

MAIDEN RESOURCE TECHNICAL REPORT FOR THE LEMHI GOLD PROJECT, LEMHI COUNTY, IDAHO, USA



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Contents

1	Summary	1
1.1	Property Description and Ownership	1
1.2	Geological Setting and Mineralization	1
1.3	History	2
1.4	Recent and Ongoing Exploration	5
1.5	Mineral Resource Estimate (MRE)	6
1.6	Interpretation and Conclusions	7
1.7	Recommendations	9
2	Introduction	11
2.1	Issuer and Purpose	11
2.2	Authors and Site Inspection	11
2.3	Sources of Information	13
2.4	Units of Measure	14
3	Reliance of Other Experts	14
4	Property Description and Location	15
4.1	Description and Location	15
4.2	Royalties and Agreements	18
4.3	Environmental Liabilities, Permitting and Other Significant Factors	19
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	22
5.1	Accessibility	22
5.2	Site Topography, Elevation and Vegetation	22
5.3	Climate	23
5.4	Local Resources and Infrastructure	23
6	History	24
6.1	District and Early Property History	24
6.2	Modern Exploration History	25
6.2.1	Ownership information	25
6.2.2	Geochemical Surveys	28
6.2.3	Geophysical Surveys	28
6.2.4	Drilling	31
6.2.4.1	FMC Drilling 1985 -1989	31
6.2.4.2	AGR Drilling 1993-1995	32
6.2.4.3	LGT Drilling 2012	32
6.2.4.4	Quality and Reliability of Drill Data	35
6.3	Historical Resource and Reserve Estimates	41
6.3.1	1987 FMC Resource	42
6.3.2	1989 FMC resource	43
6.3.3	1996 PAH resource	43
6.3.4	1996 IMC Resource	46
6.3.5	2012-2013 LGT Resources	47
6.4	Historical Processing and Metallurgical Testing	49
6.5	Pre-feasibility Study	51
6.6	Production History	52
7	Geological Setting and Mineralization	52

7.1	Regional Geology.....	52
7.1.1	Stratigraphy and Geologic Units	52
7.1.2	Structure	55
7.1.3	Regional Mineralization	56
7.2	Property Geology	56
7.3	Mineralization	60
7.3.1	Mineralogy	61
7.3.2	Deposit Character and Geometry	64
8	Deposit Types.....	66
8.1	Structurally Controlled Hydrothermal Gold	66
9	Exploration.....	67
9.1	Soil Orientation Survey.....	67
9.2	Rock and Chip Sampling.....	72
9.3	Ground Magnetic Survey.....	74
9.4	3D Induced Polarization Survey	74
10	Drilling.....	80
11	Sample Preparation, Analyses and Security.....	90
11.1	Sample Collection, Preparation and Security	90
11.2	Analytical Procedures.....	90
11.3	Quality Assurance – Quality Control (QA/QC).....	91
12	Data Verification.....	100
12.1	Adequacy of the LGT post-2000 Data	101
12.2	Adequacy of the pre-2000 Data.....	102
12.2.1	Comparing pre-2000 Drill hole data to Post-2000 Drill hole data for Bias	103
12.2.2	Recommendations	106
12.3	Drill Hole Database Verification.....	107
13	Mineral Processing and Metallurgical Testing.....	108
13.1	Historical Test Work	108
13.2	2021 Laboratory Testing.....	109
13.2.1	Phase 1 Test Work	109
13.2.2	Phase 2 Test Work	111
13.3	Interpretation	116
14	Mineral Resource Estimates	117
14.1	Introduction.....	117
14.2	Drill Hole Data Description	118
14.2.1	Lemhi Drill Hole Data	118
14.2.2	APEX Micromine Drill Hole Database	119
14.3	Estimation Domain Interpretation	119
14.3.1	Geological Interpretation of Mineralization Domains.....	119
14.3.2	Estimation Domain Interpretation Methodology	120
14.4	Exploratory Data Analysis and Compositing.....	121
14.4.1	Bulk Density	121
14.4.2	Raw Analytical Data.....	122
14.4.3	Compositing Methodology.....	124
14.4.4	Orphan Analysis.....	124

14.4.5 Capping.....	126
14.4.6 Declustering	127
14.4.7 Final Composite Statistics.....	128
14.5 Variography and Grade Continuity	129
14.5.1 Estimation Domain Variography.....	130
14.5.2 Contact Analysis	131
14.6 Lemhi Gold Project Block Model	131
14.6.1 Block Model Parameters	131
14.6.2 Volumetric Checks	132
14.7 Grade Estimation Methodology	132
14.8 Model Validation.....	134
14.8.1 Visual Validation	134
14.9 Mineral Resource Classification	137
14.10 Evaluation of Reasonable Prospects for Eventual Economic Extraction	139
14.11 Mineral Resource Reporting.....	140
15 Mineral Reserve Estimates	141
16 Mining Methods.....	141
17 Recovery Methods.....	142
18 Project Infrastructure.....	142
19 Market Studies and Contracts.....	142
20 Environmental Studies, Permitting and Social or Community Impact	142
21 Capital and Operating Costs.....	142
22 Economic Analysis.....	142
23 Adjacent Properties.....	142
23.1 Revival Gold’s Beartrack and Arnett Prospects.....	142
24 Other Relevant Data and Information	145
25 Interpretation and Conclusions	145
25.1 Results and Interpretations.....	145
25.2 Summary of Exploration Activities in 2020	147
25.3 Mineral Resource Estimate	148
25.4 Conclusions.....	150
25.5 Risks and Uncertainties.....	151
26 Recommendations	153
27 References	155
28 Certificate of Author	160

Tables

Table 4.1: Patented mining claims summary.....	19
Table 6.1: Summary of available Historical Drill hole data.	31
Table 6.2: Drilling highlights 2012 LGT core and RC holes.....	34
Table 6.3: Historical Resource Estimates Lemhi Gold Deposit*.....	42
Table 6.4: Humbug Geological Resources calculated by PAH 1996.....	44
Table 6.5: Humbug In-pit Measured and Indicated Resources calculated by PAH 1996.	45

Table 6.6: Humbug historical "potential mineable resources" estimated by IMC (1996).	46
Table 6.7: Practical Mining's grade estimation comparisons.	47
Table 6.8: Practical Mining's Lemhi open pit resource.	48
Table 6.9: Practical Mining's revised 2013 resource calculation with 2012 drill results and 36% downgrading of all historical drill data.	49
Table 6.10: Practical Mining's 2013 comparison between global mineral resource at the LGT property (unconstrained) and pit constrained to the patented property (patented) at a \$1500 gold price.	49
Table 10.1: 2020 Significant Drill Results.....	82
Table 12.1: Summary of available drill hole data.....	107
Table 13.1: KCA-1995 Leach Data	109
Table 13.2: Phase 1 Head Analyses - 2012 Assay Rejects	110
Table 13.3: Phase 1 Bottle Roll Results on 2012 Assay Rejects	111
Table 13.4: Phase 2 – 2020 Metallurgical Samples Drill Hole FG20-035C	112
Table 13.5: Phase 2 - Head Analyses of Metallurgical Composites	112
Table 13.6: Comminution Results	113
Table 13.7: Phase 2 – Bottle Roll Leach Results	113
Table 14.1: Summary statistics of raw gold assays (in ppm) from sample intervals flagged within the estimation domain.	123
Table 14.2: Orphan analysis comparing the gold statistics (in ppm) of raw assays and uncapped composite samples with and without orphans.	126
Table 14.3: Capping levels applied to composites before estimation.	127
Table 14.4: Cell sizes used to calculate declustering weights in the estimation domain.	128
Table 14.5 Statistics of declustered composites inside the estimation domain.	129
Table 14.6 Variogram model parameters.....	130
Table 14.7 3-D block model size and extents.....	132
Table 14.8: Estimation domain wireframe versus block-model volume comparison. ...	132
Table 14.9: Estimation Search and Kriging Parameters.....	133
Table 14.10: Search restrictions applied during each run of the multiple-pass classification strategy.	138
Table 14.11: Parameters for Lerchs-Grossman pit optimization for the Mineral Resource Estimate.	139
Table 14.12: The recommended reported resource estimate constrained within the "\$1,550/oz" pit shell for gold at cut-off grades specific to alteration type ¹⁻⁶ ... 140	
Table 14.13: Sensitivity analysis of the undiluted resource estimate constrained within the "\$1,550/oz" pit shell for gold at various cut-off grades ¹⁻⁶	141
Table 25.1: The recommended reported resource estimate constrained within the "\$1,550/oz" pit shell for gold at cut-off grade of 0.5 g/t Au ¹⁻⁶	149
Table 26.1: Recommended 2021 Program and Budget.	154

Figures

Figure 2.1: Property Location.	12
Figure 4.1: Lemhi Gold Project Claims.....	16

Figure 4.2: Summary of Permits required for Mining Operations at the Lemhi Gold Project.....	21
Figure 6.1: Historical Mines in the Gibbonsville Mining District.....	26
Figure 6.2: Historical rock sampling locations with assay results on the Lemhi Gold Project.....	29
Figure 6.3: Historical soil, rock and vegetation anomaly polygons on the Lemhi Gold Project.....	30
Figure 6.4: Historical Drill hole locations on the Lemhi Gold Project.....	33
Figure 6.5: Comparison of check assays by Chemex and Rocky Mountain Geochemical against original Barringer fire assays.....	38
Figure 6.6: Barringer Lab’s gold assays vs. MPEL’s assays for 34 samples containing > 1.5 g/t in initial samples.....	38
Figure 6.7: Strip log comparison of core holes C-2 and RC hole 86-014.....	40
Figure 6.8: Gold recovery vs. crush size.....	50
Figure 7.1: Regional geology of the Lemhi Gold Project.....	53
Figure 7.2: Regional stratigraphy of the Lemhi Group.....	54
Figure 7.3: Location of Lemhi Gold Project within Trans-Challis Fault System and related gold deposits.....	57
Figure 7.4: Correlation of Mapped units in the Gibbonsville Area.....	58
Figure 7.5: Property Geology of the Lemhi Gold Project.....	59
Figure 7.6: Generalized Cross-Section of Mineralization at Lemhi.....	61
Figure 7.7: Graph of gold grade (opt Au) vs quartz content based on 9,723 alteration codes compiled by PAH.....	62
Figure 7.8: Petrographic Sample 005C-168 showing gold along boundary of sulfide minerals.....	63
Figure 7.9: Petrographic Sample 005C-168, vug infilled by sulfide minerals, crosscut or rimmed by gold.....	63
Figure 7.10: Grade contour (gpt Au x meter) map of the Humbug deposit with suggested mineralized trends.....	65
Figure 9.1: Orientation survey sample sites (61) across the Lemhi Gold Deposit.....	69
Figure 9.2: Correlation heatmaps for the three methods selected.....	70
Figure 9.3: PCA for the three methods selected.....	70
Figure 9.4: Orientation survey sample sites with Au concentrations at 30 – 40 cm depth across the Lemhi Gold Deposit.....	71
Figure 9.5: Orientation survey sample sites with Au response ratio at 30 – 40 cm depth across the Lemhi Gold Deposit.....	71
Figure 9.6: Ionic leach sample depth comparison for stations 31, 32 and 33.....	72
Figure 9.7: MMI sample depth comparison for stations 31, 32 and 33.....	72
Figure 9.8: Rock grab and chip sample locations.....	73
Figure 9.9: Preliminary ground magnetic data image.....	75
Figure 9.10: 3D DC-Resistivity and Induced Polarized Survey Area.....	76
Figure 9.11: Cross Section of chargeability from the 3D IP survey plotted along Drill section 430000 with results of FG20-001C and FG20-002C.....	77
Figure 9.12: Cross Section of resistivity from the 3D IP survey plotted along Drill section 430000 with results of FG20-001C and FG20-002C.....	77

Figure 9.13: Targets and major contacts interpreted from the 3D DC-Resistivity and Induced Polarized Survey.	79
Figure 10.1: Drill collar locations for the 2020 program.	81
Figure 10.2: Visible gold hosted in quartz vein from drill hole FG20-002C at 47.25 m, the sample C375828 from 47 – 48 m returned 14.45 g/t Au.....	85
Figure 10.3: Drill section 430000 with highlighted results of FG20-001C, FG20-002C, FG20-017 and FG20-035C.	86
Figure 10.4: Drill section 429975 with highlighted results of FG20-007C and FG20-008C.....	87
Figure 10.5: Drill section 429950 with highlight results of FG20-003C and FG20-008C.	88
Figure 10.6: Drill section 429850 with highlight results of FG20-033C.....	89
Figure 11.1: Coarse blanks Au concentration.	93
Figure 11.2: Pulp blank CDN-BL10 Au concentrations.....	94
Figure 11.3: CDN-CM-40 Au concentration.....	95
Figure 11.4: CDN-GS-6F Au concentration.....	95
Figure 11.5: CDN-GS-P4J Au concentration.....	95
Figure 11.6: CDN-ME-1705 Au concentration.....	96
Figure 11.7: CDN-CGS-28 Au concentration.	96
Figure 11.8: CDN-CGS-28 Cu concentration.	96
Figure 11.9: Re-assayed samples near failed QA/QC samples.	97
Figure 11.10: Drill core duplicate analyses, original (half core) and duplicate (quartered core).....	98
Figure 11.11: Specific Gravity QA/QC. Core Shack Measurement as a function of ALS measurement (OA-GRA09).....	99
Figure 11.12: Specific Gravity QA/QC. Core shack measurement as a function of ALS wax coating measurement (OA-GRA09A).....	99
Figure 11.13: Specific Gravity QA/QC. ALS measurement (OA-GRA09) as a function of ALS wax coating measurement (OA-GRA09A).....	100
Figure 12.1 Cumulative histograms of 2012 LGT composites within 30 m of 2020 Freeman Composites and Vice-Versa.....	102
Figure 12.2: Cumulative Histograms of AGR composites and Post-2000 composites within 30 meters of each other	104
Figure 12.3: Quantile to Quantile plot of the distributions of the AGR composites and post-2000 composites within 30 meters of each other	104
Figure 12.4: Cumulative Histograms of FMC composites and Post-2000 composites within 30 meters of each other	105
Figure 12.5: Quantile to Quantile plot of the distributions of the FMC composites and post-2000 composites within 30 meters of each other	106
Figure 13.1: Gold Kinetic Leach Curves without Pre-treatment (L4) and with Gravity Pre-Treatment (L5), P80 ~110 microns.....	114
Figure 13.2: Comp. 1 - Gold Kinetic Leach Curves Vary Crush Size	115
Figure 13.3: Comp. 2 - Gold Kinetic Leach Curves Vary Crush Size	115
Figure 14.1 Plan View of the estimation domains extents projected to surface.....	120
Figure 14.2 Example of the estimation domains outline in an east-west cross-section looking north along 429825N.	121

Figure 14.3 Violin plots of the density measurements on the various lithologies observed at Lemhi.	122
Figure 14.4: Cumulative frequency plot of raw gold assays (in ppm) from sample intervals flagged within the estimation domain.	123
Figure 14.5: Cumulative histogram of the sample interval lengths analyzed within the estimation domain.	124
Figure 14.6: Orphan analysis comparing global cumulative histograms of raw assays and uncapped composites with and without orphans contained within the estimation domain.	125
Figure 14.7: Probability plot of the composited gold values before capping. Capped values highlighted in red.....	127
Figure 14.8 Cumulative histogram of clustered and declustered composites inside the estimation domain.	129
Figure 14.9 Variogram Model used for Kriging.....	130
Figure 14.10 Contact Analysis. Average Gold grade in g/t (blue line) as a function of the distance* to the edge of the estimation domain.....	131
Figure 14.11 Swath plot along Easting sections with a +/- 40 m section window.....	134
Figure 14.12 Swath plot along Northing sections with a +/- 40 m section window.	135
Figure 14.13 Swath plot along Elevation sections with a +/- 20 m section window.	135
Figure 14.14 Volume variance cumulative histogram comparison..	136
Figure 14.15 Contact analyses showing average gold grade (g/t) by distance* to the domain edge of composite data.	137
Figure 23.1: Adjacent Properties Trans – Challis Fault System	144

Appendices

Appendix 1: Liar of Patented and Unpatented Mineral Claims.....	At End
Appendix 2: Dias Geophysical Logistics Report.....	At End
Appendix 3: SGS Phase 1 - Metallurgical Samples Drill Hole Intervals.....	At End

1 Summary

1.1 Property Description and Ownership

The Lemhi Gold Project (“the Project” or “the Property”) is located in Lemhi County, Idaho (ID), USA., within the Salmon River Mountains, a part of the Bitterroot Range which forms the Idaho-Montana border. The Property is approximately 40 km (25 miles) north of the town of Salmon and 6 km (3.7 miles) west of Gibbonsville, ID. The Project comprises 10 patented mining claims (placer and lode), 1 patented millsite claim and 333 unpatented mining claims, totaling approximately 6,739 acres (2,727 hectares) of mineral rights and 615 acres (249 hectares) of surface rights. APEX Geoscience Ltd. (APEX) of Edmonton, Alberta was engaged in March 2021 by Freeman Gold Corp (“Freeman” or “the Company”), formerly Lodge Resources Inc. (“Lodge”), to complete a National Instrument (NI) 43-101 Technical Report (“the Report”) summarizing the geology, prior and ongoing exploration of the Project, a summary of drilling activities conducted during 2020 leading to a maiden Mineral Resource Estimate (MRE) and recommendations for future work for the Project. The MRE has been prepared using CIM Definition Standards on Mineral Resources & Reserves (2014), and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (2019). The Report has been written on behalf of Freeman and was prepared in accordance with the guidelines set out by the Canadian Securities Association and NI 43-101 Standards of Disclosure for Mineral Projects (2011).

A total of 11 patented claims and 53 unpatented claims were recently purchased from Lemhi Gold Trust (LGT) by Lower 48 through a closed auction bid process. Lower 48 has also optioned 46 unpatented claims that are owned by BHLK2, LLC (BHLK). Freeman recently purchased outright the Moon #100 and Moon #101 unpatented mining claims (Moon Claims) from Vineyard Gulch Resources, LLC (“Vineyard”), located within the historical resource area. An additional 232 unpatented claims were staked by Freeman in 2020 and 2021. Freeman closed a transaction to acquire Lower 48 and its parent Company 1132144 British Columbia (B.C.) Ltd. on April 16, 2020. BHLK retains a 2% NSR on production from the Lemhi Gold Project including the 11 patented claims and the 46 unpatented BHLK claims under option.

1.2 Geological Setting and Mineralization

The Lemhi Gold Project is located within the Cordilleran fold and thrust belt and more locally the Trans-Challis fault system. This is a broad 20-30-kilometre-wide system of en-echelon northeast-trending structures extending from Idaho City, ID northeast to the Idaho-Montana border. It spans over 270 km in strike length. It is one of many structures within the Idaho-Montana porphyry belt, a wide northeast-trending alignment of porphyry-related ore deposits, which parallels the contact between the Cordilleran fold and thrust belt and the Idaho batholith, and corresponds to a zone of strike-slip faults, late graben faults and northeast-trending magnetic features.

Locally the Lemhi Gold Property is largely underlain by Mesoproterozoic quartzites and phyllites with porphyritic dacite sills, dykes and flows of the Eocene Challis volcanics preserved in down-dropped fault blocks. Numerous faults crosscut the property forming grabens and half grabens. On the Property, a large low angle fault passes through Ditch Creek and is filled with Quaternary gravels covering part of the mineralization that comprises the Lemhi Gold Deposit. The mineralization on the Property is hosted in structurally controlled quartz vein swarms and quartz flooded zones and occurs in close spatial association with low angle faulting and a number of intrusive bodies.

Gold was discovered and mined from the area in the 1890's to mid-1900's. Modern exploration of the Property area commenced in 1984. FMC Gold Company (FMC) conducted exploration over the current Property area between 1984 and 1991. FMC completed geologic mapping; rock, soil, and vegetation sampling, geophysical surveys and reverse-circulation (RC) and core drilling over the Property. FMC defined an area of strong gold mineralization along the western slope of Ditch Creek. American Gold Resources (AGR) acquired the Property in 1991 and conducted exploration over the area until 1996. The FMC and AGR drilling delineated a gold deposit: the Humbug Deposit (now known as the Lemhi Gold Deposit), on the patented claims (MS 784 A and B, 2512 and 1120) which comprise the current Lemhi Gold Property. The Lemhi Gold Deposit is roughly 650 m east-west by 500 m north-south. A prominent west-northwest trending zone of higher-grade mineralization and a north-east trending zone of strong mineralization were identified within the deposit. The mineralization is interpreted to be structurally controlled by northwest and northeast high-angle faults that intersect a low-angle (thrust?) fault. In the footwall of an intrusion and along its western terminus the gold mineralization is thick (30 m - 70 m) and can occur in multiple stacked zones. In the hanging wall gold mineralization is considerably thinner and more erratic. In the core of the deposit, the low-grade envelope of mineralization is greater than 200 m thick.

1.3 History

The Lemhi Gold Project is located within the Gibbonsville mining district in Idaho, USA. Placer gold was first discovered in 1867 at Hughes Creek west of the town of Gibbonsville, followed by discoveries in the Dahlenega Creek and Andersen Creeks and the North Fork Salmon River. In 1877, gold-bearing quartz veins were discovered on the slopes of Dahlenega Creek (approximately 5 km east of the Lemhi Gold Project) and the mining of lode gold deposits ensued.

In the Ditch Creek area, overlapping the current Lemhi Gold Project, placer gold mining commenced in the 1890's. During this time a number of mining claims were located and patented. In 1891, a group of six lode claims (MS 784A: Beauty Lode, Fraction Load, Atlanta Lode, Ironstone Lode, Chamaleon Lode, Copperstain Lode), was consolidated as the Bull of the Woods Mine. These 6 patented claims are part of the current Lemhi Gold Property. Extensive placer mining has been conducted along most of Hughes Creek and many of its tributaries, such as Ditch Creek, which drains north to south through the middle of the Lemhi Project area. The placer and surface mining have

been intermittently active in the area over a period of more than 100 years with extensive placer dredge tailings piles still visible today in Hughes Creek.

Since the early 1900's, the Gibbonsville district has seen little modern exploration and mining activity until 1984, when FMC Gold Company (FMC) staked claims at Ditch Creek. After conducting regional grass-roots exploration programs in the area, FMC staked additional claims surrounding the Bull of the Woods property (patent claim: MS 784A). FMC leased and purchased some of the key patented claims and accumulated a land package of over 700 unpatented claims surrounding the patented mining claims in the area of the current Lemhi Gold Project. FMC also acquired the Beartrack property, located about 28 miles (48 km) southwest of the Lemhi Gold Project.

FMC explored the property from 1984 until 1991 (known at the time as the Ditch Creek project, later renamed the Ponderosa Project). FMC's Ponderosa Project largely overlapped the current Lemhi Gold Project and extended up to Allan Creek west of the current Project boundary. During that period FMC completed 192 Reverse-Circulation (RC) drill holes and 4 core holes. American Gold Resources Corporation (AGR) acquired the property in 1991 and held it until 1996. AGR drilled a total of 156 RC holes and 9 core holes during the period they held the property. After 1996, work on the property was limited due to numerous corporate takeovers and down turns in the mining sector.

In 2011, Lemhi Gold Trust (LGT), a joint venture between ISGC (Idaho State Gold Company) and Northern Vertex, acquired the newly consolidated Lemhi Gold Project and commenced an aggressive exploration program. The historical Lemhi Gold Trust Property included the Lemhi (Humbug) Gold Deposit. In 2011 and 2012, LGT commenced and completed an aggressive pre-development program consisting of historical data compilation and review, core and RC drilling, base-line environmental studies, and geotechnical work. Drilling included 7,860 meters (25,787 feet of core) in 40 holes and 2,672 meters (8,765 feet) in 15 holes of RC drilling. LGT also completed terrestrial vegetation and wetland delineation studies, a petrographical analysis and additional metallurgical work, as well as readdressing cultural resources, fisheries, wildlife resources, water rights and right-of-way.

Based on the 2012 core drilling, LGT proposed a new geologic model for the Lemhi Gold Deposit. The new interpretation indicated that the mineralization is hosted in a structurally controlled, hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late-Proterozoic metasediments within the structurally complex Trans-Challis fault system. The gold mineralization is interpreted to have been introduced during a tectonically active period (Early Tertiary) that is likely temporally and spatially related to intrusive activity associated with the Idaho Batholith. Gold mineralization is strongly associated with base metal (Cu and Mo) mineralization and occurs as multiple hydrothermal (epithermal – mesothermal) silica replaced structures resembling multiple flat-lying veins to stockwork zones.

The historical drilling has defined a fairly large area of gold mineralization measuring 650 m in an east-west direction by 500 m in a north-south direction with a typical thickness

of 10 to 70 m, known as the Lemhi Gold Deposit today and historically known as the Humbug Gold Deposit. To date, a total 420 RC and core holes have been drilled at the project, 407 of which are within the current claim boundaries with collar, logs and assays complete for 385 of these included holes. Anomalous gold mineralization has been intersected in more than 364 drill holes totaling more than 75,000 meters of drilling, and in excess of 48,000 gold assays. Most of the historical drilling (pre-2000) was completed using RC drilling methods. At the time, this approach was justified, however, as it became apparent that the Lemhi Gold Property lies in a very structurally complex area the lack of geological detail from RC chips hindered the development of an accurate geological model. The 2012 core drilling program with 40 core holes facilitated the collection of more detailed geological data and resulted in the development of a new deposit model for the Property. The model proposed by LGT suggested that the mineralization is hosted in a structurally controlled, hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late Proterozoic metasediments within the structurally complex Trans-Challis fault system. Mineralization is spatially associated with a number of intruded sills, often spatially associated with the contact zones.

Several historical resource estimates have been constructed based on the historical RC drilling with more recent estimates incorporating the 2012 core and RC drilling. A wide range of results have been presented and are summarized in section 6 below and are discussed in detail in Dufresne (2020). The authors are not treating any of these historical estimates as current mineral resources or mineral reserves as per the CIM Definition Standards for Mineral Resources & Mineral Reserves (2014) and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019). These historical resources have all been superseded by the current MRE presented in this Technical Report, which includes 35 core holes drilled during 2020.

Prior metallurgical studies, preliminary engineering studies, and initial baseline environmental studies all suggest that the Lemhi Gold Deposit has the potential to be developed as an open-pit tank-leach or combination tank-leach and heap-leach operation. Processing and operating costs provided in various economic studies in the 1990's are out-of-date and not currently applicable. The deposit lacks a current economic assessment and requires a significant amount of metallurgical test work in order to characterize oxidation and recovery characteristics for gold across the deposit, as well as a modern processing flow sheet. A new cost analysis will be necessary using current gold prices and updated processing, mining, and permitting costs.

A number of baseline environmental, archeological and geotechnical studies were conducted on the project in the 1990's, as well as 2011 - 2013. Several reports document a summary timeline and overview of permitting required for the development of a potential heap-leach operation and are summarized by Brewer (2019) and Cuffney (2011). Based on the initial baseline studies and preliminary permitting completed by AGR in 1995-96, subsequent baseline studies commissioned by LGT, and on public comments received during LGT's tenure, there does not appear to be any major obstacles that would prevent the potential development of a mine on the Lemhi Gold Property. It was concluded that

there were no significant impediments identified to the potential development of an open pit mine, particularly on the patented mining claims.

1.4 Recent and Ongoing Exploration

The 2020 surface exploration program conducted by Freeman consisted of the following methods:

- Soil Orientation Survey (conventional B-horizon, partial extraction leach techniques such as Ionic Leach (IL) and Mobile Metal Ion (MMI) sampling)
- Prospecting, Rock and Chip Sampling
- Ground Magnetic Survey
- 3D Induced Polarization Survey
- Core Drilling

Until Freeman's 2020 program, no significant surface exploration other than drilling had been conducted on the property since the late 1980's. During Freeman's 2020 exploration program, modern soil geochemical techniques utilizing partial extraction techniques including Mobile Metal Ion (MMI) and Ionic Leach (IL) were tested. The results of this soil orientation program will guide further exploration in under explored areas with significant glacial or glacio-fluvial cover, such as areas west and north of the deposit.

In addition, the entire claim group was covered with a ground magnetic survey, and the core resource area was covered with a 3D Induce Polarization (IP) electromagnetic survey. The surveys have been completed and interpretation of the results is ongoing.

During the lead author's site visits, the author confirmed the locations of several historical collars on the property. The 2019 pulp re-assays (Dufresne, 2020) returned values which have close correlation with the original assays for these samples confirming the validity of the 2012 assay results.

Based on the review of historical information and recent re-assay results, the authors consider the Lemhi Gold Property a property of significant merit that requires further exploration and delineation work.

Drilling completed on the Property in 2012 by LGT and in 2020 by Freeman has returned encouraging results in both infill and step-out drilling. All 55 LGT holes and all of the 35 Freeman core holes intersected gold mineralization. The new geological interpretation resulting from the data obtained from the core drilling has also identified additional potential exploration targets, including:

1. Deep feeder zones
2. Down-dip mineralization to the south
3. Extensions of known mineralization to the west and southwest spatially associated with intrusions

4. “Hidden” targets below the glacial cover immediately to the north of the known deposit.

Freeman’s 2020 drilling program consisted of the completion 7,149 m in 35 core holes of infill and steep-out drilling. Results have been received for all of the holes to date. As part of the drilling program, Freeman has commissioned a series of metallurgical studies to characterize the amenability of the mineralized material to certain recovery processes. The studies that are currently in progress along with the new core drilling have assisted in delineation and improvement of the existing geological and mineralization model into a coherent 3D model allowing for the construction of a modern MRE presented below.

The tank leaching laboratory findings to date indicate that over a range of potential mill feed grades that the gold recovery ranges in the mid to upper ninety percent range. This can be achieved under standard process operating conditions.

In 2021, APEX personnel validated and compiled an updated drill hole database (DHDB) to correct mistakes identified in the 2012 DHDB and include additional historical drill results discovered while verifying the 2012 database. The new 2021 Freeman DHDB was utilized in constructing the maiden MRE in this report.

1.5 Mineral Resource Estimate (MRE)

The Lemhi Project database contains a total of 437 drill holes with collar information and assays totalling 74,018 m of drilling with 50,712 drill hole sample intervals. The sample database contains a total of 48,525 samples assayed for gold. The Lemhi Project MRE utilized 364 drill holes (65,458 m) with 277 drill holes completed between 1983 and 1995, and 87 drill holes completed between 2012 and 2020. Inside the mineralized domains, there is a total of 15,611 samples analyzed for gold. Standard statistical treatments were conducted on the raw and composite samples resulting in a capping limit of 27.1 grams per tonne (“g/t”) gold (Au) applied to the composites. The current drill hole database was validated by APEX personnel and is deemed to be in good condition and suitable for use in ongoing MRE studies. Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo, President of APEX, is an independent qualified person (QP) and is responsible for the database validation and MRE.

Modelling was conducted in the Universal Transverse Mercator (UTM) coordinate space relative to the North American Datum (NAD) 1983, National Spatial Reference System 2011, and State Plane Idaho Central, (EPSG:6448). The mineral resource block model utilized a block size of 3 m (X) x 3 m (Y) x 3 m (Z) in order to honor the mineralization wireframes. The percentage of the volume of each block within each mineralization domain was calculated and used in the MRE. The gold estimation was completed using ordinary kriging (OK) utilizing 7,565 composited samples within the interpreted mineralization wireframes. The search ellipsoid size used to estimate the gold grades was defined by modelled variograms. Block grade estimation employed locally varying anisotropy (LVA), which allows structural complexities to be reproduced in the estimated block model during gold estimation.

There are two dominant styles of gold mineralization at the Lemhi Gold Project. The primary mineralization is interpreted to occur as a halo around a granodiorite intrusion with secondary mineralization along shallow dipping foliation and faults. Both styles of mineralization generally occur as stacked parallel sub-horizontal sheets.

A total of 8,015 specific gravity samples were available and utilized to determine the bulk density. No significant variation of the density was observed between the geological units or mineralized versus un-mineralized zones. The overall average bulk density was 2.62 g/cm³ and was applied to all blocks for the Lemhi Gold Project MRE.

All reported mineral resources occur within a pit shell optimized using values of \$US1,550 per ounce of gold. The Indicated and Inferred MRE are undiluted and constrained within an optimized pit shell, at a 0.5 g/t lower cut-off. The MRE comprises an Indicated Mineral Resource of 22.94 million tonnes at 1.02 g/t Au for 749,800 oz of gold, and an Inferred Mineral Resource of 7.68 million tonnes at 1.01 g/t Au for 250,300 oz of gold (Table 1.1). The MRE covers a surface area of 400 by 500 metres, extends down to a depth of 180 metres below surface, and remains open on strike to the north, south and west as well as at depth.

Table 1.1: The recommended reported mineral resource estimate constrained within the “\$1,550/oz” pit shell for gold at a cut-off grade of 0.5 g/t Au¹⁻⁶.

Au Cutoff (grams per tonne)	Tonnes (1000 kg)**	Avg Au (grams per tonne)	Au (troy ounces)**	Class*
0.5	22,939,000	1.02	749,800	Indicated
0.5	7,683,000	1.01	250,300	Inferred

1 Contained Tonnes and ounces may not add due to rounding.

2 Mineral resources are not mineral reserves and do not have demonstrated economic viability. The Indicated, and Inferred MRE is undiluted and constrained within an optimized pit shell constructed using a gold price of US\$1550 per oz. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There is no certainty that Mineral Resources will be converted to Mineral Reserves.

4. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

5. The Mineral Resources in this Technical Report were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

6. The constraining pit optimization parameters were US\$2.1/t mineralized and US\$2/t waste material mining cost, CIL processing cost of US\$8/t, US\$2.4/t HL processing cost, US\$2/t G&A, 50-degree pit slopes with a 0.50 g/t Au lower cut-off.

The Lemhi Gold Project MRE is classified according to the CIM “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29th, 2019 and CIM “Definition Standards for Mineral Resources and Mineral Reserves” dated May 10th, 2014.

1.6 Interpretation and Conclusions

In conclusion, a significant mineralized zone has been intersected by numerous drill holes between 1984 and 2020. Up until 2012, much of the drilling conducted was vertical RC holes and only a few core holes. To confirm multiple zones of gold mineralization intersected and to assist in further development of the geological model, an infill HQ core

drilling program with a number of angle holes was completed by Freeman in 2020. In addition, a modern metallurgical program was initiated utilizing core from historical drilling and 1 PQ core hole completed as part of the 2020 infill drilling program. The 2020 core drilling program consisted of 7,149 m in 35 core holes including 34 HQ holes and 1 PQ hole. All results from the 2020 have been received and a maiden MRE has been completed herein. The MRE comprises an Indicated Mineral Resource of 22.94 million tonnes at 1.02 g/t Au for 749,800 oz of gold, and an Inferred Mineral Resource of 7.68 million tonnes at 1.01 g/t Au for 250,300 oz of gold (Table 1.1). The MRE covers a surface area of 400 by 500 metres and extends down to a depth of 180 metres below surface. The work to date indicates that there is potential to expand the current MRE and there is potential for new discoveries with further exploration drilling. There is also need to complete additional drilling to upgrade the confidence in the MRE, upgrade the classification and reduce the reliance on the use of the FMC 1980's drill hole data.

Recent metallurgical studies indicate that the Lemhi mineralization is amenable to tank leaching with gold recovery ranges in the mid to upper ninety percent range over a range of potential mill feed grades. The results indicate that this can be achieved under standard process operating conditions.

The Lemhi Property carries risks inherent both in utilizing significant amounts of historical drilling along with potentially nuggety gold in developing a robust metallurgical and process model for mineralized material that may affect the construction of future mineral resource estimates and economic studies. In addition, there are certain aspects of future permitting that may pose risks with potentially advancing the project to production.

The metallurgy of the deposit must be economically established with additional metallurgical test work across the deposit and by undertaking a preliminary economic assessment (PEA). Based on historical studies and by comparing Lemhi to similar existing operation it is evident that the undertaking of a PEA is warranted supported by additional metallurgical test work.

Current metallurgical work has been focussed on whole ore tank leaching optionally with heap leach a consideration for lower grade material. There is some sulfide present and it can be expected that it may become more prevalent in parts of the deposit particularly at depth. This can be handled more readily with conventional mill processing techniques, particularly if the presence of sulfide is accompanied by higher grades. Further geological modelling and metallurgical work are required to assess these risks for the Lemhi Gold Deposit.

The tank leaching laboratory findings to date indicate that over a range of potential mill feed grades that the gold recovery ranges in the mid to upper ninety percent range. This can be achieved under standard process operating conditions. A moderate grind of approximately 80% passing 110 microns, with approximately 36 hours of leach retention time appears to be typically sufficient for optimum recovery. Preliminary comminution testing indicates moderate hardness of the rock contained in the resource. Pre-treatment

of leach feed by centrifugal gravity concentration suggest one third or more of the gold might typically be recovered into an uncleaned gravity concentrate, suitable for intense cyanidation. Gravity tailings would then be forwarded for conventional tank leaching procedures, such as carbon in pulp (CIP). Some lower gold recoveries were evident on feeds with higher copper content. The bench scale testing to simulate flash flotation to remove a Cu-Ag-Au concentrate allowed the float tailing to increase the gold leach recoveries back to more typical levels of the feeds with lower copper content.

Permitting of an open-pit gold mining operation using tank and/or heap-leach at Lemhi carries a higher level of risk. No “fatal flaws” in permitting a mine at Lemhi were found in the initial permit scoping and base-line environmental studies completed by AGR and LGT. Ditch and Hughes creeks represent areas of significant historical disturbance due to more than a 100 years of placer mining activity, however, water quality and fisheries will be very sensitive issues, which must be carefully addressed with proper mine and process plant design. Social impacts, particularly on homeowners’ lands along the Hughes Creek Road, will need to be addressed and mitigated.

Permitting timelines are currently estimated to range from 18 months to 30 months for a project wholly contained on the private lands (patented claims). Permitting can be expected to be considerably longer if United States Forestry Service (USFS) lands are involved. However, those time estimates were made for a project starting from scratch. The permitting work and baseline studies previously conducted at the Lemhi Gold Project may jump-start the permitting process by a considerable amount of time. The risk that permits to develop a mine at Lemhi will not be obtained is considered fairly low if the above measures are taken. There is a moderate to high risk that the permitting process will take longer and cost more than expected. Revised permitting timeline and cost estimates may be necessary following an initial permitting scoping study.

1.7 Recommendations

Historical drilling and the 2020 drilling have defined a significant zone of gold mineralization at the Lemhi Gold Project. Prior 3D modelling has shown the deposit to be of significant size and open in a number of directions, which was confirmed with the 2020 drilling. Prior to 2020, little surface exploration has been conducted at the Lemhi Project since the late 1980’s. Certainly no modern exploration techniques have been employed to either extend the known mineralization or identify new mineralization along strike. Freeman’s surface exploration plan in 2020 included a soil orientation survey comprising three methods (conventional soil, IL and MMI), prospecting, rock and trench sampling, in combination with two ground geophysical surveys (ground magnetics and 3D IP). In addition, the program included the restart of certain environmental baseline studies initiated in the 1990s and 2000’s along with the initiation of drill permitting on unpatented mining claims.

A significant mineralized zone has been intersected by numerous drill holes between 1984 and 2020. The work to date indicates that there is potential to expand the current MRE and there is potential for new discoveries with further exploration drilling. There is

also need to complete additional drilling to upgrade the confidence in the MRE, upgrade the classification and reduce the reliance on the use of the FMC 1980's drill hole data.

To follow-up the results from the 2020 program, there is a certain amount of exploration for the project that should be conducted in 2021. This includes, infill drilling, exploration drilling, a certain amount of metallurgical drilling and studies, a property wide soil and rock sampling program, geological mapping, trenching and certain remote sensing type surveys such as Worldview 3 alteration mapping and a structural interpretation of Lidar surveys completed by the Idaho Lidar Consortium (processing of Lidar survey is ongoing by Boise State University).

The Phase 1 program should comprise about 8,000 m of core drilling (HQ and PQ) in at least 40 holes along with geological mapping, soil and rock sampling, trenching in areas where mineralization has been identified at surface along with various remote sensing studies leading to a modern structural interpretation. The estimated cost of the Phase 1 exploration program is \$US4.0 million (\$CDN 5.0 million).

2 Introduction

2.1 Issuer and Purpose

The Lemhi Gold Project (“Lemhi Project” or “the Property”) is located in Lemhi County, Idaho (ID), USA within the Salmon River Mountains, near the Idaho-Montana border, approximately 40 km (25 miles) north of the town of Salmon and 6 km (3.7 miles) west of Gibbonsville (Figure 2.1). The Property totals approximately 6,739 acres (2,727 hectares) of mineral rights and 615 acres (249 hectares) of surface rights (Appendix 1). The Lemhi Gold Project is an intermediate to advanced stage exploration property located within the Trans-Challis fault system of central Idaho and is on trend with other past producing gold deposits including the Atlanta and Beartrack mines.

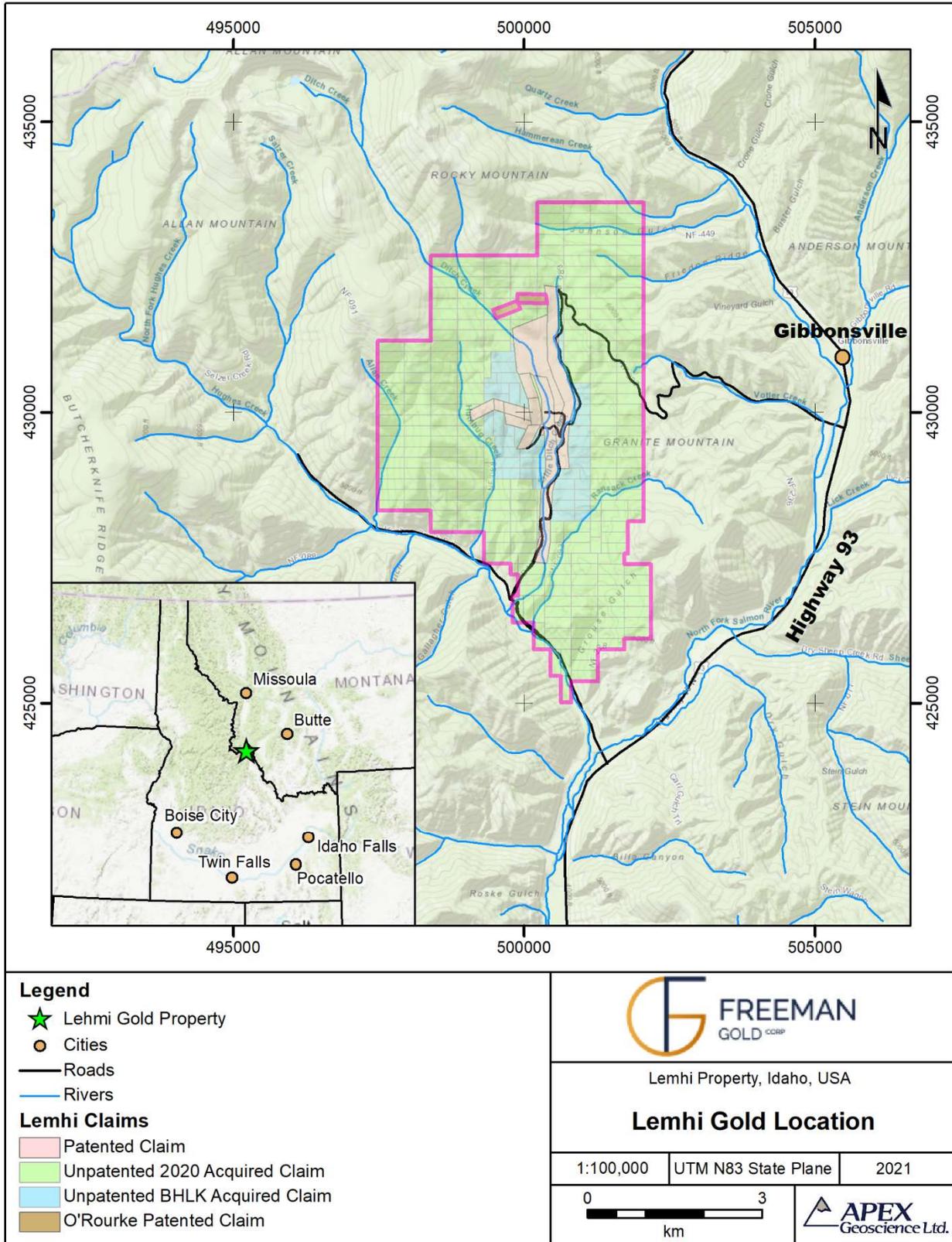
APEX Geoscience Ltd. (“APEX”) of Edmonton, Alberta was engaged in March, 2021 by Freeman Gold Corp (“Freeman”) to complete a National Instrument (NI) 43-101 Mineral Resource Estimate (“MRE”) Technical Report (“the Report”) pertaining to the exploration work completed to date on the Lemhi Gold Deposit and the acquisition of Lower 48 Resources (Idaho) LLC (“Lower 48”), which controls the Lemhi Gold Project. The purpose of this report is to provide a maiden MRE that is in line with CIM Definition Standards on Mineral Resources & Reserves (2014), and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (2019). The report includes a technical summary of geological and exploration activities conducted on the Lemhi Gold Project to date and recommendations for future work. The Report has been written on behalf of Freeman and was prepared in accordance with the guidelines set out by the Canadian Securities Association (CSA) and NI 43-101.

A total of 11 patented claims and 53 unpatented claims were recently purchased from Lemhi Gold Trust (LGT) by Lower 48 through a closed auction bid process. Lower 48 has also optioned 46 unpatented claims that are owned by BHLK2, LLC (BHLK). Freeman recently purchased outright the Moon #100 and Moon #101 unpatented mining claims (Moon Claims) from Vineyard Gulch Resources, LLC (“Vineyard”), located within the historical resource area. An additional 232 unpatented claims were staked by Freeman in 2020 and 2021. Freeman closed a transaction to acquire Lower 48 and its parent Company 1132144 British Columbia (B.C.) Ltd. (1132144) on April 16, 2020. Freeman issued 33,740,000 common shares to the shareholders of Lower 48 to complete the transaction. BHLK retains a 2% NSR on production from the Lemhi Gold Project including the 11 patented claims and the 46 unpatented BHLK claims under option.

2.2 Authors and Site Inspection

This Report was prepared by Mr. Michael Dufresne M.Sc., P.Geol., P.Geo. and Ms. Anetta Banas, M.Sc., P.Geol. of APEX and Mr. Frank Wright, B.Sc., P.Eng. of F. Wright Consulting Inc. (FWCI). Mr. Dufresne and Ms. Banas are both independent geological consultants and Qualified Persons (QP), with extensive experience exploring for precious metals deposits in Western Canada and USA. Mr. Wright is an independent process metallurgist and QP focussed on developing precious and base metal projects.

Figure 2.1: Property Location.



Mr. Dufresne has had prior involvement with the Project completing a prior property visit and the initial listing Technical Report (Dufresne, 2020) for Freeman (formerly Lodge Resources Inc.) in 2020.

This Report has been prepared in accordance with the guidelines set out by the Canadian Securities Association and in National Instrument (NI) 43-101. The Technical Report has been written on behalf of Freeman Gold Corp. (CSE: FMAN).

A site visit was conducted by the lead author Mr. Dufresne on November 8th and 9th, 2019 and from September 10th to 17th, 2020. During the 2020 visit, Mr. Dufresne confirmed the locations of several historical collars on the property, assisted in planning of the 2020 program and reviewed core from the first couple of drill holes. The author also conducted a site visit to Freeman's core facility on February 26, 2021 and observed and reviewed a number of the gold-bearing core intersections from the 2020 drilling program.

Mr. Dufresne takes responsibility for the preparation and publication of sections 9 to 12 and 14, and joint responsibility for sections 1, 6 to 8, 15, 16 and 18 to 27 of this Technical Report. Ms. Banas takes responsibility for sections 2 to 5 and joint responsibility of sections 1, 6 to 8, 15, 16 and 18 to 27. Mr. Wright takes responsibility for sections 13 and 17, with joint responsibility for sections 1.6, 1.7 and 26. APEX staff Mr. Tyler Acorn, M.Sc. and Mr. Warren Black, M.Sc., P.Geo. made contributions to Section 14, under the direct supervision of Mr. Dufresne. Both Mr. Black and Mr. Dufresne are independent qualified persons (QPs) with APEX and take responsibility for the MRE herein. Mr. Dufresne is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia (EGBC) and has worked as a mineral exploration geologist for more than 35 years since his graduation from university and has been involved in all aspects and stages of mineral exploration in North America for precious metal deposits. Ms. Banas is a Professional Geologist with APEGA and has worked as a mineral exploration geologist for more than 18 years since her graduation from university. Mr. Wright is a Professional Engineer with EGBC and has worked as a process engineer for more than 40 years since his graduation from university.

2.3 Sources of Information

This report summarises publicly available and internal information as listed in the reference section and relies heavily on information from three previous reports written for LGT and Northern Vertex Capital Inc. (Northern Vertex) by Mr. Brian Brewer (2019) and Mr. Robert G. Cuffney (2011), respectively, as well and a Technical Report completed by Mr. Dufresne (2020). The data discussed in this report was provided by LGT in digital and paper format and was compiled and examined by the author who has conducted data verification. The data provided included previous technical reports, exploration data, drill data and historical resource estimations. The supporting documents used as background information are referenced in the History, Geologic Setting and Mineralization, Deposit Types and Reference sections.

Mr. Dufresne, the lead author of this Technical Report, has supervised the overall preparation of the report and based on the author's property visit September 10th – 17th, 2020 and the work performed on the Property to date, the author believes that exploration completed by previous property owners as listed in the reference section is accurate and complete, and has been completed to acceptable standards.

2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Technical Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006);
- 'Bulk' weight is presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.);
- Assays and gold grades are presented as ounces per short ton (opt) and grams per metric tonne (gpt or g/t) and are converted using 34.2857.
- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Idaho State Plane Central FIPS 1102 (Meters) of the North American Datum ("NAD") 1983; and,
- Currency in Canadian dollars (CDN\$), unless otherwise specified (e.g., U.S. dollars, US\$; Euro dollars, €).

3 Reliance of Other Experts

The authors are not qualified to provide an opinion or comment on issues related to legal agreements, royalties, permitting and environmental matters. Accordingly, the authors of this Technical Report disclaim portions of the report particularly in Section 4, Property Description and Location. This disclaimer of responsibility includes the following:

- The QP's relied entirely on background information and details regarding the nature and extent of Lower 48's Land Titles (in Section 4.1) provided by LGT and Freeman. The legal and survey validation of the claims is not in the author's expertise and the QP's have relied on LGT and Freeman's land-persons and legal team. Bureau of Land Management (BLM) Customer Information Reports were provided by Freeman. The authors have confirmed the unpatented mineral claims are in good standing as of July 8th, 2021 using the MLRS register and have no reason to question the validity or good standing of the claims.
- The QP's relied entirely on information regarding the agreements of acquired Vineyard Gulch Resources claims that was provided by Freeman and is summarised to the best of the authors knowledge in Section 4.1.

- The QP's relied entirely on information regarding royalties and back-in agreements that was provided by LGT, Lower 48 and Freeman, and is summarised to the best of the authors knowledge in Section 4.2.
- The QP's relied entirely on information regarding permitting and environmental status of the Project that was provided by LGT, Lower 48 and Freeman, and is summarised to the best of the authors knowledge in Section 4.3.

4 Property Description and Location

4.1 Description and Location

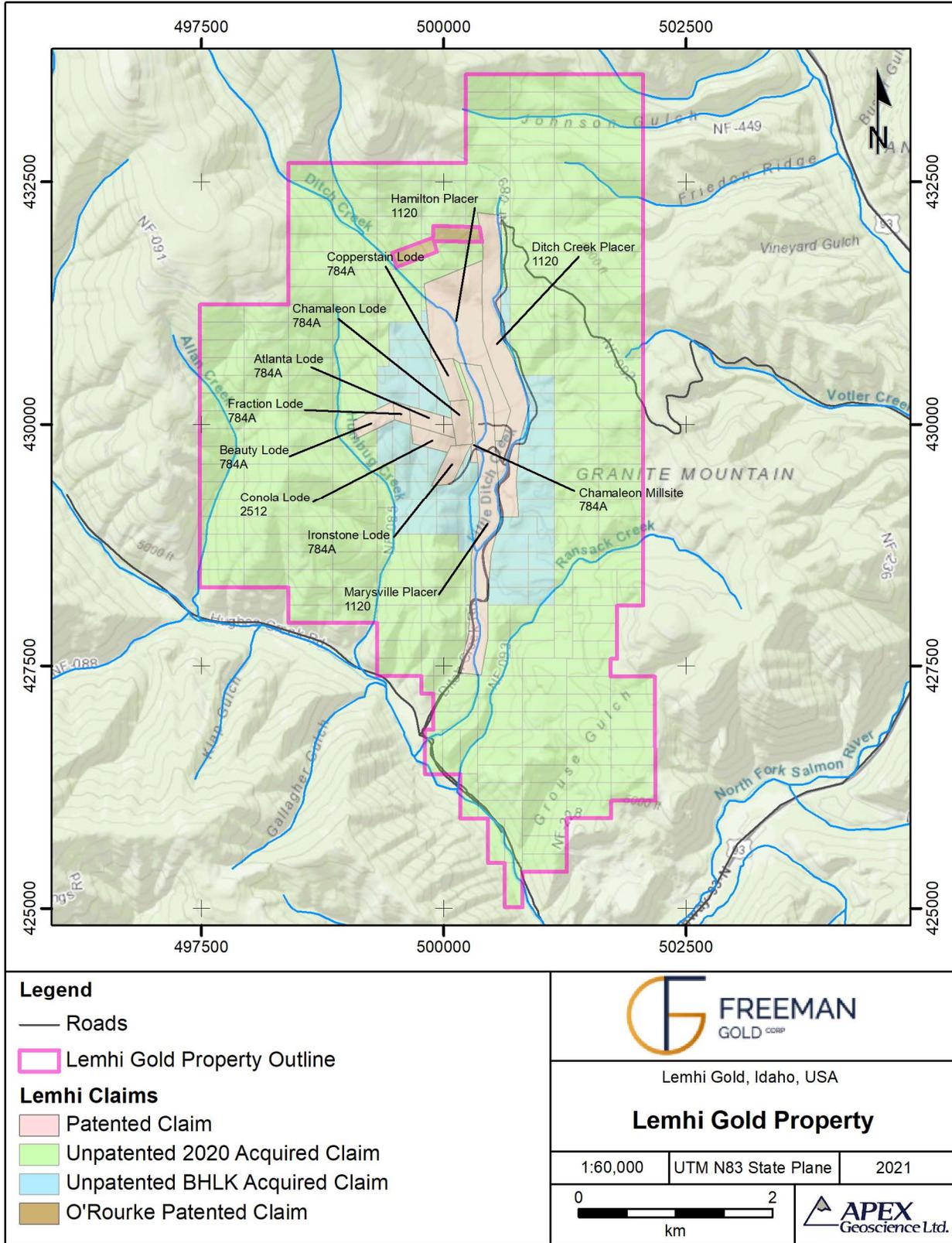
The Project is located in Lemhi County in east-central Idaho, within the Salmon River Mountains, a part of the Bitterroot Range which forms the Idaho-Montana border (Figure 2.1). The Property is approximately 40 km (25 miles) north of the town of Salmon, ID and 6 km (3.7 miles) west of Gibbonsville, ID. The approximate center of the Property in Universal Transverse Mercator (UTM) NAD83 Idaho State Plane coordinates is Easting 500,275, Northing 429,900.

The Project consists of 10 patented mining claims (placer and lode), 1 patented millsite claim and 333 unpatented mining claims, totaling approximately 6,739 acres (2,727 hectares) of mineral rights and 615 acres (249 hectares) of surface rights (Figure 4.1 and Appendix 1). The 11 patented mining claims and 53 nearby unpatented mining claims were previously owned by Lemhi Gold Trust, LLC (LGT) and were acquired by Lower 48 in a sealed bid auction in November 2019. Freeman has since acquired 100% of the issued shares of Lower 48 and its parent company 1132144 for a total of 33,740,000 common shares of Freeman. In addition, in order to complete the transaction a finder's fee of 3,500,000 common shares was issued by Freeman to Sub C Holdings Ltd.

A total of 46 unpatented mining claims are owned by BHLK and are under option to the parent company of Lower 48, 1132144. Lower 48 has the right to earn a 100% interest in the BHLK claims by making an aggregate of US\$1 million in payments to BHLK over a 7-year period. Freeman recently purchased outright the Moon #100 and Moon #101 unpatented mining claims (Moon Claims) from Vineyard Gulch Resources, LLC ("Vineyard"), located within the resource area. An additional 232 unpatented claims were staked by Freeman in 2020 and 2021.

The 11 patented mining claims were recently purchased at auction by Lower 48 and are to be transferred to Lower 48 in due course. Patented mining claims originated as unpatented mining claims and were converted to private ownership through the Patent and Mineral Survey process. The patented claims on the Lemhi Gold Property were patented between 1890 and 1910. Corner survey monuments are intact (with several observed by the author) and the United States Forest Service (USFS) has placed markers

Figure 4.1: Lemhi Gold Project Claims.



delineating USFS land boundaries along the claim boundaries. In order to keep the claims in good standing annual real estate taxes must be paid to Lemhi County. As long as the annual taxes are paid the patented claims will remain in good standing in perpetuity.

The 333 unpatented Bureau of Land Management (BLM) federal lode claims are administered by the USFS. The claims are owned by 2 separate entities:

- 46 unpatented claims staked by BHLK of Missoula, Montana in 2011 and 2017.
- 53 claims staked by LGT in September 2019, purchased by Lower 48.
- 232 claims staked by Lower 48 in April 2020, with 2 claims purchased outright from Vineyard by Freeman in September 2020.
- 2 claims (the Moon Claims) purchased by Lower 48 from Vineyard in 2020.

Lower 48 recently purchased, at auction, the 11 LGT patented mining claims and the 53 LGT unpatented mining claims. Additionally, Lower 48 has an option agreement with BHLK for 46 unpatented mining claims. The 53 LGT claims have been transferred to Lower 48. The 46 BHLK claims will be transferred to Lower 48 in due course. Any portion of an unpatented claims which overlaps a patented claim is deemed invalid. The valid portion of all unpatented claims totals approximately 6,125 acres (2,479 hectares).

In October 2010 Vineyard of Salmon, Idaho staked two fractional claims on a narrow strip of USFS ground between the Proksch and Meridian Patented Claim groups. The two claims (Moon #100 and Moon #101) cover approximately 3.4 hectares (8.3 acres) of ground and are located toward the northern portion of the historical resource. In September 2020, Freeman purchased 100% ownership of the Moon claims via a Purchase and Sale Agreement between Freeman and Vineyard (“the “Seller”) of the Moon Claims. Freeman paid the Seller cash consideration of US\$150,000 as well as issuing 375,000 common shares of Freeman to Vineyard. The transaction was not subject to a finder’s fee or brokerage commission.

An additional two patented claims lie within the boundaries of the unpatented claims and are owned by John G O’Rourke of San Bruno California. These claims consist of 35.8 acres and are not part of Freeman’s land package.

All information pertaining to the ownership and option agreements for ownership of the patented and unpatented mining claims was provided by Lower 48 and Freeman. The various agreements have been reviewed but have not been verified by the author.

The Mining Law of 1872 states that with respect to unpatented mining claims on federal lands, the locator has the right to explore, develop and mine mineral mining claims. Surface rights are not included and remain the property of the United States government. No payment of production royalties to the Federal government is required. To maintain existing unpatented claims in good standing an annual maintenance fee of

US\$165 must be paid per claim to the BLM prior to September 1 of each year or the claims will be invalidated and will expire. New lode mining claims require a US\$10 recording fee payable to the County Courthouse of the relevant jurisdiction in which the claims are located. In addition, the BLM requires a further maintenance fee of US\$165, a US\$20 processing fee and a US\$40 claim location fee. The total fee payable to BLM for recording a new claim is US\$225 per claim. All 333 mineral claims were understood to be in good standing based on the information received from LGT, BHLK, Vineyard and Freeman. The status of the claims was checked against the BLM MLRS register database on July 8, 2021, and they are confirmed to be in good standing.

4.2 Royalties and Agreements

Lower 48 purchased at auction in November 2019, the 11 patented LGT mining claims and the 53 unpatented LGT mining claims. The patented mining claims came with a couple of historical and active encumbrances in the form of royalties and a buy back clause. The 11 patented and 53 unpatented claims have been transferred to Lower 48. The royalties are still active, however, the buy back clause has been purchased and extinguished.

BHLK obtained a 2% net smelter return royalty (NSR) on all 11 patented mining claims and 74 surrounding unpatented mining claims through a deed of royalty upon LGT's purchase of the project in 2011. The 11 patented mining claims are divided into two groups based upon two separate historical deals (Table 4.1). The Meridian group of patented mining claims were purchased by LGT from Yamana Gold Inc. (Meridian Gold Inc.) in 2011. The Proksch group of patented mining claims were purchase by LGT from Joseph and Hailie Proksch in 2011 (Table 4.1). The 74 unpatented mining claims were optioned by LGT from BHLK in 2011 and cover the area currently represented by BHLK's 46 unpatented mining claims. The 46 unpatented mining claims are under option and Freeman may earn a 100% interest in the claims with cash payments totalling US\$1 million over 7 years, at which time the BHLK 2% NSR will extend over the claims.

The Meridian group of patented mining claims consists of three placer and two lode patents; the Ditch Creek, Hamilton, Marysville, Canola and Copperstain patented mining claims. Meridian Gold Inc. (Meridian) purchased the five patented claims from Ashanti Goldfields Inc. (Ashanti) in 1997. Ashanti (now AngloGold Ashanti Ltd.) retained a cash royalty of US\$2.0 million, which is payable in full within 30 days after the first commercial production pour of dore' gold or silver mined from any or all of the 11 patented mining claims. At that time, the Proksch group of patents were under lease.

LGT purchased the Meridian group of five patented mining claims from Meridian (now a wholly owned subsidiary company of Yamana Gold Inc. [Yamana]) in 2011 for a one-time payment of \$US2.5 million. The purchase was subject to Ashanti's royalty and a "back-in" whereby Meridian can "back-in" to a 51% ownership of the Meridian group of five patented mining claims if and when the mineral reserve reaches 2.5 million mineable ounces of gold. This back-in right was purchased outright by Freeman in September 2020 for 4,035,273 shares. These patented claims were recently purchased by Lower 48 at

auction. Real estate taxes paid to Lemhi County annually for the Meridian group of patented mining claims total US\$406.46.

Table 4.1: Patented mining claims summary

Claim Group	Claim Names	Mineral Survey Number	Acres
Meridian (Yamana)	Ditch Creek Placer	MS 1120	477.75
	Hamilton Placer		
	Marysville Placer	MS 2512	19.79
	Conola Lode		
	Copperstain Lode	MS 784 A and B	20.66
Proksch	Beauty Consolidated Lode	MS 784 A and B	97.75
	Atlanta Lode		
	Fraction Lode		
	Chamaleon Lode		
	Chamaleon Millsite		
	Ironstone Lode		

The Proksch group of patented mining claims consists of five mining lode patents and one millsite patent and includes the Atlanta, Fraction, Ironstone and Chamaleon lode patents, along with the Chamaleon Millsite patent (Table 4.1): The Proksch group of patented claims is subject to the Ashanti Cash Royalty. LGT purchased the Proksch group of patents from Joe and Hallie Proksch for US\$2.5 million. The deal was a cash deal and did not include a royalty. These patented claims were recently purchased by Lower 48 at auction. The annual real estate taxes paid to Lemhi County total US\$77.24. BHLK maintains a 2% royalty over the 11 patented claims.

Lower 48's parent company, 1132144, has recently signed an option agreement with BHLK, in which 1132144 has the option to acquire a 100% interest in the BHLK unpatented mining claims that surround the patented claims in consideration of payment of US\$1.0 million paid over a seven-year period. An initial payment of \$75,000 has been made by 1132144. BHLK retains a 2% NSR on production from the BHLK unpatented claims and an area of interest of 1-mile of the outer boundary of the unpatented mining claims (excluding the patented mining claims). Lower 48 and/or 1132144 have an option to buy down half the NSR for \$US1.0 million at any time.

4.3 Environmental Liabilities, Permitting and Other Significant Factors

Enviroscientists Inc. conducted an environmental assessment on the Project in 2008 and concluded there were no known environmental liabilities on the project (Cuffney, 2011; Brewer, 2019). Site inspections conducted by Cuffney during his 2011 property visit noted the presence of a small historical shaft located on the Conola claim which should be fenced or filled in to prevent inadvertent entry. The Enviroscientists Inc. phase one

environmental assessment was not available to the authors and could not be verified. The results of the assessment are summarized from Brewer (2019).

Previous baseline environmental studies were undertaken in 1995 by American Gold Resources (AGR) which included:

- surface water monitoring
- ground water monitoring
- wetlands delineation, fish population and habitat survey,
- acid generation potential survey
- fisheries/aquatic habitat study (fish population and habitat survey)
- rare, endangered, and threatened plant and animal species studies
- hydrologic studies
- air quality/meteorological studies
- preliminary geotechnical analysis

A Cultural Resources survey for the Project was completed in August 1995 by Sagebrush Archaeological Consultants, LLC (Sagebrush). A large amount of cultural material from historical mining activities is present on the patented mining claims, some dating back to the late 1800's. Additionally, Sagebrush identified 3 sites which were evaluated for eligibility to the Nation Registry of Historic Places (NRHP). It was concluded that neither the cultural material nor the identified sites were eligible for preservation (Polk, 1995). To the Author's knowledge no other cultural sites of concern exist on the Project.

Ditch Creek and Hughes Creek are perennial streams, which empty into the North Fork and then into the Salmon River, a popular fishing and rafting river. The Salmon River and its tributaries have been designated as critical habitat for the Salmon River spring/chinook salmon and bull trout (Kuzis, 1995). Kuzis concluded that "Ditch Creek does not support a resident bull trout population", and "it is unlikely that there are any fluvial bull trout utilizing Ditch Creek for spawning". A more recent Fish survey conducted in 2008 by the Idaho Department of Fish and Game supported these conclusions as no bull trout were encountered at their sample locations in Ditch Creek (Warren and Taylor, 2008). Ditch Creek and Hughes Creek are significantly disturbed by more than 100 years of extensive historical placer mining including widespread placer dredge tailings in the Hughes Creek valley. Nevertheless, measures to prevent water pollution or siltation from exploration and mining activities will be critical for future permitting and operations.

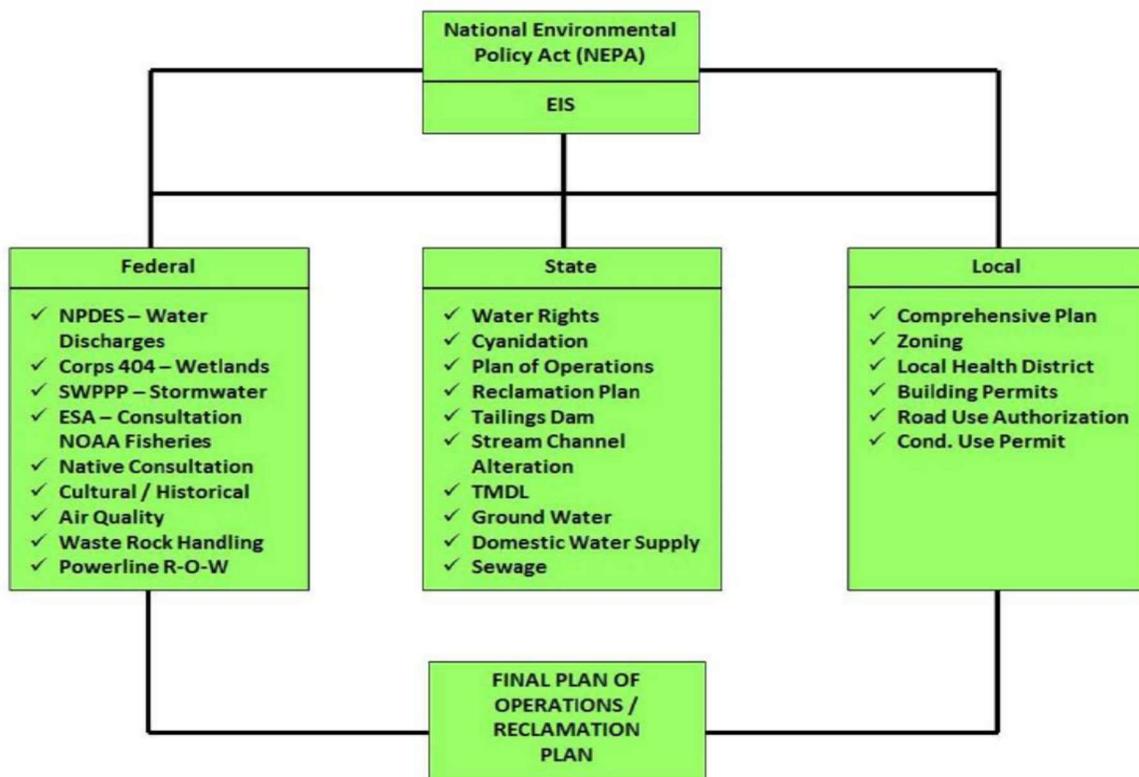
Exploration and mining activities on private land, including patented mining claims, are regulated by the Idaho Department of Lands (IDL) and are subject to The Mined Land Reclamation Act of 1971. Exploration activity including use of motorized earth moving equipment requires that a notice of exploration be filed with the department within seven days of commencing operations. Holes and trenches must be closed with one year and reseeded. If exploration exceeds 5 contiguous or 10 non-contiguous acres further approvals are required including a reclamation plan and bonding.

Permits to drill on federal land BLM mineral claims are administered by the BLM and USFS. For drilling on USFS land, a Notice of Intent or Plan of Operations must be submitted and accepted prior to disturbance. If the surface area disturbance is expected to be <5 acres drilling and/or trenching can be conducted with a Notice of Intent which is typically obtained within 60 to 180 days. For disturbances of >5 acres a Plan of Operations is required at which point reclamation bonds, archeological surveys and other requirements may be requested by USFS.

In 2012, LGT commissioned Rick Richins of Boise, Idaho to provide a summary timeline and overview of permitting required for a 5,000 to 7,500 ton per day cyanide (CN) heap-leach operation, the details of which are discussed in previous reports by Brewer (2019) and Cuffney (2011) and summarized in Figure 4.2. It was concluded that there were no significant impediments to the potential development of a mine on the patented claims.

Based on the initial baseline studies and preliminary permitting completed by AGR in 1995-96, subsequent baseline studies commissioned by LGT, and on public comments received during LGT's tenure, there does not appear to be any major obstacles that would prevent the potential development of a mine on the Lemhi Gold Property.

Figure 4.2: Summary of Permits required for Mining Operations at the Lemhi Gold Project



The authors are not aware of any environmental liabilities, or any other known significant factors or risks related to the Lemhi Property that may affect access, title or the right or ability to perform work on the Lemhi Property. If the Company were to advance the Lemhi Property to Pre-Feasibility Study or Feasibility Study, the Company may have to consider preparing a comprehensive EIS to ensure the project is considered in a careful and precautionary manner such that the project does not cause significant adverse environmental effects.

Based on the historical initial baseline studies and preliminary permitting completed by AGR in 1995-96, subsequent baseline studies commissioned by LGT, and on public comments received during LGT's tenure, there does not appear to be any major obstacles that would prevent the potential development of a mine on the Lemhi Gold Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Project can be accessed by paved and gravel road from Salmon, Idaho by following US Highway 93 north for 34 km (21 miles) to North Fork and then an additional 7.4 km (4.6 miles) to the Hughes Creek Road (USFS Road 091). The property can be reached by traveling 3.2 km (2.0 miles) west along the Hughes Creek Road then another 3.1 km (1.9 miles) north along the Ditch Creek Road to a two-track road leading northwest to the Lemhi Gold Property. The Hughes Creek and Ditch Creek roads are public graded gravel roads maintained by US Forest Service and/or Lemhi County and provide all-weather access to the project area.

Alternatively, the Property can be accessed via the Granite Mountain Road (USFS Road 092), which heads west from Highway 93 about 7.5 km (4.6 miles) north of the Hughes Creek Road. The Granite Mountain Road follows Votler Creek westward, then wraps around the south side of Granite Mountain and drops into the Little Ditch Creek drainage to intersect the Ditch Creek Road near the north end of the Lemhi Gold Property, approximately 8 km (5 miles) from Highway 93. This road could provide a good access route for heavy equipment, supplies, and personnel in the summer months, but in its present condition would be unacceptable for winter travel due to the high altitude and lack of adequate berms.

5.2 Site Topography, Elevation and Vegetation

The Project is located in the Salmon River Mountains within the Rocky Mountain physiographic province. The Bitterroot Range, which forms the border between Idaho and Montana lies to the east, across the Salmon River. The claims are centered on Ditch Creek, a south-draining tributary of Hughes Creek, which in turn flows into the North Fork of the Salmon River. The area is mountainous and characterized by fairly steep slopes (30% to 100% grade) along Hughes Creek and Ditch Creek. Total relief is about 500 m (1,650 ft), with elevations ranging from 1,500 m to 2,000 m (4,900 to 6,560 ft).

Pine forest, consisting of ponderosa pine and douglas fir with minor lodgepole pine covers most of the project area. A fire-wise timber thinning program was conducted in 2013-2014. Riparian areas within the Ditch Creek drainage contain aspen and a few cottonwood trees. Mammals in the area include mule deer, elk, coyote, wolf, black bear, mountain lion, beaver, rabbits, and a variety of small rodents.

5.3 Climate

The climate is typical of the central Rocky Mountains. Summers (June-September) are generally warm with average daytime highs of about 15° - 20° C (59° - 68° F). Summer nights are cool. Winter temperatures are cold with overnight lows often below -10° C (14° F). Annual precipitation is largely a function of elevation with Gibbonsville (elevation 4,480 ft) receiving about 34 cm (13 inches), and Moose Creek (elevation 6200 ft) receiving 82 cm (32 inches), mostly as snow between November and March (Carroll, 1996). Snowstorms are frequent, but access routes to the Property can be kept open with minimal snow plowing.

5.4 Local Resources and Infrastructure

The town of Salmon has a population of approximately 3,300 people. The economy of Salmon is based on ranching, forestry, mining, and tourism. Salmon is home to the regional offices of the USFS, BLM and IDFG as well as other state and federal agencies. Basic supplies are available, as are food and lodging. Steele Memorial hospital and medical clinic in Salmon provides basic medical needs, but the nearest hospital is in Dillon, Montana, 90 km north of Salmon.

The Lemhi County airport, located 8 km (5 miles) south of town, handles regularly scheduled commuter flights to/from Idaho Falls and Boise as well as charter flights. Salmon has historically provided both skilled and unskilled labor for the mining industry.

The patented mining claims at the Lemhi Gold Project provide adequate area for mine infrastructure. The placer claims of MS 1120 contain 193 hectares of gently sloping private land suitable for mine offices, leach pads, a processing plant, and waste dumps. There is no power or other mining infrastructure on the Lemhi Gold Property. A 35.5 kV power line passes through the settlement of North Fork, about 16 km by road from the Property. Sufficient water for exploration is available from Ditch Creek, which has a good perennial water flow. Two of the patented mining claims carry water rights totaling 3.5 cubic feet per second (cfs). Water wells would have to be drilled to provide sufficient water for mining and a processing plant.

To conclude, the Lemhi area has a rich history of exploration and metallic mineral mining. The region has the availability and sources of power, water, and mining personnel. The Project can be accessed year-round. Most exploration activities associated with fieldwork and drilling can likely be conducted year-round, although there may be periods in December to March, where snow conditions may temporarily impede

fieldwork. The authors do not see any significant obstacles that would prevent the potential development of a mine on the Lemhi Gold Property.

6 History

6.1 District and Early Property History

The Lemhi Gold Project is located within the Dahlonaga (Gibbonsville) mining district in Idaho, USA.

In the Dahlonaga mining district, placer gold was first discovered in 1867 at Hughes Creek east of the town of Gibbonsville, followed by discoveries in the Dahlonaga Creek and Andersen Creeks and the North Fork Salmon River. In 1877, gold-bearing quartz veins were discovered on the slopes of Dahlonaga Creek (approximately 5 km east of the Lemhi Gold Project) and mining of lode gold deposits ensued (Johnson et al., 1998; Pierson, 2010). The American Development, Mining and Reduction Company (AD&M) purchased the Dahlonaga Creek property and erected a 30-stamp mill with amalgamation and chlorination plants in 1895. A fire destroyed the main processing plant in 1907; a 20-stamp mill and cyanidation plant were built the following year. Production from 1901 to 1917 is reported to be 4,481 oz gold and 755 oz silver (Kiilsgaard et al., 1989). After a brief hiatus, lode gold mining resumed in the 1930's and continued, with interruptions until 1942. Placer mining continued on and off throughout this period up until 1948 (Kiilsgaard, et al., 1989). The total production of the Gibbonsville Mining district immediately east of the property up to 1913 is estimated at 100,000 oz of gold (Johnson et al., 1998 and references therein; Cooper, 1988). The majority of this production was derived from the AD&M mine with reported production of about 48,000 oz of gold. Production from other notable mines: the Twin Brothers and Clara Morris is reported at 14,500 oz and 12,000 oz of gold, respectively. The remainder of the production was derived from smaller operations for which production values are unavailable (Kiilsgaard et al., 1989). Figure 6.1 shows the locations of historical mines in the area.

In the Ditch Creek area, overlapping the current Lemhi Gold Project, placer and gold mining commenced in the 1890's, during which time a number of mining claims were located and patented (Pierson, 2010). Placer mining has been intermittently active in the area over a period of more than 100 years with extensive placer dredge tailings piles still visible today in Hughes Creek. In 1891, a group of six patented lode claims (MS 784A: Beauty Lode, Fraction Load, Atlanta Lode, Ironstone Lode, Chamaleon Lode, Copperstain Lode), was consolidated as the Bull of the Woods Mine. These 6 patented claims are part of the current Lemhi Gold Property. The Idaho Mining and Lumber Company acquired the Bull of the Woods Mine in 1908. A 100 ton/day stamp mill was built, and the mine produced an unknown amount of gold (Pierson, 2010). Extensive placer mining has been conducted along most of Hughes Creek and many of its tributaries, such as Ditch Creek, which drains north to south through the middle of the Lemhi Project area.

6.2 Modern Exploration History

The modern exploration history below is largely compiled and taken from reports prepared by Cuffney (2011) and Brewer (2019).

6.2.1 Ownership information

Since the early 1900's, the Gibbonsville district has seen little modern exploration and mining activity until 1984, when FMC Gold Company (FMC) staked claims at Ditch Creek. After conducting regional grass-roots exploration programs in the area, FMC staked additional claims surrounding the Bull of the Woods property (patent claim: MS 784A). FMC leased and purchased some of the key patented claims and accumulated a land package of over 700 unpatented claims surrounding the patented mining claims in the area of the current Lemhi Gold Project. FMC also acquired the Beartrack property, located about 28 miles (48 km) southwest of the Lemhi Gold Project.

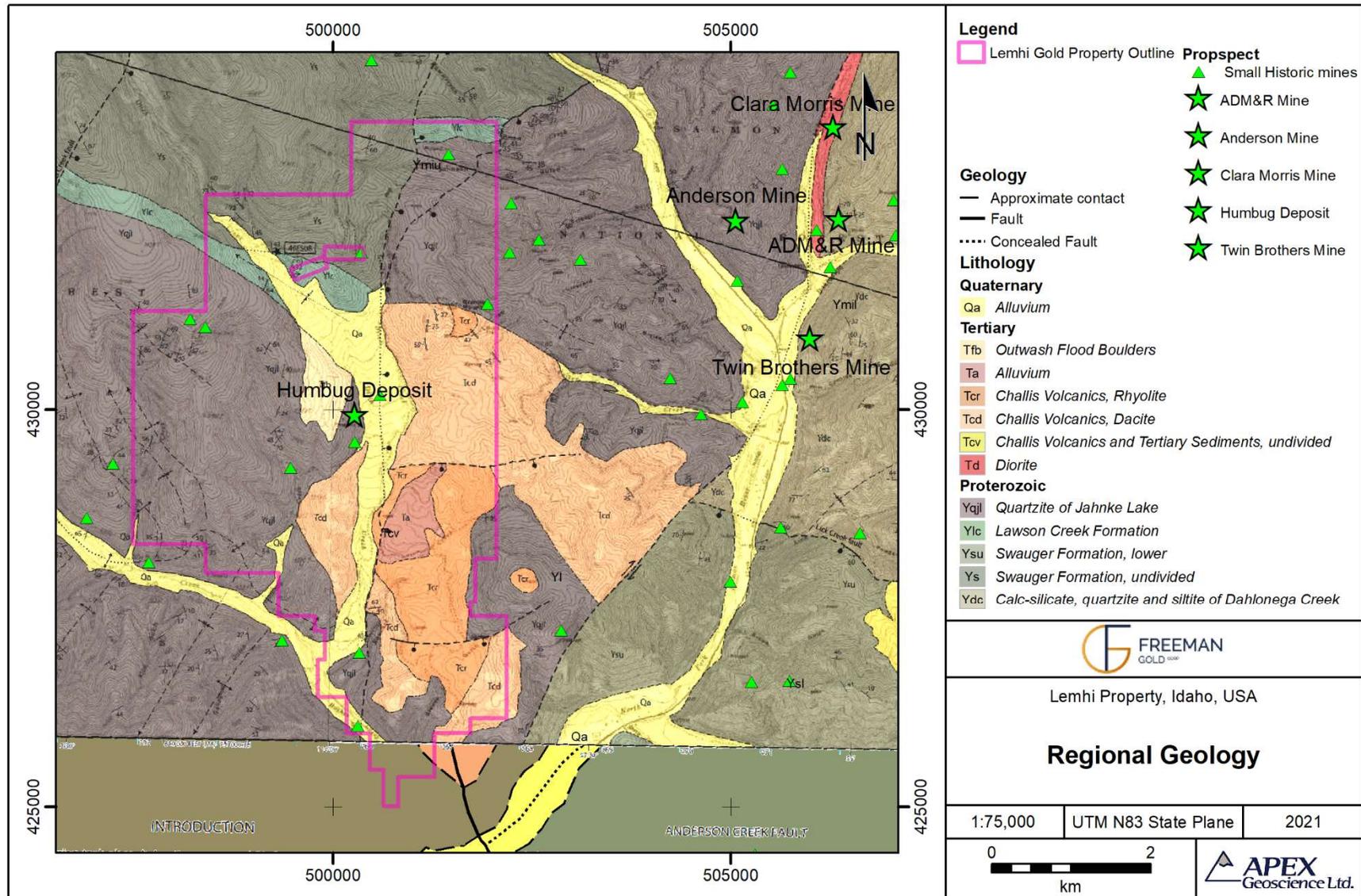
FMC explored the property from 1984 until 1991, after which American Gold Resources Corporation (AGR) acquired the property and held it until 1996. After 1996, work on the property was limited due to numerous corporate takeovers and down turns in the mining sector. In 2011, Lemhi Gold Trust (LGT), a joint venture between ISGC (Idaho State Gold Company) and Northern Vertex, acquired the newly consolidated Lemhi Gold Project and commenced an aggressive exploration program. The historical Lemhi Gold Trust Property included the Lemhi (Humbug) Gold Deposit.

FMC explored the Lemhi Gold Property area (known at the time as the Ditch Creek project, later renamed the Ponderosa Project) between 1984 and 1991. FMC's Ponderosa Project largely overlapped the current Lemhi Gold Project and extended up to Allan Creek west of the current Project boundary. During that period FMC completed:

- geological mapping
- geochemical sampling (rock chip, soil, biogeochemical samples)
- geophysical surveying (airborne infrared, IP/resistivity, CSAMT, magnetics)
- trenching
- drilling: 192 reverse-circulation (RC) holes, 177 of which are on the current property and 4 core holes
- metallurgical testing (cyanide leach tests, bottle roll & column leach tests)
- petrological studies
- deposit modelling and resource estimation

In 1987, FMC decided to focus on development of their Beartrack deposit near Leesburg. No drilling was conducted in 1988, but drilling resumed in 1989. After completion of the 1989 drilling program, FMC decided to farm out the property. No JV agreements could be reached and in 1991 FMC abandoned the project and dropped the unpatented mining claims (Cuffney, 2011; Brewer, 2019).

Figure 6.1: Historical Mines in the Gibbonsville Mining District.



In the fall of 1991, after FMC's unpatented claims lapsed, American Gold Resources (AGR) located 94 unpatented claims, the Humbug claim group, to the west of the patented ground. AGR's Humbug Project largely overlapped the current Lemhi Gold Project and extended slightly west to cover Humbug Creek. AGR then consolidated the property by leasing and/or purchasing the patented claims in the area. Exploration work completed by AGR between 1991 and 1996 on the Humbug Property (overlapping the current Lehi Gold Project) included:

- drilling: 159 RC drill holes and 9 core holes
- resource calculations (Pincock, Allen and Holt [PAH], 1996: Independent Mining Consultants [IMC], 1996)
- metallurgical testing (Kappes Cassiday, 1994-1996)
- pre-feasibility studies (Kappes Cassiday, 1995, 1996)
- scoping study for permitting
- baseline environmental studies

In February 1995, AGR submitted a Conceptual Plan of Operations to the Bureau of Minerals of the Idaho Department of Lands. AGR planned to start an Environmental Impact Statement the following year however they were acquired by Ashanti Goldfields Inc. (Ashanti) in May 1996. After the acquisition, Ashanti sold the AGR assets in the Salmon Idaho area, including the Humbug Project, to Meridian Gold Inc. (formerly FMC Gold) in 1997. Meridian was mainly interested in the Arnett Creek and Beartrack projects and completed no additional work on the Humbug Property (Pierson, 2010). Meridian was taken over by Yamana Gold Inc. in 2007. Yamana purchased Meridian for the company's South American assets and sold their North American properties including Humbug. No work was completed by Yamana on the Humbug Property (Cuffney, 2011; Brewer, 2019).

In 2011, the Lemhi Gold Trust (LGT), a joint venture between Northern Vertex Capital and Idaho State Gold Company, acquired the consolidated Lemhi Project which consisted of properties from 4 parties: BHLK, Meridian Gold Inc (Yamana), Joe and Hallie Proksch, and Vineyard Gulch Resources LLC (Cuffney, 2011; Brewer, 2019). The former LGT Property largely overlaps the current Lemhi Gold Project. In 2012, LGT began an aggressive pre-development program consisting of:

- historical data compilation and review
- Drilling: 40 core holes and 15 RC holes
- geotechnical work
- petrography
- metallurgical work
- updated geological model and resource
- base-line environmental studies, addressing cultural resources, fisheries, wildlife resources, water rights and right-of-way concerns
- terrestrial vegetation and wetland delineation studies,

In 2013, Northern Vertex decided to focus on the development of their Moss Gold-Silver Mine in Arizona and sold their interest in LGT to the Idaho State Gold Company. No further work has been conducted since 2012 - 2013 (Brewer, 2019).

6.2.2 Geochemical Surveys

Geochemical surveys completed by FMC between 1984 and 1989 included rock chip sampling, trench sampling, soil sampling and vegetation sampling. These surveys were conducted across the entire Ponderosa Property including areas overlapping the current Lemhi Gold Project and in areas west of the current Project area up to Allan Creek.

FMC collected 628 float and outcrop rock-chip samples from the Ponderosa Property in 1984 - 1985. Of these, 393 samples have location data and 341 lie within the current Lemhi Gold Project claim boundary (Figure 6.2). In addition, 363, 20-foot (6.1 m) channel samples were collected from all exposures in roads and trenches. A total of 136 of these channel samples have location data and lie within the current Lemhi Gold Project claim boundary. Gold values ranged from less than detection to a high of 4.67 opt (160 g/t) Au. In the main prospect area along the west slope of Ditch Creek, 630 samples were collected. Anomalous gold (>0.002 opt Au [>68 ppb Au]) was found in 58% of the samples; 32% of the samples contained >0.01 opt Au (343 ppb Au) and 9% had >0.05 opt Au (1.71 g/t Au) (McCarter, 1985).

FMC also collected 515 soil samples at claim corners and in several small grids surrounding the Lemhi Gold Property. The claim corner soils showed gold anomalies in the main prospect area of Ditch Creek and along the east side of Humbug Creek. The historical interpreted anomaly polygons are shown in Figure 6.3.

A vegetation survey was conducted over the gravels in Ditch Creek. Douglas fir, Spruce and Ponderosa pine twigs and needles were collected. The survey detected four areas of coincident gold, arsenic and copper anomalies in the gravel-covered valley of Ditch Creek (Huang, 1986).

In 1989 FMC collected rock, soil and vegetation samples across 5 priority areas on the Ponderosa Property. A total of 431 rock chip samples, 755 soil samples and 360 vegetation samples were collected. Anomalous gold results in 3 areas were followed up with RC drilling (McCarter, 1988).

6.2.3 Geophysical Surveys

During the early exploration stage at Ditch Creek, FMC contracted Geophysical Environmental Research Inc. of New York City, NY to fly an aerial infrared remote-sensing survey of the area in 1984. The survey was successful in locating a number of vegetation anomalies and spectral anomalies related to argillic alteration (Collins, 1985). Ground magnetic and Very Low Frequency Electromagnetic (VLF-EM) surveys were conducted by North American Exploration over the main prospect area centered on Ditch Creek in 1985. Zonge Engineering collected Controlled Source Audio-Frequency Magnetotelluric

Figure 6.2: Historical rock sampling locations with assay results on the Lemhi Gold Project.

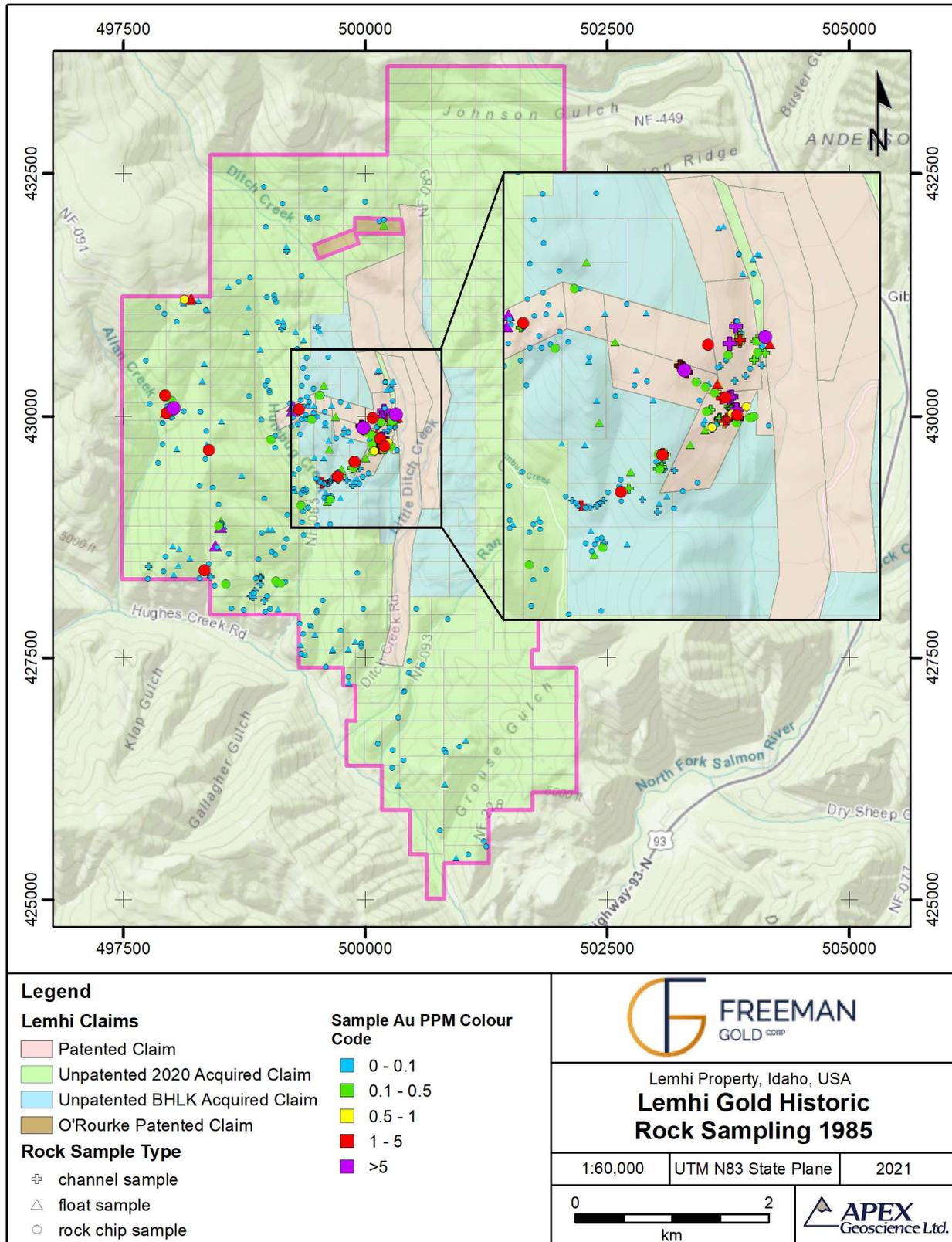
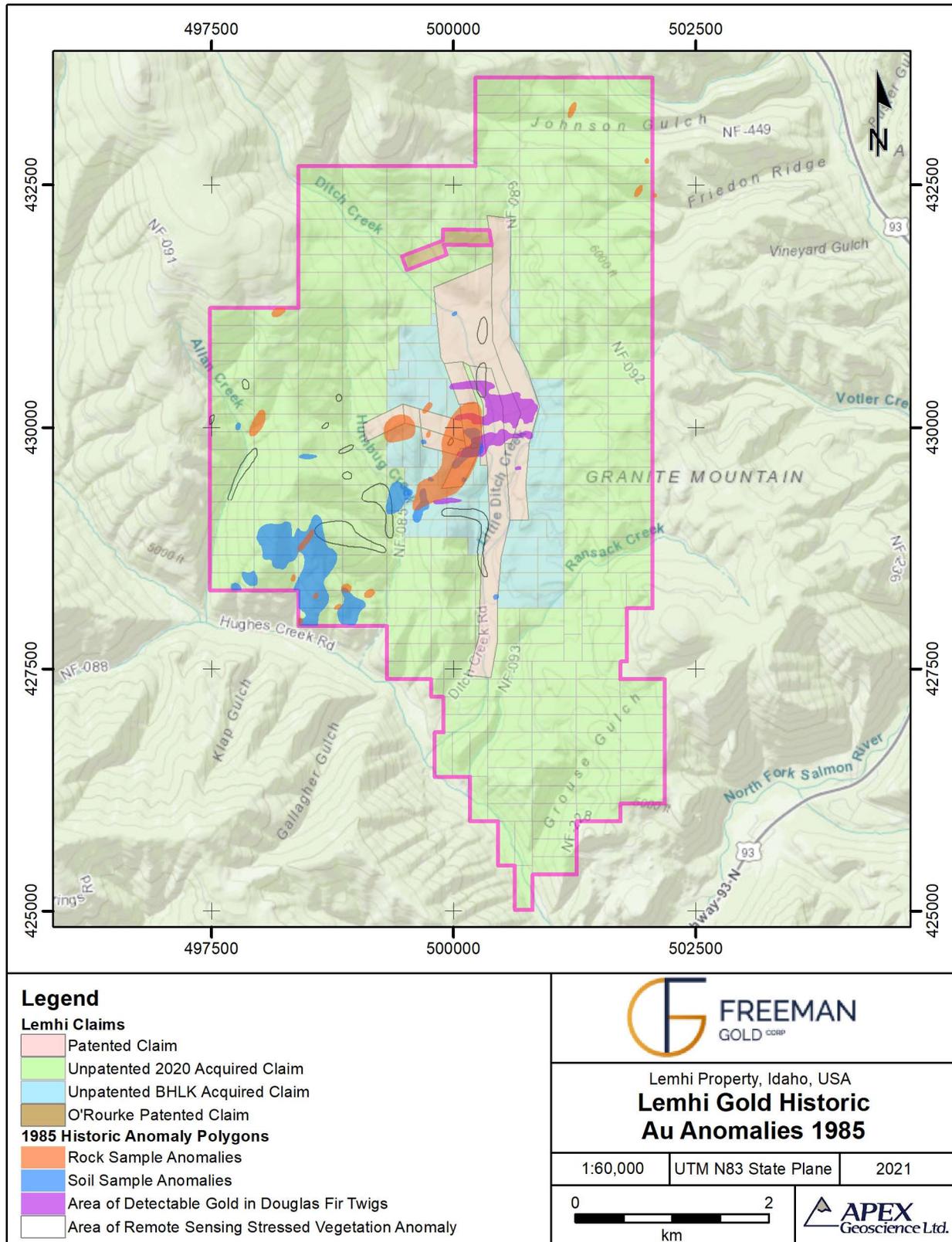


Figure 6.3: Historical soil, rock and vegetation anomaly polygons on the Lemhi Gold Project.



(CSAMT) data along six lines across the main prospect area in 1986. Quantech Geoservices performed a dipole-dipole Induced Polarization (IP)/Resistivity survey (5 lines - 7,200 line feet) and a time domain (TDIP) IP/Resistivity survey (54,600 line feet) in 1989 (Morrison, 1989).

Shaubs (1989) noted that drilling geophysical anomalies was not particularly successful. Gold mineralization correlates with intermediate resistivity and conductivity values rather than highs and lows, making targeting IP/resistivity anomalies problematic.

6.2.4 Drilling

Drilling has been conducted on the property by 3 previous owners from 1984 to 2012: FMC, AGR and LGT. A total of 420 historical drill holes: 366 RC holes (353 inside of the boundaries of the current property) and 54 core holes, have been completed on or near the Lemhi Gold Property. All available historical data pre-2012 was digitized and compiled by LGT and BHLK. The 2012 data was retained by ISGC. Both original and compiled drill data was provided to Lower 48 and Freeman. The availability of historical drill data is variable and summarized in Table 6.1. All historical drill holes for which collar locations are available, except for fifteen FMC holes, are located within the current Lemhi Gold Property Boundary (Figure 6.4). Collars exist for a total of 408 of the 420 holes completed. Assays exist for 411 of the 420 holes completed. Drill logs exist for 410 of the 420 holes completed. A total of 385 holes have collars, assays and drill logs.

Table 6.1: Summary of available Historical Drill hole data.

Company	Year	Total Drill Holes		Collar Data		Assay Data		Drill Log	
		RC	DDH	RC	DDH	RC	DDH	RC	DDH
FMC Gold Corporation	1985	12		12		12		12	
FMC Gold Corporation	1986	74	3	74	3	74	3	74	3
FMC Gold Corporation	1987	84		83		83		83	
FMC Gold Corporation	1989	22	1	16	1	22	1	21	1
American Gold Resources	1993	39	3	39	2	39	2	39	2
American Gold Resources	1994	20	3	20	3	20		20	
American Gold Resources	1995	100	4	96	4	99		99	
Lemhi Gold Trust	2012	15	40	15	40	15	40	15	40
	Total	366	54	355	53	364	46	363	46

6.2.4.1 FMC Drilling 1985 -1989

FMC conducted drilling on the Ponderosa property in 1985-87 and in 1989. During this period, 192 RC holes (>79,000 ft; >24,000 m) and four core holes (2,178 feet; 664 m) were drilled (Figure 6.4). Of these 192 holes, 177 holes with available collar coordinates are located within the current Lemhi Gold Project. The majority of holes were drilled vertically with the exception of 10 RC holes and one core hole which were drilled

at an angle of -45 degrees. These were oriented either to the southwest or northeast across the drill grid. Downhole orientation surveys were not completed.

FMC used Lang Exploratory Drilling of Salt Lake City, UT as the primary drill contractor.

6.2.4.2 AGR Drilling 1993-1995

AGR completed drilling on the Humbug property between 1993 and 1995. A total of 159 RC holes and 9 core holes were drilled, totalling >117,000 ft (>35,000 m) of drilling (Figure 6.4). Of these 159 holes, a total of 155 holes with available collar coordinates are located within the current Lemhi Gold Project. AGR drilled vertical holes with the exception of three core holes: DCC 93-1 and 2, and DCC 94-1. In 1995 down-hole surveys were completed for several drill holes. AGR drilled three NQ-size core holes in 1993 for geologic studies. The three holes drilled in 1994 (DCC 94 1-3) were large diameter PQ-size core drilled to obtain large samples for metallurgical testing. The four core holes in 1995 were drilled with HQ core using a split tube to obtain better core recovery and more intact core for geotechnical studies.

Drill holes ranged from 226 ft to 1,000 ft (69 – 305 m) in total length (depth). Water was encountered in most holes, but excessive water flow was recorded in only a few holes. The drillers were able to complete holes to over 600 ft in depth without the hammer watering out. The Humbug deposit was drilled out on a nominal 100 feet x 100 feet grid of holes oriented along N-S by E-W lines. Several holes were drilled outside the grid area, following weaker mineralization in the northeast and southwest.

AGR used Lang Exploratory Drilling of Salt Lake City, UT as the primary drill contractor. Target Drilling of Kelowna, British Columbia drilled the core holes for AGR in 1993-1995 using a Longyear 38 drill rig.

6.2.4.3 LGT Drilling 2012

LGT completed an aggressive core and RC drilling program on the Property in 2012 (Figure 6.4). A total of 25,787 ft (7,860 m) of HQ core was drilled in 40 holes throughout the LGT property. All LGT drill holes are located within the current Lemhi Gold Project. Hole depths ranged from 472 ft to 803 ft (144 – 245 m). Core holes were drilled as a combination of confirmation “twin” holes of historical RC drill holes, and in-fill and step-out holes of the known deposit. After completing several “twin” holes, some significant variation and discrepancies in assay results were identified between the historical RC holes and the recent core holes. To assist in understanding the cause of these discrepancies, LGT completed 15 RC holes totalling 8,765 ft (2,672 m). All core and RC holes were drilled vertically. Down-hole surveys were completed on all core holes and for 3 RC holes. LGT used Ruen Drilling of Clark Fork, Idaho as the drill contractor to complete the core drilling and Diversified Drilling of Missoula, MT as the RC drill contractor (Brewer, 2019).

Figure 6.4: Historical Drill hole locations on the Lemhi Gold Project.

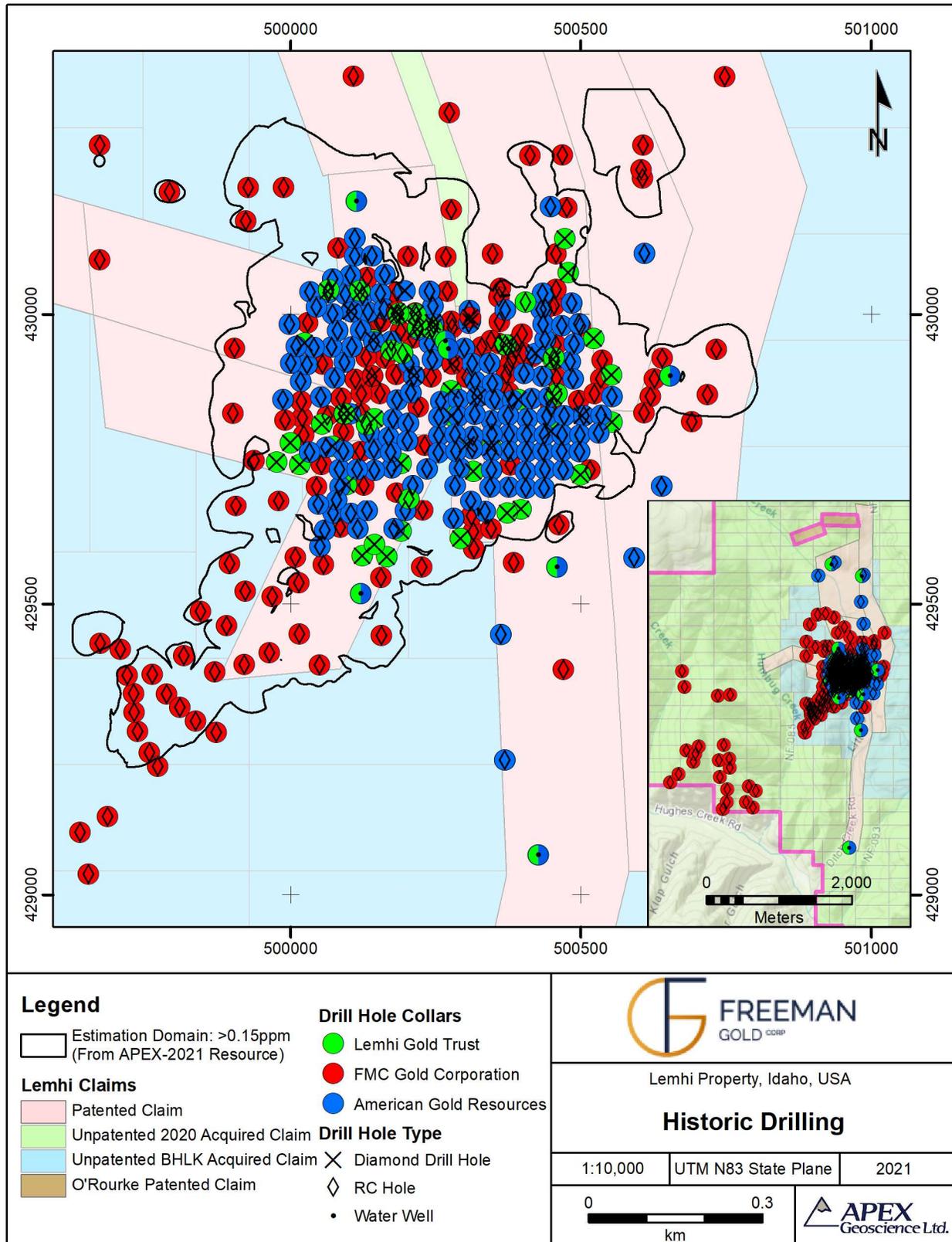


Table 6.2: Drilling highlights 2012 LGT core and RC holes.

Hole ID	From (m)	To (m)	Intercept		Au	
			Width (m)	Width (ft)	(g/t)	(opt)
LGT12-020C	28.22	40.54	12.31	40.4	2.47	0.072
Including	29.81	32.77	2.96	9.7	4.51	0.132
LGT12-021C	156.06	163.98	7.92	26.0	1.74	0.051
LGT12-022C	11.58	23.32	11.73	38.5	1.17	0.034
LGT12-022C	116.59	131.52	14.94	49.0	0.89	0.026
LGT12-024C	107.59	130.61	23.01	75.5	0.81	0.024
LGT12-025C	122.53	157.73	35.20	115.5	0.73	0.021
LGT12-028C	183.19	187.91	4.72	15.5	3.26	0.095
Including	183.18	184.86	1.68	5.5	8.22	0.240
LGT12-028C	194.31	198.12	3.81	12.5	5.47	0.160
Including	195.38	196.75	1.37	4.5	10.85	0.316
LGT12-029C	117.04	149.05	32.00	105.0	1.20	0.035
Including	126.19	131.06	4.88	16.0	3.63	0.106
Including	140.67	146.00	5.33	17.5	2.36	0.069
LGT12-029C	157.43	174.96	17.53	57.5	0.71	0.021
LGT12-014C	61.57	71.93	10.36	34.0	3.46	0.101
Including	67.67	71.93	4.27	14.0	7.24	0.211
LGT12-015C	32.92	49.68	16.76	55.0	2.62	0.076
Including	32.92	35.97	3.05	10.0	12.37	0.361
LGT12-015C	109.12	114.61	5.49	18.0	2.08	0.061
LGT12-017C	92.66	108.66	16.00	52.5	1.60	0.047
Including	92.66	101.80	9.14	30.0	2.40	0.070
LGT12-017C	116.74	167.34	50.60	166.0	0.67	0.020
LGT12-019C	123.75	136.25	12.50	41.0	1.67	0.049
Including	132.28	136.25	3.96	13.0	3.25	0.095
LGT12-023C	137.16	167.03	29.87	98.0	1.06	0.031
Including	138.38	144.48	6.10	20.0	2.37	0.069
LGT12-027C	68.28	77.72	9.45	31.0	1.56	0.046
LGT12-027C	106.83	130.76	23.93	78.5	0.65	0.019
LGT12-027C	136.86	163.83	26.97	88.5	0.75	0.022
LGT12-064R	21.34	25.91	4.57	15.0	4.35	0.127
LGT12-064R	88.39	129.54	41.15	135.0	1.19	0.035
Including	105.16	117.35	12.19	40.0	2.24	0.065
LGT12-064R	149.35	170.69	21.34	70.0	0.68	0.020
LGT12-065R	9.14	35.05	25.91	85.0	0.67	0.019
LGT12-066R	121.92	153.92	32.00	105.0	1.53	0.045
Including	131.06	135.64	4.57	15.0	3.82	0.111
LGT12-066R	160.02	182.88	22.86	75.0	0.94	0.027
LGT12-073R	30.48	42.67	12.19	40.0	2.06	0.060
Including	32.00	38.10	6.10	20.0	3.58	0.104

The results of the 2012 drill program indicate that gold mineralization is widespread, even more so than was evident from historical drilling. All 2012 holes encountered at least weak or spotty gold mineralization, with a number of holes providing excellent results with

both wide modest grade intercepts, narrower high-grade intercepts and often multiple downhole intercepts of note (Table 6.2). This is demonstrated in holes such as LGT12-064R which intersected 4.57 m (15 ft) grading 4.35 gpt (0.127 opt) Au at a depth of 21.34 m (70 ft) followed by 41.15 m (135 ft) grading 1.19 gpt (0.035 opt) Au. One of the four mineralized intersections in hole LGT12-015C comprises 16.76 m (55 ft) grading 2.62 gpt (0.076 opt) including 3.05 m (10 ft) grading 12.37 gpt (0.361 opt) Au. Other wide intercepts include LGT12-029C with 1.2 gpt (0.035 opt) Au over 32.00 m (105 ft) core length, LGT12-023C with 1.06 gpt (0.031 opt) Au over 29.87 m (98 ft) and LGT12-66R with 1.53 gpt (0.045 opt) over 32.00 m (105 ft) hole length (Table 6.2). The LGT drilling program was successful in confirming the historically recognized gold deposit at the LGT Gold Property as well as identifying incremental southward extension of the main zone of mineralization (Northern Vertex, 2012; Brewer, 2019).

A total of 12 of the 40 core holes completed in 2012 were devoted to twinning historical RC holes. Some significant discrepancies were identified in the twinning program. A significant effort was spent in an attempt to gain a better understanding of the discrepancies between the historical RC and the 2012 core results, in fact, a number of additional 2012 RC holes were also added into the twin drilling program to assist in sorting out the discrepancies. In general, the ore zones between the historical holes and their 2012 twin holes showed excellent continuity. However, there were a number of discrepancies in the gold grades within these mineralized zones. The twin core hole intersections were often lower grade in the 2012 drilling than in the historical RC drilling. Out of the twelve 2012 core vs historical RC hole pairs, a total of five holes yielded greater than 35% difference in grade over more than 140 m intervals. A total of 6 core holes vs historical RC holes yielded marginal differences or were fairly low grade. One core hole, LGT12-011C yielded a 37% greater grade over 152 m than the historical RC hole (86004) that it attempted to twin (Brewer, 2019).

A total of 9 RC holes were subsequently completed in 2012 in an attempt to twin a number of the 2012 core holes that were drilled to twin historical RC holes. On average, the 2012 LGT core holes yielded approximately the same grade as the 2012 RC holes or slightly higher grades, with the exception of the RC hole (LGT12-069R) drilled to twin LGT12-011C discussed above.

In general, there was pretty good reproducibility between the 2012 twinned core and RC holes. It is not immediately clear what is the cause of some of the discrepancies with the historical RC holes, but the uncertainty of the locations of the historical holes, combined with the lack of downhole surveys, could easily be problematic along with other more concerning issues such as nugget effect and/or smearing of gold during drilling due to poor drilling practices or techniques in the 1980's and 1990's.

6.2.4.4 Quality and Reliability of Drill Data

Historical drilling at the Lemhi Gold Deposit was designed and managed by experienced teams of exploration geologists working for major gold mining companies. Drill contractors and assay labs used by FMC, AGR and LGT were all established experts in their fields. All work appears to have been done to industry standards at the time. There

is no reason to suspect any tampering with samples or other breaches of security during the drilling programs. The author believes that the drilling data is reliable and accurate.

Drill samples from historical drill programs were handled according to industry standards at the time. For the 2012 LGT drill program quality control / quality assurance procedures were implemented that met, or exceeded, all industry standards today (Brewer, 2019).

6.2.4.4.1 Pre-2000 Drilling

This sub-section encompasses Drilling completed by FMC from 1985 to 1989 and AGR from 1993 to 1995. The author has relied upon reports from that era and information provided by Mr. Brian Brewer and Mr. Dennis Krasowski who participated not only in the 2012 LGT drilling program but some of the older historical programs.

The RC drill holes used a 5.5 inch (12.7 cm) sized bit. Samples of cuttings were collected continuously on 5-foot intervals and split either using a Gilson splitter for dry drilling or using a rotary splitter for wet drilling. The samples weighed approximately 10 to 15 pounds (4.5 – 7 kg). Core drill holes used NQ, HQ or PQ core diameter drills. Core was logged and then split. One split (one-half of the core) was sent for analysis. The other core split was retained for additional study and sampling, but was eventually discarded.

FMC used Intermountain Analytical Services Inc. (“Intermountain”) of Pocatello, ID for analysis of drill samples, and Bondar Clegg of North Vancouver, BC for geochemical analyses. AGR used Bondar Clegg and Barringer Labs (“Barringer”) of Sparks, NV for analysis of rock and drill samples. These analytical labs were not ISO-registered at the time, but were considered reliable assay laboratories.

No standard or blank pulps were inserted into the sample stream in the early drilling by FMC. However, FMC used Bondar Clegg as an umpire lab and routinely sent large numbers of pulps to Bondar Clegg as checks against Intermountain’s assays. In September 1987, FMC started inserting check samples every 10th sample (50 feet), beginning with hole 87-047. The author was not able to locate the check assay results or find any discussion of the results. AGR apparently did not insert control samples in the sample stream and relied on the analytical labs’ internal quality-control procedures. However, AGR did run numerous crosschecks against two umpire labs. Although relying on the labs’ internal QA/QC procedure is not ideal, the author considers the combination of the QA/QC protocols of the analytical labs and the umpire lab checks to be acceptable and adequate for the exploration phase of the Lemhi project.

AGR conducted a series of check assays in 1994. Pulps from samples prepared and assayed by Barringer Labs were assayed at the Rocky Mountain Geochemical (“Rocky Mountain”) and/or Chemex Laboratory (“Chemex”). A total of 147 samples were checked by Rocky Mountain and 50 samples were checked by Chemex. Additionally, twenty-eight samples were checked by both Rocky Mountain and Chemex (Figure 6.5). Both mineralized and barren material were check assayed against original assays ranging from

<1 part per billion (ppb) Au to 38.29 g/t Au. There was considerable difference in the absolute value of gold assays between the labs. Although some of the discrepancy can be attributed to nugget effect (erratic distribution of fine gold grains), there is an obvious laboratory bias to the data. Chemex's assays are consistently slightly lower than Barringer's initial assay, but within an acceptable range. Rocky Mountain's assays were consistently and significantly lower than those of both Barringer and Chemex. Figure 6.5 illustrates the difference in assays for the higher-grade samples (17 samples in excess of 3 g/t Au) analyzed by Barringer, Chemex, and Rocky Mountain.

The consistent variation in gold assays among the three analytical labs is both striking and puzzling. The average grade of the 17 samples analyzed by Barringer was 11.241 g/t Au. The average grade obtained by Chemex was 9.293 g/t Au, 83% of Barringer's average. Rocky Mountain's assays averaged only 6.155 g/t Au, a mere 55% of Barringer's average grade and only 66% of Chemex's average. The reasons for the discrepancies are not clear.

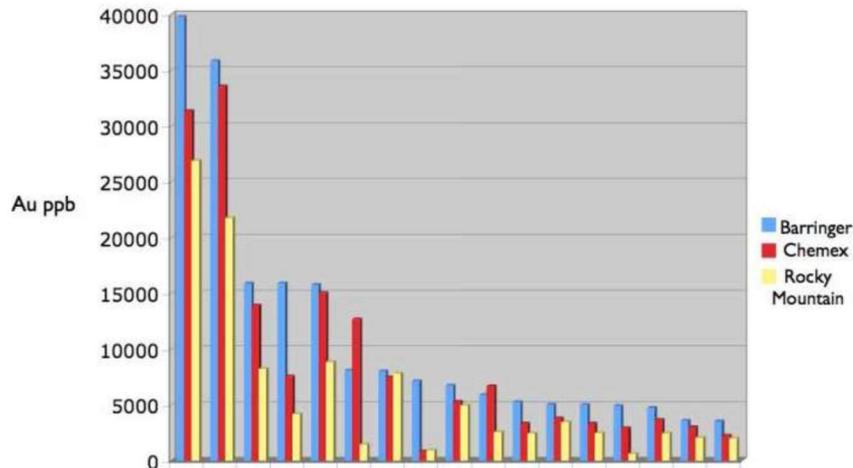
Nugget effect alone would produce variation in gold grades, but would be somewhat random. Barringer's and Chemex's assays were two-assay-ton fire assays, which should help reduce the nugget effect by assaying a larger charge (60 g vs 30 g for 1 assay-ton fire assay), whereas Rocky Mountain's assays were smaller one-assay-ton fire assays. Part of the problem may have stemmed from the use of AA finish on fire assay fusions. The upper limit for AA finish on fire assays is 10 g/t Au, and at gold grades of >5 g/t the reproducibility of samples is reduced because the solution containing the gold dissolved from the fire assay bead must be diluted, a process which decreases accuracy. Inconsistencies in dilution procedures between labs can produce systematically high or low values between labs. Another possible cause of the discrepancies could be errors in the rolling process and subsequent sub-sampling of pulps, producing inconsistent sample splits (Colwell, 1994). There does seem to be a significant problem with the results from Rocky Mountain, and it was Cuffney's (2011) opinion that those results should be discarded.

A second set of check assays was run by Mineral Processing and Environmental Laboratories Inc. (MPEL) of Sparks, NV acting as the umpire lab. AGR submitted pulps from 154 drill samples for check gold assays. Both Barringer and MPEL utilized 2 assay-ton fire assays with an AA finish. Although there was considerable difference between individual analysis by Barringer and MPEL, the difference was random and was greater at high gold grades, as would be expected from a nugget effect. For 81 samples exceeding 1 g/t Au the average grade of the Barringer assays was 3.065 g/t Au, whereas the average of MPEL's assays was 3.222 g/t Au, a difference of only 5%. For 73 samples containing less than 1 g/t Au Barringer's average grade was 635 ppb, whereas MPEL's average was 556 ppb Au (Figure 6.6).

MPEL conducted duplicate check assays on several of the Barringer pulps and found a similar variance in gold grades, thus confirming that the irreproducibility of gold assays is a function of erratically distributed fine gold grains, likely the nugget effect. The nugget effect is surprising, given the fine-grained nature of gold particles (5-25 microns) found

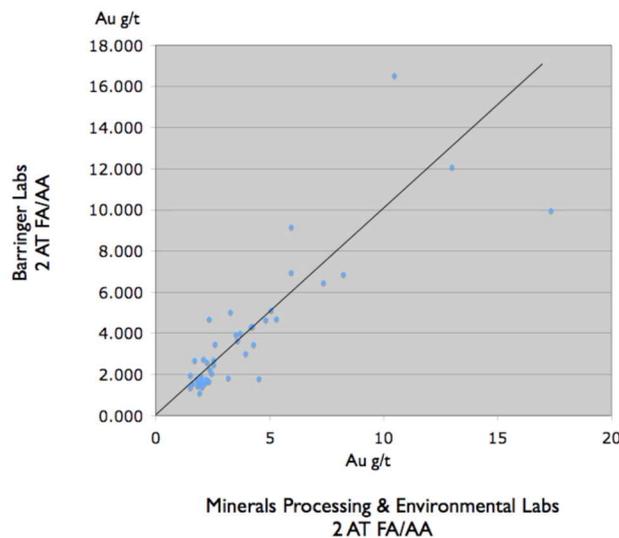
both in petrographic and metallurgical studies. It is likely that a coarser fraction of gold particles is present in fair abundance, perhaps associated with some of the late veins. Krasowski (1994) mentions observing visible gold in core holes drilled in 1993 and 2012. Cuffney (2011) has observed visible gold in outcrop on the property substantiating the presence of coarse gold, at least locally within the deposit. This is supported also by the presence of actual placer gold accumulations in the local creeks.

Figure 6.5: Comparison of check assays by Chemex and Rocky Mountain Geochemical against original Barringer fire assays. Samples with original assay >3 g/t Au are plotted (Cuffney, 2011).



FMC drilled three core holes (C-1, C-2, C-3) as twin holes of RC holes in 1987. The core holes were located within 10 feet of the RC collars and drilled in the same vertical

Figure 6.6: Barringer Lab's gold assays vs. MPEL's assays for 34 samples containing > 1.5 g/t in initial samples. Although there is considerable scatter, it is random and increases with gold grade. Best fit line through the data approximates a 45° slope (Cuffney, 2011).



orientation. All three core holes showed significant variation in grade from the RC holes. Individual 5-foot sample intervals rarely correlate, yet the tops and bottoms of broad mineralized zones (and thickness of zones) are fairly consistent. There is also significant variation in the average grade of the mineralized zones. Figure 6.7 illustrates the differences between core hole C-2 and reverse circulation hole 86-014.

Cuffney, 2011 concluded:

“The differences in gold grades are likely due to one or more of four potential factors, irregular distribution of quartz veining and gold mineralization within the deposit, a nugget effect, core loss through the mineralized zones, and hole deviation. Although the variation in grade on detailed scale is significant, overall mineralization holds together and the effect on tons and grade should be minimal”.

It is also possible that the wet drilling conditions for the RC drill program may have concentrated the gold mineralization due to a loss of sericite and associated light minerals. However, this would not explain the higher grades encountered in core drilling vs. RC drilling. Reverse-circulation drilling in highly broken or friable rocks with high water flows can lead to down-hole contamination, particularly if free gold is present. Typically, for holes with such contamination, gold values will gradually tail off down-hole from a high-grade intercept and/or will spike every 20 feet down-hole at rod changes (when material can fall down-hole). These patterns were not observed in the reverse-circulation drill logs. FMC’s drill logs were checked for notes on water levels and water flows, and high-water flows were mentioned in only a few holes. Significant water was usually not encountered until at least 400-600 feet in most holes. There does not seem to be a down-hole contamination problem with reverse circulation drilling at the Lemhi Gold deposit.

FMC did not perform down-hole orientation surveys on its drill holes. AGR started surveying holes near the end of the drilling program in 1995. Fairly significant down-hole deviation was noted in some of the holes. Given the tight (nominal 100 foot) spacing of the holes, the actual location of gold intercepts at depth and the relationship of intercept between adjacent holes in both AGR’s and FMC’s drilling is somewhat questionable.

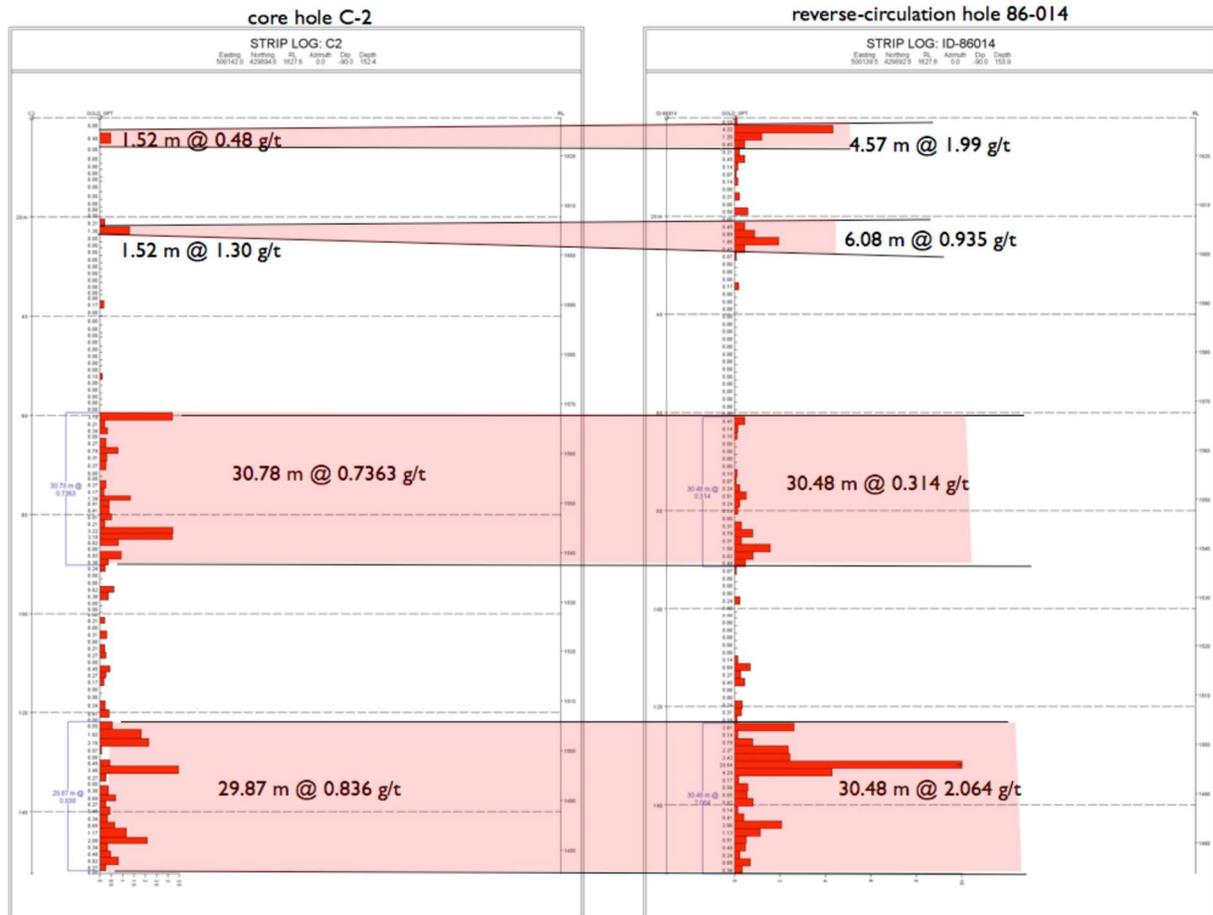
In conclusion, the historical pre-2000 drilling completed on the Lemhi Gold Project for FMC and AGR was conducted by experienced professionals using industry best practices at the time. With the possible exception of the lack of down-hole surveys, the work conducted was adequate for mineral resources calculations. The gold mineralization within the Lemhi Gold Deposit is erratically distributed and a nugget effect is plausible due to the presence of fine to moderately coarse free gold, which causes difficulties in replication of individual gold assays.

6.2.4.4.1 LGT Drilling 2012

Core drilling was completed using HQ core diameter drills. Drill core was securely stored at the drill site and the core logging/office facility in Salmon, Idaho. The core processing entailed cleaning of the core, geotechnical and geological logging photographing and sampling. During the geological logging process, the geologist identified and clearly

marked all sample descriptions and intervals along with placement of all Quality assurance / quality control (QA/QC) samples (Brewer, 2019).

Figure 6.7: Strip log comparison of core holes C-2 and RC hole 86-014 (Cuffney, 2011).



Quality assurance / quality control samples included analytical reference standards and blanks along with duplicates. Analytical reference standards of varying geochemical grades were inserted into the normal sample stream at a frequency of no less than 1 per 30 normal core samples. Coarse blank material samples were inserted immediately after or within a presumed mineralized interval and at a frequency of no less than 1 per 30 normal core samples randomly and at an alternating frequency to the analytical reference standard (Brewer, 2019).

The core was split utilizing either a 14-inch diamond core saw or a hydraulic core splitter. Samples of one-half core were submitted for assay to ALS in Reno Nevada, an ISO-accredited laboratory. Standard analytical methodology for all LGT core samples included a standard fire assay for gold with a 30g nominal charge weight and 61 element four acid “near total” digestion ICP-AES. Subsequent analysis included metallic screen fire assay for all samples that initially reported 4.0 g gold or greater.

Because the 2012 RC drilling was initiated to try to better understand the discrepancies between the historical RC drilling and the more recent core drilling, the 2012 RC sampling process tried to achieve 100% sample collection from the drill rig. This included collecting all water as well as drill cuttings. Samples were collected in 5-gallon buckets, which at times resulted in a numerous buckets per 5-foot sample with many buckets containing only water and minimal cuttings and slimes. All samples were treated with flocculant, water was decanted and solid material with slimes were combined for one sample per 5 feet of drilling (Brewer, 2019). All samples were securely shipped to ALS laboratory in Reno, NV. The RC samples were analyzed using the same methods as the core samples.

Down-hole surveys for all core holes were conducted every 50 ft utilizing a single shot survey camera. Minimal deviation was detected in core holes. All RC holes were left open upon completion and attempts were made to case the holes with PVC in order to facilitate down-hole surveys. International Directional Services was contracted to complete the down-hole surveys of the RC holes, however, only three holes (LGT12-60R, 69R and 72R) were stable enough to achieve any meaningful down-hole survey. LGT12-60R had the most deviation at 6° in 700 ft. Holes LGT12-69R and LGT12-72R had 2° in 525 ft and 3.25° in 595 ft, respectively. All drill collars were adequately marked and preserved after hole abandonment and were subsequently surveyed by a Professional Land Surveyor upon completion of the drill program.

6.3 Historical Resource and Reserve Estimates

This section contains historical information on resource estimates made prior to Freeman entering into an agreement to acquire the Lemhi Gold Project. Historical resource estimates from the 1980's and 1990's were completed prior to the implementation of NI 43-101 and the construction of the CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines, dated November 23rd, 2003 and its recent update, dated November 29th, 2019 along with the most recent CIM Definition Standards on Mineral Resources & Mineral Reserves dated May 10th, 2014. These historical resource estimates use resource categories different from those defined by the CIM Definition Standards. In addition, even the most recent resource estimates that were completed on behalf of Lemhi Gold Trust in 2012 and 2013, were informal estimates that were not properly documented in any NI 43-101 Technical Reports and were completed prior to the most recent CIM Guidelines of 2019, and CIM Definition Standards of 2014. A brief synopsis of the history of the resource calculations on the Lemhi Gold Project is presented in Table 6.3 and is discussed below. The authors of this report, independent QP's, are not treating any of the historical resource estimates as current mineral resources or mineral reserves. They are presented to assist in describing the extent of gold mineralization at the project and to outline the exploration potential. The historical resources presented are superseded by the drilling conducted in 2020 by Freeman and the MRE presented in this Technical Report. The following summary is largely compiled from Dufresne (2020), Brewer (2019) and Cuffney (2011).

Table 6.3: Historical Resource Estimates Lemhi Gold Deposit*.

SOURCE	CATEGORY*	GRADE opt (g/t)***	TONS (TONNES)	CUT-OFF opt (g/t)***	OUNCES*
1987 FMC (Disbrow, 1987)	“Geological Reserve”	0.057 (1.95)	3,006,595 (2,727,537)	0.035 (1.20)	171,375
1989 FMC (Mine Reserve Associates)	“Reserves”	0.055 (1.89)	623,700 (565,811)	0.032 (1.10)	34,304
		0.044 (1.51)	1,014,400 (920,248)	0.024 (0.82)	44,634
1996 AGR (Pincock Allen Holt PAH - Sandefur, 1996)	“Geological Resource”	0.0375 (1.29)	32,361,539 (29,357,894)	0.003 – 0.012 (0.1 – 0.4)	1,217,704
	“In-pit Geological Resource”	0.0385 (1.32)	13,649,974 (12,383,048)	0.003 – 0.012 (0.1 – 0.4)	525,938
1996 AGR (Independent Mining Consultants)	“In-pit Potential Mineable Resource”	0.036 (1.23)	15,031,000 (13,635,894)	0.011 (0.38)	542,620
2012 LGT (Practical Mining Swanson et al. 2012)**	Indicated	0.025 (0.87)	21,003,440 (19,054,000)	0.004 (0.14)	529,300
	inferred	0.020 (0.69)	14,083,130 (12,776,000)	0.004 (0.14)	281,400
2013 LGT (Practical Mining)**	Measured & Indicated	0.024 (0.81)	24,222,402 (21,974,200)	0.006 (0.20)	569,631
	Inferred	0.018 (0.61)	13,781,831	0.006 (0.20)	268,959
2013 LGT (Practical Mining)**	Unconstrained Pit Resource	0.020 (0.68)	23,461,740 (21,284,138)	0.006 (0.21)	464,480
	Patent Constrained Pit Resource	0.020 (0.67)	10,796,117 (9,794,075)	0.006 (0.21)	211,648

*All resources are considered historical in nature. Resources completed in or prior to 2013 either do not use categories as set out in in the CIM Definition Standards on Mineral Resources & Mineral Reserves (2014), and/or are outdated due to subsequent drilling.

**The authors of this Technical Report do not have enough information to verify the 2012 or 2013 Practical Mining resource estimates (which were internal estimates with no formal technical reports) as current mineral resources, therefore they are considered historical in nature and are superseded by the MRE presented in this Technical Report.

***opt = troy ounces per short ton, gpt or g/t = grams per metric tonne.

6.3.1 1987 FMC Resource

In 1987, FMC reported that the Ponderosa property (i.e. Lemhi Gold Deposit) contained an in-house “drill indicated mineral inventory” of 3,006,595 tons (2,727,537 tonnes) grading 0.057 opt Au (1.95 g/t Au), using a cut-off grade of 0.035 opt Au (1.20 g/t Au) as shown in Table 6.3. The historical estimate was reported by FMC in a 1987 internal company report titled “*Ponderosa Reserve Evaluation*” (Disbrow, 1987). Historical “drill indicated reserves” were estimated using a block model of 50 ft x 50 ft x 10 ft and varying gold prices. The “reserves” ranged from 237,000 tons grading 0.076 opt (2.61 g/t) Au for 18,000 oz Au at \$350/oz gold to 989,300 tons grading 0.058 opt (1.99 g/t) Au for 57,000

oz Au at \$550/oz gold. Disbrow (1987) concluded, “*although the deposit displays significant geologic reserves, the surface mineable reserve potential is very limited.*” The 1987 study also stated, “*A brief economic analysis indicated that the reserves, as defined, would not support the capital required*”.

FMC’s “mineral inventory” and “reserve” estimates were calculated prior to implementation of NI 43-101 and use categories other than those defined by the CIM Definition Standards on Mineral Resources & Mineral Reserves (2014). The term “mineral inventory” was an in-house term used by FMC to indicate mineralization defined by wide-spaced drilling, but for which no economic assessments had been made. The confidence level of FMC’s “mineral inventory” approximates that of inferred resources as defined by the CIM Definition Standards, however, the lack of economic consideration prevents the mineralization from being considered a resource estimate by current definitions. FMC’s term “reserve” does not equate to any reserve category as defined by the CIM Definition Standards on Mineral Resources & Mineral Reserves (2014). Given that FMC’s own preliminary economic analysis indicated that the gold mineralization was uneconomic, the “reserve” estimate would not qualify as a reserve. This 1987 estimate was superseded by revised estimates in 1989 and estimates made for AGR in 1996 after additional drilling.

6.3.2 1989 FMC resource

In 1989 Mine Reserve Associates updated the geologic model and resource estimate for the Ponderosa Property on behalf of FMC. The modelling produced resource estimates termed “reserves” at the time ranging from 623,700 tons (565,811 tonnes) grading 0.055 opt (1.89 g/t) Au at a cut-off grade of 0.032 opt (1.10 g/t) Au to 1,014, 400 tons (920,248 tonnes) at 0.044 opt (1.51 g/t) Au at a cut-off grade of 0.024 opt (0.82 g/t) Au (Table 6.3). The historical estimate was reported in a 1989 company report titled “*Ponderosa re-evaluation: unpublished intra-company memorandum*” prepared for FMC Gold Corporation (Disbrow, 1989). The 1989 update was based on re-interpretation of the geometry of the mineralization, revised production costs and grade estimation parameters which allowed the high-grade zones to be estimated separately from the surrounding low-grade material. An economic analysis concluded that the project would be a break-even proposition, but was sensitive to the price of gold, operating costs and heap leach recoveries. Disbrow therefore recommended conducting additional drilling and heap-leach testing. FMC’s 1989 resource estimate used resource categories not allowable as defined by the CIM Definition Standards on Mineral Resources and Mineral Reserves. The historical estimate was superseded by estimates made in 1996 and 2012 – 2013, which encompass additional drilling.

6.3.3 1996 PAH resource

In 1996, Pincock, Allen, and Holt (PAH) developed a geological model and calculated resources for the Lemhi Gold (Humbug) Deposit. PAH estimated “geological resources” (Measured, Indicated and Inferred) as 32.36 million tons (29.36 million tonnes) grading 0.0375 opt (1.29 g/t) Au containing 1.217 million oz of Au. The historical estimate was

reported in “Geologic and Resource Model of the Humbug Deposit” an unpublished report prepared for American Gold Resources Inc. (Sandefur, 1996).

The PAH geological and grade block models were based on 277 RC drill holes totaling 157,000 ft (47,854 m) of drilling. The resource was developed utilizing a multiple-indicator kriged model with a cut-off grade varying from 0.1 g/t Au to 0.4 g/t (0.003 to 0.012 opt Au). PAH used a block size of 25 ft x25 ft x10 ft (7.6 x 7.6 x 3 m) for the block model. PAH classified resources as “measured and indicated” if they were within 75 feet of a drill hole. The PAH estimates had a very high in situ waste to resource ratio of 45.7:1 for the Measured and Indicated geological resources and 29.2:1 for the larger Measured, Indicated, and Inferred geological resource (Table 6.4). The author suggests that given that the drilling in these areas was largely confined to a narrow NW-SE corridor, the large amount of rock classified as waste was likely a function of the lack of drilling, rather than rock actually verified as barren by drilling.

Table 6.4: Humbug Geological Resources calculated by PAH 1996 (Sandefur, 1996).

American Gold Resources Humbug Project Undiluted Geologic Resources				
Rock Type	Tonnage		Grade Oz Au/ton	Contained Ounces
	Waste	Resources		
Measured, Indicated and Inferred (Au>=0.0122 grade multiple indicator model with 0.72 factor)				
1	241,339	580,661	0.0433	25,141
2	5,834,569	14,438,431	0.0433	624,692
10	6,226,000	0	0.0000	0
20	161,000	0	0.0000	0
50	44,978,472	1,991,528	0.0291	57,994
61	887,882,954	15,355,046	0.0329	505,813
All	945,328,461	32,361,539	0.0375	1,213,704
Measured, Indicated (Distance = 75.0 ft) (Au>=0.0122 grade multiple indicator model with 0.72 factor)				
1	292,714	529,286	0.0422	22,324
2	6,961,748	13,311,252	0.0435	579,408
10	6,226,000	0	0.0000	0
20	161,000	0	0.0000	0
50	45,856,811	1,113,189	0.0296	32,996
61	897,276,629	5,961,371	0.0308	183,719
All	956,767,434	20,922,566	0.0391	818,424
Tonnage and ounces given to one's unit and grade given to 0.0001 opt for comparative purposes only				

PAH's resource estimates were made prior to implementation of NI 43-101 and use categories other than those defined by the CIM Definition Standards on Mineral Resources & Mineral Reserves (2014). Drill spacing of 75 feet for PAH's Measured and Indicated Geological Resource, given the variography of the deposit, is sufficient to meet

current confidence levels equivalent to Measured and Indicated Resources. However, PAH's combined resources were not in any way constrained by any kind of an economic model in order to demonstrate a reasonable prospect for future economic extraction. The resource estimate has been superseded by 2012 – 2013 resource estimates and the current 2021 MRE reported here in, along with additional drilling conducted during 2012 and 2020, therefore the resource estimate is considered historical in nature.

PAH made a separate estimate of "in-pit resources" based on a floating cone pit design. Several different grade indicator models were used, but all produced similar results, ranging from 525,938 in situ oz of Au to 584,205 in situ oz of Au at more reasonable waste to resource strip ratios of 4.73:1 to 4.78:1. PAH's table of resource calculations is reproduced below (Table 6.5)

Table 6.5: Humbug In-pit Measured and Indicated Resources calculated by PAH 1996 (Sandefur, 1996).

American Gold Resources Humbug Project Comparative In-Pit Resources					
Rock Type	Tonnage		Contained		SR tons/tons
	Waste	Resource	Grade Oz Au/ton	Ounces	
Au>=0.0112 Grade Single Indicator Model					
1	70,965	379,035	0.0358	13,564	0.19
2	2,374,317	11,980,683	0.0419	504,696	0.20
10	3,821,000	0	0.0000	0	0.00
20	19,000	0	0.0000	0	0.00
50	10,521,013	169,987	0.0242	4,106	611.89
61	48,282,975	1,238,025	0.0251	31,084	39.00
All	65,087,742	13,768,258	0.0400	550,439	4.73
Au>=0.0112 Grade Multiple Indicator Model					
1	71,685	378,315	0.0397	15,035	0.19
2	2,401,592	11,953,409	0.0446	533,360	0.20
10	3,821,000	0	0.0000	0	0.00
20	19,000	0	0.0000	0	0.00
50	10,534,911	156,089	0.0258	4,027	67.49
61	48,362,209	1,158,791	0.0274	31,797	41.74
All	65,206,026	13,649,974	0.0428	584,205	4.78
Au>=0.0112 Grade Multiple Indicator Model with 0.72 Factor					
1	71,685	378,315	0.0366	13,845	0.19
2	2,401,592	11,953,409	0.0400	477,941	0.20
10	3,821,000	0	0.0000	0	0.00
20	19,000	0	0.0000	0	0.00
50	10,534,911	156,089	0.0248	3,875	67.59
61	48,362,209	1,158,791	0.0261	30,292	41.74
All	65,206,026	13,649,974	0.0385	525,938	4.78
Au>=0.0112 Grade Multiple Indicator Model with 0.84 Factor					
1	71,685	378,315	0.0379	14,355	0.19
2	2,401,592	11,953,409	0.0420	501,691	0.20
10	3,821,000	0	0.0000	0	0.00
20	19,000	0	0.0000	0	0.00
50	10,534,911	156,089	0.0252	3,941	67.59
61	48,362,209	1,158,791	0.0267	30,936	41.74
All	65,206,026	13,649,974	0.0404	550,912	4.78
Based on 0.0112 single indicator floating cone pit					

PAH used the 0.72 indicator factor as the best fit to the model. This produces an in-pit resource of roughly 525,938 oz Au at a grade of 0.0385 opt (1.32 g/t) Au and a waste to resource strip ratio of 4.78:1. PAH's resource estimates were made prior to implementation of NI 43-101. This estimate was superseded by a revised estimate made later in 1996 by Independent Mining Consultants (IMC) and more recent estimates made by Practical Mining, LLC in 2012 and 2013 and the MRE reported in this Technical Report. The authors of this report are treating this mineral resource estimate as a historical resource.

6.3.4 1996 IMC Resource

Later in 1996, IMC calculated a revised resource estimate applying realistic mining criteria at the time. IMC used PAH's block model and a floating cone algorithm based on \$400/oz Au to design the pit. The final pit design was used to calculate "potential mineable resources" at cut-off grades ranging from 0.010 opt (0.34 g/t) to 0.030 opt (1.03 g/t) Au. IMC settled on a plan using a 0.011 opt (0.38 g/t) Au cut-off grade. The in-pit "potential mineable resource" was reported as 15,031,000 tons (13,635,894 tonnes) at 0.036 opt (1.23 g/t) containing 542,620 ounces of gold. The strip ratio was 4.90:1. IMC's table of calculations at different cut-off grades is reproduced below (Table 6.6). The historical mineral resource estimate was reported by Independent Mining Consultants in a 1996 internal company report titled "*American Gold Resource Corporation Humbug project, Idaho, scoping study, mine plan, capital and operating costs*" prepared for American Gold Resources Inc. (IMC, 1996).

Table 6.6: Humbug historical "potential mineable resources" estimated by IMC (1996).

Potential Mineable Resources by Gold Cutoff Grades				
Gold Cutoff	Ore Ktons	Gold (oz/t)	Gold (koz)	Strip Ratio
0.010	15,070	0.036	544.03	4.89
0.011	15,031	0.036	542.62	4.90
0.013	14,735	0.037	539.30	5.02
0.015	14,200	0.037	531.08	5.25
0.020	12,956	0.039	510.47	5.85
0.025	11,012	0.042	465.81	7.06
0.030	8,730	0.046	403.33	9.16
Total Ktons Contained in The Pit 88,723				

IMC used a multiple indicator kriging partial block model for the resource study. Due to multiple correction factors and dilution considerations, IMC found the kriging method to be unstable and prone to yielding a wide range of resource estimate results, depending on the correction factors applied. The study concluded that the use of a better estimation method than indicator kriging would be preferable. IMC classified the historical estimates as "potential mineable resources", which is a term not defined by the CIM Definition Standards on Mineral Resources & Mineral Reserves (2014). This historical estimate has been superseded by more recent resource estimates constructed in 2012 and 2013 by Practical Mining, LLC and by more recent drilling and the MRE presented in this Technical

Report. The authors of this report are not treating this historical mineral resource estimate as a current mineral resource.

6.3.5 2012-2013 LGT Resources

Prior to the initiation of the 2012 drill program, LGT commissioned Practical Mining, LLC (Practical) of Elko, Nevada to complete an informal but modern mineral resource estimate based on all the historical drilling data. The historical estimate was reported by Practical in a 2012 internal unpublished company report entitled “*Lemhi Project Geologic Model and Resource Estimate January 2012*” prepared for Lemhi Gold Trust (Swanson et al., 2012). Practical utilized grade shells, a 0.14 g/t (0.004 opt) Au cut-off and modeled the mineralization with a 2 x 2 x 2 m block model, which gave a resolution that maintained a reasonably accurate volume of the stacked mineralization shapes and accurately fit the modeled geology. Only samples within the grade shell were used to estimate the blocks within the grade shells, which prevented both dilution and over-estimation. Practical delineated a mineral resource (not pit constrained) of 21.0 million tons (19,054,000 tonnes) at 0.025 opt (0.87) gpt Au for 529,300 oz Au in indicated and 14.083 million tons (12,776,000 tonnes) at 0.020 opt (0.69) gpt for 281,400 oz Au inferred using a lower cut-off of 0.004 opt (0.14 gpt) Au.

Despite having a cut-off grade that is 38% lower than that used by PAH, Practical’s resource has 33% fewer ounces than the 1996 PAH estimate. The lower average grade is, at least partly, attributed to the lower cut-off grade, however the decrease in total ounces is more difficult to reconcile. One explanation for the difference is that PAH overestimated the tons and grade by using a block size that did not have a high enough resolution to accurately model the geology and mineralization shapes, and by populating those blocks with grades derived from a more restrictive sample population than that depicted by the 7.6 x 7.6 x 3 m blocks used in the PAH model. Practical Mining validated their block model by comparing the average grades obtained by each of the three grade estimation techniques and comparing this grade to the average grade of all drill composites within the 0.14 gpt grade shells (Table 6.7).

Table 6.7: Practical Mining's grade estimation comparisons (Swanson et al., 2012).

Grade Estimation Method	Tonnes (000's)	Grade (g/t)	Ounces (000's)
Ordinary Kriging	32,420	0.781	814.1
Inverse Distance			
Cubed	32,420	0.785	818.2
Nearest neighbor	32,420	0.778	810.9
3M Drill Composites		0.861	

Subsequently, Practical Mining re-blocked the 2x2x2 blocks to 6x6x8 meter blocks to represent the selective mining unit. The average grade of the larger block was calculated as the weighted average grade of the smaller blocks within each large block. Lerchs-

Grossman optimal pits were calculated using the large blocks at a range of gold prices including \$1,275 per ounce and \$1,400 per ounce (Table 6.8).

Table 6.8: Practical Mining's Lemhi open pit resource (Swanson et al., 2012).

Cutoff	Indicated			Inferred		
	Tonnes (000's)	Gpt	Ounces (000's)	Tonnes (000's)	Gpt	Ounces (000's)
\$1,275 Pit (0.025 g/t)	13,758	0.85	355.2	3,177	0.68	66.0
\$1,400 Pit (0.023 g/t)	15,218	0.82	379.0	3,667	0.65	72.8

The Practical estimates appear to have employed industry standard methodologies and statistical treatments being used today. However, the 2012 mineral resource estimate was not formalized in a NI 43-101 technical report, nor did it utilize the 2012 core and RC drilling, therefore the resource is considered historical in nature and has been superseded by their 2013 estimate and the current MRE presented in this Technical Report.

In 2013, after the completion of the 2012 drill program, Practical provided an informal update mineral resource that included all of the 2012 drill results and included an estimate using all the data and an alternative estimate downgrading the historical drill assay results. There is no technical report or summary report provided by Practical that supports and provides the methodologies and assumptions for the 2013 resource estimates even though the appropriate categories are utilized as set forth in the CIM Definition Standards on Mineral Resources & Reserves (2014). A summary is provided in a 2019 unpublished internal report prepared for LGT by Brewer (2019). Practical delineated a mineral resource (not pit constrained) of 24.2 million tons (21,974,200 tonnes) at 0.024 opt (0.81) gpt for 569,631 oz Au in measured and indicated and 15.19 million tons (13,781,831 tonnes) at 0.018 opt (0.61) gpt for 268,959 oz Au inferred using a cut-off of 0.006 opt (0.24 gpt) Au (Table 6.9). They also provided a pit constrained resource of 23.46 million tons (21,284,138 tonnes) at 0.020 opt (0.68 gpt) for 464,480 oz Au using a lower cut-off of 0.006 opt (0.21 gpt) Au (Table 6.10). The authors of this Technical Report are treating the 2013 mineral resource estimates as historical in nature and not a as a current mineral resource due to the fact that it was not supported by a technical report and little detail is available on the exact assumptions, methodology and parameters employed to calculate the resource estimates, including the logic and reasons for downgrading the historical assay data. Accordingly, the 2013 mineral resource estimates presented below use the appropriate mineral resource categories as per CIM Definition Standards on Mineral Resources & Reserves (2014), however, the authors do not have enough information to verify these resource estimates as current mineral resources, as per the CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (2019), therefore they are considered historical in nature.

The historical resource estimations discussed in Section 6.3, including all associated subsections are relevant in that they were prepared and calculated by reputable companies that were intimately familiar with, and knowledgeable about, the property and the geology and resource potential of the Lemhi Gold Property. These historical resources

do provide an indication of the extent of mineralization identified by previous operators at the project. The authors of this Technical Report have not done sufficient work to classify any of the historical estimates in this section as current mineral resources, therefore, none of the historical estimates are being treated as current resources. Further work, including but not limited to infill and confirmatory drilling with appropriate standard reference materials and QA/QC protocols, along with additional metallurgical work is required. This work was completed in 2020 by Freeman and is discussed and outlined in sections 10, 11, 12, 13 and 14.

Table 6.9: Practical Mining's revised 2013 resource calculation with 2012 drill results and 36% downgrading of all historical drill data.

Technique	Cut-off (g/t)	Measured			Indicated			Inferred		
		Tonnes (000's)	gpt	Ounces (000's)	Tonnes (000's)	gpt	Ounces (000's)	Tonnes (000's)	gpt	Ounces (000's)
Ordinary Kriging	0.2	193,147	1.18	7,309	21,781,053	0.8	562,322	13,781,831	0.61	268,959
Inverse Distance Cubed	0.2	186,470	1.24	7,434	21,479,485	0.82	566,277	12,875,448	0.64	264,931
Nearest Neighbour	0.2	160,993	1.43	7,402	17,396,039	0.98	548,110	9,688,084	0.8	249,183

Table 6.10: Practical Mining's 2013 comparison between global mineral resource at the LGT property (unconstrained) and pit constrained to the patented property (patented) at a \$1500 gold price (Brewer, 2019).

Pit Class	Ore > 0.49 g/t			Low Grade 0.21 - 0.49 g/t			Waste Tonnes
	Tonnes	Grade g/t	Ounces	Tonnes	Grade g/t	Ounces	
Unconstrained \$1500							
Measured	103,155	1.39	4,593	23,704	0.33	252	2,978
Indicated	9,476,520	0.99	302,164	4,299,732	0.36	49,369	827,885
Inferred	2,241,411	0.77	55,410	5,139,616	0.32	52,691	14,732,567
Nrm		0.00			0.00		75,720
None		0.00			0.00		37,886,893
Unconstrained \$1500 Total	11,821,086	0.95	362,167	9,463,052	0.34	102,313	53,526,042
Patented \$1500							
Measured	56,338	1.31	2,379	8,700	0.31	87	2,213
Indicated	3,901,749	1.05	132,013	2,165,361	0.35	24,047	598,024
Inferred	1,063,425	0.78	26,789	2,598,502	0.32	26,333	9,471,869
None							24,286,637
Patented \$1500 Total	5,021,512	1.00	161,181	4,772,564	0.33	50,467	34,358,743

6.4 Historical Processing and Metallurgical Testing

FMC analyzed drill cuttings for gold both by fire assay methods and cyanide leach analyses. Cyanide leach values varied widely from the fire assay values.

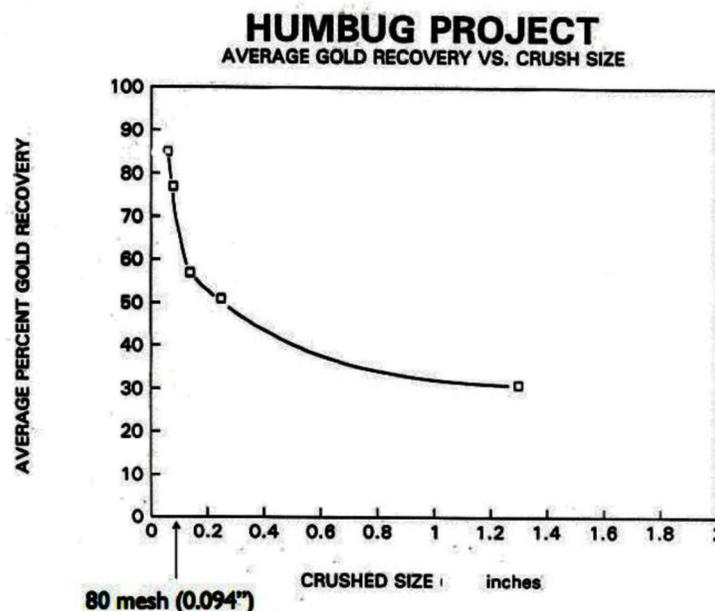
Hazen Research Inc. of Golden, Colorado performed cyanide leach tests in 1986 and performed bottle-roll tests, column leach tests, agitated leach tests and flotation, and

concentrate leach tests on five composite samples of drill cuttings in 1987. Head grades of the samples ranged from 0.032 to 0.104 opt Au, 0.071 to 0.22 opt Ag, and 0.023% to 0.127% Cu. Bottle roll results were disappointing with only 39.5% to 47.9% gold dissolution. Hazen’s test results showed that fairly fine grinding was necessary to liberate fine-grained gold and achieve high gold recoveries. Gold in -100 mesh shake leach test residues occurred as very fine (10-12 microns) free gold grains and 5-micron-size gold inclusions in pyrite. Hazen also concluded that the ore had poor permeability characteristics, even after agglomeration (Shaw, 1987).

AGR commissioned Kappes, Cassidy and Associates (KCA) of Reno, NV to perform metallurgical testing on core and RC samples in 1994 and 1995. KCA was also contracted to prepare a “pre-feasibility” report on the Lemhi Gold (Humbug) Project to guide mine design. KCA conducted seven bottle roll tests and 22 column leach tests on mineralized core and cuttings. No information is provided in the KCA report regarding the nature of the samples (i.e. oxide vs. sulfide, location of samples within deposit), but it is assumed that material representative of the overall deposit was used. Column leach tests were performed on 10 sample types (three core composites, one quartzite sample, one phyllite sample, a quartz vein sample, one unidentified core sample, and a “mixed” sample). Column test sample size ranged from 44 to 200 pounds. Head grades of the samples ranged from 0.01 opt to 0.188 opt (Defilippi, 1996).

The primary goal of the study was to determine the optimum crush size for heap leaching. Column leach tests were performed on agglomerated crushed samples. Samples were crushed and tested at five different sizes: - 2 inches, - ½ inch, - 4 mesh, as-received drill cuttings, and minus 8 mesh (particles <2.38 mm [0.0937 inch] across). Gold recoveries ranged from 31% to 85% as a direct function of crush size (Figure 6.8). Gold recovery was found to increase with finer crush sizes down to minus 16 mesh. Crushing to smaller than 16 mesh yielded only minimal improvement in gold recovery.

Figure 6.8: Gold recovery vs. crush size (Defilippi, 1996).



Defilippi (1996) concluded:

“Metallurgical test results indicated that ore is amendable to cyanide heap leaching at a crush size of 90 percent minus 8 mesh with agglomeration at an average of 8.5 pounds of cement per ton of ore. Gold recovery is projected at 80%. It is estimated that sodium cyanide consumption will be 1.0 pounds per ton of ore”.

Silver head grades were not reported and no recoveries for silver were calculated. It is assumed that silver recovery would be insignificant.

Defilippi (1996) recommended additional column tests using a lower amount of cyanide to determine the effects of lower cyanide levels on gold recovery, leach time, and cyanide consumption.

6.5 Pre-feasibility Study

KCA conducted two pre-feasibility studies of the Humbug Deposit for AGR in 1995 and 1996. The 1996 pre-feasibility study was prepared by KCA in a company report titled: “Humbug Project Heap Leach Pre-Feasibility Study” 1996 (Defilippi, 1996). The studies incorporated the metallurgical test work done by KCA in 1994-1995 and the resource estimate and geologic model prepared by PAH. The 1995 study assumed a production rate of 5,000 tons per day (tpd) of mineralized material, whereas the 1996 study used a higher rate of 7,500 tpd processed by heap leaching. The study included the following assumptions:

- deposit size of 15,565,000 dry tons grading 0.036 opt (1.23 g/t) Au
- specific gravity of ore = 12.5 cu ft/ton
- mining rate of 7,500 tpd
- mine life of six years
- heap leach recovery of 80% with minus 8 mesh grind and agglomeration
- 90-day leach cycle in 2 stages
- mobile radial stacking system with four 20-foot lifts

Fine crushing of low-grade gold ores followed by heap leaching is a proven method for recovering gold, but is dependent on the climate of the mine area and the physical properties of the ore, specifically clay content and coarse silica (quartz) content of the crusher feed (Kappes, Cassiday and Associates, 1994). KCA recommended a crushing circuit comprised of a primary jaw crusher, followed by a standard cone crusher, and a Barmac vertical shaft impact crusher for tertiary crushing to produce the minus 8 mesh product for heap leaching. Both capital and operating costs are higher for such a fine crush, and economic analysis must be performed to determine if the increase in gold recovery (approximately 20%) between conventional crushing to minus ½ inch vs. a fine crush of minus 8 mesh will offset the capital and operating costs.

The pre-feasibility study concluded that mineralized material could be successfully heap-leached. The study dealt only with processing costs and did not attempt to estimate

mining costs. The capital and operating costs estimated by KCA are historical in nature and are believed to have been accurate at the time. The author of this Technical Report is not treating these historical pre-feasibility studies as current economic studies. The studies do not reflect current costs, as both costs and the price of gold have risen over time. Certain conclusions are considered to be relevant, because the studies established benchmark costs for heap leaching and plant construction. A new study based on the technical assumptions of KCA, but utilizing a modern resource estimated and current costs will be necessary before any decision is made to proceed with developing the deposit. These historical pre-feasibility studies should not be relied upon.

6.6 Production History

Placer gold was produced from Ditch Creek between 1867 and 1877. There are no records of the amount of gold extracted. There is a significant amount of dredge tailings along Hughes Creek suggesting that placer gold was extracted along Hughes Creek in gold dredging and hydraulic operations likely in the 1890's to early 1900's. No information or records are available for this period of mining.

The Bull of Woods mine on the MS 784A patented claims produced an unknown amount of lode gold between 1891 and the early 1900's. There are no production records for the operation.

7 Geological Setting and Mineralization

The following sections of Geology and Mineralization have been modified or taken directly from previous reports by Brewer (2019) and Cuffney (2011).

7.1 Regional Geology

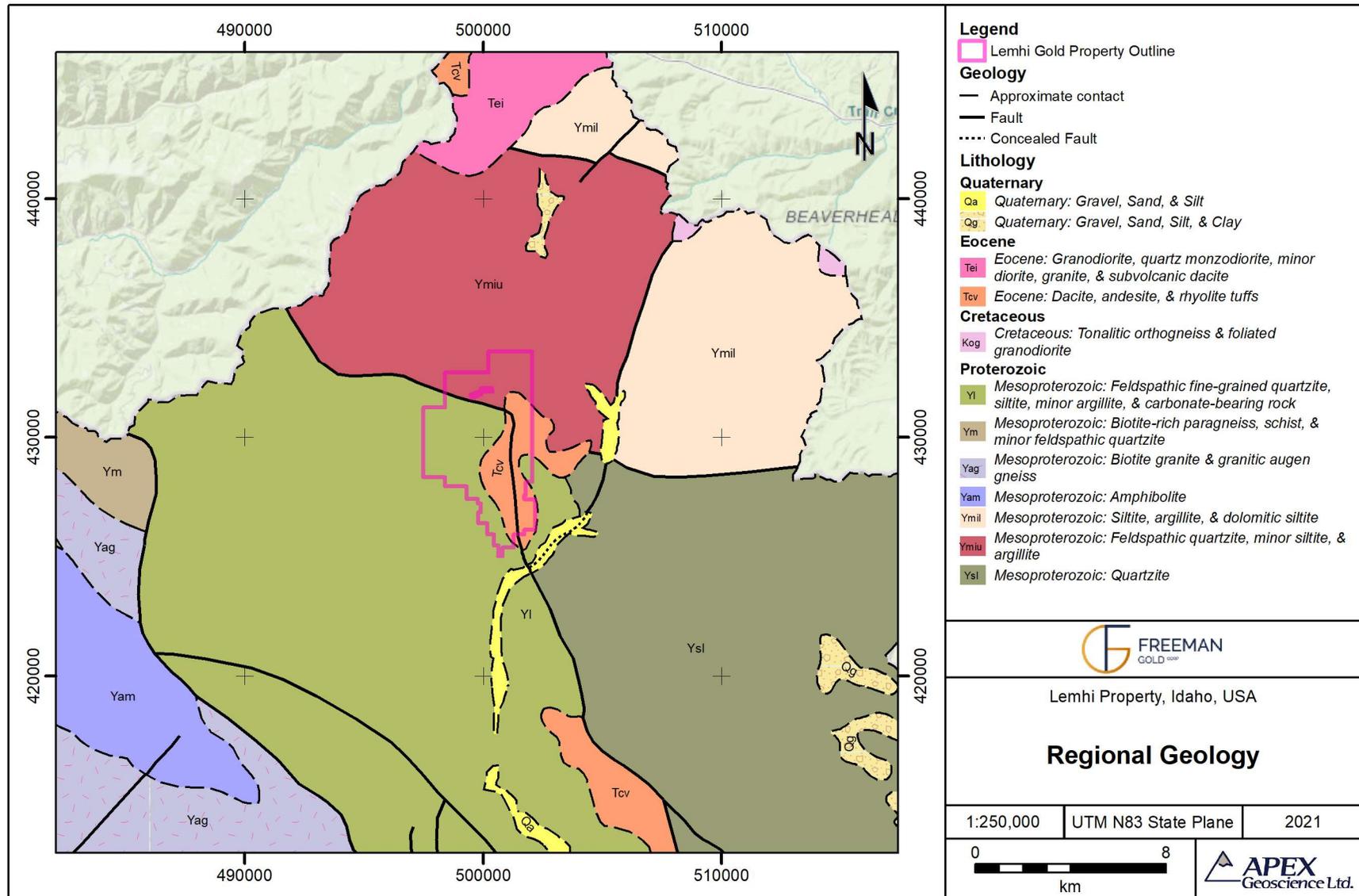
7.1.1 Stratigraphy and Geologic Units

Bedrock in most of the Clearwater Mountains and Salmon River Mountains of east central Idaho, is composed of Precambrian siliciclastic metasediments tentatively correlated with the Mesoproterozoic Belt Supergroup of Montana and southern British Columbia (Figure 7.1; Link et al., 2007). These rocks were deposited in a large intracratonic basin between 1,470 and 1,400 million years ago (Ma).

The stratigraphy of the Belt Supergroup has been extensively studied. However, the similarity between the (rather monotonous) lithologies within the various formations makes identification of formations and units difficult. Lonn and McFaddan (1999) described the problem succinctly:

“Differentiating Belt Supergroup units in the field is difficult and describing them so others can recognize them is even more problematic. Neither grain size, nor color, nor mineralogy can be used to distinguish the formations. Argillite, siltite, and quartzite are

Figure 7.1: Regional geology of the Lemhi Gold Project.



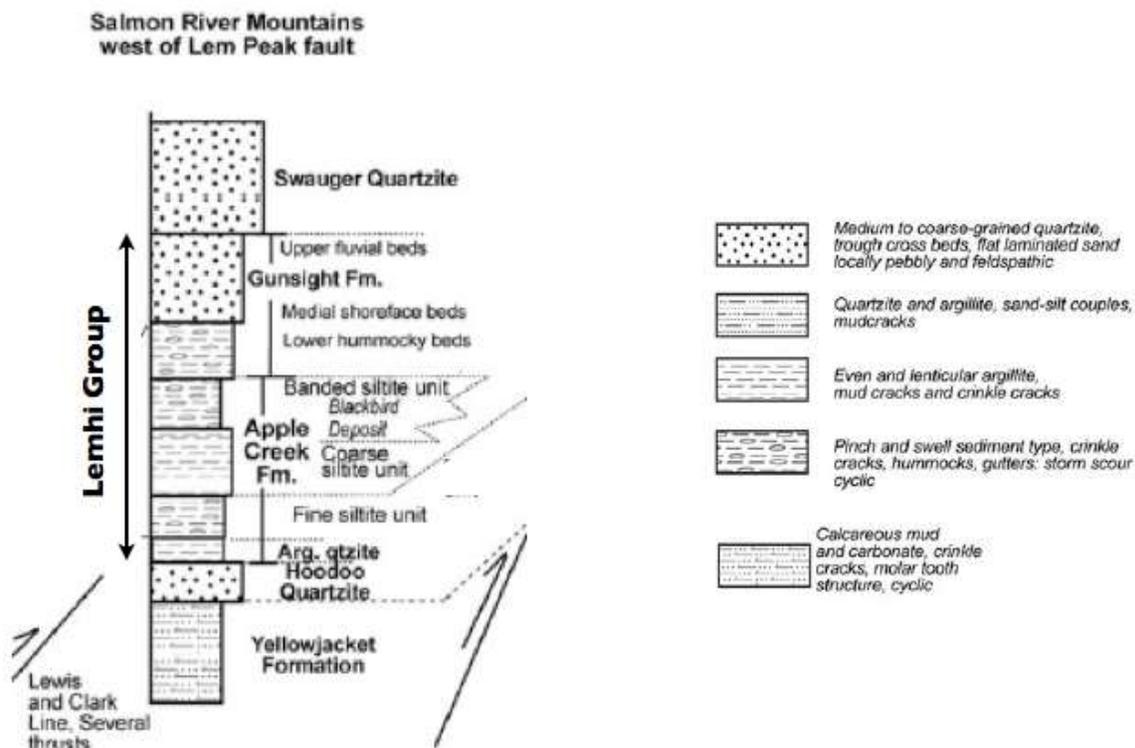
found in virtually every formation; color is mostly a diagenetic or metamorphic feature, and mineralogy is quite uniform”.

Stratigraphic correlations are made even more difficult by the use of informal local unit names, lack of fossils for dating and correlation, and structural complexities due to folding and several periods of high-angle and low-angle faulting. As a result, there is often disagreement in geologic maps produced by different geologic mappers.

Lopez (1982) mapped the Gunsight, Apple Creek and Big Creek Formations of the Lemhi Group and the older Yellowjacket Formation in the Gibbonsville quadrangle.

Immediately to the west, in the adjacent Allan Mountain quadrangle, Stewart et al. (2009) mapped the Quartzite of Hughes Creek (Lemhi Group) and the Quartzite of Allan Mountain. Tysdal et al. (2003) and Lund et al. (2003) mapped the Gunsight Formation, Apple Creek Formation, Helena and Empire Formations, and an un-named feldspathic sandstone (quartzite) unit within the Proterozoic package in the Gibbonsville and Allan Mountain areas. A stratigraphic section is presented below in Figure 7.2.

Figure 7.2: Regional stratigraphy of the Lemhi Group (after Cuffney, 2011 and references therein).



Intrusive rocks of Precambrian to Tertiary age cut the Mesoproterozoic rocks and Paleozoic rocks south and west of the Gibbonsville area. A large Middle Proterozoic granite pluton intrudes the metasediments to the southwest of the Lemhi Gold Project and is flanked on its northeast side by a body of amphibolite (Figure 7.1). Two Cretaceous

granite to granodiorite bodies lie to the west-southwest of the area. The Painted Rock pluton, a small granitic batholith of Eocene age, is exposed about 22 miles to the west of the Project. Cretaceous to Eocene diorite to granodiorite of the Chief Joseph plutonic complex is exposed in the headwaters of the North Fork of the Salmon River, and small dikes and sills of similar age and composition occur throughout the Gibbonsville area.

Mapped thrust relationships are questionable because faults locally place younger Eocene volcanic rocks of the Challis Volcanic Group over the Precambrian rocks. The volcanic rocks consist of intermediate to mafic lava flows and intermediate to felsic pyroclastic rocks. The Challis volcanics were derived from several large calderas located to the southwest of the Lemhi Gold Property, including Thunder Mountain, Van Horn Peak and the Twin Peaks calderas, and from the Mount Withington caldera, located south of Salmon. The volcanic rocks are very thick within the calderas, but thin rapidly away from the effusive centers. Smaller volcanic centers, which sourced local intermediate-composition lava flows, occur throughout Lemhi County.

7.1.2 Structure

East-central Idaho lies within the Cordilleran fold and thrust belt, a wide zone of folding and thrust faulting produced by east-northeast/west-southwest compression during the Cretaceous Sevier orogeny. Several northwest-trending regional thrust faults, including the Poison Creek fault and the Brush Creek fault, have been mapped by the USGS (Evans and Green, 2003). These faults are regional in nature and generally thrust the Yellowjacket or equivalent units over the younger Lemhi Group. Large areas of brecciated quartzite and siltite are often associated with the fault zones. Recent geological investigations have shown that many of these mapped faults are actually stratigraphic contacts, zones of normal faulting, decollements associated with folds, or deformation zones produced during bedding-parallel shearing (Link and Janecke, 1999). Winston et al. (1999) note that most geologists tend to map all contacts between the Lemhi Group and the older Yellowjacket Formation as a thrust fault, when in many places the contact is conformable. The Medicine Lodge thrust fault is often mapped as Lemhi Group over Yellowjacket Formation (younger over older). Winston et al. (1999) interpret that relationship to actually be the normal stratigraphic relationship of Gunsight Formation on top of Apple Creek Formation.

The Gibbonsville area lies along the Trans-Challis fault system, a broad (20-30 km-wide) system of en-echelon northeast-trending structures extending from Idaho City, Idaho for more than 270 km to the northeast to the Idaho-Montana border (Kiilsgaard et al., 1986). The Trans-Challis fault system is one of many structures within the Idaho-Montana porphyry belt which parallels the contact between the Cordilleran Fold and Thrust belt and the Idaho batholith, and corresponds to a zone of strike-slip faults and northeast-trending magnetic features. The Idaho-Montana porphyry belt encompasses a wide northeast-trending alignment of porphyry-related ore deposits (Figure 7.3; Hildebrand et al., 2000).

Basin-and-range style extensional faulting has broken much of the area into north-northwest trending horsts and grabens or half grabens. Extensional faulting was initiated between 17 Ma and 5 Ma and continues to this day, as evidenced by the magnitude 7.3 Borah Peak earthquake of 1983.

7.1.3 Regional Mineralization

The Lemhi Project lies within the Idaho-Montana porphyry belt, a northeast-trending alignment of metallic ore deposits related to granitic porphyry intrusions that extend north-easterly across Idaho from the Boise Basin in west-central Idaho to the Little Belt Mountains of central Montana (Figure 7.3). Within the mineral belt, much of the mineralization is related to the Trans-Challis fault system, a broad (20-30 km-wide) system of en-echelon northeast-trending structures extending from Boise Basin more than 270 km to the Idaho-Montana border (Kiilsgaard et al., 1986). Mineralization related to the Trans-Challis fault system includes porphyry molybdenum deposits (Thompson Creek, Napoleon Hill), epithermal and intrusion related gold-silver veins and stockworks (Silver City, Stibnite), uranium and thorium veins, stratiform copper-cobalt deposits (Blackbird), and fluorite vein and breccia deposits.

Gold deposits in the north part of the Trans-Challis belt, located south of the Lemhi Gold Project include the Beartrack mine from which FMC produced 650,000 oz Au between 1995 and 2000 (Hatch, 2008); and the Grouse Creek gold deposit mined by Hecla (Figure 7.3).

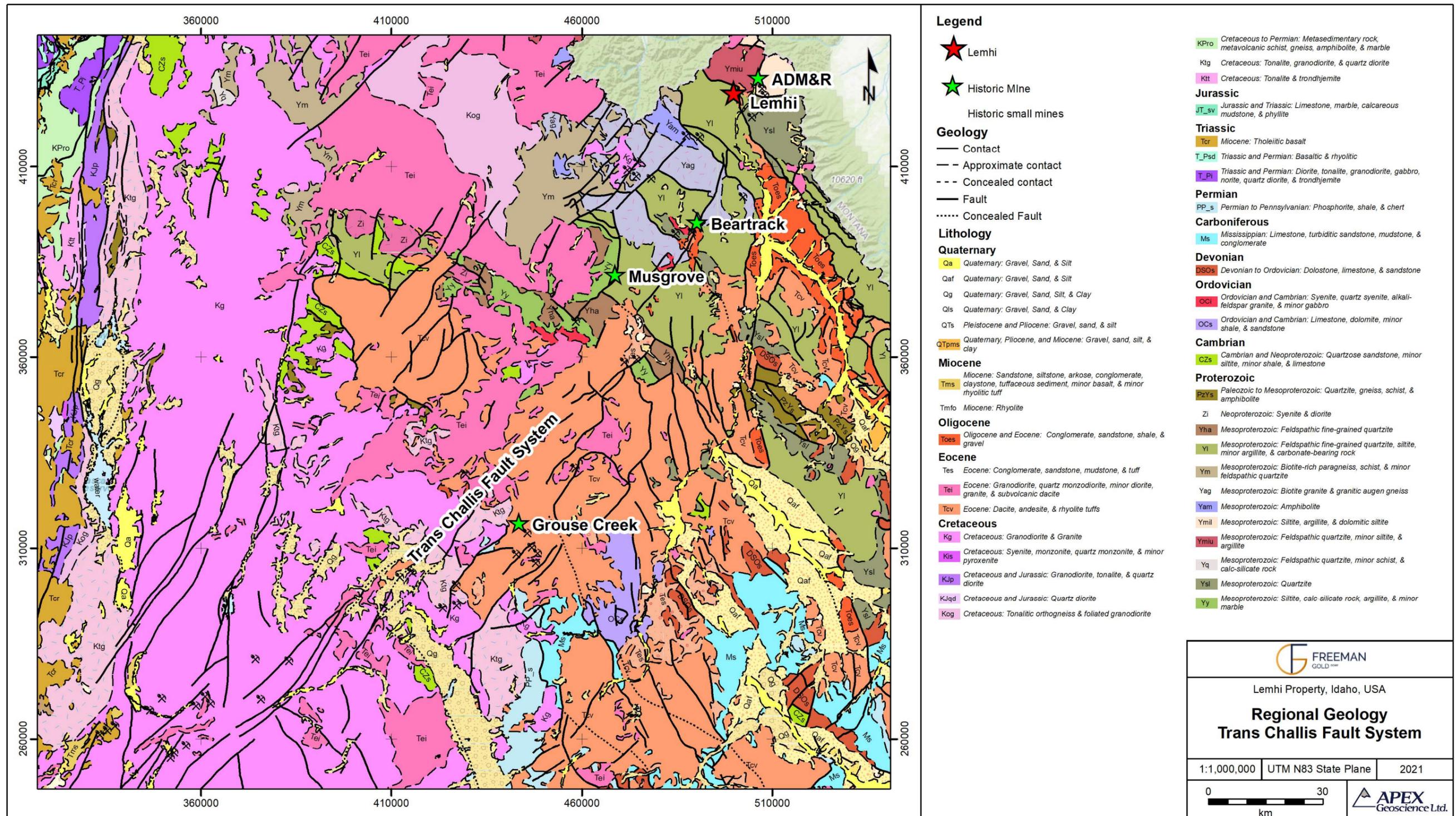
These gold deposits are not “adjacent properties” to the Lemhi Gold Project and are noted only to indicate that the Lemhi Property lies within an important mineral belt. The authors have not verified the published production figures for the Beartrack and Grouse Creek mines nor do they mean to imply any size or grade relationship between these deposits and the Lemhi Property. This information is not necessarily indicative of the mineralization known or to be expected on the Lemhi Property.

7.2 Property Geology

The Lemhi property is largely underlain by quartzites and phyllites of Mesoproterozoic age. Porphyritic dacite flows of the Eocene Challis volcanics are preserved in down-dropped fault blocks on the east side of Little Ditch Creek and the south end of Ditch Creek valley. The valley between Ditch Creek and Little Ditch Creek is filled with coarse Quaternary gravels composed of subround quartzite cobbles and boulders. Drilling has determined that the gravels are up to 20 m (65 ft) thick in places. Perched gravels of similar composition lie along the ridge on the west side of Ditch Creek. Cobbles and boulders of quartzite derived from the gravels mantle the hillside down-slope of the perched gravel deposits.

Evans and Green (2003) mapped a west-northwest-trending thrust fault passing through the northern part of Ditch Creek. The thrust fault places Mesoproterozoic metasediments of the Gunsight Formation of the Lemhi Group over an unnamed feldspathic quartzite unit in the upper reaches of Ditch Creek (Figure 7.4). Stewart et al.

Figure 7.3: Location of Lemhi Gold Project within Trans-Challis Fault System and related gold deposits.

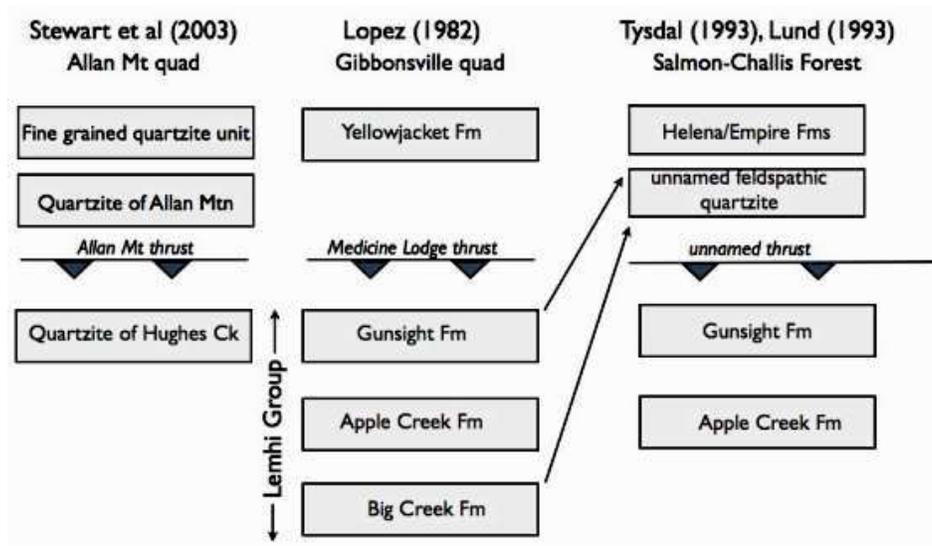


(2009) mapped a similar fault, but interpreted the relationship as the Quartzite of Hughes Creek thrust over the Quartzite of Allan Mountain. The Quartzite of Hughes Creek is a local unit interpreted to be part of the Lemhi Group. The Quartzite of Allan Mountain is also a local map unit, which is interpreted to correlate with the slightly younger Missoula Group, thus the fault relationship would be a thrust with older rocks over younger ones.

The Project lies within a structurally complex region defined simplistically by an east-westerly striking thrust fault (southerly dipping), which is offset by north-northeast trending, high-angle basin and range normal faults (block faulting) to the east and west. Numerous intrusions of late Cretaceous to early Tertiary age are also widespread throughout the area (Brewer, 2019 and references therein).

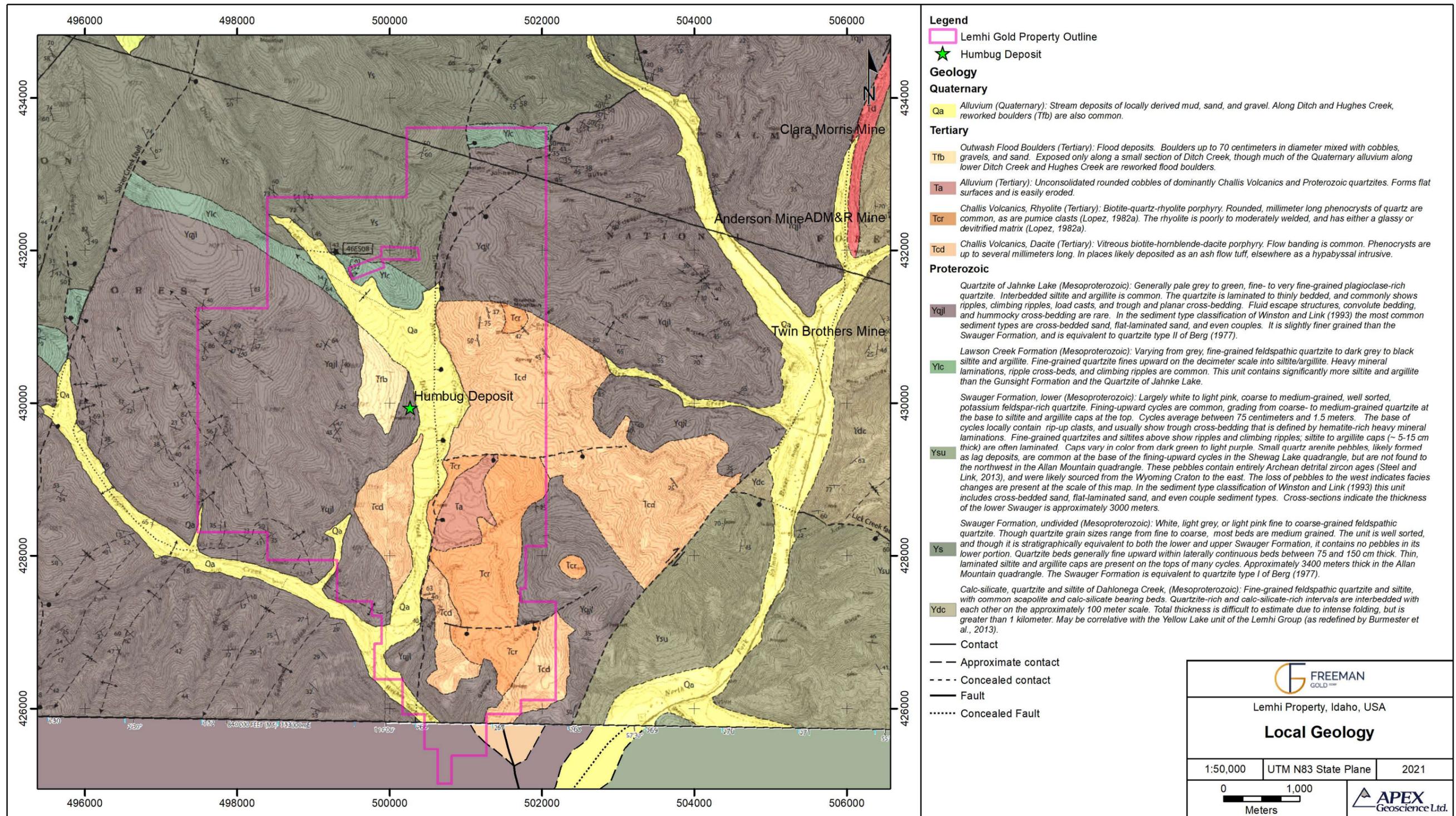
Lopez (1982) mapped the Medicine Lodge thrust fault to the east of Ditch Creek. However, Lopez mapped the Big Creek and Gunsight Formations of the Lemhi Group in the upper plate of the Medicine Lodge thrust, in areas where Tysdal et al. (1993) mapped the unnamed feldspathic unit. Lopez mapped Yellowjacket Formation in the lower plate, which would produce a younger-over-older relationship. Given the similarity of lithologies in the Belt Supergroup it may well be that the assignment of rocks in the upper plate of the thrust to the Yellowjacket Formation by Lopez and FMC is incorrect, and the older-over-younger thrust relationship noted by Stewart et al. (2009) may be correct. Figure 7.5 attempts to correlate the various units mapped in the Gibbonsville area.

Figure 7.4: Correlation of Mapped units in the Gibbonsville Area.



Regardless of stratigraphic nomenclature and relative movement of fault blocks, it is obvious that a large low-angle fault passes through Ditch Creek and has produced a wide zone of sheared and brecciated rock (Cuffney, 2011). Stewart et al. (2009) divided the rocks in the Ditch Creek area into three structural domains of which two domains are separated by the thrust fault (a low-angle ductile shear): Domain 3 in the hangingwall, characterized by south to northwest-plunging fold axes; and Domain 2 in the footwall, characterized by strongly folded rocks with northwest-trending sub-horizontal fold axes.

Figure 7.5: Property Geology of the Lemhi Gold Project.



Cuffney (2011) summarizes mapping completed by Evans and Green (1993) shows that the thrust fault is offset and rotated from a northwest orientation to a west-northwest orientation across Ditch Creek. The trace of the fault is lost in Quaternary gravels in Ditch Creek and it is not known if the fault merely bends to the north or is offset by a normal fault.

Geologists working for FMC and AGR interpreted the unit in the upper plate of the thrust fault at Ditch Creek to be correlative with the Lemhi Group (Gunsight and Apple Creek Formations) and the rocks in the lower plate to be part of the Yellowjacket Formation (Bertram, 1996), in accordance with mapping of the Gibbonsville quadrangle by Lopez (1982), which was the only published geologic mapping in the area at the time. Mineralization is interpreted to be hosted by phyllitic quartzite of the Apple Creek, as mapped by Lopez along the west side of Ditch Creek.

The low angle fault created a subhorizontal zone of shattering and brecciation, along which sill-like bodies of quartz-feldspar porphyry intruded. The intrusive rocks are not exposed on the surface, but have been encountered in numerous drill holes. The porphyry is described as a quartz diorite, but is compositionally and texturally a dacite or rhyodacite. The groundmass and feldspar phenocrysts in the porphyry have largely been altered to kaolinite and sericite. The groundmass was initially very fine grained to glassy, suggesting high-level hypabyssal emplacement (Cuffney, 2011 and references therein). Geist (1995) studied thin sections of the volcanic rocks at Lemhi and concluded that they were all welded ash-flow tuffs derived from distant sources, based on eutaxitic fabric of the rocks.

7.3 Mineralization

Gold deposits in the Dahlongega mining district consist of two types of mineralization: gold-bearing lodes (quartz veins and stockworks), and placer gold deposits derived from weathering of the veins, which were mined in drainages a short distance downstream from the lode deposits. Gold occurs both as lodes (Lemhi Gold Deposit) and placers on the Lemhi Project. Extensive placer mining took place in the drainage of Ditch Creek in the late 1800's to early 1900's.

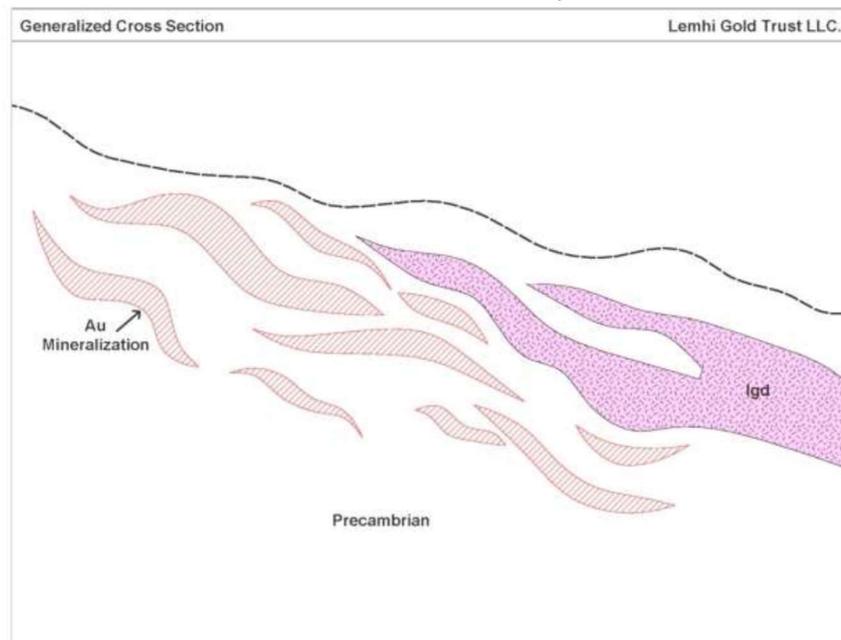
Previous interpretation of the mineralization by Cuffney (2011) states that "gold accompanied by minor silver and copper mineralization is spatially and likely genetically related to sub-horizontal dikes/sills that intrude quartzites and phyllites of the Lemhi Group (Gunsight and Apple Creek Formations) in the hangingwall of a low-angle (thrust?) fault. Mineralization occurs as swarms of gold-bearing quartz veins and silicified zones. Quartz veining, silicification, and gold mineralization occur in low-angle zones of sheared/cataclastic phyllite generally dipping gently up to 25° to the southeast. Mineralization more or less surrounds the quartz porphyry intrusions. Thicker and higher-grade gold mineralization occurs in the footwall of the low-angle dike/sill, whereas mineralization above the intrusion is thinner and lower grade. Mineralization is also concentrated along the western terminus of the main intrusive. Minor precious metals mineralization occurs within the intrusions, suggesting that they are penecontemporaneous with the mineralization."

Reinterpretation based on the results of the 2012 core drilling program suggested that the deposit is a structurally controlled hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late-Proterozoic metasediments within the structurally complex Trans-Challis fault system (Brewer, 2019). It is further suggested that gold mineralization was introduced during a tectonically active period and is likely temporally related to intrusive activity associated with the Idaho Batholith. Gold mineralization has a strong association with base metal (Cu and Mo) mineralization and occurs as multiple hydrothermal (epithermal – mesothermal) silica replaced structures resembling multiple flat-lying veins (Figures 7.6).

7.3.1 Mineralogy

Precious metals mineralization at the Lemhi Project occurs within a gangue of quartz and minor carbonate (magnesite or ferroan dolomite). Bartlett (1986) identified magnesite as the most abundant alteration mineral, occurring as veinlets cutting both quartz veins and wall rocks. Overall gold mineralization has a low sulfide content, normally less than 2%, but pockets of high sulfide concentration have been noted. Pyrite and lesser chalcopyrite and molybdenite are the dominant sulfide species. Bornite, digenite, and traces of galena, sphalerite, pyrrargyrite, and arsenopyrite have also been identified. Silver is present in small amounts with silver to gold ratios usually less than 1:1.

Figure 7.6: Generalized Cross-Section of Mineralization at Lemhi (Brewer 2019 and references therein)

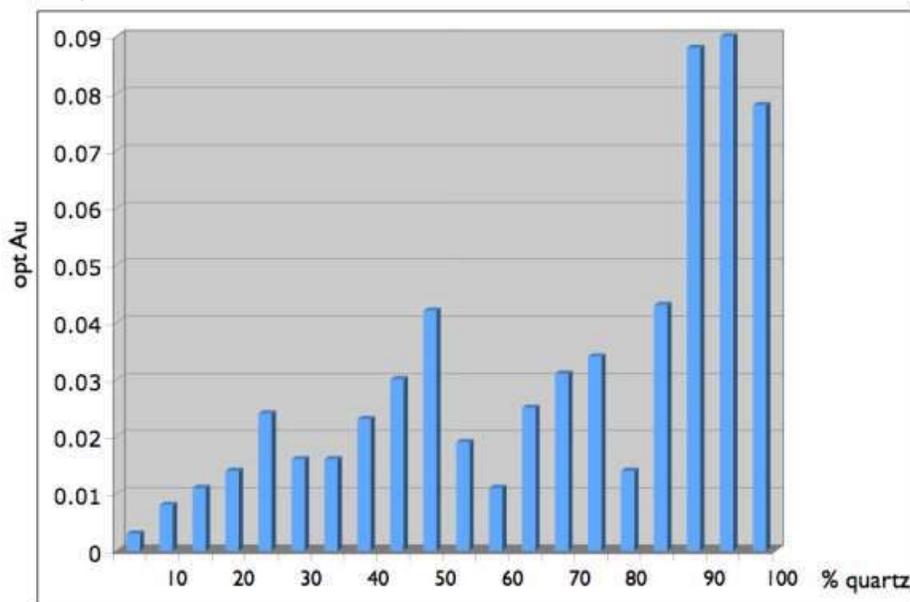


Gold is nearly always associated with quartz veining or quartz flooding. McCarter (1985) observed that gold intercepts in drilling correlated with zones of >20% quartz. Sandefur et al. (1994) performed a statistical analysis of mean gold grade vs lithology and alteration codes (9,723 code entries) from the 1985-1994 drilling database (Figure 7.7). Gold grades were found to be closely related to quartz veining. Two peaks in gold grade were found at quartz concentrations of 35%-50% and at 85%-95%. The latter range

averaged 0.085 opt (2.65 g/t) Au. However, high quartz intervals account for only a small percentage of the volume of the deposit and the bulk of gold mineralization contains 15%-45% quartz. Intervals with <15% quartz veining contained little or no gold.

Oxidation generally extends 30-50 m (100 – 165 ft) below the surface (Bertram, 1996). Gold occurs largely as free gold in the oxide zone. Gold grade below the redox zone correlates with sulfide content, suggesting that gold in primary ore occurs as auriferous pyrite or within/on copper sulfides. Paster (1986) studied polished sections of mineralized core and established that gold occurs as irregular blebs in bornite and as small blebs intergranular to dolomite veinlets, in some cases in association with chalcopyrite. Gold found by Paster was fine grained (2 to 25 microns) but one sample contained a gold grain that was 70 microns across. Petrographic work performed by Hazen Research on -100 mesh leach residues found fine (10-20 micron) gold as free grains and very fine (5 micron) gold as inclusions within fine-grained pyrite (Shaw, 1987). Gold and associated base-metal sulfides were emplaced late in the paragenetic sequence.

Figure 7.7: Graph of gold grade (opt Au) vs quartz content based on 9,723 alteration codes compiled by PAH (Sandefur et al., 1994)



In 2012, LGT sent 13 core samples consisting of 4 igneous and 9 metasedimentary rocks, for petrographic analysis. All samples exhibited some degree of hydrothermal alteration, notably carbonate veining/flooding. Thompson (2012) noted sample number 005C-168 was a calcareous quartzite with ferroan calcite-sulfide alteration (Figure 7.8 and 7.9). Thomson (2012) described the sample as containing: “Sutured quartz grains with veinlet-bedding-controlled sulfides-ferroan calcite. Some sulfides appear stylitic in form or along sutured quartz veins. Sulfides present in order of formation are pyrite→chalcocite→bornite→chalcopyrite→gold. Locally, vugs with a quartz druse have the sulfide assemblage coating the quartz. Pyrite is invariably brecciated and cemented by later Fe-Cu sulfides. Traces of monazite are present in this sample. The sulfide paragenetic relationships are consistent with early pyrite that is broken followed by

Figure 7.8: Petrographic Sample 005C-168 showing gold along boundary of sulfide minerals

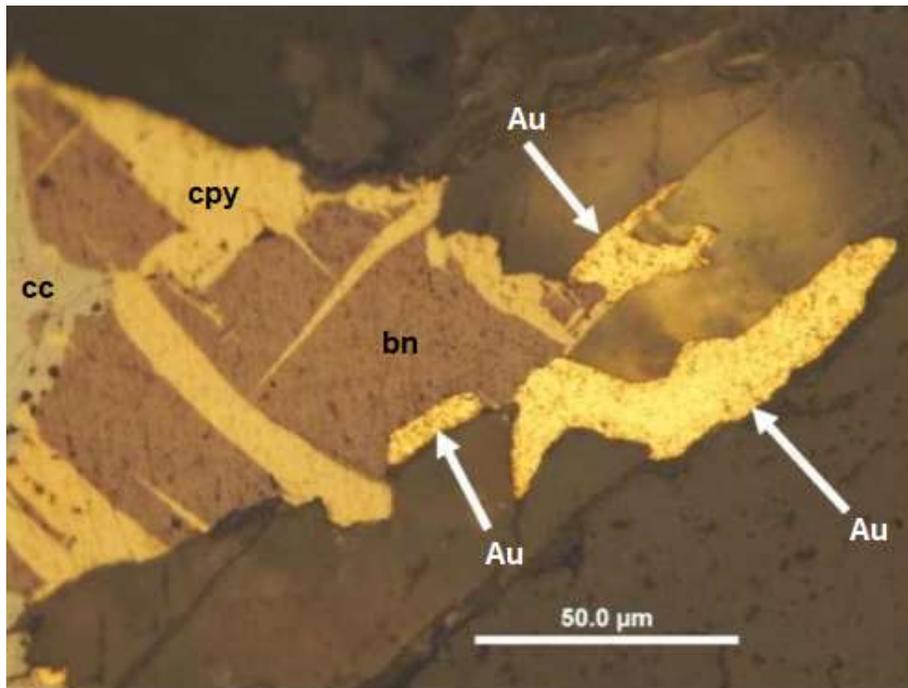
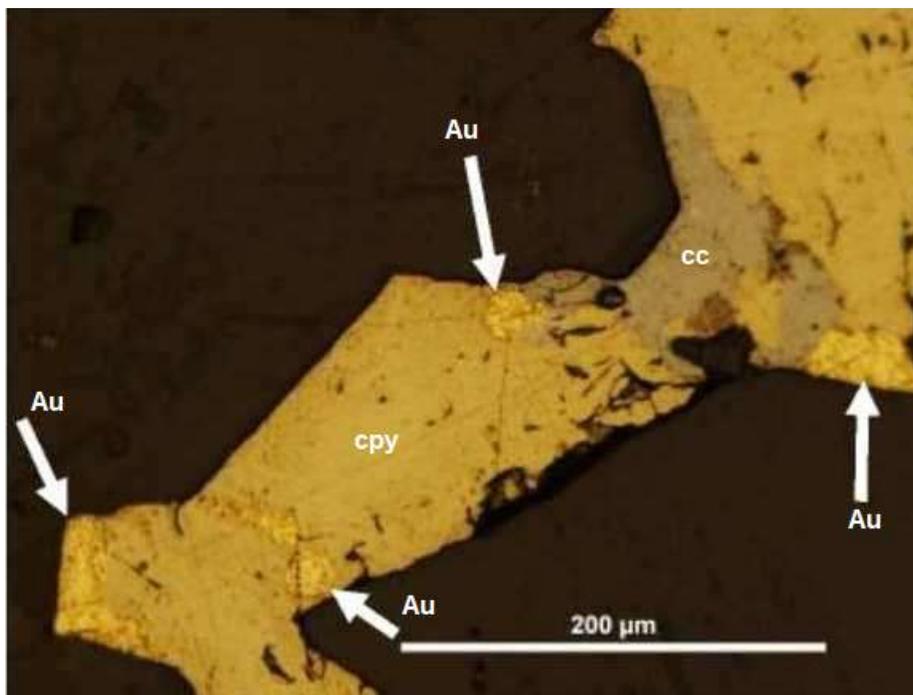


Figure 7.9: Petrographic Sample 005C-168, vug infilled by sulfide minerals, crosscut or rimmed by gold



chalcocite, bornite, chalcopyrite and gold (last ore mineral). There is invariably close spatial association between the sulfides and ferroan calcite.”

7.3.2 Deposit Character and Geometry

The Lemhi Gold Deposit is exposed in road cuts and trenches on the slope along the west side of Ditch Creek. The eastern one-half of the deposit lies under cobble to boulder gravels in the Ditch Creek valley and has no surface expression. Mineralization exposed in artificial cuts is characterized by intense brecciation, quartz veining and flooding, and abundant hematite staining. Brecciation and silicification are so intense that protoliths are difficult to determine. The rocks are microbrecciated to the point of being cataclasites. Williams (1984) studied thin sections of mineralized material and mentioned that he had difficulty identifying the protolith due to intense crushing and alteration. Several of the samples were described as mylonitized breccias. In 1989 FMC drilled a -45° core hole (C-4) across the deposit in hopes of obtaining oriented core for structural analysis. Schaub (1989) laments that, “the section sampled by the core hole was crushed and broken to such a degree that oriented core was impossible to complete.” Schaub also noted that, “These sediments have been contorted and brecciated, and shears and fault zones are present throughout the length of the hole.”

The Lemhi Gold deposit has a footprint of roughly 650 m (2,130 ft) east-west by 500 m (1,640 ft) north-south, based on grade x thickness plots. Higher-grade mineralization in the northern part of the deposit has a strong west-northwest alignment. McCarter (1988) describes this high-grade zone as 395 m (1300 ft) long by 75 m (250 ft) wide and up to 30 m (100 ft) thick. West-northwest high-angle structures were noted in trenches and road cuts during the CPI and are probably responsible for this trend. A strong northeast trend (035°) and a weaker parallel northeast trend further to the east are also indicated by the grade-thickness contours (Figure 7.10). Both the west-northwest and northeast high-grade zones are interpreted to be mineralization concentrated at intersections of high-angle structures with the broad low-angle fault zone. In the core of the deposit, the low-grade envelope of mineralization is greater than 200 m thick.

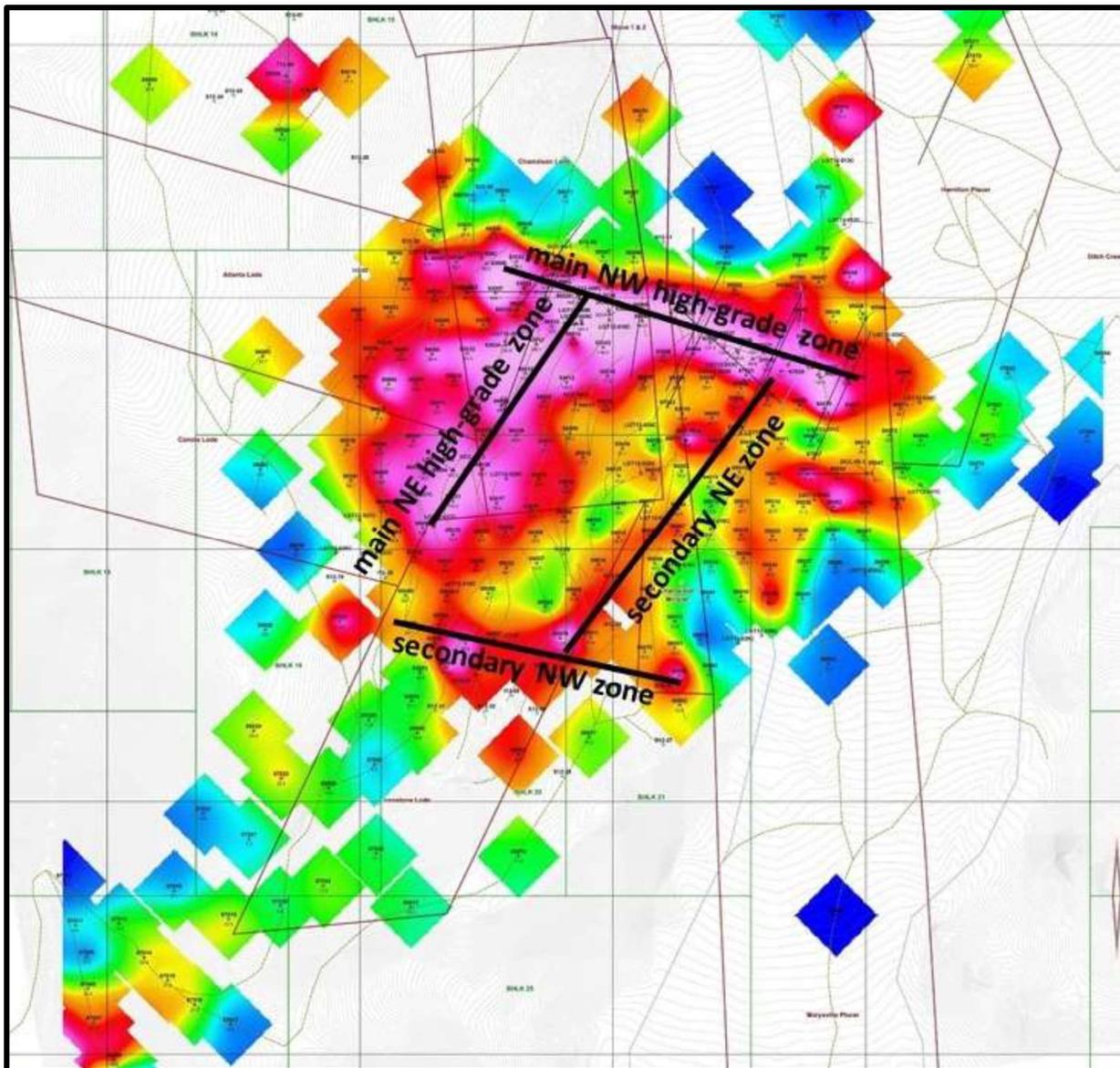
The current developing geologic model for the gold mineralization at the Lemhi Project is of a structurally controlled hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late-Proterozoic metasediments within the structurally complex Trans-Challis fault system. It is further suggested that gold mineralization was introduced during a tectonically active period and is likely temporally related to intrusive activity associated with the Idaho Batholith. Gold mineralization has a strong association with base metal (Cu and Mo) mineralization and occurs as multiple hydrothermal (epithermal – mesothermal) silica replaced structures resembling multiple flat-lying veins.

Cross-sections produced by FMC, AGR and ISGC show good lateral correlation of ore zones, but grades that often change rapidly from hole to hole. Sandefur (1996) noted that variograms developed in modelling by PAH showed that the deposit was significantly more variable in plan than in vertical dimension. The structural complexity of the Lemhi Gold deposit along with the abundant Quaternary alluvium, glacial till and outwash flood boulders and the overlying Tertiary volcanics (Challis Formation) have hindered the full understanding of the deposit character and geometry.

The relative role of high-angle vs low-angle structures as mineralization controls remains unresolved. Two sets of prominent high-angle fracture sets with related quartz veining (N75°W 85°SW, N45°E 75°NW) and a low-angle fracture set (N30°E 45°SE) were observed by Cuffney (2011). Cuffney (2011) suggested that “It is quite possible that the low-angle stacked ore pods are in fact sub-horizontal zones of nested high-angle veins”.

Given the flat-lying nature of the mineralized zones, the gold intercepts from the vertical drill holes on average approximate true thickness.

Figure 7.10: Grade contour (gpt Au x meter) map of the Humbug deposit with suggested mineralized trends (Brewer, 2019).



8 Deposit Types

The following section has been slightly modified or taken directly from previous Summary and/or Technical Reports by Brewer (2019) and Cuffney (2011).

8.1 Structurally Controlled Hydrothermal Gold

Kiilsgaard et al. (1986) note that gold deposits in the Gibbonsville area do not extend to depth and they assumed that the deposits were epithermal in nature. However as noted by Cuffney (2011) “a mesothermal level of emplacement is evidenced by the following: 1) lack of open space filling, 2) crystalline quartz and lack of very fine-grained or chalcedonic quartz, 3) copper - molybdenum association, 4) coarse-grained sulfides, 5) associated bismuth, 6) low arsenic, antimony and mercury and 7) spatial association with the porphyritic intrusions.”

The Lemhi Gold Deposit is localized within a major low-angle shear zone (thrust fault?) and is spatially associated with a high-level porphyritic intrusion. Precious metals mineralization at Lemhi has historically been classified as shear-hosted porphyry-style mineralization. Both FMC and AGR recognized this deposit type and used a porphyry-related model to guide their exploration programs. Key elements of the exploration model were major structures (structural permeability); high-level intrusions (source of heat and fluids); alteration consisting of silicification and sericitization; and gold, copper, and molybdenum geochemical anomalies.

However, based on the 2012 core drilling, an alternate deposit model was suggested of a structurally controlled hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late-Proterozoic metasediments within the structurally complex Trans-Challis fault system. It was suggested that gold mineralization was introduced during a tectonically active period and was likely temporally related to intrusive activity associated with the Idaho Batholith. The observed gold mineralization is strongly associated with base metal (Cu and Mo) mineralization and occurs as multiple hydrothermal (epithermal – mesothermal) silica replaced structures resembling multiple flat-lying veins.

The gold deposit on the Lemhi Gold Property shares many similarities with the Beartrack mine, 35 km (22 miles) to the southwest, and the Musgrove deposit, 25 km (15 miles) further southwest. Both Beartrack and Musgrove are quartz stockworks hosted within major shear zones cutting the Apple Creek Formation.

Geochron Labs measured K-Ar ages on two samples of quartz-veined and sericitic altered quartzite from core hole C-4. Sericite believed to be a product of hydrothermal alteration yielded an age date of 65.5 +/- 2.5 Ma. The age date is close to that of the Beartrack deposit (68 Ma) and Napoleon Hill porphyry molybdenum deposit (Schaubs, 1990).

9 Exploration

Prior to 2020, the most recent exploration was completed by LGT in 2012 and included reevaluation of the historical data, additional petrographic analysis, geochemical analysis and evaluation, and baseline environmental studies. A summary of these activities is provided in the History and Property Geology Sections of this report.

In 2020, Freeman commenced a surface exploration program at the Lemhi Gold Project. This first phase of exploration consisted of the following methods:

- Soil Orientation Survey (Conventional Soil, Ionic Leach and Mobile Metal Ions)
- Rock and Chip Sampling
- Ground Magnetic Survey
- 3D Induced Polarization Survey

9.1 Soil Orientation Survey

With no modern soil samples taken on the property, a soil orientation survey was completed to determine the method most suitable for the Lemhi Gold Property. Across the property variable soil profiles are observed with areas of moderate-low organics to areas of significant glacial or glacial-fluvial cover, specifically north of the deposit. Of the methods chosen, two utilized partial extraction techniques, Mobile Metal Ions (MMI) and Ionic Leach, with the third technique comprising a conventional soil sample. An Orientation Survey consists of a single transect over a known target, with dense site spacing. Multiple samples are collected from each sample pit. The primary reasons for performing this survey are to:

- Determine the appropriate method to identify mineralization.
- Determine a site spacing that is sufficiently dense to identify mineralization.
- Identify which elements characterize the mineralized zone.
- Establish the appropriate depth below live organic material at which to collect samples.
- Determine whether to do the complete elemental suite or establish the appropriate elements to use in a reduced elemental package.

The orientation survey employed the following guidelines:

- The samples were collected at 25 m intervals (for a 50 m spaced regional survey).
- Samples were taken over the target's center and beyond to include the hanging wall and the footwall of the mineralization or edges of the mineralized zone.
- Extend the sampling at least 150 m (~350 m on completed survey) beyond the edges of the target mineralized zone to capture the background levels.
- 25 sampling sites are required and at least 3 must be over the target to ensure sufficient coverage (61 total samples, half of which are over the target).
- Each site must cross-sect the soil profile by at least 40 cm.

A total of nine samples were collected at each sample site; one Conventional, four MMI, and four Ionic Leach. At each sample site tools were brushed and flushed to eliminate residue from the previous sample. Organic matter (~5 – 10 cm), if present, was removed and included decomposed leaf matter, rootlets and hairs. Organic Matter will not adversely affect the MMI or Ionic Leach analyses, but large rocks and twigs were removed by hand from each sample. The “Zero Datum” depth where organics decompose and start to see soil formation was recorded. MMI and Ionic Leach samples must be taken at a constant depth near surface at the various depth profiles below.

- 0 – 10 cm
- 10 – 20 cm
- 20 – 30 cm
- 30 – 40 cm

In skeletal soils with sub-crop/outcrop, samples were collected nearer to the surface with deeper profiles not sampled (30 – 40 cm). If a soil profile was atypical of the survey area, then it was recorded as this may influence the data interpretation stage. Conventional soils were taken from the B-horizon where soil profile exists (C-horizon when no B-horizon is present) with the depth of sample recorded. All field data was recorded within the Fulcrum App. Conventional soils were placed in a labeled Kraft bag and Ionic Leach/MMI samples were placed in a labeled snap and seal bag. Excess air was removed from the snap and seal bags preserving volatile elements (Hg, I, and Br) in the sample. Excess water, when present, was immediately decanted from the sample bags at site. Ionic Leach/MMI samples were not allowed to air dry.

From the 61 sample sites centered over the 2012 lode outline, Figure 9.1, a total of 633 samples were collected, including duplicates and blanks. Generally, most orientation surveys return the best results from 10 to 25 cm depth. Exploratory data analysis (EDA) was used to interpret the data general univariate descriptive statistics applied on all elements for all three methods. First histograms, empirical cumulative distribution function and box plots were generated to provide a sense of the distribution of the data. Following this, Spearman-Rank correlation matrix then transformed the data into heatmaps to visualize potential relationships. A negative correlation between REE and metallic mineralization (Au-Ag-Cu-Mo-Hg(-W)) is apparent for Ionic Leach (strongest) and MMI methods (Figure 9.2)

To further visualize relationships, a principal component analysis (PCA) was completed. PCA (Figure 9.3) shows a cluster of Au-Ag-Cu-Mo-Hg for every method (red circles) while REE cluster for Ionic Leach and MMI (not visible in conventional; black circles) and As-Ti shows an inverse relationship to mineralization for every method (potential indicator). All methods show anomalous samples over the 2012 lode outline (Figure 9.4). The response ratio (RR) was utilized to compare each element to background and was calculated from the lowest 25% of the data from which the mean was calculated. Each sample was divided by the background value. Figure 9.5 shows these results, which removes attenuated ‘anomalies’ seen in the conventional method. MMI and Ionic leach seem to pick up buried mineralization better than conventional soils.

Figure 9.1: Orientation survey sample sites (61) across the Lemhi Gold Deposit

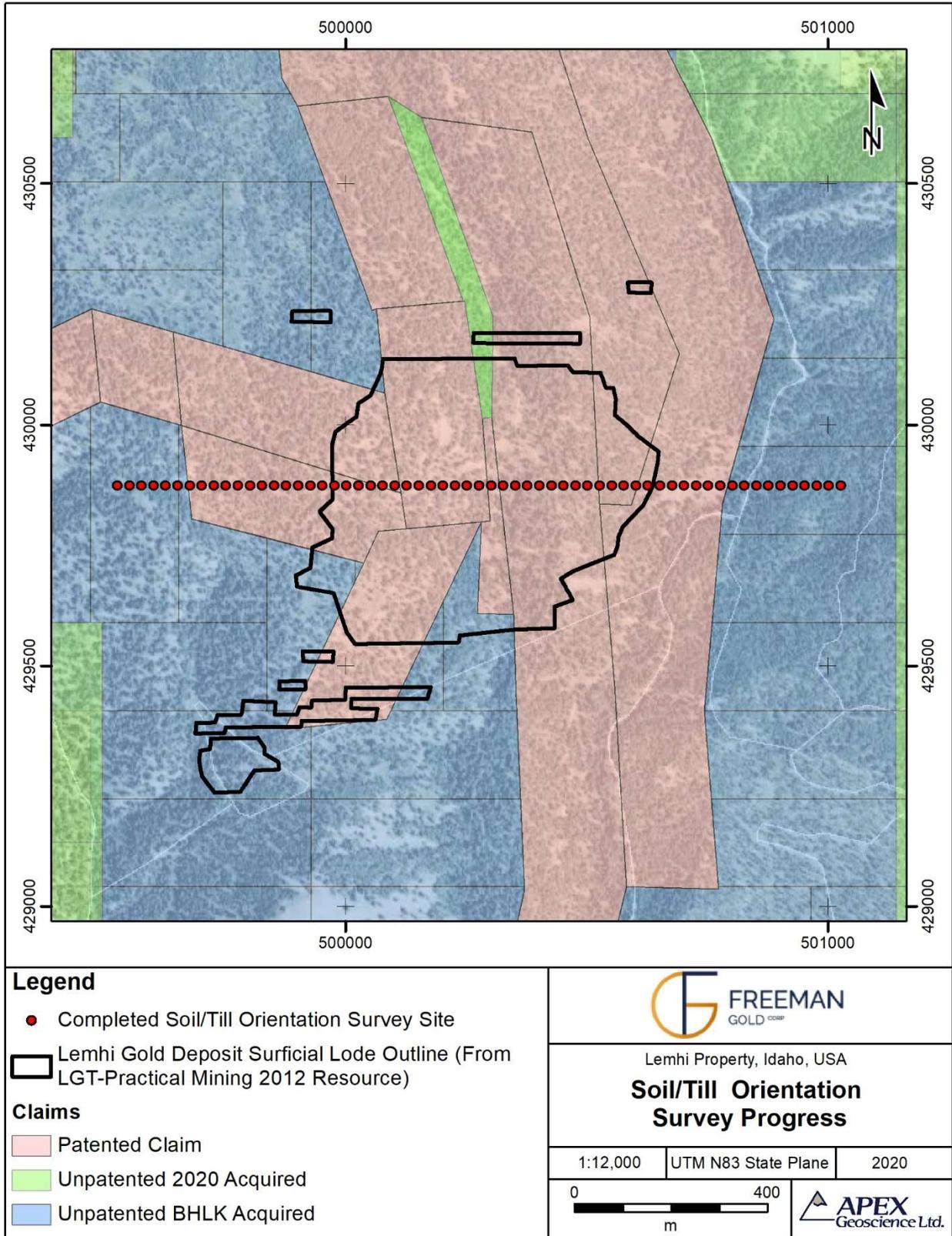


Figure 9.2: Correlation heatmaps for the three methods selected.

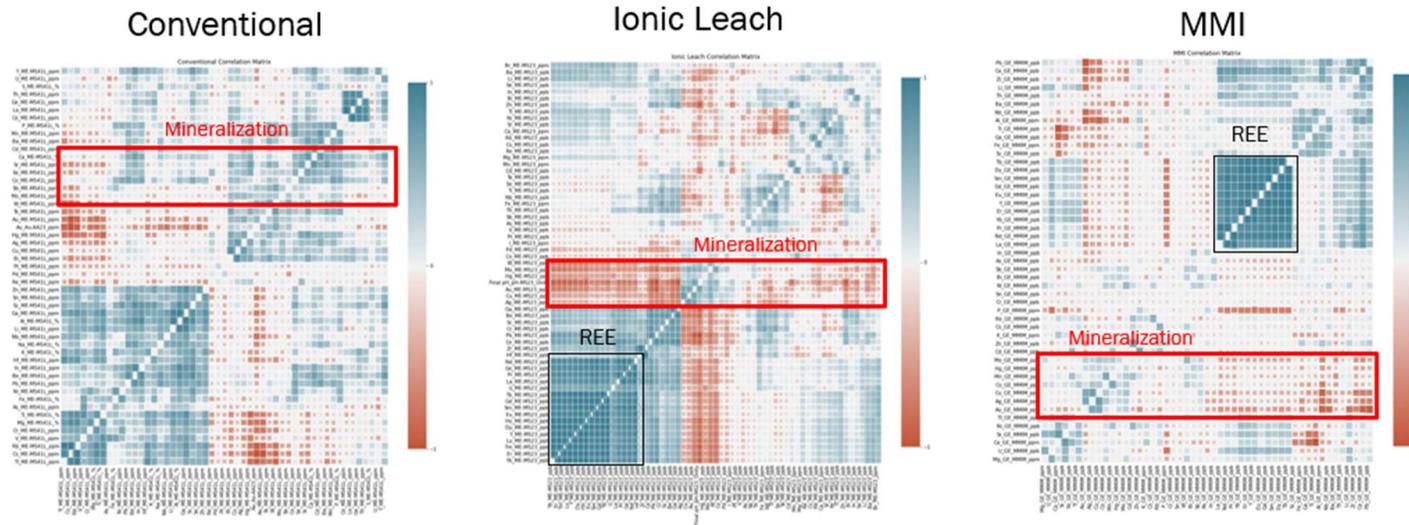


Figure 9.3: PCA for the three methods selected.

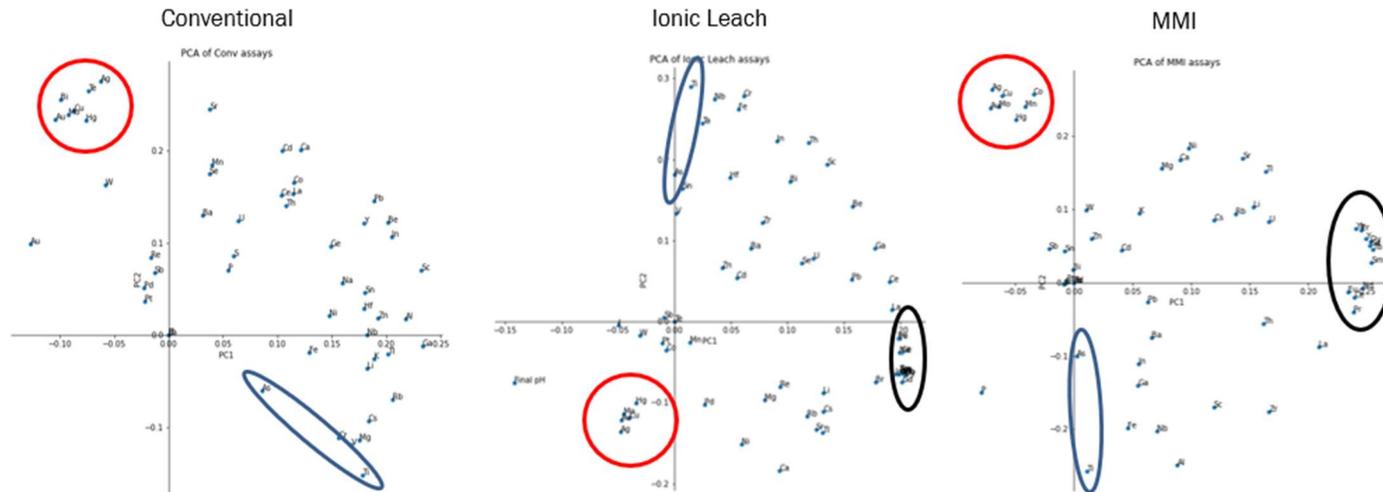


Figure 9.4: Orientation survey sample sites with Au concentrations at 30 – 40 cm depth across the Lemhi Gold Deposit.

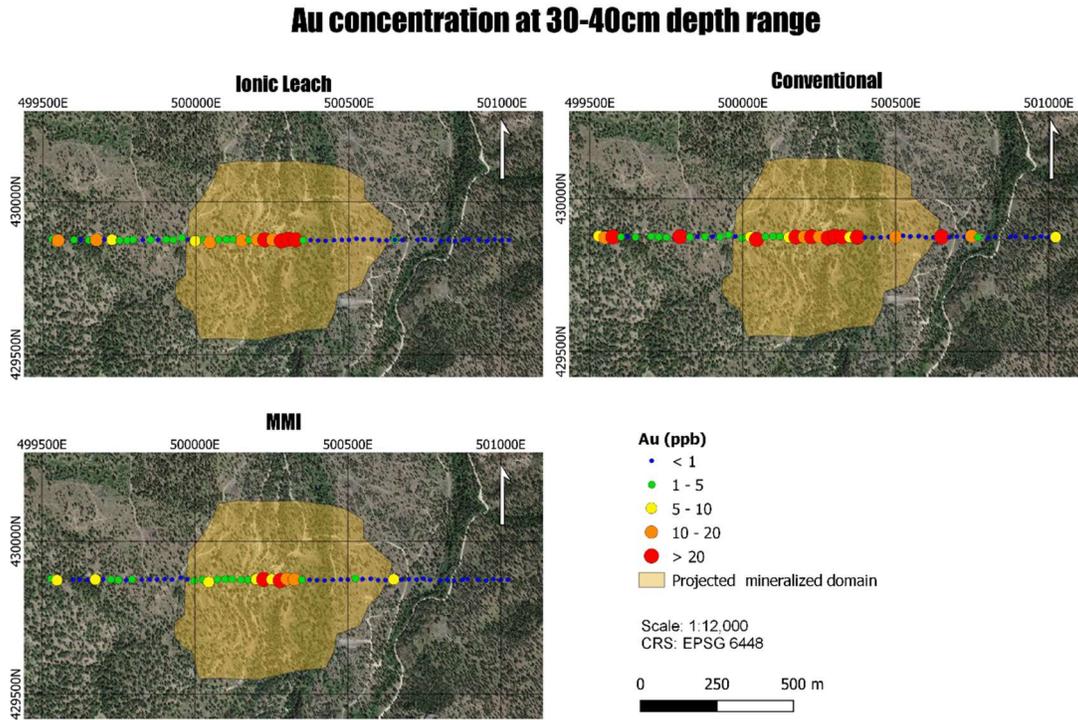


Figure 9.5: Orientation survey sample sites with Au response ratio at 30 – 40 cm depth across the Lemhi Gold Deposit.

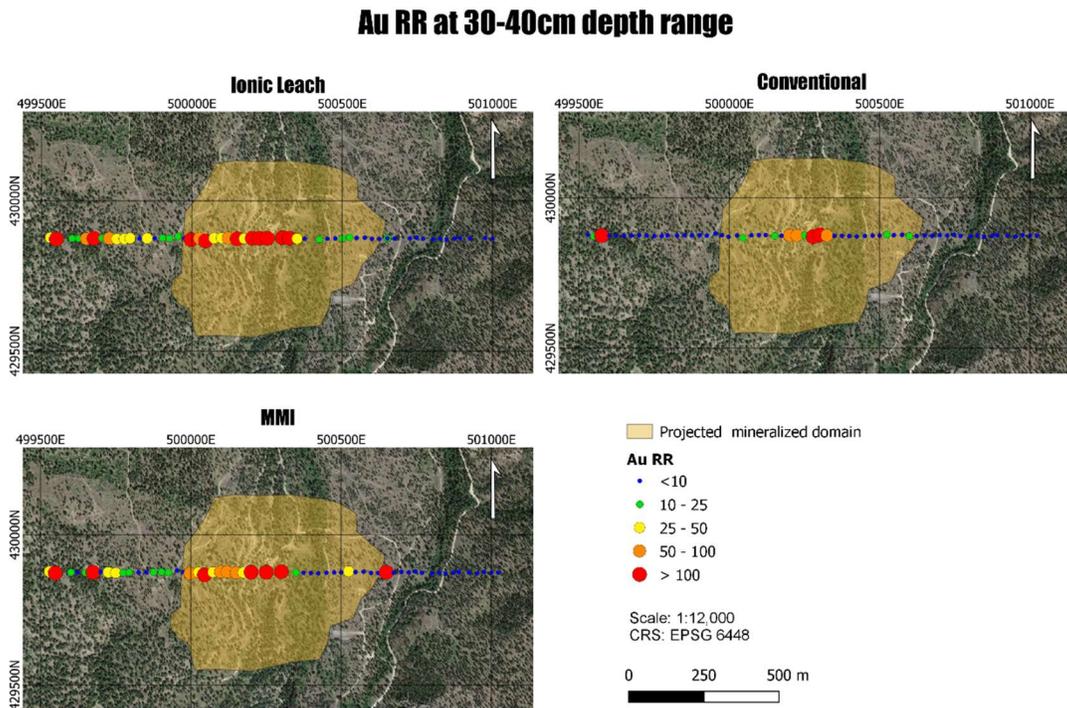


Figure 9.6: Ionic leach sample depth comparison for stations 31, 32 and 33.

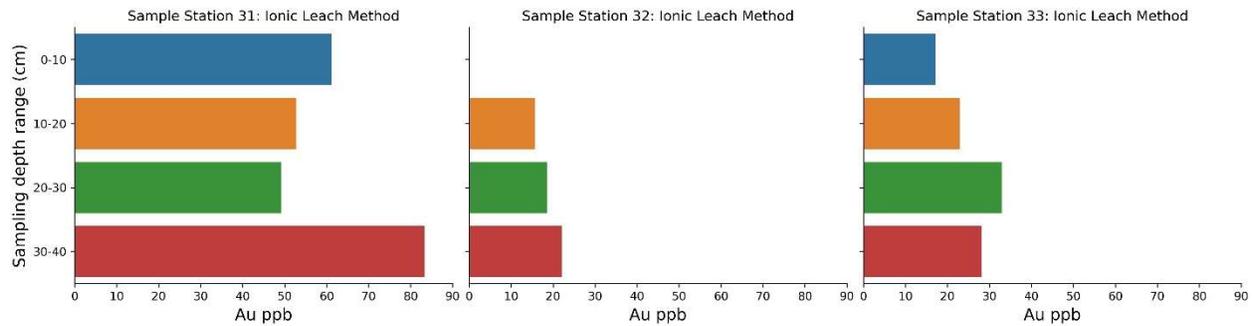
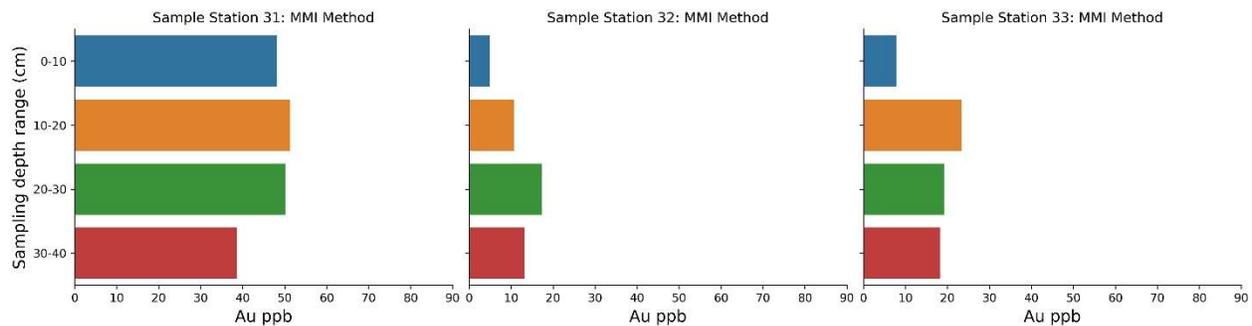


Figure 9.7: MMI sample depth comparison for stations 31, 32 and 33.



At the various depth profiles ionic leach showed consistently higher values from 20-40 cm (Figure 9.6) while MMI the highest values occurred from 10-30 cm (Figure 9.7).

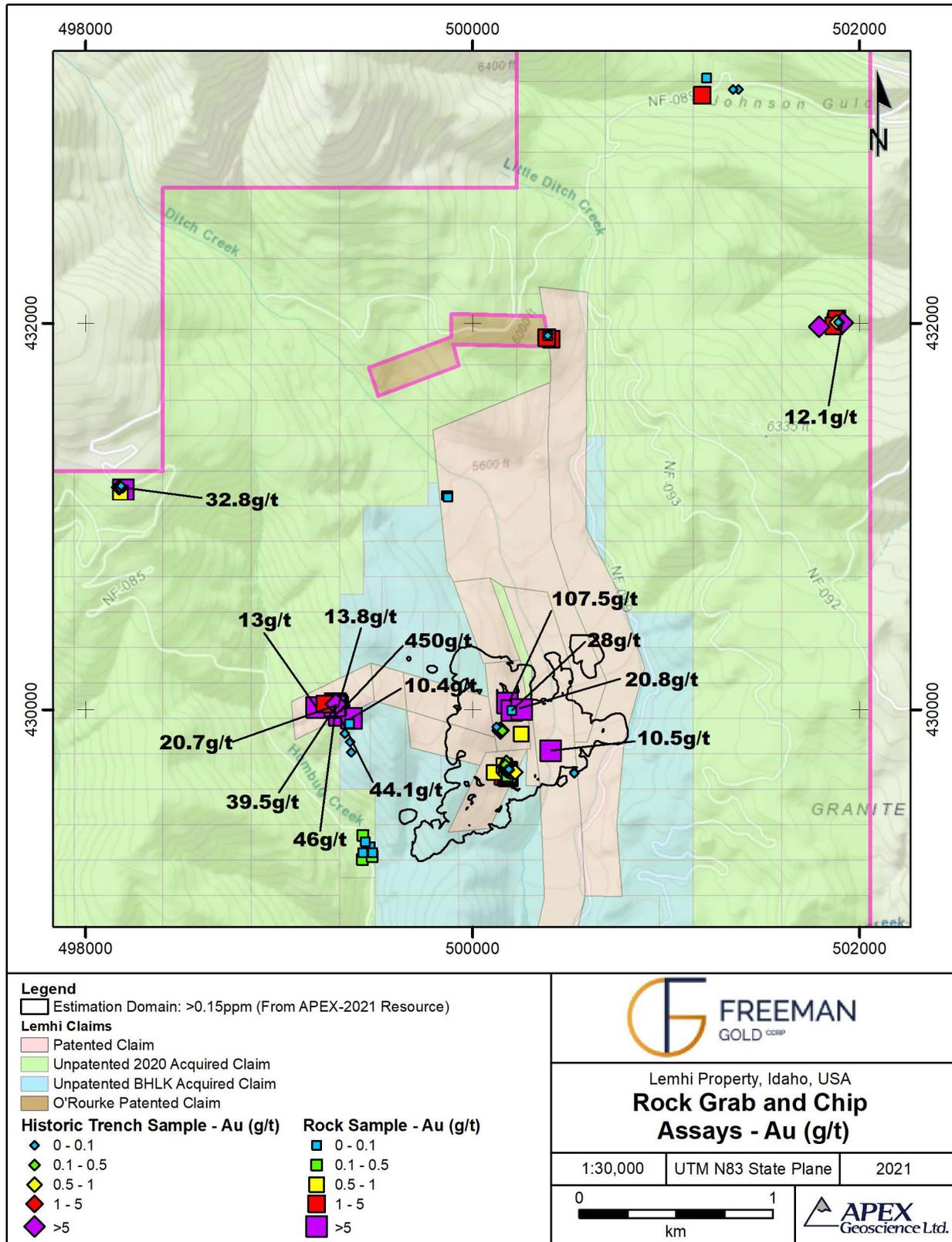
Based upon the results of the orientation soil survey, IL and MMI are preferred over conventional soil geochemistry since they have less noise and pick up underlying mineralization when plotting the response ratio. Results for IL and MMI were similar, however, due to cost of analysis and the fact that IL provides a larger suite of elements analyzed, IL is the recommended method to be employed in the 2021 regional sampling program at a depth of 30 cm.

9.2 Rock and Chip Sampling

A rock grab and chip sample program consisted of prospecting and chip sampling various exposed rock faces and trenches exposed across the property. Prospecting consisted of following up previous high-grade rock samples and visiting numerous adits and old workings across the property. A total of 145 samples (Figure 9.8) were collected; including blanks, standards and duplicates. Samples ranged from 0.5 – 2.5 kgs.

Chip samples were taken from outcrop and historical trenches. They were taken at 50 cm intervals across the rock face. A total of five locations were selected for chip sampling, from these 69 samples were collected. Grab samples were collected from historical trenches, outcrop or float for a total of 55 samples. The remaining 21 samples were standards and blanks. Of the samples collected 54 returned assay values greater than 1 g/t Au and 20 greater than 5 g/t Au (up to 450 g/t). Of the rock samples collected, 27

Figure 9.8: Rock grab and chip sample locations.



samples contain greater than 10 g/t Ag (up to 219 g/t). Mineralization was within phyllites, quartzite and quartz veins and appears similar to that of known mineralization at Lemhi encountered in core drilling. These results have identified five new exploration target areas for priority follow-up during 2021.

9.3 Ground Magnetic Survey

Freeman commissioned a ground magnetic (mag) survey over the entire Lemhi gold property. The mag survey was completed between September 20 to December 10, 2020.

The survey grid encompassed an area covering 2,675 hectares and consisted of 246 traverse lines oriented E-W and spaced 12.5m apart over the 1.44 km² deposit area (1.2 by 1.2 km) and 50-100 m spaced over the rest of the property. As the survey progressed and data was collected at a more regional scale, cursory interpretations of the unlevelled data were made. It was deemed appropriate to increase resolution from 50 to 100m line spacing to increase productivity along the northern, western, and southern extents of the property. Survey lines ranged in length from 180 to 4,570 m. In total, 559.4 line km of mag data was collected.

A GEM GSM-19V Overhauser magnetometer with an integrated GNSS receiver to collect ground magnetic measurements. The MAG data is recorded as total magnetic intensity readings at a cycle time of 1 second while the GEM unit was in walk mode and collecting continuous measurements along the traverse lines.

Processing and levelling the ground magnetics is complete but interpretation and target generation of the ground geophysical data is ongoing. The levelled ground magnetic data image is displayed by Figure 9.9.

9.4 3D Induced Polarization Survey

Between September 23 and October 9, 2020, Dias Geophysical Limited (“Dias”) carried out a 3D DC-resistivity and induced polarization (DCIP) survey on the Lemhi Gold Property using the DIAS32 system. This geophysical program was designed to detect the electrical resistivity and chargeability signatures associated with potential targets of interest. This was achieved using the DIAS21 acquisition system in conjunction with on GS5000 transmitter. The survey was completed using a rolling distributed partial 3D DCIP array with a pole-dipole transmitter configuration. The survey covered an area spanning approximately 1.44km² (1.2 by 1.2 km) over the Deposit (Figure 9.10).

Additional information regarding methodology and procedures, data processing and presentation and 3D inversion modelling is located in Appendix 2. The survey was designed to characterize the geophysical signature of the deposit and possible define new areas of gold mineralization and extensions of the known mineralized zones delineated by drilling. Cross Sections displaying chargeability (Figure 9.11) and resistivity (Figure 9.12) from the 3D IP survey plotted along drill section 430000N with results of FG20-001C and FG20-002C are displayed below.

Figure 9.9: Preliminary ground magnetic data image.

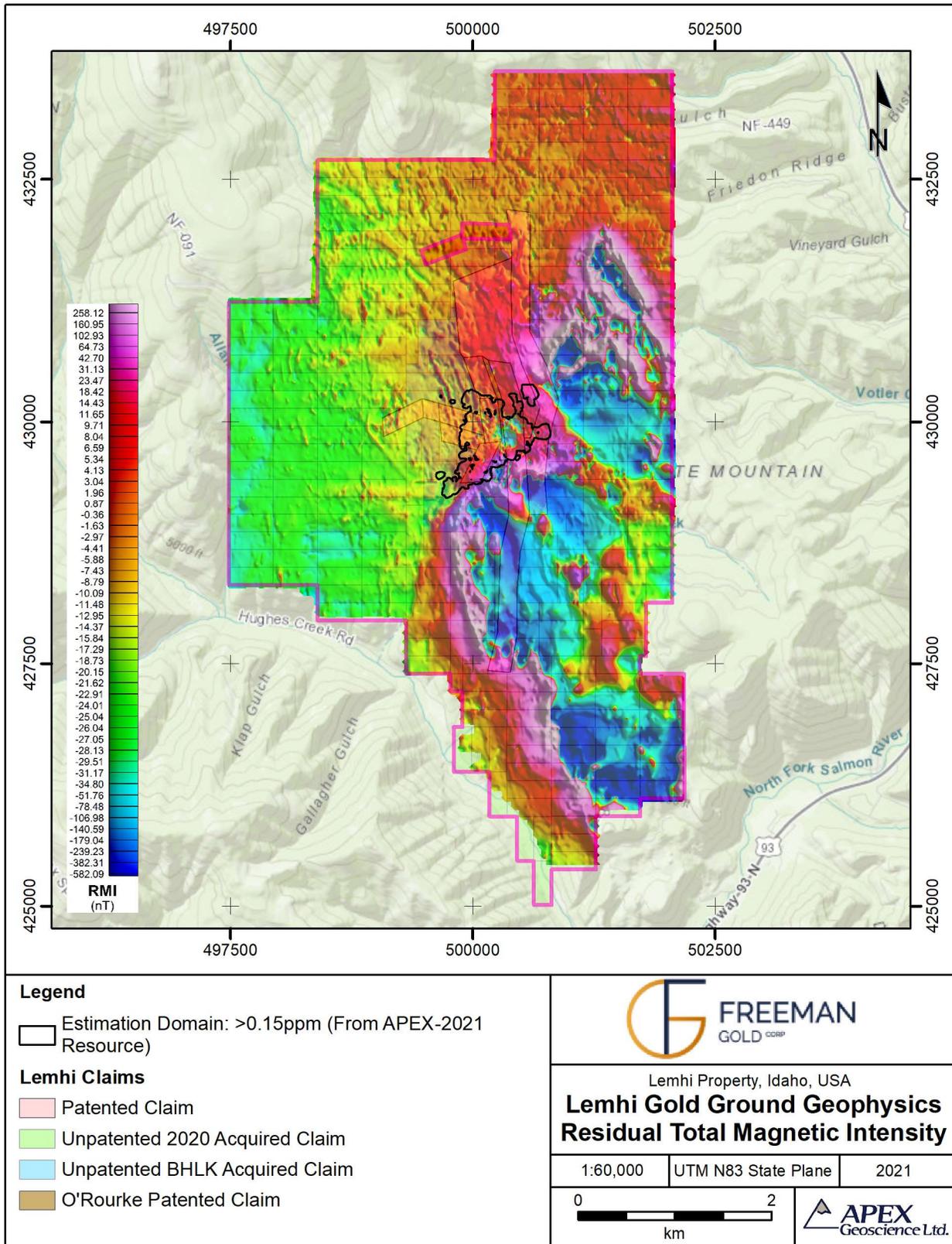


Figure 9.10: 3D DC-Resistivity and Induced Polarized Survey Area.

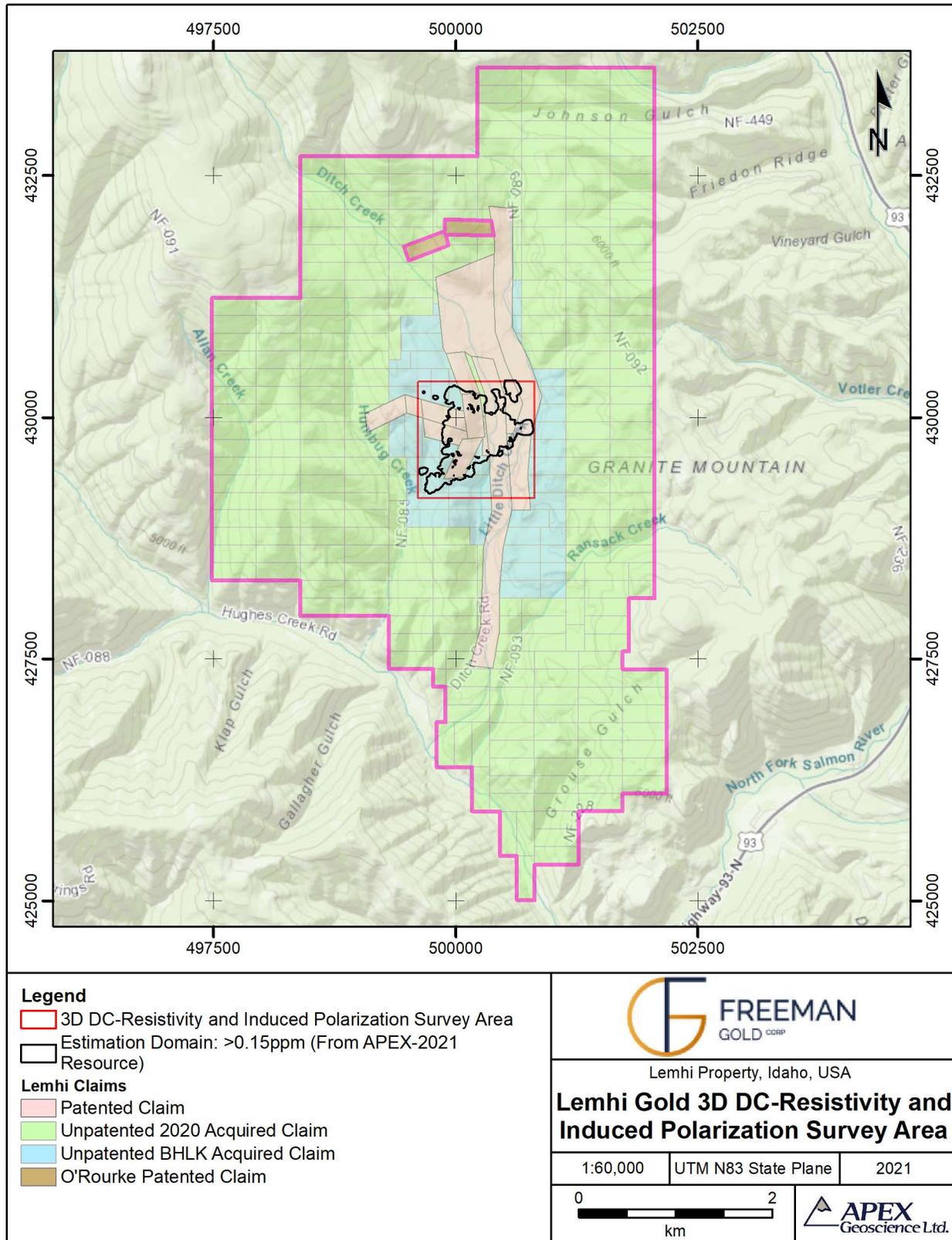


Figure 9.11: Cross Section of chargeability from the 3D IP survey plotted along Drill section 430000 with results of FG20-001C and FG20-002C.

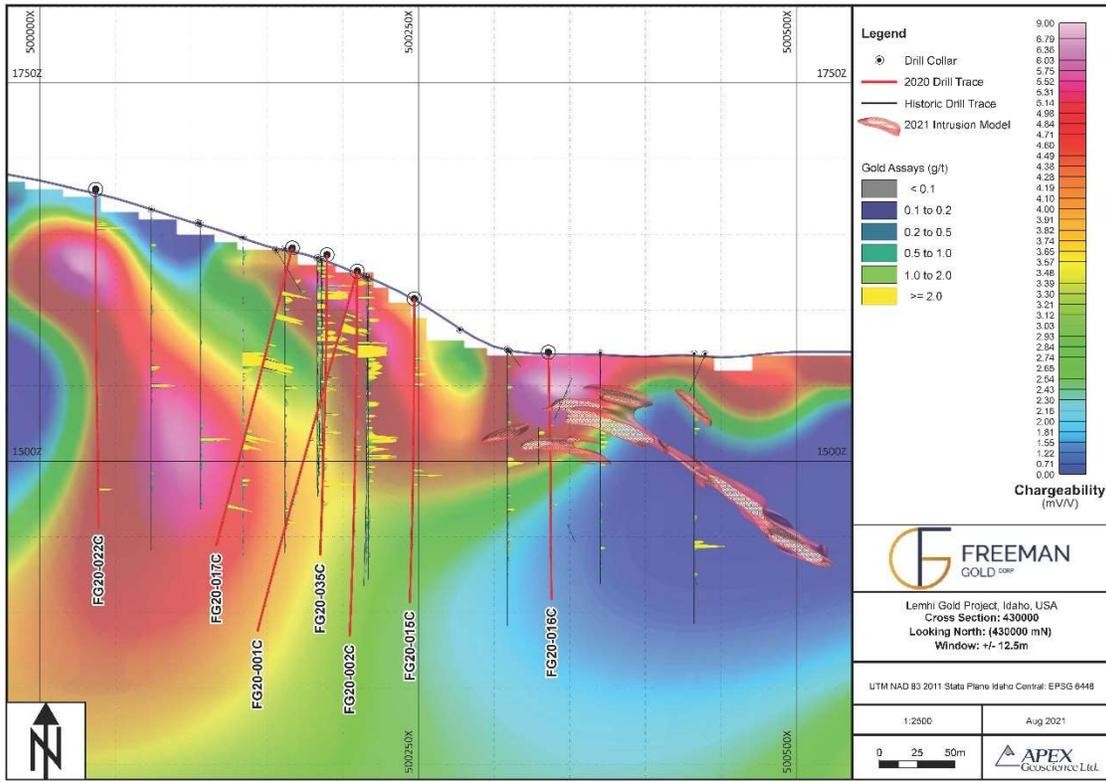
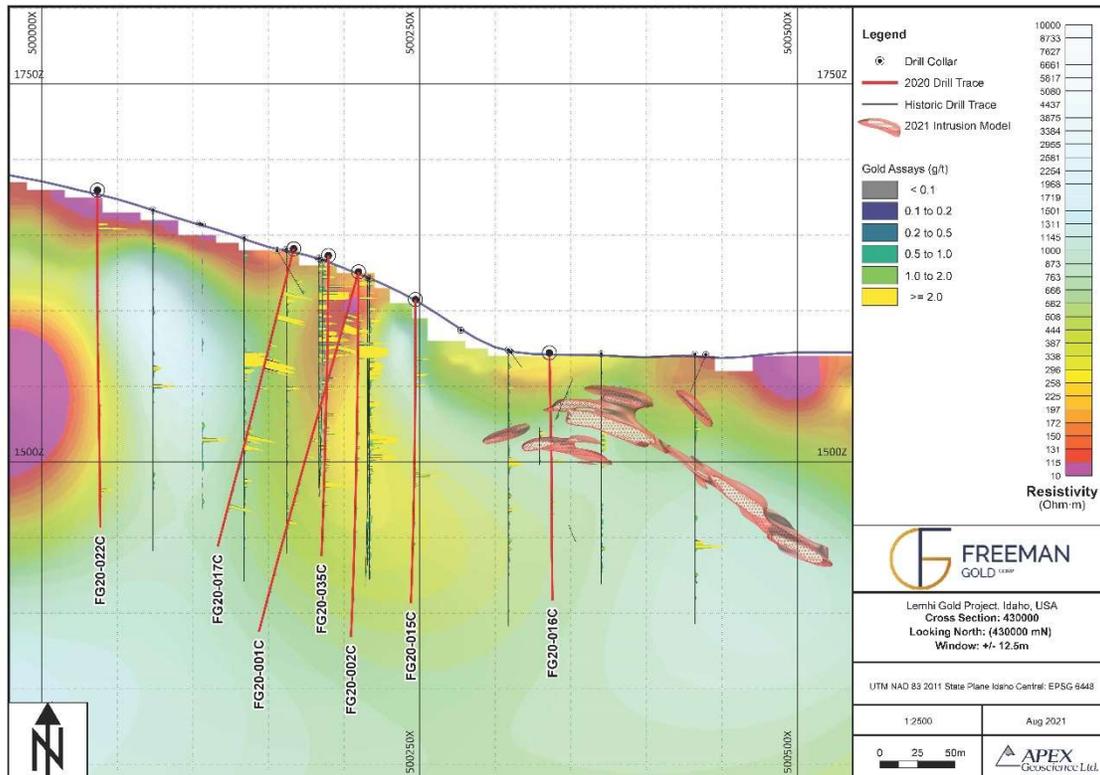


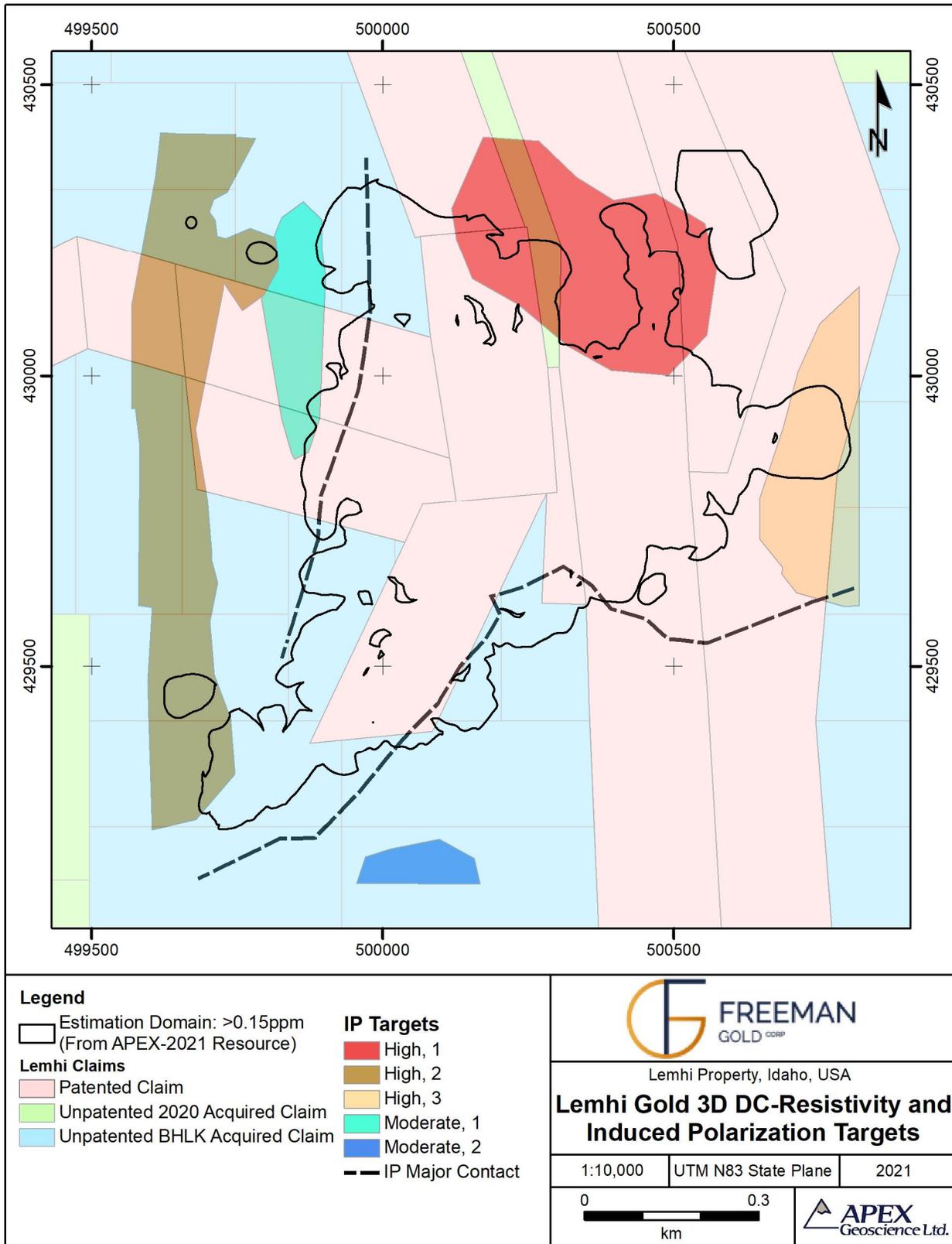
Figure 9.12: Cross Section of resistivity from the 3D IP survey plotted along Drill section 430000 with results of FG20-001C and FG20-002C.



From the 3D IP results two major contacts have been interpreted: the strongest one follows an east-northeast curvi-linear trend where chargeabilities are generally low and resistivities are very low to the south-southeast. The contact is also coincident with a magnetic high trend. The second major contact is also coincident with a magnetic high trend and trends to the north-south, located on the west side of the survey block and is characterized by low chargeability coincident with low resistivity.

Three high priority and two moderate priority anomalies have been defined (Figure 9.13). The first high priority is an area of elevated resistivity that is partially coincident with the northern limit of the gold grade zone. The second is a large north-south trending zone of high resistivity and high chargeability located at the western boundary of the survey block that is unbounded to the west. The third is a zone of high chargeability located at the eastern border of the survey block and unbounded to the east. The first moderate priority is a north-south trending zone of high resistivity and high chargeability adjacent to the northwestern boundary of the gold grade zone that is only seen in the shallow depth slices. The second moderate priority is a zone of high chargeability that straddles the southwestern portion of the mineralized zone and is seen only in the deep depth slices. The anomalies require drill testing and are shown on Figure 9.13. If additional gold mineralization is intersected, the IP survey should be extended to define the extent of the anomalies. As well, 3D IP could then be used as an important exploration tool in other areas with coincident anomalies to better define buried mineralization.

Figure 9.13: Targets and major contacts interpreted from the 3D DC-Resistivity and Induced Polarized Survey.



10 Drilling

From September 13 to December 5, 2020, Freeman conducted a 7,149 m drill program consisting of 35 core holes on the Lemhi Project (Figure 10.1). The focus of this program was to confirm historical drill results completed by LGT in 2012, reported in detail in Brewer (2019), and other historical drilling summarized in the History section of this report.

In addition to confirming historical mineralization, the objective of the 2020 Phase 1 drill program was designed to allow the use of 385 historical drill holes in a current and maiden mineral resource estimate (MRE). The drill program focused on infill and step-out drilling within the known mineralized body to increase confidence and maximize the potential resource.

Through the phase 1 drilling, Freeman confirmed and extended the presence a number of stacked mineralized structures over a 600 x 700 meter area from surface down to over 260 metres in depth. As of January 27, 2021, all geological logging of the core was completed, and samples were submitted to ALS Geochemistry – Vancouver. Of the 35 holes drilled, 23 yielded visible gold within the various mineralized zones (Figure 10.2). All core sample results have been received and highlights of the results are summarized below in Table 10.1. Most of the drill holes intersect shallow high-grade oxide gold, and several highlighted intersections are displayed in Figure 10.3, 10.4, 10.5 and 10.6. Highlighted results (using core length) from these holes include 3.3 g/t Au over 25m, including 5.4 g/t Au over 7m (FG20-001C); 3.4 g/t Au over 51.6m, including 14 g/t Au over 10m (FG20-002C); 3.2 g/t Au over 14.6m (FG20-003C); 1.8 g/t Au over 92m, including 8.7 g/t Au over 7.7m and 15.1 g/t Au over 4.3m (FG20-006C); 0.8 g/t over 174.26m, including 6.3 g/t over 7.53m (FG20-007C); 0.9 g/t over 174.28m (FG20-008C); 2.5 g/t over 151m, including 25 g/t over 8.7m and 8.3 g/t over 4m (FG20-017C); 1.4 g/t over 48.75m, including 2.1 g/t over 22m (FG20-033C); and 0.54 g/t over 189.35m, including 1.1 g/t over 38.53m (FG20-035C). Gold mineralization extends to at least 200 meters and is open at depth. Of note, the high-grade zones lie within broader lower grade mineralized envelopes, such as 1.1 g/t over 189.1 metres (FG20-006C); 2.5 g/t over 174.26m (FG20-017C), and 0.54 g/t over 189.35m (FG20-035C).

Figure 10.1: Drill collar locations for the 2020 program.

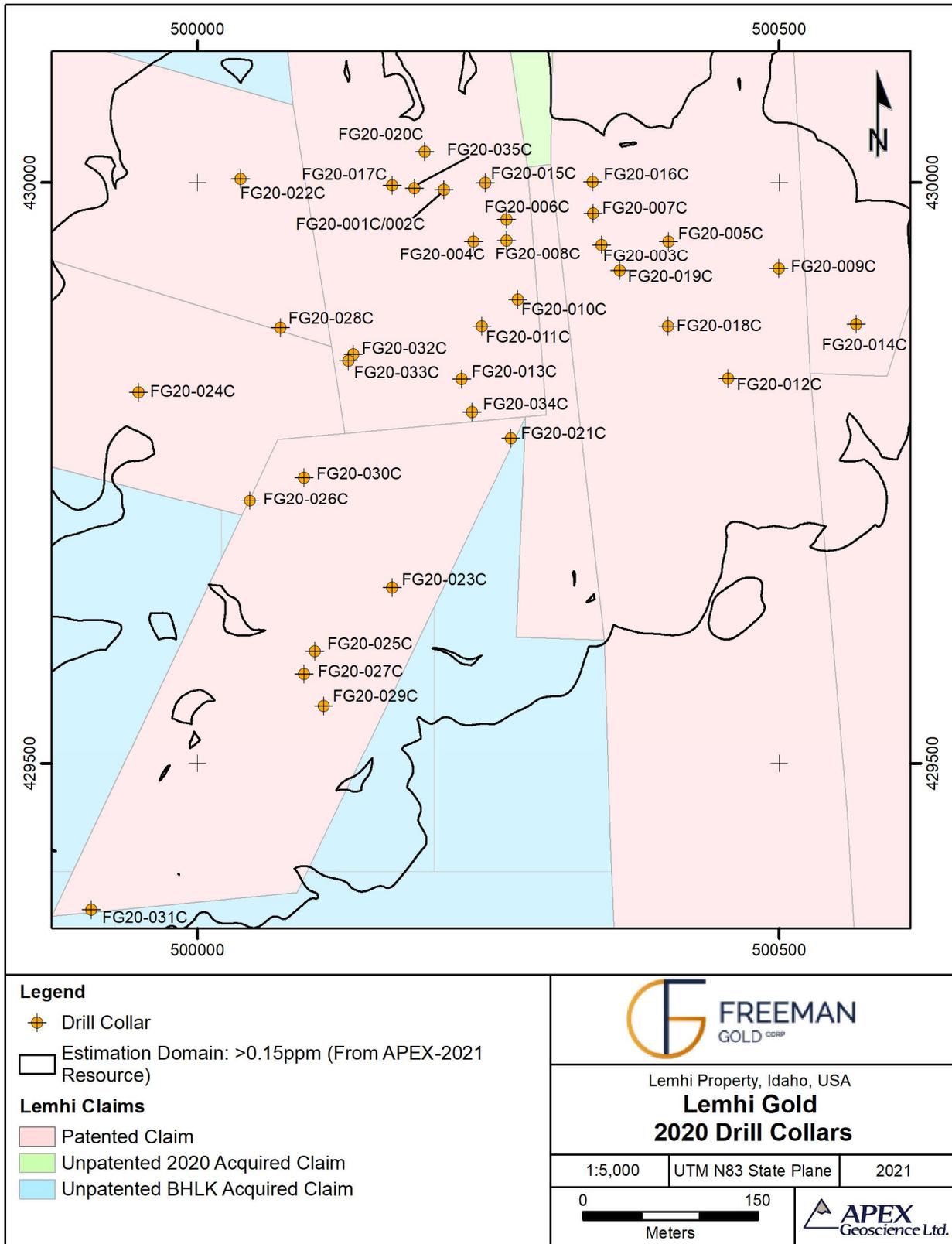


Table 10.1: 2020 Significant Drill Results

DRILL HOLE	DEPTH (METRES)	DIP	AZIMUTH	DEPTH (METRES)		INTERVAL (METRES)	GRADE (G/T AU)*	HIGHLIGHT
				FROM	TO			
FG20-001C <i>Including..</i> <i>Including..</i>	247	-75	247	28.0	53.0	25.0	3.3	25.0m @ 3.3 g/t Au
				32.0	41.0	9.0	4.0	
				46.0	53.0	7.0	5.4	
FG20-002C <i>Including..</i>	242	-90	360	6.4	58.0	51.6	3.4	51.6m @ 3.4 g/t Au
				47.0	57.0	10.0	14.0	10.0m @ 14 g/t Au
FG20-003C <i>Including..</i>	185	-90	360	40.0	96.0	56.0	1.2	56.0m @ 1.2 g/t Au
				81.4	96.0	14.6	3.2	14.6m @ 3.2 g/t
FG20-004C <i>Including..</i>	223	-75	298	0	27.43	27.43	0.4	14.2m @ 1.8 g/t Au
				93.03	167.03	74	0.7	
				93.03	107.23	14.2	1.8	
				208.18	209.85	1.67	5.2	
FG20-005C <i>Including..</i>	210	-90	360	42.99	57.07	14.08	2.6	8.04m @ 3.5 g/t Au
				49.03	57.07	8.04	3.5	
				66.85	123.6	56.75	0.5	
FG20-006C <i>Including..</i> <i>Including..</i> <i>Including..</i>	213	-75	213	12.9	202.1	189.2	1.1	189.2m @ 1.1 g/t Au
				37.0	129.0	92.0	1.8	7.7m @ 8.7 g/t Au
				81.5	89.2	7.7	8.7	
				81.5	85.8	4.3	15.1	
FG20-007C <i>Including..</i> <i>Including..</i>	182	-90	360	7.4	181.66	174.26	0.8	174.26m @ 0.8 g/t Au
				15.8	36.01	20.21	2.2	7.53m @ 6.3 g/t Au
				89.97	97.5	7.53	6.3	
				14.89	100.85	85.96	1.6	
FG20-008C <i>Including..</i> <i>Including..</i>	184	-90	360	9.36	183.64	174.28	0.9	174.28m @ 0.9 g/t Au
				64.7	71.78	7.08	3.8	
				82.05	100.58	18.53	3.9	
FG20-009C <i>Including..</i>	197	-90	360	16.46	183.1	166.64	0.3	6.92m @ 2.6 g/t Au
				155.06	161.98	6.92	2.6	
FG20-010C <i>Including..</i>	173	-90	360	100.01	136.94	36.93	0.6	
				108.02	113.06	5.04	1.7	
FG20-011C <i>Including..</i> <i>Including..</i>	173	-90	360	12.08	153.02	140.94	0.3	3.85m @ 5 g/t Au
				118.1	121.95	3.85	5	
				118.1	132.02	13.92	1.9	
FG20-012C <i>Including..</i> <i>Including..</i> <i>Including..</i>	264	-90	360	56.86	99.46	42.6	1.2	13.17m @ 2.5 g/t Au
				56.86	70.03	13.17	2.5	
				139.6	234.53	94.93	0.4	
				139.6	149.97	10.37	2.1	
				143.69	148.13	4.44	4.2	4.44m @ 4.2 g/t Au

FG20-013C	184	-90	360	106.92	127.21	20.29	2.1	
<i>Including..</i>				109.12	118.57	9.45	3.5	9.45m @ 3.5 g/t Au
<i>Including..</i>				110.2	116.89	6.69	4.3	
FG20-014C	286	-90	360	70.02	75.04	5.02	1.1	
<i>Including..</i>				157.87	179.68	21.81	1.2	21.81m @ 1.2 g/t Au
<i>Including..</i>				159	163	4	2	
FG20-015C	201	-90	360	35	59	24	1	
<i>Including..</i>				49	51	2	4.8	
<i>Including..</i>				113	124	11	2.1	11m @ 2.1 g/t Au
<i>Including..</i>				113	117	4	4.9	4m @ 4.9 g/t Au
<i>Including..</i>				146	168	22	0.3	
FG20-016C	164	-90	360	64.8	101.09	36.29	0.25	
<i>Including..</i>				71	72	1	4.3	1m @ 4.3 g/t Au
FG20-017C	203	-75	270	29	180	151	2.5	
<i>Including..</i>				29	33.07	4.07	4.9	151m @ 2.5 g/t Au
<i>Including..</i>				45	48	3	14.5	4.07m @ 4.9 g/t Au
<i>Including..</i>				74	82.7	8.7	25	3m @ 14.5 g/t Au
<i>Including..</i>				121	137	16	3.35	8.7m @ 25 g/t Au
<i>Including..</i>				127	131	4	8.3	16m @ 3.35 g/t Au
<i>Including..</i>				175	177	2	5.26	4m @ 8.3 g/t Au
<i>Including..</i>								2m @ 5.26 g/t Au
FG20-018C	178	-90	360	12	47	35	0.3	
<i>Including..</i>				112.32	163	50.68	0.4	
<i>Including..</i>				112.32	124	11.68	1	11.68m @ 1 g/t Au
FG20-019C	170	-90	360	52	56	4	1.2	
<i>Including..</i>				78	127.05	49.05	0.9	49.05m @ 0.9 g/t Au
<i>Including..</i>				78	81	3	2.3	3m @ 2.3 g/t Au
<i>Including..</i>				101.92	105	3.08	2.9	3.08m @ 2.9 g/t Au
FG20-020C	201	-90	360	75	110	35	0.3	
<i>Including..</i>				83	84	1	4.2	35m @ 0.3 g/t Au
<i>Including..</i>				109	110	1	3.6	1m @ 4.2 g/t Au
FG20-021C	170	-90	360	32.92	57.9	24.98	0.6	
<i>Including..</i>				32.92	34	1.08	3.1	24.98m @ 0.6 g/t Au
<i>Including..</i>				47	53	6	1.7	1.08m @ 3.1 g/t Au
<i>Including..</i>				129.1	133	3.9	1.3	6m @ 1.7 g/t Au
FG20-022C	223	-90	360	4	34.14	30.14	1	
<i>Including..</i>				22	28	6	4.6	30.14m @ 1 g/t Au
<i>Including..</i>				198	203.32	5.32	1.1	6m @ 4.6 g/t Au
FG20-023C	212	-90	360	2.13	26.64	24.51	0.5	
<i>Including..</i>				24.91	26.64	1.73	3.5	24.51m @ 0.5 g/t Au
<i>Including..</i>				95	98.05	3.05	0.9	1.73m @ 3.5 g/t Au
<i>Including..</i>				120.3	122.8	2.5	1.1	3.05m @ 0.9 g/t Au
<i>Including..</i>								2.5m @ 1.1 g/t Au

				174.45	194.4	19.95	0.6	19.95m @ 0.6 g/t Au
FG20-024C	222	-90	360	143	215	72	0.4	72m @ 0.4 g/t Au
<i>Including..</i>				180	181	1	10.15	1m @ 10.15 g/t Au
<i>Including..</i>				205.05	208	2.95	1.4	2.95m @ 1.4 g/t Au
FG20-025C	238	-90	360	17.75	69	51.25	0.3	51.25m @ 0.3 g/t Au
<i>Including..</i>				26	28	2	1.9	2m @ 1.9 g/t Au
				116	127	11	0.6	11m @ 0.6 g/t Au
				189.57	206	16.43	0.5	16.43m @ 0.5 g/t Au
FG20-026C	227	-90	360	21.34	38.06	16.72	0.8	16.72m @ 0.8 g/t Au
<i>including...</i>				22	23	1	5.65	1m @ 5.65 g/t Au
				101	173.37	72.37	0.9	72.37m @ 0.9 g/t Au
<i>Including...</i>				139	160.1	21.1	2.1	21.1m @ 2.1 g/t Au
<i>Including...</i>				141	149.85	8.85	4.1	8.85m @ 4.1 g/t Au
<i>Including...</i>				171.29	173	1.71	5	1.71m @ 5 g/t Au
FG20-027C	235	-90	360	9	72.54	63.54	0.5	63.54m @ 0.5 g/t Au
<i>Including..</i>				63	72.54	9.54	1.9	9.54m @ 1.9 g/t Au
<i>Including..</i>				68	72.54	4.54	2.8	4.54m @ 2.8 g/t Au
				192.05	212	19.95	0.5	19.95m @ 0.5 g/t Au
FG20-028C	197	-90	360	20	21	1	2	1m @ 2 g/t Au
				76	77	1	1.2	1m @ 1.2 g/t Au
				95	192	97	0.5	97m @ 0.5 g/t Au
<i>Including...</i>				149	174	25	1.1	25m @ 1.1 g/t Au
<i>Including...</i>				155	156	1	10.85	1m @ 10.85 g/t Au
FG20-029C	249	-90	360	48	66	18	1.1	18m @ 1.1 g/t Au
				202	215	13	0.4	13m @ 0.4 g/t Au
<i>Including</i>				202	203.4	1.4	1.3	1.4m @ 1.3 g/t Au
FG20-030C	214	-90	360	4	123	119	0.4	119m @ 0.4 g/t Au
<i>Including..</i>				72.97	95	22.03	1	22.03m @ 1 g/t Au
<i>Including..</i>				75.81	78.1	2.29	2.9	2.29m @ 2.9 g/t Au
				109.15	123	13.85	1.1	13.85m @ 1.1 g/t Au
				145	150.86	5.86	1	5.86m @ 1 g/t Au
				167	173.13	6.13	0.9	6.13m @ 0.9 g/t Au
FG20-031C	228	-90	360	39	87.15	48.15	0.4	48.15m @ 0.4 g/t Au
<i>Including..</i>				71.17	74	2.83	2.4	2.83m @ 2.4 g/t Au
				179.98	188.05	8.07	2.1	8.07m @ 2.1 g/t Au
FG20-032C	70	-90	360					NSR - LOST HOLE
FG20-033C	199	-90	360	112.25	161	48.75	1.4	48.75m @ 1.4 g/t Au
<i>Including..</i>				116	138	22	2.1	22m @ 2.1 g/t Au
<i>Including..</i>				155.75	160.32	4.57	4	4.57m @ 4 g/t Au
FG20-034C	182	-90	360	102.32	109.95	7.63	2.3	7.63m @ 2.3 g/t Au
				132	141	9	1.5	9m @ 1.5 g/t Au

<i>Including..</i>				133.01	135	1.99	4	1.99m @ 4 g/t Au
FG20-035C	199	-90	360	8.65	189	180.35	0.54	189.35m @ 0.54 g/t Au
<i>Including...</i>				20	23	3	3.9	3m @ 3.9 g/t Au
				49.95	53	3.05	2.7	3.05m @ 2.7 g/t Au
				128.47	167	38.53	1.1	38.53m @ 1.1 g/t Au
				149.46	153	3.54	6.6	3.54m @ 6.6 g/t Au

Figure 10.2: Visible gold hosted in quartz vein from drill hole FG20-002C at 47.25 m, the sample C375828 from 47 – 48 m returned 14.45 g/t Au.

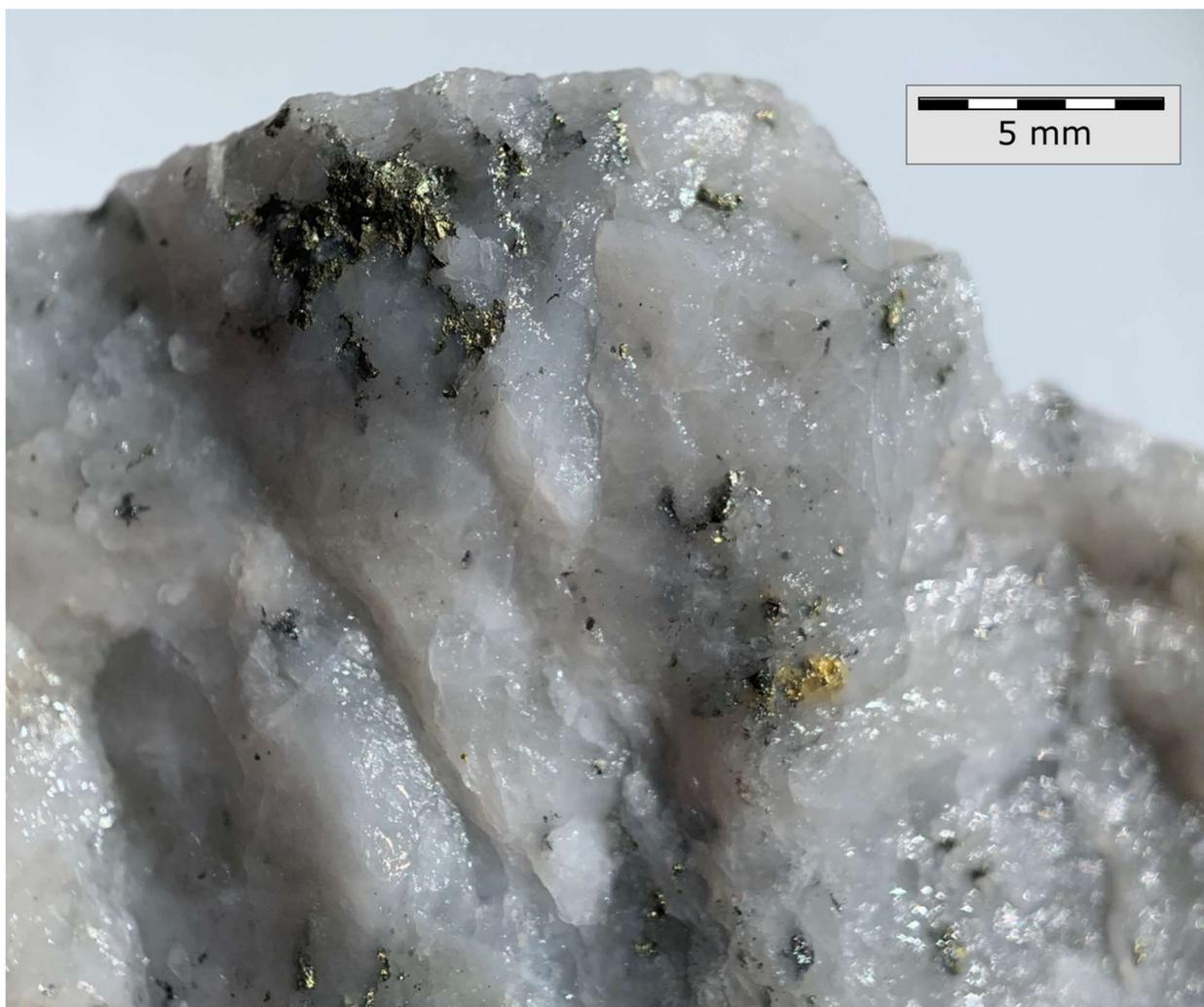


Figure 10.3: Drill section 430000 with highlighted results of FG20-001C, FG20-002C, FG20-017 and FG20-035C.

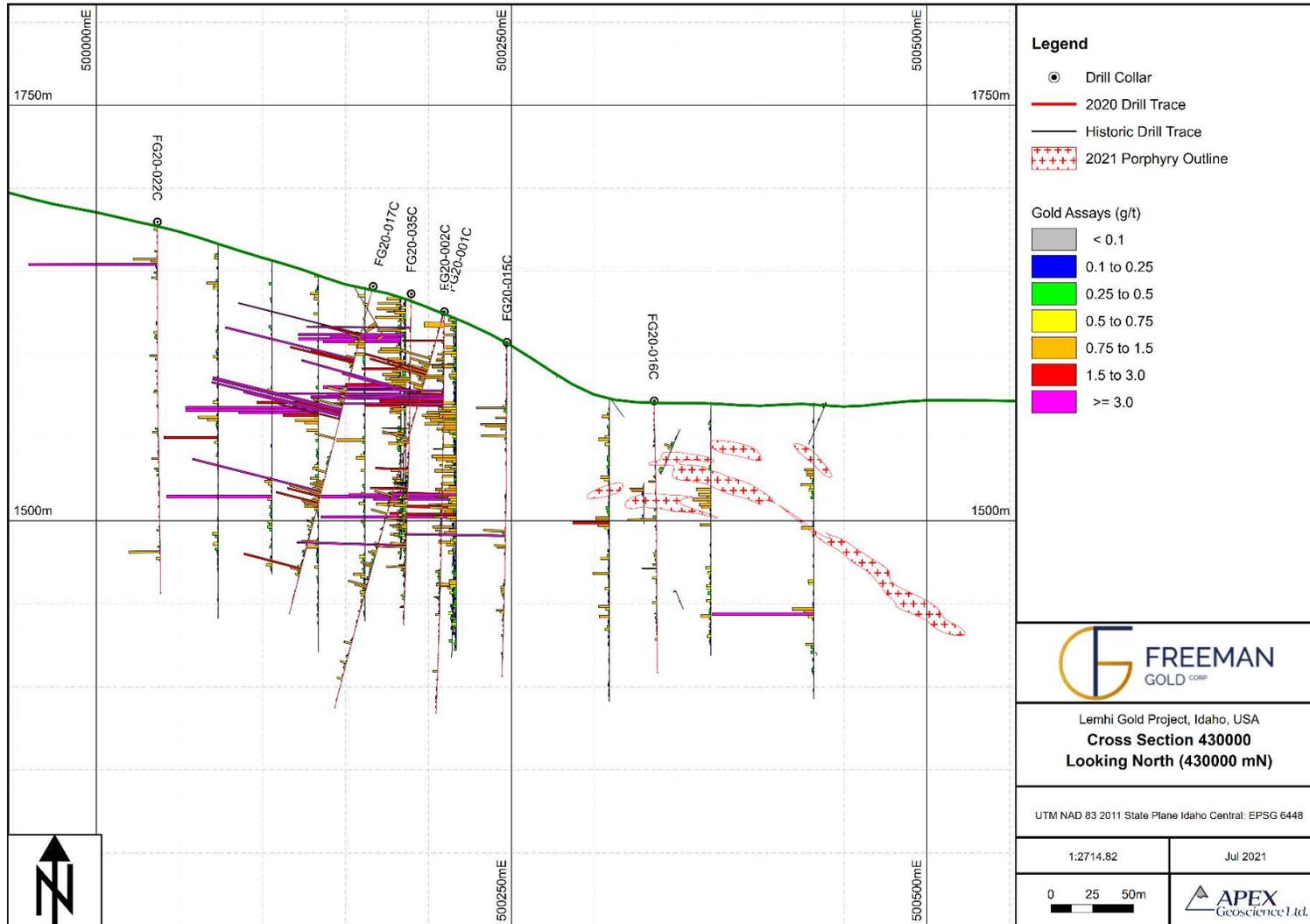


Figure 10.4: Drill section 429975 with highlighted results of FG20-007C and FG20-008C.

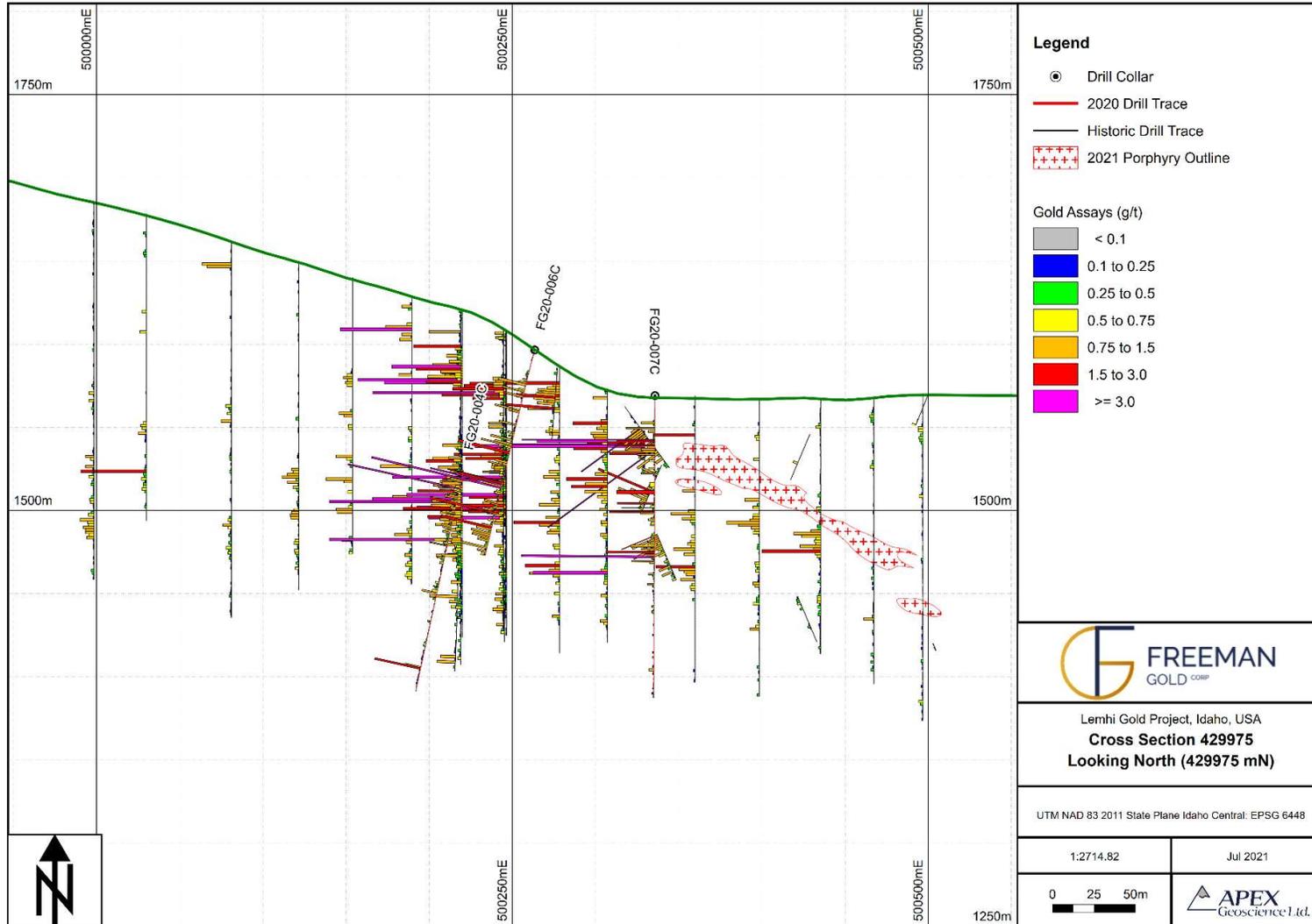


Figure 10.5: Drill section 429950 with highlight results of FG20-003C and FG20-008C.

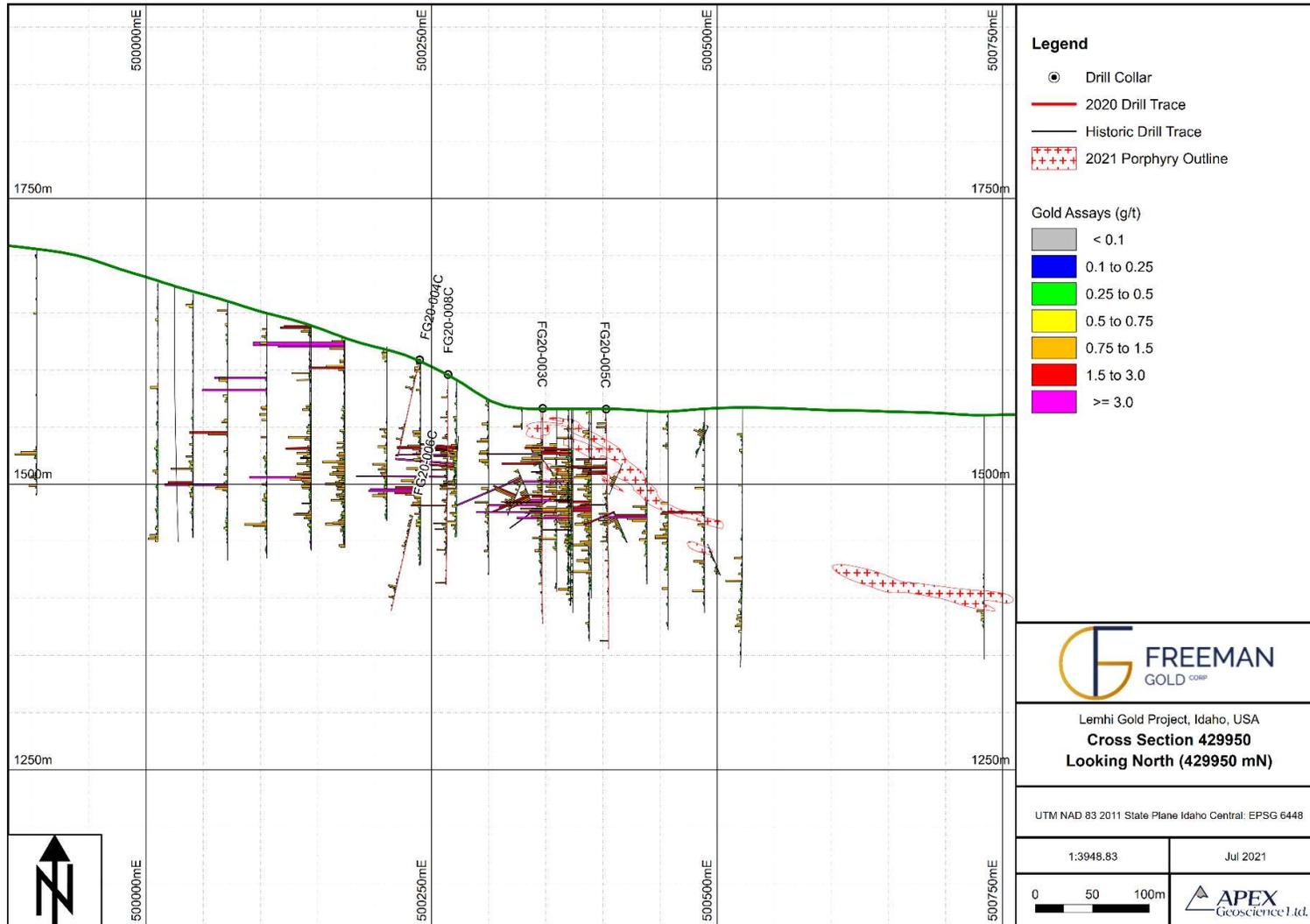
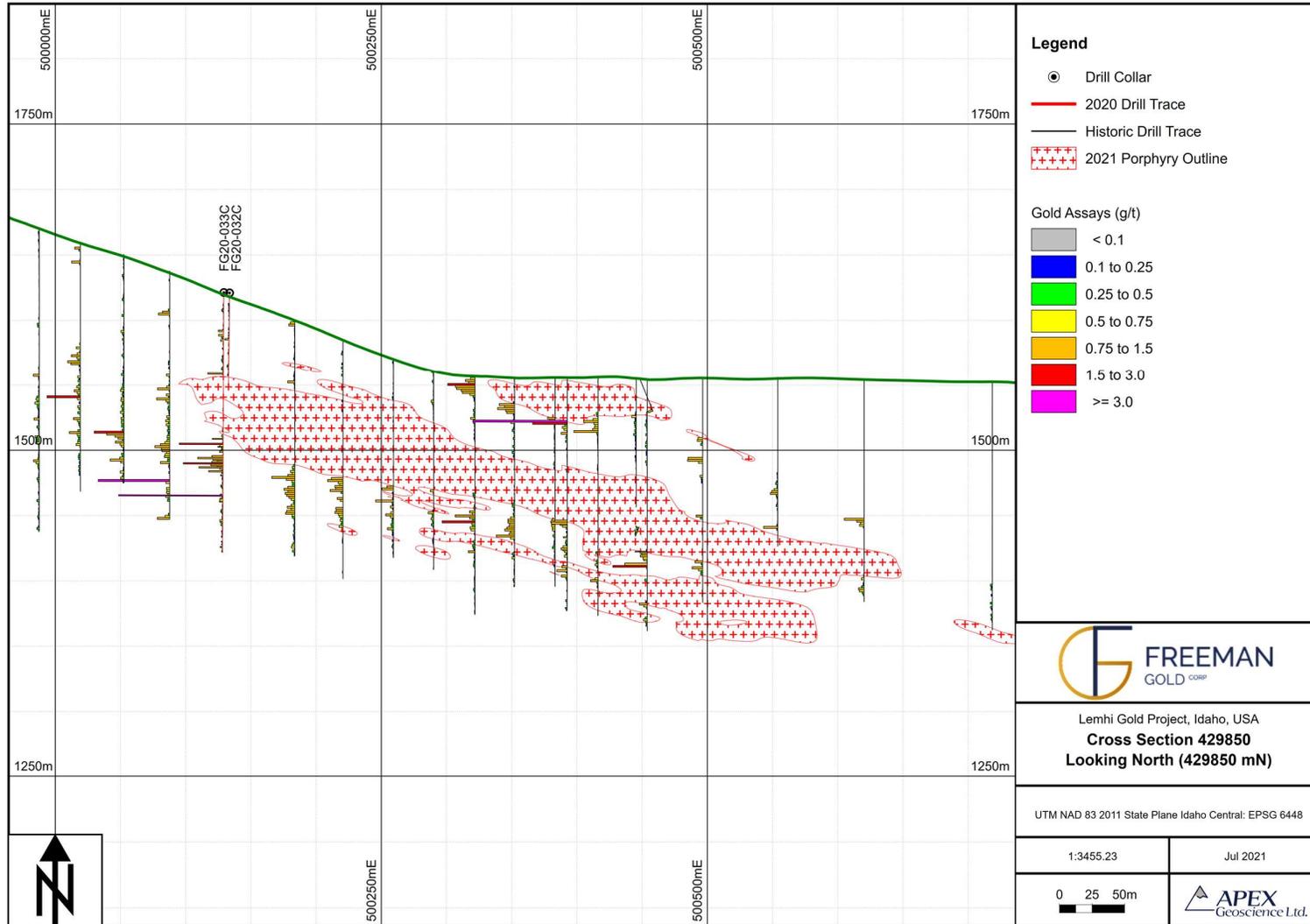


Figure 10.6: Drill section 429850 with highlight results of FG20-033C.



11 Sample Preparation, Analyses and Security

11.1 Sample Collection, Preparation and Security

A total of 7,215 drill core samples, 145 rock samples, 633 soils samples were collected during the 2020 exploration program. Of the soil samples, 291 were submitted to SGS Mineral Services – Burnaby (SGS) for MMI analysis, all remaining core, rock and soil samples were submitted to ALS Geochemistry – Vancouver (ALS). As samples were collected, they were recorded within the Fulcrum App and relevant information such as sample location, geological information and photographs of the sample and site are recorded within the app. Sample locations were recorded with a handheld GPS and input into the app.

Soil and rock sample shipments were prepared on the property. Individual samples were placed in rice bags and sealed with tamper-proof security seals. These samples were then placed on a pallet and shipped to their respective labs via semi-truck for analysis.

Once geological logging was completed, samples of approximately 1m were selected. Sample intervals were chosen so that they never crossed significant changes in lithology, alteration, or mineralization. Drill core samples were cut along cut lines drawn down the long axis of the core tube. The left half of the core was placed in its respective sample bag while the right half was placed back into the core box. Duplicate samples consisted of a quarter sample of the remaining core leaving a quartered core segment in the box. The same approach of shipping drill core samples was applied, placing several samples in rice bags and tied with tamper-proof security seals before being shipped to ALS.

11.2 Analytical Procedures

The samples were assayed at ALS Global Vancouver, BC, Canada (ALS) or SGS Mineral Services Burnaby, BC, Canada (SGS), both of which are entirely independent of APEX and Freeman. ALS is certified with ISO 9001:2015 for survey/inspection activity and [ISO/IEC 17025:2017](#) UKAS ref 4028 for laboratory analysis. SGS is also certified with ISO 9001:2015.

A sub-set of the soil samples were measured for Mobile Metal Ions (MMI), which is a partial extraction proprietary method offered by SGS. MMI measures metal ions that travel upward from mineralization to unconsolidated surface materials such as soil, till and sand. Utilizing careful sampling strategies (discussed in Section 9.1), sophisticated chemical ligands and ultra-sensitive instrumentation, SGS measures metals ions through a partial dissolution of the sample. Targeted elements are extracted using weak solutions of organic and inorganic compounds rather than conventional aggressive acid or cyanide-based digests. MMI solutions contain strong ligands, which detach and hold metal ions that were loosely bound to soil particles by weak atomic forces in an aqueous solution. The MMI solutions are the chemically active or ‘mobile’ component of the sample.

Because these loosely bound complexes are in very low concentrations, measurement is by conventional ICP-MS and the latest evolution of this technology ICP-MS Dynamic Reaction Cell™ (DRC II™). The MMI complete package returns values for 53 elements.

The two other sub-sets of soil samples are Ionic Leach and conventional soil geochemical methods completed by ALS. Ionic Leach is a proprietary method offered by ALS similar to the MMI method offered by SGS. Ionic Leach is a partial extraction technique for surface samples that relies on complexing agents to selectively extract and hold ionic species from soil, stream and organic rich sediment samples in the leachant solution. The leachant solution is introduced directly into the ICP-MS instrument. Using advanced sample introduction technology and ultra-low sub-ppb detection limits, this technique routinely achieves 'natural background' levels and enhances 'signal to noise' ratios. This helps identify often subtle, but significant responses from mineralization, geology and alteration that can be diagnostic of numerous mineral systems. The ionic leach complete package returns values for 61 elements.

Conventional soil geochemical analysis was completed by ALS. Analysis consisted of the preparation code PREP-41 and the analytical methods ME-MS41L and Au-AA23. The soil and sediment preparation package PREP-41 comprises drying the sample at <60°C/140°F, sieve sample to -180 micron (80 mesh) and both fractions are retained. The super trace gold and multi-element in soils and sediment method (ME-MS41L) consist of an aqua regia digestion with super trace ICP-MS finish. This method utilizes 0.5g of sample thus gold determinations are semi-quantitative. ME-MS41L package returns values for 53 elements. Gold was determined via Au-AA23 which is a 30 g fire assay and an atomic absorption spectroscopy (AAS) finish with a 0.005 ppm detection limit.

Rock samples and drill core analysis were completed by ALS. Analysis consisted of preparation code PREP-31BY and analytical methods ME-MS41 and Au-AA24. The rock preparation package PREP-31BY is a crusher/rotary splitter combo. The sample is crushed to 70% less than 2mm and 1kg is rotary split off, the split is pulverized to better than 85% passing 75 microns. The method ME-MS41 is an aqua regia digestion with an ICP-MS finish. This method utilizes 0.5g of sample, thus gold determinations are semi-quantitative. The ME-MS41 packages returns values for 51 elements. Gold was determined via Au-AA24 which is a 50 g fire assay and an atomic absorption spectroscopy (AAS) finish with a 0.005 ppm detection limit.

11.3 Quality Assurance – Quality Control (QA/QC)

A total of 7,993 drill samples were submitted for analysis. This total includes 875 QA/QC samples (10.9 %) which falls within the industry standard of at least 10% QA/QC samples for ongoing quality control and future resource work. Known standards were inserted after every 20 unknown analyses, duplicates after every 20 unknown analyses and coarse blanks were inserted after predicted high grade intersections. Six different Certified Reference Materials (CRMs) were selected from CDN Resource Laboratories

Ltd. These CRMs selected include: CDN-BL-10, CDN-CM-40, CDN-GS-6F, CDN-GS-P4J, CDN-ME-1705 and CDN-CGS-28.

Coarse blanks were inserted by the logging geologist after predicted high grade samples or zones. There were a total of nine coarse blank failures for the 69 samples submitted which are shown in Figure 11.1. These nine coarse blank failures and the preceding high grade samples are displayed in Table 11.1. The carryover amount of gold during crushing is calculated based on a barren material with an equivalent weight as the high-grade sample. Contamination in preparation facility through carryover from a high-grade sample processed at the same station is a known risk in the industry. Seven of the blank samples yielded calculated carryover of less than 0.2% and six of these yielded assays at <0.05 ppm Au. This is well below any potential economic threshold for a mineral resource or mining, therefore is not considered material. Two of the failures had a carryover of 0.43% and 0.09% with a grade of 0.135 ppm Au and 0.107 ppm Au, respectively. These samples are approaching what could be a lower cut-off grade for a resource. ALS was notified for all coarse blank failures and 3 samples on either side were re-assayed and returned similar results. ALS recognizes this risk and actively mitigates it by conducting actions listed below:

- Carrying out the crushing and pulverizing in custom-made plenum with sufficient ventilation to remove and reduce the dust generated in operation.
- Utilizing pre-tested barren materials to clean the equipment between two batches of samples or more frequently as needed.
- Implementing vigorous standard operating procedures (SOP's), which require a thorough cleaning of the sample preparation equipment using compressed air before processing each sample.

With the above measures, ALS is confident that the carryover, if there is any, will not exceed the target of 1% of the previous sample processed at the same station. Due to the carryover <1%, these blank failures are not statistically significant and do not pose any concern in confidence in the lab. Another potential avenue for uncertainty is the low volume of material used for each of the coarse blank samples. Given these factors and ALS' mitigating procedures, coarse blank failures of under 20% is deemed acceptable. However, ALS has been made aware of these failures and all nine of these samples were selected for re-assay and returned similar results.

The pulp blank, CDN-BL-10, had one sample failure shown in Figure 11.2. Three samples on either side of the failed sample were selected to be re-assayed and the results returned similar values. The failed pulp blank, representing 1.75% of the dataset, is an outlier and this failure does not pose any concern for the confidence in the lab or dataset.

Gold standards CDN-CM-40 (Figure. 11.3), CDN-GS-6F (Figure. 11.4), CDN-GS-P4J (Figure. 11.5), and CDN-CGS-28 (Figure. 11.7) have one recorded failure each representing failure rates of 1.59%, 2.04%, 1.56%, and 1.56%, respectively, with the failures plotting just outside of 3 standard deviations of the expected value. Gold standard CDN-ME-1705 (Figure. 11.6) has two recorded failures representing a 3.33% failure rate,

one of which falls significantly outside of 3SD. Copper standard CDN-CGS-28 (Figure 11.8) has no recorded failures in 64 analyses.

Figure 11.1: Coarse blanks Au concentration.

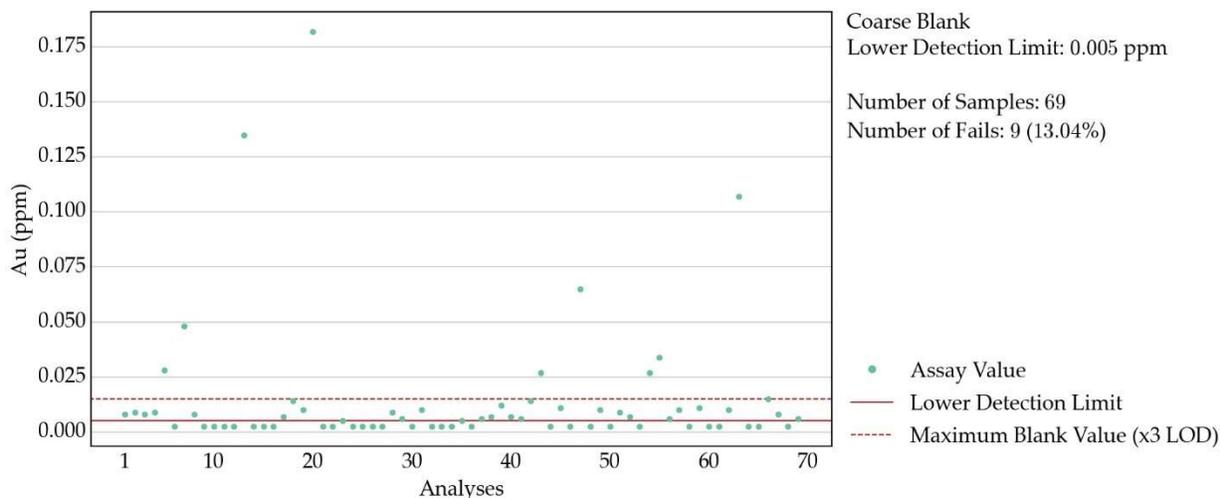


Table 11.1: Failed coarse blank analysis with the previous high grade sample.

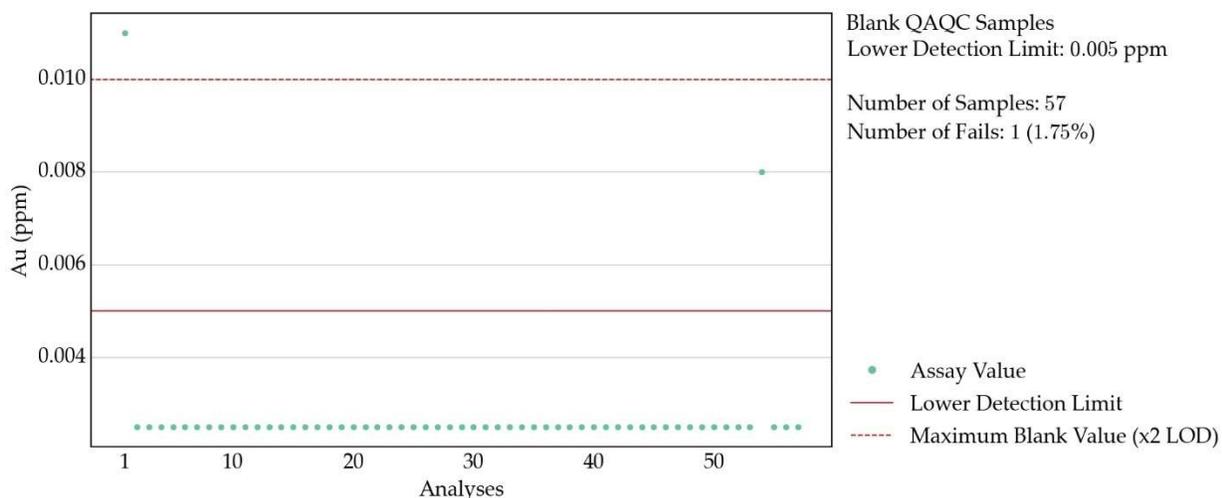
Certificate	Barren Material			High grade sample			Carryover*
	Sample ID	Sample Weight	Au Result	Sample ID	Sample Weight	Au Result	
		(kg)	(ppm)		(kg)	(ppm)	
VA20239375	C375839	0.3	0.028	C375838	0.44	10.85	0.18%
VA20303006	C376583	0.62	0.135	C376582	2.86	6.75	0.43%
VA20240863	C376156	0.6	0.048	C376155	2.96	9.04	0.11%
VA20308266	C371296	0.18	0.028	C371295	2.54	4.37	0.05%
VA21009450	C373277	0.16	0.065	C373276	0.8	8.02	0.16%
VA21018322	C374726	0.3	0.107	C374725	1.7	20	0.09%
VA21009439	C370825	0.24	0.027	C370824	2.1	7.07	0.04%
VA21009439	C370855	0.26	0.034	C370854	2.4	5.27	0.07%
VA20273975	C377296	0.2	0.182	C377295	3.64	63.6	0.02%

*Carryover % = (Blank Au result * Blank Sample weight) / (High grade Au result * High grade sample weight) * 100%

Each of the failed CRM's along with 3 natural samples above and below the failed standards were selected for re-assay. The original values along with the re-assays are displayed by Figure 11.9. The re-assay's of the natural sample suites associated with a failed standard returned both higher and lower values with no trends observed in the dataset. Greater scatter is observed in samples with lower concentrations while samples >0.5 ppm plot tighter to the 1:1 reference line. These pulp re-assays display a similar

trend to the pulp re-assays completed by Dufresne (2019). All the re-runs plotted here overall had an average increase of 9.5% with an average increase of 6.1% in samples with >0.1%. The maximum and minimum percent difference in natural samples was 68.9% and -70.6%, respectively. The sample re-assays were issued on corrected certificates.

Figure 11.2: Pulp blank CDN-BL10 Au concentrations.



The CDN-ME-1705 with the significant low failure required additional investigation. Initial re-assays of three natural samples on either side of this CRM showed an average increase of 40% in the natural samples surrounding the failed CRM. Following this, pulps were re-assayed spanning from successfully passed CRM to passed CRM. The pulp re-assay spanned 38 natural samples and 3 CRM's. The re-runs of the 38 natural samples have an average increase of 14%. However, these average increases include low grade samples (< 0.15 ppm). In this re-assay, one of the perviously passed CRMs plotted outside of 3SD. The samples surrounding the CRM that failed the re-assayed were assigned the original assay value, since the original CRM assay passed. The re-assay of the original failed CRM (CDN-ME-1705) now passed in the re-assay. Samples surrounding this CRM with the original failure were assigned the re-assay value. Overall these samples showed an increase in the grade, however the samples classified as mineralized grade (> 0.15 ppm) showed a net percent difference of 0%, indicating no bias in the mineralized natural samples. The significant low failure of CDN-ME-1705 is considered an isolated occurrence and does not pose any concern for the validity of the 2020 dataset.

Overall, the dataset shows both high precision and accuracy with only a few analyses falling outside of 3 standard deviations and the vast majority within 2 standard deviations. This further demonstrates the high degree of confidence placed in ALS and validity of the 2020 core sample dataset. The 2020 core sample data is considered suitable for use in the 2021 MRE presented in this Technical Report.

Figure 11.3: CDN-CM-40 Au concentration.

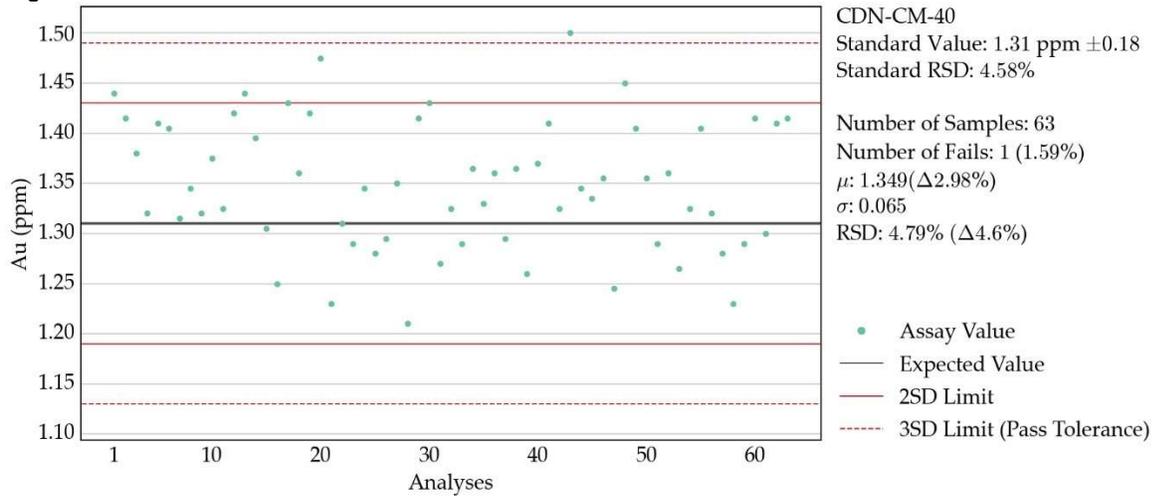


Figure 11.4: CDN-GS-6F Au concentration.

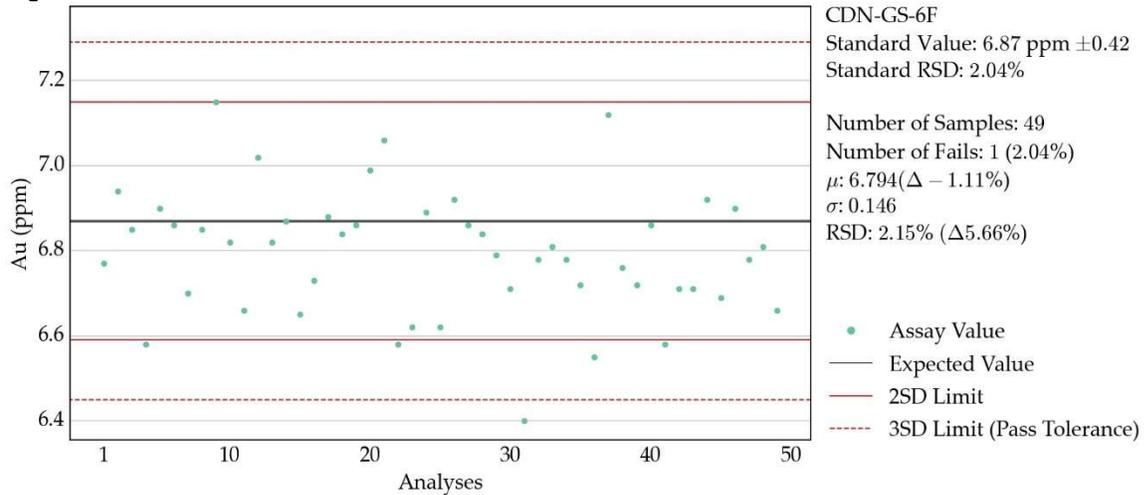


Figure 11.5: CDN-GS-P4J Au concentration.

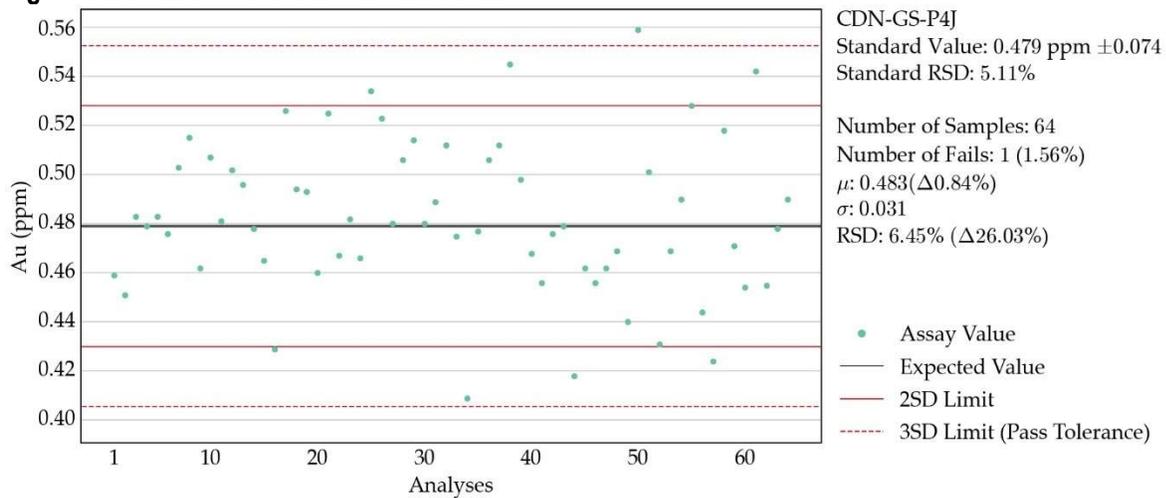


Figure 11.36: CDN-ME-1705 Au concentration.

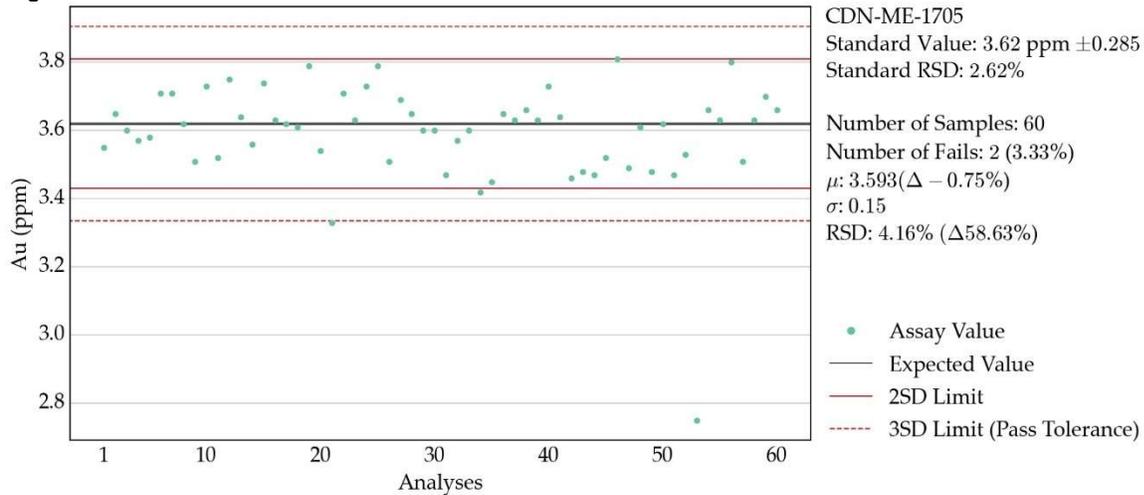


Figure 11.7: CDN-CGS-28 Au concentration.

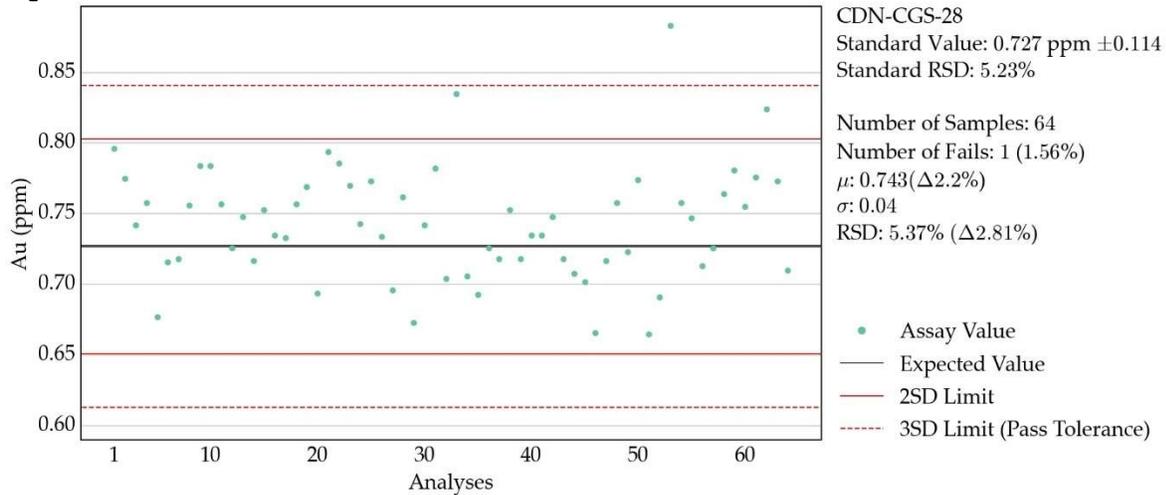


Figure 11.8: CDN-CGS-28 Cu concentration.

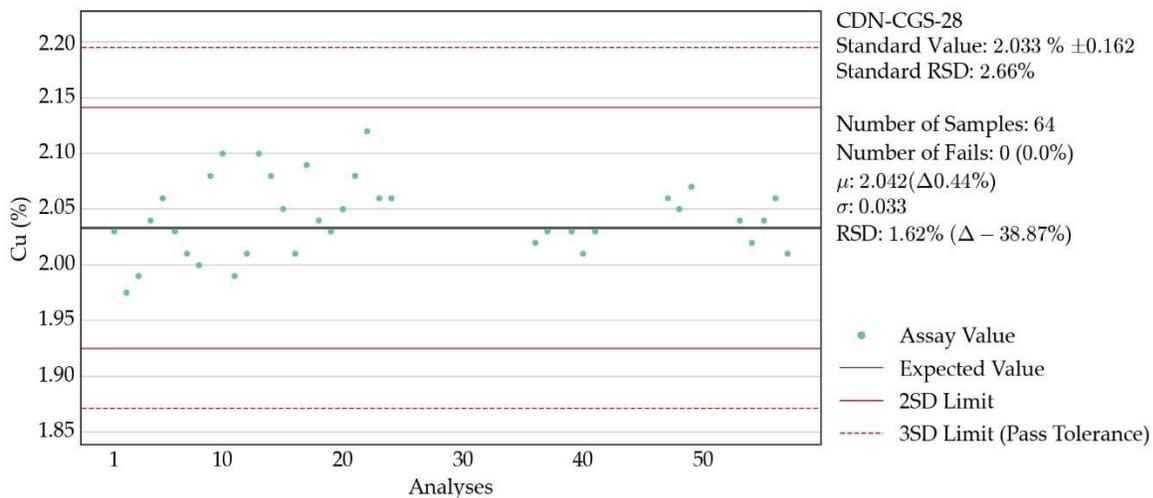
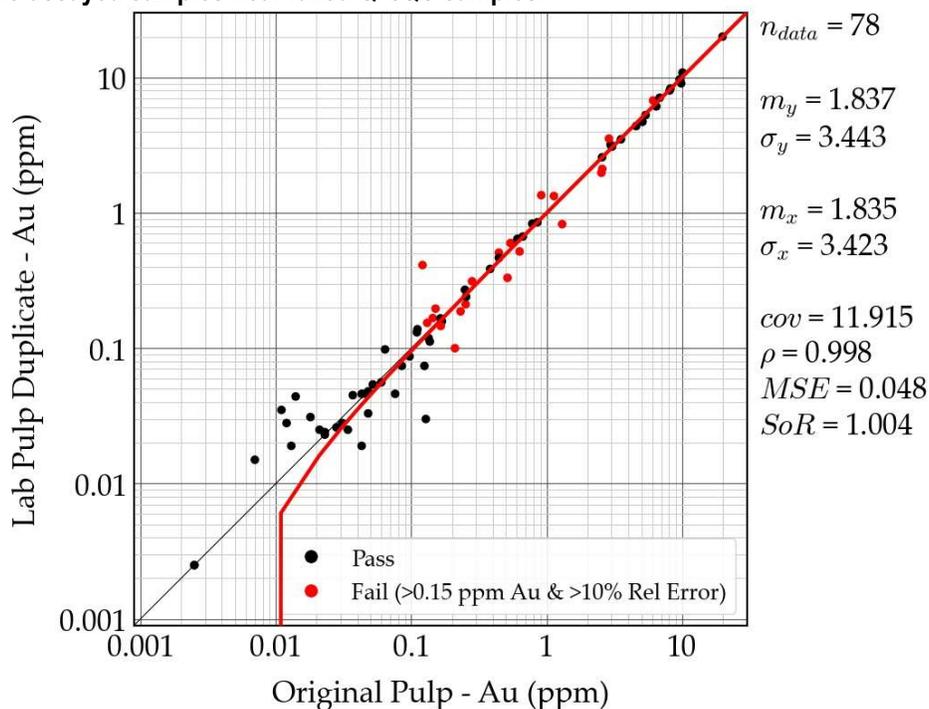


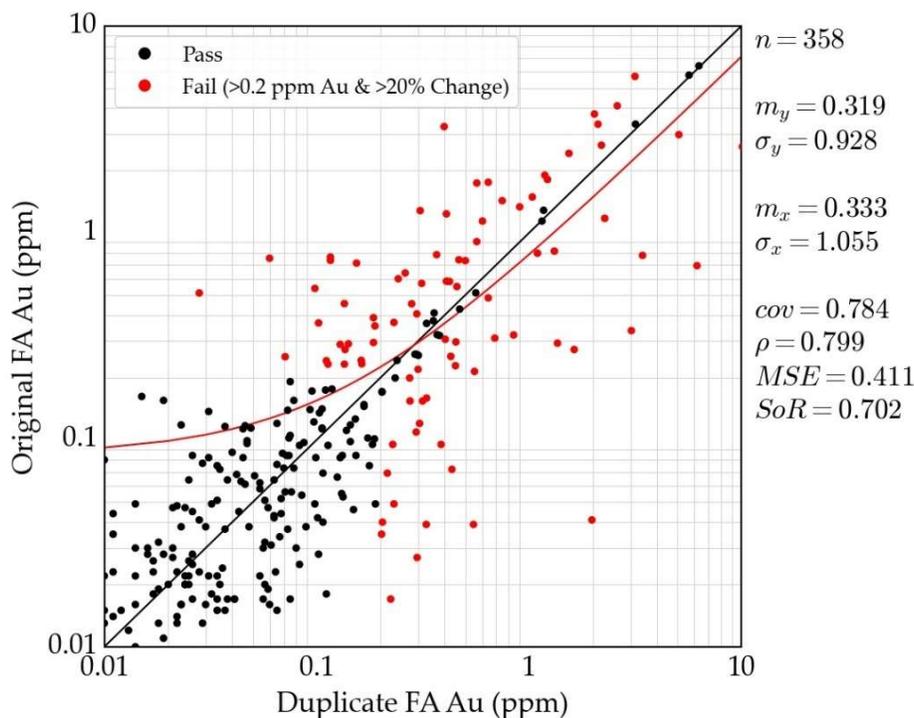
Figure 11.9: Re-assayed samples near failed QA/QC samples.



Core duplicates were collected every 20 samples. Regular and parent samples were obtained by cutting the core in half, with one half going to the lab, and the other half returning to the core box. Duplicate samples were collected from the same sampling interval as the parent, where the half-core in the box was quartered, with one quarter going to the lab as a core duplicate and the remaining quarter returned to the box.

Duplicates analysis results to date are considered poor, with 25 of 29 samples >0.2 ppm Au yielding a >20% change in grade. Several factors are attributed to this poor reproducibility. The volume of rock in the duplicate submitted is half of the parent sample which further exacerbates the potential distribution of coarse gold and blebs of sulfide in veins, known as the 'nugget' effect. Historically, this discrepancy has been observed in the drill hole 'twinning' programs conducted at Lemhi, discussed in Section 6, which is attributed to the uneven distribution of veins across the deposit. Although grade reproducibility has been a challenge in historical twinning programs, horizons or zones of high grade values are consistent. This feature of the Lemhi Gold Deposit is observed on a smaller scale in the duplicate samples shown in Figure 11.10. Other factors that could be attributed to this discrepancy could be a result of the duplicate sampling procedure. Due to the fissile nature of the host rock, cutting the drill core proved to be challenging. Although extreme care was taken to ensure all core pieces returned to the box or sample bag, the fissile rock would often strongly fragment during cutting which may have resulted in a non-uniform volume of rock split between the duplicate and parent samples, and the remaining material in the core box. These factors could be further skewing the duplicate data, but should not show any kind of systematic bias.

Figure 11.10: Drill core duplicate analyses, original (half core) and duplicate (quartered core).



Specific Gravities (SGs), measured by the geologists in the core shack had its own QA/QC protocol. A SG measurement was taken in every sample (~1m samples) for a total of 6,578 SG measurements. In the core shack, a geologist selected a sample of core ~10 cm in length. The sample was weighed dry then weighed a second time in a wire basket suspended in a bucket of water. From these measurements, the SG was calculated (dry weight)/(dry weight-wet weight). A subset of SG measurements ~1 in every 50 m was sent to ALS geochemistry to have OA-GRA09 (bulk density by water displacement) and OA-GRA09A (bulk density after wax coating). A total of 140 samples were measured by OA-GRA09 and 44 samples by OA-GRA09A. These results are displayed in Figure 11.11, 11.12 and 11.13. The core shack SGs and OA-GRA09 display similar results with samples plotting both higher and lower than the 1:1 ratio showing little to no bias in the dataset. OA-GRA09 results display lower variability (standard deviation) than the core shack measurements (Figure 11.11). Six of the core shack versus OA-GRA09 measurements have >10% change with an average change of 1.9%. When comparing the core shack measurement and OA-GRA09 to wax coated OA-GRA09A (Figures 11.12 and 11.13, respectively) these show similar trends to one another. The average percent change between core shack versus OA-GRA09A and OA-GRA09 versus OA-GRA09A are -0.7% and -3.1%, respectively. Overall little change is observed between the core shack measurements and ALS methods, thus all core shack measurements are considered acceptable to be used for the purposes of the MRE.

Figure 11.11: Specific Gravity QA/QC. Core Shack Measurement as a function of ALS measurement (OA-GRA09).

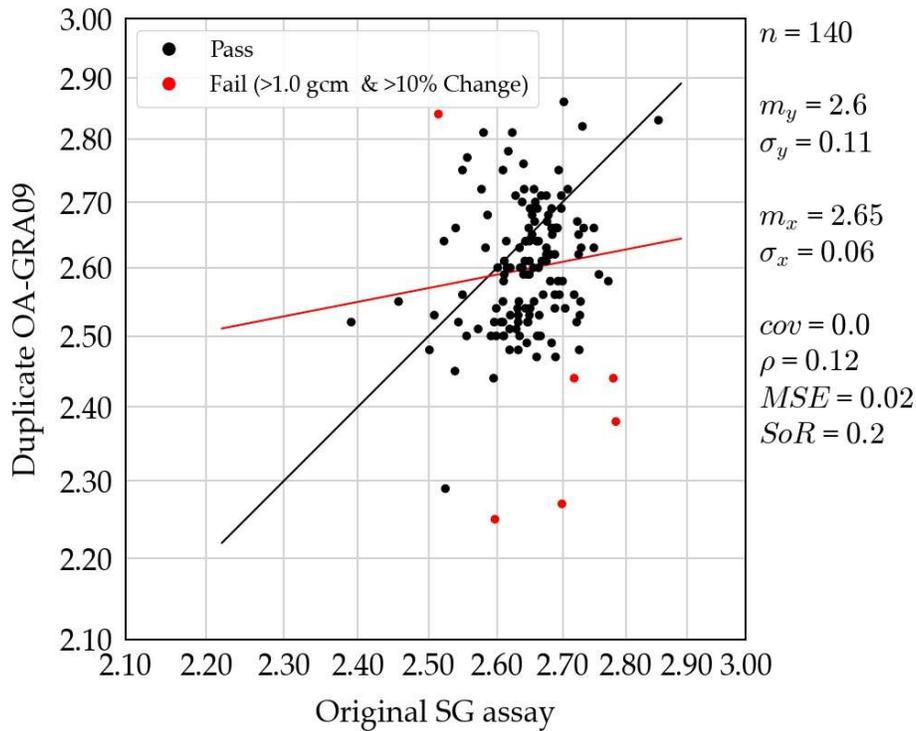


Figure 11.12: Specific Gravity QA/QC. Core shack measurement as a function of ALS wax coating measurement (OA-GRA09A).

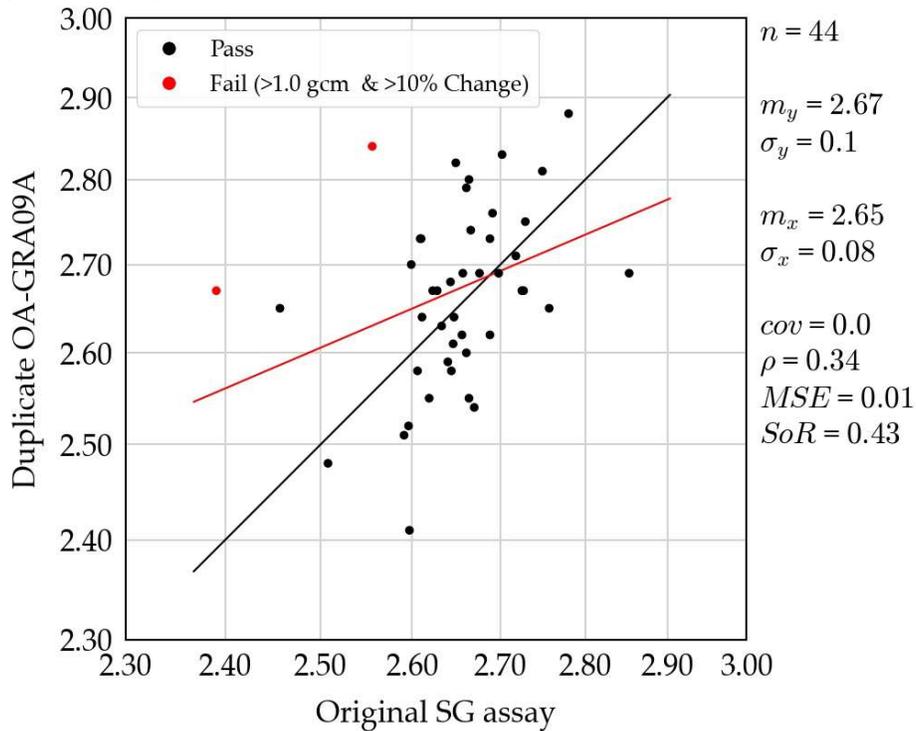
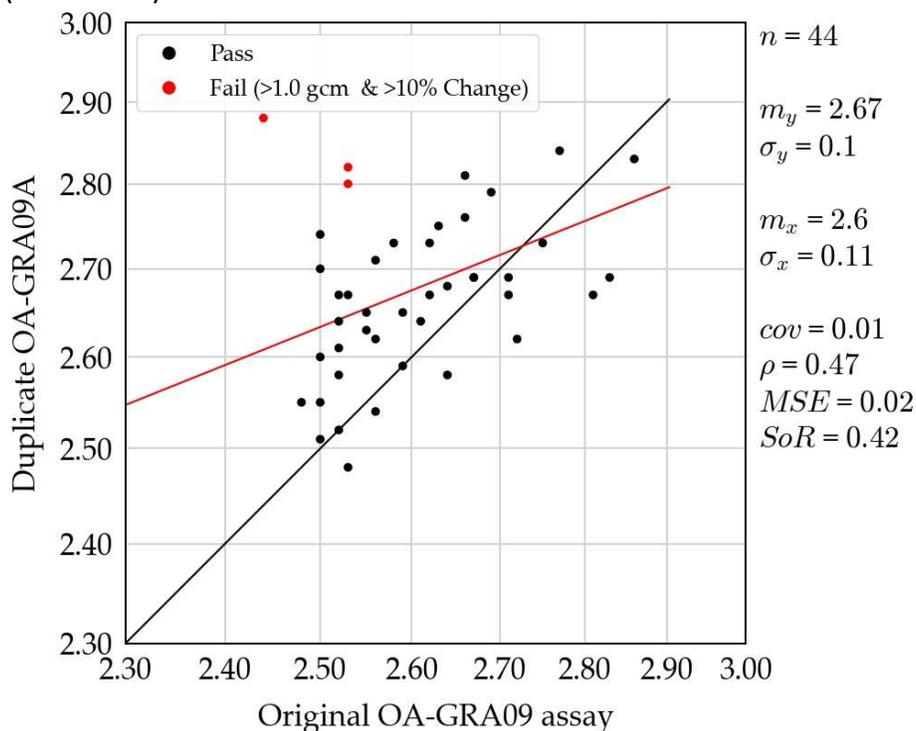


Figure 11.13: Specific Gravity QA/QC. ALS measurement (OA-GRA09) as a function of ALS wax coating measurement (OA-GRA09A).



Both the soil orientation and rock sample programs had their own QA/QC programs. The rock grab sample program had a total of 145 rock grabs, which included 14 CRMs and 7 duplicate samples (14.5% QA/QC). The standard suite consisted of the same CDN standards utilized in the drilling program. All of the CRMs plotted within 3SD, however one pulp blank plotted above 2 MDL (method of detection limit: 0.005 ppm) at 0.011 ppm. Three natural samples on either side of the failed pulp blank were re-assayed. These re-assays returned similar results. Thus, this failure is considered statistically insignificant. The soil samples QA/QC consisted of duplicates and blanks. Minor variation in the soil duplicates across the three methods was observed. Of the 38 blank samples two of these samples returned higher than 3x LOD. Both of these failures were in the ionic leach method (LOD = 0.02 ppb). These two failures are considered outliers in the dataset and are considered statistically insignificant.

12 Data Verification

The lead author made a site visit from September 10th to 17th, 2020, in which he confirmed the locations of several historical collars on the property in preparation for drilling and observed core from the first two holes completed in 2020. The lead author also conducted a visit to Freeman's core facility on February 26, 2021 and reviewed a number of the 2020 core intersections with significant values of gold.

Freeman provided APEX with the Lemhi Gold Property's drill hole database (DHDB) consisting of analytical, geological, density, collar survey information and downhole survey information. After spot checking the historical 2012 DHDB, it was deemed incomplete and APEX personnel compiled a new more complete DHDB of analytical, geological, density, collar survey information, downhole survey information, and assay analysis metadata using original data wherever possible. The DHDB was validated in-house and the validation work comprised of:

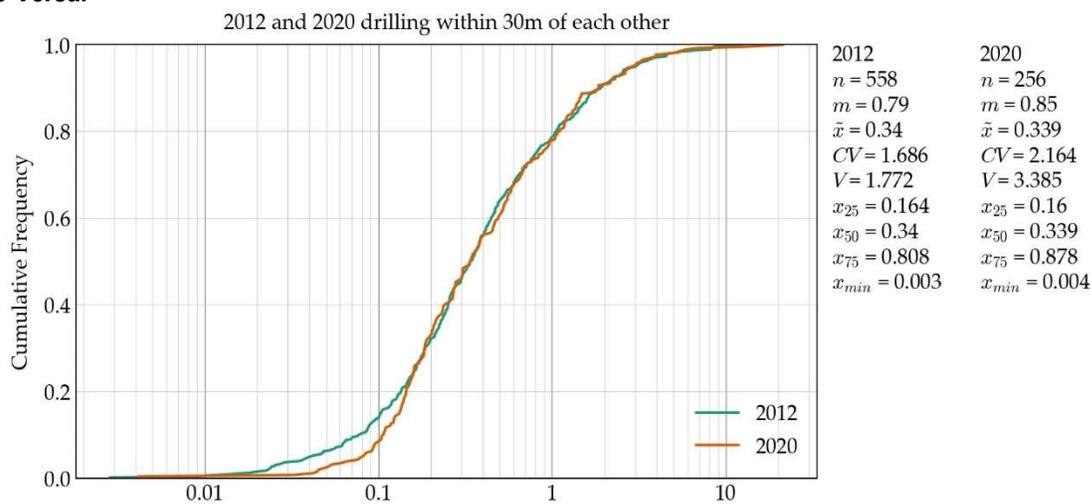
- Adding 30 historical holes to the database.
- Adding historical analytical methodology.
- Adding all methodology completed on a single sample i.e., screen fire, cyanide, multi-element, etc.
- Rectifying problems in the lithology compilation
- Rectifying problems with the survey and collar files.
- Adding the 35 drill holes completed by Freeman in 2020 to the drill hole database.

12.1 Adequacy of the LGT post-2000 Data

During the lead author's initial site visit in 2019, a total of 128 pulps were selected from the existing 2012 drill core sample pulps. The pulps were submitted for re-assay to ALS labs in Vancouver, BC, Canada. Pulps were selected from drill intersections that covered mineralized zones to confirm the 2012 assay results. The 2019 pulp re-assays returned values which have close correlation with the original assays for these samples confirming the validity of the 2012 assay results (Dufresne, 2020).

To further validate the reliability of the LGT drill hole data for mineral resource estimation, an analysis of the LGT 2012 database was completed comparing it to the 2020 drill hole data completed by Freeman. The drill hole data was first treated as if it was going into a mineral resource estimation. Compositing of data, composite orphan analysis, and capping of gold grades were completed on all the drill hole data, 2012 LGT samples and 2020 Freeman samples together. See Section 14 for the general drill hole data preparation workflow that was completed for mineral resource estimation. This normalized the samples from both the LGT and Freeman datasets to the same volume of support. The LGT and Freeman datasets were pared down to only samples within the currently constructed mineralized domains. Spatially similar data were then compared based upon certain distances from each other. The LGT composites within 30 meters of Freeman composites were compared to the respective Freeman nearby composites.

1 shows the cumulative histograms of the LGT and Freeman composites withing 30 meters of each other. The LGT data compares favorably to the Freeman data with the main discrepancies being in the low-grade portion of the dataset below 0.2 g/t. The mean of the 2012 LGT dataset is slightly lower versus the Freeman data, while the medians of the of the two datasets are nearly the same.

Figure 12.1 Cumulative histograms of 2012 LGT composites within 30 m of 2020 Freeman Composites and Vice-Versa.

Based on the results of the 2019 re-assays (Dufresne, 2020), as well as the comparison of 2012 LGT data to nearby 2020 Freeman composite data, it is the author's opinion that the 2012 LGT drill hole data is suitable for the purposes used in the Technical Report. It is also the author's opinion that the data is suitable for future work including mineral resource estimations.

12.2 Adequacy of the pre-2000 Data

Pre-2000 drill hole data encompasses drilling completed by FMC from 1985 to 1989 and AGR from 1993 to 1995. The lead author has reviewed reports from that era and information provided by Mr. Brian Brewer and Mr. Dennis Krasowski who participated not only in the 2012 LGT drilling program but some of the older historical programs, see Section 6.2.4. It is the lead author's opinion that the historical pre-2000 drilling completed on the Lemhi Gold Project for FMC and AGR was conducted by experienced professionals using industry best practices at the time. Visual comparisons showed no major discrepancies in the pre-2000 era drill hole data in terms of capturing mineralization zones. In general, cross-section reviews showed that where post-2000 era data showed relative high grade, lower grade, or waste zone, the pre-2000 era data also showed similar relative high grade, lower grade, or waste zones. However, discrepancies within the pre-2000 drill hole assay results were noticed, see Section 6.2.4.4,

The pre-2000 drill hole data is not deemed to be as reliable as drill hole data undertaken with current industry best practices for sample preparation, analyses, QA/QC and security. The discrepancies in the pre-2000 era dataset included lower accuracy in collar location due to collar coordinates often being based on rectified collar location maps, and discrepancies between check assays and umpire assay results based on review of previous reports. Previous industry best practices for sample preparation, assay, and security standards did not include adequate Quality assurance and Quality

control (QA/QC) of lab assay results and therefore confidence in pre-2000 assay results is lower than current assay results.

12.2.1 Comparing pre-2000 Drill hole data to Post-2000 Drill hole data for Bias

An analysis was completed on pre-2000 era drill hole data by comparing it to modern drill hole data in the form of the LGT and Freeman drilling undertaken using current industry QA/QC best practices, in order to qualify the confidence in the pre-2000 data. Drill holes within close proximity to each other and within the mineralized zone were compared to each other for potential systematic bias in assay results. The main intent of this analysis was to determine confidence in the pre-2000 drill hole data that would be used to estimate gold grades in the MRE.

In order to qualify the reliability of the pre-2000 drill hole data for mineral resource estimation, the drill hole data was first treated as if it was going into a mineral resource estimation. Compositing of data, composite orphan analysis, and capping of gold grades were first completed on all the drill hole data, both pre-2000 and post-2000 era samples together. See Section 14 for the general drill hole data preparation workflow that is completed for a mineral resource estimation. This normalized the samples from both pre-2000 and post-2000 era datasets to the same volume of support. The drill hole database was then split into a pre-2000 sample dataset, and a post-2000 sample dataset. The pre-2000 dataset was further split into an FMC dataset and an AGR dataset with each dataset consisting of all composites within the mineralized zone from the drill holes completed by either FMC or AGR respectively. Spatially similar data were then compared. FMC composites within 30 meters of post-2000 composites were compared to the respective post-2000 nearby composites. Similarly, AGR composites within 30 meters of post-2000 composites were compared to the respective post-2000 nearby composites.

Figure 12.2 shows the cumulative histograms of AGR (1990's) and post-2000 composites withing 30 meters of each other. The AGR data compares favorably to the post-2000 data with the main discrepancies being in the low-grade portion of the dataset below 0.2 g/t. The means of both datasets are nearly the same, while the median of the AGR data is slightly lower. Figure 12.3 compares the composite data distributions of the AGR (1990's) and post-2000 data within 30 meters of each other using a quantile to quantile (QQ) plot. The QQ plots are a graphical tool for comparing two distributions by plotting the matching quantiles from two distributions. A systematic departure above or below the 45 degree line implies high or low bias. Figure 12.3 shows that the AGR (1990's) data distribution compares favorably to the post-2000 data distribution.

Figure 12.2: Cumulative Histograms of AGR composites and Post-2000 composites within 30 meters of each other.

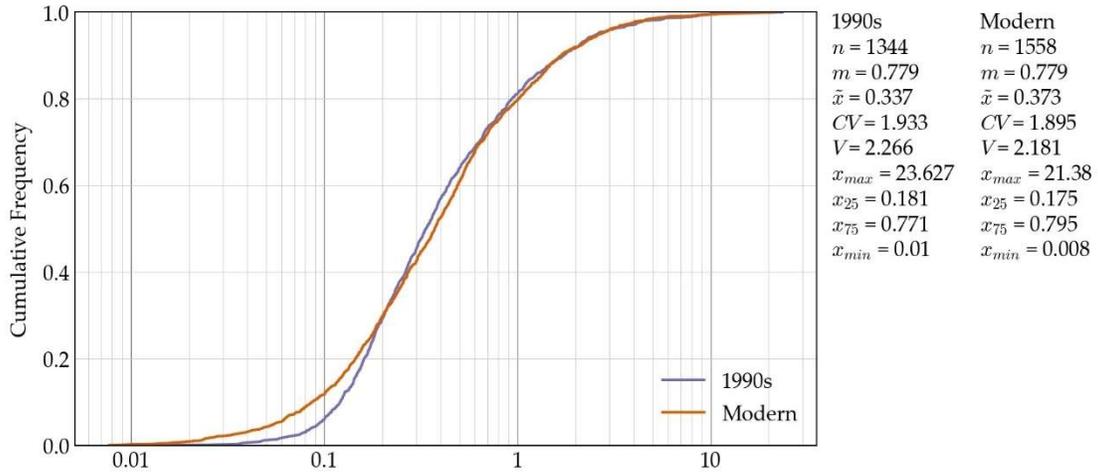


Figure 12.3: Quantile to Quantile plot of the distributions of the AGR composites and post-2000 composites within 30 meters of each other.

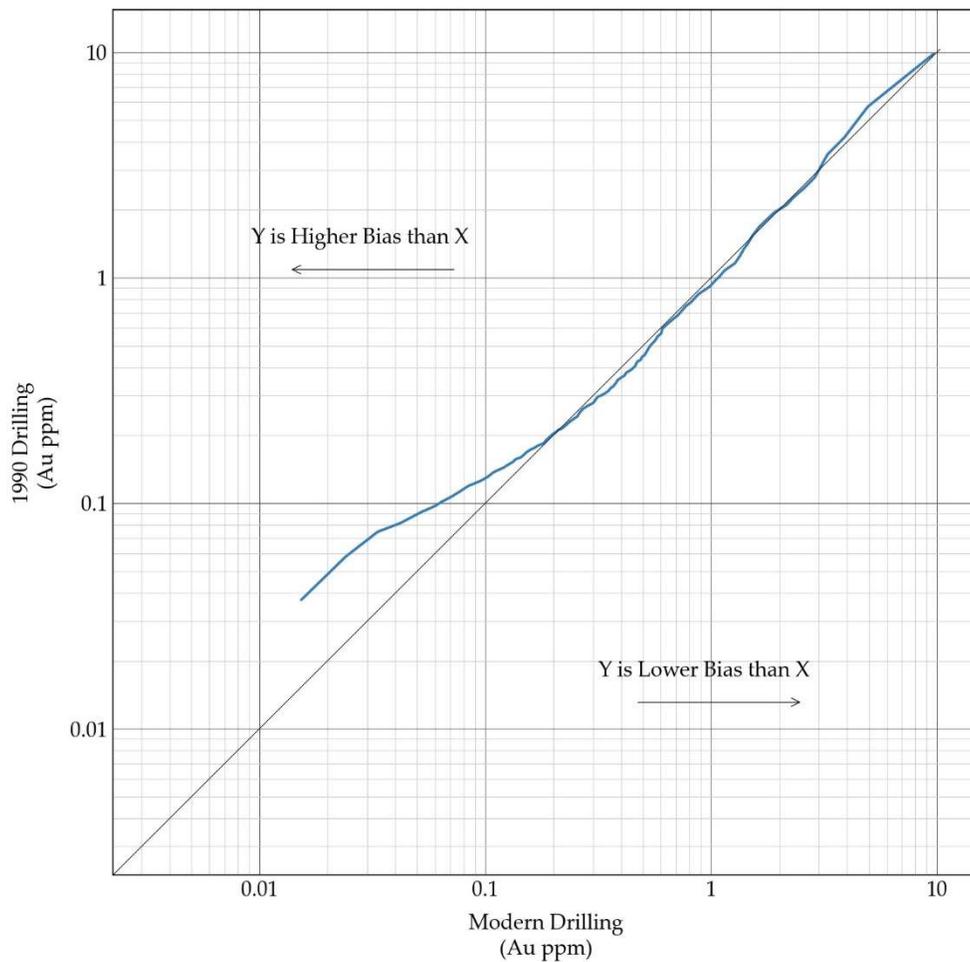
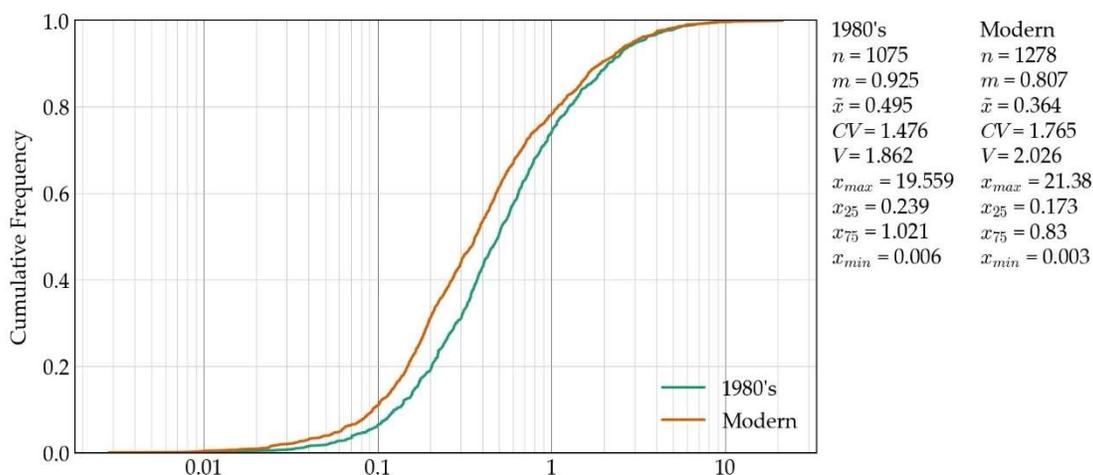


Figure 12.4 below shows the cumulative histograms of the FMC (1980's) and post-2000 composites within 30 meters of each other. The FMC data shows a fairly systematic departure from the post-2000 data with the main discrepancies being below 0.8 g/t. The mean and median of the FMC (1980's) dataset is higher then the post-2000 data.

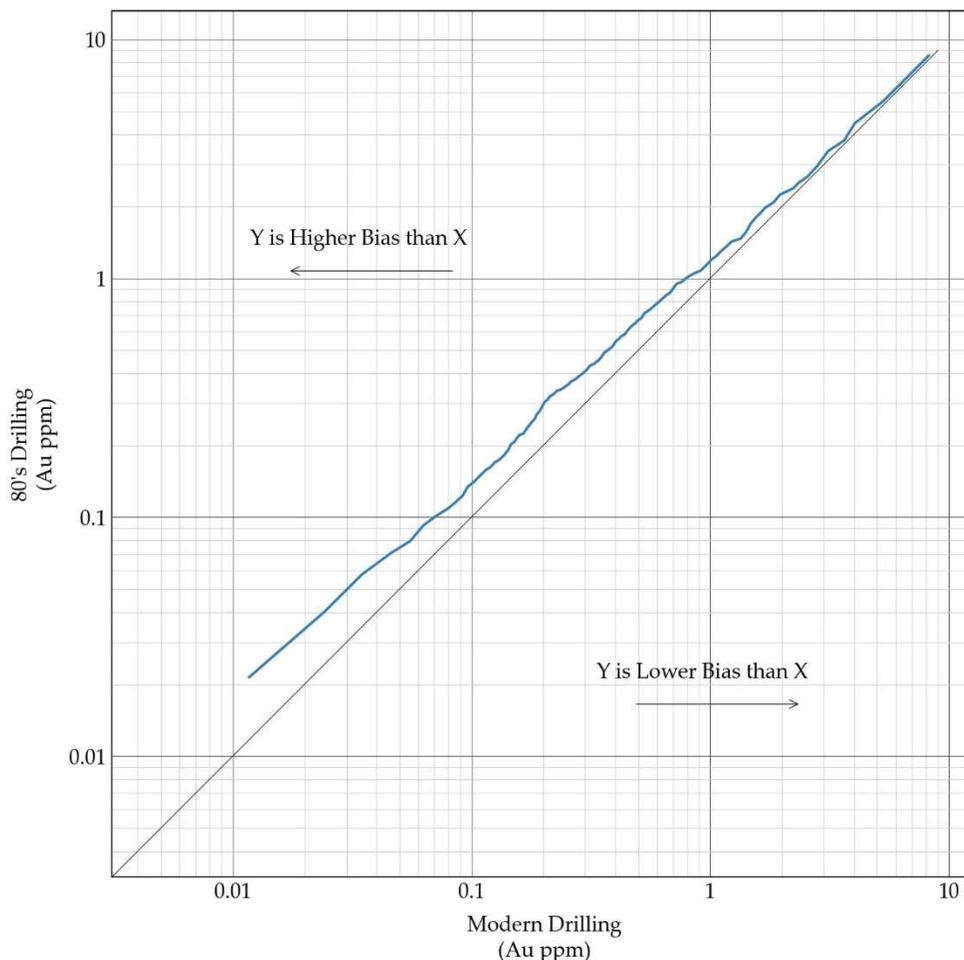
Figure 12.5 below compares the composite data distributions of the 1980's FMC and post-2000 data within 30 meters of each other in a a QQ plot and shows systematic departure above the 45 degree line for the FMC data. The systematic departure above the 45 degree line indicates that the FMC (1980's) data has a high bias compared to nearby post-2000 data. This supports the high bias difference in the means between the two datasets as shown in Figure 12.4.

Figure 12.4: Cumulative Histograms of FMC composites and Post-2000 composites within 30 meters of each other.



It is not clear whether the bias is related to drilling methodology differences such as dry versus wet RC drilling, or if it is related to laboratory and assaying methodology differences.

Figure 12.5: Quantile to Quantile plot of the distributions of the FMC composites and post-2000 composites within 30 meters of each other.



12.2.2 Recommendations

The lead author of this report considers the pre-2000 drill hole data to be well documents and in good condition and suitable for ongoing resource estimation studies. The inclusion of the AGR 1990's data should present no risk in the MRE based upon the review. The inclusion of the 1980's FMC data does, however increase the risk of a slightly biased estimate in areas that rely on the 1980's FMC data. To this end, the MRE in section 14 has adjusted the classification to a lower confidence level in areas that significantly rely on the 1980's FMC data.

The lead author of this report considers the current Lemhi drill hole database to be in good condition and suitable for ongoing resource estimation studies. As discussed in Sections 17 and 18, recommendations for conducting modern drilling in areas of the MRE that rely on significant numbers of historical 1980's FMC drill holes have been made in order to enable higher confidence in the database and the MRE.

12.3 Drill Hole Database Verification

Spot checks of the 2012 drill hole database (DHDB) revealed it was incomplete. To remove any uncertainty in the 2012 DHDB, APEX personnel compiled a new DHDB of analytical, geological, density, collar survey information, downhole survey information, and assay analysis metadata utilizing all available original documents and data. The 2020 DHDB was validated 100% by APEX personnel and the validation work was comprised of:

- Adding 30 historical holes to the database.
- Adding historical analytical methodology and correcting any errors or omissions in assays including adding in all data at or below the detection limits.
- Adding all methodology completed on a single sample i.e., screen fire, cyanide, multi-element, etc.
- Rectifying problems in the lithology compilation
- Rectifying problems with the survey and collar files.
- Adding the 35 drill holes completed by Freeman in 2020 to the drill hole database.

Once the re-construction of the DHDB was complete, spot checks of ~10% of the DHDB collars and assays confirmed it was in good condition and suitable for ongoing resource estimation studies. The DHDB contained a total of 468 holes. Of these, 455 are within the current property boundaries. Available drill holes, collar data, assay data and drill logs are displayed in Table 12.1. A total of 420 drill holes have complete collar, assay and drill log data.

Table 12.1: Summary of available drill hole data.

Company	Year	Total Drill Holes		Collar Data		Assay Data		Drill Log	
		RC	DDH	RC	DDH	RC	DDH	RC	DDH
FMC Gold Corporation	1985	12		12		12		12	
FMC Gold Corporation	1986	74	3	74	3	74	3	74	3
FMC Gold Corporation	1987	84		83		83		83	
FMC Gold Corporation	1989	22	1	16	1	22	1	21	1
American Gold Resources	1993	39	3	39	2	39	2	39	2
American Gold Resources	1994	20	3	20	3	20		20	
American Gold Resources	1995	100	4	96	4	99		99	
Lemhi Gold Trust	2012	15	40	15	40	15	40	15	40
Freeman Gold Corp	2020		35		35		35		35
	Total	366	89	355	88	364	81	363	81

13 Mineral Processing and Metallurgical Testing

Historical metallurgical test work on the Lemhi project was primarily focussed on heap leach evaluation. A 2021 laboratory test program was developed for advancing the project process aspects and focused on the application of tank leaching and heap leaching for the metallurgical investigations. The approach to evaluate tank leaching was due to a number of technical reasons, outlined below in this section. There has also been a significant improvement in gold prices that would better support a processing approach that can achieve improved recovery.

13.1 Historical Test Work

Cyanide leach testing was conducted in the mid 1990's by Kappes Cassiday and Associates (KCA), of Reno, Nevada. The KCA program was conducted in a phased program. Initial results, including analyses of leach residues by particle size fraction, suggested a fine crush size was needed for column studies. It was also noted that the quartzite had a superior leach response to phyllite dominated material from the resource. Phyllite provided gold recovery in the upper sixty percent range, while quartzite recovery was typically in the upper eighty percent range.

The KCA studies culminated in a Phase 3 report, dated September 28, 1995 for their client, American Gold Resource Corp. (AGR), who had provided the samples. Unfortunately, there is no apparent origin location for the material used to make up the composites that is provided in that report. The KCA test work consisted of testing three samples loaded into separate 6" diameter columns. The column charge each weighed approximately 40 kg and were crushed to 8 Tyler mesh (m). The particle size used was based on the earlier test programs conducted by KCA.

The column leach response was compared against corresponding 72 hour bottle roll tests conducted at a grind of -100 m (150 μ m). The results including column leach times are summarized in Table 13.1.

In addition to not knowing sample location or lithology, the apparent head grades of the Phase 3 samples appear to be higher than postulated for the current planned resource estimate. The results of the historic data are therefore difficult to quantify with respect to the current project plans. The higher gold grades would likely have resulted in higher column recoveries than would otherwise be expected for lower grade material.

Table 13.1: KCA-1995 Leach Data.

Client	Column Leach (-8m)			Bottle Roll
Sample ID	Calc. Head	Time	Recovery	-100m Leach
	Au g/t	Days	%Au Rec.	%Au Rec.
No. 1	5.45	109	73.7	94.1
No. 2	1.13	112	75.1	95.2
No. 3	3.16	90	90.1	95.2

The KCA leach data indicates tank leaching provides for an approximate 20% improvement to gold recovery for two of the samples, and about 5% for the third sample. This is provided the test procedure use a relatively coarse grind for tank leaching of minus 100 mesh (150 um), verses being finely crushed to -8 mesh for column studies.

13.2 2021 Laboratory Testing

The SGS Mineral Services Inc. (SGS) laboratory located in Burnaby BC initiated test work on Lemhi material beginning in January, 2021. The test work program is being conducted in three phases as follows;

- Phase 1: 2012 Assay Rejects: completed
- Phase 2: 2020 PQ drill core: completed
- Phase 3: 2020 Assay Rejects: Planned to begin in September, 2021

Final laboratory reporting of this program would be provided at the conclusion of the Phase 3 test work, expected in late 2021 or early 2022. The initial phase of testing used -6 mesh archived assay rejects, from the 2012 exploration. The rejects were too fine for column leach studies, but instead were used to make up several composites to evaluate for tank leaching.

13.2.1 Phase 1 Test Work

A list of the SGS Phase 1 drill hole intervals that were received are provided in Appendix 3. A summary of the principal composites tested with corresponding head assays is provided in Table 13.2 below. Some of the additional drill intervals were also investigated separately.

Prior to the 2020 drill program, LGT pulled select core from the 2012 drill program for metallurgical testing. The 2012 samples selected by LGT were inspected by the current logging geologist who determined that post-extraction oxidation of the sulfide minerals in the core was minor or absent. These samples were sent to SGS and were used as a test to refine the procedure that was to be applied to the metallurgical work conducted on FG20-035C. The metallurgical work from this hole, and not the 2012 LGT core, was used

for recovery information in the pit optimizations considered to constrain the MRE in Section 14.

The results show that gold content in the samples (by 30 g fire assaying) varying between 1.1 g/t to 1.7 g/t gold, with a single higher grade sample of 3.5 g/t Au. It was also found by subsequent metallics analyses and the metallurgical response including by gravity separation that a significant portion of the gold particles are likely to be coarse grained. This was also present in variable fire assay results on the gold head assays which were shown to be variable. Consequently, on an individual test basis, reliance is better directed to the calculated head for gold feed grades.

Silver values are shown to be low. There is sulfide sulphur (indicated by below detection limit on sulphate sulphur) present at between 0.1% to 0.4% S. Organic carbon, which is a potential preg robber during leaching is considered low and are to below detection limits on most samples. Possible cyanicides including copper and zinc are present, especially for copper edging up to 0.2% Cu in two of the samples.

Table 13.2: Phase 1 Head Analyses - 2012 Assay Rejects.

Sample ID	Hole ID	FA Au g/t	%Total S	%SO4	%Total C	TOC %	Ag g/t	As g/t	Hg g/t	Cu g/t	Zn g/t
HG Comp 1	C17 (304-334)	1.69	0.39	< 0.1	2.66	0.16	< 2	< 30	< 0.3	503	58
HG Comp 2	C28 (596-612)	3.52	0.24	< 0.1	0.78	< 0.05	4	< 30	< 0.3	1500	54
HG Comp 3	C28 (631-664)	1.47	0.26	< 0.1	0.86	< 0.05	7	< 30	1.0	1810	43
MG Comp 1	C17 (429-456)	1.26	0.20	< 0.1	1.49	< 0.05	2	< 30	0.8	353	45
MG Comp 2	C24 (371-404)	1.31	0.10	< 0.1	0.17	< 0.05	< 2	< 30	0.5	323	26
LG Comp 1	C28 (347-366)	1.14	0.09	< 0.1	0.95	0.07	< 2	< 30	1.0	231	32

A leach test on a sub-sample of a higher copper interval (DH17 388-394 with ~2.5 g/t Au & ~0.28% Cu calculated head) showed a poor leach gold recovery of approximately 87%. This resulted in an elevated final tailing grade of 0.51 g/t Au following leaching with gravity pre-treatment. Flotation was evaluated to remove copper, zinc and precious metals using a flash (rapid) float procedure in hopes of improving leach response. Despite the age of the sample of almost 10 years the flotation response seemed good. A partially cleaned concentrate removed ~88% Cu and 66% Au grading 15.8%Cu, 79 g/t Au, as well as 411 g/t Ag. Leaching of the tailing decreased final gold losses to 0.10% Au, thereby improving total gold recovery from 86.8% to 95.5%. The procedure indicates if sufficient zones of elevated copper content are in a future mine plan, then flash flotation can be considered to improve leach recovery in addition to potentially producing a marketable copper concentrate with added precious metal values.

The Phase 1 2012 assay reject samples were subjected to bottle roll testing under various conditions, primarily at investigating the effect of the feed particle size to the leach. The coarsest size was the as received material of minus 6 mesh leached for 11 days. This was compared to the same sample using a moderate grind targeting between 80% passing (P₈₀) 90 to 125 micron range. The ground particles included the use of gravity pre-treatment prior to leaching at pH 12 for 48 hours. Selected results are presented in Table 13.3.

The results for Phase 1 test work for the -6 mesh coarse bottle roll were between 60% to 83%. This tends to support data from the historic column leach studies by KPA. By grinding to a finer particle size, the gold recovery increased an additional 14% to 36% depending on the sample. This increase represents potential recovery improvements when going from a fine crush heap leach scenario to a mid range grind typical of tank leaching. The corresponding residue losses increased at the coarser size from between 0.2 g/t to 0.7 g/t Au, depending on sample and head grade.

Table 13.3: Phase 1 Bottle Roll Results on 2012 Assay Rejects.

Lemhi Assay Rejects Met Sample ID (Drill Hole ID)	Test ID	Leach - Compare Grind Size (~-6 m vs K80-90; 11 days vs 48h)									Overall Au Recovery (Gravity plus leaching) %
		Residue K ₈₀	NaCN	Lime	Au Grade, g/t			Leach Extraction (on grav. Feed)	Leach Distr. Of Grav Feed	Gravity Au Recovery	
			Consum.	Consum.	Residue	Calc. Head	Direct Head				
			kg/t	kg/t	g/t	g/t	g/t				
C17 (304-334)	HG Comp1-L1	-6m	2.44	2.15	0.36	2.17	1.96	n/a	83.4	not applic	83.4
C17 (304-334)	HG Comp1-L4	88	1.32	0.58	0.05	1.22	1.11	95.9	58.7	38.8	97.5
C28 (631-664)	HG Comp3-L1	-6m	3.35	1.17	0.63	1.58	1.50	n/a	60.0	not applic	60.0
C28 (631-664)	HG Comp3-L5	96	0.85	0.34	0.08	1.09	1.06	92.7	53.1	42.6	95.8
C24 (371-404)	MG Comp2-L1	-6m	2.97	0.94	0.19	0.68	0.98	n/a	78.0	not applic	78.0
C24 (371-404)	MG Comp2-L4	101	0.56	0.08	< 0.02	0.46	0.39	98.1	45.2	54.0	99.1
C28 (347-366)	LG Comp1-L1	-6m	1.60	1.41	0.78	1.97	1.1	n/a	61.4	not applic	61.4
C28 (347-366)	LG Comp1-L5	126	0.57	0.31	0.07	0.74	0.74	90.6	28.1	68.9	97.1

Leach pre-treatment on ground material typically used Knelson centrifugal concentration into a low grade uncleaned gravity concentrate suitable for intense cyanidation. The gravity recovery was between 39% to 69%, which is relevant given the corresponding head grades, and indicates the likely presence of coarser gold particles.

13.2.2 Phase 2 Test Work

The second phase of the 2021 laboratory test program performed by SGS, used PQ core (85 mm dia.). The core originated from drill hole #FG20-035C, which was completed during the 2020 exploration program. The material was used to make up two composites for Phase 2 studies, which along with the corresponding sample intervals are provided in Table 13.4 following.

Table 13.4: Phase 2 – 2020 Metallurgical Samples Drill Hole FG20-035C.

Comp. ID	Sample ID	Intevals	Sample ID	Weight, kg	Au g/t
1	C373645 to C373652	8.65-10.06	Comp1-V1	10.5	0.47
		10.06-11.43	Comp1-V2	13.5	0.26
		11.43-12.30	Comp1-V3	12.0	0.22
		12.30-12.95	Comp1-V4	7.1	< 0.02
		12.95-13.80	Comp1-V5	12.2	< 0.02
		Total		55.3	
2	C373786 to C373792	125.65-126.8	Comp2-V1	15.4	0.08
		126.8-128.32	Comp2-V2	20.9	< 0.02
		128.32-129.00	Comp2-V3	9.3	0.19
		129.00-130.15	Comp2-V4	15.5	0.44
		130.15-131.06	Comp2-V5	12.0	0.25
		131.06-131.98	Comp2-V6	13.5	3.80
		Total		86.6	

The composites were used to undertake comminution testing, as well as additional bottle roll testing to include coarse particle size for comparing to earlier column testing done by KCA. As part of the work, rheology and liquid solid (L/S) separation studies were conducted, and the resulting data will be included in final SGS reporting.

The core was shipped whole, so that an edge was shaved to provide for the split used for an assay fraction. This sample preparation procedure for assay is not as representative as -6 mesh splits but was necessary to retain sufficient particle diameter for the comminution study and coarse bottle roll testing. For metallurgical Comp.1 and 2 the full contiguous intervals supplied were used for comminution testing. Based on the initial gold analyses the process evaluation for Comp. 1 used intervals from 8.65 m to 12.3 m, and for Comp. 2 from 129 m to 132 m. These process composites were then re-assayed, with gold done by triplicate fire assay. The results are summarized in Table 13.5.

As with Phase 1 composites, the gold head analyses varied, likely from the presence of coarse particles. The calculated head from the various test procedures should therefore be referenced for more accurate data. Also, as with earlier samples these composites had low silver and low sulfides content. The copper content is lower than most of the previous samples tested in Phase 1.

Table 13.5: Phase 2 - Head Analyses of Metallurgical Composites.

Sample ID	Au g/t	Ag, g/t	C(tot) %	TOC %	S %	S= %	Cu g/t	Zn g/t
Comp. 1	0.74	<2	0.05	< 0.05	0.07	< 0.05	68.8	26
Comp. 2	0.23	<2	0.22	< 0.05	0.01	< 0.05	306	31

The PQ core allowed for comminution testing including those summarized in Table 13.6, providing for SCSE (SAG Circuit Specific Energy values), using both SMC (SAG Mill Comminution) and Drop Weight (DWT) evaluation procedures. Also shown are Bond

work indices (Wi) for crushing, ball mill (BM), and rod mill (RM), along with abrasion values (Ai).

Table 13.6: Comminution Results.

Sample ID	SCSE (kWh/t)		Work Index (kWh/t)			Abrasion
	SMC	DWT	Cwi	BRMWi	BBMWi	Ai (g)
Comp. 1	5.3	5.14	4.4	11.6	13.4	0.156
Comp. 2	7.5	7.21	5.4	13.1	13.9	0.37

The near surface Comp. 1 drill core intervals were observed on receiving to be weathered and friable as compared to the competent rock evident with the deeper Comp. 2 material. This was verified by the comminution data showing the Comp. 1 material to be softer and less abrasive. Both materials are considered to be of moderate hardness. However, the Phase 1 work had additional Bond Ball Mill Work Index (BBMWi) performed. The results ranged from 14 to 18 kWh/t indicating harder rock can be present. Hardness of potential mill feed will need to be followed as testing progresses.

The 48 hour leach testing on Phase 2 composites was performed to a medium grind with product particle size passing (P₈₀) ~110 microns for both Comp. 1 and Comp. 2. Each of these was tested under two conditions, with one using gravity pre-treatment and the other without.

For the coarser particle bottle rolls three crush sizes were evaluated. These were for targeting a P₈₀ passing 8 Tyler mesh, 3/8" (9.5 mm), and 3/4" (19.1 mm) and adjusting the leach retention times. The procedures and results are summarized in Table 13.7.

Table 13.7: Phase 2 – Bottle Roll Leach Results.

Test ID	Test Description	Procedures			Reagents				Gold Grade		Gold Recovery		
		Charge kg	Feed Size as shown	Time days	NaCN (kg/t)		CaO (kg/t)		Residue g/t	Calc. Hd. g/t	Gravity %	Leach %	Total %
Comp1B-L1	Coarse Crush (high CN)	10	3/4"	21	3.24	2.21	2.09	1.92	0.134	0.41	NA	67.2	67.2
Comp1B-L2	Mid Crush	5	3/8"	14	2.17	0.43	1.42	1.29	0.172	0.40	NA	56.7	56.7
Comp1B-L3	Fine Crush	2	8 Mesh	7	2.23	1.42	0.89	0.61	0.22	0.51	NA	56.5	56.5
Comp1B-L4	Grind (no Gravity)	2	110 µm	2	1.84	0.26	0.87	0.75	0.04	0.37	NA	97.3	97.3
Comp1B-L5	Grind (with Gravity)	2	110 µm	2	1.90	0.3	0.62	0.51	<0.02	0.16	41.8	54.6	96.4
Comp2B-L1	Coarse Crush (high CN)	10	3/4"	21	3.26	2.63	1.94	1.60	0.24	0.41	NA	42.3	42.3
Comp2B-L2	Mid Crush	5	3/8"	14	2.53	1.14	1.18	0.79	0.17	0.34	NA	51.4	51.4
Comp2B-L3	Fine Crush	2	8 Mesh	7	1.94	1.31	0.73	0.3	0.12	0.40	NA	69.8	69.8
Comp2B-L4	Grind (no Gravity)	2	110 µm	2	1.83	0.2	0.35	0.19	<0.02	0.29	NA	96.5	96.5
Comp2B-L5	Grind (with Gravity)	2	110 µm	2	2.12	0.17	0.32	0.15	<0.02	0.17	39.6	56.9	96.5

The findings confirm the Phase 1 results with rougher gravity gold recovery on the ground product achieving approximately 40% for both samples. Final leach residue grades with and without gravity were similar for both procedures in both samples showing low losses and excellent final gold dissolution of ~97%. The corresponding leach kinetic curves for each of these tests following the sample identification in Table 13.7 is shown in Figure 13.1, following.

Somewhat surprisingly the leach kinetic curves show no real differences in the dissolution rates. This may be a result of the cracking or high surface areas of the coarser gold particles and should be confirmed with further leach testing and possibly a mineralogical study.

As the material particle size of the feed increased, not unexpectedly the gold recoveries drop. Despite using elevated cyanide dosage and a three week bottle roll retention time the 3/4" Comp. 1 test had ~67% final gold recovery, while Comp. 2 which is the more competent material had only 42%. The kinetic curves for the three crush sizes performed on Comp. 1 (L1 -3/4", L2 -3/8" and L3 – 8mesh) are provided below in Figure 13.2.

Similarly for Comp. 2 (L1 -3/4", L2 -3/8" and L3 – 8mesh) the gold dissolution verses bottle roll retention time for crushed material is provided in Figure 13.3.

Figure 13.1: Gold Kinetic Leach Curves without Pre-treatment (L4) and with Gravity Pre-Treatment (L5), P80 ~110 microns.

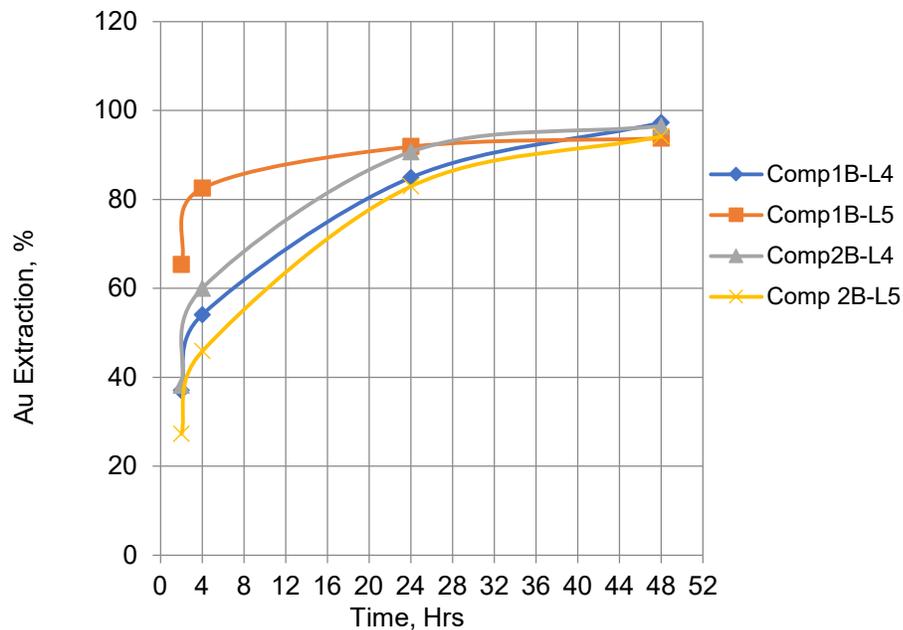


Figure 13.2: Comp. 1 - Gold Kinetic Leach Curves Vary Crush Size.

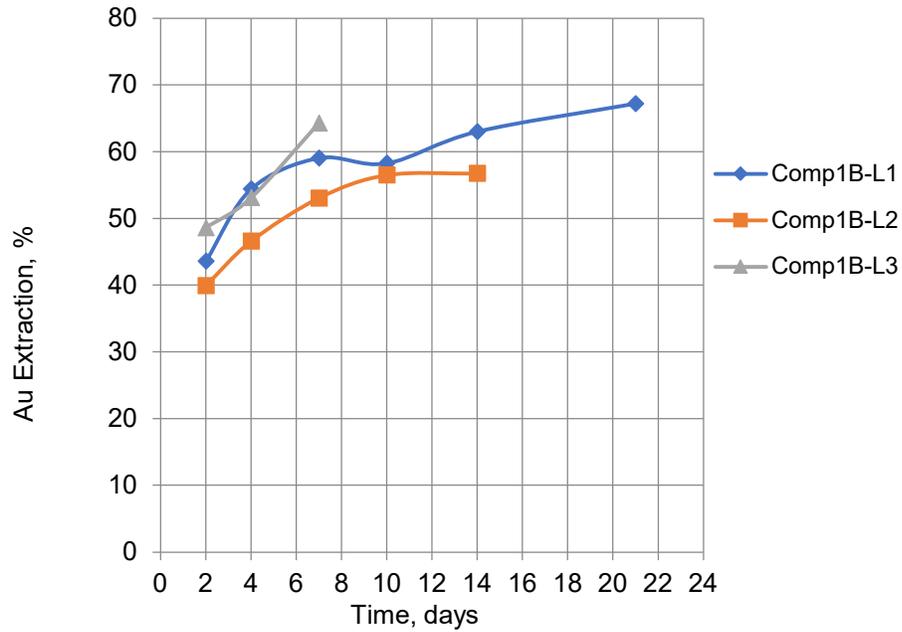
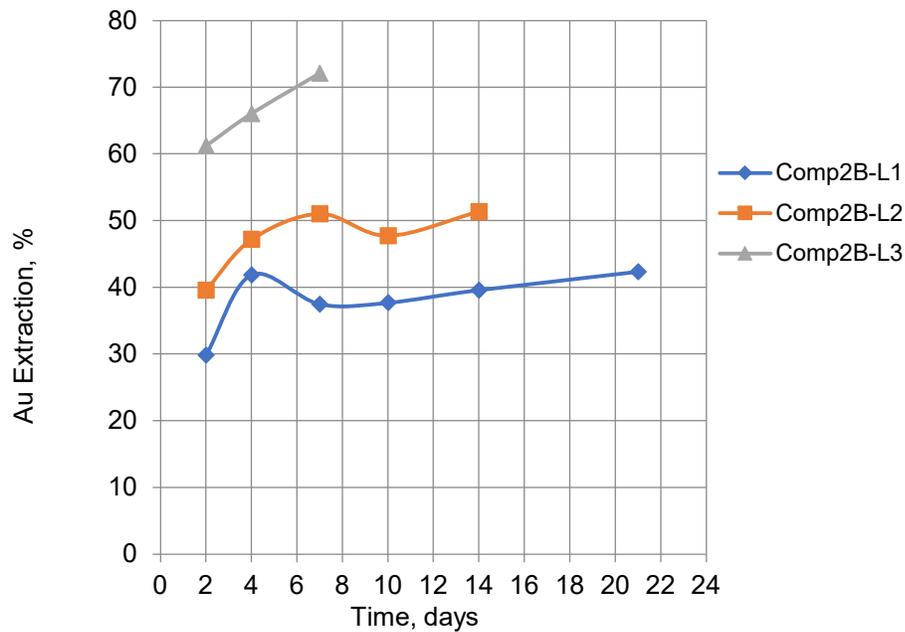


Figure 13.3: Comp. 2 - Gold Kinetic Leach Curves Vary Crush Size.



The kinetic data indicates that for some of the tests the gold extraction should increase further with extended leach times. This is particularly evident for the 8 mesh bottle rolls which were operated for one week, and likely could be operated for several more days, potentially providing another 5% to 10% gold recovery. Coarser bottle rolls appeared to have gold dissolution leveling off, particularly of Comp. 2. It should be noted that bottle rolls provide near perfect particle accessibility to cyanide solution and aeration. Leach times could be significantly longer, and final heap recovery would be unlikely to match these results. Column leach studies would be a more accurate method for evaluating heap response.

Detailed reporting of the results by SGS is expected to be issued in late 2021 or early 2022, following the conclusion of Phase 3 test work to be conducted on 2020 drill core assay rejects.

13.3 Interpretation

Historically the process approach for Lemhi suggested the use of heap leaching be forwarded. However, the 2021 test work has shown using even a fine crush particle size will result in significantly lower gold recovery as compared to tank leaching at a moderate grind. The recent bottle roll data agreed reasonably well with historic KCA column test work that suggests a (8 mesh material) might expect 70% to 80% gold recovery. This recovery may be improved for near surface, more friable material. KCA noted gold mineralization associated with phyllite as having lower indicated recovery than that dominated by quartzite. The KCA work also used head grades considerably higher than the average grade outlined in the current resource, which could result in higher gold recovery in the test work. The presence of coarse gold particles, copper as a cyanicide, and organic carbon as a preg robber also need to be further investigated. While these issues might be adequately addressed in tank leaching, they could result in potential recovery limitations for heap leaching. Numerous column leach tests would be required to determine gold dissolution rates more accurately in a heap to represent the entire resource.

For tank leaching the laboratory findings to date indicate that over a range of potential mill feed grades that the gold recovery ranges in the mid to upper ninety percent range. This can be achieved under moderate process operating conditions. A moderate grind of approximately 80% passing 110 microns, with approximately 36 hours of leach retention time is typically sufficient for optimum recovery. Preliminary comminution testing indicates an average hardness of the resource material. Pre-treatment of leach feed by centrifugal gravity concentration suggest one third or more of the gold might typically be recovered into an uncleaned gravity concentrate, suitable for intense cyanidation. Some lower gold recoveries were evident on feeds with higher copper content. The bench scale testing to simulate flash flotation to remove a Cu-Ag-Au concentrate allowed the float tailing to increase the gold leach recoveries back to more typical levels.

The 2021 laboratory test program is not yet completed, but the data generated to date indicates that tank leaching may be the preferred approach over heap leaching based on

purely technical aspects. The flowsheet design based on mineralogy and grade can likely be directed to a carbon in pulp (CIP) process for further evaluation.

14 Mineral Resource Estimates

The maiden Mineral Resource Estimate (MRE) herein is based upon the historical drilling and drilling conducted in 2020 and supersedes all the prior resource estimates for the Lemhi Gold Property. Previous historical resource estimates are discussed in the Section 6 of this report and are all now considered historical in nature and should be treated as such.

This section details an updated NI 43-101 MRE completed for the Lemhi Gold Property by APEX Geoscience Ltd. (APEX) of Edmonton, Alberta, Canada. Mr. Tyler Acorn, M.Sc. completed the mineral resource estimate, with assistance from Mr. Warren Black, M.Sc., P.Geol., under the direct supervision of Mr. Michael Dufresne, M.Sc., P.Geol., P.Geol. Both Mr. Black and Mr. Dufresne are independent qualified persons (QPs) with APEX and take responsibility for the MRE herein. Mr. Dufresne, M.Sc., P.Geol., P.Geol., visited the property in September, 2020 and reviewed core from the initial couple of holes completed by Freeman. Mr. Dufresne also reviewed a number of the 2020 core holes with significant gold intersections at Freeman's core facility on February 26, 2021.

Definitions used in this section are consistent with those adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Council in "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019 and "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014, and prescribed by the Canadian Securities Administrators' NI 43-101 and Form 43-101F1, Standards of Disclosure for Mineral Projects. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

14.1 Introduction

Statistical analysis, three-dimensional (3D) modelling and resource estimation was completed by Mr. Tyler Acorn, M.Sc. with assistance from Mr. Warren Black, M.Sc., P.Geol., of APEX (under the direct supervision of Mr. Michael Dufresne, M.Sc., P.Geol.). Mr. Dufresne takes full responsibility for section 14 of the Technical Report. The workflow implemented for the calculation of the Lemhi Gold Property MRE was completed using the commercial mine planning software MICROMINE (v 21). Supplementary data analysis was completed using the Anaconda Python distribution (Continuum Analytics, 2017) and a custom Python package developed by Mr. Black and Mr. Acorn.

The 2021 DHDB, discussed in section 12, was validated by APEX under the supervision of Mr. Dufresne and was utilized to construct an updated geological model for the Lemhi Gold Property, this included a 3D model of the intrusion (granodiorite) and

an overburden surface. In the opinion of the author, the current Lemhi DHDB is deemed to be in good condition and suitable to use in ongoing resource estimation studies.

The MRE was calculated using a block model size of 3 m (X) by 3 m (Y) by 3 m (Z). The gold grade was estimated for each block using Ordinary Kriging with locally varying anisotropy (LVA) to ensure grade continuity in various directions is reproduced in the block model. The block model was partially diluted by estimating a waste grade for the portions of the outer blocks overlapping the edge of the estimation domain boundaries using composites within a transition zone along the outer edge of the mineralized estimation domains. The waste grade was then proportionately combined with the estimated grade for the portion of the block within the mineralized domain to obtain a final grade for each overlapping block. The partially diluted block model was used in pit optimization studies. The MRE is reported as undiluted within and optimized pit shell. Details regarding the methodology used to calculate the MRE are documented in this section. The mineral resources defined in this section are not mineral reserves.

Modelling was conducted in the Universal Transverse Mercator (“UTM”) system relative to Idaho State Plane Central FIPS 1102 (Meters) of the North American Datum (“NAD”) 1983. The database consists of 385 drill holes containing useable downhole data completed at the Lemhi Gold Property between 1985 to 2020. APEX constructed estimation domains using a combination of gold grade and all available geological information that helped constrain different controls on mineralization. The estimation domains were used to subdivide the deposit into volumes of rock and the measured sample intervals within those volumes for geostatistical analysis.

14.2 Drill Hole Data Description

14.2.1 Lemhi Drill Hole Data

Data from Freeman’s 2020 drilling program was captured and validated on-site during the drill program. At the conclusion of the 2020 program, APEX personnel compiled the results with the newly validated historical data, discussed in section 12. In the opinion of the lead author, the current Lemhi drill hole database is deemed to be in good condition and suitable to use in ongoing resource estimation studies.

The Lemhi Project database contains a total of 437 exploration drill holes (collars and assays) completed from 1985 to 2012 by previous operators (391 holes totalling 66,869 m) and in 2020 by Freeman (35 holes totalling 7,149 m). Of the 437 drill holes, 364 intersected the estimation domains and were used in the MRE. The portion of the drill hole database used in the MRE consists of a total of 43,769 unique sample/interval entries of which 15,647 sample/interval entries are within the estimation domains and were used in the Mineral Resource Estimation.

14.2.2 APEX Micromine Drill Hole Database

For the 364 drill holes that intersect the mineralization domains, there are a total of 42,692 samples in the database that were assayed for gold. A total of 29,394 sample intervals returned a value greater than the detection limit. A total of 13,285 samples returned assays that were at or below the detection limit. A total of 1,010 intervals were not analyzed, and it is assumed that they were selectively not analyzed and classified as "no sample" (NS). A total of 67 drill hole sample intervals have explicit documentation that drilling did not return enough material to allow their analysis and are classified as "insufficient recovery" (IR). It is essential to distinguish between these two cases as they are treated differently during resource estimation. Intervals classified as "no sample" (NS) are assigned a nominal waste value of 0.0025 ppm Au, half the value of the lower detection limit of modern fire assay analyses. Samples that returned assays less than detection limit were assigned values of half the detection limit. Samples with unknown detection limits and/or assay methodologies and in the database as zero were assigned a value of 0.0025 ppm Au. Intervals classified as "insufficient recovery" (IR) were left blank.

All data was validated using the Micromine validation tools when the data was imported into the software. Any validation errors encountered were data entry errors rectified by consulting original documentation. A detailed discussion on the verification of historical (pre-2000) and modern (post-2011) drill hole data is provided in Section 11 and 12 of this report. The lead author of this report considers the current Lemhi drill hole database to be in good condition and suitable for ongoing resource estimation studies. As discussed in Section 12, recommendations are provided in sections 12, 17 and 18 for conducting modern drilling in areas of the MRE that significantly rely on the historical FMC 1980's drill holes in order to enable higher confidence in the database and the MRE.

14.3 Estimation Domain Interpretation

14.3.1 Geological Interpretation of Mineralization Domains

There are two dominant styles of gold mineralization at the Lemhi Gold Property. The primary mineralization occurs as a halo around the granodiorite intrusion with secondary mineralization along shallow dipping foliation and faults. It appears that both styles of mineralization generally occur in zones of stacked parallel sub-horizontal sheets.

A total of five 3-D trend surfaces were modelled and used as input for the implicit modelling process applied to create the estimation domains and by kriging to ensure both honour the observed geological controls on mineralization. The trend surfaces were created using all available subsurface data, including RC and core drill hole assays and geological logs. Two of the trend surfaces represent boundaries of the two main intrusion fingers. While the other three surfaces represent mineralization trends following locally folded and faulted metasediments (phyllite, siltite and quartzite). The trend surfaces were modelled in a way where the intrusion surfaces were given more weight. When further away from the intrusion, the trend surfaces were controlled more tightly by foliation

surfaces. These intrusion-foliation trend surfaces are used as input for the implicit modelling applied to create the estimation domains described in Section 14.3.2.

14.3.2 Estimation Domain Interpretation Methodology

APEX used an implicit modelling approach for constraining a single estimation domain to a gold grade shell while still honouring interpretations of local geological controls on mineralization. The raw RC and core drill hole analytical data were composited and classified as either ore or waste. Those composites were then used as input by implicit modelling to generate the 3-D estimation domain wireframes. The contact-controlled trend surfaces described in Section 14.3.1 are used as input for the implicit modelling process to ensure the generated estimation domain honours the observed geological controls on mineralization. The single estimation domain was evaluated in 3-D and on a section by section basis. Control points were inserted to constrain spurious features in the generated wireframes and ensure that the underlying geology was honoured. The control points were used in a second pass of the implicit model to construct the final estimation domain. Plan view of the extents of the estimation domain projected to surface with the drill hole collar locations is shown in Figure 14.1 and an East-West cross-section showing the estimation domain, intrusion outline, and drill strings are shown in Figure 14.2.

Figure 14.1 Plan View of the estimation domains extents projected to surface.

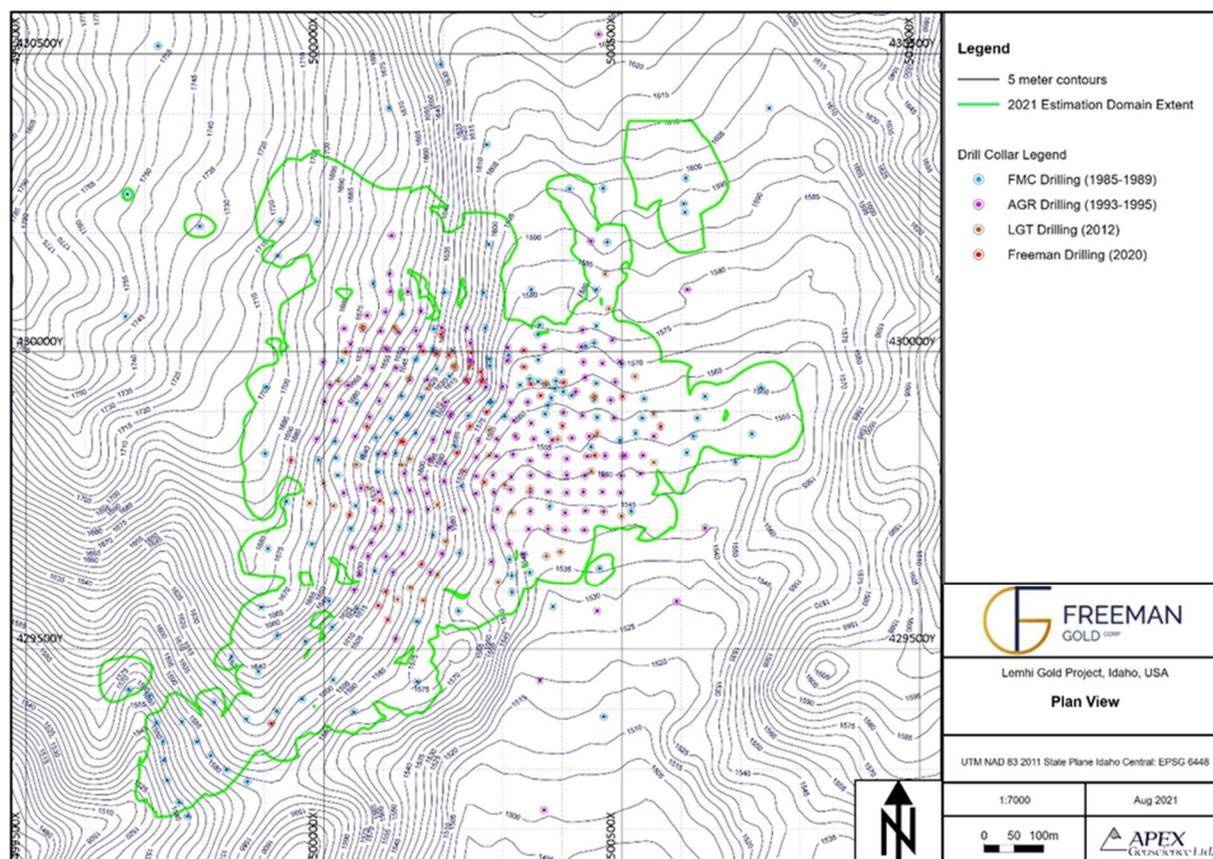
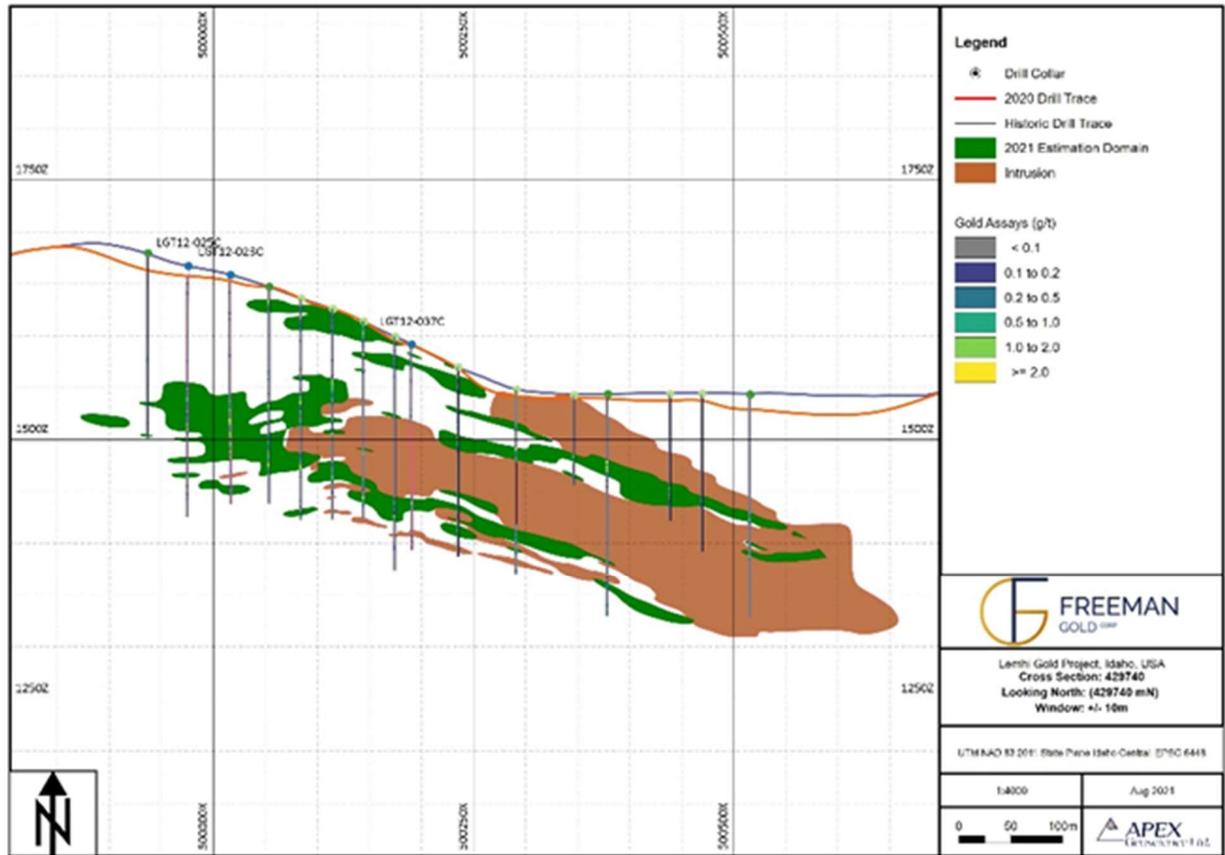


Figure 14.2 Example of the estimation domains outline in an east-west cross-section looking north along 429825N (section window extends +/- 10 m).



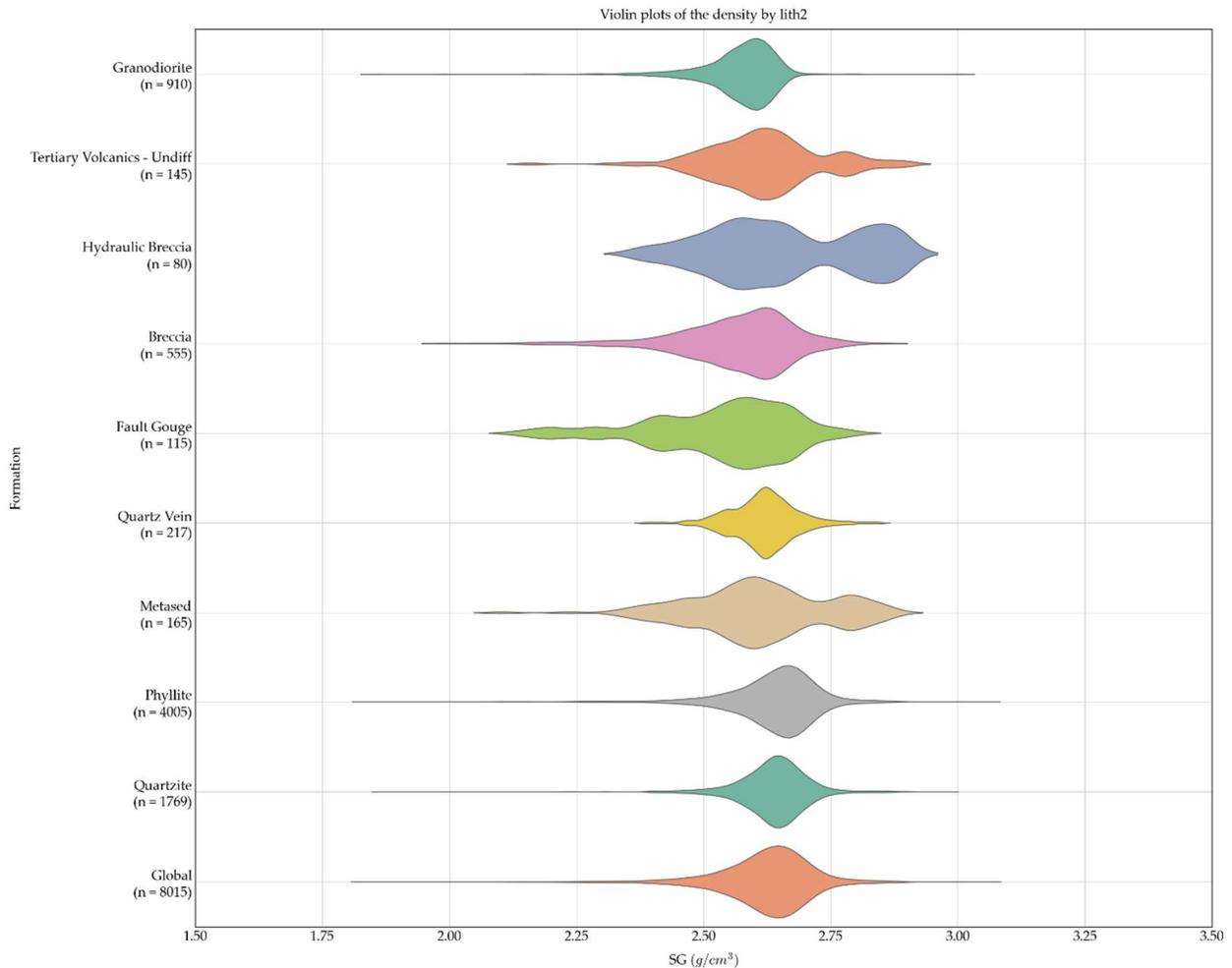
14.4 Exploratory Data Analysis and Compositing

14.4.1 Bulk Density

Density measurements were acquired on core samples in 2012 and in 2020. Density measurement consisted of 1,459 measurements in 2012 and 6,578 measurements in 2020.

Figure 14.3 shows violin plots for the various density measurements. Statistical T-tests performed on the granodiorite, quartzite, phyllite and global showed no significant differences in the density distributions. No significant difference in density was distribution was note for mineralized zones versus unmineralized zones in equivalent rock types. An average density of 2.62 was applied to the various rock types.

Figure 14.3 Violin plots of the density measurements on the various lithologies observed at Lemhi.



14.4.2 Raw Analytical Data

Cumulative histograms and summary statistics for the raw (un-composited) assays from sample intervals contained within the estimation domains are presented in Figure 14.4 and tabulated in Table 14.1. The assays within the estimation domains appear to exhibit a single coherent statistical population.

Figure 14.4: Cumulative frequency plot of raw gold assays (in ppm) from sample intervals flagged within the estimation domain.

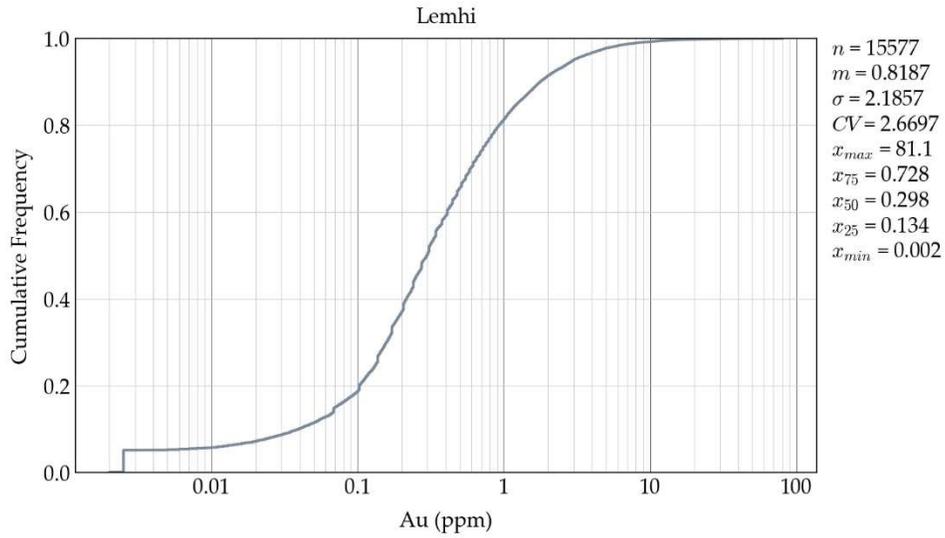


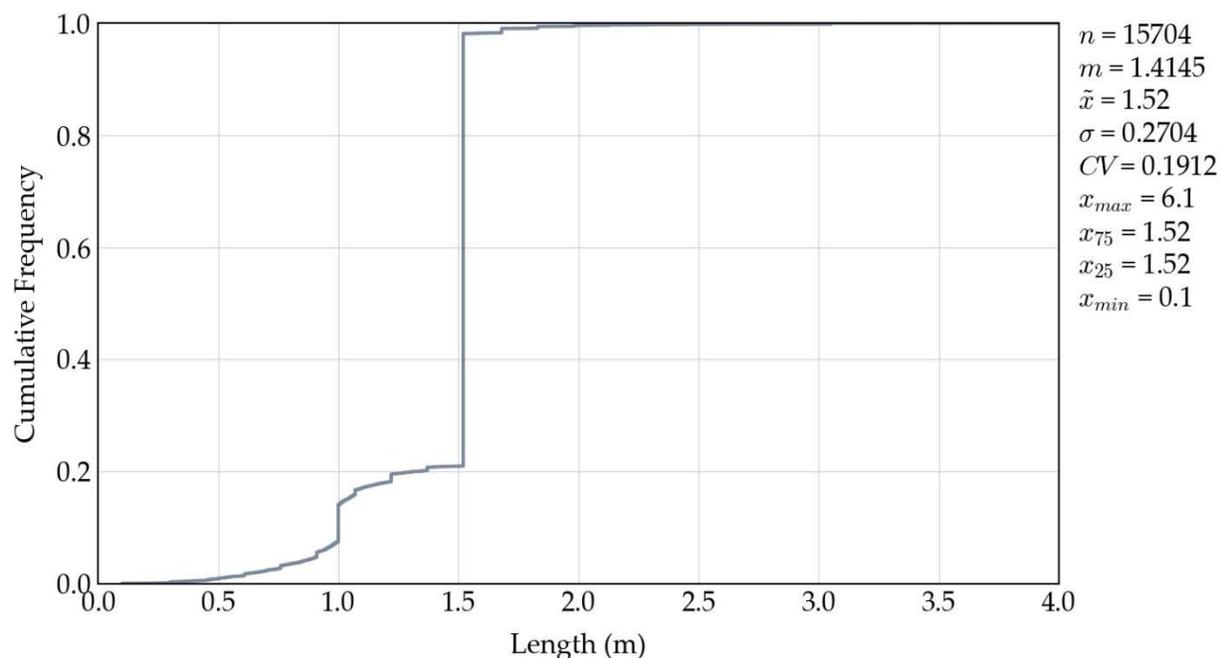
Table 14.1: Summary statistics of raw gold assays (in ppm) from sample intervals flagged within the estimation domain.

	Au (ppm)
	Lemhi Mineralized Domain
count	15,577
mean	0.8187
median	0.2980
Standard deviation	2.1857
variance	4.7772
Coefficient of variation	2.6697
min	0.0020
25%	0.1340
50%	0.2980
75%	0.7280
max	81.1000

14.4.3 Compositing Methodology

Downhole sample length analysis shows sample lengths range from 0.05 m to 10.67 m, with the dominant sample length being 1.52 m (5 ft) as shown in Figure 14.5. A composite length of 3 m is selected as it provides adequate resolution for mining purposes and is equal to, or larger than all but 599 drill hole samples (Figure 14.5: Intervals that were not sampled or had insufficient recovery are not considered).

Figure 14.5: Cumulative histogram of the sample interval lengths analyzed within the estimation domain.



The length-weighted compositing process starts from the drill hole collar and ends at the bottom of the hole. However, the final composite intervals along the drill hole cannot cross contacts between estimation domains that demonstrate a hard boundary. Therefore, composites extending downhole are truncated when one of these contacts are intersected. A new composite begins at these contacts and continues to extend downhole until the maximum composite interval length is reached, or another truncating contact is intersected.

14.4.4 Orphan Analysis

Composites that do not reach their maximum allowed length are called orphans. Orphans are created during the truncation processes at contacts, as described in Section 14.4.3, or when a drill hole ends before the last composite reaches its final length. Considering all the orphans during the estimation process may introduce a bias. Therefore, gold's distribution was examined with and without orphans to determine if they should be deemed equivalent in importance to the full-length composite's estimation process. Three configurations are examined for this analysis:

1. Composites that are 3 m in length without any orphans;
2. Composites and orphans greater than or equal to 1.5 m in length; and
3. All composites and orphans

It is common to observe a decrease in the mean when comparing the composite values to the original raw assay statistics. This decrease in the mean is typical as large un-sampled intervals (that are assigned a nominal waste value, as discussed in Section 14.2.2) are split into multiple smaller intervals. Also, by not snapping truncating contacts of the estimation domain wireframes to the start or end of raw sample intervals, many orphans can be created that are redundant data that is not representative that may skew the resource estimate. However, the boundaries of the estimation domains constructed occur at the start or end of raw sample intervals, which will reduce the number of orphan samples significantly.

The completed orphan analysis for all gold assay composite samples contained within the estimation domain is presented in Figure 14.6 and Table 14.2. Figure 14.6 illustrates little difference between the distribution of composited metal grade with the various composite length scenarios. When comparing only the composites equal to 3 m to all composites, including the orphans, gold assays illustrate a mean change of $\pm 4.5\%$ when orphans are considered (Table 14.2). The 856 orphans that are ≥ 1.5 m in length are used when calculating the MRE. However, the 950 orphans that are < 1.5 m in length are not used to calculate the MRE as they are considered redundant.

Figure 14.6: Orphan analysis comparing global cumulative histograms of raw assays and uncapped composites with and without orphans contained within the estimation domain.

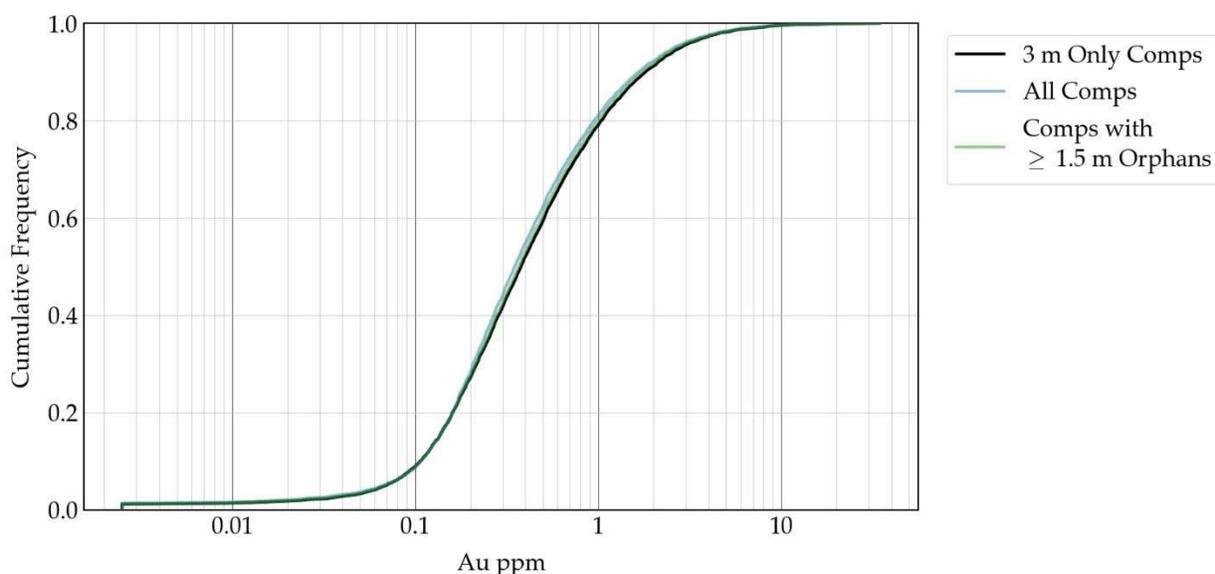


Table 14.2: Orphan analysis comparing the gold statistics (in ppm) of raw assays and uncapped composite samples with and without orphans.

	Au (ppm)			
	Uncomposited	Composited	3m Only	Comps with ≥ 1.5 m Orphans
count	15,577	8,515	6,709	7,565
mean	0.8187	0.7575	0.8210	0.7928
median	0.2980	0.3502	0.3804	0.3707
Standard deviation	2.1857	1.4676	1.5831	1.5221
variance	4.7772	2.1538	2.5061	2.3166
Coefficient of variation	2.6697	1.9374	1.9282	1.9198
min	0.0020	0.0025	0.0025	0.0025
25%	0.1340	0.1823	0.1878	0.1874
50%	0.2980	0.3502	0.3804	0.3707
75%	0.7280	0.7715	0.8503	0.8200
max	81.1000	34.7063	34.7063	34.7063

14.4.5 Capping

To ensure metal grades are not overestimated by including outlier values during estimation, composites are capped to a specified maximum value. Probability plots illustrating each composite's values are used to identify outlier values that appear higher than expected relative to each estimation domain's gold distribution. Composites identified as potential outliers on the probability plots are evaluated in three dimensions (3-D) to determine if they are part of a high-grade trend or not. If identified outliers are deemed part of a high-grade trend that still requires a capping level, the level used on them may not be as aggressive as the capping level used to control isolated high-grade outliers.

The probability plot illustrated in Figure 14.7 of composited values indicate the capping levels detailed in Table 14.3. Visual inspection of the potential outliers revealed they have no spatial continuity with each other. Therefore, the capping levels detailed in Table 14.3 are applied to all composites used to calculate the MRE.

Figure 14.7: Probability plot of the composited gold values before capping. Capped values highlighted in red.

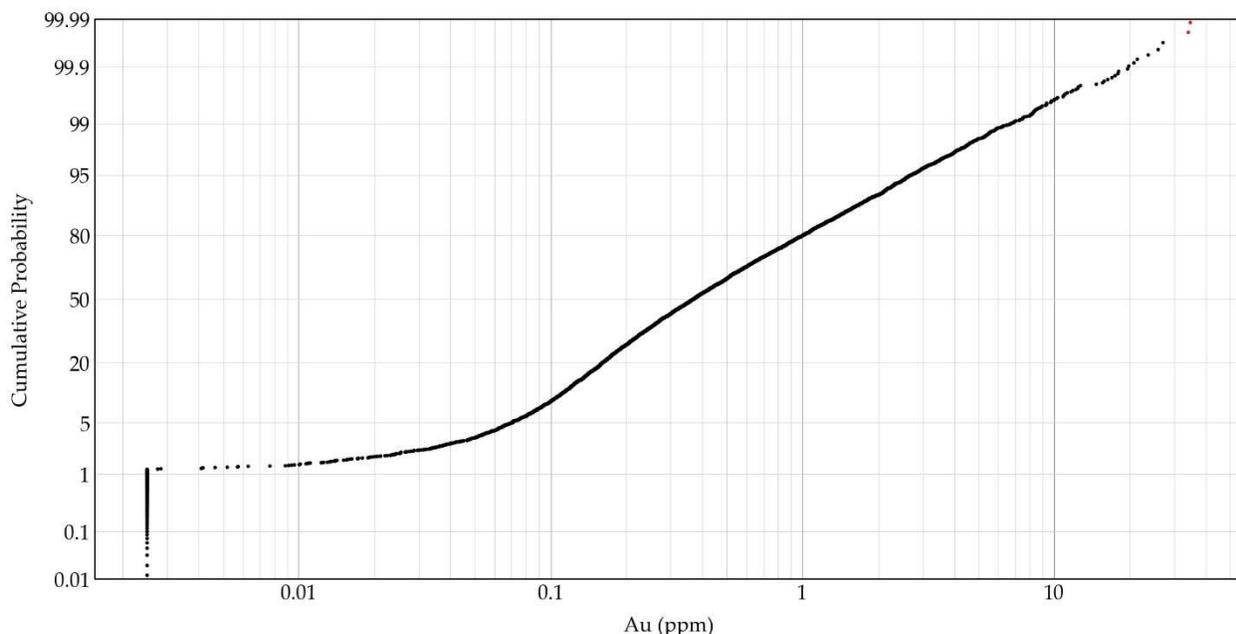


Table 14.3: Capping levels applied to composites before estimation.

Capping Levels Per Domain		
Domain	Au (ppm)	# Samples Capped
Lemhi Domain	27.1	2

14.4.6 Declustering

It is typical to collect data in a manner that preferentially samples high valued areas over low-value areas. This preferential sampling is an acceptable practice; however, it produces closely spaced measurements that are likely statistically redundant, which results in under-represented sparse data compared to the over-represented closer-spaced data. Therefore, it is desirable to have spatially representative (i.e., declustered) statistics for global resource assessment and to check estimated models. Declustering techniques calculate a weight for each datum that results in sparse data having a higher weight than closely spaced data. The calculated declustering weights allow spatially repetitive summary statistics to be calculated, such as a declustered mean.

Cell declustering is performed globally on all composites within the estimation domains, which calculates a declustering weight for each composite. Cell declustering works by discretizing a 3-D volume into cells that are the same size. The sum of the weights of all the composites within the cell must equal 1. Therefore, the weight assigned to each composite is proportional to the number of composites within each cell. For

example, if there are four composites within a cell, they are all assigned a declustering weight of 0.25.

As a general rule of thumb, the cell size used to calculate declustering weights will ideally contain one composite per cell in the sparsely sampled areas. Visual evaluation of the sparsely sampled areas in a 3-D visualization software gives a rough idea of this size. Additionally, a high-resolution block model populated with the distance to each block nearest composite can help guide the declustering of the cell size. The 90-percentile of the distance block model, with a cell size much lower than the final declustering cell size, approximates the optimal cell size. Finally, plotting a series of declustered means for a range of declustering cell sizes will help determine the optimal cell size. The optimal cell size will likely be when the declustered mean in the plot is locally low or high at a cell size that is very close to the two potential cell sizes that were determined from the visual review and calculated 90-percentile distance. Preferential sampling in high-grade zones results in a declustered mean that is likely within a local minimum. In contrast, preferential sampling in low-grade zones results in a declustered mean that is expected within a local maximum.

Calculated declustering weights for the estimation domain were constructed. Visual evaluation of the sparsely sampled areas in Micromine suggests similar cell sizes as the 90-percentiles from the distance block model for each estimation domain. Plots comprised of a series of declustered means for a range of declustering cell sizes were utilized to inform the final cell sizes. Table 14.4 details the cell size used, which was very close to the size indicated by the visual evaluation and distance block model.

Table 14.4: Cell sizes used to calculate declustering weights in the estimation domain.

Domain	Cell Declustering Size (m)
Lemhi Domain	43

14.4.7 Final Composite Statistics

Cumulative histograms and summary statistics for the declustered and capped composites contained within the interpreted estimation domains, without orphans < 1.5 m, are presented in Figure 14.8 and tabulated in Table 14.5, respectively. The Gold assays within the estimation domain generally exhibit a single coherent statistical population.

Figure 14.8 Cumulative histogram of clustered and declustered composites inside the estimation domain.

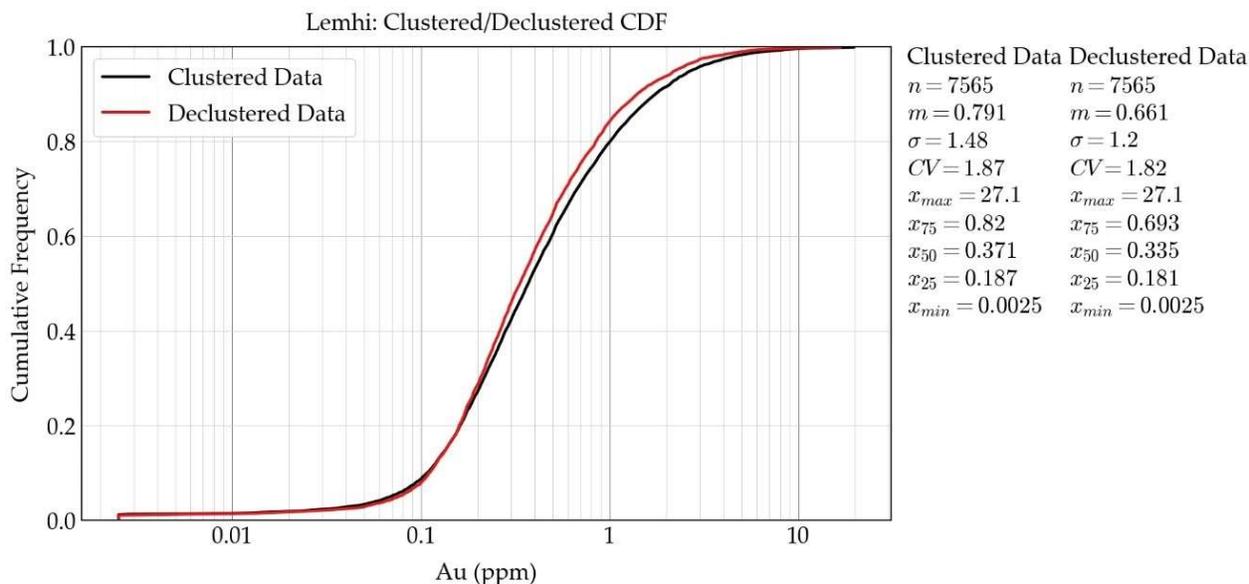


Table 14.5 Statistics of declustered composites inside the estimation domain.

	Au (ppm)
	In Domain
count	7,565
mean	0.661
std	1.201
var	1.443
CV	1.819
min	0.003
25%	0.187
50%	0.371
75%	0.82
max	27.1

14.5 Variography and Grade Continuity

Experimental semi-variograms for each domain are calculated along the major, minor, and vertical principal directions of continuity that are defined by three Euler angles. Euler angles describe the orientation of anisotropy as a series of rotations (using a left-hand rule) that are as follows:

1. Angle 1: A rotation about the Z-axis (azimuth) with positive angles being clockwise rotation and negative representing counter-clockwise rotation;
2. Angle 2: A rotation about the X-axis (dip) with positive angles being counter-clockwise rotation and negative representing clockwise rotation; and

3. Angle 3: A rotation about the Y-axis (tilt) with positive angles being clockwise rotation and negative representing counter-clockwise rotation.

14.5.1 Estimation Domain Variography

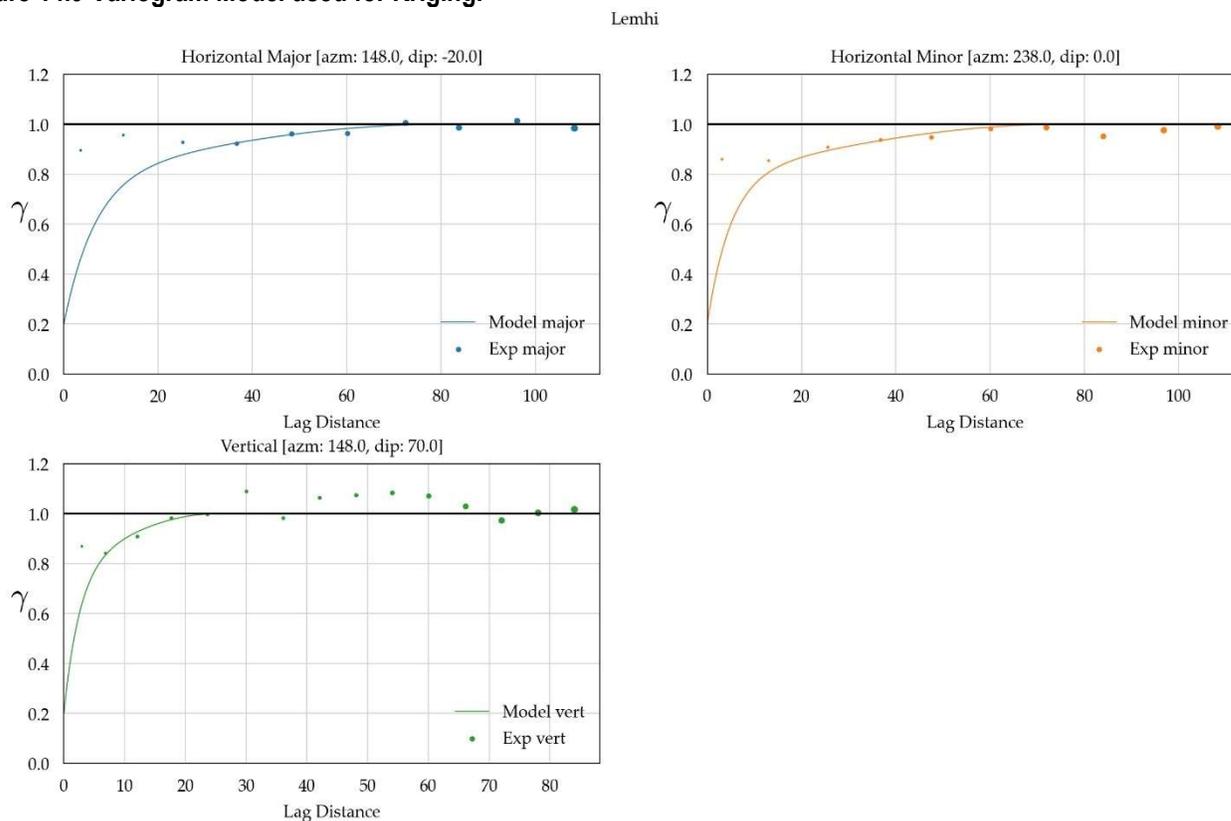
Using the correlogram algorithm, calculated gold experimental variograms were completed using the composites within the estimation domain. Table 14.6 and Figure 14.9 detail the final variogram model parameters used by Kriging. As described in Section 14.7, estimation uses locally varying anisotropy (LVA) that defines the variogram's orientation on a per-block basis. The three Euler angles described in Table 14.6 are not used during estimation, as they are only used to calculate the experimental variogram.

Table 14.6 Variogram model parameters.

Zone	Variable	Ang1	Ang2	Ang3	Sill	C0	Structure 1			Structure 2						
							Type	C1	Ranges (m)		Type	C2	Ranges (m)			
									Major	Minor			Vertical	Major	Minor	Vertical
Estimation Domain	Au	148	-20	0	2.20	0.44	Exp	1.32	20	15	8	Sph	0.44	80	75	25

sph: spherical, *exp*: exponential; *C0*: nugget effect; *C1*: covariance contribution of structure 1; *C2*: covariance contribution of structure 2; *LVA* - locally varying anisotropy

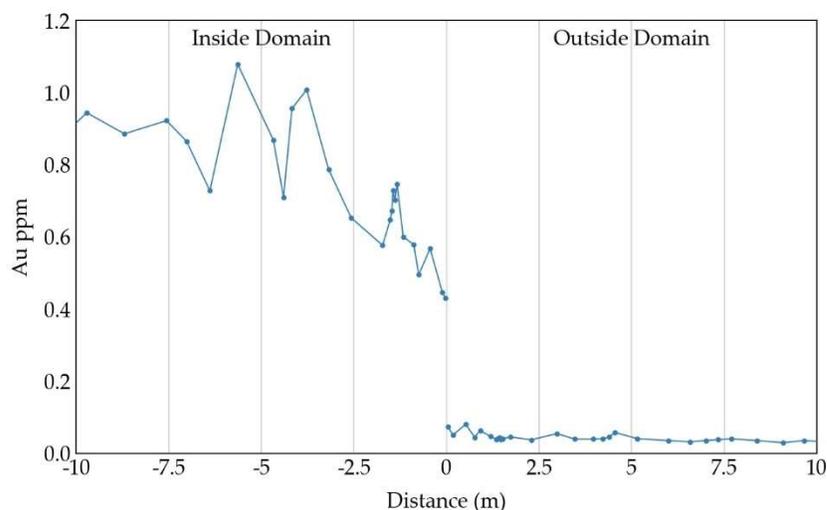
Figure 14.9 Variogram Model used for Kriging.



14.5.2 Contact Analysis

The mineralization profile at the contact between the estimation domain and the waste rock can occur in a soft, hard, or semi-soft manner. Soft boundaries occur when mineralization at the contact gradually changes from high to low as you cross into the neighbouring domain. Hard boundaries occur when mineralization at the contact abruptly changes as you cross into the neighbouring domain. Semi-soft boundaries occur when mineralization changes gradually within a small window as you cross into the neighbouring domain. If possible, the final block model should reproduce the mineralization profile observed in the drill hole data at contacts between domains. A contact analysis was completed to evaluate the mineralization profile at the estimation domain and waste rock contact using plots of grade as a function of distance to the contact to determine the type of mineralization profile as shown in Figure 14.10. The resultant analysis illustrates a hard boundary.

Figure 14.10 Contact Analysis. Average Gold grade in g/t (blue line) as a function of the distance* to the edge of the estimation domain.



*Negative distance is inside domain and positive distances represent outside of the domain and into waste model.

14.6 Lemhi Gold Project Block Model

14.6.1 Block Model Parameters

The block model used for the calculation of the Lemhi Gold Project MRE fully encapsulates the estimation domains used for resource estimation described in Section 14.3. A block size of 3 m by 3 m by 3 m was used. The coordinate ranges and block size dimensions used to build the 3-D block model are presented in Table 14.7.

A block factor (BF) representing the percentage of each block's volume that lies within each estimation domain was calculated and used to:

- flag what the estimation domain is for each block;
- calculate the volume of mineralized material and waste for each block; and
- calculate the tonnes of mineralized material of each block when calculating the MRE.

Table 14.7 3-D block model size and extents.

Axis	Block Size (m)	Minimum Extent (m)	Maximum Extent (m)
X (Easting)	3	499,626	500,799
Y (Northing)	3	429,220	430,387
Z (Elevation)	3	1,276	1,711

14.6.2 Volumetric Checks

A comparison of estimation domain wireframe volumes versus block model volumes illustrates there is no considerable over-stating or under-stating of tonnages (Table 14.8). The calculated block factor for each block is used to scale its volume when calculating the block model's total volume within each estimation domain.

Table 14.8: Estimation domain wireframe versus block-model volume comparison.

Wireframe	Wireframe Volume (m ³)	Block Model Volume with Block Factor (m ³)	Volume Difference (%)
Main	22,792,316	22,791,823	0.002%

14.7 Grade Estimation Methodology

Ordinary Kriging (OK) was used to estimate gold grades for the Lemhi Gold Project block model. Grade estimates are only calculated for blocks that contain more than 12.5% mineralized material by volume.

Estimation of blocks is completed with locally varying anisotropy (LVA), which uses different rotation angles to define the principal directions of the variogram model and search ellipsoid on a per-block basis. Blocks within the estimation domain are assigned rotation angles using a trend surface wireframe. This method allows structural complexities to be reproduced in the estimated block model. Variogram and search ranges are defined by the variogram model described in Section 14.5.

To ensure that all blocks within the estimation domains are estimated, a three-pass method was used for each domain that utilizes three different variogram model and search ellipsoid configurations (Table 14.9). The range of the first variogram structure never changes, while the second variogram structure's range is the only variogram parameter that changes with each pass. The first pass uses the variogram ranges as modelled and detailed in Section 14.5, while each subsequent run extends the range of the second structure as-needed. The search ellipsoid distances are always defined by the range of the variograms second structure. The second and third passes are normally not required because the blocks estimated during those passes are far from composites, but because of structural complexities and the limitation of search ellipses not being able to look along the trend of the folds they were utilized here. In the first pass, 97.9% of the blocks were estimated. The maximum distance between an estimated block and its closest composite is 79.9m; however, 99% of the estimated blocks are 67.4m from a composite or are closer.

Table 14.9: Estimation Search and Kriging Parameters.

Zone	Variogram			Max Variogram and			Min No Holes	Max No. Comps
	Euler Angles			Search Ranges				
	Ang1	Ang2	Ang3	Major	Minor	Vertical		
Passs 1	LVA	LVA	LVA	80	75	25	5	30
Passs 2	LVA	LVA	LVA	160	150	50	4	15
Passs 3	LVA	LVA	LVA	240	225	75	2	2

The correct volume-variance relationship is enforced by restricting the maximum number of conditioning data (composites) to 30 and the maximum number of composites from each drill hole to 3 is estimating the grade for each block. These restrictions are implemented to ensure the estimated models are not over smoothed, which would lead to inaccurate estimation of global tonnage and grade. The parameters used to enforce the right volume-variance relationship cause local conditional bias but ensure the global estimate of grade and tonnes is accurately estimated.

Blocks that contain more than or equal to 1.56% waste by volume are diluted by estimating a waste gold value that is volume-weight averaged with the estimated gold grade. It is desired that the behaviour of gold at the boundary between the estimation domain and waste beyond its boundary is reproduced. The nature of gold mineralization at the mineralized/waste contact is evaluated and used to determine a window to flag composites that are used to condition a waste gold estimate for blocks containing waste material. As illustrated in Section 14.5.2, gold behaves in a hard manner, where the grade of the composite centroids flagged within an estimation domain sharply transitions from mineralized to waste over a short window. Composites within a window of 3 m into waste and 0 m into the estimation domain are used to estimate a waste gold value. Blocks containing waste values are assigned a volume weighted gold grade for the Lerchs-Grossman (LG) pit optimizations. The MRE is reported undiluted.

14.8 Model Validation

Visual and statistical validation was completed to ensure that the estimated block model honours directional trends observed in the composites and that the block model is not over-smoothed or over- or under-estimated with respect to grade

14.8.1 Visual Validation

Swath plots verify that the estimated block model honours directional trends and identifies potential areas of over- or under-estimation in grade. They are generated by calculating the average metal grades of composites and the estimated blocks within directional slices. A window of 80 m is used in east-west slices, 80 m in north-south slices, and 40 m in vertical slices.

The block model was visually validated in plan view and in cross-section to compare the estimated metal values versus the conditioning composites using swath plots (Figures 14.11 to 14.13). Overall, the block model compares well with the composites. There is some local over- and under-estimation observed. Due to the limited number of conditioning data available for the estimation in those areas, this is the expected result.

Figure 14.11 Swath plot along Easting sections with a +/- 40 m section window.

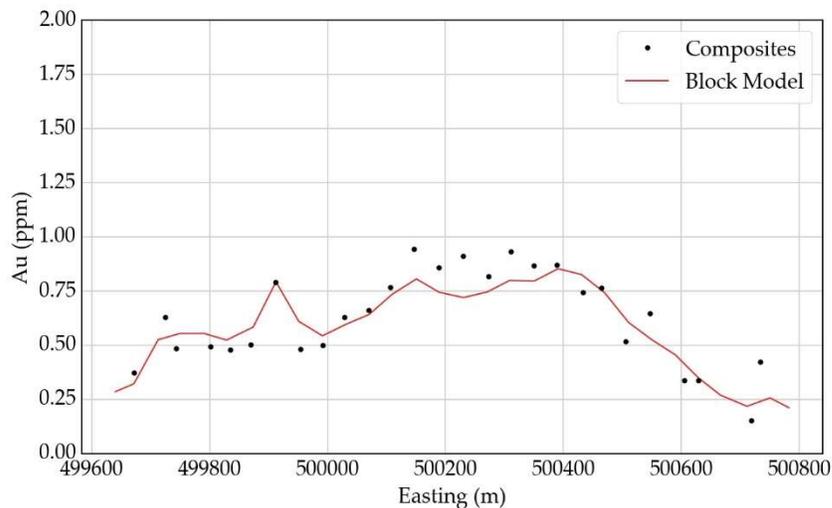


Figure 14.12 Swath plot along Northing sections with a +/- 40 m section window.

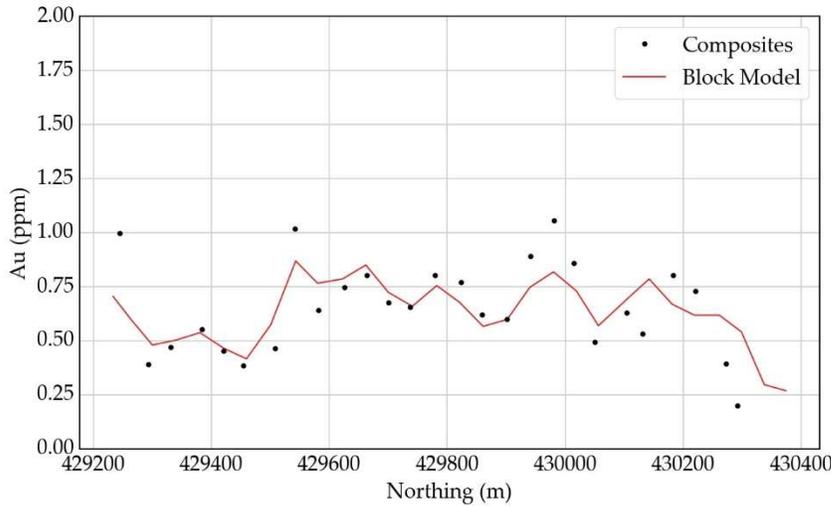
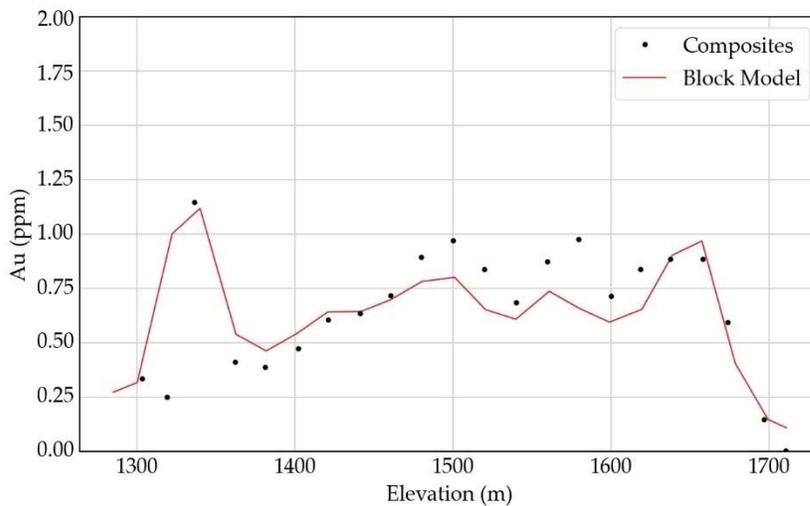
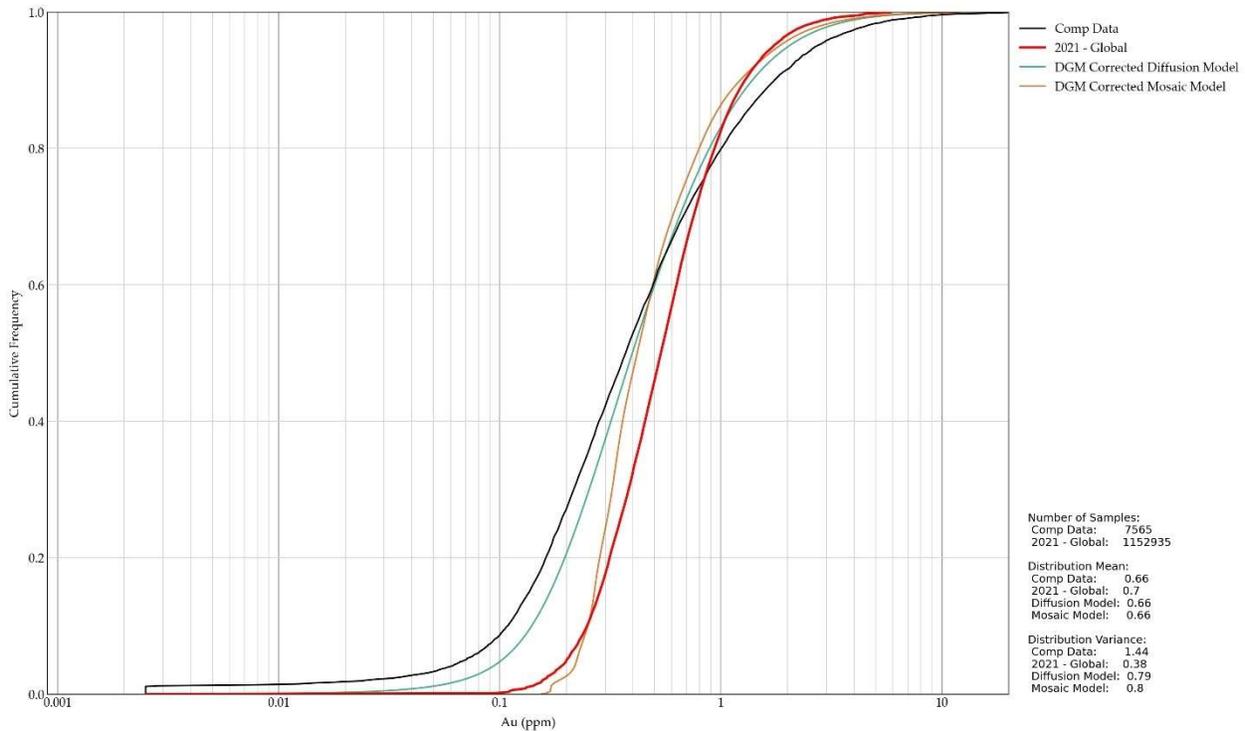


Figure 14.13 Swath plot along Elevation sections with a +/- 20 m section window.



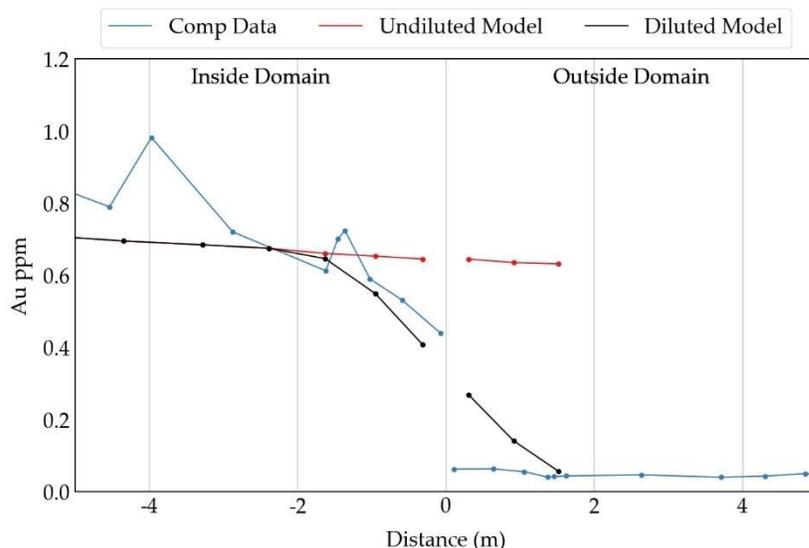
Smoothing is an intrinsic property of Kriging, and as described in Section 14.7 volume-variance corrections are used to help reduce its effects. To verify that the correct level of smoothing is achieved, theoretical histograms that indicate each estimated metal's anticipated variance and distribution at the selected block model size are calculated and plotted against the estimated final block model in Figure 14.14. Smoothing is observed; however, further modifications of the search strategy to help control the smoothing will degrade the quality of the gold estimates. The theoretical models and the estimated model are similar in distribution with slight over estimation of grade in the estimated block model (Figure 14.14).

Figure 14.14 Volume variance cumulative histogram comparison. Cumulative histograms of declustered composited data, volume variance corrected models, and the block model estimates.



As described in Section 14.7, blocks within the Lemhi Gold Project block model that contain more than or equal to 1.56% waste by volume are diluted using the estimated waste gold and mineralized domain gold values. Ideally, the nature of gold mineralization at the mineralized zone/waste contact observed in the composites is reproduced in the block model. A contact analysis plot checking contact profile reproduction is illustrated in Figure 14.15. The mineralized zone/waste contact profile is adequately reproduced with some over-estimation into waste and under-estimation into the mineralized zone.

Figure 14.15 Contact analyses showing average gold grade (g/t) by distance* to the domain edge of composite data, undiluted block model and diluted block model.



*Negative distance is inside domain and positive distances represent outside of the domain and into waste model.

14.9 Mineral Resource Classification

The Lemhi Gold Project maiden MRE discussed in this report has been classified in accordance with guidelines established by the CIM “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29, 2019 and CIM “Definition Standards for Mineral Resources and Mineral Reserves” dated May 14th, 2014.

A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

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. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

The 2021 Lemhi Gold Project MRE is classified as Indicated and Inferred according to the CIM definition standards. The classification of the Indicated and Inferred Resources utilizes only post-1990 drill hole data and is based on geological confidence, data quality and grade continuity of that data. In areas of the MRE dominated by 1980’s FMC drill hole data, the classification has been kept at a lower classification (Inferred and in some cases indicated), even where the 1980’s data density might have indicated a higher classification was justified. The most relevant factors used in the classification process were:

- density of conditioning data;
- level of confidence in historical drilling results and collar locations;
- level of confidence in the geological interpretation; and
- continuity of mineralization.

The lead author of this report has recommended that modern drilling be conducted in areas dominated by the FMC 1980’s drill holes in order to remove the reliance on that drill hole data and to increase the confidence in the database for the upgrading of the current resources to indicated and measured.

Resource classification was determined using a multiple-pass strategy that consists of a sequence of runs that flag each block with the run number a block first meets a set of search restrictions. With each subsequent pass, the search restrictions are decreased, representing a decrease in confidence and classification from the previous run. For each run, a search ellipsoid is centred on each block and orientated in the same way described in Section 14.6. Table 14.10 details the range of the search ellipsoids and the number of composites that must be found within the ellipse for a block to be flagged with that run number. The runs are executed in sequence from run 1 to run 2. Classification is then determined by relating the run number that each block is flagged as to indicated (run 1) or inferred (run 2).

Table 14.10: Search restrictions applied during each run of the multiple-pass classification strategy.

Run No.	Classification	Min No. Holes	Min No. Comp	Major Range (m)	Minor Range (m)	Vertical Range (m)
Run 1	Indicated	4	15	75	60	25
Run 2	Inferred	2	2	120	120	60

14.10 Evaluation of Reasonable Prospects for Eventual Economic Extraction

To demonstrate that the Lemhi Gold Project has the potential for future economic extraction, the unconstrained and partially diluted resource block model was subjected to several pit optimization scenarios to look at the prospect for eventual economic extraction. Pit optimization was performed in Micromine using the industry standard Lerchs-Grossman algorithm (LG). The criteria used in the LG pit optimizer were considered reasonable for a structurally controlled hydrothermal deposit with the potential for heap leach and carbon in leach (CIL) style processing. All mineral resources reported below are reported within an optimized pit shell using \$US1,550/oz for gold and was defined using blocks classified as Indicated or Inferred. The criteria used for the \$1,550/oz pit shell optimization are shown in Table 14.11. A variable lower gold grade cutoff and recovery is used based on the processing method chosen. Two processing methods were chosen, a Carbon in Leach (CIL) tank for blocks above a mining cut-off grade of 0.253 g/t and heap leach for lower grade blocks below the CIL cut-off and above a mining cut-off grade, Equation 14.1, of 0.122 g/t. The cut-off grades are based on a mining cut-off grade calculation using the mining parameters in Table 14.11.

$$COG_{mining} = \frac{Cost_{processing} + Cost_{mining\ ore}}{Recovery_{ore} * (SalePrice - RefiningUnitCost)} \quad (14.1)$$

The lead author of this report considers the Lerchs-Grossman pit parameters presented in Table 14.11 appropriate to evaluate the reasonable prospect for future economic extraction at the Lemhi Gold Project for the purpose of providing a MRE. The resources presented herein are not mineral reserves, and they do not have demonstrated economic viability. There is no guarantee that any part of the resources identified herein will be converted to a mineral reserve in future.

Table 14.111: Parameters for Lerchs-Grossman pit optimization for the Mineral Resource Estimate.

Parameter	Unit	Cost
Gold price	\$US/ounce	1,550
Gold Recovery	%	CIL – 97; HL - 75
Gold Sale price	\$US/ounce	0.75
Pit wall angles	degrees	50
Ore Mining Cost	US\$/ton	2.10
Waste Mining Cost	US\$/ton	2.00
Ore Density	gcm	2.62
Waste Density	gcm	2.62
Processing Cost	US\$/ton ore	CIL – 8.00; HL – 2.40
G & A Cost	US\$/ton ore	2.00
Royalty	percent	1

14.11 Mineral Resource Reporting

The Lemhi Gold Project maiden MRE is reported in accordance with the CSA NI 43-101 rules for disclosure and has been estimated using the CIM “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29, 2019 and CIM “Definition Standards for Mineral Resources and Mineral Reserves” dated May 10th, 2014.

The MRE was estimated within three-dimensional (3-D) solids that were created from the implicit modelling interpretation of geology and grade shells. The upper contact has been cut by the topographic surface. Where there is overburden modeled, the upper contact was subsequently cut by the overburden surface. Grade was estimated into a block model with a block size of 3 m (X) by 3 m (Y) by 3 m (Z).

Grade estimation of gold was performed using Ordinary Kriging (OK). For the purposes of the pit shell optimization, blocks that contain waste were diluted by estimating a waste value using composites within a transition zone along the outer boundary of the estimation domains. The final diluted gold grade for the diluted model assigned to each block is a volume-weighted average of the estimated gold and waste grade values. The diluted model was utilized for the pit optimization. The MRE is reported within a pit shell and is undiluted.

The maiden Lemhi Gold Project MRE is reported at a lower cut-off grade of 0.5 g/t and presented in Table 14.12. The Indicated and Inferred MRE is undiluted and constrained within an optimized pit shell. The Indicated resource includes 22.9 million Tonnes of mineralized material at an average gold grade of 1.02 g/t for a total of 749,800 ounces. The Inferred resource includes 7.7 million Tonnes of mineralized material at an average gold grade of 1.01 g/t for a total of 250,300 ounces.

Table 14.122: The recommended reported resource estimate constrained within the “\$1,550/oz” pit shell for gold at cut-off grades specific to alteration type¹⁻⁶.

Au Cutoff (grams per tonne)	Tonnes (1000 kg)**	Avg Au (grams per tonne)	Au (troy ounces)**	Class*
0.5	22,939,000	1.02	749,800	Indicated
0.5	7,683,000	1.01	250,300	Inferred

¹ Contained Tonnes and ounces may not add due to rounding.

² Mineral resources are not mineral reserves and do not have demonstrated economic viability. The Indicated, and Inferred MRE is undiluted and constrained within an optimized pit shell constructed using a gold price of US\$1550 per oz. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There is no certainty that Mineral Resources will be converted to Mineral Reserves.

⁴ The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

⁵ The Mineral Resources in this Technical Report were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

⁶ The constraining pit optimization parameters were US\$2.1/t mineralized and US\$2/t waste material mining cost, CIL processing cost of US\$8/t, US\$2.4/t HL processing cost, US\$2/t G&A, 50-degree pit slopes with a 0.176g/t Au Heap-leach lower cut-off, and 0.253g/t CIL tank cut-off.

Mineral Resources can be sensitive to the selection of the reporting cut-off grade. For sensitivity analysis other cut-off grades are presented in Table 14.13 for review, ranging from 0.2 g/t Au to 1 g/t Au cut-off grades.

Table 14.133: Sensitivity analysis of the undiluted resource estimate constrained within the “\$1,550/oz” pit shell for gold at various cut-off grades¹⁻⁶.

Au Cutoff (grams per tonne)	Tonnes (1000 kg)	Avg Au (grams per tonne)	Au (troy ounces)	Class
0.2	35,970,000	0.78	900,200	Indicated
0.3	32,341,000	0.84	870,000	Indicated
0.4	27,490,000	0.92	815,500	Indicated
0.5	22,939,000	1.02	749,800	Indicated
0.6	18,683,000	1.12	674,700	Indicated
0.8	12,038,000	1.36	526,500	Indicated
1	7,812,000	1.61	405,300	Indicated
0.2	13,952,000	0.72	322,600	Inferred
0.3	12,233,000	0.78	308,700	Inferred
0.4	9,875,000	0.89	282,100	Inferred
0.5	7,683,000	1.01	250,300	Inferred
0.6	5,823,000	1.16	217,600	Inferred
0.8	3,528,000	1.47	166,900	Inferred
1	2,348,000	1.76	133,200	Inferred

1 Contained Tonnes and ounces may not add due to rounding.

2 Mineral resources are not mineral reserves and do not have demonstrated economic viability. The Indicated, and Inferred MRE is undiluted and constrained within an optimized pit shell constructed using a gold price of US\$1550 per oz. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There is no certainty that Mineral Resources will be converted to Mineral Reserves.

4. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

5. The Mineral Resources in this Technical Report were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

6. The constraining pit optimization parameters were US\$2.1/t mineralized and US\$2/t waste material mining cost, CIL processing cost of US\$8/t, US\$2.4/t HL processing cost, US\$2/t G&A, 50-degree pit slopes with a 0.176g/t Au Heap-leach lower cut-off, and 0.253g/t CIL tank cut-off.

15 Mineral Reserve Estimates

This section is not applicable to this report.

16 Mining Methods

This section is not applicable to this report.

17 Recovery Methods

The process recovery methods for the Lemhi Gold Project have not currently been developed and will be dependent on planned future metallurgical evaluation.

18 Project Infrastructure

This section is not applicable to this report.

19 Market Studies and Contracts

This section is not applicable to this report.

20 Environmental Studies, Permitting and Social or Community Impact

This section is not applicable to this report.

21 Capital and Operating Costs

This section is not applicable to this report.

22 Economic Analysis

This section is not applicable to this report.

23 Adjacent Properties

23.1 Revival Gold's Beartrack and Arnett Prospects

The Beartrack and Arnett Prospects are located approximately 45 km (28 miles) southwest of the Lemhi Gold Project and lie along the same structural trend, the Trans-Challis Fault Zone (Figure 23.1). These gold prospects are not “adjacent properties” to the Lemhi Property but are discussed below due to the numerous geologic similarities between Lemhi and these gold deposits within the regional Trans – Challis Fault System, demonstrating that the Lemhi Property lies within an important mineral belt.

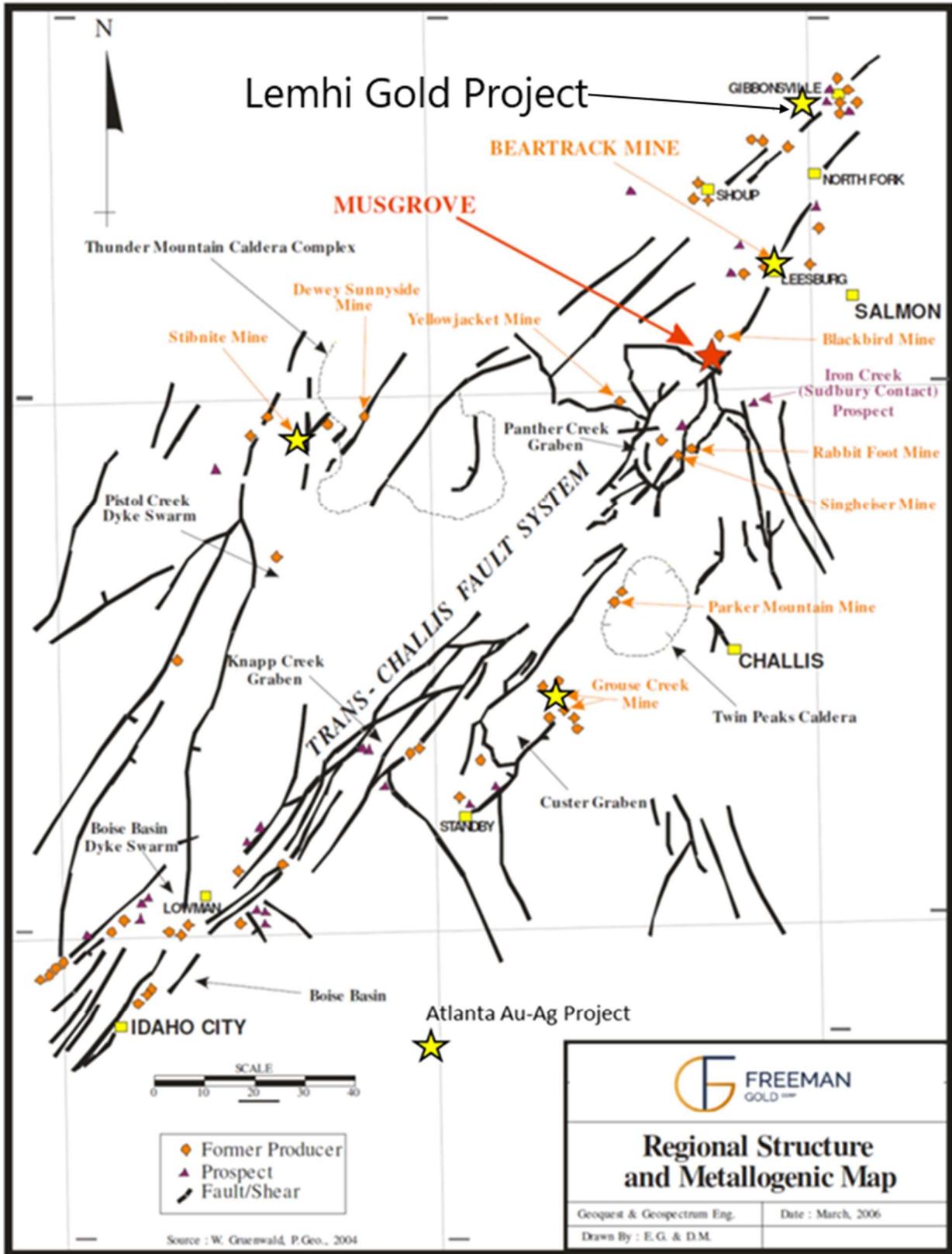
In 2018 and 2019 Revival Gold Inc. (Revival) completed extensive exploration on their Beartrack and Arnett Properties to confirm and extend the mineralization in both areas.

At Beartrack, the gold mineralization is associated with a major Au-As bearing, structurally controlled hydrothermal system. The mineralization is hosted in stockwork, veins and breccia. The mineralization is spatially related to, and controlled by, the Panther Creek Fault (Lechner and Karklin, 2018). Drilling in 2018 and 2019 extended the strike length of the mineralization to over 5 kms in length. The mineralization remains open to the southwest and at depth beyond 600 m (Lechner and Karklin, 2019). No indication of grade, mineral or metal zonation with depth was reported. The $^{40}\text{Ar}/^{39}\text{Ar}$ dating of sericite and potassium feldspar indicate that the mineralization is approximately 68 Ma, which is within error of the age (65.5 Ma \pm 2.5 Ma) reported for sericite alteration at Lemhi (Cuffney, 2011). Re-interpretation of recent and historical geophysical data confirms that the Panther Creek Shear Zone, which hosts the gold mineralization at Beartrack, is a deep-seated structure and that it intersects the north-south-trending Coiner fault. The Coiner fault continues south and offers further potential (Revival, 2019a).

In 2018, Revival reported a resource for the Beartrack Property based on historical and recent drilling. The historical and recent data were reviewed and verified by a QP responsible for estimating mineral resources on behalf of Revival. The resource was reported in “Mineral Resource Estimate, Beartrack Property, Lemhi County Idaho, United States” by Lechner and Karklin, (2018). The pit constrained Beartrack MRE is comprised of an Indicated Mineral Resource of 33.4 million tonnes at 1.13 g/t Au containing 1,214,000 oz of Au; and an Inferred Mineral Resource of 16.9 million tonnes at 1.41 g/t Au containing 765,000 oz of Au. The MRE was constrained by a conceptual pit based on a gold price of US\$1,300/oz, a 0.61 g/t Au mill cut-off and a 0.26 g/t cyanide soluble Au heap leach cut-off (Lechner and Karklin, 2018). An inverse distance model was used to complete the calculations. The grade models were validated using visual and statistical methods and fine-tuned using historical production data and blast-holes. The interpolated block grades were classified into Indicated and Inferred MRE categories based on drill hole spacing and continuity of mineralization. Two block gold grades: cyanide soluble and fire assay, were estimated and formed the basis for determining potential leach and mill resources. Potential block net values were calculated for each block based on the estimated cyanide soluble (leach) and fire assay grades (mill). The conceptual pit was generated from the greater of the two conceptual block values (Lechner and Karklin, 2018). The authors have not independently verified the MRE reported for the Beartrack Prospect. however, the resource model and estimation completed by Lechner and Karklin (2018) was calculated by a reputable company that is intimately familiar with, and knowledgeable about, the properties, the geology and resource potential of the Beartrack Prospect and the authors have no reason to doubt the validity of this resource.

Historically, the Beartrack Deposit has been mined as a heap leach operation that focused on cyanide soluble gold. Meridian Gold (the operator) was aware that less soluble gold resources extended at depth below their open pits based on fire assay data and the 2018 resource calculation considered recovery parameters for conceptual leach and mill scenarios. Total historical gold production from 1994 to 2014 is reported as 21,880,000 tonnes mined at a grade of 0.99 g/t producing 609,141 oz Au (Lechner and Karklin, 2018). The authors have not verified the published production figures for the Beartrack Mine.

Figure 23.1: Adjacent Properties Trans – Challis Fault System



The Arnett Project is located approximately 6.5 kilometers west of Beartrack. At Arnett gold mineralization is again structurally controlled and associated with widespread sericitic and argillic alteration. Mineralization is controlled by northwest- to north-northeast-trending structures. Mineralization is largely confined to quartz veining and silicification associated with Arnett Creek stock wall rocks and occasionally extends into the adjacent metasediments. Higher gold grades are associated with increased quartz veining, limonite/pyrite concentration and secondary potassium feldspar and biotite. To date, no vertical or horizontal zonation in mineral content, trace element geochemistry or alteration type has been observed. Sericite related to the mineralization has been dated at 82 to 77 Ma (Earnest, 2017).

Recent exploration (2018-2019) completed by Revival Gold over the Arnett Project includes core drilling and an aeromagnetic survey. The 2019 drilling confirmed the presence of significant near-surface mineralization over a strike length of over 400 m. The system remains open along strike (Revival Gold, 2019b). Interpretation of the aeromagnetic survey using modern processing techniques has identified several near-surface intrusions including a strong high-amplitude magnetic anomaly measuring approximately 2 kilometers in diameter. Geophysical and geological information suggests that there is potential to extend exploration to the north and southwest of the current area of mineralization (Revival Gold, 2019a).

The Author does not imply any size or grade relationship between the Beartrack and Arnett Prospects, and the Lemhi Property and notes that this information is not necessarily indicative of the mineralization known or to be expected on the Lemhi Property, which is the subject of this Technical Report. However, the processing methodology that has been employed at Beartrack and is contemplated in future is relevant and perhaps is a potential scenario for future processing at the Lemhi Project. In addition, some of the exploration success and the techniques utilized by Revival Gold are of direct significance to the Lemhi Gold Project in terms of future exploration.

24 Other Relevant Data and Information

The authors are not aware of any other information or data relevant to the Lemhi Gold Project at this time.

25 Interpretation and Conclusions

25.1 Results and Interpretations

The Lemhi Gold Project is an intermediate to advanced stage exploration project that has seen significant exploration and extensive drilling completed on the Property intermittently from 1984 to 2020. Previous work includes geological mapping, sampling, drilling, metallurgical studies, base-line environmental studies, historical resource

estimates, and a historical pre-feasibility study, in preparation for an open-pit heap leach gold mine operation. The authors have reviewed the historical data generated by FMC, AGR and LGT during their exploration and pre-development programs conducted between 1984 and 2012. In addition to this, the authors have reviewed the data from the Freeman 2020 exploration program.

The Lemhi Gold Project comprises 11 patented and 333 unpatented claims, totaling approximately 6,739 acres (2,727 hectares) of mineral rights and 615 acres (249 hectares) of surface rights. The 11 patented claims, as well as 53 of the unpatented claims, were recently purchased from LGT by Lower 48 through a closed auction bid process. Another 46 unpatented claims are owned by BHLK and have been optioned to Lower 48. Freeman has completed the acquisition of Lower 48 and its parent Company 1132144 British Columbia (B.C.) Ltd. Freeman also recently acquired the Moon #100 and Moon #101 unpatented mining claims from Vineyard, located within the historical resource area. In addition to this, an additional 232 unpatented claims have recently been staked by Freeman in 2020 and 2021.

Historical drilling at the Lemhi Gold Project has defined a large area of gold mineralization measuring 650 m in an east-west direction by 500 m in a north-south direction with a thickness of 10 to 70 m. Anomalous gold mineralization has been intersected in more than 407 drill holes totaling more than 75,000 meters of drilling, and in excess of 48,000 gold assays. The vast majority of historical drilling (pre-2000) was completed using RC drilling methods. At the time, this approach was justified, however, as it became apparent that the Lemhi Gold Property lies in a structurally complex area the lack of geological detail from RC chips hindered the development of an accurate geological model. The 2012 core drilling program facilitated the collection of more detailed geological data and resulted in the development of a new deposit model for the Property. The model proposed by LGT suggests that the mineralization is hosted in a structurally controlled, hydrothermal deposit associated with varying amounts of sulfides in a quartz-carbonate gangue hosted by late Proterozoic metasediments within the structurally complex Trans-Challis fault system. Mineralization is spatially associated with a number of intruded dykes and sills.

Several historical resource estimates have been constructed based on the historical RC drilling with a more recent informal estimate incorporating the 2012 core and RC drilling. A wide range of results and historical mineral resources have been presented. as per the CIM Definition Standards for Mineral Resources & Mineral Reserves (2014) and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019). The authors, independent QPs, are treating these estimates as historical in nature and not current mineral resources or mineral reserves. All of the historical mineral resource estimates are now superseded by the current MRE for the Lemhi Gold Project reported herein.

Prior metallurgical studies, preliminary engineering studies, and initial baseline environmental studies all indicate that the Lemhi Gold Deposit has the potential to be developed as an open-pit tank-leach or combination tank-leach and heap-leach

operation. Processing and operating costs provided in various economic studies in the 1990's are out-of-date and not currently applicable. A new economic assessment is required that should utilize recent metallurgical test work to characterize oxidation and recovery characteristics for gold across the deposit, as well as a modern processing flow sheet. A new cost analysis will be necessary using current gold prices and updated processing, mining, and permitting costs.

A number of baseline environmental, archeological and geotechnical studies were conducted on the project in the 1990's, as well as 2011 - 2013. Several reports document a summary timeline and overview of permitting required for the development of a potential heap-leach operation and are summarized by Brewer (2019) and Cuffney (2011). Based on the initial baseline studies and preliminary permitting completed by AGR in 1995-96, subsequent baseline studies commissioned by LGT, and on public comments received during LGT's tenure, there does not appear to be any major obstacles that would prevent the potential development of a mine on the Lemhi Gold Property. It was concluded that there were no significant impediments identified to the potential development of an open pit mine, particularly on the patented mining claims.

25.2 Summary of Exploration Activities in 2020

The 2020 surface exploration program conducted by Freeman consisted of the following methods:

- Soil Orientation Survey (conventional b-horizon, partial extraction leach techniques such as IL and MMI sampling)
- Prospecting, Rock and Chip Sampling
- Ground Magnetic Survey
- 3D Induced Polarization Survey
- Core Drilling

Until Freeman's 2020 program, no significant surface exploration had been conducted on the property since the late 1980's. During Freeman's 2020 exploration program, modern soil geochemical techniques utilizing partial extraction techniques including MMI and IL were tested. The results of this soil orientation program will guide further exploration in under explored areas with significant glacial or glacial-fluvial cover, such as areas west and north of the deposit.

In addition, the entire claim group was covered with a magnetic survey, and the core resource area was covered with a 3D IP survey. The surveys have been completed and interpretation of the results is ongoing.

Drilling completed on the Property in 2012 by LGT and in 2020 by Freeman has returned encouraging results in both infill and step-out drilling. All 55 LGT holes and most of the 35 Freeman core holes have intersected gold mineralization. The new geological interpretation resulting from the data obtained from the core drilling has also identified additional potential exploration targets, including:

1. Deep feeder zones
2. Down-dip mineralization to the south
3. Extensions of known mineralization to the west and southwest associated with intrusions
4. "Hidden" targets below the glacial cover immediately to the north of the known deposit.

Freeman's 2020 drilling program consisted of the completion 7,149 m in 35 core holes of infill and steep-out drilling. Results have been received for all of the holes to date. As part of the drilling program, Freeman has commissioned a series of metallurgical studies to characterize the amenability of the mineralized material to certain recovery processes. The studies that are currently in progress along with the new core drilling have assisted in delineation and improvement of the existing geological and mineralization model into a coherent 3D model allowing for the construction of a modern MRE presented below.

The tank leaching laboratory findings to date indicate that over a range of potential mill feed grades that the gold recovery ranges in the mid to upper ninety percent range. This can be achieved under standard process operating conditions.

In 2021, APEX personnel validated and compiled an updated drill hole database (DHDB) to correct mistakes identified in the 2012 DHDB and include additional drill results discovered while verifying the 2012 database. The new validated 2021 Freeman DHDB was utilized in constructing the maiden MRE in this report.

During the lead author's site visits, the author confirmed the locations of several historical collars on the property. The 2019 pulp re-assays (Dufresne, 2020) returned values which have close correlation with the original assays for these samples confirming the validity of the 2012 assay results.

Based on the review of historical information, recent re-assay results and the current 2020 program results, the authors consider the Lemhi Gold Property a property of significant merit that requires further exploration and delineation work.

25.3 Mineral Resource Estimate

The Lemhi Project database contains a total of 437 drill holes with collar information and assays totalling 74,018 m of drilling with 50,712 drill hole sample intervals. The sample database contains a total of 48,525 samples assayed for gold. The Lemhi Project MRE utilized 364 drill holes (65,458 m) with 277 drill holes completed between 1983 and 1995, and 87 drill holes completed between 2012 and 2020. Inside the mineralized domains there is a total of 15,611 samples analyzed for gold. Standard statistical treatments were conducted on the raw and composite samples resulting in a capping limit of 27.1 g/t Au applied to the composites. The current drill hole database was validated by APEX personnel and is deemed to be in good condition and suitable for use in ongoing MRE studies. Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo, President of APEX, is an

independent qualified person (QP) and is responsible for the database validation and MRE.

Modelling was conducted in the Universal Transverse Mercator (UTM) coordinate space relative to the North American Datum (NAD) 1983, National Spatial Reference System 2011, and State Plane Idaho Central, (EPSG:6448). The mineral resource block model utilized a block size of 3 m (X) x 3 m (Y) x 3 m (Z) in order to honor the mineralization wireframes. The percentage of the volume of each block within each mineralization domain was calculated and used in the MRE. The Gold estimation was completed using ordinary kriging (OK) utilizing 7,565 composited samples within the interpreted mineralization wireframes. The search ellipsoid size used to estimate the gold grades was defined by modelled variograms. Block grade estimation employed LVA, which allows structural complexities to be reproduced in the estimated block model.

There are two dominant styles of gold mineralization at the Lemhi Gold Project. The primary mineralization occurs as a halo around a granodiorite intrusion with secondary mineralization along shallow dipping foliation and faults. Both styles of mineralization generally occur as stacked parallel sub-horizontal sheets.

A total of 8,015 specific gravity samples were available and utilized to determine the bulk density. No significant variation of the density was observed between the geological units or mineralized versus un-mineralized zones. The overall average bulk density was 2.62 g/cm³ and was applied to all blocks for the Lemhi Gold Project MRE.

All reported mineral resources occur within a pit shell optimized using values of \$US1,550/oz Au. The Indicated and Inferred MRE are undiluted and constrained within an optimized pit shell, at a 0.5 g/t Au lower cut-off. The MRE comprises an Indicated Mineral Resource of 22.94 million tonnes at 1.02 g/t Au for 749,800 oz of gold, and an Inferred Mineral Resource of 7.68 million tonnes at 1.01 g/t Au for 250,300 oz of gold (Table 25.1). The MRE covers a surface area of 400 by 500 metres, extends down to a depth of 180 metres below surface, and remains open on strike to the north, south and west as well as at depth.

Table 25.1: The recommended reported resource estimate constrained within the “\$1,550/oz” pit shell for gold at cut-off grade of 0.5 g/t Au¹⁻⁶.

Au Cutoff (grams per tonne)	Tonnes (1000 kg)**	Avg Au (grams per tonne)	Au (troy ounces)**	Class*
0.5	22,939,000	1.02	749,800	Indicated
0.5	7,683,000	1.01	250,300	Inferred

1 Contained Tonnes and ounces may not add due to rounding.

2 Mineral resources are not mineral reserves and do not have demonstrated economic viability. The Indicated, and Inferred MRE is undiluted and constrained within an optimized pit shell constructed using a gold price of US\$1550 per oz. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There is no certainty that Mineral Resources will be converted to Mineral Reserves.

4. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

5. The Mineral Resources in this Technical Report were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

6. The constraining pit optimization parameters were US\$2.1/t mineralized and US\$2/t waste material mining cost, CIL processing cost of US\$8/t, US\$2.4/t HL processing cost, US\$2/t G&A, 50-degree pit slopes with a 0.50 g/t Au lower cut-off.

The Lemhi Gold Project MRE is classified according to the CIM “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29th, 2019 and CIM “Definition Standards for Mineral Resources and Mineral Reserves” dated May 10th, 2014.

25.4 Conclusions

In conclusion, gold was first discovered and mined from the Lemhi Project area in the 1890’s to mid-1900’s. Modern exploration of the Property area commenced in 1984. FMC conducted exploration over the current Property area between 1984 and 1991. FMC defined an area of strong gold mineralization along the western slope of Ditch Creek. AGR acquired the Property in 1991 and conducted exploration over the area until 1996. The FMC and AGR drilling delineated a gold deposit: the Humbug Deposit (now known as the Lemhi Gold Deposit), on the patented claims (MS 784 A and B, 2512 and 1120) which comprise the current Lemhi Gold Property. The Lemhi Gold Deposit is roughly 650 m east-west by 500 m north-south. A prominent west-northwest trending zone of higher-grade mineralization and a north-east trending zone of strong mineralization were identified within the deposit. The mineralization is interpreted to be structurally controlled by northwest and northeast high-angle faults that intersect a low-angle (thrust?) fault. In the footwall of an intrusion and along its western terminus the gold mineralization is thick (30 m - 70 m) and can occur in multiple stacked zones. In the hanging wall gold mineralization is considerably thinner and more erratic. In the core of the deposit, the low-grade envelope of mineralization is greater than 200 m thick.

A significant mineralized zone has been intersected by numerous drill holes between 1984 and 2020. Up until 2012, much of the drilling conducted was vertical RC holes and only a few core holes. To confirm multiple zones of gold mineralization intersected and to assist in further development of the geological model, an infill HQ core drilling program with a number of angle holes was completed by Freeman in 2020. In addition, a modern metallurgical program was initiated utilizing core from historical drilling and 1 PQ core hole completed as part of the 2020 infill drilling program. The 2020 core drilling program consisted of 7,149 m in 35 core holes including 34 HQ holes and 1 PQ hole. A maiden MRE comprises an Indicated Mineral Resource of 22.94 million tonnes at 1.02 g/t Au for 749,800 oz of gold, and an Inferred Mineral Resource of 7.68 million tonnes at 1.01 g/t Au for 250,300 oz of gold (Table 25.1). The MRE covers a surface area of 400 by 500 metres, extends down to a depth of 180 metres below surface. The work to date indicates that there is potential to expand the current MRE and there is potential for new discoveries with further exploration drilling. There is also need to complete additional drilling to upgrade the confidence in the MRE, upgrade the classification and reduce the reliance on the use of the FMC 1980’s drill hole data.

Recent metallurgical studies indicate that the Lemhi mineralization is amenable to tank leaching with gold recovery ranges in the mid to upper ninety percent range over a range of potential mill feed grades. The results indicate that this can be achieved under standard process operating conditions.

25.5 Risks and Uncertainties

The Lemhi Property carries risks inherent both in utilizing significant amounts of historical drilling along with potentially nuggety gold in developing a robust metallurgical and process model for mineralized material that may affect the construction of future mineral resource estimates and economic studies. In addition, there are certain aspects of future permitting that may pose risks with potentially advancing the project to production.

Specific risks center on the poor reproducibility of assay results from the 2012 LGT core twinning program as compared with historical RC hole results. Confirmation drilling completed in 2012 by LGT included twin holes of historic drill holes with both core and RC drilling methods. The results from the LGT twin holes indicate that 2012 core drilling returned a number of erratic and a few lower grade intersections for a number of holes versus historical RC drilling within the same mineralized zones. Historically these variances were also observed in comparisons between historical core holes and historical RC holes whereby the core holes returned lower overall assays for a particular interval. Additionally, assaying both halves of split core has indicated that gold values can also vary significantly within a particular core interval, this is further confirmed by the duplicate analyses received to date in the 2020 Freeman Phase 1 drilling program. LGT's duplicate sampling using the 2012 pulps and rejects showed significant variances between fire assay and metallic screen assay results of as much as 300%. LGT duplicate sampling has also indicated variances of between 200% and 400%. Brewer (2019) concludes that while these variances are not the norm, they do indicate that the Lemhi Gold Deposit exhibits some significant nugget effects. The 2020 drill program has identified a significant number of occurrences of visible gold in a number of core holes, likely further indicative of potential nugget effects.

The issue of poor assay value reproducibility is poorly understood and requires further investigation. The discrepancy can, at least in large part, be explained by the indications of potential nugget effect in this deposit, along with the uncertainty of accurately "twinning" unsurveyed historical drill holes and, the inherent grade variance within a deposit that does have some mineralization related to quartz veining. However further work is ongoing and is required to assess which statistical approach and future sampling technique will be most appropriate for the deposit including the historical drill data.

A secondary risk is the metallurgy of the deposit, which must be economically established with additional metallurgical test work across the deposit and by undertaking a preliminary economic assessment (PEA). Based on historical studies and by comparing Lemhi to similar existing operation it is evident that the undertaking of a PEA is warranted supported by additional metallurgical test work.

Current metallurgical work has been focussed on whole ore tank leaching optionally with heap leach a consideration for lower grade material. There is some sulfide present, and it can be expected that it may become more prevalent in parts of the deposit particularly at depth. This can be handled more readily with conventional mill processing techniques, particularly if the presence of sulfide is accompanied by higher grades. Further geological modelling and metallurgical work are required to assess these risks for the Lemhi Deposit.

The tank leaching laboratory findings to date indicate that over a range of potential mill feed grades that the gold recovery ranges in the mid to upper ninety percent range. This can be achieved under standard process operating conditions. A moderate grind of approximately 80% passing 110 microns, with approximately 36 hours of leach retention time appears to be typically sufficient for optimum recovery. Preliminary comminution testing indicates moderate hardness of the rock contained in the resource. Pre-treatment of leach feed by centrifugal gravity concentration suggest one third or more of the gold might typically be recovered into an uncleaned gravity concentrate, suitable for intense cyanidation. Gravity tailings would then be forwarded for conventional tank leaching procedures, such as carbon in pulp (CIP). Some lower gold recoveries were evident on feeds with higher copper content. The bench scale testing to simulate flash flotation to remove a Cu-Ag-Au concentrate allowed the float tailing to increase the gold leach recoveries back to more typical levels of the feeds with lower copper content.

Permitting of an open-pit gold mining operation using tank and/or heap-leach at Lemhi carries a higher level of risk. No “fatal flaws” in permitting a mine at Lemhi were found in the initial permit scoping and base-line environmental studies completed by AGR and LGT. However, that work is dated now. Ditch and Hughes creeks represent areas of significant historical disturbance due to more than a 100 years of placer mining activity, however, water quality and fisheries will be very sensitive issues, which must be carefully addressed with proper mine and process plant design. Social impacts, particularly on homeowners along the Hughes Creek Road, will need to be addressed and mitigated as well.

Permitting timelines are currently estimated to range from 18 months to 30 months for a project wholly contained on the private lands (patented claims). Permitting can be expected to be considerably longer if USFS lands are involved. However, those time estimates were made for a project starting from scratch. The permitting work and baseline studies previously conducted at the Lemhi Gold Project may jump-start the permitting process by a considerable amount of time. The risk that permits to develop a mine at Lemhi will not be obtained is considered low if the above measures are taken. There is a moderate to high risk that the permitting process will take longer and cost more than expected. Revised permitting timeline and cost estimates may be necessary following an initial permitting scoping study.

26 Recommendations

Historical drilling and the 2020 drilling have defined a significant zone of gold mineralization at the Lemhi Gold Project. Prior 3D modelling has shown the deposit to be of significant size and open in a number of directions, which was confirmed with the 2020 drilling. Prior to 2020, little surface exploration has been conducted at the Lemhi Project since the late 1980's. Certainly no modern exploration techniques have been employed to either extend the known mineralization or identify new mineralization along strike. Freeman's surface exploration plan in 2020 included a soil orientation survey comprising three methods (conventional soil, IL, and MMI), prospecting, rock and trench sampling, in combination with two ground geophysical surveys (ground magnetics and 3D IP). In addition, the program included the restart of certain environmental baseline studies initiated in the 1990s and 2000's along with the initiation of drill permitting on unpatented mining claims.

To follow-up the results from the 2020 program, there is a certain amount of exploration for the project that should be conducted in 2021. This includes, exploration and infill drilling, a certain amount of metallurgical drilling and studies, a property wide soil and rock sampling program, geological mapping, trenching and certain remote sensing type surveys such as Worldview 3 alteration mapping a structural interpretation of Lidar surveys completed by the Idaho Lidar Consortium (processing of Lidar survey is ongoing by Boise State University).

It is recommended to continue with current SGS program in a planned third phase of bottle roll studies. This would use more recent assay reject samples, originating from the 2020 exploration program, and will substantiate if more areas of the resource match with the initial findings. These Phase 3 samples should be chosen from spatial and depth areas that best represent the range of lithology, mineralogy and expected grades. This would include copper and organic carbon as principal elements of interest in the resource for potential negative effect on gold recovery.

The Phase 3 portion of the current metallurgical program work would include sample preparation, basic petrography/mineralogy, gravity treatment, bottle roll leaching, and downstream process testing. This will improve confidence in Preliminary Economic Assessment (PEA) level technical reporting. A laboratory budget for the planned Phase 3 work is expected to be approximately \$60,000 - \$75,000. Final laboratory reporting including all three phases of the preliminary test program, which includes the data summarized above can be used in PEA evaluation. Proceeding to pre-feasibility level would require additional comminution and leach testing including to have it represent a conceptual mine plan and schedule. This would require further PQ core drilling for additional comminution studies.

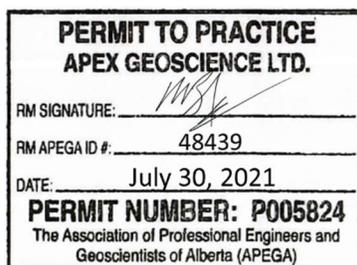
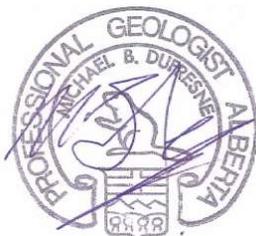
The next phase of exploration should comprise at minimum geological mapping along with regional and targeted soil and rock sampling, trenching where mineralization has been identified at surface, along with various remote sensing studies leading to a modern

structural interpretation. Additional exploratory and infill drilling are also warranted with the authors recommending at minimum a larger metallurgical program. A program consisting of 8,000 m in 40 drill holes is proposed for 2021. The estimated cost of the 2021 program is currently US\$4.0 million (CDN\$5.0 million) as shown in Table 26.1.

Table 26.1: Recommended 2021 Program and Budget.

Activity Type	Cost/ft (All-in)	Cost/m (approx.)	Quantity (ft)	Quantity (m)	Cost US\$
Geological Mapping & Structural Interpretation					\$70,000
Rock, Soil and Trench Channel Sampling (4 to 6 weeks)					\$270,000
WorldView 3 Deep Learning Alteration Mapping					\$40,000
Lidar Structural Interpretation					\$20,000
HQ Core 25 holes (Infill/Exploration Holes)	\$106/ft	\$350/m	16,400	5,000	\$1,750,000
PQ Core 15 holes (Met Holes)	\$137/ft	\$450/m	9,800	3,000	\$1,350,000
Metallurgical Studies (2021-22)					\$300,000
Contingency ~5%					\$200,000
2021 Activities Subtotal					US\$4,000,000

APEX Geoscience Ltd.



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{SIGNED AND SEALED}

[Frank Wright]

Frank Wright, P.Eng.

Edmonton, Alberta, Canada

Effective Date: June 1, 2021

Signing Date: July 30, 2021

27 References

- Bartlett, M.W. (1986): Petrographic report prepared for Paul McCarter, FMC Corporation, Minerals Division: unpublished consultant's report for FMC Gold Corporation, 60 p.
- Bertram, N. (1996): Humbug gold project, Lemhi County, Idaho: unpublished company report, American Gold Resources Corp.
- Brewer, B.T. (2019): Technical Report on the Lemhi Gold Trust Property, Lemhi County, Idaho USA, Lemhi Gold Trust LLC., 121 p.
- Carroll, M., (1996): Jurisdictional wetland determination for Humbug Gold Project, Lemhi County, Idaho: unpublished Selkirk Environmental report for American Gold Resources Inc., 16 p.
- CIM, 2003, Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines: Prepared by the CIM Mineral Resource & Mineral Reserve Committee and Adopted by CIM Council November 23rd, 2003; document available from the CIM website at <http://web.cim.org/standards>, 55 p.
- CIM, (2011): CIM Best Practice Guidelines for Mineral Processing: Prepared by the sub-committee on Best Practice Guidelines for Mineral Processing, available from the CIM website at <https://mrmr.cim.org/en/best-practices/mineral-processing/> , 12 p.
- CIM, (2014): Definition Standards for Mineral Resources and Mineral Reserves. Prepared by the CIM Standing Committee on Reserve Definitions, May 10, 2014: CIM Bulletin Vol. 93, No. 1044, pp. 53-61.
- CIM, (2015): Guidance on Commodity Pricing Used in Resource and Reserve Estimation and Reporting; available at www.cim.org, 9 p.
- CIM, (2019): Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines: Prepared by the CIM Mineral Resource & Mineral Reserve Committee and Adopted by CIM Council November 29th, 2019; document available from the CIM website at <http://web.cim.org/standards>, 75 p.
- Collins, W., (1985): Airborne infrared spectroradiometer survey in the Salmon, Idaho area: unpublished Geophysical Environmental Research Inc. report for FMC Gold Corporation, 24 p.
- Colwell, W.M., (1994): Results of 2 A.T. fusions: unpublished Minerals Processing and Environmental Laboratories Inc. report for American Gold Resources Inc.
- Cooper, J.J. (1988): FMC Gold Company Ponderosa Gold Project, Lemhi County Idaho. Internal Memorandum, 7p.
- Cuffney, R.G. (2011): Technical Report on the Lemhi Property Lemhi County, Idaho USA, Technical Report prepared for Northern Vertex Capital Inc., 78 p. Available on SEDAR

- Defilippi, C., (1996): Humbug Project Heap Leach Pre-Feasibility Study. Unpublished Kappes, Cassidy and Associates report prepared for American Gold Resources Inc.
- Disbrow, D.A., (1987): Ponderosa Reserve Evaluation. Internal company report prepared for FMC Gold Corporation
- Disbrow, D.A., (1989): Ponderosa re-evaluation: unpublished intra-company memorandum. Internal company report prepared for FMC Gold Corporation
- Dufresne, M., (2020): Technical Report For the Lemhi Gold Project, Lemhi County, Idaho, USA. Lodge resources Inc., 95 p.
- Earnest, D.F., (2017): Arnett Creek property, Lemhi County, Idaho, United States Technical Report. Technical Report prepared for Strata Minerals Inc., 65 p. Available on SEDAR
- Evans, K.V. and Green G.N. (2003): Geologic map of the Salmon National Forest and vicinity, east-central Idaho: U.S. Geological Survey Map I-2765
- Geist, D.L. (1995): Report of petrographic analyses, American Gold Resources: unpublished consulting report for American Gold Resources
- Gruenwald, W., and Makepeace, D. (2004): Technical report on the McClusky Creek Project, Salmon Idaho: NI 43-101 report prepared for Wave Exploration Corp., 26 p
- Hatch, R. M. (2008): Musgrove Creek project June 2008 summary report: NI 43-101 report prepared for Journey Resources Corporation, 30 p.
- Hildebrand, T.G., Berger, B., Jachens, R.C., and Ludington, S. (2000): Regional crustal structures and their relationship to the distribution of ore deposits in the western United States, based on magnetic and gravity data: Econ. Geology, volume 95, pp 1583-1603.
- Huang, C.I., (1986): Data interpretation for a biogeochemical survey, Ponderosa Project, Lemhi County, Idaho: unpublished internal memorandum, FMC Gold Corporation, June 4, 1986
- Idaho Government (2019): Idaho Department of Lands 20.03.02 Rules Governing Mined Land Reclamation; Idaho Administrative Code; Department of Lands, URL <https://adminrules.idaho.gov/rules/current/20/200302.pdf> [December 2019]
- Independent Mining Consultants, (1996): American Gold Resource Corporation Humbug project, Idaho, scoping study, mine plan, capital and operating costs: unpublished report for American Gold Resources Inc.
- Johnson, R., Close, T., and McHugh, E, (1998): Mineral resource appraisal of the Salmon National Forest: U.S. Geological Survey OF 98-478, 286 p.
- Kappes, Cassidy and Associates, (1994): Humbug, project, Salmon Idaho, Metallurgical report: unpublished Kappes, Cassidy and Associates report for American Gold Resources Corporation

- Kiilsgaard, T.H. Fisher, F.S., Bennett, E.H., (1986): The Trans-Challis fault system and associated precious metals deposits: *Econ. Geology* vol 81 no. 3, pp 721-724.
- Kiilsgaard, T.H., Fisher, F.S., and Bennett, E.H., (1989): Gold-silver deposits associated with the Trans-Challis fault system, Idaho in Shawe, D.R., Ashley, R.P., and Carter, L.M.H., eds, *United States Gold Terranes- Part 1: U.S. Geological Survey Bulletin 1857-B*, pp B22-B44
- Kuzis, K. (1995): *Ditch Creek Baseline Fish Population and Habitat Surveys*, 55p.
- Krasowski, D.J., (1994): *Humbug project core drilling, 1993-1994, final report: unpublished internal company memorandum, American Gold Resources, March 30, 1994*
- Lechner, M. and Karklin, G., (2018): *Mineral Resource Estimate Beartrack Property, Lemhi County, Idaho, United States Technical Report. Technical Report prepared for Revival Gold Inc., 148 p. Available on SEDAR*
- Link, P.K. , Fanning, C.M., Lund, K.I., and Aleinikoff, J.N. (2007): Detrital zircons, correlation and provenance of Mesoproterozoic Belt Supergroup and correlative strata of east-central Idaho and southwestern Montana in Link, P.K. and Lewis, R.S., eds, *SEPM Special Publication 86, Proterozoic geology of western North America and Siberia*, p. 101-128.
- Link, P.K., and Janecke, S.U. (1999): *Geology of east-central Idaho: Geologic roadlogs for the Big and Little Lost River, Lemhi, and Salmon River valleys*, in Hughes, S.S., and Trackray, G.D., eds, *Guidebook to the geology of eastern Idaho: Pocatello, Idaho Museum of Natural History*, pp 295-334.
- Lodge Resources Inc. (2019): *Lodge Resources Inc.: Interim Agreement to Acquire Lemhi Gold Project; news release transmitted by News File Corp, November 28, 2019, URL <https://www.newsfilecorp.com/release/50207>*
- Lonn, J.D., and McFaddan, M.D. (1999): *Geological map of the Montana part of the Wallace 30'x60' quadrangle: Montana Bureau of Mines and Geology Open File Report MBMG 388, 15 p.*
- Lopez, D.A. (1982): *Reconnaissance geologic map of the Gibbonsville quadrangle, Lemhi County, Idaho and Beaverhead County, Montana: U.S. Geological Survey Miscellaneous Field Investigations Map MF 1446*
- Lund, K.I., Evans, K.V., Tysdal, R.G., and Winkler, G.R. (2003): *Geologic map of the eastern part of the Salmon National Forest*, in Evans, K.V., and Green, G.N., 2003, *Geologic map of the Salmon National Forest and vicinity, east-central Idaho: U.S. Geological Survey Map I-2765*
- McCarter, P. (1985): *Ponderosa project progress report, Lemhi County, Idaho: unpublished company report, FMC Corporation Minerals Division, 30 p.*
- McCarter, P. (1988): *Ponderosa project geologic summary, Lemhi County, Idaho: unpublished company report, FMC Gold Corporation, 34 p.*

Morrison, K., (1989): Geophysical report on the induced polarization and resistivity survey on the Ponderosa project, North Fork, Idaho for FMC Gold Corporation: unpublished Quantech Engineering report for FMC Gold Corporation

Northern Vertex Mining Corp. (2012): Northern Vertex Announces Results From First 33 Holes of 10,000 Meter Drill and Resource Definition Program at Lemhi Gold Project, Idaho. Northern Vertex Mining News release, October 19, 2012, URL <https://northernvertex.com/news-releases/2012/northern-vertex-announces-results-from-first-33-holes-of-10-000-meter-drill-and-resource-definition-program-at-lemhi-gold/>

Northern Vertex Mining Corp. (2013): Northern Vertex Closes Sale of Lemhi Property Joint Venture Interest for Total Proceeds of US\$7.65 Million; Northern Vertex news release, February 11, 2013, URL <https://northernvertex.com/news-releases/2013/northern-vertex-agrees-to-sell-lemhi-property-joint-venture-interest-for-total-proceeds-of-us-7.65-million/>

Paster, T.P. (1986): Ore mineralogy and paragenesis of 12 core samples, C series, Project V-762, PR# D-1554 for FMC Corporation: unpublished consulting report for FMC Gold Corporation, 9 p.

Polk, M.R. (1995): A Cultural Resources Survey of the Proposed Humbug Land Exchange, Lemhi County, Idaho; 15 p.

Revival Gold Inc. (2019a): Airborne Geophysics Firms Up Arnett Gold Deposit Model, August 12, 2019. Revival Gold Press Release, URL <https://revival-gold.com/airborne-geophysics-firms-up-arnett-gold-deposit-model-2/>

Revival Gold Inc. (2019b): Revival Gold Expands Oxide Gold Target at Arnett, September 3, 2019. Revival Gold Press Release, URL <https://revival-gold.com/revival-gold-expands-oxide-gold-target-at-arnett/>

Sandefur, R.L., Izzo, T.F. Kolin, K.M. (1994): April 1994 Update of Humbug Project Prefeasibility Study, unpublished report, American Gold Resources 53p.

Sandefur, R.L. (1996): Geologic and Resource Model of the Humbug Deposit. Internal company report prepared for American Gold Resources Inc.

Schaubs, M.P. (1989): Ponderosa Project 1989 Summary, unpublished report FMC Gold Company, 32p.

Schaubs, M.P. (1990): Ditch Creek data: unpublished internal company memorandum, American Gold Resources Corporation.

Shaw, D.R. (1987): Report on continued metallurgical studies on Ponderosa samples: unpublished Hazen Research Inc report for FMC Gold Corporation.

Stewart, E.D., Link, P.K., and Rodgers, D.W. (2009): Geologic map of Allan Mountain quadrangle, Lemhi County, Idaho and Ravalli County, Montana: Idaho Geological Survey Technical Paper 10-1.

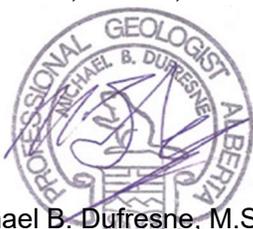
- Stewart, E.D., Steel, T.D., Stewart, D.E., Link, P.K. (2014): Geologic Map of the Gibbonsville, Shewag Lake, and Allan Mountain Quadrangles, and Parts of the Lost Trail Pass and Big Hole Pass Quadrangles, Lemhi County, Idaho, and Ravalli and Beaverhead Counties, Montana, Idaho Geological Survey, Technical Report 14-2, scale 1:40,000.
- Swanson, K., Symmes, L., and Odell, M. (2012): Lemhi Project Geologic Model and Resource Estimate January 2012. Internal company report prepared for American Gold Resources Inc.
- Thompson, T.B. (2012): Petrographic analysis of Lemhi Gold Project samples: unpublished report for Lemhi Gold Trust.
- Tysdal, R.G., Lund, K.I., and Evans, K.V. (2003): Geologic map of the western part of the Salmon National Forest: in Evans, K.V., and Green, G.N., 2003, Geologic map of the Salmon National Forest and vicinity, east-central Idaho: U.S. Geological Survey Map I2765.
- Warren, Chuck and Taylor, Cory. (2008): Hughes Creek Fisheries Report; Idaho Department of Fish and Game Anadromous Fish Screen Program, Salmon, Idaho, 46 p.
- Williams, S.A. (1984): Rock sample descriptions: unpublished Globo de Plomo Enterprises report for FMC Gold Corporation, 11 p.
- Winston, D., Link, P.K., and Hathaway, N. (1999): The Yellowjacket is not the Pritchard and other heresies: Belt Supergroup correlations, structure, and paleogeography, east-central Idaho, in Hughes, S.S., and Trackray, G.D., eds, Guidebook to the geology of eastern Idaho: Pocatello, Idaho Museum of Natural History, pp 295-334

28 Certificate of Author

I, Michael B. Dufresne, M.Sc., P.Geol., P. Geo., do hereby certify that:

1. I am President and a Principal Consultant of APEX Geoscience Ltd., Suite 100, 11450 –160th Street NW, Edmonton, AB, Canada, T5M 3Y7.
2. I graduated with a B.Sc. Degree in Geology from the University of North Carolina Wilmington in 1983 and a M.Sc. Degree in Economic Geology from the University of Alberta in 1987.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists (“APEGA”) of Alberta since 1989 (Licence# 48439). I have been registered as a Professional Geoscientist with the association of Professional Engineers and Geoscientists of BC (“EGBC”) since 2012 (Licence# 37074).
4. I have worked as a geologist for more than 35 years since my graduation from University and have extensive experience with exploration for, and the evaluation of, gold deposits of various types, including epithermal, mesothermal, sediment-hosted and intrusion related mineralization.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for sections 9 to 12 and 14, and jointly responsibility for sections 1, 6 to 8, 15, 16 and 18 to 27 of the Technical Report titled “Maiden Resource Technical Report For The Lemhi Gold Project, Lemhi County, Idaho, USA”, with an effective date of June 1st, 2021 (the “Technical Report”). I visited the Lemhi Gold Property on November 8th and 9th, 2019 and September 10th to 17th, 2020.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and NIC 43-101CP.
10. I prepared an Introductory Technical Report for the Property March 31st, 2020 but have not had any prior involvement with the Property that is the subject of the Technical Report.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Signing Date: July 30th, 2021
Edmonton, Alberta, Canada



Michael B. Dufresne, M.Sc., P.Geol., P. Geo.

Certificate of Author

I, Anetta Banas, M.Sc., P.Geol., do hereby certify that:

1. I am a Senior Staff Geologist with APEX Geoscience Ltd. Suite 100, 11450 – 160th Street, Edmonton, AB, Canada, T5M 3Y7.
2. I graduated with a B.Sc. Degree in Geology from the University of Alberta in 2002 and with a M.Sc. Degree in Geology from the University of Alberta in 2005.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta since 2009 (Licence# 70810).
4. I have worked as a geologist for more than 15 years since my graduation from university and have extensive experience with the exploration for, and the evaluation of, gold deposits of various types, including epithermal, mesothermal and intrusion related gold systems.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for sections 2 to 5 and jointly responsibility for sections 1, 6 to 8, 15, 16 and 18 to 27 of the Technical Report titled “Maiden Resource Technical Report For The Lemhi Gold Project, Lemhi County, Idaho, USA”, with an effective date of June 1st, 2021 (the “Technical Report”). I have not visited the Property.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.
10. I have not had any prior involvement with the Property that is the subject of the Technical Report.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Signing Date: July 30th, 2021.
Edmonton, Alberta, Canada



Anetta Banas, M.Sc., P.Geol.

CERTIFICATE OF QUALIFIED PERSON

FRANK WRIGHT, P.ENG.

I, Frank R. Wright, P.Eng., of Delta, BC, do hereby certify that:

1. I am currently employed as a Metallurgical Engineer with F. Wright Consulting Inc., with an office at #45-10605 Delsom Cr. Delta BC, Canada V4C 0A4;
2. This certificate applies to the Technical Report titled “Maiden Resource Technical Report for the Lemhi Gold Project, Lemhi County, Idaho, USA”, (The “Technical Report”), with an effective date of June 1, 2021.
3. I am a graduate of University of Alberta, in Edmonton, AB Canada with a Bachelor of Science in Metallurgical Engineering in 1979, and from Simon Fraser University in Burnaby, BC Canada with a Bachelor of Business Administration in 1983. I am a member in good standing with the Engineers and Geoscientists British Columbia (License #15747), and a member of the Canadian Institute of Mining and Metallurgy. I have continuously practiced my profession in the areas of hydrometallurgy, environmental, and mineral process engineering since 1979 as an employee of various resource companies and consulting firms. Since 1998, I have been the principal and a self-employed consultant with F. Wright Consulting Inc., primarily providing services, including the co-authoring of technical reports for junior and mid-tier mineral exploration and mining firms.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 13 and 17, and am jointly responsible for related subsections consisting of Sections 1.6, 1.7, and 26 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and for the sections for which I am responsible this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Sections for which I am responsible in the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: June 1, 2021

Signed Date: July 30, 2021

{SIGNED AND SEALED}

[Frank Wright]

Frank Wright, P.Eng.

APPENDIX 1

List of Patented and Unpatented Mineral Claims

APPENDIX 2

Dias Geophysical Logistics Report

LOGISTICAL REPORT

LEMHI GOLD PROJECT

IDAHO, USA

3D DC RESISTIVITY AND
INDUCED POLARIZATION SURVEY

WORK PERIOD: SEPTEMBER 21 – OCTOBER 11, 2020

UTM ZONE 11N AND 12N WGS84



Prepared by: Dias Geophysical Limited

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**Freeman Gold Corp. – Lemhi Gold
ProjectDC-Resistivity and IP
Logistical Report**



THIS REPORT IS ON FILE AND AVAILABLE FOR REVIEW AT APEX GEOSCIENCE LTD.

APPENDIX 3
SGS Phase 1 – Metallurgical Sample Drill Hole Intervals

SGS Sample Receive Sheet - January 2021
Lemhi Gold Project - 2012 Assay Reject Samples (received from Freeman)

Sample ID	Original Sample Number	From ft	To ft	Met Comp ID	Bucket Number	SGS Inventory, g
W725601	993188	299	304	TQ19-Met-01	1	4792.5
W725602	993189	304	309	TQ19-Met-01	1	5877
W725603	993191	309	311.5	TQ19-Met-01	2	2347.5
W725604	993192	312.5	315.5	TQ19-Met-01	2	4027.5
W725605	993193	315.5	319.5	TQ19-Met-01	2	4482.5
W725606	993194	319.5	324	TQ19-Met-01	3	6294.5
W725607	993195	324	329	TQ19-Met-01	3	6253.5
W725608	993197	329	334	TQ19-Met-01	4	6035
W725609	993213	383	388	TQ19-Met-01	4	1800
W725610	993214	388	394	TQ19-Met-01	4	7486
W725611	993219	409	414	TQ19-Met-01	5	1485
W725612	993220	414	419	TQ19-Met-01	5	6763.5
W725613	993223	429	434	TQ19-Met-01	5	5062
W725614	993224	434	439	TQ19-Met-01	6	7014
W725615	993226	439	444	TQ19-Met-01	6	6263
W725616	993227	444	448	TQ19-Met-01	7	5107.5
W725617	993228	448	453.5	TQ19-Met-01	7	6333.5
W725618	993229	453.5	456	TQ19-Met-01	8	3159
W725619	993232	464	469	TQ19-Met-01	8	2860.5
W725620	993233	469	474	TQ19-Met-01	8	5310.5
Total						98754.5

Sample ID	Original Sample Number	From ft	To ft	Met Comp ID	Bucket Number	SGS Inventory, g
W725621	994323	353	358	TQ19-Met-02	1	
W725621	994324	353	358	TQ19-Met-02	1	6140
W725622	994325	358	361.5	TQ19-Met-02	1	4487
W725623	994327	371	373	TQ19-Met-02	1	2391
W725624	994329	373	377	TQ19-Met-02	2	4989
W725625	994330	377	382	TQ19-Met-02	2	6248
W725626	994331	382	386	TQ19-Met-02	3	4959
W725627	994332	386	389.5	TQ19-Met-02	3	2998
W725628	994333	389.5	394.5	TQ19-Met-02	3	4948
W725629	994334	394.5	397	TQ19-Met-02	4	3331
W725630	994335	397	402	TQ19-Met-02	4	5965
W725631	994337	402	404	TQ19-Met-02	4	2643
W725632	994635	347	352.5	TQ19-Met-02	5	5312
W725633	994636	352.5	357.5	TQ19-Met-02	5	5245
W725634	994638	357.5	363	TQ19-Met-02	5	4579
W725635	994639	363	366	TQ19-Met-02	6	3316
W725636	994651	596	601	TQ19-Met-02	6	5486
W725637	994652	601	606.5	TQ19-Met-02	6	5928
W725638	994654	606.5	611	TQ19-Met-02	7	4946
W725639	994655	611	612.5	TQ19-Met-02	7	1564
W725640	994658	629.5	631	TQ19-Met-02	7	1271
W725641	994660	631	637.5	TQ19-Met-02	7	7353
W725642	994661	637.5	641	TQ19-Met-02	8	4283
W725643	994662	641	645.5	TQ19-Met-02	8	3502
W725644	994664	645.5	650	TQ19-Met-02	8	5128
W725645	994665	653	656.5	TQ19-Met-02	9	3037
W725646	994666	656.5	660.5	TQ19-Met-02	9	4842
W725647	994667	660.5	664.5	TQ19-Met-02	9	4697
Total						119588