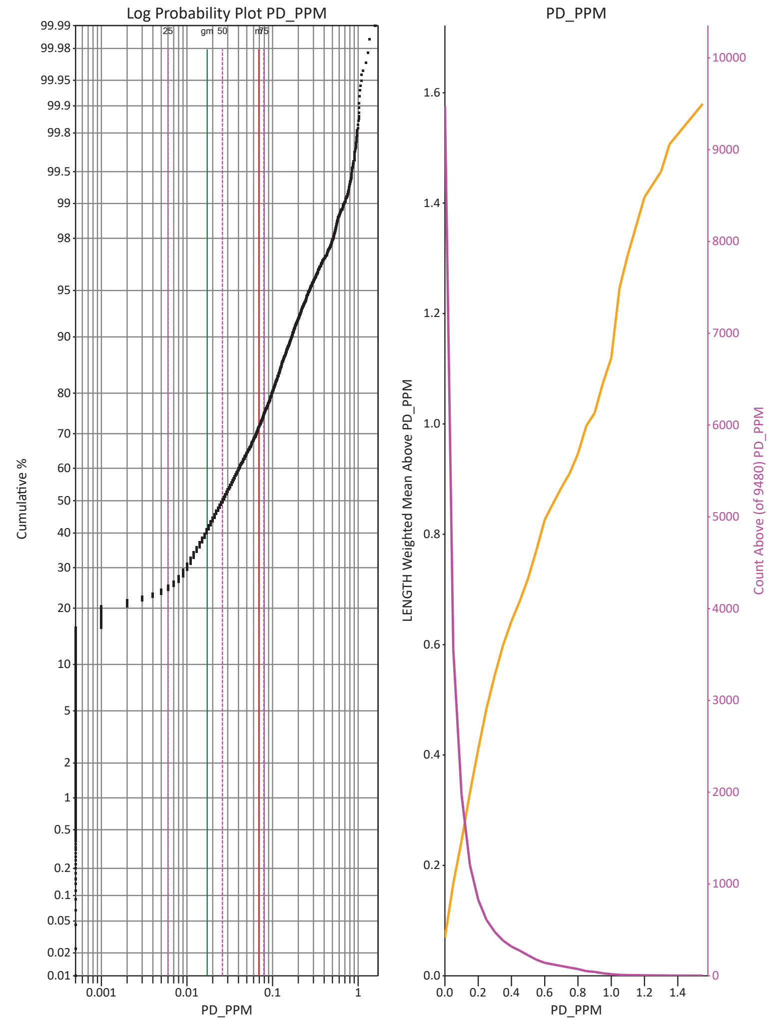
Log probability plot and histogram Ni (%), BG domain Current Lake Deposit



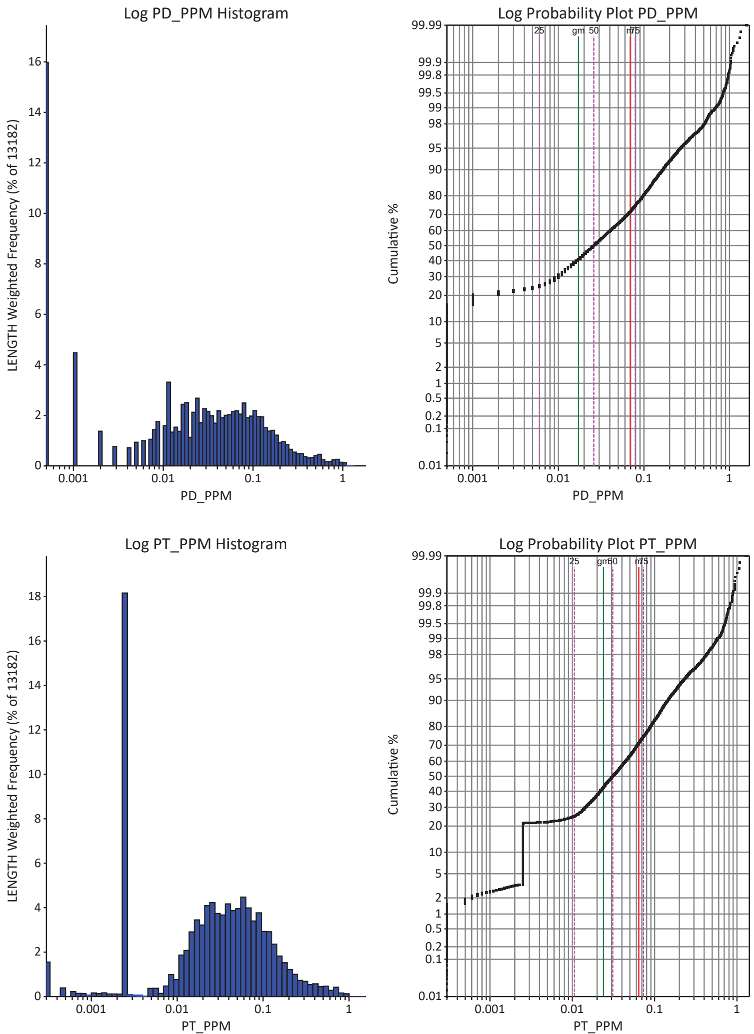
Log probability plot and histogram Ni (%), MG domain Current Lake Deposit



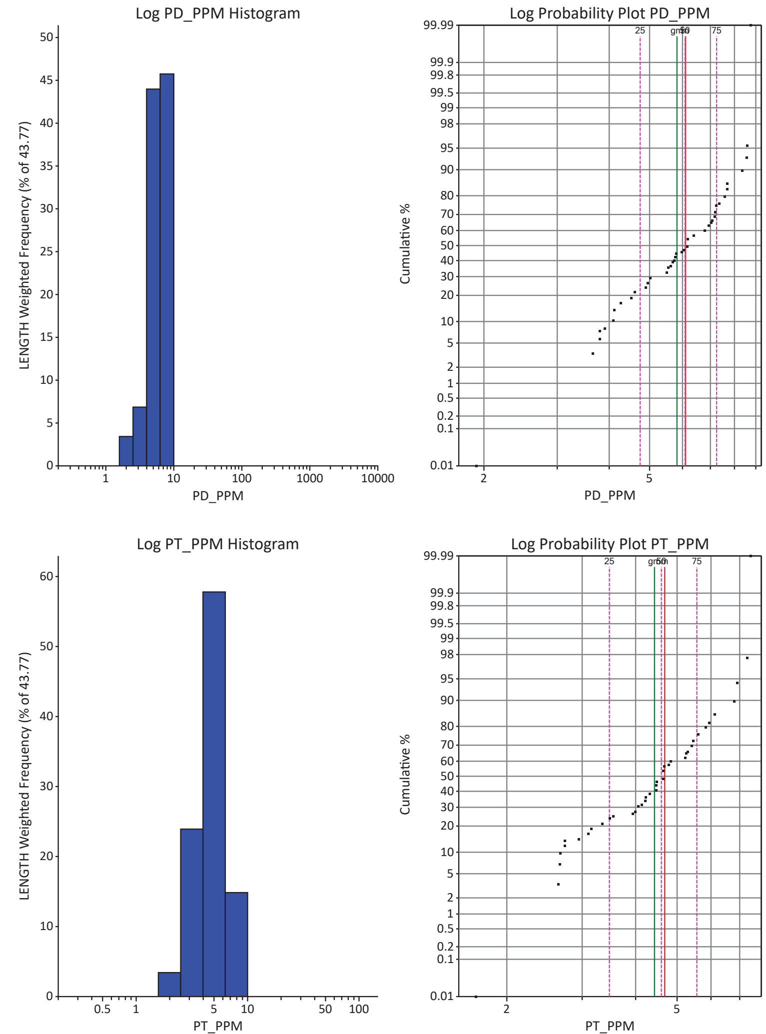
Log probability plot Pd (g/t), BG domain Current Lake Deposit



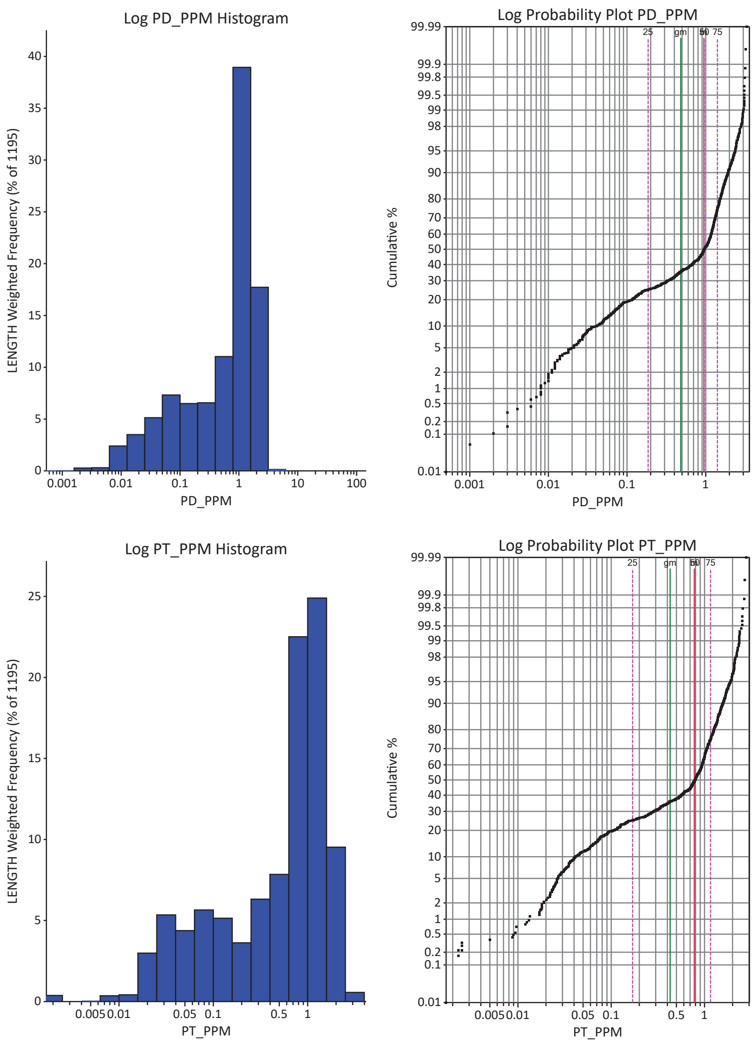
Histogram Pd (g/t), BG domain Current Lake Deposit



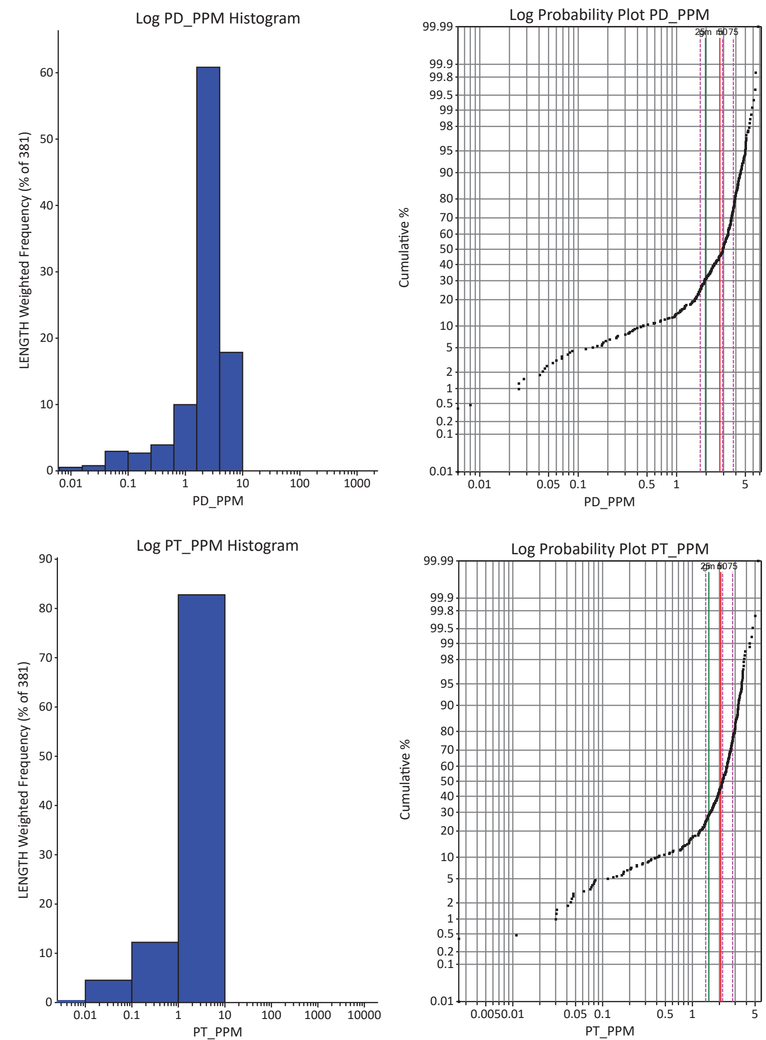
Log probability plot and histogram Pd/Pt (g/t), BG domain
Current Lake Deposit



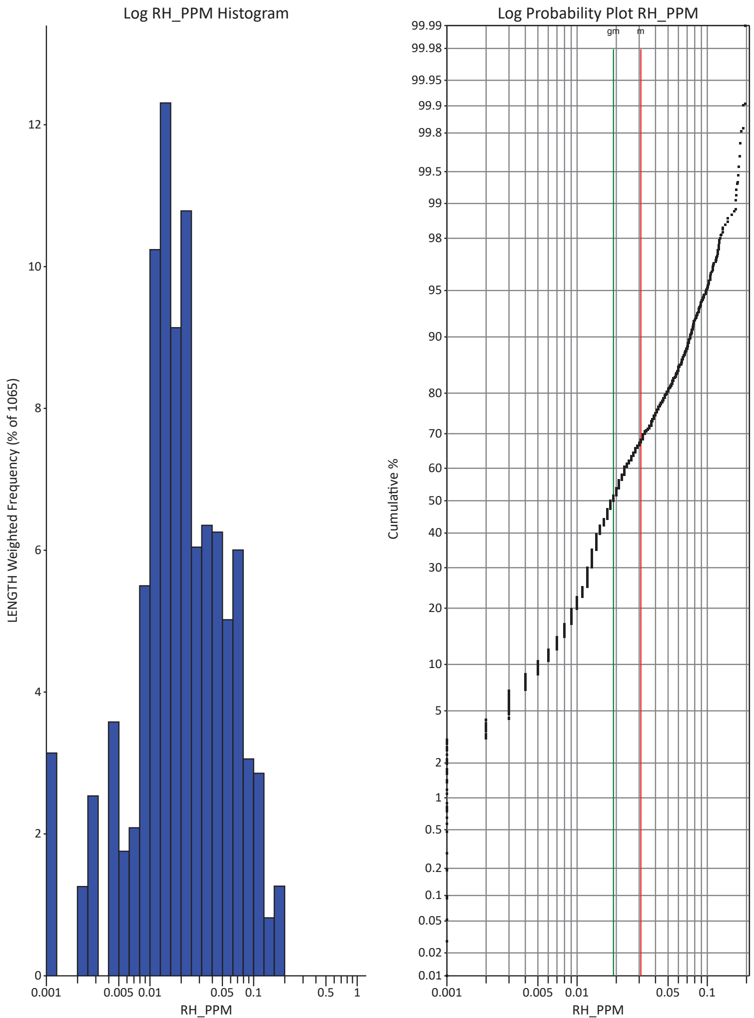
Log probability plot and histogram Pd/Pt (g/t), HG domain
Current Lake Deposit



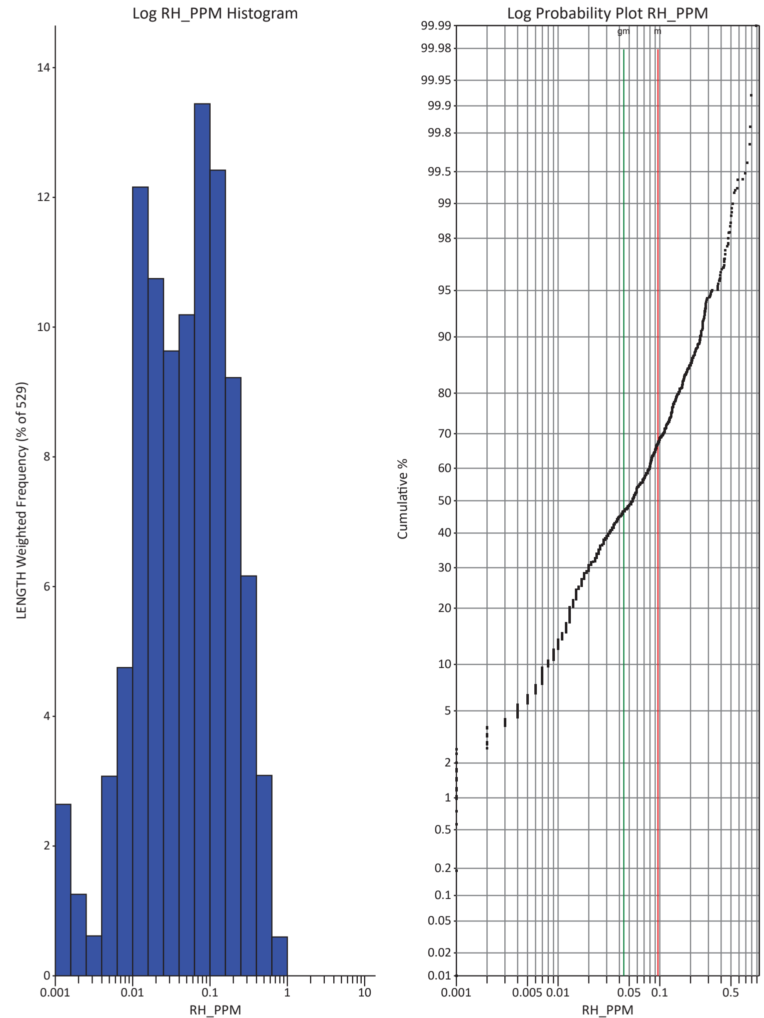
Log probability plot and histogram Pd/Pt (g/t), LG domain
Current Lake Deposit



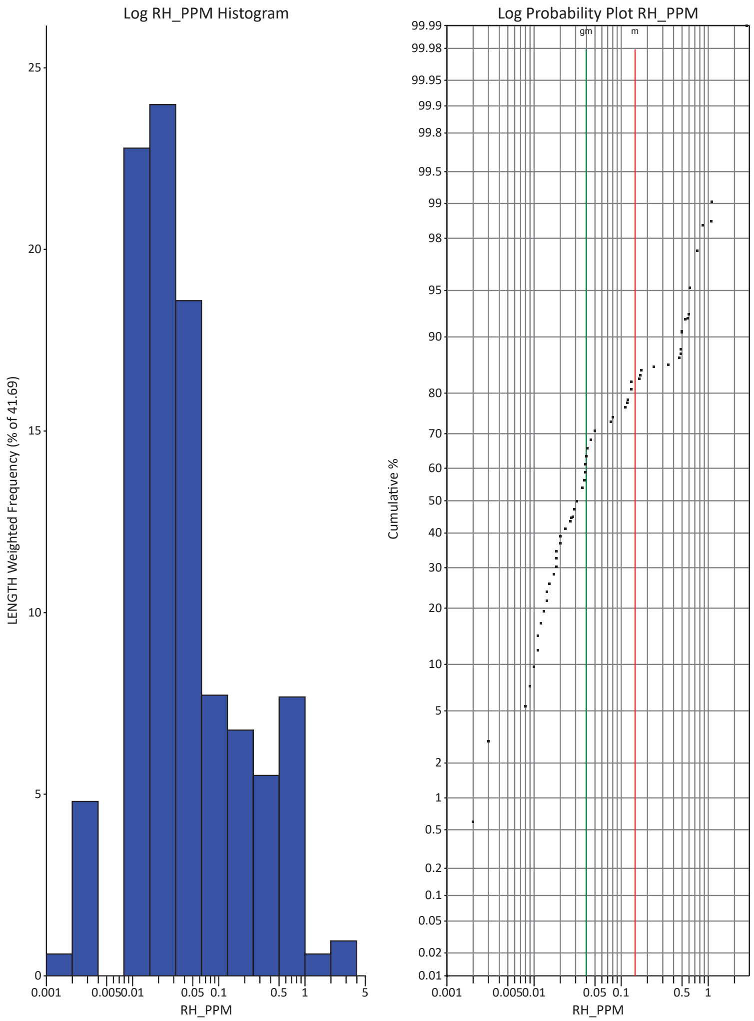
Log probability plot and histogram Pd/Pt (g/t), MG domain
Current Lake Deposit



Log probability plot and histogram Rh (g/t), BG domain Current Lake Deposit

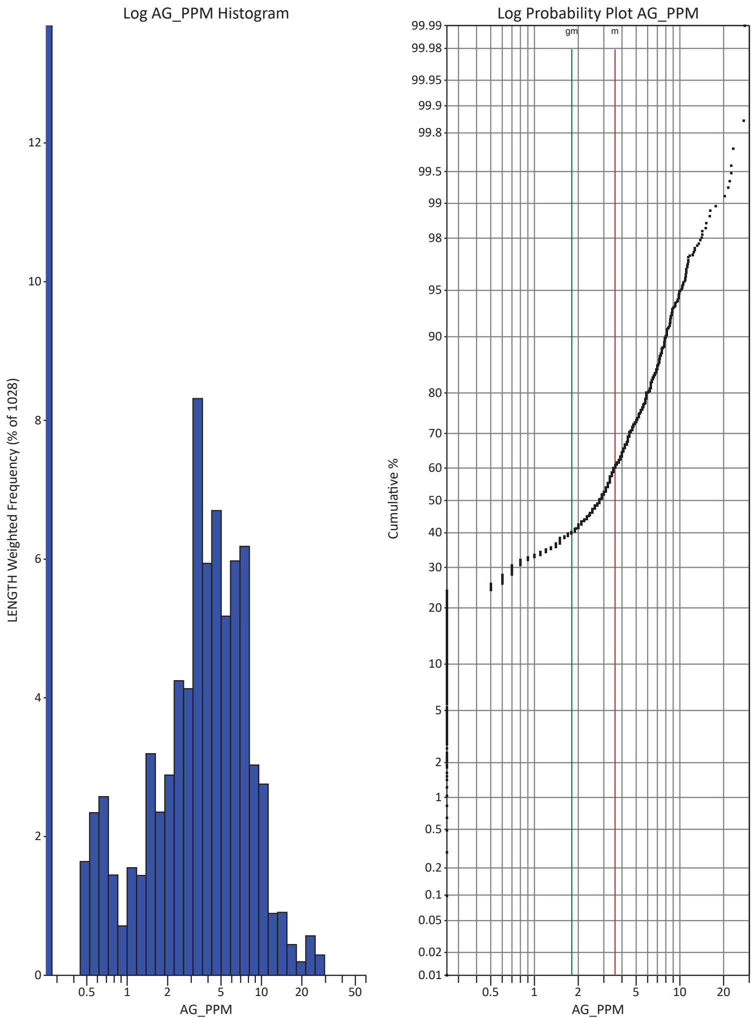


Log probability plot and histogram Rh (g/t), LG domain Current Lake Deposit

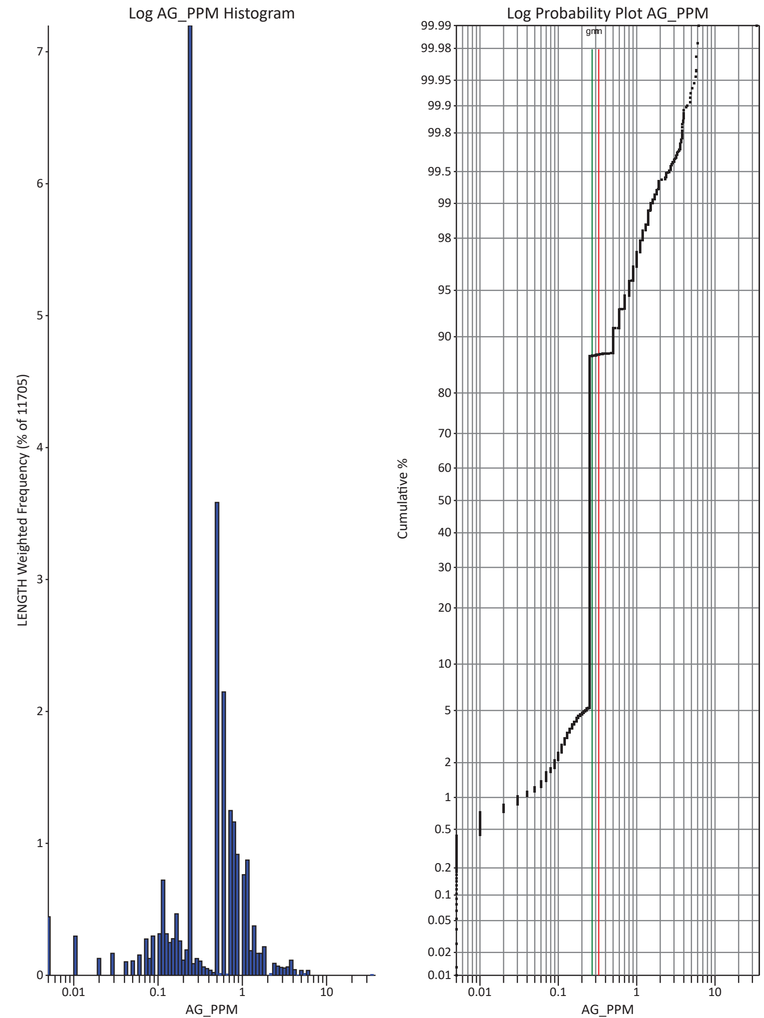


Log probability plot and histogram Rh (g/t), MG/HG domain
Current Lake Deposit

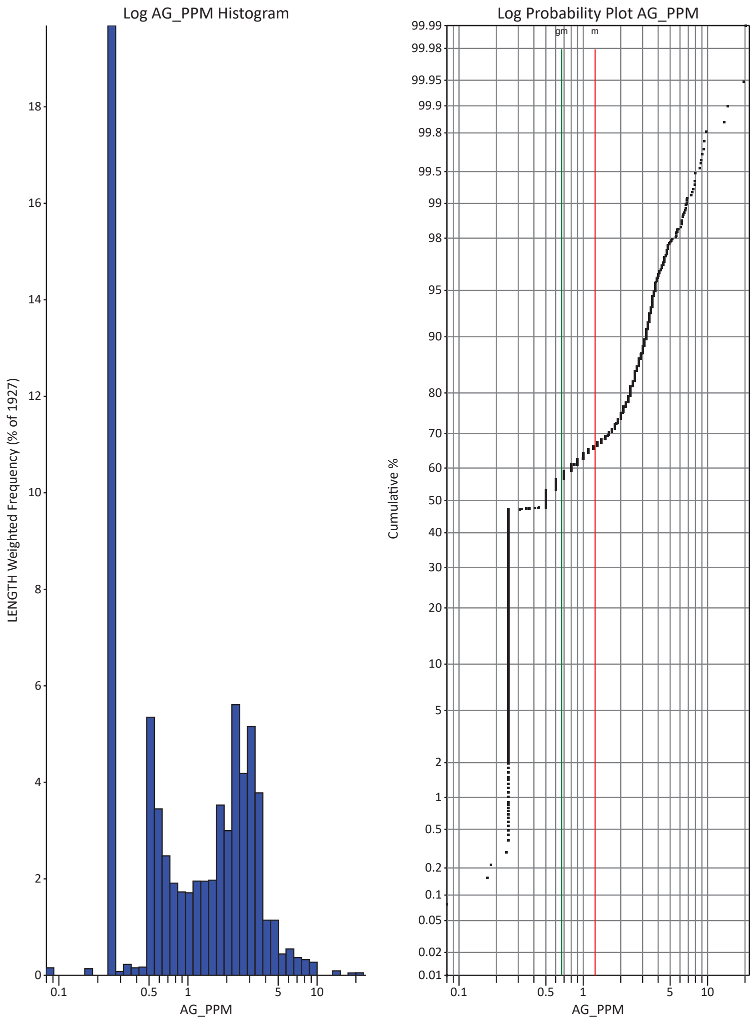
Escape Lake Deposit



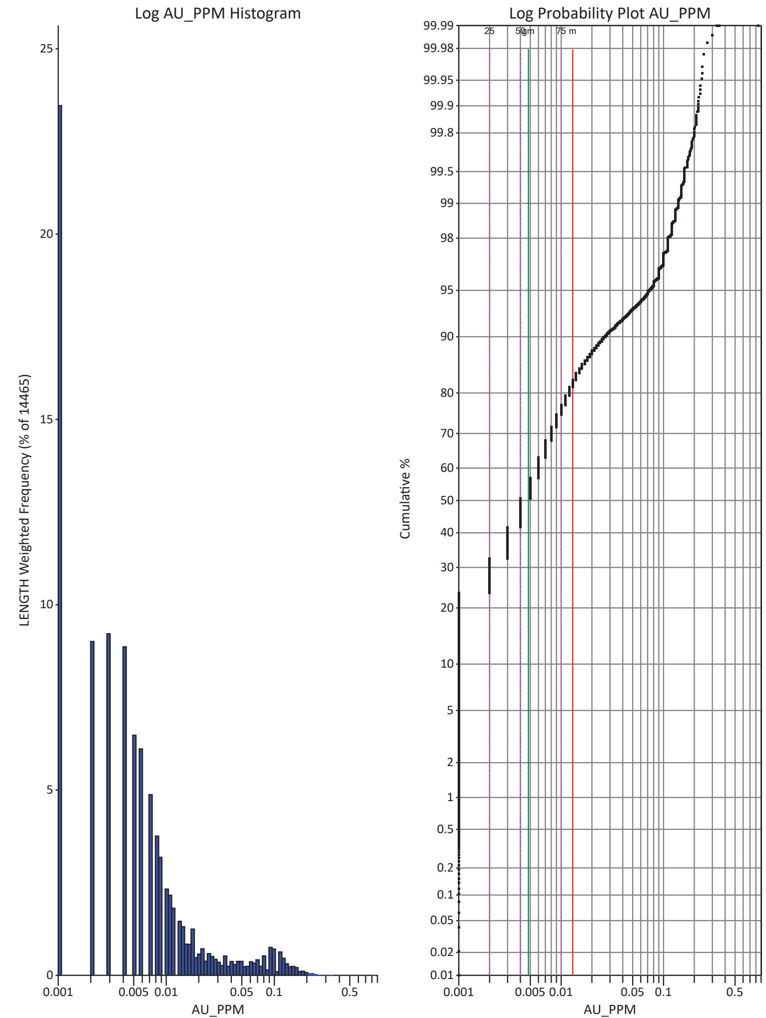
Log probability plot and histogram Ag (g/t), HG domain Escape Lake Deposit



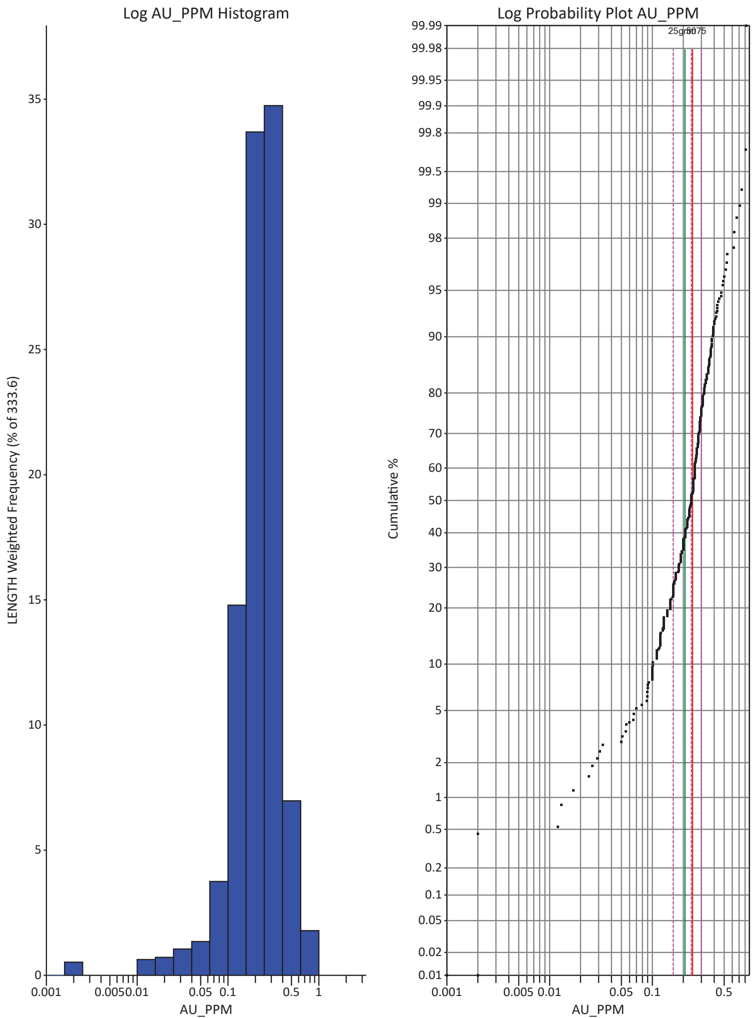
Log probability plot and histogram Ag (g/t), BG domain Escape Lake Deposit



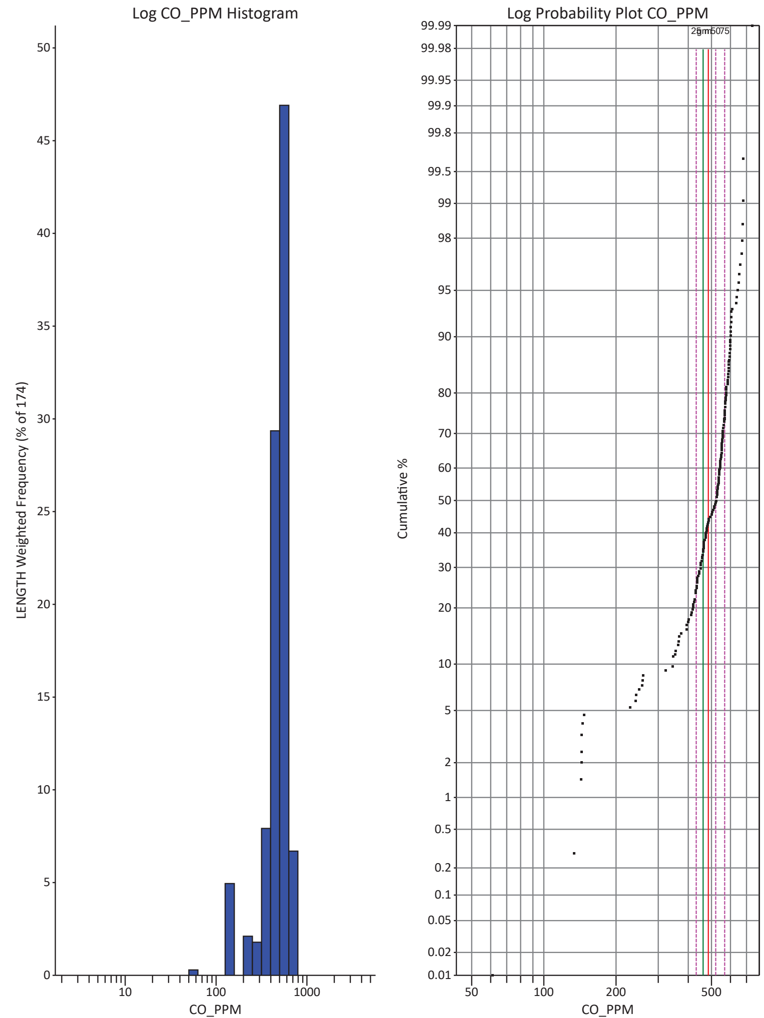
Log probability plot and histogram Ag (g/t), LG domain Escape Lake Deposit



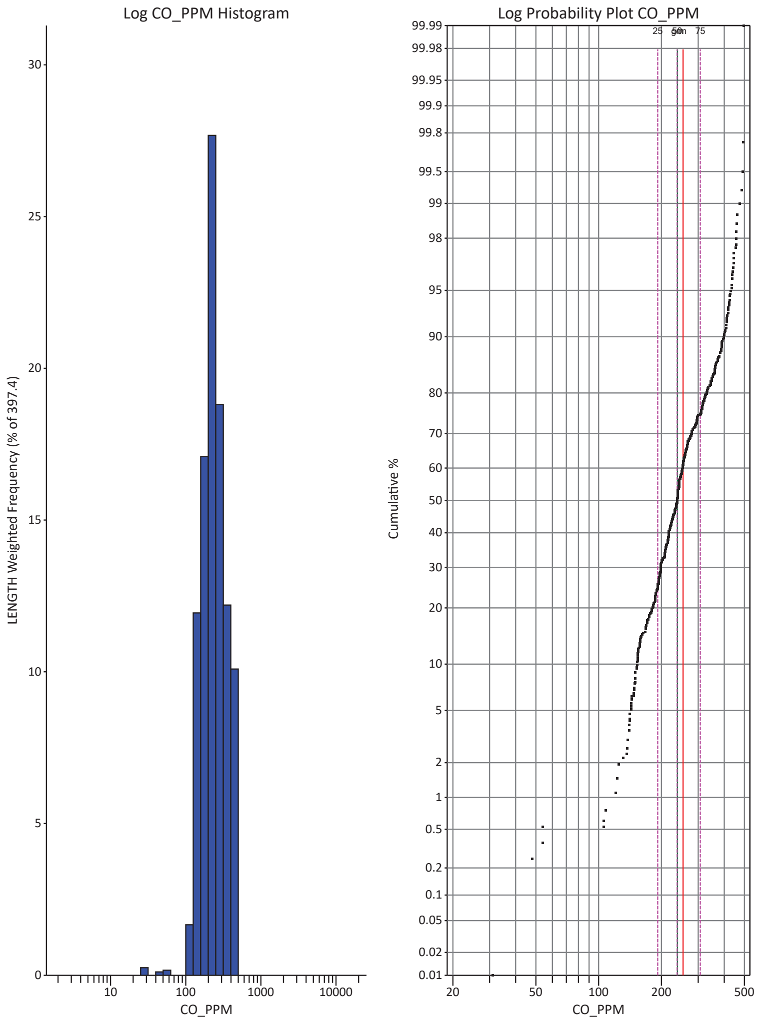
Log probability plot and histogram Au (g/t), BG domain Escape Lake Deposit



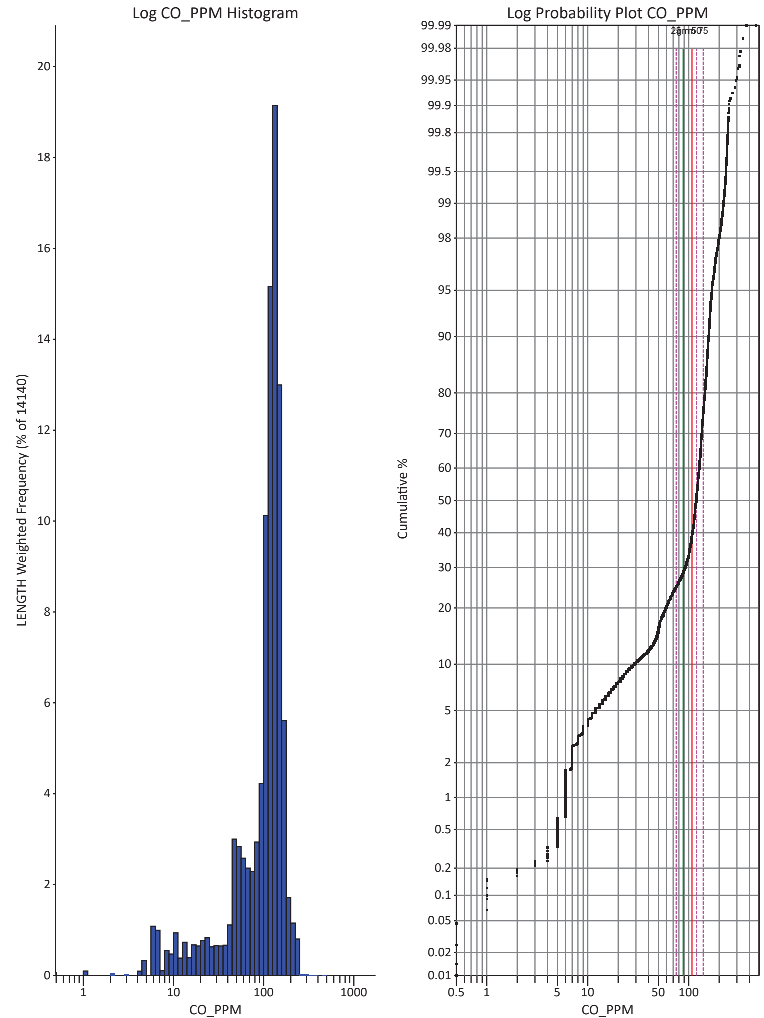
Log probability plot and histogram Au (g/t), HG domain Escape Lake Deposit



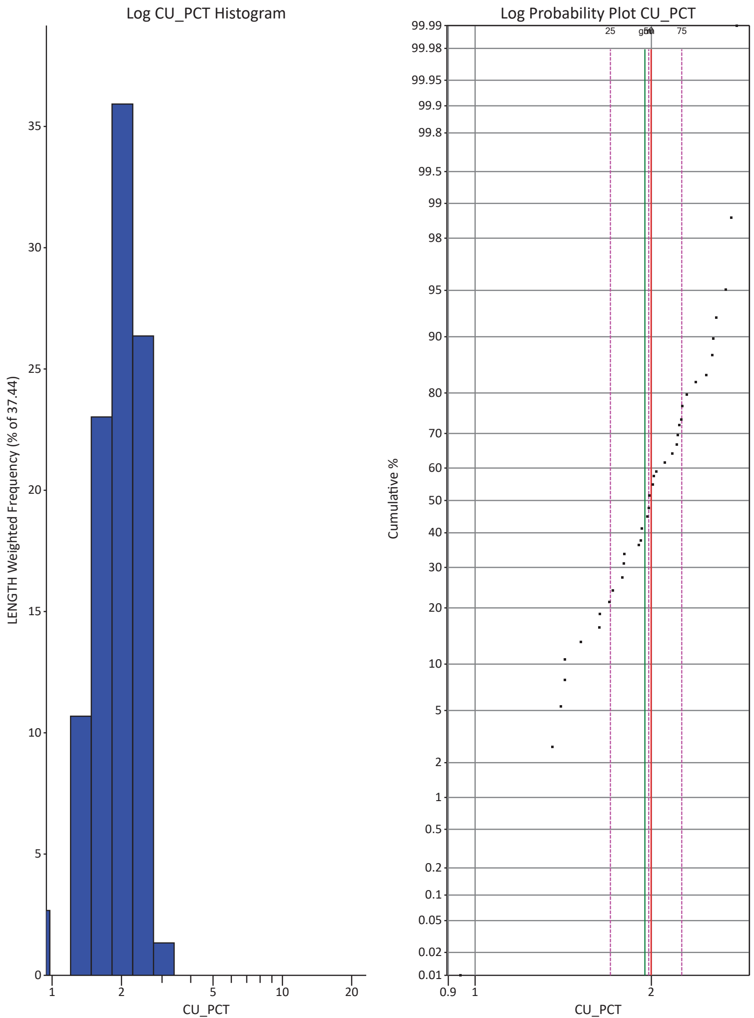
Log probability plot and histogram Co (g/t), HG domain Escape Lake Deposit



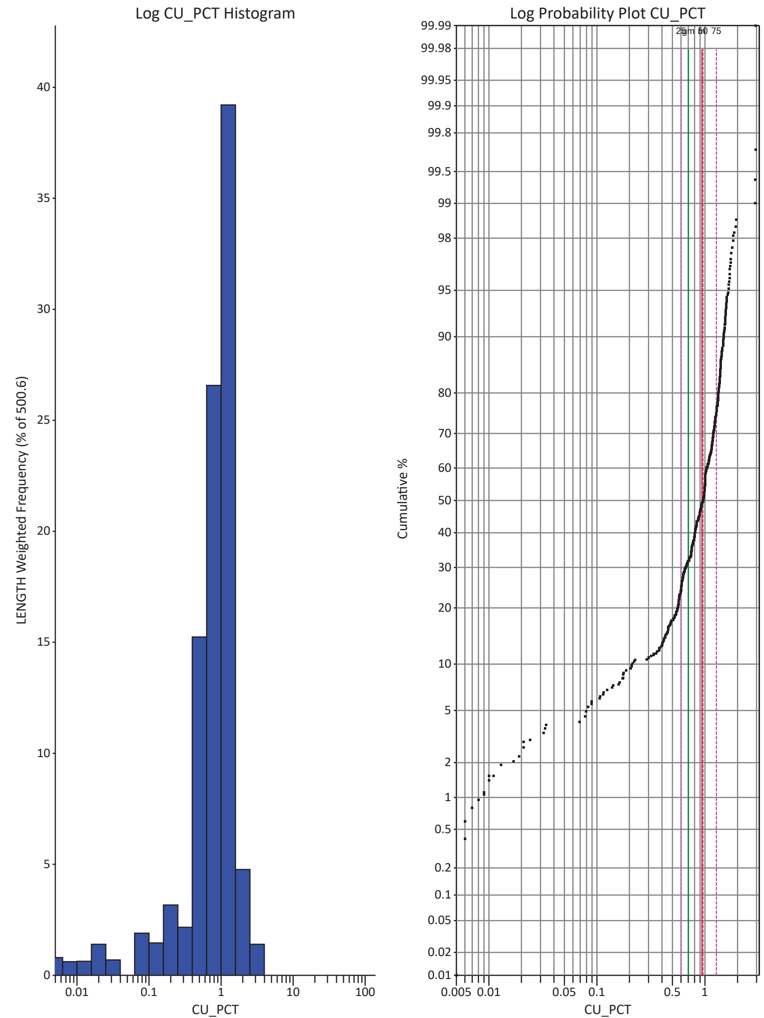
Log probability plot and histogram Co (g/t), LG domain Escape Lake Deposit



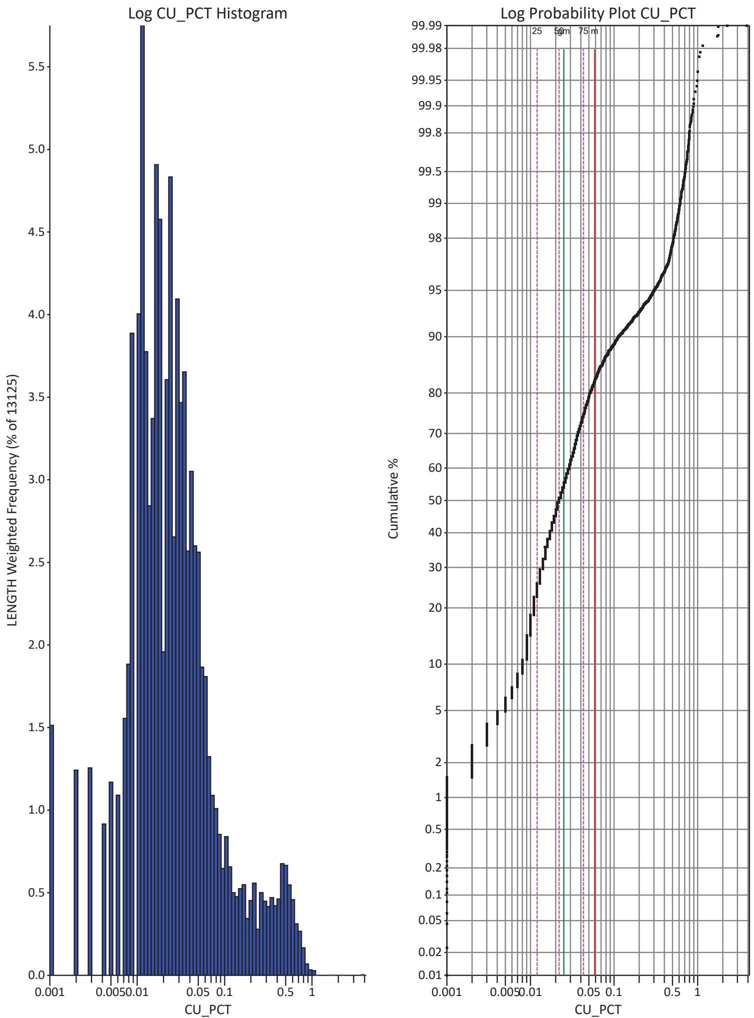
Log probability plot and histogram Co (g/t), BG domain Escape Lake Deposit



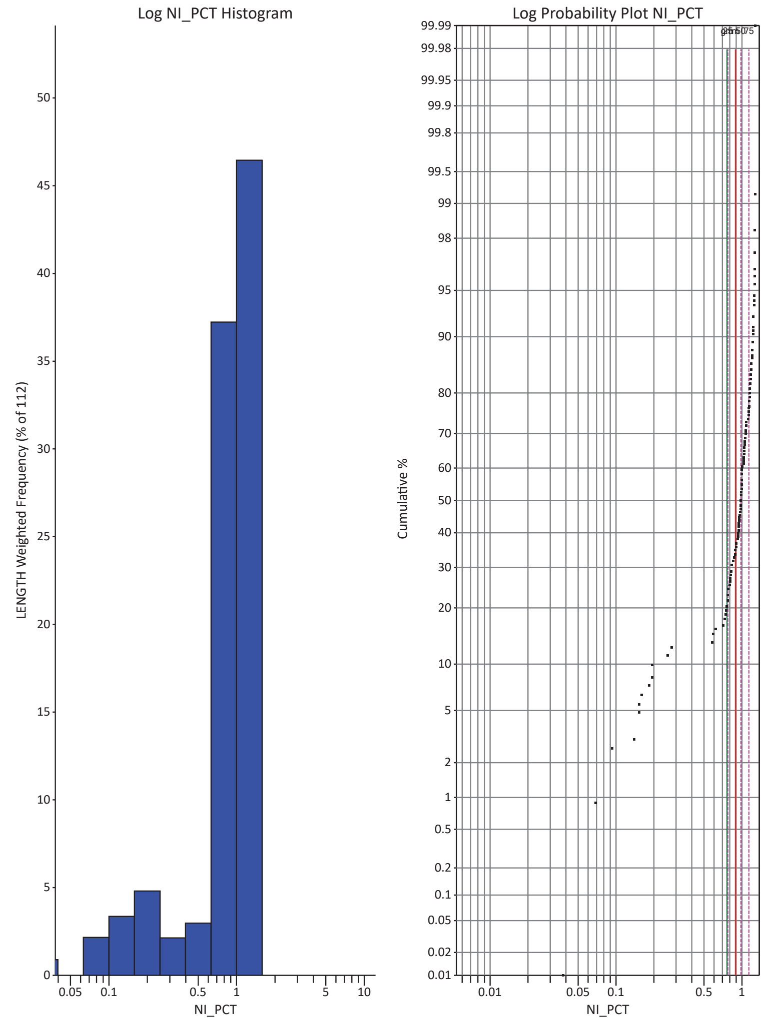
Log probability plot and histogram Cu (g/t), HG domain Escape Lake Deposit



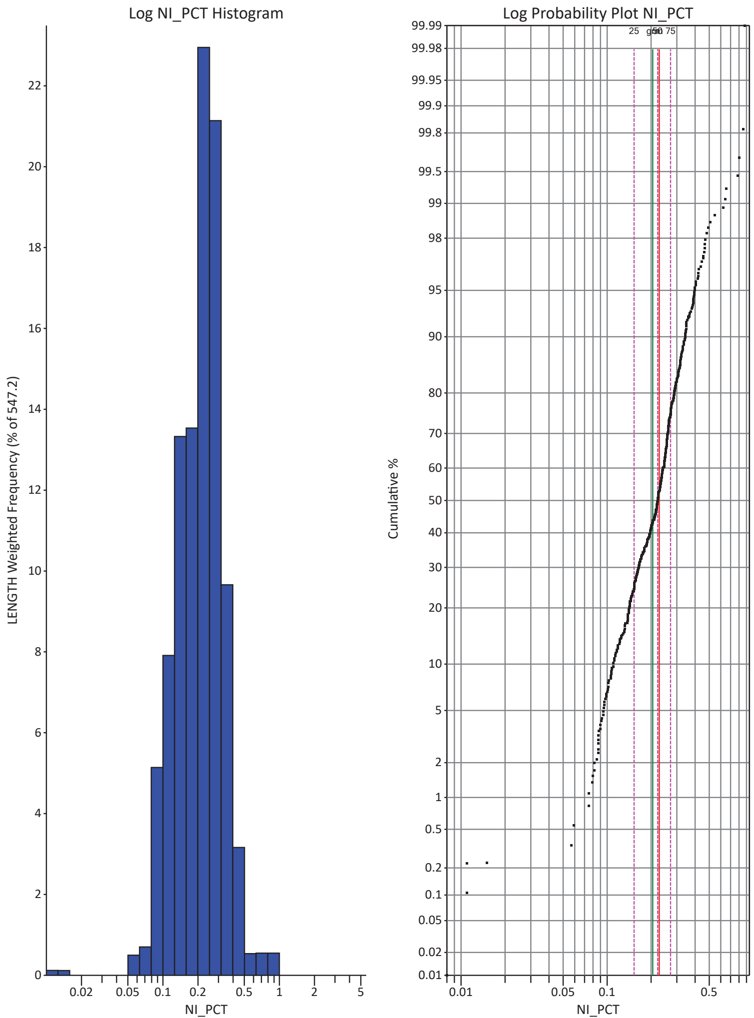
Log probability plot and histogram Cu (g/t), LG domain Escape Lake Deposit



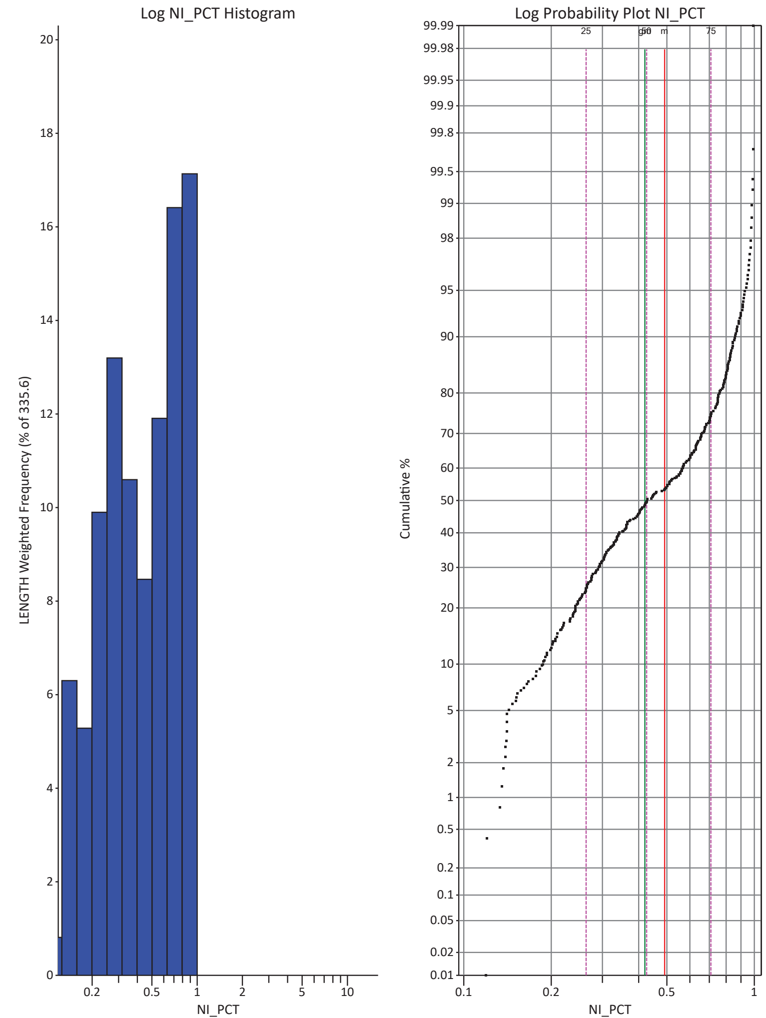
Log probability plot and histogram Cu (g/t), BG domain Escape Lake Deposit



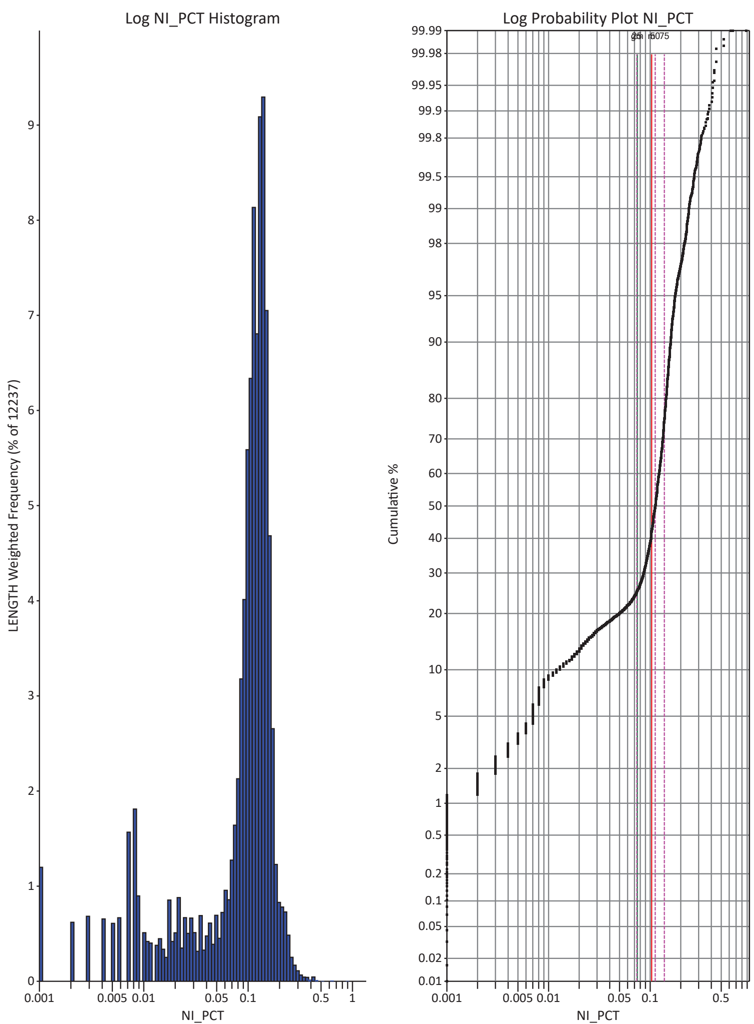
Log probability plot and histogram Ni (g/t), HG domain Escape Lake Deposit



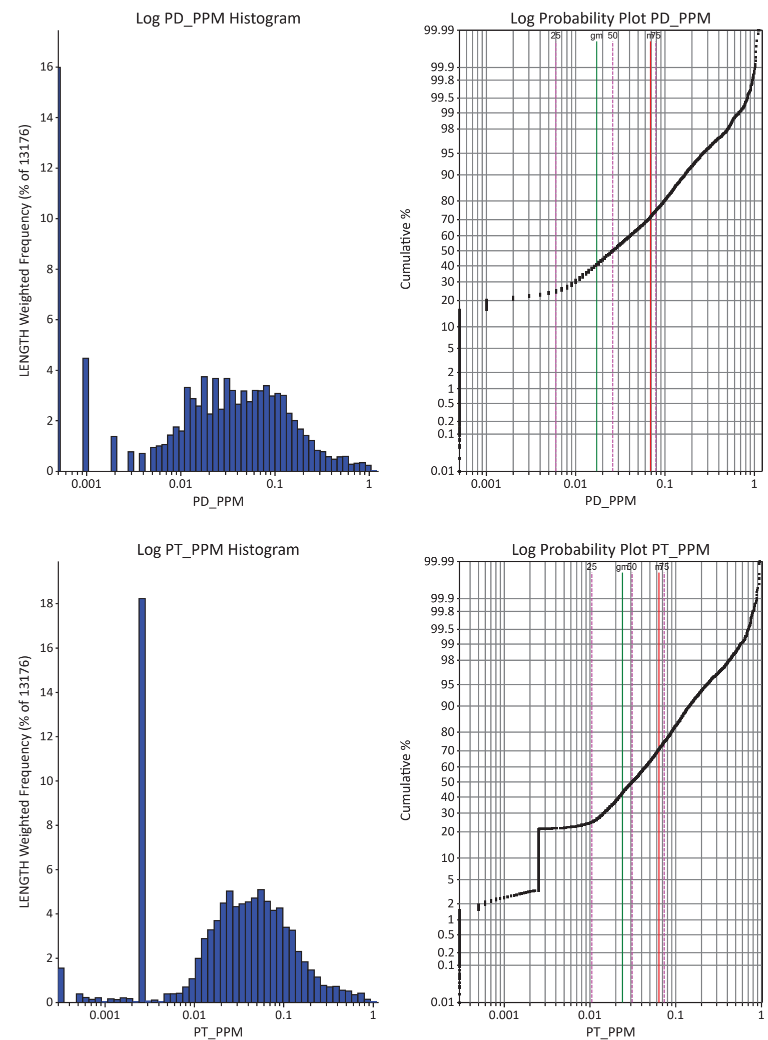
Log probability plot and histogram Ni (g/t), LG domain Escape Lake Deposit



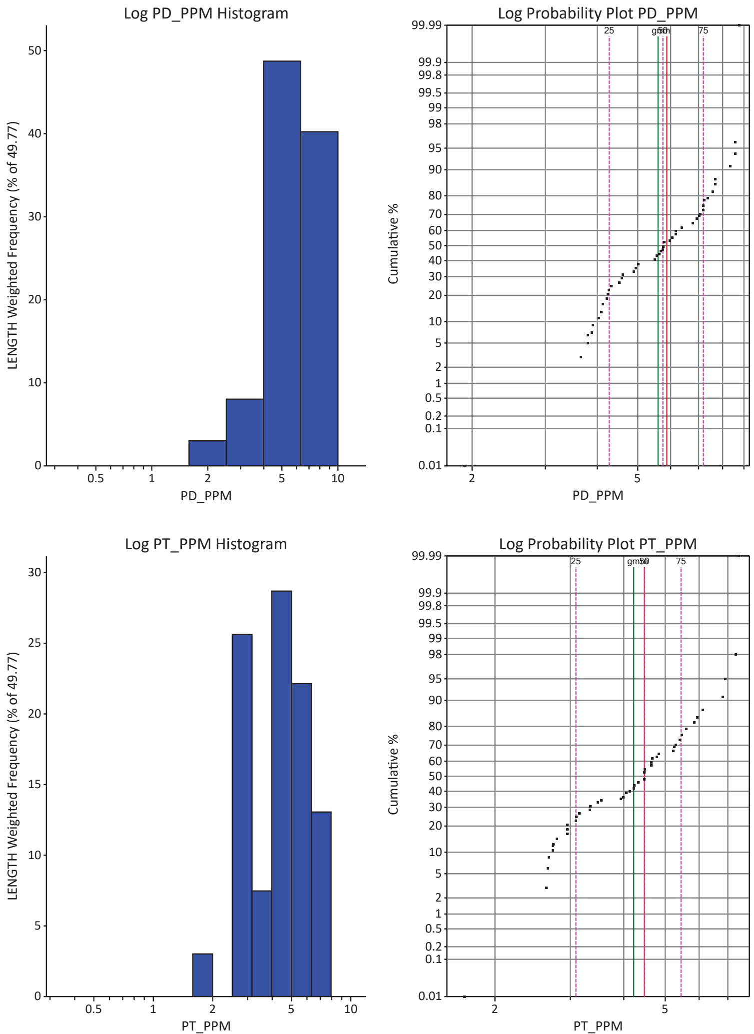
Log probability plot and histogram Ni (g/t), MG domain Escape Lake Deposit



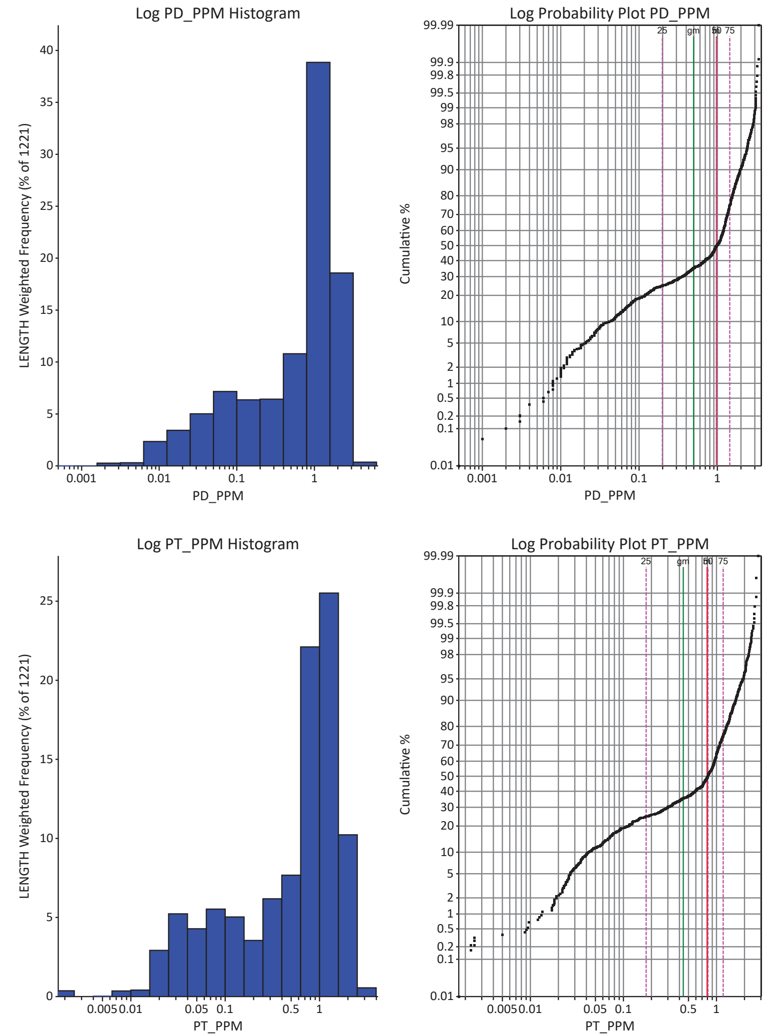
Log probability plot and histogram Ni (g/t), BG domain Escape Lake Deposit



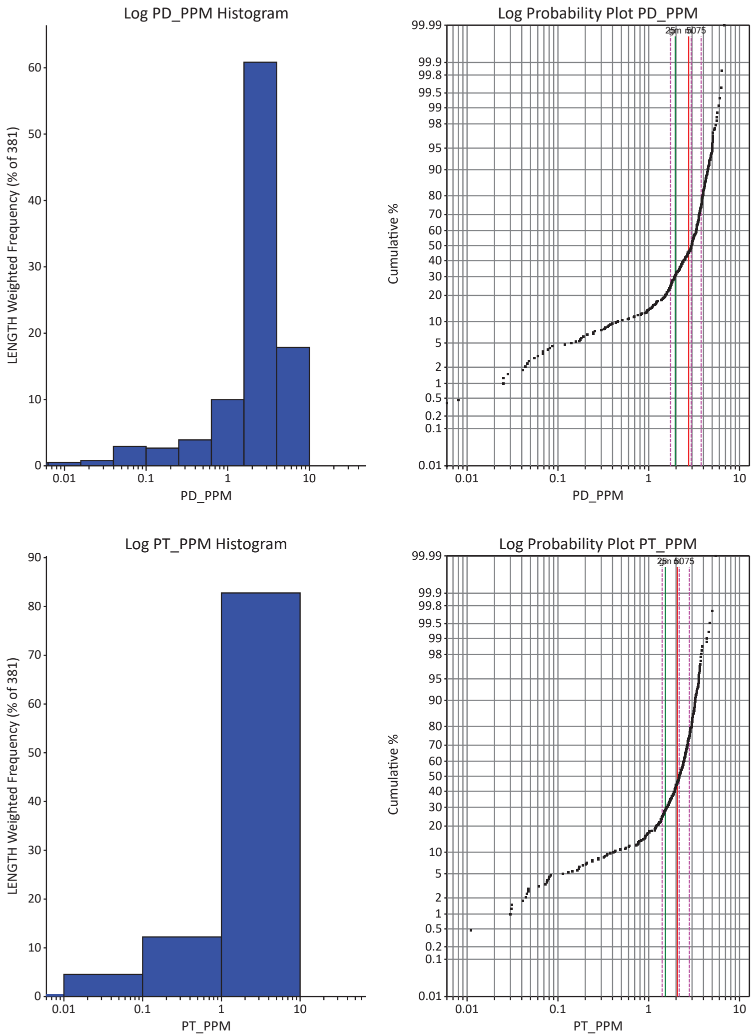
Log probability plot and histogram Pd/Pt (g/t), BG domain Escape Lake Deposit



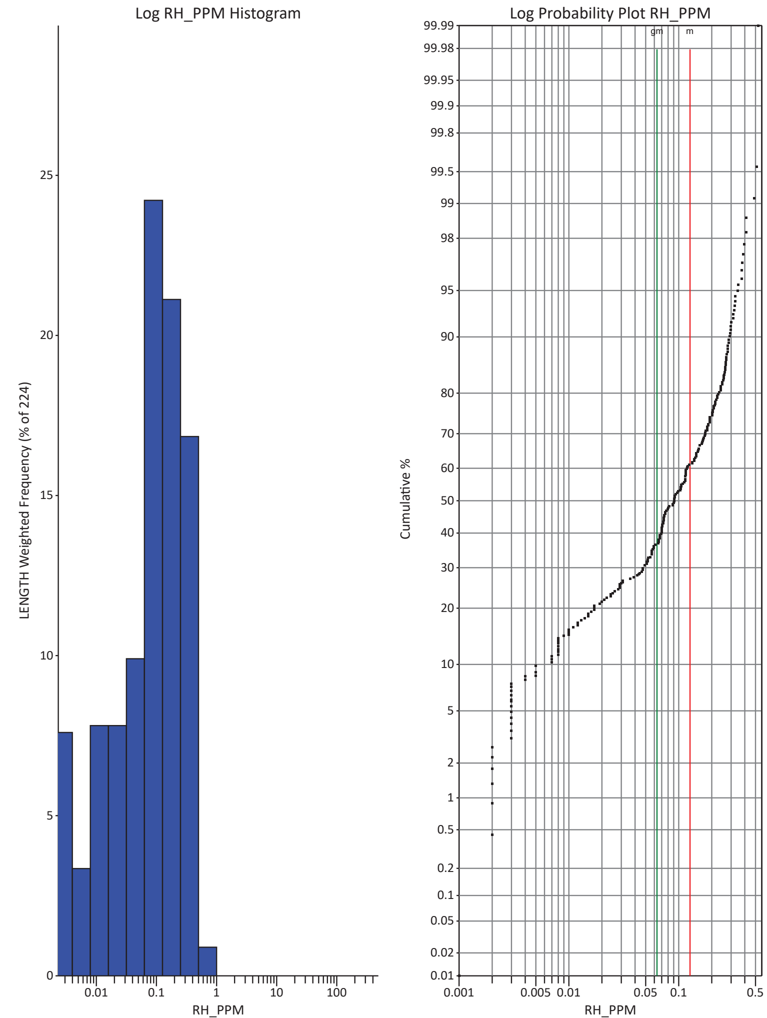
Log probability plot and histogram Pd/Pt (g/t), HG domain
Escape Lake Deposit



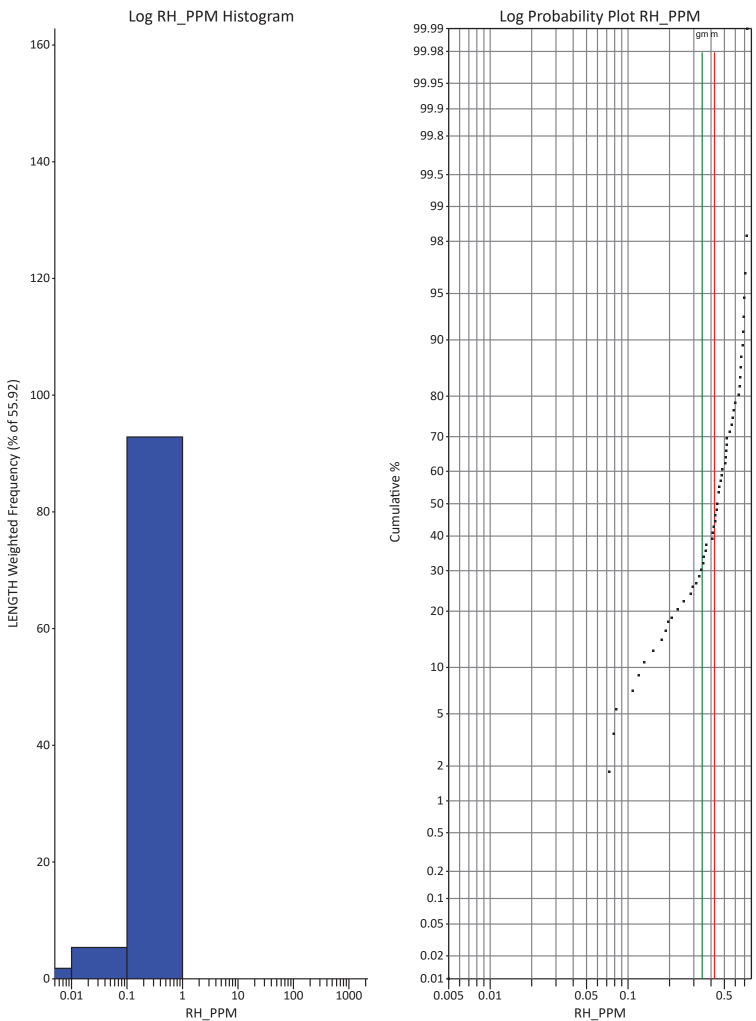
Log probability plot and histogram Pd/Pt (g/t), LG domain
Escape Lake Deposit



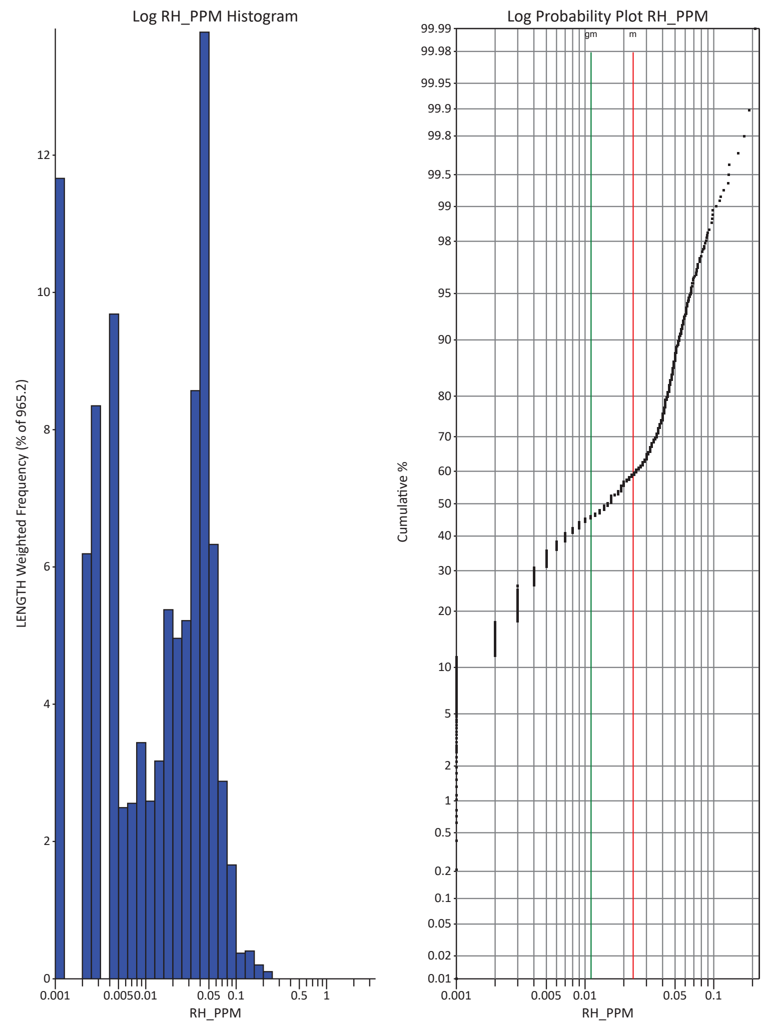
Log probability plot and histogram Pd/Pt (g/t), MG domain Escape Lake Deposit



Log probability plot and histogram Rh (g/t), LG domain Escape Lake Deposit



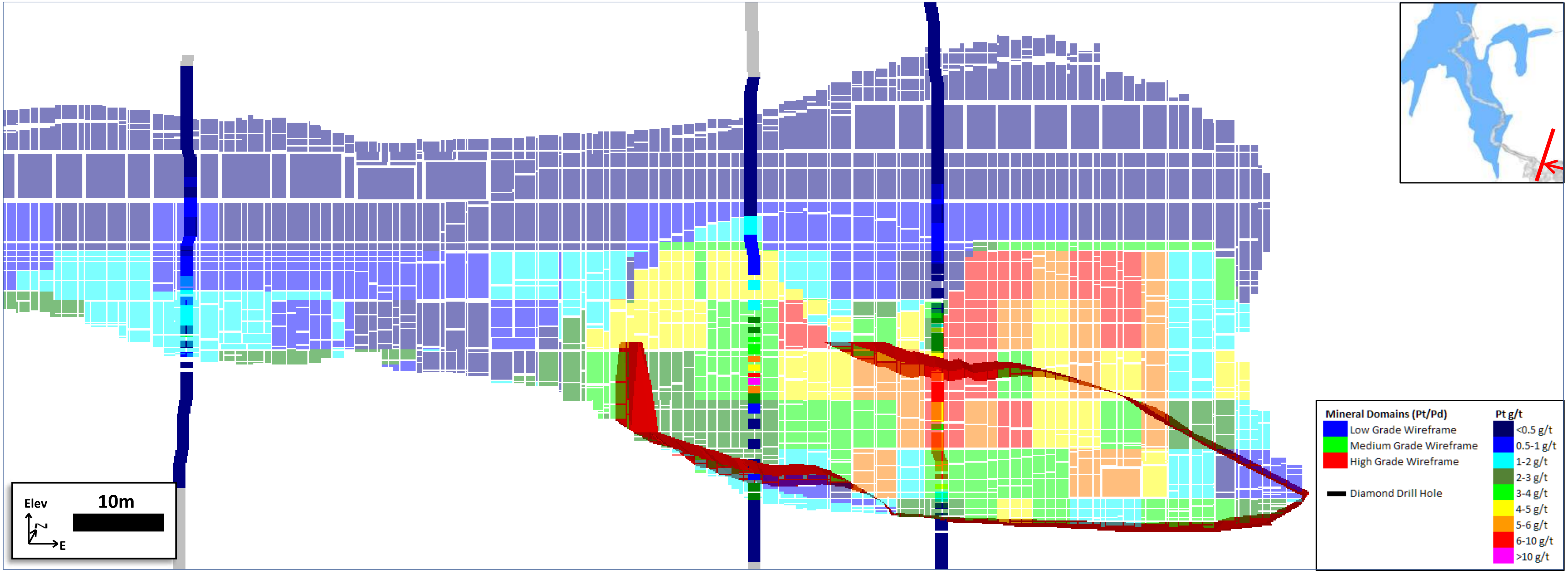
Log probability plot and histogram Rh (g/t), MG domain Escape Lake Deposit



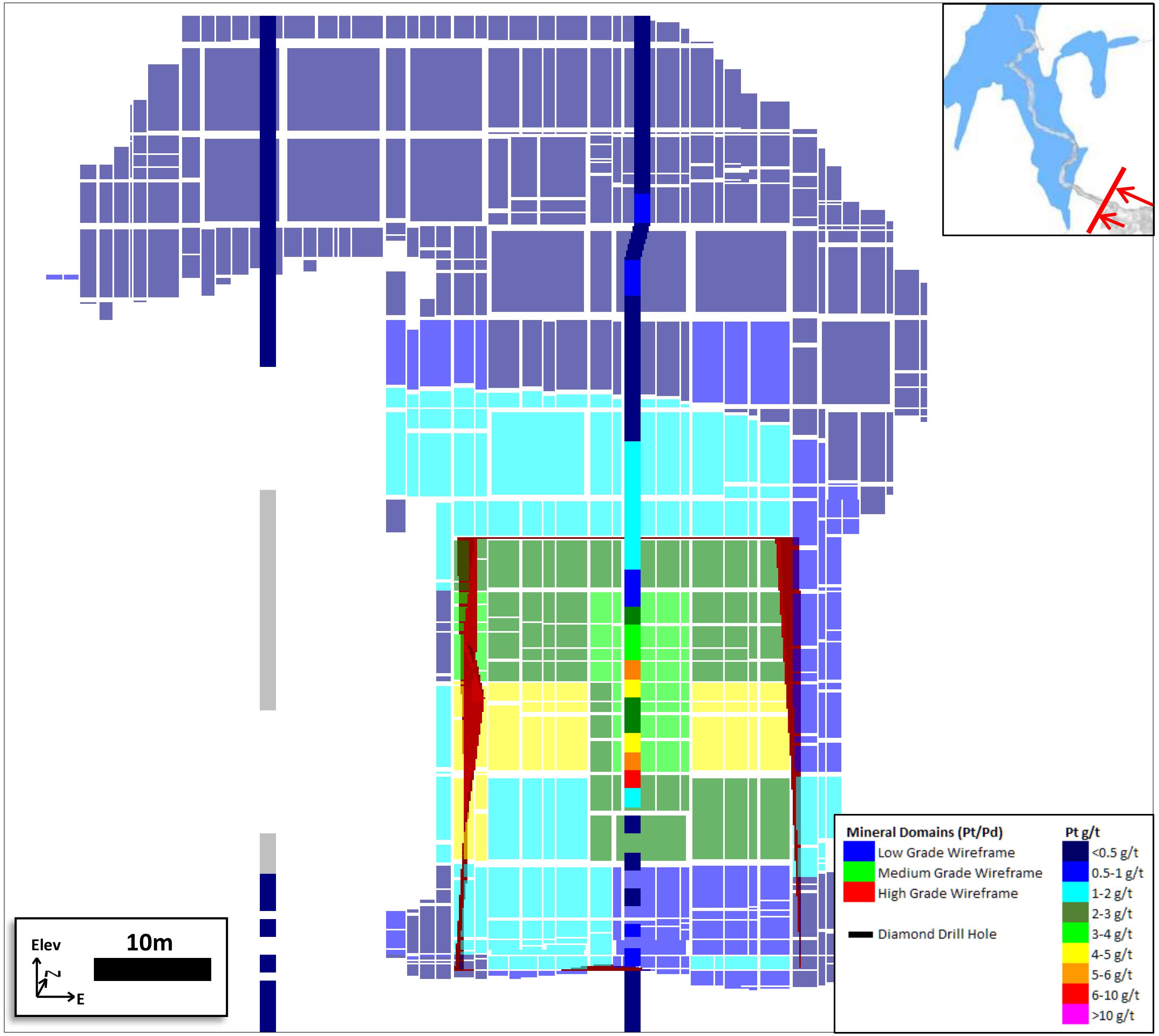
Log probability plot and histogram Rh (g/t), BG domain Escape Lake Deposit

Appendix E: Visual Comparison of Block Model Elements

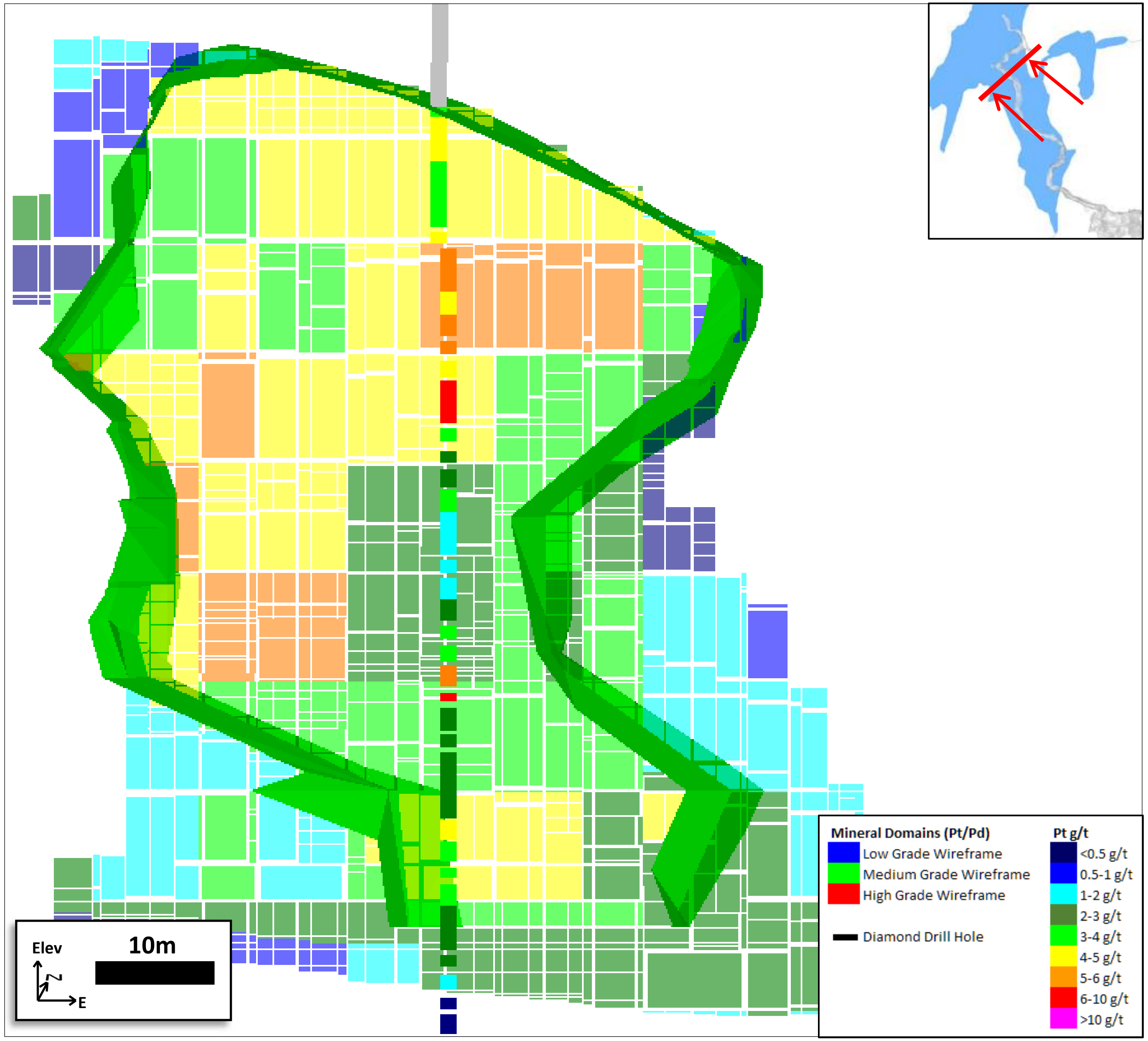
Current Lake Block Model Validation – Platinum g/t



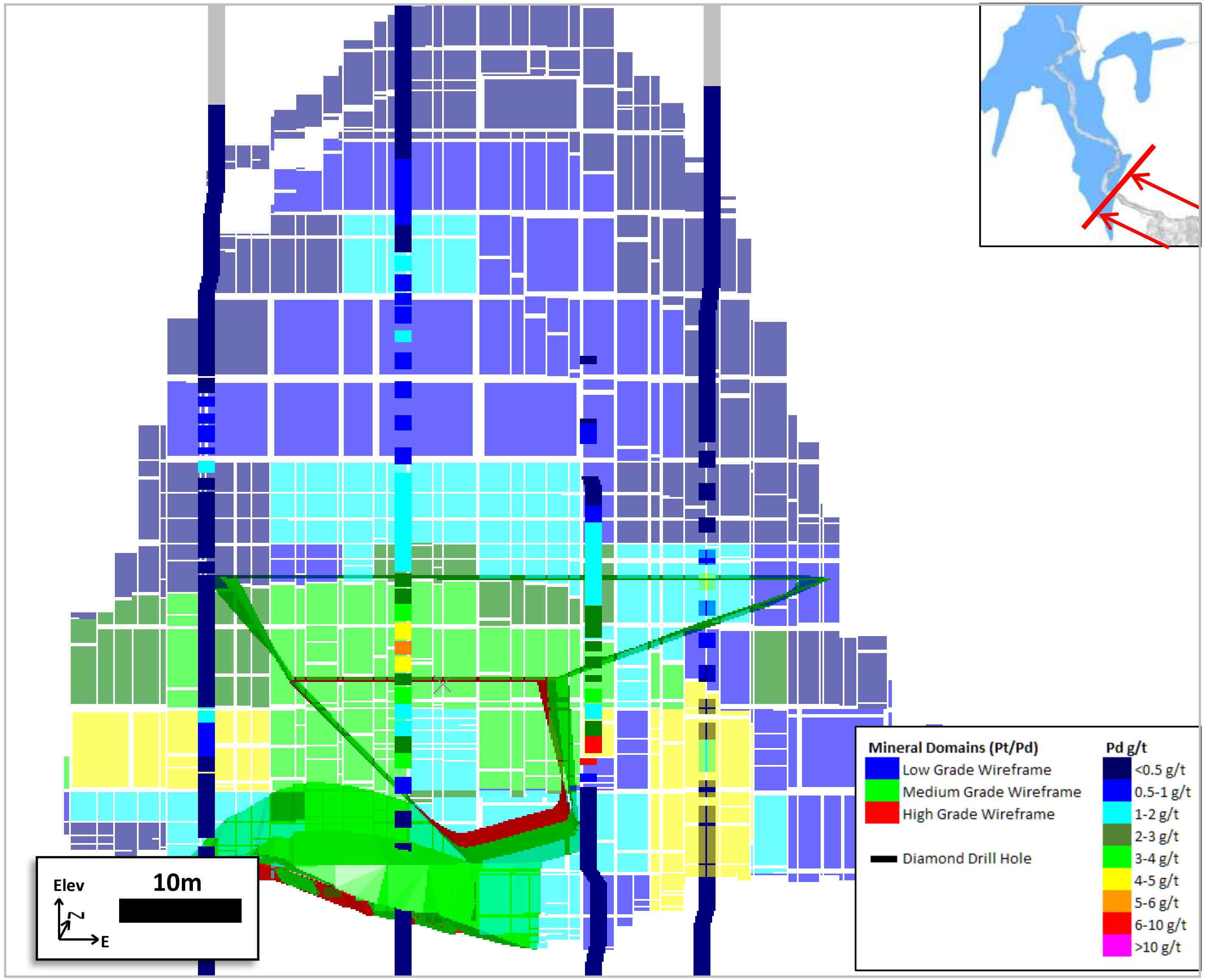
Current Lake Block Model Validation – Platinum g/t



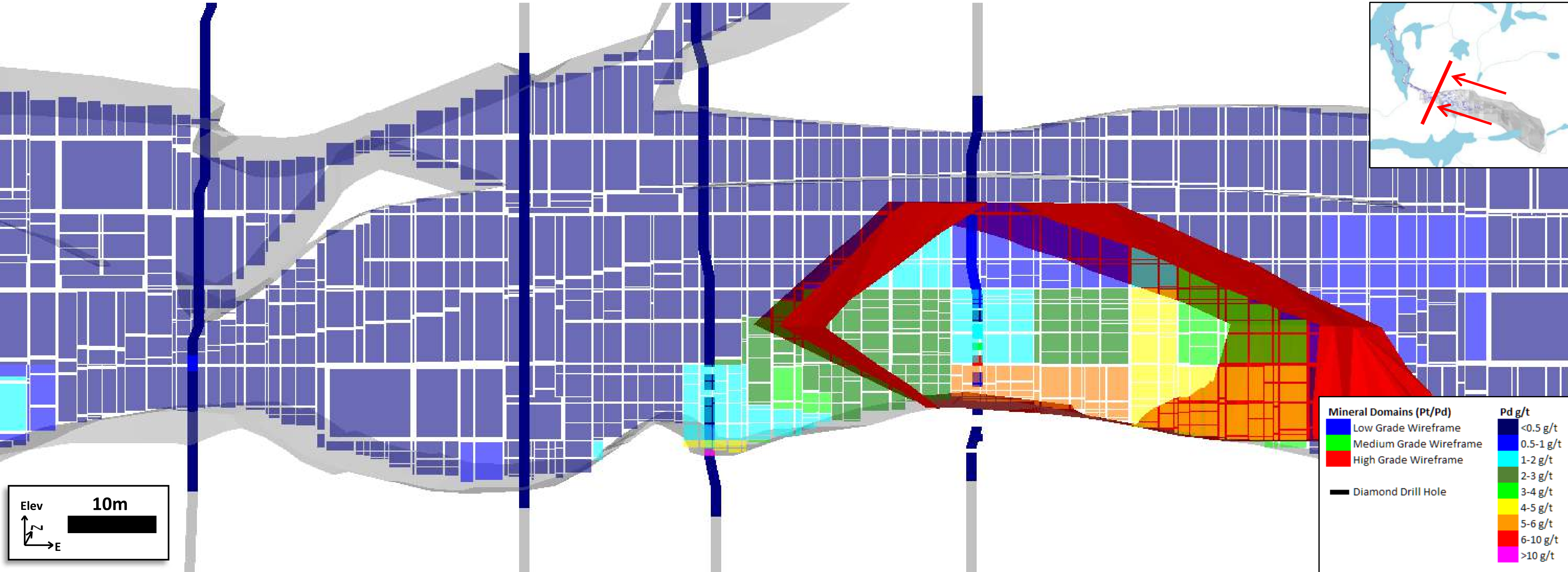
Current Lake Block Model Validation – Platinum g/t



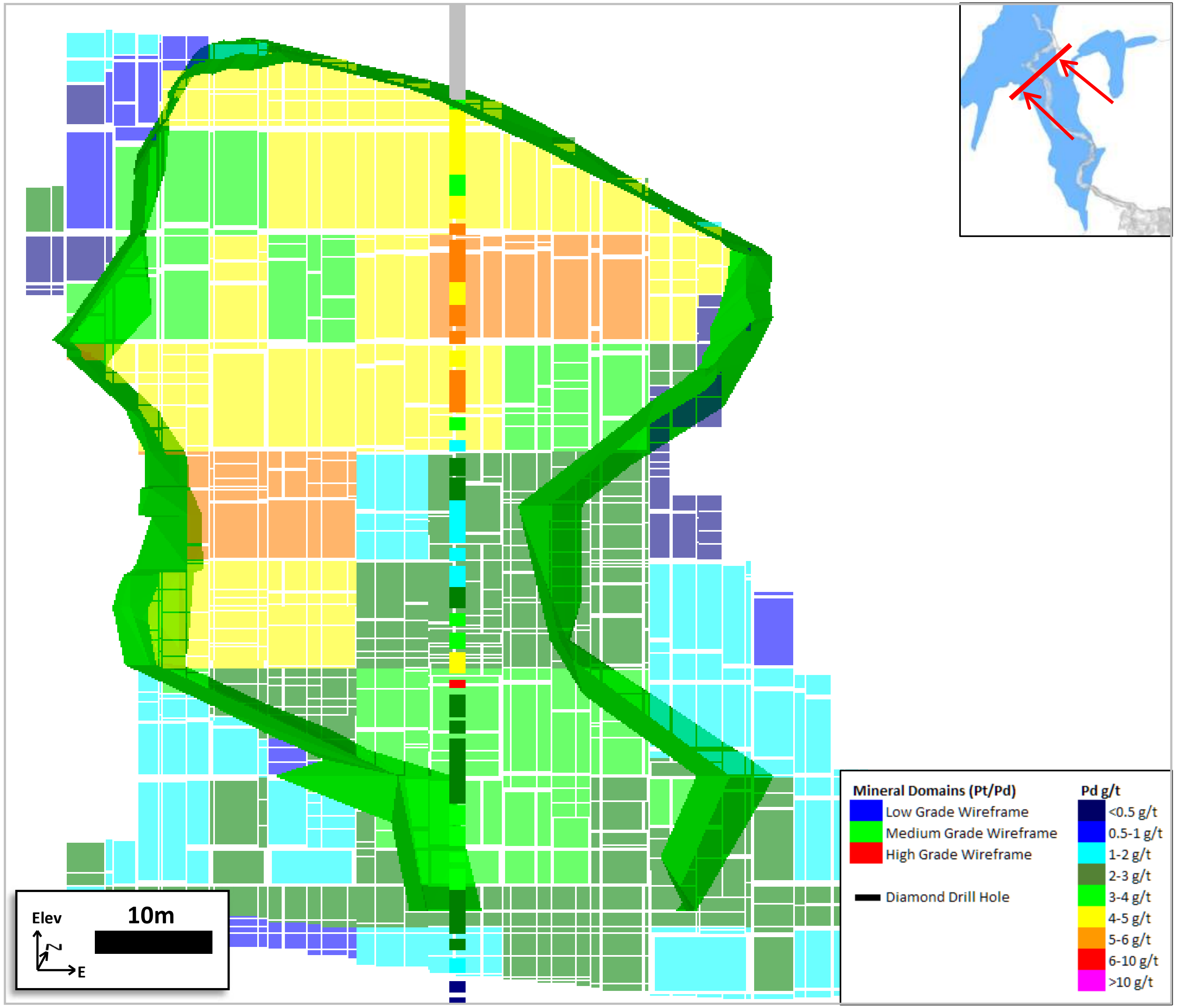
Current Lake Block Model Validation – Palladium g/t



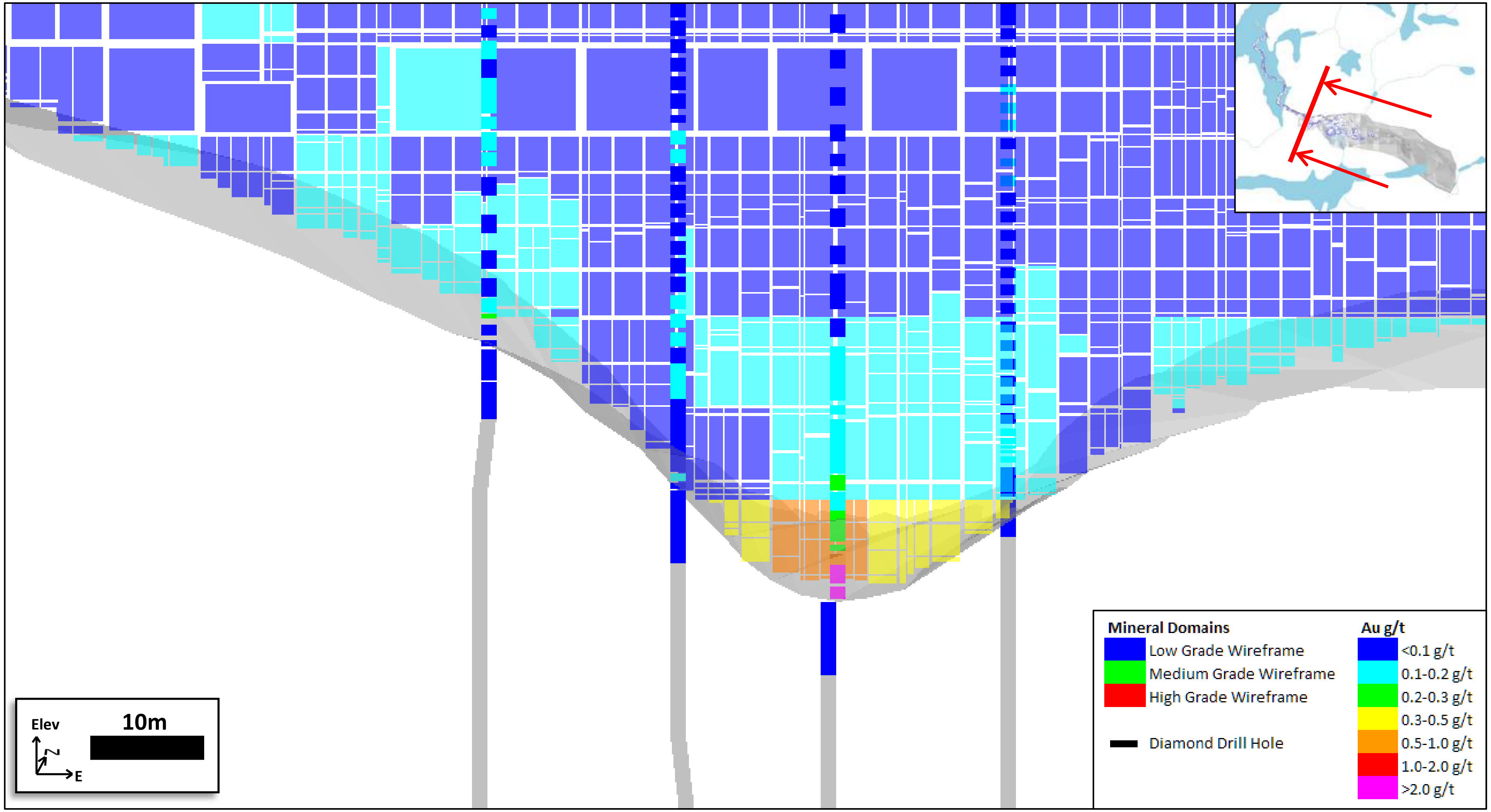
Current Lake Block Model Validation – Palladium g/t



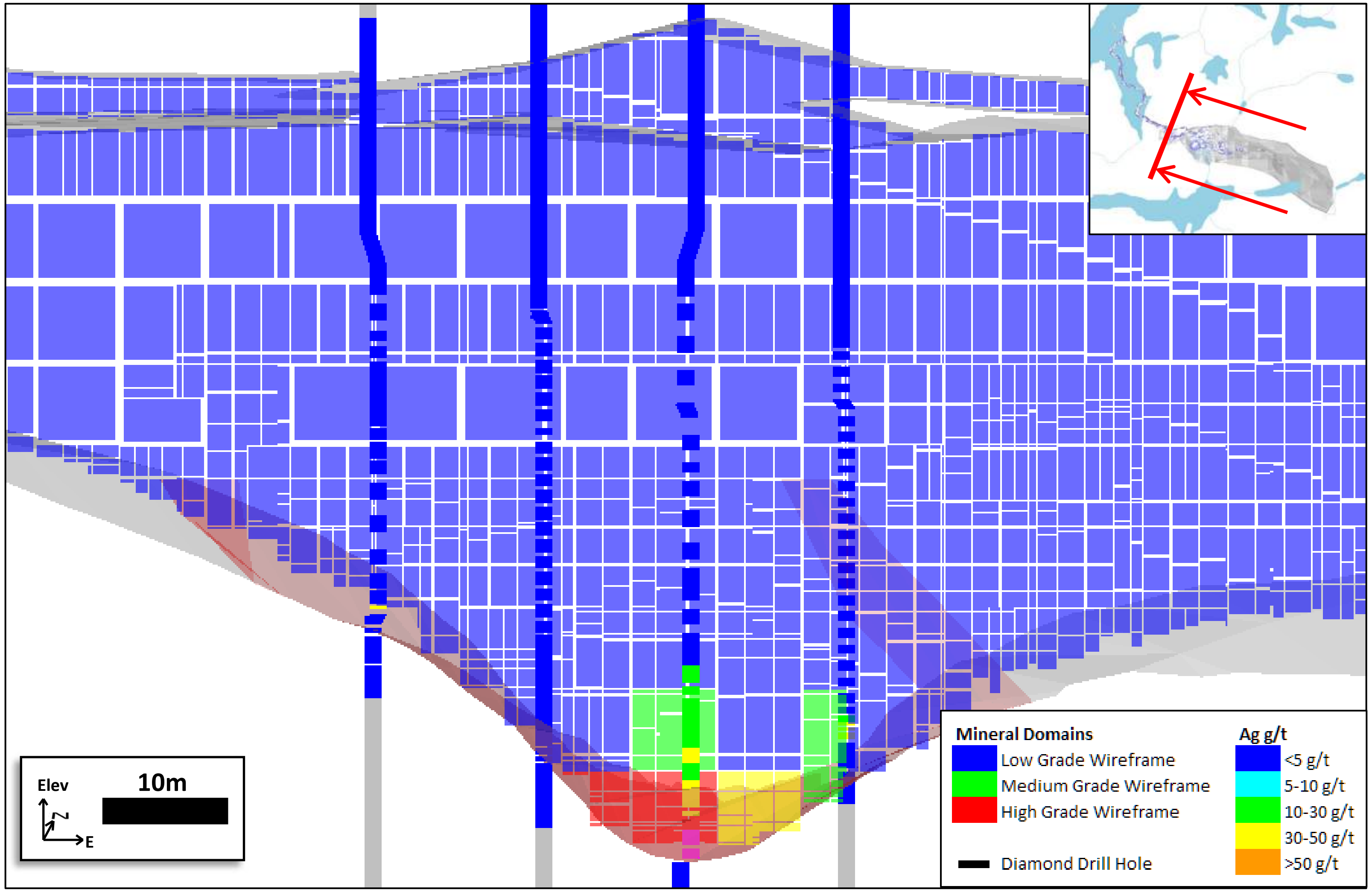
Current Lake Block Model Validation – Palladium g/t



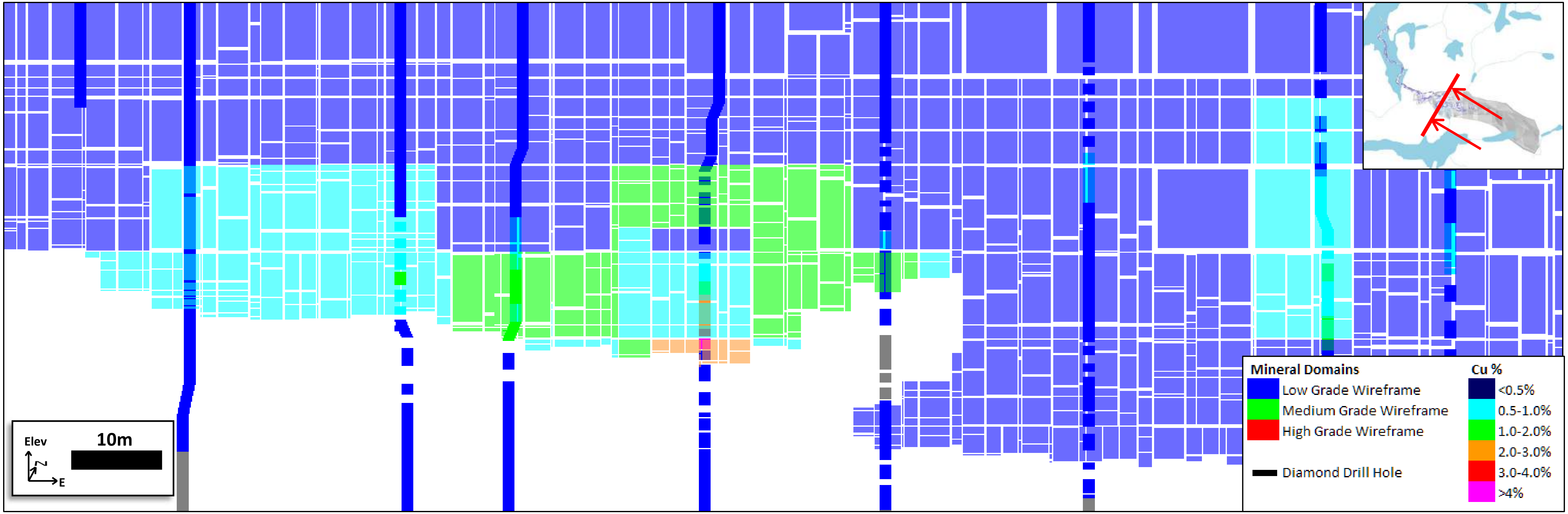
Current Lake Block Model Validation – Gold g/t



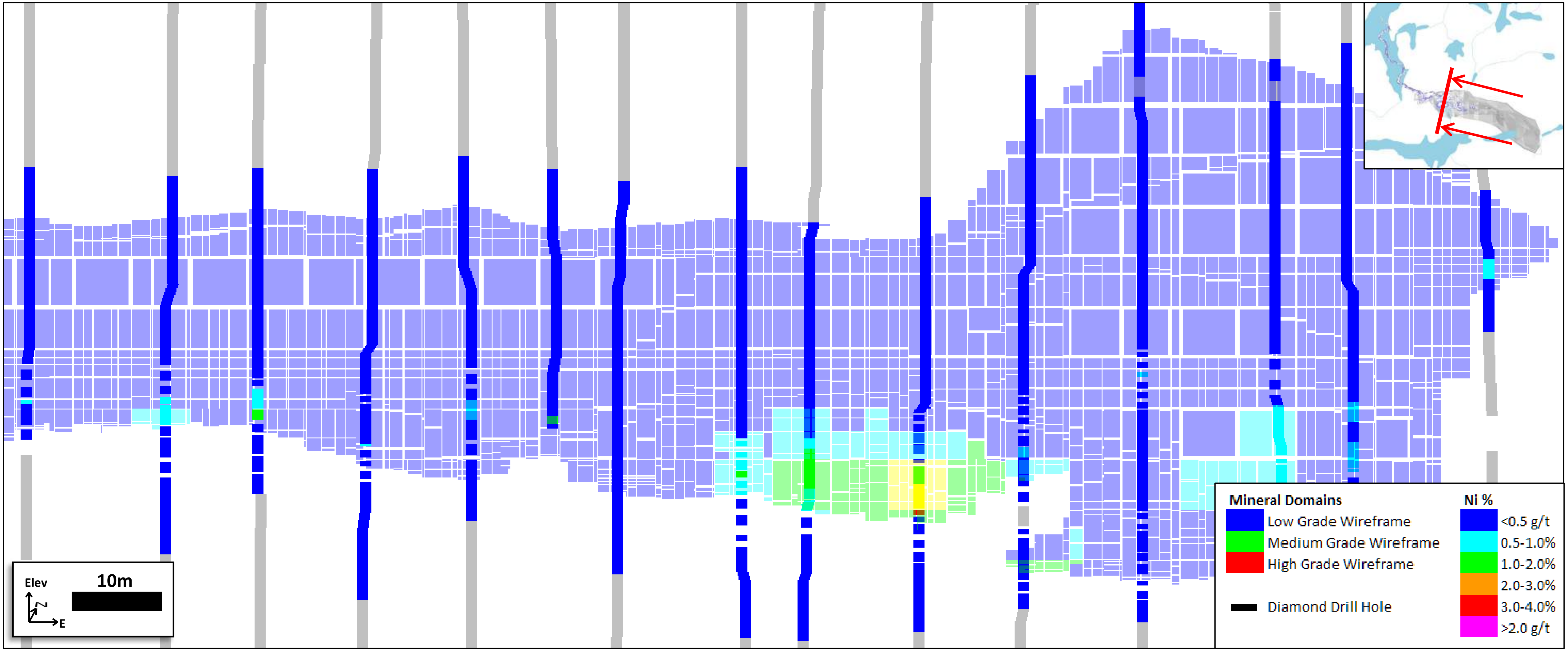
Current Lake Block Model Validation – Silver g/t



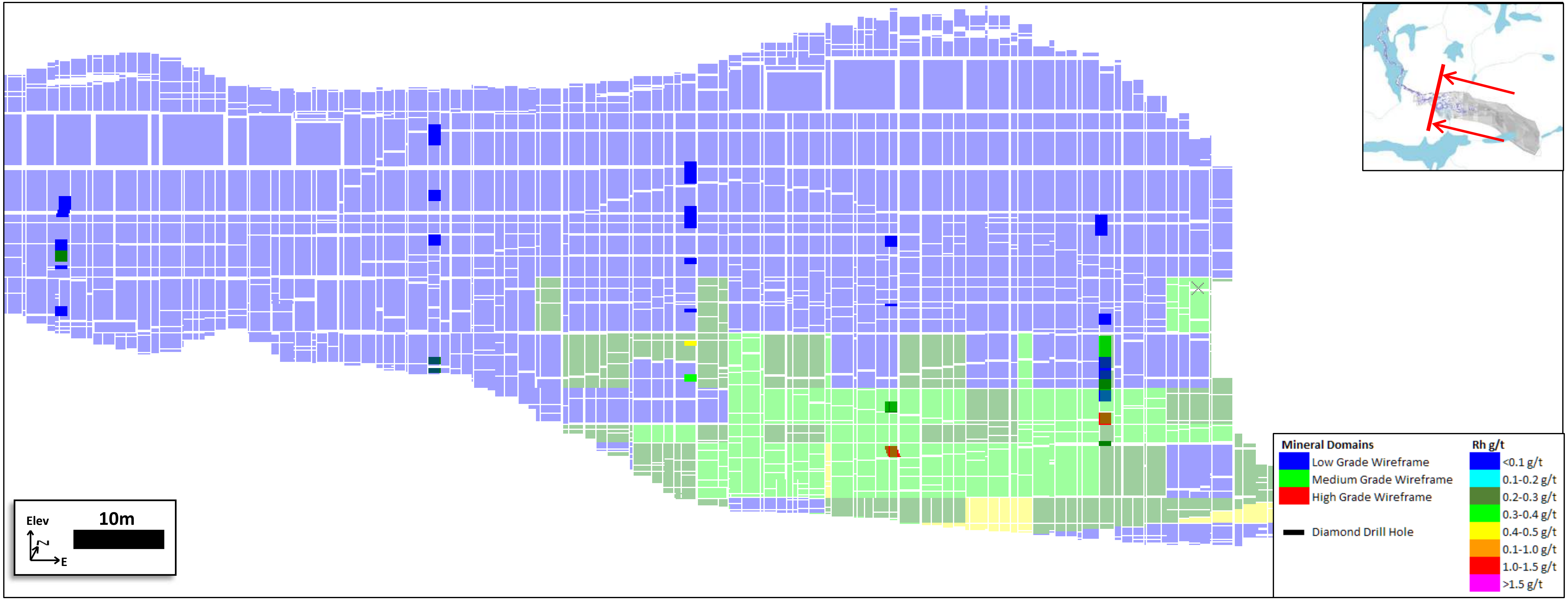
Current Lake Block Model Validation – Copper %



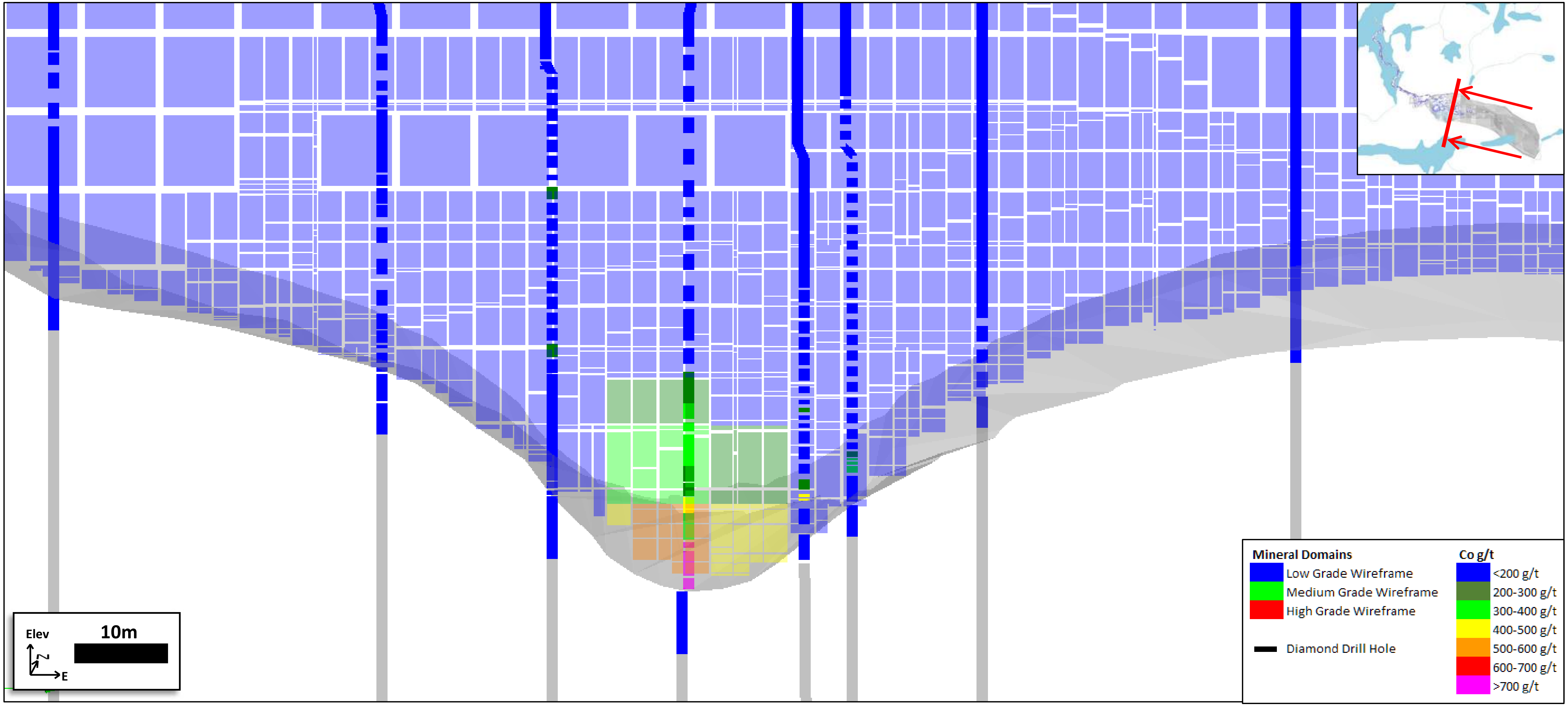
Current Lake Block Model Validation – Nickel %



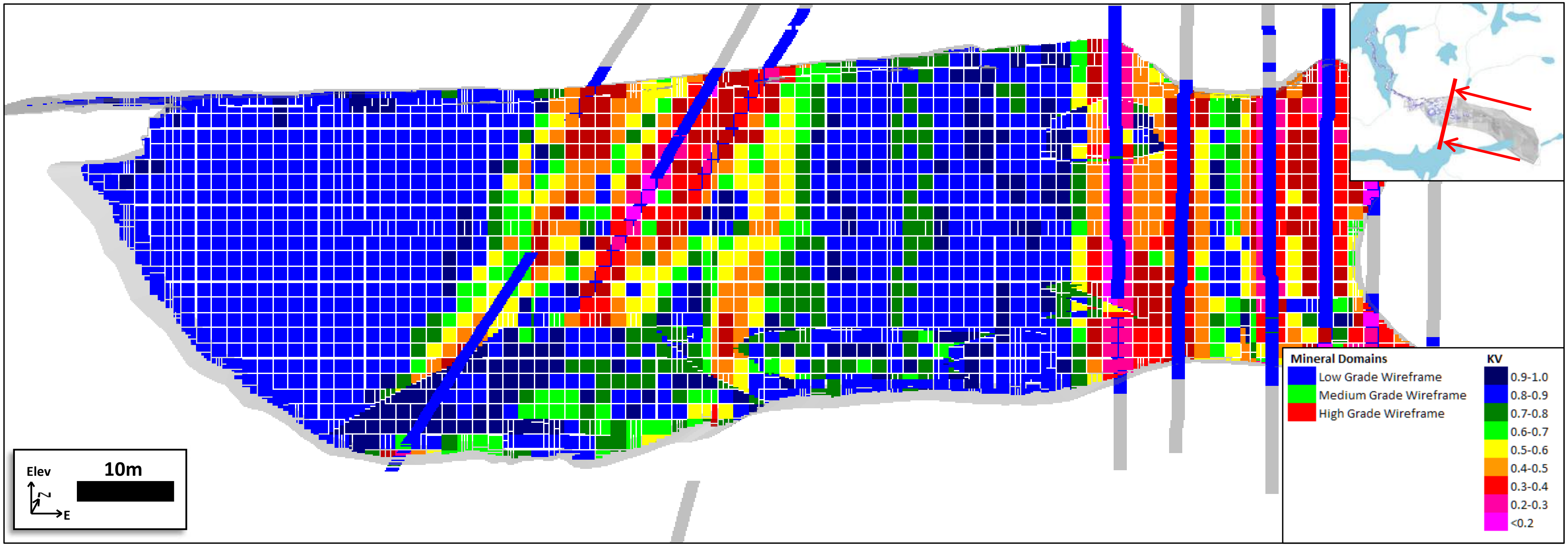
Current Lake Block Model Validation – Rhodium g/t



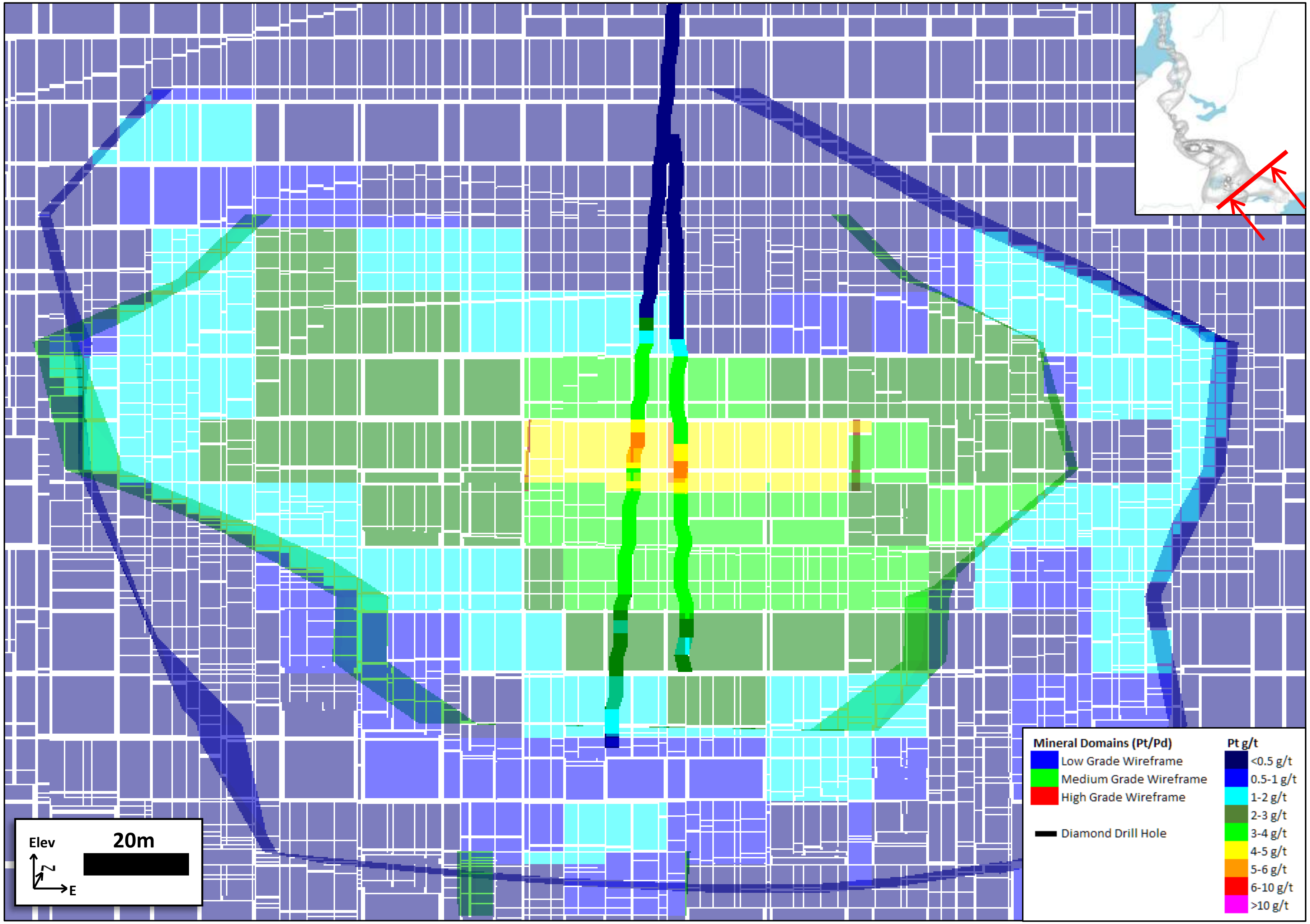
Current Lake Block Model Validation – Cobalt g/t



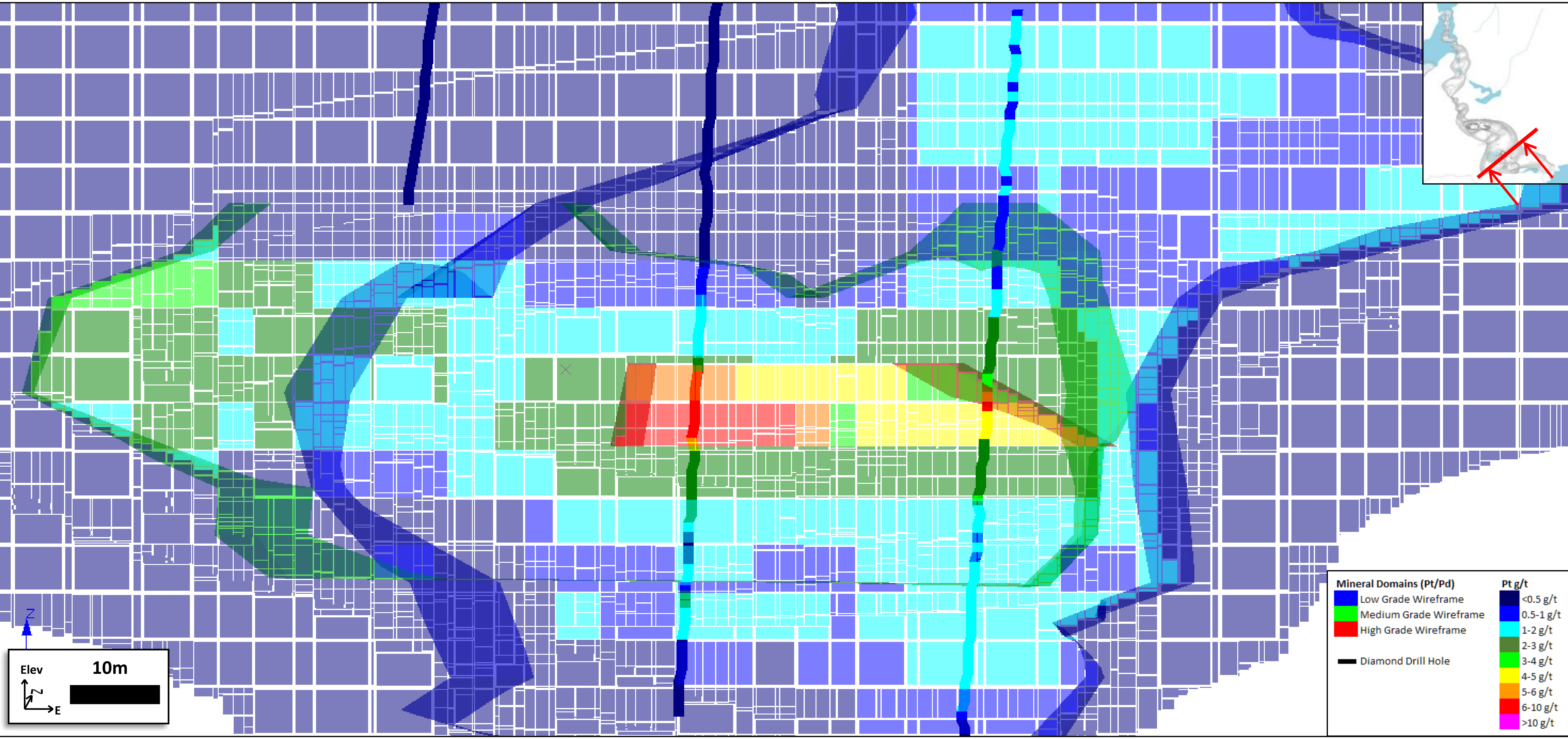
Current Lake Block Model Kriging Variance, Pt



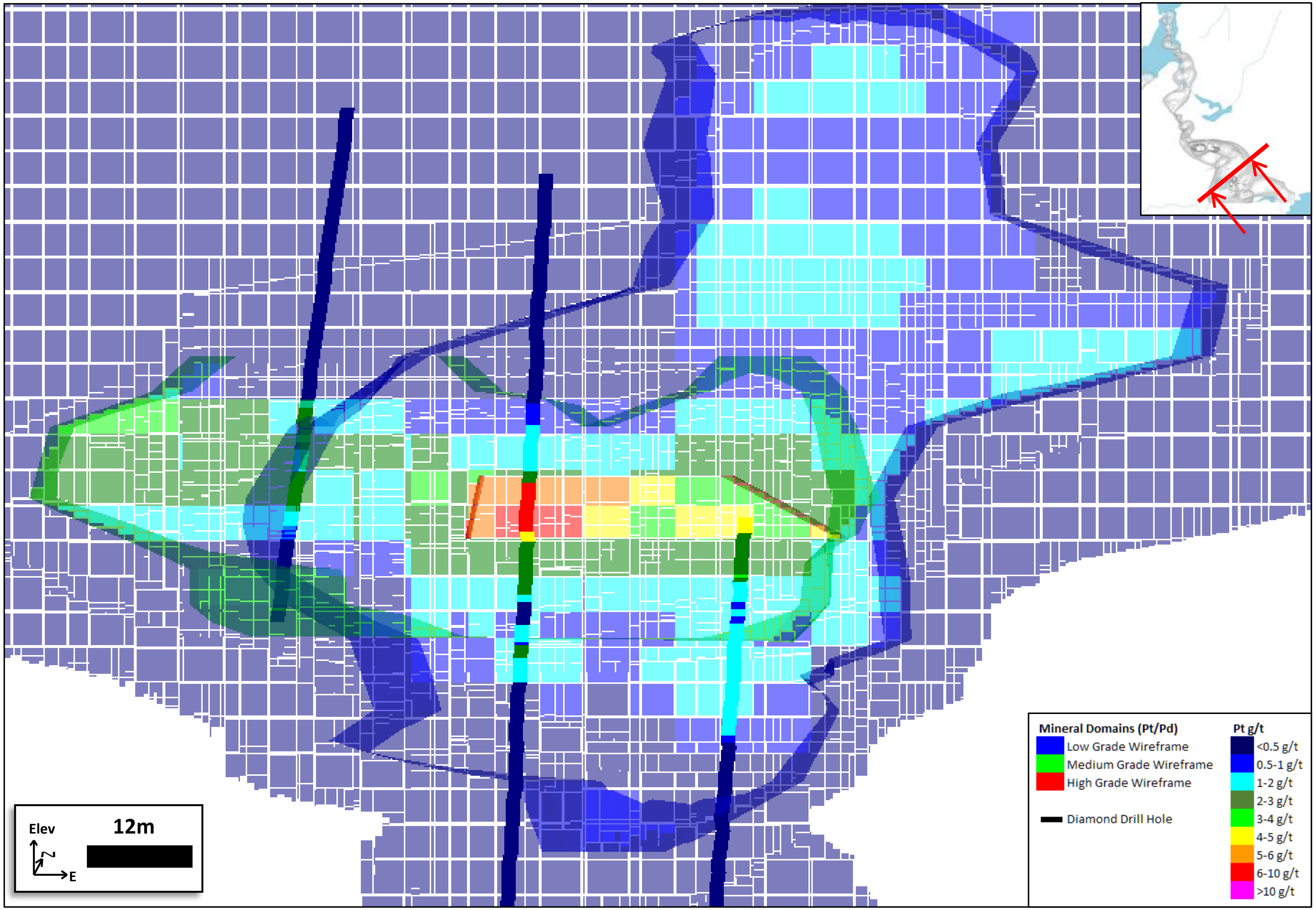
Escape Lake Block Model Validation – Platinum g/t



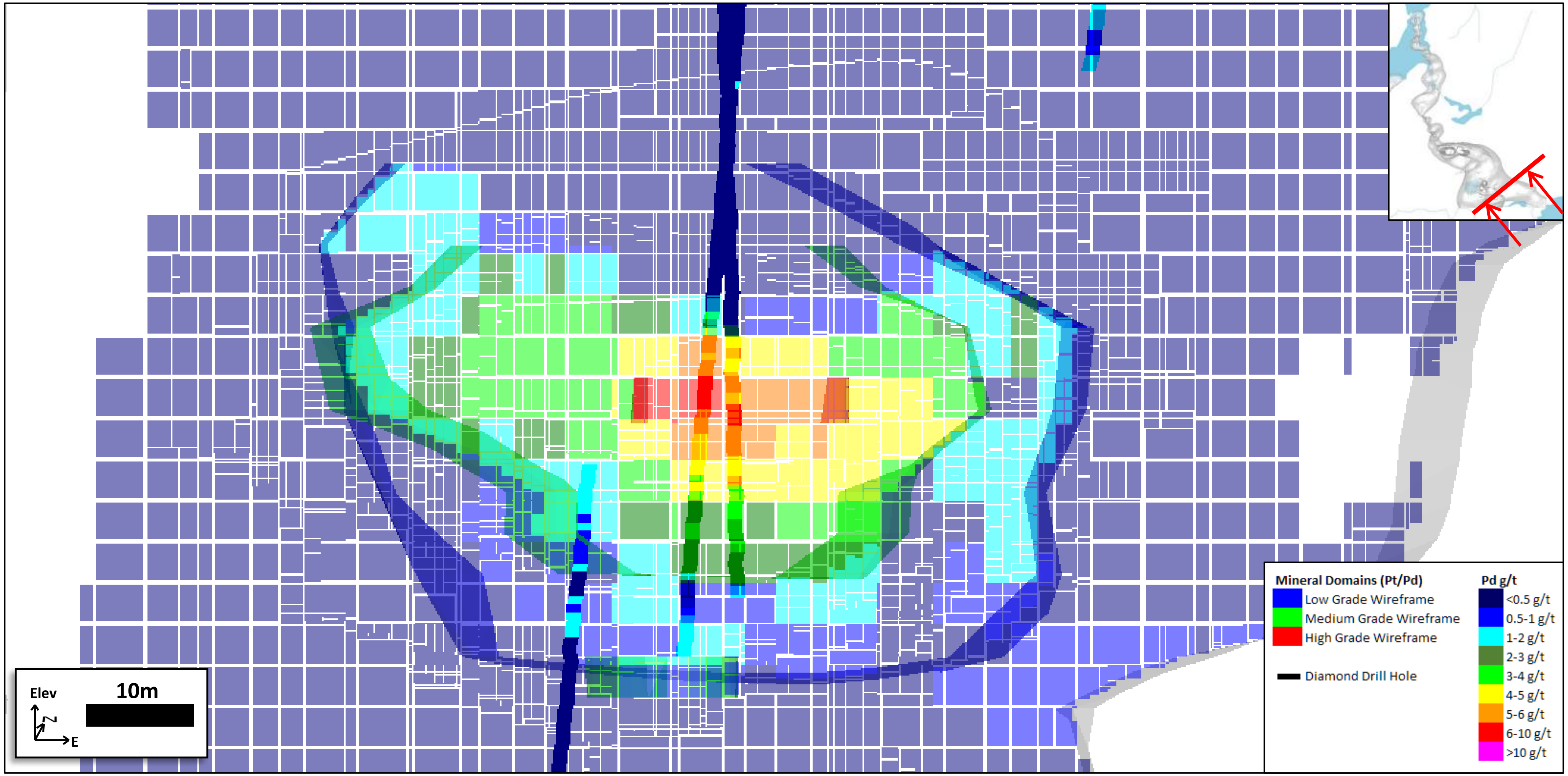
Escape Lake Block Model Validation – Platinum g/t



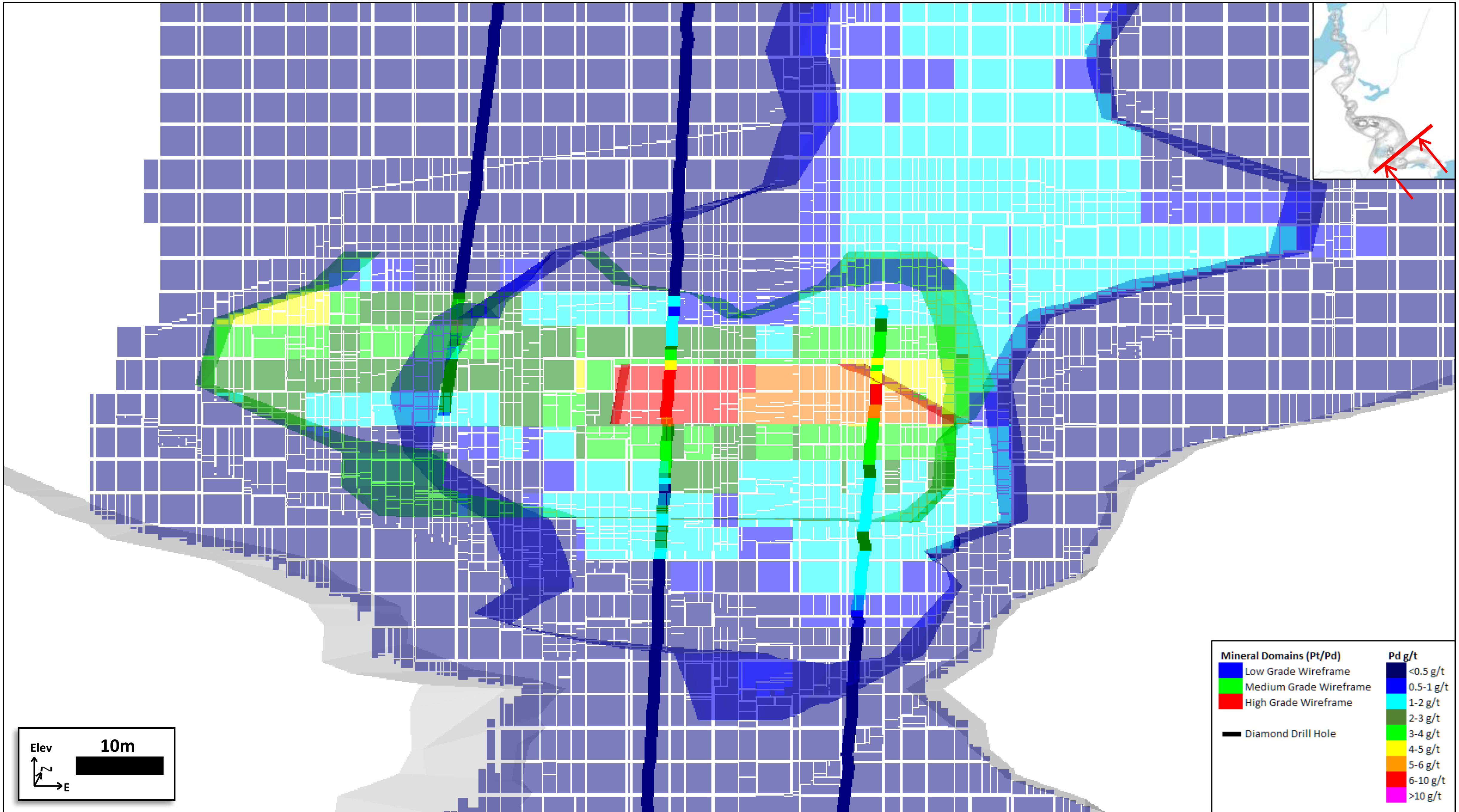
Escape Lake Block Model Validation – Platinum g/t



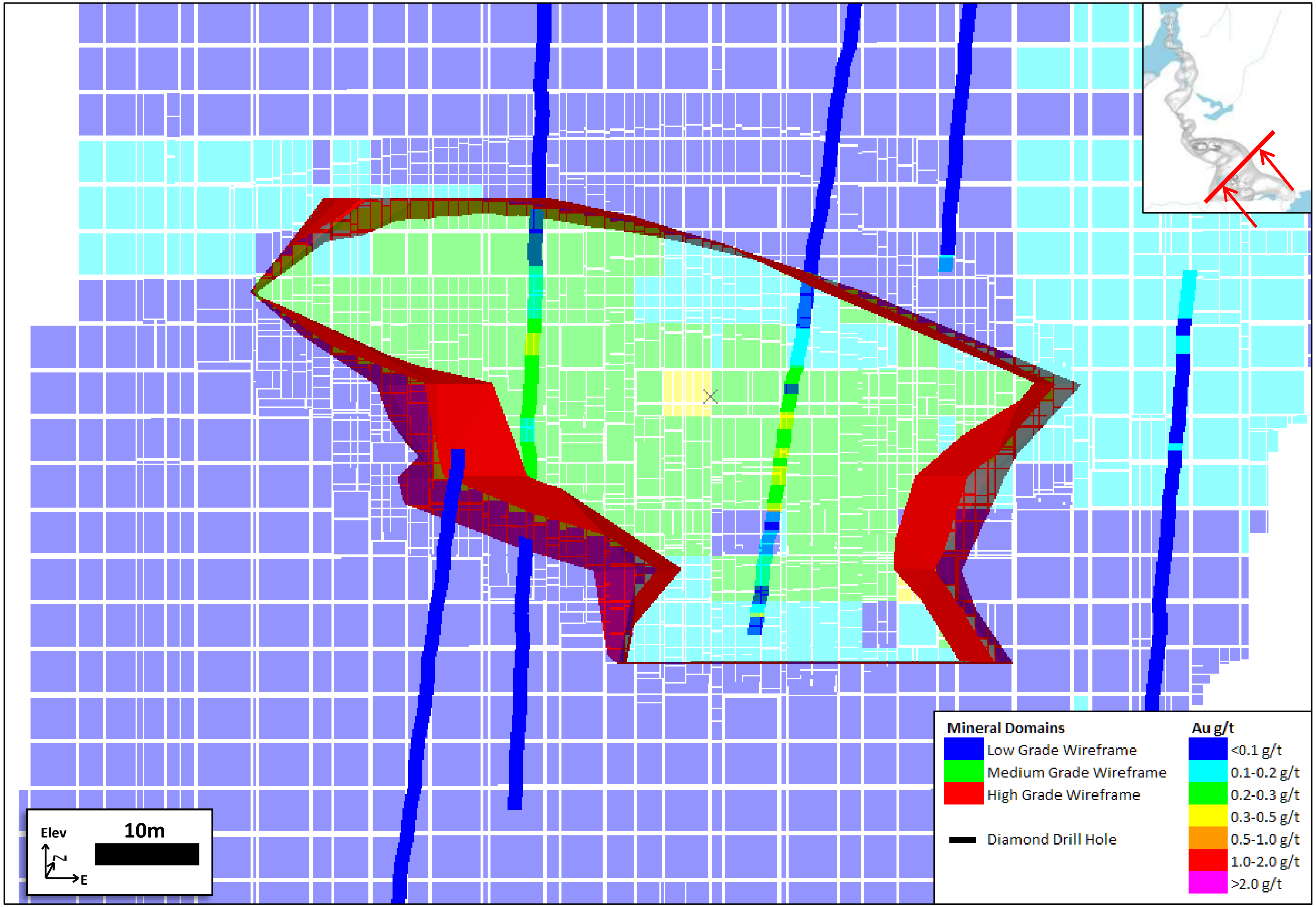
Escape Lake Block Model Validation – Palladium g/t



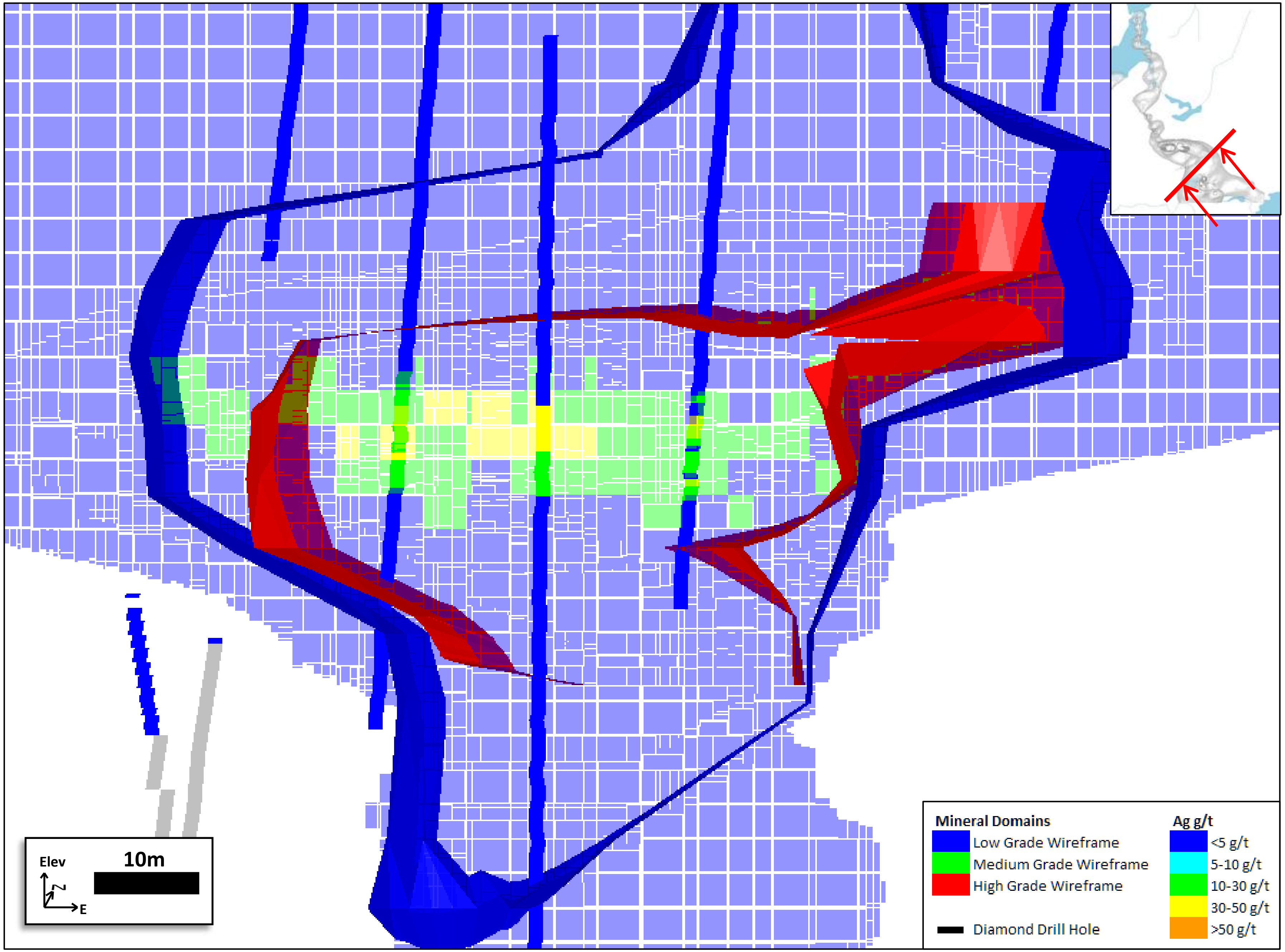
Escape Lake Block Model Validation – Palladium g/t



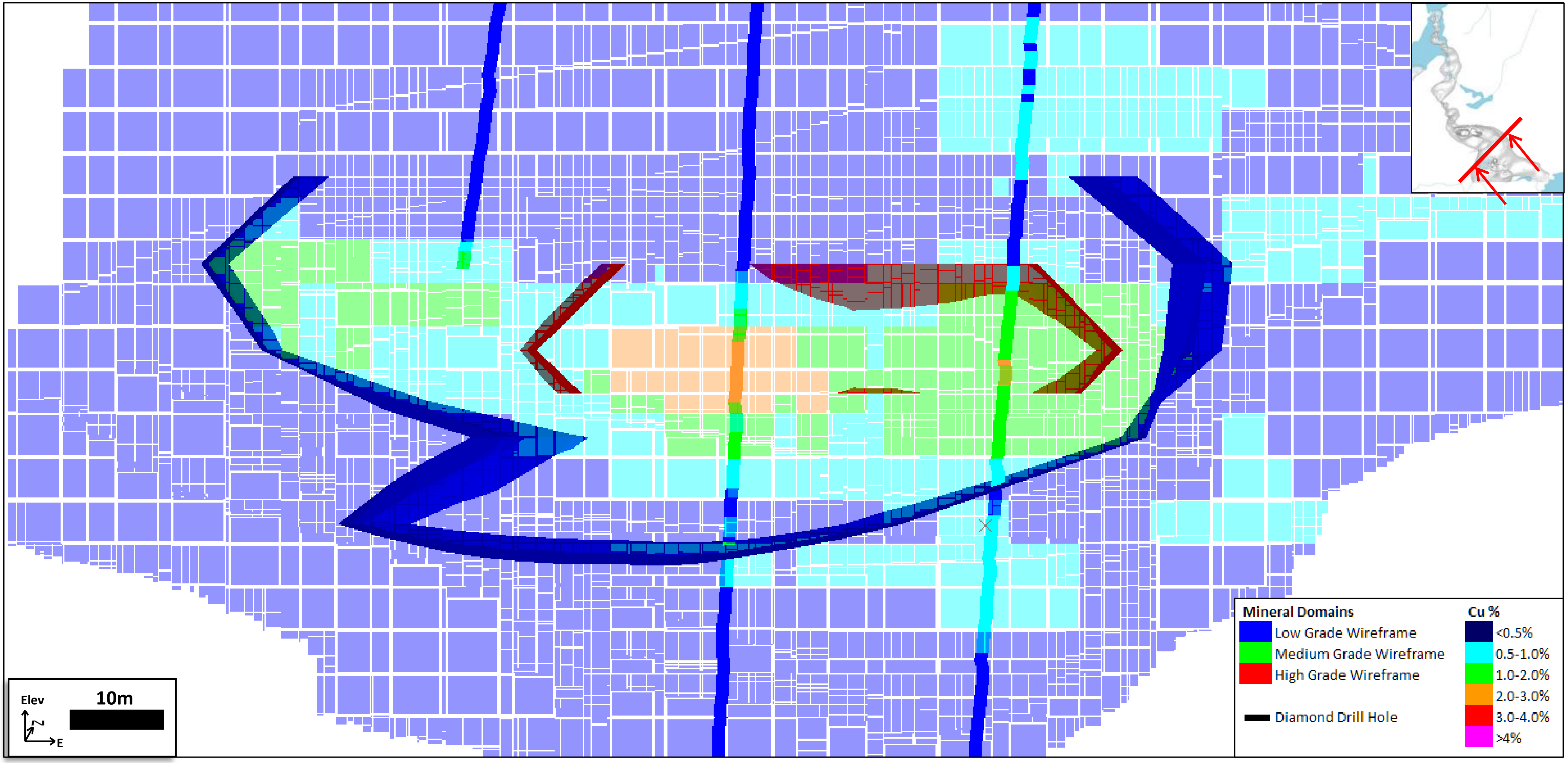
Escape Lake Block Model Validation – Gold g/t



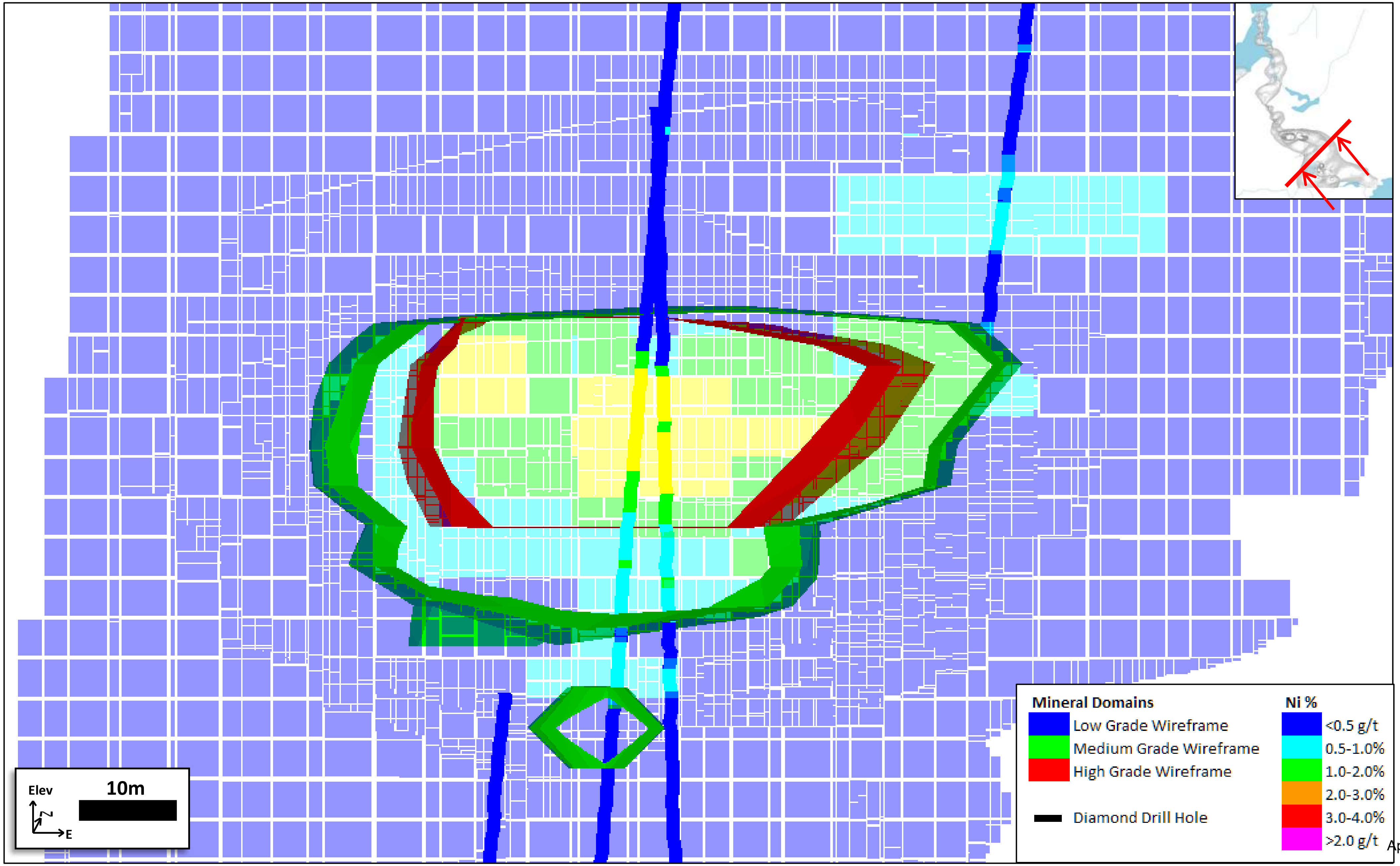
Escape Lake Block Model Validation – Silver g/t



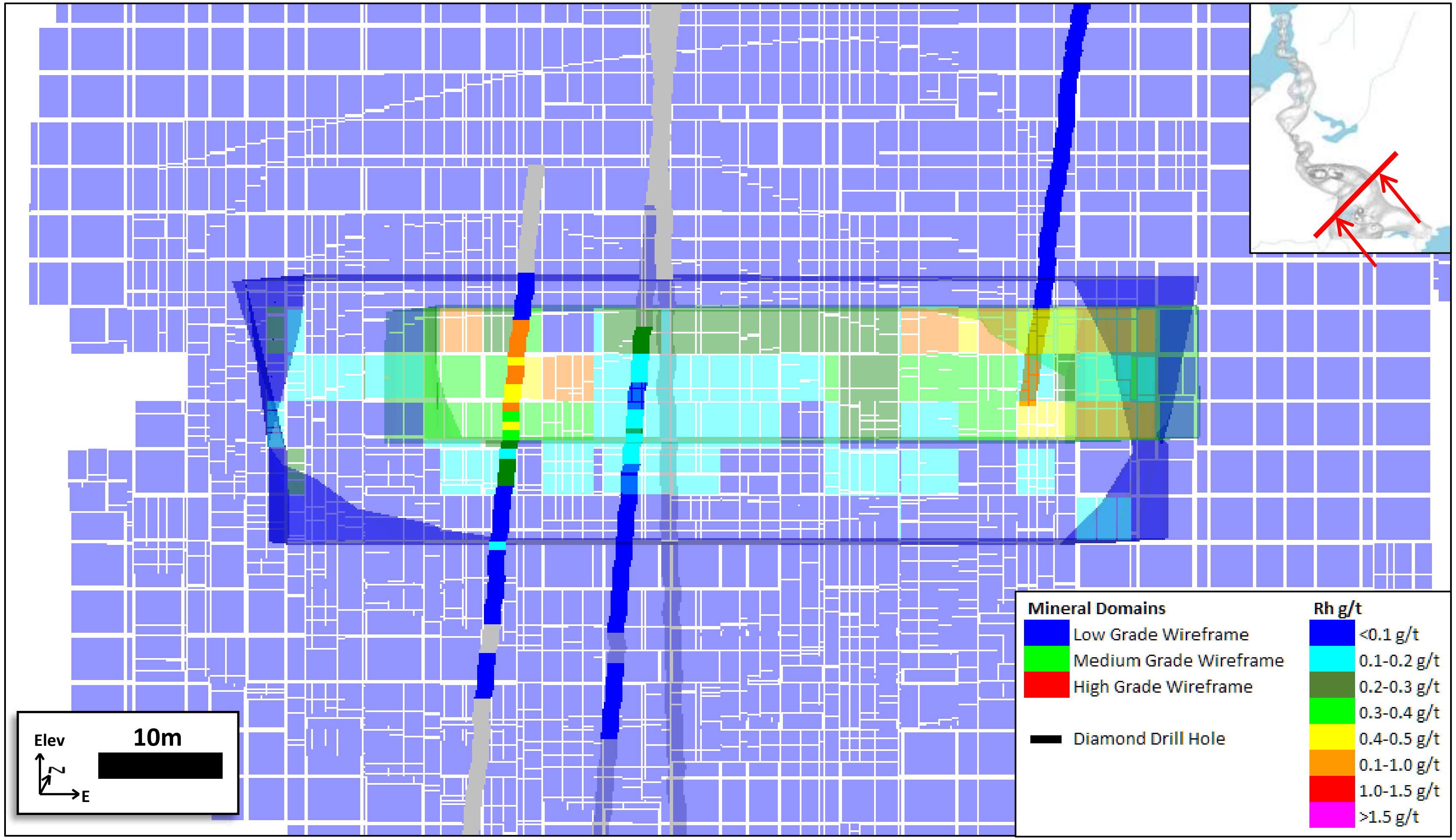
Escape Lake Block Model Validation – Copper %



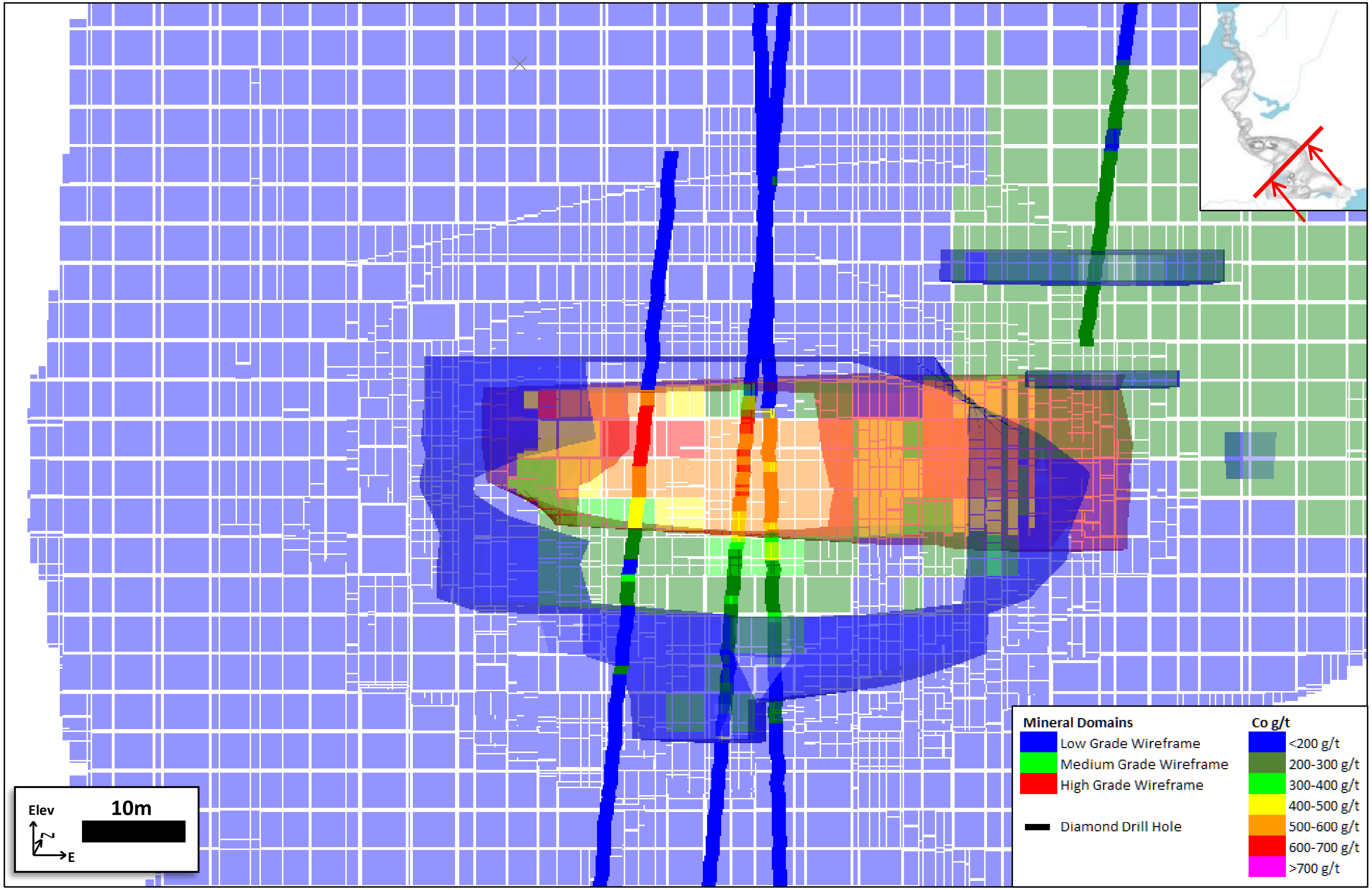
Escape Lake Block Model Validation – Nickel %



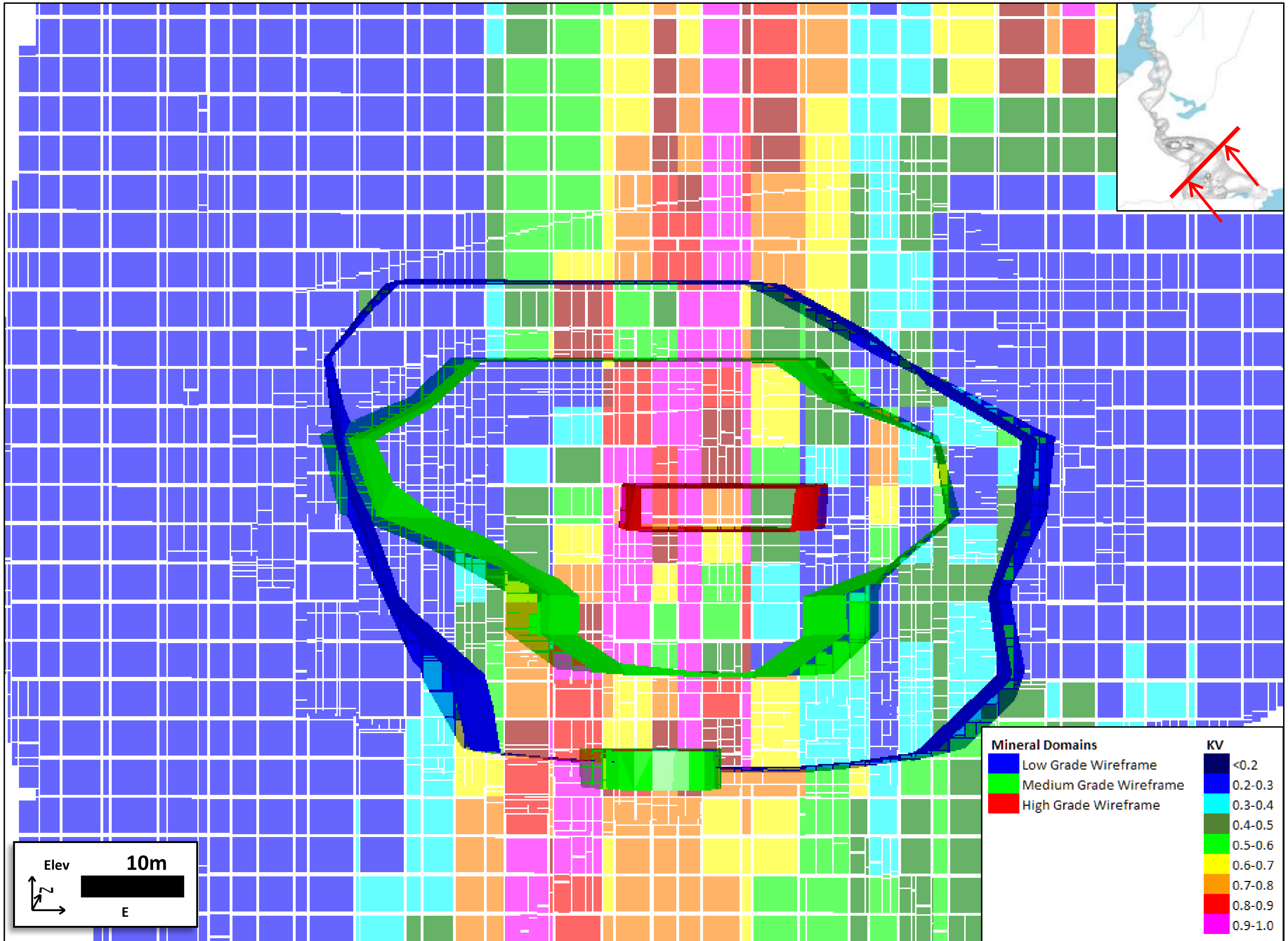
Escape Lake Block Model Validation – Rhodium g/t



Escape Lake Block Model Validation – Cobalt g/t



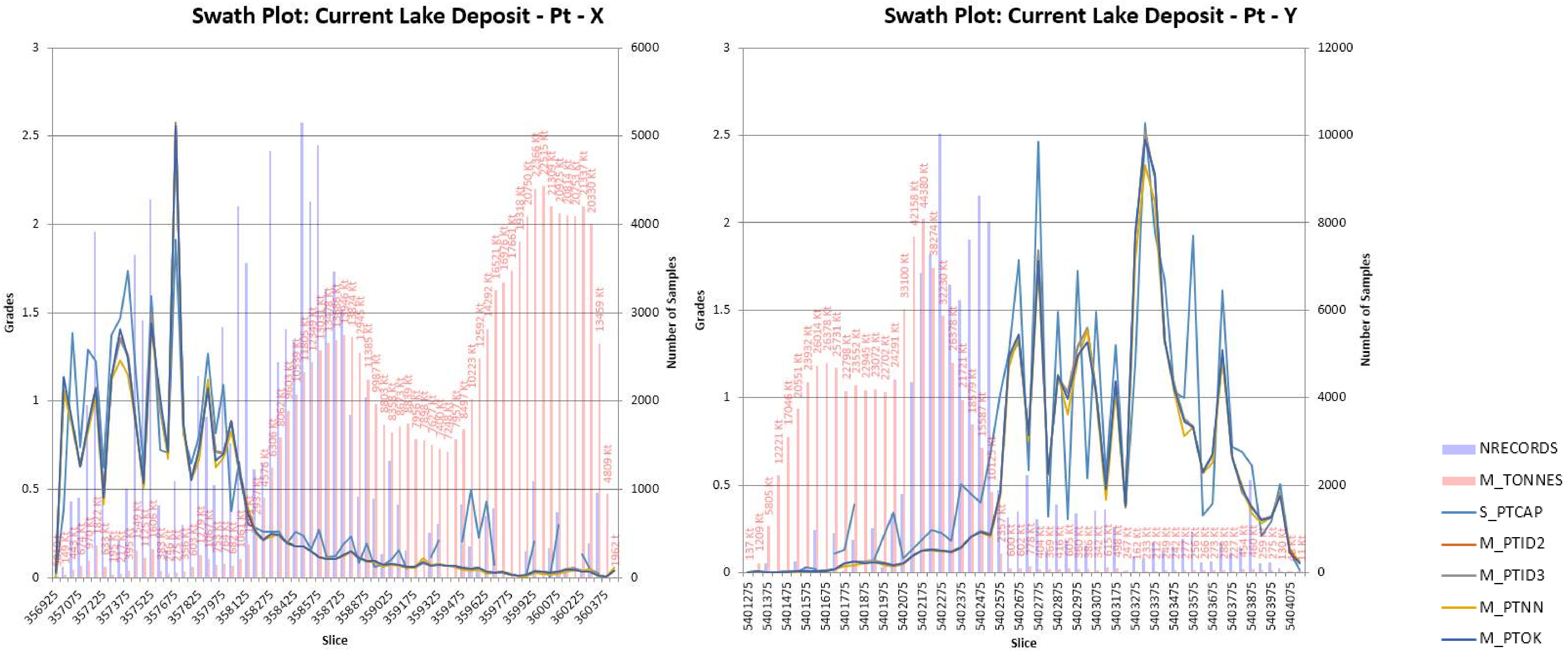
Escape Lake Block Model Kriging Variance, Pt



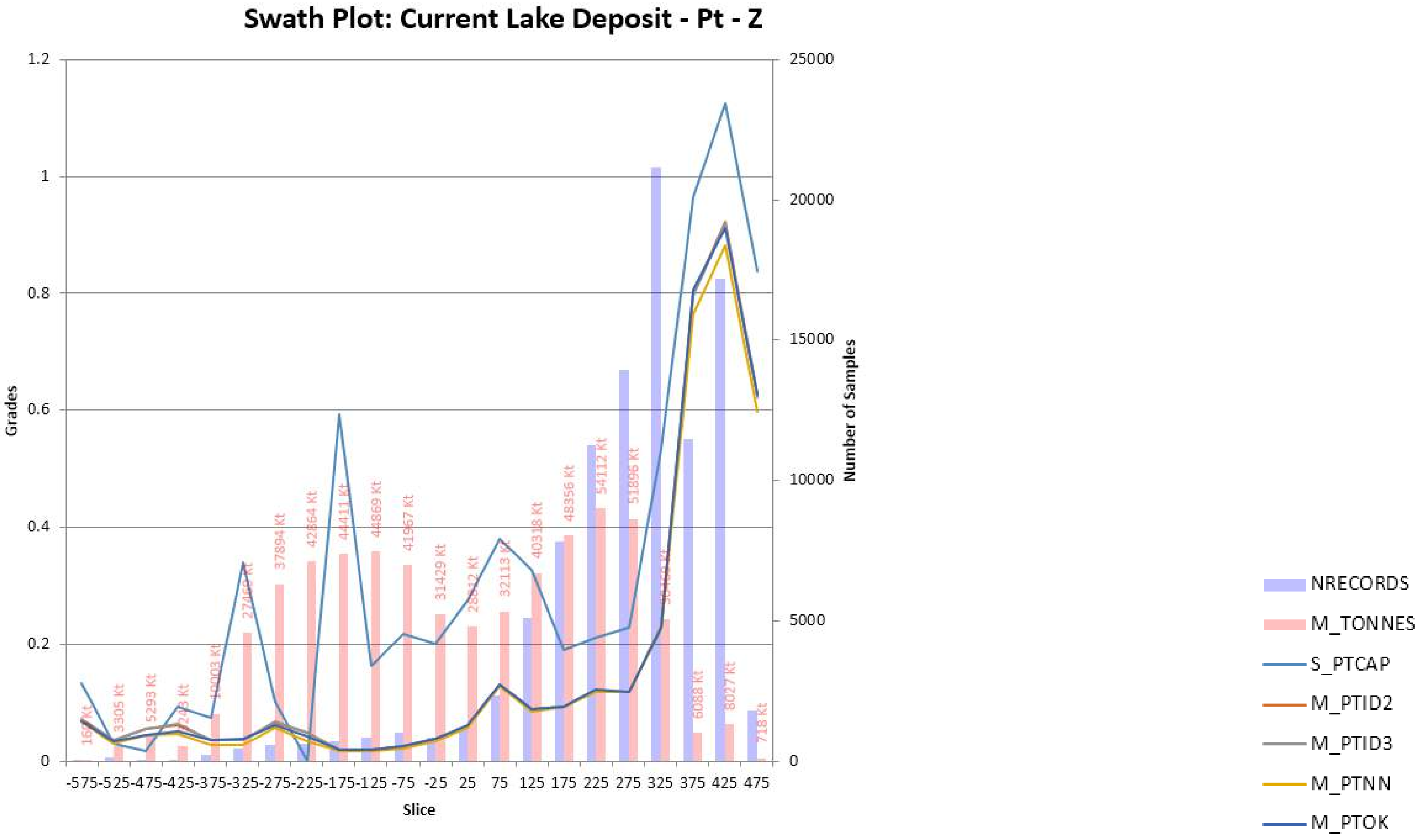
Appendix F: Grade Distribution Swath Plots

Current Lake Deposit Swath Plots

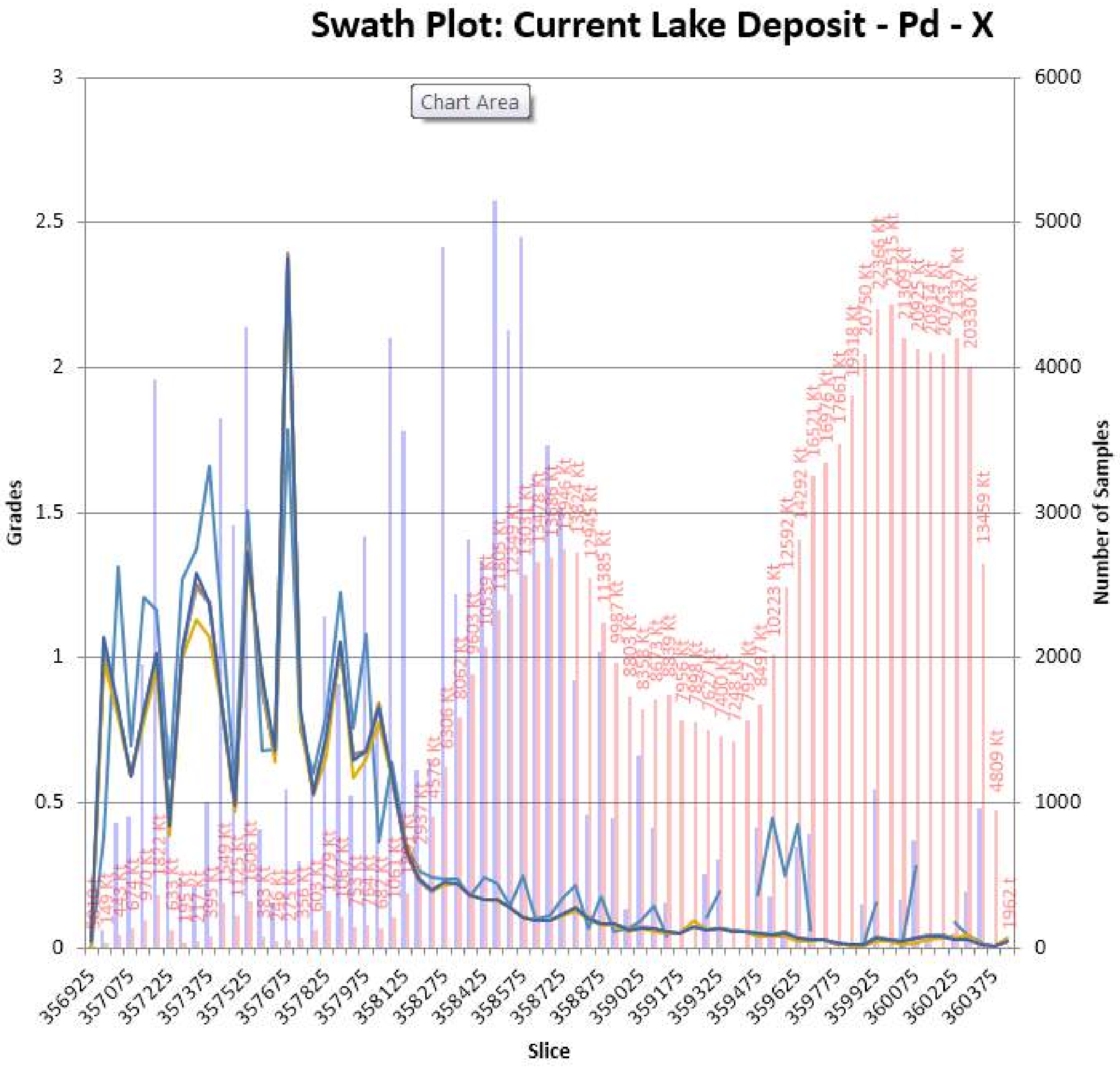
Swath Plot, Current Lake Deposit – Pt in X and Y directions (Easting and Northing)

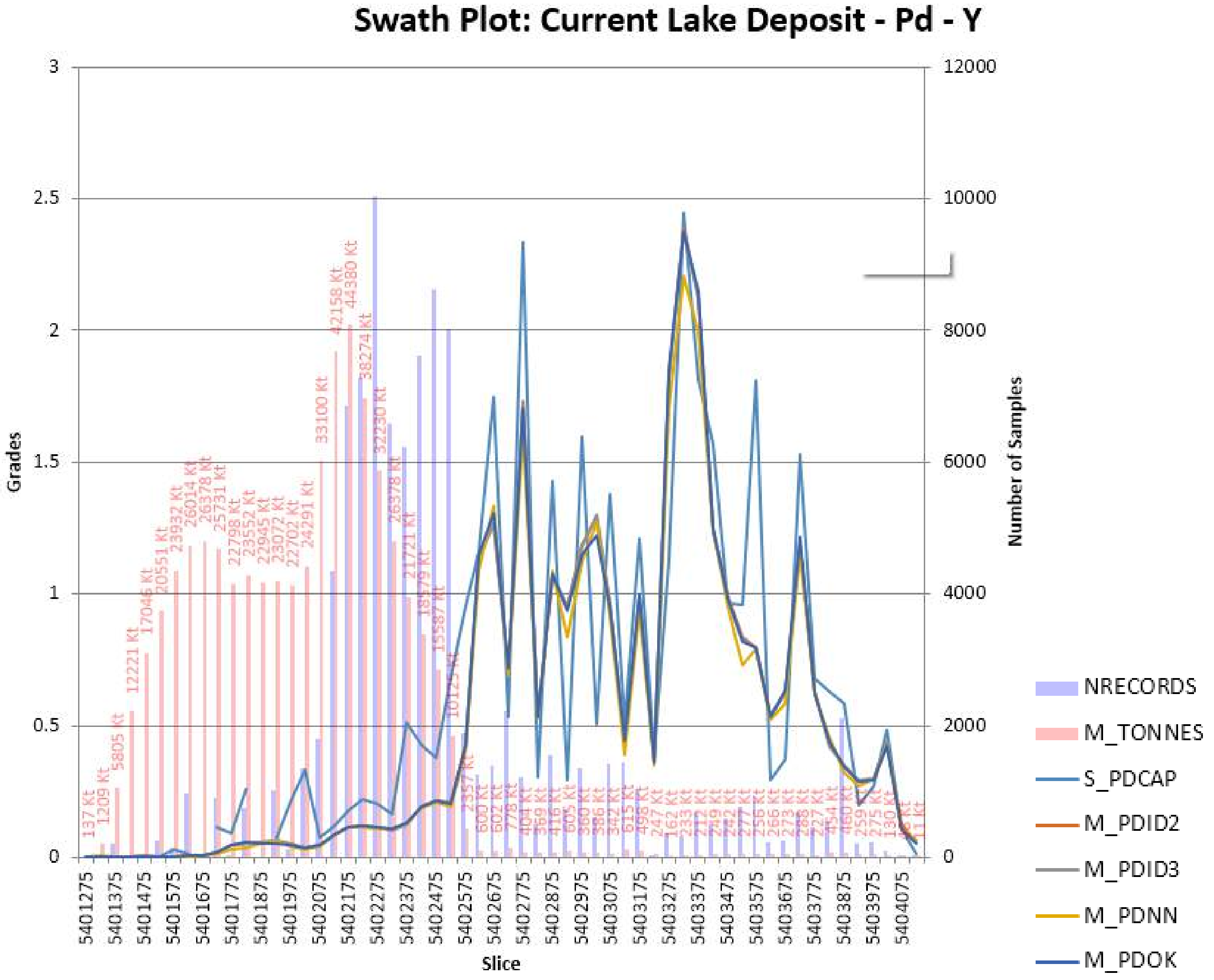


Swath Plot, Current Lake Deposit – Pt in Z direction (Elevation)

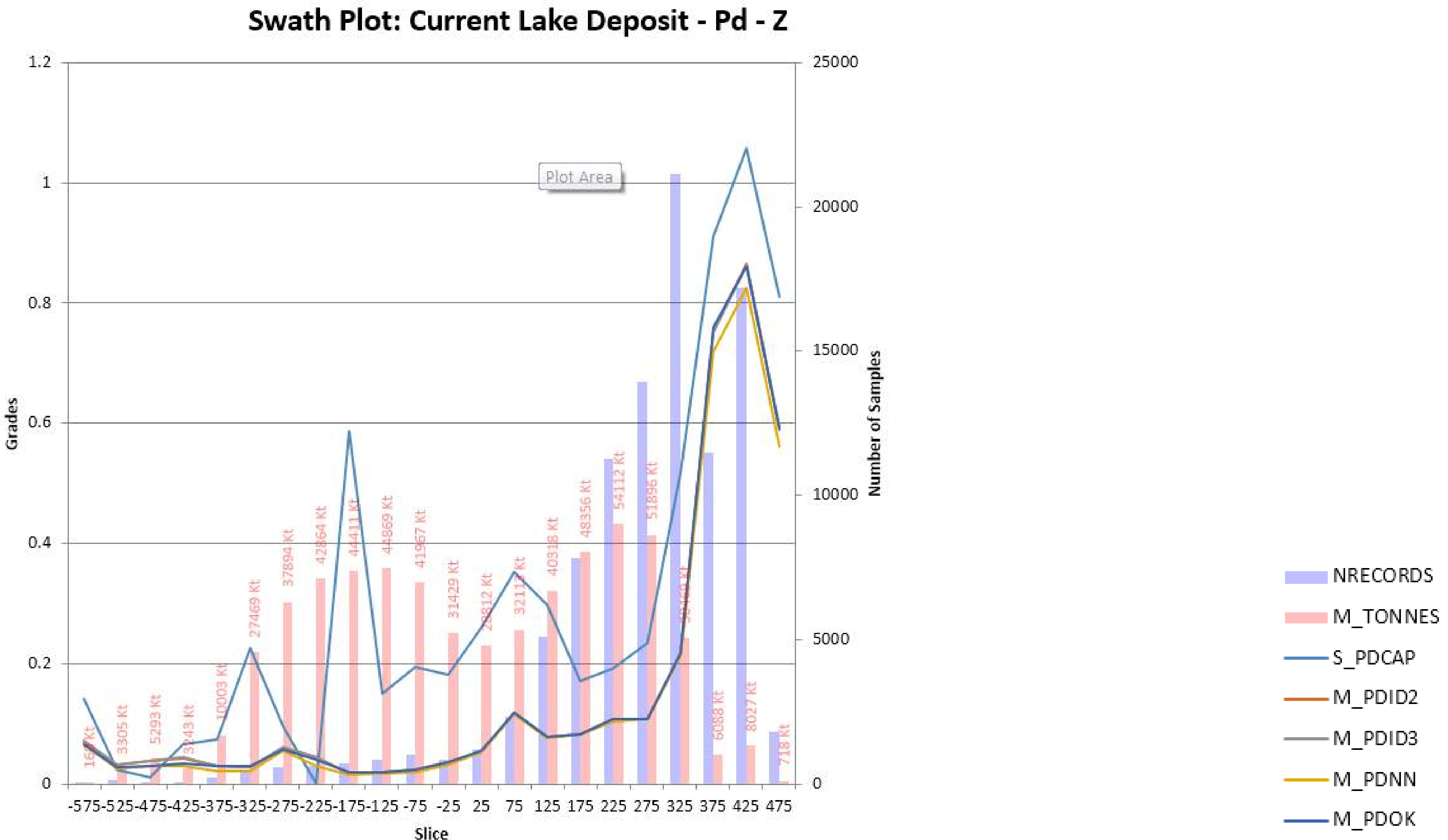


Swath Plot, Current Lake Deposit – Pd in X and Y directions (Easting and Northing)

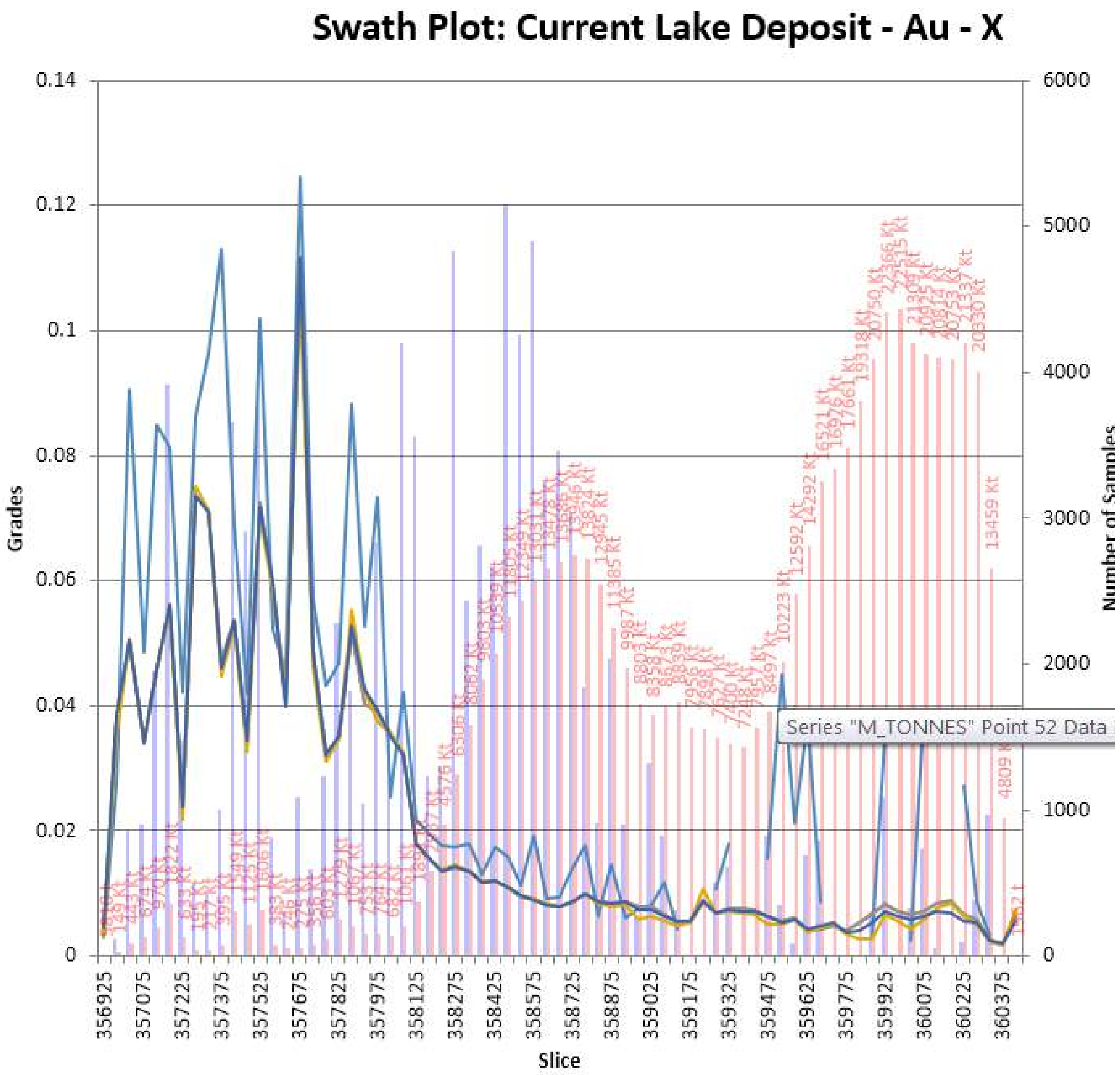


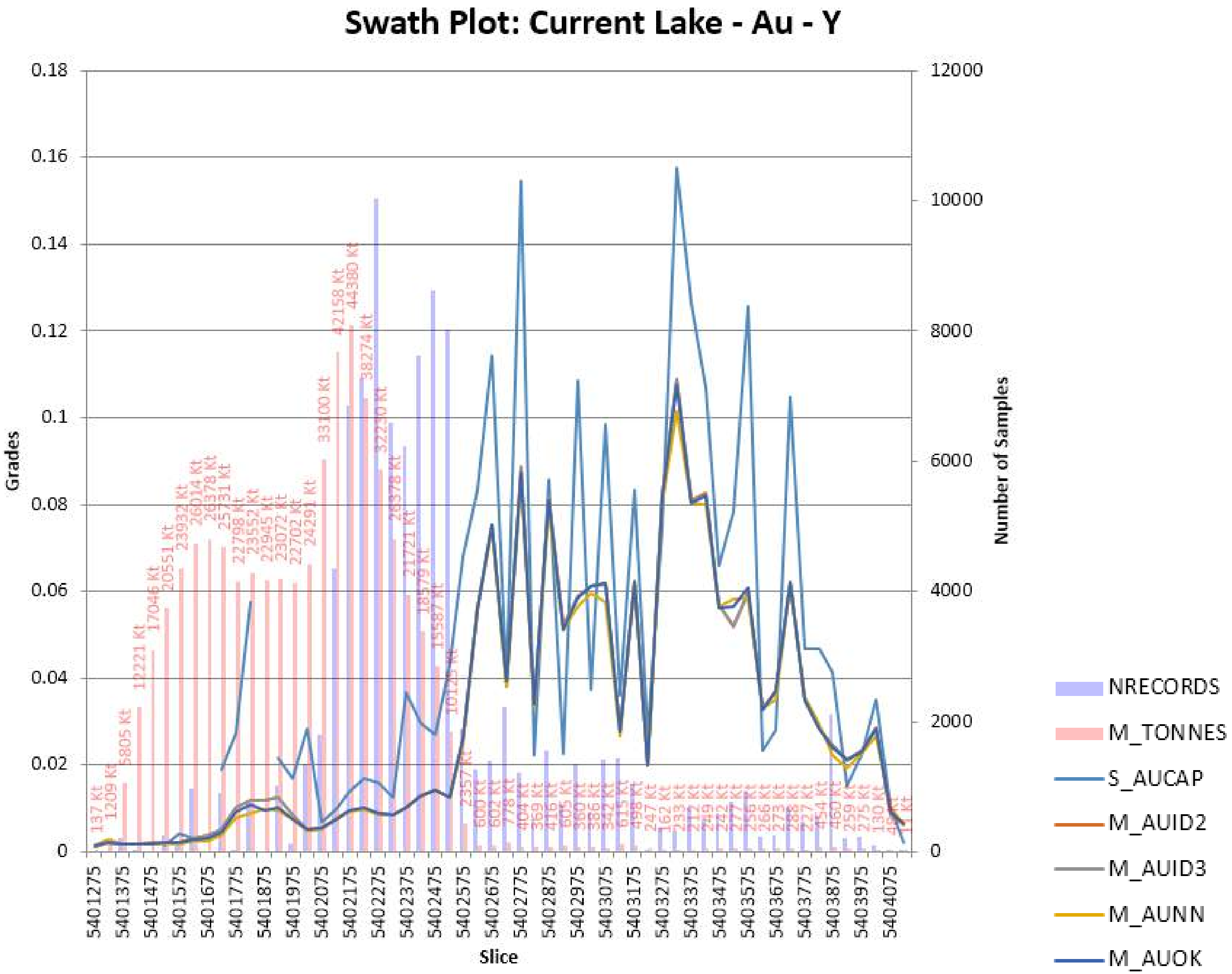


Swath Plot, Current Lake Deposit – Pd in Z direction (Elevation)

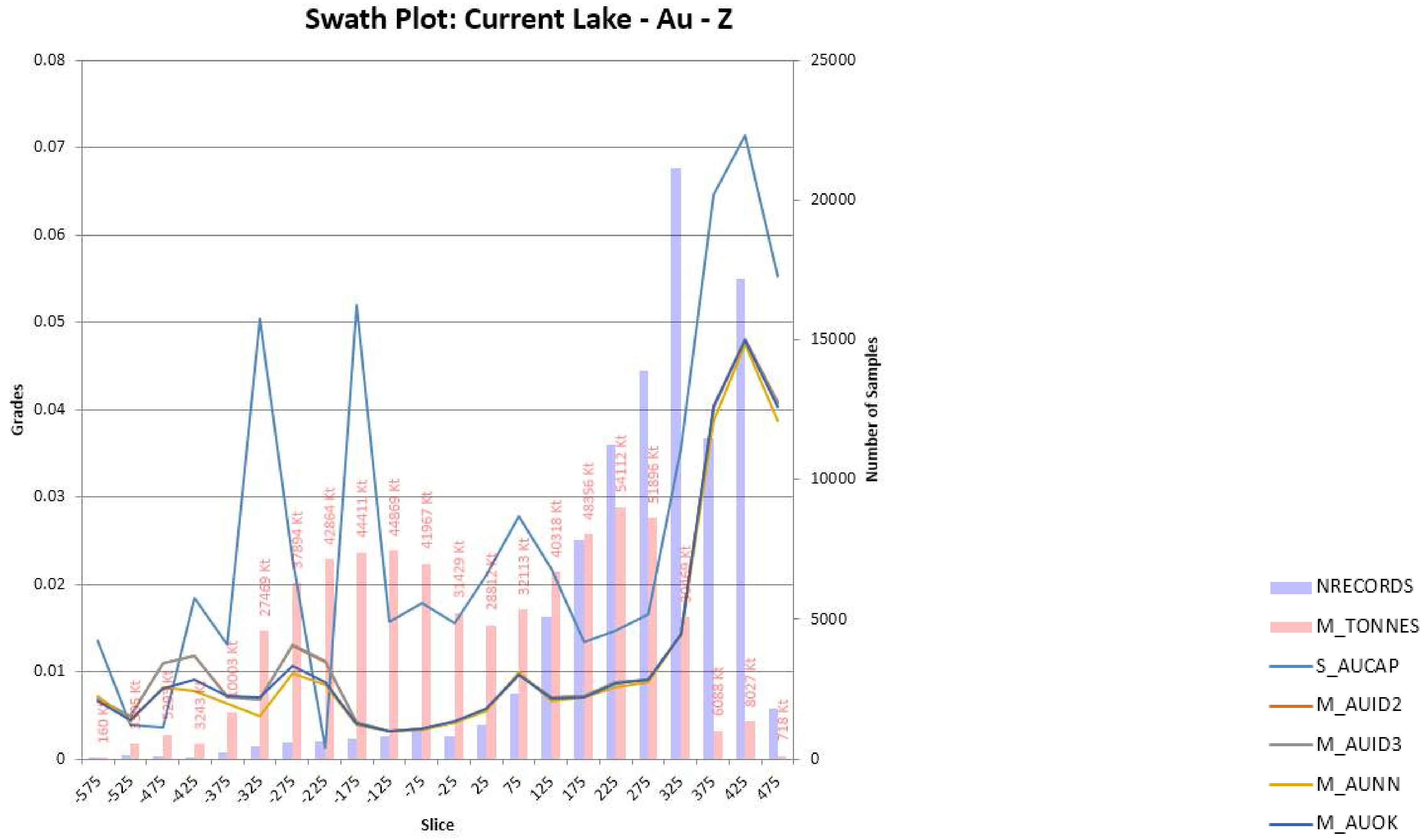


Swath Plot, Current Lake Deposit – Au in X and Y directions (Easting and Northing)

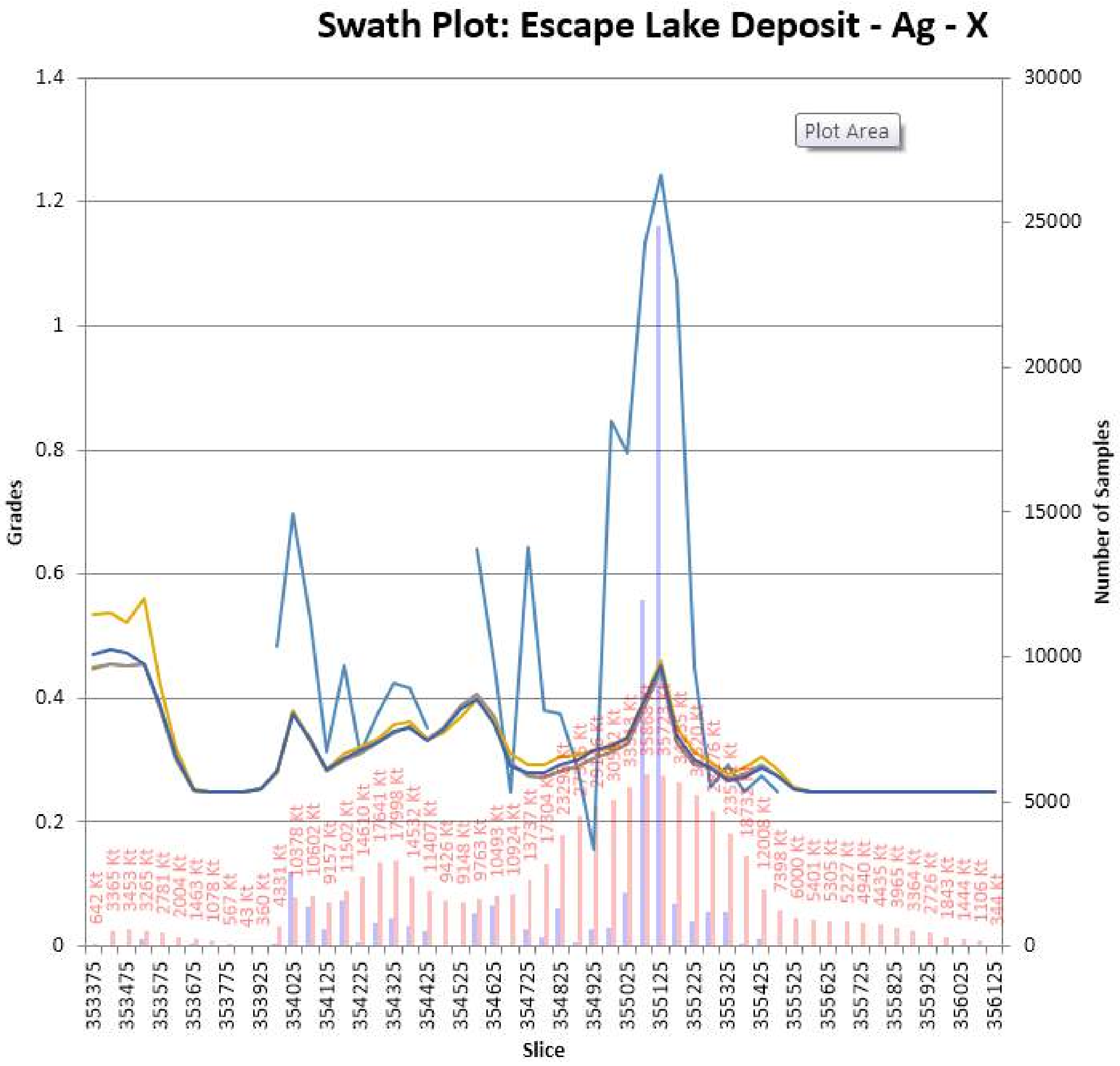


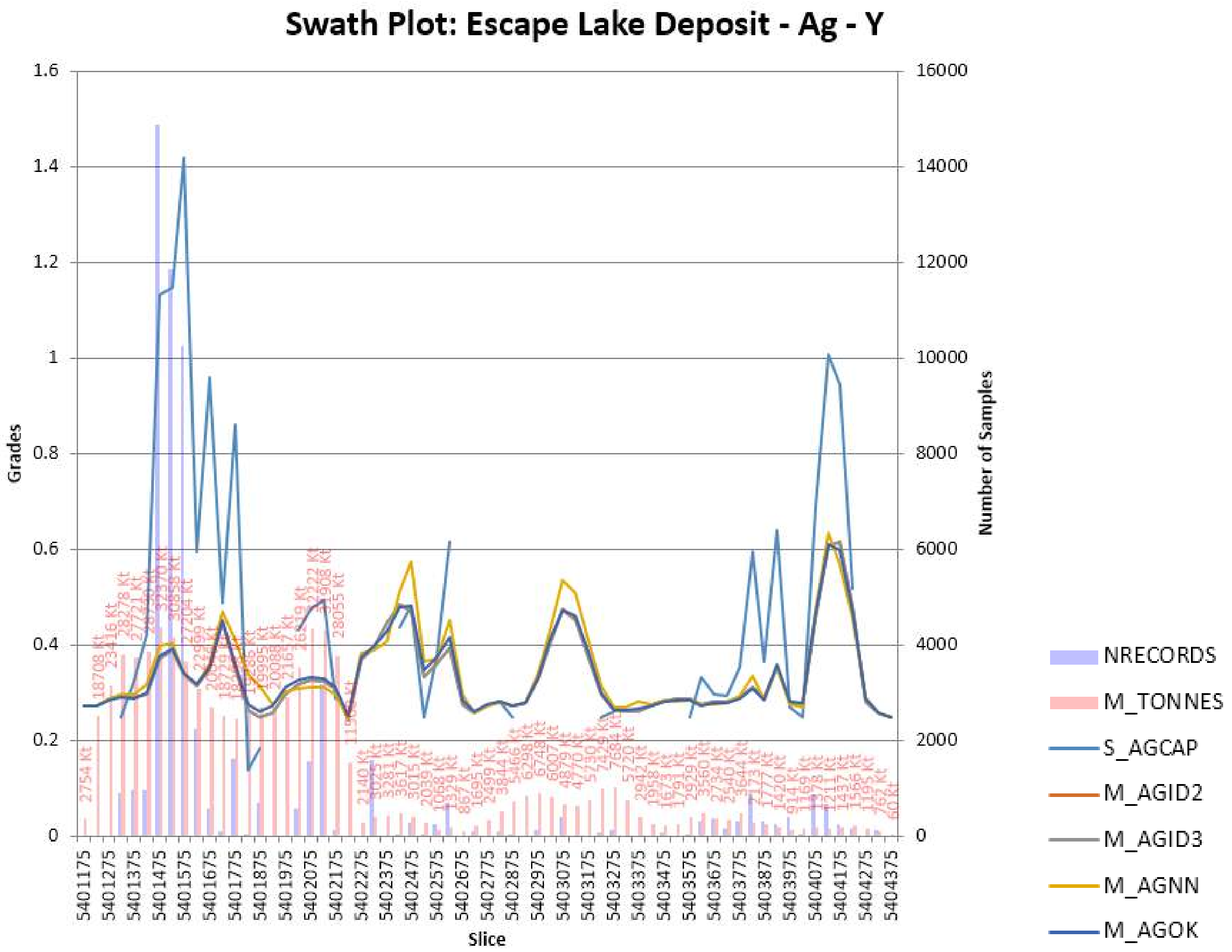


Swath Plot, Current Lake Deposit – Au in Z direction (Elevation)

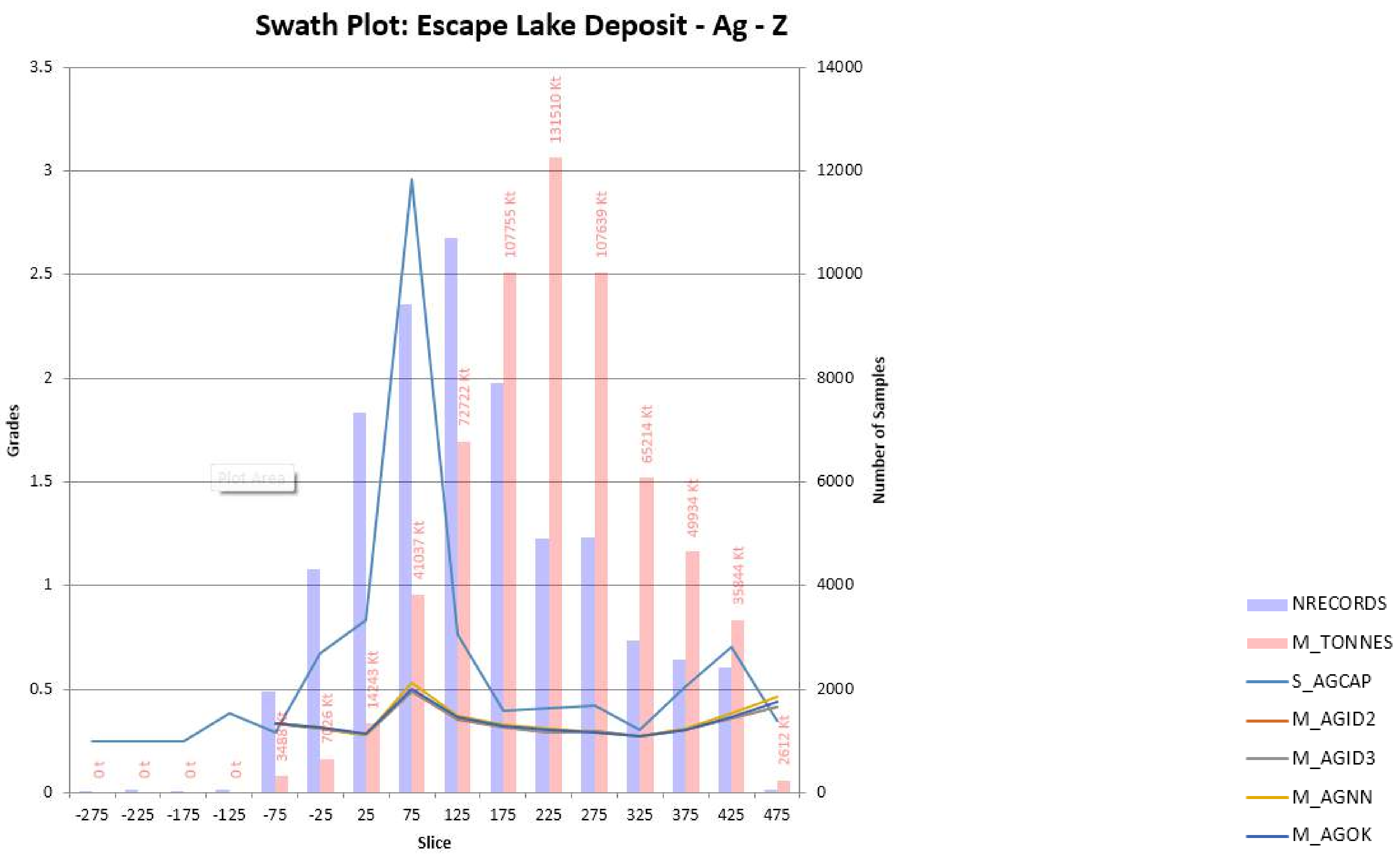


Swath Plot, Current Lake Deposit – Ag in X and Y directions (Easting and Northing)

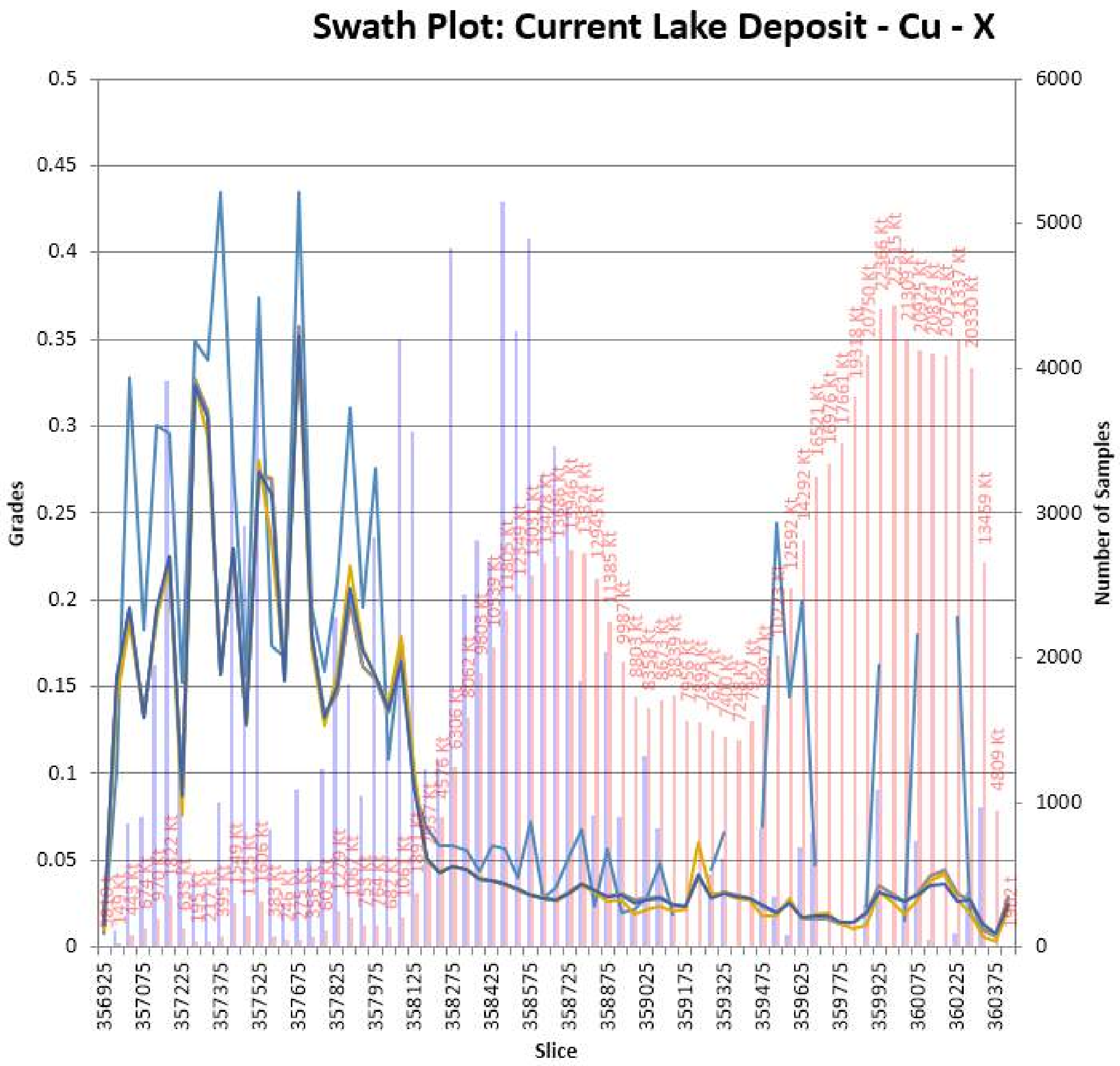


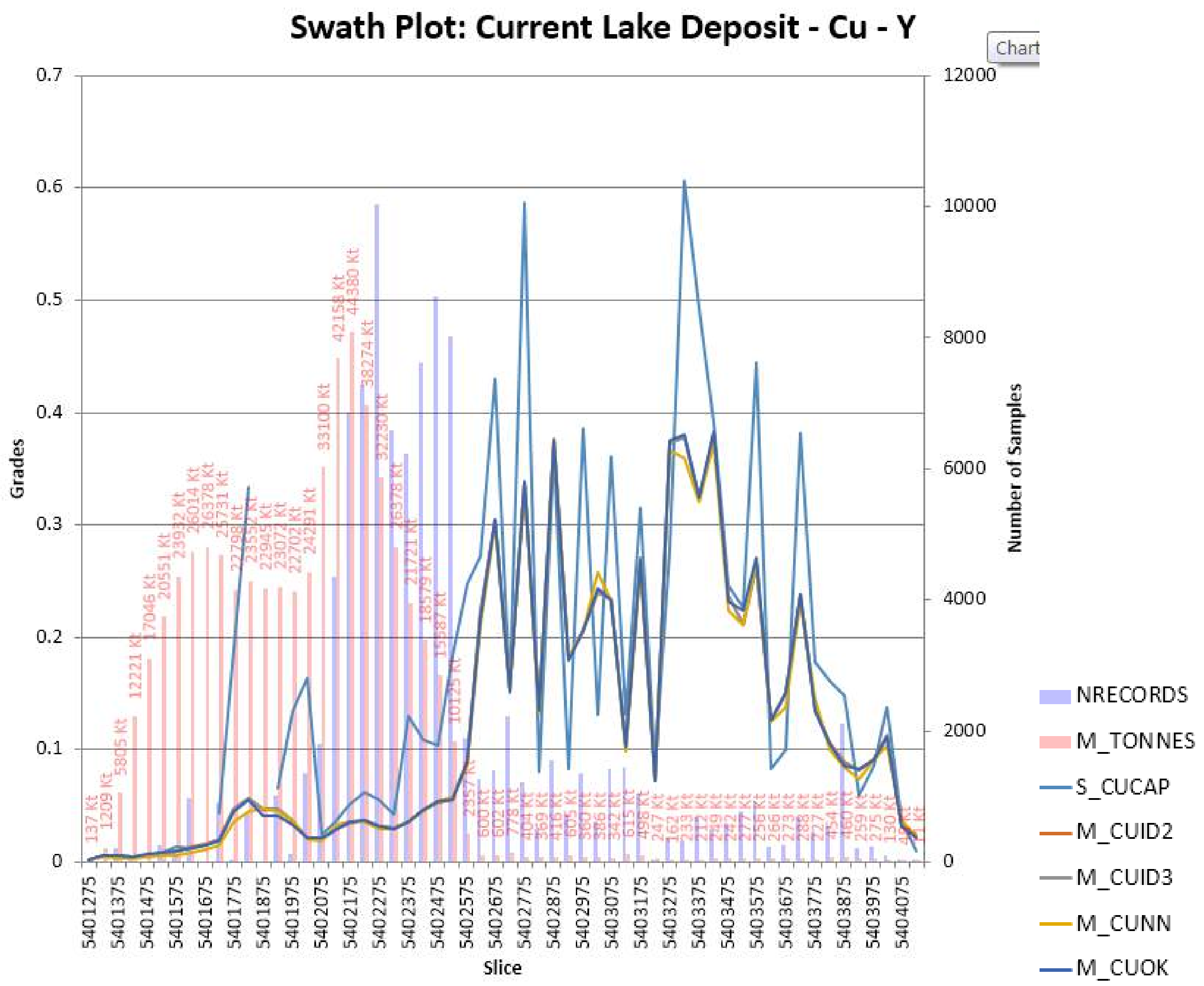


Swath Plot, Current Lake Deposit – Ag in Z direction (Elevation)

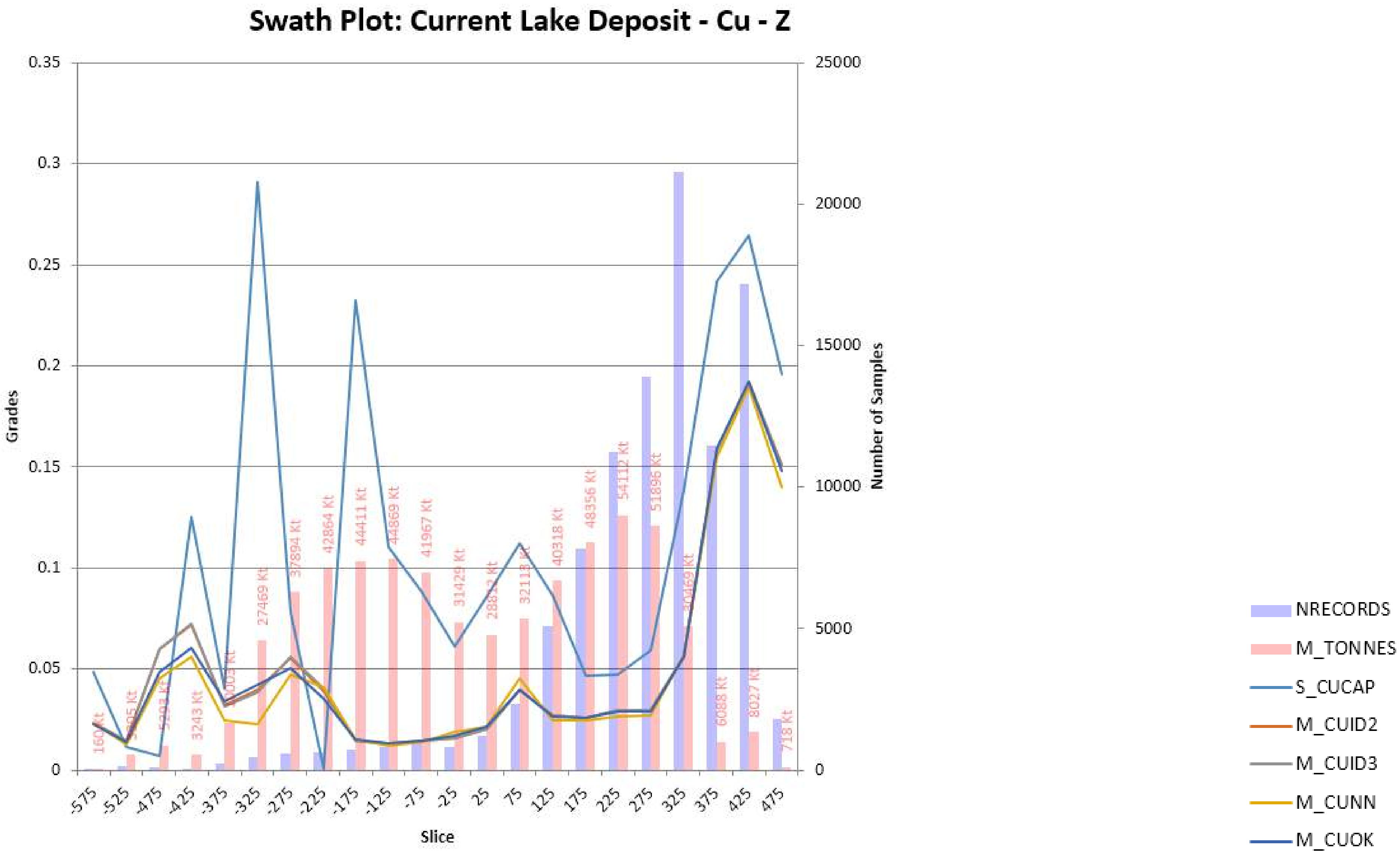


Swath Plot, Current Lake Deposit – Cu in X and Y directions (Easting and Northing)

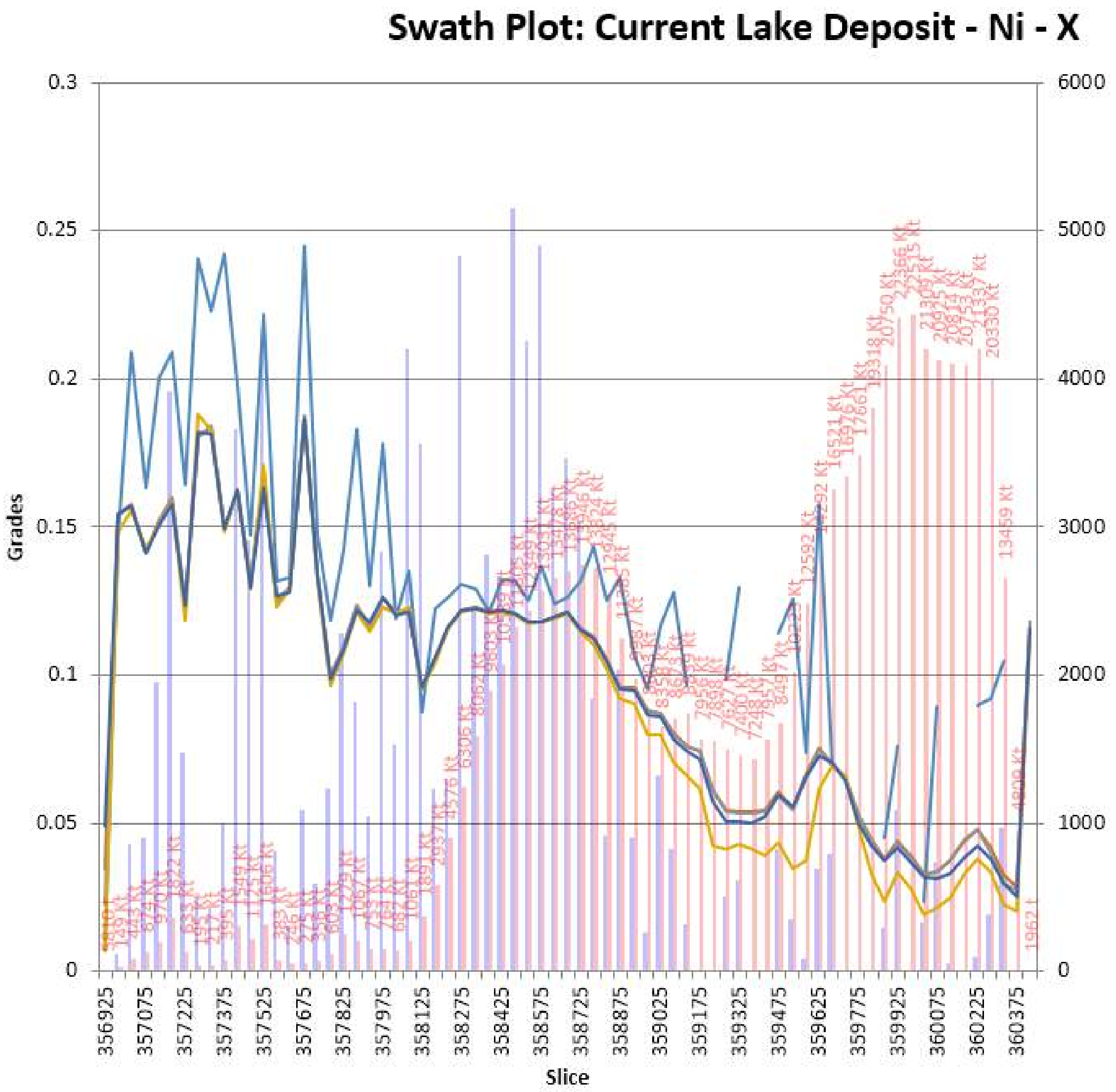


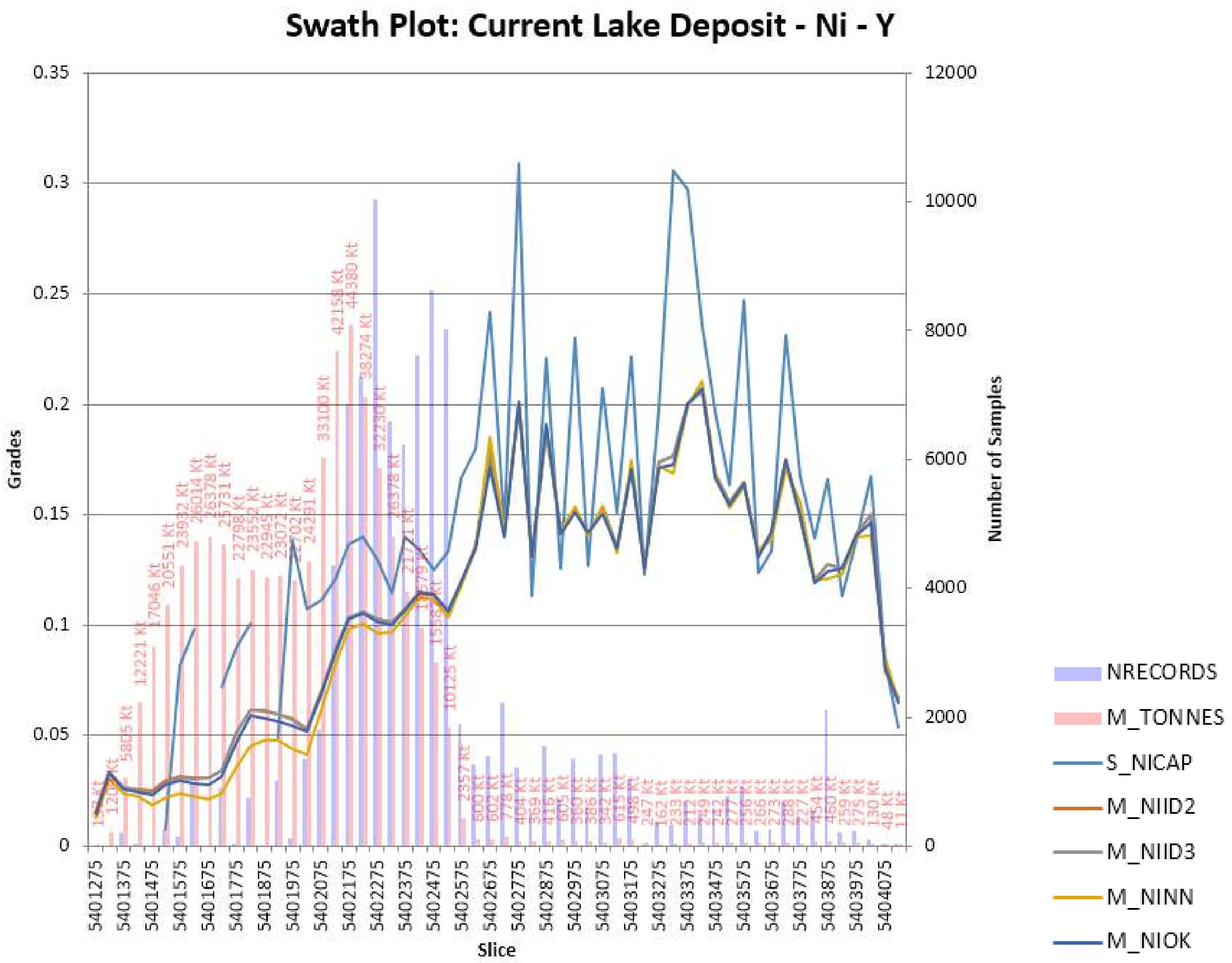


Swath Plot, Current Lake Deposit – Cu in Z direction (Elevation)

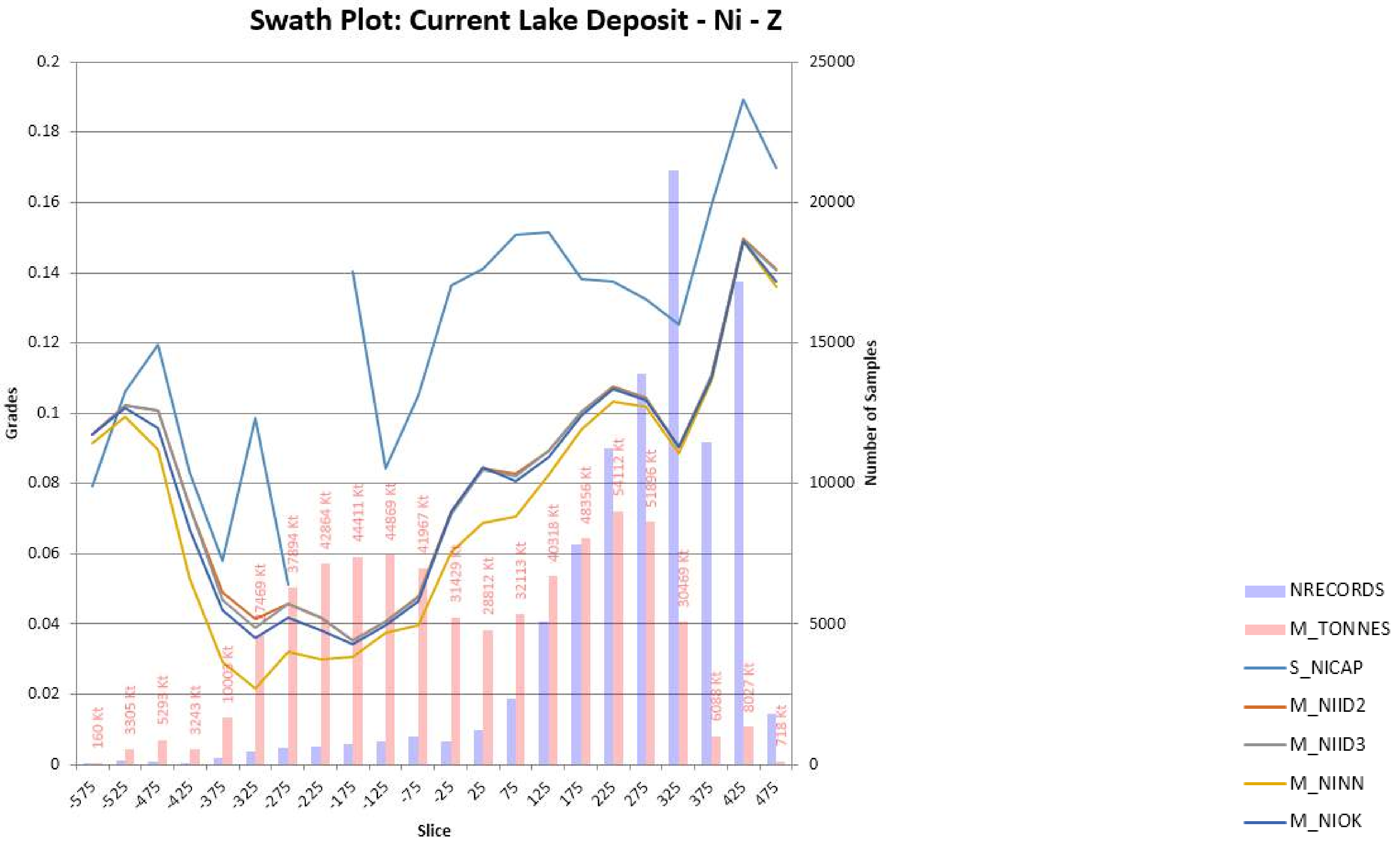


Swath Plot, Current Lake Deposit – Ni in X and Y directions (Easting and Northing)

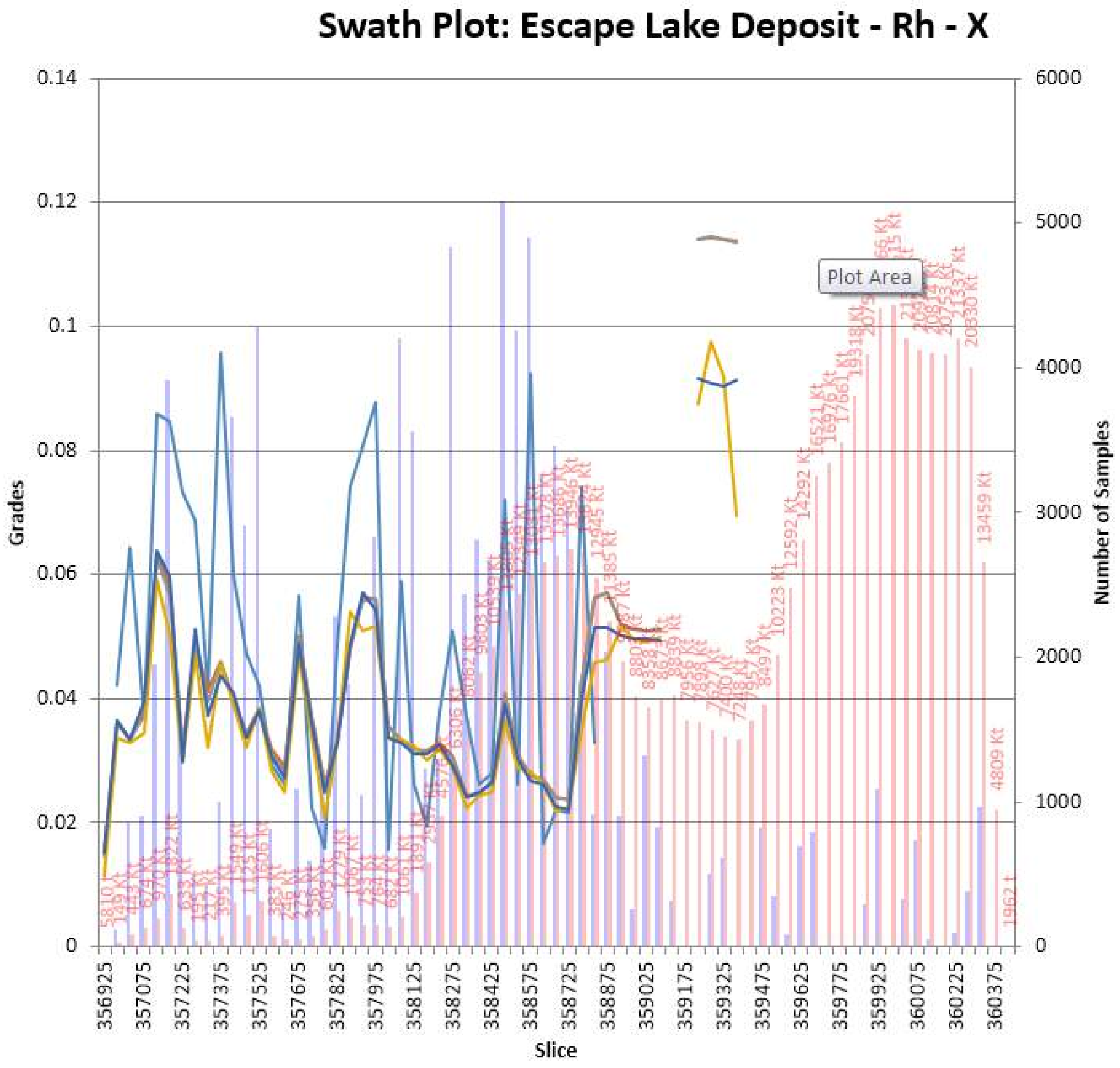


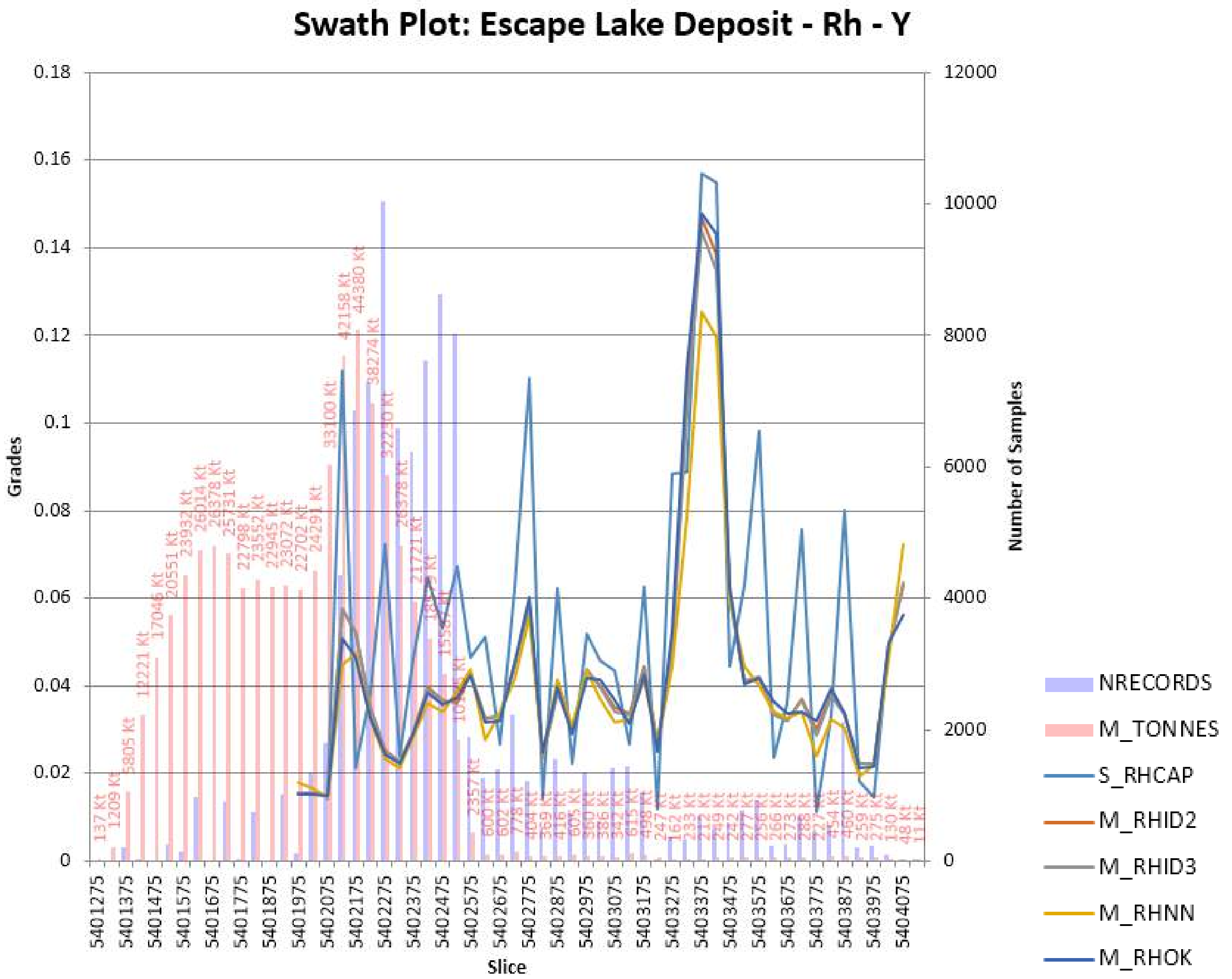


Swath Plot, Current Lake Deposit – Ni in Z direction (Elevation)

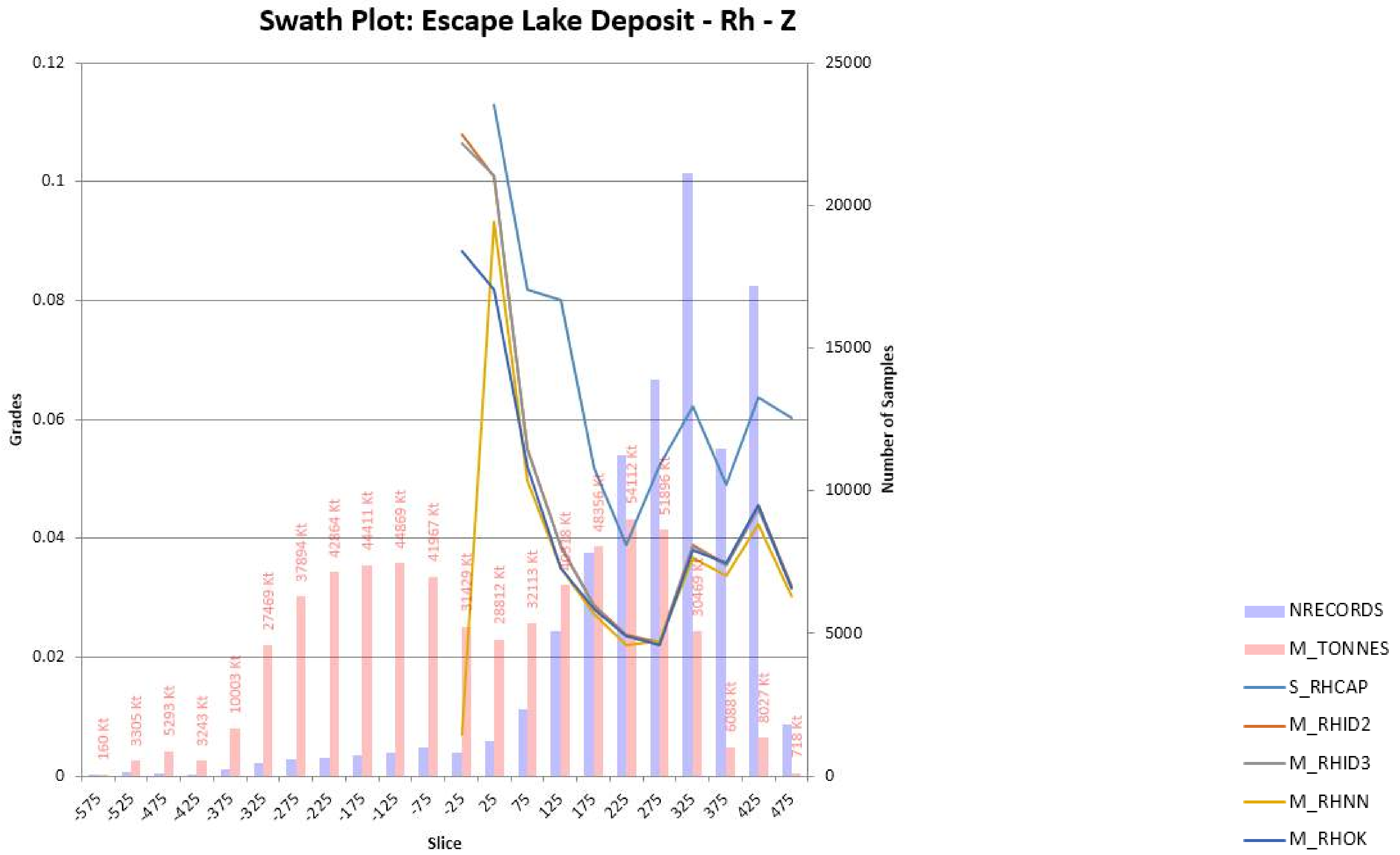


Swath Plot, Current Lake Deposit – Rh in X and Y directions (Easting and Northing)

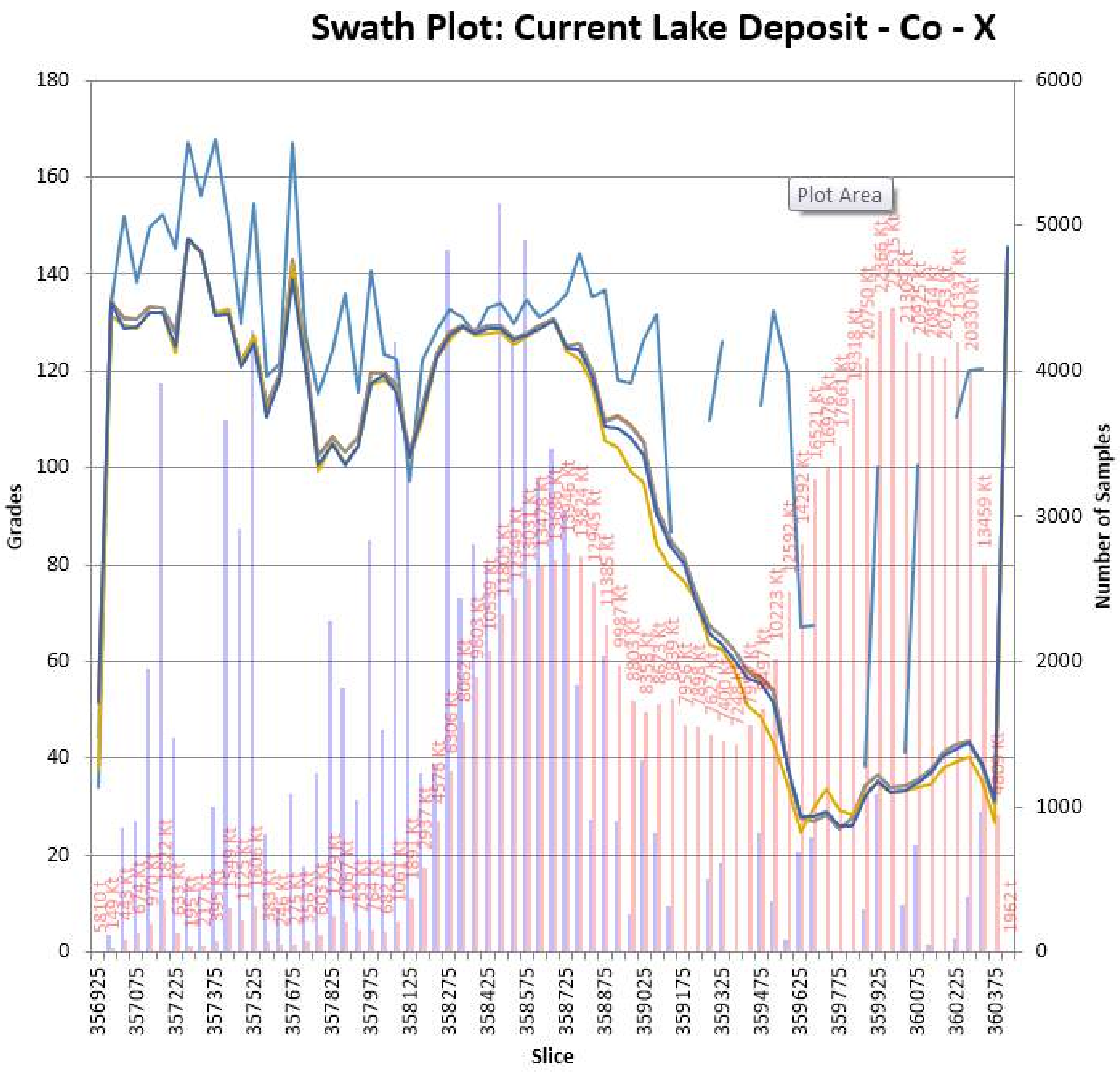


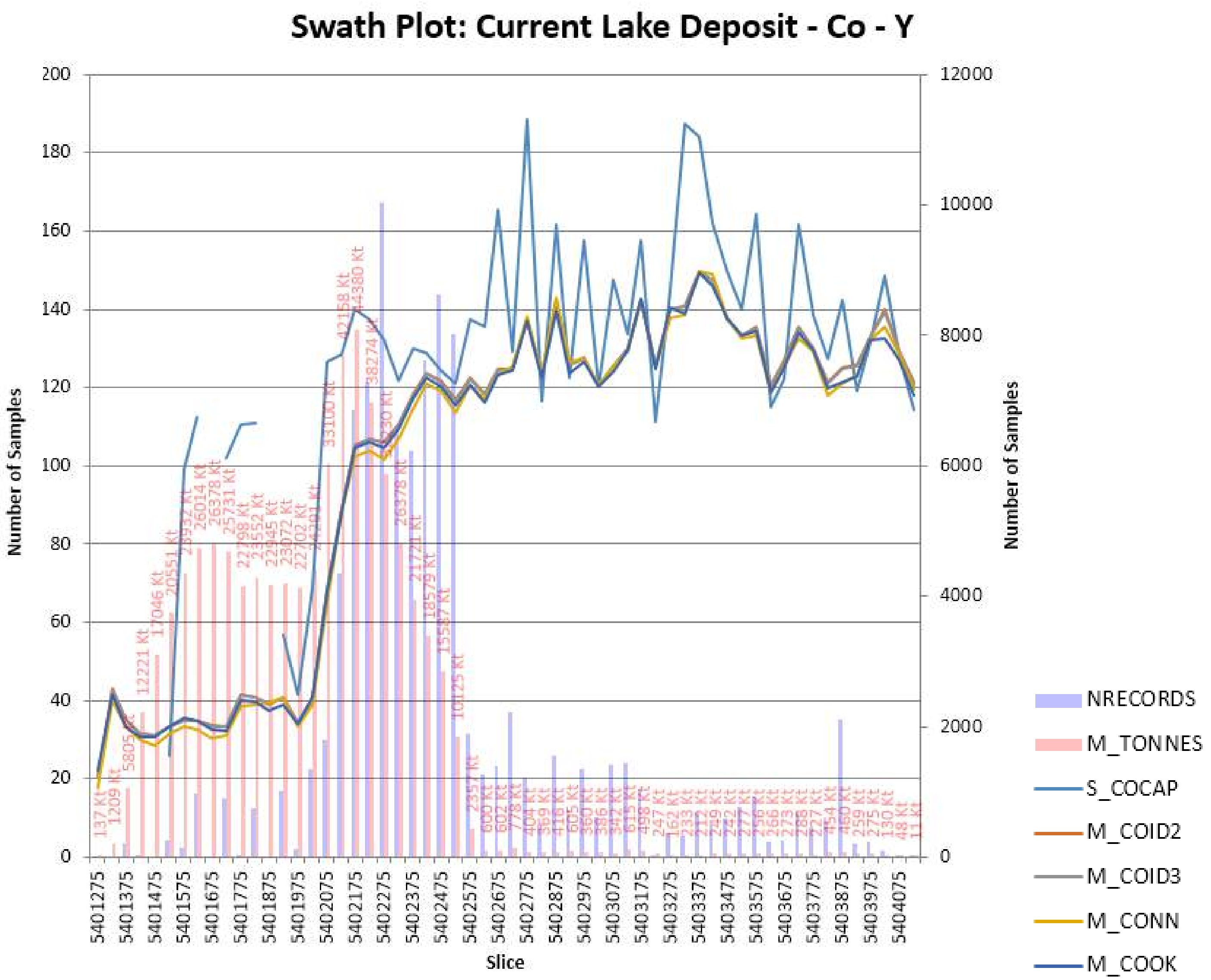


Swath Plot, Current Lake Deposit – Rh in Z direction (Elevation)

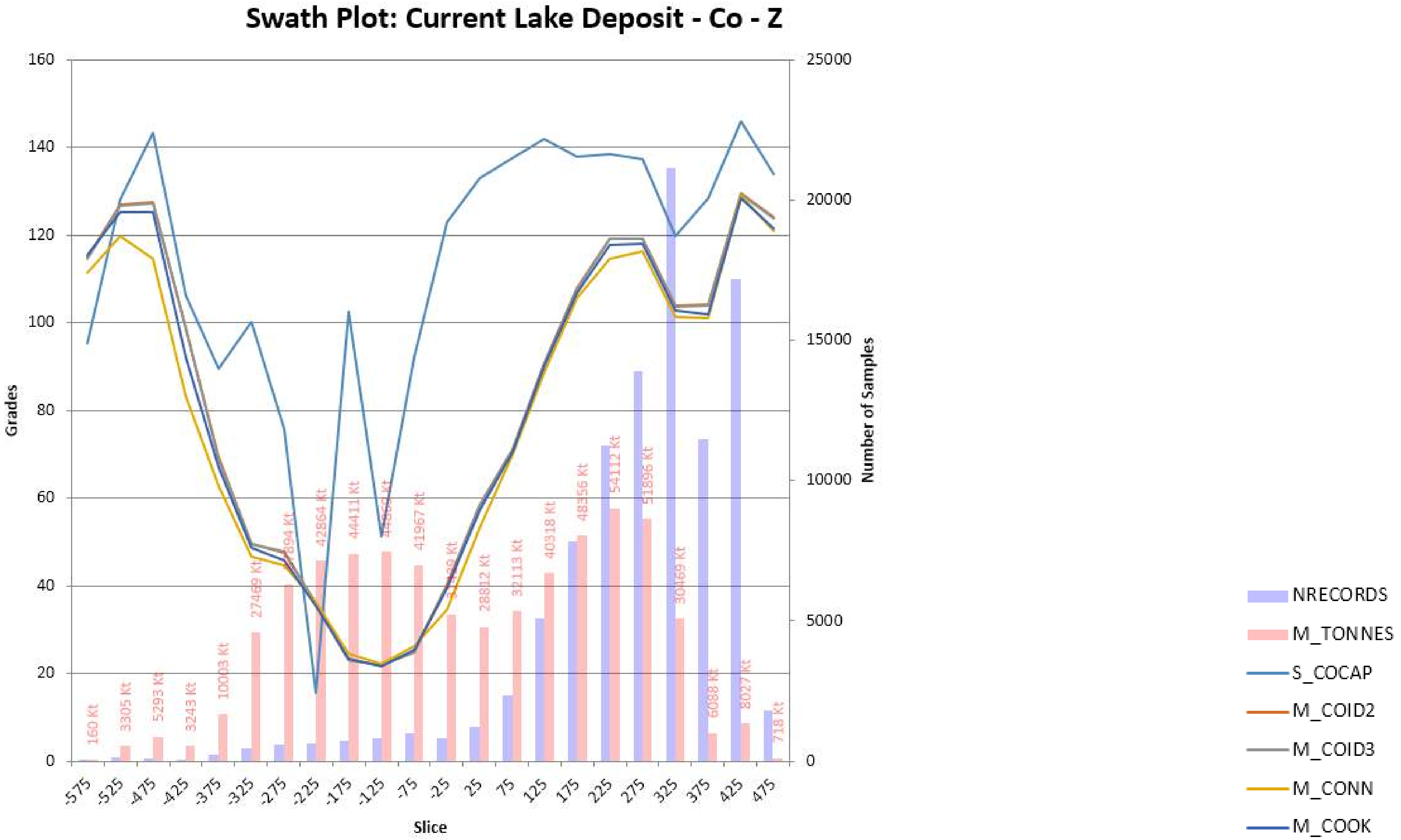


Swath Plot, Current Lake Deposit – Co in X and Y directions (Easting and Northing)



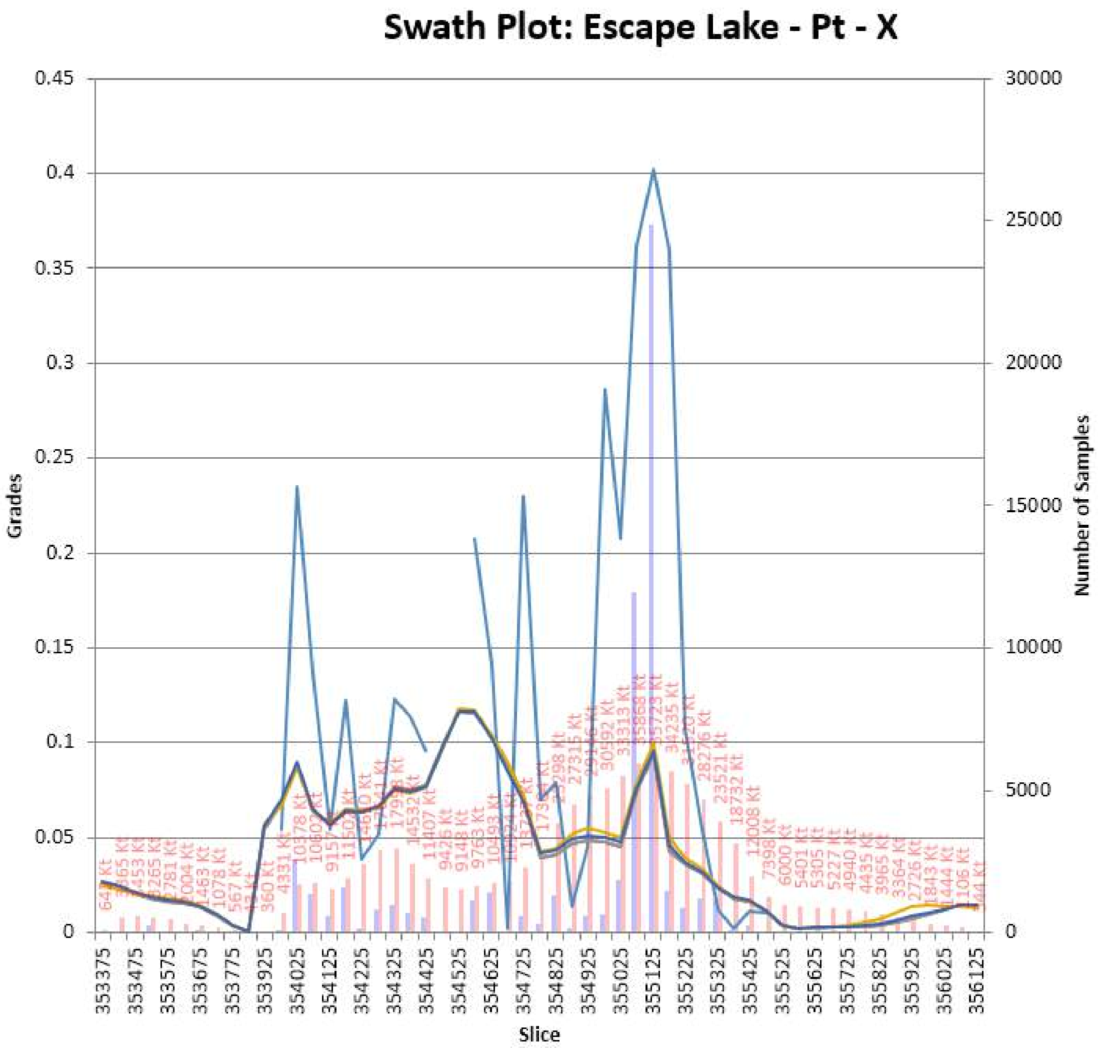


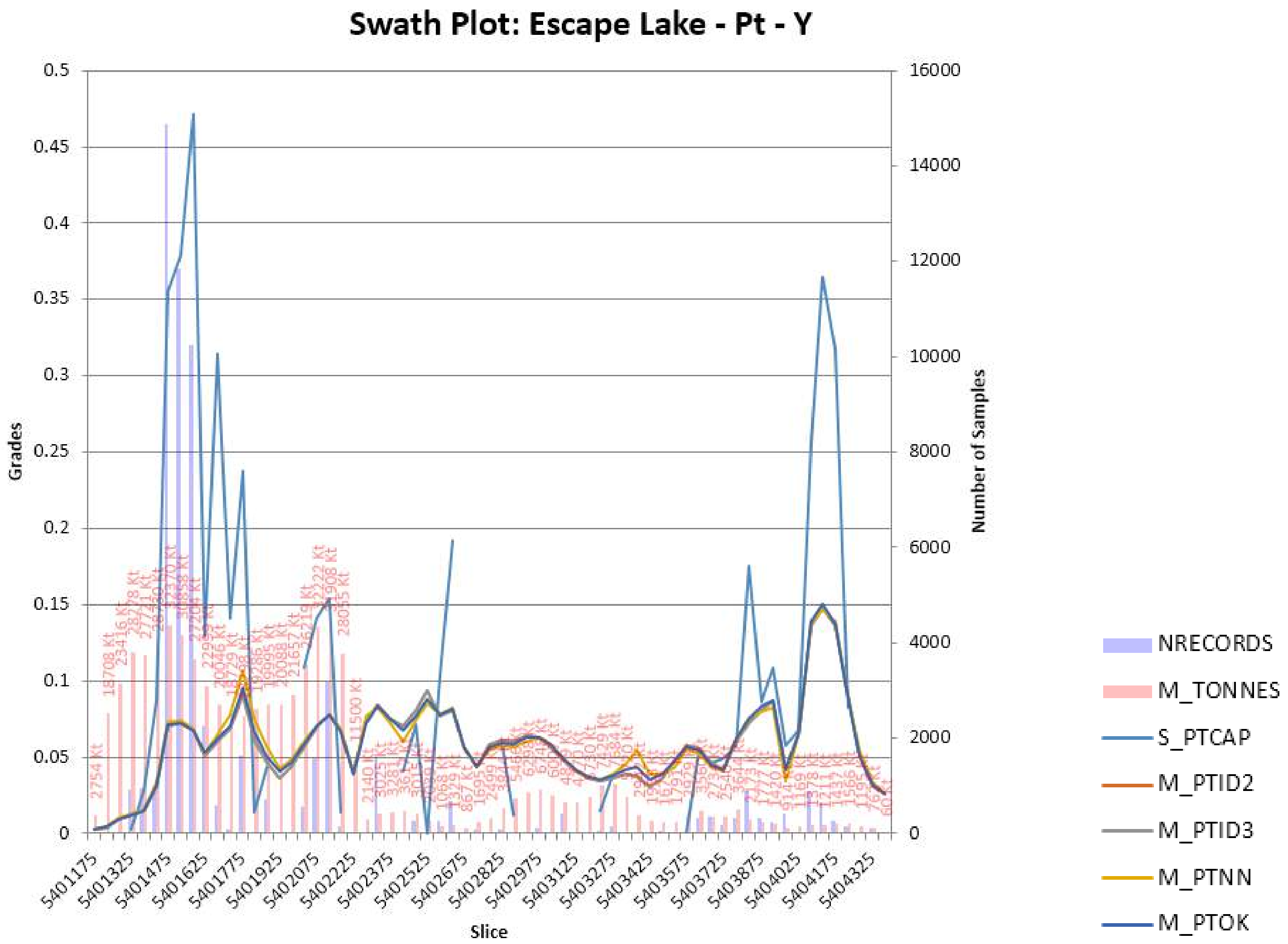
Swath Plot, Current Lake Deposit – Co in Z direction (Elevation)



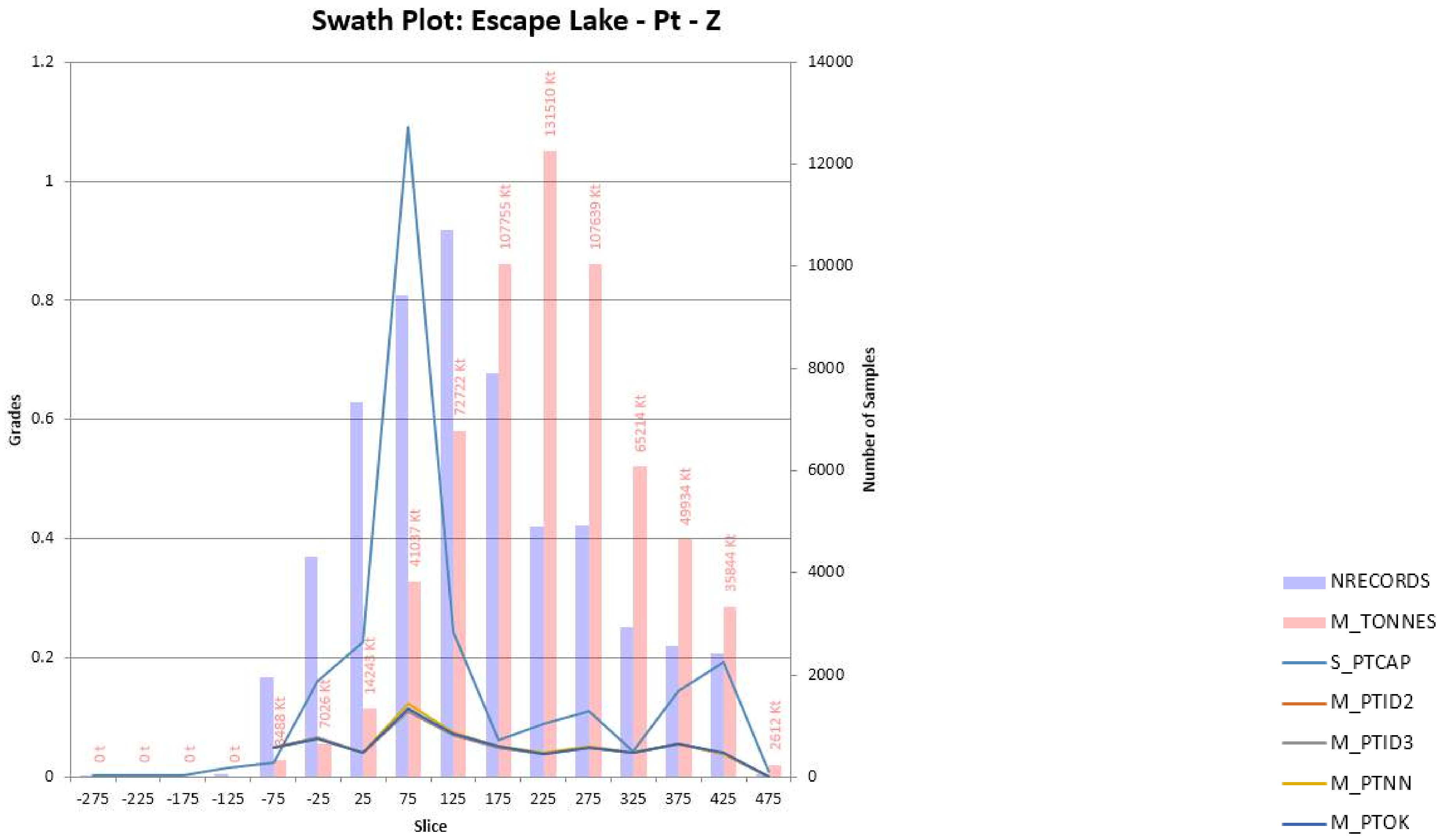
Escape Lake Deposit Swath Plots

Swath Plot, Escape Lake Deposit – Pt in X and Y direction (Easting and Northing)

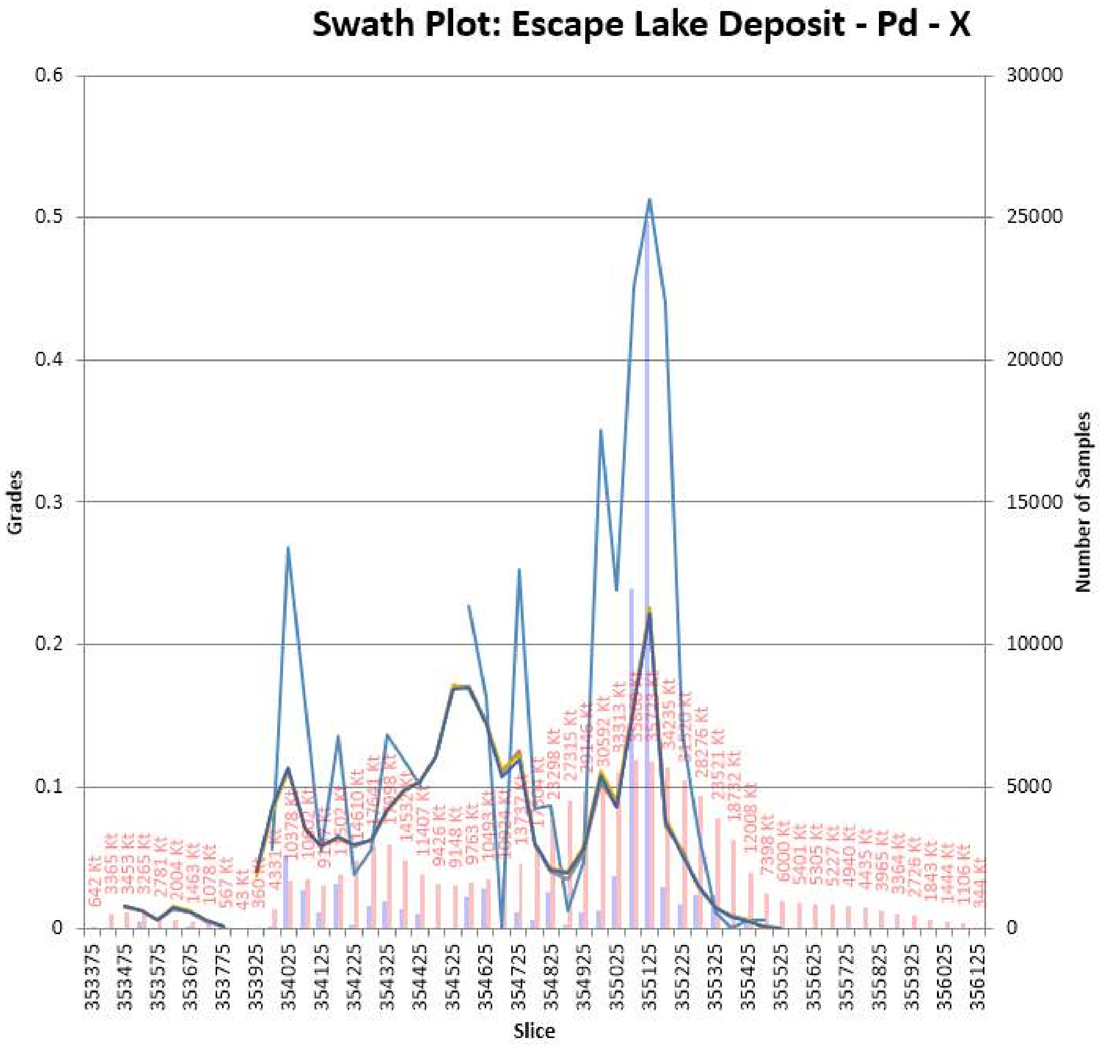


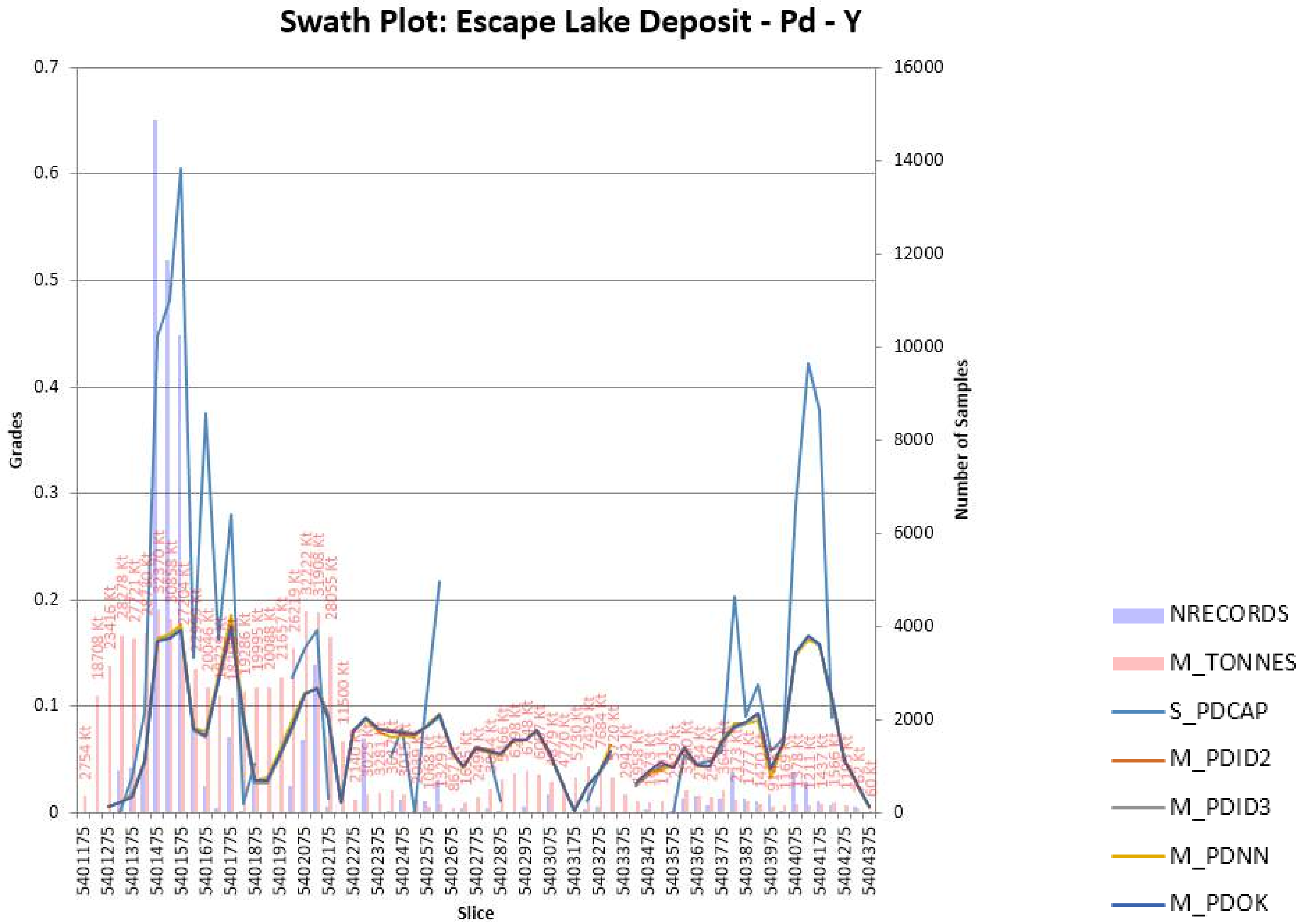


Swath Plot, Current Lake Deposit – Pt in Z direction (Elevation)

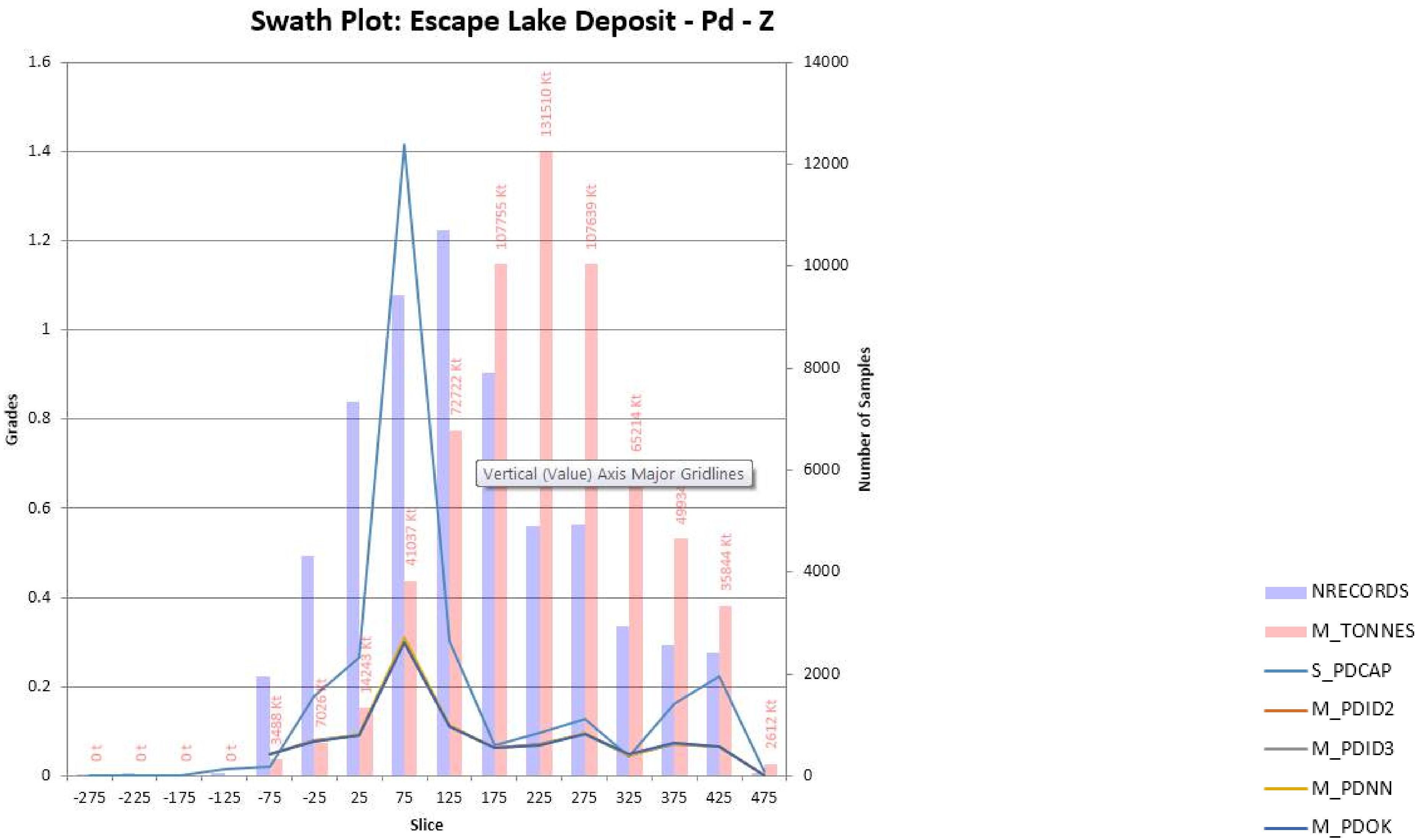


Swath Plot, Escape Lake Deposit – Pd in X and Y directions (Easting and Northing)

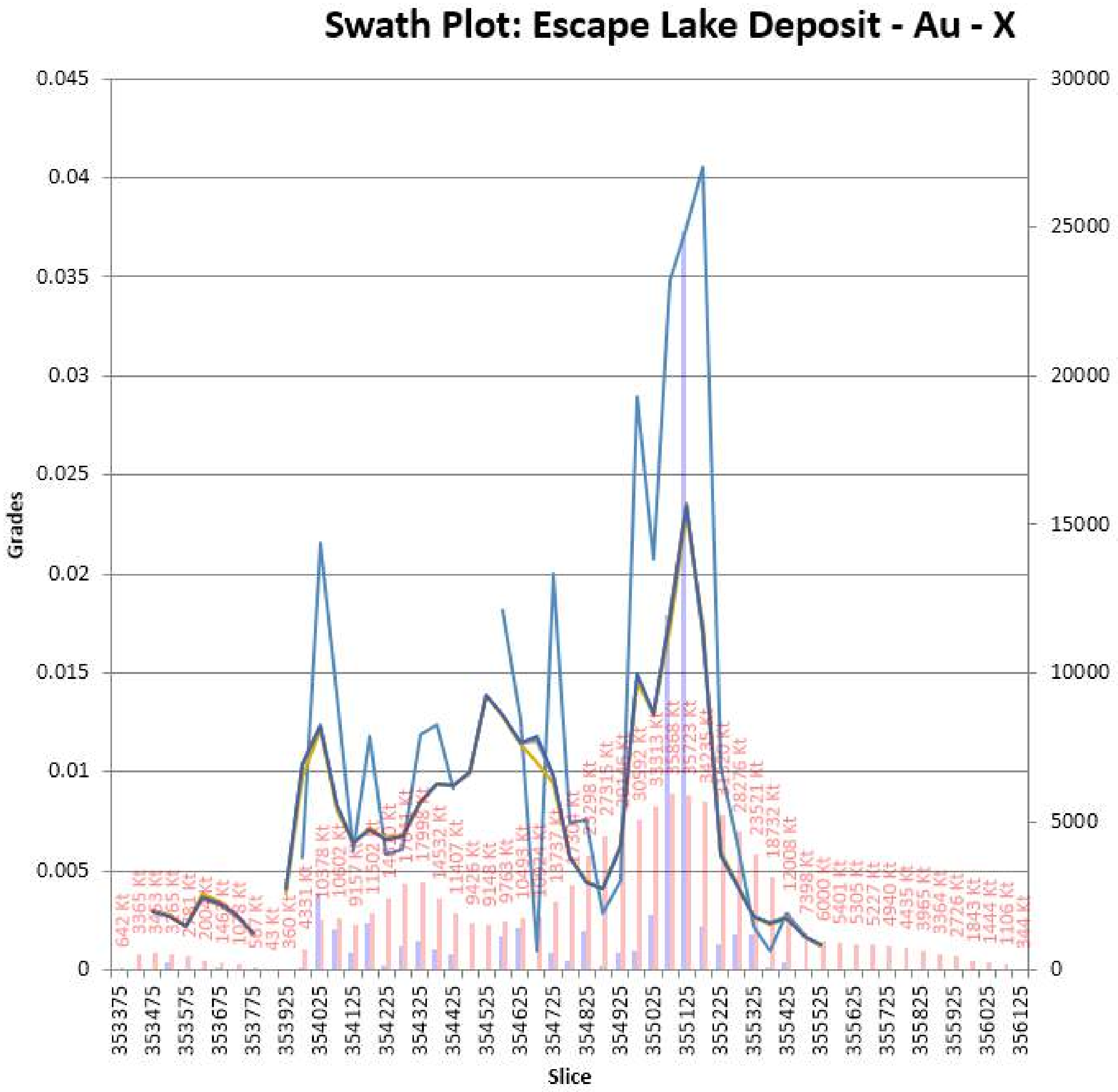


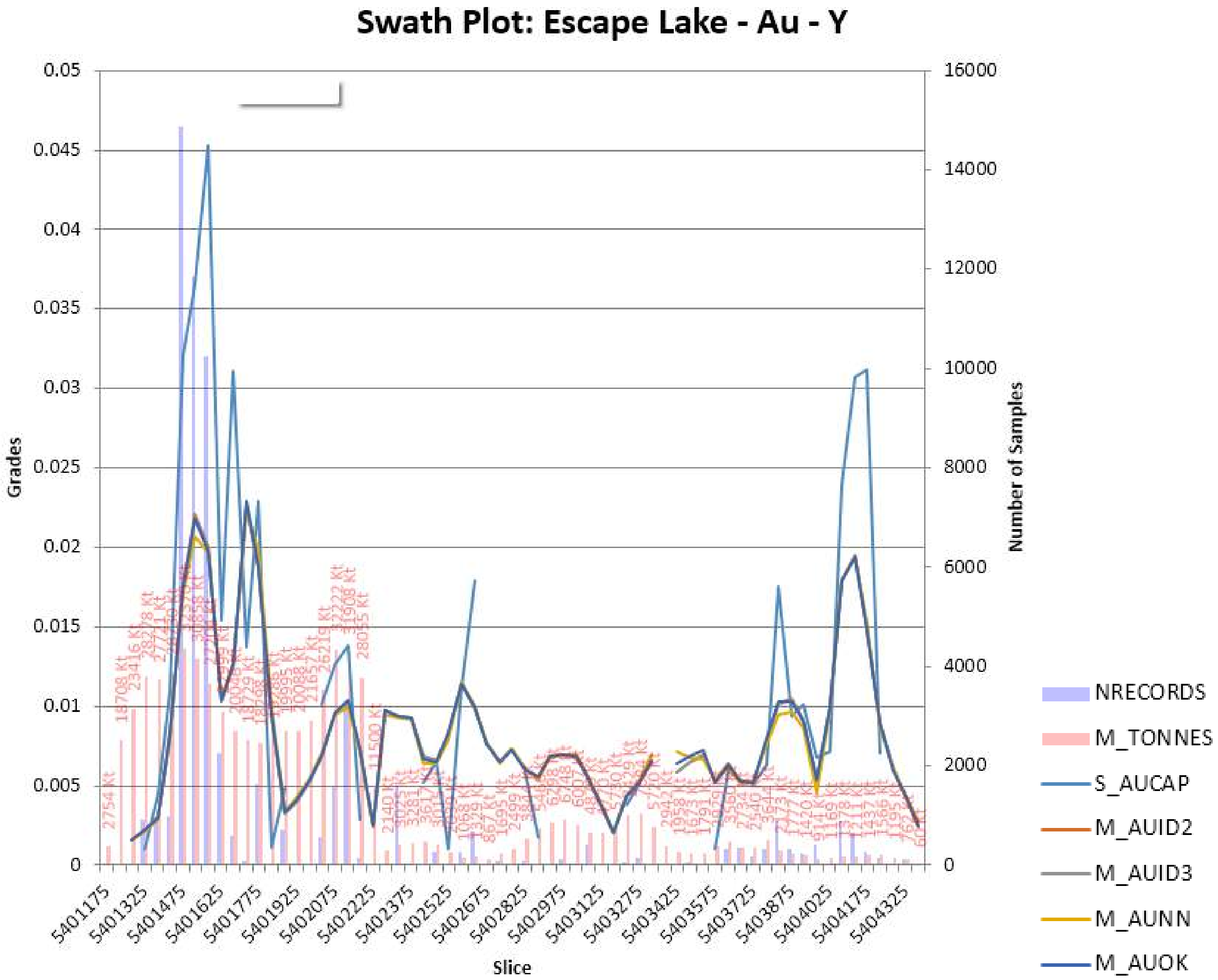


Swath Plot, Escape Lake Deposit – Pd in Z direction (Elevation)

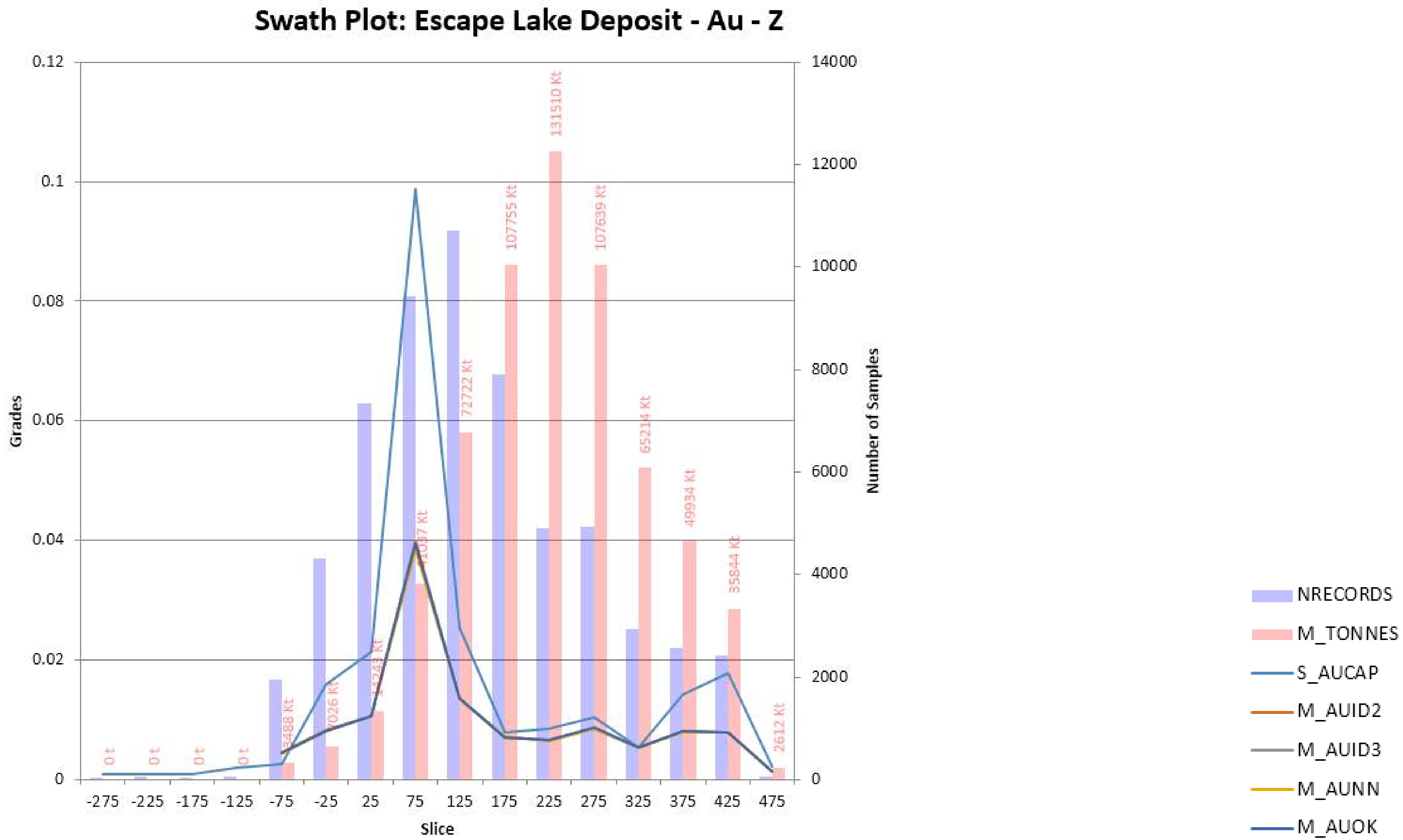


Swath Plot, Escape Lake Deposit – Au in X and Y directions (Easting and Northing)

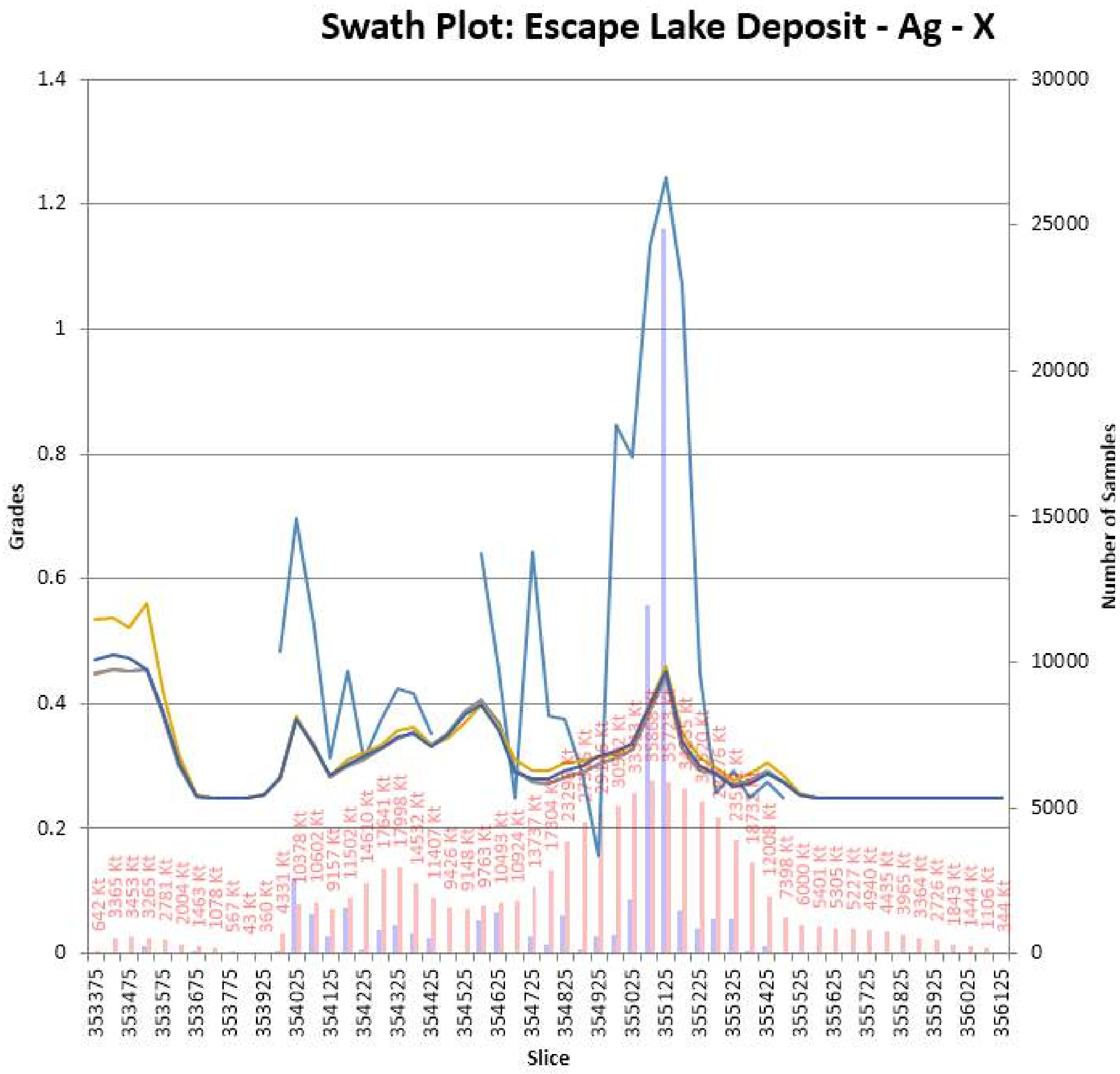


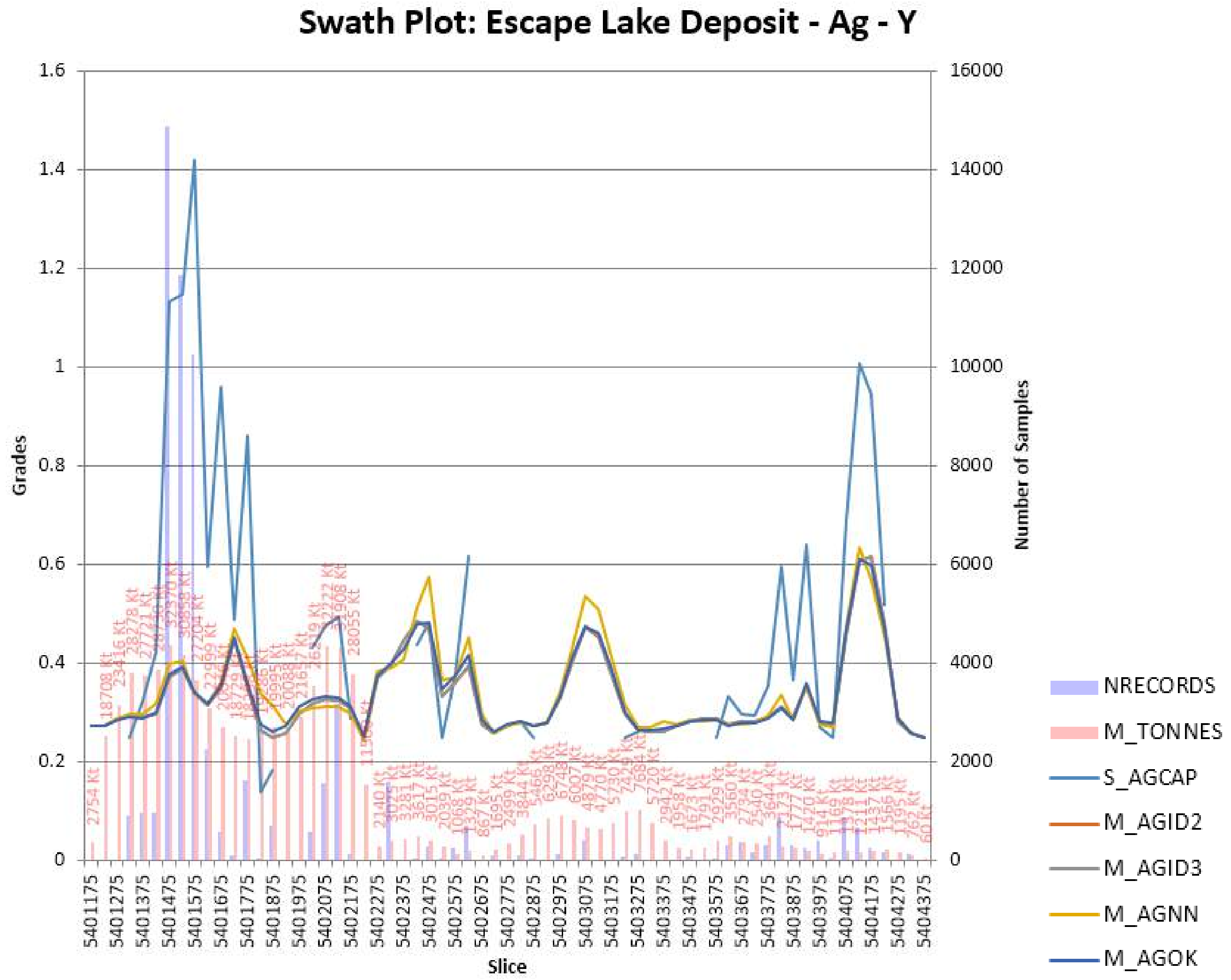


Swath Plot, Escape Lake Deposit – Au in Z direction (Elevation)

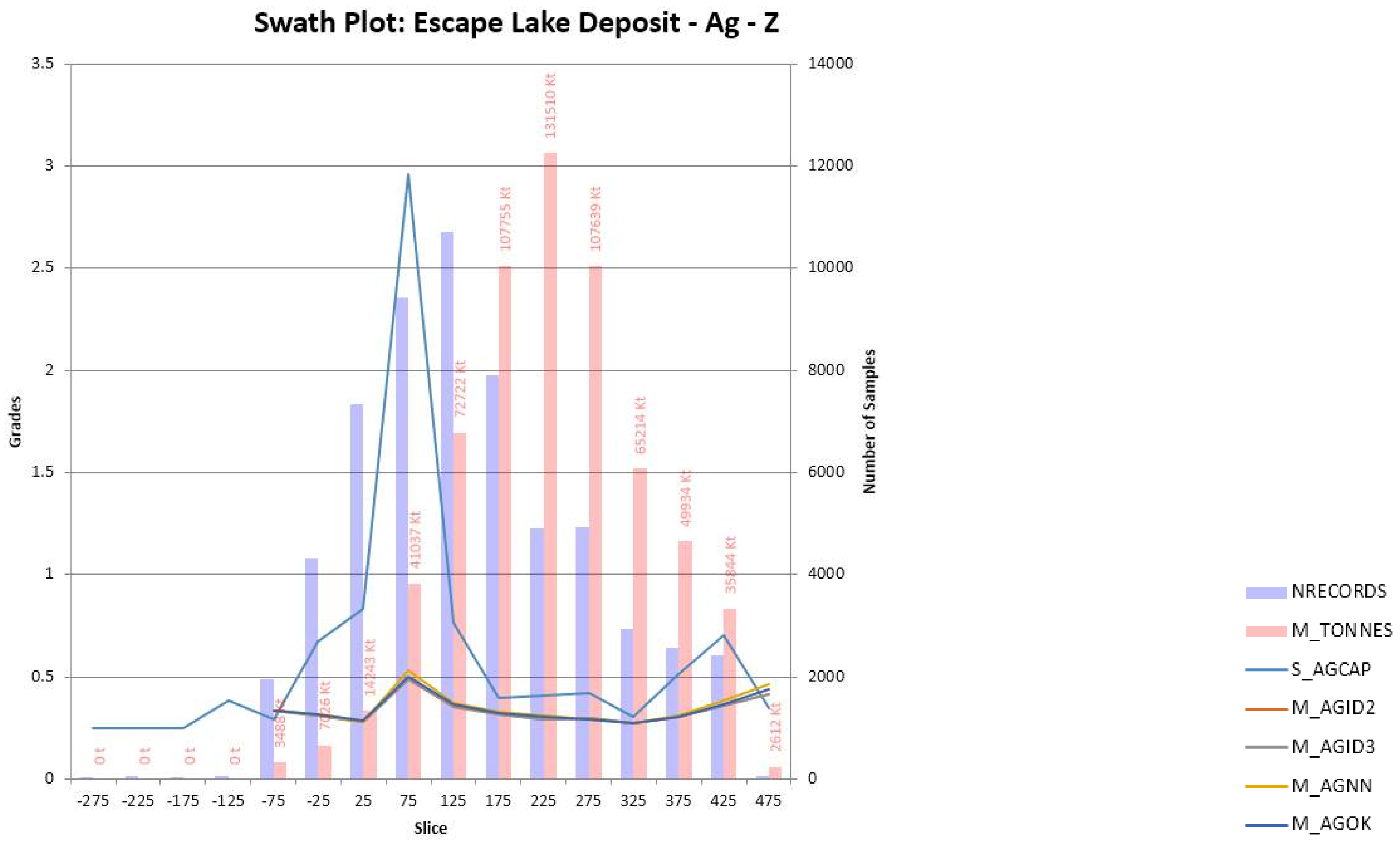


Swath Plot, Current Lake Deposit – Ag in X and Y directions (Easting and Northing)

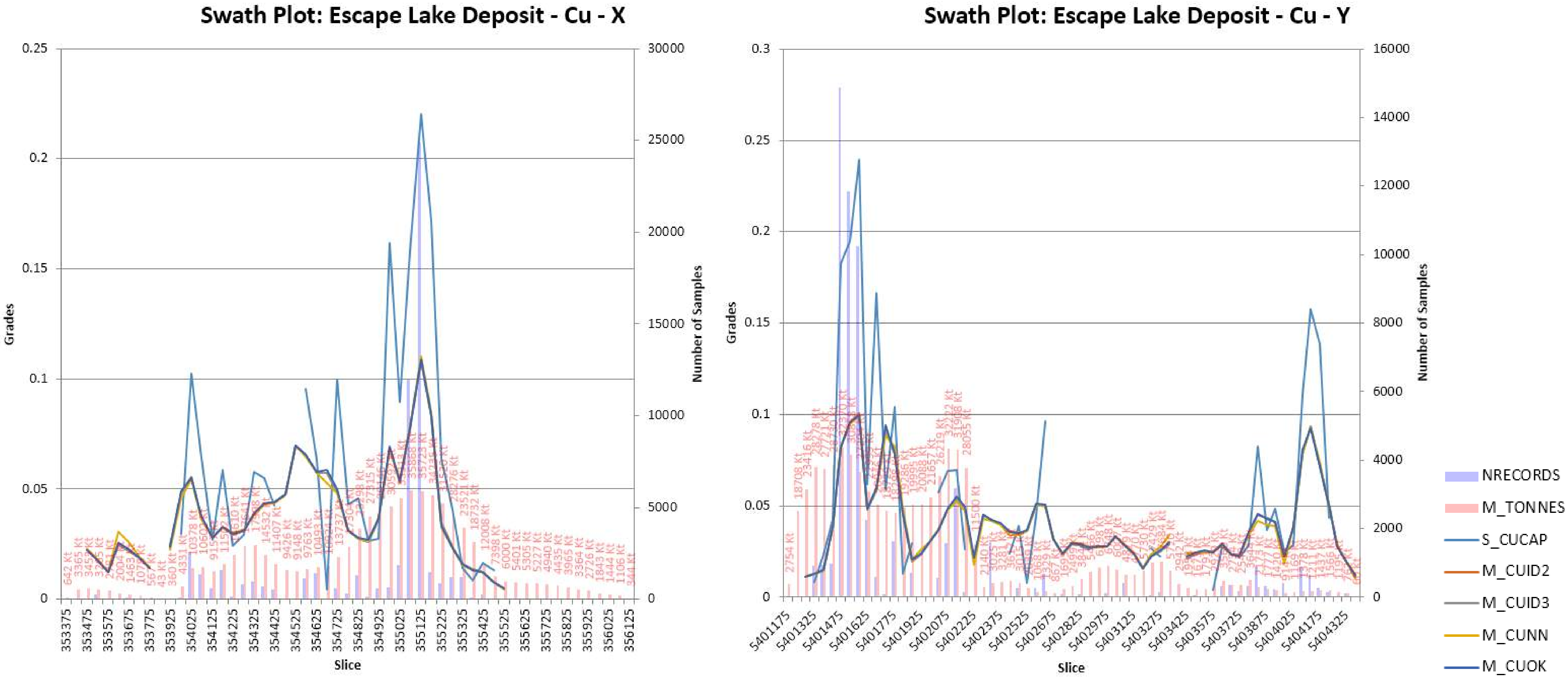




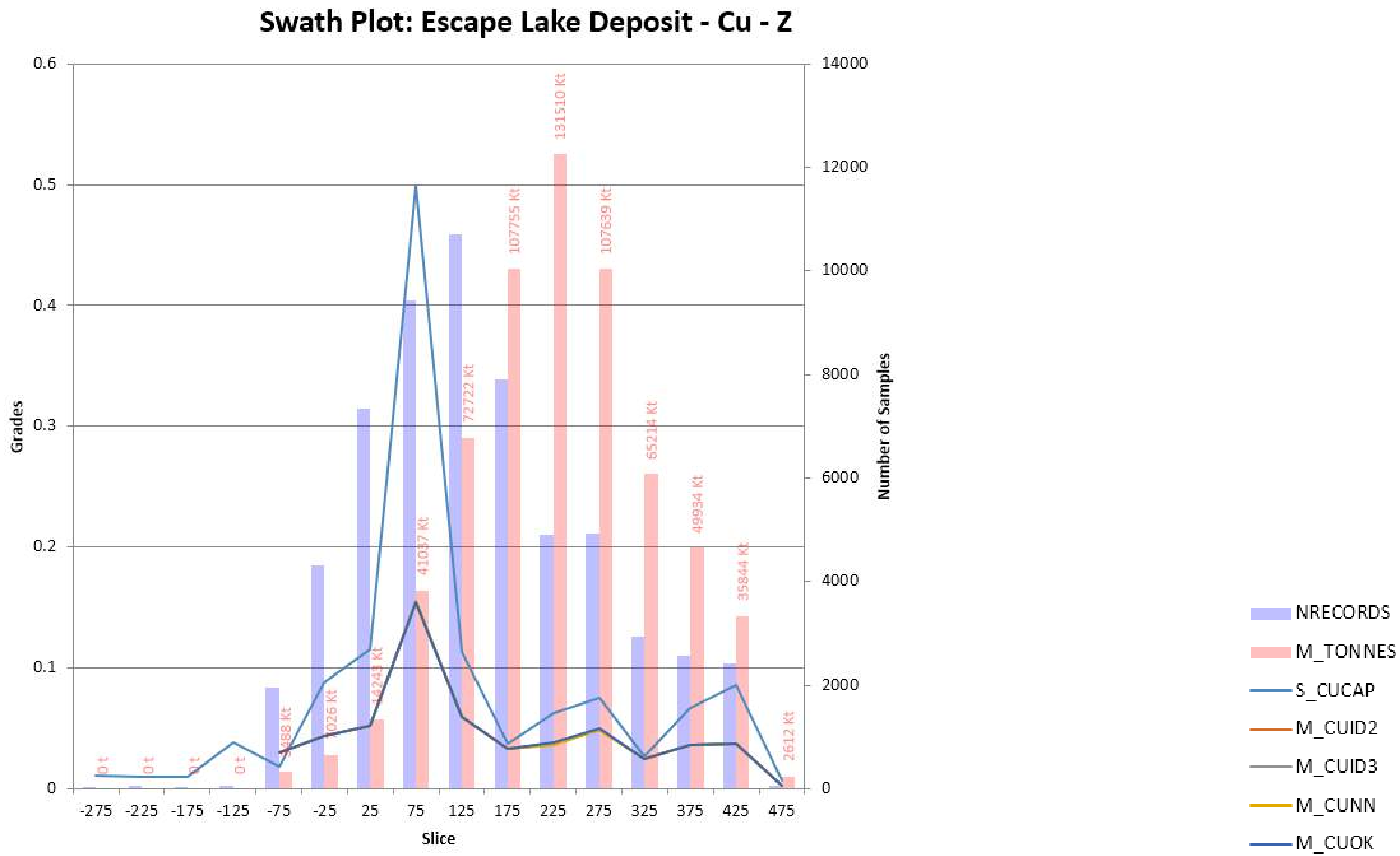
Swath Plot, Current Lake Deposit – Ag in Z direction (Elevation)



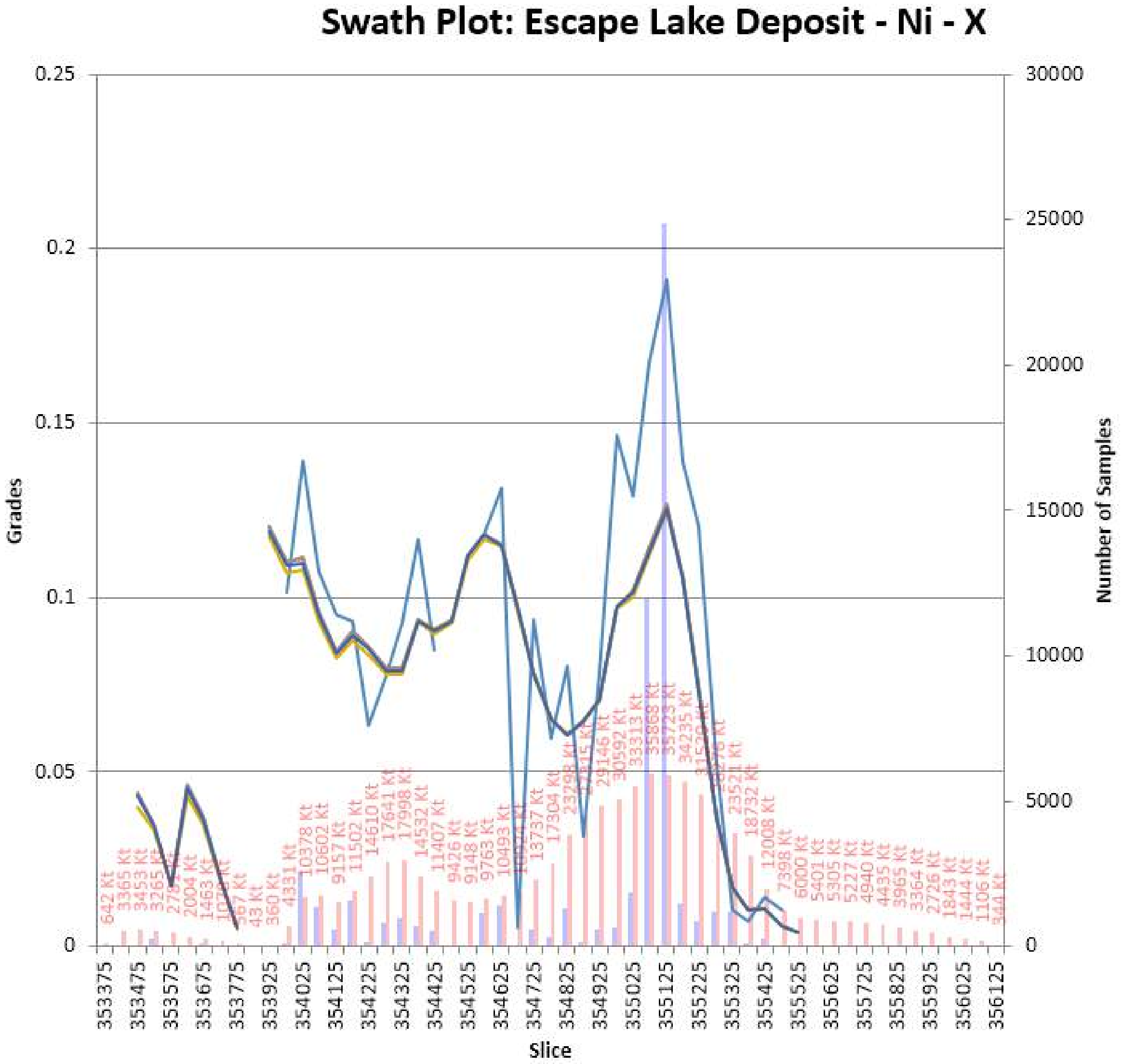
Swath Plot, Escape Lake Deposit – Cu in X and Y directions (Easting and Northing)

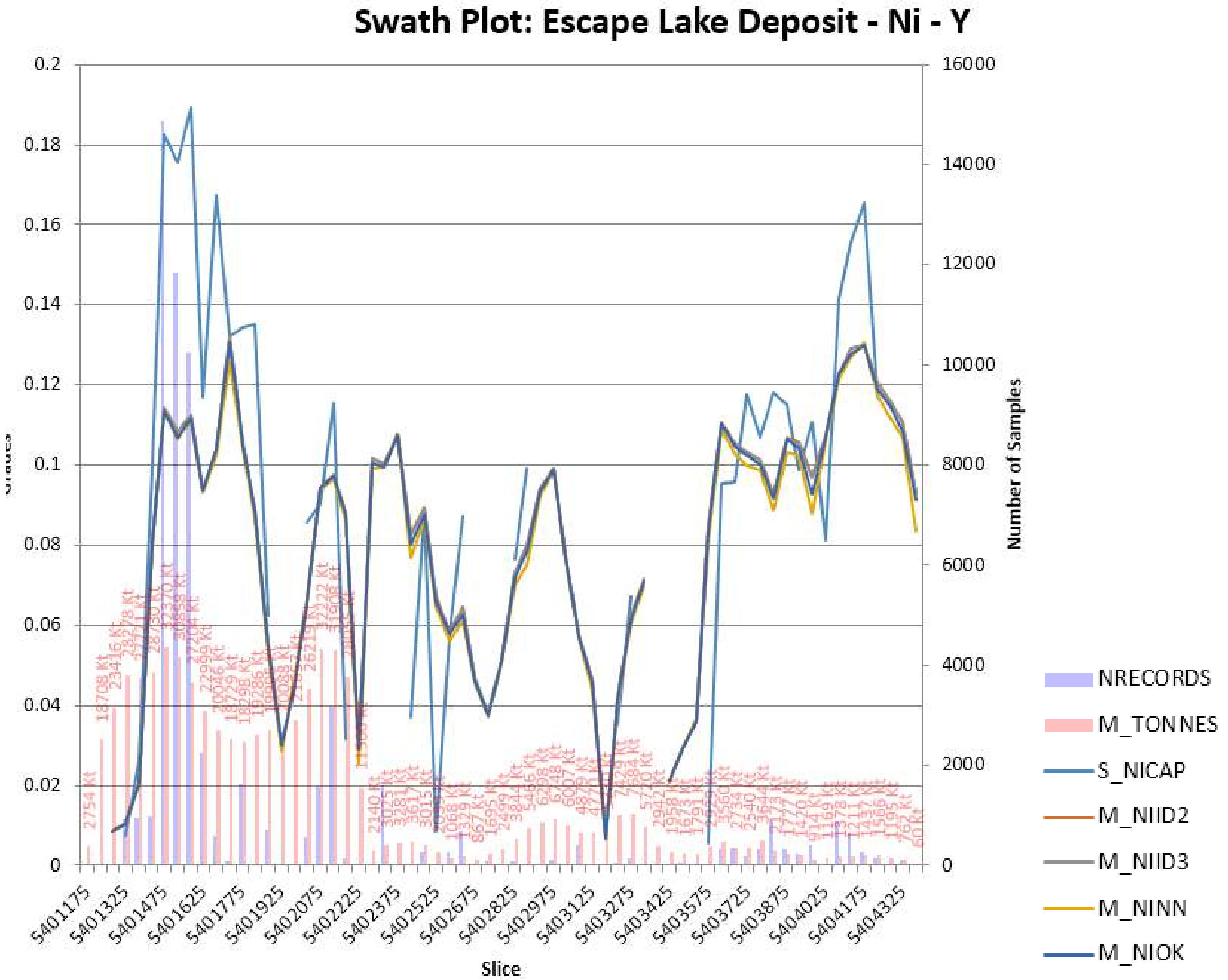


Swath Plot, Escape Lake Deposit – Cu in Z direction (Elevation)

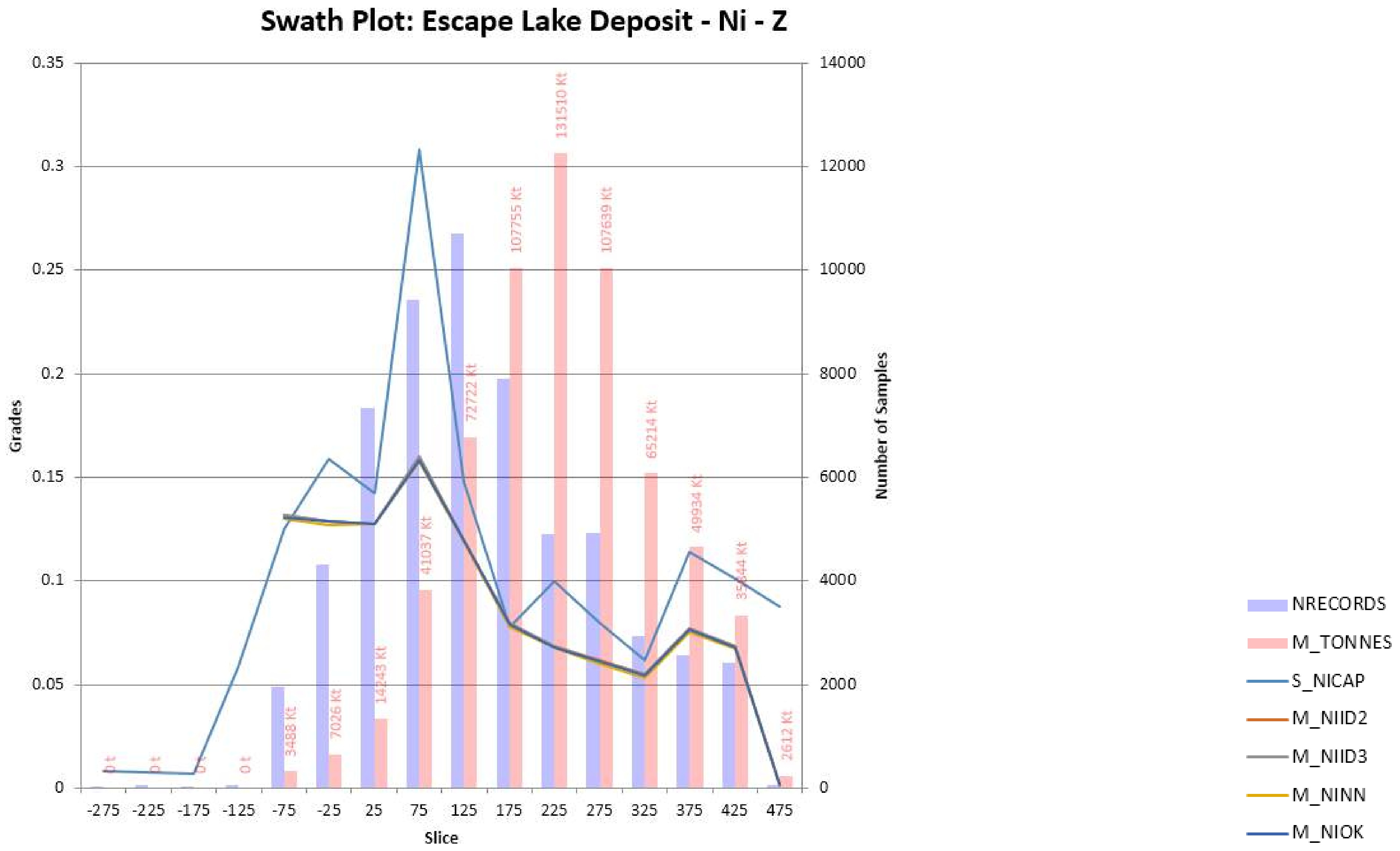


Swath Plot, Escape Lake Deposit – Ni in X and Y directions (Easting and Northing)

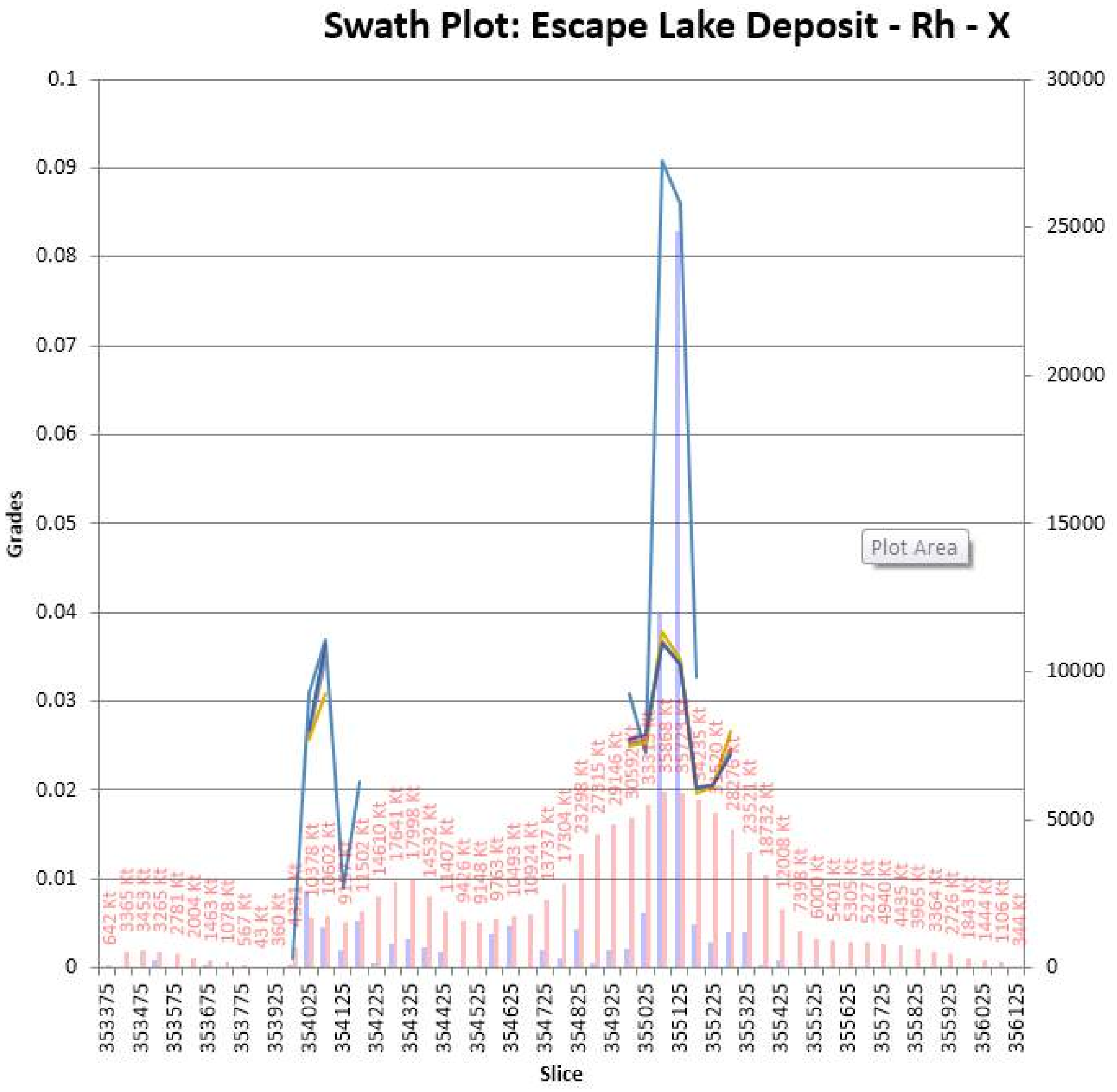


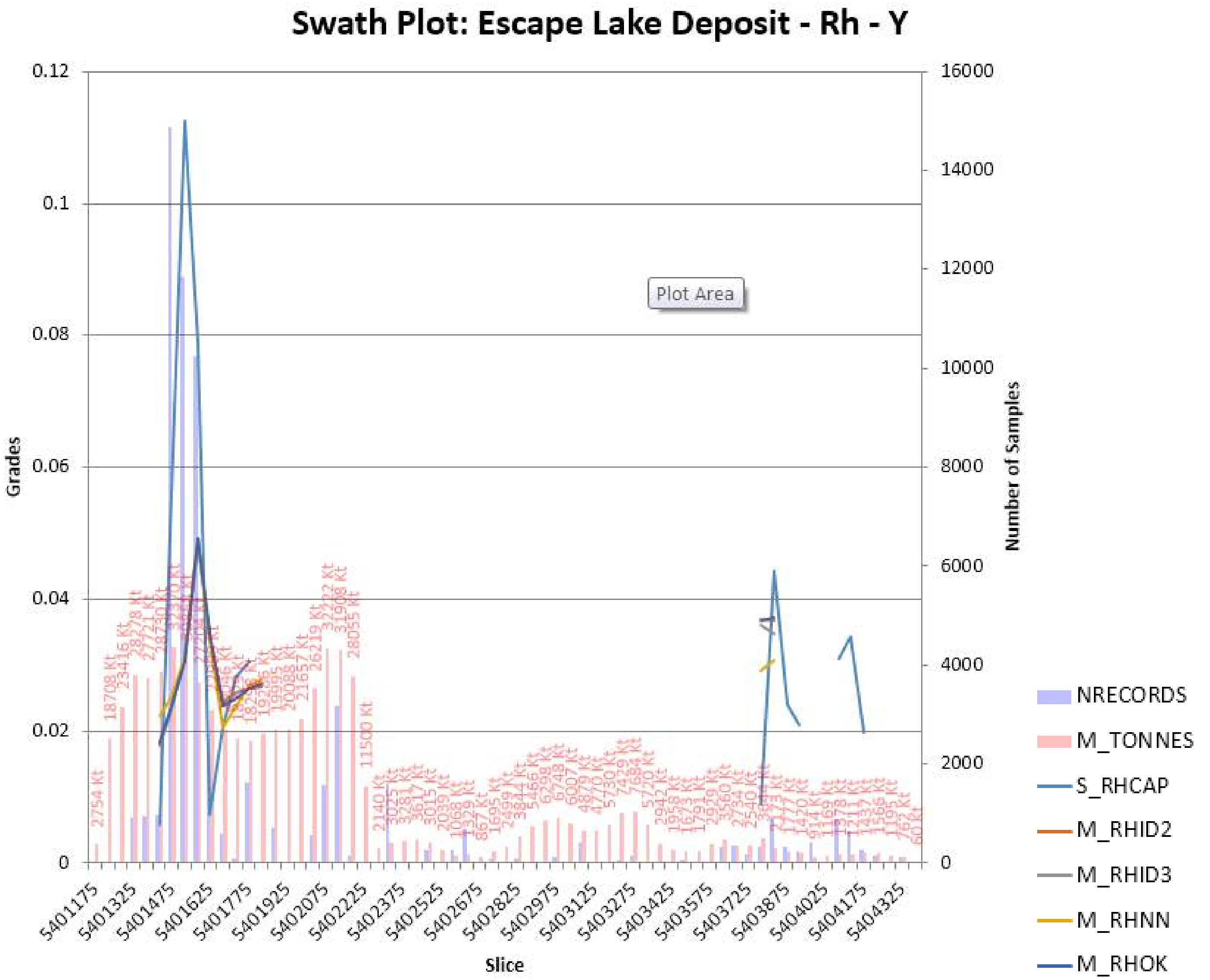


Swath Plot, Escape Lake Deposit – Ni in Z direction (Elevation)

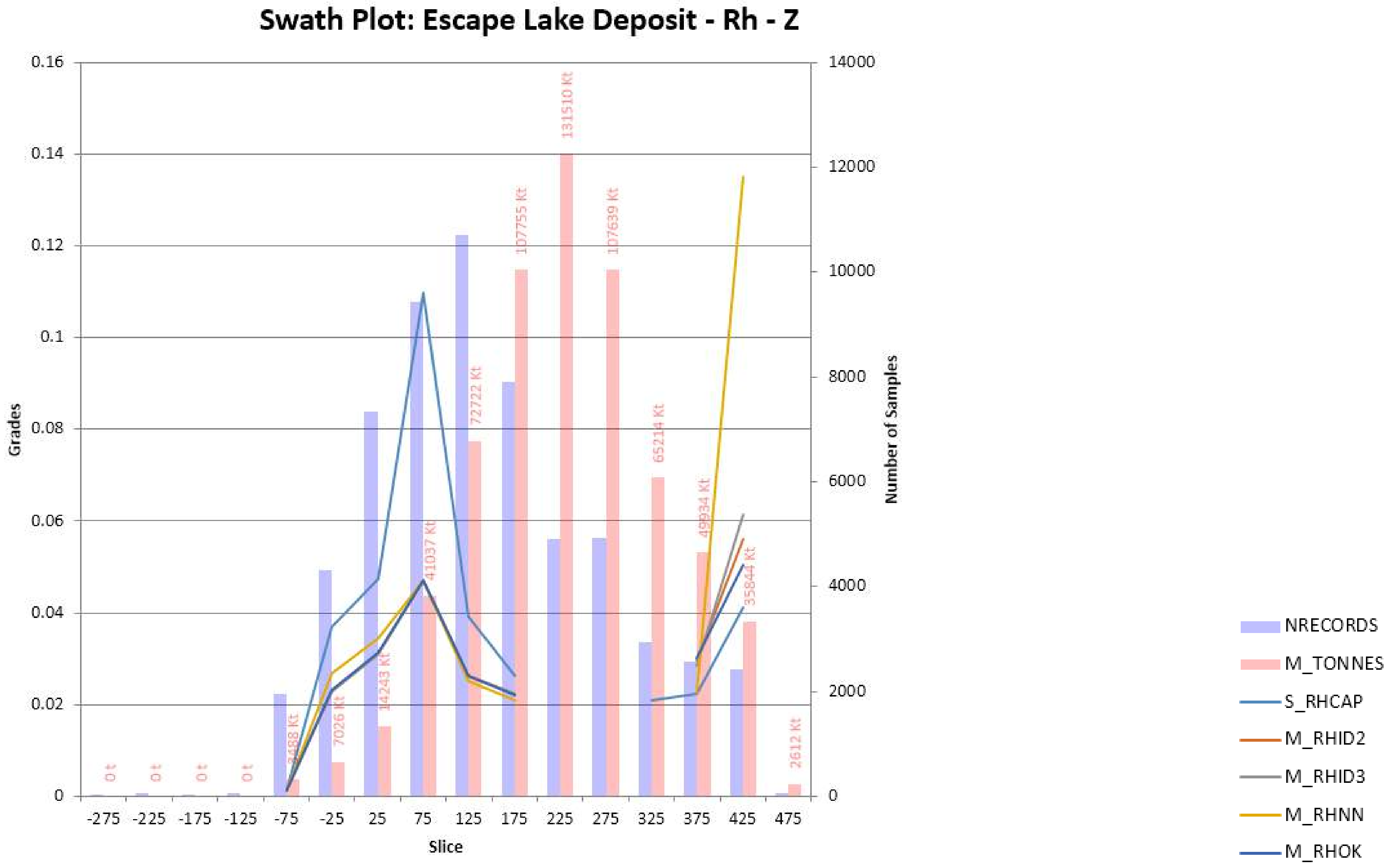


Swath Plot, Escape Lake Deposit – Rh in X and Y directions (Easting and Northing)

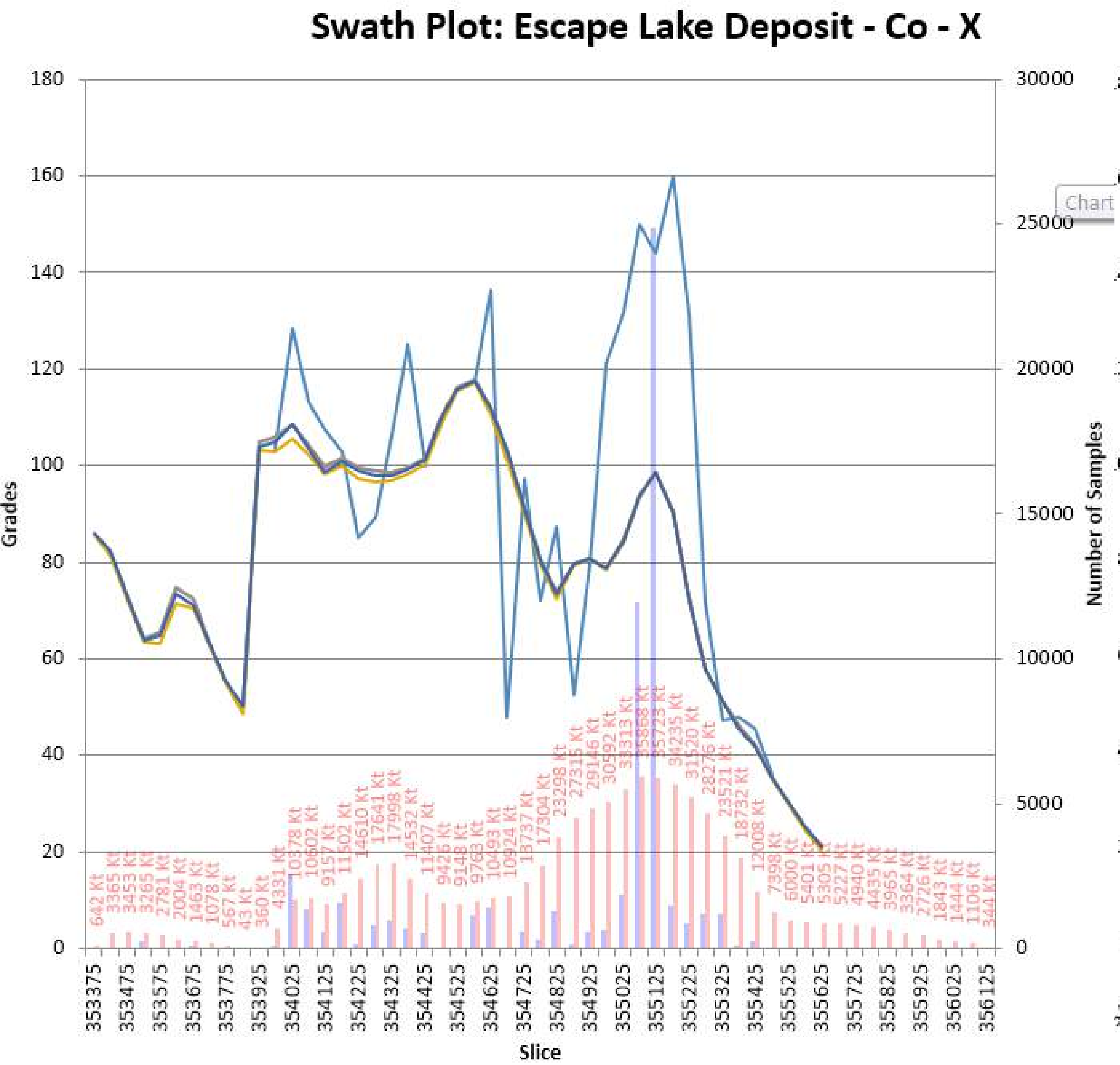


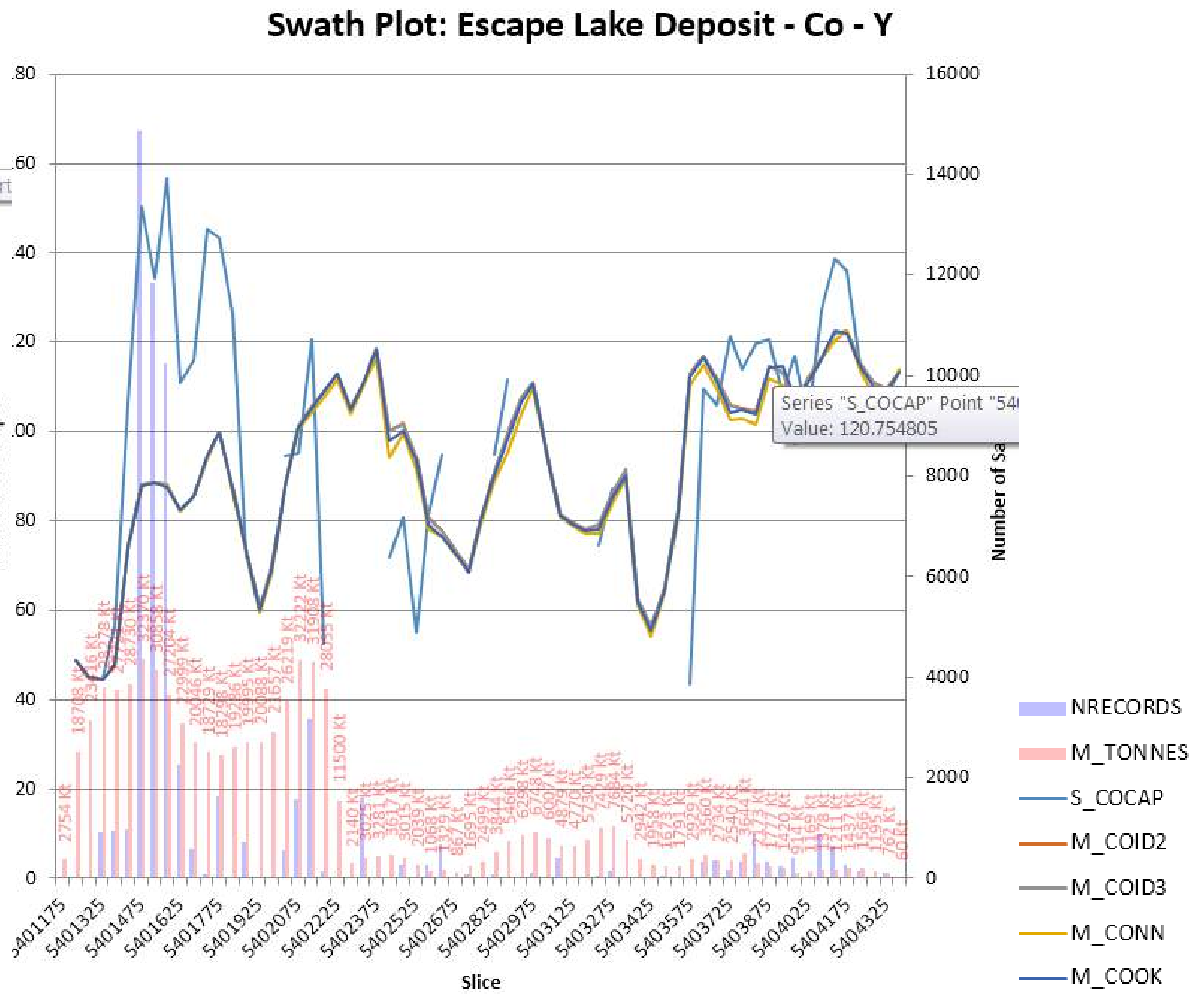


Swath Plot, Escape Lake Deposit – Rh in Z direction (Elevation)



Swath Plot, Escape Lake Deposit – Co in X and Y directions (Easting and Northing)





Swath Plot, Escape Lake Deposit – Co in Z direction (Elevation)