



AMENDED NI 43-101 TECHNICAL REPORT

ON THE

**GRANADA GOLD PROJECT  
MINERAL RESOURCE ESTIMATE UPDATE  
ROUYN-NORANDA, QUEBEC, CANADA**

Latitude 48°10' N, Longitude 79°01' W

**Prepared for:**

**Granada Gold Mine Inc.**  
3028 Quadra Court  
Coquitlam, BC  
Canada, V3B 5X6

Report Date: April 11<sup>th</sup>, 2023  
Effective Date: June 23<sup>rd</sup>, 2022

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<b>TABLE OF CONTENTS</b>	<b>PAGE</b>
TABLE OF CONTENTS .....	i
LIST OF FIGURES.....	iv
LIST OF TABLES .....	v
1 SUMMARY .....	7
1.1 Property Description, Location, Access, and Physiography .....	8
1.2 History .....	9
1.3 Geology and Mineralization.....	10
1.4 Exploration and Drilling .....	10
1.5 Mineral Processing, Metallurgical Testing and Recovery Methods .....	13
1.6 Gold Mineral Resource Estimate .....	14
1.7 Recommendations .....	16
2 INTRODUCTION.....	17
2.1 Terms of References.....	17
2.2 Sources of Information .....	17
2.3 Site Visit .....	18
2.4 Currency, Units, Abbreviations and Definitions.....	20
3 Reliance on Other Experts .....	21
4 PROPERTY DESCRIPTION AND LOCATION .....	22
4.1 Property Description, Ownership and Royalty .....	23
4.1.1 Ownership History .....	25
4.2 Underlying Agreements.....	25
4.3 Permits and Environmental Liabilities .....	26
4.4 Mining Rights in Quebec.....	27
5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	28
5.1 Accessibility .....	28
5.2 Topography and Physiography .....	28
5.3 Climate .....	28
5.4 Local Resources and Infrastructure .....	28
6 HISTORY.....	30
6.1 Exploration History .....	30
6.2 Work History Since Acquisition by Granada Gold Mines Inc. ....	33
7 GEOLOGICAL SETTING AND MINERALIZATION .....	36
7.1 Regional Geology.....	36
7.2 Local Geology .....	37
7.3 Property.....	42
7.4 Mineralization .....	42
7.4.1 Vein #1 .....	43
7.4.2 Vein #2 .....	43
7.4.3 Vein #3 .....	43
7.4.4 Vein #5 .....	43
7.4.5 Vein A & B.....	43
8 DEPOSIT TYPES.....	44
8.1 About the Rubidium.....	44
9 EXPLORATION.....	45
9.1 Geological & Structural Study by Earthmetrix (2011) .....	45
9.2 Bulk Sample 2007 .....	45
9.3 2014-2015 Trenching Works.....	45
9.4 2018 Trenching Works .....	47
9.4.1 Results .....	52
9.5 2018-2019 Drone Magnetometer Survey.....	52
9.5.1 Overview .....	52
9.5.2 Results .....	53
9.6 2019-2020 Stripping and Trenching Works .....	53
9.7 2019 Bulk Sampling: Thermal Fragmentation.....	55

9.8	2020 High-Grade exploration and Bulk Sampling Program .....	55
9.9	2021 Exploration .....	58
10	DRILLING .....	59
10.1	2009 to 2011 Drilling .....	59
10.2	2012 Drilling .....	61
10.3	2016 – 2017 Drilling .....	62
10.4	2018 Drilling .....	63
10.5	2019 Drilling .....	65
10.6	2020 Drilling .....	67
10.7	2021 Drilling .....	70
10.8	Core Recovery .....	71
11	SAMPLE PREPARATION, ANALYSES, AND SECURITY .....	72
11.1	2009 to 2011 Drilling .....	72
11.2	2012 Drilling .....	74
11.3	2013 Channel Sampling Protocol.....	74
11.4	2016 to 2017 Drilling .....	75
11.4.1	Accurassay Laboratories.....	75
11.4.2	SGS Lakefield .....	75
11.4.3	Quality Assurance/Quality Control (QA/QC) Program .....	76
11.4.4	Fire Assay versus Screen Metallic .....	76
11.4.5	2017 Drilling Campaign .....	76
11.5	2018 Drilling .....	77
11.5.1	Sampling Approach and Methodology .....	77
11.5.2	Samples Preparation.....	79
11.5.3	Fire Assay Analysis .....	79
11.5.4	Screen Metallic Analysis .....	80
11.5.5	Quality Assurance and Quality Control .....	80
11.5.6	2018 QA/QC Conclusion .....	81
11.6	2019 Drilling .....	82
11.6.1	Sampling Approach and Methodology .....	82
11.6.2	Samples Preparation.....	82
11.6.3	Storage of Core Boxes .....	84
11.6.4	Quality Assurance and Quality Control .....	85
11.6.1	2019 QA/QC Conclusion .....	87
11.7	2020 Drilling .....	87
11.7.1	Sampling Approach and Methodology .....	87
11.7.2	Samples Preparation.....	88
11.7.3	Fire Assay Analysis .....	88
11.7.4	Screen Metallic Analysis .....	88
11.7.5	Storage of Core Boxes .....	88
11.7.6	Quality Assurance and Quality Control .....	89
11.7.7	2020 QA/QC Conclusion .....	93
11.8	2021 Drilling .....	93
11.8.1	Sampling Approach and Methodology .....	93
11.8.2	Samples Preparation.....	93
11.8.3	Fire Assay Analysis .....	94
11.8.4	Storage of Core Boxes .....	94
11.8.5	Quality Assurance and Quality Control .....	94
11.8.6	2021 QA/QC Conclusion .....	97
12	DATA VERIFICATION .....	98
12.1	2022 SGS Site Inspection and Data Verification .....	98
12.1.1	Gold.....	99
12.1.2	500-Tonne Bulk Sample.....	101
12.1.3	Rubidium .....	101
12.2	2020 SGS Site Inspection and Data Verification .....	106
12.3	2018 SGS Site Inspection and Data Verification .....	107

12.4	Conclusion.....	109
13	MINERAL PROCESSING AND METALLURGICAL TESTING .....	110
13.1	SGS Lakefield Testwork – Project 13526-001 (December 2011 – January 2012).....	110
13.1.1	Gravity Separation.....	110
13.1.2	Cyanidation .....	110
13.2	SGS Lakefield Testwork - Project 14041-001 (March – April 2013) .....	110
13.2.1	Specific Gravity .....	110
13.2.2	Head Analysis .....	111
13.2.3	Comminution .....	111
13.2.4	Heavy Liquid Separation .....	111
13.2.5	Metallurgical Testing .....	111
13.3	Gekko Systems Pty. Limited Testwork – Report T1037 (April – July 2013).....	112
13.3.1	Head Grade Analysis .....	112
13.3.2	Comminution .....	112
13.3.3	Dense Media Separation.....	112
13.3.4	Gravity Recovery.....	112
13.3.5	Flotation.....	112
13.3.6	Cyanidation .....	113
13.3.7	Total Gold Recovery (Table, Falcon, Flotation, Cyanidation) .....	113
13.4	Unité de Recherche et de Service en Technologie Minérale (URSTM) Project №: PU-2013-09-835-B (2013) .....	113
13.4.1	Head Analysis .....	113
13.4.2	ICP Analysis in Head Sample .....	114
13.4.3	Acid-Generating Tests .....	114
13.4.4	Ore-Specific Gravity .....	114
13.4.5	Ball Mill Work Index.....	114
13.4.6	Gravity-Cyanidation Tests.....	114
13.4.7	Chemical Consumption .....	114
13.4.8	Settling Tests (Thickener Dimensioning) .....	115
13.4.9	Cyanide Destruction Tests .....	115
13.4.10	Gravity-Cyanidation duplicate .....	115
13.5	Additional Tests at COREM report of July 15 <sup>th</sup> , 2016 .....	117
13.6	Additional Tests at Gekko – document of May 24 <sup>th</sup> , 2016 & April 13 <sup>th</sup> , 2017.....	117
13.7	Re-2Ox and Recovery of Critical US Strategic Metals (2022) .....	118
13.8	SGS Lakefield Testwork – Project 18690-01 (2021 – 2022) .....	119
14	MINERAL RESOURCE ESTIMATE .....	120
14.1	Introduction.....	120
14.2	Drill Hole Database .....	120
14.3	Topography .....	123
14.4	Mineralized Intervals and Wireframing.....	124
14.5	Compositing and Capping.....	127
14.6	Specific Gravity .....	127
14.7	Block Model Parameters .....	128
14.8	Grade Interpolation .....	129
14.9	Mineral Resource Classification Parameters .....	131
14.9.1	Classification Methodology .....	132
14.10	Reasonable Prospects for Eventual Economic Extraction.....	132
14.10.1	Pit Constrained Resources .....	133
14.10.2	Underground Resources .....	133
14.11	Mineral Resource Statement.....	134
14.12	Model Validation and Sensitivity Analysis.....	137
14.13	Comparison with 2021 Resource.....	137
14.14	Disclosure.....	137
15	MINERAL RESERVE ESTIMATES.....	138
16	MINING METHODS.....	139
17	RECOVERY METHODS .....	140

18	PROJECT INFRASTRUCTURE.....	141
19	MARKET STUDIES AND CONTRACTS.....	142
20	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT .....	143
21	CAPITAL AND OPERATING COSTS .....	144
22	ECONOMIC ANALYSIS .....	145
23	ADJACENT PROPERTIES .....	146
23.1	Yorbeau Resources Inc. - Rouyn Property .....	147
23.2	Opawica Explorations - McWatters Property .....	147
24	OTHER RELEVANT DATA AND INFORMATION .....	148
25	INTERPRETATION AND CONCLUSIONS .....	149
25.1	Risks and Opportunities .....	150
26	RECOMMENDATIONS .....	151
27	REFERENCES.....	152
28	DATE AND SIGNATURE PAGE .....	153
29	CERTIFICATES OF QUALIFIED PERSONS.....	154

## LIST OF FIGURES

Figure 4-1	Property Location Map .....	22
Figure 4-2:	Property Land Tenure Map .....	23
Figure 5-1	Location of the Existing Infrastructures (Google Earth, image taken on June 13 <sup>th</sup> , 2020) ..	29
Figure 6-1	Historic 1934 Longitudinal of Vein #2 (Duplessis et al. 2013) .....	31
Figure 7-1	Geological map of the Superior Province showing the position of the Property .....	36
Figure 7-2	Regional Geology.....	37
Figure 7-3	Regional Geology Map of the Granada Mine Area (Duplessis et al., 2014) .....	38
Figure 7-4	Large Smoky Quartz Veins Oriented E-W Locally Affected by NNE Dextral Faults .....	39
Figure 7-5	Porphyry with large Phenocrysts of Feldspars.....	39
Figure 7-6	Visible Gold Within Smoky Quartz Vein in a Surface Sample .....	40
Figure 7-7	Regional Geology of the Granada Mine Area (Ref: SIGEOM) .....	41
Figure 7-8	Plan View, 50 m below Surface, of Zones of Mineralization, Granada Deposit .....	42
Figure 8-1	Typical Conglomerate S1 Unit on Surface .....	44
Figure 9-1	Location of Aukeko Zone on the Granada Property (Gestim website, March 3 <sup>rd</sup> , 2021) ....	48
Figure 9-2	Location of Aukeko Trenches on the Granada Property.....	49
Figure 9-3	Trenches at Aukeko Site .....	50
Figure 9-4	Drone-borne Magnetic (contours) Survey of Granada Property, by Zen Geomap Inc. ....	53
Figure 9-5	Drone- Magnetic Survey calculated 1VD Magnetics, Granada .....	53
Figure 9-6	2019-2020 Stripping on Granada Property .....	54
Figure 9-7	Exposed Quartz Vein after Surface clearing.....	54
Figure 9-8	Bulk Sample Location .....	57
Figure 9-9	Bulk Material stored in a Shelter .....	58
Figure 10-1	Location of the 2009 to 2011 Drill holes with respect to the Current Granada Deposit.....	61
Figure 10-2	Location of the 2012 Drill holes with respect to the Current Granada Deposit.....	62
Figure 10-3	Location of the 2016 - 2017 Drill holes with respect to the Current Granada Deposit.....	63
Figure 10-4	The Diamond Drill at Granada Property.....	64
Figure 10-5	Drillhole Locations, 2018 Drilling Campaign .....	64
Figure 10-6	2018 Drill hole Location Map with respect to Current Granada Deposit.....	65
Figure 10-7	Diamond Drill on Quartz Vein at Granada Property.....	66
Figure 10-8	Picture during Drilling Campaign in November 2019 on Granada's Property.....	66
Figure 10-9	2019 Drill hole Location Map with respect to Current Granada Deposit.....	67
Figure 10-10	2020 Drill hole Location Map with respect to Current Granada Deposit.....	69
Figure 10-11	2021 Drill hole Location Map with respect to Current Granada Deposit.....	71
Figure 11-1	Pictures of Cores, Holes GR-18-01, GR-18-03, GR-18-04 and GR-18-05.....	78
Figure 11-2	A) Sample in Plastic Bag with Tag; B) Two Standards used during the Drilling Program ..	78
Figure 11-3	Rice Bags filled with Samples transported to ALS Laboratory at Rouyn Noranda .....	79
Figure 11-4	Distribution of Blank Samples used for the 2018 Drilling Campaign .....	80
Figure 11-5	Distribution of Standards (Au g/t) used in the 2018 Drilling Campaign.....	81

Figure 11-6 Core Shack located on Granada’s Property, where Logging was Performed ..... 83

Figure 11-7 A) Core Samples cut in Half Using a Cutting Saw; B) Sample in Plastic Bag with Tag ..... 84

Figure 11-8 Distribution of Blank Samples – Aug. 2019 Drill Campaign – Pool Filter Silica Sand ..... 86

Figure 11-9 Distribution of Blank Samples used for Nov. 2019 Drilling Campaign - Decorative Marble 86

Figure 11-10 Distribution of Standards (Au g/t) (2019 Drilling Campaign) ..... 87

Figure 11-11 Distribution of Blank Samples (2020 Drilling Campaign) ..... 90

Figure 11-12 Distribution of Standards CDN-GS-2R (Au g/t) (2020 Drilling Campaign) ..... 91

Figure 11-13 Distribution of Standards CDN-GS-5M (Au g/t) (2020 Drilling Campaign) ..... 91

Figure 11-14 Distribution of Standards CDN-GS-3T (Au g/t) (2020 Drilling Campaign) ..... 92

Figure 11-15 Distribution of Standards OREAS-15h (Au g/t) (2020 Drilling Campaign) ..... 92

Figure 11-16 Distribution of Blank Samples used for 2021 Drilling Campaign ..... 95

Figure 11-17 Distribution of Standards CDN-GS-2R (Au g/t) (2021 Drilling Campaign) ..... 96

Figure 11-18 Distribution of Standards CDN-GS-3T (Au g/t) (2021 Drilling Campaign) ..... 96

Figure 11-19 Distribution of Standards CDN-GS-1X (Au g/t) used in the 2021 Drilling Campaign ..... 97

Figure 12-1 GR-21-24 from 247.7 to 248.3 m (B0138937) ..... 99

Figure 12-2 GR-21-25 from 275.15 to 276.15 m (A0430210) ..... 100

Figure 12-3 GR-16-14W3 from 888 to 888.65 m (B0136725) ..... 100

Figure 12-4 Bulk Material Stored in a Shelter ..... 101

Figure 12-5 GR-20-22 around 1053 m ..... 102

Figure 12-6 GR-20-22 from 1053 to 1056 m ..... 102

Figure 12-7 GR-20-22 from 1053 to 1056 m ..... 103

Figure 12-8 GR-20-22 from 1053 to 1056 m (Close-Up) ..... 103

Figure 12-9 GR-20-22 from 1053 to 1056 m (close-up) ..... 104

Figure 12-10 GR-20-22 from 1060 to 1065 m with Purple Mineral as Fracture Filling ..... 105

Figure 12-11 GR-20-22 from 1060 to 1065 m with Purple Mineral as Fracture Filling ..... 105

Figure 12-12 Site Visit on November 24<sup>th</sup>, 2020 ..... 106

Figure 12-13 Core observed on the hole GR-20-101 ..... 107

Figure 12-14 Independently Re-Assayed Samples Au (ppm) vs Independent SGS Au (ppm) (A) with and (B) without Sample 7583/61997 ..... 108

Figure 14-1 Plan View of the Granada Deposit Area Showing the Topographic Surface Including Areas of Bulk Sampling ..... 123

Figure 14-2 Isometric View Looking Northeast of the Granada Deposit Area Showing the Topographic Surface Including Areas of Bulk Sampling ..... 124

Figure 14-3 Plan View with Drill Holes, Trenches and Thin, Rich Veins Model (Colours at Random) 125

Figure 14-4 Isometric View Looking SSE Showing the Drill Holes, and the Thin, Rich Veins Model (107 Wireframes)) 126

Figure 14-5 Isometric View Looking NNW Showing the Drill Holes, and the Thin, Rich Veins Model. 126

Figure 14-6 Section 34.5 Looking West Showing the Drill Holes, and the Thin, Rich Veins Model..... 127

Figure 14-7 Isometric View Looking South-southeast with the Thin, Rich Veins Model and the Pass 1, 2 and 3 Search Ellipsoids ..... 129

Figure 14-8 Along-the-holes Experimental Variogram and Model ..... 130

Figure 14-9 Isometric View Looking South-southeast with Block Model. 0,55 g/t Au COG Inside the pit and 2.5 g/t Au COG Under the Pit ..... 136

Figure 14-10 Isometric View Looking Southeast with the Estimated Blocks in Current Whittle Pit, Blocks by Category 136

Figure 23-1 Properties Adjacent to the Granada Gold Property (Gestim, March 3<sup>rd</sup>, 2021) ..... 146

**LIST OF TABLES**

Table 1-1 Granada Deposit Updated Mineral Resource Estimates, Effective June 23<sup>rd</sup>, 2022 ..... 14

Table 1-2 Recommended 2021 Work Program for the Granada Deposit ..... 16

Table 2-1 List of Abbreviations ..... 20

Table 4-1 Property Claim Data ..... 24

Table 9-1 Highlights of the 2014-2015 Trenching Program ..... 47

Table 9-2 List of Trenches Samples at Aukeko Site ..... 51

Table 9-3 List of the Best Trench Sample Results (Au by “AA24” Method) ..... 52

Table 9-4	Bulk Sample Assay Results for Minus 20 Mesh Fraction .....	56
Table 10-1	Drill holes Completed on the Property since Acquisition of the Property.....	59
Table 10-2	2018 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17) .....	65
Table 10-3	2019 Diamond drill holes Data (UTM coordinates, NAD 83 zone 17) .....	67
Table 10-4	2020 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17) .....	68
Table 10-5	2021 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17) .....	70
Table 12-1	List of 10 Highest Gold Values of 2021 Drilling Campaign .....	99
Table 12-2	List of 10 Highest Rubidium Values of 2021 Drilling Campaign .....	99
Table 12-3	Independent Check Sample Statistics .....	108
Table 13-1	Head Analysis Results .....	113
Table 13-2	ICP Analysis in Head Sample Results .....	114
Table 13-3	Acid Generating Test Results .....	114
Table 13-4	Gravity Cyanidation Test Results.....	115
Table 13-5	Settling Tests Results .....	115
Table 13-6	Cyanide Destruction Test Results.....	116
Table 13-7	Gravity Cyanidation Duplicate Results.....	116
Table 14-1	Statistics of the Drill Holes in the Granada Project Database (including Wedges).....	121
Table 14-2	Statistics of the Wedges in the Granada Project Database (All Retained for the Estimation) 121	
Table 14-3	Statistics of the Trenches in the Granada Project Database .....	121
Table 14-4	List of Parallel Drill Holes Excluded from Resource Estimation.....	122
Table 14-5	Statistics of the Drill Holes Retained for the MRE (including Wedges, including some Drill Holes that do not Actually touch the Mineralization).....	122
Table 14-6	Statistics of the Trenches Retained for the MRE .....	122
Table 14-7	Deposit Block Model Geometry.....	128
Table 14-8	Grade Interpolation Parameters by Vein Domain .....	130
Table 14-9	Whittle™ Pit Optimization Parameters.....	133
Table 14-10	Underground Mining Parameters .....	133
Table 14-11	Granada Deposit Updated Mineral Resource Estimate, Effective June 23 <sup>rd</sup> , 2022 .....	134
Table 14-12	In Pit part of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23 <sup>rd</sup> , 2022 (0.55 g/t Au COG) .....	135
Table 14-13	Underground part of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23 <sup>rd</sup> , 2022 (2.5 g/t Au COG) .....	135
Table 14-14	Details of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23 <sup>rd</sup> , 2022	135
Table 14-15	Comparison of 2021 and 2022 Assumptions Used for the Preparation of the Pit Shell Limiting the Mineral Resources .....	137
Table 26-1	Recommended 2021 Work Program for the Granada Deposit.....	151

## 1 SUMMARY

SGS Canada Inc. (“SGS”) was contracted by Granada Gold Mine Inc. (“Granada Gold”) to complete a Mineral Resource Estimate update for the Granada Gold Deposit (“Granada deposit”) within the Granada Gold Property (the “Property”), located approximately 5 km south of the historic mining community of Rouyn-Noranda, Quebec, Canada, to prepare an updated Mineral Resource Estimate for the gold resources and a technical report written in support of the resources. The reporting of the Mineral Resource Estimate update follows all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated Mineral Resource is consistent with current CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014).

Granada Gold is a Canadian public company involved in mineral exploration and development. Granada’s common shares are listed on the Toronto Stock Exchange Venture Exchange (“TSX-V”) under the symbol “GGM”. Their current business address is 3028 Quadra Court, Coquitlam, BC Canada, V3B 5X6.

This technical report will be used by Granada Gold in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). This technical report is written in support of an updated Mineral Resource Estimate completed for Granada Gold. Granada Gold reports that the Granada deposit contains an updated mineral resource, at a base case cut-off grade of 0.55 g/t Au for pit constrained mineral resources within a conceptual pit shell and at a base case cut-off grade of 2.5 g/t for underground mineral resources within reasonably mineable volumes, 543,000 ounces of gold (8,220,000 tonnes at an average grade of 2.05 g/t Au) in the Measured and Indicated category, and 456,000 ounces of gold (3,010,000 tonnes at an average grade of 4.71 g/t Au) in the Inferred category. The effective date of the resource estimate is June 23<sup>rd</sup>, 2022.

The updated Mineral Resource Estimate presented in this report was estimated by Yann Camus, P.Eng., (“Camus” or the “Author”) of SGS. Camus is an independent Qualified Persons as defined by NI 43-101.

Maxime Dupéré (“Dupéré”) personally inspected the Property on November 12<sup>th</sup>, 2018, accompanied by Merouane Rachidi, Ph.D., P.Geo., consultant geologist for Granada Gold. Dupéré examined several core holes, and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security. Also, Dupéré personally inspected the Property on November 24<sup>th</sup>, 2020, accompanied by Maude Marquis, CPI, for Goldminds Geoservices. Dupéré examined several core holes and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security. Furthermore, Dupéré personally inspected the Property on March 3<sup>rd</sup>, 2022, accompanied by Claude Duplessis, P. Eng., for Goldminds Geoservices. Dupéré examined several core holes and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security.

On March 14<sup>th</sup>, 2006 the Consolidated Big Valley Resources Inc. (“CBVR” or the “Company”) and Mousseau Tremblay Inc. (“MTI”) entered into a Memorandum of Understanding to lease-acquire 100% interest in the 2 mining leases located in Rouyn-Noranda, Quebec, more commonly known as the Granada Mine site. The Company and MTI entered into a formal Lease and Purchase Agreement dated July 4<sup>th</sup>, 2006 and amended August 10<sup>th</sup>, 2006, September 20<sup>th</sup>, 2006 and October 19<sup>th</sup>, 2006. General terms of the agreement are for staged cash payments totalling \$350,000; \$5,000 per month plus applicable taxes as equipment/building lease payments and \$0.50 per tonne for each tonne deposited on the Granada site as tailings until such time as the Company has exercised its right to acquire 100% interest in the property. The first payment of \$175,000 cash to MTI is due within five business days of the Company receiving approval from the TSX Venture Exchange in order to earn a 51% interest (paid). The Company can exercise its remaining 49% interest early by making the final cash payment of \$175,000 on or before October 1<sup>st</sup>, 2009. MTI will retain a 3% NSR on the value of the gold and silver recovered from all the Granada ores extracted, with the Company having a right to purchase 1.5% for \$1 million, such option to be exercised on the

anniversary of the date of commencement of commercial production from the Granada site. No common shares will be issued. This transaction received Exchange approval as a material transaction with the graduation application.

On January 29<sup>th</sup>, 2007, CBVR announced that it had received regulatory approval to change its name to “Gold Bullion Development Corp.” (“Gold Bullion” or GBDC). No consolidation of share capital took effect. Effective Wednesday January 31, 2007 the common shares CGB began trading under its new name “Gold Bullion Development Corp.” and under the new symbol “GBDC”.

On January 9<sup>th</sup>, 2017, GBDC announced that it planned to change its name to Granada Gold Mine Inc. (“Granada Gold”) to align Granada Gold’s name with its main project, the Granada Gold property.

## 1.1 Property Description, Location, Access, and Physiography

The Property is located in the province of Quebec, approximately 5 km south of the city center of Rouyn-Noranda and 1.5 km south east of the borough of Granada. The Property is centered at 48°10' N Latitude and 79°01' W Longitude in National Topographic Map (NTS) map sheets 32D/02 and 32D/03.

The Property is 100% owned by Granada Gold (formerly Gold Bullion Development Corp.) and currently comprises two mining leases (BM 813 and BM 852), twenty-four (24) CDC claims, twenty-five (25) CL claims and one CLD claim and covers a total area of 1,473.77 ha (14.73 km<sup>2</sup>).

Access to the Property is provided by the Rouyn-Granada asphalt road, which is adjacent to the Property and is 630 m west away from the existing gate. The connection to the road is gained by a gravel road. Regional snowmobile trails in winter and ATV trails in summer also exist on the Property.

The topography is characterized by low-lying lightly forested areas separated by low ridges. The Property is traversed by rare creeks which occupy swampy, shallow valleys. Relief is low, ranging from 274 m to 315 m above sea level, predominantly gentle sloping.

The Property is located within the Abitibi clay belt, the remnant of the glacial Ojibway Lake. Clusters of isolated rock outcrops are found locally. In the main active exploration area, natural overburden is thin; typically ranging from 0 to 5 m in zones of interest.

The Granada property area and vicinity has a subarctic climate, intermediary between the temperate and polar climate (Dfb: Humid Continental Climate according to the Köppen climate classification). Summers are hot and winters are more severe than in most temperate climates. The vegetation is mostly boreal and mixed in some places. The average temperature ranges between -18° C and -19° C in January to between 16° C and 17° C in July with cold and hot records such as -49.5° C in 1984 and 34.5° C in 1995.

Average annual rainfall is approximately 976 mm and snowfall 258 cm. Winters are harsh and often lead to poor flying conditions. The practical field season is from May through October. Snowfall in November, December, January and February generally exceeds 55 cm per month and the wettest summer months are August and September with average rainfalls of 100 mm per month. Lakes usually thaw in early April and freeze up in November. These are normal climatic conditions for the Abitibi region, where exploration work is usually conducted year-round.

All the required services are provided on the Property. Depending on the required volume, water supply is available from either Pelletier and/or Beauchastel Lakes. Most necessary services and manpower for a mining operation are already offered in Rouyn-Noranda and its vicinity. Rail transportation is available, and Rouyn-Noranda is serviced by an airport located 13 km from the old pit.

A 25,000-volt transmission line runs parallel to the Rouyn-Granada road and can provide up to 12,000 kW to the Property. An electrical sub-station in the range of 3,000 kW should be installed if additional power is

required in the future. A natural gas pipeline services the borough of Granada and the headwaters to the La Bruere River originate along the western margin of the Property. This being said, it is also known that additional electric power investment by Hydro-Québec for the region is required due to the booming of large-scale high-energy consuming projects and other high tonnage/ low-grade ventures at the development stage which may come to production in the coming years, depending strongly on gold price and market conditions.

The area of the Property is sufficient for an eventual mining operation with all required installations for mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant site. The RSW-Beroma's (UMCO) mobile gold mill used in 2000 has been recently dismantled and removed (2013-2014). The existing office administrative building and conference room are made of mobile trailers. A core logging facility with garage and dry with washroom exist as a separate building.

## 1.2 History

The Granada Mine was one of the three first gold mining ventures in the Abitibi Belt of Northwestern Quebec along with O'Brien in Cadillac and Siscoe mine near Val D'Or.

The former Granada mine claims were originally staked in 1922 by W.A and R.C Gamble. Gold bearing veinlets of the #1 Vein were subsequently discovered in 1923. The Granada Mine was brought into production in 1930 utilizing a vertical and an incline shaft. Five veins, named from north to the south, # 5, 1, 3, 2a, and 2 were identified at the time of the mines' commissioning.

Granada Gold Mines Ltd replaced Granada Rouyn Mining Company Ltd and deepened the first Shaft up to 200 m. Shaft #2 on the vein #2 was built in 1933. Latter was inclined and reached a vertical depth of 488 m. Lateral work stretched out 7,925 m and 11 levels. In 1934, the mill capacity was increased to 181 tonnes per day. From 1930 to 1935, Granada Gold Mines extracted 164,816 tonnes of ore at an average grade of 9.7 g/t Au and 1.5 g/t Ag. This ore came primarily from vein #2. Tailings of this ore were deposited in a tailings pond covering an area of approximately 50,000 m<sup>2</sup> and located just north of the old mill.

During the years 1989-1990, 27 surface drill-holes were performed as well as geophysical surveys throughout the property. In 1991, SEG Exploration Inc. acquired Goldsearch stakes. In 1992, KWG Resources drilled 69 holes totalling 2,973 m on the veins #1 and veins #2. During the same summer, KWG Resources and Exploration SEG performed stripping works of 4,078 m<sup>2</sup> in order to make a bulk sample.

On July 16<sup>th</sup>, 1993, MRN issued to KWG Resources Inc. and SEG Resources Inc. Mining Lease 813 which covers most of the mineral resources of the Granada mine. In July 1993, Granada Resources becomes 100% owner of the Granada property by buying Exploration SEG and KWG Resources' stakes. In May 1994, the agreement was signed giving exploitation operation to KWG Resources. Between 1992 and 1994, an overall assessment of the economic potential of Granada mine took place, along a resource estimate of the property undertaken by the firm A.C.A. Howe (1990, 1993a, 1993b and 1994).

In 1994, Granada Resources extracted a bulk sample of 87,311 tonnes grading 5.17 g/t Au from pit #1. This generated 139,856 tonnes of waste that have been piled on sterile tailings located east of the pit #1.

In 1995, Met-Chem Pellemon produced an assessment of an operating vein #2 project through two shallow open pits (26 m). The amount of ore contained in these pits is estimated at 105,000 tonnes at an average grade of 3.45 g/t Au.

In 1990, 7 holes were drilled totaling 2,156 m; 857 samples were assayed (not including blanks, standards or duplicates). In 1992, 137 holes were drilled, totaling 6,169m; 4,148 samples were assayed. In 1993, 107 holes were dug, for a total of 6963 m; 4,227 samples were assayed. In 1994, 81 holes were dug. In total, 6,659 m were drilled and 4,049 samples assayed. In 1995, 123 holes were drilled totaling 4,266 m; 3092 samples were assayed.

In 1996, Granada Resources extracted a bulk sample of 22,095 tonnes grading 3.46 g/t Au from pit #2. This also generated 4,309 tonnes of waste that have increased the size of a sterile dump to 1.2 hectares. In addition, 8,822 tonnes of ore were crushed and used in a trial separation using an optical sorting machine ("ore sorter," rented from a firm in Denver, Colorado). In principle, based on the color of crushed fragments, the unit separates fragments of quartz veins (high gold content) and fragments of rock (low gold content). The results of this trial have not been reported and the unit was returned to Denver. The crushed material resulting from this test was placed in the sterile dumps located northwest of the pit #1.

In 1997, KWG Resources Inc. sold 100% of Granada Resources Inc. (a subsidiary company of KWG Resources Inc.) to Mousseau Tremblay Inc. (MTI).

### 1.3 Geology and Mineralization

The Granada property is situated within rocks of the Temiscaming group, on the south limb of the regional east-west trending Granada synclinorium whose axial trace is located south of the Cadillac Fault. The property is underlain principally by east-west-trending, north-dipping interbedded-polymictic conglomerate, porphyry-pebble conglomerate, greywacke and siltstone mudstone of the Granada Formation.

The Cadillac Fault traverses the northern part of the property. Within the Granada mine site itself a parallel set of shears (Granada Shear Zone) occur over a zone of 500 m+ in width. The shears are characterized by intense sericite, iron carbonate plus minor chlorite alteration with disseminated pyrite and arsenopyrite and host quartz veins and stringers. The veins comprise boudinaged or en echelon quartz lenses within the sediments and more continuous veins in the syenite intrusive bodies. A series of north-easterly trending sigmoidal faults occur between the Cadillac Fault and the Granada Shear Zone due to late shearing. This late shearing also imparted the fracturing and dilatancy in the quartz veins.

The gold mineralization is hosted by east-west trending smoky grey, fractured quartz veins and stringers. Free gold occurs at vein margins or within fractures of the quartz veins or sulphides. Late north-easterly-trending sigmoidal faults also host high-grade gold mineralization. Accessory minerals include tourmaline, carbonate, chlorite, and disseminated sulphides. Pyrite is the dominant sulphide typically occurring within the immediate wall rock to the quartz veins. Minor pyrite does occur within the veins themselves. Additional sulphides such as chalcopyrite, arsenopyrite, sphalerite, and galena are present in trace amounts. Fuchsite (chromium mica) is present in the immediate wall rock to the quartz veins in some places.

The gold grade at Granada varies due to coarse free gold in the mineralized structures. Apparently discontinuous, the mineralized structures are relatively continuous; this is shown by assay grade continuity on cross section and the associated geometry of the underground workings.

The mineralized zones are being cut in blocks which are shifted in majority to the north, along the late NNE trending faults.

In a cross-sectional view near shaft #1, the east-west extent of the vein is over 250 m, supported by drill hole data and now extend downdip over 900 m + based on the 2016-2017 drilling. An important point to mention is the fact that previous operators did not extract all the gold. It is possible to see the drift projection between recent mineralized core intersections into the foot wall vein (historically they only pick up a single vein).

### 1.4 Exploration and Drilling

The Granada property has been explored throughout since 2007 by Gold Bullion Development Corp. Geological and structural studies were done by EarthMatrix Technologies Inc. in order to determine optimal exploration targets for the discovery of significant gold mineralization on the D2D3 group of properties from available data (Assessment work files from the MRNF), structural interpretations using the technology

developed by Technologies EarthMetrix Inc. by integrating all results coming from different interpretations. Maps are defined by the property limits.

A 140,000 tonne bulk sample was processed by Gold Bullion in 2007 from an open pit at the Granada Mine, of which 30,000 tonnes were processed using an on-site mill. The average gold grade from this large sample was 1.62 g/t with a 90-percent rate gold recovery. The waste from this bulk sample, along with the waste stockpile from past bulk sampling programs at the Granada mine by previous operators were also assayed and returned an average grade of 1.75 g/t Au. This confirms the presence of gold mineralization between the vein structures, which trend east-west as one large overall structure.

In early 2013, SGS discovered shallow high-grade zones using assay results from previous exploration campaigns. In May 2013, Gold Bullion contracted SGS Geostat to perform channel sampling on the Granada Gold property. The campaign focused on developing the newly discovered high-grade zones identified in drill holes. Assays from channel samples taken from the trenched areas varied from 22.42 g/t Au over 1.04 metres to 0.01 g/t Au over 0.82 metres.

In September 2014, 6 trenches were dug to the east of the pit 2A. The trenches are 100 m long by 1,8 m to 2.5 m in width and trend N195°. The space between the trenches T14-1, T14-2, T14-3, T14-4 and T14-5 is 25 m. The trench T14-6 is located 36 m east of the Pit 2A. The work was done by Technominex and supervised by Goldminds Geoservices. A total of 334 channel samples were assayed by Accurassay Lab for Au by fire assay SAA/PCI method on 30-gram samples and by gravimetric method on 50-gram samples for the samples with more than 10g/t Au. The control QA/QC has been applied by introducing a standard sample each 20 samples and with a blank at each 40 samples. The lab duplicates were made every 20 samples.

In 2015, two additional trenches were done (T15-11 and T15-12). The trenches are 80 m long, 1.8 m wide and 0.2 to 1.5 m deep. A total of 119 channel samples were taken. The cleaning and channeling started on March 2<sup>nd</sup> and ended on March 18<sup>th</sup>. Two men from Technominex as well as two men from Gold Bullion worked on the trenching, which was managed by Goldminds Geoservices. The samples were assayed at Accurassay lab in Rouyn-Noranda.

In 2016, Goldminds Geoservices Inc. was mandated to identify the drilling targets, to supervise the drilling and to analyze the results. The drill campaign started on September 20<sup>th</sup>, 2016 and the last hole was drilled on October 13<sup>th</sup>, 2016. The campaign goal was to identify a new high-grade zone and to better define the known mineralization and increase the mineral resources on the mining site.

A total of 2,142 samples, not including blanks, duplicates and standards, were analyzed at Accurassay laboratory in Rouyn-Noranda. The drilling contractor selected for the 2016 campaign was Forage Orbit Garant, headquartered in Val-d'Or.

Merouane Rachidi, P. Geo, Ph. D., and Isabelle Hébert, Jr. Eng. were on-site during the campaign to supervise the drilling, to log and to supervise the sampling with site visits of Claude Duplessis Sr. Eng. and QP of the project.

In 2017, another campaign was conducted by Goldminds Geoservices in continuation to the 2016 campaign. Four new drill holes, totaling 2633 m were done. Hole GR-17-04 was drilled in order to validate historic drill hole data and was drilled on top of a sterile pile. Isabelle Hébert, Jr. Eng. was on-site during the campaign to supervise the drilling, to log and to supervise the sampling under guidance of Claude Duplessis Sr. Eng. of the project.

A granitic intrusion has been identified based on historical information to the north-west of the property and may have act as the heat sources for the mineralized fluid circulation and could be the genesis of a portion of the gold at Granada.

Previous to the recent drilling Granada Gold has carried out three phases of exploration starting in 2009, another in 2010, the third in 2011. All exploration work, especially drilling, was completed under supervision and management of the Company's previous consultant. The drilling was done by diamond-drill using NQ core size.

- Phase 1: The Company drilled 25 shallow holes from December 2009 to January 2010 at the Granada Gold Property. A total of 2,817 metres was drilled.
- Phase 2: The Company launched a 20,000 metres drill program at the Granada Gold Project in early May 2010, which was extended by 5,000 metres in September due to encouraging early results.
- Phase 3: Gold Bullion completed nearly 11,000 metres of drilling at its Granada Gold Property to the end of 2011, with intersecting new mineralized structures throughout the LONG Bars Zone (main Granada mineralized structure package). From that drilling mineralization remains open in all directions at Granada.

The deep and shallow drilling programs were initiated in 2012 under Claude Duplessis Sr. Eng. recommendation to test structures and gold mineralization presence on the north and west extension of the Granada property. The spring 2012 drilling program was intended to enlarge the gold mineralization envelope of the expanded LONG Bars zone resource to the north at depth and near surface to the west. A total of 8,339.25 metres in 23 holes was drilled on the Granada property in 2012.

In 2018, trenching works were completed on the Aukeko zone, a former gold mine, which is part of the east-west trending structure on the Granada Gold Mine property. It is 2 km east from the extended LONG Bars zone. From June until August 2018, three trenches were completed at Aukeko for a total of 365 m in length and with an average width of 1.5 m (trench 1 of 90 m in length, trench 2 of 190 m in length and trench 3 of 85 m). Details of the trenching and results at Aukeko zone is presented in section 9.4 because it is part of the Granada property. However, the Aukeko results were not used to support the MRE.

In August 2018, a drone-borne magnetic survey was first performed by Zen Geomap Inc. on Granada property. In addition, a survey was conducted in January 2019, adding data east for the previous survey of 2018. Using the Geometrics MFAM magnetometer drone, the LONG Bars zone was covered, totaling 140 km at a spacing of 50 and locally, 25 m. The drone magnetic survey shows several anomalies that follow the E-W trends and a new target at the north-west part of the property. Those targets are partially intersected during the 2018 drilling program that will increase the mineral resources of the Granada property.

In 2019, a bulk sample aiming for 150 tons has been undertaken using the thermal fragmentation technology of Nippon Dragon Inc. (Nippon) on the main mineralized quartz vein located around the holes GR-19-A, GR-19-B and GR-19-C. The bulk sampling was halted due to mixed recovery results. There are no results from this bulk sampling.

In August and September 2020, three blasts for bulk sampling of high-grade Vein No. 1 were completed: 908 tonnes, 353 tonnes of access ramp and 780 tonnes of mineralized material have been blasted. A composite sample was then processed at Temiskaming Testing Labs in Cobalt, Ontario. Conventional gravity concentration was used and therefore only native gold was recovered and quantified. The gold-bearing sulfides were not recovered. A 500 tonnes bulk sample of crushed ore is stored and pending processing at a commercial lab.

In September 2018, Granada Gold started a diamond drilling campaign. Four (4) NQ diamond drill holes were collared (GR-18-01, GR-18-03, GR-18-04 and GR 18-05) totaling 2,889 m. Samples taken from diamond drill holes (930 samples, not including blanks, duplicates and standards) were assayed at ALS laboratory in Rouyn-Noranda (Québec).

In 2019, Granada Gold completed two diamond drilling campaigns. From August 19<sup>th</sup> up to the 26<sup>th</sup>, 2019, a total of 6 NQ diamond holes (450 m) were drilled (GR-19-A, GR-19-B, GR-19-C, GR-19-D, GR-19-E, and

GR-19-F). A total of 476 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 21 blanks and 21 standards. From November 19<sup>th</sup> up to the 30<sup>th</sup>, 2019, a total of 7 NQ diamond holes (450 m) were drilled (GR-19-EA, GR-19-EB, GR-19-G, GR-19-SA, GR-19-SB, GR-19-WA and GR-19-WB). A total of 490 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 18 blanks and 13 standards.

In 2020, Granada Gold completed two diamond drilling campaigns. A total of 48 NQ diamond holes (9,583.18 m) were drilled (including 1 wedge) (GR-20-01 to GR-20-21, GR-20-21W3, and GR-101 to GR-126). A total of 3,358 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 174 blanks and 173 standards. Also, another drill holes and a wedge were drilled in 2020 (GR-20-22, and GR-20-21W4) but did not have assay results at the effective date. Note that GR-20-21W1 and GR-20-21W2 are 2 wedges attempts that failed in reaching the targets.

For the long-hole campaign, a total of 22 diamond drill holes (GR-20-01 to GR-20-21) including one wedge (GR-20-21W3), which represents 7,783.41 m of core, were drilled.

For the short-hole campaign, a total of 26 shorts diamond drill holes (100-series), (GR-101 to GR-126) were drilled with lengths varying from 25.7 to 141 m from the surface, which represents 1,799.77 m of core, including 17 verticals and 9 with an angle from 45° to 60°.

The 100-series holes were drilled to intersect the Vein 1 extension uncovered by stripping and to follow the high-grade corridor. Holes GR-20-101 to GR-20-105 are vertical holes drilled to intersect the mineralized vein structure. Holes GR-20-111 to GR-20-113 are drilled within the vein structure. Holes GR-20-114 to GR-20-117 are vertical holes drilled to intersect the mineralized vein structures. Typical true thickness of the number 1 vein is 1.5 to 6 m. The halo effect around vein 1 has been measured up to 20 m true thickness with numerous mineralized veinlets hosting native gold. It has been estimated, based on metallurgical testing, that close to 50 percent of the gold is in native form and will be recovered from these veinlets.

In 2021, Granada Gold completed a 18,757 m drill program. Granada Gold planned to do much of the drilling during the first phase in, around and below the existing pit aiming to significantly increase the gold mineral resources in line with their target grades, and also to confirm gold mineralization with step-out drilling to the north of the pit.

## 1.5 Mineral Processing, Metallurgical Testing and Recovery Methods

Metallurgical testing done at SGS Lakefield and at the URSTM of Rouyn-Noranda on the Granada ore suggests that 95% gold recovery is easily attainable by gravity separation followed by cyanidation of the gravity tailings. Additional testing with flotation has been done at COREM to assess recovery and also test of neutralization with addition of calcite to potentially bring the ore to non-acid generating and non-metal leachable. Moreover, preconcentration tests have been done at Gekko to enable gold recovery from low grade material.

The property is also tested for Rubidium at the moment. Canada Silver Cobalt Works and Granada Gold Mine announced that the stage I bench-scale testing had been completed at SGS Lakefield using the Re-2Ox process for the recovery of performance-enhancing battery metal Rubidium from Granada Gold Mine's drill core. They announced a positive bench-scale leach test results achieving 99 percent extraction of the contained rubidium from drill core sourced from the rubidium mineralization at the Granada Gold deposit.

In 2021 and 2022, metallurgical tests were carried out at SGS Lakefield on 50 samples from the Granada deposit. The test program included chemical characterization, comminution, environmental testwork, and metallurgical testing. The main objective of the test program was to obtain baseline grindability and gold, silver and sulfur recovery data for a gravity separation / gravity tailing cyanidation and gravity flotation flowsheet.

## 1.6 Gold Mineral Resource Estimate

Completion of the current updated Mineral Resource Estimate involved the assessment of a drill hole database, which included all data for drilling completed through June 23rd, 2022, an updated three-dimensional (3D) grade-controlled wireframe model, revised pit optimization parameters which are based on the possibility of on-site milling rather than of site custom milling, evaluation of the underground resource potential, review of the classification of the mineral resource estimate (Measured, Indicated and Inferred) and review of available written reports.

Kriging restricted to a grade-controlled wireframe model was used to interpolate gold grades (g/t Au) into a block model. Measured, indicated, and inferred mineral resources are reported in detail in the tables in Section 14.12. The base case summary is presented in Table 1-1. The Mineral Resource Estimate (MRE) takes into consideration that the current deposit will be mined partly by open pit mining and partly by underground mining methods.

**Table 1-1 Granada Deposit Updated Mineral Resource Estimates, Effective June 23<sup>rd</sup>, 2022**

Cut-Off (g/t Au)	Classification	Type	Tonnes	Au (g/t)	Gold Ounces
0.55 / 2.5	Measured <sup>1</sup>	InPit+UG	4,900,000	1.70	269,000
	Indicated	InPit+UG	3,320,000	2.57	274,000
	<b>Measured &amp; Indicated</b>	<b>InPit+UG</b>	<b>8,220,000</b>	<b>2.05</b>	<b>543,000</b>
	Inferred	InPit+UG	3,010,000	4.71	456,000

- (1) The 1930-1935 production was removed from these numbers (164,816 tonnes at 9.7 g/t Au / 51,400 ounces Au).
- (2) The Independent QP for this resources statement is Yann Camus, P.Eng., SGS Canada Inc.
- (3) The effective date is June 23<sup>rd</sup>, 2022.
- (4) CIM (2014) definitions were followed for Mineral Resources.
- (5) Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to a Measured and 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.
- (6) No economic evaluation of the resources has been produced.
- (7) All figures are rounded to reflect the relative accuracy of the estimate. Totals may not add due to rounding.
- (8) Composites have been capped where appropriate. The 2.5 m composites were capped at 21 g/t Au in the thin rich veins and at 7 g/t Au in the low-grade volumes.
- (9) Cut-off grades are based on a gold price of US\$1,700 per ounce, a foreign exchange rate of US\$0.78 for CA\$, a processing gold recovery of 93%.
- (10) Pit constrained mineral resources are reported at a cut-off grade of 0.55 g/t Au within a conceptual pit shell.
- (11) Underground mineral resources are reported at a cut-off grade of 2.5 g/t Au within reasonably mineable volumes.
- (12) A fixed specific gravity value of 2.78 g/cm<sup>3</sup> was used to estimate the tonnage from block model volumes.
- (13) There are no mineral reserves on the Property.
- (14) The deepest resources reported are at a depth of 990 m.
- (15) SGS is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the mineral resource estimate.
- (16) The results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are

*no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.*

In order to determine the quantities of material offering “reasonable prospects for eventual economic extraction” by an open pit, Whittle™ pit optimization software and reasonable mining assumptions and metal recovery assumptions were used. The pit optimization was completed by SGS. The pit optimization parameters used are summarized in Table 14-9. Based on SGS’s experience with open pit exploration projects and mining operations, the Authors consider the assumptions listed in Table 14-9 to be appropriate reporting assumptions for the purposes of the current report.

A Whittle pit shell at a revenue factor of 1.0 was selected as the ultimate pit shell for the purposes of the current Mineral Resource Estimate. The corresponding stripping (waste/ore) ratio is 7.5:1.

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

All geological data has been reviewed and verified by SGS as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. SGS considers that the assay sampling and extensive QA/QC sampling of core by Granada Gold provides adequate and good verification of the data and Camus and Dupéré believe is of sufficient quality to be used for the current resource estimate.

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. The Authors are not aware of any known mining, processing, metallurgical, environmental, infrastructure, economic, permitting, legal, title, taxation, socio-political, or marketing issues, or any other relevant factors not reported in this technical report, that could materially affect the Mineral Resource Estimate Update.

## 1.7 Recommendations

The Authors consider that the Granada deposit contains a significant open pit and underground Mineral Resource that is associated with a well-defined gold mineralized trend and model. The current Mineral Resource Estimate Update has shown that the Deposit can likely be mined by conventional open pit and underground mining methods with a scenario of an on-site mill rather than off-site custom milling. Deeper drilling recently completed also demonstrates that the Property has more underground potential.

The Authors consider the Property to have significant potential for delineation of additional Mineral Resources and that further exploration is warranted. Granada Gold's intentions are to continue to drill the Deposit in 2022 and plan to direct their exploration efforts towards resource growth, with a focus on extending the limits of known mineralization along strike and at depth, as well as infill drill the existing deposit in order to convert portions of Inferred mineral resources into Indicated or Measured.

Given the prospective nature of the Property, it is the Authors' opinion that the Property merits further exploration and that a proposed plan for further work is justified. A proposed work program by SGS will help advance the Deposit towards a pre-development stage and will provide key inputs required to evaluate the economic viability of a mining project (open pit and underground) at a pre-feasibility study (PFS) level.

If the PFS is positive, GGM might want to take the opportunity of current gold price and install a mill on site.

SGS recommends GGM conducts further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered. For 2022, a total of 30,000 m of drilling is proposed to continue expanding mineral resources and upgrading existing Inferred resources as well as exploring the deposit. This 30,000 m of drilling is part of the current planned 90,000 m drilling plan set by GGM.

SGS recommends that GGM continues with the bulk sample project that is currently scheduled for 2022.

A survey of the available witness core should be organised for rubidium. A budget for rubidium assays should be accounted for. The goal is to confirm the potential for this strategic alkali metal.

The total cost of the recommended work program is estimated at C\$9,000,000 (Table 26-1).

**Table 1-2 Recommended 2021 Work Program for the Granada Deposit**

Item	Cost in CAD\$
Resource Expansion Drilling and Resource Classification improvement (Open Pit; <500 m depth) 5,000 m	\$750,000
Resource Identification Drilling (Underground; > 500 m depth) 25,000 m	\$6,000,000
Assays/Geochemistry	\$700,000
Bulk sample continuation as planned for 2022	\$300,000
Rubidium survey of existing core and rubidium assays	\$125,000
Additional Metallurgical Testing	\$250,000
Continued geotechnical studies for improved pit optimization parameters	\$150,000
Environmental Baseline Studies	\$150,000
Updated Resource Estimate	\$75,000
Pre-feasibility Study and Related Studies	\$500,000
<b>Total:</b>	<b>\$9,000,000</b>

## 2 INTRODUCTION

SGS Canada Inc. (“SGS”) was contracted by Granada Gold Mine Inc. (“Granada Gold”) to complete a Mineral Resource Estimate update for the Granada Gold Deposit (“Granada deposit”) within the Granada Gold Property (the “Property”), located approximately 5 km south of the historic mining community of Rouyn-Noranda, Quebec, Canada, and to prepare a technical report written in support of the Mineral Resource Estimate update. The purpose was to use the recent drilling information and use narrow, rich, vein modelling and both open pit and underground resources and revised pit optimization parameters which are based on the possibility of constructing and using an on-site mill rather than off-site custom milling of the ore. The reporting of the Mineral Resource Estimate complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated Mineral Resource is consistent with current CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014).

Granada Gold is a Canadian public company involved in mineral exploration and development. Granada’s common shares are listed on the Toronto Stock Exchange Venture Exchange (“TSX-V”) under the symbol “GGM”. Their current business address is 3028 Quadra Court, Coquitlam, BC Canada, V3B 5X6.

The updated Mineral Resource Estimate presented in this report was estimated by Yann Camus, P.Eng., (“Camus” or the “Author”). The current report is authored by Camus and Maxime Dupéré, B.Sc., géo. (“Dupéré”), both of SGS. Camus and Dupéré are independent Qualified Persons as defined by NI 43-101.

### 2.1 Terms of References

The present report is being prepared according to National Instrument 43-101 guidelines for mineral deposit disclosure and describes historic works, mineralization types and mineral potential of the project. Recommendations are presented for further exploration works.

This technical report will be used by Granada Gold in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). This technical report is written in support of an updated Mineral Resource Estimate completed for Granada Gold.

Granada Gold may use this Technical Report to satisfy disclosure and filing requirements of Canadian securities regulators. The effective date of the Technical Report is of June 23<sup>rd</sup>, 2022.

### 2.2 Sources of Information

The data used in the estimation of the current resource estimate and the development of this report was provided to SGS by Granada Gold. Some information including the property history and regional and property geology has been sourced from previous technical reports and revised or updated as required. Technical reports include:

- NI 43-101 Technical Report, Granada Gold Project Resource Estimate Update, Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mines Inc., March 15<sup>th</sup>, 2021. SGS Canada Inc.: Yann Camus and Maxime Dupéré, 2021.
- NI 43-101 Technical Report, Granada Gold Project Resource Estimate, Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mines Inc., February 13<sup>th</sup>, 2019. SGS Canada Inc.: Allan Armitage and Maxime Dupéré, 2019.

- NI 43-101 Technical Report Prefeasability Study (PFS) Phase 1 – Open Pit Granada Gold Project Rouyn Noranda, Québec, and Report prepared for Gold Bullion Development Corp., June 19<sup>th</sup>, 2014. SGS Canada – Goldminds Geoservices - Roche: Claude Duplessis, Gilbert Rousseau, Jonathan Gagné, and Martin Stapinsky, 2014.
- NI 43-101 Technical Report, Preliminary Economic Assessment (PEA) Granada Gold Project, Rouyn-Noranda, Québec, and Report prepared for Gold Bullion Development Corp., February 4<sup>th</sup>, 2013. SGS Canada Inc.: Claude Duplessis, Gilbert Rousseau, Gaston Gagnon, and Jonathan Gagné, 2013.
- NI 43-101 Technical Report, Granada Gold Project Resource Estimate, Rouyn-Noranda, Québec, and Report prepared for Gold Bullion Development Corp., April 2<sup>nd</sup>, 2012. SGS Canada Inc.: Claude Duplessis, Gilbert Rousseau, Karina Sarabia, and Jonathan Gagné, 2012.
- NI 43-101 Technical Report for the Granada Mine Property, Rouyn Township, Quebec, and Report prepared for Consolidated Big Valley Resources Inc., October 2006. Robinson, D., 2006.

In addition, the Authors have reviewed company news releases and Management's Discussions and Analysis ("MD&A") which are posted on SEDAR ([www.sedar.com](http://www.sedar.com)).

SEDAR, "The System for Electronic Document Analysis and Retrieval", is a filing system developed for the Canadian Securities Administrators to:

- facilitate the electronic filing of securities information as required by Canadian Securities Administrator;
- allow for the public dissemination of Canadian securities information collected in the securities filing process; and
- provide electronic communication between electronic filers, agents and the Canadian Securities Administrator

The Authors have carefully reviewed all of the Property information and assume that all of the information and technical documents reviewed and listed in the "References" are accurate and complete in all material aspects. Information regarding the property history, regional property geology, deposit type and metallurgical test work (Sections 5-13) have been sourced from the previous technical reports and company filings on SEDAR and revised or updated as required.

## 2.3 Site Visit

Dupéré visited the site on March 3<sup>rd</sup>, 2022. A review of the latest 2021 drilling including wedges was shown and explained on site at the Granada site office. A list of mineralized intervals was reviewed onsite for the 10 highest gold and rubidium values of the recent 2021 drilling. The amount of snow did not permit the location of the 2022 drill collars however, the fact that they were surveyed, the presence of assay certificates and the sampling and logging procedures described by Granada Gold and consultants are satisfactory for the client in terms of quality and relevance.

Gold bearing intervals of the 2021 drilling campaign were looked at in the core shack. The author was able to verify the presence of gold mineralisation and visible gold as well. The anomalous rubidium value samples meterage was also observed. The author lacks the understanding of where exactly the rubidium

is, i.e., mineralisation and rubidium-bearing minerals. Granada has done metallurgical tests on rubidium bearing material during 2021. Results are explained in section 13 of this report.

A 500-tonne bulk sample was taken near the area where GR-19-W drill holes were drilled. The bulk material is stored in a shelter. Results from the bulk sample are not available at the time of the writing of this report.

Rubidium intervals were seen at the core shack for GR-20-20 (around 355,8 m). Some alteration was seen. Further details from Granada will determine what type of rock and alteration is present. Some purple mineral and staining are present in cm intervals which triggered our curiosity.

Dupéré visited the site on November 24<sup>th</sup>, 2020. During site visit, Dupéré verified the presence of the 2020 clearing of the Vein1. Several drilling sites done in 2020 were verified in the field. Mineralised and interesting core intervals were also looked at. Drilling was still ongoing during site visit. No major issues were detected.

Maxime Dupéré (“Dupéré”) personally inspected the Property on November 12<sup>th</sup>, 2018, accompanied by Merouane Rachidi, Ph.D., P.Geol., consultant geologist for Granada Gold. Dupéré examined several core holes, and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security.

During the 2018 site visit, a total of 50 individual mineralized core duplicates were collected by Dupéré from drill holes GR-09-02, GR-11-271, GR-11-302, GR-11-302, GR-11-311, GR-12-411 and GR-16-03 for verification purposes and submitted for gold analysis at the SGS Minerals Laboratory in Lakefield, Ontario.

Based upon the evaluation of the QA/QC program undertaken by Granada Gold and the due diligence sampling by SGS, it is the Authors’ opinion that its independent check assay confirms the presence of gold mineralization on the Property and that the results are acceptable for use in the current Mineral Resource Estimate.

## 2.4 Currency, Units, Abbreviations and Definitions

Units of measurement used in this report conform to the SI (metric) system. All currency in this report is US dollars (US\$) unless otherwise noted. The coordinate system used in this report is NAD83 / UTM Zone 17, Northern Hemisphere.

**Table 2-1 List of Abbreviations**

%	Percent sign
°	Degree
°C	Degree Celsius
°F	Degree Fahrenheit
Au	Gold (chemical element)
cm	Centimeters
FA	Fire Assay
g	Grams
Ga	Billion years
CBVR	Consolidated Big Valley Resources
COG	Cut-off Grade
GBDC	Gold Bullion Development Corp.
GMG	Goldminds Geoservices Inc.
g/t	Gram per metric tonne
ha	Hectares
ICP-MS	Inductively coupled plasma mass spectrometry
ICP-OES	Inductively coupled plasma optical emission spectrometry
kg	Kilograms
km	Kilometers
µm	Micrometers
m	Meters
Ma	Million years
Moz	Million ounces
Mt	Mega tonne
MRE	Mineral Resource Estimation
mm	Millimeters
N, S, E, W	North, South, East, West
NE, NNE, ENE	Northeast, North-Northeast, East-Northeast
NAD	North America Datum
NQ	Drill core size (47.6 mm in diameter)
NTS	National Topographic System
Oz	Troy ounce
Oz/ton	Troy ounce per short ton
ppb	Parts per billion
ppm	Parts per million
Rb	Rubidium (chemical element)
SG	Specific Gravity
SGS	SGS Canada Inc. Geological Services
SGS Lakefield	SGS Minerals Services Lakefield Facility
SM	Screen Metallic
tonne or t	Metric tonne
t/m <sup>3</sup>	Tonne per cubic meter
UTM	Universal Transverse Mercator

### **3 Reliance on Other Experts**

Information concerning claim status and ownership which are presented in Section 4 below have been found by SGS on the government “Gestim” web site and looked at by GGM. The Authors only reviewed the land tenure in a preliminary fashion and have not independently verified the legal status or ownership of the property or any underlying agreements. However, the Authors have no reason to doubt that the title situation is other than what is presented in this technical report. The Authors are not qualified to express any legal opinion with respect to Property titles or current ownership.

#### 4 PROPERTY DESCRIPTION AND LOCATION

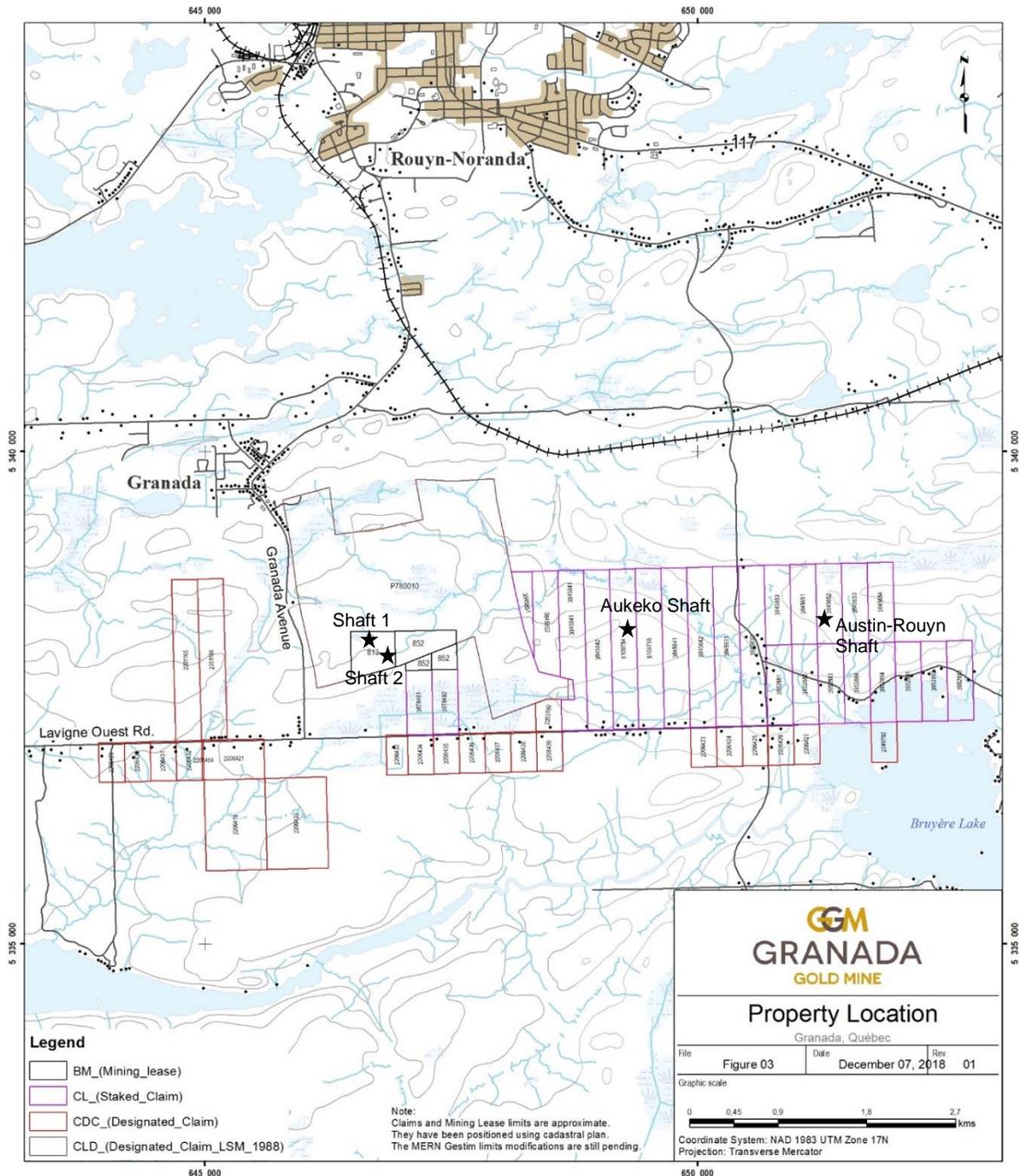
The Property is located in the province of Quebec, approximately 5 km south of the city center of Rouyn-Noranda (Figure 4-1) and 1.5 km southeast of the borough of Granada. The Property is centered at 48°10' N Latitude and 79°01' W Longitude in National Topographic Map (NTS) map sheets 32D/02 and 32D/03.



Figure 4-1 Property Location Map

### 4.1 Property Description, Ownership and Royalty

The Property is 100% owned by Granada Gold (formerly Gold Bullion Development Corp.) and currently comprises two mining leases (BM 813 and BM 852), twenty-four (24) CDC claims, twenty-five (25) CL claims and one CLD claim and covers a total area of 1,473.77 ha (14.73 km<sup>2</sup>) (Table 4-1). There are 4 old shafts on the property: Granada Shaft 1 and 2, Aukeko Shaft (also known as the Northern Quebec / Pantan) and Austin-Rouyn Shaft. The property and old shafts' locations are shown on the Figure 4-2.



**Figure 4-2: Property Land Tenure Map**

**Table 4-1 Property Claim Data**

NTS Sheet	Title No	Status	Type	Date of Registration	Expiry Date	Area (Ha)	Work Required	Fees Required	Holder, Percent
SNRC 32D03	813	Active	BM	20/09/1993	19/09/2023	21.12			Granada, 100%
SNRC 32D03	852	Active	BM	28/02/2000	27/02/2030	22.47			Granada, 100%
SNRC 32D03	2201165	Active	CDC	18/01/2010	17/01/2025	42.8	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D03	2201166	Active	CDC	18/01/2010	17/01/2025	42.78	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D03	2203160	Active	CDC	26/01/2010	25/01/2025	8.22	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206419	Active	CDC	22/02/2010	21/02/2025	57.43	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D03	2206420	Active	CDC	22/02/2010	21/02/2025	57.43	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D03	2206421	Active	CDC	22/02/2010	21/02/2025	24.94	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2206423	Active	CDC	22/02/2010	21/02/2025	10.62	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2206424	Active	CDC	22/02/2010	21/02/2025	10.62	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2206425	Active	CDC	22/02/2010	21/02/2025	10.64	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2206426	Active	CDC	22/02/2010	21/02/2025	10.64	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2206427	Active	CDC	22/02/2010	21/02/2025	10.64	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206429	Active	CDC	22/02/2010	21/02/2025	10.47	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206430	Active	CDC	22/02/2010	21/02/2025	10.48	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206431	Active	CDC	22/02/2010	21/02/2025	10.49	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206432	Active	CDC	22/02/2010	21/02/2025	10.5	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206433	Active	CDC	22/02/2010	21/02/2025	8.76	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206434	Active	CDC	22/02/2010	21/02/2025	10.57	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206435	Active	CDC	22/02/2010	21/02/2025	10.57	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206436	Active	CDC	22/02/2010	21/02/2025	10.57	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206437	Active	CDC	22/02/2010	21/02/2025	10.59	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206438	Active	CDC	22/02/2010	21/02/2025	10.6	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206439	Active	CDC	22/02/2010	21/02/2025	10.59	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	2206464	Active	CDC	22/02/2010	21/02/2025	0.57	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	2249792	Active	CDC	14/09/2010	13/09/2023	10.63	\$750.00	\$35.25	Granada, 100%
SNRC 32D03	P780010	Active	CLD	13/10/1972	24/03/2024	355.03	\$3,600.00	\$104.00	Granada, 100%
SNRC 32D02	3845631	Active	CL	07/11/1979	20/10/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845632	Active	CL	07/11/1979	20/10/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845641	Active	CL	07/11/1979	19/10/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845642	Active	CL	07/11/1979	19/10/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845651	Active	CL	07/11/1979	20/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3845652	Active	CL	07/11/1979	20/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3845653	Active	CL	07/11/1979	20/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3845654	Active	CL	07/11/1979	20/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02,32D03	3845841	Active	CL	07/11/1979	19/10/2024	39	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845842	Active	CL	07/11/1979	19/10/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D03	3845851	Active	CL	07/11/1979	19/10/2024	16	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	3845852	Active	CL	07/11/1979	19/10/2024	28	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	3845853	Active	CL	07/11/1979	19/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	3878491	Active	CL	11/02/1980	20/01/2025	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D03	3878492	Active	CL	11/02/1980	20/01/2025	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952881	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952882	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952883	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%

NTS Sheet	Title No	Status	Type	Date of Registration	Expiry Date	Area (Ha)	Work Required	Fees Required	Holder, Percent
SNRC 32D02	3952884	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952891	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952892	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952893	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	3952894	Active	CL	03/11/1980	15/10/2024	20	\$1,000.00	\$35.25	Granada, 100%
SNRC 32D02	5109754	Active	CL	21/08/1993	20/08/2024	40	\$2,500.00	\$68.75	Granada, 100%
SNRC 32D02	5109755	Active	CL	21/08/1993	20/08/2024	40	\$2,500.00	\$68.75	Granada, 100%
					<b>Total:</b>	<b>1,473.77</b>			

Modified after GESTIM (*Gestion des titres miniers – Gouvernement du Québec*) July 19<sup>th</sup>, 2022.

#### 4.1.1 Ownership History

On March 14<sup>th</sup>, 2006 the Consolidated Big Valley Resources Inc. (“CBVR” or the “Company”) and Mousseau Tremblay Inc. (“MTI”) entered into a Memorandum of Understanding to lease-acquire 100% interest in the 2 mining leases located in Rouyn-Noranda, Quebec, more commonly known as the Granada Mine site. The Company and MTI entered into a formal Lease and Purchase Agreement dated July 4<sup>th</sup>, 2006 and amended August 10<sup>th</sup>, 2006, September 20<sup>th</sup>, 2006 and October 19<sup>th</sup>, 2006. General terms of the agreement are for staged cash payments totalling \$350,000; \$5,000 per month plus applicable taxes as equipment/building lease payments and \$0.50 per tonne for each tonne deposited on the Granada site as tailings until such time as the Company has exercised its right to acquire 100% interest in the property. The first payment of \$175,000 cash to MTI is due within five business days of the Company receiving approval from the TSX Venture Exchange in order to earn a 51% interest (paid). The Company can exercise its remaining 49% interest early by making the final cash payment of \$175,000 on or before October 1<sup>st</sup>, 2009. MTI will retain a 3% NSR on the value of the gold and silver recovered from all the Granada ores extracted, with the Company having a right to purchase 1.5% for \$1 million, such option to be exercised on the anniversary of the date of commencement of commercial production from the Granada site. No common shares will be issued. This transaction received Exchange approval as a material transaction with the graduation application.

A NI 43-101 Technical Report was filed with the Exchange and filed on SEDAR and information on the merits and planned exploration and development of the property were detailed and news released on November 13<sup>th</sup>, 2006.

On January 29<sup>th</sup>, 2007, CBVR announced that it had received regulatory approval to change its name to “Gold Bullion Development Corp.” (“Gold Bullion”). No consolidation of share capital took effect. Effective Wednesday January 31<sup>st</sup>, 2007 the common shares CGB began trading under its new name “Gold Bullion Development Corp.” and under the new symbol “GBDC”.

On January 9<sup>th</sup>, 2017, GBDC announced that it planned to change its name to Granada Gold Mine Inc. (“Granada Gold”) to align Granada Gold’s name with its main project, the Granada Gold property.

## 4.2 Underlying Agreements

### **The Mousseau Tremblay Inc. Agreement/Royalty.**

This agreement applies on Mining Leases BM 813 & BM 852 (the property under agreement) and states that all ores mined from the Granada Mine has a 3% NSR on gross value (on gold & silver) payable to Mousseau Tremblay Inc.

### **Timiskaming First Nation**

Granada Gold Mine entered discussions with Timiskaming First Nation back in August 2014 at which time both parties signed an agreement to essentially have open doors of communication based on respect called the Communication Protocol. Over time, the relationship evolved to more of an agreement structure wherein, in January 2015, a formal Memorandum of Understanding was signed. Granada Gold Mine recognizes the Aboriginal Rights of the First Nation in concert with understanding the company's interests to conduct exploration. Granada Gold Mine continues to seek the engagement of the First Nation and provides regular updates as requested with a desire to advance the project into Advanced Exploration.

The reader must be aware that the Supreme Court of Canada, in its judgement of June 26, 2016, in the file of the specific B.C. Tsilhqot'in Nation regarding First Nation rights and territorial claims, has set a standard of having agreement(s) with the immediate First Nation in any resource development on Canadian territory for the Project to proceed.

The Authors are not aware of any other underlying agreements relevant to the Project.

### **4.3 Permits and Environmental Liabilities**

On the 26<sup>th</sup> of May 2016, Granada Gold released a statement confirming that the MDDELCC certificate of authorization had been obtained for mining approximately 75,000 ounces of gold. This certificate authorizes GGM to mine 550 tonnes per day for a total of 590,000 tonnes and have it process outside of site.

A reclamation deposit has been paid to the MERN on the property which has to be increased to the required value before the rolling start to fully take place.

A portion of the property is covered by tailings due to previous production. The tailings currently located on the mine site are considered an orphan site and therefore belong to the MERN. Granada Gold is in communication with the MERN and the MDDELCC to try to find a solution to this environmental liability.

SGS is unaware of any other significant factors and risks that may affect access, title, or the right, or ability to perform the exploration work recommended for the Property.

A Certificate of Authorization was given on May 29<sup>th</sup>, 2003 to Mr. Mousseau Tremblay for the recovery of waste rock on the Granada site. Authorization was issued for the remediation of approximately 300,000 metric tonnes of waste rock stored on the Granada property as Category I material, as defined by the Guide for the remediation of non-hazardous residual materials from industrial sources as construction material (Guide de valorisation des matières résiduelles non dangereuses de source industrielle comme matériau de construction).

Also, the waste rock can be used as a category III material, as defined by the Guide, if it does not meet the granulometric size requirement specific to category I.

Currently, Galarneau Entrepreneur Général Inc. has a certificate of authorization that allows it to crush and screen aggregate for 70,000 tonnes on the Granada property. This agreement is valid and in operation. Granada Gold Mine does not have a copy of the certificate. This is in the name of the Galarneau company.

Gold Bullion Corp. (now Granada Gold Mine Inc.) announced on July 14<sup>th</sup>, 2014 that it had signed a custom machining agreement with lamgold at the Westwood plant. Associated mining activities at the site included open pit ore mining at a rate of 550 tonnes per day. At the site, the facilities included pits, an overburden dump, two waste rock piles, a temporary ore storage area, a network of roads, a mining wastewater basin, and various new infrastructure and buildings. lamgold withdrew from the deal. The operation and start-up of this operation did not take place.

Granada Gold received the approval of the restoration plan for the Granada site on November 26<sup>th</sup>, 2020 from the MERN.

#### 4.4 Mining Rights in Quebec

As defined by the Ministère de l'Énergie et des Ressources naturelles (MERN) website ([www.mrn.gouv.qc.ca](http://www.mrn.gouv.qc.ca)) a claim is the only valid exploration right in Quebec. The claim gives the holder an exclusive right to search for mineral substances in the public domain, except within sand, gravel, clay and other loose deposits on the land subjected to the claim.

A claim can be obtained by map designation, henceforth the principal method for acquiring a claim, or by staking on lands that have been designated for this purpose. The accepted means to submit a notice of map designation for a claim is through GESTIM Plus ([www.gestim.mines.gouv.qc.ca](http://www.gestim.mines.gouv.qc.ca)).

The term of a claim is two years from the day the claim is registered, and it can be renewed indefinitely providing the holder meets all the conditions set out in the Mining Act, including the obligation to invest a minimum amount required in exploration work determined by the regulation. The Act includes provisions to allow any amount disbursed to perform work in excess of the prescribed requirements to be applied to the subsequent terms of the claim.

Any claim holder to specific mineral substances as described under Section 5 of the Mining Act can obtain a mining lease. The application must demonstrate that the deposit is mineable to a standard acceptable to the Province (feasibility or similar). The surface area of a mining lease must not exceed 100 hectares unless the circumstances warrant an exception deemed acceptable by the MERN. A written application must be submitted that includes a report certified by a geologist or engineer describing the nature and extent of the deposit and its likely value. Mining leases have a duration of 20 years and are renewable by 10-year periods.

Mining Lease BM 852 which is 24.8 hectares, was renewed in 2021 for another 10 years till 2030. The renewal keeps the current 26 permits in good standing for mining and shipping to a custom mill and allows the taking of bulk samples of up to 500 tonnes. The extension required the closure plan to be revised and triggered an increase in financial assurances which was completed and paid. Another revised closure plan with revised bond will be necessary once Granada property goes into production. (PR, June 16, 2021)

## **5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1 Accessibility**

Access to the Property is provided by the Rouyn-Granada asphalt road, which is adjacent to the Property and is 630 m west away from the existing gate. The connection to the road is gained by a gravel road. Regional snowmobile trails in winter and ATV trails in summer also exist on the Property.

The Granada Gold Property is easily accessible and surrounded by all the necessary infrastructure to support a possible large open-pit, bulk tonnage gold deposit. The property is five km south of the city centre of Rouyn-Noranda, a famous mining community which hosts the Xstrata Smelter. Rouyn-Noranda has a population of 41,000 and is 500 km northwest of Montreal.

The Granada property is accessed by highways running south from Rouyn-Noranda through Granada municipality on the west and to Bellecombe on the east and connected by east-west range roads.

### **5.2 Topography and Physiography**

The topography is characterized by low-lying lightly forested areas separated by low ridges. The Property is traversed by rare creeks which occupy swampy, shallow valleys. Relief is low, ranging from 274 m to 315 m above sea level, predominantly gentle sloping.

The Property is located within the Abitibi clay belt, the remnant of the glacial Ojibway Lake. Clusters of isolated rock outcrops are found locally. In the main active exploration area, natural overburden is thin; typically ranging from 0 to 5 m in zones of interest.

### **5.3 Climate**

The Granada property area and vicinity has a subarctic climate, intermediary between the temperate and polar climate (Dfb: Humid Continental Climate according to the Köppen climate classification). Summers are hot and winters are more severe than in most temperate climates. The vegetation is mostly boreal and mixed in some places. The average temperature ranges between -18° C and -19° C in January to between 16° C and 17° C in July with cold and hot records such as -49.5° C in 1984 and 34.5° C in 1995.

Average annual rainfall is approximately 976 mm and snowfall 258 cm. Winters are harsh and often lead to poor flying conditions. The practical field season is from May through October. Snowfall in November, December, January and February generally exceeds 55 cm per month and the wettest summer months are August and September with average rainfalls of 100 mm per month. Lakes usually thaw in early April and freeze up in November. These are normal climatic conditions for the Abitibi region, where exploration work is usually conducted year-round.

### **5.4 Local Resources and Infrastructure**

All the required services are provided on the Property. Depending on the required volume, water supply is available from either Pelletier and/or Beauchastel Lakes. Most necessary services and manpower for a mining operation are already offered in Rouyn-Noranda and its vicinity. Rail transportation is available, and Rouyn-Noranda is serviced by an airport located 13 km from the old pit.

Old tracks, contemporary with the exploration activities of the 1930's and 40's, occur throughout the property and are only lightly overgrown. Granada Gold is in the process of constructing roads throughout its large land package to provide quick and efficient access for drill rigs, especially as drilling proceeds further eastward.

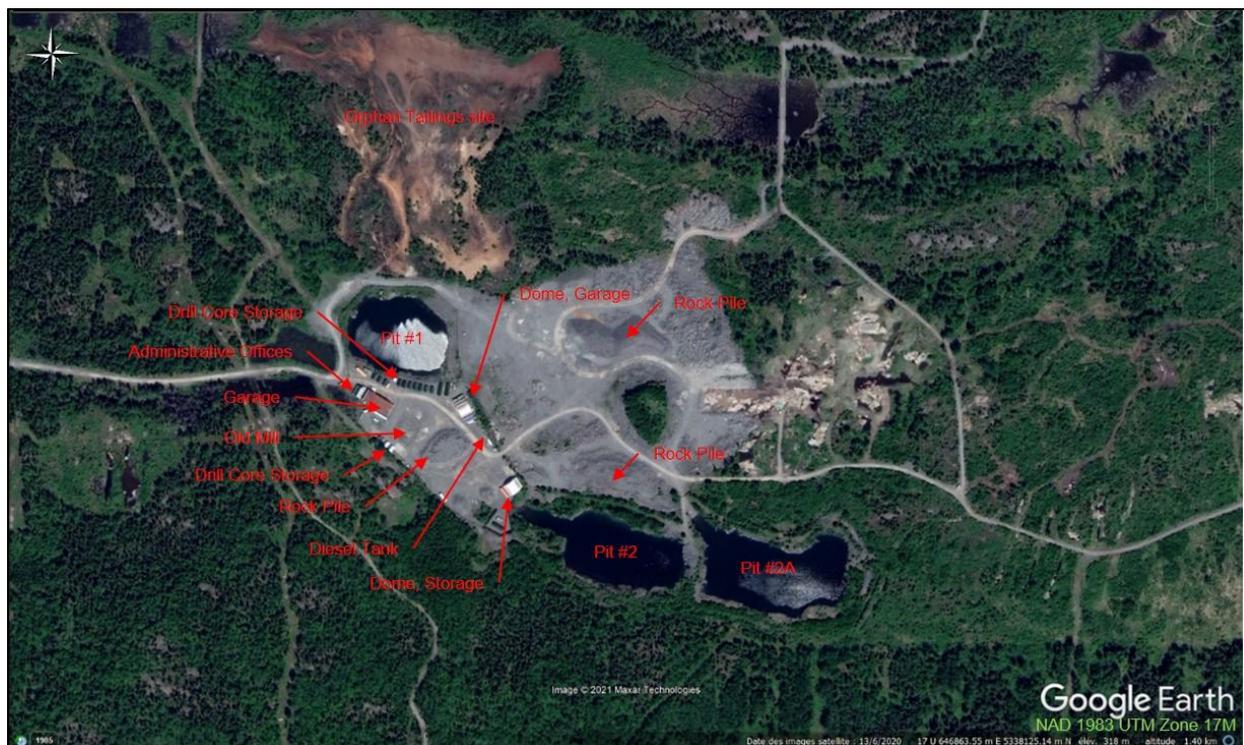
A 25,000-volt transmission line runs parallel to the Rouyn-Granada road and can provide up to 12,000 kW to the Property. An electrical sub-station in the range of 3,000 kW should be installed if additional power is required in the future. A natural gas pipeline services the borough of Granada and the headwaters to the La Bruere River originate along the western margin of the Property. This being said, it is also known that additional electric power investment by Hydro-Québec for the region is required due to the booming of large-scale high-energy consuming projects and other high tonnage/ low-grade ventures at the development stage which may come to production in the coming years, depending strongly on gold price and market conditions.

The area of the Property is sufficient for an eventual mining operation with all required installations for mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant site. The RSW-Beroma's (UMCO) mobile gold mill used in 2000 has been recently dismantled and removed (2013-2014).

The company does not have a factory or a mill in Quebec or elsewhere in the world. There used to be a mill on the site. It has not been in operation since the 1935 fire and has been dismantled in recent years. The last piece of the mill left the site at the start of 2017. Since the dismantling, the space that was once occupied by the mill is now vacant.

The existing office administrative building and conference room are made of mobile trailers. A core logging facility with garage and dry with washroom exist as a separate building. On the site there are also a few containers, several metal cores (in front of the garage and to the south of the property) and two mega storage domes next to the east gate.

The sanitary system has been damaged by diamond drilling under responsibility of previous consultant and will require some changes prior to extensive operation. The Figure 5-1 shows the location of the existing infrastructures.



**Figure 5-1 Location of the Existing Infrastructures (Google Earth, image taken on June 13<sup>th</sup>, 2020)**

## 6 HISTORY

This section is a compilation of relevant work done by past owners of the Property. It is a summary of the work descriptions from past work reports, drilling reports, assessment reports and from past 43-101 technical reports from SGS and GMG since 2012. Parts of this section were summarized from the 2014 prefeasibility study authored by Claude Duplessis, Sr. Eng., filed on June 19<sup>th</sup>, 2014 on SEDAR and from SGS previous report.

### 6.1 Exploration History

The Granada Mine was one of the three first gold mining ventures in the Abitibi Belt of Northwestern Quebec along with O'Brien in Cadillac and Siscoe mine near Val D'Or.

The former Granada mine claims were originally staked in 1922 by W.A and R.C Gamble. Gold bearing veinlets of the #1 Vein were subsequently discovered in 1923. The Granada Mine was brought into production in 1930 utilizing a vertical and an incline shaft. Five veins, named from north to the south, # 5, 1, 3, 2a, and 2 were identified at the time of the mines' commissioning.

1924-1925: McIntyre Porcupine Mines Limited dug several trenches and exploration wells to better define the veins but dropped the option in 1925.

1927-1929: Granada Rouyn Mining Company Ltd resumed the option. The company drilled a first shaft on a dark vein #1; it reached a depth of 129 m. The vein was developed on five levels. In 1929, a mill with a capacity of 63 tonnes per day was built. Vein #2 is discovered.

1930-1935: Granada Gold Mines Ltd replaced Granada Rouyn Mining Company Ltd and deepened the first Shaft up to 200 m. Shaft #2 on the vein #2 was built in 1933. Latter was inclined and reached a vertical depth of 488 m. Lateral work stretched out 7,925 m and 11 levels. In 1934, the mill capacity was increased to 181 tonnes per day. From 1930 to 1935, Granada Gold Mines extracted 164,816 tonnes of ore at an average grade of 9.7 g/t Au and 1.5 g/t Ag (51,476 ounces of gold in 181,744 sT @ 0.28 oz/sT). This ore came primarily from vein #2. Tailings of this ore were deposited in a tailings pond covering an area of approximately 50,000 m<sup>2</sup> and located just north of the old mill.

1935-1947: During this period, the Owners carried out minor surface works with a limited surface drilling program.

1947-1950: Old Mill Gold Mines Limited carried out geophysical surveys. In 1950, shaft #1 was dewatered down to the 5<sup>th</sup> level, but no work was performed.

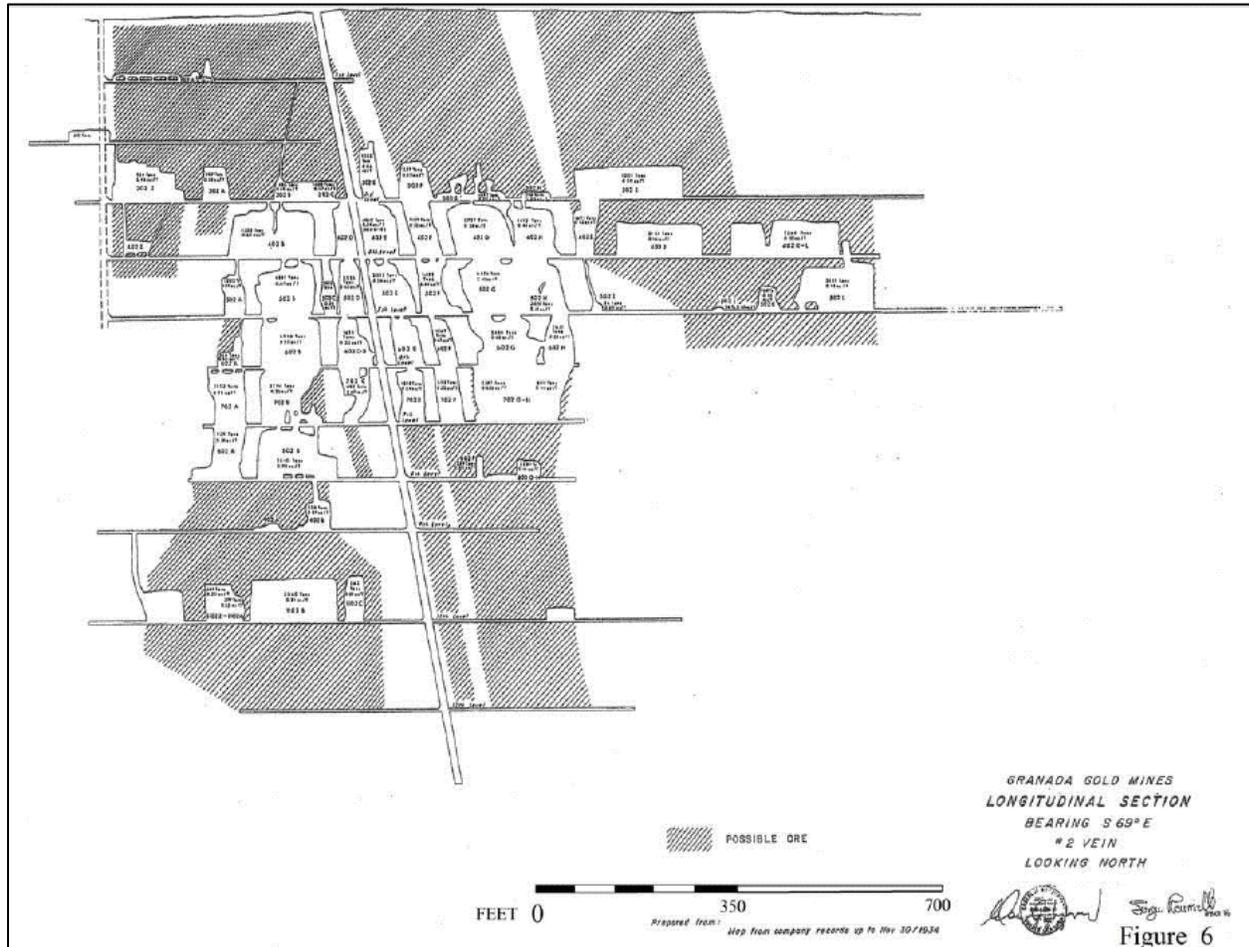
1967-1968: In 1967, the claims were submitted to the Crown (failure to pay taxes) and were then acquired by several individuals who formed the company Stanford Mines Limited. In 1968, The Gamble acquired claims and conducted geophysical surveys and exploratory surveys.

1972-1980: Goldsearch acquired ownership and made some exploration work. New reserves of 294,835 tonnes at 12 g/t Au in the vein #2 were then calculated. This reserve estimate predates National Instrument 43-101 and is considered historical. A qualified person has not done sufficient work to classify the historical reserve estimate as current mineral reserves and Granada Gold is not treating the historical estimate as current mineral reserves.

1981-1991: In 1981, Kewagama Gold Mines (hereinafter by KWG Resources Inc.) and Goldsearch signed an agreement that allows Kewagama Gold Mines to acquire a 50% stake in the project Granada. In 1982, the mine was dewatered and underground and surface rehabilitation works were made. In 1983, Goldsearch obtained a certificate of approval for the development of the mine and reported to the vein #2 reserves 102,512 tonnes to 13.37 g/t Au and 3.43 g/t Ag. This reserve estimate predates National

Instrument 43-101 and is considered historical. A qualified person has not done sufficient work to classify the historical reserve estimate as current mineral reserves and Granada Gold is not treating the historical estimate as current mineral reserves.

During the years 1989-1990, 27 surface drill-holes were performed as well as geophysical surveys throughout the property. In 1991, SEG Exploration Inc. acquired Goldsearch stakes.



**Figure 6-1 Historic 1934 Longitudinal of Vein #2 (Duplessis et al. 2013)**

In 1990, 7 holes were drilled totaling 2,156 m; 857 samples were assayed (not including blanks, standards or duplicates). In 1992, 137 holes were drilled, totaling 6,169 m; 4,148 samples were assayed. In 1993, 107 holes were dug, for a total of 6963 m; 4,227 samples were assayed. In 1994, 81 holes were dug. In total, 6,659 m were drilled, and 4,049 samples assayed. In 1995, 123 holes were drilled totaling 4,266 m; 3092 samples were assayed.

1992: At the beginning of the taxation year 1992, KWG Resources drilled 69 holes totalling 2,973 m on the veins #1 and veins #2. During the same summer, KWG Resources and Exploration SEG performed stripping works of 4,078 m<sup>2</sup> in order to make a bulk sample.

1993: July 16<sup>th</sup>, 1993, MRN issued to KWG Resources Inc. and SEG Resources Inc. Mining Lease 813 which covers most of the mineral resources of the Granada mine.

In July 1993, Granada Resources becomes 100% owner of the Granada property by buying Exploration SEG and KWG Resources' stakes. In May 1994, the agreement was signed giving exploitation operation to KWG Resources.

Between 1992 and 1994, an overall assessment of the economic potential of Granada mine took place, along a resource estimate of the property undertaken by the firm A.C.A. Howe (1990, 1993a, 1993b and 1994).

1994: Granada Resources extracted a bulk sample of 87,311 tonnes grading 5.17 g/t Au from pit #1. This generated 139,856 tonnes of waste that have been piled on sterile tailings located east of the pit #1.

1995: Met-Chem Pellemon produced an assessment of an operating vein #2 project through two shallow open pits (26 m). The amount of ore contained in these pits is estimated at 105,000 tonnes at an average grade of 3.45 g/t Au.

1996: Granada Resources extracted a bulk sample of 22,095 tonnes grading 3.46 g/t Au from pit #2 (see Figure 14-1, Section 14.3 below). This has also generated 4,309 tonnes of waste that have increased the size of a sterile dump to 1.2 hectares. In addition, 8,822 tonnes of ore were crushed and used in a trial separation using an optical sorting machine ("ore sorter," rented from a firm in Denver, Colorado). In principle, based on the color of crushed fragments, the unit separates fragments of quartz veins (high gold content) and fragments of rock (low gold content). The results of this trial have not been reported and the unit was returned to Denver. The crushed material resulting from this test was placed in the sterile dumps located northwest of the pit #1.

1997: KWG Resources Inc. sold 100% of Granada Resources Inc. (a subsidiary company of KWG Resources Inc.) to Mousseau Tremblay Inc. (MTI).

1998: August 16<sup>th</sup>, 1998, a commercial contract of sale and purchase of ore was made by Mousseau Tremblay Inc. to the company RSW-Béroma. The latter wished to use the Granada mine site to demonstrate its concept Factory Modular Concentration Ore Gold (UMCO).

1999: On August 31<sup>st</sup>, 1999, RSW-Béroma and MTI applied to the Ministry of Environment Quebec for a certificate of authorization (C of A) in order to install a UMCO on Granada mine site and to conduct the following operations:

- extract 105,000 tonnes of ore from pits #2 (55,000 tonnes) and #2A (50,000 tonnes);
- treat ore in the UMCO;
- carry out cyanide destruction (by SO<sub>2</sub>/air method) in the final waste before its release in the pit #1.

On September 21<sup>st</sup>, 1999, the certificate of authorization 7610-08-01-70063-24 was issued to this effect.

From September 1999 to January 2000, RSW-Béroma built its UMCO prototype. It is a plant with a capacity of 175 tonnes per day, using the method of direct cyanidation with gold precipitation by zinc powder (Merrill-Crowe process). Concurrently with the construction of the UMCO, operation of the pit #2 took place between October 1999 and January 2000. This generated 55,000 tonnes of ore and 121,000 tonnes of waste. Added sterile rock extended the tailings pond to an area of 1.8 hectares. The ore was processed in the newly installed UMCO to demonstrate its effectiveness. On 16 September 1999, a plan to restore the Granada mine site at the end of the planned operations was submitted to the Ministry of Natural Resources of Quebec. This plan was approved by the MRNQ November 7<sup>th</sup>, 2000.

2000: From February to October 2000, 27,313 tonnes of ore were processed in the UMCO Granada. The total production was 2,032 ounces of gold at an average grade of 2.51 g/t Au with a recovery of 92.2%. The UMCO had demonstrated its ability to achieve excellent recovery, despite a relatively low mineral content. On July 19<sup>th</sup>, 2000, an initial agreement for the sale of sterile Mousseau Tremblay Inc. operated between RN and Aggregates Inc.

On July 23<sup>rd</sup>, 2000, the MRN issues in Granada Resources mining lease 852 adjacent, east 813 mining lease. 852 mining lease contains extensions to the east of all the veins of the Granada mine.

2001: January 1<sup>st</sup>, 2001, the company merged Granada society Mousseau Tremblay Inc. Granada mining property was transferred to Mousseau Tremblay Inc. and becomes the sole owner of said property.

Fall 2001, the UMCO capacity was increased from 175 to 250 tonnes per day following addition of larger semi-autogenous mill. From December 2001 to March 2002, 24,638 additional tonnes of ore from the pit #2 were treated in the UMCO. Total production was 1,122 ounces of gold at an average grade of 1.80 g/t Au with a recovery of 78.6%. The lower recovery than during the first phase of processing is explained by the lower ore grade.

2003: an intensive waste testing program was instituted to obtain a Certificate of Authorization to operate waste rock. This certificate was received on May 29<sup>th</sup>, 2003. Certificate contained certain covenants that limit the use of waste, especially fine particles less than 2 mm.

2005: the agreement between Mousseau Tremblay Inc. and Agrégats R-N, which allows the latter to exploit the mine tailings of Granada, was renewed on March 1<sup>st</sup>, 2005 for a period of five years, until March 1<sup>st</sup>, 2010.

2006: the Granada UMCO remained inactive from March 2002 to May 2006. Due to a rise in gold prices, the firm Consolidated Big Valley Resources (CBVR) approached RSW-Béroma to buy the UMCO, in early

## 6.2 Work History Since Acquisition by Granada Gold Mines Inc.

2006. An agreement was signed in July 2006. Meanwhile, in March 2006, a lease purchase of the property was signed by Mousseau Tremblay Inc. and CBVR. This agreement allowed CBVR to resume activities that RSW-Béroma had interrupted in 2002. The agreement also provides to CBVR the possibility of buying mining leases 813 and 852 which represent the main Granada mine site. The contract provides use of all facilities available on site (including pit #1 to store the residues resulting from the treatment of ores in CBVR plant) by CBVR.

In January 2007, CBVR changed its name to Gold Bullion.

Mining activities resulting from the agreement signed in 2006 between Mousseau Tremblay Inc. and Gold Bullion Development Corporation were as follows:

The UMCO was put into operation on May 23<sup>rd</sup>, 2006, with the start shakedown testing. At first, it dealt with a small amount of ore from the pit #2 (approximately 3,000 tonnes) which had been left behind by RSW-Béroma at the end of its operations in March 2002;

- At the same time, GBDC began operating Vein #2 in the open pit #2A, located in Test Pit #2 operated by RSW-Béroma in 1999-2000. Originally, pit #2A exploitation would generate 50,000 tonnes of ore and 70,000 tonnes of waste. However, GBDC decided to use a broader and deeper pit in order to recover some gold veins presenting high in the roof and the wall of the main mineralized zone. Consequently, pit #2A exploitation produced 30,000 tonnes of ore and 110,000 tonnes of waste. Ore from pit #2A was treated in the UMCO at the rate of 250 tonnes per day;
- Plant rejects were pumped into the pit #1, after cyanide destruction. At the end of operations RSW-Béroma in March 2002, the pit #1 contained approximately 52 000 tonnes of solid waste occupying a volume of 16,800 m<sup>3</sup>. This corresponds to approximately 21% of the volume of the pit #1 (80 000 m<sup>3</sup>) as measured by RSW-Béroma, who performed the complete dewatering of September 21st to

November 21<sup>st</sup>, 1999. This means that at the resumption by GBDC in May 2006, the pit #1 could still accept nearly 196,000 tonnes of treatment plant rejects;

- In addition to the ore from Granada property, GBDC planned to eventually treat ore from other mining properties located in Abitibi. To do so, the firm filed, in February 2007, a Certificate of Authorization for the collection of a bulk sample of 40,000 tonnes of the Val St-Gilles property, located north of La Sarre. Got the C of A but never did the bulk sample.

In May 2007, the MRN accepted the Mousseau Tremblay and RSW-Bérroma restoration plan. Gold Bullion paid the deposit guarantee of \$ 171,800 on January 23<sup>rd</sup>, 2011. On June 3<sup>rd</sup>, 2009, at the request of Gold Bullion, the 7610-08-01-70063-24 C of A for the operation of the treatment plant was revoked.

2007: A bulk sample of 140,000 tonnes was processed by Gold Bullion in 2007 from the pit (Pit 2A on BM852) at the Granada mine, of which 30,000 were ground on site. The average gold grade of this bulk sample was 1.62 g/t, with a recovery rate of 90%. The waste rock from this bulk sampling, as well as the waste rock stored from old bulk sampling programs by previous operators, was also analyzed and gave a grade of 1.75 g/t Au. This confirmed the presence of gold mineralization between the structures of the east-west trending veins as a large overall structure.

On November 25<sup>th</sup>, 2010, Mousseau Tremblay Inc. transfers to Gold Bullion Development Corp. (GBDC) all of its 26 mining claims (claims) and its two mining concessions on the Granada mining property.

On February 1<sup>st</sup>, 2011, Mousseau Tremblay sent to the MERN a certificate of release from the Granada mining site and a request for transfer of responsibility, Mousseau Tremblay and RSW-Bérroma Gold Bullion, under article 232.10 of the Mining Law.

On November 7<sup>th</sup>, 2011, Mousseau Tremblay Inc. wrote a letter to Gold Bullion in which it transferred the rights and privileges conferred by the Certificate of Authorization 7610-08-01-70063-25 for recovery of waste on the Granada property.

On November 21<sup>st</sup>, 2011, Mousseau Tremblay Inc. sent to the MDDEP an assignment of the Certificate of Authorization. The application closed before conclusion due to lack of information.

On April 2<sup>nd</sup>, 2012, SGS Canada Inc. produced a resource estimate for the Granada gold project using a large mineralized envelope. The full report named "Granada gold project Resource estimate Rouyn-Noranda, Abitibi, Qc" is available on the Granada Gold Mine website.

On February 4<sup>th</sup>, 2013, SGS Canada Inc. produced a Preliminary Economic Assessment for the Granada gold project using a large mineralized envelope. The full report named "NI 43-101 Technical Report Preliminary Economic Assessment (PEA) Granada Gold Project Rouyn-Noranda, Quebec" is available on the Granada Gold Mine website.

On May 14<sup>th</sup>, 2013, Mousseau Tremblay asked the MDDEFP for a new transfer of the certificate of authorization to Gold Bullion. Gold Bullion refused the transfer in order to be able to submit a new request for a certificate of authorization for the treatment by gravity of tailings smaller than 2 mm. During the summer of 2013, RSW-Beroma finalized the dismantling of its plant in accordance with the terms of the agreement of November 14, 2006 concerning the leasing of its plant to Gold Bullion. On May 15<sup>th</sup>, 2013, the Galarneau company sent a request for a certificate for the crushing and reclamation of tailings stored on the Granada mining site. The Galarneau CA was granted in May 2014.

On April 8<sup>th</sup>, 2014, Gold Bullion Development Corp. signed a protocol of agreement with IAMGOLD Corporation (IMG) regarding the processing of ore from the Granada mine site at its Westwood plant. On May 6<sup>th</sup>, Gold Bullion announced that it had received its Pre-Feasibility Study (PFS) for the Rolling Start

launch in Granada. In September 2014, GBDC dug 6 trenches east of pit 2A. A total of 230 channel samples were sent for analysis.

On June 19<sup>th</sup>, 2014, SGS Canada Inc. produced a prefeasibility study for the Granada gold project using a model based on thin, rich veins as the mineralized envelope. The full report named “NI 43-101 Technical Report Prefeasibility Study (PFS) Phase I – Open Pit Granada Gold Project Rouyn-Noranda, Québec” is available on the SEDAR website.

In January 2015, GBDC signed a protocol of agreement with the Timiskaming First Nations. In March 2015, Granada Gold dug two more trenches west of pit 1. A total of 119 channel samples were sent for analysis.

In May 2016, GBDC obtained a certificate of authorization from the Government of Quebec's Ministry of the Environment for gold mining at Granada, as set out in the company's 2014 preliminary feasibility study. (Several additional technical and environmental studies were carried out at the request of the MDDELCC to obtain the certificate of authorization.) In September 2016, Granada Gold began diamond drilling as part of a new exploration program aimed at increasing its gold mineral resources near the surface. A total of 15 boreholes were completed in 2016 and 4 more in 2017.

In January 2017, Gold Bullion Development Corp. (GBDC) announces its name change to Granada Gold Mine Inc. (“Granada Gold”). In February 2017, Granada Gold signed a letter of intent with the Temagami First Nation and Teme-Augama Anishabai, which would give the Granada gold mine the opportunity to assess brownfield sites located on traditional territories in view of redevelopment potential.

In April 2018, Granada chooses Ausenco for open pit feasibility study and GMG prepares for trenching and drilling at Aukeko zone and submits drilling request to Austin Rouyn zone. On June 4<sup>th</sup>, an exploration program began on the eastern extension of the long bars area in Aukeko. In October 2018, a drilling program begins in Granada. Later in the month, a clarification and retraction of the technical report disclosure is announced.

On February 13<sup>th</sup>, 2019, filing of the 43-101 technical report for the Granada gold project with a reworked resource estimate using a large mineralized envelope. Early March, Exploration Update (March 1<sup>st</sup>). Results on the preconcentration test on low grade mineralization of the Granada gold mine, metallurgical testing program (July 23<sup>rd</sup>) and start of a drilling program in Granada (August 19<sup>th</sup>, 2019) targeting shallow mineralized structures.

On March 15<sup>th</sup>, 2021, filing of the 43-101 technical report for the Granada gold project with a reworked resource estimate using a thin vein model for the mineralized envelopes.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Granada Mine property lies within the Abitibi Greenstone Belt of the Superior Province (Figure 7-1, Figure 7-1). The oldest rocks in the immediate area are schists and migmatites belonging to the Pontiac Group. These are located from 100-200 metres south of the Property. They are overlain by conglomerates, sandstones and siltstones of the Temiscaming Group. The contact between the Pontiac Group and the Temiscaming metasediments is exposed for over 400 m as an intensely altered 10-75 m wide shear zone. This group is capped by the Larder Lake Break rocks comprising carbonate rocks, talc-chlorite and chlorite, and minor sandstone interbeds. The Larder Lake Break rocks were laid down on the Temiscaming paleosurfaces and thus belong to that group. The Temiscaming Group is in contact to the north with the Blake River Group. The contact area is composed of clastic sedimentary rocks (source to the south) with intercalated volcanoclastics and sediments derived from Blake River volcanism.

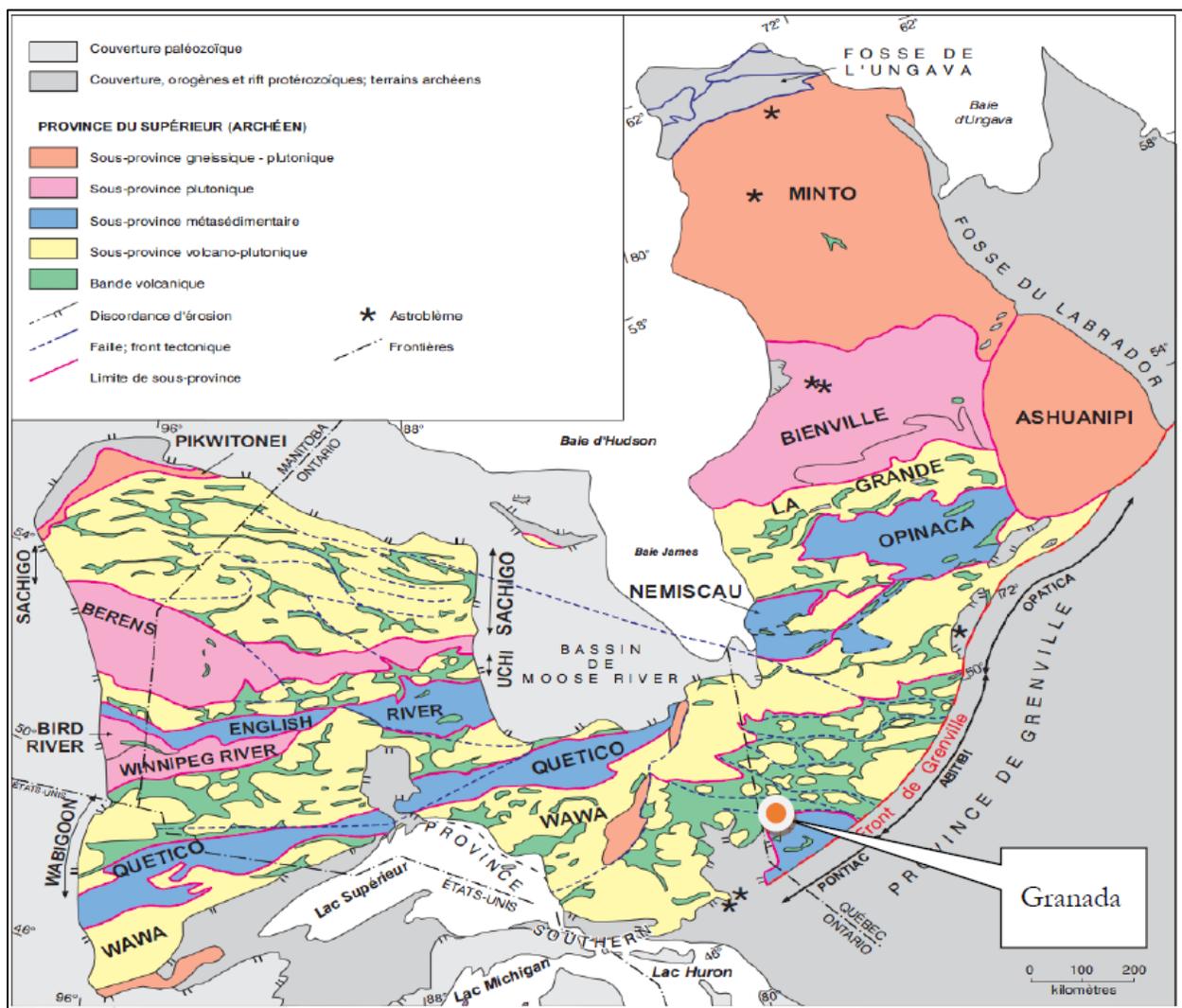
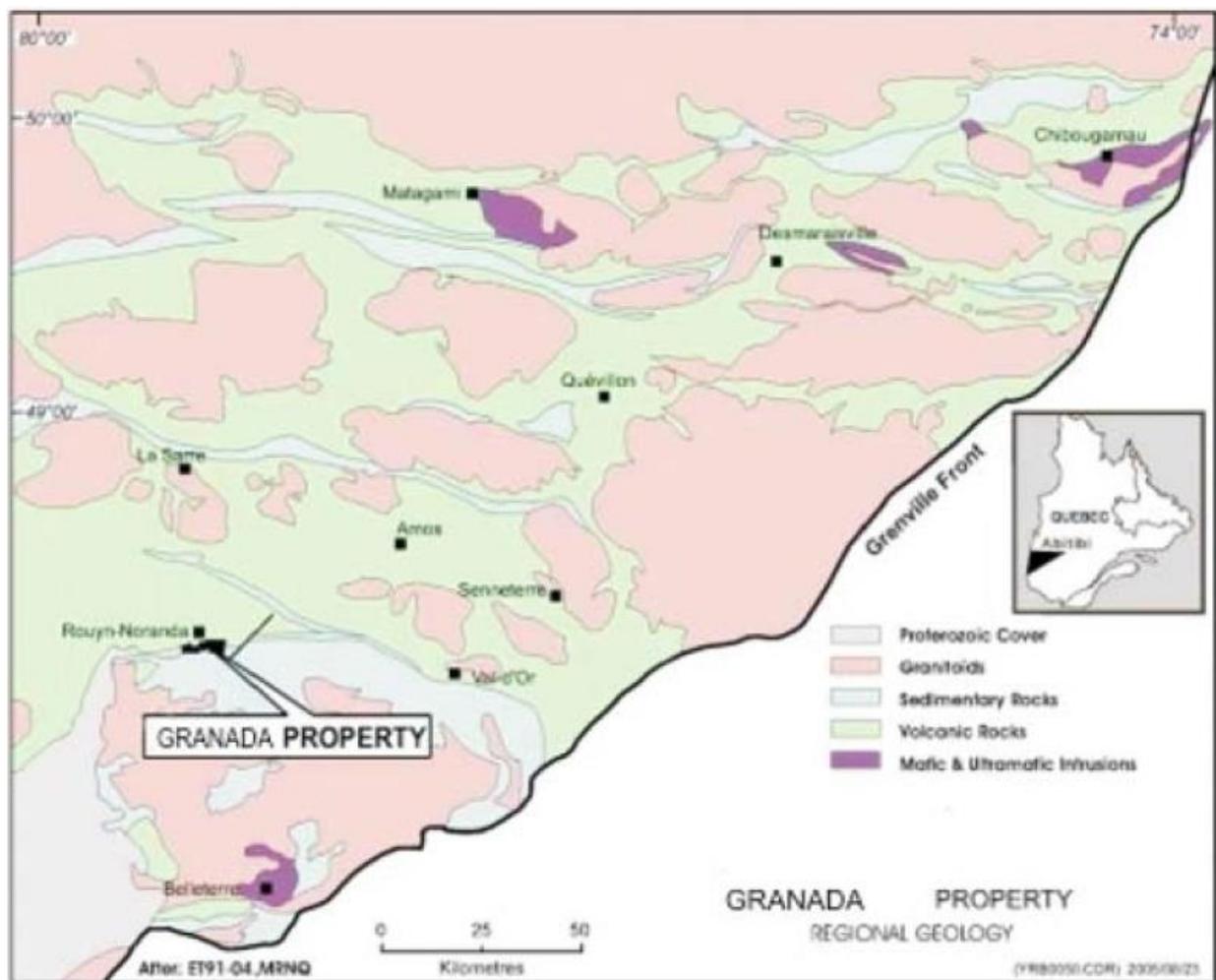


Figure 7-1 Geological map of the Superior Province showing the position of the Property



**Figure 7-2 Regional Geology**

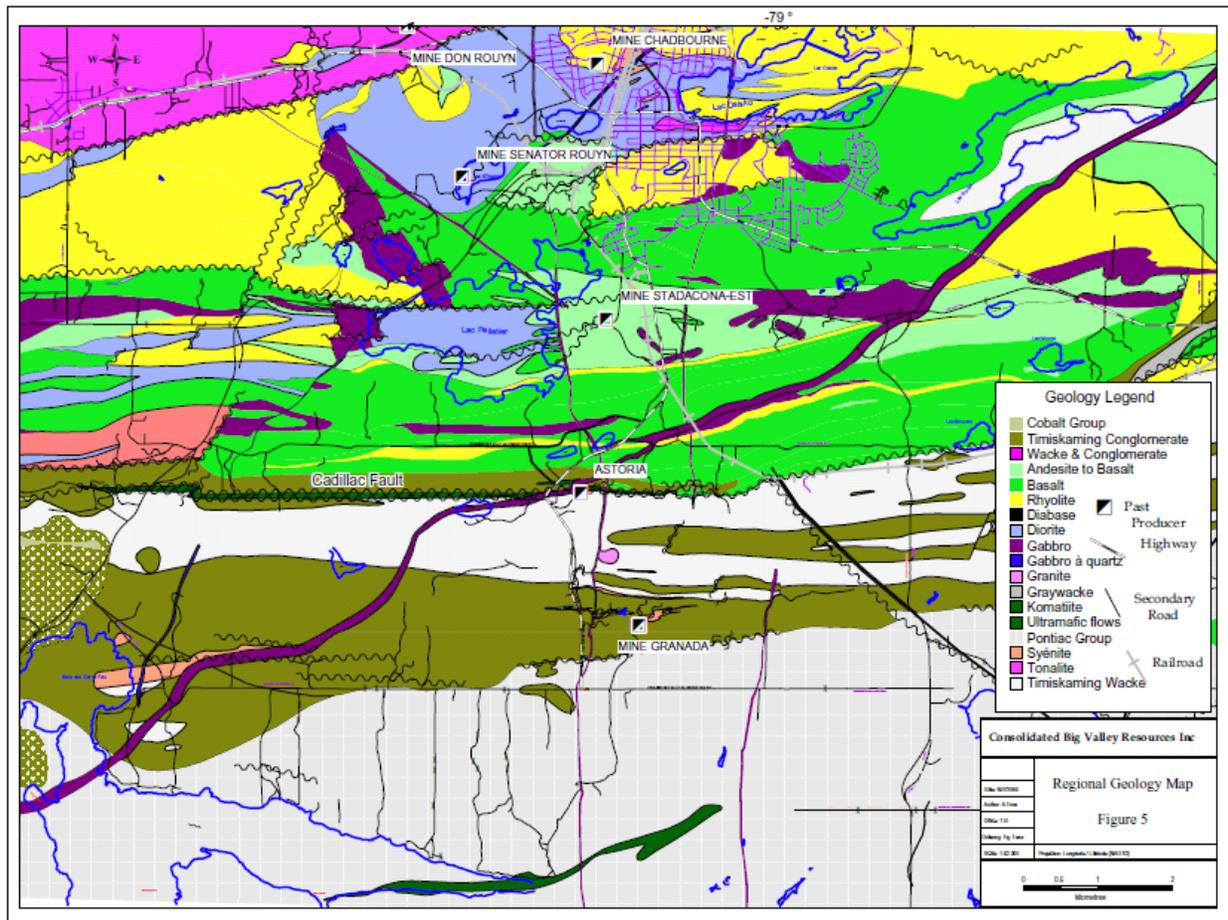
## 7.2 Local Geology

The Granada Mine property is situated within rocks of the Temiscaming group, on the south limb of the regional east-west trending Granada synclinorium whose axial trace is located south of the Cadillac Fault (Figure 7-3). The property is underlain principally by east-west trending, north-dipping interbedded-polymictic conglomerate, porphyry-pebble conglomerate, greywacke and siltstone mudstone of the Granada Formation. It has been reported by Wilson in 1962 that the conglomerate units had different fragment compositions on opposing limbs of the Granada synclinorium. Conglomerate on the north limb (La Brure Formation) is characterized by jasper fragments which are absent from the south limb and contain scattered magnetite pebbles (Granada Formation).

The Granada Formation is intruded by northerly-trending Proterozoic diabase dykes, felsic dykes, sills and stocks. Sill-like syenitic bodies are concentrated throughout the immediate area of the mine property. The syenite bodies are aphyric to porphyritic with up to 10% tabular centimetre-scale feldspar phenocrysts in an aphyric to slightly porphyritic groundmass. The syenite bodies are slightly oblique (040°-050°) to bedding (050°-060°) and exhibit schistosity (045°-060°). On alkali-silica diagrams the syenitic bodies show four compositional facies: monzonite, syenite, quartzmonzonite and granite, similar to that of most other Temiscaming intrusive rocks from Ontario as sourced from Siriunas, 1994, in a previous report.

The principal structural feature in the area is a penetrative schistosity affecting all lithologies. This fabric is usually parallel to the stratigraphy. The flattening intensity of pebbles and cobbles increases from south to north towards the Cadillac Fault. Locally, the intensity of the regional schistosity strengthens into discrete shear zones that are emphasized by hydrothermal alteration. In the area of the mine workings, there is a prominent zone of deformation, hydrothermal alteration and quartz veining (Figure 8, Figure 9 and Figure 10) which extends over 5 km. Figure 7-7 presents the local geology with the Property outline.

Structural analysis from outcrop data indicates that the Temiskaming sedimentary rocks are isoclinally folded about east-west trending axes, with fold axes gently plunging east (Figure 7-8). This early fold pattern has been subsequently modified by a set of north-westerly trending folds. A series of late northeast trending faults horizontally offsets the stratigraphy, the quartz veining and the alteration by a magnitude of 30-50 m typically displaying a dextral motion but sinistral is also observed. All the lithologies in the area of the Property, with the exception of the Pontiac Group, are metamorphosed to greenschist facies.



**Figure 7-3 Regional Geology Map of the Granada Mine Area (Duplessis et al., 2014)**



**Figure 7-4 Large Smoky Quartz Veins Oriented E-W Locally Affected by NNE Dextral Faults**



**Figure 7-5 Porphyry with large Phenocrysts of Feldspars**



**Figure 7-6 Visible Gold Within Smoky Quartz Vein in a Surface Sample**

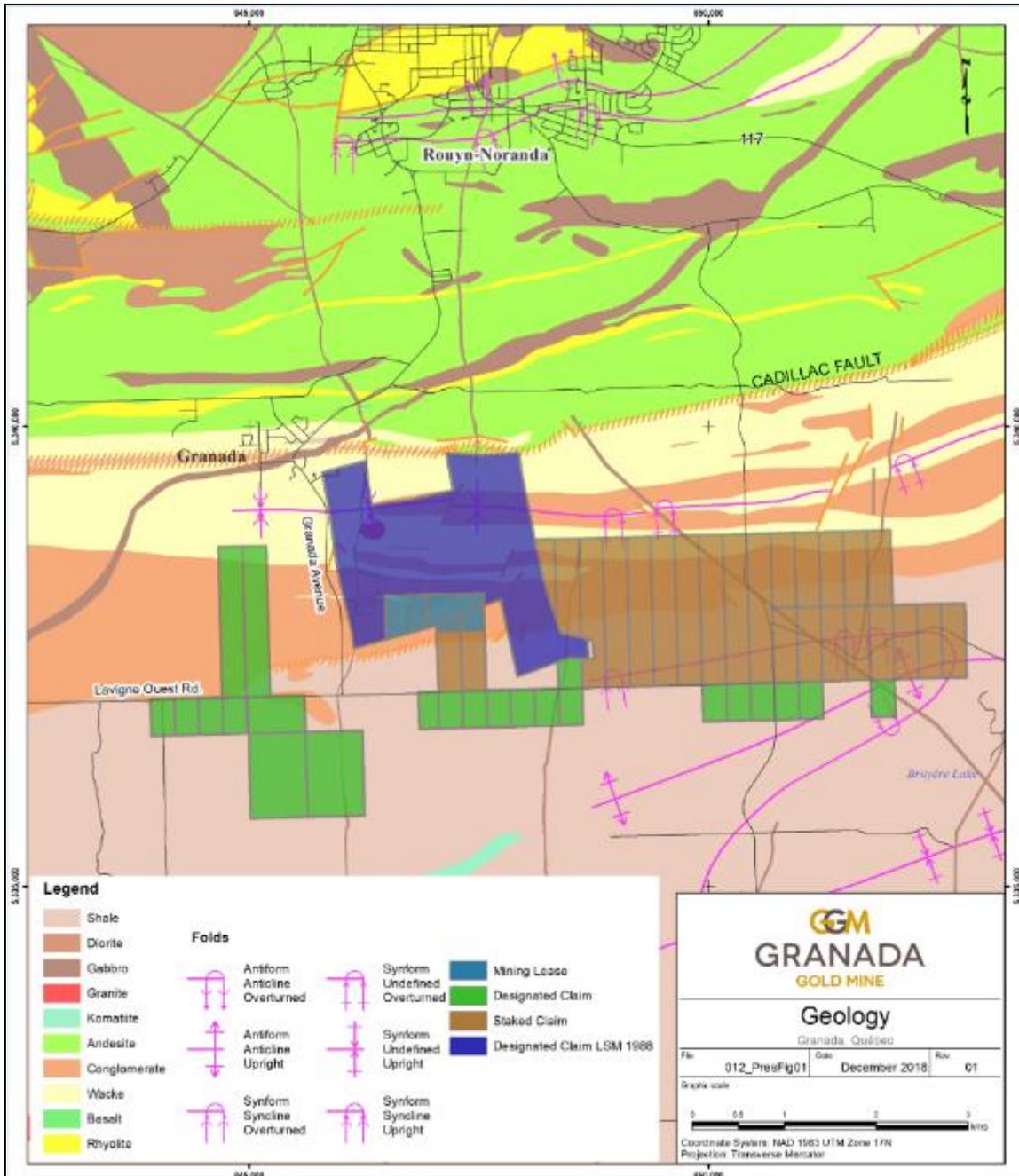
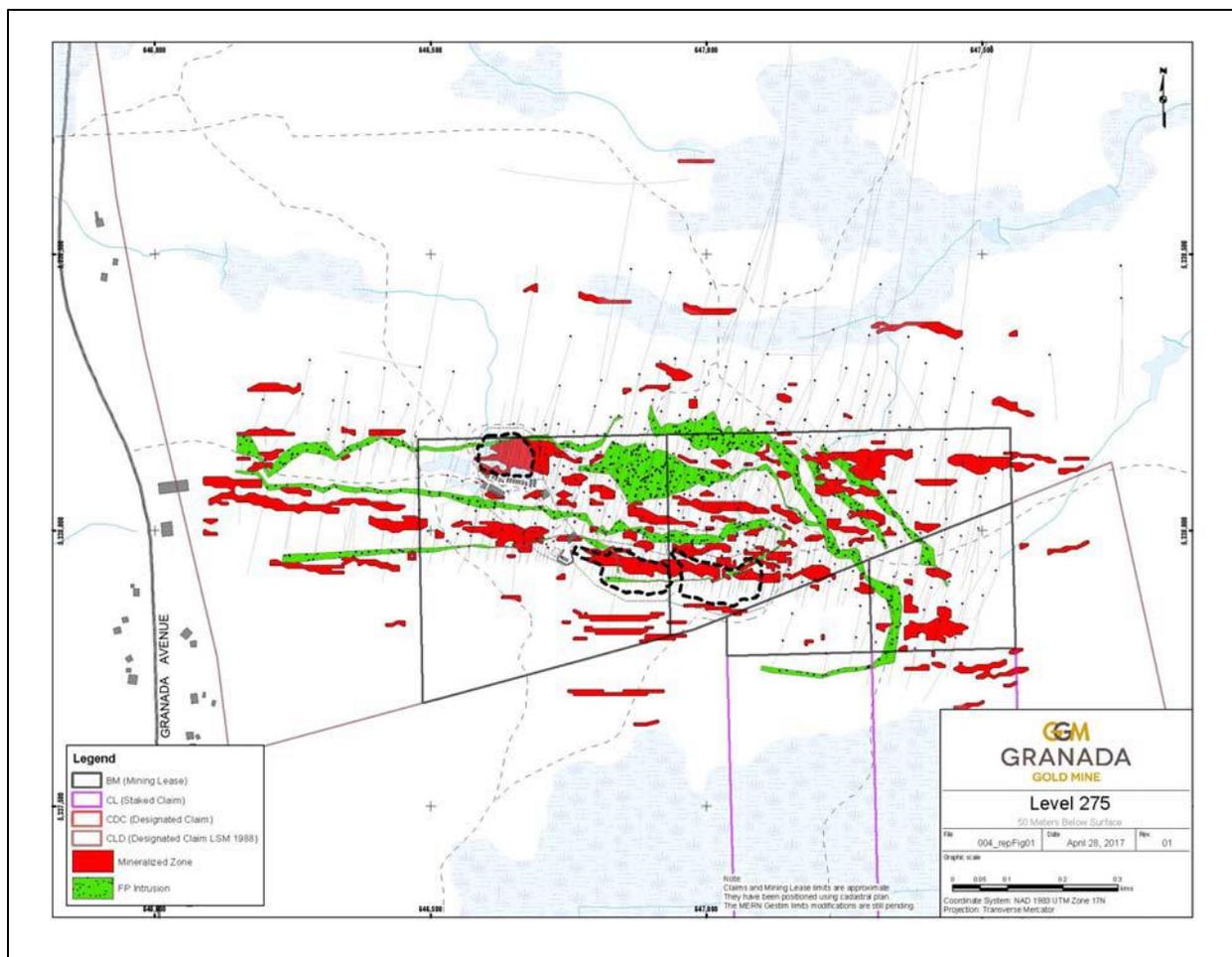


Figure 7-7 Regional Geology of the Granada Mine Area (Ref: SIGEOM)



**Figure 7-8 Plan View, 50 m below Surface, of Zones of Mineralization, Granada Deposit**

### 7.3 Property

The Cadillac Fault traverses the northern part of the Property. Within the Granada mine site itself, a parallel set of shears (Granada Shear Zone) occur over a zone of 500 m in width. The shears are characterized by intense sericite, iron carbonate plus minor chlorite alteration with disseminated pyrite and arsenopyrite and host quartz veins and stringers. The veins comprise boudinaged or en echelon quartz lenses within the sediments and more continuous veins in the syenite intrusive bodies. A series of northeasterly trending sigmoidal faults occur between the Cadillac Fault and the Granada Shear Zone due to late shearing. This late shearing also imparted the fracturing and dilatancy in the quartz veins (Howe, 1994).

### 7.4 Mineralization

Gold mineralization is hosted by east-west trending smokey grey, fractured quartz veins and stringers. Free gold occurs at vein margins or within fractures of the quartz veins or sulphides. Late north-easterly-trending sigmoidal faults also host high-grade gold mineralization. Accessory minerals include tourmaline, carbonate, chlorite, and disseminated sulphides. Pyrite is the dominant sulphide typically occurring within the immediate wall rock to the quartz veins. Minor pyrite does occur within the veins themselves. Additional sulphides such as chalcopyrite, arsenopyrite, sphalerite and galena are present in trace amounts. Fuchsite

(chromium mica) is present in the immediate wall rock to the quartz veins. The descriptions of the veins below correspond to the available information before the resource update described in section 14 of this report.

#### **7.4.1 Vein #1**

Vein # 1 was the original discovery vein on the Property. It extends for 600 m across the Property. The vein's width can vary from greater than 1 m to a couple of centimetres. Gold grades are very erratic from nil to greater than 100 g/t Au. Shaft #1 was sunk to exploit this vein during the underground operations of 1930-1935. The vein only contributed to approximately 5% of the gold production during this period due to the vein's erratic grade. The vein was later the target of open pit operations by KWG Resources during 1993 and 1994.

#### **7.4.2 Vein #2**

Vein #2 is more correctly described as a mineralized zone of two parallel quartz veins, one in the hanging wall and the other in the footwall, separated by a zone of millimetre-scale quartz veinlets in altered conglomerate. The two main veins are lenticular, locally greater than 1 m in width with metre-scale portions thinning to several centimetres. The hanging wall vein is generally thicker, more continuous and of higher grade (6 to 10 g/t Au) than the footwall vein. The hanging wall vein, plus associated veinlets and pyritic alteration haloes average 3 m in thickness. The intervening zone of quartz veinlets averages 5 m in width and is locally auriferous in the order of 0.7 to 0.8 g/t Au. The footwall vein is generally boudinaged with associated veinlets and pyritic alteration haloes averaging 2 m in thickness yielding on average assay grades of 4 to 5 g/t Au. The entire vein #2 zone averages 10 m in width averaging 3.5 to 4 g/t Au. This vein system was the principal sources of ore for the historical underground operations and open pit production for KWG Resources. The bulk of the historical underground production came from this zone. The heterogeneous distribution of gold grade along strike within the Vein #2 zone resulted in the selective mining of the zone from two shallow pits by RSW-BÉROMA in the year 2000. A western extension of the #2 zone was partially drilled and defined by KWG Resources in 1995 with the proposed pit referred to as 2B. RSW-BÉROMA calculated a non-NI 43-101 compliant geological resource of 28,501 tonnes at 2.4 g/t Au (Trudel, 2000).

#### **7.4.3 Vein #3**

Vein # 3 was discovered during underground exploration by KWG Resources while drifting on the fifth level between Vein #1 and #2. It is described as a large shear zone containing numerous quartz veinlets hosting free gold.

#### **7.4.4 Vein #5**

Vein #5 is the most continuous vein of the Granada property. It has been traced by drill holes from surface to the seventh level of the mine (213 m vertical). It is hosted within the conglomerate along the northern contact with a porphyritic syenite sill. On surface, trench samples of Vein #5 yielded weakly anomalous assays of 0.51 g/t Au over 15 m. Underground development reported visible gold when the vein was encountered.

#### **7.4.5 Vein A & B**

Both Veins A and B were discovered after underground operation ceased. Little descriptive information is available for these zones. Vein A outcrops on surface just east of the waste rock pile at 900E and 425N in a trench.

## 8 DEPOSIT TYPES

The Granada property lies within the Abitibi Greenstone Belt, the northern part of the Granada Gold Mine Property is traversed by the Larder Lake-Cadillac fault (“CLLF”). It is a typical example of a large transcrustal fault zone that hosts many world-class mining camps (>100 Mt) such as Val-d’Or, Malartic, Cadillac, Larder Lake, Kirkland Lake, and Matachewan (Poulsen et al., 2000). However, gold deposits are not distributed regularly along the CLLF. Multiple secondary faults at Granada have become areas of intense interest since they may have acted as permeable conduits for mineralizing fluids.

The Granada property is located within intensely hydrothermally altered rocks of the Timiskaming group. The property is underlain principally by east-west trending, north-dipping interbedded polymictic conglomerate, porphyry-pebble conglomerate, greywacke and siltstone-mudstone of the Granada Formation.

The Granada deposit is a quartz-vein mesothermal gold deposit hosted by late Achaean Timiskaming sedimentary rock and younger syenite porphyry dykes dated at 2673+/-3 Ma as per works by Davis in 1991. The dykes belong to a late tectonic alkaline magmatic suite that hosts the mesothermal gold mineralization in the Kirkland Lake and Timmins gold camps in Ontario and in Duparquet, north of Rouyn-Noranda, in the Province of Quebec. The mineralization is mainly confined in the Conglomerate/Greywacke package S1 of the Granada formation (Figure 8-1).

Mineralization spatially associated with syenitic intrusions includes two subtypes: quartz-carbonate veins such as the Granada mine (Couture and Willoughby, 1996), and less common disseminated sulphides enriched in Au and Cu (Couture and Marquis, 1996; Legault and Lalonde, 2009).

A granitic intrusion has been identified based on historical information to the North-West of the property and may have acted as the heat sources for the mineralized fluid circulation and could be the genesis of a portion of the gold at Granada.



**Figure 8-1 Typical Conglomerate S1 Unit on Surface**

### 8.1 About the Rubidium

The Rubidium was discovered analysing for many elements. It is currently unknown how it came in place and the deposit model of it. More research will have to happen soon to develop this topic.

## 9 EXPLORATION

### 9.1 Geological & Structural Study by Earthmetrix (2011)

Earth Metrix Inc. conducted a geological and structural study on a number of GBDC properties in the Rouyn-Noranda region, not only Granada Gold Mine property. Earth Metrix used the assessment work file from MRNF, satellite imagery and data from their sensor.

The three studied claim blocks consist of Kekeko South (12.95 km<sup>2</sup>), Beauchastel Syenite (49.23 km<sup>2</sup>) and Adanac Extension (45.15 km<sup>2</sup>). These three properties are located south of Rouyn-Noranda.

This study's objective was to determine exploration targets for the discovery of major gold mineralization outside of the Granada Gold Mine site.

### 9.2 Bulk Sample 2007

Granada Gold mined 139,471.39 dry metric tonnes, of which 29,948.49 dry metric tonnes were processed as mill feed. The waste-mill feed strip ratio for the first bench was 3.65/1. Bulk test mining and processing highlights are as follows:

- Calculated recovered gold grade of mill feed of 1.62 grams/tonnes is 20.0% above average mill head grade of 1.35 grams/tonnes due to free gold content.
- Strong mill feed continuity beyond the past formally defined mineralized zones and drilled intersections of the past exploration programs.
- Milling recoveries remain very high at 89.76 per cent with no increase in operational costs or decrease in throughput of the plant.

Parameters of the Bulk Test Mining and Processing program are as follows:

- The mill feed that was processed was mined from an area defined as Pit 2A (see Figure 14-1, Section 14.3 below) from the surface of the #2 vein structure.
- Dilution in the first bench was within 15%.
- Processing was done at the Granada Mill, under the supervision of Mr. Karol O. Mikulash, P.Eng., metallurgist and qualified person.
- Assay samples were taken at each shift and sent for analysis to Laboratories, Rouyn-Noranda (Quebec).
- The Granada Mill grinding circuit was completely dismantled.
- Final refining of the Dore bars was done at the Royal Canadian Mint located in Ottawa, Ontario and Handy & Harman of Canada, Inc. located in Rexdale, Ontario.

### 9.3 2014-2015 Trenching Works

In September 2014, 6 trenches were completed to the east of the pit 2A (see Figure 14-3 Section 14.4 below). The trenches are 100 m long by 1,8 m to 2,5 m in width and trend N195°. The space between the trenches T14-1, T14-2, T14-3, T14-4 and T14-5 is 25 m. The trench T14-6 is located 36 m east of the Pit 2A. The work has been done by Technominex and supervised by Goldminds Geoservices.

A total of 230 channel samples has been assayed by Accurassay Lab for Au by fire assay SAA/PCI method on 30-gram samples and by gravimetric method on 50-gram samples for the samples with more than 10g/t

Au. The control QA/QC has been applied by introducing a standard sample each 20 samples and with a blank at each 40 samples. The lab duplicates were made every 20 samples.

The gold mineralization is found within the quartz veinlets through the syenite porphyry and the conglomerate of the Granada Formation in the Timiskaming Group. The conglomerate shows a chlorite alteration in the footwall of the zone, while it is rather sericitic and ankeritic inside the ore zone. Those trenching works outlined the mineralization zones that were cut by the previous diamond drill hole and give important information on where to start the surface mining operation.

The trench T14-1\_36\_38, from 0 to 3 m, returned 3 m @1.535 g/t Au. In T14-1\_11\_21, from 0 to 5 m, returned 1.548 g/t over 5 m.

The trench T14-2 did not cut any significant ore zones, with the highest grade being in T14-2\_1\_14 from 1 to 2.3 m which returned 1.3 m @ 0.859 g/t Au.

The zone T14\_3\_1\_17, between 14 and 16.5 m, returned 2.5 m @ 1.716g/t Au. The second zone, in T14\_3\_26\_31 between 0 and 3 m, returned 3 m @ 3.922 g/t Au. This zone includes a very high value of 108.6 g/t Au on 1 m channel cutting a quartz veinlet inside the altered conglomerate. A high value is found in T14-3\_34 between 0 and 1 m, returning 4.834 g/t Au.

In the trench T14-4\_15\_32, an ore zone from 12 to 15 m who returned 3 m @ 1.754 g/t Au.

The trench T14-5\_18\_32 also cut an interesting ore zone between 4 m and 9 m which returned 5 m @ 3.456 g/t Au.

In the trench T14-6\_9\_18, an ore zone from 8.2 to 10.4m returned 2.2, @ 1.442 g/t Au. This indicates the possibility to extend the ore zone from the Pit 2A, but other surface works would confirm that point.

In the trench T14-6, a high-grade interval was identified between 18 and 24 m, showing 1.566 g/t over 5.2 m. The high value of 6.78 g/t, between 18 and 19 m (GBDC sample number 3238), was removed from the access database.

In 2015, two additional trenches were done (T15-11 and T15-12). The trenches are 80 m long, 1.8 m wide and 0.2 to 1.5 m deep. 119 channel samples were taken. The cleaning and channeling started on March 2nd and ended on March 18<sup>th</sup>. Two men from Technominex as well as two men from Granada Gold Mine Inc. (formely Gold Bullion Development Corp.) worked on the trenching, which was managed by Goldminds Geoservices. The samples were assayed at Accurassay lab in Rouyn-Noranda.

In the trench T15-11\_S, located west of the pit #1, an interval returned 6.054 g/t over 7 m from 18 to 25 m, with a high value of 32.467 g/t Au on 1 m at 23 m.

In the trench T15-12, an interval from 26 m to 30 m returned 0.5192 g/t over 4 m.

The main alteration type is albitization of the plagioclase and alteration by muscovite/sericite. Some of the samples show biotite alteration, while carbonate alteration varies across the samples.

**Table 9-1 Highlights of the 2014-2015 Trenching Program**

Hole Name	From	To	Sample Number	length	Au (g/t)
T14-1_11_21	0	5	3651	5	1.5482
T14-1_36_38	0	3	3674	3	1.535
T14-2_1_14	1	2.3	3676	1.3	0.859
T14-2_1_14	0	6.3	3680	6.3	0.311333
T14-3_1_17	14	16.5	3163	2.5	1.715667
T14-3_26_31	1	4	3175	3	0.596667
T14-4_15_32	12	15.5	3130	3.5	1.3765
T14-5_18_32	0	9	3223	9	1.8446
T14-6_9_18	0	1.2	3239	1.2	
T14-6_9_18	0	3.2	3241	3.2	0.452333
T14-6_9_18	7.2	10.4	3248	3.2	1.077667
T15-11_S1	16	25	1378452	9	5.384556
T15-12_13	15	19	1378385	4	0.5855

#### 9.4 2018 Trenching Works

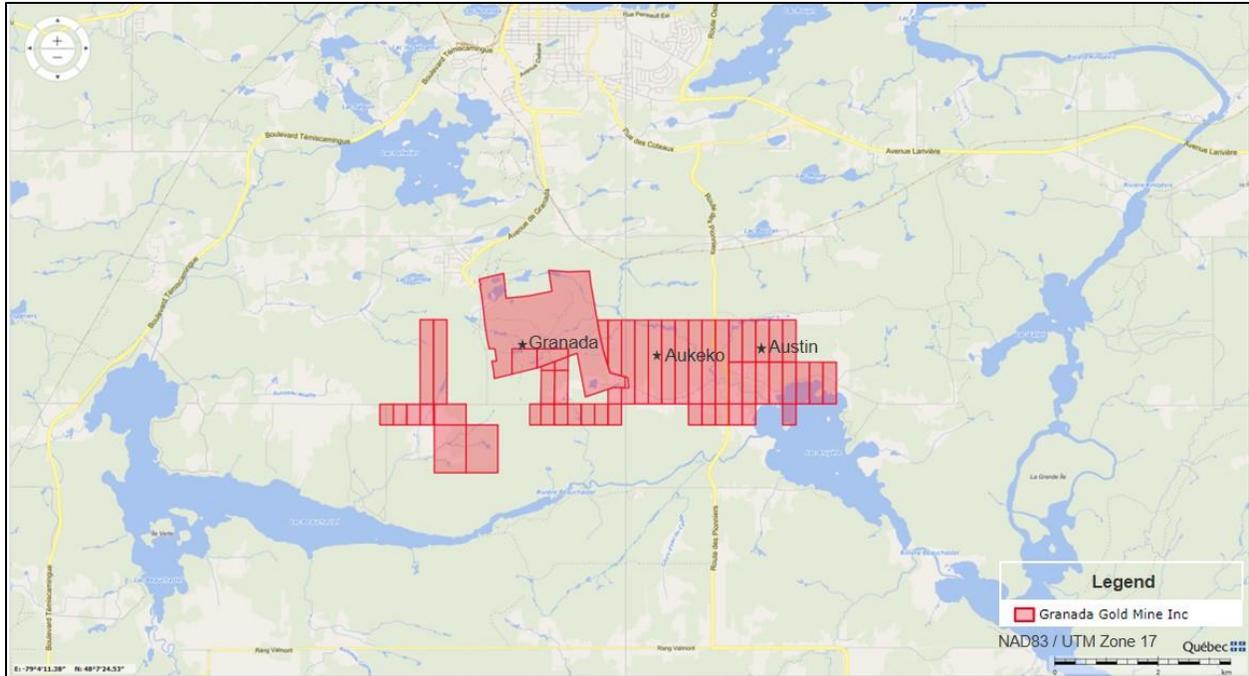
*The following section has been taken from the Assessment Report on Granada Gold Mine Property, (trenching, drilling and updated Pit Constrained Mineral Resources), Rouyn-Noranda, Province of Quebec, prepared by GMG for Granada Gold Mine Inc., dated May 27<sup>th</sup>, 2019.*

The Aukeko zone, a former gold mine, is part of the east-west trending structure on the Granada Gold Mine property. It is 2 km east from the extended LONG Bars zone. From June until August 2018, three trenches were completed at Aukeko for a total of 365 m in length and with an average width of 1.5 m (trench 1 of 90 m in length, trench 2 of 190 m in length and trench 3 of 85 m).

The trenching work consist of three trenches totaling 365 m with a width of 1.5 m (trench 1 of 90 m in length, trench 2 of 190 m in length and trench 3 of 85 m). The main goal of the trenching program is to intersect the East-West extension of the extended LONG Bars zone of gold mineralization and to prepare targets for the upcoming diamond drilling program.

The trenching started in June 2018 at Aukeko totaling 365 m with a width of 1.5 m (trench 1 of 90 m in length, trench 2 of 200 m in length and trench 3 of 85 m).

Figure 9-1 shows the location the Aukeko zone on the Granada property map and Figure 9-2 shows the location of the three trenches in the Aukeko zone. Details of the trenching and results at Aukeko zone is presented in this section because it is part of the Granada property. However, the Aukeko results were not used to support the MRE.



**Figure 9-1 Location of Aukeko Zone on the Granada Property (Gestim website, March 3<sup>rd</sup>, 2021)**

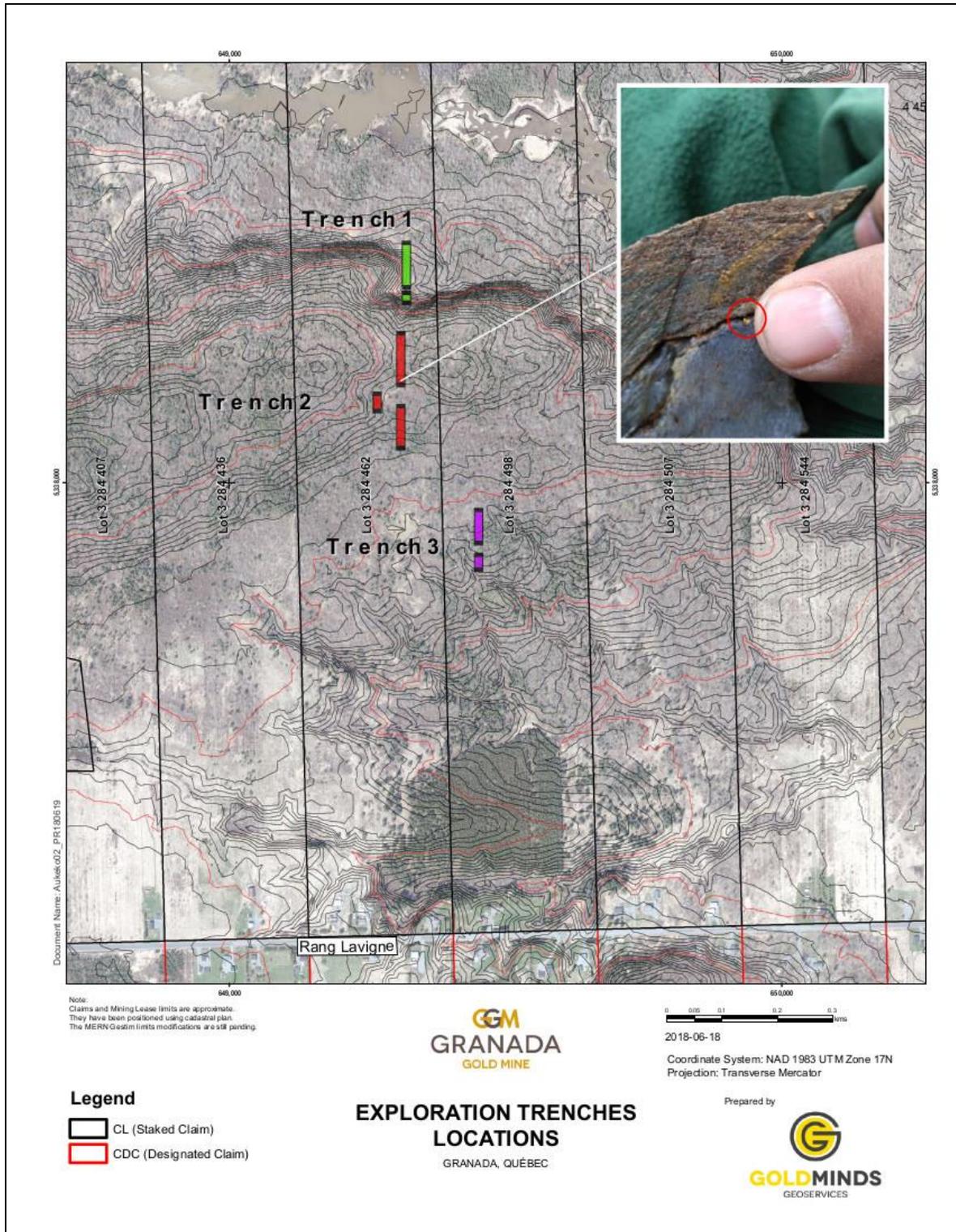


Figure 9-2 Location of Aukeko Trenches on the Granada Property



**Figure 9-3 Trenches at Aukeko Site**

**Table 9-2 List of Trenches Samples at Aukeko Site**

Channel Sample	Easting	Northing	Elevation (m)	Azimuth (°)	Dip (°)	Length (m)
F1-1	649312.67	5338261.63	306.7225	181.4688	-35.61	0.767751
F1-2	649313.07	5338261.00	306.3145	185.7937	-1.61	0.961288
F1-3	649311.34	5338260.40	306.6375	140.7955	-9.05	0.432533
F1-4	649311.61	5338260.07	306.5695	136.0826	-10.72	0.914132
F1-5	649312.55	5338259.70	306.3765	146.2008	5.88	0.731898
F1-6	649312.59	5338258.99	306.4085	181.5717	37.52	0.413726
F2-1	649311.98	5338257.10	306.5975	184.4132	-23.68	0.993353
F2-2	649312.44	5338256.04	306.1485	189.5772	-12.69	0.924137
F2-3	649312.15	5338254.33	305.9365	203.0089	56.04	0.567874
F3-1	649310.34	5338235.49	307.5495	187.286	-30.87	1.028933
F3-2	649310.08	5338234.06	307.0875	179.7252	60.13	0.837239
F3-3	649309.10	5338233.71	308.0285	170.8788	1.20	1.242986
F4-1	649311.08	5338228.01	307.2505	169.6233	-29.14	1.061566
F4-2	649311.25	5338227.09	306.7335	162.8973	-1.56	1.619173
F4-3	649311.72	5338225.55	306.6895	218.8478	-1.80	0.666728
F4-4	649311.56	5338224.61	306.8335	153.381	16.30	0.990586
F5-1	649311.84	5338218.44	306.7245	202.7717	-32.88	0.587594
F5-2	649312.29	5338217.01	305.7625	181.2405	15.87	1.056533
F5-3	649312.26	5338216.00	306.0515	185.8842	13.36	1.012599
F5-4	649312.16	5338215.02	306.2855	188.6049	16.22	0.995368
F6-1	649312.86	5338210.06	306.5875	197.0952	7.21	1.131545
F6-2	649312.06	5338209.10	306.6565	195.7383	1.74	0.988496
F6-3	649311.79	5338208.15	306.6865	199.1224	-2.44	1.081607
F6-4	649313.00	5338207.06	306.6725	186.6368	-7.52	0.925094
F6-5	649312.90	5338206.15	306.5515	182.6026	4.82	0.928237
F6-6	649312.86	5338205.22	306.6295	185.2783	7.93	0.812171
F6-7	649313.12	5338204.44	306.6395	177.5586	1.77	0.775075
F6-8	649313.15	5338203.66	306.6635	171.9643	10.56	0.69857
F6-9	649312.69	5338202.97	306.5405	168.4049	9.62	0.999159
F6-10	649312.88	5338202.01	306.7075	172.5339	9.89	0.86714
F7-1	649308.52	5338134.58	304.1705	202.017	45.45	0.562726
F7-2	649308.38	5338134.22	304.5715	196.1516	34.79	0.976155
F8-1	649309.65	5338127.17	305.0235	191.6316	-35.11	0.982262
F8-2	649309.49	5338126.39	304.4585	192.054	-34.12	0.948548
F8-3	649308.70	5338123.06	304.2425	166.9544	46.85	1.107587
F9-1	649311.96	5338115.77	306.5475	178.5655	-64.08	1.370881
F9-2	649311.00	5338112.70	305.1945	164.8497	-12.39	0.932355
F9-3	649311.23	5338111.82	304.9945	167.1925	-9.89	0.792178
F10-1	649309.77	5338103.74	305	157.1482	-54.32	1.231132
F10-2	649310.05	5338103.08	304	157.1481	-55.39	1.215076
F10-3	649310.15	5338102.50	303	169.6513	0.00	1.083668
F10-4	649310.67	5338101.46	303.5	167.3475	47.04	1.366342

### 9.4.1 Results

A total of 254 samples were taken from the three trenches realized at Aukeko zone. Samples were sent to ALS laboratory for fire assay Au. The trenching program totaling 365 m. Channel sampling with a rock saw in all 3 trenches have been completed by Technominex of Rouyn-Noranda under the supervision of Goldminds Geoservices. The distribution of trench samples was affected by the topography of the terrain and the presence of water. The best trench sample results are disclosed in Table 9-3.

**Table 9-3 List of the Best Trench Sample Results (Au by “AA24” Method)**

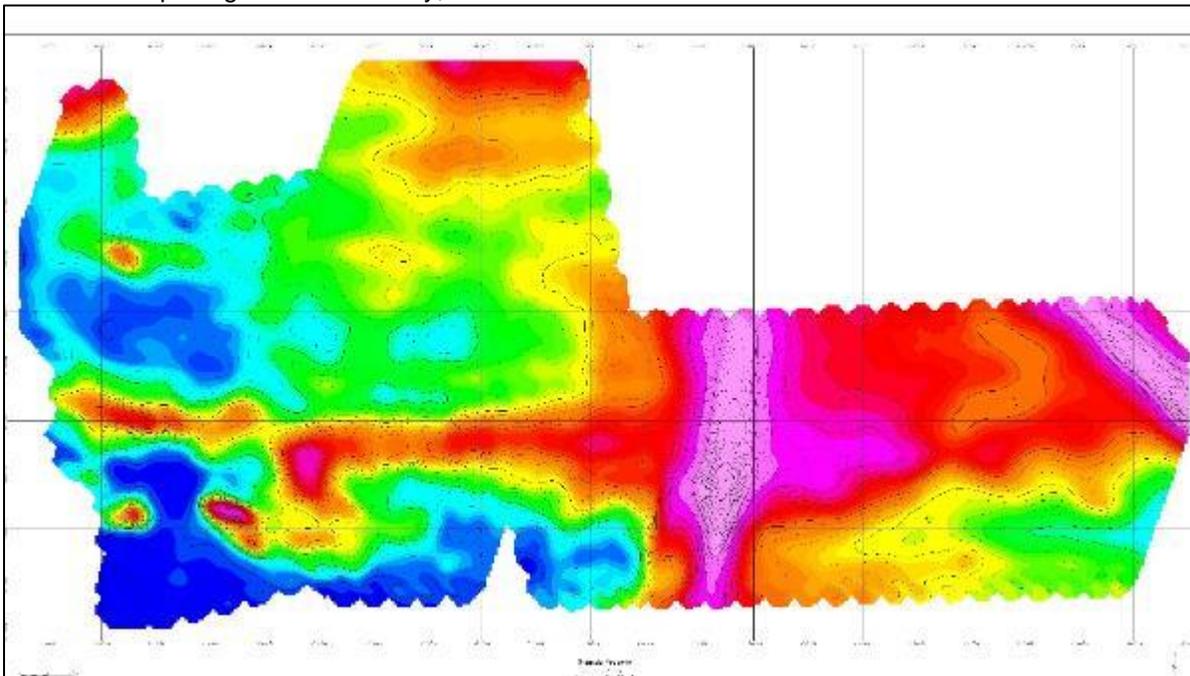
Sample#	NAME	Au ppm	Sample#	NAME	Au ppm
16848	AUK-TR2-CS59B	8.49	16791	AUK-TR2-CS29A	0.154
21518	AUK-TR2-CSF5-1	0.249	16884	AUK-TR2-CS76A	0.121
21532	AUK-TR2-CSF6-9	0.17	16894	AUK-TR1-CS10H	0.097

## 9.5 2018-2019 Drone Magnetometer Survey

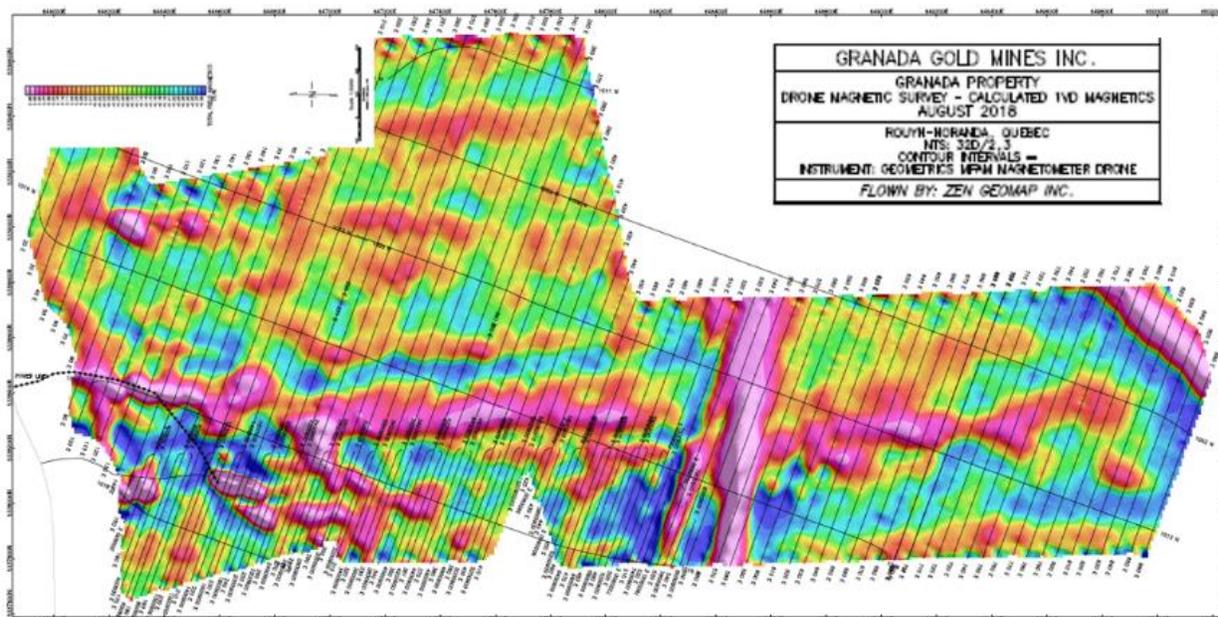
*The following section has been taken from the Assessment Report on Granada Gold Mine Property, (trenching, drilling and updated Pit Constrained Mineral Resources), Rouyn-Noranda, Province of Quebec, prepared by GMG for Granada Gold Mine Inc., dated May 27<sup>th</sup>, 2019.*

### 9.5.1 Overview

The drone-borne magnetic survey was first performed in August 2018, by Zen Geomap Inc. on Granada property. In addition, a survey was conducted in January 2019, adding data east for the previous survey of 2018. Using the Geometrics MFAM magnetometer drone, the LONG Bars zone was covered, totaling 140 km at a spacing of 50 and locally, 25 m.



**Figure 9-4 Drone-borne Magnetic (contours) Survey of Granada Property, by Zen Geomap Inc.**



**Figure 9-5 Drone- Magnetic Survey calculated 1VD Magnetics, Granada**

### 9.5.2 Results

The drone magnetic survey shows several anomalies that follow the E-W trends and a new target at the north-west part of the property. Those targets are partially intersected during the 2018 drilling program that will increase the mineral resources of the Granada property.

## 9.6 2019-2020 Stripping and Trenching Works

*The following section has been taken from the Assessment Report on Granada Gold Mine Property, Drilling Campaign & Stripping, Rouyn-Noranda, Province of Quebec, prepared by GMG for Granada Gold Mine Inc., January 26<sup>th</sup>, 2021.*

The results of the 2019 drilling campaign showed significant grades of gold (Au) in holes GR-19-A, GR-19-B, GR-19-C, and GR-19-E. Following receipt and analysis of the results, a larger surface area of the location of the mineralization was stripped in order to have a better understanding the behaviour of the quartz veins.

A bulk sampling of 150 tons with thermal fragmentation was planned at the location of the first three holes of the drilling campaign where the holes that showed high gold grades (see section 9.7.)

From September 23<sup>rd</sup> up to October 4<sup>th</sup>, 2019 stripping was done to uncover a larger part of the zone where the mineralized quartz veins are located. About 1,200 m<sup>2</sup> of surface was uncovered.



**Figure 9-6 2019-2020 Stripping on Granada Property**



**Figure 9-7 Exposed Quartz Vein after Surface clearing**

## 9.7 2019 Bulk Sampling: Thermal Fragmentation

In 2019, a bulk sample of 150 tons has been undertaken using the thermal fragmentation technology of Nippon Dragon Inc. (Nippon) on the main mineralized quartz vein located around the holes GR-19-A, GR-19-B and GR-19-C. The bulk sampling was halted due to mixed recovery results. There are no results from this bulk sampling.

## 9.8 2020 High-Grade exploration and Bulk Sampling Program

Three blasts for bulk samples of high-grade Vein No. 1 were completed in August and September 2020: 908 tonnes, 353 tonnes of access ramp and 780 tonnes of mineralized material have been blasted.

Samples were then processed at Temiskaming Testing Labs in Cobalt, Ontario. Conventional gravity concentration was used and therefore only native gold was recovered and quantified. The gold-bearing sulfides were not recovered.

Granada processed, by conventional gravity concentration, a large 1,220 kg grab sample taken over a 3 m strike length in the stripped area of Vein 1, resulting in the recovery of 55.6 g/t native gold. The native gold component for the Granada Gold Mine has been defined to represent an average of 50% of the recoverable gold.

The stripping continued along strike to the west and the mineralized structure has been traced on surface for over 115 m on an east-west trend. The structure extends over 500 m when we connect the pierce points from drill holes. The stripping has confirmed the continuation of the mineralized structure from historical Pit #1 for up to 350 m East-West. Pit #1, mined in 1994, extracted 87,311 tonnes grading 5.17 g/t Au.

The 500-tonne bulk sample of mineralized material and 900 tonnes of waste (low grade) was taken near the area where GR-19-A, B and C drill holes were drilled. The 500 tonnes of bulk material are stored in a shelter (Figure 9-9).

The 500-tonne bulk sample, obtained by drilling and blasting with rubber mats, has been crushed to smaller than 4 inches with a crusher set-up on the boom of the excavator and the company is currently looking to further process the mineralized material to get an overall assay. The bulk sample excavation site has been refilled and levelled for safety reasons.

Visible gold has been encountered during the processing of some of the 500-tonne bulk sample in the plus 20 mesh material. A 10.5-tonne composite sample was screened from the 500-tonne mineralized bulk sample. The 10.5-tonne composite sample was crushed, ground and screened at 20 mesh.

The screened, minus 20 mesh material was passed through the sampling tower at Temiskaming Testing Laboratory (TTL) in Cobalt, Ontario. Five super sacs were sampled by taking four samples from each super sac for assaying. Duplicate assays were run on one sample per super sac. The Table 9-4 identifies the sample assay results. No visible gold was recovered when processing the minus 20 mesh portion of the bulk sample. Visible gold was present in the plus 20 mesh material. The grade of the plus 20 mesh fraction is currently unknown. At this stage of evaluating the surface mineralization sample, the company is assessing the grade of the material without any high-grade visible gold. It has been estimated, based on metallurgical testing, that close to 50 percent of the gold at Granada is in native form.

A gold assay of 4.33 grams per tonne was reported for its 500-tonne bulk sample. This value is the average of the 23 assays from the minus 20 mesh material. The authors do not know the estimated grade for the plus 20 mesh material and cannot confirm the estimated grade for the 500-tonne bulk sample.

A 100-kilogram mineralized material sample was sent to GEKKO in Australia to evaluate the amenability of upgrading using in-line pressure jigs. The company has visited GEKKO in Australia, and two plant installations using in-line pressure jigs, and found that using them to pre-concentrate the low-grade mineralized material may be viable for the Granada Mine Property. GEKKO has processed the material and has submitted a report on the findings of the testwork. GGM is interpreting the results. Results are not available at the time of the writing of this report.

**Table 9-4 Bulk Sample Assay Results for Minus 20 Mesh Fraction**

Sample ID	Sample Source	Au by AA (g/t)	Sample ID	Sample Source	Au by AA (g/t)
OSLSR007-1	Bag #006-1	5.176	OSLSR007-9	Bag #007-1	4.199
OSLSR007-1DUP		4.795	OSLSR007-10		2.858
OSLSR007-2		3.949	OSLSR007-11		3.249
OSLSR007-3		4.562	OSLSR007-12		2.294
OSLSR007-4		2.558	OSLSR007-13		3.21
OSLSR007-5	Bag #006A-1	10.197	OSLSR007-13DUP	Bag #008-1	3.063
OSLSR007-5DUP		9.052	OSLSR007-14		2.85
OSLSR007-6		13.003	OSLSR007-15		2.661
OSLSR007-7		9.693	OSLSR007-16		3.397
OSLSR007-8		3.621	OSLSR007-17		1.246
			OSLSR007-18	Bag #009-1	1.352
			OSLSR007-19		1.341
			OSLSR007-20		1.237



**Figure 9-8 Bulk Sample Location**



**Figure 9-9 Bulk Material stored in a Shelter**

## 9.9 2021 Exploration

In 2021, Granada Gold Mine (GGM) excavated some overburden and sorted historic muck on mining lease BM 813 in preparation for bulk sampling in 2022. GGM also contracted SGS to complete additional metallurgical and environmental testing in order to amend the current permits to allow a potential mill on site. GGM started processing a bulk sample from mining lease BM 852 at Temiskaming Testing Laboratories (TTL) and successfully conducted leach tests at SGS in Lakefield using Re-2Ox process leaching 99% of Rubidium. More details about the processing test results are in section 13 of this report.

## 10 DRILLING

The following table summarizes the drilling completed on the Property since acquisition in 2006 by Granada Gold.

**Table 10-1 Drill holes Completed on the Property since Acquisition of the Property**

Year	# of Drill Holes and Wedges	Total Meterage	# of Assays
2009	11	1,027	841
2010	180	35,357	26,053
2011	211	41,181	30,345
2012	23	8,479	5,710
2014	6	235	230
2015	2	119	119
2016	15	4,306	2,967
2017	4	2,633	1049
2018	4	2,889	930
2019	13	900	893
2020	50	11,589	4,292
2021	35	18,757	8,743
<b>Total:</b>	<b>554</b>	<b>127,472</b>	<b>82,172</b>

### 10.1 2009 to 2011 Drilling

Granada Gold carried out three phases of exploration starting in 2009, another in 2010 and the third in 2011 (Figure 10-1). The drilling was done by diamond drill using NQ core size.

Granada Gold drilled 25 shallow holes in the Phase 1 drill program from December 2009 to January 2010 at the Property. A total of 2,817 m was drilled and was successful at testing for structure. The program also revealed a possible substantial new discovery of shallow depth mineralization northeast of the historic and past producing Pits #2 West and #2 East.

Drilling highlights include hole GR 10-17 located over 300 m from the edge of Pit #2 East, intersected 65.5 m of 1.21 g/t Au gold (from 3.5 m to 69 m) within a wider interval grading 0.95 g/t Au over 99.2 m. This hole, reported March 1<sup>st</sup>, 2010, was collared 103 m southeast of GR-10-15 which returned 73.8 m of 0.88 g/t Au as reported February 8, 2010.

Three other Phase 1 holes in Granada Gold named “LONG Bars Zone Eastern Extension” were also encouraging. GR-10-18, collared 125 m southwest of GR-10-17, intersected 19 m of 1.02 g/t Au. GR-10-14 and GR-10-16 returned lower gold values over shorter intersections but confirmed the continuity of mineralization in this newly discovered area. Some highlights of that campaign are:

- GR-10-21 - 50 m outside the western boundary of the zone and nearly 800 m from GR-10-17, intersected 65.5 m grading 0.72 g/t Au (from 3.50 to 69 m) including 20 m of 2.20 g/t Au.
- GR-10-13 - located between Pit #1 and Pit #2 inside the zone, returned 27.75 m grading 1.27 g/t Au within a wider interval of 66 m grading 0.56 g/t Au;

- GR-10-12 - located north of Pit #2 East and 300 m southwest of GR-10-17, intersected 68.8 m of 1.07 g/t Au (from 16.2 to 85 m) including 44 m grading 1.54 g/t Au and 14 m grading 4.28 g/t Au;
- GR-09-08 - 46 m east-southeast of GR-10-12, returned 32.5 m of 1.27 g/t Au, also at shallow depth, within a wider interval of 0.92 g/t Au over 51 m;
- GR-09-05 - 75 m northeast of GR-09-08, graded 0.92 g/t Au over 31 m between 92 and 123 m;
- GR-09-02 - at the western edge of the waste pile east of Pit #1, returned 32.5 m of 1.74 g/t Au between 15.5 and 48 m;
- GR-09-01 - 25 m north of GR-09-02, intersected 14.7 m of 1.60 g/t Au over a wider interval of 61.7 m averaging 0.56 g/t Au between 6.3 m and 68 m.

Granada Gold launched a 20,000 metre Phase 2 drill program at the Granada Gold Property in early May 2010, which was extended by 5,000 m in September due to encouraging early results. The two-pronged strategy was to a) conduct infill drilling as well as further exploratory drilling within the main zone as a first step toward an eventual 43-101 resource estimate, and b) significantly expand the overall LONG Bars Zone mineralized area. Some deeper drilling was also planned, and has taken place, within both the main zone and the Eastern Extension in order to test the Granada structure at depth as most drilling at the property historically and in the Granada Gold's Phase 1 program has been shallow (mostly less than 100 m vertical depth).

Granada Gold completed nearly 11,000 m of Phase 3 drilling at its Granada Gold Property as of January 21, 2011, with Phase 2 and Phase 3 drilling intersecting new mineralized structures throughout the LONG Bars Zone (main Granada mineralized structure package) from that drilling mineralization remains open in all directions at Granada.

In November 2011, Granada Gold reported the discovery of significant mineralization northeast and southeast of its LONG Bars Zone and the Granada Gold Property as a whole.

GR-10-108, collared 30 m north of GR-10-55 which delivered the longest mineralized intersection to date at Granada (356.6 m @ 0.60 g/t Au), returned an interval of 141.7 m grading 0.70 g/t Au.

One of the goals of Phase 3 drilling was to expand the continuity of the feldspar porphyry and quartz veining in this particular area. GR-10-108 was collared 150 m northeast of the main zone.

Meanwhile, nearly 500 m south of GR-10-108, GR-10-86 returned 84.6 m grading 1.00 g/t Au within a total near-surface interval of 127.5 m (4.5 m to 132 m) grading 0.76 g/t Au as reported November 19. This hole was drilled toward the south and was collared approximately 180 m southeast of Granada Gold's Preliminary Block Model. The discovery of near-surface mineralization in the deep-south of the Eastern Extension is considered a significant development.

All Phase 2 drilling was completed by late October and more than 20% of the Phase 3 program has been completed as of January 21, 2011.

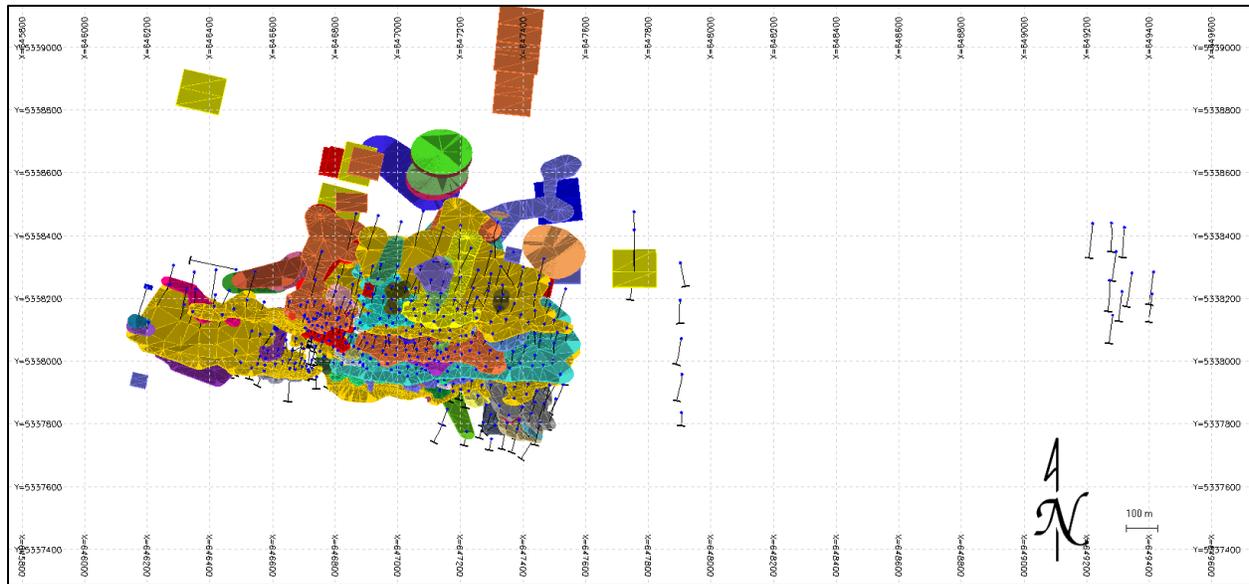
Gold Bullion reported September 9 that their previous geological consultant had observed visible gold and disseminated sulphides, along with large alteration zones, in feldspar porphyry in numerous holes drilled in Phase 2.

The fact that porphyry is hosting gold is an interesting development historically for the Granada property as a 2006 Technical Report on the property stated that all economic mineralization at Granada was related to quartz veining.

Other results; GR-10-53, collared 88 m southeast of GR-10-41 and near Pit #2 East, intersected 68.3 m of 2.16 g/t Au, including a high-grade section of 4.60 g/t Au over 26 m, within a wider near-surface interval of 110.5 m (3.5 m to 114 m) grading 1.34 g/t Au. This hole was drilled perpendicular to Vein #2 and is believed to closely approximate true width. Alteration dominated by intense sericitization and silicification was encountered in this hole along with quartz veining and abundant pyrite.

Most of the drill holes have been drilled close to perpendicular angle of the veins. The core lengths are in general 85% to 90% of the true width for the hole drilled south-southwest. The holes which were drill southeast show an approximate 75% true width as per new current modeling.

The near surface holes are closer to true width while holes a depth which were drilled steeper.



**Figure 10-1 Location of the 2009 to 2011 Drill holes with respect to the Current Granada Deposit**

## 10.2 2012 Drilling

The 2012 deep and shallow drilling program was initiated to test structures and gold mineralization presence on the north and west extension of the Granada property. The spring 2012 drilling program was intended to enlarge the gold mineralization envelope of the expanded LONG Bars zone resource to the north at depth and near surface to the west (Figure 10-2).

The original drill plan on the northern deep drilling area was designed to have three deep holes (DUP-12-01, DUP-12-02 and DUP-12-03) each hole with one wedge. The program commenced with planned drill hole DUP-12-03. Due to excessive deviation, this hole was consequently abandoned at 378 m. In order to continue the drill program, hole DUP-12-03A, located 400 m NNE ( $12^\circ$  North) of hole GR-11-390 was drilled 25 m to the west of DUP-12-03 to a final depth of 1347 m. Following this, three wedge holes W1, W2 and W3 were placed into DUP-12-03A.

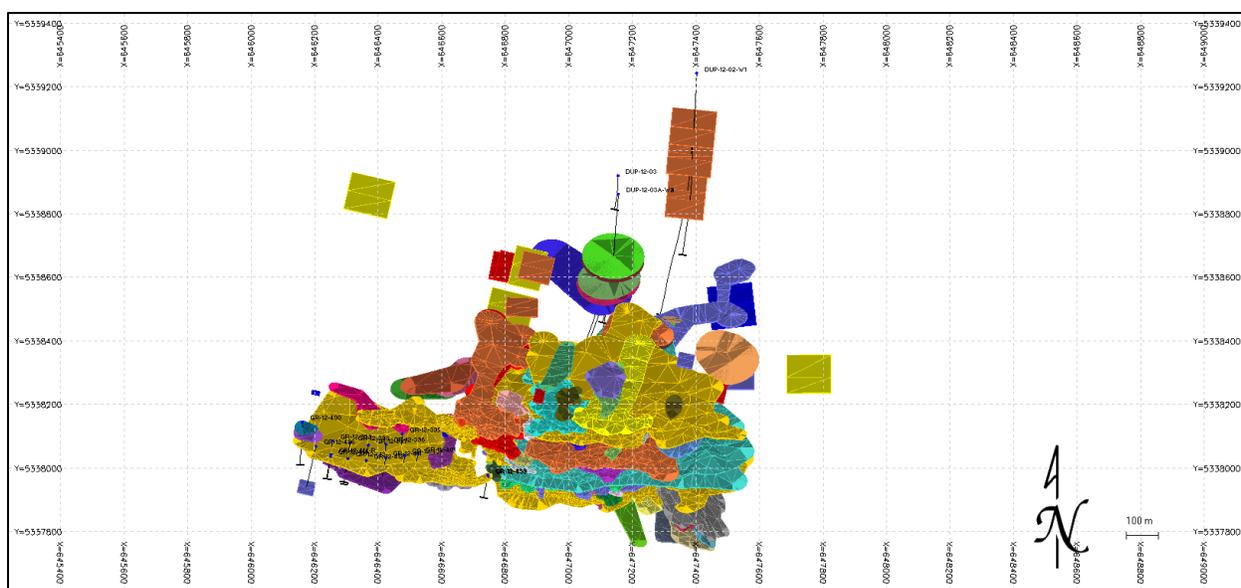
Hole DUP-12-02, located 830 m NNE ( $24^\circ$  North) of hole GR-11-390 was drilled down to 1593 m with one wedge added, W1.

These deep drill holes have expanded the mineralization by 650 m to the north and an additional 600 m in depth where the mineralization envelope remains open for expansion.

Due to the success of DUP-12-03A, DUP-12-02 and the associated wedges demonstrating continuation at depth of gold mineralization the drill was reassigned to the western extension to further evaluate near-surface mineralization. Planned hole DUP-12-01 was put on hold for these reasons.

A total of 8,339.25 m in 23 holes was drilled on the Granada property. The drilling contractor was Landdrill International Ltd. of Notre-Dame-Du-Nord, Quebec, which provided two surface diamond drill rigs (Marcotte Hydraulic model).

The drilling started on March 5<sup>th</sup>, 2012 and concluded on July 6<sup>th</sup>, 2012. All the drill holes were orientated south and drilled with different ranges of dip and length (see Table 10-2 and Table 10-3 for more details). Deep holes were spotted and surveyed by Mazac Geoservices Inc and the GR-12 holes were located by SGS Geologists using a handheld GPS. Down-hole orientation surveys were carried out by both Gyro and Reflex EZ-trac for the deep holes and only Reflex EZ-trac for the western extension holes.



**Figure 10-2 Location of the 2012 Drill holes with respect to the Current Granada Deposit**

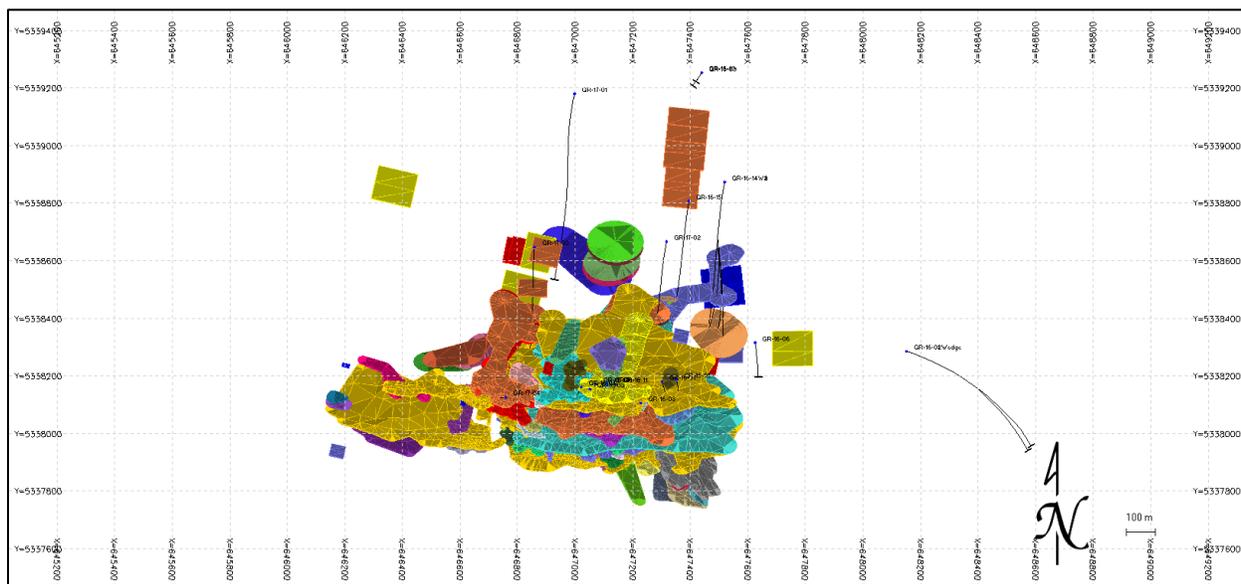
### 10.3 2016 – 2017 Drilling

Granada Gold started a diamond drilling campaign in September of 2016. Fourteen (14) NQ diamond drill holes were collared (GR-16-01, GR-16-03 to GR 16-15) and 1 hole was wedged to hit two different targets (GR16-02 wedge) for 4,305 m (Figure 10-3). Samples taken from diamond drill holes (2,967 samples not including blank, duplicates and standards) were analyzed at Accurassay laboratory in Rouyn-Noranda (Quebec). The drilling contractor was Forages Orbit Garant, who provided one surface diamond drill rig.

In 2017, four additional holes were drilled for a total of 2,633 m. A total of 826 Samples (not including blanks, standards or duplicates) were sent to Accurassay laboratory in Rouyn-Noranda for assaying. Blank and duplicate samples were integrated every 20 samples. Accurassay declared bankruptcy before the end of the job and assayed and unassayed samples were retrieved from the laboratory. These samples were then sorted, and all samples from holes GR-17-02, GR-17-03 and GR-17-04 were sent to SGS Lakefield for

assaying. Samples from the end on hole GR-17-01 were also sent (from 947 m to 1,277 m). Some samples (GR-16-15 and GR-17-04) have thus been sampled in both labs, allowing a comparison of results from both labs.

The hole GR-17-01 was drilled deep in order to cross the Pontiac zone and hit the underlying lithology. The hole GR-17-04 was drilled on top of a waste pile in order to confirm the presence of a high-grade zone that was observed in historic drill hole.



**Figure 10-3 Location of the 2016 - 2017 Drill holes with respect to the Current Granada Deposit**

## 10.4 2018 Drilling

Granada Gold started a diamond drilling campaign in September 2018. Four (4) NQ diamond drill holes were collared (GR-18-01, GR-18-03, GR-18-04 and GR 18-05) totaling 2,889 m. Samples taken from diamond drill holes (930 samples, not including blanks, duplicates and standards) were assayed at ALS laboratory in Rouyn-Noranda (Québec).

Drilling was performed by Vic Drilling Inc. of Val-d'Or, Québec. Drilling started on September 28<sup>th</sup>, 2018 and continued until November 10<sup>th</sup>, 2018

A total of 930 samples (not including standards, blanks and duplicates) from the drill core were cut, bagged and then transported to the ALS laboratory at Rouyn-Noranda (Québec) for gold fire assay and multi-elements.



Figure 10-4 The Diamond Drill at Granada Property

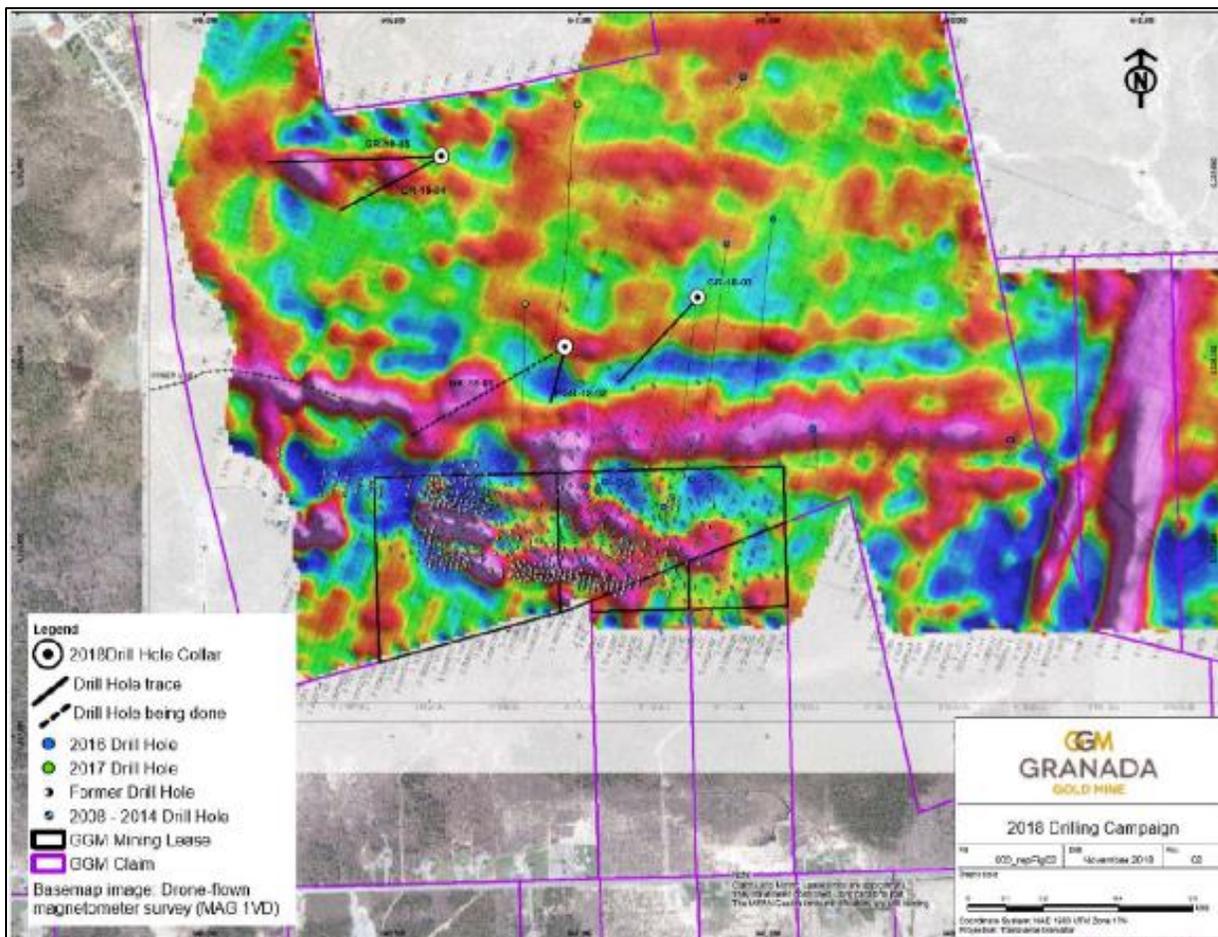
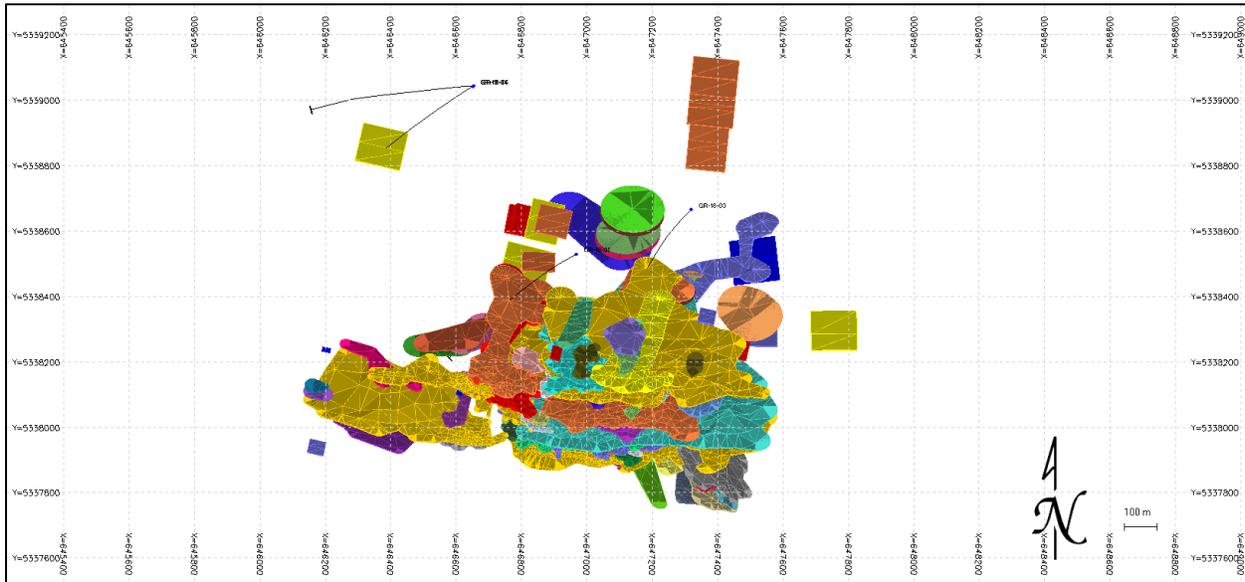


Figure 10-5 Drillhole Locations, 2018 Drilling Campaign

**Table 10-2 2018 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17)**

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)	End date
GR-18-01	646,964.86	5,338,531.62	303.81	236.76	-50	714	2018-11-10
GR-18-03	647,316.22	5,338,668.05	302.63	223.30	-64	726	2018-10-13
GR-18-04	646,648.95	5,339,044.34	304.40	239.50	-63	726	2018-10-20
GR-18-05	646,651.45	5,339,046.19	304.53	262.95	-48	723	2018-10-30



**Figure 10-6 2018 Drill hole Location Map with respect to Current Granada Deposit**

### 10.5 2019 Drilling

In 2019, Granada Gold completed two diamond drilling campaigns. From August 19<sup>th</sup> up to the 26<sup>th</sup>, 2019, a total of 6 NQ diamond holes (450 m) were drilled (GR-19-A, GR-19-B, GR-19-C, GR-19-D, GR-19-E, and GR-19-F). A total of 476 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 21 blanks and 21 standards.



**Figure 10-7 Diamond Drill on Quartz Vein at Granada Property**

From November 19<sup>th</sup> up to the 30<sup>th</sup>, 2019, a total of 7 NQ diamond holes (450 m) were drilled (GR-19-EA, GR-19-EB, GR-19-G, GR-19-SA, GR-19-SB, GR-19-WA and GR-19-WB). A total of 490 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 18 blanks and 13 standards.



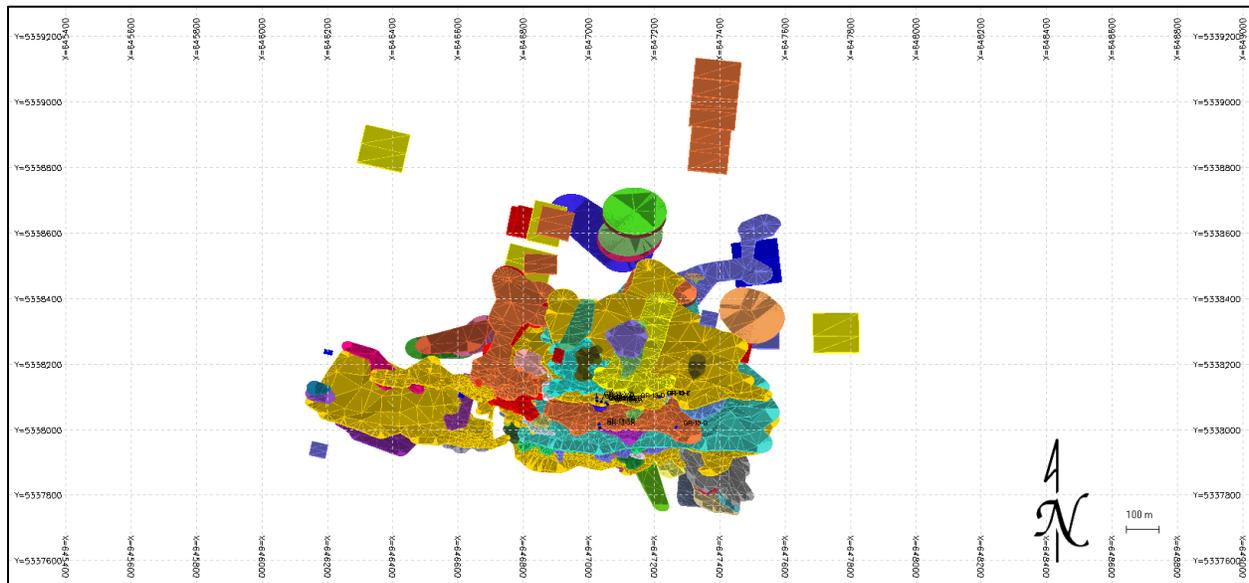
**Figure 10-8 Picture during Drilling Campaign in November 2019 on Granada's Property**

Table 10-3 shows the detailed information of the diamond holes drilled on Granada property in 2019.

**Table 10-3 2019 Diamond drill holes Data (UTM coordinates, NAD 83 zone 17)**

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)	End date
GR-19-A	647035.68	5338087.33	315	21.13	-41	90	2019-08-19
GR-19-B	647035.26	5338086.43	315	355.75	-79	21	2019-08-19
GR-19-C	647034.71*	5338084.98*	315*	30.00	-47	70	2019-08-20
GR-19-D	647132.29	5338094.40	314	355.75*	-58*	54	2019-08-22
GR-19-E	647212.88	5338101.47	314	164.09	-60	174	2019-08-23
GR-19-F	647213.05	5338101.15	314	156.55	-48	41	2019-08-24
GR-19-EA	647054.04	5338079.87	315	15.00	-45	75.1	2019-11-24
GR-19-EB	647050.57	5338084.93	315	0.00	-90	50.6	2019-11-25
GR-19-G	647264.02	5338010.26	315	0.00	-90	79	2019-11-30
GR-19-SA	647030.42	5338009.14	317	15	-50	71.3	2019-11-28
GR-19-SB	647028.91	5338017.98	317	0	-90	51	2019-11-26
GR-19-WA	647022.49	5338090.71	316	5	-45	72.05	2019-11-21
GR-19-WB	647021.63	5338099.57	315	0	-90	51	2019-11-21

\*data were not surveyed by MAZDAC; approximated according to the location of surrounding holes



**Figure 10-9 2019 Drill hole Location Map with respect to Current Granada Deposit**

### 10.6 2020 Drilling

From June to December 2020, two (2) diamond drilling campaign occurred on Granada’s property. The campaigns were supervised by Goldminds Geoservices with 2 drills turning on site.

A total of 48 NQ diamond holes (9,583.18 m) were drilled (including 1 wedge) (GR-20-01 to GR-20-21, GR-20-21W3, and GR-101 to GR-126). A total of 3,358 samples were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) including 174 blanks and 173 standards.

Also, another drill holes and a wedge were drilled in 2020 (GR-20-22, and GR-20-21W4) but did not have assay results in time for the 2021 resource update. As of 2022, these holes and the corresponding assays for these holes are accounted for as being 2020 as shown in Table 10-1 to simplify the accounting of assays. Note that GR-20-21W1 and GR-20-21W2 are 2 wedge attempts that failed, they are not part of the database and not counted.

For the long-hole campaign, a total of 22 diamond drill holes (GR-20-01 to GR-20-21) including one wedge (GR-20-21W3), which represents 7,783.41 m of core, were drilled.

For the short-hole campaign, a total of 26 short diamond drill holes (100-series), (GR-20-101 to GR-20-126) were drilled with lengths varying from 25.7 to 141 m from the surface, which represents 1,799.77 m of core, including 17 verticals and 9 with an angle from 45° to 60°.

The 100-series holes were drilled to intersect the Vein 1 extension uncovered by stripping and to follow the high-grade corridor. Holes GR-20-101 to GR-20-105 are vertical holes drilled to intersect the mineralized vein structure. Holes GR-20-111 to GR-20-113 are drilled within the vein structure. Holes GR-20-114 to GR-20-117 are vertical holes drilled to intersect the mineralized vein structures. Typical true thickness of the number 1 vein is 1.5 to 6 m. The halo effect around vein 1 has been measured up to 20 m true thickness with numerous mineralized veinlets hosting native gold. It has been estimated, based on metallurgical testing, that close to 50 percent of the gold is in native form and will be recovered from these veinlets.

**Table 10-4 2020 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17)**

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)
GR-20-01	647537.61	5338109.99	311.00	185.98	-44.5	27
GR-20-02	647537.62	5338110.88	311.14	185.00	-85.7	30
GR-20-03	647538.14	5338109.27	310.95	246.58	-46.5	42
GR-20-04	647414.72	5338126.39	310.56	166.00	-44.32	132
GR-20-05	647414.22	5338127.05	310.31	0.00	-90	72
GR-20-06	647417.34	5338126.05	310.70	118.48	-45.3	42
GR-20-07	647325.92	5338003.30	314.62	207.31	-67	147
GR-20-08	647212.90	5338063.99	316.68	4.02	-48.5	75
GR-20-09	647213.66	5338082.20	317.01	23.50	-73.7	72
GR-20-10	647140.14	5338416.93	304.85	192.93	-57.4	475
GR-20-11	647140.23	5338417.29	304.83	186.91	-76.8	522
GR-20-12	647139.96	5338417.10	304.63	195.97	-70	552
GR-20-13	647140.38	5338417.26	304.88	185.66	-70.5	549
GR-20-14	647226.50	5338476.78	303.40	185.61	-69.9	525
GR-20-15	647226.52	5338476.94	303.32	180.00	-80.3	552
GR-20-16	647006.48	5338446.28	312.52	201.48	-73.1	498
GR-20-17	647006.55	5338446.43	312.48	201.50	-80.2	558.54
GR-20-18	647335.71	5338656.25	302.05	222.00	-65	600
GR-20-19	647335.71	5338656.25	302.05	197.63	-65	702
GR-20-20	645968.00	5339544.00	292.00	183.63	-86	588
GR-20-21	647335.71	5338656.25	302.05	183.63	-75	761.07
GR-20-22	647335.71	5338656.25	286.97	4.4	-65	1626.12
GR-20-21W3	647620.8	5339243.41	302.05	183.63	-75	684.49
GR-20-21W4	647335.71	5338656.25	302.05	183.63	-75	792

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)
GR-20-101	647000.97	5338105.08	315.40	0.00	-89.8	75
GR-20-102	646981.40	5338105.49	315.62	0.00	-90	63
GR-20-103	646966.03	5338103.71	315.44	0.00	-90	75
GR-20-104	646951.64	5338102.39	316.88	0.00	-87.6	75
GR-20-105	646933.78	5338105.11	316.14	0.00	-89.4	141
GR-20-106	646929.58	5338090.70	315.09	20.91	-51	33
GR-20-107	646941.01	5338089.54	314.64	33.59	-55.4	30
GR-20-108	646941.15	5338089.77	314.66	34.49	-45.5	25.77
GR-20-109	646957.88	5338087.38	314.93	26.63	-46.1	63
GR-20-110	646980.65	5338080.97	314.60	19.22	-50.5	79
GR-20-111	647024.09	5338088.44	314.90	358.50	-60.4	71
GR-20-112	647037.25	5338100.21	314.76	17.29	-50	69
GR-20-113	647042.71	5338114.68	314.98	345.10	-52	90
GR-20-114	647042.41	5338114.34	315.51	0.00	-89	60
GR-20-115	647057.64	5338110.31	314.91	0.00	-89.2	51
GR-20-116	647051.39	5338095.57	315.80	0.00	-89	51
GR-20-117	647068.77	5338124.77	316.24	0.00	-90	65
GR-20-118	647056.38	5338130.53	315.70	0.00	-88.3	81
GR-20-119	647076.03	5338130.61	315.56	0.00	-88.7	66
GR-20-120	647068.17	5338137.56	315.71	0.00	-89.7	87
GR-20-121	647053.96	5338145.46	315.17	0.00	-89.5	92
GR-20-122	647071.57	5338158.82	314.76	0.00	-90	96
GR-20-123	647083.38	5338154.22	315.48	0.00	-88.2	63
GR-20-124	647108.29	5338174.77	314.03	0.00	-90	55
GR-20-125	647114.00	5338207.00	313.00	0.00	-90	109
GR-20-126	647041.00	5338075.00	316.00	17.63	-57	34

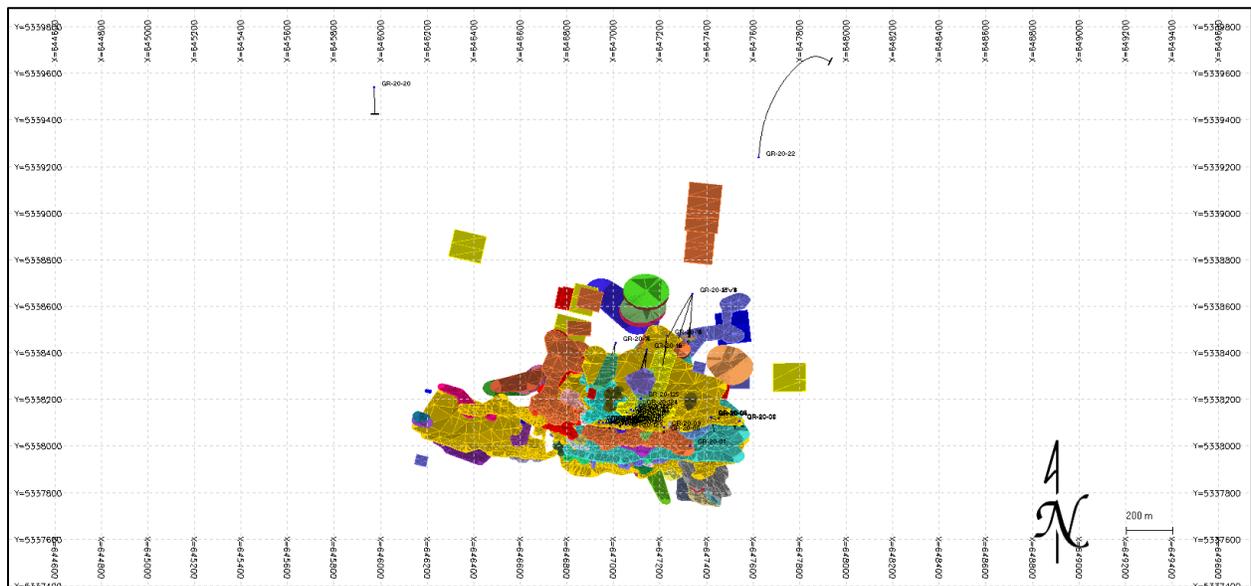


Figure 10-10 2020 Drill hole Location Map with respect to Current Granada Deposit

## 10.7 2021 Drilling

From December 2020 to July 2021, this diamond drilling campaign occurred on Granada's property. The campaign was supervised by Goldminds Geoservices with 2 to 3 drills turning on site.

Granada Gold drilled a total of 35 holes and wedges totalling 18,757 meters in 2021 during its infill diamond drill program to expand the existing open pit and underground resource. During this exploration program, a potentially large, low-grade, rare earth and alkaline metal structure was also identified. Holes were also drilled to verify the extension of structure and gold mineralization under the orphan tailings area

On April 27<sup>th</sup>, 2021, a 3<sup>rd</sup> drill started a new deep hole in the North-East of the property on the Property. With this drill hole, Granada Gold expected to cross the rare earth and alkali metals zone on its way to intersect the gold zone at depth. Granada hired Forage Lamontagne-Fortier Inc. for a first 10,000 meters. The drill was rated for holes up to 2500 meters. In addition to potentially intersecting the new REE and Alkali metal findings, Granada Gold was still aiming to intersect the gold mineralization at depth. This allowed the two other drills of Forage Multi-Drilling to continue to develop the underground Mineral Resources under the recent pit constrained Mineral Resources Granada Gold is also drilling at an angle with Multi Drilling to define an underexplored area under the orphan tailings.

The 200-Series drill holes (GR-21-05, GR-21-09, GR-21-10, and GR-21-11) were designed to determine the variability of gold mineralization of the main vein zone within the eastern extension of Pit #1 by drilling down the dip of the structure. The 200-Series holes were designed with an azimuth of 10-30 degrees to the north attempting to drill down the vein structures as opposed to obliquely. Normally, the drill holes are aimed southward which are designed to intersect the structures at a high angle, with an azimuth in the general range of 170-190 degrees. The grades we see in the 200-Series drill holes validate the grades encountered previously in other drill programs and confirm the continuity of the gold mineralization. It also demonstrates that the system is a multi-vein system (as opposed to a single discrete vein).

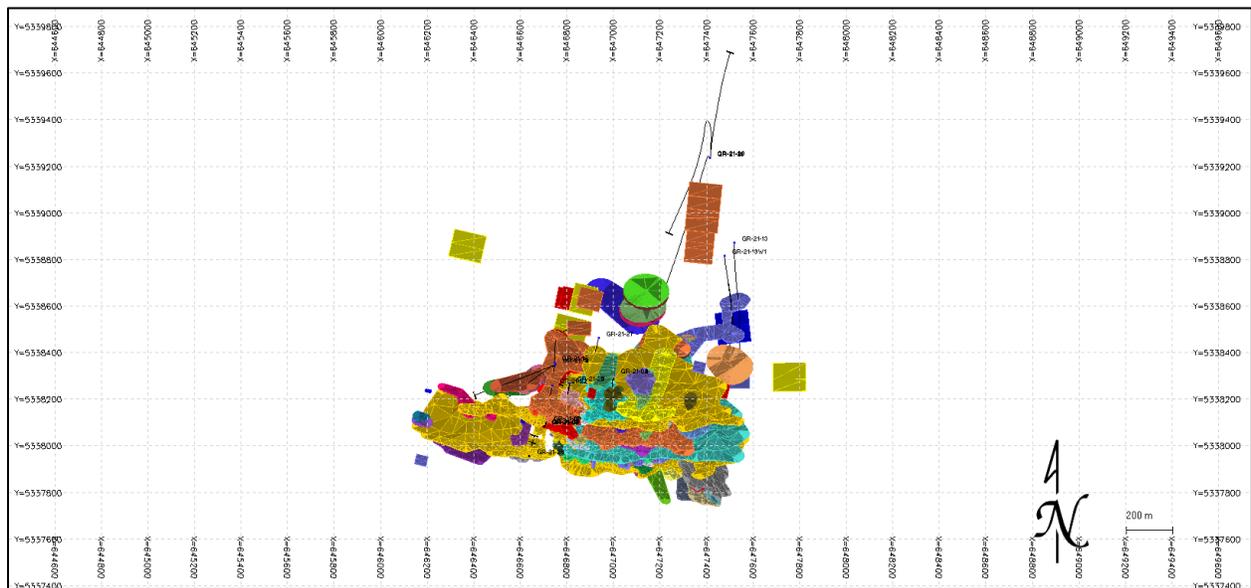
A total of 35 NQ diamond holes (18,757 m) were drilled (including 7 wedges) (GR-16-14W1 to GR-16-14W3, GR-20-21W5 to GR-20-21W7, GR-21-01 to GR-21-28 and GR-21-19W1). A total of 8743 samples (not counting the QAQC) were assayed at ALS Laboratory located in Rouyn-Noranda (Québec) or SGS Laboratory in Val-d'Or and Burnaby. There were an additional 354 blanks samples and 345 standard samples.

It is to note that assays of 2020 drill holes GR-20-22 and GR-20-21W4 were added to the database after the 2021 resource estimation.

**Table 10-5 2021 Diamond Drill Holes Data (UTM coordinates, NAD 83 zone 17)**

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)
GR-16-14W1	647516.79	5338875.69	298.96	191.54	-65.5	906
GR-16-14W2	647516.79	5338875.69	298.96	191.54	-65.5	990
GR-16-14W3	647516.79	5338875.69	298.96	191.54	-65.5	977.35
GR-20-21W5	647335.71	5338656.25	302.05	183.63	-75	766.15
GR-20-21W6	647335.71	5338656.25	302.05	183.63	-75	777
GR-20-21W7	647335.71	5338656.25	302.05	183.63	-75	762
GR-21-01	646996.59	5338305.42	309.47	186.00	-80	447
GR-21-02	646996.59	5338305.42	309.47	196.00	-65	429
GR-21-03	646996.59	5338305.42	309.47	196.00	-80	274.65
GR-21-04	646996.59	5338305.42	309.47	182.00	-85	417
GR-21-05	646700.97	5338087.80	315.13	15.00	-47	279
GR-21-06	646701.57	5338087.23	315.07	30.00	-47	114
GR-21-07	646701.43	5338087.02	315.12	30.00	-55	81
GR-21-08	646699.30	5338084.64	315.16	16.00	-47	70.3

Hole Name	Easting	Northing	Elevation	Azimuth (°)	Dip (°)	Length (m)
GR-21-09	646706.53	5338101.24	315.33	16.00	-57	136
GR-21-10	646706.37	5338101.40	315.11	28.00	-65	141
GR-21-11	646706.21	5338100.82	315.01	0.00	-90	99
GR-21-12	646745.60	5338351.33	307.85	203.00	-85	474
GR-21-13	647516.79	5338875.69	298.96	191.54	-80	1197
GR-21-14	647412.04	5339239.18	303.48	340.00	-85	2004.43
GR-21-15	646746.49	5338351.72	308.11	240.00	-67	582
GR-21-16	646746.14	5338351.58	308.06	240.00	-85	636
GR-21-17	646745.51	5338351.30	308.26	240.00	-52	582
GR-21-18	646743.77	5338359.08	308.08	360.00	-72	889
GR-21-19	647474.81	5338818.20	300.36	183.00	-80	1041.15
GR-21-19W1	647474.81	5338818.20	300.36	183.00	-80	1002
GR-21-20	647412.52	5339240.16	303.42	4.00	-50	702
GR-21-21	647412.49	5339239.59	303.47	4.00	-70	2473
GR-21-22	646734.16	5338261.04	311.71	193.00	-70	318
GR-21-23	646809.34	5338270.62	311.31	193.00	-75	276
GR-21-24	646809.34	5338270.62	311.31	193.00	-85	516
GR-21-25	646809.34	5338270.62	311.31	193.00	-70	435
GR-21-26	646634.50	5337958.78	318.00	12.00	-45	129
GR-21-27	646934.00	5338466.00	310.00	197.00	-80	548.8
GR-21-28	646634.45	5337958.81	318.23	12.00	-45	80.85



**Figure 10-11 2021 Drill hole Location Map with respect to Current Granada Deposit**

### 10.8 Core Recovery

In this project, the core recovery is excellent, typically above 96% with some losses generally occurring in the beginning of the hole and near shears or faults zones. Rock Quality Designation (RQD) measurements indicate that the rocks units observed in the Granada property are very competent. During the site visit on November 24<sup>th</sup>, 2020, the author Maxime Dupéré visually corroborated the core recovery.

## 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Sample preparation, analyses and security for the Project between 2009 and 2017 is described in previous technical reports on the Project by SGS and Goldminds Geoservices (Duplessis et al., 2012; Duplessis et al., 2013), (Duplessis et al., 2014), (Armitage et al., 2019). This information is summarized below.

Basically, the results of the QA/QC programs to date on the Project indicate there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support a mineral resource estimation.

### 11.1 2009 to 2011 Drilling

During the 2009 to 2011 drill campaign, samples of NQ size core were systematically assayed for gold and occasionally for arsenic and silver with a multi-element package.

All core sample assays from the exploration programs were performed by 4 different laboratories:

- Lab-Expert in 2009-2010
- Swastika in 2010
- ALS-Chemex in 2010-2011
- Accurassay in 2010-2011.

These laboratories have facilities in Quebec, Ontario and BC; Rouyn, Swastika, Val D'Or and Vancouver. The sampling procedures included the systematic inclusion of standards and property specific blank samples.

The drill hole core samples were split in half with a rock saw with one half sent for assaying while the second half was retained as a witness sample for future geological reference or re-assaying should it be deemed necessary.

Sampling was conducted not only on core with visible evidence of mineralization, such as veins, stringers, alteration zone, but also on barren looking core to preserve the sampling continuity in between mineralized zones and to test for broad zones of lower grade material as well.

The core sampling protocol is as follows:

- The core is logged by geologist
- For mineralized intervals NQ size core, the drill core samples have a minimum core length of 30 cm and a maximum length of 1.5 m.
- Photos of the main mineralized intersections are taken using a digital camera.
- Core is split in half with a rock saw by GBDC technicians at the project site.
- Half core samples retained for future references are returned to the core box along with their respective assay tag number.
- Samples are bagged at the project site and delivered by commercial courier to the lab facilities
- The sampling procedure includes the insertion of commercially prepared standards and property specific blanks collected from similar geological units, at regular intervals.

The information recorded in the drill log by the project geologist describing the core normally includes:

The from-to, depth, core length, true width, as well as observations concerning rock type, deformation, alteration, fault zones and nature of mineralization, the name of the vein if possible, and core angles. All observations are normally entered into a drill hole database management software program.

All core boxes are stored outside on site. Each individual core box is identified with aluminium metallic tags labelled by a dymo with the drill hole number. The boxes are store on core racks. The site had constant security guard for that specific drilling period. The facility where core is stored is fenced and locked and is monitored with video security.

Sample preparation and assaying procedures for 2009 through 2011 have changed. There was one standard procedure for regular samples however when visible gold was observed in core a secondary procedure was adopted which included a complete pulp metallic (screen metallic) assay on the whole sample.

Sample preparation includes the following procedures and operations however, they may not have been performed on all samples but for the majority of them:

- Log sample into the tracking system.
- Record the weight of material received from the client.
- Crush drill core samples to finer than 70% passing 2 mm.
- Split sample using a riffle splitter.
- Pulverize the split (up to 250 g) to a particle size finer than 85% passing 75  $\mu\text{m}$ .

Once the sample is pulverized the following assay methods are then applied to the sample:

- Gold assays are routinely performed using fire assay (FA) with atomic absorption (AA) finish. High gold assays are automatically re-assayed using a FA with gravimetric finish.
- A multi-element geochemical package was used to determine As, Ag and others elemental concentrations.

Granada Gold implemented a Quality Assurance/Quality Control (QA/QC) program for the Granada project at the beginning of the 2009 to 2011 drill program.

It was found that it was consisting of the insertion of commercially prepared reference material.

The exact structure (list-computerized table) for the insertion of standards and blanks into the sampling sequence is not available. Regardless, the physical sample tags with drill hole numbers, from-to depths, and unique sample number referring to the from-to depths that were used to rebuild the database independently of the QA/QC assay, they were put aside.

This being said, it was possible to build a table to check QA/QC from the ALS–Chemex laboratory's internal blanks and standards data. There were apparently no failures in terms of contamination at the ALS laboratory.

Not having the target value, it was difficult to judge, however SF 30 was likely two different reference materials and that OXL 78 standard had one failure.

The sample preparation was adequate; however, it appears to have changed over time to accommodate bigger amount of rock crushed and pulverized prior to splitting, which is good. As for security there is no reason to believe that tampering has occurred as per arguments of the next section and the physical

observation of gold in core at the site. The gold fire assay and screen metallic are industry standard for analysis of gold and are acceptable.

The reader should keep in mind that this property is not a green field and mining activities have taken place and previous owners had demonstrated the presence of gold in the ground.

An extensive independent sampling program has been put in place right at the beginning of the mandate in order to compensate the lack of follow-up on previous QA/QC, which also built confidence on the data for preparation of the resource estimate in the context of a nuggety gold project.

## 11.2 2012 Drilling

One (1) sample out of every 26 was an established standard purchased from either Ore Research, Exploration or from Accurassay. The standards were inserted in a predefined sequence. Based on an analysis of the standard results, none of the standards indicated serious bias. The results of the data for the standards indicate that control has been established and there is no significant bias.

Six of every 200 samples were sent to the laboratory as blank material. The material was a marble purchased from the local hardware store and inserted by SGS Geostat. The blanks consistently provided control as a blank material. There was no mislabels or sequence errors for blank material.

Granada Gold implemented a double duplicate method for core duplicates. A total of 350 assays were compared with 1400 duplicate assays. A quarter core split is taken and sent to the laboratory blind as the original for duplicate comparison. An additional half core was sampled and sent to the laboratory with the title “DDUP”, and a quarter core remains as a witness sample.

Scatter plots of the  $\frac{1}{4}$  core split gold values versus each of the duplicated values (1A, 1B, 2A, 2B) were created to check if there is the expected linear relationship. Most of the values did not match on a 1:1 line or within the 20% variance, displaying that there appears to be a nugget effect within the deposit. However, by comparing the results on a line chart there is a definite relationship with the duplicate results. The nugget effect hypothesis is further solidified by comparing the duplicates that came from the same pulp, the 1A and 1B results and also the 2A and 2B results. When comparing samples produced from the same pulp, the results plot closer to a 1:1 relationship. This indicates there is much less variation within the individual pulps as compared to the entire sample.

SGS has reviewed the 2012 QA/QC and the results of the QA/QC indicated there are no significant issues with the 2012 drill core assay data.

## 11.3 2013 Channel Sampling Protocol

During the 2013 channel sampling campaign, core samples were systematically assayed for gold with multi-element package by Accurassay laboratory in Rouyn Noranda. The sampling procedure included insertion of standards and blanks. The channel samples were made with a mechanical saw and sectioned in 1 metre long samples. Samples were identified, packaged and sent to Accurassay laboratories. Each sample was surveyed by a surveyor (location of “from” and “to”).

- The trench locations were identified by the geologist.
- The trenches were dug by a shovel operator.
- The bedrock was cleaned using water hoses.
- The channels were set by technician and sectioned into metres.

- Photos of the channel were taken using a digital camera.
- Rock samples were cut using a rock saw.
- Samples were bagged at the project site and delivered directly to the lab facilities by the technician.
- The sampling procedure included the insertion of commercially prepared standards and property specific blanks collected from similar geological units, at regular intervals.

## 11.4 2016 to 2017 Drilling

Several holes were drilled on the Granada property and a rigorous QA/QC program was in place during the 2016-2017 campaign. This procedure includes the systematic addition of certified standards, blanks and duplicates. The QA/QC program consisted of controlled core & assays being conducted by Accurassay Laboratories in Rouyn-Noranda, Québec and SGS in Lakefield, Ontario.

The 2016 and 2017 samples were sent to Accurassay Laboratories. In 2017, Accurassay laboratory went bankrupt. The samples from the 2017 campaign that were not assayed were retrieved from Accurassay and shipped to SGS Lakefield.

### 11.4.1 Accurassay Laboratories

For the 2016 drilling campaign at the Granada mine two types of assays were done on the cores, fire assays (GR-16-01 to GR-16-13) and screen metallic (GR-16-14 and GR-16-15).

#### Fire assay analysis

A total of 2142 samples (from GR-16-01 to GR-16-13) were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t. Table 4, presents the number of samples sent to the laboratory per hole as well as the number of blanks, standards #1 and standards #2 inserted in the shipments to the laboratory.

Given the results of drill holes GR-16-01 to Gr-16-13 from the fire assay method of analysis, it was decided to target specific mineralized intervals from those same drill holes and use the screen metallic method of analysis on the rejects. Then, the screen metallic analysis method was kept for drill holes GR-16-14 and Gr-16-15.

#### Screen metallic analysis

A total of 1342 samples (516 samples from drill holes GR-16-01 to GR-16-13 and 826 samples from drill holes GR-16-14 and -15) were assayed using screen metallic method. The screen metallic analysis is one of the methods able to overcome the gold nugget effect by increasing the sub-sample size to 1,000 g and physically collecting the free gold within the system. The subsample is pulverized to ~90% -150 mesh (106 $\mu$ ) and subsequently sieved through a 150-mesh (106 $\mu$ ) screen. The entire +150 metallics portion is assayed along with two duplicate subsamples of the -150 pulp portion. Results are reported as a weighted average of gold in the entire sample.

### 11.4.2 SGS Lakefield

A total of 855 samples (239 samples from drill hole GR-16-15 and 612 samples from drill holes GR- 17-01 to GR-17-04) were assayed using the screen metallic method. Normally, samples received are dried then crushed to achieve a nominal sample size (~9 mesh). In this case, samples were already crushed and dried by Accurassay. Then, samples are split using a 14 slot, 3/4 inch splitter that divides the sample into 2 portions

(pulp and reject). A representative head sample of which is within ~10% of the required sample weight is riffled.

The entire head sample is pulverized then screened using a Ro-tap assembly to a specified micron size (based on scheme selected) to ensure target weight is obtained. The entire plus fraction is submitted to the lab for analysis to extinction. Two aliquots are riffled from the minus fraction and submitted for analysis (weight of these aliquots may be 30g or 50g; weight may be client specified). Final assays are weight ratioed back to the representative sample weight.

#### **11.4.3 Quality Assurance/Quality Control (QA/QC) Program**

The 2016-2017 drilling campaign consisted of 19 diamond drill holes (including one wedge) and a rigorous QA/QC program was established by the GMG geologist. This procedure includes the systematic addition of certified standards, blanks and duplicates in the assayed core.

Because Accurassay went out of business during the process of campaign 2017, only 6 Blanks out of 19, 3 Standard 1 out of 10 and 4 Standard 2 out of 12 were analyzed. Limited statistical analysis was done on campaign 2017.

But, holes GR-16-15 (240 samples) and GR-17-04 (62 samples) were analysed in both laboratories. Therefore, there are 301 duplicates for the 2016-2017 campaign.

A total of 127 blanks, were inserted and consist of coarse pure white quartz sand. The results of assay blank samples showed that there are no anomalous values and all values are less than 0.06 ppm.

Two types of standards were used (STD1 and STD2). A total of 127 standards (66 STD1 and 58 STD2) were sent to Accurassay laboratory.

All standards fall within a narrow range. Two samples fall out of their respective range but fall within the range of the other standard. It is likely the two standards were mislabelled.

A total of 196 duplicates were analyzed. Excluding the one high grade assay, the slope of the regression line and the correlation coefficient are close to unity, indicating a good reproducibility of the results.

#### **11.4.4 Fire Assay versus Screen Metallic**

A total of 1,342 samples (not including blank, duplicates and standards) were analyzed with the screen metallic method by Accurassay Laboratory in Rouyn-Noranda. A total of 516 samples from drill holes GR-16-01 to GR-16-13 and 826 samples from drill holes GR-16-14 and GR-16-15.

The screen metallic method allows a greater recovery and measurement of gold content than a single fire assay method. Therefore, the screen metallic method was used for drill holes GR-16-14 and GR-16-15 and is used for all the 2017 drilling campaign.

#### **11.4.5 2017 Drilling Campaign**

Granada Gold adhered to a quality control procedure, including inserting two different standards and blanks.

In 2017, 19 blanks were sent to Accurassay, as well as 20 standards (9 STD1 and 11 STD2). The blanks and standards were inserted every 20 samples, with one blank every forty samples and a STD1 or STD2 alternating every 40 samples (blank, STD1, Blank, STD2, Blank, etc.). However, since the lab went

bankrupt before the assaying was done, not all these samples have been assayed. The decision was taken to not send any additional blanks and standards to SGS Lakefield, because of the complexity of the task and the time constraints.

A total of six (6/19) blanks were assayed by Accurassay and consist of pure quartz sand. The average grade is 0.0033 g/t Au, with a maximum of 0.005 g/t and a minimum of <0.001.

Two types of standards were used (STD1 and STD2). A total of 7 standards (3/10 STD1 and 4/10 STD2) were assayed at Accurassay laboratory.

No blanks or standards have been sent to SGS Lakefield. The assay results of the blanks and standards from Accurassay lab show no significant outlier and are very similar to the assay results from the 2016 assay results.

## 11.5 2018 Drilling

*The following section has been taken from the Assessment Report on Granada Gold Mine Property, (trenching, drilling and updated Pit Constrained Mineral Resources), Rouyn-Noranda, Province of Quebec, prepared by GMG for Granada Gold Mine Inc., dated May 27<sup>th</sup>, 2019.*

### 11.5.1 Sampling Approach and Methodology

During the drilling campaign, a consistent methodology was used for the sample preparation. The core sampling protocol was established by Goldminds Geoservices and is described below.

Once the drilling core was extracted, the sampling method was as follows:

- a) The geologist takes photos of dry and wet core boxes (Figure 11-1);
- b) The geologist matches the different pieces of the core to determine the direction of veins and faults;
- c) Once the geology is described, the geologist mark the beginning and the end of the samples directly onto the core with a yellow-colored wax crayon;
- d) The core is sampled over regular intervals of one (1) meter;
- e) Goldminds Geoservices tags are placed at the beginning of each sample interval and the tag number is integrated within the database on an Excel® spreadsheet (Figure 11-1);
- f) Blanks and standards tags are inserted after each batch of 20 samples;
- g) Samples are cut into two parts at the Granada mine site, one part of each sample is sent for assaying by fire-assay to ALS laboratory in Rouyn-Noranda and the other part is stored for the archives;
- h) The half-core meter-long samples are placed in plastic bags with their own tag and closed. The remaining half-cores are kept at the company's core-shack for future assay verification or any other further investigation;
- i) The plastic bags are placed into rice bags. Each rice bag is then closed with a tie-wrap and identified prior to being transported to the laboratory (Figure 11-3);



Figure 11-1 Pictures of Cores, Holes GR-18-01, GR-18-03, GR-18-04 and GR-18-05



Figure 11-2 A) Sample in Plastic Bag with Tag; B) Two Standards used during the Drilling Program



**Figure 11-3 Rice Bags filled with Samples transported to ALS Laboratory at Rouyn Noranda**

### **11.5.2 Samples Preparation**

For the 2018 drilling campaign at the Granada mine, two types of assays were done on the cores, fire assays and screen metallic. The geologist of GMG made his decision depending on the presence of visible gold and extensive structures with mineralisation.

A total of 930 samples (not including blanks, duplicates and standards) from the 2018 drill cores were cut, bagged and shipped to the Accurassay Laboratory in Rouyn-Noranda.

Some intervals not sampled during the 2017 drilling program were sampled and a total of 278 samples from four drillholes (GR-17-01, -02, -03 and 04) were sent to ALS laboratory at Rouyn Noranda.

A total of 26 blank samples were inserted and 29 standards were included (STD1 and STD2) for the QA/QC program. The ALS laboratory carried out internal standard, blank and duplicate analyses.

### **11.5.3 Fire Assay Analysis**

A total of 906 samples (from GR-18-01, -03, -04 and -05) were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

Given the observation of the geologist responsible for logging it was decided to target specific mineralized intervals from those drill holes and use the screen metallic method of analysis.

#### 11.5.4 Screen Metallic Analysis

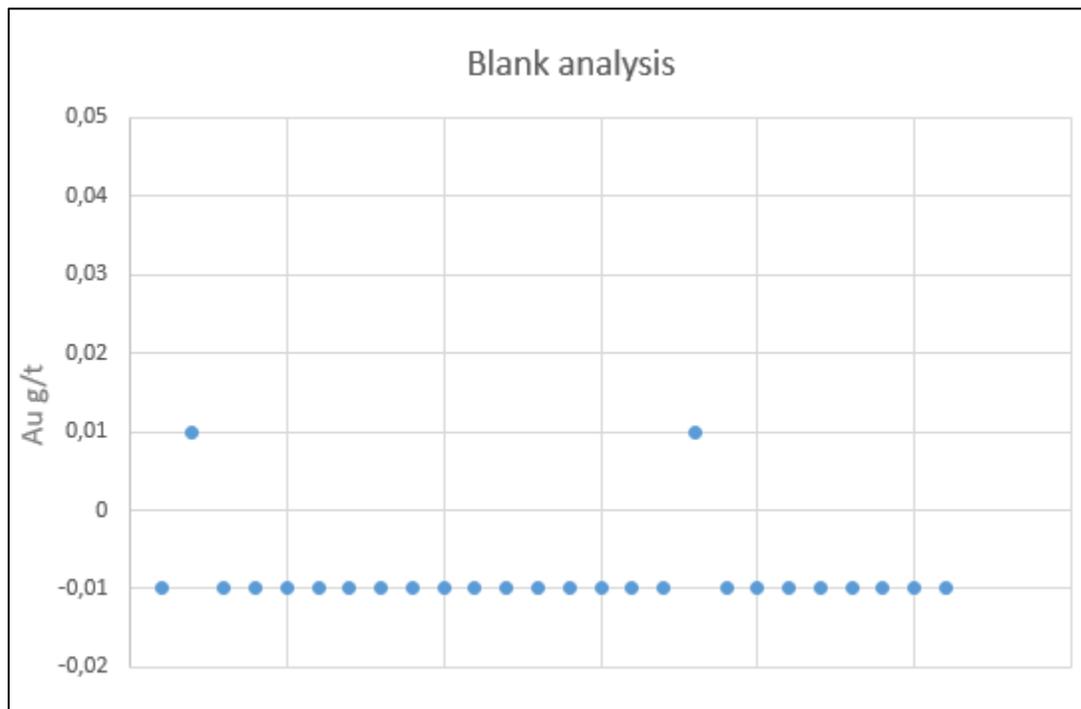
A total of 24 samples from drill holes GR-18-01 and -04 were assayed using screen metallic method. The screen metallic analysis is one of those methods able to overcome the gold nugget effect by increasing the sub-sample size to 1,000 g and physically collecting the free gold within the system. The subsample is pulverized to ~90% -150 mesh (106 $\mu$ ) and subsequently sieved through a 150-mesh (106 $\mu$ ) screen. The entire +150 metallics portion is assayed along with two duplicate sub-samples of the -150 pulp portion.

Results are reported as a weighted average of gold in the entire sample.

#### 11.5.5 Quality Assurance and Quality Control

The 2018 drilling campaign consisted in four diamond drill holes. A rigorous QA/QC program was established by the GMG geologist. This procedure includes the systematic addition of certified standards, blanks in the assayed core. The sampling preparation described here was performed under the supervision of GMG. Since all assays were analyzed at an independent and certified laboratory, no duplicates were sent to another laboratory.

A total of 26 blanks were inserted and consist of coarse pure white quartz sand (Figure 11-4).

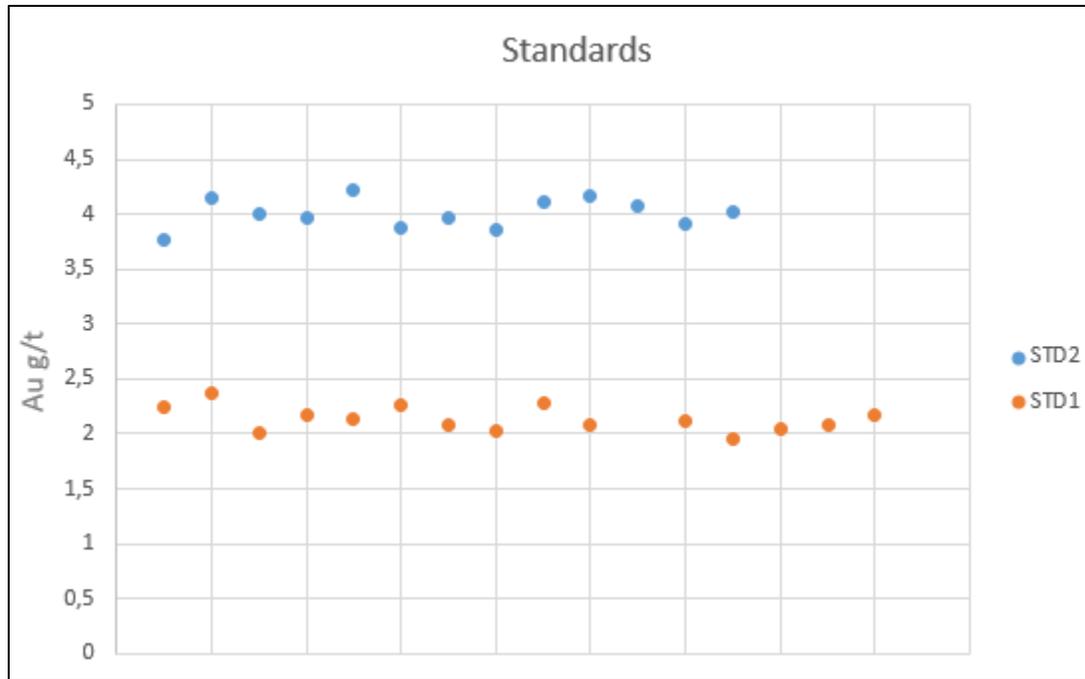


**Figure 11-4 Distribution of Blank Samples used for the 2018 Drilling Campaign**

The results of assay blank samples showed that there are no anomalous values with values less than 0.02 ppm Au (Figure 11-4).

Two types of standards were used (STD1 and STD2; Figure 11-5). GMG sent a total of 28 standards (15 STD1 and 13 STD2), to ALS laboratory at Rouyn Noranda.

STD1 shows a minimum value of 1.96 g/t, a maximum of 2.37 g/t and an average of 2.13 g/t. STD2 shows a minimum value of 3.77 g/t, a maximum of 4.22 g/t and an average of 4.00 g/t.



**Figure 11-5 Distribution of Standards (Au g/t) used in the 2018 Drilling Campaign**

**11.5.6 2018 QA/QC Conclusion**

The assay results of the blanks and standards from ALS Laboratory show no significant outlier and are very similar to the assay results from the previous drilling campaigns.

Note that there has been QA/QC on the Aukeko zone, but it is not included here because it was not used to support the MRE.

## 11.6 2019 Drilling

*The following section has been taken from the Assessment Report on Granada Gold Mine Property, Drilling Campaign & Stripping, Rouyn-Noranda, Province of Quebec, prepared by GMG for Granada Gold Mine Inc., January 26<sup>th</sup>, 2021.*

### 11.6.1 Sampling Approach and Methodology

The sampling approach was established by GMG during the drilling work. Core logging of hole GR-19-A was performed by Claude Duplessis, Sr. Eng. Logging of holes GR-19-B up to GR-19-F was conducted by Merouane Rachidi, P.Geo. and holes from the November drilling campaign (GR-19-EA, GR-19-EB, GR-19-G, GR-19-SA, GR-19-SB, GR-19-WA and GR-19-WB) were logged by Maxime Dupéré, géo. All logging activities took place at the core shack located on Granada's property following procedures further described herein.

At reception, all core boxes were stacked on rack in building. All core boxes were progressively opened and placed in order on the logging tables. All meterage wood blocks were verified to control core box numbers and any possible mistakes made during drilling procedures.

Logging procedures included a mineral description of geological units and sub-units in terms of color, grain size, alteration, accessory minerals and fracture descriptions. These descriptive data were entered on Microsoft Excel® sheet and compiled by drillhole. Pictures of the core boxes were taken, one showing dry cores and a second damp cores. Once the geology is described, the geologist marks the beginning and the end of the samples directly onto the core with a yellow-colored wax crayon.

Sample length average of 1 meter for both campaigns. Sample length of 0.5 to 1 meter were selected for intervals with clear signs of minerals (pyrite, chalcopyrite, pyrrhotite, arsenopyrite). Sample intervals of 1.5 m were taken within the schist unit when no significant sulfides were observed.

Numbered sample tags were placed at the end of each sample, together with distinctive arrows on the core marking the beginning and end intervals. The tag numbers are integrated in the database on Microsoft Excel® sheet.

### 11.6.2 Samples Preparation

All core samples were cut in half using the wet cutting saw for rock at Granada's facilities.

For all samples, half of the cores was retained and placed back in the core box, respecting the original orientation and position. Sample tags were stapled to the bottom of the box at each sample interval, so that each sample could be relocated following future handling, transportation and storage.

A total of 966 samples were prepared from the 900 m extracted core from August to December 2019. From the 450 m drilling campaign in August, 448 m were cut. A total of 476 samples were prepared (from drill holes GR-19-A to GR-19-F). 21 Standards and 21 Blanks were inserted at different intervals in the shipment to the laboratory. From the 450 m drilling campaign in November, 438 m were cut. A total of 490 samples were prepared (from drill holes GR-19-G, GR-19-EA to GR-19-WB). A total of 13 Standards and 18 Blanks were inserted at different intervals in the shipment to the laboratory.

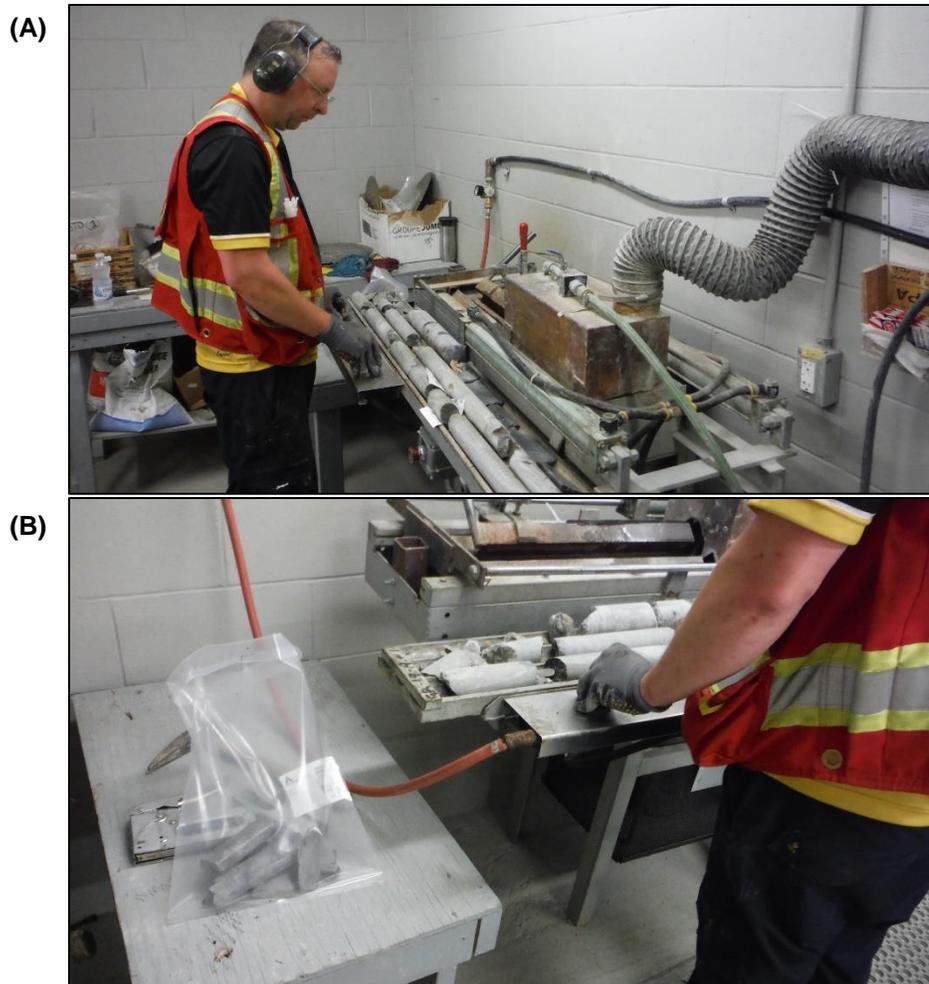
The core was cut using a rock saw, bagged and then transported to the ALS laboratory at Rouyn-Noranda (Québec) for gold fire assay (AAS and gravimetric finish), silver by aqua regia digestion ICP-AES and multi-elements (AU-AA24, AU-AA25, AU-GRA21, ME-ICP41 and AU-GRA22). Totalling 966 samples (including 34 standards and 39 blanks) in the two drillings campaign.

All samples were securely bagged and sealed with plastic zip-ties in translucent plastic bags before being placed, by group of five (5) or six (6), in much larger rice bags. All rice bags were shipped to the ALS Laboratory in Rouyn-Noranda, Québec, Canada.

Sample submittal forms were included in emails informing the laboratory of the date and method of expedition of every shipment made regarding these samples. Shipped samples were received in good standing.



**Figure 11-6 Core Shack located on Granada’s Property, where Logging was Performed**



**Figure 11-7 A) Core Samples cut in Half Using a Cutting Saw; B) Sample in Plastic Bag with Tag**

### 11.6.3 Storage of Core Boxes

Once the rock is split, half of the core is left in the core boxes. A tag presenting the information regarding the name of the hole, the number of the box and the beginning and the end of the interval or rock present in the box is affixed on one end of the wooden box. All boxes are then orderly stored on the racks located outside the main building on Granada's property.

For the 2019 drilling campaign at the Granada mine, two types of assays were done on the cores, fire assays, aqua regia digestion and multi-elements. The geologist of GMG makes his decision depending on the presence of visible gold, extensive structures with mineralization and analysis results.

A total of 893 samples (not including blanks and standards) from the 2019 diamond drill cores were cut, bagged and shipped to the ALS Laboratory in Rouyn-Noranda (Québec). Of which 434 samples are from the 2019 August drilling campaign and 459 samples the 2019 November drilling campaign.

A total of 39 blank samples were inserted and 34 standards were included (28 STD1 and 6 STD3) as part of the QA/QC program. Of which 21 blanks and 21 standard (STD1) are from the 2019 August drilling campaign and 18 blanks and 13 standards (7 STD1 and 6 STD3) are from the 2019 November drilling campaign. The material used for the custom-made blank is pool filter sand (silica sand) during the 2019 August drilling campaign and decorative marble as blanks in the 2019 November drilling campaign.

Standard STD1 correspond to CDN-GS-3T and standard STD3 to CDN-GS-2R. The ALS laboratory carried out internal standard, blank and duplicate analyses.

The following analyses were performed on some or all the core samples, as prescribed by the GMG procedure.

- Aqua Regia with ICP-AES Finish (ALS code: ME-ICP41)

Using a 0.5g sample, the following elements are analyzed: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, and Zn.

- Fire assay and AAS (ALS code: Au-AA24, Au-AA25, Au-GRA21, Au-GRAV22)

Samples were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

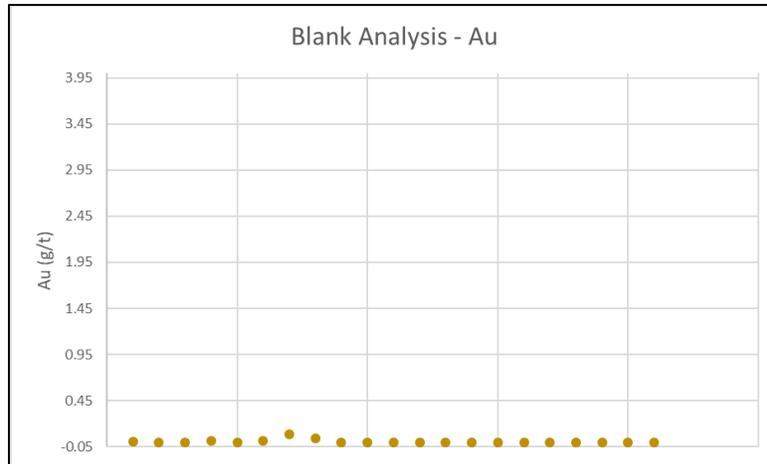
Given the observation of the geologist responsible for logging it was decided to target specific mineralized intervals from those drill holes and use the screen metallic method of analysis.

#### 11.6.4 Quality Assurance and Quality Control

The 2019 drilling campaign consisted in thirteen (13) diamond drill holes. Of which six (6) diamond drill holes from the August drilling campaign and seven (7) diamond drill holes from the November drilling campaign. A rigorous QA/QC program was established by the GMG geologist. This procedure includes the systematic addition of blanks and certified standards. The material used for the custom-made blank is pool filter sand (silica sand) and decorative marble. The sampling preparation described here was performed under the supervision of GMG. Since all assays were analyzed at an independent and certified laboratory, no duplicates were sent to another laboratory.

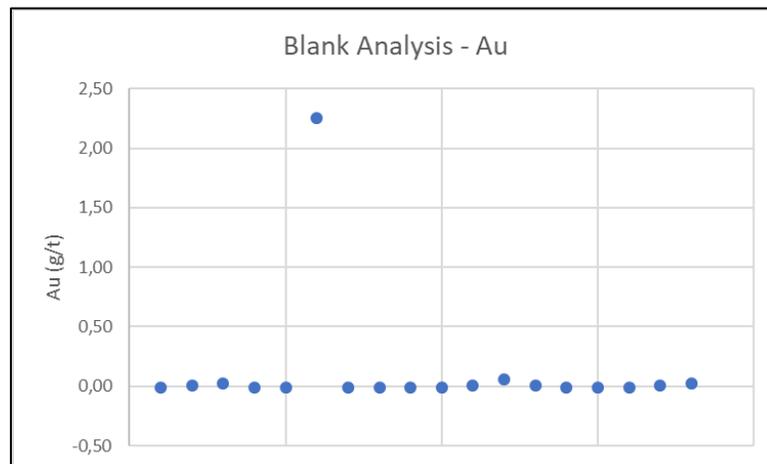
The standards STD1 (CDN-GS-3T) were prepared by CDN Resource Laboratories Ltd. using reject ore material provided by Agnico Eagle's gold project. The latter is composed of Archean volcanic and sedimentary rocks of the Meliadine greenstone belt in the Nunavut Territory in northern Canada. The laboratory split the material into bags of 30 g with gold grading around 3.05 g/t Au  $\pm$  0.19 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The standards STD3 (CDN-GS-2R) were prepared by CDN Resource Laboratories Ltd. using reject ore material. Standard was prepared using 786 kg of blank granite and 14 kg of high-grade gold ore. The laboratory split the material into bags of 30 g with gold grading around 2.03 g/t Au  $\pm$  0.14 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.



**Figure 11-8 Distribution of Blank Samples – Aug. 2019 Drill Campaign – Pool Filter Silica Sand**

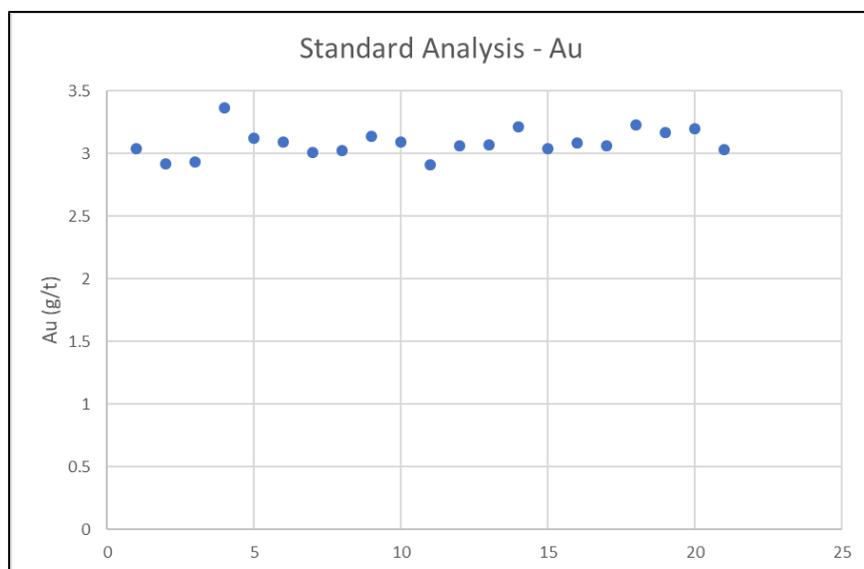
The results of assay blank samples showed that there are no anomalous values, with an average value of 0.003 g/t Au (Figure 11-8). Minimum value is of -0.005 g/t Au, maximum reaching 0.083 g/t Au.



**Figure 11-9 Distribution of Blank Samples used for Nov. 2019 Drilling Campaign - Decorative Marble**

The results of assay blank samples showed that there is one anomalous value (2.25 g/t Au). Because of its value in Au, the potential of this assay being a standard is high (STD1=2.03 g/t Au ± 0.14 g/t). There was most certainly a mixed up between the two bags during the process. The results of assay blank show an average value of 0.0024 g/t Au (Figure 11-9). Minimum value is of -0.01 g/t Au, maximum reaching 0.06 g/t Au (without the anomalous value).

One type of standard was used. The author sent a total of 21 standards to ALS Laboratory at Rouyn Noranda (Québec). The standard shows a minimum value of 2.91 g/t Au, a maximum of 3.36 g/t Au and an average of 3.08 g/t Au (Figure 11-10).



**Figure 11-10 Distribution of Standards (Au g/t) (2019 Drilling Campaign)**

#### 11.6.1 2019 QA/QC Conclusion

The assay results of the blanks and standards from ALS Laboratory show no significant outlier and are very similar to the assay results from the previous drilling campaigns.

### 11.7 2020 Drilling

#### 11.7.1 Sampling Approach and Methodology

The sampling approach was established by GMG during the drilling work. Core logging of holes GR-20-01 to GR-20-22 and GR-20-101 to GR-20-126 was performed by Maude Marquis, CPI under supervision of Claude Duplessis Sr. Eng. and Merouane Rachidi, Ph.D., P.Geo. All logging activities took place at the core shack located on Granada's property following procedures further described herein.

At reception, all core boxes were stacked on rack in building. All core boxes were progressively opened and placed in order on the logging tables. All meterage wood blocks were verified to control core box numbers and any possible mistakes made during drilling procedures.

Logging procedures included a mineral description of geological units and sub-units in terms of color, grain size, alteration, accessory minerals and fracture descriptions. These descriptive data were entered on Microsoft Excel® sheet and compiled by drill hole. Pictures of the core boxes were taken, one showing dry cores and a second damp cores. Once the geology is described, the geologist marks the beginning and the end of the samples directly onto the core with a yellow-colored wax crayon.

Sample length average of 1 meter for both campaigns. Sample length of 0.5 to 1 meter were selected for intervals with clear signs of minerals (pyrite, chalcopyrite, pyrrhotite, arsenopyrite). Sample intervals of 1.5 m were taken within the schist unit when no significant sulfides were observed.

Numbered sample tags were placed at the end of each sample, together with distinctive arrows on the core marking the beginning and end intervals. The tag numbers are integrated in the database on Microsoft Excel® sheet.

### **11.7.2 Samples Preparation**

All core samples were cut in half using the wet cutting saw for rock at Granada's facilities.

For all samples, half of the cores was retained and placed back in the core box, respecting the original orientation and position. Sample tags were stapled to the bottom of the box at each sample interval, so that each sample could be relocated following future handling, transportation and storage.

A total of 3,358 samples were prepared from the 9,583.2 m extracted core from June to December 2020. A total of 172 standards and 174 blanks were inserted at different intervals in the shipment to the laboratory.

The core was cut using a rock saw, bagged and then transported to the ALS laboratory at Rouyn-Noranda (Québec) for gold fire assay (AAS and gravimetric finish), silver by aqua regia digestion ICP-AES and multi-elements (AU-AA24, AU-AA25, AU-GRA21, ME-ICP41 and AU-GRA22). Totaling 3,704 samples (including 172 standards and 174 blanks) in the two drillings campaign.

All samples were securely bagged and sealed with plastic zip-ties in translucent plastic bags before being placed, by group of five (5) to six (6), in much larger rice bags. All rice bags were shipped to the ALS Laboratory in Rouyn-Noranda, Québec, Canada.

Sample submittal forms were included in emails informing the laboratory of the date and method of expedition of every shipment made regarding these samples. Shipped samples were received in good standing.

### **11.7.3 Fire Assay Analysis**

Samples in 2020 were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

Given the observation of the geologist responsible for logging it was decided to target specific mineralized intervals from those drill holes and use the screen metallic method of analysis when visible gold was observed

### **11.7.4 Screen Metallic Analysis**

Samples with Visible Gold of the 2020 drilling campaign were assayed using screen metallic method. The screen metallic analysis is one of those methods able to overcome the gold nugget effect by increasing the sub-sample size to 1,000 g and physically collecting the free gold within the system. The subsample is pulverized to ~90% -150 mesh (106µ) and subsequently sieved through a 150-mesh (106µ) screen. The entire +150 metallics portion is assayed along with two duplicate sub-samples of the -150 pulp portion.

Results are reported as a weighted average of gold in the entire sample.

### **11.7.5 Storage of Core Boxes**

Once the rock is split, half of the core is left in the core boxes. A tag presenting the information regarding the name of the hole, the number of the box and the beginning and the end of the interval or rock present

in the box is affixed on one end of the wooden box. All boxes are then orderly stored on the racks located outside the main building on Granada's property.

For the 2020 drilling campaign at the Granada mine, two types of assays were done on the cores, fire assays, aqua regia digestion and multi-elements. The geologist of GMG makes his decision depending on the presence of visible gold, extensive structures with mineralization and analysis results.

A total of 3,358 samples (not including blanks and standards) from the 2020 diamond drill cores were cut, bagged and shipped to the ALS Laboratory in Rouyn-Noranda (Québec). Of which 2,269 samples (3,045.47 m) are from the 2020 long-hole drilling campaign and 1,089 samples (1,587.89 m) from the 2020 short-holes drilling campaign.

A total of 174 blank samples were inserted and 172 standards were included 12 CDN-GS-2R, 102 CDN-GS-5M, 49 CDN-GS-3T, and 9 OREAS-15h as part of the QA/QC program. The material used for the custom-made blank is pool filter sand (silica sand) and decorative marble as blanks.

Standard STD1 correspond to CDN-GS-2R, standard STD2 to CDN-GS-5M, standard STD3 to CDN-GS-3T and STD4 correspond to OREAS-15h. The ALS laboratory carried out internal standard, blank and duplicate analyses.

The following analyses were performed on some or all the core samples, as prescribed by the GMG procedure.

- Aqua Regia with ICP-AES Finish (ALS code: ME-ICP41)

Using a 0.5g sample, the following elements are analyzed: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, U, V, W, and Zn.

- Fire assay and AAS (ALS code: Au-AA24, Au-AA25, Au-GRA21, Au-GRAV22)

Samples were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

Given the observation of the geologist responsible for logging it was decided to target specific mineralized intervals from those drill holes and use the screen metallic method of analysis.

#### 11.7.6 Quality Assurance and Quality Control

The 2020 drilling campaign consisted in forty-eight (48) diamond drill holes. Of which twenty-two (22) diamond drill holes (including one wedge) from the long-hole drilling campaign and twenty-six (26) diamond drill holes from the short-hole drilling campaign. A rigorous QA/QC program was established by the GMG geologist. This procedure includes the systematic addition of blanks and certified standards. The material used for the custom-made blank is pool filter sand (silica sand) and decorative marble. The sampling preparation described here was performed under the supervision of GMG. Since all assays were analyzed at an independent and certified laboratory, no duplicates were sent to another laboratory.

The standards CDN-GS-2R were prepared by CDN Resource Laboratories Ltd. using reject ore material. Standard was prepared using 786 kg of blank granite and 14 kg of high-grade gold ore. The laboratory split the material into bags of 30 g with gold grading around 2.03 g/t Au  $\pm$  0.14 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The standards CDN-GS-5M were prepared by CDN Resource Laboratories Ltd. using reject ore material. Standard was prepared using 772 kg of granitic rock and 28 kg of a high-grade gold ore. The laboratory split the material into bags of 30 g with gold grading around 3.99 g/t Au  $\pm$  0.38 g/t (Fire Assay/ICP) or 3.91 g/t Au  $\pm$  0.30 g/t (Fire Assay/Grav.). In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The standards CDN-GS-3T were prepared by CDN Resource Laboratories Ltd. using reject ore material provided by Agnico Eagle's gold project. The latter is composed of Archean volcanic and sedimentary rocks of the Meliadine greenstone belt in the Nunavut Territory in northern Canada. The laboratory split the material into bags of 30 g with gold grading around 3.05 g/t Au  $\pm$  0.19 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The standards OREAS 15h were prepared by Ore Research & Exploration Pty Ltd. from a blend of barren alkali olivine basalt from Epping, Victoria, Australia and gold-bearing Magdala ore from the Stawell Gold Mine, west central Victoria, Australia. The Magdala lode is intimately associated with an intensely deformed package of volcanogenic sedimentary rocks. Mineralisation in the ore consists of a quartz-sericite-carbonate schist assemblage containing the sulphides pyrite and arsenopyrite. The major constituents of the alkali olivine basalt are feldspar, augite, olivine and titanomagnetite. Seventeen laboratories participated in the analytical program and are listed in the section headed 'Participating Laboratories'. To maintain anonymity laboratories have been randomly designated the letter codes A through Q. Each laboratory received two scoop-split 120-gram subsamples from each of three 1kg test units taken at regular intervals during the bagging stage. They were instructed to carry out one 30-50-gram fire assay gold determination with new pots on each subsample. The nested design of the interlaboratory programme is amenable to analysis of variance (ANOVA) and enables a comparative assessment of within and between-unit homogeneity. The recommended value of gold grading is of 1.019 g/t Au  $\pm$  0.025 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The results of assay blank samples showed that there was one anomalous value (3.15 g/t Au), which is not shown in Figure 11-11. Because of its value in Au, the potential of this assay being a standard is high (CDN-GS-3T=3.05 g/t Au  $\pm$  0.19). There was most certainly a mixed up between the two bags during the process. Without this inversion, the results of assay blank show an average value of 0.007 g/t Au. Minimum value is of 0.005 g/t Au (the detection limit is 0.01 g/t), maximum reaching 0.03 g/t Au.

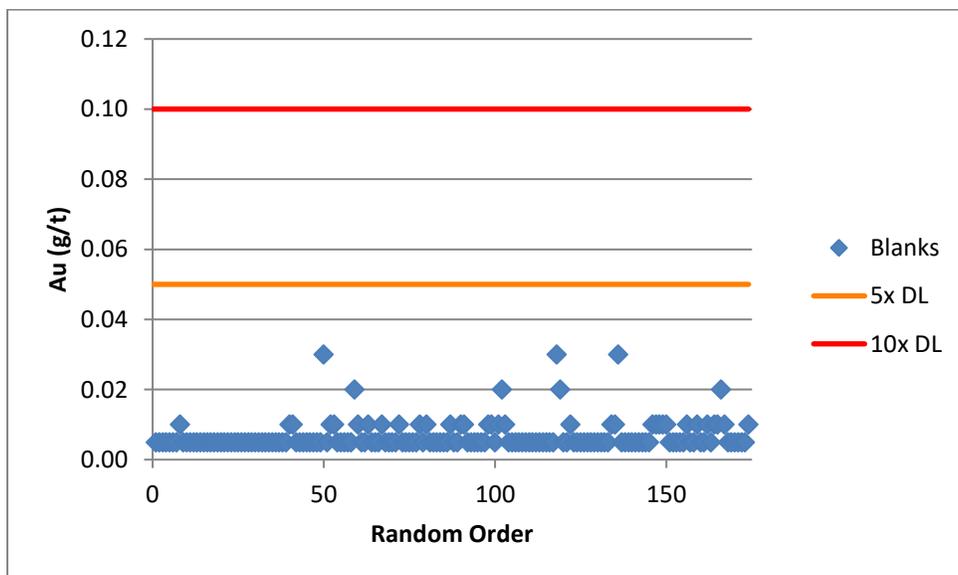
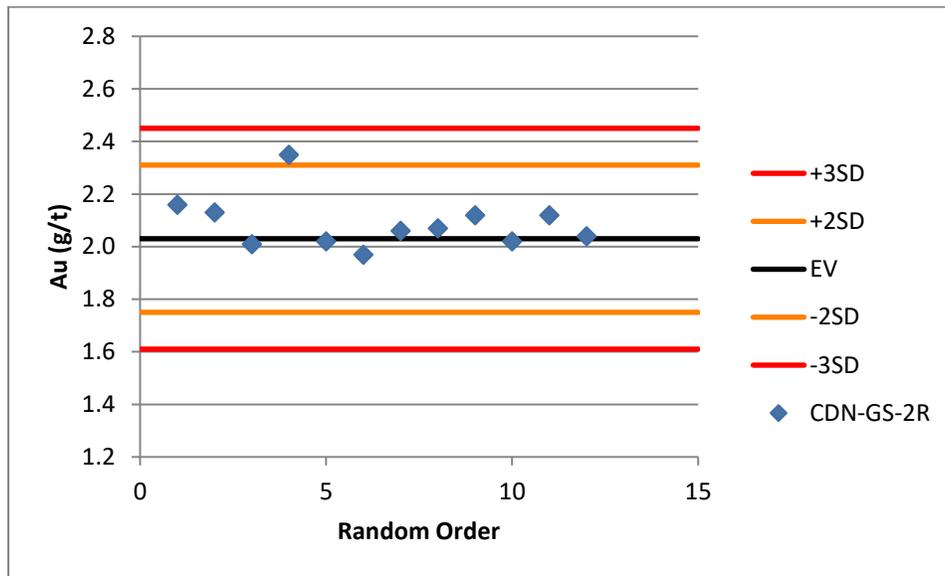


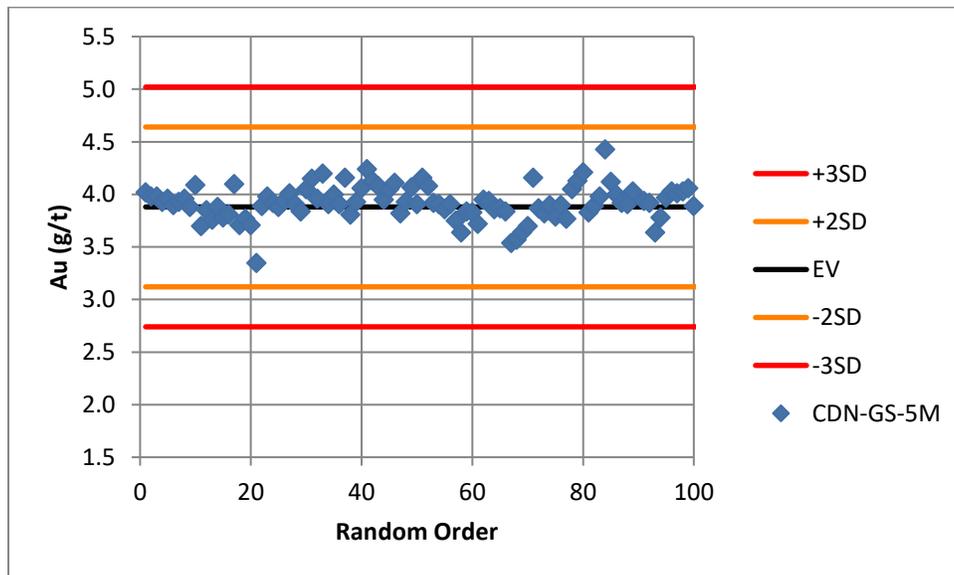
Figure 11-11 Distribution of Blank Samples (2020 Drilling Campaign)

Four types of standard were used: CDN-GS-2R, CDN-GS-5M, CDN-GS-3T, and OREAS 15h. GMG sent a total of 172 standards to ALS Laboratory at Rouyn Noranda (Québec). The standard CDN-GS-2R shows a minimum value of 1.97 g/t Au, a maximum of 2.35 g/t Au and an average of 2.08 g/t Au (Figure 11-12).



**Figure 11-12 Distribution of Standards CDN-GS-2R (Au g/t) (2020 Drilling Campaign)**

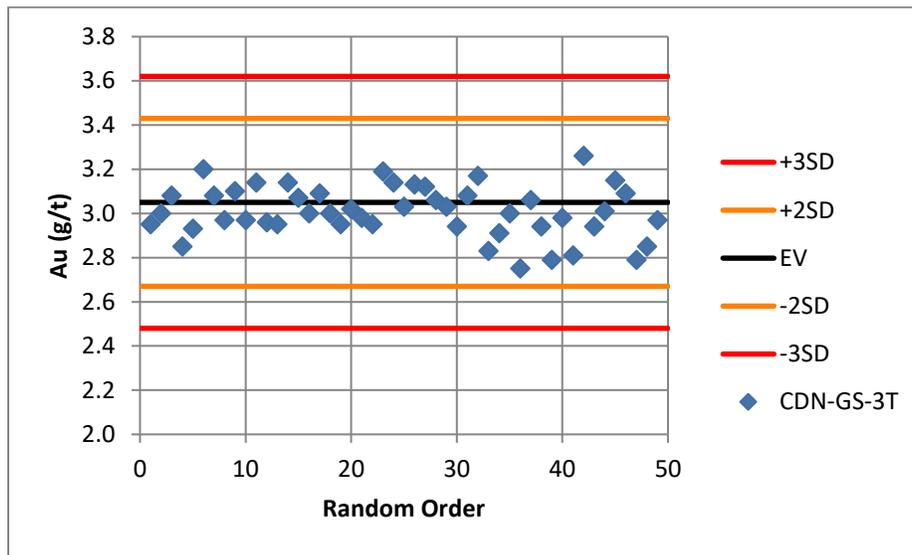
The standard CDN-GS-5M shows a minimum value of 3.35 g/t Au, a maximum of 4.43 g/t Au and an average of 3.90 g/t Au (Figure 11-13).



**Figure 11-13 Distribution of Standards CDN-GS-5M (Au g/t) (2020 Drilling Campaign)**

The results of standard CDN-GS-3T samples showed that there was one anomalous value (0.02 g/t Au), which is not shown in Figure 11-14. Because of its value in Au, the potential of this assay being a blank is high. There was most certainly a mixed up between the two bags during the process. Without this inversion,

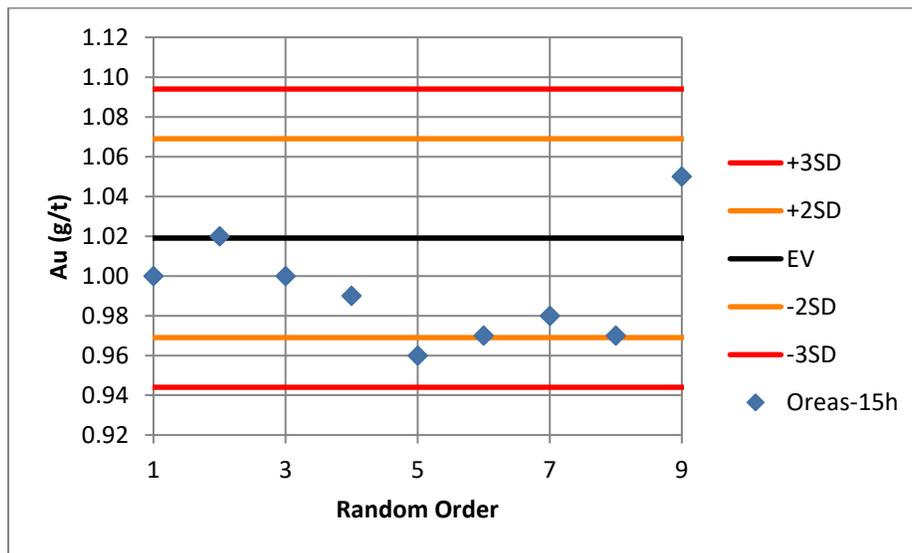
the standard CDN-GS-3T shows a minimum value of 2.75 g/t Au, a maximum of 3.26 g/t Au and an average of 3.01 g/t Au (Figure 11-14).



**Figure 11-14 Distribution of Standards CDN-GS-3T (Au g/t) (2020 Drilling Campaign)**

A total of 13 standard OREAS-15h were mislabelled by the technician with a wrong code in relation to the standard bag put in the sample bag. From these 13 standards, one (1) was found to be the standard CDN-GS-2R, three (3) were found to be the standard CDN-GS-5M, and nine (9) were found to be the standard CDC-GS-3T. Figure 11-12, Figure 11-13, Figure 11-14 and Figure 11-15 show the results for each standard after the correction of these 13 mislabelled standards.

The standard OREAS-15h shows a minimum value of 0.96 g/t Au, a maximum of 1.05 g/t Au and an average of 0.99 g/t Au (Figure 11-15).



**Figure 11-15 Distribution of Standards OREAS-15h (Au g/t) (2020 Drilling Campaign)**

### 11.7.7 2020 QA/QC Conclusion

The assay results of the blanks and standards from ALS Laboratory show no significant outlier and are very similar to the assay results from the previous drilling campaigns.

## 11.8 2021 Drilling

### 11.8.1 Sampling Approach and Methodology

The sampling approach was established by GMG during the drilling work. Core logging of holes GR-16-14W1 to GR-16-14W3, GR-20-21W3 to GR-20-21W7, GR-20-22, and GR-21-01 to GR-21-28 was managed and core logged by Claude Duplessis, P.Eng. with the assistance of Maude Marquis, P.Eng., Kateri Marchand, P.Geo., and François-Pierre Bisson, intern from Laval University. All logging activities took place at the core shack located on Granada's property following procedures further described herein.

At reception, all core boxes were stacked on rack in building. All core boxes were progressively opened and placed in order on the logging tables. All meterage wood blocks were verified to control core box numbers and any possible mistakes made during drilling procedures.

Logging procedures included a mineral description of geological units and sub-units in terms of color, grain size, alteration, accessory minerals and fracture descriptions. These descriptive data were entered on Microsoft Excel® sheet and compiled by drill hole. Pictures of the core boxes were taken, one showing dry cores and a second damp cores. Once the geology is described, the geologist marks the beginning and the end of the samples directly onto the core with a yellow-colored wax crayon.

Sample length average of 1 meter for both campaigns. Sample length of 0.5 to 1 meter were selected for intervals with clear signs of minerals (pyrite, chalcopyrite, pyrrotite, arsenopyrite). Sample intervals of 1.5 m were taken within the schist unit when no significant sulfides were observed.

Numbered sample tags were placed at the end of each sample, together with distinctive arrows on the core marking the beginning and end intervals. The tag numbers are integrated in the database on Microsoft Excel® sheet.

### 11.8.2 Samples Preparation

All core samples were cut in half using the wet cutting saw for rock at Granada's facilities.

For all samples, half of the cores was retained and placed back in the core box, respecting the original orientation and position. Sample tags were stapled to the bottom of the box at each sample interval, so that each sample could be relocated following future handling, transportation and storage.

A total of 10,069 samples were prepared from the 19,136 m drilled from January to December 2021. A total of 345 standards and 354 blanks were inserted at different intervals in the shipment to the laboratories.

The core was cut using a rock saw, bagged and then transported to the ALS laboratory at Rouyn-Noranda (Québec) for gold fire assay and aqua regia digestion ICP-AES and multi-elements (AU-AA24 and ME-ICP41) or to the SGS laboratory for gold and multi-element assays (GO\_FAU50V10 and GE\_IMS91A50). Preparation of samples was performed at the SGS Val-d'Or site and analysis of samples was performed at the SGS Burnaby site. Totaling 10,069 samples (including 345 standards and 354 blanks) in the drilling campaign.

All samples were securely bagged and sealed with plastic zip-ties in translucent plastic bags before being placed, by group of five (5) to six (6), in much larger rice bags. All rice bags were shipped to the ALS laboratory in Rouyn-Noranda, Québec, Canada.

Sample submittal forms were included in emails informing the laboratory of the date and method of expedition of every shipment made regarding these samples. Shipped samples were received in good standing.

### 11.8.3 Fire Assay Analysis

Samples in 2021 were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

Given the observation of the geologist responsible for logging it was decided to target specific mineralized intervals from those drill holes and use the screen metallic method of analysis when visible gold was observed

### 11.8.4 Storage of Core Boxes

Once the rock is split, half of the core is left in the core boxes. A tag presenting the information regarding the name of the hole, the number of the box and the beginning and the end of the interval or rock present in the box is affixed on one end of the wooden box. All boxes are then orderly stored on the racks located outside the main building on Granada's property.

For the 2021 drilling campaign at the Granada mine, two types of assays were done on the cores, fire assays, aqua regia digestion and multi-elements. The geologist of GMG makes his decision depending on the presence of visible gold, extensive structures with mineralization and analysis results.

A total of 354 blank samples were inserted and 345 standards were included 88 CDN-GS-2R, 19 CDN-GS-3T, and 238 CDN-GS-1X as part of the QA/QC program. The material used for the custom-made blank is pool filter sand (silica sand) and decorative marble as blanks.

Standard STD1 correspond to CDN-GS-2R, standard STD3 to CDN-GS-3T and STD4 correspond to CDN-GS-1X. The ALS and SGS laboratories carried out internal standard, blank and duplicate analyses.

The following analyses were performed on some or all the core samples, as prescribed by the GMG procedure.

- Aqua Regia with ICP-AES Finish (ALS code: ME-ICP41)

Using a 0.5g sample, the following elements are analyzed: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, and Zn.

- Fire assay and AAS (ALS code: Au-AA24)

Samples were weighed, dried, crushed, split and pulverized to -200 mesh. Pulps were assayed by fire assay and gravimetric analysis for fire assay that returned grades above 5 g/t.

### 11.8.5 Quality Assurance and Quality Control

The 2021 drilling campaign consisted of 36 diamond drill holes. A rigorous QA/QC program was established by the GMG geologist. This procedure includes the systematic addition of blanks and certified standards.

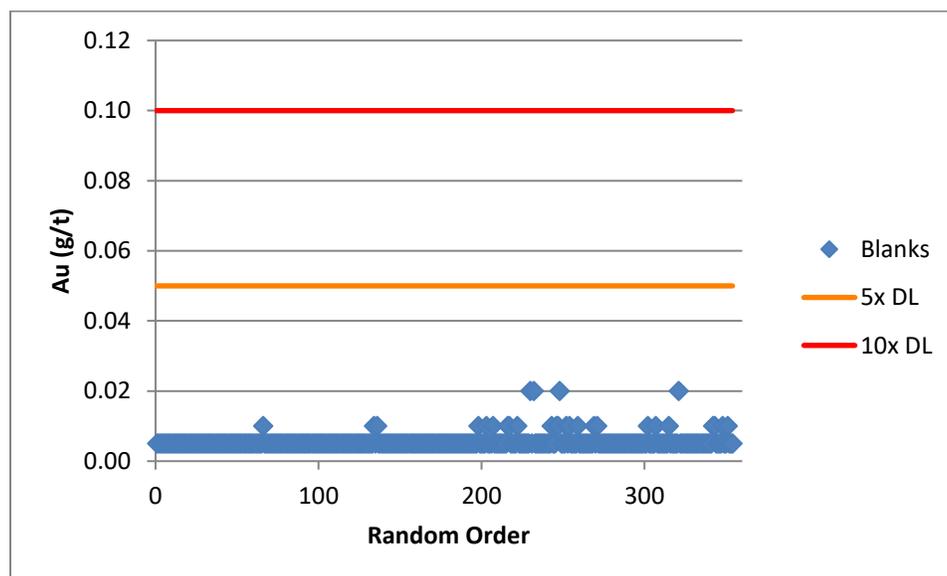
The material used for the custom-made blank is pool filter sand (silica sand) and decorative marble. The sampling preparation described here was performed under the supervision of GMG. Since all assays were analyzed at independent and certified laboratories, no duplicates were sent to another laboratory.

The standards CDN-GS-2R were prepared by CDN Resource Laboratories Ltd. using reject ore material. Standard was prepared using 786 kg of blank granite and 14 kg of high-grade gold ore. The laboratory split the material into bags of 30 g with gold grading around 2.03 g/t Au  $\pm$  0.14 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The standards CDN-GS-3T were prepared by CDN Resource Laboratories Ltd. using reject ore material provided by Agnico Eagle's gold project. The latter is composed of Archean volcanic and sedimentary rocks of the Meliadine greenstone belt in the Nunavut Territory in northern Canada. The laboratory split the material into bags of 30 g with gold grading around 3.05 g/t Au  $\pm$  0.19 g/t. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

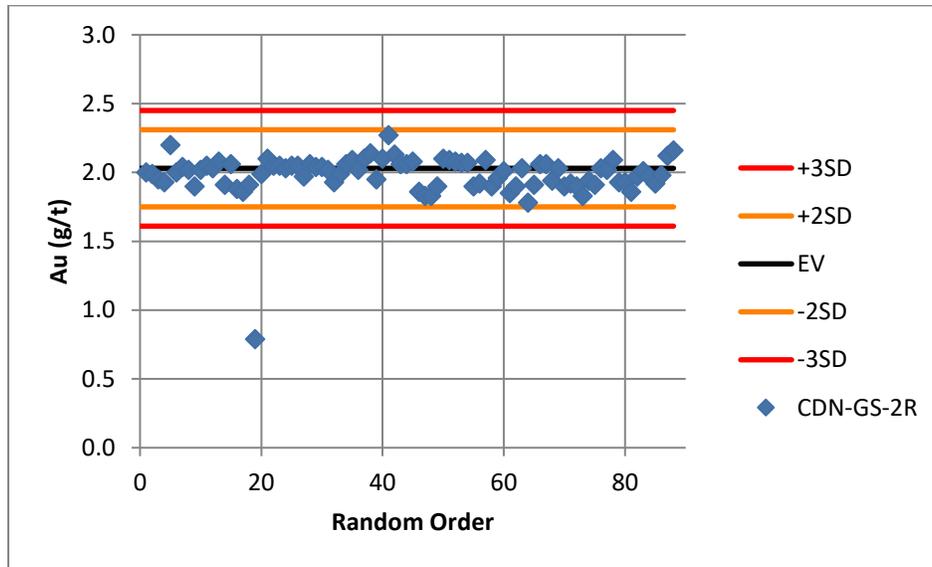
The standards CDN-GS-1X were prepared by CDN Resource Laboratories Ltd. using reject ore material. Standard was prepared by combining 812 kg of granite blended with 8 kg of high-grade gold ore supplied by Teuton Resources from their Clone gold property in B.C., Canada and 30 kg of ore provided by Hecla Green Creek property. Mineralization of Clone gold property is localized within highly silicified semi-massive to massive specular hematite. Gold occurs as fine disseminations and is associated with the oxide mineralization. The major lithology is light grey to green andesitic pyroclastic intercalated with fine grained to aphanitic andesite. Reject ore material was dried, crushed, pulverized and then passed through a 270-mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone blender. Splits were taken and sent to 15 commercial laboratories for round robin assaying. In between the intervals planned by GMG, the standards were bagged in translucent bags identified by their own sample tags.

The results of assay blank samples showed that there were no anomalous values as shown in Figure 11-16. The results of assay blank show an average value of 0.0055 g/t Au. Minimum value is of 0.005 g/t Au (the detection limit is 0.01 g/t), maximum reaching 0.02 g/t Au.



**Figure 11-16 Distribution of Blank Samples used for 2021 Drilling Campaign**

Three types of standards were used: CDN-GS-2R, CDN-GS-3T, and CDN-GS-1X. GMG sent a total of 345 standards to ALS Laboratory at Rouyn Noranda (Québec) or to the SGS laboratory (Val-d’Or and then Burnaby). The standard CDN-GS-2R shows a minimum value of 0.79 g/t Au, a maximum of 2.27 g/t Au and an average of 1.98 g/t Au (Figure 11-17).

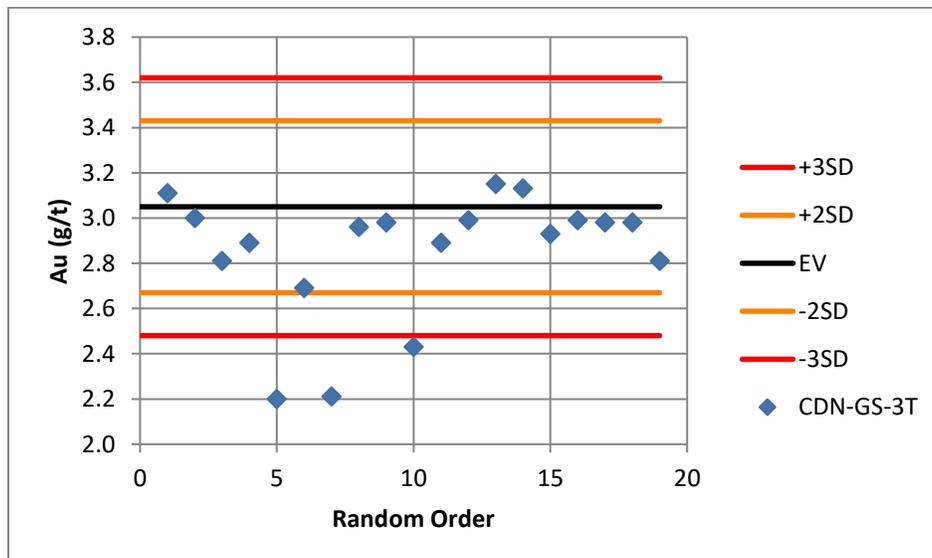


**Figure 11-17 Distribution of Standards CDN-GS-2R (Au g/t) (2021 Drilling Campaign)**

The standard CDN-GS-3T shows a minimum value of 2.2 g/t Au, a maximum of 3.15 g/t Au and an average of 2.85 g/t Au (Figure 11-18).

Two values seem to be mislabelled for a standard CDN-GS-2R. There was most certainly a mixed up between the bags during the process.

The results of standard CDN-GS-3T samples showed that there were two anomalous values (2.2 and 2.21 g/t Au), which is not shown in Figure 11-18.



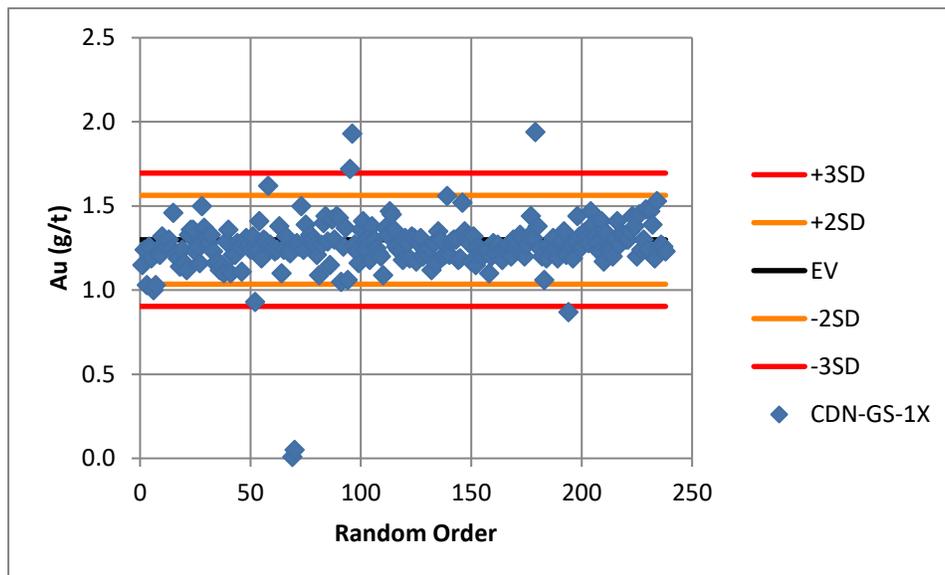
**Figure 11-18 Distribution of Standards CDN-GS-3T (Au g/t) (2021 Drilling Campaign)**

The standard CDN-GS-1X shows a minimum value of 0.01 g/t Au, a maximum of 1.94 g/t Au and an average of 1.27 g/t Au (Figure 11-19).

Because of values near 0 g/t in Au, the potential of two assays being a blank is high. Also, two other values seem to be mislabelled for a standard CDN-GS-2R. There was most certainly a mixed up between the bags during the process.

A total of 6 standard (2 standard CDN-GS-2R and 4 standard CDN-GS-1X) were mislabelled by the technician with a wrong code in relation to the standard bag put in the sample bag. From these 6 standards, four (4) were found to be the standard CDN-GS-2R and two (2) were found to be a blank.

Figure 11-17, Figure 11-18, and Figure 11-19 show the results for each standard after the correction of these 6 mislabelled standards.



**Figure 11-19 Distribution of Standards CDN-GS-1X (Au g/t) used in the 2021 Drilling Campaign**

#### 11.8.6 2021 QA/QC Conclusion

The assay results of the blanks and standards from ALS and SGS laboratories show no significant outlier and are very similar to the assay results from the previous drilling campaigns.

## 12 DATA VERIFICATION

The following sub-sections summarise the data verification procedures that were carried out and completed and documented by the Authors for this technical report.

As part of their verification process, the Authors reviewed all geological data and databases, past public and technical reports, and reviewed procedures and protocols as practiced by the Granada field and technical team. The Granada technical team provided all relevant data, explanations and interpretations.

In addition, as described below, the SGS team conducted its own site visit and sampling activities to better evaluate the veracity of the data. Dupéré took independent analytical checks of drill core duplicate samples taken from Granada in 2009, 2011, 2012, 2016, and 2020 diamond drilling programs.

SGS conducted verification of the laboratories analytical certificates and validation of the Project digital database supplied by Granada Gold for errors or discrepancies. A minimum of 10% of the digital assay records were randomly selected and checked against the laboratory assay certificates. Verifications were carried out on drill hole locations (i.e. collar coordinates), down hole surveys, lithology, SG, trench data, and topography information. A lot of small corrections were done in the database (removal of some survey data, difference in survey data for the wedges, errors in the hole names and sample numbers, overlaps of some from and to or length, removal of some duplicates, change of elevation of 21 holes with surveyed coordinates to clamp them on the topography, addition of a new variable for rubidium (using ME-MS81 method in priority, or GE-IMS91A50, and lastly ME-MS61) There were no significant errors noted in the database that could make it unsuitable for resource estimation.

### 12.1 2022 SGS Site Inspection and Data Verification

Mr. Dupéré personally inspected the Property on March 3<sup>rd</sup>, 2022, accompanied by Claude Duplessis, P.Eng., for Goldminds Geoservices.

A review of the latest 2021 drilling including wedges was shown and explained on site at the Granada site office. A list of mineralized intervals was reviewed onsite. The following table lists the 10 highest gold values of the recent 2021 drilling (Table 12-2). The database contains 1129 rubidium values (Rb) mainly in the GR-20-22 and GR-20-24. The 10 highest values are all within GR-20-22 (Table 12-3).

Drill collars were surveyed on site by a land surveying company. The amount of snow did not permit the location of the 2022 drill collars however, the fact that they were surveyed, the presence of assay certificates and the sampling and logging procedures described by Granada Gold and consultants are satisfactory for the client in terms of quality and relevance.

The author was able to verify the presence of gold mineralisation and visible gold as well. The anomalous rubidium value samples meterage was also observed. The author lacks the understanding of where, exactly, the rubidium is, i.e., mineralisation and rubidium-bearing minerals. Granada has done metallurgical tests on rubidium-bearing material during 2021. Results are explained in section 13 of this report.

**Table 12-1 List of 10 Highest Gold Values of 2021 Drilling Campaign**

Hole Name	From	To	Sample Number	Length	Au	Method Au	Comment
GR-16-14W2	938.66	939.2	L211501	0.54	117	Au-SCR24	
GR-21-04	239	240	L212539	1	114	Au-GRA22	
GR-21-09	115.6	116.1	B0084320	0.5	95	Au-SCR24	
GR-21-05	109	109.5	B0081527	0.5	66.54	AuM GO_FAS50M - M	
GR-21-05	43	43.5	B0081435	0.5	62.08	AuM GO_FAS50M - M	
GR-21-26	121.05	121.7	A0430446	0.65	53.7	Au-AA26	36.7 ppm (Au-GRAV22)
GR-16-14W3	888	888.65	B0136725	0.65	53.5	Au-GRA22	42.3 ppm (Au-AA26)
GR-21-10	62.85	63.6	B0084398	0.75	38.7	Au-AA26	27.3 ppm (Au-GRAV22)
GR-21-23	140.5	141.5	L211777	1	31.3	Au-AA26	28.1 ppm (Au-GRAV22)
GR-21-05	46.5	47	B0081442	0.5	31.26	AuM GO_FAS50M - M	

**Table 12-2 List of 10 Highest Rubidium Values of 2021 Drilling Campaign**

Hole Name	From	To	Sample Number	Length	Au	Rb (GE IM891A50) 0,2 - 10,000 ppm m/m
GR-20-22	1061.3	1062.3	B0080332	1	0.005	443
GR-20-22	1098.65	1099.65	B0080374	1	0.005	423
GR-20-22	1083.3	1084.3	B0080356	1	0.005	409
GR-20-22	1081.3	1082.3	B0080354	1	0.005	399
GR-20-22	1082.3	1083.3	B0080355	1	0.005	397
GR-20-22	1064.3	1065.3	B0080335	1	0.005	396
GR-20-22	1089.3	1090.3	B0080362	1	0.005	396
GR-20-22	1084.3	1085.3	B0080357	1	0.005	394
GR-20-22	1097.15	1097.65	B0080372	0.5	0.005	392
GR-20-22	1095.3	1096.3	B0080368	1	0.005	391

### 12.1.1 Gold

Gold-bearing intervals of the 2021 drilling campaign were looked at in the core shack. GR-21-24: From 247.7 m to 248.3 m (B0138937) hosts gold mineralisation and visible gold was observed. Assay results returned 5.4 g/t Au (Figure 12-4).

**Figure 12-1 GR-21-24 from 247.7 to 248.3 m (B0138937)**

GR-21-25: From 275.15 m to 276.15 m (A0430210) hosts gold mineralisation and visible gold was observed. Assay results returned 8.67 g/t Au (Figure 12-5).



**Figure 12-2 GR-21-25 from 275.15 to 276.15 m (A0430210)**

GR-16-14W3: from 888 m to 888.65 m (B0136725) hosts gold mineralisation in an altered and highly sheared conglomerate. No visible gold was observed. Assay results returned 53.5 g/t Au (Figure 12-6).



**Figure 12-3 GR-16-14W3 from 888 to 888.65 m (B0136725)**

### 12.1.2 500-Tonne Bulk Sample

A 500-tonne bulk sample was taken near the area where GR-19-W drill holes were drilled. The bulk material is stored in a shelter. Results from the bulk are not available at the time of the writing of this memo (Figure 12-7).



**Figure 12-4 Bulk Material Stored in a Shelter**

### 12.1.3 Rubidium

Rubidium intervals were seen at the core shack for GR-20-20 (around 355.8 m). Some alteration was seen. Further details from Granada will determine what type of rock and alteration is present. Some purple mineral and staining are present in cm intervals which triggered our curiosity.

Granada has done metallurgical tests on Rubidium-bearing material during 2021. The results are explained in the section 13 of this report.

Figure 12-8 to Figure 12-14 highlight the rubidium-bearing mineralisation. The author does not know what form the rubidium is in and therefore nor where, exactly, it is located on the project.



**Figure 12-5 GR-20-22 around 1053 m**



**Figure 12-6 GR-20-22 from 1053 to 1056 m**

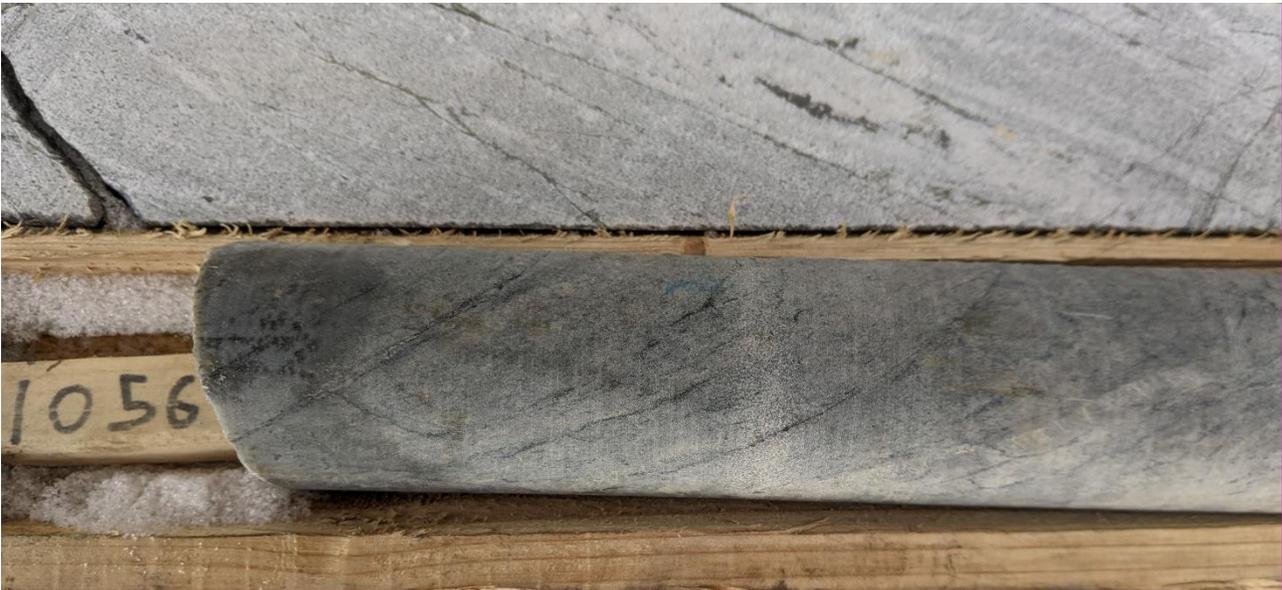


Figure 12-7 GR-20-22 from 1053 to 1056 m



Figure 12-8 GR-20-22 from 1053 to 1056 m (Close-Up)



**Figure 12-9 GR-20-22 from 1053 to 1056 m (close-up)**



**Figure 12-10 GR-20-22 from 1060 to 1065 m with Purple Mineral as Fracture Filling**



**Figure 12-11 GR-20-22 from 1060 to 1065 m with Purple Mineral as Fracture Filling**

## 12.2 2020 SGS Site Inspection and Data Verification

During site visit, Dupéré was able to look at the recent 2020 stripping highlighting the vein 1 over a strike length of approximately 350 m. All 2020 Vein 1 shallow vertical and inclined drill holes were visible on site.

Several drilling sites were verified with a handheld GPS. Drill holes GR-20-013, -016, -021, -022, -121, -125. Coordinate correlations were done, and no major issues were detected.

Several mineralised intervals were verified on site. The focus was made on the pertinence and the verification of high-grade intersections as disclosed in Granada Gold press release dated September 30<sup>th</sup> and October 23<sup>rd</sup>, 2020.

Mr. Dupéré personally inspected the Property on November 24<sup>th</sup>, 2020, accompanied by Maude Marquis, CPI, for Goldminds Geoservices. Dupéré examined several core holes and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security.

During the site visit, several mineralized core intervals were verified by Dupéré from drill holes GR-20-013, -016, -021, -022, -121, -125. for verification purposes. Observations of the core concur with previously disclosed information in the press releases dated September 30<sup>th</sup> and October 23<sup>rd</sup>, 2020.



**Figure 12-12 Site Visit on November 24<sup>th</sup>, 2020**



**Figure 12-13 Core observed on the hole GR-20-101**

### 12.3 2018 SGS Site Inspection and Data Verification

Mr. Dupéré personally inspected the Property on November 12<sup>th</sup>, 2018, accompanied by Merouane Rachidi, Ph.D., P.Geo., consultant geologist for Granada Gold. Dupéré examined several core holes, and accompanying drill logs and assay certificates. Assays were examined against drill core mineralized zones. Dupéré inspected the offices, core logging facilities/sampling procedures and core security.

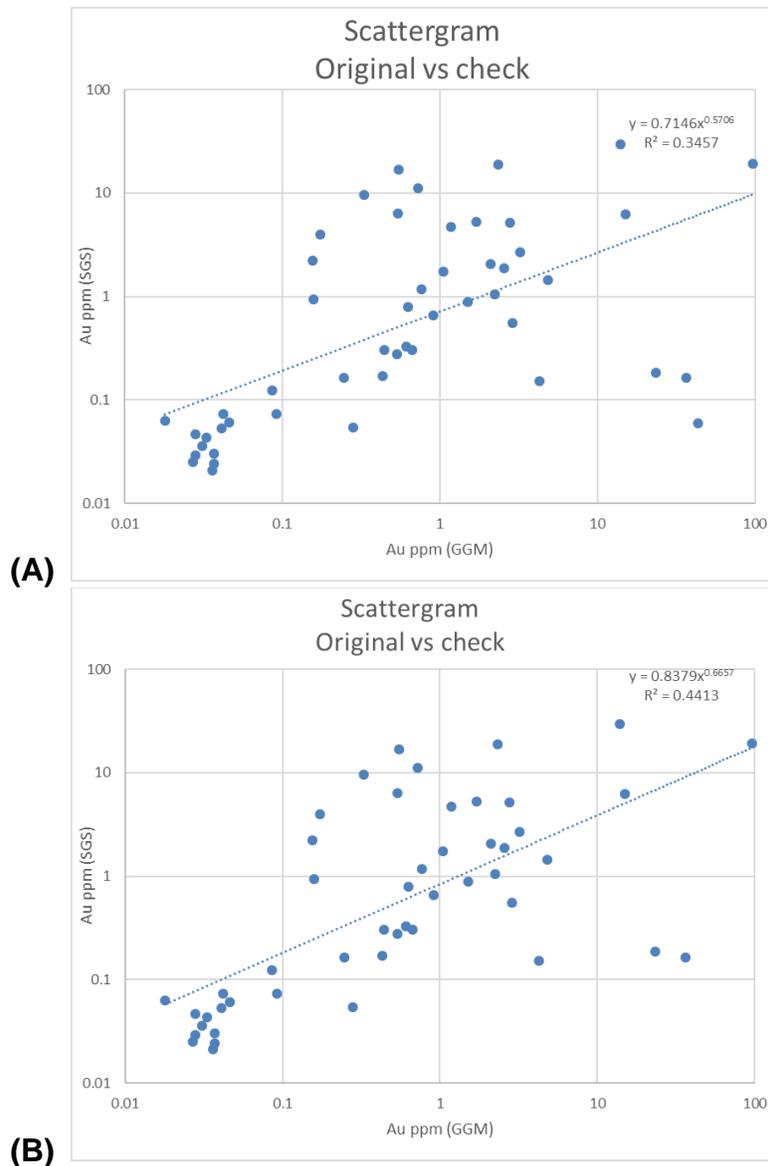
During the site visit, a total of 50 individual mineralized core duplicates were collected by Dupéré from drill holes GR-09-02, GR-11-271, GR-11-302, GR-11-302, GR-11-311, GR-12-411 and GR-16-03 for verification purposes and submitted for gold analysis at the SGS Minerals Laboratory in Lakefield, Ontario.

The 50 verification samples were collected by taking the remaining ½ split and sampled core from sample intervals previously sampled by Granada Gold. The verification samples were collected, bagged, labelled and transported from the Project site by Dupéré to SGS's Val d'Or's laboratory for final shipment to the SGS laboratory in Lakefield, Ontario for sample preparation and analyses. Upon receipt of the samples at the SGS Lakefield facility, all samples were weighed, dried, crushed to 75% passing through a 2-mm screen and a subsample of 250 g was pulverized to 85% passing through a 75 µm screen. All of the verification samples were analyzed for gold (50 g pulp sample) by fire assay with an AAS finish. All samples returning a value >5 g/t Au were re-analysed (50 g pulp sample) by fire assay with a gravimetric finish.

A comparison of the Granada Gold and SGS assay pair data was completed by Dupéré. Results of the comparison are presented in Table 12-1 and as bi-variate scatter plots in Figure 12-1. The data shows some scatter along the entire grade range (Figure 12-1), as would be expected in this type of deposit and suggests that coarse gold is present in this deposit.

The assay pair data shows poor to fair correlation as is the weighted average of the two intercepts is similar (Figure 12-1). However, Sign tests and Student T test completed on the assay pair data set were inconclusive as to demonstrating any potential bias. SGS recommends Granada Gold to continue periodically sending quarter split core to an umpire laboratory as part of the QA/QC program. The authors realize that the check assay program is limited and only represents a very small portion of the overall database (50 vs > 85,000 assays (<0.05%)). The Authors see a poor to fair correlation between the independent verification samples and the original Granada Gold analyses and some high variations between them (Table 12-1).

Based upon the evaluation of the QA/QC program undertaken by Granada Gold and the due diligence sampling by SGS, it is the Authors' opinion that its independent check assay confirms the presence of gold mineralization on the Property and that the results are acceptable for use in the current Mineral Resource Estimate.



**Figure 12-14 Independently Re-Assayed Samples Au (ppm) vs Independent SGS Au (ppm) (A) with and (B) without Sample 7583/61997**

**Table 12-3 Independent Check Sample Statistics**

Drill Hole ID	Sample No.		From (m)	To (m)	Length (m)	Au (ppm)		Difference (%)	Wt. Avg. (ppm/m)		Difference (%)
	Granada Gold	SGS				Granada Gold	SGS		Granada Gold	SGS	
GR-09-02	27049	61951	39.2	39.6	0.4	15.01	6.26	-58.3%	Length:	8.4 m	
GR-09-02	27052	61952	40	40.7	0.7	4.29	0.152	-96.5%			
GR-09-02	27053	61953	40.7	41	0.3	96.6	19.12	-80.2%			
GR-09-02	27054	61954	41	41.6	0.6	2.78	5.15	+85.3%			
GR-09-02	27055	61955	41.6	42.6	1	0.628	0.797	+26.9%			
GR-09-02	27056	61956	42.6	43.6	1	0.55	16.83	+2960.0%			
GR-09-02	27057	61957	43.6	44.6	1	0.767	1.166	+52.0%			
GR-09-02	27058	61958	44.6	45.1	0.5	1.71	5.264	+207.8%			

Drill Hole ID	Sample No.		From (m)	To (m)	Length (m)	Au (ppm)		Difference (%)	Wt. Avg. (ppm/m)		Difference (%)
	Granada Gold	SGS				Granada Gold	SGS		Granada Gold	SGS	
GR-09-02	27059	61959	45.1	45.6	0.5	3.22	2.673	-17.0%			
GR-09-02	27060	61960	45.6	46	0.4	0.158	0.943	+496.8%			
GR-09-02	27061	61961	46	47	1	0.173	3.987	+2204.6%			
GR-09-02	27062	61962	47	48	1	1.51	0.89	-41.1%	16.17	4.70	-71%
GR-11-271	1023251	61963	205	206	1.5	0.028	0.029	+3.6%	Length:	3 m	
GR-11-271	1023252	61964	206	207.5	1.5	23.373	0.185	-99.2%	8.80	0.11	-99%
GR-12-411	1295516	61965	46.5	48	1.5	2.876	0.558	-80.6%			
GR-12-411	1295517	61966	48	49.5	1.5	0.668	0.303	-54.6%	Length:	6 m	
GR-12-411	1295518	61967	49.5	51	1.5	0.433	0.169	-61.0%			
GR-12-411	1295519	61968	51	52.5	1.5	0.281	0.054	-80.8%	1.71	0.27	-84%
GR-11-302	1024401	61969	75.5	77	1.5	0.539	6.361	+1080.1%			
GR-11-302	1024402	61970	77	78	1	2.343	18.75	+700.3%			
GR-11-302	1024403	61971	78	79	1	2.242	1.057	-52.9%	Length:	8 m	
GR-11-302	1024404	61972	79	80.5	1.5	1.179	4.68	+296.9%			
GR-11-302	1024405	61973	80.5	82	1.5	1.051	1.753	+66.8%			
GR-11-302	1024406	61974	82	83.5	1.5	0.912	0.656	-28.1%	2.03	5.00	146%
GR-11-311	1074175	61975	65.5	66.5	1	13.944	29.89	+114.4%			
GR-11-311	1074176	61976	66.5	67.5	1	0.725	11.13	+1435.2%	Length:	7.5 m	
GR-11-311	1074177	61977	67.5	68.5	1	0.444	0.306	-31.1%			
GR-11-311	1074178	61978	68.5	69.5	1	0.042	0.073	+73.8%	(excluding 1074182/61981)		
GR-11-311	1074179	61979	69.5	70.5	1	0.329	9.685	+2843.8%	3.67	8.56	133%
GR-11-311	1074181	61980	70.5	71.5	1	0.535	0.276	-48.4%			
GR-11-311	1074182	61981	71.5	73	1.5	36.516	0.165	-99.5%	8.00	6.88	-14%
GR-16-03	7567	61982	53	54	1	0.018	0.063	+250.0%			
GR-16-03	7568	61983	54	55	1	0.612	0.326	-46.7%			
GR-16-03	7569	61984	55	56	1	0.046	0.061	+32.6%			
GR-16-03	7570	61985	56	57	1	2.101	2.068	-1.6%			
GR-16-03	7571	61986	57	58	1	2.565	1.89	-26.3%			
GR-16-03	7572	61987	58	59	1	4.823	1.445	-70.0%			
GR-16-03	7573	61988	59	60	1	0.033	0.043	+30.3%			
GR-16-03	7574	61989	60	61	1	0.027	0.025	-7.4%			
GR-16-03	7575	61990	61	62	1	0.036	0.021	-41.7%			
GR-16-03	7577	61991	62	63	1	0.031	0.036	+16.1%	Length:	19 m	
GR-16-03	7578	61992	63	64	1	0.037	0.024	-35.1%			
GR-16-03	7579	61993	64	65	1	0.041	0.053	+29.3%			
GR-16-03	7580	61994	65	66	1	0.247	0.165	-33.2%			
GR-16-03	7581	61995	66	67	1	0.155	2.242	+1346.5%	(excluding 7583/61997)		
GR-16-03	7582	61996	67	68	1	0.028	0.047	+67.9%	1.58	0.46	-71%
GR-16-03	7583	61997	68	69	1	43.578	0.059	-99.9%			
GR-16-03	7584	61998	69	70	1	0.086	0.124	+44.2%			
GR-16-03	7585	61999	70	71	1	0.037	0.03	-18.9%			
GR-16-03	7586	62000	71	72	1	0.092	0.073	-20.7%	3.87	0.46	-88%

## 12.4 Conclusion

All geological data has been reviewed and verified by SGS as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. SGS considers that the assay sampling and extensive QA/QC sampling of core by Granada Gold provides adequate and good verification of the data and Camus and Dupéré believe is of sufficient quality to be used for the current resource estimate. The work to have been done within the guidelines of NI 43-101. The client provided all relevant data and explanations on the provided data and validation work. There were no limitations or failures to conduct verifications on the Data provided by the client.

Based upon the evaluation of the QA/QC program undertaken by Granada Gold and the due diligence sampling by SGS, it is SGS's opinion that the results are acceptable for use in the current Mineral Resource Estimate Update.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

The following description of Mineral Processing and Metallurgical Testing for the Property has been extracted from previous technical reports.

### 13.1 SGS Lakefield Testwork – Project 13526-001 (December 2011 – January 2012)

A series of metallurgical tests were carried out at SGS Lakefield on 29 composite samples from the Granada deposit in order to determine the most probable head grade of the mineralization. The samples in their entirety were processed through gravity separation followed by cyanide leaching of the gravity tailings. An overall gravity separation plus cyanidation metallurgical balance was applied to calculate the head grade of each composite sample. Because of a possible misinterpretation of the block model by a former company, it was discovered afterward that some of the composite samples came from drill holes that were outside the known boundary of the deposit. In order to correct the situation and to come up with a more exact deposit head grade, a number of composite samples were discarded from the SGS Lakefield met tests.

The prime objective of the metallurgical testwork was to determine the head grade of each composite by subjecting the entire sample to gravity concentration of the coarse gold followed by cyanide leaching of the gravity tailings. An overall (gravity plus cyanidation) gold metallurgical balance was applied to calculate the head grade of each sample and the total gold recovery.

#### 13.1.1 Gravity Separation

For the gravity testwork, each composite sample was ground in a laboratory rod mill to a target of P80 particle size of 75 µm. The mill product was passed through a 3-inch Knelson concentrator. The Knelson concentrate was cleaned on a Mozley table. Both the Mozley and Knelson tailings were combined and submitted to cyanide leaching.

The gold recovery to the gravity concentrates ranged from 29.6% to 78% with an average of 54.0%.

#### 13.1.2 Cyanidation

The combined Knelson and Mozley table tailings were subjected to cyanide leaching under the following conditions:

- The extraction of gold by cyanidation ranged from 83.5% to 94% with an average of 89.3%. The NaCN and lime consumptions ranged from 0.03 to 1.40 kg/t and 0.21 to 0.70 kg/t respectively. The overall extraction, gravity plus cyanidation ranged from 90.0 to 98.5% with an average of 94.9%.

### 13.2 SGS Lakefield Testwork - Project 14041-001 (March – April 2013)

The purpose of this second test program was to determine the amenability of the sample to coarse gravity separation and flotation. The original test program included dense media separation, flash flotation and cyanidation testwork. The sections below present and summarize the results of testwork that was completed on these Granada samples.

#### 13.2.1 Specific Gravity

Seventeen (17) of the individual core samples which were used for the Master Composite were submitted for density measurements. The initial rock weight, weight in water and water displacement was recorded. The weights were then used to calculate the specific gravity of the ore which was found to be 2.78.

### 13.2.2 Head Analysis

Four (4) gold size fraction analyses were completed on the Master Composite sample. The gold head grade for the -1/4" Master Composite sample was 1.39 g/t. The gold head grade for the three size fractions which were created by screening at 4 mm and 1.18 mm ranged from 0.43 g/t to 1.35 g/t.

### 13.2.3 Comminution

The Master Composite sample was submitted for a standard Bond abrasion test. The results of this test can be used to determine steel media and liner wear in crushers, rod mills and ball mills. The Abrasion Index (AI) was 0.247 g and the sample was classified as medium abrasive.

A Bond low-energy impact test was performed on twenty rock samples from the Granada site. Twenty rocks in the range of 2" to 3" were selected and shipped to Phillips Enterprises LLC for the completion of a Bond low-energy impact test. The CWI average was 19.2 kWh/t and fell in the very hard hardness-range.

### 13.2.4 Heavy Liquid Separation

Two samples (-1/4" +4 mm and -4 mm +1.18mm) were submitted for heavy liquid separation (HLS) testing. The samples were placed in separatory funnels containing heavy liquid (methylene iodide) at six specific gravities, 3.1, 3.0, 2.9, 2.8, 2.75 and 2.7. The test was carried out sequentially starting with the sample run of highest SG (3.1), creating a float and sink fraction. The float fraction was cleaned, dried, weighed and then run at the next lowest SG. The minerals lighter than the heavy liquid specific gravity floated and those denser sank. The sink fraction and final float (2.7 SG) from each test were submitted for gold analysis.

The results indicated that 69.2% of the gold was recovered at a mass recovery of 30.6%. In order to get a higher gold recovery a larger mass recovery is required. The results for the -4 mm +1.18 mm Master Composite test indicated that there was improved separation at a finer fraction compared to the coarser fraction (-1/4" + 4 mm). A mass recovery of 30.5% yielded a gold recovery of 79.3%, approximately 10% higher than the coarser fraction results.

It should also be noted that the 2.70 float was very low grade, 0.05 g/t Au. Additional testwork at a finer crush size (6 mesh) was recommended by SGS.

### 13.2.5 Metallurgical Testing

The original testwork program included dense media separation (DMS) testwork on the -1/4" +4 mm and -4 mm +1.18 mm samples. Dense media separation was going to be used to preconcentrate the minerals and reject gangue materials prior to flotation testwork (float fraction) and cyanidation testwork (sink fraction). Based on the HLS test results Granada Gold decided not to engage in the DMS testwork.

A Wilfley shaking table was used to complete one single pass Wilfley test on the -1.18 mm Master Composite sample. The target concentrate weights were 1%, 2%, 5%, 10% and 15% of the feed weight. The concentrates from the test were going to be used for cyanidation testwork and the Wilfley tailings were going to be used for flotation and cyanidation testwork. The Wilfley table products were dried, weighed and assayed for gold.

Eight (8) concentrate samples were collected during the Wilfley test and combined to create weight fractions close to the target values. These concentrates were dried, weighed and assayed for gold. The calculated gold head grade for the -1.18 mm Master Composite sample was 1.31 g/t which compared well to the gold size fraction analysis value, 1.35 g/t Au. Based on the Wilfley table test results Granada Gold decided not to pursue the flotation and cyanidation testwork.

### 13.3 Gekko Systems Pty. Limited Testwork – Report T1037 (April – July 2013)

The purpose of Gekko's testwork was to build upon the previous scoping program, which found that the Granada Gold Granada ore was amenable to coarse gravity recovery and fine flotation. Additional tests such as gravity (Falcon), coarse flotation and leaching were added to the original scope of the testwork.

#### 13.3.1 Head Grade Analysis

The head grade analysis of the dense media separation feed at a crushed size range of -4 mm to +1.18 mm showed a head assay of 1.23 g/t whilst the calculated grade was 0.47 g/t Au. In one of the four (4) repeat fire assays, a reading of 3.75 g/t Au was evident, which indicates a presence of coarse or 'spotty' gold in the dense media separation feed sample.

The table feed crushed to 100% passing 1.18 mm, also indicated the presence of spotty or coarse gold. The average head assay was 1.03 g/t and a calculated grade obtained by the feed sizing was 0.97 g/t Au. This is supported by the higher LeachWell grade (2.06 g/t) than the fire assay grade of the single pass table feed sizing; this can be caused by 'spotty' gold that is captured by the LeachWell test but may be exacerbated in a 50-g fire assay.

#### 13.3.2 Comminution

The sample had an impact crushing work index of 19.3 kWh/tonne with a range from of 6.1 to 33 kWh/tonne. The abrasion index of the sample was 0.287. Vertical shaft impact (VSI) crushing (Barmac) produced high circulating loads that indicated low amenability to this comminution technique.

#### 13.3.3 Dense Media Separation

Dense media separation tests indicated gold recovery to be at 70% in a mass yield of 4.3% of the feed at a cumulative grade of 19.4 g/t. Approximately 70% of the feed material resided in the -4 mm to +1.18 mm size fraction for DMS cyclone test. The total calculated grade (tail grade) of sinks (SG of 2.9) to floats (SG of 2.7) was 0.35 g/t Au. A tail grade of 0.35 g/t was attributed to the residual material from the dense media separation test. This represented approximately 96% of the test mass.

#### 13.3.4 Gravity Recovery

The optimum single pass table gold recovery for the sample at 100% passing 1.18 mm was 56.2% into 15% of the feed mass at a grade of 4.2 g/t Au. The table tails grade was 0.58 g/t, therefore gravity recovery methods were employed in order to minimize the loss of gold to tails.

A Falcon batch centrifugal concentration was used on the gravity tails and selected gravity concentrates 3, 4 and 5, to increase the recovery of gold into a smaller mass. The Falcon was able to recover 22.1% of the gold into 0.5% of the feed mass at a grade of 30.8 g/t Au. While the concentration of the ore via Falcon is considered low on its own, its contribution to overall gold recovery via gravity is significant.

#### 13.3.5 Flotation

Coarse flotation completed on the Falcon tails at P100 = 600 µm recovered 51.1% of the gold into 7.8% of the feed mass for a grade of 2.49 g/t Au. Whilst flotation completed on the Falcon tails that was ground to P100 = 125 µm recovered 57.1% of the gold into 11.8% of the feed mass achieved a grade of 2.27 g/t Au. The tails grade for both the coarse and fine flotation tails were consistent with one another, at 0.20 g/t Au and 0.23 g/t Au respectively.

### 13.3.6 Cyanidation

Intensive cyanidation tests were carried out on the combined gravity and flotation tests to determine leach amenability.

### 13.3.7 Total Gold Recovery (Table, Falcon, Flotation, Cyanidation)

The recovery of gold for combined table, Falcon and coarse flotation concentrate was 82.7% at a grade of 8.20 g/t into 10.5% of the feed mass whilst the overall gold recovery of combined table, Falcon and fine flotation concentrates of 82.6%, at a grade of 6.45 g/t into 14.4% of the feed mass. Combined gravity, Falcon and fine flotation concentrate (LGOLD 02) displayed higher recoveries. Over 24 hours gold leach recovery for LGOLD 01 was 74.2% and over the same time period, gold leach recovery for LGOLD 02 was 90%.

## 13.4 Unité de Recherche et de Service en Technologie Minérale (URSTM) Project No: PU-2013-09-835-B (2013)

This report presents results of selected metallurgical tests done on Granada ore. These tests were completed from September to October 2013 by Jean Lelièvre, P. Eng., M.Sc., from URSTM, in the mineral processing facilities of Cégep de l'Abitibi-Témiscamingue in Rouyn-Noranda (QC) Canada. The fire assays and ICP on solids were conducted at Laboratoire Expert, Rouyn-Noranda (QC). Cyanide analyses were done by Multilab at Rouyn-Noranda. Acid generating tests (ABA and NAG) were performed by Mr. Marc Paquin, chemist at URSTM.

### 13.4.1 Head Analysis

Head analysis for the gold and silver returned the following values:

**Table 13-1 Head Analysis Results**

Samples	Au	Au-Dup	Ag	Ag-Dup
	g/t	g/t	g/t	g/t
S-1	0.72	0.69	0.6	0.5
S-2	0.69		0.2	
S-3	0.62	0.62	0.4	0.4
S-4	0.69			
S-5	1.37			
S-6	1.44			
S-7	0.62			
S-8	0.55			
Average	0.81		0.42	

### 13.4.2 ICP Analysis in Head Sample

The ICP analysis returned the following results:

**Table 13-2 ICP Analysis in Head Sample Results**

Granada Ore Sample	Concentration								
	Ag	As	Cu	Fe	Ni	Pb	Sb	S	Zn
	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm
	1.30	105.0	>1.0	6.53	148.0	14.0	<10	1.60	54.0

### 13.4.3 Acid-Generating Tests

The acid generating test returned the following results:

**Table 13-3 Acid Generating Test Results**

Granada Ore Sample	S <sub>t</sub>	S <sub>sulphate</sub>	S <sub>sulfur</sub>	AP	C <sub>t</sub>	NP	NNP	NP/AP	Potential
	%	%	%	CaCO <sub>3</sub>	%	CaCO <sub>3</sub>	CaCO <sub>3</sub>		Acid
				k/t		kg/t	kg/t		Producing
	1.28	0.047	1.23	38.4	1.50	65.2	26.8	1.7	Yes

### 13.4.4 Ore-Specific Gravity

Specific gravity of each sample has been evaluated by the pycnometer method and was found to be 2.78.

### 13.4.5 Ball Mill Work Index

A Bond ball mill work index has been done on the Granada ore using the standard work index protocol. The ball mill work index of Granada sample was 10.9 kW-h/tonne. A work index of 10.9 is a very low figure compared to most Canadian gold ores.

### 13.4.6 Gravity-Cyanidation Tests

A combined gravimetric concentration and cyanidation – carbon adsorption of gravimetric tails has been performed on the Granada samples. Results are summarized in Table 13-4.

- Overall gold recovery: 96.5%
- Free gold (gravity recovery): 41.0%

### 13.4.7 Chemical Consumption

- NaCN : 0.25 kg/t
- Ca(OH)<sub>2</sub> : 1.74 kg/t

### 13.4.8 Settling Tests (Thickener Dimensioning)

A total of three (3) laboratory settling tests have been done on cyanided Knelson-Mozley tails and the Talmage and Fitch method has been used for estimating the thickening area (m<sup>2</sup>/tpd). Results are summarized in Table 13-5.

**Table 13-4 Gravity Cyanidation Test Results**

	Mass	Mass	Grade	Distribution
	g	%	g/t	%
Grav. conc.	1.39	0.03	2265.0	41.0
Carbon ads.	110.7		38.5	55.5
Solution	8213.3		0.015	1.6
Tails solid	4789.6	99.97	0.03	1.9
Calc. feed	4791.0	100	1.60	100

**Table 13-5 Settling Tests Results**

Test	Flocculent Dosage Percol E10	% solid initial	% solid final	Thickener Unit area m <sup>2</sup> /tpd	Supernatant clarity
SED-1	0.0 g/t	23.2	55.0	0.138	Poor
SED-2	4.6 g/t	23.2	55.0	0.046	Clear
SED-3	18.4 g/t	23.2	55.0	0.041	Clear

### 13.4.9 Cyanide Destruction Tests

A total of (4) cyanide destruction has been done on cyanided tailings of the Granada ore. The cyanide destruction method used was the SO<sub>2</sub>-Air method. As usual for lab testing, the SO<sub>2</sub> was substituted by sodium metabisulfite (Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub>).

Principal parameters as well as cyanide destruction results are given in Table 13-6.

### 13.4.10 Gravity-Cyanidation duplicate

Out of the 23.5 kg of sample received by the URSTM, some 19.4 kg was used for the above tests thus leaving approximately 6.1 kg untouched. Because of the problem of conciliating the ore geological and mining grades to the tests head grades, probably due to a bad nugget effect, the URSTM was asked to do another gravity-cyanidation test employing the rest of the sample.

Results are summarized in Table 13-7.

- Overall gold recovery: 96.8%
- Free gold (gravity recovery): 15.1%
- NaCN consumption = 0.18 kg NaCN / mt of ore

- $\text{Ca(OH)}_2$  consumption = 1.97 kg  $\text{Ca(OH)}_2$  / mt of ore

**Table 13-6 Cyanide Destruction Test Results**

Test	Description		Ret. time hours	Reagents addition			pH	CNd	CNT	As	Cu
				$\text{Na}_2\text{S}_2\text{O}_5$ kg/t	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ kg/t	$\text{Ca(OH)}_2$ kg/t					
1	pH 8.5 $\text{SO}_2/\text{CNd}$ 6.73	Before CN dest.						267	264	0.33	25.44
	0 ppm Cu addition	After CN dest.	2	4.18	0.0	1.58	85	0.05	0.16	0.21	2.56
2	pH 8.5 $\text{SO}_2/\text{CNd}$ 6.73	Before CN dest.						267	264	0.33	25.44
	103 ppm Cu addition	After CN dest.	2	4.18	0.6	1.49	8.5	0.06	0.63	0.08	0.19
3	pH 8.5 $\text{SO}_2/\text{CNd}$ 5.17	Before CN dest.						267	264	0.33	25.44
	26 ppm Cu addition	After CN dest.	2	3.21	0.2	0.83	8.5	21.58	25.29	0.11	26.63
4	pH 8.5 $\text{SO}_2/9.07$	Before CN dest.						267	264	0.33	25.44
	130 ppm Cu addition	After CN dest.	2	5.63	0.8	2.00	8.5	0.12	0.43	0.08	0.19

**Table 13-7 Gravity Cyanidation Duplicate Results**

	Mass	Mass	Grade	Distribution
	g	%	g/t	%
Grav. conc.	4.44	0.07	616.0	15.1
Carbon ads.	154.1		96.0	81.7
Solution	10269.8		0.015	0.8
Tails solid	6107.6	99.93	0.07	2.4
Calc. feed	6112.0	100.0	2.97	100.0

### 13.5 Additional Tests at COREM report of July 15<sup>th</sup>, 2016

In an attempt to process the ore identified in the PFS at the Aurbel QMX Mill in Val d'Or flotation tests have been done as well as test with addition of calcite in order to have the potential of acid generating ore removed.

Metallurgical work on a gold sample was carried out to confirm the performance of the various processes and to verify that the generated waste meets environmental standards. For this purpose, gravimetric, flotation and cyanidation gold recovery tests were performed on Gold Bullion (Granada Gold) ore. Flotation releases were analyzed to estimate acid generating potential (PGA) and identify leachable metals (TCLP method).

A majority of the gold in the sample is recoverable by gravimetry (> 80%), and the flotation of gravimetric discharges has enabled efficient desulphurization (plus 92% sulfur recovery). Although underestimated because of the detection limits of the analysis, the recovery of gold by flotation was also appreciable, exceeding 80%. It has also been possible to confirm that flotation releases were not potentially acid generators or leachable as defined in Directive 019 of the Government of Québec following the analysis of six samples by the PGA and TCLP methods. Cyanidation tests were carried out on a flotation concentrate and produced about 86% recovery. The overall recovery was evaluated at 94.7% following the gravimetry, flotation and cyanidation steps.

The PN/PA for the AMD with addition of 35 kg/t of Calcite reach 5.1 which is much higher than the ratio of 3 expected to be declared non-acid generator, additional test could be done to lower the amount of calcite required by tonne of ore. Total sulfide assayed in the ore is 0.81%. These analyses were completed by Maxxam laboratories by under COREM supervision.

### 13.6 Additional Tests at Gekko – document of May 24<sup>th</sup>, 2016 & April 13<sup>th</sup>, 2017

In 2 confidential documents provided by Gekko where they carried additional testing, they highlighted the potential to upgrade the low grade material with the pressure jigs in order to reduce the amount of material to treat by cyanidation:

- The recovery of gold for combined table, Falcon and coarse flotation concentrate was 82.7% at a grade of 8.20 g/t into 10.5% of the feed mass whilst the overall gold recovery of combined table, Falcon and fine flotation concentrates of 82.6%, at a grade of 6.45 g/t into 14.4% of the feed mass.
- Intensive cyanidation tests were carried out on the combined gravity and flotation tests to determine leach amenability. Combined gravity, Falcon and fine flotation concentrate displayed higher recoveries. Over 24 hours gold leach recovery was 74.2% and over the same time period, gold leach recovery was 90%.
- Therefore, the use of fine flotation concentrates combined with gravity and Falcon concentrates as a composite sample for leaching, exhibits greater leach performance.

The test shows potential of preconcentration of lower grade material. Further optimisation testing should be done if that route is selected.

### 13.7 Re-2Ox and Recovery of Critical US Strategic Metals (2022)

Metallurgical studies on the mineralization are being undertaken at SGS for a potential mill on the Granada Mine Property.

On March 30, 2021, Granada Gold Mine and Canada Silver Cobalt Works jointly announced that early analysis indicates the potential for the Re-2Ox (<http://www.re-2ox.com/>) process to be used for the extraction of rare earth and alkali metals which have recently been found at the Granada Gold Mine property. The Re-2Ox process was previously used in the production of a cobalt sulphate compound at SGS Canada for end use in lithium-ion batteries at Canada Silver Cobalt's Castle property from a high-grade silver, cobalt and arsenic gravity concentrate

The processing of mineralized core involves using one of the conventional mineral processing steps: gravity concentration, magnetic concentration or flotation. Some bench scale leach testing to be done on the Granada rare earth and alkali concentrate. Pilot plant leach testing to be done on the Granada rare earth and alkali concentrate.

Both Companies will continue to work together on this initiative and will look at market demand fundamentals for the rare earth and alkali metal compounds prior to commencing bench scale testing.

On June 28, 2021, Granada Gold Mine announced a positive pre-concentration test work performed at Gekko in Australia on low-grade, mineralized waste material from the 500- tonne bulk sample recently taken from the Granada Gold Mine deposit.

The concentrate produced by the testing had an average grade of 1.16 g/t Au, which was more than three times higher than the 0.33 g/t Au assayed grade of the test sample. The concentrate amount was 18.2 percent of the sample size but with 47.1 percent recovery of the gold.

The preliminary results indicated that pre-concentration prior to milling has the potential to increase the gold grade by 251 percent with a 47.4 percent gold recovery for the low-grade mineralized waste material. In addition, the testing showed the calculated head grade of the Granada sample to be 36.4 percent higher than the assayed grade, which, if applied to Granada's historical in-situ mineral resource, would result in a corresponding significant increase in resources.

Test work was carried out on a 100 kg sample of Granada Gold waste mineralized material to determine amenability of the sample to pre-concentration via the Gekko InLine Pressure Jig. Amenability was determined through three gravity concentration processes. (1) DMS (dense media separation) Viking testing (45.6 percent of the gold could be recovered into 24.8 percent of the test feed mass. Given an assayed test feed grade of 0.45 g/t gold (estimated grade prior to actual assaying at 0.33 g/t Au), the corresponding concentrated grade equated to 1.30 g/t Au, giving a gold grade increase in value of 290 percent). (2) DMS Cyclone testing (69.9 percent of the gold could be recovered into 23.0 percent of the test feed mass. Given a test feed grade of 0.22 g/t gold, the corresponding concentrate grade equated to 0.78 g/t gold, giving a gold grade increase in value of 350 percent), and (3) Single Stage gravity table recovered 64.9 percent of the gold into 15.5 percent of the sample mass. Given a test feed grade of 0.79 g/t Au, the corresponding concentrate grade equated to 3.29 g/t gold, giving a gold grade increase in value of 420 percent). Recoveries achieved through the DMS and tabling test work are directly scalable to recoveries expected from a plant scale InLine Pressure Jig.

A 10-kilogram drill core sample was sent to SGS, Lakefield for mineralogical studies to identify the minerals associated with rubidium. The studies indicated so far that rubidium is likely in the micas and/or K-feldspars. Analytical results returned a grade of 1,238.5 ppm for rubidium. Distinct rubidium minerals do not commonly occur in nature and are almost always associated with feldspars and micas.

The test program at SGS was undertaken in two stages. The first stage consisted of straight forward flotation followed by leaching using the Re-2Ox process. The second stage was straight leaching using the Re-2Ox process. The test program was developed to target rubidium in the mineralized zones.

On January 11, 2022, Canada Silver Cobalt Works and Granada Gold Mine announced that the stage I bench-scale testing had been completed at SGS Lakefield using the Re-2Ox process for the recovery of performance-enhancing battery metal Rubidium from Granada Gold Mine's drill core. They announced a positive bench-scale leach test results achieving 99 percent extraction of the contained rubidium from drill core sourced from the rubidium zone at the Granada Gold deposit.

Granada Gold Mine wants to enhance the projects' economic by having gold bullion as a primary metal recovery and rubidium carbonate as a secondary by-product metal recovery.

Granada Gold Mine plans to reintegrate the precious metal leaching stage into the Re-2Ox process.

### 13.8 SGS Lakefield Testwork – Project 18690-01 (2021 – 2022)

A series of metallurgical tests were carried out at SGS Lakefield on 50 samples from the Granada deposit. The test program included chemical characterization, comminution, environmental testwork, and metallurgical testing. The main objective of the test program was to obtain baseline grindability and gold, silver and sulfur recovery data for a gravity separation / gravity tailing cyanidation and gravity flotation flowsheet.

The metallurgical test program was completed on fifty samples from the Granada deposit: 40 ore composite samples and 10 waste composite samples. Four main sources were identified: 1. High-grade pile (samples DH001 to DH0015), 2. Low-medium grade piles (samples DH0016 to DH0030), 3. Core Au (samples DH0031 to DH0040), and 4. Core waste composite (samples DH0041 to DH0050). The gold content for the high-grade pile was comprised between 1.76 g/t and 5.83 g/t and silver content was between 0.8 g/t and 2.9 g/t. The gold content for the low medium grade pile was comprised between 0.66 g/t and 4.25 g/t and silver content was between 0.7 g/t and 1.1 g/t. The gold content for the Core Au was comprised between 0.02 g/t and 8.76 g/t and silver content was between 0.7 g/t and 3.7 g/t.

The gravity tests on the high-grade pile samples (DH0001 to DH00015) resulted in a recovery of gold from 21.2% (DH00011) to 51.3% (DH00013). DH00011 and 13 yielded a gold concentrate of 502 g/t and 1391 g/t, respectively. The gravity tests on the medium low-grade pile samples (DH00016 to DH00029) resulted in a recovery of gold from 14.5% (DH00016) to 57.6% (DH00026). DH00016 and 26 yielded a gold concentrate of 136 g/t and 1468 g/t, respectively. The gravity tests on the Au Core pile samples (DH00031 to DH00040) resulted in a recovery of gold from 15.7% (DH00039) to 50.5% (DH00033). DH00039 and 33 yielded a gold concentrate of 8 g/t and 461 g/t, respectively.

The results from gravity tailing cyanidation tests showed final gold extractions from 78% to 96%. The tests returned final tailing residue gold grades between 0.02 g/t and 0.19 g/t. Reagent consumptions for sodium cyanide and lime ranged from 0.30 kg/t to 0.8 kg/t, and 0.56 kg/t to 1.01 kg/t, respectively for all the tests conducted. The overall gold recoveries achieved (gravity + cyanidation) for the tests performed were high, ranging from 88% to 98%.

The results from gravity tailing flotation tails showed final gold extraction from 48% to 92%. The tests returned final tailing residue gold grades between 0.02 g/t and 0.55 g/t. The overall gold recoveries achieved (gravity + flotation) for the tests performed were high, ranging from 64% to 96%.

## 14 MINERAL RESOURCE ESTIMATE

### 14.1 Introduction

The completion of the current updated Mineral Resource Estimate involved the assessment of a drill hole database, which included all data for drilling completed as of June 23rd, 2022, an updated three-dimensional (3D) grade-controlled wireframe model, revised pit optimization parameters, evaluation of the underground resource potential, review of the classification of the mineral resource estimate (Measured, Indicated and Inferred) and review of available written reports.

Kriging restricted to a grade-controlled wireframe model was used to interpolate gold grades (g/t Au) into a block model. Measured, indicated, and inferred mineral resources are reported in the summary tables in Section 14.11. The MRE takes into consideration that the current deposit will be mined partly by open pit mining and partly by underground mining methods.

This updated gold MRE uses thin, rich vein modelling and both open pit and underground resources and revised pit optimization parameters that are based on the possibility of constructing and using an on-site mill rather than off-site custom milling of the ore.

### 14.2 Drill Hole Database

To complete an updated Mineral Resource Estimate for the Deposit, the database used for the 2021 NI 43-101 technical report was used. The additional data used for this report consists of the assays from 3 drill holes completed in 2020 and 35 drill holes and wedges completed in 2021. The database included diamond drill hole and channel (called trenches in the tables) location information (NAD83 / UTM Zone 17), survey data, assay data, and lithology data. The data (see details in Table 14-1, Table 14-2 and Table 14-3, note that Table 14-1 include the wedges) was then imported into the SGS Genesis software for statistical analysis, block modeling and resource estimation. After an initial evaluation of the database, some of the data was fixed. We homogenise the geology terms used, removed some survey data that was clearly off, adjusted a few elevations for drill holes that were not on the topography. Note that at least 30 of the drill holes mentioned in the tables do not touch the resource model but were sometimes used to constrain it.

**Table 14-1 Statistics of the Drill Holes in the Granada Project Database (including Wedges)**

DDH (including wedges)			
Year	Count	Length (m)	Assays Count
1990	7	2,156	857
1992	137	6,197	4,184
1993	107	6,963	4,227
1994	75	6,659	4,049
1995	123	4,266	3,092
2009	11	1,027	841
2010	180	35,357	26,053
2011	211	41,181	30,345
2012	23	8,479	5,710
2016	15	4,306	2,967
2017	4	2,634	1,049
2018	4	2,889	930
2019	13	900	893
2020	50	11,589	4,292
2021	35	18,757	8,743
<b>TOTAL</b>	<b>995</b>	<b>153,358</b>	<b>98,232</b>

**Table 14-2 Statistics of the Wedges in the Granada Project Database (All Retained for the Estimation)**

Wedges			
Year	Count	Length (m)	Assays Count
2012	4	2,506	1,585
2016	1	375	354
2020	2	641	560
2021	7	3,385	2,084
<b>TOTAL</b>	<b>14</b>	<b>6,907</b>	<b>4,583</b>

**Table 14-3 Statistics of the Trenches in the Granada Project Database**

Trenches			
Year	Count	Length (m)	Assays Count
2014	34	235	229
2015	8	119	119
<b>TOTAL</b>	<b>42</b>	<b>354</b>	<b>348</b>

All trenches and drill holes of a length of 8 m or less were not used in the resource estimation because they run a higher risk of bearing a selection bias and therefore not be representative of the deposit. The count of information rejected for this reason is of 25 trenches and 1 drill hole. Another 25 drill holes were excluded from the resource estimation process because they are very “parallel” to the mineralization and therefore not representative of the deposit. The list of these holes is in Table 14-4.

**Table 14-4 List of Parallel Drill Holes Excluded from Resource Estimation**

List of Drillholes Excluded from the MRE				
GR-11-263	GR-19-SA	GR-20-108	GR-20-113	GR-21-08
GR-19-A	GR-19-WA	GR-20-109	GR-20-126	GR-21-09
GR-19-C	GR-20-08	GR-20-110	GR-21-05	GR-21-10
GR-19-D	GR-20-106	GR-20-111	GR-21-06	GR-21-26
GR-19-EA	GR-20-107	GR-20-112	GR-21-07	GR-21-28

The data used for the current Mineral Resource Estimate comprises data for 521 surface drill holes or wedges totaling 151,262 m and 17 channels totaling 253.1 m completed in the Deposit area between 1990 and 2021. It contains a total of 98,232 drill core assay samples and 349 channel assay samples. The details are in Table 14-5 and Table 14-6. All wedges are used in the estimation and included in the Table 14-2.

Overall, in 2021, there were 940 drillholes and wedges retained for the MRE totalling 131,385 m. In 2022, there were 969 drillholes and wedges retained for the MRE totalling 151,255 m. The increase is of 29 drillholes and wedges totalling 19,870 m.

**Table 14-5 Statistics of the Drill Holes Retained for the MRE (including Wedges, including some Drill Holes that do not Actually touch the Mineralization)**

DDH (including wedges)			
Year	Count	Length (m)	Assays Count
1990	7	2,156	857
1992	137	6,197	4,184
1993	107	6,963	4,227
1994	75	6,659	4,049
1995	123	4,266	3,092
2009	11	1,027	841
2010	180	35,357	26,053
2011	210	41,118	30,314
2012	23	8,479	5,710
2016	15	4,306	2,967
2017	4	2,634	1,049
2018	4	2,889	930
2019	7	468	475
2020	40	11,019	3,950
2021	27	17,726	7,750
<b>TOTAL</b>	<b>970</b>	<b>151,262</b>	<b>96,448</b>

**Table 14-6 Statistics of the Trenches Retained for the MRE**

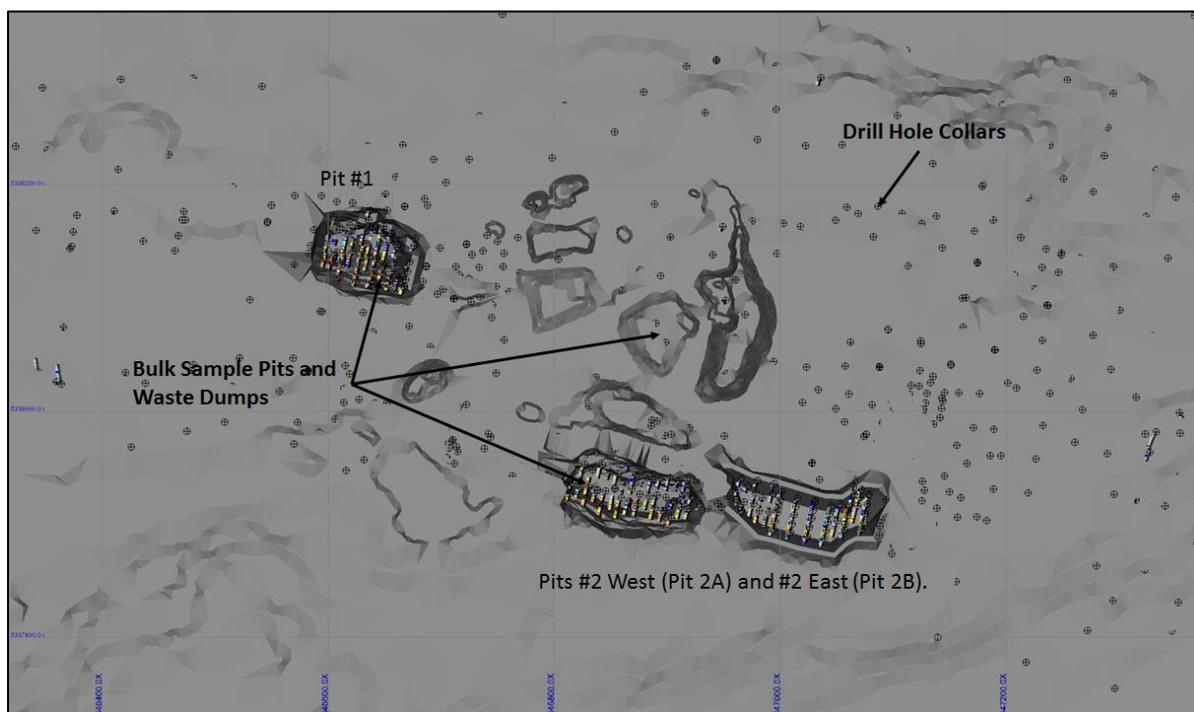
Year	Trenches			
	Count	Length	Assays Count	Assays Length
2014	11	145.1	143	145.1
2015	6	108.0	108	108.0
<b>TOTAL</b>	<b>17</b>	<b>253.1</b>	<b>251</b>	<b>253.1</b>

The database was checked for typographical errors in drill hole locations, down hole surveys, lithology, assay values and supporting information on source of assay values. Overlaps and gapping in survey, lithology and assay values in intervals were checked.

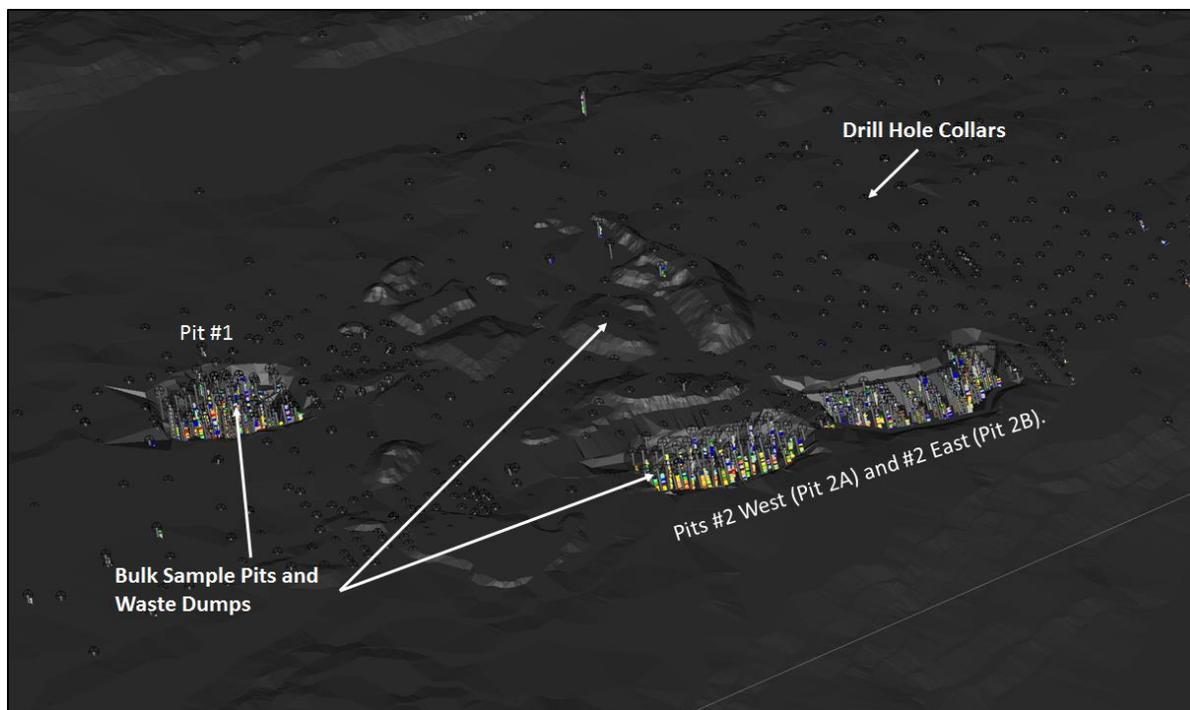
The database used for this mineral resource estimate includes drill results obtained from drill programs in 2009, 2010, 2011, 2012, 2016, 2017, 2018, 2019, 2020, 2021 and trenches from 2014 and 2015 plus many of the historic holes (1990's).

### 14.3 Topography

The topography surface used for this MRE update is the same as the one used for the previous 2021 MRE published in the January 29<sup>th</sup>, 2021 press release with a few updates to fit the 2021 drilling. The resource is also cut by the bedrock surface, slightly updated to fit the 2021 drilling. The surface topography model is in the form of a DXF format. A 3D DXF surface model representing the top of bedrock was designed from the drill hole information and was updated to fit the new drilling information. The topography surface was created from Lidar (Light Detection and Ranging) data merged with data from an open-pit (areas of bulk sampling) bottom survey conducted in 2012 (Figure 14-1; Figure 14-1). The overburden lithologic units within the drill hole logs were used to construct the bedrock surface model. The surface topography and bedrock surface models were used to exclude resource blocks, that extend above the bedrock surface or the base of the existing open pit surfaces.



**Figure 14-1 Plan View of the Granada Deposit Area Showing the Topographic Surface Including Areas of Bulk Sampling**



**Figure 14-2 Isometric View Looking Northeast of the Granada Deposit Area Showing the Topographic Surface Including Areas of Bulk Sampling**

#### 14.4 Mineralized Intervals and Wireframing

The modeling was done in two steps: the first step is the modelling of the thin, rich veins and the second step was the modelling of the large, low-grade.

In order to update the resource estimation, the individual thin, rich veins were modelled individually. These veins are quite continuous (over distances of 1,400m in strike and 1,000m down dip). Mineralization is open at depth and on strike. The maximum distance between linked intervals is currently about 150 m. Some gaps of about 300 m have no drilling but should contain mineralization given the continuous nature of the deposit.

Mineralized Intervals for the thin, rich zones were optimized automatically using a script in Genesis. The COG used is of 0.7 g/t Au over a minimum thickness of 2.5 m. The MIs were manually updated afterwards for the purpose of the modeling. While the 2.5 m constraint was always met, some intervals were considered under 0.7 g/t to allow to model continuous mineralized structures.

The final number of mineralized intervals used is 2,393. They are all tagged as belonging to one of the-107 thin rich veins. Tags are: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 41, 42, 43, 44, 45, 46, 47, 48, 49, 95, 96, 97, 98, 99, 111, 112, 113, 114, 115, 116, 117, 118, 151, 152, 201, 202, 203, 204, 205, 206, 231, 232, 233, 301, 302, 303, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 351, 352, 353, 356, 357, 358.

The veins called Vein #1, #2, #3, #5, A and B in all other parts of this document and historically on the property corresponds to different veins tagged with different numbers in the resources. The vein #1 is tag 6 (drilled in 1992) in the resource model, the extension of the vein #1 (drilled with GR-20-101 to GR-20-

126) corresponds to tag 5 in the resource model. The vein #2 (drilled in 1992) is close to tags 1 (footwall vein #2) and 4 (hanging wall vein #2). The pits 2 and 2A (Figure 5-1) mined the vein tagged 1 in the resource model. The vein #3 is close to tag 8. The vein #5 is close to tag 7.

The Deposit grade-controlled wireframe model was modelled in the SGS Genesis software, based on the mineralized intervals (Figure 14-3 to Figure 14-5). The 3D grade-controlled model was built by visually interpreting mineralized intercepts in drill holes and from cross sections.

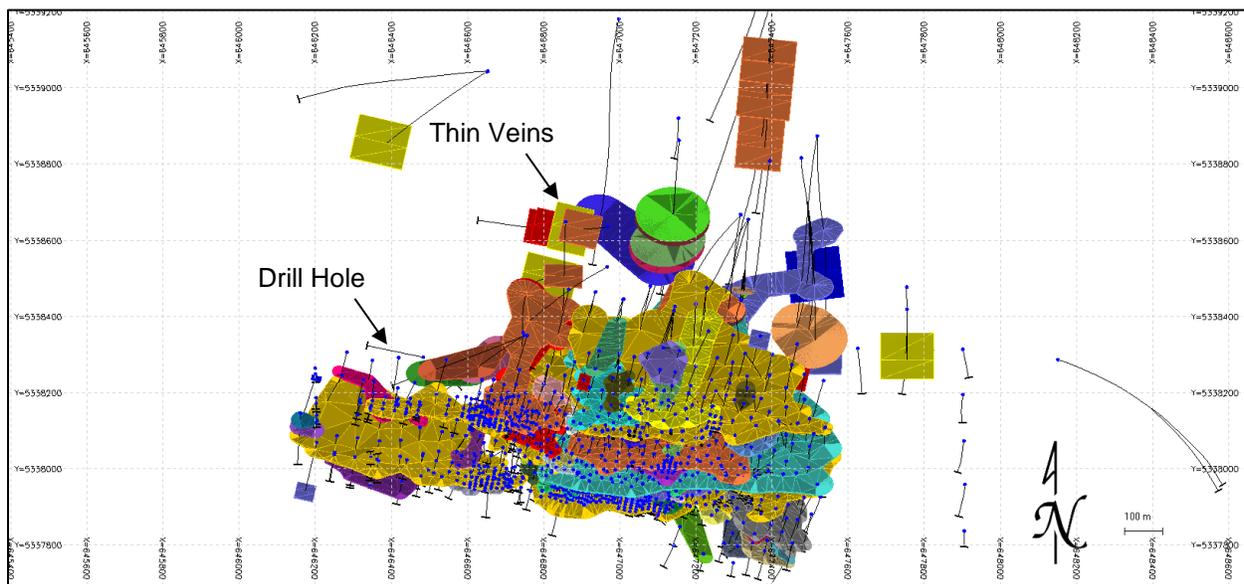
Once all intervals were tagged with the volume names, the volumes were generated using the planar technology in Genesis that find the best triangulation to get unbiased geometry and especially unbiased thickness.

We estimate that the final 107 thin, rich veins modelled contain 92% of the gold from intervals that meet the 0.7 g/t over 2.5 m criteria. The remaining 8% was left to be estimated in the large, low-grade mineralized volume around the thin, rich veins. The average thickness for the most important veins vary between 3.0 and 5.6 m. The maximum thickness is around 20 m.

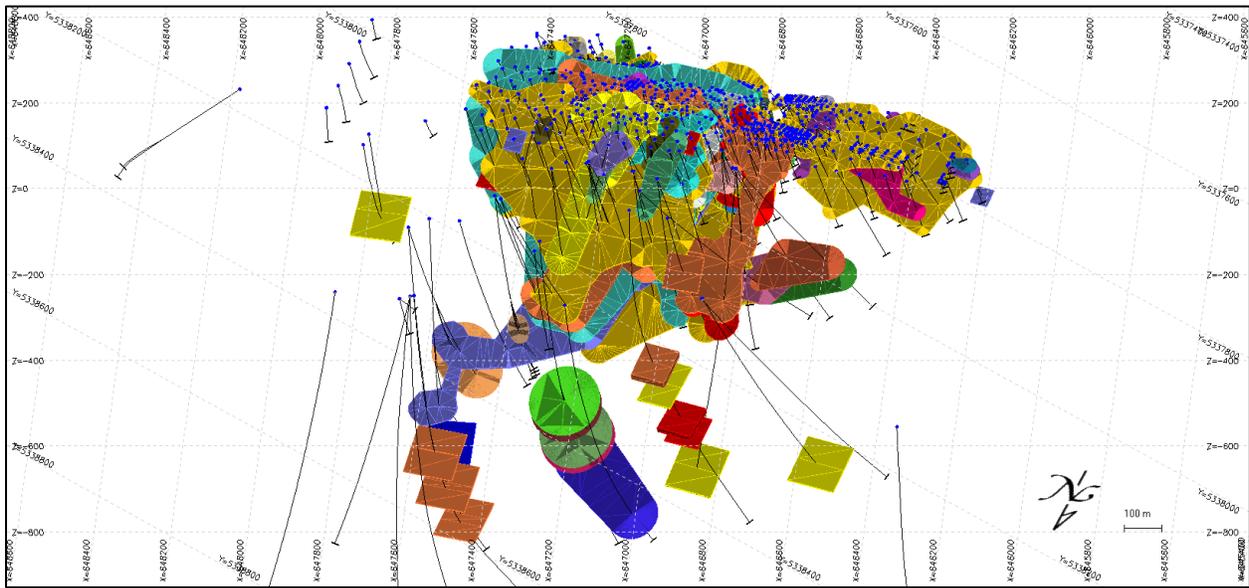
In order to make sure that the interpretation was as good as possible, many cross sections in many orientations were done and looked at and the shapes of the veins were improved until the model looked great from all directions.

A large, low-grade zone was modelled around all intervals containing significant gold. This large, low-grade volume is similar in shape but slightly larger in size (thanks to new drilling information) to the previous resource model.

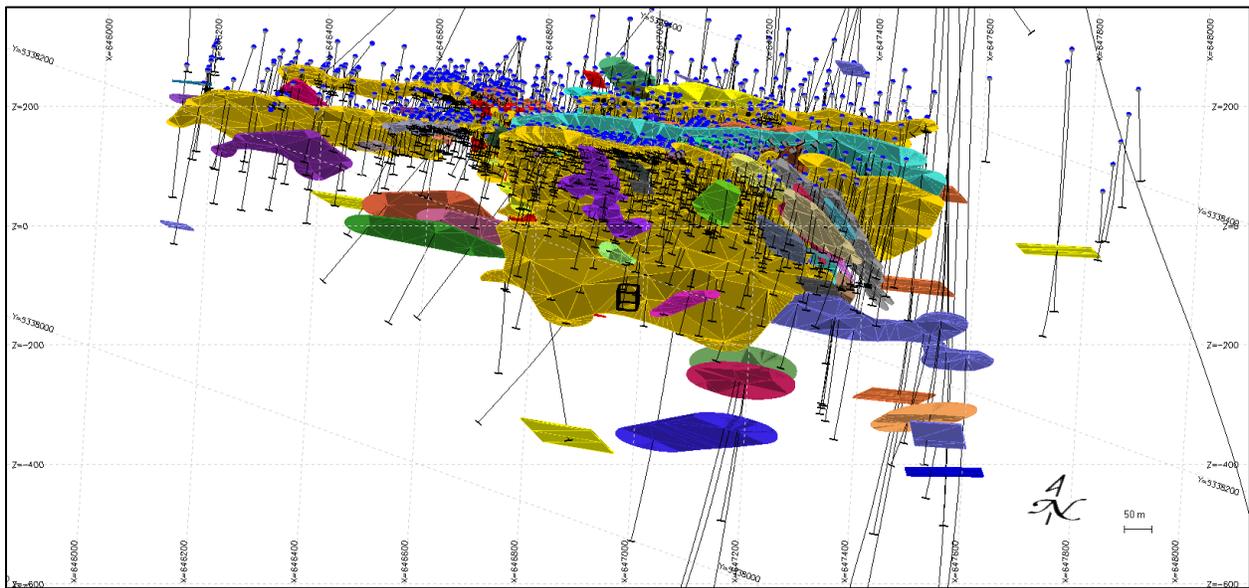
Several deep drill holes indicate gold mineralization extends at depth. The thin, rich veins were interpreted to up to a depth of 1000 m. The drill holes that are widely spaced (as much as 200 m) were included to generate Inferred resource but only where the continuity is better than average (like for the zone 1 for example). Most of the other inferred resources were limited to a space between holes of 100 m. The deepest resources end up being at about 990 m below the surface.



**Figure 14-3 Plan View with Drill Holes, Trenches and Thin, Rich Veins Model (Colours at Random)**



**Figure 14-4 Isometric View Looking SSE Showing the Drill Holes, and the Thin, Rich Veins Model (107 Wireframes)**



**Figure 14-5 Isometric View Looking NNW Showing the Drill Holes, and the Thin, Rich Veins Model**



density measurements previously taken by SGS range from 2.68 g/cm<sup>3</sup> to 2.90 g/cm<sup>3</sup> with a mean of 2.80 g/cm<sup>3</sup>. Additional measurements taken in 2012 have lowered the average to 2.70 g/cm<sup>3</sup>.

Seventeen (17) individual core samples were collected for metallurgical test work in 2013 (SGS Lakefield Testwork - Project 14041-001 March – April 2013) (see section 13.2 above) and were submitted for density measurements. The initial rock weight, weight in water and water displacement was recorded. The weights were then used to calculate the average specific gravity of the Granada deposit which was found to be 2.78 g/cm<sup>3</sup>. An additional 8 samples were collected for metallurgical tests by Unité De Recherche Et De Service En Technologie Minérale (URSTM) (September to October 2013). Specific gravity measurements of each sample were evaluated by the pycnometer method and was found to be 2.78 g/cm<sup>3</sup>. Based on the results of the SG measurements from the metallurgical testwork done on the Granada mineralization, a fixed SG of 2.78 is used to calculate the tonnage of the Granada resource. Based on the lack of data, an SG of 2.78 is also used for the waste rock.

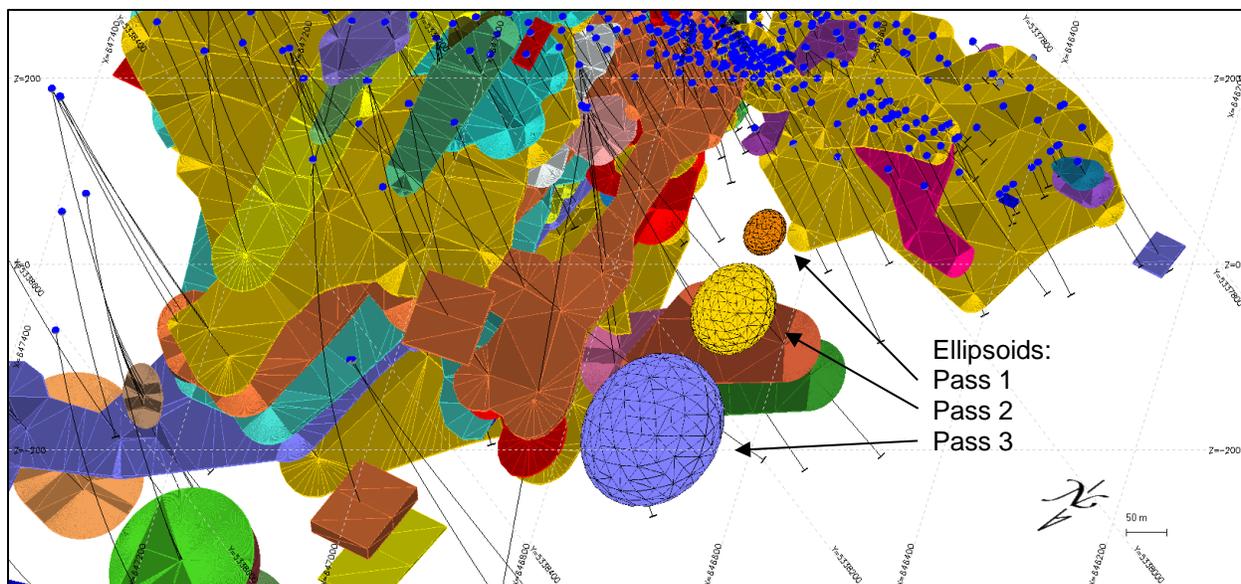
SGS strongly recommend that additional SG measurements be collected on mineralized and unmineralized rocks from various locations throughout the deposit area.

#### 14.7 Block Model Parameters

The Deposit grade-controlled wireframe model was used to constrain composite values chosen for interpolation, and the mineral blocks reported in the estimate of the mineral resource. A block model within NAD83 / UTM Zone 17 (Table 14-7) space (with a rotation of 9 degrees clockwise to conform with the deposit orientation) (Figure 14-7) with block dimensions of 5 x 2.5 x 2.5 m in the x (east), y (north) and z (elevation) directions was placed over the wireframe model. The block size was selected based on borehole spacing, composite assay length, the geometry of the vein structures, and the selected reasonable mining methods (open pit and underground). The model was intersected with a bedrock surface and surface topography to exclude blocks, with centers above the bedrock surface. We used the block centers to determine the block's nature. No partial blocks or sub-blocks were used.

**Table 14-7 Deposit Block Model Geometry**

Model Name	X (East)	Y (North)	Z (Elevation)
Origin (NAD83 / UTM Zone 17) (center of block 1,1,1)	645702.5	5337702.5	-1297.5
Block Count	460	1090	660
Block Size	5	2.5	2.5
Discretization (for the Estimation)	4	2	2
Rotation (clockwise)	9°		



**Figure 14-7 Isometric View Looking South-southeast with the Thin, Rich Veins Model and the Pass 1, 2 and 3 Search Ellipsoids**

## 14.8 Grade Interpolation

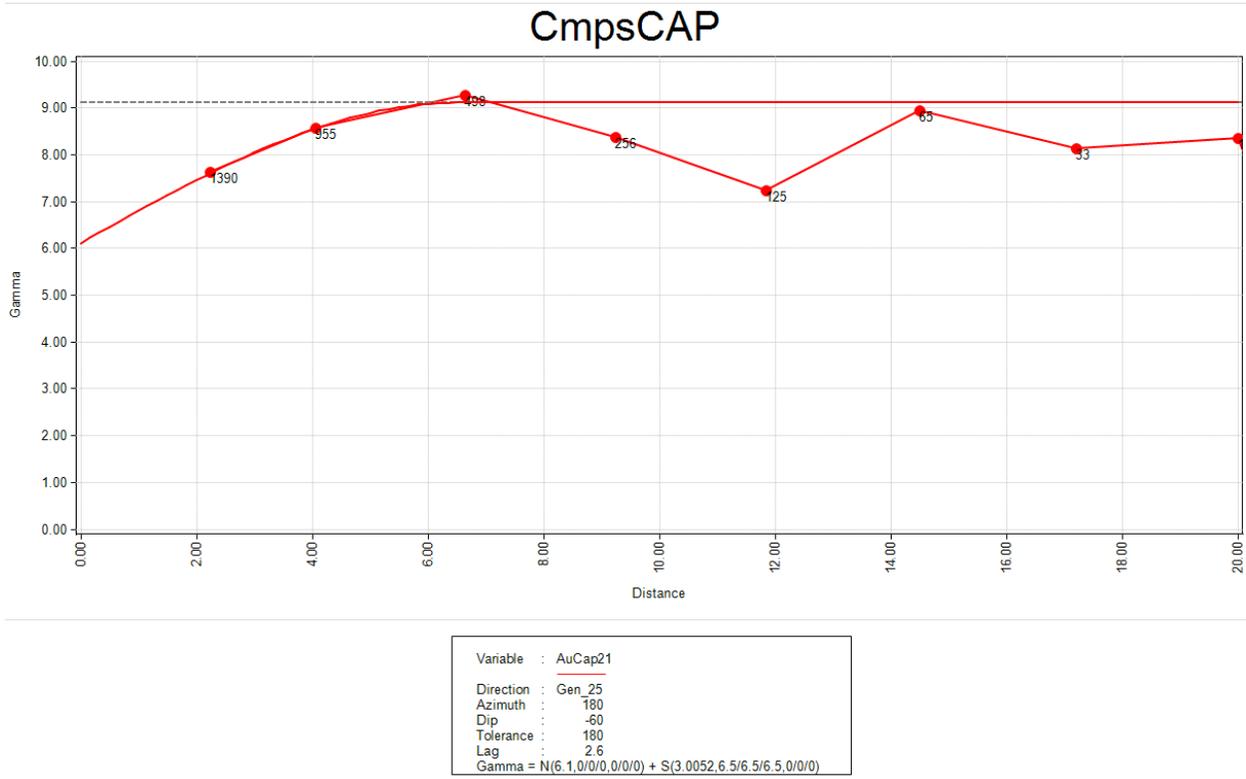
Both the kriging and inverse square distance estimation methods were tested with very similar results globally. The kriging is slightly more conservative in grade and gold content once we apply the cut-off grades to report resources. Kriging was retained as the estimation method of choice for this project.

The variography was completed using Genesis. The “along the hole” variogram is well modeled and shown in Figure 14-8. Because the variogram “along the veins” was not possible to model for the moment, we used some reasonable assumptions with a range of 20 m in the long and medium range of the final 3D variogram.

As for the search ellipsoids, we kept them similar to the ellipsoids used for the 2018 and 2021 MREs. The details are in Table 14-8. The search ellipsoids were attributed variable orientation, so they conform to local orientations of the thin veins. As for the large, low-grade volume, the search ellipsoids were attributed variable orientation too. Search ellipsoid orientations are variable depending on local orientation of the model.

Three passes were used to interpolate grade into all of the blocks in the deposit wireframe model (Table 14-8). For Pass 1 the search ellipse size (in metres) for all vein domains was set at 30 x 30 x 7.5 m; for Pass 2 the search ellipse size for each domain was set at 60 x 60 x 15 m; for Pass 3 the search ellipse size was set at 100 x 100 x 30 m. Classification of the blocks was done as a separate step in the MRE process.

A minimum of a single drill hole is needed to estimate blocks inside thin, rich veins. A minimum of 2 drill holes are needed to estimate blocks in the low-grade volume. Grades were interpolated into blocks using a minimum of 5 and maximum of 7 composites to estimate block grades during Pass 1 and Pass 2 (maximum of 2 composites per drill hole), and a minimum of 1 and maximum of 7 composites to estimate block grades during Pass 3 (maximum of 2 composites per drill hole) (Table 14-8). The only exception to these settings is for the estimation of blocks in the large, low-grade volume a minimum of 3 composites is needed to estimate a block therefore 2 drill holes are needed.



**Figure 14-8 Along-the-holes Experimental Variogram and Model**

**Table 14-8 Grade Interpolation Parameters by Vein Domain**

Parameter	Granada		
	Pass 1	Pass 2	Pass 3
	Indicated	Indicated	Inferred
Search Type	Ellipsoid		
Azimuth	Variable for thin veins and for the low-grade		
Dip	Variable for thin veins and for the low-grade		
Spin	0°		
Size X	30	60	100
Size Y	30	60	100
Size Z	7.5	15	30
Min. Samples	3	3	1 for thin veins, 3 for low-grade
Max. Samples	7	7	7
Max. Samples per Hole/Trench	2	2	2

## 14.9 Mineral Resource Classification Parameters

The Mineral Resource Estimate presented in this Technical Report was prepared and disclosed in compliance with all current disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the current Mineral Resource Estimate into Measured, Indicated and Inferred is consistent with current 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources “have reasonable prospects for eventual economic extraction”.

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured 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.

Interpretation of the word ‘eventual’ in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage ‘eventual economic extraction’ as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

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.

### ***Measured Mineral Resource***

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 deposit.

Geological evidence is derived from 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.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

### ***Indicated Mineral Resource***

An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource Estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

### ***Inferred Mineral Resource***

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 Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

#### **14.9.1 Classification Methodology**

The classification in measured, indicated and inferred was done as a separate step with an algorithm with ellipsoids centered on composites. A drilling grid with a minimum of 3 drillholes within 30 m of each other or less defines measured resources (under 25 m most of the time) and a drilling grid with a minimum of 3 drillholes within 60 m of each other or less defines indicated resources (under 50 m most of the time). Measured resource extends only by 20 m around drillholes and indicated extends only by 40 m.

### **14.10 Reasonable Prospects for Eventual Economic Extraction**

The general requirement that all mineral resources have “reasonable prospects for economic extraction” implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, the Authors consider that the Granada deposit mineralization is amenable for both open pit and underground extraction.

Gold prices have evolved significantly since the 2021 MRE and that has helped the MRE presented in the current technical report. Gold price used is 1,700 US\$/oz.

#### 14.10.1 Pit Constrained Resources

In order to determine the quantities of material offering “reasonable prospects for eventual economic extraction” by an open pit, Whittle™ pit optimization software and reasonable mining assumptions and metal recovery assumptions are used to evaluate the proportions of the block model that could be “reasonably expected” to be mined from an open pit were used. The pit optimization was completed by SGS. The pit optimization parameters used are summarized in Table 14-9. Based on SGS’s experience with open pit exploration projects and mining operations, the Authors consider the assumptions listed in Table 14-9 to be appropriate reporting assumptions for the purposes of the current report.

The revised pit optimization parameters are based on the possibility of on-site milling rather than off-site custom milling. The methodology used for this update of the resource estimation is largely the same as the previous estimation from 2021.

A Whittle pit shell at a revenue factor of 1.0 was selected as the ultimate pit shell for the purposes of the current Mineral Resource Estimate (Figure 14-7; Table 14-9). The corresponding stripping (waste/ore) ratio is 7.5:1.

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

**Table 14-9 Whittle™ Pit Optimization Parameters**

Parameter	Value	Unit
Gold Price	\$1700	US\$ per ounce
Exchange Rate	0.78 US\$ : 1 CA\$	
<b>Assumed Mining and Processing Costs</b>		
Pit Slope	50	Degrees
Open Mining Cost	\$6.00	CA\$ per tonne mined
Processing, Transportation Cost and General and Administrative (G&A)	\$25.00	CA\$ per tonne milled
<b>Assumed Metal Recoveries</b>		
Gold Recovery	93	Percent (%)
Open Pit Mining loss / Dilution	10 / 20	Percent (%) / Percent (%)
Open Pit Cut-off Grade	0.55	g/t Au

#### 14.10.2 Underground Resources

In order to have “reasonable prospects for eventual economic extraction”, we decided to remove any group of blocks under 300 m<sup>2</sup> (or about 5 x 5 x 12 m). The impact of this measure was very slight. The list of the underground mining parameters is presented in the Table 14-10. The resulting COG is of 2.5 g/t Au.

**Table 14-10 Underground Mining Parameters**

Parameter	Value	Unit
Underground Mining Cost	\$105.00	CA\$ per tonne mined
Underground Mining loss / Dilution	10 / 10	Percent (%) / Percent (%)
Underground Cut-off Grade	2.5	g/t Au

## 14.11 Mineral Resource Statement

The 2022 Mineral Resource Estimate Update for the Granada deposit is presented in Table 14-11. The open pit and underground mineral resource update includes, at a base case cut-off grade of 0.55 g/t Au for open-pit mineral resources within a conceptual pit shell and at a base case cut-off grade of 2.5 g/t for underground mineral resources within reasonably mineable volumes, 543,000 ounces of gold (8,220,000 tonnes at an average grade of 2.05 g/t Au) in the Measured and Indicated category, and 456,000 ounces of gold (3,010,000 tonnes at an average grade of 4.71 g/t Au) in the Inferred category.

The mineral resource statement excludes the historical production of 51,476 ounces of gold (181,744 Tons @ 0.28 oz/Ton Au equivalent to 164,816 tonnes at 9.7 g/t Au) from 1930 to 1935. These numbers were subtracted from the measured resources in the whittle open pit.

The summary numbers of the base case scenario are shown in Table 14-11. The same numbers but with more details is shown in Table 14-14.

The Figure 14-9 shows all estimated blocks both in the current pit and underground. The blocks shown are the “base case” so the COG is of 0.55 g/t Au in the pit and of 2.5 g/t Au for anything under the pit. Blocks below 2.5 g/t Au under the pits and below 0.55 g/t Au in the pits are not visible. The Figure 14-10 shows the same as the previous figure but the colour of the blocks is based on the classification of the blocks. Most of the inferred resources are underground as shown in Table 14-14.

**Table 14-11 Granada Deposit Updated Mineral Resource Estimate, Effective June 23<sup>rd</sup>, 2022**

Cut-Off (g/t Au)	Classification	Type	Tonnes	Au (g/t)	Gold Ounces
0.55 / 2.5	Measured <sup>1</sup>	<b>InPit+UG</b>	4,900,000	1.70	269,000
	Indicated	<b>InPit+UG</b>	3,320,000	2.57	274,000
	<b>Measured &amp; Indicated</b>	<b>InPit+UG</b>	<b>8,220,000</b>	<b>2.05</b>	<b>543,000</b>
	Inferred	<b>InPit+UG</b>	3,010,000	4.71	456,000

(1) The 1930-1935 production was removed from these numbers (164,816 tonnes at 9.7 g/t Au / 51,400 ounces Au).

(2) The Independent QP for this resources statement is Yann Camus, P.Eng., SGS Canada Inc.

(3) The effective date is June 23<sup>rd</sup>, 2022.

(4) CIM (2014) definitions were followed for Mineral Resources.

(5) Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to a Measured and 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.

(6) No economic evaluation of the resources has been produced.

(7) All figures are rounded to reflect the relative accuracy of the estimate. Totals may not add due to rounding

(8) Composites have been capped where appropriate. The 2.5 m composites were capped at 21 g/t Au in the thin rich veins and at 7 g/t Au in the low-grade volumes.

(9) Cut-off grades are based on a gold price of US\$1,700 per ounce, a foreign exchange rate of US\$0.78 for CA\$1, a processing gold recovery of 93%.

(10) Pit constrained mineral resources are reported at a cut-off grade of 0.55 g/t Au within a conceptual pit shell

(11) Underground mineral resources are reported at a cut-off grade of 2.5 g/t Au within reasonably mineable volumes.

(12) A fixed specific gravity value of 2.78 g/cm<sup>3</sup> was used to estimate the tonnage from block model volumes

(13) There are no mineral reserves on the Property.

(14) The deepest resources reported are at a depth of 990 m.

(15) SGS is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the mineral resource estimate.

(16) The results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

**Table 14-12 In Pit part of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23<sup>rd</sup>, 2022 (0.55 g/t Au COG)**

Category	Type	Tonnes	Au (g/t)	Gold Ounces
Measured	InPit <sup>1</sup>	4,840,000	1.68	261,000
Indicated	InPit	2,440,000	2.09	164,000
<b>Measured &amp; Indicated</b>	<b>InPit</b>	<b>7,280,000</b>	<b>1.81</b>	<b>425,000</b>
<b>Inferred</b>	<b>InPit</b>	<b>420,000</b>	<b>1.78</b>	<b>24,000</b>

- All footnotes shown below Table 14-11 also apply to this table.

**Table 14-13 Underground part of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23<sup>rd</sup>, 2022 (2.5 g/t Au COG)**

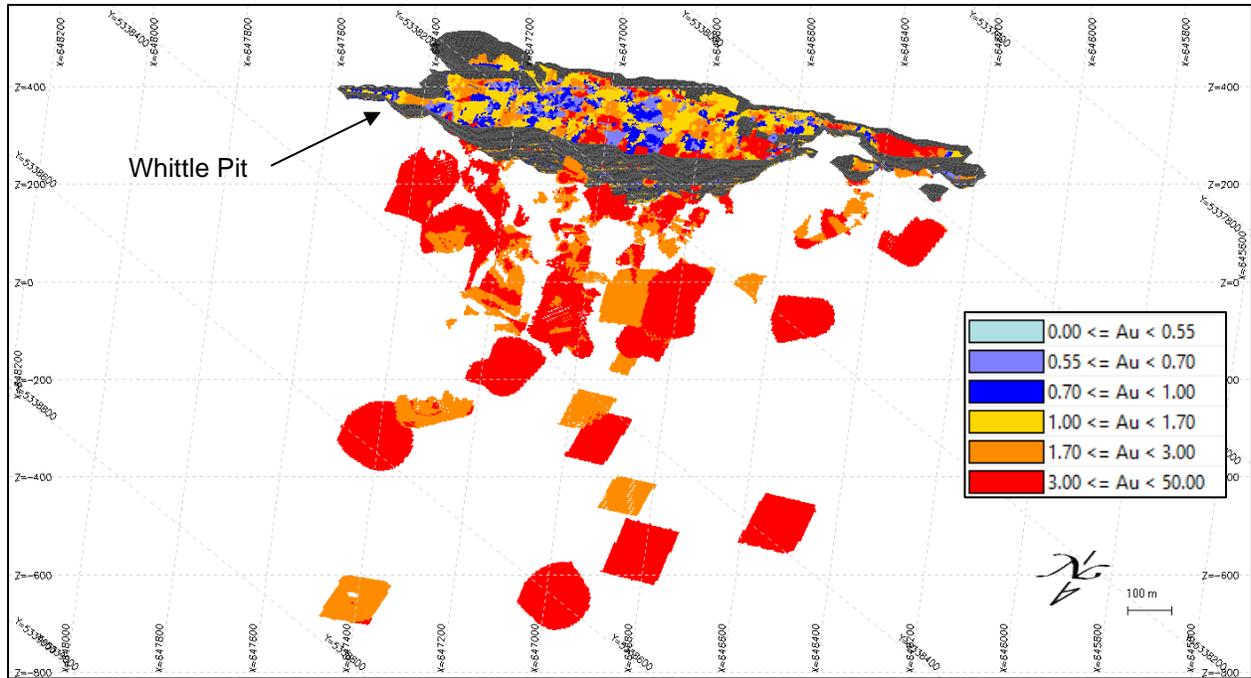
Category	Type	Tonnes	Au (g/t)	Gold Ounces
Measured	UG	60,000	3.84	8,000
Indicated	UG	870,000	3.93	110,000
<b>Measured &amp; Indicated</b>	<b>UG</b>	<b>940,000</b>	<b>3.92</b>	<b>118,000</b>
<b>Inferred</b>	<b>UG</b>	<b>2,590,000</b>	<b>5.19</b>	<b>431,000</b>

- All footnotes shown below Table 14-11 also apply to this table.

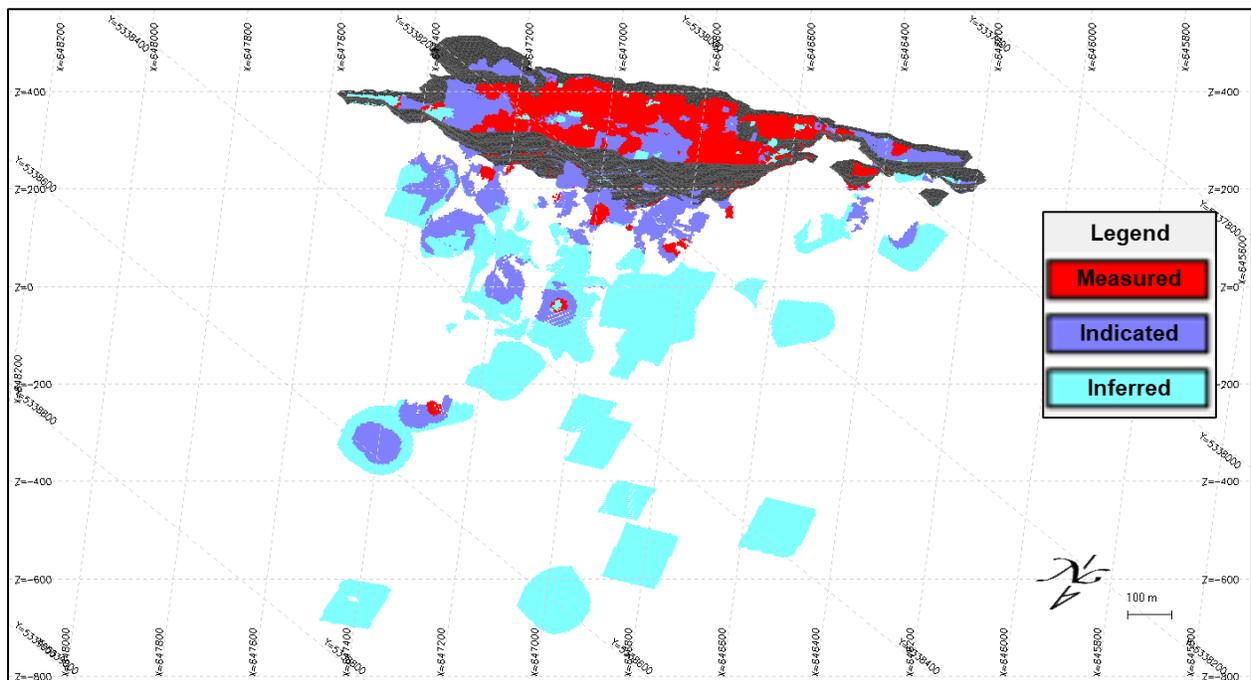
**Table 14-14 Details of the Granada Deposit Updated Mineral Resource Estimate, Effective June 23<sup>rd</sup>, 2022**

Category	Type	COG	Tonnes	Au (g/t)	Gold Ounces
Measured	InPit <sup>1</sup>	0.55	4,840,000	1.68	261,000
	UG	2.5	60,000	3.84	8,000
	<b>InPit+UG</b>	<b>0.55/2.5</b>	<b>4,900,000</b>	<b>1.70</b>	<b>269,000</b>
Indicated	InPit	0.55	2,440,000	2.09	164,000
	UG	2.5	870,000	3.93	110,000
	<b>InPit+UG</b>	<b>0.55/2.5</b>	<b>3,320,000</b>	<b>2.57</b>	<b>274,000</b>
<b>Measured &amp; Indicated</b>	<b>InPit+UG</b>	<b>0.55/2.5</b>	<b>8,220,000</b>	<b>2.05</b>	<b>543,000</b>
Inferred	InPit	0.55	420,000	1.78	24,000
	UG	2.5	2,590,000	5.19	431,000
	<b>InPit+UG</b>	<b>0.55/2.5</b>	<b>3,010,000</b>	<b>4.71</b>	<b>456,000</b>

- All footnotes shown below Table 14-11 also apply to this table.



**Figure 14-9 Isometric View Looking South-southeast with Block Model. 0,55 g/t Au COG Inside the pit and 2.5 g/t Au COG Under the Pit**



**Figure 14-10 Isometric View Looking Southeast with the Estimated Blocks in Current Whittle Pit, Blocks by Category**

## 14.12 Model Validation and Sensitivity Analysis

Different validation steps were taken to ensure the estimation is of good quality. The visual inspection of the model in many angles, with many colour legends, and many cross sections allowed to ensure the estimates went as wanted. Visual checks of block gold grades against the composite data on vertical section showed good correlation between block grades and drill intersections.

Also, the estimates were compared to the drill hole data and to the composite data on a vein per vein basis and corresponded well. As stated in the estimation settings part of this report, the inverse distance squared and the kriging estimates were compared and, at 0.0 g/t Au cut-off grade, value compared well.

## 14.13 Comparison with 2021 Resource

Compared to the 2021 MRE, the tonnages increased for all categories of resources and for both resources in the pit and underground (overall a 55% tonnage increase). Also, the ounces increased for all (overall a 40% contained gold ounces increase). These increments come from bigger interpreted volumes thanks to new successful drilling, increased gold price and reduced cut-off grades. On the other hand, this comes at the cost of a reduced grade also for all categories of resources and for both resources in the pit and underground (overall a 10% Au grade reduction). The Table 14-15 show the difference between the 2021 and the 2022 assumptions.

**Table 14-15 Comparison of 2021 and 2022 Assumptions Used for the Preparation of the Pit Shell Limiting the Mineral Resources**

Parameter	Value		Unit
	2021	2022	
Gold Price	\$1600	\$1700	US\$ per ounce
Exchange Rate	0.76 US\$ : 1 CA\$	0.78 US\$ : 1 CA\$	
Pit Slope	50	50	Degrees
Open Mining Cost	\$6.00	\$6.00	CA\$ per tonne mined
Underground Mining Cost	\$105.00	\$105.00	CA\$ per tonne mined
Processing, Transportation Cost and General and Administrative (G&A)	\$35.00	\$25.00	CA\$ per tonne milled
Gold Recovery	93	93	Percent (%)
Open Pit Mining loss / Dilution	10 / 20	10 / 20	Percent (%) / Percent (%)
Underground Mining loss / Dilution	10 / 20	10 / 10	Percent (%) / Percent (%)
Open Pit Cut-off Grade	0.9	0.55	g/t Au
Underground Cut-off Grade	3.0	2.5	g/t Au

## 14.14 Disclosure

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading.

The Authors are not aware of any known mining, processing, metallurgical, environmental, infrastructure, economic, permitting, legal, title, taxation, socio-political, or marketing issues, or any other relevant factors not reported in this technical report, that could materially affect the Mineral Resource Estimate Update.

## **15 MINERAL RESERVE ESTIMATES**

There are no current Mineral Reserve estimates stated on this Property. This section does not apply to the Technical Report.

## **16 MINING METHODS**

This section does not apply to the Technical Report.

## **17 RECOVERY METHODS**

This section does not apply to the Technical Report.

## **18 PROJECT INFRASTRUCTURE**

This section does not apply to the Technical Report.

## **19 MARKET STUDIES AND CONTRACTS**

This section does not apply to the Technical Report.

## **20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

Some information is described in section 4.3 Permits and Environmental Liabilities of this Report.

Granada Gold sent a notice of declaration for drilling work to the Ministère de l'Environnement et de la Lutte aux changements climatiques (MELCC) on January 5<sup>th</sup>, 2021.(MELCC website)

Also as of the date of the report, metallurgical and environmental characterization studies on the mineralization are being undertaken at SGS for a potential mill on the Granada Mine Property.

## **21 CAPITAL AND OPERATING COSTS**

This section does not apply to the Technical Report.

## **22 ECONOMIC ANALYSIS**

This section does not apply to the Technical Report.

## 23 ADJACENT PROPERTIES

The Property lies in an area of active exploration and development on the Cadillac trend. Several mining companies are active including Yorbeau Resources Inc. (“Yorbeau” optioned by IAMGOLD) located directly north of the Granada Gold Property and Opawica Explorations Inc. (“Opawica”) located directly north-east of the Granada property.

Figure 23-1 shows the location of the different properties near Granada.

- To the north, the Astoria property of Yorbeau Resources has declared resource statement in 2005 in the 700,000 to 1 Million gold ounce range. The resource is in a different geological context associated with the Cadillac fault. The technical report can be downloaded from their web site. The authors are aware Yorbeau conducted some drilling works in 2014, targeting gold mineralization associated with the Cadillac Break and the Piché Group at depths ranging from 200 to 400 m. They indicated having hit 9.1 g/t Au over 9 m. Kinross has optioned the property and has conducted exploration works. Now an agreement is in place with IAMGOLD.
- Opawica Exploration Inc. has claims on the northeast (McWatters property) and the northwest of the Property (Bazooka property), which is not adjacent to the Granada property.
- No data could be found on the western side for Mines d’Argent Ecu Inc.
- In the middle of the Granada claims are claims owned by Probe Metals Inc. No information is available on their website on any works that have been done on this property since they took over Adventure Gold.

The information presented regarding the Rouyn Property of Yorbeau has been publicly disclosed by Yorbeau on their website [www.yorbeauresources.com](http://www.yorbeauresources.com).

The Authors have been unable to verify the information from the Rouyn Property, and the information is not necessarily indicative of the mineralization on the Granada Gold Property.

There is no other information on properties adjacent to the Granada Gold Property necessary to make the technical report understandable and not misleading.

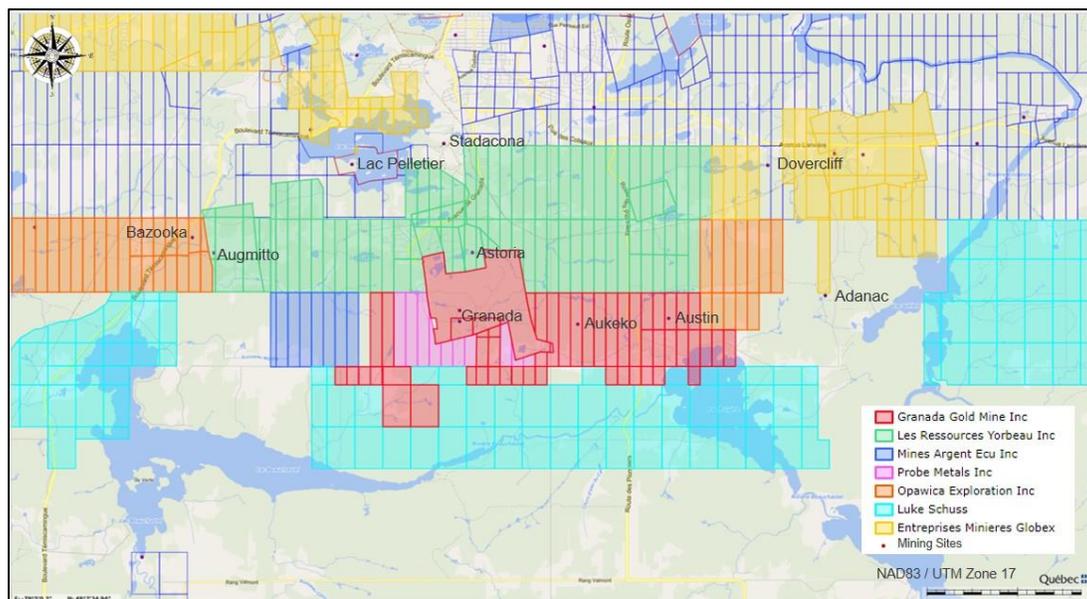


Figure 23-1 Properties Adjacent to the Granada Gold Property (Gestim, March 3<sup>rd</sup>, 2021)

### 23.1 Yorbeau Resources Inc. - Rouyn Property

The Rouyn Property covers a 12-kilometre stretch of the Cadillac-Larder Lake Break. It consists of one mining concession and 94 claims and covers a total area of nearly 2,700 ha ([www.yorbeauresources.com](http://www.yorbeauresources.com)).

Because of its large size, the property has been subdivided into seven major "Blocks" (from west to east): Augmitto, Cinderella, Durbar, Lake Gamble, Wright-Rouyn, Astoria and Lake Bouzan.

Mineral Resource estimates, compliant to NI-43-101 regulations, have been completed for two distinct deposits, namely the Astoria and Augmitto deposits ([www.yorbeauresources.com](http://www.yorbeauresources.com)).

Mineral Resource estimates for the Augmitto project (cut-off: 3.4 g/t Au) includes Measured and Indicated Resources totalling 247,000 t at 6.08 g/t Au containing 48,200 gold ounces. Inferred Resources total 633,000 t at 7.79 g/t Au for 158,800 gold ounces.

Mineral Resource estimates for the Astoria project (cut-off: 3.0 g/t Au) includes Measured + Indicated Resources totalling 1,429,564 t at 5.18 g/t Au containing 238,084 gold ounces. Inferred Resources total 302,597 t at 5.40 g/t Au for 52,536 gold ounces.

In summary, by combining Mineral Resources of 207,000 ounces at Augmitto, with Potential ranging (depending on drill hole influence) from 0.8 to 1.7 million ounces at Gamble Lake and Astoria, it can be seen that Rouyn has potential host between 1.2 and over 1.5 million ounces of gold within drilled off sectors. Of course, additional "in-fill" drilling is required before compliant Mineral Resources can be estimated and reported. It is important to note that all zones remain open at depth.

The Company signed a definitive agreement in December 2018, whereby IAMGOLD has the option to acquire a 100% interest in the Rouyn property. In order to earn the purchase option, IAMGOLD must make cumulative cash payments of C\$4 million and fund C\$9 million dollars of exploration expenditures over a 4-year period, including no less than 20,000 m of diamond drilling within the first two years. The drill program started in January 2019 with the goal of converting well established exploration potential into mineral resources, initially at the lac Gamble zone and subsequently at the Astoria deposit.

### 23.2 Opawica Explorations - McWatters Property

The McWatters property is continuous to the Long Bars Zone Break, the Yorbeau Rouyn property and the Granada Gold Property. The McWatters Property has easy access for exploration and a historical drill hole on the property returned 7.79 g/t Au over 3 m. Past exploration work on the property includes an MMI survey, walking IP and soil sampling.

## **24 OTHER RELEVANT DATA AND INFORMATION**

There is no other relevant data or information available that is necessary to make the current technical report understandable and not misleading. To SGSs' knowledge, there are no significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information or Mineral Resource estimate.

## 25 INTERPRETATION AND CONCLUSIONS

SGS Canada Inc. (“SGS”) was contracted by Granada Gold Mine Inc. (“Granada Gold”) to complete a Mineral Resource Estimate update for the Granada Gold Deposit (“Granada deposit”) within the Granada Gold Property (the “Property”), located approximately 5 km south of the historic mining community of Rouyn-Noranda, Quebec, Canada, and to prepare a technical report written in support of the Mineral Resource Estimate update. The purpose was to use the recent drilling information and use, as with the 2021 resource update, narrow, rich, vein modelling and both open pit and underground resources and revised pit optimization parameters which are based on the possibility of constructing and using an on-site mill rather than off-site custom milling of the ore. The reporting of the Mineral Resource Estimate follows guidelines set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated Mineral Resource is consistent with current CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014).

The completion of the current updated Mineral Resource Estimate involved the assessment of a drill hole database, which included all data for drilling completed through June 23rd, 2022, an updated three-dimensional (3D) grade-controlled wireframe model, revised pit optimization parameters, evaluation of the underground resource potential, review of the classification of the mineral resource estimate (Measured, Indicated and Inferred) and review of available written reports.

Kriging restricted to a grade-controlled wireframe model was used to interpolate gold grades (g/t Au) into a block model. The Mineral Resource Estimate (MRE) takes into consideration that the current deposit will be mined partly by open pit mining and partly by underground mining methods.

In order to determine the quantities of material offering “reasonable prospects for eventual economic extraction” by an open pit, Whittle™ pit optimization software and reasonable mining assumptions and metal recovery assumptions are used to evaluate the proportions of the block model that could be “reasonably expected” to be mined from an open pit were used. The pit optimization was completed by SGS. Based on SGS’s experience with open pit exploration projects and mining operations, the Authors consider the assumptions used to be appropriate reporting assumptions for the purposes of the current report.

Measured, indicated, and inferred mineral resources are reported in the summary tables in Section 14.11.

All geological data has been reviewed and verified by SGS as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. SGS considers that the assay sampling and extensive QA/QC sampling of core by Granada Gold provides adequate and good verification of the data and Camus and Dupéré believe is of sufficient quality to be used for the current resource estimate. The work to have been done within the guidelines of NI 43-101. The client provided all relevant data and explanations on the provided data and validation work. There were no limitations or failures to conduct verifications on the Data provided by the client.

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. The Authors are not aware of any known mining, processing, metallurgical, environmental, infrastructure, economic, permitting, legal, title, taxation, socio-political, or marketing issues, or any other relevant factors not reported in this technical report, that could materially affect the Mineral Resource Estimate Update.

## 25.1 Risks and Opportunities

Approximately 45% of the contained metal at the reported cut-off grades for current Mineral Resource is in the Inferred Mineral Resource classification. The Inferred Resource is based on limited information and although it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated or Measured Mineral Resources with infill drilling, it is not guaranteed.

There is an opportunity on the Project to extend known mineralization at depth and along strike on the Property. Granada Gold's intentions are to direct their exploration efforts towards resource growth in 2022. Granada Gold will continue to drill the Deposit with a focus on extending the known limits of the Deposit.

## 26 RECOMMENDATIONS

The Authors consider that the Granada deposit contains a significant open pit and underground Mineral Resource that is associated with a well-defined gold mineralized trend and model. The current Mineral Resource Estimate Update has shown that the Deposit can likely be mined by conventional open pit and underground mining methods with a scenario of an on-site mill rather than off-site custom milling. Deeper drilling recently completed also demonstrates that the Property has more underground potential.

The Authors consider the Property to have significant potential for delineation of additional Mineral Resources and that further exploration is warranted. Granada Gold's intentions are to continue to drill the Deposit in 2022 and plan to direct their exploration efforts towards resource growth, with a focus on extending the limits of known mineralization along strike and at depth, as well as infill drill the existing deposit in order to convert portions of Inferred mineral resources into Indicated or Measured.

Given the prospective nature of the Property, it is the Authors' opinion that the Property merits further exploration and that a proposed plan for further work is justified. A proposed work program by SGS will help advance the Deposit towards a pre-development stage and will provide key inputs required to evaluate the economic viability of a mining project (open pit and underground) at a pre-feasibility study (PFS) level.

If the PFS is positive, GGM might want to take the opportunity of current gold price and install a mill on site.

SGS recommends GGM conducts further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered. For 2022, a total of 30,000 m of drilling is proposed to continue expanding mineral resources and upgrading existing Inferred resources as well as exploring the deposit. This 30,000 m of drilling is part of the current planned 90,000 m drilling plan set by GGM.

SGS recommends that GGM continues with the bulk sample project that is currently scheduled for 2022.

A survey of the available witness core should be organised for rubidium. A budget for rubidium assays should be accounted for. The goal is to confirm the potential for this strategic alkali metal.

The total cost of the recommended work program is estimated at C\$9,000,000 (Table 26-1).

**Table 26-1 Recommended 2021 Work Program for the Granada Deposit**

Item	Cost in CAD\$
Resource Expansion Drilling and Resource Classification improvement (Open Pit; <500 m depth) 5,000 m	\$750,000
Resource Identification Drilling (Underground; > 500 m depth) 25,000 m	\$6,000,000
Assays/Geochemistry	\$700,000
Bulk sample continuation as planned for 2022	\$300,000
Rubidium survey of existing core and rubidium assays	\$125,000
Additional Metallurgical Testing	\$250,000
Continued geotechnical studies for improved pit optimization parameters	\$150,000
Environmental Baseline Studies	\$150,000
Updated Resource Estimate	\$75,000
Pre-feasibility Study and Related Studies	\$500,000
<b>Total:</b>	<b>\$9,000,000</b>

## 27 REFERENCES

- Goldminds Geoservices: Claude Duplessis 2017. NI 43-101 Technical Report, Mineral Resource Estimate, Update 2017, Granada Gold Mines Inc., Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mine Inc., June 20<sup>th</sup>, 2017.
- Goldminds Geoservices: Claude Duplessis and Isabelle Hébert, 2020. Demande de renouvellement du Bail Minier – BM 852, Propriété de Granada Gold Mine, Rouyn-Noranda, préparé pour Granada Gold Mine Inc., Province de Québec, January 9<sup>th</sup>, 2020.
- Goldminds Geoservices: Merouane Rachidi, 2019. Assessment Report on Granada Gold Mine Property, (trenching, drilling and updated Pit Constrained Mineral Resources), Rouyn-Noranda, Province of Quebec, prepared for Granada Gold Mine Inc., May 27<sup>th</sup>, 2019.
- Goldminds Geoservices: Claude Duplessis 2021. Assessment Report on Granada Gold Mine Property, Drilling Campaign & Stripping, Rouyn-Noranda, Province of Quebec, prepared for Granada Gold Mine Inc., January 26<sup>th</sup>, 2021.
- GoldMinds Geoservices: Claude Duplessis and Maude Marquis, 2022. Assessment Report on Granada Gold Mine Property – Drilling campaign & stripping, Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mines Inc., July 31<sup>st</sup>, 2022.
- Ministère de l'Énergie et des Ressources naturelles, 2020. Approbation du plan de restauration pour le site de Granada, November 26<sup>th</sup>, 2020.
- Robinson, D., 2006. NI 43-101 Technical Report for the Granada Mine Property, Rouyn Township, Quebec, and Report prepared for Consolidated Big Valley Resources Inc., October 2006.
- SGS Canada Inc.: Claude Duplessis, Gilbert Rousseau, Karina Sarabia, and Jonathan Gagné, 2012. NI 43-101 Technical Report, Granada Gold Project Resource Estimate, Rouyn-Noranda, Québec, and Report prepared for Gold Bullion Development Corp., April 2<sup>nd</sup>, 2012.
- SGS Canada Inc.: Claude Duplessis, Gilbert Rousseau, Gaston Gagnon, and Jonathan Gagné, 2013. NI 43-101 Technical Report, Preliminary Economic Assessment (PEA) Granada Gold Project, Rouyn-Noranda, Québec, and Report prepared for Gold Bullion Development Corp., February 4<sup>th</sup>, 2013.
- SGS Canada – Goldminds Geoservices - Roche: Claude Duplessis, Gilbert Rousseau, Jonathan Gagné, and Martin Stapinsky, 2014. NI 43-101 Technical Report Prefeasability Study (PFS) Phase 1 – Open Pit Granada Gold Project Rouyn Noranda, Québec, and Report prepared for Gold Bullion Development Corp., June 19<sup>th</sup>, 2014.
- SGS Canada Inc.: Allan Armitage and Maxime Dupéré, 2019. NI 43-101 Technical Report, Granada Gold Project Resource Estimate, Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mines Inc., February 13<sup>th</sup>, 2019.
- SGS Canada Inc.: Yann Camus and Maxime Dupéré, 2021. NI 43-101 Technical Report, Granada Gold Project Resource Estimate, Rouyn-Noranda, Québec, and Report prepared for Granada Gold Mines Inc., March 15<sup>th</sup>, 2021.

## 28 DATE AND SIGNATURE PAGE

This report titled “AMENDED NI 43-101 TECHNICAL REPORT ON THE GRANADA GOLD PROJECT MINERAL RESOURCE ESTIMATE UPDATE, ROUYN-NORANDA, QUEBEC, CANADA” dated April 11<sup>th</sup>, 2023 (the “Technical Report”) for Granada Gold Mines Inc. was prepared and signed by the following authors:

The effective date of the report is June 23<sup>rd</sup>, 2022.  
The date of the report is April 11<sup>th</sup>, 2023.

Signed by:

*"Original Signed and Sealed"*

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Qualified Person  
Yann Camus, P.Eng.,  
April 11<sup>th</sup>, 2023

Company  
SGS Canada Inc. (“SGS”)

Signed by:

*"Original Signed and Sealed"*

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Qualified Person  
Maxime Dupéré, B.Sc., géo.  
April 11<sup>th</sup>, 2023

Company  
SGS Canada Inc. (“SGS”)

## 29 CERTIFICATES OF QUALIFIED PERSONS

## QP CERTIFICATE – YANN CAMUS

To accompany the report entitled: Amended NI 43-101 Technical Report on the Granada Gold Project Mineral Resource Estimate Update, Rouyn-Noranda, Quebec, Canada, dated April 11<sup>th</sup>, 2023 and with an effective date of June 23<sup>rd</sup>, 2022.

I, Yann Camus, P. Eng. of Blainville, hereby certify that:

- a) I am a Mineral Resource Estimation Engineer for SGS Canada Inc, - SGS Geological Services with an office at 10 Boul. de la Seigneurie Est, Suite 203, Blainville Quebec Canada, J7C 3V5. (www.geostat.com).
- b) I am a graduate of the École Polytechnique de Montréal (B.Sc. Geological Engineer, in 2000). I am a member of good standing, No. 125443, of the l'Ordre des Ingénieurs du Québec (Order of Engineers of Quebec). My relevant experience includes continuous mineral resource estimation since my graduation from university including many gold projects. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- c) I have not personally inspected the subject property.
- d) I am an author of this report and responsible for sections 2 to 6, 13 to 24 and jointly responsible for sections 1 and 25 to 29 of the Technical Report. I have reviewed these sections and accept professional responsibility for these sections of this technical report.
- e) I am independent of Granada Gold Mine Inc. as defined in Section 1.5 of National Instrument 43-101.
- f) My prior involvement on the property was for the resource estimation update in 2021.
- g) I have read the definition of qualified person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of National Instrument 43-101.
- h) As at the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- i) I have read National Instrument 43-101, Form 43-101F1 and confirm that this technical report has been prepared in accordance therewith.

Signed and dated this 11<sup>th</sup> day of April 2023 at Val-Morin, Quebec.

*"Original Signed and Sealed"*

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*Yann Camus, P.Eng., SGS Canada Inc.*

## QP CERTIFICATE – MAXIME DUPÉRÉ

To accompany the report entitled: Amended NI 43-101 Technical Report on the Granada Gold Project Mineral Resource Estimate Update, Rouyn-Noranda, Quebec, Canada, dated April 11<sup>th</sup>, 2023 and with an effective date of June 23<sup>rd</sup>, 2022.

I, Maxime Dupéré, P. Geo., of Blainville, do hereby certify that:

- a) I am a geologist with SGS Canada Inc, SGS Geological Services, with an office at 10 Boul. de la Seigneurie Est, Suite 203, Blainville Quebec Canada, J7C 3V5.
- b) I am a graduate from the Université de Montréal, Québec in 1999 with a B.Sc. in geology. I am a member in good standing of the Ordre des Géologues du Québec (#501, 2006). I am a member in good standing of the Association of Professional Engineers and Geoscientists of Manitoba and use the title of Professional Geologist (P.Geo.) (Certificate No. 43252; 2018). I have practiced my profession continuously since 2001. I have 19 years of experience in mining exploration in diamonds, gold, silver, base metals, and iron ore. I have prepared and made several mineral resource estimations for different exploration projects including lithium at different stages of exploration. I am aware of the different methods of estimation and the geostatistics applied to metallic, non-metallic and industrial mineral projects.
- c) I visited the property site on November 15<sup>th</sup>, 2018, on November 24<sup>th</sup>, 2020 and on March 3<sup>rd</sup>, 2022.
- d) I am an author of this report and responsible for the sections 7 to 12, and jointly responsible for sections 1 and 25 to 29 of the Technical Report. I have reviewed these sections and accept professional responsibility for these sections of this technical report.
- e) I am independent of Granada Gold Mine Inc. as defined in Section 1.5 of National Instrument 43-101.
- f) My prior involvement on the property was for the resource estimation update in 2018 and 2021.
- g) I have read the definition of “qualified person” set out in the National Instrument 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be an independent qualified person for the purposes of NI 43-101.
- h) As at the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- i) I have read National Instrument 43-101, Form 43-101F1 and confirm that this technical report has been prepared in accordance therewith.

Signed and dated this 11<sup>th</sup> day of April 2023 at Blainville, Québec.

*"Original Signed and Sealed"*

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*Maxime Dupéré, P.Geo., SGS Canada Inc.*