Mineral Resource Estimate NI 43-101 Technical Report

Gold Springs Project

Utah-Nevada, USA

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Prepared for:

Gold Springs Resource Corporation

Prepared by:

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Date and Signature Page

This Technical Report on the Gold Springs Project is submitted to Gold Springs Resource Corporation and is effective June 13, 2022.

The Qualified Persons and Responsible Report Sections follow:

Qualified Person	Responsible for Report Sections
Terre Lane	Sections 1.0, 1.1, 1.4, 1.5, 1.6, 2 through 6, 14, 15, 16, and 18 through 27
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LIST OF ACRONYMS AND ABBREVIATIONS

2-D	two-dimensional
3-D	three-dimensional
Ag	silver
Amanda Resources	Amanda Resources Corporation
asl	above sea level
Astral	Astral Mining Corporation
Au	gold
AuEq	gold equivalent
BLM	Bureau of Land Management
Cambior	Cambior, Inc.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CSA	Canadian Securities Administrators
CSAMT	Controlled Source Audio Magento Tellurics
DEM	Digital Elevation Model
DT	total divergency
DTM	digital terrain model
EIS	Environmental Impact Statement
Energex	Energex Minerals Ltd.
g/t	grams per tonne
Gold Springs	Gold Springs Gold Project
gpm	gallons per minute
gpm/ft^2	gallons per minute per square foot
GPS	global positioning system
GRC	Gold Springs Resource Corp. a Canadian Corporation
GRE	Global Resource Engineering Ltd.
GSLLC	Gold Springs, LLC.
ha	hectares
HDG	High Desert Gold Corporation, a Canadian Corporation
Hz	hertz
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometry
IDS	International Directions Services, LLC
ISO	International Organization for Standardization

JV	Joint Venture
KCA	Kappes Cassiday Associates
kg	kilograms
km	kilometre
L&A	Lane and Associates, Inc.
lph/m^2	litres per hour per square metre
m	metre
Ma	million years ago
MEG	Minerals Exploration and Environmental Geochemistry
mm	millimetre
NAD	North American Datum
NI	National Instrument
NSR	net smelter royalty
NVHDGLLC	Nevada High Desert Gold, LLC., a Nevada Limited Liability Company
OTCQB	Over the Counter
oz	ounce (troy ounce)
PEA	Preliminary Economic Assessment
PFS	Pre-Feasibility Study
Phelps Dodge	Phelps Dodge Exploration, Inc.
ppb	parts per billion
ppm	parts per million
QA/QC	quality assurance/quality control
Qal	alluvial deposits
Qc	talus, colluvial deposits
QSP	quartz-sericite/illite –pyrite
RC	reverse circulation
RDi	Resource Development Inc.
RQD	rock quality designation
RTP	Reduced to Pole
SITLA	School and Institutional Trust Land Administration (Utah)
SME	Society of Mining, Metallurgy, and Exploration
SRK	SRK Consulting (Canada) Inc.
Tal	silt and fine sand sediments
Tbb	breccia
Tbg	rhyolite tuffs
Tbi	rhyolite intrusions
Tlf	andesite to latite lava flows and tuffs
TMI or TriMetals	Mining Inc., a Canadian Corporation
TMI-US	TriMetals Mining Inc., a USA Corporation
Trdo	older rhyolite member
Ts	sediments
Tscl	younger latite lava flows and tuffs
Tsr	rhyolite lava flows

TSX	Toronto Stock Exchange
Tt	Pliocene-Miocene epiclastic and clastic deposits
ZTEM	Z-Tipper Electromagnetic System

1.0 SUMMARY

Global Resource Engineering Ltd. (GRE) was retained by Gold Springs Resource Corp. ("GRC") and assisted by Randall Moore, Executive V.P. of Exploration for GRC, to complete a National Instrument 43-101 (NI 43-101) Technical Report on the Gold Springs Gold Project ("Gold Springs" or "the Property") located in the Gold Springs and Deer Lodge Mining Districts, Iron County, Utah, and Lincoln County, Nevada. This report presents an update of the Mineral Resource Estimate and has been prepared in accordance with the Canadian Securities Administrators (CSA) NI 43-101.

GRC is a British Columbia (Canada) company trading on the Toronto Stock Exchange (TSX) as GRC, and on the U.S. Over the Counter Market Group (OTCQB) as GRCAF.

This Technical Report was commissioned following the 2021 drill program, which completed 82 holes totaling 18,156 meters of drilling. This drill campaign was successful in intercepting significant gold mineralization at several of the targets including South Jumbo, North Jumbo, Charlie Ross, White Point, and the newly identified Tremor target, which is an extension of North Jumbo, only intrusive hosted. Highlights of these results include:

South Jumbo (Etna)

- E-21-004 7.6 meters @ 1.58 g/t Au and 8.3 g/t Ag and
  13.6 meters@ 0.97 g/t Au 2.6 g/t Ag
- E-21-005 4.6 meters @ 0.46 g/t Au and 8.2 g/t Ag and
  7.6 meters @ 0.63 g/t Au and 7.2 g/t Ag
- E-21-007 9.1 meters @ 0.58 g/t Au and 6.7 g/t Ag
- E-21-011 20.9 meters @ 0.67 g/t Au and 4.2 g/t Ag
- E-21-012 56.4 meters @ 0.58 g/t Au and 12.1 g/t Ag and
  19.8 meters @ 5.2 g/t Au and 12.4 g/t Ag
- E-21-016 16.8 meters @ 0.51 g/t Au and 3.3 g/t Ag

North Jumbo/Tremor

- J-21-003 10.7 meters @ 0.62 g/t Au and 7.91 g/tAg
- J-21-006 24.4 meters @ 5.95 g/t Au and 66.5 g/t Ag
- including 4.6 meters @ 27.3 g/t Au and 259.4 g/t Ag and
  82.3 meters @ 0.52 g/t Au and 4.7 g/t Ag
- J-21-015 163.1 meters @ 0.93 g/t Au and 5.1 g/t Ag
- including 33.5 meters @ 1.32 g/t Au and 7.4 g/t Ag

Charlie Ross

- CR-21-005 45.7 meters @ 0.98 g/t Au and 13.4 g/t Ag
- including 15.2 meters @ 2.14 g/t Au and 30.0 g/t Ag

- CR-21-008 15.3 meters @ 1.16 g/t Au and 7.4 g/t Ag
- CR-21-017 16.7 meters @ 1.82 g/t Au and 19.8 g/t Ag and
  13.7 meters @ 1.55 g/t Au and 9.2 g/t Ag and
  10.7 meters @ 2.19 g/t Au and 9.4 g/t Ag
- CR-21-022 15.2 meters @ 1.56 g/t Au and 13.8 g/t Ag and
  10.6 meters @ 2.43 g/t Au and 9.6 g/t Ag

White Point

- WP-21-002 13.7 meters @ 0.62 g/t Au and 6.0 g/t Ag
- WP-21-003 19.9 meters @ 0.5 g/t Au and 4.3 g/t Ag and
  7.6 meters @ 0.56 g/t Au and 3.9 g/t Ag
- WP-21-004 51.8 meters @ 0.32 g/t Au and 3.7 g/t Ag
- WP-21-005 36.6 meters @ 0.74 g/t Au and 5.8 g/t Ag
- WP-21-006 15.3 meters @ 1.31 g/t Au and 6.5 g/t Ag

Details of these results are presented in the corresponding sections of this report.

The Qualified Persons (QPs) responsible for the preparation of this Technical Report are:

- Terre Lane
- Hamid Samari, PhD
- Todd Harvey, PhD

1.1 Property Description and Ownership

The Gold Springs project is an advanced exploration-stage gold project located along the Nevada-Utah border in the United States of America, in western Iron County, Utah, and eastern Lincoln County, Nevada. The project consists of nine hundred twenty-four (924) unpatented lode claims, nineteen (19) patented lode claims, one partial-patented lode claim that includes an easement for existing roadways, and five (5) Utah state mineral leases, all covering a total of approximately 7,544 hectares (ha). The project also has an undivided interest in an additional five (5) patented lode claims that cover approximately 31.25 ha.

The Gold Springs property is held by Gold Springs, LLC (GSLLC), a Nevada limited liability company and wholly owned subsidiary of GRC-US, a Delaware corporation whose name was changed from TriMetals Mining Inc. (TMI-US) on November 4, 2019. Prior to March 17, 2014, GRC was known as South American Silver Corp. and acquired 100% ownership of TMI-US through its acquisition of High Desert Gold Corporation, a Canadian corporation ("HDG"), on December 20, 2013. HDG, GRC-US, and Gold Springs, LLC are now wholly owned subsidiaries of GRC.

1.2 Geology and Mineralization

The Gold Springs project lies within the Indian Peak volcanic field, which is a broad Tertiary volcanic field that straddles the Utah-Nevada border and contains several nested, collapsed calderas and resurgent dome features that formed as part of a major Oligocene-Miocene "ignimbrite flare-up cycle" (Best, et al., 1989). The Indian Peak caldera complex is the southeastern extension of the Central Nevada volcanic complex and represents a 10-million-year period of focused magmatic and volcanic activity (Best, et al., 1989). Host rocks are predominantly older (23 to 22 Ma) andesite-latite to trachydacites and trachyandesite flows and tuffs around the margins of the Gold Springs (19 to 16.5 Ma) caldera/diatreme. Locally, the Gold Springs rhyolite and welded to non-welded tuff breccias are also mineralized.

Gold mineralization at Gold Springs is hosted by complex sheeted veins, breccias, and stockwork vein systems that are laterally extensive and locally form erosion-resistant ledges and ribs that protrude up to 10 metres above the surrounding ground surface. The veins contain quartz, adularia, and bladed calcite with minor sulfides (<1%) and represent a low sulfidation, epithermal gold-silver vein system. Controls for the mineralization are structurally prepared zones related to Basin and Range extensional faulting and along the margins and ring fractures of several collapsed caldera complexes. The ground preparation along these structural zones provided conduits for hydrothermal alteration and mineralization that commonly extends along permeable structurally prepared zones and along lithologic contacts. An important note is that mineralization and alteration extend beyond the discrete vein structures to produce zones with disseminated precious metal concentrations. This deposit is most-similar to Round Mountain in Central Nevada, which is also a low sulfidation epithermal gold-silver deposit hosted within a caldera complex superimposed on a Basin and Range structural fabric.

Gold and silver mineralization are hosted in quartz and quartz-calcite veins, breccias, and stockwork/sheeted vein zones and extend outward into the adjacent wallrock. The true thickness of the mineralized intervals is up to 150 metres wide; the strike length of the structural corridor that controls the Jumbo Trend extends up to 8 kilometres (km), as shown by surface exposures and geophysical data.

The Gold Springs project has a number of exploration targets that have been drill tested, and several of these have been consolidated into distinct resource areas described in this report. In this report, the South Jumbo resource is also referred to as the Etna Resource and the North Jumbo resource is also referred to as the Jumbo resource..

During 2021, GRC, through its wholly owned operating company Gold Springs LLC. (GSLLC), completed 82 reverse-circulation (RC) drill holes for a total of 18,156 metres within the South Jumbo, Central Jumbo, North Jumbo, Juniper, North Jennie, Charlie Ross, and White Point targets. This drilling program constitutes new significant data, which is presented in this Technical Report.

GRC began working on the Gold Springs project in 2010 as High Desert Gold Corporation, and to date has completed 364 drill holes within the Gold Springs Project totaling 60,084 metres. Another 20 drill holes totaling 2,646.6 metres were completed by previous operators.

GRC has identified a total of 33 exploration targets containing gold mineralization on the property. Six of these targets have resources (North and South Jumbo, Grey Eagle, Charlie Ross, White Point, and Thor) and one has a discovery hole (Homestake). (The Tremor discovery is now part of the North Jumbo resource). Of the other targets, five have had limited drilling, and an additional twenty targets with outcropping gold mineralization or positive geophysical signatures remain to be drill tested. The primary focus of GRC drilling on the property during 2021 was to continue extending the mineralization at North and South Jumbo and to conduct the initial drilling on several other targets. That drilling produced discoveries at Charlie Ross, Tremor, and White Point.

1.3 Mineral Processing and Metallurgical Testing

GRC has completed a series of preliminary metallurgical test work programs on the Grey Eagle and the North Jumbo resources. The work to date consists of:

- Gravity concentration followed by bottle roll cyanidation of the gravity tailing of 74-micron (200-mesh) material from drill cuttings (Inspectorate, 2010)
- Cyanide extraction from bottle roll tests on drill cuttings ground to 74 microns (Inspectorate, 2012)
- Cyanide extraction from bottle roll tests of RC cuttings which varied in size from a P_{80} of 0.762 to 8.636 millimetres (mm) (KCA, 2014)
- Small column tests of trench samples from Grey Eagle material crushed to 9.5 mm (KCA, 2015)
- Small column tests from North Jumbo drill core crushed to 9.5 mm (KCA, 2015)
- Large Column tests from North Jumbo drill core (RDi, 2016)

The gravity/cyanide tests produced a range of gold cyanide recoveries from 35% to 95%, with an average recovery of 76%. The combined cyanide and gravity recoveries were all greater than 91% and averaged 97%. Of the total gold recovered from the samples during these tests, between 2% and 57% was recovered from the gravity circuit.

Additional testing at Inspectorate Labs using bottle roll leach tests on RC drill cuttings ground to 74 µm yielded average gold recoveries for North Jumbo and Grey Eagle of 85% and 93%, respectively, while silver extractions were 78% and 53%, respectively. These tests produced consistently high recoveries for gold, though silver showed variability, with lower recoveries observed from the Grey Eagle resource.

Further bottle roll leach tests completed on RC cuttings (KCA, 2013) of a coarser size fraction produced an average gold extraction from Grey Eagle of 71% (range: 38% to 83%) for P_{80} of 0.07 to 0.34 inches and 88.5% (range: 88% to 89%) from North Jumbo for P_{80} of 0.03 to 0.14 inches. Silver extractions for the same samples were more variable and lower, with an average total silver recovery of 21% for Grey Eagle and 54% for North Jumbo.

A total of six column tests were conducted (KCA, 2014) using 9.5-mm crushed material from the Grey Eagle trench (3 samples) and core from North Jumbo drill hole J-11-001C (3 samples). Material was subjected to cyanide leach tests and sampled at approximately 7-day intervals for 129 days. These tests showed a variation in recoveries from 63% to 87% gold and 9% to 23% silver for Grey Eagle, and 56% to 92% gold and 37% to 58% silver for North Jumbo.

Additional column testing was completed (RDi, 2016) with material with a wide range of grades varying from 1.09 g/t to 0.23 g/t gold. The material was crushed to a P_{80} of ¾ inches. The material was leached and sampled over a longer time frame to evaluate the impact on gold and silver extraction. Rest periods were included, and a high cyanide dosage was employed to enhance silver extraction. Table 1-1 shows that gold recoveries increased several percent after the rest period, and silver recoveries increased significantly. Approximately 90% of the gold recovery was achieved in the first 12 to 18 days.

Table 1-1: Final Extractions for 2016 Large Column Testing Over Extended Time Frame

Column	43-day Extraction		84-day Extraction		282-day Extraction after rest period*		Calculated Head Grade	
	Gold %	Silver %	Gold %	Silver %	Gold %	Silver %	Gold g/t	Silver g/t
1	90.1	25.3	90.6	28.4	94.3	34.3	1.09	24.3
2	62.5	35.4	62.5	43.3	66.9	53.4	0.54	20.6
3	76.8	39.9	76.8	48.0	81.9	59.8	0.23	11.9

*Leach sequence included 84 days of leaching followed by 35-day rest, followed by 44 days of leaching, followed by a second rest period of 90 days, followed by a further 29 days of leaching.

No testing has been conducted on run of mine size materials.

1.4 Previous Mineral Resource Estimates and Economic Models

Previous Mineral Resource Estimates were completed as follows:

- 2012 by Armitage (Armitage, 2012)
- 2013 by Armitage and Katsura (Armitage, et al., 2013)
- 2014 by Lane and Associates, Inc. (L&A) and Kurt Katsura (L&A and Kurt Katsura, 2014)
- 2015 by GRE (GRE, 2015)
- 2017 by GRE (GRE, 2017a)
- 2020 by GRE (GRE, 2020).

The results of those resource estimates are summarized in Table 1-2.

1.5 Updated Mineral Resource Estimate

In April 2022, GRE was contracted to complete an updated Mineral Resource Estimate incorporating the drilling through 2021. The updated Mineral Resource includes an update for the North and South Jumbo, Grey Eagle, and Thor targets and new resource statements for the Charlie Ross and White Point targets. Although there has been no new drilling in either the Grey Eagle or Thor targets, updated and new constraining pits were generated to reflect current gold and silver prices and the most recent estimates of mining and processing costs. These estimates are current as of the effective date of this report. Table 1-3: shows the updated pit-constrained Mineral Resource at various gold grade cutoffs, with the base case cutoff highlighted.

Table 1-2: Summary of Previous Resource Estimates

Year	Resource Category	Tonnes (1000s)	Gold (oz)	Gold Grade (g/t)	Silver (oz)	Silver Grade (g/t)	Gold Equivalent (oz)	Gold Equivalent Grade (g/t)
Grey Eagle								
2013	Inferred	2,900	62,000	0.67	633,000	6.8	74,000	0.79
2014	Measured	3,337	69,000	0.64	767,000	7.1	82,000	0.77
	Indicated	4,329	81,000	0.58	928,000	6.7	97,000	0.70
	Inferred	3,484	65,000	0.58	759,000	6.8	78,000	0.70
2015	Measured	3,368	63,000	0.58	736,000	6.8	76,000	0.70
	Indicated	5,751	96,000	0.52	1,165,000	6.3	116,000	0.63
	Inferred	2,193	25,000	0.36	339,000	4.8	31,000	0.44
North Jumbo								
2012	Inferred	9,392	173,000	0.57	3,881,000	12.9	233,000	0.77
2013	Inferred	16,473	239,000	0.45	5,574,000	11.0	342,000	0.65
2014	Measured	-	-	-	-	-	-	-
	Indicated	13,623	189,000	0.43	4,992,000	11.4	276,000	0.63
	Inferred	13,190	149,000	0.35	4,098,000	9.7	221,000	0.52
2015	Measured	6,209	90,000	0.45	2,468,000	12.4	133,000	0.67
	Indicated	14,718	185,000	0.39	4,927,000	10.4	271,000	0.57
	Inferred	18,694	200,000	0.33	4,274,000	7.1	275,000	0.46
2017	Measured	8,448	143,000	0.53	3,599,000	13.25	-	-
	Indicated	8,546	128,000	0.47	3,025,000	11.01	-	-
	Inferred	2,328	34,000	0.45	542,000	7.25	-	-
South Jumbo								
2017	Measured	2,098	43,000	0.64	466,000	6.91	-	-
	Indicated	3,214	60,000	0.58	645,000	6.24	-	-
	Inferred	1,435	23,000	0.50	243,000	5.27	-	-
2020	Measured	4,995	85,000	0.53	1,000,000	6.2		
	Indicated	4,342	67,000	0.48	807,000	5.8		
	Inferred	924	13,000	0.42	193,000	6.5		
Thor								
2017	Measured	210	7,000	0.99	128,000	19.0	-	-
	Indicated	145	4,000	0.92	73,000	16.93	-	-
	Inferred	23	400	0.63	8,000	11.1	-	-

Gold Equivalent calculations reflected gross metal content using the following metal prices and were not adjusted for metallurgical recoveries:

2012: $1,020/oz Au and $15.80/oz Ag
2013: $1,600/oz Au and $28/oz Ag
2014: Au/Ag price ratio of 57.14
2015: Au/Ag price ratio of 57.14

Table 1-3: June 13, 2022 Updated Mineral Resource - $1800 Au Pit Constrained

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
Charlie Ross	Measured	0.1	0	0	0		0	0	
		0.15	0	0	0		0	0	
		0.2	0	0	0		0	0	
		0.25	**0**	**0**	**0**		**0**	**0**	
		0.3	0	0	0		0	0	
	Indicated	0.1	11,922	123	3,825	0.32	1,795	55,820	4.68
		0.15	8,133	108	3,363	0.41	1,404	43,677	5.37
		0.2	6,250	97.7	3,040	0.49	1,162	36,154	5.78
		0.25	**4,943**	**88.3**	**2,746**	**0.56**	**990**	**30,808**	**6.23**
		0.3	4,013	80.1	2,492	0.62	860	26,748	6.67
	M&I	0.1	11,922	123	3,825	0.32	1,795	55,820	4.68
		0.15	8,133	108	3,363	0.41	1,404	43,677	5.37
		0.2	6,250	97.7	3,040	0.49	1,162	36,154	5.78
		0.25	**4,943**	**88.3**	**2,746**	**0.56**	**990**	**30,808**	**6.23**
		0.3	4,013	80.1	2,492	0.62	860	26,748	6.67
	Inferred	0.1	2,986	30.5	950	0.32	489	15,216	5.10
		0.15	1,847	26.1	813	0.44	384	11,939	6.46
		0.2	1,373	23.5	731	0.53	338	10,520	7.66
		0.25	**1,122**	**21.7**	**675**	**0.60**	**313**	**9,740**	**8.68**
		0.3	958	20.3	630	0.66	293	9,112	9.51
South Jumbo	Measured	0.1	14,324	157	4,889	0.34	2,024	62,959	4.40
		0.15	11,291	145	4,510	0.40	1,768	55,003	4.87
		0.2	8,588	130	4,041	0.47	1,497	46,548	5.42
		0.25	**6,457**	**115**	**3,563**	**0.55**	**1,244**	**38,684**	**5.99**
		0.3	4,908	101	3,140	0.64	1,039	32,309	6.58
	Indicated	0.1	14,117	146	4,527	0.32	1,659	51,608	3.66
		0.15	10,729	132	4,107	0.38	1,381	42,965	4.00
		0.2	7,936	116	3,620	0.46	1,104	34,347	4.33
		0.25	**5,657**	**100**	**3,111**	**0.55**	**849**	**26,399**	**4.67**
		0.3	4,036	85.9	2,670	0.66	666	20,725	5.13
	M&I	0.1	28,441	303	9,417	0.33	3,683	114,567	4.03
		0.15	22,020	277	8,617	0.39	3,150	97,968	4.45
		0.2	16,524	246	7,661	0.46	2,601	80,895	4.90
		0.25	12,115	215	6,674	0.55	2,092	65,083	5.37
		0.3	8,944	187	5,810	0.65	1,705	53,034	5.93
	Inferred	0.1	6,017	51.9	1,614	0.27	529	16,440	2.73
		0.15	4,631	46.5	1,447	0.31	423	13,169	2.84
		0.2	3,774	41.7	1,298	0.34	349	10,852	2.88
		0.25	**2,929**	**35.5**	**1,103**	**0.38**	**282**	**8,768**	**2.99**
		0.3	1,353	21.8	677	0.50	175	5,430	4.01

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
Grey Eagle	Measured	0.1	4,325	67.7	2,105	0.49	837	26,043	6.02
		0.15	3,860	65.8	2,046	0.53	795	24,714	6.40
		0.2	3,321	62.8	1,952	0.59	730	22,695	6.83
		0.25	**2,852**	**59.4**	**1,847**	**0.65**	**663**	**20,633**	**7.23**
		0.3	2,476	56.1	1,744	0.70	602	18,740	7.57
	Indicated	0.1	6,687	96.5	3,002	0.45	1,248	38,808	5.80
		0.15	5,788	92.9	2,889	0.50	1,165	36,246	6.26
		0.2	5,065	88.8	2,763	0.55	1,085	33,749	6.66
		0.25	**4,433**	**84.3**	**2,621**	**0.59**	**1,002**	**31,177**	**7.03**
		0.3	3,897	79.5	2,474	0.63	919	28,584	7.33
	M&I	0.1	11,012	164	5,107	0.46	2,085	64,851	5.89
		0.15	9,649	159	4,935	0.51	1,960	60,960	6.32
		0.2	8,386	152	4,715	0.56	1,815	56,444	6.73
		0.25	7,285	144	4,468	0.61	1,666	51,809	7.11
		0.3	6,373	136	4,218	0.66	1,522	47,324	7.43
	Inferred	0.1	1,321	12.7	394	0.30	208	6,469	4.90
		0.15	1,080	11.7	365	0.34	186	5,777	5.35
		0.2	927	10.9	338	0.36	170	5,273	5.69
		0.25	**783**	**9.8**	**305**	**0.39**	**148**	**4,613**	**5.90**
		0.3	652	8.7	269	0.41	127	3,959	6.07
North Jumbo	Measured	0.1	39,984	366	11,391	0.28	9,298	289,213	7.23
		0.15	28,859	322	10,010	0.35	7,921	246,362	8.54
		0.2	21,148	279	8,672	0.41	6,641	206,548	9.77
		0.25	**15,752**	**240**	**7,466**	**0.47**	**5,510**	**171,370**	**10.88**
		0.3	11,892	206	6,410	0.54	4,535	141,042	11.86
	Indicated	0.1	21,229	149	4,639	0.22	3,296	102,509	4.83
		0.15	13,489	119	3,697	0.27	2,422	75,318	5.58
		0.2	8,597	91.5	2,846	0.33	1,728	53,740	6.25
		0.25	**5,509**	**69.4**	**2,160**	**0.39**	**1,209**	**37,592**	**6.82**
		0.3	3,763	54.1	1,683	0.45	881	27,409	7.28
	M&I	0.1	61,213	515	16,029	0.26	12,594	391,722	6.40
		0.15	42,347	441	13,707	0.32	10,342	321,680	7.60
		0.2	29,745	370	11,518	0.39	8,368	260,288	8.75
		0.25	**21,261**	**309**	**9,626**	**0.45**	**6,718**	**208,962**	**9.83**
		0.3	15,655	260	8,093	0.52	5,416	168,451	10.76
	Inferred	0.1	6,825	46.8	1,454	0.21	794	24,692	3.62
		0.15	4,341	37.0	1,149	0.26	564	17,541	4.04
		0.2	2,662	27.6	859	0.32	367	11,407	4.29
		0.25	**1,725**	**20.9**	**649**	**0.38**	**250**	**7,783**	**4.51**
		0.3	1,093	15.3	476	0.44	168	5,221	4.78

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
Thor	Measured	0.1	2,648	31.2	969	0.37	512	15,932	6.02
		0.15	2,018	28.6	891	0.44	464	14,419	7.15
		0.2	**1,432**	**25.4**	**790**	**0.55**	**409**	**12,727**	**8.89**
		0.25	1,107	23.1	718	0.65	373	11,594	10.48
		0.3	894	21.2	660	0.74	344	10,715	11.99
	Indicated	0.1	4,146	43.2	1,343	0.32	610	18,984	4.58
		0.15	3,183	39.3	1,223	0.38	531	16,503	5.18
		0.2	**2,245**	**34.1**	**1,061**	**0.47**	**452**	**14,059**	**6.26**
		0.25	1,650	29.9	929	0.56	394	12,259	7.43
		0.3	1,272	26.6	826	0.65	347	10,800	8.49
	M&I	0.1	6,794	74.4	2,313	0.34	1,123	34,917	5.14
		0.15	5,201	68.0	2,115	0.41	994	30,922	5.95
		0.2	**3,677**	**59.5**	**1,851**	**0.50**	**861**	**26,786**	**7.29**
		0.25	2,757	52.9	1,647	0.60	767	23,853	8.65
		0.3	2,166	47.8	1,486	0.69	692	21,515	9.93
	Inferred	0.1	3,530	43.4	1,350	0.38	506	15,738	4.46
		0.15	2,728	40.3	1,253	0.46	448	13,949	5.11
		0.2	**1,963**	**36.0**	**1,121**	**0.57**	**394**	**12,255**	**6.24**
		0.25	1,549	33.1	1,029	0.66	364	11,308	7.30
		0.3	1,333	31.2	969	0.73	340	10,577	7.94
White Point	Measured	0.1	0	0	0		0	0	
		0.15	0	0	0		0	0	
		0.2	0	0	0		0	0	
		0.25	**0**	**0**	**0**		**0**	**0**	
		0.3	0	0	0		0	0	
	Indicated	0.1	2,702	24.1	748	0.28	270	8,388	3.10
		0.15	2,189	22.0	685	0.31	232	7,230	3.30
		0.2	1,753	19.6	609	0.35	197	6,129	3.50
		0.25	**1,274**	**16.1**	**501**	**0.39**	**156**	**4,846**	**3.81**
		0.3	845	12.4	385	0.46	114	3,554	4.21
	M&I	0.1	2,702	24.1	748	0.28	270	8,388	3.10
		0.15	2,189	22.0	685	0.31	232	7,230	3.30
		0.2	1,753	19.6	609	0.35	197	6,129	3.50
		0.25	**1,274**	**16.1**	**501**	**0.39**	**156**	**4,846**	**3.81**
		0.3	845	12.4	385	0.46	114	3,554	4.21
	Inferred	0.1	580	3.8	119	0.21	28.4	884	1.52
		0.15	458	3.3	103	0.23	23.7	736	1.60
		0.2	235	2.0	62	0.26	15.7	490	2.08
		0.25	**113**	**1.1**	**36**	**0.31**	**9.8**	**305**	**2.69**
		0.3	51	0.6	19	0.38	5.5	170	3.33

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
Total	Measured	0.1	61,281	622	19,354	0.32	12,672	394,147	6.43
		0.15	46,028	561	17,457	0.38	10,947	340,498	7.40
		0.2	34,489	497	15,454	0.45	9,276	288,518	8.37
		0.25	26,168	437	13,594	0.52	7,789	242,281	9.26
		0.3	20,170	384	11,954	0.59	6,520	202,805	10.05
	Indicated	0.1	60,803	581	18,085	0.30	8,877	276,116	4.54
		0.15	43,510	513	15,965	0.37	7,135	221,938	5.10
		0.2	31,846	448	13,939	0.44	5,729	178,177	5.59
		0.25	23,466	388	12,068	0.51	4,600	143,081	6.10
		0.3	17,826	339	10,529	0.59	3,788	117,821	6.61
	M&I	0.1	122,084	1,204	37,439	0.31	21,549	670,263	5.49
		0.15	89,538	1,075	33,422	0.37	18,083	562,436	6.28
		0.2	66,335	945	29,393	0.44	15,005	466,694	7.04
		0.25	49,634	825	25,662	0.52	12,390	385,361	7.76
		0.3	37,995	723	22,483	0.59	10,308	320,626	8.44
	Inferred	0.1	21,260	189	5,880	0.28	2,554	79,439	3.74
		0.15	15,086	165	5,130	0.34	2,029	63,111	4.18
		0.2	10,934	142	4,409	0.40	1,633	50,797	4.65
		0.25	8,220	122	3,797	0.46	1,367	42,518	5.17
		0.3	5,440	98	3,041	0.56	1,108	34,470	6.34

1) The effective date of the Mineral Resources Estimate is June 13, 2022.
2) The Qualified Person for the estimate is Terre Lane QP-MMSA of GRE.
3) Mineral resources are not ore reserves and are not demonstrably economically recoverable.
4) Mineral resources are reported at various cutoff grades, an assumed gold price of 1,800 $/tr. oz, using variable recovery, a slope angle of 45 degrees, 98% payable gold, 95% payable silver, 0% royalty, $1.5/tonne mining costs, 0.5893 mining CAF for Post-Mineral material, and Merrill-Crowe processing cost $3.94 per tonne (includes admin).

1.6 RECOMMENDATIONS

Table 1-4 tabulates the estimated costs to complete an intensive 2-year program designed to maximize the resource within the project area. Components of this program would include:

- 70,000 metres of RC and 10,700 metres of diamond (core) drilling
- Expanding ground geophysical coverage to all priority drill targets
- Expanding detailed structural mapping to develop new targets in areas with post-mineral cover
- Completing baseline studies
- Completing all drill related permitting
- Completing comprehensive metallurgical testing
- Securing mining permits
- Producing a Prefeasibility Study (PFS)
- Clearing all cultural sites within the resource and mine plan areas
- Mitigating all significant cultural sites within the resource and mine plan areas

Table 1-4 Estimated Costs to Complete the 2-year program

Exploration Cost Area	Year		
	2022	2023	Total
Drilling, Surface Sampling, and geochemistry Down-Hole Surveys	$4,585,900	$7,079,450	$12,295,350
Land and Option Payments	$399,840	$274,840	$674,680
Staffing & HHRR Travel Meals	$600,000	$613,000	$1,213,000
Reclamation, Environmental	$35,000	$48,000	$83,000
Camp Operations	$54,000	$60,000	$114,000
Geophysics	$240,000	$ -	$240,000
Capital-Asset Purchases	$162,000	$32,000	$194,000
43-101 Technical Reports	$200,000	$250,000	$450,000
Cultural Surveys	$200,000	$200,000	$400,000
Baseline Studies and Obtaining Permits	$400,000	$395,000	$795,000
Metallurgy	$250,000	$250,000	$500,000
Permitting and Consultants	$84,000	$58,000	$142,000
Information Technology & Miscellaneous	$17,000	$17,000	$34,000
Totals	$7,227,740	$9,907,290	$17,135,030

1.6.1 Drilling

Drilling requirements have been estimated to move the project forward rapidly with the goal of developing a +2,500,000-ounce gold resource by the end of 2023. This will be achieved by deploying three RC drills to continue resource expansion in the Jumbo trend and to investigate the other high priority targets. This program would provide for 70,000 metres of RC drilling in approximately 500 holes and 10,700 metres of diamond (core) drilling in 70 holes. Sequencing for the program would be to initially focus on the Jumbo Trend and completely define the total resource within this +5-kilometre trend. Drilling would advance to other high priority targets within Nevada based on priorities developed through continuing geologic, geophysical, geochemical, and structural studies.

Geotechnical HQ size core will be used to define the acceptable slopes within the planned open pits. Core provides a better view of the geology than RC chips. A portion of the core will be consumed for metallurgical column testing.

1.6.2 Metallurgical Testing

A limited amount of metallurgical testing has been completed on the Gold Springs project. To advance the project, it will be necessary to complete additional column testing on the six resource areas. It is anticipated that core from South Jumbo, North Jumbo, Thor, Charlie Ross, White Point, and Grey Eagle will be collected for test columns. Sampling and testing should be designed to provide better spatial and grade representation across the deposits and include heap leach testing (columns) across a wider variety of material sizes.

1.6.3 Baseline Cultural / Environmental

Cultural and biological surveys have been completed over large areas of the project. This work should continue but will focus on additional target areas and to minimize potential interference with significant cultural sites. Many of these studies will be carried out over multiple years to create baseline studies with enough data to use in an Environmental Impact Statement (EIS).

1.6.4 Land Work

Allowances have been made to keep land ownership and title current along with acquisition.

1.6.5 Utilities

GRC has acquired 965 acre-feet of water in the Escalante water basin. These water rights ensure access to sufficient water to run a large-scale heap leach mining operation capable of producing +150,000 ounces of gold/year.

GRC has contacted power companies in Nevada and Utah about bringing power to the site. In Nevada, there is an old power line easement that was used to bring power to the historic Jennie mill. In Utah, power can be brought in along Gold Springs road, which is a county easement, for a reasonable price and with potentially streamlined permitting.

2.0 INTRODUCTION

2.1 Terms of Reference

Global Resource Engineering Ltd. (GRE) was retained by Gold Springs Resource Corp. ("GRC") to complete a National Instrument 43-101 (NI 43-101) Technical Report on the Gold Springs Gold Project ("Gold Springs" or "the Property"). The property is bisected by the Utah-Nevada state boundary and is located in the Gold Springs and Deer Lodge Mining Districts, Iron County, Utah, and Lincoln County, Nevada. This report has been prepared in accordance with the Canadian Securities Administrators (CSA) NI 43-101, and the Resources have been classified in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "CIM Definition Standards – For Mineral Resources and Mineral Reserves," prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on December 17, 2010, as amended November 30, 2019.

GRC is a British Columbia (Canada) company trading on the Toronto Stock Exchange (TSX) as GRC, and on the U.S. Over the Counter Market Group (OTCQB) as GRC AF. This update was commissioned to provide information on the drill programs conducted in 2017.

The independent Qualified Persons (QPs) as defined by NI 43-101 responsible for the preparation of this Technical Report are:

- Terre Lane (GRE), SME 4053005
- Hamid Samari, PhD (GRE), MMSA 01519QP
- J. Todd Harvey, PhD (GRE), SME 4144120RM

In addition, sections of this report were prepared with input from Randall Moore, Executive Vice President of Exploration for GRC, SME Registered Member 4194046.

Practices consistent with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2014) were applied to the generation of this Resource Estimate.

Ms. Lane, Dr. Samari, and Dr. Harvey are collectively referred to as the "Authors" of this PEA. Ms. Lane and Dr. Samari have visited the property (see Section 2.4). In addition to their own work, the Authors have made use of information from other sources and have listed these sources in this document under "References."

Table 2-1 lists the primary "Qualified Persons" (as defined in the National Instrument 43-101) that compiled different sections of the report.

Table 2-1: List of Contributing Authors

Section	Section Name	Qualified Person
1	Summary 1.0, 1.1, 1.4, 1.5, and 1.6	Terre Lane
1	Summary 1.2	Hamid Samari
1	Summary 1.3	Todd Harvey
2	Introduction	Terre Lane
3	Reliance on Other Experts	Terre Lane

Section	Section Name	Qualified Person
4	Property Description and Location	Terre Lane
5	Accessibility, Climate, Local Resources, Infrastructure, and Physiography	Terre Lane
6	History	Hamid Samari
7	Geological Setting and Mineralization	Hamid Samari
8	Deposit Types	Hamid Samari
9	Exploration	Hamid Samari
10	Drilling	Hamid Samari
11	Sample Preparation, Analyses and Security	Hamid Samari
12	Data Verification	Hamid Samari
13	Mineral Processing and Metallurgical Testing	Todd Harvey
14	Mineral Resource Estimates	Terre Lane
15	Mineral Reserve Estimates	Terre Lane
16	Mining Methods	Terre Lane
17	Recovery Methods	Todd Harvey
18	Project Infrastructure	Terre Lane
19	Market Studies and Contracts	Terre Lane
20	Environmental Studies, Permitting and Social or Community Impact	Terre Lane
21	Capital and Operating Costs	Terre Lane
22	Economic Analysis	Terre Lane
23	Adjacent Properties	Terre Lane
24	Other Relevant Data and Information	Terre Lane
25	Interpretation and Conclusions	Terre Lane
26	Recommendations	Terre Lane
27	References	Terre Lane

2.2 Purpose of Report

The purpose of the Technical Report is to provide Gold Springs Resource Corp. and its investors with an updated Mineral Resource Estimate of the project. This report contains:

- Updates of the resource estimate for the South Jumbo, Grey Eagle, North Jumbo, and Thor resource areas and new resource estimates for the Charlie Ross and White Point resource areas, with results from the 2021 drill program.
- An independent opinion as to the technical merits of the project and the appropriate manner to proceed with continuing exploration and project development

It is intended that this report may be submitted to those Canadian stock exchanges and regulatory agencies that may require it. It is further intended that GRC may use the report for any lawful purpose to which it is suited.

2.3 Sources of Information

Drill hole and assay data for the property were generated by GRC from 2010 through 2021 through one of its subsidiaries, GSLLC. In addition, an extensive geological and assay database was provided by Astral Mining Corporation from their work on the Gold Springs property between 2004 and 2009. Geologic maps, reports, results from geochemical sampling, and geophysical work were supplied by GRC, including available work by previous operators. Dr. Samari or Mr. Moore have satisfactorily verified these interpretations and results in the field during visits to the Property.

2.4 Scope of Personal Inspection of the Property

GRE's QP Dr. Hamid Samari has conducted site visits in 2017 and March 2022 to review the surface sampling, mapping, the results from the drilling programs conducted on the Property by GRC, and to directly observe the geological units and style of mineralization (Photo 2-1). Terre Lane conducted a site visit to the property in February 2014. Mr. Moore has been the Executive Vice President of Exploration for GRC over the course of the project and has managed most of the programs. Dr. Todd Harvey has not visited the property.

Photo 2-1: Surface Outcropping of the Jumbo Vein

Surface outcropping of the Jumbo vein in the Gold Springs property in Utah, note outcrop of the vein extends along the ridge in the right background

2.5 Units

All measurements used in the Gold Springs Project are metric units. Tonnages are in metric tonnes, and grade is reported as grams per tonne unless otherwise noted. Cost and revenue are reported in U.S. dollars at the time this report was written.

3.0 RELIANCE ON OTHER EXPERTS

In the preparation of this report, the authors have conducted due diligence to verify the technical reports and data prepared by geologists engaged or employed by GRC as described below in Section 12.0.

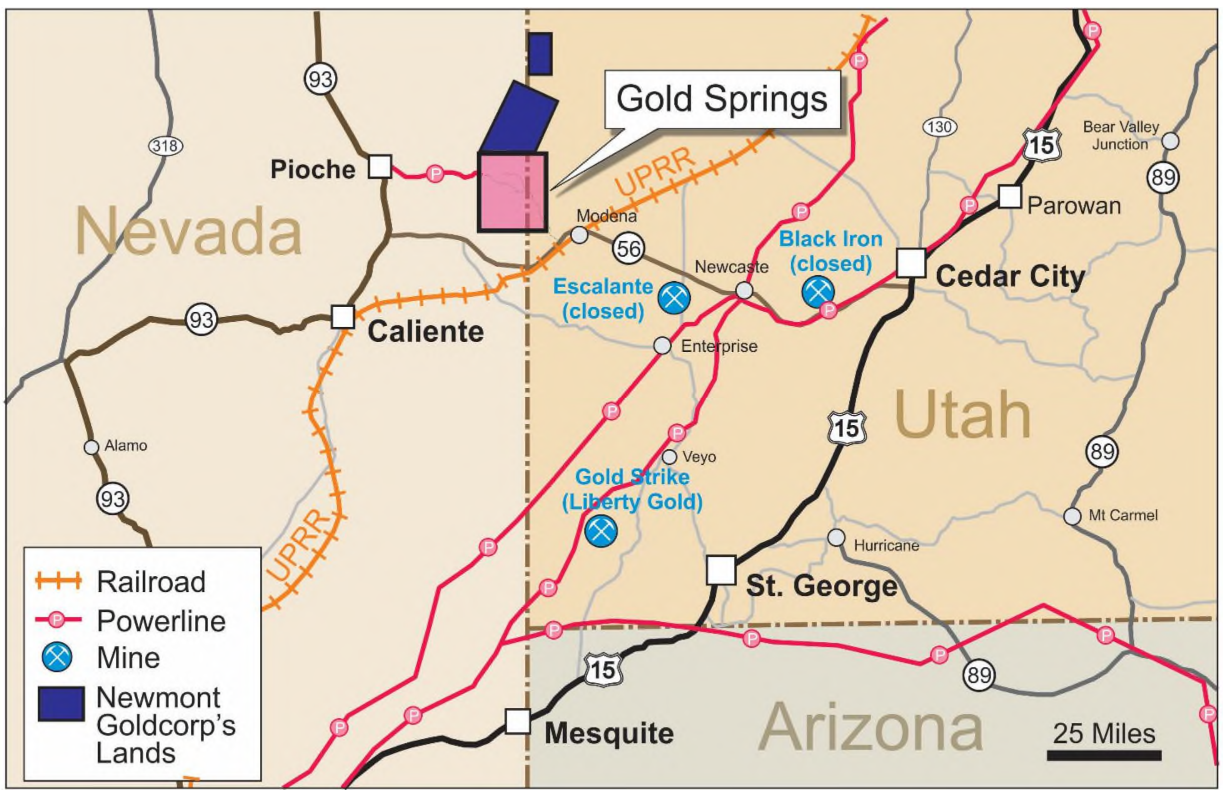
The authors have not reviewed land status or independently verified the permitting status of the Gold Springs Project and have relied upon information provided through communication with Randall Moore, GRC Executive Vice President of Exploration.

4.0 PROPERTY LOCATION AND DESCRIPTION

4.1 Property Location

The Gold Springs property is located along the Nevada-Utah state lines approximately 90 kilometres (km) west of Cedar City, Utah, and 35 km east of Pioche, Nevada. The primary target resource areas on the property are approximately 15 km north of Utah State Highway 56/ Nevada Route 25, as shown in Figure 4-1. Cedar City is the nearest significant town to the property, with a population of approximately 33,000, and lies along Interstate 15, which provides access between Las Vegas, Nevada, and Salt Lake City, Utah, and is served by the Union Pacific railroad and an airport with regular daily service to Salt Lake City. There is a long history of mining in Iron County, Utah, dating back to the 1860s, and Cedar City has the facilities to provide labor and services to support the exploration and mining activities on the property. Recent mining in Iron County includes the underground Escalante silver mine that closed in 1988, the Black Iron LLC open pit iron mine that operated until 2014, and the ongoing exploration at the Goldstrike Oxide Gold Project by Liberty Gold. Pioche, Nevada, is located 35 km west of the property, with a population of approximately 1,400, and is the County seat of Lincoln County, Nevada.

Figure 4-1: Gold Springs Project Location



4.2 Property Description

GRC's Gold Springs project area falls within several historic mining districts that include the Deer Lodge, Fay, and the Eagle Valley districts, all within Nevada, and the Gold Springs District in Utah. For the purposes of this report, the entire area is collectively referred to as the Gold Springs Mining District. The project area contains numerous historical mines and prospects that were active starting around 1897, and several mines that continued producing gold intermittently until the early 1940s.

The Gold Springs project was officially formed by an Option and Earn-in Agreement dated January 10, 2010, which called for GRC to expend $1 million in exploration and make payments to Liberty Gold ("LGD") totaling $160,000. These obligations were completed, and the two companies formed a 60% (GRC) and 40% (LGD) joint venture (JV) on the project, which is held by, and initiated the formation of, Gold Springs, LLC ("GSLLC"). GSLLC is a wholly owned subsidiary of Nevada High Desert Gold, LLC ("NVHDGLLC") which is a wholly owned subsidiary of GRC-US. Following the formation of the JV, LGD's interest was diluted through non-contribution to the continuing exploration programs. In 2013, GRC acquired LGD's remaining interest and currently holds a 100% interest in the Gold Springs project. On December 20, 2013, GRC completed the acquisition of TMI-US through its sole shareholder, High Desert Gold Corporation, a Canadian corporation, to take control of 100% of the property.

All lands that make up the Gold Springs property are held under Gold Springs LLC. The Gold Springs property, as shown in Figure 4-2, includes nine hundred twenty-four (924) unpatented lode claims on Bureau of Land Management ("BLM") lands in Utah and Nevada, and on Stock Raising Homestead Lands in Nevada, where private surface rights are underlain by Federal mineral rights. The mineral rights located under the homestead lands were staked under a Notice of Intent to Locate filed with the BLM Nevada state office on April 26, 2010. All claims were located with the use of a global positioning system (GPS) and tied to section corners and quarter-section corners physically located in the field. In addition to the unpatented lode claims, GSLLC controls nineteen(19) patented lode claims, one partial patented lode claim, which includes an easement for existing roadways, and five (5) Utah state mineral leases, all covering a total of approximately 7,544 hectares (ha), as well as an undivided interest in an additional five (5) patented lode claims which cover approximately 31.25 ha.

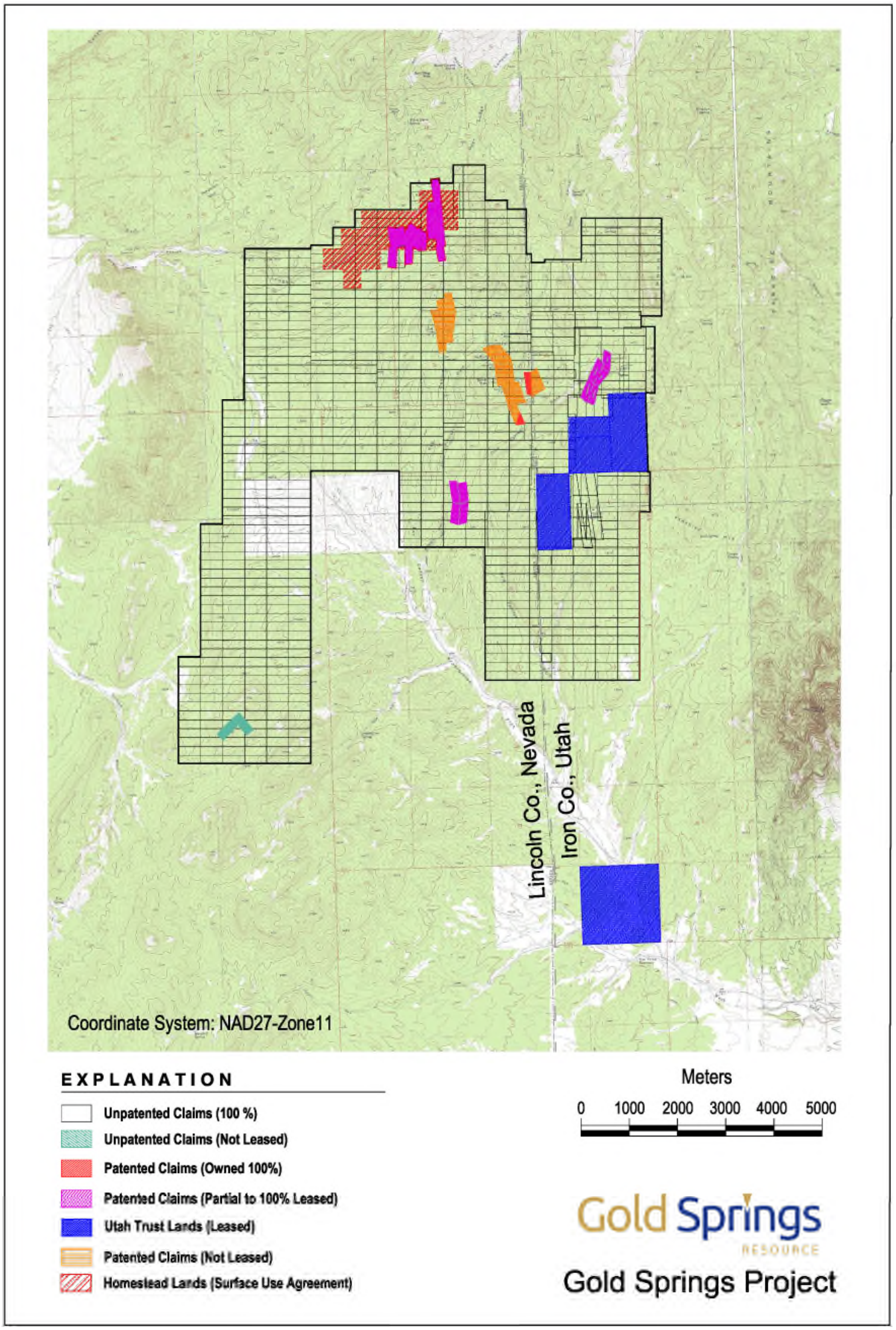
Two (2) unpatented claims, Grandee 2 and Grandee 4, covering 16.72 ha, were part of the original JV land package with LGD and are subject to an underlying lease with option-to-purchase agreement dated June 11, 2009. This agreement requires annual advanced royalty payments and is subject to a small royalty on Net Smelter Returns ("NSR"). It also allows for the purchase of a 100% interest in the claims within the first 10 years of the agreement. The option to purchase was exercised in June 2019, and these claims are 100% controlled by Gold Springs LLC with no retained underlying royalty.

The Melville and Midnight patented claim blocks include twelve (12) patented claims covering 75.49 hectares (ha) and are subject to a lease agreement dated March 19, 2010 requiring annual payments and a small retained royalty on Net Returns, whereas all payments under the agreement are considered advance royalty.

The Talisman patented claim block claim covers 6.77 ha and was purchased on June 12, 2015 through a lease with option to purchase agreement dated April 4, 2011 and is now 100% controlled by GRC.

Two (2) unpatented mining claims, Snowflake No. 6 and Snowflake No. 7, which cover 18.13 ha and one (1) surface real estate deed parcel covering 2.3 ha, which includes an easement for existing roadways, were acquired through a lease with option to purchase agreement dated August 1, 2013. The option to purchase was exercised in August 2018, and these claims are now 100% owned by Gold Springs LLC.

Figure 4-2: Gold Springs, LLC Land Position in Utah and Nevada



Five (5) Metalliferous Minerals leases covering 580.19 ha have been completed on Utah State Trust lands between 2010 and 2016 and require annual payments and a royalty on gross value of leased substances with an annual minimum royalty commencing on the 11th year of each lease, creditable against actual production royalties accrued during each year.

GSLLC has recently acquired an undivided interest in five (5) additional patented lode claims covering approximately 31.25 ha through a lease agreement dated February 8, 2017, which requires annual payments and a royalty on Net Returns.

In October 2017, GSLLC acquired through a lease agreement the six patented Homestake lode claims covering 44.1 ha, requiring annual payments and a small retained royalty on Net Returns.

All land agreements are in good standing as of the date of this report. Table 4-1 through Table 4-7 summarize the unpatented, patented, state leases, surface real estate, and right-of-way comprising the Gold Springs property.

Table 4-1: Nevada Unpatented Federal Lode Claims

Name of Claim	BLM Serial No. Nevada State Office	County Recording No. Lincoln County, Nevada
BS 1 – BS 88	NMC 1063344 – NMC 1063431	DOC 0140182 – DOC 0140269
BS 89 – BS 157	NMC 1062422 – NMC 1062490	DOC 0140337 – DOC 0140405
BS 158 – BS 186	NMC 1067785 – NMC 1067813	DOC 0140667 – DOC 0140695
BS 187	NMC 1067815	DOC 0140696
BS 188	NMC 1067814	DOC 0140697
BS 189 – BS 271	NMC 1067816 – NMC 1067898	DOC 0140698 – DOC 0140780
BS 272 – BS 283	NMC 1086823 – NMC 1086834	DOC 0142426 – DOC 0142437
BS 284 – BS 293	NMC 1086785 – NMC 1086794	DOC 0142415 – DOC 0142424
BS 294 – BS 295	NMC 1086835 – NMC 1086836	DOC 0142438 – DOC 0142439
BS 296 – BS 343	NMC 1091016 – NMC 1091063	DOC 0143140 – DOC 0143187
FAY 1 – FAY 7	NMC 1020231 – NMC 1020237	DOC 0135170 – DOC 0135176
FAY 20 – FAY 49	NMC 1020238 – NMC 1020267	DOC 0135177 – DOC 0135206
FAY 51 – FAY 90	NMC 1020269 – NMC 1020308	DOC 0135208 – DOC 0135247
FAY 91	NMC 1020309	DOC 0135772
FAY 92 – FAY 104	NMC 1020310 – NMC 1020322	DOC 0135249 – DOC 0135261
FAY 105	NMC 1026130	DOC 0136167
FAY 106	NMC 1020324	DOC 0135263
FAY 107	NMC 1026131	DOC 0136168
FAY 108	NMC 1020326	DOC 0135265
FAY 109 – FAY 110	NMC 1026132 – NMC 1026133	DOC 0136169 – DOC 0136170
FAY 111 – FAY 117	NMC 1020329 – NMC 1020335	DOC 0135268 – DOC 0135274
FAY 118	NMC 1026134	DOC 0136171
FAY 119	NMC 1020337	DOC 0135276
FAY 120	NMC 1026135	DOC 0136172
FAY 121	NMC 1020339	DOC 0135278
FAY 122 – FAY 156	NMC 1026136 – NMC 1026170	DOC 0136173 – DOC 0136207
FAY 157 – FAY 170	NMC 1039147 – NMC 1039160	DOC 0137857 – DOC 0137870
FAY 171 – FAY 189	NMC 1026172 – NMC 1026190	DOC 0136208 – DOC 0136226
FAY 190	NMC 1026171	DOC 0136227
FAY 191 – FAY 214	NMC 1039161 – NMC 1039184	DOC 0137871 – DOC 0137894
FAY 229 – FAY 266	NMC 1062154 – NMC 1062191	DOC 0140054 – DOC 0140091
FAY 399 – FAY 417	NMC 1062192 – NMC 1062210	DOC 0140092 – DOC 0140110
FAY 422 – FAY 439	NMC 1062378 – NMC 1062395	DOC 0140112 – DOC 0140129

Name of Claim	BLM Serial No. Nevada State Office	County Recording No. Lincoln County, Nevada
FAY 450 – FAY 454	NMC 1062406 – NMC 1062410	DOC 0140140 – DOC 0140144
FAY 698 – FAY 699	NMC 1081495 – NMC 1081496	DOC 0142225 – DOC 0142226
FAY 700	NMC 1081497	DOC 0144017
FAY 701 – FAY 704	NMC 1081498 – NMC 1081501	DOC 0142228 – DOC 0142231
FAY 714	NMC 1081502	DOC 0142233
FAY 715	NMC 1081503	DOC 0144018
FAY 739	NMC 1081504	DOC 0144019
FAY 740	NMC 1081505	DOC 0142237
FAY 741	NMC 1081506	DOC 0144020
FAY 742	NMC 1081507	DOC 0142239
MN 21 – MN 30	NMC 849467 – NMC 849476	120568 – 120577
MN 31 – MN 43	NMC 846731 – NMC 846743	120017 – 120029
MN 45 – MN 47	NMC 846745 – NMC 846747	120031 – 120033
MN 108 – MN 121	NMC 846752 – NMC 846765	120038 – 120051
MN 130 – MN 133	NMC 846748 – NMC 846751	120034 – 120037
MN 181 – MN 188	NMC 846766 – NMC 846773	120052 – 120059
SNOWFLAKE 6	NMC 1109884	DOC 0147130
SNOWFLAKE 7	NMC 1109885	DOC 0147131

Table 4-2: Utah Unpatented Federal Lode Claims

Name of Claim	BLM Serial No. Utah State Office	County Recording No. Iron County, Utah
CND 8 – CND 21	UMC 369567 – UMC 369580	00463645 – 00463658
ETNA 1 – ETNA 2	UMC 369036 – UMC 369037	00456463 – 00456464
ETNA 3 – ETNA 9	UMC 369560 – UMC 369566	00463638 – 00463644
ETNA 10 – ETNA 14	UMC 369942 – UMC 369946	00465039 – 00465043
ETNA 15 – ETNA 17	UMC 380867 – UMC 380869	00518145 – 00518147
FAY 8 – FAY 19	UMC 411144 – UMC 411155	00651846 – 00651857
FAY 267 – FAY 271	UMC 414459 – UMC 414463	00651834 – 00651838
FAY 272	UMC 414464	00655538
FAY 273	UMC 414465	00655544
FAY 274 – FAY 287	UMC 414466 – UMC 414479	00651859 – 00651872
FAY 288	UMC 414480	00655545
FAY 289 – FAY 294	UMC 414481 – UMC 414486	00651874 – 00651879
FAY 305 – FAY 308	UMC 419668 – UMC 419671	00636587 – 00636590
FAY 309 – FAY 311	UMC 414491 – UMC 414493	00651840 – 00651842
FAY 312	UMC 414494	00655539
FAY 313 – FAY 314	UMC 414495 – UMC 414496	00651844 – 00651845
FAY 315 – FAY 318	UMC 414497 – UMC414500	00651880 – 00651883
FAY 319	UMC 414501	00655546
FAY 320 – FAY 329	UMC 414502 – UMC 414511	00651885 – 00651894
FAY 330 – FAY 331	UMC 414512 – UMC 414513	00655547 – 00655548
FAY 332 – FAY 339	UMC 414514 – UMC 414521	00651897 – 00651904
FAY 340	UMC 414522	00655549
FAY 341	UMC 414523	00622007

Name of Claim	BLM Serial No. Utah State Office	County Recording No. Iron County, Utah
FAY 343	UMC 414525	00622009
FAY 345	UMC 414527	00621011
FAY 347	UMC 414529	00643925
FAY 349	UMC 414531	00622015
FAY 351	UMC 414533	00643926
FAY 353	UMC 414535	00622019
FAY 355	UMC 414537	00622021
FAY 357	UMC 414539	00622023
FAY 359	UMC 414541	00622025
FAY 361	UMC 414542	00622026
FAY 363	UMC 414545	00622028
FAY 365	UMC 414547	00622030
FAY 367	UMC 414549	00622032
FAY 369	UMC 414551	00656690
FAY 371	UMC 414553	00651906
FAY 373	UMC 414554	00651907
FAY 375	UMC 414556	00651908
FAY 377	UMC 414559	00651909
FAY 398	UMC 414580	00651910
FAY 482 – FAY 486	UMC 415345 – UMC 415349	00630968 – 00630972
FAY 492	UMC 415355	00630978
FAY 513 – FAY 515	UMC 415376 – UMC 415378	00622923 – 00622925
FAY 516	UMC 415379	00630999
FAY 517	UMC 415380	00622927
FAY 518	UMC 419661	00636614
FAY 519	UMC 415381	00622928
FAY 540 – FAY 544	UMC 415402 – UMC 415406	00622949 – 00622953
FAY 545 – FAY 549	UMC 419662 – UMC 419666	00636615 – 00636619
FAY 550	UMC 419667	00639210
FAY 551	UMC 415412	00622959
FAY 572 – FAY 578	UMC 415433 – UMC 415439	00622980 – 00622986
FAY 579	UMC 415440	00631004
FAY 580 – FAY 582	UMC 415441 – UMC 415443	00622988 - 00622990
FAY 603	UMC 415464	00623011
FAY 604	UMC 415465	00631006
FAY 605 – FAY 613	UMC 415466 – UMC 415474	00623013 – 00623021
FAY 634 – FAY 645	UMC 415495 – UMC 415506	00631025 – 00631036
FAY 705 – FAY 709	UMC 419650 – UMC 419654	00636621 – 00636625
FAY 710 – FAY 713	UMC 419655 – UMC 419658	00656691 – 00656694
FAY 716 – FAY 717	UMC 419672 – UMC 419673	00655551 – 00655552
FAY 719 – FAY 720	UMC 419675 – UMC 419676	00655553 – 00655554
FAY 721	UMC 419677	00660106
FAY 722 – FAY 723	UMC 419678 – UMC 419679	00655555 – 00655556
FAY 724	UMC 419680	00636599
FAY 725 – FAY 726	UMC 419681 – UMC 419682	00655557 – 00655558
FAY 727	UMC 419683	00636602

Name of Claim	BLM Serial No. Utah State Office	County Recording No. Iron County, Utah
FAY 728 – FAY 729	UMC 419684 – UMC 419685	00655559 – 00655560
FAY 730	UMC 419686	00636605
FAY 731 – FAY 732	UMC 419687 – UMC 419688	00655561 – 00655562
FAY 733	UMC 419689	00636608
FAY 734 – FAY 737	UMC 419690 – UMC 419693	00655563 – 00655566
FAY 738	UMC 419694	00636613
FAY 743	UMC 419659	00656696
Grandee 2	UMC 159222	145694
Grandee 4	UMC 159224	145995
GRETA 1 - GRETA 3	UMC 417370 – UMC 417372	00633000 – 00633002
GRETA 4 – GRETA 10	UMC 417373 – UMC 417379	00627417 – 00627423
GRETA 11	UMC 417380	00633003
GRETA 12 – GRETA 15	UMC 417381 – UMC 417384	00627425 - 00627428
GRETA 16 – GRETA 17	UMC 417385 – UMC 417386	00633004 - 00633005
GRETA 18 – GRETA 19	UMC 417387 – UMC 417388	00627431 - 00627432
GS 1 – GS 24	UMC 369581 – UMC 369604	00463659 – 00463682

Table 4-3: Nevada Patented Lode Claims Leased or Optioned to Purchase by Gold Springs, LLC

Name of Claim	USMS Number
Nevada[1]*	3235
Nevada #5[1]*	3235
Jessie[1]*	3235
Mabel[1]*	3235
Jackenni[1]*	3235
Duplex #2[1]*	3235
Monitor #2[1]*	3235
Indiana[1]*	3235
Everest (amended)[1]*	3895
Midnight (amended)[1]*	3895
Ione (amended)[1]*	3895
Reliance (amended)[1]*	3895
Homestake No. 1[2]	3897
Amended Homestake No. 2[2]	3897
Amended Homestake No. 3[2]	3897
Amended Homestake No. 4[2]	3897
Homestake No. 5[2]	3897
Amended Deerlodge[2]	3897

Notes: [1] Subject to a lease dated March 19, 2010 by and between Marvil Investments, LLC and TMI-US. * TMI-US conveyed its interest to GSLLC pursuant to an Assignment of Mining Lease dated September 25, 2012. [2] Subject to a lease dated October 25, 2017 by and between Lynette Taylor and Gold Springs, LLC.

Table 4-4: Nevada Patented Lode Claims - Purchased

Name of Claim	USMS Number
Talisman No. 2(1)*	2352

Notes: (1) Talisman No. 2 patented claim was purchased on June 12, 2015 pursuant to the option to purchase agreement dated April 4, 2011 by and between Beacon Group LLC and TMI-US. * TMI-US conveyed its interest to GSLLC pursuant to an Assignment of Mining Lease dated September 25, 2012.

Table 4-5: Utah Patented Lode Claims Situated in Iron County, UT – Ownership % Leased

Name of Claim	USMS Number
Fitzhugh Lee(1)	4113
Sigsbee(1)	4113
Marix(1)	4113
Richmond(1)	6257
Richmond No. 2(1)	6257

Notes: (1) Partial interest acquired pursuant to the lease agreement dated February 8, 2017 by and between Charles and Cheryl Reeve and GSLLC.

Table 4-6: Utah State Lands Situation in Iron County – Leased

Minerals Lease No.	Legal Description
ML#51806(1)	T33S, R20W, SLB&M. SEC.36: S1/2NW1/4
ML#52053(2)	T34S, R20W, SLB&M. SEC.2: LOTS 1(35.92), 2(24.05), 3(27.48), 4(28.26), 5(29.05), SE1/4NE1/4, E1/2SE1/4 [ALL]
ML#52119 (3)	T33S, R20W, SLB&M. SEC.36: E1/2
ML#52608 (4)	T34S, R20W, SLB&M. SEC.36
ML#53269 (5)	T33S, R20W, SLB&M. SEC.36 : SW1/4

Notes: (1) Lease dated June 1, 2010 by and between State of Utah School and Institutional Trust Lands Administration (SITLA) and Gold Springs LLC. (2) Lease dated September 1, 2011 by and between State of Utah SITLA and Gold Springs LLC. (3) Lease dated March 1, 2012 by and between State of Utah SITLA and Gold Springs LLC. (4) Lease dated September 1, 2013 by and between State of Utah SITLA and GSLLC. (5) Lease dated March 1, 2016 by and between State of Utah SITLA and GSLLC.

Table 4-7: Nevada Surface Real Estate with Easement – Optioned to Purchase

Description	Reference#
Surface Real Estate Deed Parcel including Easement to existing roadways	Parcel#12-080-04 Easement Permit#64710(1)

Notes: (1) Subject to a lease with option to purchase dated August 1, 2013 by and between Dan Maxwell and GSLLC. These lands were purchased in August, 2018

The titles to all of the properties listed above have been transferred into GSLLC, which is now a subsidiary of GRC.

The Authors do not know of any environmental, permitting, legal, title, surface access, taxation, socio-economic, marketing, or political issue that could materially affect the information contained in this technical report. Annual payments to the BLM are required to maintain the claims in good standing, and these are current through August 2022.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

Access to the property is from Cedar City, west along State Route 56, to a point just west of the town of Modena, Utah, and then north via maintained gravel roads approximately 15 km to the Property. Access is also available via County-maintained gravel roads east from Pioche, Nevada, through Eagle Valley and Ursine, Nevada. Road access within the Property is served by a network of maintained gravel roads, dirt roads, and trails that were previously developed to serve the mining and ranching activities in the area.

5.2 Climate

Climate is typical for the southern Great Basin, relatively arid with winter temperatures ranging from an average of 5°C in January to 9°C in February, and moderate summer temperatures that average 29.5°C in June to 33°C in July. Precipitation falls relatively evenly throughout the year, with slightly heavier periods during the summer monsoon season and from Pacific storm systems that generally last from July through early September and winter snowstorms that occur between January and March. Average annual precipitation is 260 millimetres (mm), as recorded at Modena, Utah, approximately 20 km southeast of the Property.

5.3 Local Resources

The Gold Springs property is located approximately 90 km west of Cedar City, Utah, 35 km east of Pioche, Nevada, and approximately 15 km north of Utah State Highway 56/ Nevada Route 25, as shown in Figure 4-1. Cedar City is the nearest significant town to the Property, with a population of approximately 33,000. Cedar City lies along Interstate 15, which provides access between Las Vegas, Nevada, and Salt Lake City, Utah, and is served by the Union Pacific railroad and an airport with regular daily service to Salt Lake City. Electric power lines and a spur of the Union Pacific railroad follow Utah State Highway 56, with the closest utility services at Modena, Utah, and Pioche, Nevada. Pioche, Nevada, is located 35 km west of the property and is the county seat for Lincoln County, Nevada. Pioche has a population of approximately 1,400 and lies along U.S. Highway 93, which links Caliente and Ely, Nevada, and provides services to the local ranching communities.

There is a long history of mining in Iron County, Utah, and Lincoln County, Nevada, dating back to the 1860s, and Cedar City has adequate facilities to provide labor and services to support the exploration and mining activities on the Property. Recent mining activity includes the Black Iron mine that closed in late 2014 and the Escalante Silver Mine that closed in 1988 (Arentz, 1978; Holloway, et al., 1990).

5.4 Infrastructure

Currently there is little infrastructure developed at the Gold Springs property other than a series of dirt roads that are maintained by the county, dirt roads and trails maintained by GRC, and a few local springs, wells, and tanks for watering livestock. However, power lines and a spur railroad line follow Utah State Highway 56, approximately 15 km south of the Property. A power line easement exists from Pioche to the historic Jennie mill site; however, the line has been removed. There is also a powerline along Hwy 56 that could provide a source for power to a project facility.

There has been adequate water available from springs and a well in the area to support the recent drilling operations at the project. In 2016, GRC filed for and was granted a 900-acre-feet water right permit in the Escalante Basin from the Nevada Division of Water Rights. GRC purchased another 65-acre-feet water right within the Nevada portion of the Escalante Basin in 2018. This total water allocation is equivalent to 3,260 cubic metres per day (m^3/day) (approximately 37.7 liters per second [L/s]). Cedar City is currently the closest source for an adequate labor force available for mining and development, transportation, and medical services.

5.5 Physiography

The property has sufficient area in gently rolling topography and valleys available to accommodate the development of an open-pit, heap leach mining operation.

The Gold Springs property is located between Gold Springs Wash and the Deer Lodge Canyon along the southwestern flank of the Mahogany Mountains that straddle the Utah/Nevada state line. The project covers gently rolling to moderately steep topography that ranges in elevation from 1,950 metres (6,400 feet) above sea level (asl) at Newell Spring to 2,337 metres (7,668 feet) asl at Bull Mountain. Photo 5-1 shows the generalized topography.

Photo 5-1: View Toward the South Jumbo Resource Area

View looking south down the Jumbo Trend with the resource area in the foreground and South Jumbo located at the southern edge of the cleared area.

The topography is typical for the flanks of the Basin and Range region, with colluvial cover blanketing the lower slopes of the fault-block range, and subsequent downcutting by erosion. The hills and slopes in the project area are covered by scrub Juniper and Pinyon pine, with sage brush dominating the valleys. Locally, areas have been stripped of woody species (as shown in Photo 5-1) to support livestock grazing, which is the primary economic use of the lands.

6.0 HISTORY

The Gold Springs project area has a long history of gold mining and exploration activity dating back to the 1870s, when “Old Man Pike” found high-grade gold in float while prospecting in the area but was unable to trace it to its source (Perry, 1976) (Photo 6-1). In 1896, gold was discovered in the nearby Stateline District in Utah, and this “rush” attracted prospectors to the Gold Springs area (Tshanz, et al., 1970), with the first locations filed in 1897 on the Jumbo and Wild Irish claim groups (Salt Lake Mining Review, 1903). The Gold Springs district was formed shortly thereafter (Tingley, 1998; Doelling, et al., 1983). Originally, the portion of the mining district located in Utah was called the Gold Springs District, and the portion located in Nevada was called the Eagle Valley district and the Fay district (Perry, 1976); the use of several names for these mining areas has contributed to some of the confusion with regards to crediting past production records to various mining districts and various states (Perry, 1976). Mining continued in the Gold Springs area until the 1940s, with the historical production reported as being 9,300 ounces of gold up to 1942. However, it is certain that this amount is well below what was actually produced because some reports have combined mine production from the Gold Springs and the nearby Stateline District in Utah, and some of the individual mine production records exceed what has been officially reported for the district (Perry, 1976). Historic reports describe the inability of operators to establish significant land positions and control the lateral extent of the vein systems as the key elements that hampered previous exploration and development. In addition, some of the veins are offset by post-mineral faults (as is documented at the Jennie Mine), but the displaced extensions were never located. The largest historical producing mines in the district are the Horseshoe, Jennie, and Homestake mines, for which individual production records are generally lacking and inconsistent. Historically, the gold ores are reported to have been mined from high-grade veins and stockworks that averaged >10 g/t gold across mining widths that locally exceeded 10 metres wide (Perry, 1976). The ores typically had a low-sulfide content (<2%) and were treated in local mills, which are reported to have recovered >80% of the gold by gravity separation and cyanide vat leaching methods (Short, 1909).

Photo 6-1: Ore Bin at the Thor Mine

During the 1960s to 1970s, Ranchers Exploration, Inc. and others conducted drilling programs at the Horseshoe and Jumbo properties, with limited success in identifying significant gold resources (Ranchers, 1974). In the early 1980s, AMAX Exploration, Inc. examined potential molybdenum mineralization in the nearby Stateline District in Utah (Candee, 1981), and there is evidence that FMC Exploration, Inc. may have also been interested in molybdenum mineralization in the Gold Springs caldera, where several drill holes targeted the rhyolitic breccias and rhyolite dome complex in the Bull Mountain area (Askey, 1985).

In 1981, Energex Minerals Ltd. ("Energex") initiated consolidation of a significant land position that included the Jumbo Trend, and in 1988 completed a 10-hole, 890-metre reverse circulation (RC) drilling program that focused on identifying bulk-mineable gold mineralization targets. The Energex drilling data reported mineralized drill intercepts at the North Jumbo target grading 2.0 g/t gold across 24.4 metres, and 14.5 g/t gold across 1.5 metres (Energex News Release, 9/1988). Between 1985 and 1988, Energex completed 12 drill holes in the North Jumbo, South Jumbo, and Thor target areas; however, this data was not available to the Authors for review. During 1996-1998, Cambior Inc. ("Cambior"), acquired a large land position in the area and conducted a program of geological mapping, rock chip, and soil sampling. Cambior collected and analyzed 662 rock chip samples across the project area and 88 soil samples. In 1998, the property was optioned to Phelps Dodge Exploration, Inc. ("Phelps Dodge"), who evaluated the property, focusing their efforts on gold mineralization hosted in the caldera environment and in potential bulk tonnage targets in the Jumbo Trend. Phelps Dodge allowed the claims to lapse in 2001. North American Gold Inc. re-staked and acquired claims in the area during 2002-2003, conducted geochemical sampling, and completed the drilling of six RC holes in the North Jumbo and South Jumbo target areas. In 2004, Amanda Resources Corporation ("Amanda Resources") acquired the property from North American Gold Inc. and conducted exploration on a portion of the current property controlled by GSLLC. The work conducted by Amanda Resources included geologic mapping and sampling in the South Jumbo, Jumbo, and Iris mine areas and geophysical work consisting of magnetometer and Controlled Source Audio Magneto Tellurics (CSAMT) surveys on portions of the property conducted by Zonge Geosciences of Reno, Nevada. In 2005, Amanda Resources changed its name to Astral Mining Corporation ("Astral") and filed a NI 43-101 report on their work to that date. Astral completed a 10-hole RC drilling program in 2006 on the North Jumbo, South Jumbo, and North Jennie targets. In 2009, Astral terminated their interest in the project due to a lack of funds.

7.0 GEOLOGIC SETTING AND MINERALIZATION

7.1 Regional Overview

The Gold Springs property is situated in the southeastern portion of the Basin and Range physiographic province, which is characterized by northerly-trending mountain ranges with closed internal drainage basins that are the result of extensional tectonism and associated volcanism during the Tertiary period. The Basin and Range province extends from southern Oregon and Idaho through Nevada and most of Utah. The Gold Springs project lies within the Indian Peak volcanic field, which is a broad Tertiary volcanic field that straddles the Utah-Nevada border and contains several nested, collapsed calderas and resurgent dome features that formed as part of a major Oligocene-Miocene “ignimbrite flare-up cycle” (Best, et al., 1989). The Indian Peak caldera complex is the southeastern extension of the Central Nevada volcanic complex and represents a 10-million-year period of focused magmatic and volcanic activity (Best, et al., 1989). The initial volcanic field formed about 32 to 27 million years ago (Ma) in the southeastern Great Basin and consists of the Indian Peak caldera complex and the surrounding blanket of calc-alkaline ash-flow tuff sheets that cover an area of approximately 55,000 square km, with an estimated volume of approximately 10,000 cubic km of volcanic rocks. The caldera complex is located central to the volcanic field, and the volume of rock is dominated by ash-flow tuff units, with minor amounts of andesite and rhyolite flows that were extruded during the early stages and again later in the life of the volcanic complex (Best, et al., 1989). Subsequent dome building resurgence and associated felsic volcanism (25 to 19 Ma) and hydrothermal mineralization are related to the Buck Mountain-Gold Springs rhyolite dome-caldera-diatreme event between 19 to 16.5 Ma (Williams, et al., 1997). Younger volcanic activity in the project area consists of felsic flows and tuffs dated between 16 to 10 Ma (Williams, et al., 1997) with associated periods of hydrothermal activity.

The oldest rocks in the region consist of Proterozoic through lower Mesozoic sedimentary sequence that became folded and thrust-faulted eastward during the Cretaceous Sevier orogeny and were subsequently overlain by Tertiary sedimentary deposits (Stewart, 1980). Regional crustal extension during the middle Cenozoic resulted in crustal thinning, widespread volcanic activity throughout the Central Nevada volcanic field, including the Indian Peak volcanic field, and extending eastward to the Marysville volcanic complex that was active until 10 Ma. Younger basin and range faulting overprints the Indian Peak caldera complex, resulting in nearly half of the complex now lying beneath alluvium-filled basins or younger volcanic rocks (Best, et al., 1989a).

Andesite and latite flows were prevalent during the early and late stages in the evolution of the Indian Peak volcanic complex. The early andesite flows have previously been correlated with the Escalante Desert Formation, Wah Wah Springs Formation, or Ryan Springs Formation, approximately 32 Ma (Best, et al., 1989a); however, recent data suggests that the older andesite-latite sequence is more closely related to the 22 to 23 Ma Condor Canyon Formation (Williams, et al., 1997) (Rowley, et al., 2008). This thick section (300 metres) of intermediate volcanic tuffs and flows are andesitic-latitic to trachydacitic in composition and are overlain by a series of rhyolitic to dacitic flows and tuffs associated with episodic eruptions from the caldera complex, which are correlated with the Blawn Formation. This latter stage of felsic volcanic activity includes the development of collapse caldera features and resurgent domes and ash eruptions that were deposited over an extensive area (Best, et al., 1992). The Gold Springs caldera was formed during this period of activity and is a prominent feature in the project area.

Following a hiatus of approximately three million years after final eruptions in the Indian Peak complex, the Caliente caldera complex began activity 40 km to the south of the project area, and the resurgent White Rock caldera overprints the southwestern margin of the Indian Peak caldera, as part of the continued regional volcanism (Best, et al., 1989a; Rowley, et al., 1988). During the Pliocene, local basins and lakes formed during initial Basin and Range faulting, and these features accumulated sediments and ash deposits that overlie the older volcanic rock units. Uplift and faulting have continued into the Quaternary, and many of the slopes surrounding the ranges are covered with a variable thickness of recent colluvial and alluvial deposits.

Gold mineralization in the Gold Springs project is hosted by veins, complex sheeted veins, breccias, and stockworks that are oriented along north-south and northeast- and northwest-striking structural zones that cut andesite and latite flows and rhyolite dikes around the collapsed margins of the Gold Springs caldera. The veins typically form resistant ledges and ribs that protrude up to 10 metres above the surrounding ground surface and consist of quartz, adularia, and calcite with minor (<1%) sulfides. The vein systems are laterally extensive and can be traced for up to two kilometres along strike between exposures, and likely further, where the veins extend beneath Quaternary cover. The Gold Springs area is known for numerous small mines and prospects, primarily exploiting high-grade gold and silver veins that are scattered across the volcanic field and have remained largely inactive since the 1940s(see Section 6.0) (Perry, 1976; Thomson, et al., 1975).

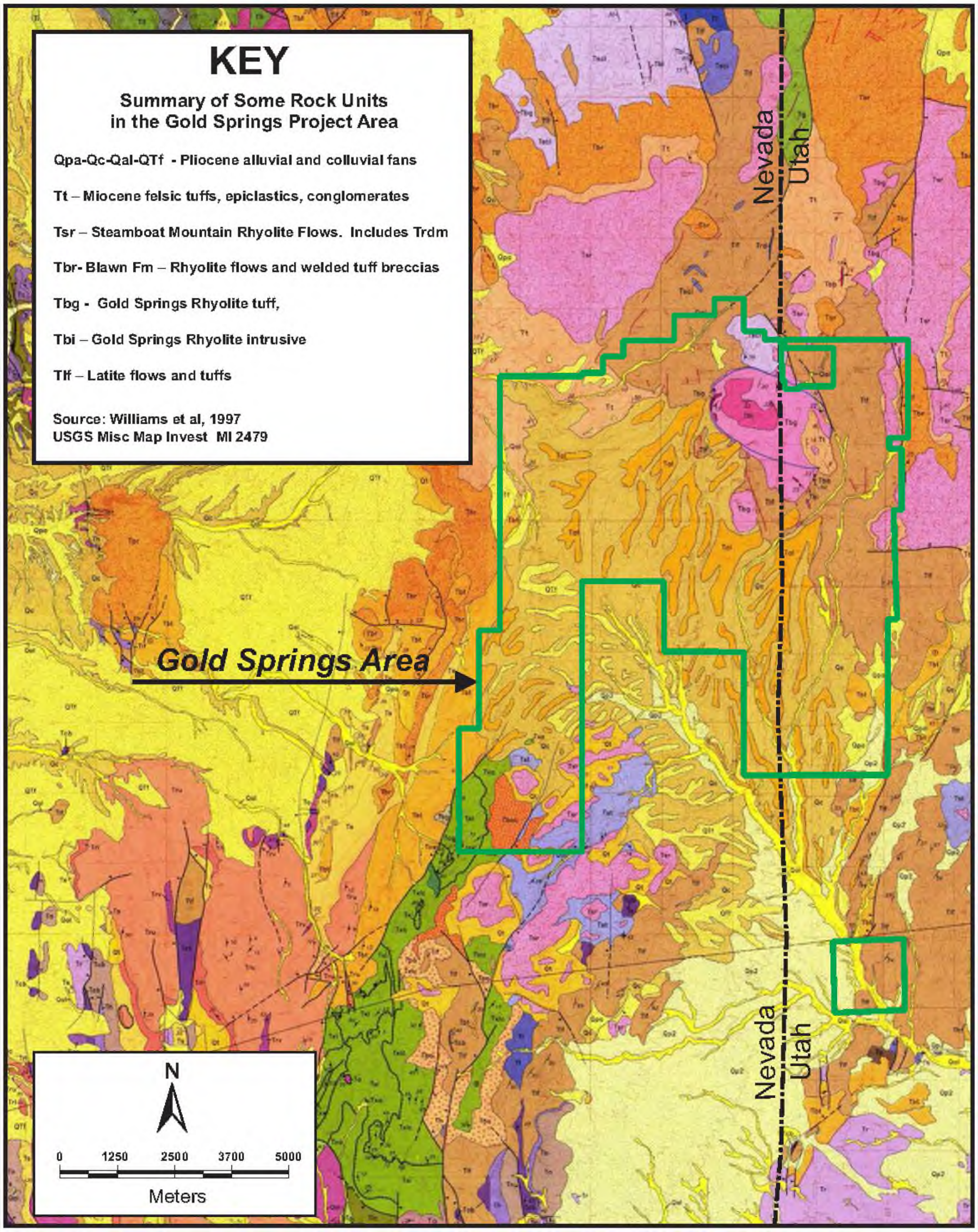
7.2 Local Geologic Setting

The Gold Springs project area is located in the southern portion of the Indian Peak volcanic field, surrounding and including the Gold Springs caldera.

The following is a summary of the rock units in the central Indian Peak volcanic complex near the project area, as they have been described and subdivided by Williams et al. (1997), in Utah by Rowley et al. (2008), and are summarized in Figure 7-1. The correlation among individual rock units within a volcanic field is an inherently complex matter because individual eruptive events, flows, and units are generally not laterally extensive, and temporal sequences are tenuous at best. In the Gold Springs project area, recent mapping by Rowley et al. (2008) was conducted in the Utah portion of the project area, and some of these maps units attempt to further refine the volcanic stratigraphy described by (Williams, et al., 1997). The following discussion of the geology is a comprehensive summary that incorporates a combination of this data. The rock units are presented chronologically from the oldest to youngest units.

Andesite to latite lava flows and tuffs (Oligocene-Miocene 23 to 22 Ma) are prevalent in the project area (Tlf), and may be correlated with the Escalante Desert Formation, Wah Wah Springs Formation, or Ryan Springs Formation at approximately 32 to 28 Ma (Best, et al., 1989a) or possibly part of the Condor Canyon trachydacite at 22.8 Ma (Rowley, et al., 2008). The andesite-latite-trachydacite flows are of variable thicknesses, and incomplete sections are as much as 300 metres thick (Rowley, et al., 2008). The andesite section is predominant in the Buck Mountain to Grey Eagle area and is composed of a series of andesite flows, lithic tuff breccias, and biotite tuffs and is the primary host rock for gold-silver mineralization at

Figure 7-1: Regional Geologic Map Showing the Gold Springs Project Area



Jennie, Thor, Snowflake, Homestake, and Grey Eagle mine areas. The older andesite-latite to trachydacite flows and tuffs appear to overlie the andesite section and are often only distinguishable from the Buck Mountain andesites by having an increase in biotite content. The andesite-to-trachydacite flows are the primary host rock for the vein systems that are exposed in the North Jumbo, Central Jumbo, and portions of the Etna mine areas.

There are also younger latite lava flows and tuffs (Miocene) that form a sequence of reddish-brown to grey-green lava flows containing phenocrysts of plagioclase, biotite, and clinopyroxene and magnetite, and are probably as much as several hundred metres thick in the Jumbo Trend area (Best, et al., 1992). The younger latite flows and tuffs are mostly post-mineral and are observed to cover mineralized sections in the older andesite and latite flows.

Blawn Formation (Miocene) is an assemblage of siliceous rhyolite rocks of early Miocene age that have been subdivided into informal members of rhyolite tuffs and rhyolite lava flows (Tbg), rhyolite intrusions (Tbi), breccias (Tbb), mafic lava flows, and minor epiclastic deposits (Tt). The age for the rhyolite flows range from 24 to 18 Ma (Best, et al., 1992).

In the Utah portion of the property, the low-silica rhyolites described by Rowley et al. (2008) as Trdo (older rhyolites) probably represent the terminal phase of calc-alkaline volcanism related to an ignimbrite episode. Subsequent volcanism in the project area shows a trend towards increasing alkaline flows and tuffs.

Perhaps the most striking geologic feature in the project area is the collapsed Gold Springs caldera, mapped by United States Geological Survey (USGS) (Best, et al., 1992), in the vicinity of Bull Mountain. This caldera is bound on the west and northwest by heterolithic breccia dikes along a steeply dipping contact with older andesite flows. Interior to the caldera is a resurgent rhyolite dome complex at Bull Mountain and intercalated tuffaceous sediments, tuffs, and flows that are 20-16.5 Ma (Rowley, et al., 2008). In the Pope and Charlie Ross Mine areas, the tuff units breached the caldera margin and uncomformably overlie the surrounding andesite flows, extending southward towards the Jennie Mine.

Pliocene-Miocene (16 to 10 Ma) clastic rock units (Tt) consist of a heterogeneous sequence of weakly consolidated primary pyroclastic flows, reworked pyroclastic material, conglomerates, and epiclastic rocks that locally underlie the Steamboat Mountain Formation (Best, et al., 1992). This unit generally represents the erosional unconformity that occurred during and after the major felsic tuff eruptive cycle from the caldera complex. These sedimentary rock units were deposited in basins that formed during Basin and Range extensional faulting and subsidence of the Pine Park and Telegraph Draw calderas. These poorly consolidated volcanoclastic and epiclastic units cover broad areas of prospective older andesite and latite and commonly contain clasts of vein material.

Steamboat Mountain Formation (Tsr) is a bi-modal assemblage of high-silica rhyolite and basaltic trachyandesite of middle Miocene age (Best, et al., 1987). In the project area, the Steamboat Mountain rhyolite flow unit is found capping some of the ridges between Deer Lodge Canyon and the Jumbo area.

Lacustrine Deposits (Upper Miocene to Pliocene) consist of silt and fine sand sediments (Tal) that accumulated in a shallow lake that occupied ancestral Eagle Valley. These sediments are generally fine-grained and grade laterally and upwards into coarse sands and gravels, representing a transition from lacustrine to alluvial deposition as the basin filled and along its eastern margins.

Quaternary Deposits consist of several units that represent tectonic episodes and subsequent erosion and deposition along the basin and range front. These include talus (debris trains), colluvial deposits (Qc), alluvial deposits adjacent to streams (Qal), floodplain deposits in the modern washes, and older benches and terraces associated with progressive down cutting of fan and pediment alluvium.

Perhaps the most important result of Quaternary geomorphology is the fact that the project area is covered by Quaternary deposits of varying thickness, and that these deposits may locally contain cobbles and boulders of high-grade vein material. Several shafts and cuts were historically developed in the colluvium and appear to follow boulders of ore-grade material. In some cases, the vein material appears to have travelled only a short distance from nearby buried vein outcroppings.

7.3 Project Lithologic Units

The Gold Springs project is located in the southern portion of the Indian Peak volcanic field, surrounding and including the Gold Springs caldera. The project area includes many of the lithologic units that are described above, or portions of those units, as shown in Figure 7-1:. In general, the gold-silver mineralization is found in a variety of northwest to northeast striking quartz-adularia +/- calcite veins, stockworks, hydrothermal breccias, and silicified structural zones and altered host rock around these features. Host rocks are predominantly older (23 to 22 Ma) andesite-latite to trachydacites and trachyandesite flows and tuffs around the margins of the Gold Springs (19 to 16.5 Ma) caldera/diatreme. Locally, the Gold Springs rhyolite and welded to non-welded tuff breccias are also mineralized. The following are the significant lithologic units found in the project areas. These are described and presented below in chronological order.

The older andesites (Ta) are a composite of numerous flows, tuffs, and multilithic tuff breccias with a variable aggregate thickness of as much as 400 metres (Best, et al., 1992). There has been some attempt to identify individual flow units (Smith, 2005); however, these are generally not laterally continuous. The uppermost member of the Ta andesite sequence is a biotite rich (5% to 20%) tuff found in the central Grey Eagle and White Point areas. It has largely been removed by erosion in the North and South Grey Eagle areas and is unconformably overlain by the Tt tuffs. The andesite flows are the primary host rock for the vein systems that have been historically mined in the Gold Springs project area (Perry, 1976), and are the primary host rocks for Grey Eagle, Homestake, Horseshoe, Snowflake, Jennie, Thor, and Midnight mine mineralization. Post-mineral andesite dikes are found in the Grey Eagle area and locally appear to crosscut the mineralization in the Grey Eagle and Iris mine areas.

The older andesite-latite to trachydacites and trachyandesite flows and tuffs (Ta) are the prevalent ore hosts in the North, Central, and South Jumbo areas. Differentiating between the flows is difficult; however, some flows can generally be identified based on increased biotite content, magnetite, and rare quartz phenocrysts. Where mineralized, the flows exhibit strong QSP (quartz-sericite/illite-pyrite) alteration with associated strong quartz stockworking and breccias. The northern and western flanks of the Jumbo Ridge (North Jumbo resource) area are often capped by thin, platy, biotite-latite flows that are typically light grey in color, exhibit moderate sericitic (illite) alteration, and are weak veining. These platy latites may form a cap to the mineralizing system and created hydrothermal "ponding" at the base of the flows. The platy latite unit has a variable thickness (5 to 100 metres) and appears to have been largely eroded from the east flank of Jumbo Ridge.

A sequence of younger latite tuffs and flows (Tpl) overlies the mineralized andesite and latite flows along the east flank of Jumbo Ridge and ranges from 5 to 70 metres in thickness. The section of grey-green to reddish brown, variably indurated, locally altered biotite latite crystal tuff unconformably overlies and may be in fault contact with the Main Jumbo vein system and older latite units. The typical tuff section consists of an upper grey-green propylitic-altered tuff overlying a lower, oxidized, hematitic zone where it overlies the vein zone. Drill cross sections show that the Ta/Tpl contact dips at 35 to 60-degrees to the east, which is generally steeper than other erosional contacts observed in the project area. This implies a possible structural contact that was synchronous or post-dates deposition of the tuff eruptive event. The younger tuff is moderately, to strongly, QSP (quartz-sericite/illite-pyrite-calcite) altered with local disseminated pyrite. The altered tuff generally exhibits a slightly elevated level of detectable gold and silver but is not known to host ore-grade mineralization. The younger tuff unit (Tpl) may have been deposited after main stage mineralization, and the observed pervasive alteration may be related to active hydrothermal activity. In the South Jumbo area, the younger tuff is capped by more recent buff colored, lacustrine, and air-fall tuff (Tt) that overlies much of the district between the Jumbo trend and Grey Eagle areas.

The widespread latite-dacite flows (Tld) are weakly porphyritic, magnetite-bearing, and locally exhibit an aphanitic matrix. They surround and cover much of the Central and Southern Jumbo areas, south of the North Jumbo target, and are the dominant lithology of Rowley's (2008) Tlf latite flows. The base of the latite flows are locally altered, but, in several locations north of the Etna mine, the fresh flows overlie strongly stockworked, altered, and mineralized latite and andesite. The airborne magnetic survey conducted on the Jumbo Trend area by GRC shows this unit to be strongly magnetic and indicates a large area of Tld extending to the northwest, west, south, and southeast of Etna.

A series of three moderately to densely welded units of trachytic ash-flow tuffs unconformably overlie the latite-andesite flows (Rowley et al., 1991). These units are referred to as the old rhyolite (Trdo) in the recent mapping in Utah (Rowley et al., 2008) and are the host for part of the mineralization in the State Line District to the north of the Gold Springs project. Remnants of an upper unit locally contain a black vitrophyre, and several lower members have been identified that exhibit reddish cooling units and may be intercalated with tuffs from other sources found to the east of the Jumbo mine area and cap some of the higher ridges and hills in the project area. Locally in the project area, there are zones with late stage deuteric alteration observed that appear as orange frothy tuff zones, but no significant mineralization has been found within the old rhyolites east of the Jumbo target area.

The Gold Springs caldera is a prominent feature in the project area and was identified by the USGS (Best, et al., 1992), in the vicinity of Bull Mountain. The caldera is partially defined on the west and northwest by outcrops of heterolithic breccias that locally form large ribs along the steeply-dipping contact with older andesite flows to the south and west caldera margin and central to the caldera is a resurgent rhyolite dome complex. Rhyolitic flows and intercalated tuffaceous sediments and tuffs occur within the caldera and extend beyond the margins, where they unconformably overlie the surrounding andesite flows in the Pope and Charlie Ross Mine areas and extend southward towards the Jennie Mine. These tuffs are observed to host veins and stockwork gold mineralization. The Gold Springs Caldera appears to be the geographic focus of gold-silver mineralization hosted by the welded tuff unit and in pipe-like bodies that cut the resurgent rhyolite dome associated with fluorite mineralization.

Throughout the Gold Springs district, poorly consolidated felsic tuffs, reworked epiclastics and lacustrine deposits, and tuffaceous sediments overlie the andesite flows and veins. In the Grey Eagle area, Miocene-Pliocene sediments and tuff (Ts) accumulated in the ancestral Eagle Valley and unconformably overlie the mineralized andesite flows. The lacustrine sedimentary units grade laterally into agglomerates and poorly sorted sediments that are weakly consolidated and are often indistinguishable from the younger Quaternary sediments. Locally present are vitrophyres, obsidian-bearing tephra units, and tuffaceous sedimentary units that are intercalated with the coarse sands and gravels. One example occurs on Buck Mountain and another near the north edge of Prohibition Flats. It appears that these naturally occurring obsidian deposits have been incorporated into the Quaternary deposits that blanket the range and is the source of obsidian nodules scattered throughout the area.

The USGS (Best, et al., 1992) has identified several distinct and mappable Quaternary units in the project area that represent a series of tectonic episodes and subsequent erosion and deposition along the range front. The most pronounced basin in the area is a broad, west-northwest trending basin that corresponds to Prohibition Flats area on the southwestern portion of the project. The clastic units include talus (debris trains), colluvial deposits, alluvial deposits adjacent to streams, floodplain deposits in the modern washes, and older benches and terraces associated with progressive down cutting of fan and pediment alluvium. Most the project area is covered beneath these Quaternary deposits (Qc), which are of varying thickness, and it is interesting to note that the majority of areas where the bedrock andesites are exposed are also where gold mineralization has been prospected and mined. Of particular interest is the presence of high-grade vein material as cobbles and boulders that occur in some of the Quaternary deposits. Historically, this is what initially attracted the first wave of prospecting in the 1870s, but the source for the ore material remained elusive to the early prospectors (Perry, 1976). There are a number of shafts and open cuts throughout the project area that are developed in colluvium searching for the presence of ore-grade material. In some cases, this material may not have travelled far from the source, and indicate nearby buried areas of the outcropping veins, as observed in the North Jumbo resource area and in trenches in the Grey Eagle area. The significance of these local basin filling sediments became evident during the 2013 Grey Eagle exploration drilling, where the main northeast-striking, westerly dipping South Grey Eagle stockwork zone was traced under post-mineral clastic cover for over 400 metres to the south. The post-mineral (Ts) tuff package is typically thin bedded, gently to moderately (5 to 30 degrees) dipping to the southwest. The air fall and lacustrine crystal ash tuff units exhibit local scour and fill, graded bedding, and reworked conglomerates. The thickness of the post-mineral clastic unit (Ts) is locally modified by normal faulting and can vary between 3 and 50 metres, thickening downslope to the southwest where GRC step-out drilling in 2014 intercepted >200 metres of overlying tuff above the mineralized contact. Drilling shows that the basal tuff zones incorporated variable thicknesses (one to eight metres) of mineralized vein-bearing regolith deposited in a high-energy environment on moderate to steep topography that is an erosional surface. Resistant ridges of quartz veining are locally surrounded and covered by post-mineral deposits that show a minimum of 20 metres of cut and fill channels. The 2014 road building and drilling program in the South Grey Eagle area exposed a >50-metre-thick zone of reworked tuff exhibiting high-energy cut and fill structures, mudflows, heterolithic, poorly sorted, vein bearing debris-flow conglomerates. Along the southeast flank of the Grey Eagle main ridge, a significant portion of the southern extension of the Grey Eagle vein system was removed by erosion and is overlain by tuff (Ts) and sediments (Qc). This was illustrated with holes GE-14-001 to GE-14-004, which were drilled to extend the mineralization intercepted in GE-13-038, GE-13-016, and GE-13-005.

7.4 Structure

The Gold Springs project area is located within the Basin and Range physiographic province and is characterized by north-south block faulting that produced internally draining basins and ranges that have developed from east-west extensional tectonism since about 30 Ma (Best, et al., 1992). The original rock units in the Indian Peak volcanic field have been displaced by faulting, and most of the project area is covered beneath younger Pliocene to Quaternary sediments and colluvium.

The dominant mineralized zones in the Gold Springs project generally strike north-south to northeast-northwest and are moderately to steeply-dipping along laterally extensive faults and veins that cut the andesites, as shown in Figure 7-2. In addition, there are subsidiary northeast-striking vein systems such as in the Etna and Midnight mine areas that locally exhibit a series of dilatant northwest-striking veins. In the North Jumbo resource area, the mineralization consists of veins and a wide area of silicification, veining, alteration, and clast and matrix-supported breccias and micro-breccias, with predominate sets of north-northeast or southwest striking orientations within the zone.

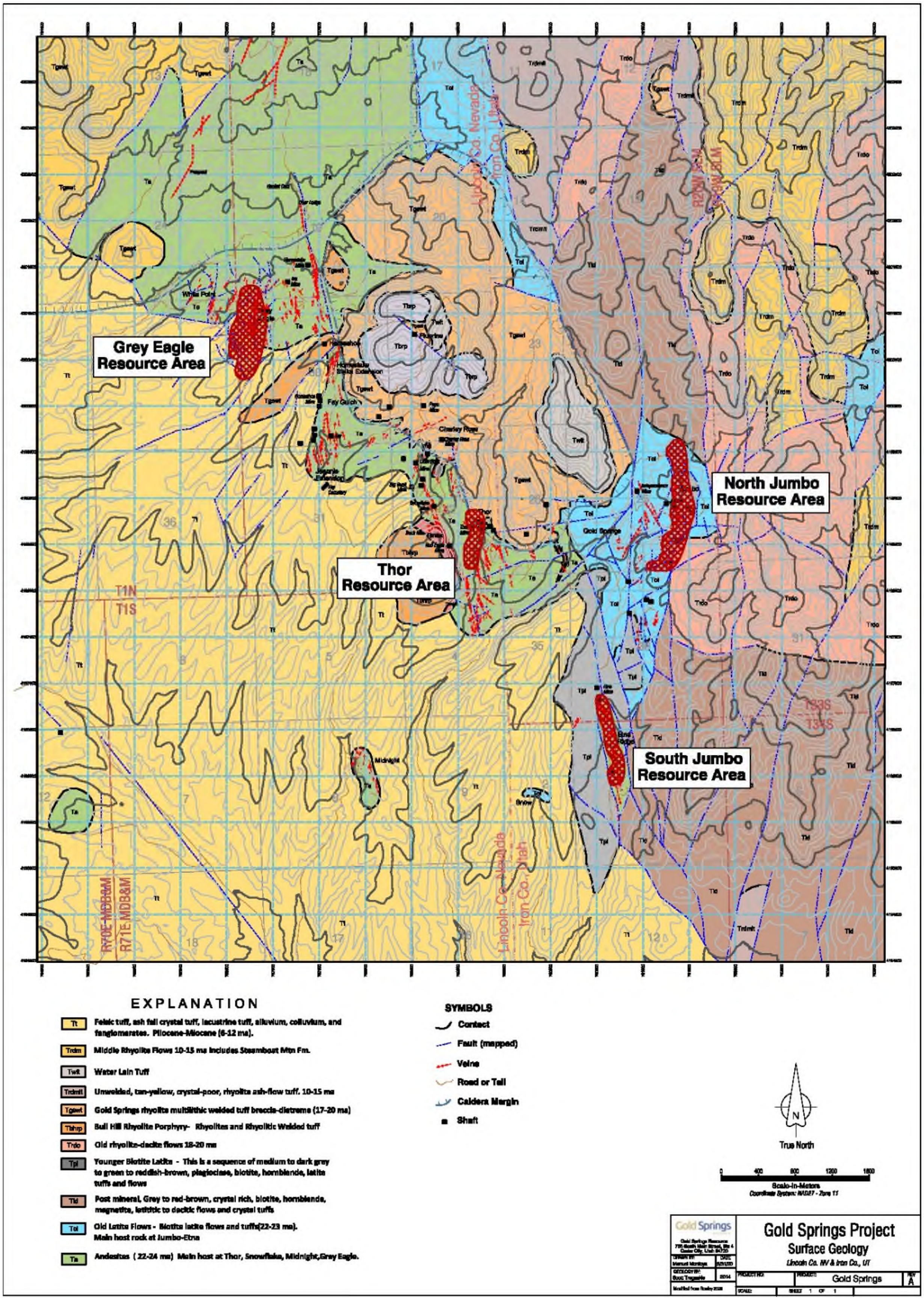
Extensional tectonics (30 to 10 Ma) created a series of horst and graben features in the district which are superimposed on earlier caldera collapse and resurgent dome fractures related to the development of the Indian Peak and White Rock Caldera systems (34 to 22 Ma). There are indications of strike-slip faulting following the same general north-south basin and range style block faulting with local conjugate shearing developing between parallel strike-slip faults. GRC is conducting more detailed analysis to determine if there are additional structural controls on the high-grade gold mineralization, which has been suggested by detailed mapping on a portion of the Jumbo system. Historically at the Jumbo and other mines in the Gold Springs district, it is observed and reported that only certain portions of the veins grading >0.2 ounces per ton (oz/t) gold were mined (Perry, 1976), and the remaining vein material was left behind.

Arcuate structural zones related to collapsed caldera margins are also a dominant feature at the Gold Springs. Numerous nested calderas have been identified within the outcrop exposures and highlighted in the Lidar and Z-Tipper Electromagnetic System (ZTEM™) results. These areas of ring fractures and collapse features are the host of mineralization within the Grey Eagle resource area and are priority target areas for future exploration efforts.

Post-mineral faults that offset mineralization have been observed and reported by previous workers (many observed in inaccessible underground mine workings). Several faults displace or are oriented parallel to the mineralized veins with the predominate faults striking east, northeast, and north-south. Some workers have speculated that the north-south faults reflect re-activation along basement structures in the pre-Tertiary rocks (Perry, 1976). In the Jennie Mine, the main vein was cut off above the 300-foot level by a series of north-south faults dipping to the west, and a fault striking north 80° east, dipping 55° south, displaced the Jennie vein to the north of the main shaft (Mallory, 1928). The Thor vein is also cut off on the north by post-mineral faulting that is likely the same northern faults that offset the Jennie vein.

There are several areas where the north-south vein structures appear to intersect the margins of the Gold Springs Caldera (Figure 7-2) in the vicinity of the Pope and Charlie Ross mines that exhibit stockwork veining and pervasive oxidation (hematite, jarosite, and goethite staining) in the welded tuff units. The Pope vein strikes north-60° to 65° east, is nearly vertical and cuts welded crystal tuffs. The Charlie Ross

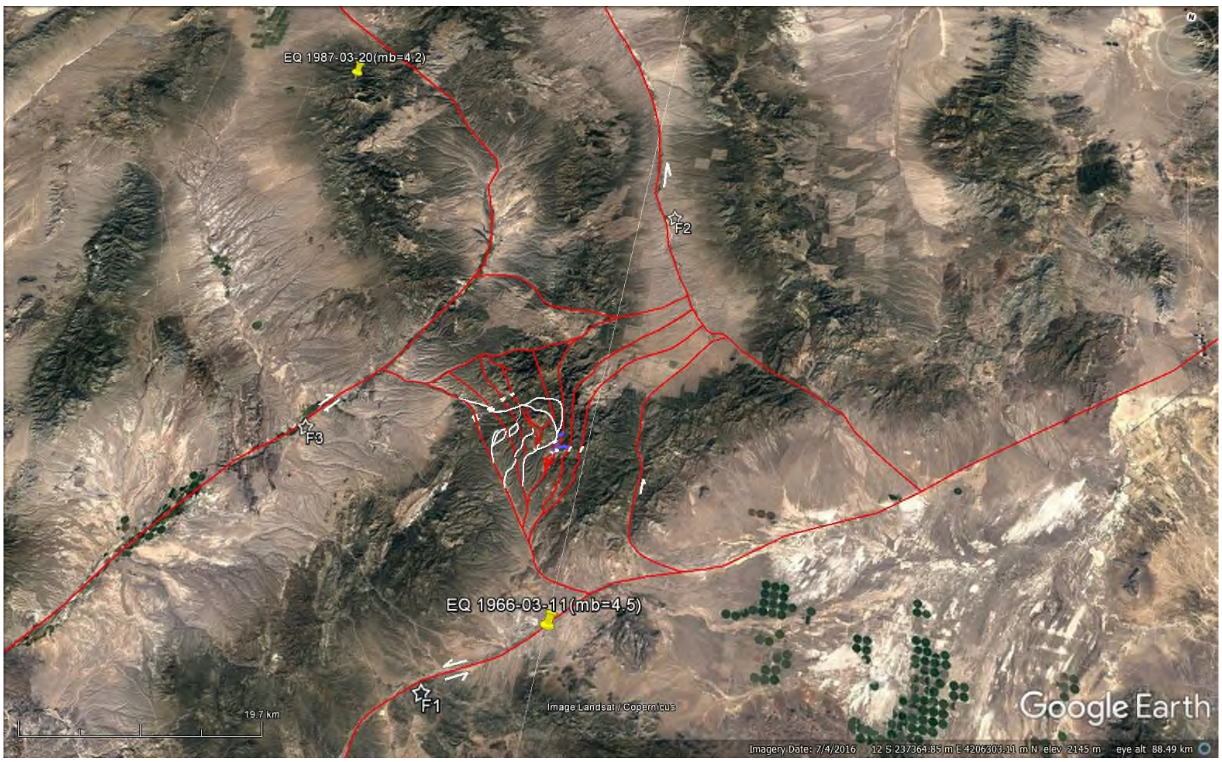
Figure 7-2: Map Showing the Project Geology, Structures and Resource Locations



vein strikes north-30° east and dips 72° south and is associated with pervasive sericitic alteration and some quartz veining.

In 2017 the Company contracted with GRE to have an overview structural interpretation completed by Dr. Hamid Samari and provide recommendations for potential targets based on the findings. GRE review of satellite images indicates that the Gold Springs area has been surrounded and affected by three main strike slip faults (F1, F2, and F3) and eight moderate strike slip faults (Eastern F1, Eastern F2, Jumbo, Etna, North Grey Eagle, South Grey Eagle, Western F1, and Western F2) as shown onFigure 7-3. Faults F1 and F2 are sinistral strike-slip faults, and fault F3 is a dextral strike-slip fault. Faults EF1, EF2, Jumbo and Etna are sinistral; North Grey Eagle, South Grey Eagle, Western F1, and Western F2 are dextral.

Figure 7-3: Main and Moderate Strike Slip Faults Around and In the Gold Springs Project Area

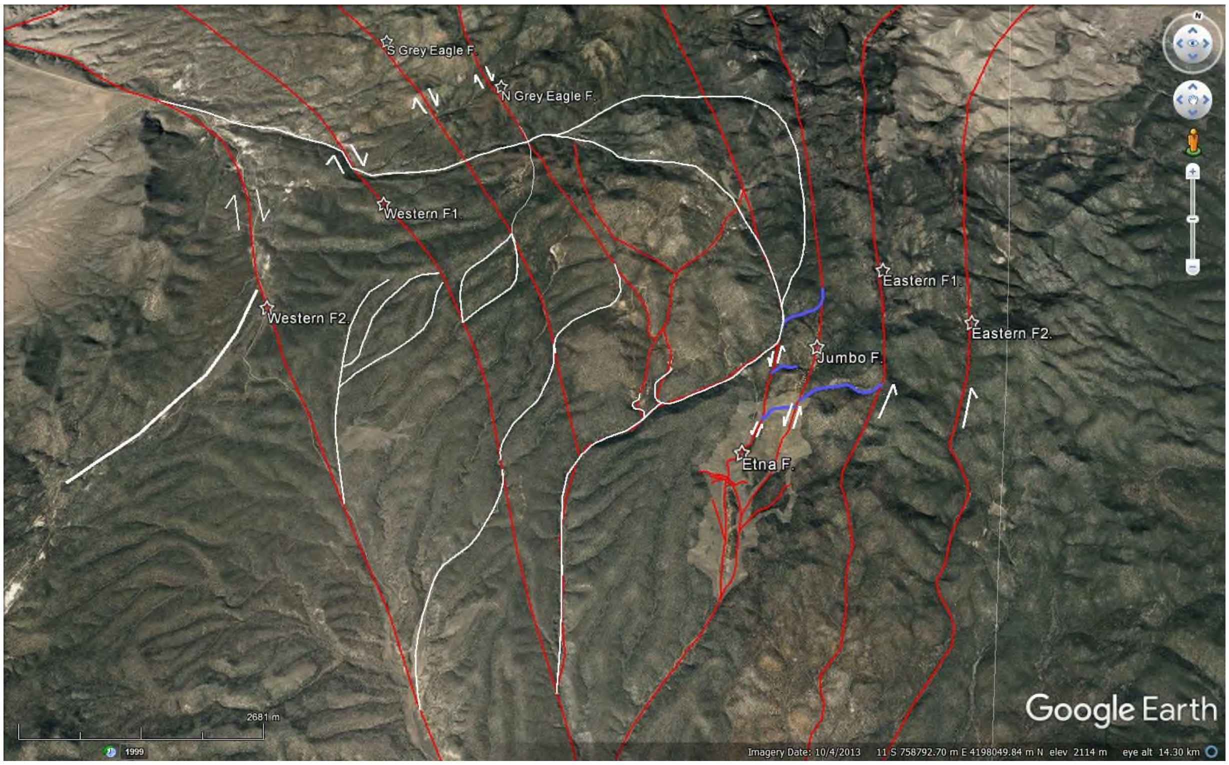


GRE determined the movement mechanism for all above-mentioned faults from satellite images based on morphology and morphotectonic features. They were determined by consideration of sharp and clear displacement of rivers and S-shapes and rhomboidal forms of some drainages. The above-mentioned features are easily defined within the North Jumbo, South Jumbo, South Grey Eagle, and Western F1 faults.
As shown in The action of all main and moderate strike slip faults generates tension stress and rotational movement in the central region interior to the faults. This tension and rotational movement likely caused the collapse of the caldera. The shape of the collapsed caldera was controlled by the location and trends of the four dextral moderate-strike slip faults.

Figure 7-4, four moderate sinistral (left lateral) faults in the Gold Springs Project area are parallel and have northeast-southwest to north-south trends. Four other moderate dextral (right lateral) strike slip faults have general northwest-southeast trends.

The action of all main and moderate strike slip faults generates tension stress and rotational movement in the central region interior to the faults. This tension and rotational movement likely caused the collapse of the caldera. The shape of the collapsed caldera was controlled by the location and trends of the four dextral moderate-strike slip faults.

Figure 7-4: Eight Moderate Strike Slip Faults in the Gold Springs Project Area



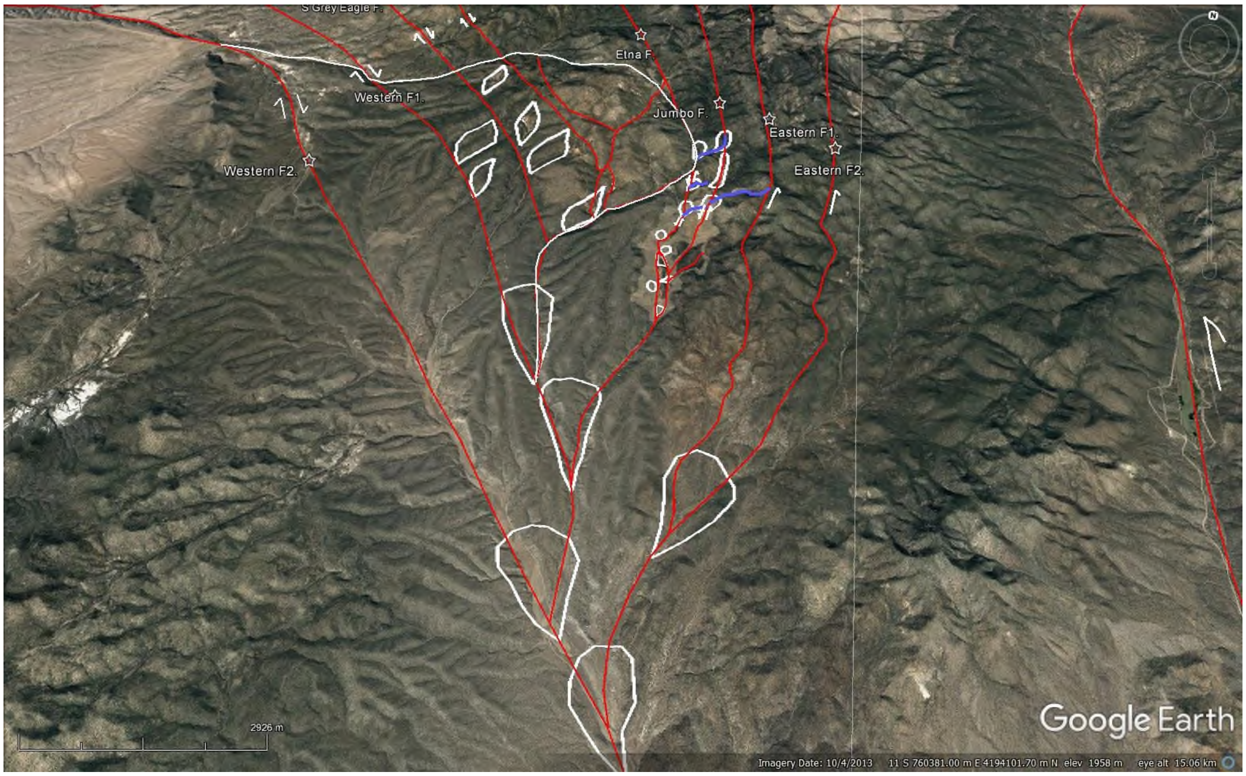
The caldera collapse event lead to increased vertical and downward forces, which may have increased the presence of hydrothermal solution regions in or around the collapsed caldera. As previously mentioned, eight strike slip faults are located in the vicinity of the collapsed caldera, and some of them pass through and cut the caldera. These lineament features and the area between them are important places for hydrothermal activity and mineralization.

In some areas, mineralization is more concentrated within or near the faults, such as at North Jumbo and South Jumbo. In these areas, the faulting has created more open space and a conduit for hydrothermal fluids and mineralization.

By considering the model concepts presented above and applying them to the structural geologic model of the region, GRE identified promising areas for supplementary exploration, as shown on Figure 7-5.

On July 19, 2018, the Company announced the completion of a structural context analysis identifying five prospective drill target areas in the central portion (Central Jumbo) of the significant Jumbo Trend at the Gold Springs Project. The Company will use the analysis to support further gold exploration and future drilling at Gold Springs. TMI engaged SRK Consulting (Canada) Inc. (SRK) from Toronto to investigate the structural controls for gold mineralization within the Central Jumbo area, between the North Jumbo and South Jumbo resource zones. The North and South Jumbo zones lie within a defined 5.5-kilometre-strike of the Jumbo Trend in Utah in the eastern portion of the Gold Springs Project. Dr. Antoine Caté of SRK produced the Central Jumbo structural report (the "SRK Report") for the Company based on interpretation from a site visit to key outcrops and evaluating structural geology, which were used to define the five drill target areas. The Company believes that prospective gold mineralization exists in Central Jumbo and that

Figure 7-5: Promising Areas for Supplementary Exploration in the Gold Springs Project Area



an improved understanding of the fault structures pervasive throughout the area will assist in future drill targeting.

7.5 Mineralization

Mineralization in the Gold Springs area is characterized by large through-going structural corridors hosting veins, breccias, and disseminated gold and silver mineralization in altered rocks. These are generally north-striking faults and structures that are the primary control for the low sulfidation-type gold bearing quartz veins, with subsidiary northeast and northwest striking veins also noted in the target areas. In addition, caldera margins, collapse features, and breccias provide areas of structural preparation and host mineralization within the Grey Eagle resource area. Andesite and latite flows are the primary host rocks to the gold-silver mineralization in the district and were intercepted during drilling conducted by GRC at the North Jumbo, South Jumbo, Central Jumbo, Thor, North Jennie, Charlie Ross, Homestake, Midnight, Grey Eagle, and White Point target areas.

In general, the gold mineralization in the Gold Springs area consists of structurally controlled quartz-adularia +/-calcite veins, hydrothermal breccias, and associated stockwork and sheeted veins, in addition to broad areas of disseminated mineralization. Host rocks adjacent to the veins and stockwork zones are variably silicified and exhibit sericitic (illite), argillic, and propylitic alteration in a general progression away from the major vein structures. Mineralization also occurs in the Gold Springs rhyolite ash-flow tuff that locally overlies the andesites, and here the mineralization occurs as stockworks surrounded by broad areas of sericitic (illite) alteration associated with the presence of fluorite. There are at least two distinct episodes of gold mineralization observed in the project area.

The dominant orientation for vein systems in the district is north-northwest to north-northeast with variable dips to the east and west. Individual veins may be segmented and occur in a regional belt or zones of mineralization that trend north to south. On a local scale, there are some distinct differences observed in the styles of mineralization between the North Jumbo, South Jumbo, Thor, and Grey Eagle zones, which are described below in detail in the following section for each of the target areas.

Within the vein zones, quartz is generally coarse-grained crystalline and appears in crustiform, colloform banding, comb, and pseudomorphs of bladed carbonate forms. The quartz veins are generally white to light grey and greenish in color. Multiple episodes of veining are evident from the replacement textures and the different varieties of vein material being crosscut by subsequent veins.

Sulfides are uncommon in the veins and generally constitute <1% of the veins, but when observed, they typically occur as pyrite, predominantly in the Jumbo Trend. Pyrite is observed disseminated throughout lateral or vertical zones within the host matrix or as blocky or equant crystals along fracture surfaces. Gangue minerals include calcite (with occasional iron and/or manganese carbonates), fluorite, and locally abundant amounts of adularia.

The North Jumbo-South Jumbo zones, referred to generally as the Jumbo Trend, is defined as a prominent north-south striking structural zone of veins, stockworks and breccias that cut altered and mineralized andesites and latites. The Grey Eagle resource is characterized by numerous veins cutting hematite-altered andesites. A younger stage of mineralization in the Gold Springs caldera consists of pipe-like bodies that cut the rhyolite dome and intra-caldera flows where gold mineralization is associated with late-stage hematite and fluorite in breccias that form pipe-like bodies. An example of this is the Pope and Charlie Ross areas where gold mineralization occurs in stockworks, fractures, and veins cutting welded tuffs on the margins of the Gold Springs caldera.

7.6 Target Areas

GRC has identified several target areas for gold mineralization located across the project area. These targets are shown in Figure 7-6 and include veins, stockworks, and disseminated styles of mineralization similar to that observed in the Jumbo and Grey Eagle resource areas. In addition, several target areas show gold mineralization hosted by welded tuffs and pipe-like breccias that are spatially associated with the Gold Springs caldera complex. The following is a synopsis of the targets where GRC conducted drilling and sampling followed by a brief description of additional targets that are identified in the project area. Table 7-1 summarizes the work completed by GRC for each of the target areas.

Figure 7-6: Map Showing the Target Areas Identified by GRC in the Gold Springs Project Area

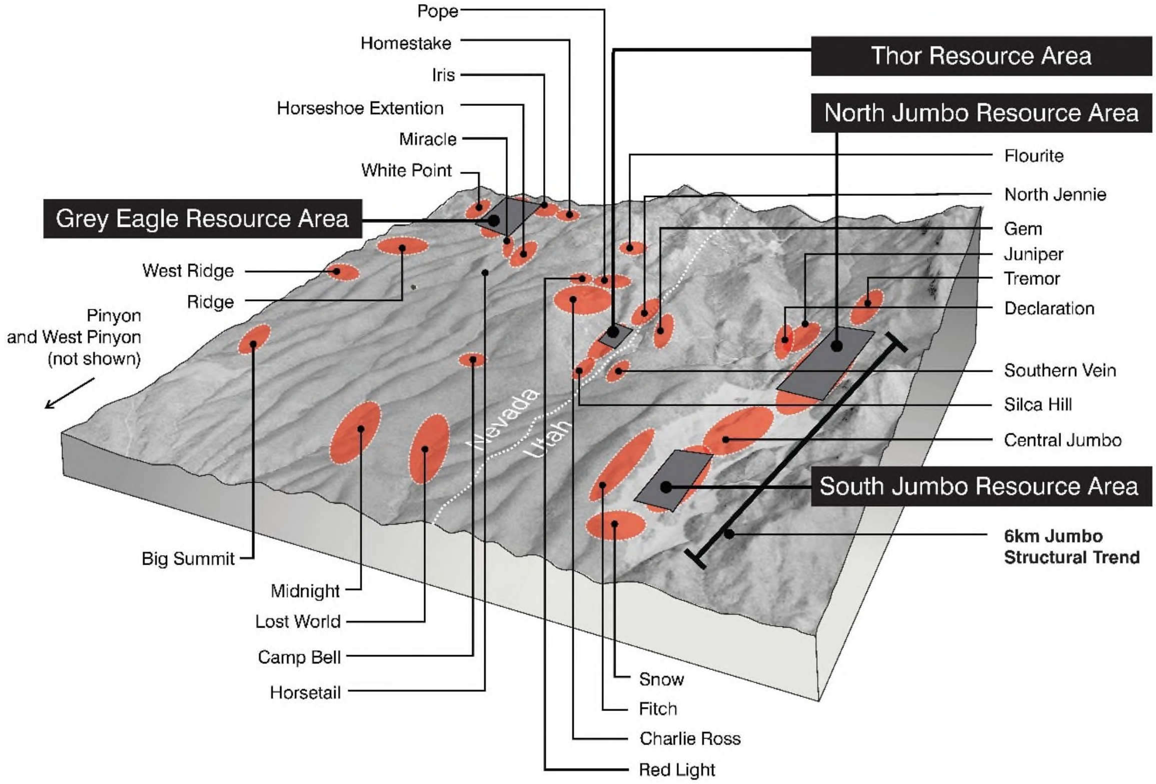


Table 7-1: GRC Target Areas and Comprehensive Summary of Work Completed through April 2020

Target	RC Drilling	Core Drilling	Mapping	Rock Chip Sampling	Soil Sampling
North Jumbo/Tremor	116 holes-GRC 16 holes pre-GRC	3 holes GRC	Yes	Detailed	Yes
Thor	14 holes GRC 2 holes pre-GRC	1 hole GRC	Yes	Detailed	Yes
Grey Eagle	85 holes GRC	2 holes	Yes	Detailed	Yes
Homestake	14 holes GRC	No	Yes	Detailed	Yes
White Point	14 holes GRC	No	Yes	Limited	Yes
Midnight	2 holes GRC	No	Yes	Detailed	Yes
South Jumbo	52 holes GRC 4 holes pre-GRC	No	Yes	Detailed	No
North Jennie	1 hole GRC 1 hole pre-GRC	No	Yes	No	No
Fluorite	3 holes GRC	No	Yes	Limited	No
Silica Hill	5 holes	No	Partial	Detailed	Yes
Silica Hill Extension	No	No	Partial	Detailed	Yes
Lost World/Camp Bell	No	No	Yes	Limited	No
Pope	2 holes GRC	No	Yes	Detailed	No
Charlie Ross/Tin Can	25 holes GRC	No	Yes	Detailed	No
Horseshoe extension	No	No	Yes	Detailed	Yes
Iris	No	No	Yes	Detailed	Yes
Central Jumbo	18 holes GRC	No	Yes	Detailed	Yes

Target	RC Drilling	Core Drilling	Mapping	Rock Chip Sampling	Soil Sampling
Snow	No	No	Yes	Limited	No
Ridge	No	No	Yes	Limited	No
West Ridge	No	No	Yes	Limited	No
Declaration	No	No	Yes	Detailed	No
Miracle	No	No	Yes	Limited	No
Gem	No	No	Yes	Limited	No
Red Light	1 hole GRC	No	Yes	Limited	Yes
Fitch	No	No	Yes	Detailed	No
Juniper	5 holes GRC	No	Yes	Detailed	Yes
Pinyon	No	No	Yes	Detailed	No
West Pinyon	No	No	Yes	Detailed	No
Big Summit	No	No	Yes	Detailed	No

7.6.1 Jumbo Trend

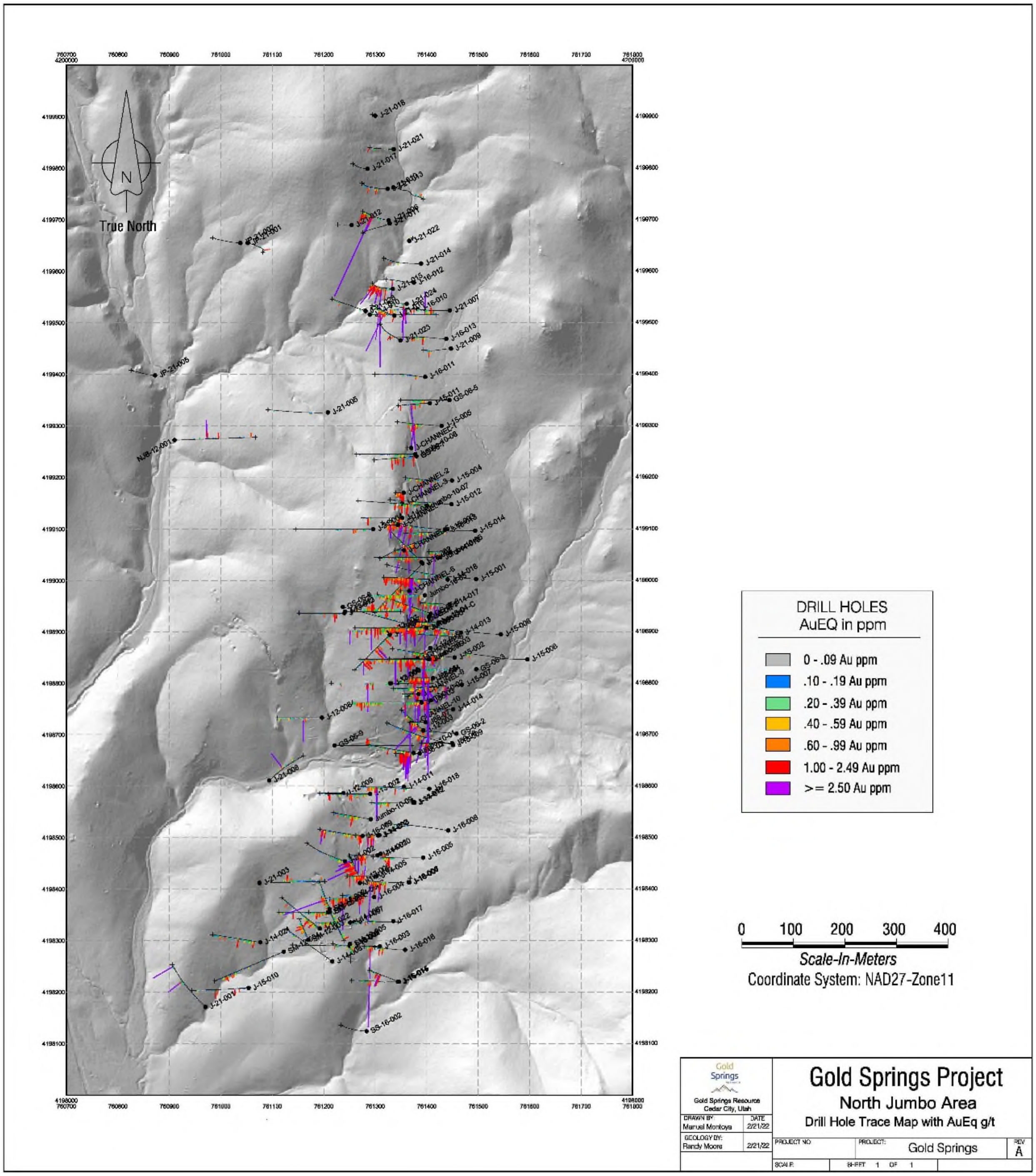
The Jumbo Trend is located in the east-central part of the project area and consists of three target areas, North Jumbo, Central Jumbo, and South Jumbo (Photo 7-1). The Jumbo Trend extends approximately 8 km and is coincident with a significant ZTEM and CSAMT anomalies that appears to continue under colluvium (Figure 9-4:). GSLLC has completed a total of 144 holes in the Jumbo Trend from 2010 through 2017. Prior to this, Astral completed nine drill holes in 2006, Amanda Resources completed three drill holes in 2003, and Energex completed 10 drill holes in 1988. This body of data provides the basis for determining the resource at North Jumbo and South Jumbo (Etna). Since the updated resource as described in Section 14.0 was filed an additional 51 holes were drilled in the Jumbo Trend within the North, Central and South Jumbo targets in 2021. These holes were primarily designed to extend the known mineralization and to test for continuity in the higher-grade material.

North Jumbo Resource Area

The North Jumbo resource area consists of a continuous structural zone that can be traced on surface for 1,500 metres before it is obscured by post-mineral cover to the north. The North Jumbo target area is characterized by a prominent vein and breccia central corridor up to 30 metres wide along a north-south striking and a steep easterly dipping zone that forms outcrops as shown in Photo 2-1. The southern portion of this resource is characterized by numerous veins and stockworks over a broad area of up to 150 metres wide (Photo 7-1). The northern extension of the Jumbo system is primarily defined by the Z-Tipper Electromagnetic System (ZTEM) survey completed by GRC and the CSAMT survey conducted by GRC and Astral. Most of this northern area is covered by post-mineral andesite flows and colluvium with discrete windows that reveal altered volcanic rocks and vein material. In 2015, 2016, and 2021 drilling programs intercepted sub-surface mineralization beneath this post mineral cover (Figure 7-7). Recent mapping has identified windows in the post mineral cover north of the current drilling, which could extend the system an additional 600 metres to the north.

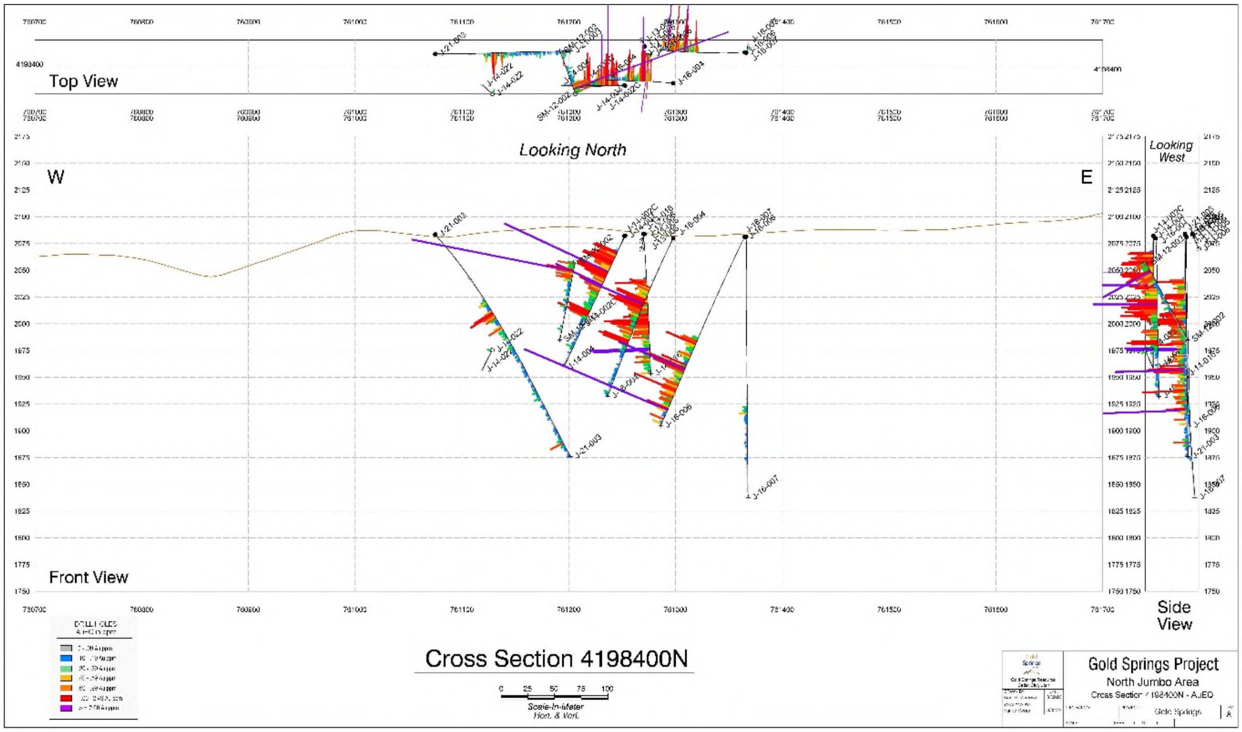
Photo 7-1: View of the North Jumbo Zone Looking North Showing the Main Vein Structure

Figure 7-7: North Jumbo Resource Area Drilling



Within the North Jumbo resource area, there is a massive quartz and quartz/calcite vein that can exceed 5 metres in width (Figure 7-8) and forms a rib as shown in Photo 2-1 and Photo 7-1, often referred to as the Jumbo Ridge.

Figure 7-8: North Jumbo Cross Section with High Grade Intercepts



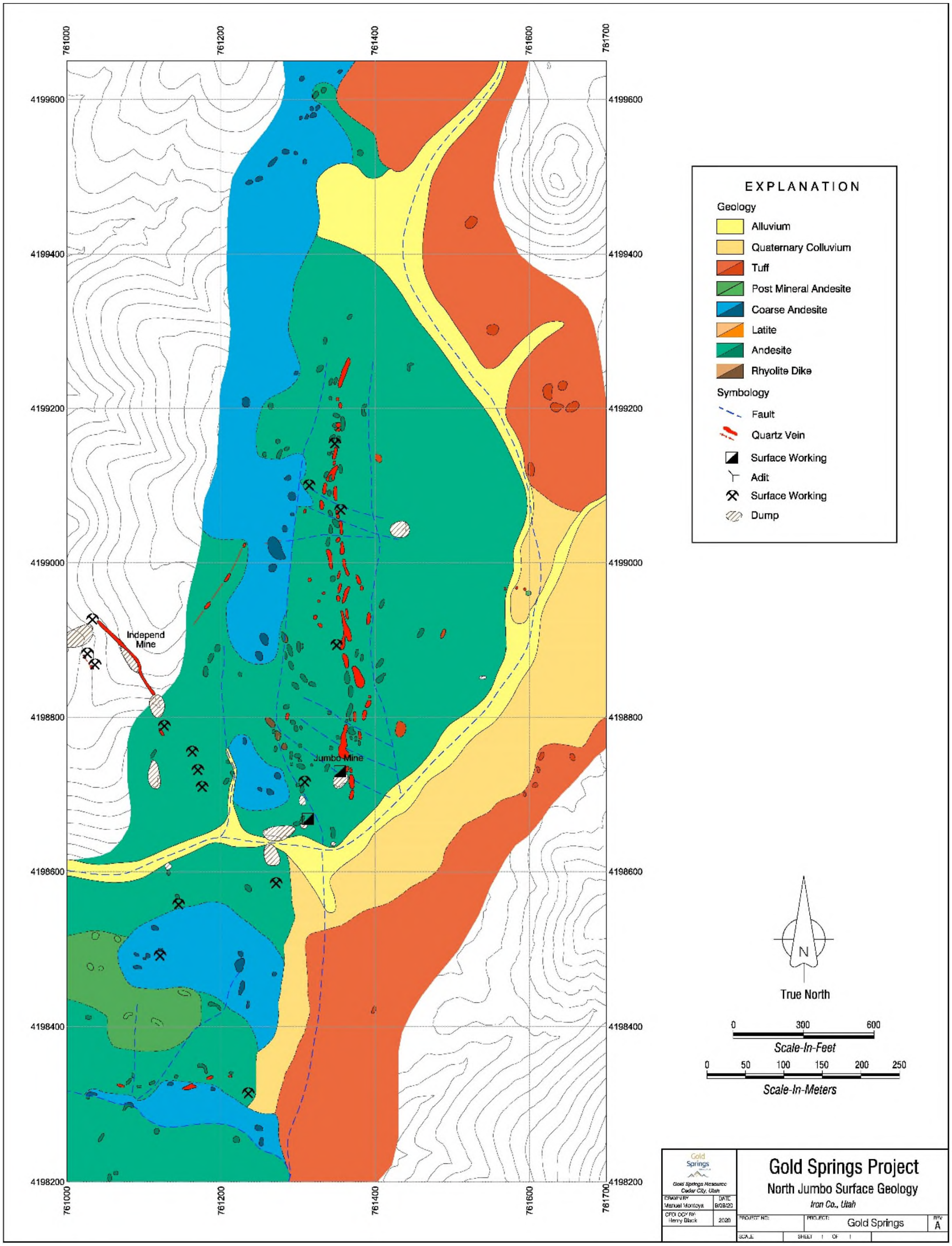
The central quartz vein is dense, fine-grained quartz, which on close examination will exhibit relict rounded pebble breccias, banding, and bladed texture after calcite. The distribution and rounded form of the breccia clasts indicate that they are derived from repeated hydrothermal brecciation and fluidization within the vein system. In some areas, the breccia consists of angular silicified wallrock clasts in a quartz matrix. The quartz veins exhibit bladed texture, which suggests that boiling occurred within the hydrothermal system. Adjacent to the veins and breccias, extensive areas of quartz stockwork veining becomes more diffuse outward from the main vein structures and grades into crackle fractures, breccias, and silicified rock.

The south end of the prominent Jumbo vein zone is offset by an east-west trending post-mineral fault that separates it from the southern portion of the resource area, where the vein structures are less prominent. This southern section is characterized by numerous veins, hydrofractures, micro-breccias, and stockworks that extend over a broad area. Locally within the main Jumbo system, there are somewhat discontinuous zones of distinct quartz veins, silicified wallrock, and quartz stockwork in both the footwall and hanging wall to the central vein structure. The pebble breccias occur within pipe-like bodies within the veins, where rounded to sub-rounded individual clasts of country rock are coated by a rim of acicular quartz crystals in a siliceous-quartz crystal matrix (Photo 7-2). In North Jumbo, mineralization is also associated with siliceous micro-breccias and hairline silica fractures, which may indicate significant over-pressuring of the hydrothermal system and fluid being released during hydrofracturing events into the surrounding wallrock. These structural zones occur in areas of apparent higher permeability distant from the main structural conduits and host gold mineralization in the stockworks, breccias, and disseminated in altered wallrock (Figure 7-9).

Photo 7-2: View of Pebble Breccia in the Main Jumbo Vein Zone

Note rounded clasts rimmed by quartz, many of the breccia clasts exhibit cross cutting relations from earlier vein episodes

Figure 7-9: North Jumbo Geologic Map



Wallrock alteration surrounding the Jumbo vein system typically extends outward from the vein into the adjacent andesite wallrock up to 200 metres. The low-sulfidation alkaline fluids which formed the main quartz-adularia +/- calcite veins appear to be associated with the QSP (quartz-sericite/illite-pyrite) alteration assemblage and are spatially proximal to the main structural conduit and gold mineralization. This alteration is observed to over-print the early propylitic (chlorite-epidote) alteration with potassium-iron smectite (celadonite) forming after chlorite, which results in a distinctive blue-green color to the QSP alteration. There is commonly an intense argillic alteration selvedge adjacent to, and along, the hanging wall of the main Jumbo vein zone that appears to be the result of an incursion of acidic fluids late during the collapse of the hydrothermal system (Figure 7-10). In the North Jumbo area, disseminated pyrite is paragenetically associated with an early alteration event and pre-dates the low-sulfidation gold mineralization. It is unclear if the early pyrite event is associated with any gold mineralization.

The 2021 GRC completed 26 holes at North Jumbo in 7,847 meters. Drilling focused on extending the North Jumbo resource to the north and to the west in the southern portion of the resource area. Drill hole locations can be seen in Figure 7-7. These holes were successful in demonstrating continuation of the mineralization to the north with gold intercepts that are generally higher in grade than the overall average of the resource with thicker intercepts. Holes testing the western extension of the system demonstrated limited extensions in that direction both along the northern and southern portions of the defined resource. Holes J-21-006 and J-21-015, located to the north of the resource, intersected a high-grade vein system in the upper part of the holes and immediately following the vein entered thick zones of a gold bearing granodiorite intrusive. The mineralized intrusive is unique to the northern extension of the North Jumbo resource containing abundant magnetite and displaying potassic alteration. This new style of mineralization has been designated the Tremor target in order to clarify the difference between it and the epithermal system at North Jumbo. Geologic mapping does not currently cover the entirety of this northern Tremor target area, though the target is largely covered by post-mineral flows and tuff packages (Figure 7-9). Eighteen holes were drilled in the area of this intrusive with 4 intersecting gold mineralization. Significant intercepts from the Tremor zone include:

- J-21-006 24.4 meters @ 5.95 g/t Au and 66.5 g/t Ag
  including 4.6 meters @ 27.3 g/t Au and 259.4 g/t Ag
  and 82.3 meters @ 0.52 g/t Au and 4.7 g/t Ag
- J-21-015 163.1 meters @ 0.93 g/t Au and 5.1 g/t Ag
  including 33.5 meters @ 1.32 g/t Au and 7.4 g/t Ag

Table 7-2 highlights of all the mineralized gold intercepts in the North Jumbo resource area.

Figure 7-10: North Jumbo Alteration Map

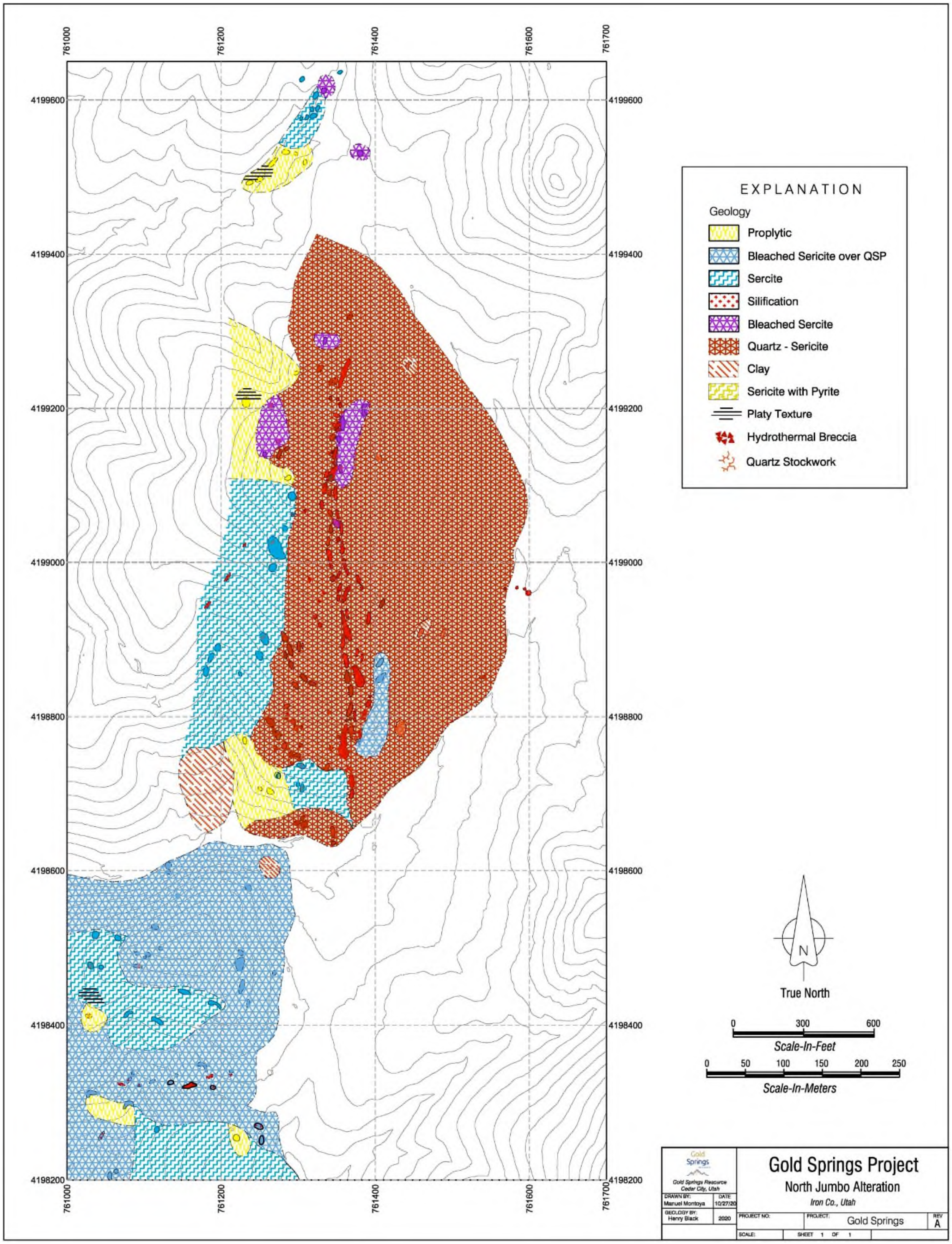


Table 7-2: North Jumbo Drill Results from 2021

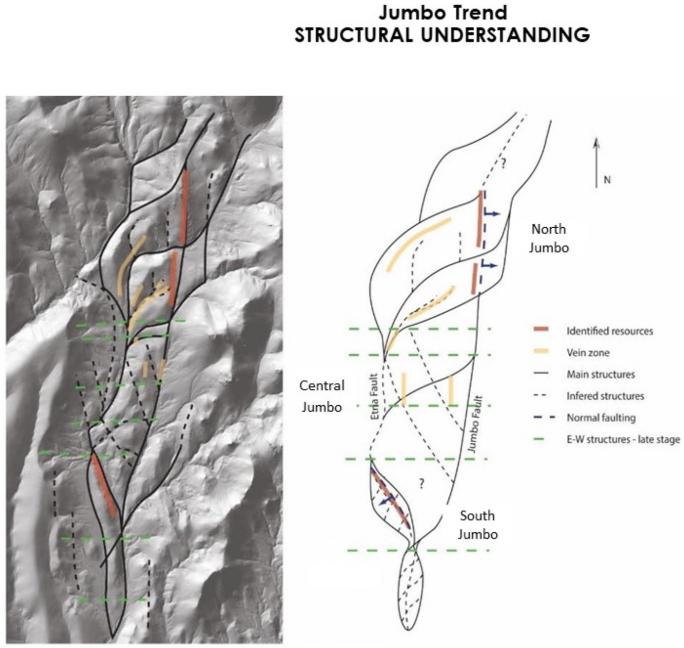
Hole	From (m)	To (m)	Thickness (m)	Gold (g/t)	Silver (g/t)
J-21-001	140.2	143.3	3.1	2.1	3.5
J-21-002	6.1	9.1	3.0	0.46	7.5
J-21-003	88.4	99.1	10.7	0.62	7.91
JP-21-004	178.3	179.8	1.5	1.02	99.7
J-21-006	118.9	143.3	24.4	5.95	66.5
including	129.5	134.1	4.6	27.3	259.4
and	192.0	274.3	82.3	0.52	4.7
including	192.0	217.9	25.9	0.68	5.7
J-21-008	73.1	80.8	7.7	0.98	8.9
J-21-009	166.1	176.8	10.7	0.51	6.3
J-21-010	187.4	193.5	6.1	0.97	3.0
J-21-011	74.7	76.2	1.5	1.13	8.9
and	155.4	161.5	6.1	0.61	12.9
J-21-015	108.2	271.3	163.1	0.93	5.1
including	108.2	141.7	33.5	1.32	7.4
including	109.7	120.4	10.7	3.07	13.5
including	109.7	114.3	4.6	5.89	20.5
including	147.8	271.3	123.5	0.87	4.7
J-21-016	93.0	102.1	9.1	1.76	44.0
including	94.5	99.1	4.6	3.08	83.0
and	132.6	147.8	15.2	0.41	18.6
J-21-024	21.3	29.0	7.7	2.72	12.9

7.6.1.1 Central Jumbo

GSLLC controls the Utah Trust Lands in Section 36, Township 20 West, Range 33 South. This area is along the central portion of the Jumbo Tend and is shown to have a strong ZTEM and CSAMT resistivity anomaly (Figure 7-7and Figure 9-5). There are numerous small pits located on these lands with wide areas of clay +/- sericite alteration.

Mapping and sampling were completed on this target in 2012, 2016, and 2020. The results of this work outlined several drill targets based on structural intersections and both CSAMT and ZTEM resistivity anomalies. Sampling of the vein systems have produced values in rock chip samples of up to 6.7 g/t gold over two metres from one prominent vein exposure. Surface exposures of veins scattered across this target area are generally lenticular and oriented N-S. These have been sampled from outcrops that carry values in the 1.0-2.0 g/t range gold. Central Jumbo is geologically characterized by a set of discontinuous quartz veins hosted within strongly clay altered and oxidized volcanic flows. The area is bounded by two north-south trending fault zones: the Etna fault to the west and the Jumbo fault to the east. Structural interpretations are complicated within the State Section target area due to offset along numerous east-west fault sets, and volcanic plugs that truncate and displace mineralization. There are similar structural features to the South Jumbo resource within this target area, with intersecting fault zones and left-lateral north-south faulting that requires further field studies (Figure 7-11).

Figure 7-11: Structural Setting of the Jumbo Trend



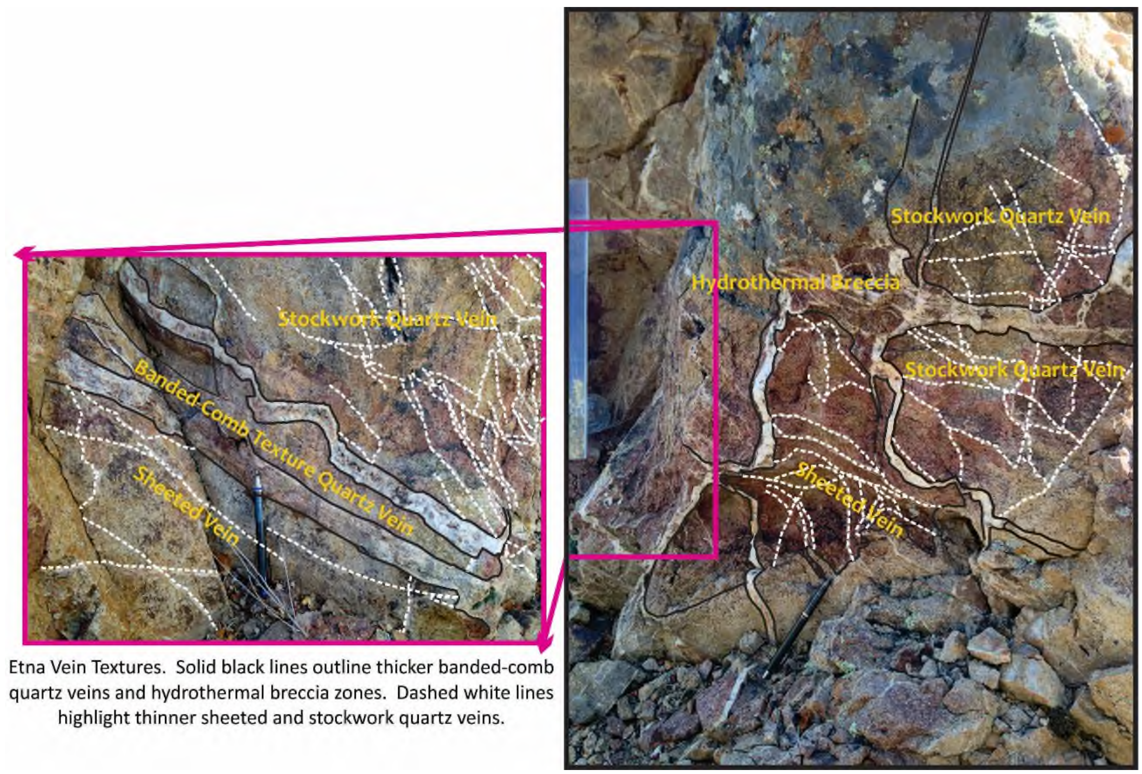
A total of 18 holes had been completed in Central Jumbo prior to 2021 with an additional 3 holes drilled in 2021. Significant drill results include drill hole SS-12-002 intercepting 6.1 metres at 2.2 g/t gold. This hole was drilled into an area of post-mineral cover to test a ZTEM anomaly. Three drill holes were completed in 2016 on the Central Jumbo target area. Drill hole SS-16-001 was drilled under one of the outcropping vein systems and showed significant gold grades, with 12.2 metres averaging 0.79 g/t gold and 5.79 g/t silver. Nine holes were completed in 2017 in the Central Jumbo target. This drilling was highlighted by hole SS-17-001 with 21.3 metres averaging 1.53 g/t gold and 2.5 g/t silver. Offset holes failed to intersect this mineralized zone. The 2021 holes were drilled along the western edge of the Central Jumbo target testing the Etna fault zone. No significant gold values were encountered but the wide intervals of sericite-clay alteration which were seen in these holes suggest a close proximity to an epithermal system. Future plans will include further testing of the CSAMT resistivity anomalies along the eastern portion of the target.

7.6.1.2 South Jumbo

South Jumbo resource area is located on the southern end of the Jumbo Trend, as defined by the ZTEM and CSAMT geophysical surveys and surface exposures of the mineralized zone. Mineralization at South Jumbo occurs primarily as quartz stockwork, sheeted quartz veins, and in hydrothermally brecciated andesite (Figure 7-12) and forms the prominent Etna Ridge extending from Newell Spring, on the south, for 1,000 metres to the north, where it is covered by post mineral andesite flows near the historic Etna Mine. The surface exposures of the South Jumbo zone range from 75 to 140 metres wide, with the greatest widths present along the north end of the zone. The silicified andesite locally forms large cliff outcrops along the eastern side of the ridge, where faulting has possibly displaced mineralization to the east below post-mineral cover.

Gold mineralization at South Jumbo and in the Etna Mine area is not characterized by a single prominent vein, unlike other targets in the project area where the quartz vein structures are one of the dominant mineralized features (Figure 7-12). The mineralized zone consists of silicification and re-cemented breccias and stockwork zones that grade into variably argillized andesite. With no single dominant vein in the South Jumbo system, the mineralization is characterized by a large block of silicified andesite that was shattered and brecciated by movement along two structures trending at 340^o on the east and west sides of the Etna ridge. Mineralization is hosted by silicified andesite, which originally appears to have been strongly jointed (trending approximately 240^o and 350^o) prior to silicification and subsequently fractured. Typically, mineralization is found within silicified andesite with hydrothermal brecciation, and crosscutting stockwork and sheeted veins (Figure 7-13 and Figure 7-14). An example is shown in Figure 7-10, where the thinner quartz veins commonly have comb, banded, vuggy, crustiform, colloform, and bladed pseudomorph (after calcite) textures. Several crosscutting dikes identified in drilling appear to utilize the same fractures and joints as the hydrothermal fluids and show weak to moderate, pervasive propylitic alteration.

Figure 7-12: South Jumbo (Etna) Vein Types and Textures



Etna Vein Textures. Solid black lines outline thicker banded-comb quartz veins and hydrothermal breccia zones. Dashed white lines highlight thinner sheeted and stockwork quartz veins.

During 2012 and 2014, GRC completed nine drill holes in the South Jumbo target, three in 2012 and six in 2014. The first drill hole was to twin a 1988 Energex hole (E88-01) that was reported to bottom in 3.05 metres at 9.3 g/t gold at a depth of 91.44 metres and contained 44.2 metres at a gold grade of 0.88 g/t gold (Caulfield, 1988; Smith, 2005). The drill site is located on the northern end of Etna Ridge, and the GRC drill hole E-12-001 intercepted 1.5 metres at 4.9 g/t gold at the same depth where the Energex hole bottomed in the high-grade interval. The 2012 GRC drill hole E-12-001 intersected 39.6 metres at 0.57 g/t AuEq between 61 and 100.6 metres. in 2014 GRC drill hole E-14-001 intersected 106.9 metres at 0.49 g/t AuEq.

Figure 7-13: South Jumbo Geologic Map

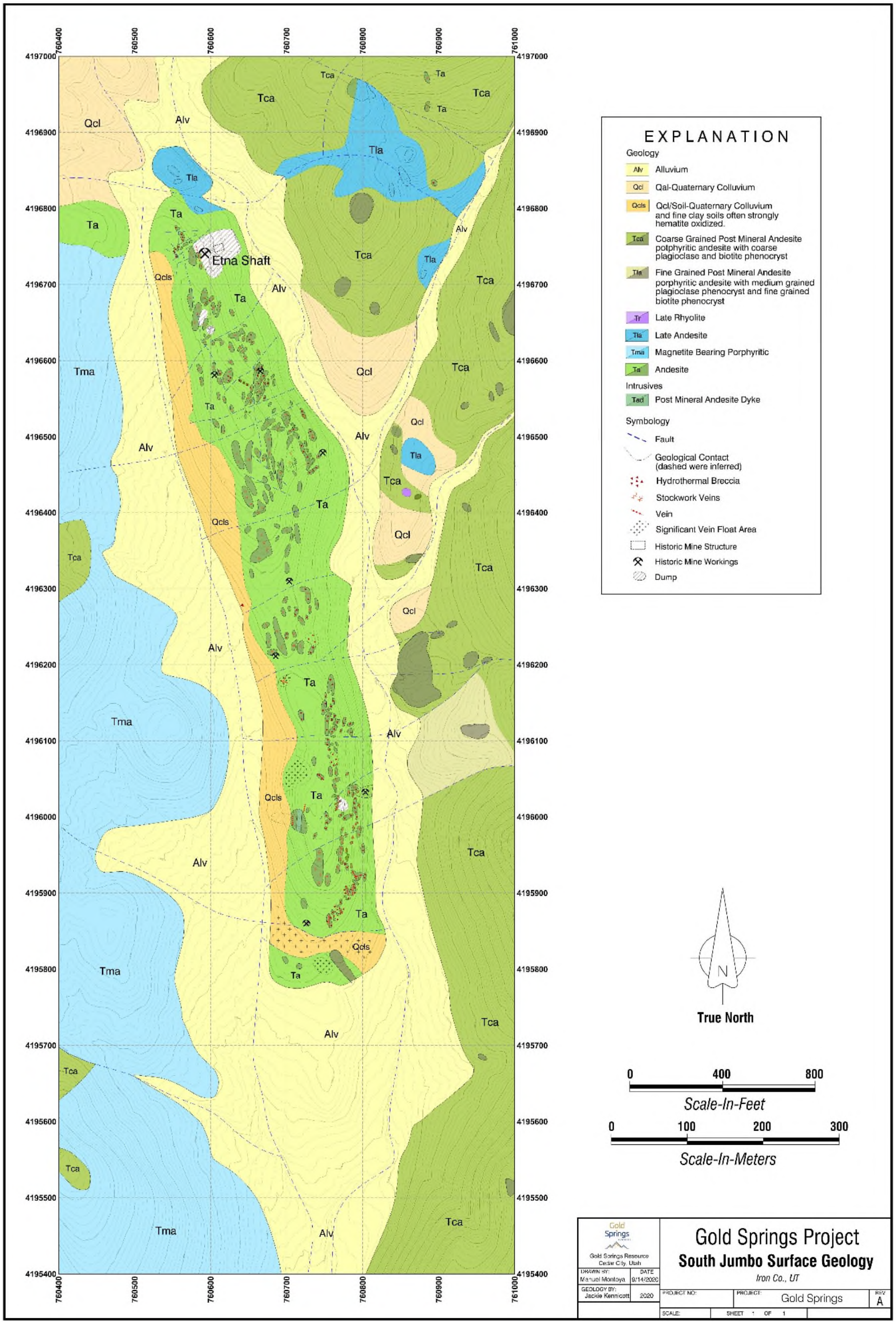
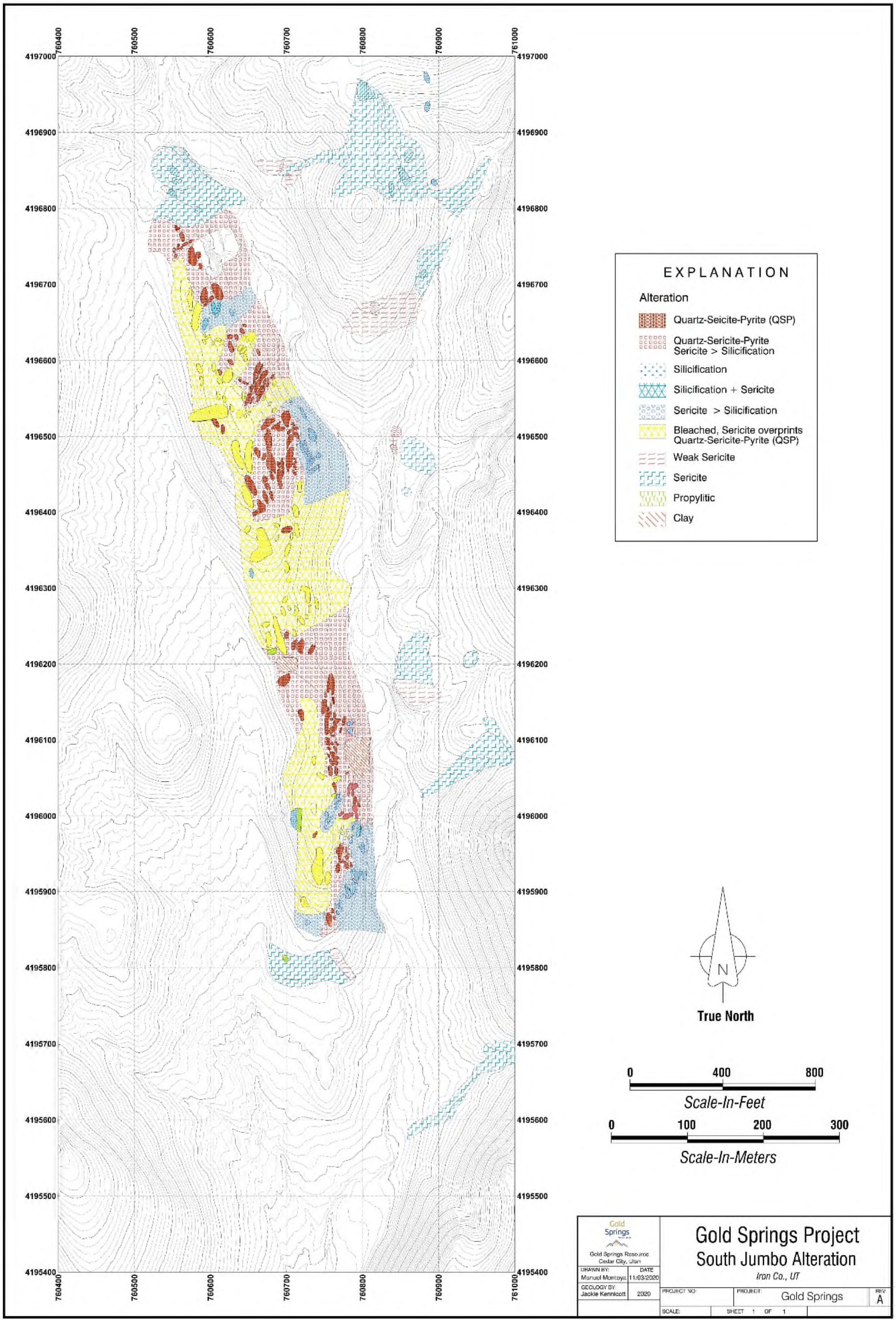


Figure 7-14: South Jumbo Alteration Map



During 2016, eight RC drill holes were completed at South Jumbo. These holes, along with E-12-001 and E-14-001, define a mineralized zone roughly 400 metres long and 150 metres wide that remained open to the North and South as well as laterally and at depth. The 2016 drill holes (except E-16-006) all collared in mineralized and silicified andesite. Drill hole E-16-001 was drilled at an azimuth of 90° with a -50° inclination to a depth of 215 metres and crossed the eastern bounding fault to the Etna ridge. The hole terminated in mineralization below post-mineral cover, with the last 15.2 metres of the hole averaging 0.67 g/t gold and 3.06 g/t silver. Drill hole E-16-005 confirms that the South Jumbo resource has widths similar to those observed at North Jumbo, with a 150.9-metre intercept averaging 0.87 g/t gold and 7.78 g/t silver. GRC completed 19 RC drill holes in 2017. This drilling was successful in extending mineralization to the south and defining higher-grade portions of the system. Drilling has intersected a higher-grade, horizontal pipe-like mineralized zone which has sufficient drilling to model this body (Figure 7-12). This zone has a thickness of 20.4 metres and averages 1.4 g/t gold and 13.0 g/t silver. It has been traced for 400 metres and remains open along strike. There is evidence from the drilling that there may be 2 or 3 more potential high-grade features in this same area (Figure 7-15).

In 2021 GRC completed 2,828 meters of drilling in 16 holes at South Jumbo. The holes were designed to test for extensions to the existing resource to the south, west, east, and at depth. Within the 1,000 meters of exposed mineralization along Etna ridge, there was a 400-meter gap in the drilling which was the result of a cultural site located in this area (Figure 7-16). In 2020 the site was cleared allowing for entry and the construction of drill roads and pads. Several of the 2021 holes were located in this gap zone (Figure 7-15). Drilling in the gap zone, located in the central portion of the resource, returned favorable results from the 6 holes located there. These include:

Figure 7-15: Target Areas for the 2021 Drill Program at South Jumbo Showing 0.25 g/t Au Grade Shell

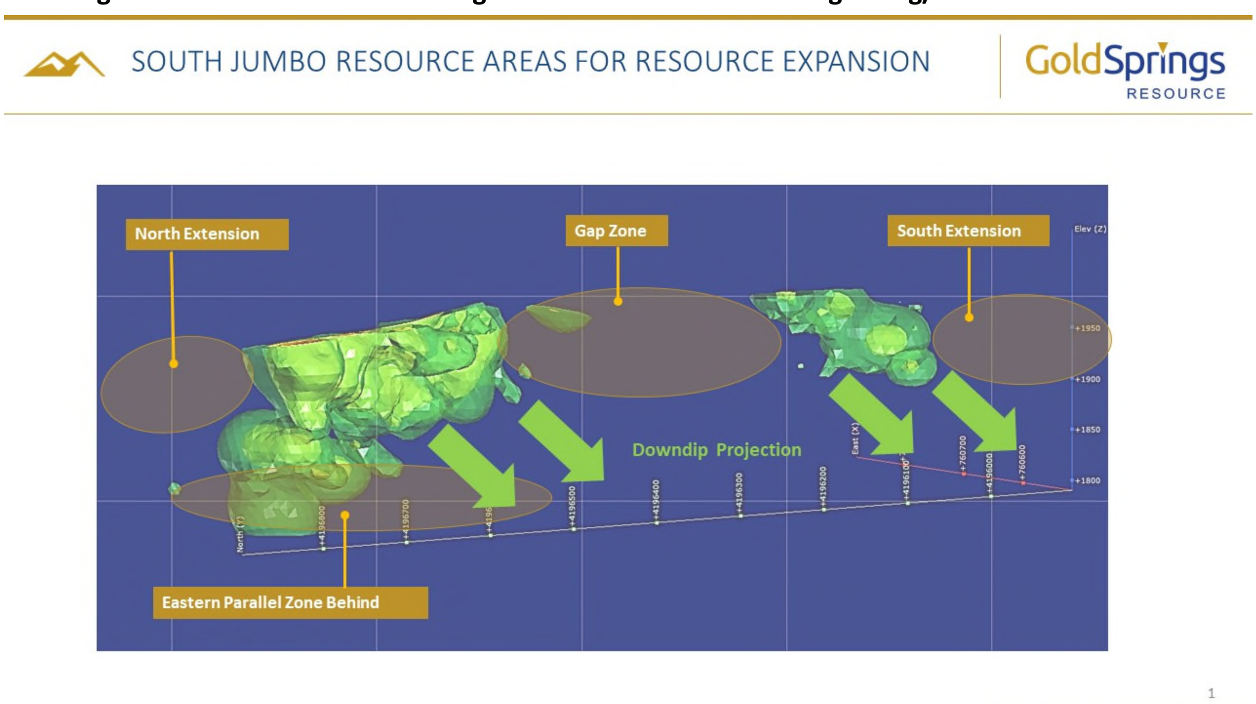


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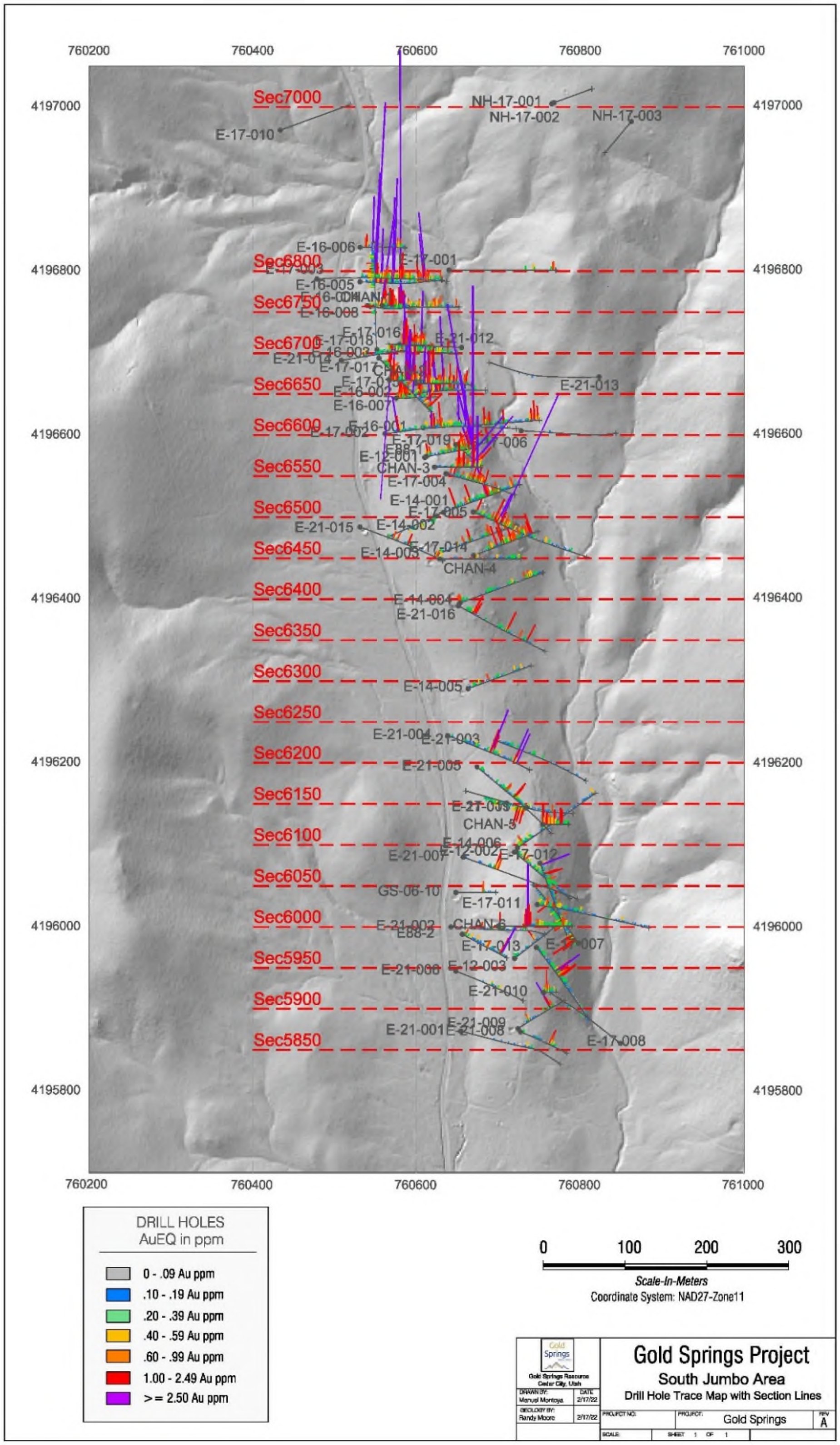
Figure 7-16: South Jumbo Drill Holes



- 0.29 g/t Au and 1.64 g/t Ag over 7.6 meters in hole E-21-003

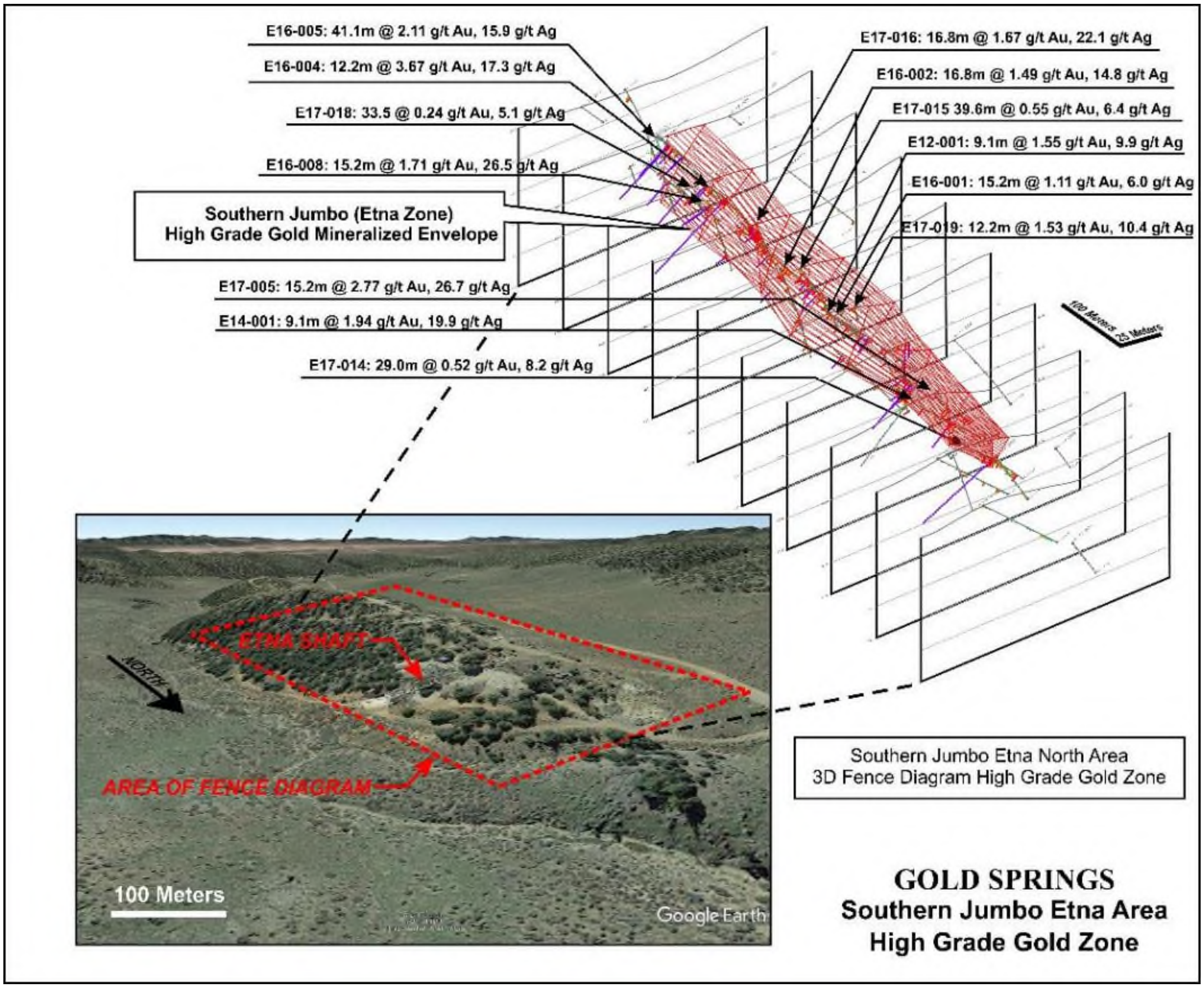
- 1.58 g/t Au and 8.3 g/t Ag over 7.6 meters and 0.97 g/t Au and 2.6 g/t Ag over 13.6 meters in hole E-21-004
- 0.46 g/t Au and 8.2 g/t Ag over 4.6 meters and 0.63 g/t Au and 7.2 g/t Ag over 7.6 meters in hole E-21-005
- 0.58 g/t Au and 6.7 g/t Ag over 9.1 meters in hole E-21-007
- 0.67 g/t Au and 4.2 g/t Ag over 20.9 meters in hole E-21-011
- 0.51 g/t Au and 3.3 g/t Ag over 16.8 meters in hole E-21-016

The 2021 drilling also extended gold mineralization an additional 85 meters to the south, where hole E-21-009 returned 0.51 g/t Au and 3.3 g/t Ag over 3 meters and 0.57 g/t Au and 8.0 g/t Ag over 13.7 meters. Hole E-21-012 extended the mineralization at depth along the western margin of the resource returning 0.58 g/t Au and 12.1 g/t Ag over 56.4 meters and 5.2 g/t Au and 12.4 g/t Ag over 19.8 meters ending in mineralization (Table 7-3). The deeper gold interval in hole E-21-012 may be part of a deeper high-grade zone as noted above and shown in Figure 7-17. Drilling conditions at South Jumbo are difficult in some areas and several holes were lost prior to reaching target depth including E-21-012. These holes are recommended for re-drilling in a future program.

Table 7-3: South Jumbo Drill Results from 2021

Hole Number	From Meters	To Meters	Thickness Meters	Gold g/t	Silver g/t
E-21-002	89.9	97.5	7.6	0.49	1.8
E-21-004	93.0	102.1	9.1	1.58	8.3
And	155.5	169.1	13.6	0.97	2.0
E-21-005	62.5	67.1	4.6	0.46	8.2
And	83.8	91.4	7.6	0.63	7.2
E-21-007	54.9	64.0	9.1	0.58	6.7
E-21-008	85.3	91.4	6.1	0.79	5.8
E-21-009	30.5	33.5	3.0	0.51	3.3
And	89.9	103.6	13.7	0.57	8.0
E-21-010	3.5	27.4	24.3	0.31	9.0
And	44.2	50.3	6.1	0.40	3.64
E-21-011	3.5	24.4	20.9	0.67	4.2
E-21-012	51.8	108.2	56.4	0.58	12.1
And	134.1	153.9	19.8*	5.2	12.4
E-21-015	99.1	100.6	1.5	1.01	2.0
And	243.8	245.4	1.6	4.32	10.3
E-21-016	19.8	36.6	16.8	0.51	3.3
and	103.6	108.2	4.6	0.81	6.6
and	160.0	161.5	1.5	1.5	2.0

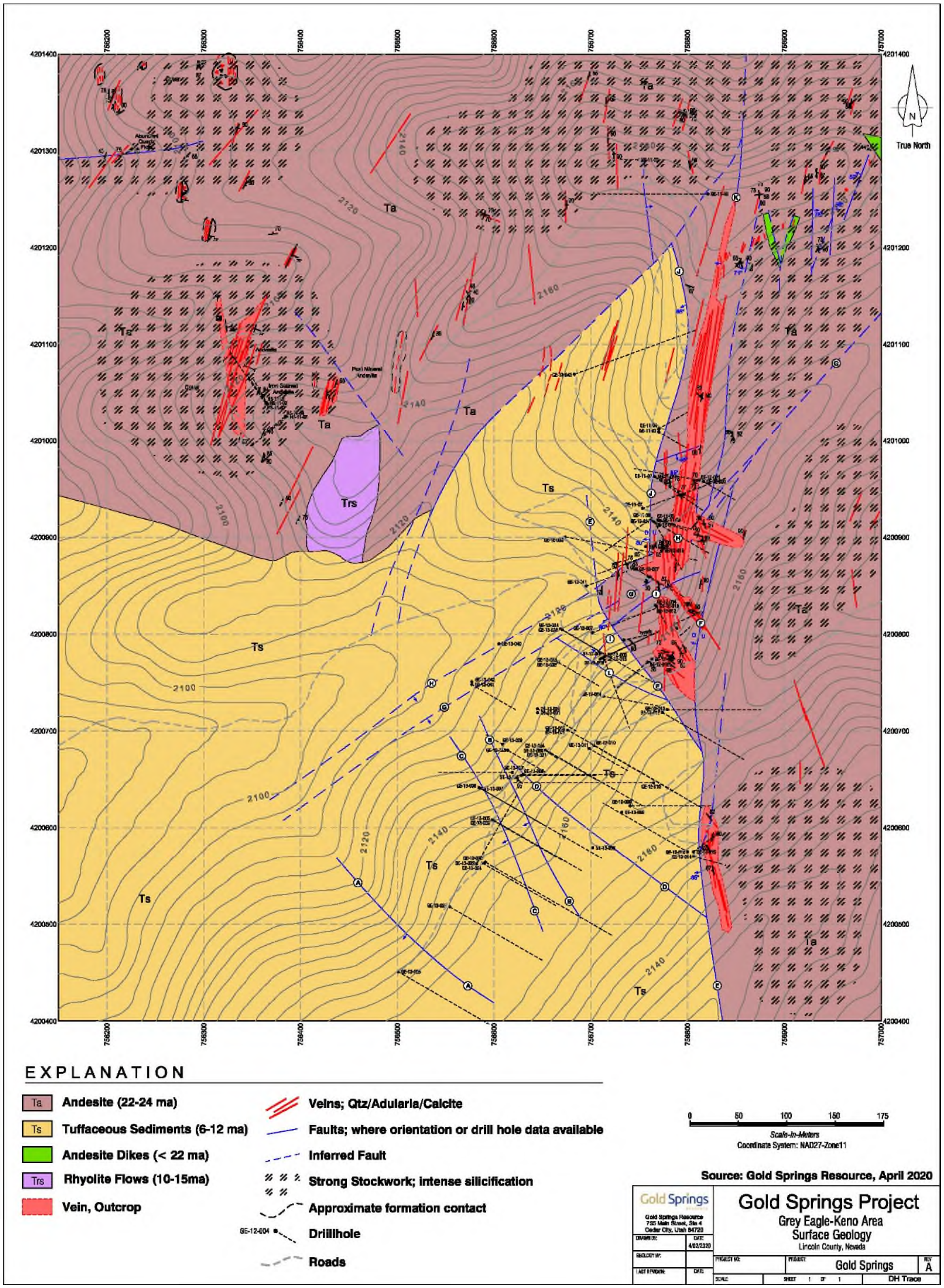
Figure 7-17: Higher-Grade Portion of South Jumbo (Etna)



7.6.2 Grey Eagle

The Grey Eagle target is characterized by a complex zone of intersecting veins trending north-south, northeast, and northwest within a north-northeast trending structural zone dipping 50° to 85° west. The structure is interpreted to be a segment of a caldera ring fracture system which is also observed in the ZTEM geophysical data (Figure 9-3). The zone is defined by an upper and lower bounding structure which is a segment of a bounding fault along a caldera margin. The rocks between the faults were shattered by differential movement along the structures, which resulted in a 20- to 80-metre-thick zone of permeable and mineralized material. The veins form within this structural package, which is traceable on the surface for over 700 metres before being obscured by post-mineral cover (Figure 7-18). The individual veins and vein zones are characterized by white quartz, crustiform, colloform banding, comb, and pseudomorphs of silica after bladed calcite forms. Calcite and fluorite have been observed both in outcrop and in drill samples. Areas of brecciation, stockwork, and sheeted veining are present throughout this package of structurally prepared rocks.

Figure 7-18: Geology and Mineralization in the Grey Eagle Zone



Rock chip sampling in the Grey Eagle target has been conducted across the area of mineralization, and the results show values of up to 13.85 g/t gold and 35.3 g/t silver. During 2012, GRC completed a 60-metre-long trench (Figure 7-19) across a portion of the southern Grey Eagle zone and opened two historic underground workings (Photo 7-3). The trench was nearly perpendicular to the strike of the mineralized zone and exposed five main north- south striking veins between 1.5 to 8 metres thick and numerous smaller veinlets and stockworks of varying orientation. A 56.4-metre-wide section cut perpendicular across the mineralization averaged 1.4 g/t gold and 10.1 g/t silver. GRC collected 22 select vein and surrounding host rock samples throughout the length of the trench. The selective samples assayed from 0.12 g/t to 8.59 g/t gold, with an average value for all samples of 1.4 g/t, which is identical to the average of the channel sampling in the trench. The 2013 and 2014 drilling programs demonstrated that this mineralization extends toward the south and west, where it lies covered by post-mineral tuff, rhyolite flows, and colluvium. No new drilling in the Grey Eagle target has been conducted by GRC since 2014.

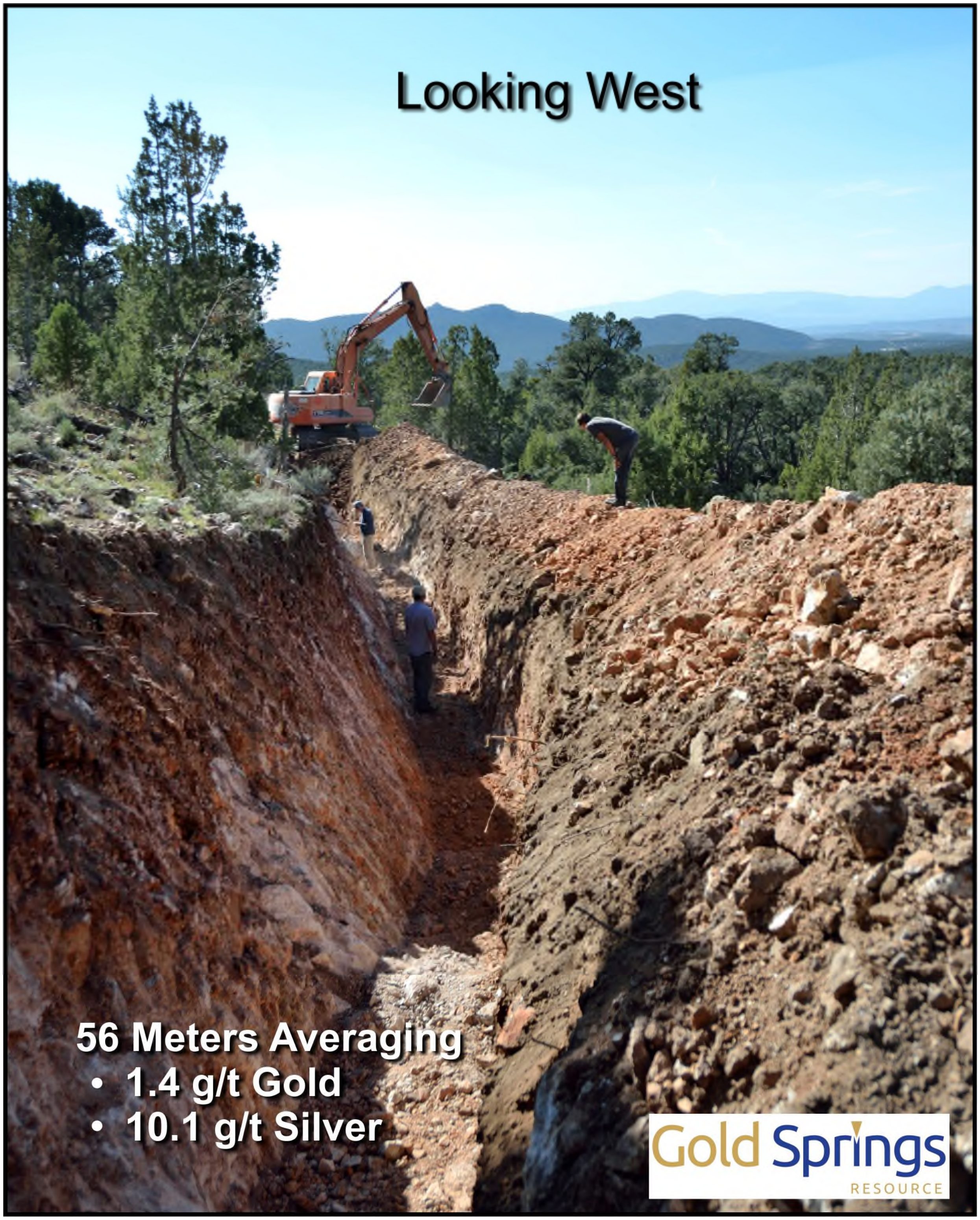
Surface sampling and trenching was conducted in the Grey Eagle target area in 2013. A series of eight, 5-foot continuous chip-channel samples across vein exposures along the north Main Ridge vein zone was conducted with line spacing of approximately 50 to 100 metres. The results showed strong Au-Ag mineralization (0.35 to 2.02 g/t Au) in most of the 5-foot channel samples across the northern zone.

An 800-foot (244-metre) long trench was excavated along the northern Grey Eagle Canyon ridgeline to expose the northern extension of the Main Grey Eagle Vein zone. Detailed sampling and mapping were completed on the >20-metre-thick main vein/stockwork zone and a series of complex, cross-cutting to sub-parallel footwall structural zones with variable quartz-calcite, +/-fluorite stockwork.

GRC has completed 85 drill holes in the Grey Eagle area for a total of 12,275 metres. The drilling in 2013 and 2014 was successful in extending known mineralization an additional 420 metres along strike to the south beneath post-mineral tuff. The mineralization consists of three anastomosing quartz-calcite sheeted vein-stockwork zones ranging from 45 to 100 metres in cumulative thickness that are oriented north-30° east and dip 50° to 65° west (Figure 7-20).

During the previous work at the Grey Eagle target, Energex conducted underground sampling from an adit (Deering, et al., 1985) beneath the trench that was excavated in 2012. The results (pre-43-101) from the Energex channel sampling report intervals of 0.91 metres at 11.56 g/t gold, 1.83 metres at 6.25 g/t gold, 0.91 metres at 10.31 g/t gold, 0.91 metres at 9.69 g/t gold, 0.91 metres at 6.25 g/t gold, and 3.5 metres at 12.5 g/t gold. These samples were all reported to have been collected from an underground stope that is in the footwall portion of the mineralized zone (Photo 7-3). During 2012, GRC collected select samples from these underground workings that showed values of up to 29.3 g/t gold and 47.4 g/t silver. These selective samples are from quartz and quartz-calcite veins, stockwork zones, and matrix-supported breccia cemented by silica.

Figure 7-19: Trench in the Grey Eagle Zone

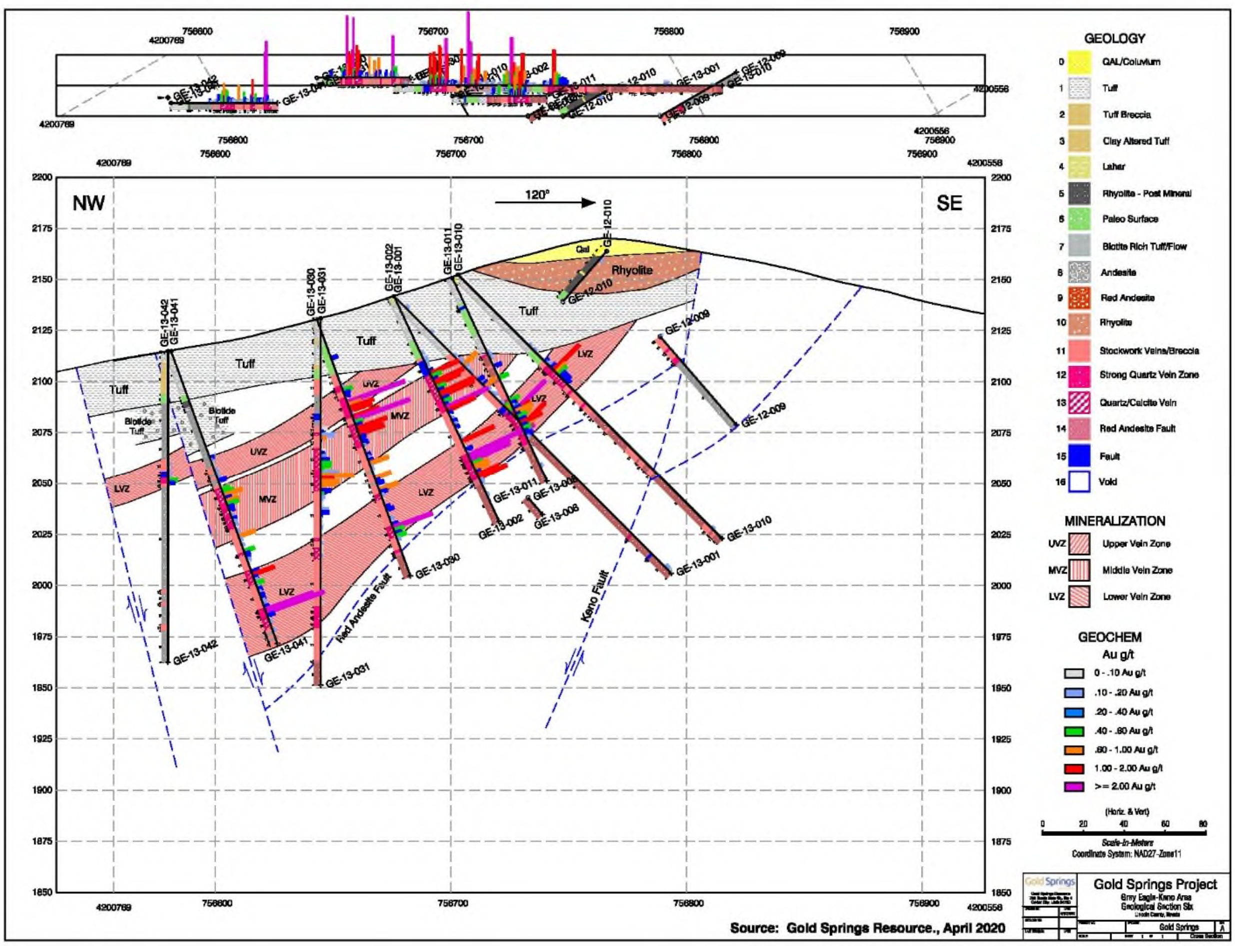


GRC trench through the southern Grey Eagle target area, showing vein mineralization

Photo 7-3: Underground Workings in the Grey Eagle Zone

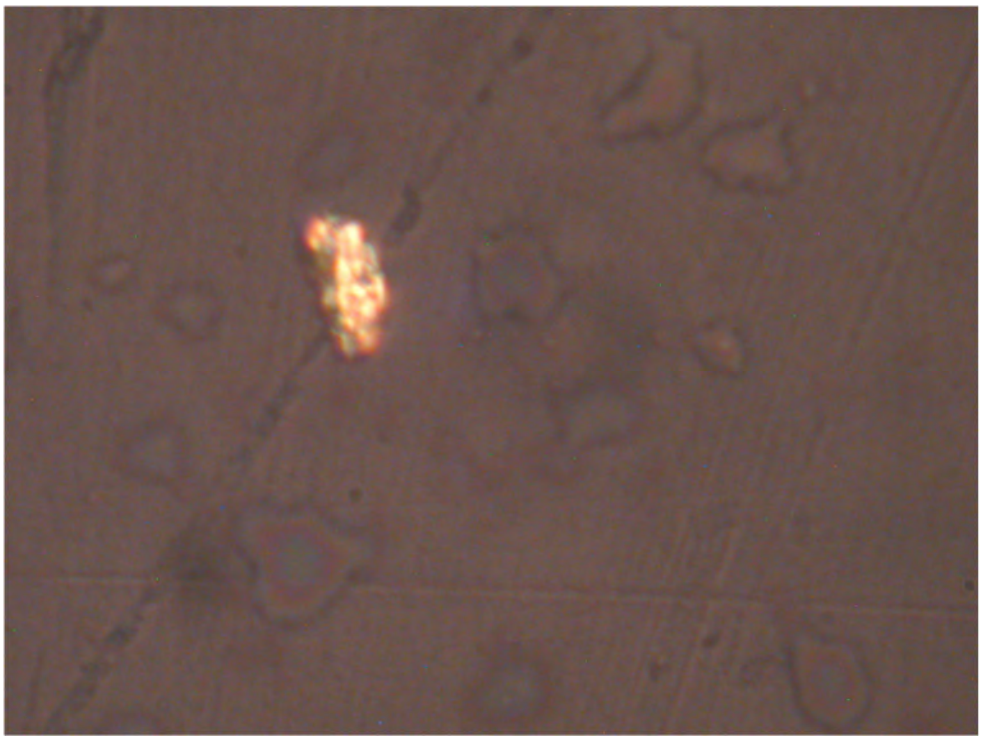
Underground workings in the Grey Eagle area, approximately underneath the GRC trench, showing some of the previous Energex sampling intervals

Figure 7-20: Cross Section Showing Geology and Mineralization in the Grey Eagle Zone



In the Grey Eagle system, gold and silver mineralization occurs within stacked quartz-calcite veins, stockwork, and breccia zones. Of particular interest is the observation that there is typically abundant calcite veining in close proximity to the precious metal mineralization and that some of the calcite appears to be contemporaneous with gold mineralization. Petrographic work identified gold grains within calcite in drilling samples from the 50.3- to 51.8-metre (165 to 170-foot) interval (sample #84451) in drill hole GE- 12-002. This interval had values of 0.347 g/t Au. The gold grain is observed to be within quartz vein material and fragments cemented by later calcite and aragonite. Some of the aragonite blades are replaced by quartz, and gold occurs in the quartz and calcite (Hansley, 2012). A photomicrograph in reflected light is shown in Photo 7-4**.** Previously, the calcite veining was thought to be a late stage of veining and to post-date gold mineralization in many parts of the Gold Springs project area.

Photo 7-4: Photomicrograph Showing Gold Grain in Calcite, Grey Eagle Target



Native gold grain in calcite in polished section under reflected light, 1000x, FL 110 microns.

7.6.3 White Point Target

The White Point target area is a 200-metre-wide zone of sheeted veins that is exposed for 300 metres along its north-south trend. The target is in the northwest portion of the property on patented claims and unpatented lode claims controlled by GSLLC. The mineralization is characterized by a 3-metre-wide north-south to northeast striking quartz-calcite vein system with an intersecting 5-metre-wide north 35° east quartz-calcite vein (Photo 7-5). In addition, there is a surrounding zone of sheeted northeast-trending quartz-calcite veins exposed in GRC drill roads and pads that can be traced for 300 metres along strike to the south where it is obscured by post-mineral volcanic flows and colluvium. The host rock to veining is a weakly altered, moderately to strongly oxidized andesite. This andesite host rock is strongly silicified directly adjacent to veining, but alteration weakens quickly away from vein walls (Figure 7-21). Oxidation within the host rock is widespread. Similarly, to the Grey Eagle resource, which is located 400 meters southeast of the White Point target area, mineralization at White Point is structurally complicated and contained within fault blocks related to caldera collapse features. The sheeted vein systems observed at surface are bound within sets of radial and ring faults related to the caldera collapse. Complexities in faulting displaces mineralization to the north and accommodates down dropping to the west and south. To the south mineralization is obscured by post mineral cover and to the west outcropping veins are limited due to this down drop (Figure 7-22). There are several shafts located within the White Point target, but there are no records of the historic production.

Photo 7-5: Vein Exposed in Caved Stope at the White Point Target

Figure 7-21: White Point Alteration Map

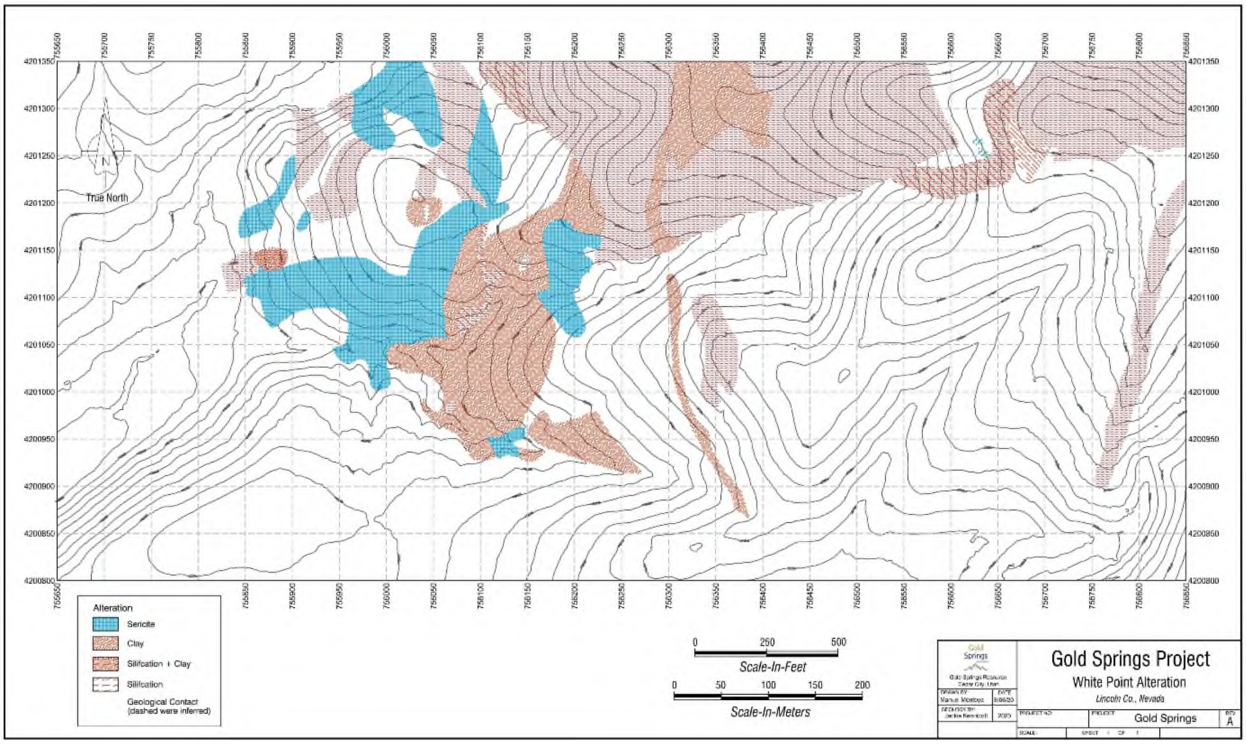
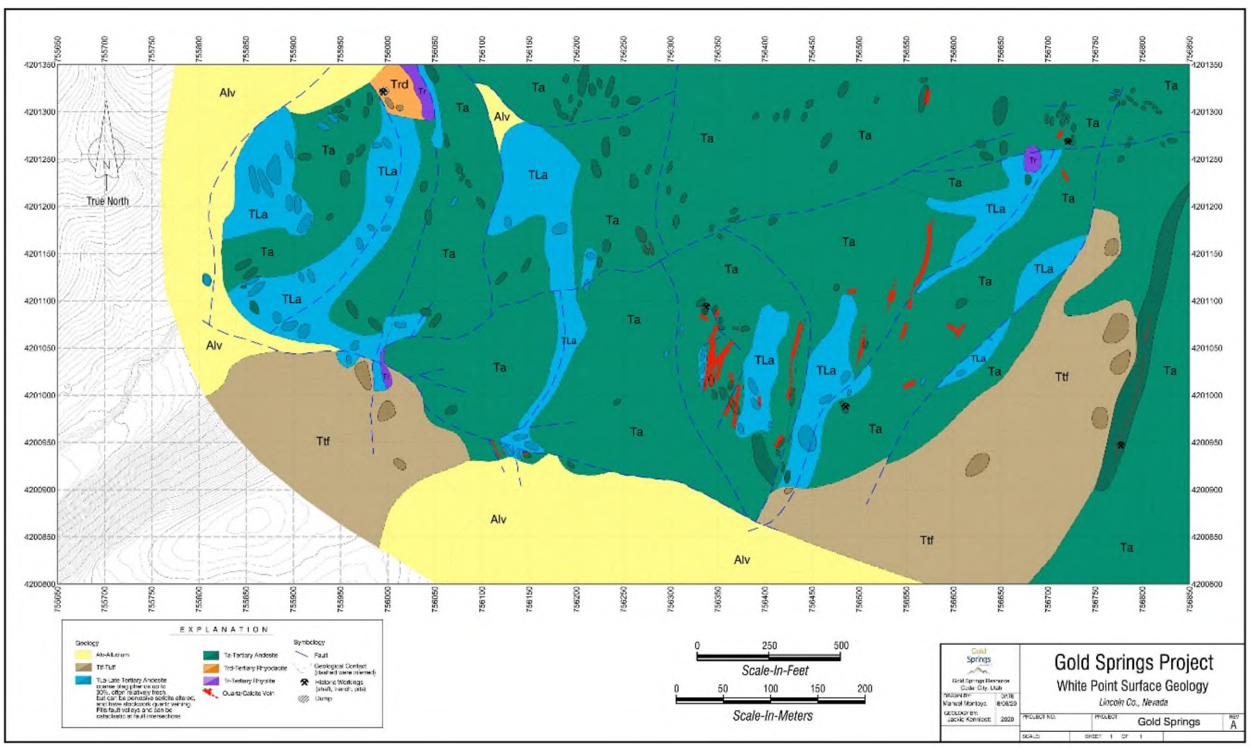


Figure 7-22: White Point Geologic Map



GRC has conducted rock chip sampling in the White Point area with results that include values up to 8.169 g/t Au and 8.9 g/t Ag from selected vein samples. A total of five RC holes were drilled by GRC in 2011. In 2013, GRC completed a series of seven continuous chip/channel sample lines comprised of a set of contiguous 1.5-to-4.6-meter samples across vein and stockwork zone exposures. GRC conducted channel sampling along road cuts and drill pads with a series of continuous 3.05- to 4.6-metre channel samples in four zones across the target area. A summary of the 2013 and 2014 channel sampling results from the White Point target area is shown in Table 7-4.

Table 7-4: White Point Channel Samples

Length of Channel Sample (metres)	Au (g/t)	Ag (g/t)
9.14	0.329	2.7
7.62	0.854	6.66
6.09	0.198	2.75
27.4	0.627	6.66
3.4	0.281	2.35
4.57	0.348	3.57
13.7	0.885	12.93
30.5	0.600	8.27
13.7	0.069	3.03
9.15	0.118	7.2
26.5	0.696	8.6

GRC completed 1,612 meters of drilling in 9 holes during the 2021 drill program at White Point. Holes were designed to test the depth extension of the mineralized zones seen on surface and potential extensions under post-mineral cover. Of the 9 holes 5 encountered significant gold mineralization with holes WP-21-003 and WP-21-004 demonstrating that the White Point system does go undercover to the south (Figure 7-23 and Figure 7-24). In general, there is a good correlation between veining and precious metal mineralization within the holes at White Point. Results of the drilling are shown in Table 7-5.

Figure 7-23: White Point Hole Locations

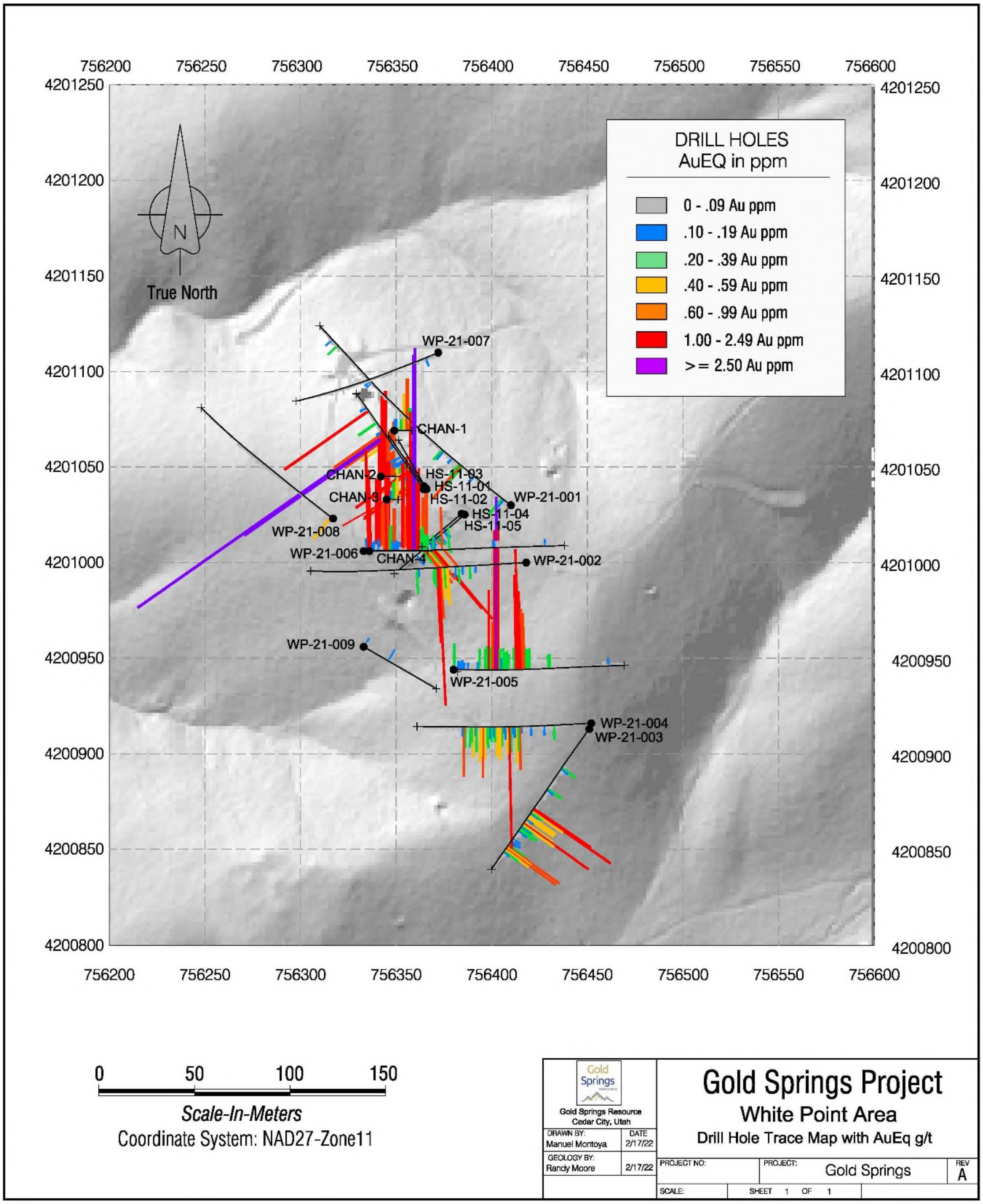


Figure 7-24: White Point Cross Section

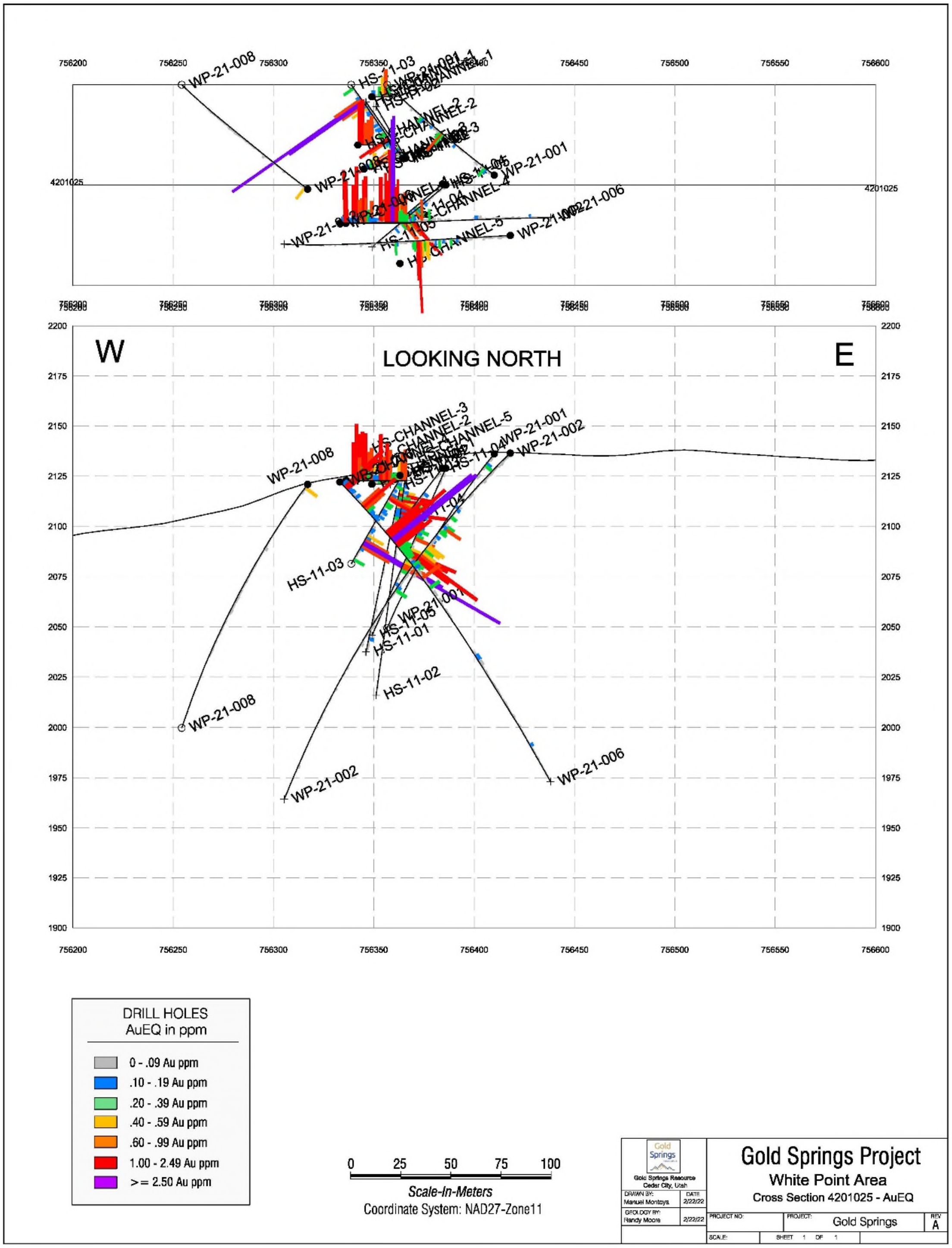


Table 7-5: White Point Drill Results

Hole	From (m)	To (m)	Thickness** (m)	Gold (g/t)	Silver (g/t)	Gold Equivalent* (g/t)
WP-21-002	61.0	74.7	13.7	0.62	6.0	0.70
WP-21-003	79.2	99.1	19.9	0.50	4.3	0.56
and	121.9	129.5	7.6	0.56	3.9	0.61

Hole	From (m)	To (m)	Thickness** (m)	Gold (g/t)	Silver (g/t)	Gold Equivalent* (g/t)
WP-21-004	54.9	106.7	51.8	0.32	3.65	0.37
WP-21-005	27.4	64.0	36.6	0.74	5.8	0.82
including	27.4	36.6	9.2	1.36	11.8	1.52
and	50.3	59.5	9.2	1.15	6.9	1.25
and	132.6	147.8	15.2	0.41	18.6	0.67
WP-21-006	3.0	6.1	3.1	1.28	6.8	1.37
and	15.2	18.3	3.1	0.77	13.2	0.95
and	33.5	48.8	15.3	1.31	6.5	1.40
including	33.5	44.2	10.7	1.75	8.4	1.87

*Gold equivalent is based on $1,800/oz gold and $25/oz silver
** True thickness is estimated to be 70-100% of thickness

7.6.4 Midnight Target

The Midnight target area is located in the southern portion of the property. The target is located on patented claims controlled by GSLLC. One of the largest shafts found within the project area is located on the Midnight vein system. In the 1990s, these patented claims were leased to a group that initiated excavation of a production size adit in the shaft area but never progressed beyond a depth of 20 metres. There are numerous cuts across the adjacent hillside areas that explore several smaller veins and stockwork zones within this vein system characterized by extensive zones of silicification. A second shaft is located on a parallel vein approximately 50 metres east of the main shaft. Selected samples from this area show gold values of up to 57.3 g/t gold. A third parallel vein/silicified zone is located approximately 70 metres further east and was the target of several old diggings and small shafts. This eastern-most zone can be traced for approximately 600 metres in a north-south direction within the patented claim block before being obscured by post mineral cover. GRC has conducted surface rock chip sampling in the Midnight area that indicates a potentially wide area of gold mineralization (up to 120 metres wide) associated with predominantly north-south trending veins, sub-parallel faults, sheeted veins, stockwork zones, and breccias. Veins are characterized by white massive quartz, pale pink to gray to white colloform banding, druse-lined quartz fracture surfaces and/or vugs, and pseudomorphs of silica after bladed calcite forms with surrounding areas of intense argillization and/or propylitization. The rock sampling results include numerous samples of +0.1 g/t gold, with values up to 57.3 g/t gold and 59.4 g/t silver.

In 2010, GRC completed two RC holes on the Midnight target. The results were encouraging; however, problems with the drilling included one hole that passed through two unanticipated open stopes in the underground workings, which may be more extensive than historically documented.

During 2013, two east-west trenches were completed across portions of the main north-east striking vein system. The two trenches and an additional five east-west sample lines located approximately 100 metres apart were completed at the Midnight target during 2013. The sample lines consisted of a series of 5-foot continuous chip-channel samples collected across exposures of a prominent quartz vein stockwork zone. The results indicate a wide zone of anomalous gold mineralization with variable concentrations from 0.20-1.10-g/t gold.

7.6.5 Thor Zone

The Thor vein is in the southeast 1/4 of Section 32, Township 1 North, Range 71 East and is approximately 180 metres west of the Jennie Vein. The Jennie was one of the district's largest producing mines, with a reported grade of 0.4 oz/t (12.4 g/t) gold over widths of 1.5 to 7.0 metres (Perry, 1976). Mineralization in the Thor target area occurs in discrete vein zones that range from 0.6 to 6.1 metres in width and are traceable for 400 metres along strike (north-south to northwest-southeast), where it is poorly exposed along the surface due to colluvial cover. The vein is traced through exposures in shallow pits, trenches, and drill holes along the defined 400-metre (Photo 7-6).

Photo 7-6: Vein Exposed in Caved Stopes at the Thor Mine

Sample KK-11-39 was collected across 2 metres of this structure Vein exposed in caved stope at the Thor Mine, assays 3.1 g/t gold across the 2 metres face shown above.

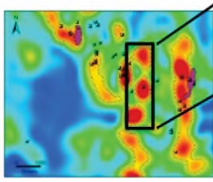
The Thor vein coincides with a structural corridor defined by a ZTEM anomaly that runs north-south connecting the Thor, Southern Vein, and Silica Hill target areas (Figure 7-25). The Thor vein is reported to be offset on the north and south by post-mineral faults (Perry, 1976). The vein system generally strikes northwest with a variable easterly dip but is reported at depth to roll over and dip to the west. The vein varies in width from 0.6 to 6.1 metres and consists of quartz, calcite, and adularia sometimes exhibiting distinct bands of high-grade gold mineralization that were selectively mined with other vein bands left behind as waste.

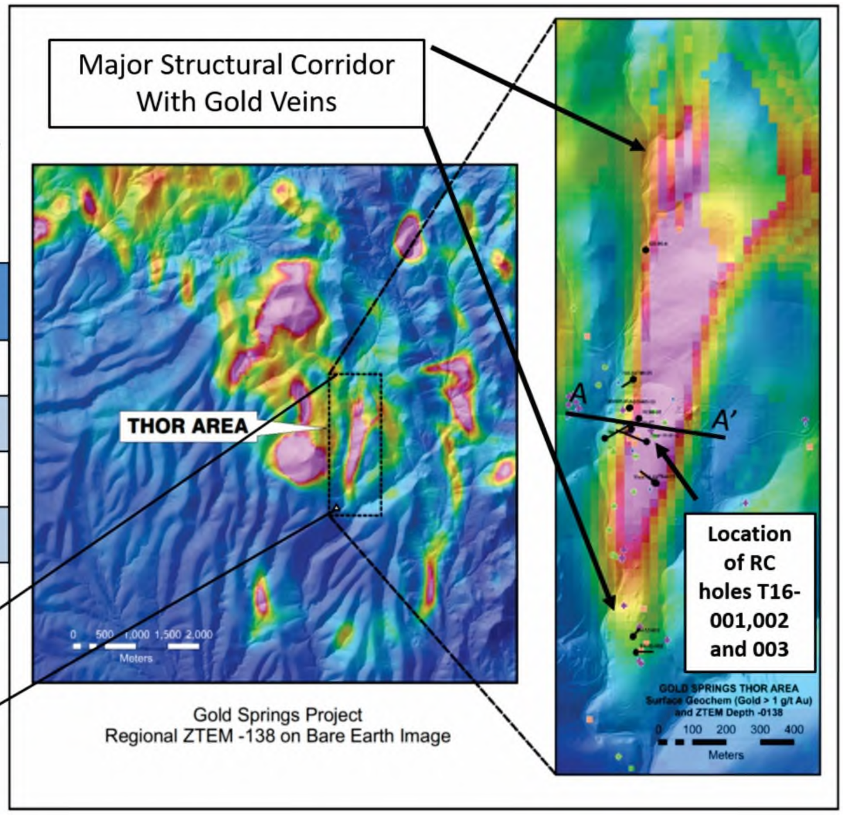
Samples of the vein near open stopes exhibit banded quartz and adularia, sparse oxidized sulfide grains, visible gold grains, and rock samples that assay up to 23.35 g/t gold and 252.9 g/t silver. A rock chip sample across a 2-metre section of the Thor vein left behind by early mining assayed 3.1 g/t gold (Photo 7-6).

Figure 7-25: Thor Trend as Defined by ZTEM

- High grade near surface veins
- Gold occurs along the edge of a high resistivity anomaly

RC Hole	Wdth m	Au g/t	Ag g/t	AuEq g/t
T-16-001	1.5	2.58	42.20	3.26
T-16-002	1.5	12.63	77.3	13.88
within	6.1	4.47	45.7	5.2
T-16-003	6.1	3.43	51.6	4.26



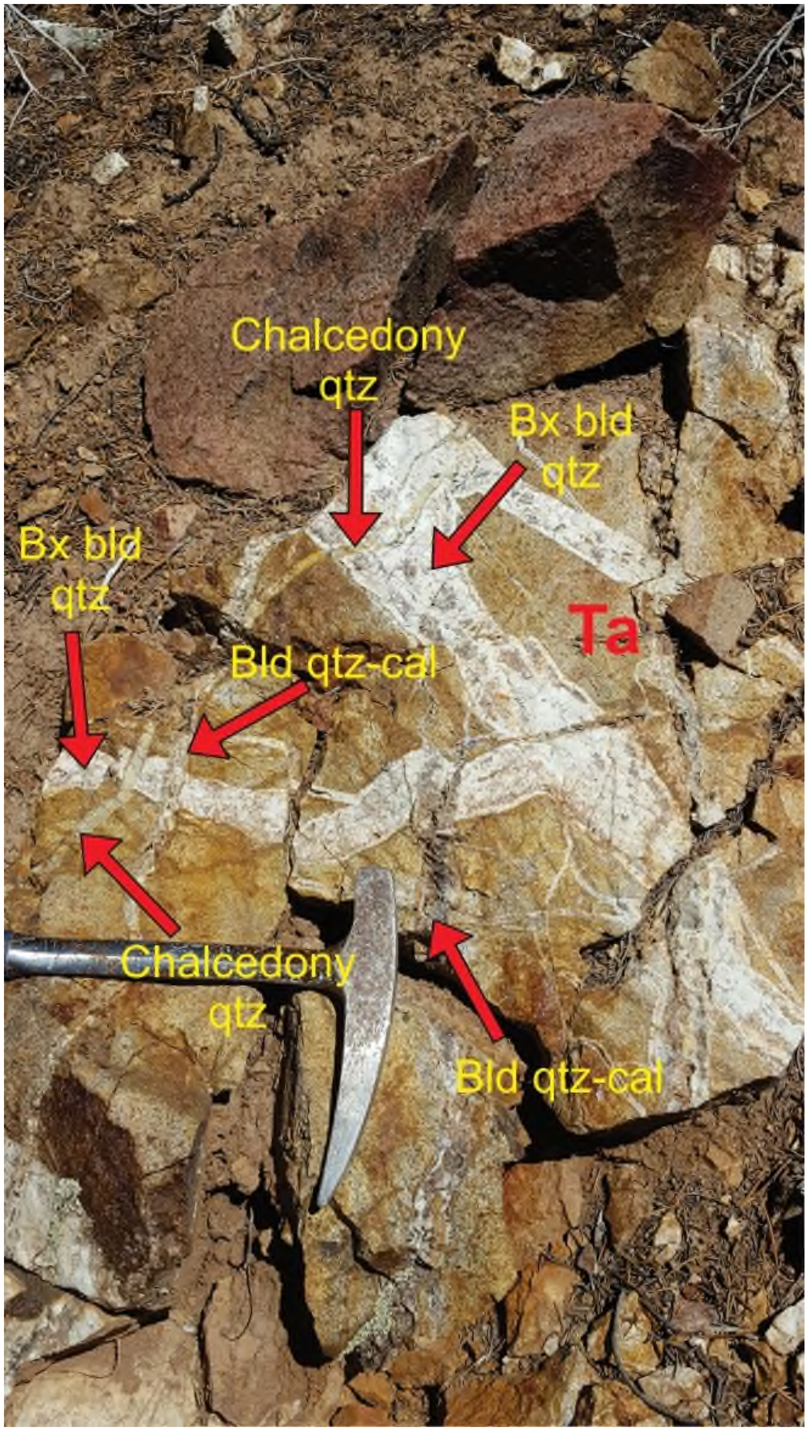


The mapping and detailed rock chip sampling conducted by GRC demonstrates that there are at least four smaller veins roughly parallel to the Thor vein that range from 30 centimetres (cm) to 2 metres in width. The mineralized veins are often white to grey banded quartz and quartz-calcite with bladed silica textures after calcite, and often occur with seams of hematite clay between bands. Veins can have large open vugs (up to 10 cm) that contain drusy quartz crystals and/or bladed silica with a dusting of earthy hematite. Gold mineralization tends to be associated with hematite clay seams between bands of quartz-calcite and in the open vugs. Veins occur in structural settings in fracture, breccia, and fault zones with several generations of veining observed (Figure 7-26). The Thor vein is margined by hydrothermal breccia zones (up to 1.5 metres in width) that appear coeval with vein emplacement. Lithic breccias are associated with fault zones that contain quartz-calcite vein material and appear to be syn- to post-mineralization (Figure 7-27). The wall rock around veins exhibits little alteration that extends beyond the vein selvedge; however, the host rock is often silicified near veins and has an increase in jarosite and hematite oxidation in fracture, fault, and breccia zones immediately adjacent to crosscutting veins. Fracture zones also vary in size from 5 centimeters to 2 metres in width and often contain some quartz and quartz-calcite vein material.

During 2016, eight trenches were excavated to follow vein structures from north to south across the area. Three trenches ran east-west and were located just west of drill pads T-16-001 and T-16-002, T-16-003 and T-16-005. Of these three trenches, Trench #2 and #3 had samples with significant gold values. The

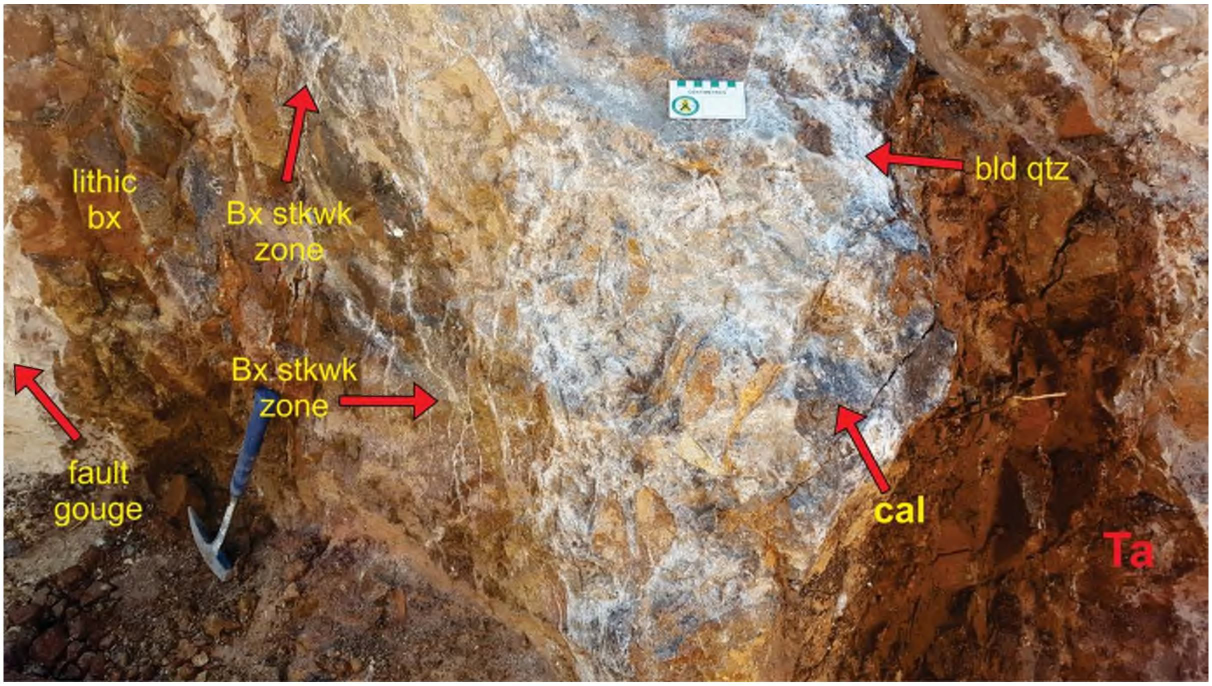
Thor vein was not intersected in these trenches; however, smaller discrete vein sets in oxidized facture zones generally trending north-south and moderately to steeply dipping to the east had values up to 19 g/t gold. Five trenches ran east-west across the top of the ridge, with a major fault zone traceable across

Figure 7-26: Thor Vein System Showing Multiple Generations of Veining in Andesite (Ta) Host Rock.



Quartz (qtz) veins with incorporated breccia clast (bx) and bladed silica textures (bld) are cut by later quartz-calcite (qtz-cal) veins with bladed silica textures (bld). These veins are in turn cut by light green chalcedony quartz (chalcedony qtz) veins.

Figure 7-27: Quartz-Calcite Vein System and Related Breccias Within the Thor Trend



Quartz (qtz)-Calcite (cal); lithic breccia (lithic bx), and breccia/stockwork vein zones (Bx-stkwk zone) within the Thor Trench and hosted by andesite (Ta)

the trenches. The fault zone is often margined by breccia zones where clast of hematized andesite (Ta) are cemented by silica and quartz stockwork veins, similar to what is seen along the margins of the Thor and Jennie veins. The fault strikes 002° dipping 71° east and contains fragments of quartz and calcite-quartz vein material. Trenches also revealed a previously unknown calcite-quartz vein 0.25-1.0 metres in width with grades up to 1 g/t gold (Figure 7-28). The vein is margined by silicified breccia zones and is cut off by a major fault zone to the north, where fragments of the vein are suspended in the fault gouge.

GRC completed a total of three drill holes in the Thor target area during 2011. One core hole was drilled to intersect the vein in an area of historic work and contained several intercepts with values >3.0 g/t gold. Two additional RC drill holes were completed approximately 100 metres south of the core drill hole. Each of these drill holes intersected vein material and contained significant gold values.

All 11 drill holes from 2016 were completed with RC drilling and intersected andesite flows cut by discrete rhyolite dikes and overlain by post mineral, quaternary alluvium. Andesite flows have slight variations in characteristics; the dominate andesite flow unit is the Thor andesite (Ta) which is porphyritic in texture and plagioclase-rich with fine-grained biotite phenocryst. Coarser-gained porphyritic andesite and equigranular andesite flows were also intersected in drill holes. Mineralization is hosted in cross-cutting banded quartz and quartz-calcite veins, often within intensely oxidized fracture zones with a larger envelope of silicification. Veins tend to be margined by breccia zones and stockwork veining. Drill holes T-16-001 to T-16-003 intersected the Thor vein with grades of 1.0 to 4.5 g/t gold (at 12-18 metres) and one 1.5-metre interval at 14 metre depth with values of 12.2 g/t gold and 105 g/t silver in drill hole T-16-002 (Figure 7-28). This vein zone trends roughly North-South and is dipping 35-45° to the East. Drill holes (T-16-001 to T-16-004 and T-16-011) also intersected a deeper quartz-calcite vein in the Thor vein system which is trending 340° and dipping 45-60° to the east with the dip shallowing moving south (Figure 7-29).

Figure 7-28: Thor Cross Section Showing the Shallow Thor Vein and the Deep High-Grade Intercept

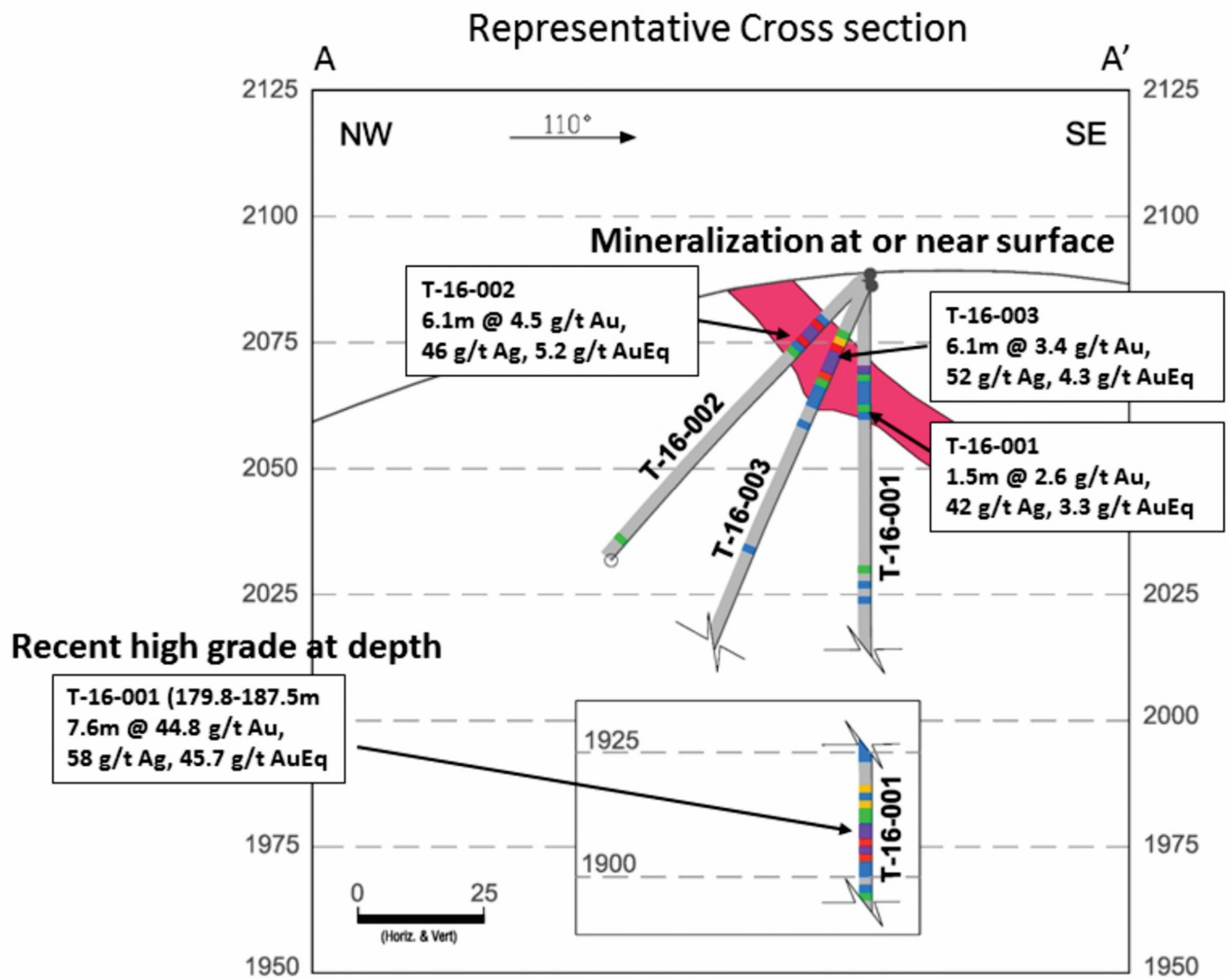


Figure 7-29: Quartz-Calcite Vein Within the Thor Trend Showing Shallow Easterly Dip

In the most southern drill holes, the Thor vein system was intersected in holes T-14-001 to T-16-004, allowing the vein system to be traced farther south for an overall strike length of 400 metres. The Thor vein is still open to extension in both the north and south directions. It appears that there is a porphyritic andesite unit that is generally not mineralized in the footwall to the Thor vein system.

Drill hole T-16-001 was drilled vertically to intercept the vein deeper than other holes that had been completed in the area in the past and to test for the potential for a stacked system and additional subparallel veins. Results show that mineralization is present at depth with a high-grade zone that averaged 44.8 g/t gold and 58 g/t silver over 7.6 metres between 179.8 metres and 187.4 metres (Figure 7-28) and contained one 1.5-metre interval that assayed 7.0 oz/t gold and 105 g/t silver. The mineralization occurred within a zone of hematized, brittle andesite host rock with little quartz-calcite vein material. Drill hole T-16-011 was drilled back towards this interval and intersected the mineralization with gold values that averaged 1.87 g/t gold and 15.3 g/t silver. Additional drilling would be required to determine the orientation and extent of this high-grade zone.

7.6.6 Silica Hill

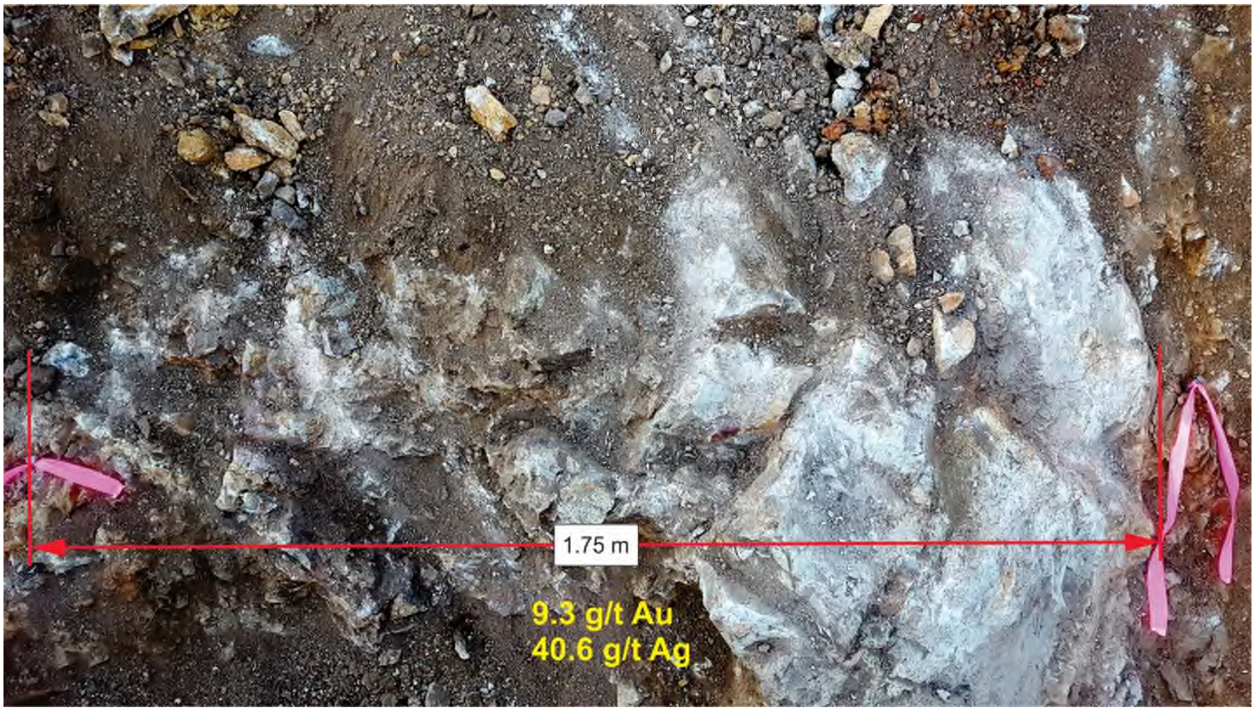
The Silica Hill target areas are located to the west of, and are generally sub-parallel to the Thor vein, with vein mineralization exposed by numerous small pits and trenches. The target area is covered by colluvium that contains abundant vein fragments that link projections of the outcropping veins, suggesting that this material is locally derived. The main host rock is comprised of silicified and brecciated andesite cut by discrete rhyolite dikes and is overlain by lahar flows and welded tuffs; some of the units are themselves extremely silicified. Selected vein material displays visible gold with assays reaching highs of 126.3 g/t gold. The Silica Hill and Silica Hill Extension are 340° trending zones that are 1,600 metres in length, displaying widths of up to 300 metres, in which these narrow high-grade veins are found. Veins within the corridor generally exhibit orientations of 035°, 330°, and 350°, all of which contain gold mineralization.

Three holes were completed within the Silica Hill area in 2012, and two were completed in 2016. Two drill holes contained zones of significant gold mineralization ranging up to 1.86 g/t gold (SH-12-002, 86.9 to -88.4 metres). Drill hole SH-12-002 was lost after it entered a void thought to be a solution cavity. Just prior to entering the void, the hole contained 4.6 metres at 1.04 g/t gold (86.9 to 91.4 metres). The third 2012 hole failed to reach the target depth. Drill hole SH-16-001 intercepted gold values up to 1.17 g/t gold in a discrete vein zone at 25.9 to 27.4 metres, and drill hole SH-16-002 intercepted low-grade gold values from 3.0 to 21.3 metres (0.22 g/t gold) and 56.4 to 71.6 metres (0.28 g/t gold).

7.6.1 Southern Vein

The Southern Vein target area is located approximately 260 metres southeast of the historic Jennie mine workings, across the drainage where tailings from the historic mine where dumped. The main host rock is the same andesite unit that hosts the Thor vein system. The Southern vein strikes 177° and dips 52° east and is traced on surface for more than 200 metres in a window surrounded by a post mineral lithic tuff unit. The width of the vein ranges from 1.0-1.75 metres and consists of a banded white-grey quartz-calcite vein with extreme hematite alteration between layers and within vugs (Figure 7-30) that locally cuts a breccia zone with quartz cement. Surface samples collected range from 4.4-9.7 g/t gold and 41-52 g/t silver across the width of the vein with selected samples of the vein carrying up to 33.6 g/t gold and 57.8 g/t silver. Drill hole SV-16-001 intersected the breccia zone along the margins the vein and penetrated a fault zone that appears to have displaced the vein at depth. No significant gold assays were reported from this drill hole.

Figure 7-30: Southern Vein in Road Outcrop



7.6.2 Fluorite Target

Bull Hill is the historic name for the prominent hill to the north of the Pope Mine (shown in Photo 7-7) and is a resurgent rhyolite dome surrounded by intercalated flows and tuffaceous sediments and tuffs that accumulated within the Gold Springs caldera moat (Best, et al., 1992) (Photo 7-8). Locally, the rocks exhibit opaline silicification, which may represent the near-surface expression of an epithermal system as described by Hedenquist et al. (2000) and shown schematically in Figure 8-1. Mineralization at the Fluorite target area is unusual and consists of a vertical shaft (Photo 7-9) and a lower adit that explore a fluorite-bearing pipe that cuts the rhyolite and tuffs and is surrounded by a broad area of phyllic alteration. The "vein" structure is reported to trend north-20° east, and averages 0.7 to 1.0 metres wide. Mineralization consists of purple and green fluorite, crustiform lattice quartz, and red earthy hematite. The fluorite is concentrically banded, and forms pods up to 2 metres across. Hematite often occurs as thin seams between bands of fluorite and appears later than the quartz. The hematite material will produce a tail of gold when panned, and samples taken of the fluorite have resulted in assays of up to 23.45 g/t gold. GRC completed three drill holes on the Fluorite target. Each hole intercepted the target structure displaying fluorite associated with hematite muds and typically followed along the margins of a younger latite dike that cut the rhyolite flows. The latite dike has a northwest strike and near vertical dip. Gold values from the holes were anomalous with most 1.52 metre intervals in the 0.04-0.09 g/t Au range and a high of 0.5 g/t Au. The drilling showed that these structures continue along strike and at depth but lacked the high-grade gold mineralization observed at the surface.

Additional geological work is required to better understand the gold mineralization in the Fluorite area. Mineralization appears to be directly associated with the Gold Springs caldera complex and is a distinctly separate style of mineralization than the vein systems observed elsewhere in the district.

Photo 7-7: View from the Pope Mine Looking Towards Bull Hill

Photo 7-8: View of the Bull Hill Area Showing a Portion of the Rhyolitic Dome and Flows

View of the Bull Hill area showing a portion of the rhyolitic dome and flows in the background and the heteroclastic breccias that form outcrops along the caldera margin.

Photo 7-9: The Shaft at the Fluorite Target Area

The shaft at the Fluorite target area, note the abundant red hematite staining and the banded fluorite veining.

7.6.3 Pope Target

The historic Pope mine is located on the margin of the collapsed Gold Springs caldera and 500 metres northeast of the Charlie Ross Target. Mineralization at Pope is hosted in a welded tuff where radial faulting attributed to caldera collapse has structurally prepared the host rock creating pathways for mineralizing fluids. Veins filling these fractures were historically exploited by a shaft, tunnels, and long slot cuts on surface.

High-grade mineralization is hosted within these thin (<0.5-metre-wide) banded and bladed quartz veins and returned grades as high as 20.2 g/t gold. The host rock is a welded tuff containing irregular and discontinuous quartz stringers. Altered, welded tuff host rock displaying brecciation and stockwork veining are characteristic of a lower grade disseminated target with one sample containing 0.53 g/t gold.

A total of 37 rock chip samples were collected from the Pope Target. Of these samples, nine returned results above the resource cut-off grade (Table 7-6). Eight of the sample returned multi-gram gold values.

Table 7-6: Rock Chip Sampling Results from Pope

Sample	Sample Type	Mineralization type	Au (g/t)	Ag (g/t)
224324	Float	Vein	8.9	88.8
224325	Float	Vein	3.2	107.0
224326	Dump	Vein	20.2	83.2
224333	Dump	Vein	6.2	46.6
224334	Dump	Vein	14.5	233.6
224336	Dump	Vein	6.3	63.9
224341	Dump	Vein	6.6	12.2
224342	Dump	Vein	2.6	34.6
224365	Grab	Breccia/stockwork in tuff	0.53	13.4

In 2012 GRC completed two holes in the Pope Target area. Drill hole P-12-001 intersected an open stope between 56.4 metres and 62.5 metres, and at 72.6 metres the drill hole intersected 1.5 metres at 9.2 g/t gold. The second hole failed to get to target depth due to poor drilling conditions.

7.6.4 Charlie Ross Target

The Charlie Ross and Tin Can targets have been combined into one target, the Charlie Ross, based on the CSAMT high resistivity response which shows them to be connected sub-surface (Figure 9-6). This target is located immediately south of the Pope target and southeast of Red Light. Gold is hosted in lithic tuffs, at the historic Charlie Ross mine and in veins and breccias within the underlying andesite flows. Historical reports describe Charlie Ross as a “175-foot shaft with a 40-foot talc zone with high-grade streaks and shipments up to $2,900/ton with tellurides of gold” (Tschanz and Pampeyan, 1970). The collar of the shaft is situated about 150 feet above the lithic tuff/andesite unconformity, with the underlying rocks hosting gold mineralization associated with veins and breccias. Surface sampling in 2020 returned high grades from veins, 17.6 g/t Au, andesite flows, 8.29 g/t Au, and lithic tuff, 2.27 g/t Au.

In general gold at the Charlie Ross Target is hosted within andesite flows similar to the current Gold Springs resources. The gold mineralization is associated with a strong north-south structural zone which also controls the mineralization at the historic Little Buck Mine and is highlighted by both ZTEM and CSAMT geophysical resistivity anomalies. Historic mining in the area was focused on a banded quartz-calcite vein up to 2 meters wide that grade up to 5.20 g/t gold and 61.5 g/t silver. This quartz-calcite vein is margined by zones of silicified breccias and stockwork veining that grade as high as 1.19 g/t gold and 46.2 g/t silver. Numerous pits, shafts and trenches follow the vein north until it disappears under post mineral cover. This area is unique at Gold Springs in that calcite-dominate sinter terraces are found which are remnants of a paleo surface hot spring environment.

In 2021 GRC completed 4,685 meters of drilling in 22 holes at Charlie Ross making the initial discovery of a gold system on the western portion of the target (Figure 7-31). Gold mineralization is controlled by several major north-south trending veins which are surrounded by zones of brecciation and stockwork vein development, all of which can host gold mineralization (Figure 7-32). The southern half of the system is exposed on surface with several historical workings having exploited high-grade portions of the veins. To the north, the system is obscured by younger post mineral rocks. GRC has now followed the system under that post mineral cover where it remains open to extension. One hundred meters to the north, the Charlie Ross system intersects the high-grade veins and structures of the Pope target. All holes contained gold mineralization, but it is generally lower-grade and short intervals. Holes CR-21-005 and CR-21-008 were the discovery holes for a north-south trending structural zone containing gold associated with veins and silicified breccias. These holes are highlighted in Table 7-7.

Figure 7-31: Charlie Ross Drill Hole Locations

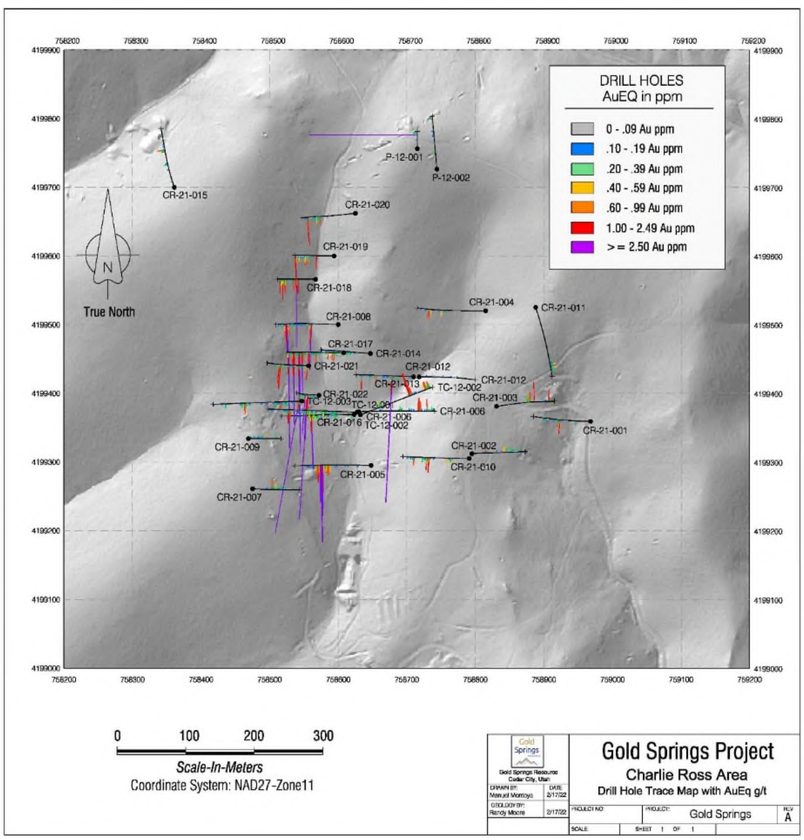


Figure 7-32: Typical Charlie Ross Cross Section

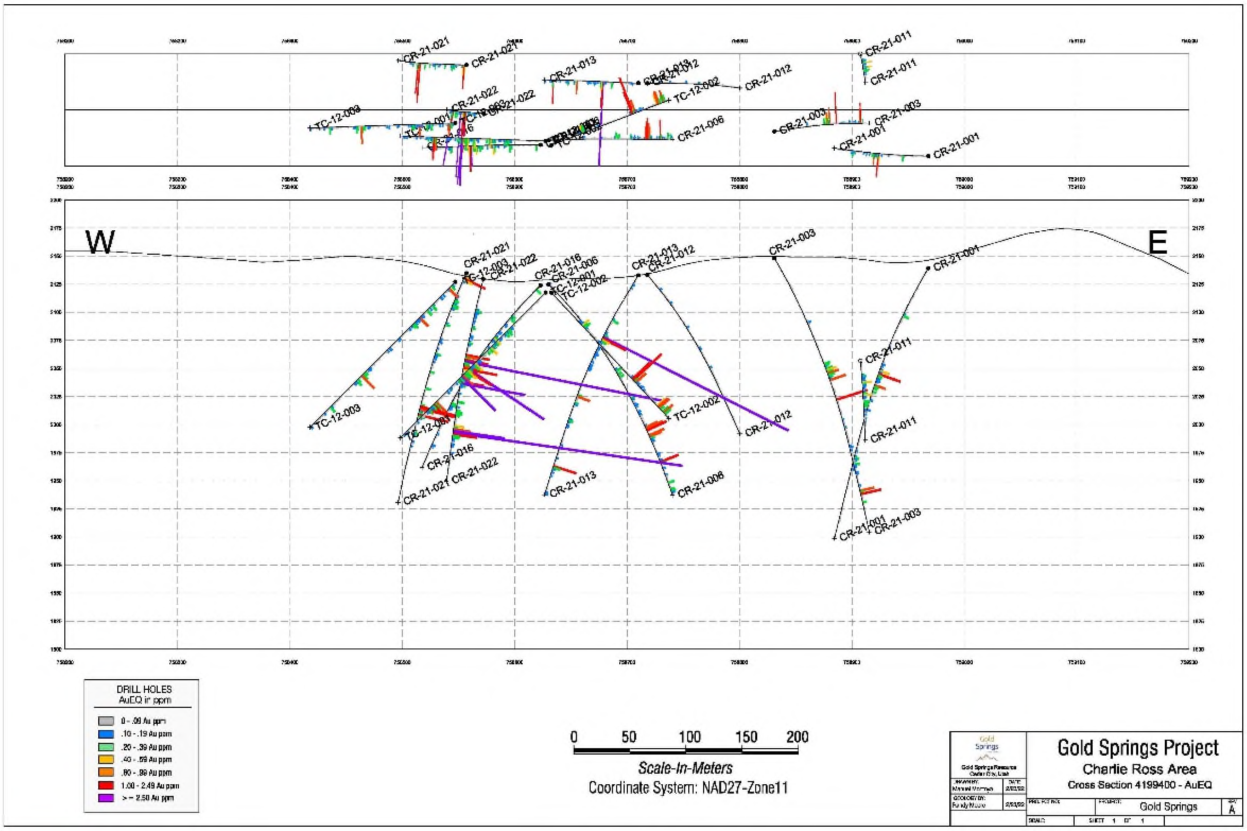


Table 7-7: Charlie Ross Drill Results

Hole	From (m)	To (m)	Thickness** (m)	Gold (g/t)	Silver (g/t)	Gold Equivalent* (g/t)
CR-21-005	93.0	138.7	45.7	0.98	13.4	1.17
including	114.3	129.5	15.2	2.14	30.0	2.56
CR-21-008	150.9	172.2	15.3	1.16	7.4	1.26
including	160.0	169.2	9.2	2.15	6.6	2.24
and	70.1	74.7	4.6	1.09	62.9	1.96
CR-21-006	153.9	158.5	4.6	0.68	14.5	0.88
and	158.5	161.5	Void			
and	161.5	164.6	3.1	0.63	8.2	0.74
CR-21-010	109.7	121.9	12.2	0.50	4.3	0.56
CR-21-013	62.5	67.1	4.6	3.03	74.4	4.06
CR-21-017	103.6	108.2	4.6	0.56	19.0	0.82
and	131.1	147.8	16.7	1.82	19.8	2.10
including	143.2	147.8	4.6	4.53	49.9	5.22
and	166.1	179.8	13.7	1.55	9.2	1.68
and	196.6	207.3***	10.7	2.19	9.4	2.32
including	196.6	201.2	4.6	4.69	19.7	4.96
CR-21-018	91.4	99.1	7.7	0.65	3.6	0.70
and	146.3	1676	21.3	0.48	5.4	0.56
and	172.2	185.9	13.7	0.38	2.8	0.42

Hole	From (m)	To (m)	Thickness** (m)	Gold (g/t)	Silver (g/t)	Gold Equivalent* (g/t)
CR-21-019	134.1	138.7	4.6	0.68	3.4	0.73
and	205.7	214.9	9.2	2.0	1.8	2.03
including	207.3	210.3	3.0	5.01	2.1	5.04
CR-21-020	143.2	149.3	6.1	0.34	2.4	0.37
and	198.1	208.8	10.7	0.70	21.7	1.00
including	201.2	204.2	3.0	1.63	34.5	2.11
CR-21-021	125.0	135.6	10.6	0.90	6.3	0.99
CR-21-022	68.6	83.8	15.2	1.56	13.8	1.75
and	93.0	96.0	3.0	2.0	19.5	2.27
and	132.6	143.2	10.6	2.43	9.6	2.56

*Gold equivalent is based on $1,800/oz gold and $25/oz silver
** True thickness is estimated to be 70-100% of thickness

7.6.5 North Jennie Target

Astral completed one hole on the North Jennie target, which is reported in their data (Smith, 2005). Astral defined this target based on interpretations of the CSAMT survey conducted by Zonge Geoscience. The target is located beneath a thick cover of Quaternary gravels at the drill collar. Astral's drill hole demonstrated that gold mineralization is present along the northern projection of the Jennie vein system, with the bottom 9.2 metres of the hole averaging 1.04 g/t gold and 5.83 g/t silver. This projection corresponds to the resistivity high shown in the CSAMT survey data and can be seen in the CSAMT cross section in Figure 9-7. In 2021 GRC completed one hole at the North Jennie target. The hole is located 200 meters north of the Astral hole and was drilled to a depth of 250 meters. The hole failed to intersect any significant gold mineralization. Future drill programs will include holes to test this strong geophysical anomaly.

7.6.6 Lost World & Camp Bell Targets

Camp Bell and Lost World represent targets developed during reconnaissance prospecting at Gold Springs that focused primarily on areas of colluvial cover in areas where ZTEM data identified potential anomalies. This target is characterized by linear traces of vein material as float fragments ranging in size from 0.2-metre to 1-metre across showing bladed quartz and adularia textures formed after calcite. The apparent linear zones of mineralized vein float follow the predominant orientation of the major veins within the district. Considering the large ribs that form in some of the Gold Springs vein systems, one hypothesis is that the source of these float trains may be locally derived and represent traces of nearby structures. Assays as high as 145.68 g/t gold and 148.2 g/t silver have been generated from samples of the float material, and gold grades of >3 g/t are not uncommon. Continued exploration of this type of target will require either trenching or drilling to determine the presence of subsurface mineralization.

7.6.7 Horseshoe Extension Target

The Horseshoe Extension target is located just north of the historical Horseshoe mine, which was the largest producer in the district, and continues to the southern edge of the Homestake target. The Horseshoe mine, the Homestake and the Horseshoe Extension targets are all located along the same major north-south trending fault zone. This structural corridor extends over 7 kilometers in length and host two of the three largest historical mine sites within the project boundaries. This structure is well exposed on surface at the southern end, where the Horseshoe mine is located, and on the northern end, where the historical Homestake mine is situated. In between lies the Horseshoe extension where much of the area is covered by post-mineral gravels. There are numerous historical workings scattered along the 750 metre Horseshoe Extension strike length with several shafts and tunnels showing mineralized material on the dumps.

The large historic underground Homestake and Horseshoe mines were developed to the north and south of this target along the same controlling structure. Several smaller workings are scattered along that north-south trend within this target. Recent sampling by GRC is shown in Table 7-8.

Table 7-8: Rock Chip Sampling Results from Horseshoe Extension

Sample ID	Sample Type	Description	Au (g/t)	Ag (g/t)
224467	Dump grab	Silicified andesite	1.67	3.1
224472	Dump grab	Silicified andesite with minor veins	1.52	3.5
224473	Outcrop grab	Silicified andesite with stockwork veins	0.4	1.8
224475	Dump 0.5m by 0.5m area	Silicified andesite with stockwork veins	7.85	2.4
224476	Outcrop grab	Old mine pit. Massive quartz-calcite vein	0.41	1.8
224477	Dump 0.5m by 0.5m area	Breccia	1.01	2
224487	Dump 0.5m by 0.5m area	Massive white quartz-calcite vein from 10m deep shaft	1.31	4.3
224489	Dump 0.25m by 0.25m	Silicified andesite with stockwork veining and crystals of green fluorite.	0.28	8.2
224494	Dump grab	Massive quartz vein.	0.33	1.8
224495	Outcrop grab	Fault gouge with hematite and quartz vein	1.38	2.6

The Company has completed road and drill pad construction on the Horseshoe Extension target, and it is ready for drilling in a future program.

7.6.8 Iris Target

The Iris target is located 230 metres west of the Homestake target and 450 metres east of the Grey Eagle resource. Iris is a high-grade vein system thought to be connected to the Homestake veins at depth. The Iris vein is a calcite dominated, banded epithermal vein that trends north-south and is traceable on surface for a strike length of 400 metres. Together with the Homestake vein sets the system represents a classic epithermal vein target with potential for bonanza grade mineralization at the intersection of the Homestake and Iris veins projected to be 250 metres below surface. The Homestake system is represented by two parallel veins of banded and bladed quartz that dip shallowly to the west, while the Iris vein is a calcite-quartz banded vein dipping steeply to the east. Where these veins intersect there is potential high-grade mineralization.

The Iris vein has produced very high-grade gold values from surface sampling returning numbers as high as 38 g/t gold. Trenching along the Iris vein continually returned values from 2.15 to 17.76 g/t Au along the 20-meter strike length of the vein exposed in trenches. Results from GRC sampling greater than 0.25 g/t Au are shown in Table 7-9.

Table 7-9: Rock Chip Sampling Results from the Iris Target

Sample ID	Sample Type and width	Description	Au g/t	Ag g/t
102990	Trench, 1m	Bladed, banded calcite-quartz vein	3.53	7.8
102991	Trench, 2m	Bladed, banded calcite-quartz vein	3.03	11.9
102992	Trench, 1m	Bladed, banded calcite-quartz vein	17.76	25.2
102993	Trench, 1m	Bladed, banded calcite-quartz vein	6.08	14.7
102994	Trench, 1m	Bladed, banded calcite-quartz vein	2.15	6.3
102995	Trench, 1m	Bladed, banded calcite-quartz vein	5.65	19.1
102996	Trench, 1m	Bladed, banded calcite-quartz vein	14.15	20.9
102997	Trench, 1m	Bladed quartz vein	14.16	22.9
102998	Trench, 1m	Bladed, banded calcite-quartz vein	14.47	19.6
102999	Trench, 1m	Bladed, banded calcite-quartz vein	1.62	13.8
52958	Dump	Quartz-calcite vein	1.10	4.3
52959	Dump	Quartz-calcite vein	1.69	4.7
52960	Outcrop	Quartz-calcite vein	0.39	1.8
52962	Dump	Quartz-calcite vein	1.14	1.5
102554	Outcrop	Quartz-calcite vein	1.01	10.2
102585	Dump	Calcite vein	10.88	NA
102594	Dump	Banded, bladed calcite-quartz vein	2.14	NA
102666	Outcrop	Drusy quartz vein	0.31	3.7
102673	Outcrop	Vuggy quartz vein	8.19	15.7
102674	Outcrop	Banded quartz vein	1.99	6.1
44356	Dump	Quartz vein	9.90	21.4
44357	Dump	Banded quartz vein	5.51	17.1
114301	Dump	Banded calcite-quartz vein	38.09	33.4
113196	Outcrop	Banded calcite-quartz vein	1.33	3.6
113198	Outcrop	Banded quartz-calcite vein	3.89	10.4

7.6.9 Snow Target

The Snow target is located 500 metres west of the Fitch target and consist of several historical slot cuts and one historic mine shaft. Much of the area outside of the historic workings is covered with colluvium and post-mineral volcanic flows. Historic workings focus on the east side of a throughgoing north-south Snow Fault defined by a deep valley and exposed in the old workings. The Snow Fault is a major structural corridor that extends for 3.5 kilometers and is highlighted as an extensive geophysical anomaly in the CSAMT data. Historic workings expose intensely clay altered andesite host rock with stockwork quartz veining within fault and fracture zones. Vein and breccia material are also found in dump piles around historic mine sites. Vein zones exposed at surface are found west of the workings and are haloed by strong clay alterations. Upslope of the vein exposures much of the area is covered with colluvium and weakly altered andesite float. However, mineralized float in the form of banded and bladed calcite-quartz veins, hydrothermal breccias and stockwork veining is found mixed in with the colluvium cover. This suggest that the epithermal gold system continues under this thin layer of colluvium cover. Significant sample results are shown in Table 7-10.

Table 7-10: Snow Target Samples

Sample	Sample Type	Mineralization type	Au (g/t)	Ag (g/t)
225417	Dump	Silicified breccia with crystalline quartz cement	1.06	5.4
225418	Grab, 10 cm	Strongly clay altered fault zone	6.96	6.6
225420	Continuous, 2m	Argillic altered fault zone 7-8 m wide	0.33	13.5
225421	Select	Banded and bladed white to grey quartz vein	1.03	17.2
225422	Dump	Banded and bladed white chalcedony and crystalline quartz vein	1.47	11.4
225423	Dump	Banded and bladed white quartz vein	0.99	66.9
225424	Dump	Clay altered andesite host rock	0.41	4.9
225426	Dump	Sericite and clay altered andesite with stockwork quartz veins	2.14	16.7
225429	Grab, 10cm	Sericite altered andesite with stockwork quartz veining	0.29	1.9
225430	Continuous, 30cm	Brecciated quartz vein	0.42	0.8
225433	Continuous, 1m	Sericite altered andesite with patchy silicification	1.1	1.6
225435	Discontinuous, 3m	Clay altered and weathered andesite with massive quartz vein	8.98	12.2
225437	Select	quartz vein	4.28	19.4
225439	Float, 1x1m area	Cobble sized float of banded and bladed quartz-calcite vein and hydrothermal breccia	0.37	1.5
225440	Float, 1x1m area	Silicified float chips of andesite containing stockwork veins	1.47	3
225441	Float, 1x1m area	Banded and bladed white quartz-calcite vein	1.0	3.3
225442	Dump	Banded and bladed white quartz vein.	1.92	11.7
225444	Float, 1x1m area	Fine-grained sugary white quartz vein	0.41	3.8

7.6.10 Ridge Target

The Ridge target is located 3 kilometers west of the White Point target (press release August 4, 2020) along the Deer Lodge canyon structural zone. The Deer Lodge canyon marks the northwest boundary of the Gold Springs Caldera, a splay of which hosts the Grey Eagle resource. Much of the Ridge target is covered with post-mineral colluvium but examining the limited outcrops, historic workings, and mineralization found in float has provided evidence of an extensive epithermal gold system below the shallow cover. Mineralized float is found over a 1.7 x 1.1 kilometer area signifying the potential size of the Ridge target. In historical working near the caldera margin there are outcropping of explosion breccias typically found at high levels within epithermal gold systems indicating there may be a fully preserved system hosted along the caldera boundary.

Mineralized material in float includes, stockwork veining in andesite, banded and bladed quartz-calcite veins, and silicified hydrothermal breccias. Vein samples returned assays as high as 2.77 g/t Au and 20.8 g/t Au with hydrothermal breccia grading 0.44 g/t Au and 35.7 g/t silver. Sample results are shown in Table 7-11.

Table 7-11: Sample Results from the Ridge Target

Sample	Sample Type	Description	Target	Au g/t	Ag g/t
225278	Float	Banded/Bladed Calcite-Quartz vein	Ridge	0.36	3.7
225274	Float	Banded Quartz vein	Ridge	0.99	9.6
225277	Float	Banded Quartz vein	Ridge	1.39	20.8
225271	Float	Banded/Bladed Quartz vein	Ridge	1.43	17.7
225279	Float	Banded/Bladed Quartz vein	Ridge	0.75	11.8
225288	Float	Banded/Bladed Quartz vein	Ridge	2.77	11.2
225262	Outcrop, Discontinuous, 0.5m	Banded/Bladed Quartz-Calcite vein	Ridge	0.94	2.1
225263	Dump	Banded/Bladed Quartz-Calcite vein	Ridge	0.33	3.1
225282	Float	Vuggy Banded Quartz vein	Ridge	0.85	2.2
225259	Float	Banded Quartz vein	Ridge	1.92	15.6
225270	Float	Banded/Bladed Quartz vein	Ridge	0.66	6
225251	Float	Hydrothermal breccia	Ridge	0.44	35.7

The Ridge area is situated on the western flank of a prominent north-northwest trending ZTEM conductivity high ridge near an intersection with a moderate northeast trending ZTEM conductivity high linear. White Point and Grey Eagle are situated on the east side of the intersection.

7.6.11 West Ridge Target

West Ridge is located immediately south of the Ridge target in the western portion of the Gold Springs project area. Similar to the Ridge target, much of the area is covered with a thin layer of colluvium, with mineralized float found over the 1.6 x 1.2-kilometer target area. Together the Ridge and West Ridge targets represent a large caldera-margin block, similar to the one hosting the Grey Eagle resource.

Using the bare earth LIDAR image, GRC was able to identify historic workings within this target area. Within the historical workings at the West Ridge target veins, breccia and stockwork zones are found to be gold bearing with vein material assays up to 5.60 g/t Au and 32.6 g/t Ag and stockwork zones along the vein margins grading +1.0 g/t gold. Sample results are shown in Table 7-12.

Table 7-12: West Ridge Sample Result

Sample	Sample Type	Description	Target	Au g/t	Ag g/t
224562	Float	Grab from quartz-calcite vein boulder	West Ridge	1.88	13.9
224564	Float	Banded quartz-calcite vein float	West Ridge	5.6	32.6
224566	Float	Green, chalcedonic, banded quartz-calcite vein	West Ridge	0.65	14.8
224567	Float	Banded, bladed quartz-calcite vein	West Ridge	0.58	4.5
224569	Dump	Silicified breccia with andesite clast in green quartz cement	West Ridge	0.28	7.3

Sample	Sample Type	Description	Target	Au g/t	Ag g/t
224570	Float	Banded, green quartz-calcite vein boulder.	West Ridge	0.43	13.3
224571	Dump	Massive quartz-calcite vein	West Ridge	1.74	15.1
224572	Grab	Quartz-calcite vein	West Ridge	0.41	12
224573	Float	Boulders of green, banded, bladed quartz-calcite vein	West Ridge	1.5	9.4
224574	Dump	Massive quartz-calcite vein	West Ridge	1.56	2.6
224576	Float	Chalcedonic, green, banded quartz vein	West Ridge	0.79	9.5
224579	Float	Bladed quartz-calcite vein	West Ridge	0.49	11.8
224580	Float	Green, banded quartz-calcite vein	West Ridge	0.65	17.4
224587	Float	Green, banded quartz-calcite vein	West Ridge	3.09	17.2
224588	Float	Silicified breccia on margin of quartz-calcite vein	West Ridge	0.39	9.6
224589	Float	Massive quartz-calcite vein	West Ridge	0.73	7.1
224591	Float	Sugary quartz vein	West Ridge	0.39	0.8
224592	Float	Drusy quartz vein	West Ridge	0.37	3.7
224593	Float	Green, bladed quartz vein	West Ridge	0.75	8.9
224597	Float	Green, banded quartz-calcite vein	West Ridge	0.34	7.2
224598	Float	Green, banded, bladed quartz vein	West Ridge	5.07	13.4
224599	Float	Green, banded, bladed quartz-calcite vein	West Ridge	1.57	11.2
225301	Float	Silicified andesite with stockwork quartz veining	West Ridge	1.43	6
225302	Sub-Outcrop	Green, banded quartz vein	West Ridge	0.93	21.4
225305	Float	Green, banded, bladed quartz-calcite vein	West Ridge	0.27	7.9

7.6.12 Big Summit Target

The Big Summit target is located immediately south of the Ridge and West Ridge targets and shows many similarities to those systems. Much of the area is covered with colluvium with a limited number of outcrops and historical workings offering insight into what is below. Mineralized float is found over a 1.7 x 2.0 kilometre area which provides an indication of the large potential size of this target. Workings in the area reveal altered and mineralized andesite below post-mineral tuffs and colluvium. Outcropping and sub-outcropping calcite-quartz veins are also found in areas near the historic workings. Veins are hosted within silicified andesite with several vein samples returning multi-gram gold values, reaching 30 g/t Au and 94.2 g/t silver. Sample results are shown in Table 7-13.

Table 7-13: Sample Results from Big Summit

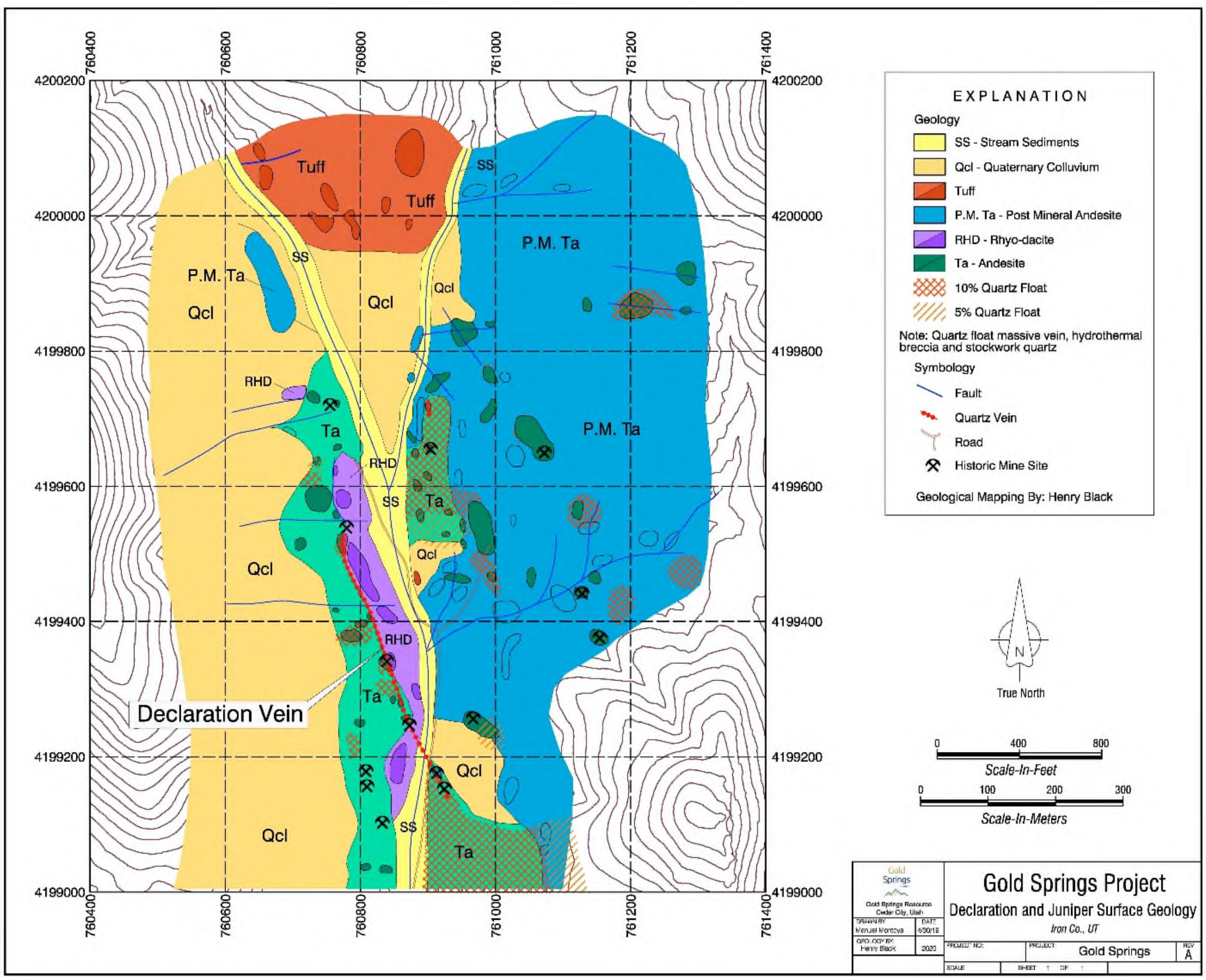
Sample	Sample Type	Description	Target	Au g/t	Ag g/t
225319	Float	Green Bladed Quartz vein	Big Summit	3.06	14.1
225406	Float	Green Banded/Bladed Quartz vein	Big Summit	30.3	94.2
225310	Float	Bladed Quartz vein	Big Summit	7.74	6.7
225324	Float	Bladed Quartz-Calcite vein	Big Summit	0.41	8.8
225331	Float	Bladed Quartz-Calcite vein	Big Summit	1.73	2.9
225333	Float	Bladed Quartz-Calcite vein	Big Summit	5.2	13.5
225300	Outcrop	Banded Calcite-Quartz vein	Big Summit	0.78	5.9
jk-20-002	Sub-outcrop	Banded Calcite-Quartz vein	Big Summit	4.01	18
225405	Outcrop, Discontinuous, 1m	Banded/Bladed Calcite-Quartz vein	Big Summit	0.48	6.5

Sample	Sample Type	Description	Target	Au g/t	Ag g/t
225296	Float	Quartz vein	Big Summit	13.4	14.2
225311	Float	Quartz vein	Big Summit	20.9	43.3
225321	Float	Quartz vein	Big Summit	0.34	7
225292	Float	Hydrothermal breccia	Big Summit	0.38	<0.5
225325	Float	Hydrothermal breccia	Big Summit	1.38	<0.5
225297	Outcrop	Stockwork Quartz veining	Big Summit	0.37	3.2

7.6.13 Declaration Target

Declaration is located to the east of the North Jumbo resource. Declaration is a massive, banded quartz vein averaging 0.5 metres in width and is hosted within altered andesite. Adjacent to the vein the host rock is brecciated and strongly silicified with stockwork veining continuing into the wall rock. The vein can be traced for 800 metres along strike with breccia and stockwork zones extending along 200 metres of strike length (Figure 7-33). Together with breccia/stockwork zones and altered host rock the target has a possible width of 50 metres. Sampling from the Declaration target has returned grades of +1 g/t Au and +100 g/t Ag with grades as high as 5.4 g/t Au and 153 g/t silver from selected vein material.

Figure 7-33: Declaration-Juniper Geology



7.6.14 Miracle Target

The Miracle target is located 250 metres west of the Horseshoe Extension and is largely covered by colluvium. Historical mine workings in a small area of roughly 50 metres by 50 metres consist of a collapsed adit, shaft and serval pits. Workings were made on a 010° striking quartz calcite vein dipping steeply to the southwest. In the historical pits heavily silicified, hematite oxidized andesite with bands of jasper are found. Work moving this target forward will require the opening of the collapsed tunnel and trenching to expose bedrock.

7.6.15 Gem Target

The Gem target is located near the northern extension of the Snow target along Gold Springs Wash. Gold Springs Wash is a major structural corridor the trends to the northeast and is a significant controller of mineralization found at the Juniper target. The Gem target is located at the confluence of the Snow Fault and the Gold Springs Wash Fault. At this intersection, a shallow geophysical high resistivity anomaly occurs in the CSAMT survey and represents a highly prospective target as both structures are known to host mineralization. Numerous historic workings are located on both the north and south sides of Gold Springs Wash. The workings expose heavily altered andesite with stockwork quartz veining. Table 7-14 lists the surface sampling results from the limited exposures within this target area.

Table 7-14: Surface Sample Results from the Gem Target

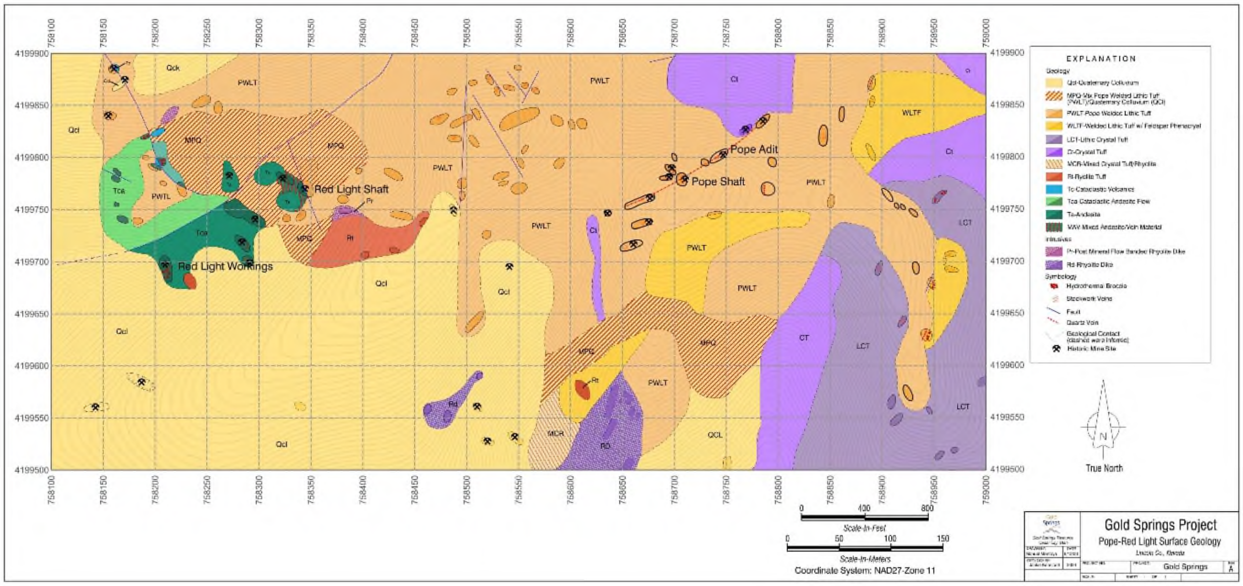
Sample	Sample Type	Mineralization type	Au (g/t)	Ag (g/t)
225337	Dump grab	Quartz sericite altered andesite	5.92	4.8
225339	1m chip	Breccia and stockwork quartz sericite altered andesite	0.33	7.4
225340	Float grab	Sugary quartz vein	0.46	19.4
225341	Float grab	Quartz vein	0.26	2.7
225343	Float 1m by 1m area	Silicified andesite and vein material	1.54	11.4

7.6.16 Red Light Target

The historical mine workings of the Red Light Target are located 400 metres to the west of the Pope mine. The target area is located along a NW trending fault valley. The contact between tuff units and the underlying andesite, where the mineralized horizon occurs, is exposed in two of the shafts along this fault. Stockwork and silicified breccias are observed in the andesite in several trench cuts and mine dumps (Figure 7-34). Banded and bladed white quartz veins are found in outcrop within mine trenches and generally strikes north-south. Together mine workings span a distance of 150 meters over a width of 50 meters before being lost under post mineral cover.

A total of 15 samples were collected from the Red Light Target. One sample returned values above the resource cut-off grade and contained 33.1 g/t gold. A select sample of vein material collected from the edge of one of the shafts exposing the tuff/andesite contact contained 33.1 g/t gold, signifying that this contact is a significant pathway for mineralizing fluids.

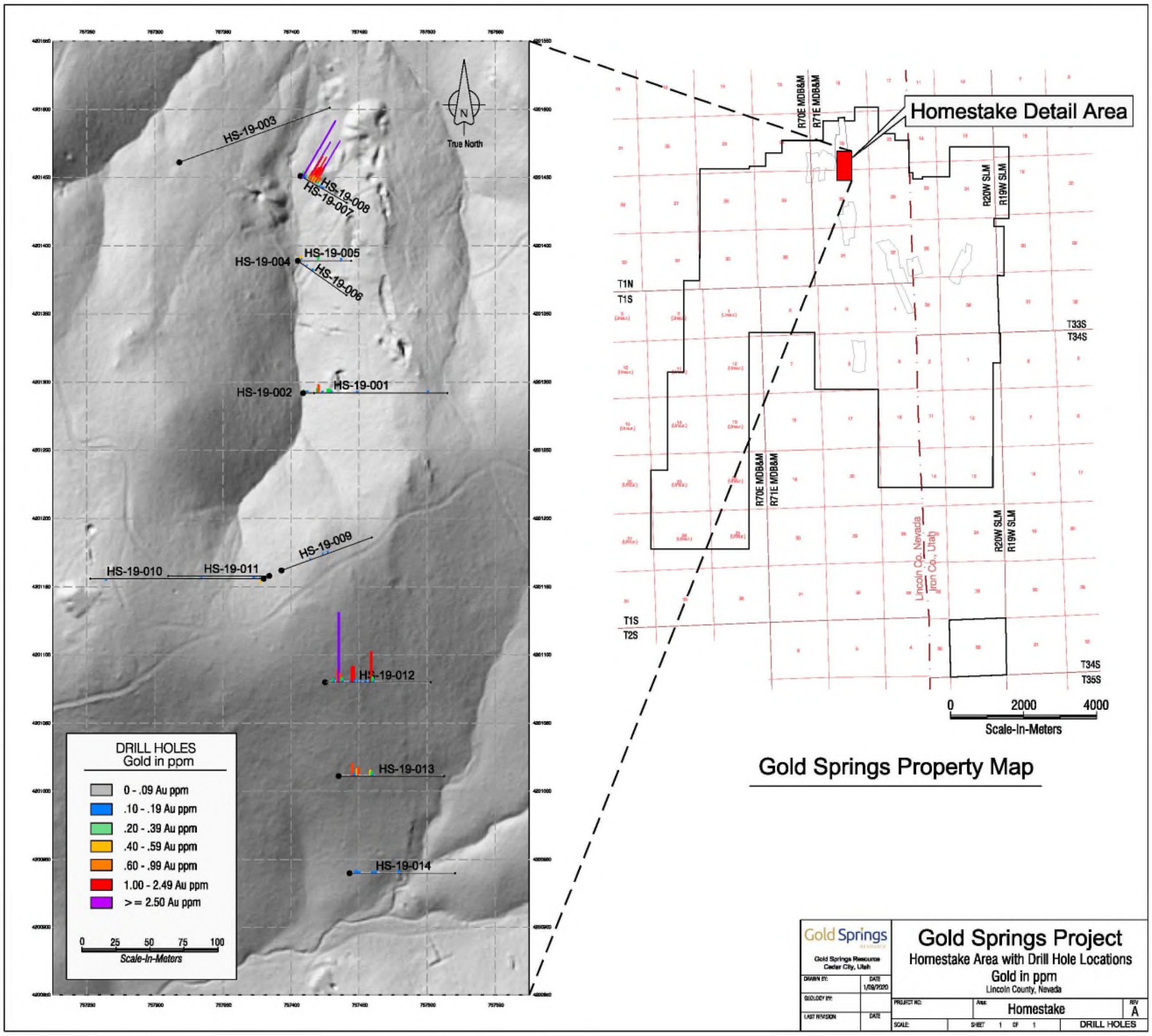
Figure 7-34: Redlight and Pope Geology



7.6.17 Homestake Target

The Homestake target is located at the northern boundary of the Gold Springs property, 700 metres east of the Grey Eagle resource (Figure 7-35). The target is comprised of a group of six patented lode claims controlled by the company through a lease agreement dated October 2017.

Figure 7-35: Homestake Drill Hole Location Map



The Homestake target is a part of the of the overall Homestake-Iris vein system and is characterized by a set of north-south trending banded quartz and quartz-calcite veins with opposing dips. The Homestake veins are two parallel, stacked veins of colloform banded and bladed quartz that dip shallowly (45-55°) to the west, while the Iris vein is a quartz-calcite banded vein dipping steeply (75-85°) to the east. Vein widths vary but are generally 2-4 metres wide as exposed in the historical mine workings. Veins can be traced for a total of 600 metres along strike and become obscured by post mineral cover to the north and south. The distinct vein structures are surrounded by zones of silicified breccias and stockwork quartz veining within the porphyritic andesite host rock that extend up to a total width of 400-metres, and in some places may extend further beneath post mineral cover. Rock chip samples collected from the Homestake veins show values of 3.5-14.4 g/t Au and 21.1-48.3 g/t Ag along a strike length of 600 metres. Breccia and stockwork zones grade as high as 1.6 g/t Au and 68.1 g/t Ag and 2.4 g/t Au and 9.9 g/t Ag, respectively, from selected rock chip samples.

The Homestake veins are hosted within an andesite package that is strongly silicified adjacent to the vein walls with larger halos of sericite and propylitic alteration. The veins occur in the hanging wall of a 005°

trending strike-slip fault zone that exhibits post mineral dike placement along the footwall. These post mineral dikes are andesitic and generally unaltered, although areas of sericitic alteration does occur within this unit directly along the fault contact. Underlying the andesite flows, the andesite is a package of dacite flows intercalated with thin 5- to 7-metre-wide rhyolite flows. The dacite and rhyolite units exhibit sericitic alteration with localized zones of Quartz-Sericite-Pyrite alteration occurring where they are brecciated or at the contact with the overlying andesite.

During 2019, GRC completed a 14-hole drill program at the Homestake target to explore the veins along strike and at depth (Figure 7-35). This drilling intersected bonanza grade mineralization at the northern exposure of the vein zone in HS-19-007, with a six-metre-wide interval averaging 22.9 g/t Au and 69.3 g/t Ag and a second larger 72-metre-wide zone grading 0.7 g/t Au and 1.9 g/t Ag (Figure 7-36 and Table 7-15). Four hundred metres to the south, the vein splays into a set of three parallel veins averaging one-metre widths at surface; drilling beneath this area returned grades of 1.12-4.23 g/t Au and 2.5-8.5 g/t Ag in hole HS-19-012 (Table 7-13). Other drill holes along strike of the Homestake system show nominal gold values, including HS-19-001 containing a 3-metre interval with an average of 0.46 g/t Au and 15.0 g/t Ag and hole HS-19-013 intersecting a 7.6-metre interval averaging 0.47 g/t Au and 3.2 g/t silver. This preliminary drilling drill results suggests there are high grade ore shoots within the vein system, similar to what is observed in the Jumbo system. Current drilling information is encouraging, and additional drilling will be required to further test this target area.

Figure 7-36: Homestake Cross-Section

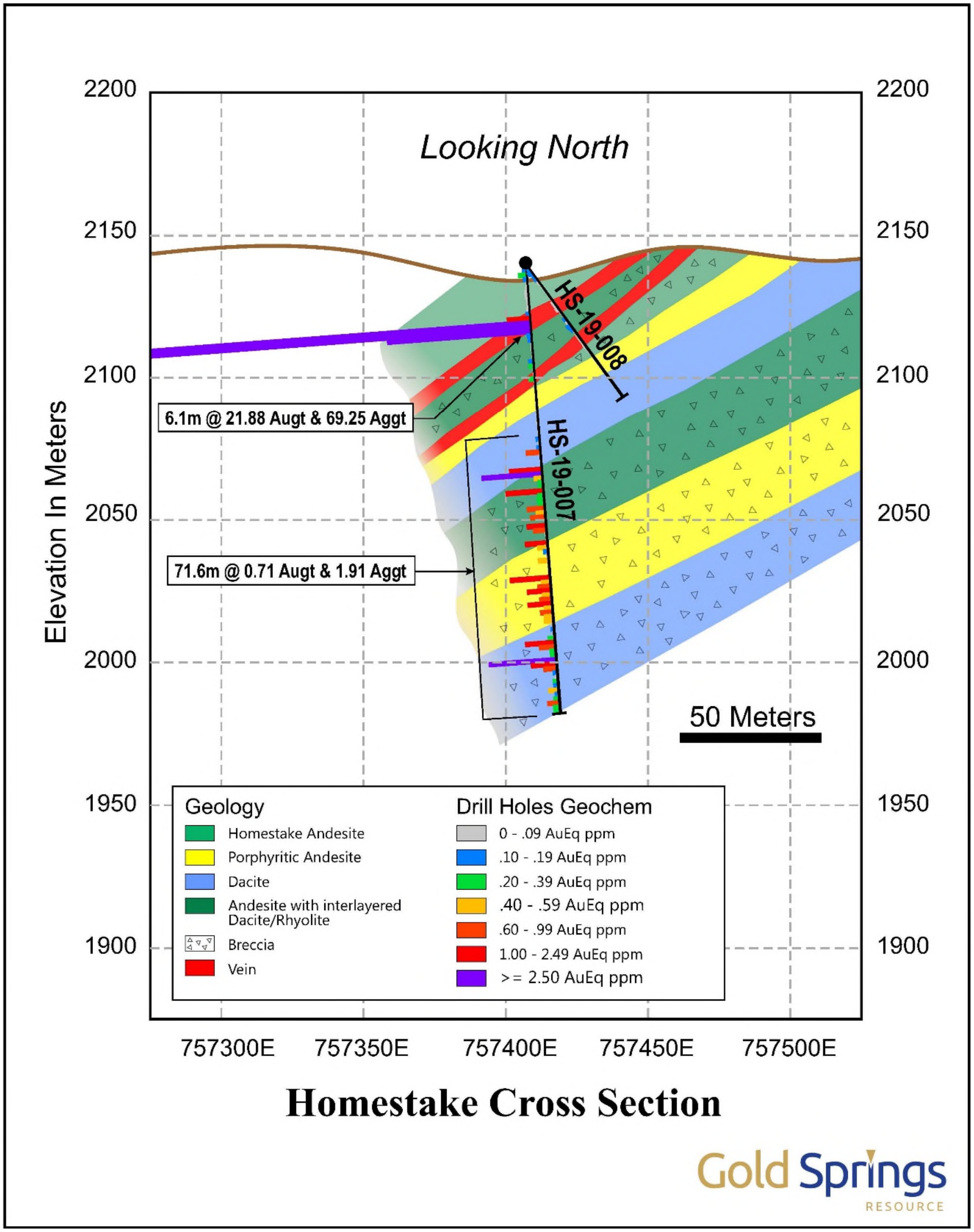


Table 7-15: Homestake Drill Results

Hole #	From (m)	To (m)	Interval (m)	Au ppm	Ag ppm
HS-19-001	15.2	18.3	3.0	0.46	15
HS-19-007	18.3	24.4	6.1	21.88	69.25
	71.6	143.3	71.6	0.712	1.91
	132.6	143.3	10.7	1.24	4.88

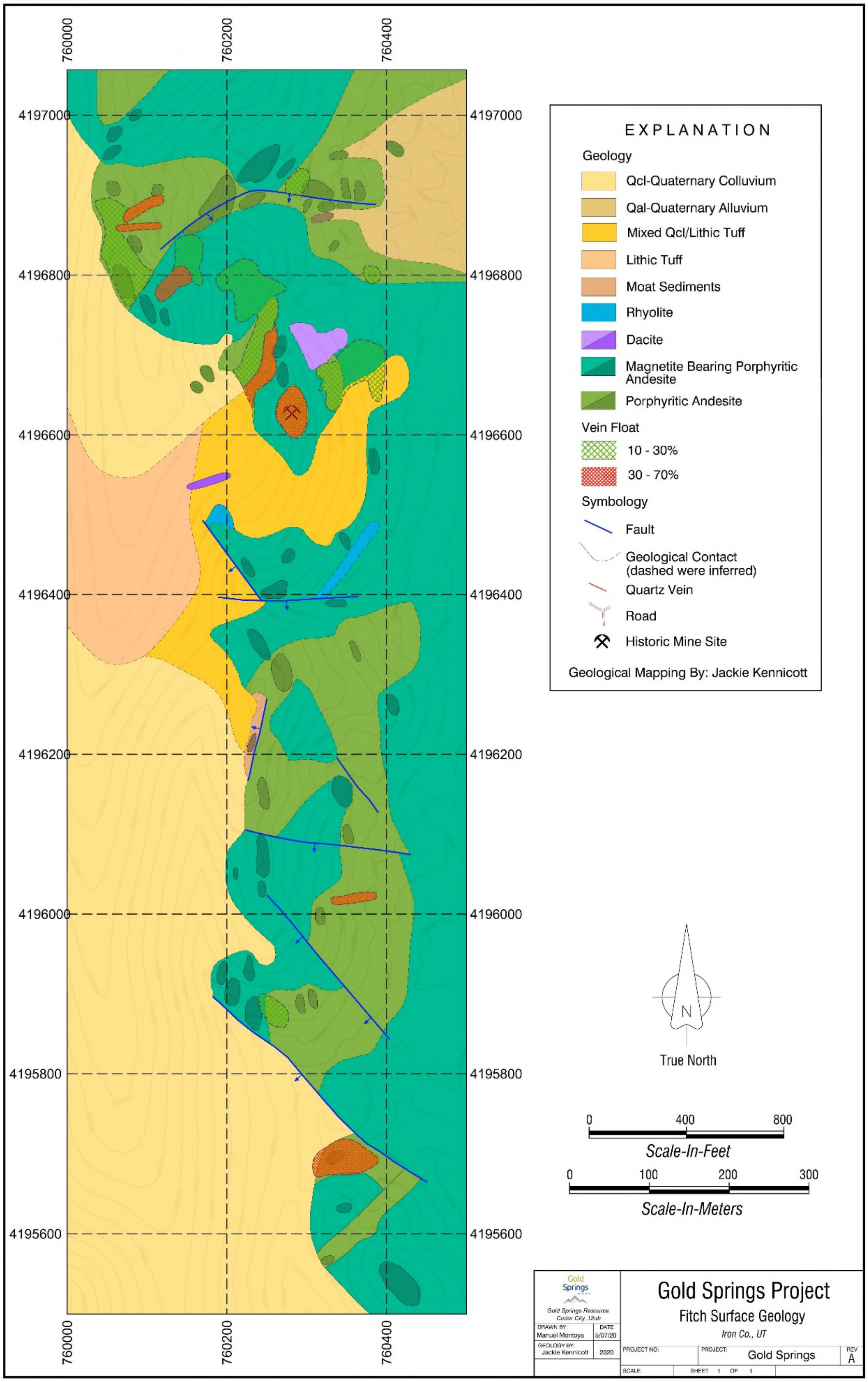
Hole #	From (m)	To (m)	Interval (m)	Au ppm	Ag ppm
HS-19-012	12.2	15.2	3.0	4.23	2.5
	27.4	30.5	3.0	1.12	4
	47.2	50.3	3.0	1.31	8.5
	12.2	50.3	38.1	0.63	2.6
HS-19-013	13.7	21.3	7.6	0.47	3.2

7.6.18 Fitch Target

The Fitch target lies along a north-south trending ridge line that runs parallel to the South Jumbo ridge and is located 400 metres due west of the South Jumbo resource area. The Fitch target is hosted along a possible structure associated with a caldera margin and is primarily identified by the ZTEM and CSAMT geophysical survey as a resistivity high.

The target consists of a series of mapped conjugate fault sets that have accommodated block faulting with the displacement down dropping to the south (Figure 7-37). Alteration is traceable for 1.5 kilometer along strike; however, veining and breccia textures are best exposed in the up lifted northern blocks. Mineralization consists of calcite-quartz banded and bladed veins hosted within strongly clay/sericite altered andesite. Calcite-quartz veins are observed as float in windows through post mineral gravels occurring as large boulders in and around historical mining trenches and makes up 35-40% of the back fill used to close the historical mine shaft. Rock samples taken from vein in float and dump material at old historic trenches at the new Fitch target grade as high as 2.4 g/t Au and 4.4 g/t silver.

Figure 7-37: Fitch Geology



7.6.19 Juniper Target

The Juniper target is defined by a strong north-south CSAMT (ground geophysical survey) resistivity anomaly (Figure 7-38). The anomaly is of similar magnitude and length to the resistivity anomaly associated with the North Jumbo resource but is much broader in width reaching up to 400 metres versus 200 metres at North Jumbo. The CSAMT anomaly is open to the north where the Company plans to extend the CSAMT ground geophysical survey coverage in 2022. Juniper is also centered on a high resistivity anomaly from the airborne ZTEM geophysical survey. The North Jumbo resource follows the eastern edge of this ZTEM anomaly (Figure 7-38). These anomalies show broad zones of resistivity highs centered on the strong quartz-sericite alteration and a region of structural complexity which is a similar setting to both the North and South Jumbo resources.

The northern portion of the Juniper target is predominantly covered by post-mineral volcanic flows. Windows exposing the underlying material contain strongly quartz-sericite altered andesite frequently containing veins up to 0.5 meters in width and broad zones of stockwork veins and breccia development. The style of mineralization, the alteration, and the structural setting at Juniper are like those seen in the southern portion of the North Jumbo resource where +80 metre zones of +1 g/t Au have been intersected in drilling. Historical mine pits are seen throughout the juniper target area, exposing quartz veins, hydrothermal breccias, and strongly altered andesite. Juniper has scattered exposures of altered and veined outcrop showings, that can be seen through windows in the overlying post-mineral material. It appears that the quartz-sericite alteration and stockwork veining extends under the thin cover, potentially stretching over an area roughly 600 x 400 metres and remains open to the north where the possible extension goes under post-mineral cover.

The Juniper target is bound by two regional left-lateral strike-slip faults that have accommodated extension and dilational zones with a series of intersecting faults, oblique to the main strike-slip fault zones. These fault intersections have similar character and shapes to structural zones that host the North and South Jumbo resources (Figure 7-39).

Figure 7-38:Juniper Target Location relationship to CSAMT

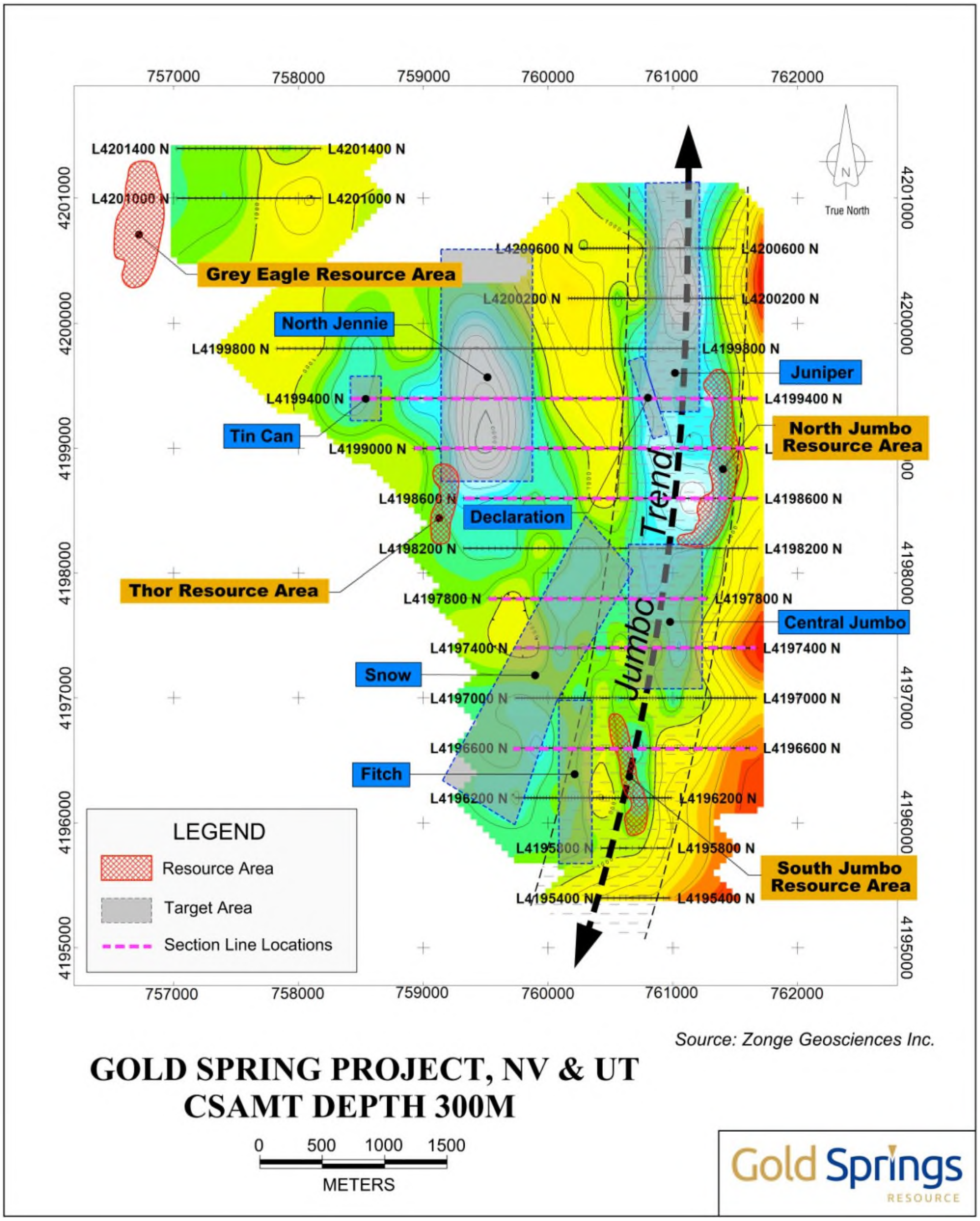
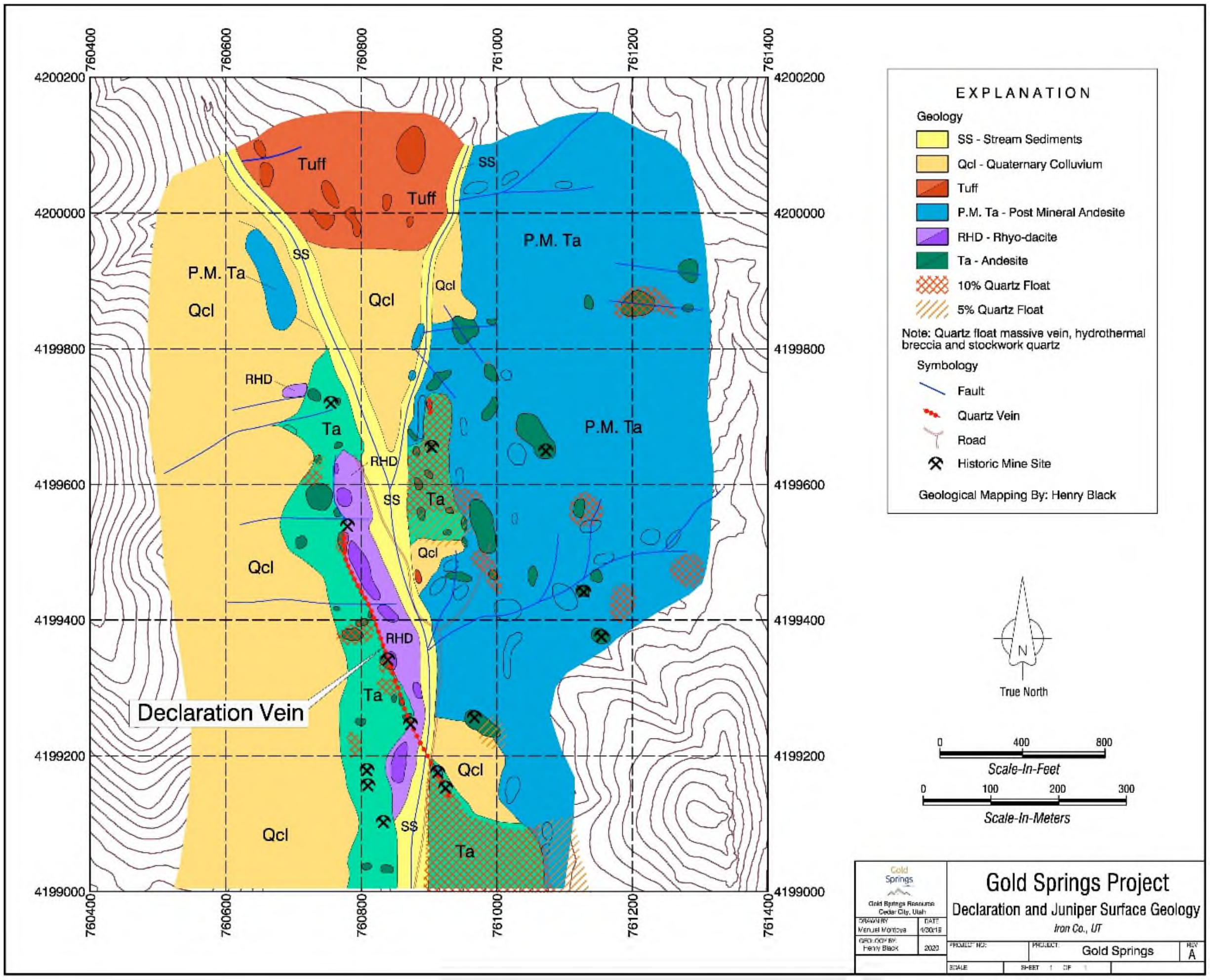


Figure 7-39: Juniper and Declaration Geology



In 2021, the Company drilled 1,140 meters in 5 holes at Juniper. The holes were located to test CSAMT resistivity highs which define a geophysical target 2,000x400 meters in this area largely covered by post mineral flows. Hole JP-21-003 returned 0.97 g/t Au and 3.0 g/t Ag over 6.1 meters and JP-21-004 returned 1.02 g/t Au and 99.7 g/t Ag over 1.5 meters .

7.6.20 Pinyon Target

The Pinyon target is located in the southwest corner of GRC claim block on the Nevada side of the project. Pinyon is situated along the western margin of the Gold Springs Caldera complex and displays structures related to the caldera collapse, similar to the setting at the Grey Eagle resource. The Pinyon target is interpreted to be a high-level expression of a caldera margin hosted, epithermal gold system.

The target covers 2.2 square kilometers that are largely covered with colluvium and post mineral tuffs. However, where exposures are found, northeast-trending sheeted-calcite-quartz-vein zones display coarse-bladed textures similar to those found at the existing resource areas on the project. The sheeted vein zones have widths of up to 50 metres before being lost under post mineral cover. Mineralized float is also found throughout the target area with samples of calcite-quartz and quartz vein material grading as high as 3.3 g/t Au and 6.9 g/t silver. Altered andesite host rock sampled in float returned grades of 3.69 g/t Au and 16.1 g/t silver.

7.6.21 West Pinyon Target

The West Pinyon target is located immediately west of the Pinyon target in the southwest corner of Gold Springs property in Nevada. Like the Pinyon target, the West Pinyon target is interpreted to be a high-level expression of a caldera margin hosted, epithermal gold system. The West Pinyon target is situated on the western edge of the Gold Springs Caldera and displays collapse features similar to other areas of the property, including the Grey Eagle resource.

The area is largely covered with post-mineral colluvium, however windows through the cover expose discontinuous banded-bladed calcite-quartz vein zones and more expansive areas of hydrothermal brecciation. Mineralized float, dominantly in the forum of hydrothermal breccia, is found mixed with colluvium throughout much of the area suggesting that the post-mineral cover is thin. Vein zones are discontinuous and traceable for 10s of metres at surface. These banded quartz and quartz-calcite vein zones contain much of the mineralization found in sampling, grading up to 42.30 g/t Au and 131.0 g/t silver. Hydrothermal breccia zones in outcrop cover an area of about 800 x 400 metres with scattered showings throughout the 1.1 x 2.0-kilometer target area signifying a large area of hydrothermal fluid activity. Rock chip gold values greater than 0.25 g/t Au are listed in Table 7-16.

Table 7-16: Rock Chip Sampling Results from West Pinyon

Sample ID	Sample Type	Description	Au g/t	Ag g/t
33933	Float	Vuggy light green quartz vein	0.35	11.6
33475	Outcrop	Quartz-calcite-adularia vein	1.03	6
33932	Outcrop	Bladed quartz-calcite-adularia vein	0.33	4.9
33572	Outcrop	Bladed, light green quartz vein	0.91	4.2
33573	Outcrop	Vuggy light green quartz-adularia vein	0.47	4.8
33571	Outcrop	Bladed light green quartz-calcite vein	0.45	3.7
33569	Suboutcrop	Quartz-calcite-adularia vein	0.79	5.1
102570	Float	Quartz boulders	0.41	3.3
102573	Float	Vuggy, bladed and banded quartz boulders	0.26	1.5
33480	Float	Banded quartz vein	1.97	10.5
33488	Float	Light green quartz vein boulder	1.87	11
33576	Float	Sugary light green quartz vein	0.34	7.7
33479	Float	Light green quartz vein	5.83	24
33495	Outcrop	Banded quartz-calcite vein	0.67	1.3
33497	Dump	Banded, bladed quartz-calcite vein	0.38	0.9
225391	Dump	Massive to sugary quartz-calcite vein	1.98	20.8
225392	Float	Massive to sugary quartz-calcite vein	0.27	2.6
225393	Suboutcrop	Massive to sugary quartz-calcite vein	0.27	2.6
225398	Float	Massive to sugary quartz-calcite vein	0.44	3.5
113971	Float	Massive to sugary, banded, quartz-calcite vein	0.27	2.5
113973	Float	Colloform banded quartz vein boulders	0.43	25.6

Sample ID	Sample Type	Description	Au g/t	Ag g/t
113983	Suboutcrop	Banded, vuggy, bladed quartz vein	0.53	5.4
113984	Outcrop	Banded and bladed, vuggy quartz-calcite vein	1.22	9.3
113997	Suboutcrop	Thinly banded quartz-calcite vein	0.78	5.3
225469	Suboutcrop	Calcite-quartz vein with bladed silica	0.37	1.7
225482	Outcrop	Banded, bladed quartz-calcite vein	0.45	0.8
225391	Dump	Massive sugary quartz/calcite vein	1.98	20.8
225392	Float	Bladed quartz-calcite vein	0.27	2.6
225393	Suboutcrop	Massive quartz vein	0.27	2.6
225398	Float	Massive quartz vein	0.44	3.5
225400	Float	Drusy quartz vein	0.24	3.7
225103	Float	Oxidized quartz vein	0.91	5.2
225111	Float	Banded green quartz vein	42.3	131

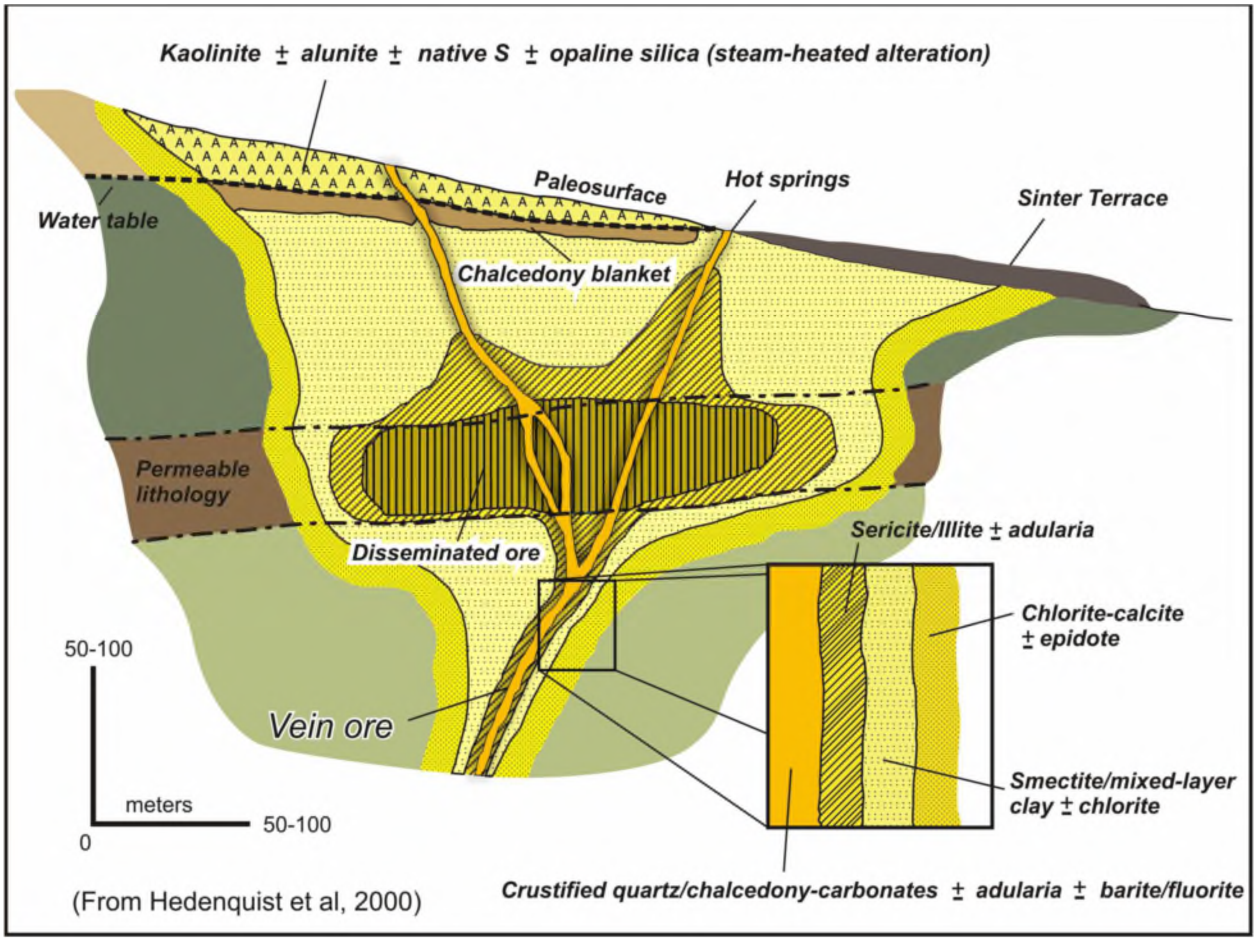
8.0 DEPOSIT TYPES

Gold mineralization on the Gold Springs project is characterized by structurally controlled vein and stockwork systems that are laterally extensive forming wide corridors of mineralization that are traceable over a strike length of several kilometres. The structural zones are a combination of Basin and Range through-going faults and ring fracture systems associated with caldera margins. Within these structurally prepared zones, mineralization takes the form of discreet veins, breccias, sheeted vein zones, stockwork veins, and zones of disseminations. The veins exhibit quartz, adularia, and low sulfide contents that are typical of a deposit type referred to as “low-sulfidation epithermal deposits” (Robert, et al., 2007). Examples of this deposit type include Round Mountain, Nevada, Hishikari, Japan (Etoh, et al., 2002), the Republic district, Washington, and Midas, Nevada (Leavitt, et al., 2004). These systems have been correlated with fossil hot springs, and the hydrothermal systems that underlie them, that developed in response to alkalic and silicic volcanic activity, commonly in a caldera setting (Robert, et al., 2007). One of the characteristics that help classify the Gold Springs systems as a “low-sulfidation epithermal deposit” are the observed textures of quartz, adularia, and calcite in the vein deposits and would be tentatively correlative with the “vein rock” schematically shown in Figure 8-1. These areas of “vein rock” are typically surrounded by broad areas of stockwork and breccia -hosted mineralization, and/or areas of altered and fractured wallrock where increased permeability hosts disseminated gold mineralization. The mineralization observed in the Bull Hill and Pope Mine areas may correspond to some of the upper levels of a hot springs system, as schematically shown in Figure 8-1, or may be a part of a completely different style of gold mineralization. Ongoing detailed geologic work by GSLLC is focusing on a better understanding of the mineralization in these target areas.

Several well documented “low sulfidation” epithermal gold systems include the El Peñón deposit in Chile, where structurally controlled veins containing quartz and adularia, cut felsic volcanic units, and are associated with waning rhyolitic volcanic activity (Robbins, 2000). Silicification extends outward from the veins into the country rock, with sericitic alteration haloes. The precious metal-bearing veins exhibit stockworks, breccias, banded texture, comb quartz, and bladed texture in quartz that replaces carbonates (Photo 8-1) (Robbins, 2000). The Midas deposit in Nevada is another low sulfidation epithermal deposit that is structurally controlled near the margins of a volcanic complex and is known for very high-grade gold mineralization hosted by veins (Leavitt et al., 2004), though it lacks the broader disseminated and stockwork-controlled mineralization as seen at Round Mountain and Gold Springs.

Low sulfidation epithermal gold deposits commonly exhibit a vertical zoning for precious metals that correspond to the levels of boiling that occurred within the hydrothermal system. Episodic sealing and explosive activity formed the breccias and stockworks commonly observed in the structures, and the concurrent rapid pressure changes resulted in the precipitation of carbonates and, in many cases, the subsequent resorption and replacement of the carbonates by quartz that result in a lattice-texture and bladed texture where quartz replaces calcite (Simmons, et al., 1994). These textures are noted as an important feature and observation in the mineralized zones of low sulfide systems because it records the rapid changes associated with the boiling zone and is associated with the precipitation of gold (Etoh, et al., 2002). Low sulfidation epithermal systems are noted for distinct vertical zoning of mineralization horizons that correspond to the boiling level in the system (Etoh, et al., 2002), and have been reported to range generally from <300 metres to almost 1-km vertical thickness (Robert, et al., 2007). This vertical

Figure 8-1: Schematic Cross Section Showing Components in a Low Sulfidation Epithermal System



Schematic cross section showing components in a low sulfidation epithermal system, after Hedenquist et al., 2000.

Photo 8-1: Bladed Texture and Banding in Quartz Vein Sample from the Jumbo System

zoning of precious metal mineralization has also been documented in systems such as at Midas, Nevada (Leavitt, et al., 2004).

The alteration associated with low sulfidation epithermal systems commonly exhibits silicification proximal to the veins and stockworks, illite alteration, and distal propylitic alteration in the country rocks, with some vertical zonation of clay minerals that have been noted ranging from higher temperature (deeper) illite to low temperature (shallow) kaolinite in the wall rock alteration assemblage (Simmons et al., 2005). Low sulfidation epithermal systems associated with alkalic volcanism may exhibit vanadium-rich mica and abundant carbonate minerals in the alteration surrounding the veins (Jensen, et al., 2000). In some examples, massive opaline silica and siliceous sinter can form, and generally indicate a very shallow level in the system that corresponds to where the paleo-water table intersected surface topography (Simmons, et al., 2005).

In the Gold Springs project area, gold mineralization is typically hosted by andesites and is also associated with the younger episodes of rhyolitic volcanism and caldera formation. The vein systems exhibit silicification adjacent to the structures, sericitic alteration, and distal propylitic alteration in the andesites. In the Bull Hill and Pope Mine areas, mineralization is hosted by rhyolitic flows and tuffs, and alteration appears to have a different character, dominated by sericitic alteration with fluorite and carbonate. The role of favorable host rocks to gold mineralization is being developed at the Gold Springs project. Studies from drilling suggest that in the Jumbo trend, andesites are the favorable host rock and that an underlying rhyolite unit appears to form a base to mineralization or possibly a portion of a stacked system. In the South Jumbo Resource area, an underlying andesite unit appears to form a lower boundary or marker in the mineralizing system. In the Pope and Charlie Ross area, rhyolitic rocks are a favorable host, and in the Fluorite area rhyolites and pipe-like features are the host for mineralization.

9.0 EXPLORATION

GRC has been involved with the Gold Springs Project since 2010 through the GSLLC subsidiary. Summaries of past exploration and drilling are detailed in the 2011, 2012, 2013, 2015, 2017, and 2020 NI 43-101 reports filed on SEDAR, (L&A and Kurt Katsura, 2014; Katsura, 2011; GRE, 2015; GR,2017a; GRE, 2020).

Since 2010, GRC has completed 363 drill holes at Gold Springs for a total of 60,165.3 metres. The Company has completed resource estimates on four of the 33 targets: North Jumbo, South Jumbo, Thor, and Grey Eagle. These resource estimates are based on the assay information from drill holes completed through 2019. In this report, new drilling data is reported from 82 RC holes comprising 18,156 meters completed in 2021 in the following targets:

- Juniper – 5 holes
- North Jumbo/Tremor – 26 holes
- South Jumbo – 16 holes
- Central Jumbo – 3 holes
- Charlie Ross – 22 holes
- White Point 9 holes
- North Jennie – 1 hole

Prior exploration activities carried out on the Property between 2010 and 2020 include:

- 42,008.5 metres of drilling in 281 RC holes
- 662 metres of drilling in 6 core holes
- Detailed surface geologic mapping on the 33 targets
- Structural mapping and interpretations
- Geological interpretations of the resource areas and 3D modeling
- Flying and the interpretation of a property wide airborne ZTEM and magnetic survey
- Completing a ground based CSAMT survey over the eastern portion of the property
- Flying of a project-wide LIDAR survey and the development of a detailed elevation model
- Collection of surface rock chip and trench samples (if available, described for each target in Section 7.0, Geology)
- Extensive soil surveys
- Stream sediment surveys
- Ongoing metallurgical testing programs, including:
    - Gravity concentration followed by bottle roll cyanidation of the gravity tailing of 74-micron (200-mesh) material from drill cuttings
    - Cyanide extraction from bottle roll tests on drill cuttings ground to 74 microns
    - Cyanide extraction from bottle roll tests of RC cuttings which varied in size from a P_{80} of 0.762 to 6.069 mm

   - Small column tests of trenched Grey Eagle material and Jumbo drill core crushed to 9.5 mm
   - Large column tests on composite drill core from Jumbo crushed to P_{80} ¾-inch
- Resource calculations and a Preliminary Economic Evaluation for the North Jumbo and Grey Eagle areas
- Updated resource calculations for North Jumbo, South Jumbo, Thor, and Grey Eagle
- Identification of 33 areas with outcropping gold mineralization in the project area
- Raptor survey
- Updated resource calculations and a Preliminary Economic Evaluation for the North Jumbo, South Jumbo, Thor and Grey Eagle

9.1 Geophysics

9.1.1 LIDAR

The LIDAR survey was completed by GRC in late June 2014, and final deliverable products were received in August 2014. Products include the following:

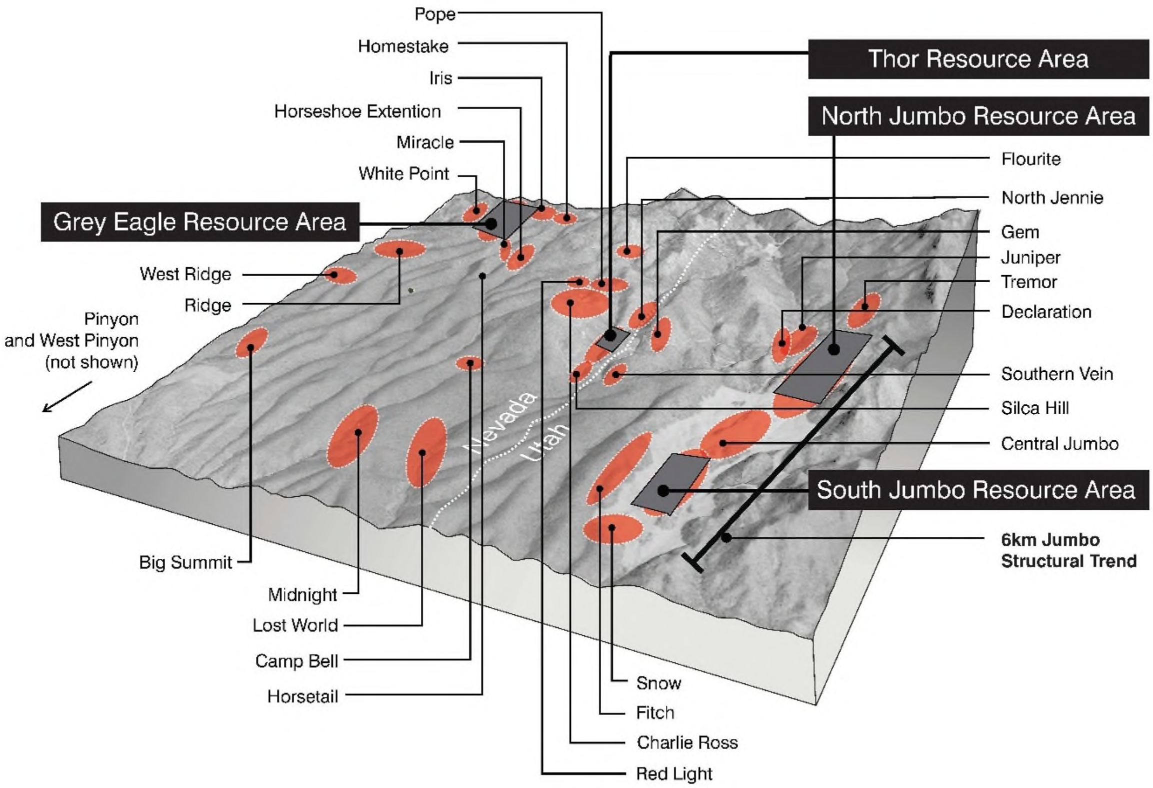
- Classified LiDAR point clouds, Ground (digital terrain model [DTM] Keypoints), Low Vegetation and High Vegetation
- Digital Terrain Model (DTM Keypoints)
- Bare Earth and Full Feature grid points at 1-metre spacing
- Greyscale hillshade models of Bare Earth and Full Feature surfaces at 1-metre pixel resolution
- 1-metre topographic contours without breaklines
- Digital color orthophoto mosaics with a 20-cm pixel resolution, 1 km x 1 km tiles
- LiDAR and orthotile index map
- LiDAR survey report outlining collection methodology, quality control measures, sensor description, calibration and check point statistics, flight line maps, ground control, LiDAR and orthophoto processing.

The survey results provided a valuable detailed topographic base for future mine planning and produced a bare earth view of the project area filtering out the Pinyon pine forest and vegetation (Figure 9-1). This enhanced view allows for a more detailed structural interpretation by revealing the true ground surface, as well as identifying additional areas of historic pits, adits, and shafts. Several new areas of mineralization were identified by this process for follow-up sampling activities.

9.1.2 ZTEM

In 2011, GRC completed a 470-line-km ZTEM and aeromagnetic helicopter survey. Previous ground CSAMT surveys revealed a positive correlation between the known epithermal gold systems and buried, subvertically-dipping resistivity high features. The ZTEM results correlated very well with CSAMT results and known geology, especially with the presence of all the known mineralized areas. This work indicated numerous additional targets in the project area which were subsequently incorporated into the project by additional federal lode claims.

Figure 9-1: Target Areas at Gold Springs



During April 27–30, 2011, Geotech Ltd. carried out a helicopter-borne geophysical survey for GRC over the Gold Springs project (Photo 9-1). The principal geophysical sensors included a ZTEM and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimetre. A total of 470-line-km of geophysical data were acquired during the survey.

The survey operations were based out of the town of Pioche, Nevada. In-field data quality assurance and preliminary processing were carried out daily during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products, were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results were presented as the following maps:

- Three-dimensional (3-D) view of In-Phase Total Divergence versus Skin Depth (30-720 hertz [Hz]) to 720 Hz)
- Total Magnetic Intensity
- Digital Elevation Model (DEM)
- Reduced to Pole (RTP) of Total Magnetic Intensity
- First Vertical Derivative of RTP
- Second Vertical Derivative of RTP
- 30 Hz In-Phase Total Divergence Grid

Photo 9-1: Helicopter Conducting ZTEM Survey for GRC during 2011

- 90 Hz In-Phase Total Divergence Grid
- 360 Hz In-Phase Total Divergence Grid
- Tzx (In-line) In-Phase Profiles over 90 Hz Phase Rotated In-Phase Grid
- Tzx (In-line) Quadrature Profiles over a 90 Hz Phase Rotated Quadrature Grid
- Tzy (Cross-line) In-Phase Profiles over 90 Hz Phase Rotated In-Phase Grid
- Tzy (Cross-line) Quadrature Profiles over a 90 Hz Phase Rotated Quadrature Grid

In addition to the above, Geotech was contracted to complete two-dimensional (2-D) inversion processing of the ZTEM data and more detailed processing of the magnetics, including the development of first and second derivatives of the RTP.

The survey was flown in an east to west (north-90° east azimuth) direction, with a flight line spacing of 200 metres. Tie lines were flown in a north to south (north-0° east azimuth) direction, with a flight line spacing of 1900 metres.

Total Divergence (DT) imaging, analogous to the very low frequency Peaker parameter of Pedersen (1998), converts the ZTEM tipper cross-over data into peak responses, which assists their interpretation in plan. The DT lows (conductive) areas signify areas with sulphides or possibly conductive clays, and the DT highs (resistive) areas represent resistive rocks which show an excellent correlation with known gold occurrences, as would be expected in the low sulphidation environment. This correlation of resistive rocks and gold mineralization can also be demonstrated in the prior ground CSAMT.

Following completion of the 2-D inversion by Geotech, Mira Geoscience was contracted to complete a 3-D inversion of both the ZTEM conductivity data and the magnetics. This work was carried out in 2012. The modelling process used geologic and geophysical modelling software including GOCAD, ZTEM_MT3D and MAG3D. The resulting models for the ZTEM and magnetic inversions provided a 3-D conductivity model of the earth that honours the ZTEM and magnetic data to a specified level of fit. The modelling correctly considered 3-D topographic effects, which can significantly influence the data. The inversion modelling was unconstrained by geologic and physical property information.

The primary outcome of these studies was the development of a clear correlation with the location of surface gold mineralization and gold intersected in drill holes particularly with the margins of the high resistivity features. This correlation can be seen both in the "depth-slice" presentation (Figure 9-2 and Figure 9-3) of the data and in cross-sections developed from the 3-D inversion study (Figure 9-2). When the resistivity high is shallow, a strong correlation between the margins of the resistivity highs and gold intersected in drill holes exists, as can be seen in the North and South Jumbo Resource areas (Figure 9-4). When the resistivity high is deeper, as at Grey Eagle, gold mineralization is found both at the margins and over the top of the resistivity features. This correlation is interpreted as relating to the heat source for the "hot spring" style mineralization seen at Gold Springs, the heat source being high silica, highly resistive rhyolites.

Figure 9-2: ZTEM Resistivity Highs and Correlation with Outcropping Gold Bearing Rocks and Gold in Drill Holes in the North Jumbo Resource Area

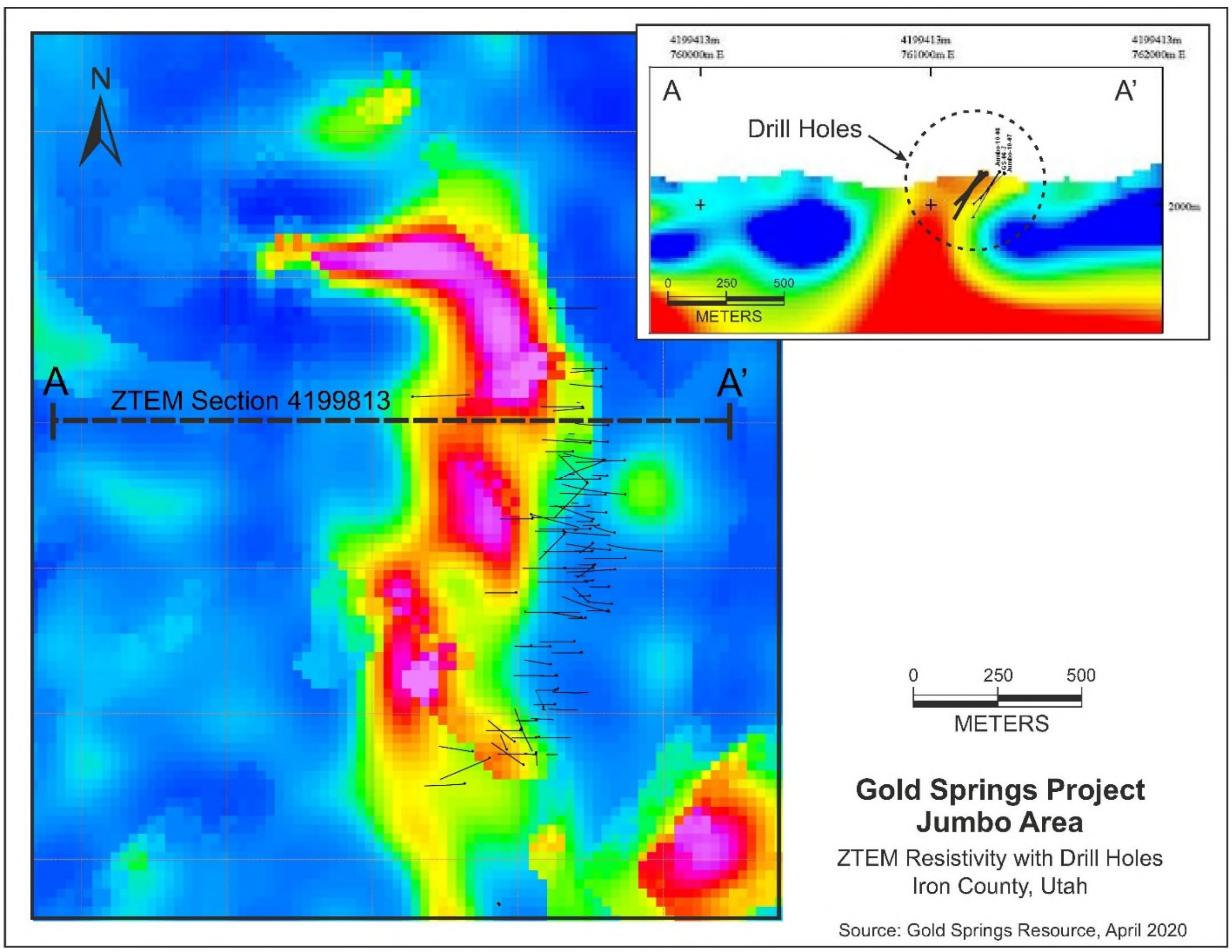


Figure 9-3: ZTEM Resistivity Highs and Correlation with Outcropping Gold Bearing Rocks in the Gold Springs Project Area

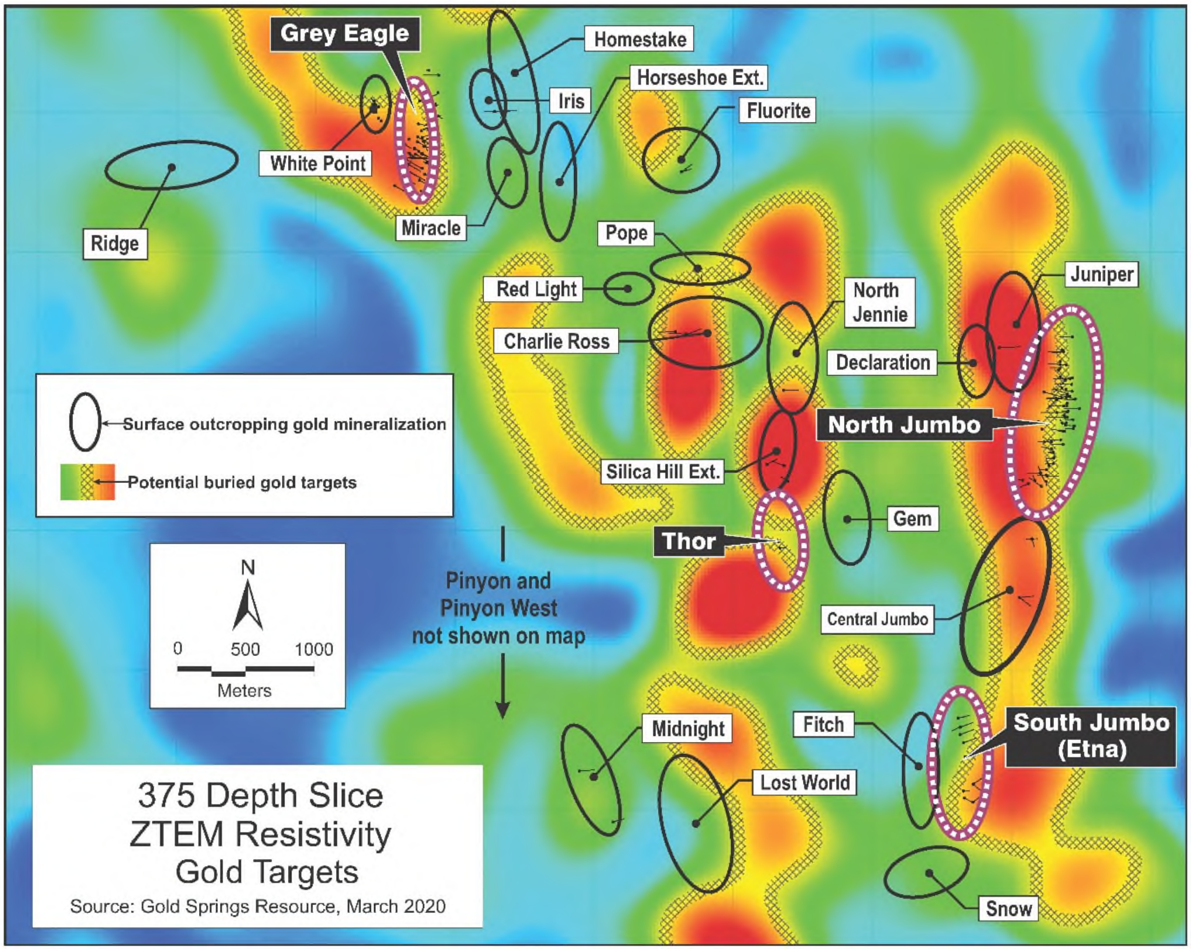
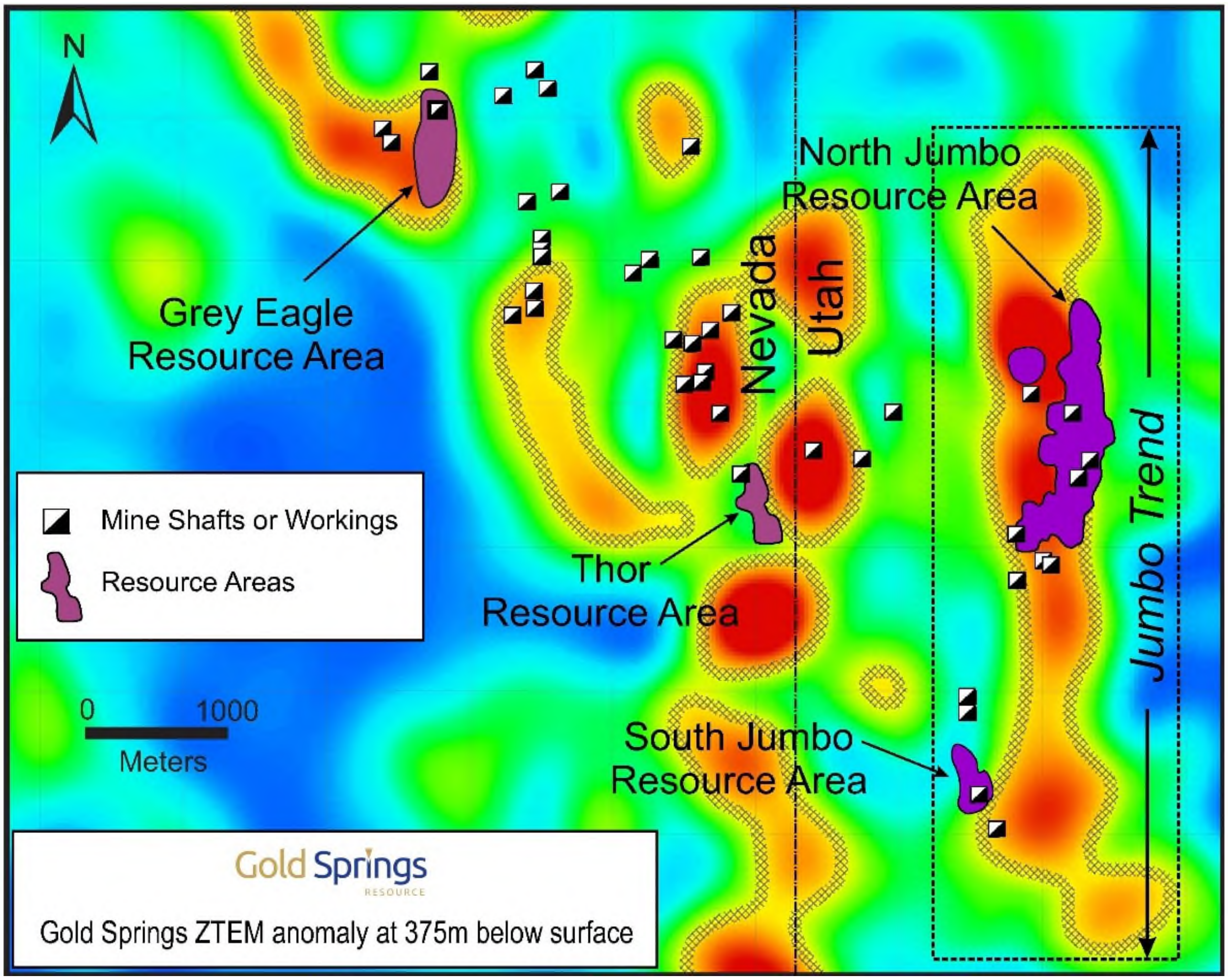


Figure 9-4: Jumbo Trend Showing ZTEM Anomaly



Surface and subsurface follow-up of the resistive features continues on the property. In the case of the Jumbo Trend, it can be seen to extend in the subsurface for several kilometres to the north of the area drilled to date and several hundred meters to the south, and defines the Jumbo Trend, which includes the South Jumbo. GRC is currently working with the geophysical data to help define targets and extensions of known gold mineralization where they likely extend under the colluvial cover or have been offset by fault structures.

9.1.3 CSAMT

In 2020 the Company contracted Zonge International, Inc. to perform a CSAMT survey on the Gold Springs Project. The survey was conducted during the period of 21 June 2020 to 3 July 2020. CSAMT data were acquired by a single receiver crew on 6 lines for a total of 8 line-kilometers of data coverage. This survey extended the coverage of an earlier survey conducted by Zonge for Astral Mining in 2004.

The CSAMT survey:

- Shows a high correlation between resistivity highs ("anomalies") and gold-bearing drill intercepts at the North and South Jumbo resources, the Thor resource and numerous other targets.

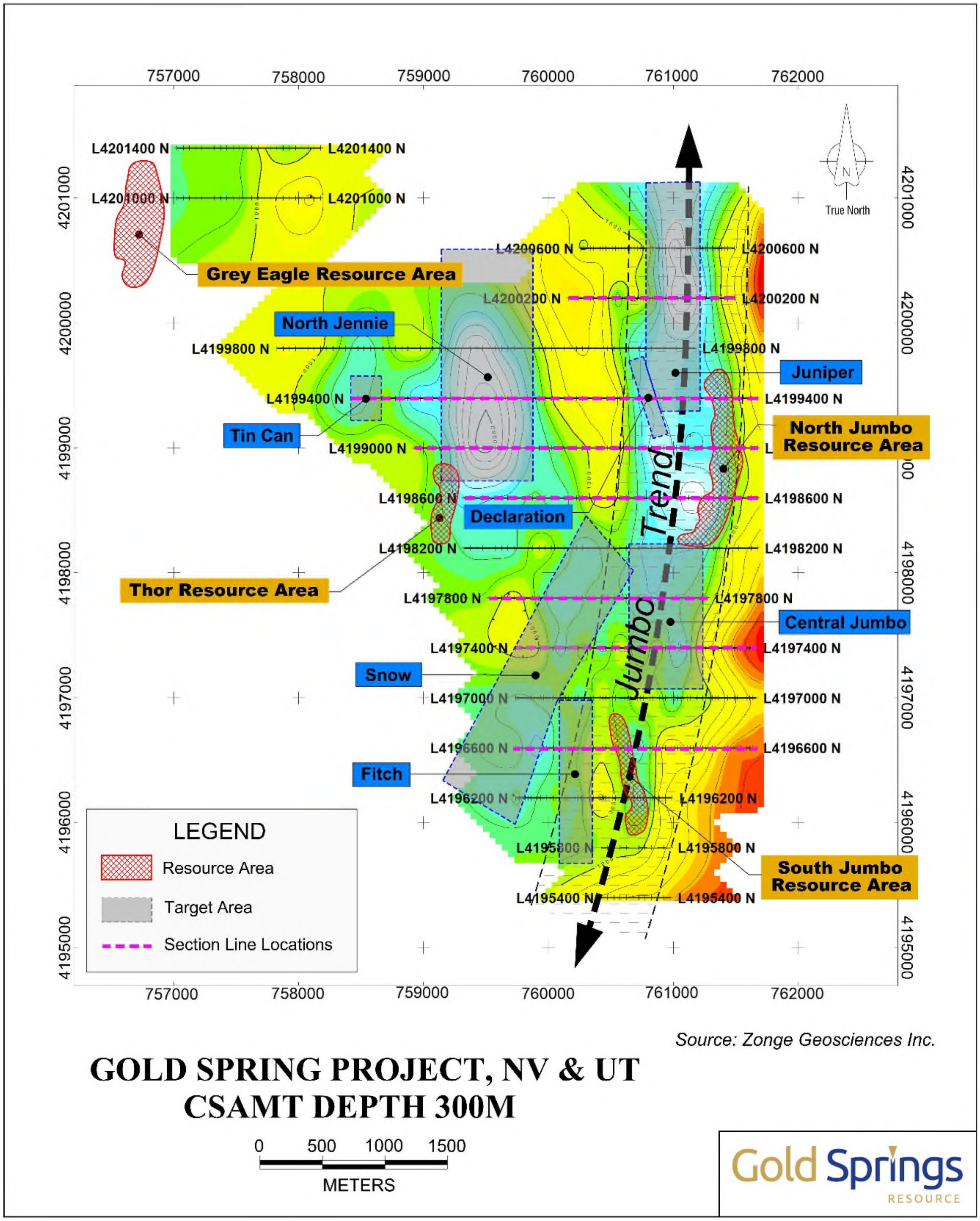
- Extends the North Jumbo resistivity high 1,500 metres north and 1,000 metres south into the Central Jumbo Target.
- Highlights the Juniper Target outlining a large 2,000-metre-long anomaly open to the north.
- Defines a large 2,000-metre-long anomaly at the North Jennie Target.
- Identifies a large 2,000-metre-long, open anomaly at the Snow Target.
- Indicates the Tin Can, Charlie Ross, Pope, and Red Light Targets may all be related to the same large system.

CSAMT measures conductivity in the subsurface rocks. Volcanic hosted epithermal gold systems, like those found on the Gold Springs project, are associated with zones of low conductivity, or conversely, areas of high resistivity. The survey results have not only demonstrated the close association of the known resources with high resistivity, but the potential extension of those resources. In addition, other GRC drill-target areas are highlighted by similar anomalies providing support for the size and quality of the targets.

The survey was designed to cover the Central Jumbo target, filling a gap in a previous survey. It also expanded the previous survey west from the South Jumbo resource to cover the Fitch and Snow targets and extend coverage north from the North Jumbo resource, testing for its extension and covering the Juniper and Declaration targets and possible extensions.

The CSAMT survey now covers 5,800 metres along the Jumbo trend and is open to the north. It mapped a high resistivity zone the length of the Jumbo trend extending it another 1,000 metres to the north where it remains open (Figure 9-5). The survey also identified high resistivity extensions into the northern portion of the Central Jumbo target and mapped the major structures through this area which control gold mineralization to the north and south. This new information will help guide the next drill program targeting Central Jumbo.

Figure 9-5: CSAMT Survey 300-metre Depth Slice



GRC has looked at the gold distribution within the resource areas and the relationship to the resistivity. This comparison demonstrates a strong correlation between gold values and resistivity highs. It also demonstrates the extensive areas yet to be drill-tested (Figures 9-6, 9-7, 9-8, 9-9, and 9-10). GRC has now mapped a resistivity anomaly extending 1,500 metres north, merging with the Juniper Target and 1,000 metres south of the current 1,500-metre-long North Jumbo resource. The Juniper, Snow, and North Jennie anomalies are all 2,000 metres in length with Juniper and Snow still open to expansion along strike. Width of the anomalies for these targets vary from 500-1,000 metres at Juniper, 400 to 700 metres at Snow, and 500 to 1,000 metres at North Jennie.

Comparing the relationship between the targets and the resistivity signature as seen in the cross sections, it is clear there is a close correlation between the targets GRC has outlined and the resistive material as defined in the CSAMT survey. Many of these targets have limited surface exposure due post-mineral cover and yet they have large scale resistivity anomalies associated with them beneath that cover. These are highlighted on the plan map and cross sections through the Juniper, North Jennie, Snow, Red Light-Pope, and Tin Can targets

Figure 9-6: CSAMT Cross Section North Jumbo-North Jennie-Charlie Ross

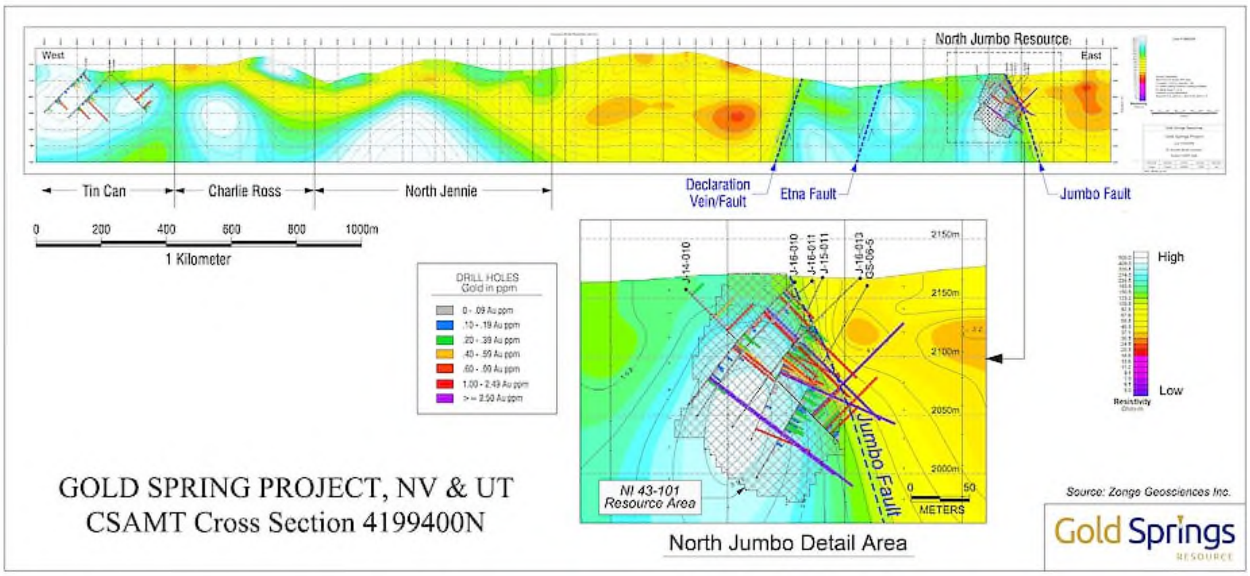


Figure 9-7: CSAMT Cross Section through North Jumbo-North Jennie

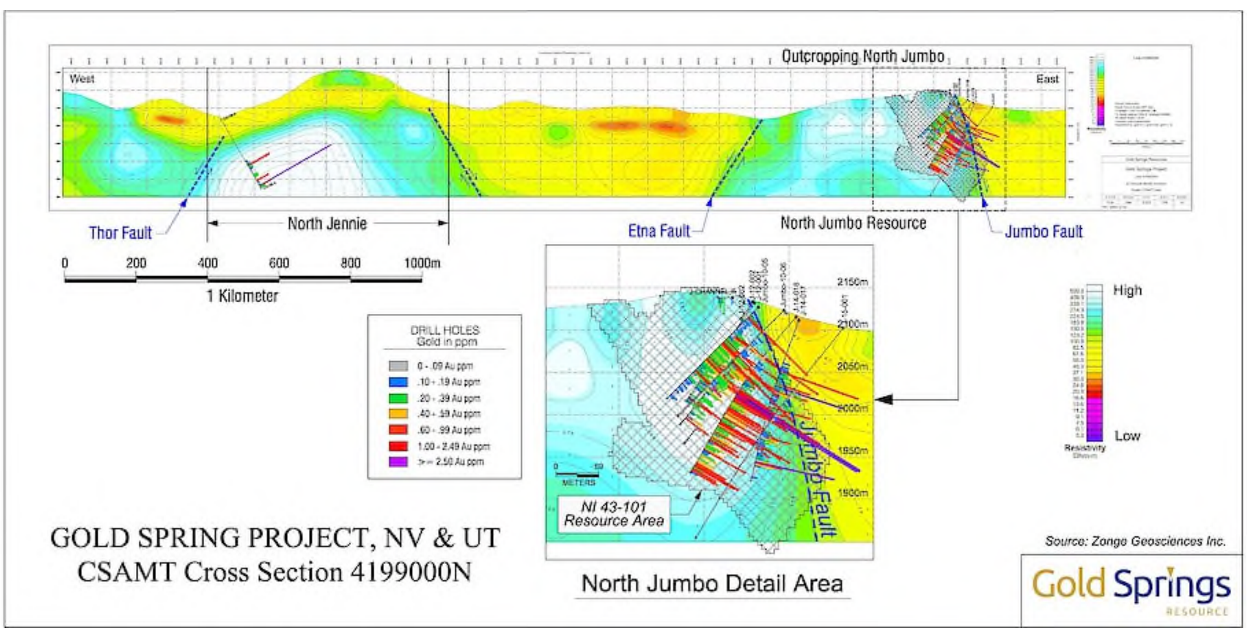


Figure 9-8: CSAMT Cross Section through South Jumbo-Fitch-Snow

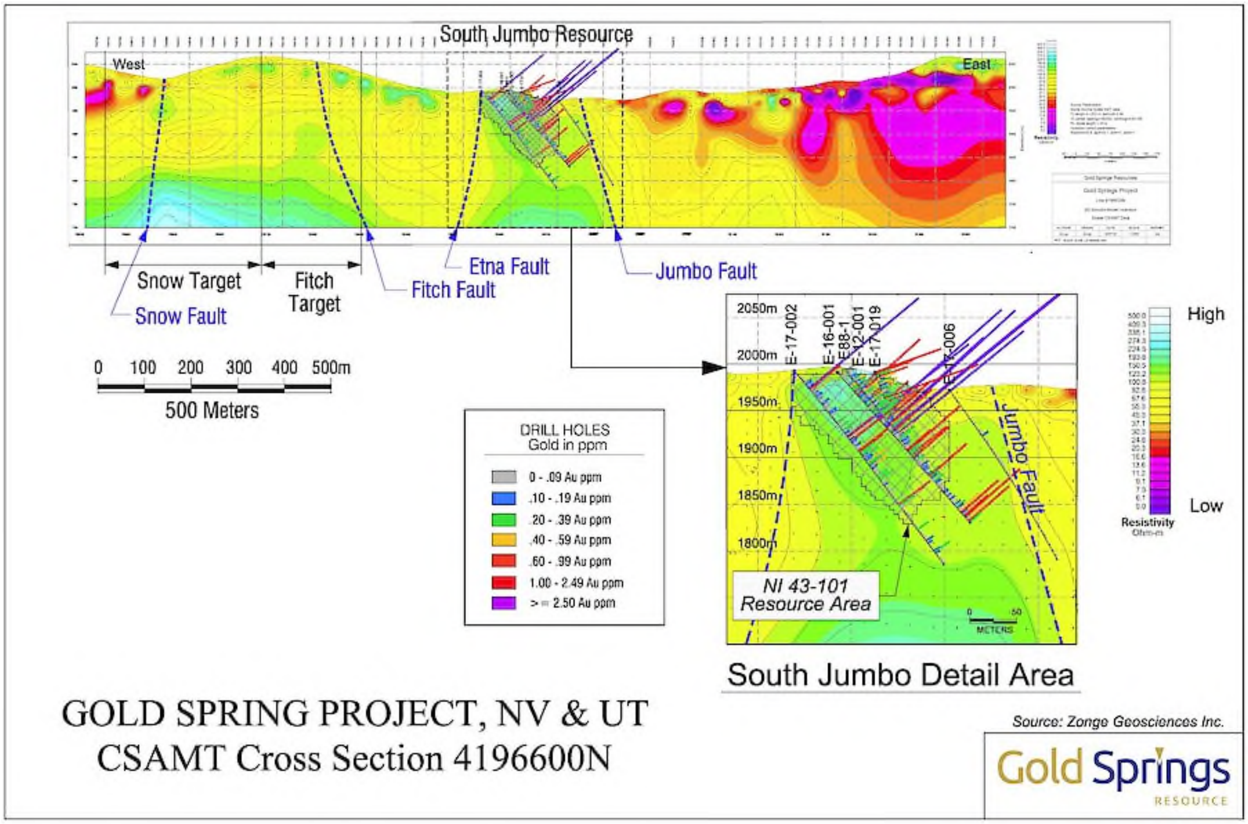


Figure 9-9: CSAMT Cross Section through Central Jumbo-Fitch-Snow

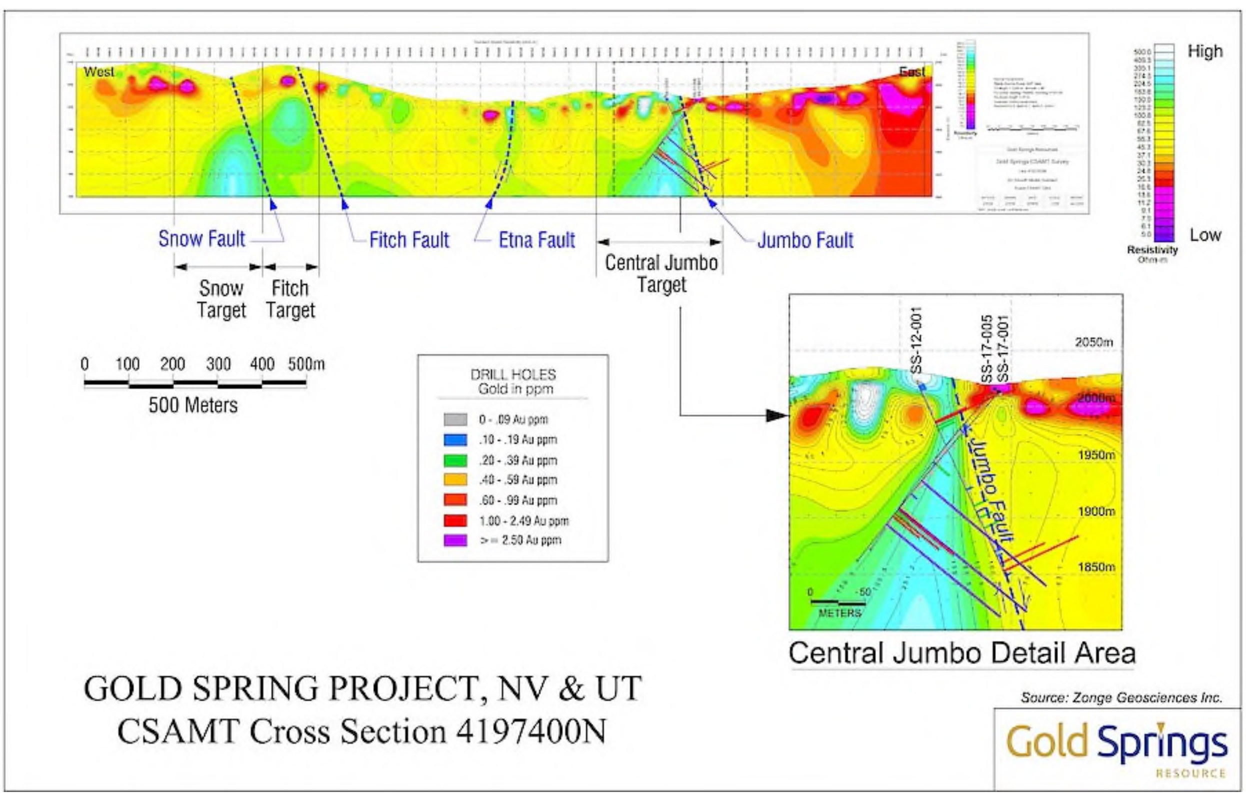
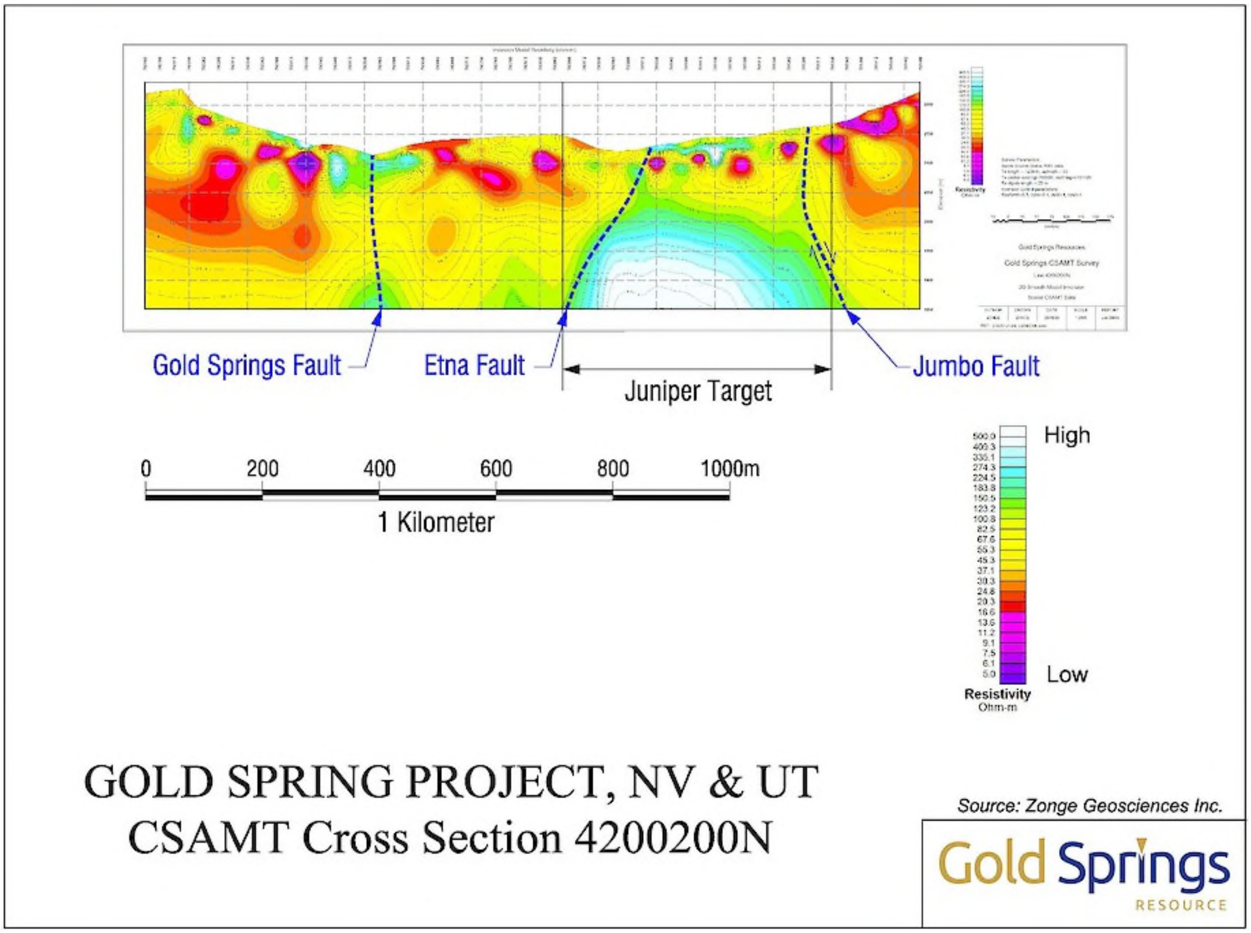


Figure 9-10: CSAMT Cross Section through Juniper



10.0 DRILLING

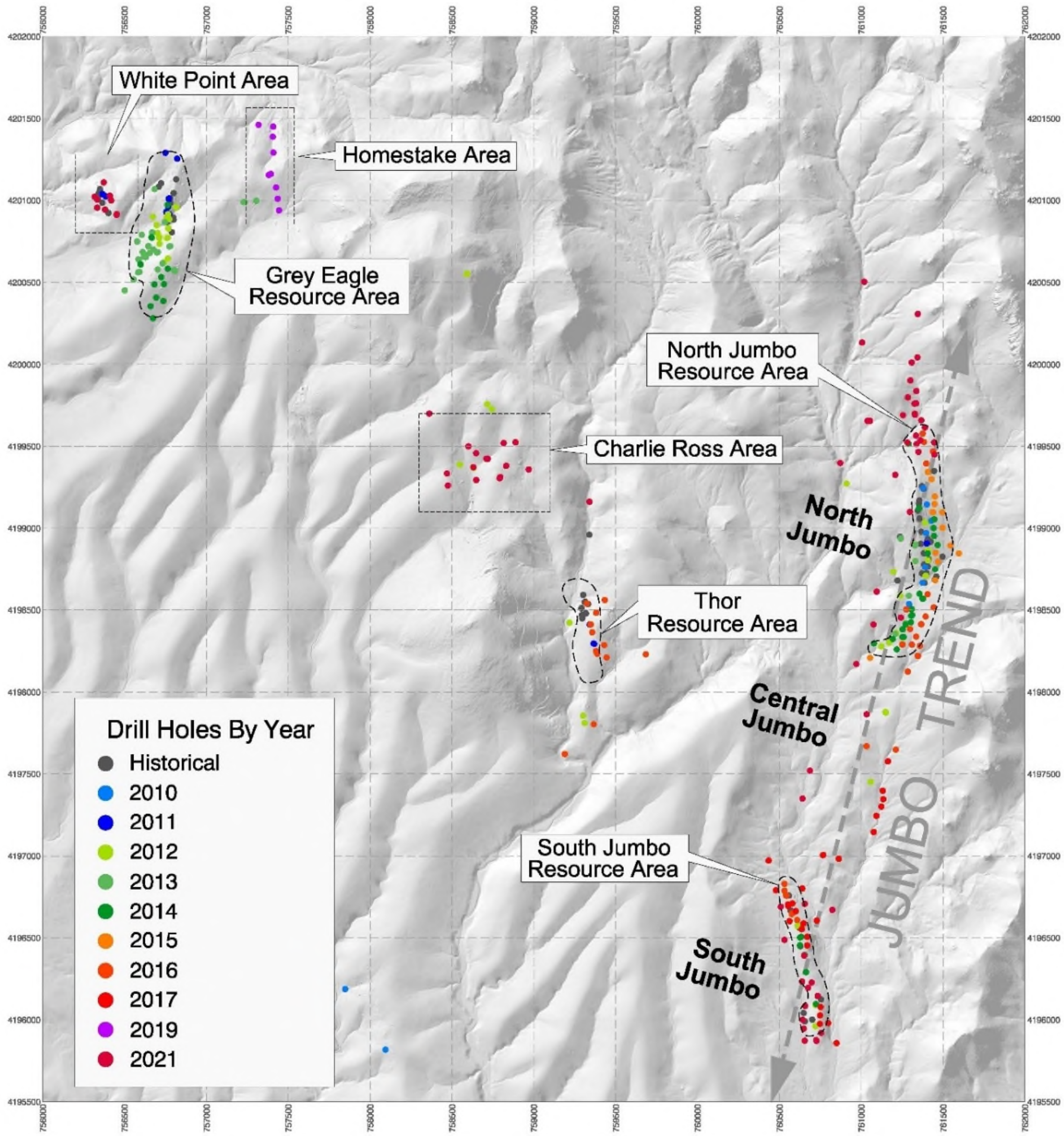
10.1 Overview

Since 2010, GRC has completed 363 drill holes at Gold Springs for a total of 60,164.7 metres. This drilling is summarized by year and target in Table 10-1, and the location of the holes is shown in Figure 10-1. High-grade intercepts for each target explored before 2021 have been provided and described in Section 7.0, Geology. This section has been updated to include the 2021 drilling campaign.

Table 10-1: Drilling Summary During 2010 to 2021

Drilling Campaign	Targets	# RC Holes	# Core Holes	Total Meters	Total # of Assays
2010	North Jumbo-Midnight	11		1,821.20	1,196.00
2011	North Jumbo-Thor- Grey Eagle-White Point	17	2	1,881.80	1,236.00
2012	North Jumbo-Grey Eagle Central Jumbo-South Jumbo Charlie Ross-Pope-Silica Hill- Fluorite	56		7,172.00	5,408.00
2013	North Jumbo-Grey Eagle	55		8,309.70	6,271.00
2014	North Jumbo-Grey Eagle- South Jumbo	37	4	6,167.50	4,754.00
2015	North Jumbo	14		3,131.70	2,363.00
2016	North Jumbo-Central Jumbo South Jumbo-Thor-Southern Vein- Silica Hill	43		7,045.40	5,296.00
2017	South Jumbo-Central Jumbo	28		4,622.00	3,385.00
2019	Homestake	14		1,856.10	1,404.00
2021	North Jumbo-Central Jumbo- South Jumbo-Charlie Ross- White Point-Juniper-North Jennie	82		18,157.30	13,702.00
Total		**357**	**6**	**60,164.70**	**45,015.00**

Figure 10-1: GRC Drill Hole Locations by Year



GRC completed a Mineral Resource Estimate and PEA on four of the 33 targets: North Jumbo, South Jumbo, Thor, and Grey Eagle (GRE, 2020). The resource estimate and PEA are based on the assay information from drill holes completed through 2019.

Table 10-2 to Table 10-10 summarize all drilling campaigns from 2010 to 2019, including 275 RC and 6 DH holes (core drilling), totaling 42,007.40 meters together with 31,313.0 assays.

10.2 2010 Drilling Campaign

In 2010, GRC completed 11 RC holes totaling 1,8210.20 metres (Table 10-2). These holes were directed into the North Jumbo and Midnight targets.

Table 10-2: 2010 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	9	1,546.9	1,016
Midnight	2	274.3	180
Total	11	1,821.20	1,196

10.3 2011 Drilling Campaign

In 2011, GRC completed two Core holes totaling 280.76 metres, including one hole in North Jumbo and one in Thor. In this campaign, GRC also completed 17 RC holes totaling 1,601.04 metres in Thor, Grey Eagle, and White Point (Table 10-3).

Table 10-3: 2011 Drilling Summary

Target	# RC Holes	# Core Holes	Total Meters	Total # of Assays
North Jumbo	0	1	143.6	95
Thor	2	1	277	182
Grey Eagle	10	0	1,031.7	677
White Point	5	0	429.5	282
Total	17	2	1,881.8	1,236

10.4 2012 Drilling Campaign

In 2012, GRC designed and completed 15 RC holes totaling 2,040.6 metres in North Jumbo, with an exposed north-trending silicification ridge.

In this campaign, GRC also extended its exploration areas to the Grey Eagle, Central Jumbo, South Jumbo, Charlie Ross, Pope, Silica Hill, and Fluorite targets. GRC completed 41 RC holes in these seven targets, totaling 5,131.4 metres (Table 10-4).

Table 10-4: 2012 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	15	2,040.6	1,541
Grey Eagle	21	2,621.3	1,978
Central Jumbo	6	693.4	523
South Jumbo	3	417.6	315
Charlie Ross	3	524.3	395
Pope	2	207.3	156
Silica Hill	3	310.9	234
Fluorite	3	356.6	266
Total	56	7,172.0	5,408

10.5 2013 Drilling Campaign

In 2013, GRC was focused on the North Jumbo and Grey Eagle targets. GRC completed 55 RC holes, including 12 holes in North Jumbo and 43 holes in Grey Eagle totaling 8,309.7 metres (Table 10-5).

Table 10-5: 2013 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	12	1,390.7	1,050
Grey Eagle	43	6,919	5,221
Total	55	8,309.70	6,271

10.6 2014 Drilling Campaign

Drilling in 2014 was a continuation of the 2013 drilling campaign. In this campaign, GRC extended its exploration on North Jumbo with drilling of 22 RC holes totaling 3,654.2 metres. GRC also extended its exploration to the South Jumbo target, with drilling of six RC holes totaling 810.7 metres. GRC also completed nine RC holes totaling 1,702.6t in Grey Eagle (see Table 10-6).

Table 10-6: 2014 Drilling Summary

Target	# RC Holes	Core Holes	Total Meters	Total # of Assays
North Jumbo	22	2	3,654.2	2,860
Grey Eagle	9	2	1,702.6	1,284
South Jumbo	6	0	810.7	610
Total	37	4	6,167.5	4,754

10.7 2015 Drilling Campaign

In 2015, the North Jumbo target, with an exposed silicification and alteration, was the main targets. In this campaign, GRC completed 14 RC holes totaling 3,131.7 metres (Table 10-7).

Table 10-7: 2015 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	14	3,131.7	2,363
Total	14	3,131.70	2,363

10.8 2016 Drilling Campaign

In 2016, GRC completed 29 RC holes in the Jumbo area, including North Jumbo, Central Jumbo, and South Jumbo, totaling 4,789.8 metres. In this campaign, GRC also competed 11 RC holes in Thor, one in Southern Vein, and two in Silica Hill, totaling 2,255.6 metres (Table 10-8).

Table 10-8: 2016 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	18	2,985.5	2,253
Central Jumbo	3	419.1	316
South Jumbo	8	1,385.2	1,045
Thor	11	1,885.2	1,423
Southern Vein	1	99.1	75
Silica Hill	2	271.3	184
Total	43	7,045.40	5,296

10.9 2017 Drilling Campaign

South Jumbo and Central Jumbo were only two exploration targets during the 2017 drilling campaign. GRC competed 28 RC holes totaling 4,622.0 metres in these two targets (see Table 10-9).

Table 10-9: 2017 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
South Jumbo	19	3,334.3	2,413
Central Jumbo	9	1,287.7	972
Total	28	4,622.0	3,385

10.10 2019 Drilling Campaign

In 2019, a new exploration target, Homestake, in the northwest of the property was tested. In this drilling campaign, GRC completed 14 RC holes totaling 1,856.1 metres (Table 10-10).

Table 10-10: 2019 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
Homestake	14	1,856.1	1,401
Total	14	1,856.1	1,401

10.11 2021 Drilling Campaign

New drilling data is reported from 82 RC holes comprising 18,157.3 metres completed in 2021 in seven targets: North Jumbo, Central Jumbo, South Jumbo, Charlie Ross, White Point, Juniper, and North Jennie (Table 10-11).

Table 10-11: 2021 Drilling Summary

Target	# RC Holes	Total Meters	Total # of Assays
North Jumbo	26	7,124.4	5,376
Central Jumbo	3	435.8	329
South Jumbo	16	2,828.1	2,134
Charlie Ross	22	4,760.8	3,593
White Point	9	1,612.3	1,217
Juniper	5	1,139.9	860
North Jennie	1	256.0	193
Total	82	18,157.3	13,702

10.12 Survey Procedures

The following is a description of the current (2021) and previous (2010 to 2017 and 2019) procedures related to the layout of the drill hole location, down-hole surveys, and hole location surveys, which were carried out on the property.

GRC geologists lay out drill-hole locations in the field. Drill hole locations are designed from the GIS database, geologic interpretations, and detailed cross-section evaluation. GRC staff supervises pad construction (and later reclamation), and fore-sight/back-sight markers are set to align the direction of drilling. Drillers are informed by GRC as to the inclination of the hole. Once the drill is set on the pad, both the bearing and inclination are checked and approved by a staff GRC geologist.

- RC drilling is conducted by a third-party contractor. The drill is a track-mounted rig capable of drilling to a depth of 500 metres.
- Down-hole surveys are conducted by International Directional Services, LLC (IDS) using a gyro deviation survey instrument at or near the termination of the hole. These surveys provide detailed down-hole data on the azimuth and dip of the hole over the length of the hole. Surveys were performed for a portion of the 2014 drilling and on all holes in 2015, 2016, and 2017, and portions of holes in 2021.
- Drill hole locations completed were surveyed by Platt & Platt Inc., professional surveyors located in Cedar City, Utah. This information is compiled in a drill hole database which includes drill hole number, UTM location, elevation, inclination, bearing, and depth of holes. The 2019 and 2021 drill holes are awaiting survey by Platt & Platt and are currently located using a hand-held GPS unit.

Information for the 2021 drill holes is provided in Table 10-12.There are only two vertical holes; the rest of the holes have an inclination between 45 and 80 degrees.

Table 10-12: GRC 2021 Drilling

Hole ID	Target	Easting - UTM NAD 27	Northing - UTM NAD 27	Elevation Meters	Azimuth	Inclination	TD (m)
SS-21-001	Central Jumbo	760641	4197350	2007	90	-55	134.1
SS-21-002	Central Jumbo	760686	4197520	2010	90	-70	137.2
SS-21-003	Central Jumbo	761033	4197864	2034	315	-45	164.6
CR-21-001	Charlie Ross	758968	4199359	2128	270	-60	250.0
CR-21-002	Charlie Ross	758795	4199312	2150	90	-65	205.0
CR-21-003	Charlie Ross	758831	4199381	2148	80	-60	243.8
CR-21-004	Charlie Ross	758815	4199520	2153	270	-50	256.0
CR-21-005	Charlie Ross	758648	4199295	2123	270	-45	219.4
CR-21-006	Charlie Ross	758630	4199373	2112	90	-45	219.4
CR-21-007	Charlie Ross	758475	4199261	2150	90	-60	189.0
CR-21-008	Charlie Ross	758600	4199500	2137	270	-50	213.3
CR-21-009	Charlie Ross	758469	4199334	2168	90	-75	182.9
CR-21-010	Charlie Ross	758791	4199305	2122	270	-50	213.3
CR-21-011	Charlie Ross	758888	4199525	2160	160	-45	213.3
CR-21-012	Charlie Ross	758718	4199424	2135	270	-45	164.6
CR-21-013	Charlie Ross	758710	4199424	2127	270	-60	213.3
CR-21-014	Charlie Ross	758647	4199458	2111	270	-65	274.3
CR-21-015	Charlie Ross	758361	4199700	2176	340	-60	201.2
CR-21-016	Charlie Ross	758623	4199369	2122	270	-45	195.1
CR-21-017	Charlie Ross	758608	4199459	2134	270	-55	207.3
CR-21-018	Charlie Ross	758567	4199566	2138	270	-55	201.2
CR-21-019	Charlie Ross	758594	4199600	2154	270	-65	219.4

CR-21-020	Charlie Ross	758625	4199662	2108	270	-60	237.7
CR-21-021	Charlie Ross	758557	4199440	2045	270	-65	182.9
CR-21-022	Charlie Ross	758572	4199397	2035	270	-75	182.9
E-21-001	Etna	760654	4195873	1950	110	-45	182.9
E-21-002	Etna	760642	4196000	1950	90	-45	189.0
E-21-003	Etna	760697	4196227	1979	110	-45	213.3
E-21-004	Etna	760638	4196233	1957	110	-50	213.3
E-21-005	Etna	760674	4196195	1964	130	-45	198.1
E-21-006	Etna	760648	4195946	1953	110	-50	176.8
E-21-007	Etna	760657	4196085	1973	110	-45	64.0
E-21-008	Etna	760727	4195872	1950	110	-50	121.9
E-21-009	Etna	760724	4195876	1950	60	-55	146.3
E-21-010	Etna	760755	4195920	1970	90	-80	143.2
E-21-011	Etna	760734	4196145	1984	290	-50	83.8
E-21-012	Etna	760655	4196707	1998	270	-45	154.5
E-21-013	Etna	760823	4196671	1987	270	-60	335.3
E-21-014	Etna	760508	4196691	1991	90	-65	201.2
E-21-015	Etna	760531	4196488	1981	110	-45	200.2
E-21-016	Etna	760651	4196392	1992	120	-45	204.2
JP-21-001	Juniper	761052	4199655	2106	110	-70	198.1
JP-21-002	Juniper	761038	4199655	2108	270	-70	219.4
JP-21-003	Juniper	761018	4200504	2123	270	-60	262.1
JP-21-004	Juniper	761005	4200134	2126	270	-70	240.8
JP-21-005	Juniper	760872	4199398	2079	270	-70	219.4
NJ-21-001	North Jennie	759340	4199162	2087	90	-60	250.0
J-21-001	North Jumbo	760970	4198171	2045	315	-55	249.9
J-21-002	North Jumbo	761241	4198454	2076	290	-60	184.4
J-21-003	North Jumbo	761075	4198412	2088	90	-50	243.8
J-21-004	North Jumbo	761296	4199100	2172	270	-45	213.3
J-21-005	North Jumbo	761208	4199326	2141	270	-45	219.4
J-21-006	North Jumbo	761326	4199699	2121	270	-70	274.3
J-21-007	North Jumbo	761445	4199524	2128	270	-50	243.8
J-21-008	North Jumbo	761094	4198611	2064	50	-60	204.2
J-21-009	North Jumbo	761447	4199450	2115	270	-70	243.8
J-21-010	North Jumbo	761324	4199760	2131	270	-70	329.2
J-21-011	North Jumbo	761328	4199693	2135	245	-70	329.2
J-21-012	North Jumbo	761254	4199690	2130	270	-80	329.2
J-21-013	North Jumbo	761335	4199763	2129	90	-65	329.2
J-21-014	North Jumbo	761389	4199615	2111	270	-60	274.3
J-21-015	North Jumbo	761334	4199566	2123	270	-75	271.3
J-21-016	North Jumbo	761337	4199514	2111	290	-75	259.1
J-21-017	North Jumbo	761285	4199799	2140	270	-80	274.3
J-21-018	North Jumbo	761300	4199902	2141	0	-90	326.1
J-21-019	North Jumbo	761308	4200011	2155	270	-70	326.1
J-21-020	North Jumbo	761345	4200307	2189	270	-60	326.1
J-21-021	North Jumbo	761336	4199837	2126	270	-70	326.1
J-21-022	North Jumbo	761366	4199659	2154	0	-90	243.8
J-21-023	North Jumbo	761349	4199466	2120	290	-70	326.1

J-21-024	North Jumbo	761361	4199537	2113	270	-75	259.1
J-21-025	North Jumbo	761343	4200043	2177	270	-75	274.3
J-21-026	North Jumbo	761281	4199523	2104	290	-65	243.8
WP-21-001	White Point	756410	4201030	2132	300	-45	274.3
WP-21-002	White Point	756418	4201000	2153	270	-45	207.3
WP-21-003	White Point	756451	4200913	2124	210	-45	152.4
WP-21-004	White Point	756452	4200916	2099	270	-45	146.3
WP-21-005	White Point	756380	4200944	2112	90	-50	158.5
WP-21-006	White Point	756333	4201006	2112	90	-45	182.9
WP-21-007	White Point	756372	4201110	2104	250	-60	195.1
WP-21-008	White Point	756317	4201023	2017	300	-45	167.6
WP-21-009	White Point	756333	4200956	2094	120	-70	128.0

10.13 Standard Logging Procedure for Percussion Drilling (2021)

GRC follows its in-house logging procedure in 2021 like previous drilling campaigns to log entire holes. The procedure covers most part of the standard logging procedure, which is sufficient for the project. The following is a summary of the logging protocols in place in 2021.

- Upon collection of chips, fill out the log noting:
    - Drill Hole (location)
    - Date/Time
    - Geologist logging
- For each sample note:
    - Interval depth: starting dept/ending depth
    - Lithology: Upon inspection with a hand lens identify the type of rock. If multiple rock types present list predominate rock first, then list any others in descending order of prevalence
    - Alteration: Identify type of alteration present: Sericite, Clay, Propylitic, and Silicification
    - Oxidation: identify oxidized, unoxidized, and mix of oxidized and unoxidized rock.
    - Structure: identify fault, micro-breccia, stockwork, vein, and breccia
    - Veins: identify quartz veins and estimate their percent.
    - Sulfide minerals: Identify pyrite mineral and its percent

The result of drilling exploration in 2021 has so far confirmed the same subsurface stratigraphy described in previous drilling campaigns. Chip samples from the 2021 drilling program showed that the subsurface lithology consists of variably volcanic and volcano clastic rocks.

By the effective date of the report, 45,015 assay results (including chip and core samples intervals, blank, and standard samples) for the entire 363 holes exist in the GRC database. Table 10-13 shows significant drilling results of the 2021 drilling program for Charlie Ross (CR), Etna or South Jumbo (E), White Point (WP), North Jumbo (J), and Juniper (JP).

Table 10-13: GRC 2021 Significant Drill Results

Hole	From (m)	To (m)	Total Thickness*(m)	Gold (g/t)	Silver (g/t)
CR-21-005	93.0	138.7	45.7	0.98	13.4
including	114.3	129.5	15.2	2.14	30.0
CR-21-008	150.9	172.2	15.3	1.16	7.4
including	160.0	169.2	9.2	2.15	6.6
and	70.1	74.7	4.6	1.09	62.9
CR-21-006	153.9	158.5	4.6	0.68	14.5
and	158.5	161.5	Void		
and	161.5	164.6	3.1	0.63	8.2
CR-21-010	109.7	121.9	12.2	0.50	4.3
CR-21-013	62.5	67.1	4.6	3.03	74.4
CR-21-016	86.9	102.1	15.2	0.70	11.1
including	97.5	100.6	3.1	2.47	31.3
CR-21-017	103.6	108.2	4.6	0.56	19.0
and	131.1	147.8	16.7	1.82	19.8
including	143.2	147.8	4.6	4.53	49.9
and	166.1	179.8	13.7	1.55	9.2
and	196.6	207.3	10.7	2.19	9.4
including	196.6	201.2	4.6	4.69	19.7
CR-21-018	91.4	99.1	7.7	0.65	3.6
and	146.3	1676	21.3	0.48	5.4
and	172.2	185.9	13.7	0.38	2.8
and	205.7	214.9	9.2	2.0	1.8
including	207.3	210.3	3.0	5.01	2.1
CR-21-019	134.1	138.7	4.6	0.68	3.4
and	205.7	214.9	9.2	2.0	1.8
including	207.3	210.3	3.0	5.01	2.1
CR-21-020	143.2	149.3	6.1	0.34	2.4
and	198.1	208.8	10.7	0.70	21.7
including	201.2	204.2	3.0	1.63	34.5
CR-21-021	125.0	135.6	10.6	0.90	6.3
CR-21-022	68.6	83.8	15.2	1.56	13.8
and	93.0	96.0	3.0	2.0	19.5
and	132.6	143.2	10.6	2.43	9.6
E-21-002	89.9	97.5	7.6	0.49	1.8
E-21-004	93.0	102.1	9.1	1.58	8.3
And	155.5	169.1	13.6	0.97	2.0
E-21-005	62.5	67.1	4.6	0.46	8.2
And	83.8	91.4	7.6	0.63	7.2
E-21-007	54.9	64.0	9.1	0.58	6.7
E-21-008	85.3	91.4	6.1	0.79	5.8
E-21-009	30.5	33.5	3.0	0.51	3.3
And	89.9	103.6	13.7	0.57	8.0
E-21-010	3.5	27.4	24.3	0.31	9.0
And	44.2	50.3	6.1	0.40	3.64
E-21-011	3.5	24.4	20.9	0.67	4.2

Hole	From (m)	To (m)	Total Thickness*(m)	Gold (g/t)	Silver (g/t)
E-21-012	51.8	108.2	56.4	0.58	12.1
And	134.1	153.9	19.8	5.2	12.4
E-21-015	99.1	100.6	1.5	1.01	2.0
And	243.8	245.4	1.6	4.32	10.3
E-21-016	19.8	36.6	16.8	0.51	3.3
and	103.6	108.2	4.6	0.81	6.6
and	160.0	161.5	1.5	1.5	2.0
WP-21-002	61	74.4	13.7	0.62	6
WP-21-003	79.2	99.1	19.9	0.5	4.3
and	121.9	129.5	7.6	0.56	3.9
WP-21-004	54.9	106.7	51.8	0.32	3.7
WP-21-005	27.4	64	36.6	0.74	5.8
including	27.4	36.6	9.2	1.36	11.8
WP-21-006	3	6.1	3.1	1.28	6.8
and	15.2	18.3	3.1	0.77	13.2
and	33.5	48.8	15.3	1.31	6.5
J-21-001	140.2	143.3	3.1	2.1	3.5
J-21-002	6.1	9.1	3.0	0.46	7.5
J-21-003	88.4	99.1	10.7	0.62	7.91
J-21-006	118.9	143.3	24.4	5.95	66.5
including	129.5	134.1	4.6	27.3	259.4
and	192.0	274.3	82.3	0.52	4.7
including	192.0	217.9	25.9	0.68	5.7
J-21-008	73.1	80.8	7.7	0.98	8.9
J-21-009	166.1	176.8	10.7	0.51	6.3
J-21-010	187.4	193.5	6.1	0.97	3.0
J-21-011	74.7	76.2	1.5	1.13	8.9
and	155.4	161.5	6.1	0.61	12.9
J-21-015	108.2	271.3	163.1	0.93	5.1
including	108.2	141.7	33.5	1.32	7.4
including	109.7	120.4	10.7	3.07	13.5
including	109.7	114.3	4.6	5.89	20.5
including	147.8	271.3	123.5	0.87	4.7
J-21-016	93.0	102.1	9.1	1.76	44.0
including	94.5	99.1	4.6	3.08	83.0
and	132.6	147.8	15.2	0.41	18.6
J-21-024	21.3	29.0	7.7	2.72	12.9
including	21.3	25.9	4.6	4.27	20.1
JP-21-003	187.4	193.5	6.1	0.97	3.0
JP-21-004	178.3	179.8	1.5	1.02	99.7

*True thickness is estimated to be 70-90% of total thickness

Drilling results from all campaigns from 2010 to 2019 confirmed the mineralization potential of gold in several exploration targets across the property, especially in North Jumbo, Central Jumbo, and South Jumbo. The 2021 drilling program shows important results because, despite confirmation of gold mineralization potential, including some high-grade intervals in North Jumbo and South Jumbo, it has provided good data and confirmation on the gold mineralization potential in Charlie Ross, in which only three RC holes were drilled in 2012.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Drilling at the Property used surface RC and core drillings. RC holes showed and approved targets with the high mineralization potential so far. It is supposed to use more core drillings in future drilling campaigns because it provides higher confidence in sample quality versus RC drilling and provides additional data for engineering studies and detailed geologic definitions of structurally controlled high-grade mineralized zones.

11.1 GRC (2010-2019)

The primary objective of the drilling programs was to collect clean, uncontaminated representative samples that were correctly labeled when drilled and logged and that could be accurately tracked from the drill rig to the assay laboratory. The following is a synopsis of the Gold Springs drilling conducted by GRC. The bulk of the drilling and defined mineral resource is contained with the Jumbo resource block located on the eastern extent of the project.

11.1.1 Reverse Circular Drilling (2010-2019)

11.1.1.1 Percussion Drill Chip Sampling (2010)

The 2010 drilling program was performed by Diversified Drilling and was done by wet reverse-circulation. Material coming out of the hole passed through a wet rotary splitter, producing two samples of equal size. The samples were collected on 5-foot (1.5-metre) intervals and handled by GRC employees. A geologist was at the drill site at all times during drilling. The geologist collected a small sample coming from the rotary splitter and placed it into chip trays labeled by drill hole number and footage. Samples were numbered with one split being designated as a duplicate sample. Duplicate samples were stored on site until the end of the drill program, when they were transported to a locked storage facility in Cedar City, Utah. Samples for analysis were transported on a daily basis to a secured area behind locked gates.

Drill samples were transported from the site to the Inspectorate Laboratory facility in Sparks, Nevada, by GRC employees every three to four days and were delivered directly to laboratory personnel.

11.1.1.2 Percussion Drill Chip Sampling (2011)

The 2011 RC drill program was conducted by Drift Drilling and was done without injecting water. Material from the hole was passed through a Jones-style splitter, and 100% was collected in two equal splits on 5-foot (1.5-metre) intervals. One split was labeled as a duplicate sample, which was stored on site behind a locked access gate until the end of the drill program and then transported by GRC employees to a locked facility in Cedar City, Utah. Samples were handled at all times by GRC personnel, and a geologist was present during drilling. The geologist collected a small portion of the duplicate sample, which was placed into chip trays labeled by drill hole number and footage. Chips were then logged on site by the geologist. From the duplicate sample, GRC filled a 4-inch x 6-inch zip lock bag labeled by drill hole number and footage. This material was intended to be used for chip boards and future petrographic study. Samples for analysis were transported from the drill site to a secured area behind a locked gate on a daily basis. From the secured area, samples were picked up by Inspectorate Laboratories and transported to their facilities in Sparks, Nevada.

11.1.1.3 Percussion Drill Chip Sampling (2012-2015)

The 2012, 2013, 2014, and 2015 drilling programs were performed by Diversified Drilling and conducted by wet reverse-circulation drilling method. All RC samples were collected by, or under the direct supervision of, an GRC geologist. The Project Manager emphasized quality control and the proper handling and numbering of all samples. The RC drill cuttings were collected as they came out of the drill hole from an industry standard rotary wet splitter provided by the drilling company, which delivers the material to three collection points. Samples were collected on 1.52-metre (5-foot) intervals. Material from the first collection point was designated for transport to Inspectorate Laboratories, located in Sparks, Nevada, USA for analysis. The material from the second collection point was retained as a duplicate sample for future testing if needed. The material from the third sample point was geologically logged onsite and put into chip trays, which were labeled with sample numbers and footage intervals from which the sample was taken. In addition to the chip trays, a 10.16 x 15.24-centimetre (4 x 6-inch) zip lock bag labeled with the drill hole designation and footage interval was filled from the third sample point. This material was retained for possible petrographic work. All samples were transported on a daily basis to a secured site within the project area behind a locked gate where they were stored. Samples designated for analysis were picked up by Inspectorate Laboratory personnel or transported by GRC personnel to the Inspectorate sample preparation laboratory facility in Elko, Nevada. No sample preparation was conducted by an employee, officer, director, or associate of GRC.

11.1.1.4 Percussion Drill Chip Sampling (2016)

The 2016 drilling program was performed by Diversified Drilling and conducted by wet reverse-circulation drilling method. All RC samples were collected by, or under the direct supervision of, a GRC geologist. Emphasis was placed on quality control and the proper handling and numbering of all samples. The RC drill cuttings were collected as they came out of the drill hole from an industry standard rotary wet splitter provided by the drilling company. These sample splits were delivered to two collection points. Samples were collected on 1.52-metre (5-foot) intervals. Material from the first collection point was designated for transport to Inspectorate Laboratories, located in Sparks, Nevada, USA for analysis. The material from the second collection point was geologically logged onsite and put into chip trays, which were labeled with sample numbers and footage intervals from which the sample was taken. All samples were transported on a daily basis to a secured area behind a locked gate where they were placed on drying racks and stored. Samples designated for analysis were picked up by Inspectorate Laboratory personnel and transported to the Inspectorate sample preparation laboratory facility in Elko, Nevada. No sample preparation was conducted by an employee, officer, director, or associates of GRC.

Randall Moore, Executive Vice President of Exploration for GRC organized sampling procedures and supervised the labeling and cataloging of all samples.

11.1.1.5 Percussion Drill Chip Sampling (2017)

The 2017 drilling program was performed by Diversified Drilling and conducted by wet reverse-circulation drilling method. All RC samples were collected by, or under the direct supervision of a GRC geologist. Emphasis was placed on quality control and the proper handling and numbering of all samples. The RC drill cuttings were collected as they came out of the drill hole from an industry standard rotary wet splitter provided by the drilling company. These sample splits were delivered to two collection points. Samples were collected on 1.52-metre (5-foot) intervals. Material from the first collection point was designated for transport to Inspectorate Laboratories, located in Sparks, Nevada, USA for analysis. The material from the second collection point was geologically logged onsite and put into chip trays, which were labeled with drill hole number, sample numbers, and footage intervals from which the sample was taken. All samples were transported on a daily basis to a secured area behind a locked gate, where they were placed on drying racks and stored. Samples designated for analysis were picked up by Inspectorate Laboratory personnel and transported to the Inspectorate sample preparation laboratory facility in Elko, Nevada. No sample preparation was conducted by an employee, officer, director, or associates of GRC.

11.1.1.6 Percussion Drill Chip Sampling (2019)

The 2019 drilling program was performed by New Frontier Drilling and conducted by wet reverse-circulation drilling method. All RC samples were collected by, or under the direct supervision of a GRC geologist. Emphasis was placed on quality control and the proper handling and numbering of all samples. The RC drill cuttings were collected as they came out of the drill hole from an industry standard rotary wet splitter provided by the drilling company. These sample splits were delivered to two collection points. Samples were collected on 1.52-metre (5-foot) intervals. Material from the first collection point was designated for transport to Bureau Veritas Minerals Laboratories, located in Sparks, Nevada, USA for analysis. The material from the second collection point was geologically logged onsite and put into chip trays, which were labeled with sample numbers and footage intervals from which the sample was taken. All samples were transported on a daily basis to a secured area behind a locked gate, where they were placed on drying racks and stored. Samples designated for analysis were picked up by Inspectorate Laboratory personnel and transported to the Bureau Veritas Minerals sample preparation laboratory facility in Elko, Nevada. No sample preparation was conducted by an employee, officer, director, or associates of GRC.

11.1.2 Dimond Drill Core Sampling (2011and 2014)

A total of 6 core holes have been drilled at Gold Springs. The primary purpose for drilling core has been for the collection of metallurgical samples. Three core holes were completed at North Jumbo, two at Grey Eagle, and one at Thor. The core drilling was done in 2011 when 2 holes were drilled and in 2014 when 4 holes were completed. The drilling in 2011 was conducted by West Core Drilling, and the 2014 drilling was done by Timberline Drilling. All drilling was NQ size core.

GRC collected the core from the drill once or twice a day. The core was transported to the GRC compound behind locked gates where it was laid out 10 boxes at a time for processing. Once boxes were laid out, wooden blocks were placed at 5-foot intervals, and core recovery was determined by measuring the length of core in each 5-foot interval and calculating the percentage recovered. After recovery was determined, GRC collected geotechnical data of rock quality designation (RQD) 4, which measured the percentage of the core greater than 4 inches in length for each interval. This was followed by washing and photographing the core. The geologist then logged the core and completed a written description in the log. The description included rock type, alteration, structure, vein percentage and vein orientation to the core axis, pyrite percentage, if present, and a quantifying 1 to 5 scale for alteration and oxidation products. The scale ranges from trace (1) to pervasive (5). Alteration products include silicification, sericite, clay, chlorite, epidote, and adularia. Oxidation products include hematite, jarosite, and goethite. The core was then cut in half lengthwise followed by one half being cut again into quarters. The half core was used for metallurgical testing, a quarter section was sent to the laboratory for assay, and a quarter was retained. Samples designated for analysis were picked up by Inspectorate Laboratory personnel and transported to the Bureau Veritas Minerals sample preparation laboratory facility in Elko, Nevada. No sample preparation was conducted by an employee, officer, director, or associate of GRC. Samples designated for metallurgical testing were transported to the testing facility by a GRC employee.

11.2 GRC (2021)

In 2021, GRC completed 82 RC holes as described in the following subsections.

11.2.1 Percussion Drill Chip Sampling (2021)

The 2021 drilling program was performed by New Frontier Drilling and conducted by wet reverse-circulation drilling method. All RC samples were collected by, or under the direct supervision of, a GRC geologist. Emphasis was placed on quality control and the proper handling and numbering of all samples. The RC drill cuttings were collected as they came out of the drill hole from an industry standard rotary wet splitter provided by the drilling company (Photo 11-1). These sample splits were delivered to two collection points. Samples were collected on 1.52-metre (5-foot) intervals. Material from the first collection point was designated for transport to Paragon Geochemical, located in Sparks, Nevada, USA or ALS Geochemistry, located in Elko, Nevada, for analysis. The material from the second collection point was geologically logged onsite and put into chip trays, which were labeled with sample numbers and footage intervals from which the sample was taken (Photo 11-2). All samples were transported on a daily basis to a secured area behind a locked gate, where they were placed in super sacks and stored. Samples designated for analysis were picked up by a transport company based in Cedar City, Utah, and taken to one of the two designated laboratories. No sample preparation was conducted by an employee, officer, director, or associates of GRC.

Photo 11-1: Drill Chip Sampling, 2021

Photo 11-2: Chip Tray Sampling, 2021

GRC had a geologist at the RC drill at all times of operation. The geologist was there to verify sampling was conducted by the methodology as described and to conduct the initial logging of the cuttings. Material from the second collection point at the wet splitter went into a sieve from which the chip tray was filled. Chip trays were numbered by footage and sample ID number. A portion of the sieve was put on the logging table for further reference if needed. The geologist used a binocular microscope to log the drill cuttings and completed a written description in the log. The description included rock type, alteration, structure, vein percentage, pyrite percentage, if present, and a quantifying 1 to 5 scale for alteration and oxidation products. The scale ranges from trace (1) to pervasive (5). Alteration products include silicification, sericite, clay, chlorite, epidote, and adularia. Oxidation products include hematite, jarosite, and goethite.

A comprehensive review of the procedures and methodology for the drilling and sampling conducted by GRC show that they are consistent with industry standards and that there are no drilling, sampling or recovery factors that would materially impact the accuracy or reliability of the drilling and sampling results.

11.2.2 Analytical Procedure (2021)

For the 2021 campaign, under controlled laboratory conditions, the Laboratories have the samples dried, crushed, split, ground, and analyzed for gold using an industry standard 30-gram fire assay charge. Analyses are conducted using an Atomic Absorption or gravimetric finish, and trace element geochemistry performed using standard Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) methods beginning with a four-acid, near-total digestion of the sample matrix. All samples with gold or silver geochemical content greater than the upper detection limit for ICP methodology were re-analyzed using fire assay with a gravimetric finish method. The laboratory facilities are International Organization for Standardization (ISO) certified.

The laboratory inserts an average of approximately 10% blank and standard samples into each analyzed sample batch to ensure precision and accuracy. The lab conducts repeat analysis of pulps from samples submitted at a rate of approximately 5% and creates duplicate pulps from the coarse rejects that are analyzed at a rate of approximately 5%. Both types of check analyses showed very consistent results, with variations of less than +/- 2%.

11.2.3 Sample Security (2021)

In the 2021 campaign, GRC maintained chain-of-custody procedures as follows: GRC had a geologist at the drill at all times it was in operation. As mentioned, the geologist logged the cuttings onsite and tracked the sampling. At the end of every 1.52-metre sample interval, the bag of material for analysis was loaded into GRC trucks and, at the end of each day, the samples were transported back to the Gold Springs compound and stored behind locked gates for air drying. The samples were then picked up by Bulloch Dirt Works, an independent transport company based in Cedar City, Utah, every few days and transported under chain-of-custody to either Paragon in Reno or ALS in Elko for sample prep and analyses (Photo 11-3). At the time of pick-up or delivery, GRC geologists delivered two copies of a sample submittal sheet to the transport personnel listing the samples submitted and the desired analysis. The transport representative signed one copy, which was retained by GRC for documenting the chain of custody. These records are retained on site and as electronic versions in the project files.

Photo 11-3: Collection and Transportation of Drill Chip Samples Under Chain-of-Custody, 2021

11.2.4 Quality Assurance and Quality Control Procedures (2021)

All drill sampling, testing, and analysis were conducted using rigorous quality assurance/quality control (QA/QC) procedures to ensure reliability and validity of results. Having sound QA/QC protocols in place instills a level of confidence with the Company, as GRC is fully aware of what is happening with all samples to establish a "chain-of-custody." Moreover, transparent QA/QC procedures demonstrate GRC 's strict adherence to industry "Best Practices" to the investment community.

This section provides details of the GRC QA/QC program for the current (2021) drill campaign. These procedures are the same as the previous (2010 to 2017 and 2019) drilling campaigns.

In GRC in-house QA/QC procedures, certified standard references, and blank samples were inserted into the numbering sequence of the drill cuttings at regular intervals by a GRC geologist, with two standards and one coarse blank submitted for every twenty samples. No field duplicate samples were selected by GRC for the drilling campaigns from 2010 to 2021. Blank and standard samples were then submitted to the laboratory as part of the numbered drill sample sequence for random quality control. The samples were analyzed in the sequence order they were received by the lab, and the standards and blanks were used as a check for consistency in analysis. These samples were recorded by the GRC geologist on a master database that contains all the sample numbers, footage intervals, and drill hole numbers. The standards and blanks were also recorded on the drill log produced by GRC geologists at the drill. Independent standard and blank material inserted by GRC is purchased from Minerals Exploration and Environmental Geochemistry (MEG) of Reno, Nevada, or Legend Inc. of Reno, Nevada. These companies are independent sample preparation laboratories with a focus on providing standard reference materials to the mining and environmental industries. Samples were individually packaged pulps put into the sample stream at the time bags were numbered and prepared for use on the drill.

The GRC in-house QA/QC procedure for the current (2021) and previous RC drilling programs also consisted of tracking and checking assay results from Labs as below:

1. Sample and assay results were tabulated on spreadsheets by a GRC geologist. Originals of the assay certificates were sent by e-mail to the GRC VP of Exploration, Randy Moore, by the lab and inserted into the master database.
2. Upon receiving completed analytical results, GRC geologists then extracted the blank and standard samples for examination of expected values and tested values, where an acceptable range is set at +/- 3 standard deviations.
3. Pulps were resubmitted for samples around any two consecutive blanks or standards that returned values outside of an acceptable range of +/- 3 standard deviations.
4. The spreadsheet information for drill hole samples was then matched with sampling intervals and geological observations for interpretation. This data was merged with the assay data by the GRC geologist into a master database.

11.2.4.1 Blank Analysis

GRC inserted one coarse blank sample at a rate of 1 per 20 samples and included these in the shipments to the laboratories. This equates to 1 coarse blank for every 17 drill samples. These samples consist of Colorado Plateau sandstone from the Cedar City, Utah, area, collected by GRC geologists. This material was tested for gold and silver content prior to use as a blank, with all analyses returning values of <5 parts per billion (ppb) gold and <0.5 parts per million (ppm) silver. The coarse blanks were inserted into the sample stream primarily to test for cross contamination during sample preparation. A total of 687 coarse blanks were sent through the sample prep process and analyzed for gold and silver. Of these 687 samples, only ten samples returned values of >10 ppb gold and 40 samples returned values between 5 ppb and 10 ppb gold (Figure 11-1). Of these 687 samples, only eight samples returned values of >0.5 ppm silver (Figure 11-2). Of these eight samples for silver, seven samples had less than 5.3 ppm silver and one showed 34.7 ppm silver with a re-assay of 32.1 ppm. This sample belonged to hole# J-21-006 with the sample ID 286990. It appears during sample insertion or labeling; a human error happened for this result. However, the re-assay result for this sample showed that no error occurred during the assaying in the Laboratory.

Figure 11-1: Assay Gold Results, Blank Samples, RC Program (2021)

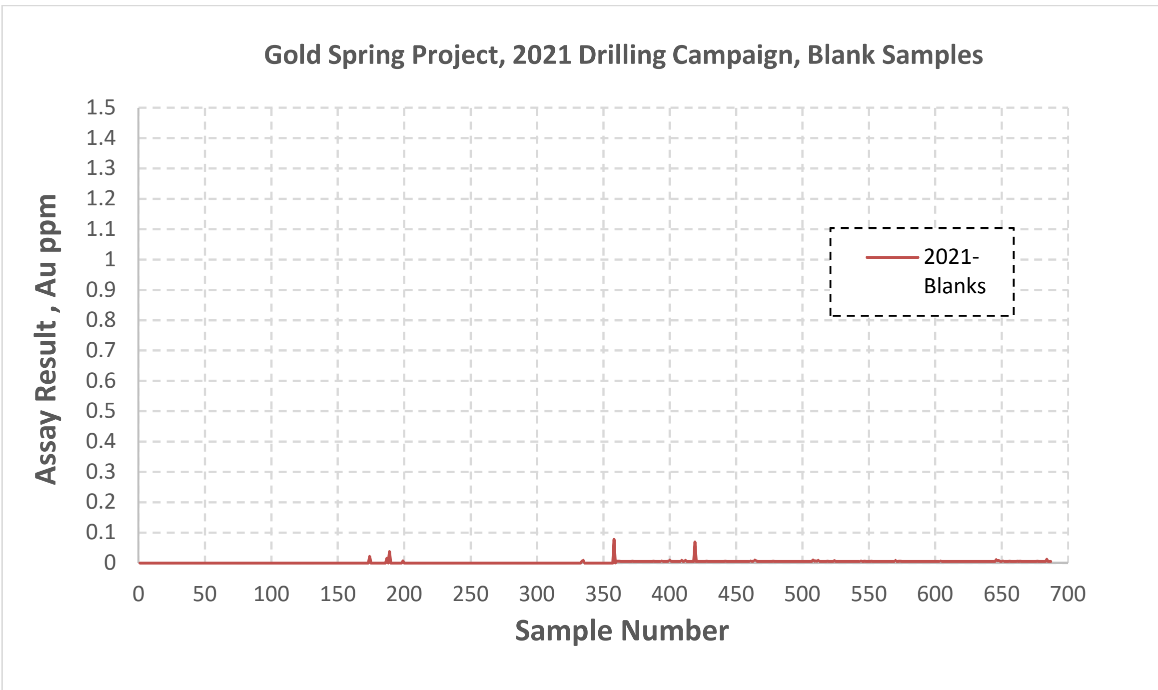
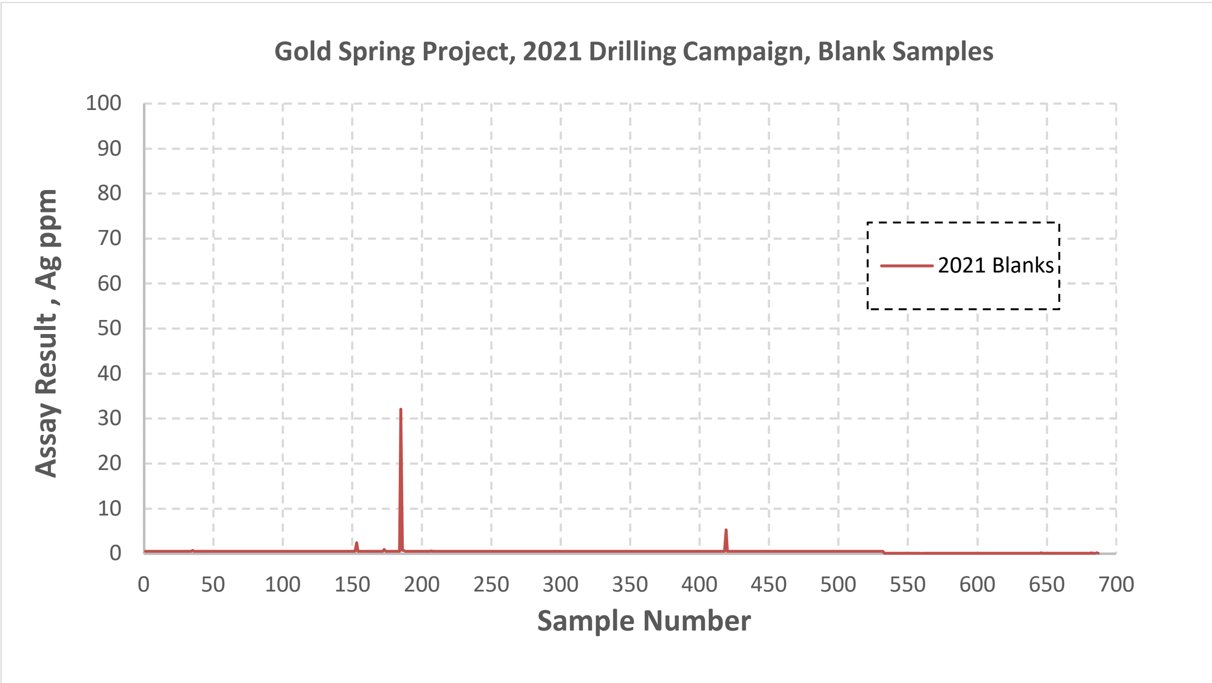


Figure 11-2: Assay Silver Results, Blank Samples, RC Program (2021)



As a result, considering excursion rates of 1.45% and 1.16% for gold and silver, respectively, and that the values of these excursions were well below the probable lower limit of the cutoff grade of gold, the GRE QP believes the results indicate there is no artificially introduced contamination in the sampling preparation process that would materially affect a mineral resource estimate.

11.2.4.2 Standards Analysis

Commercially prepared standard samples were inserted into the sample stream at a rate of two standards per 20 samples for the entire 2021 drilling campaign. As a blinding technique, sample numbers were used rather than drill hole number and footage to identify each sample.

Gold and silver standards were purchased from MEG, Inc. and KLEN International (74) Pty Ltd. and are made from mineralized rock that has been doped with additional gold to create suites of material with a wide range of metal concentrations. Values are certified for gold using conventional industry-standard “round robin” assay methods. All CRMs purchased from MEG have two certifications for gold and silver, whereas CRMs from KLEN have only one certification for gold.

11.2.4.2.1 Gold Standards Analysis

A total of 1,379 gold certified reference materials (CRMs) were inserted into the sample stream in the 2021 drilling campaign program by GRC. CRMs were prepared from MEG, Inc. and KLEN International (74) Pty Ltd. with gold standard values ranging from 60 to 5,640 ppb, each with reported standard deviations. A total of 21 different gold CRMs was used at the property in 2021 (Table 11-1).

Table 11-1: CRMs Used in 2021 Drilling Campaign

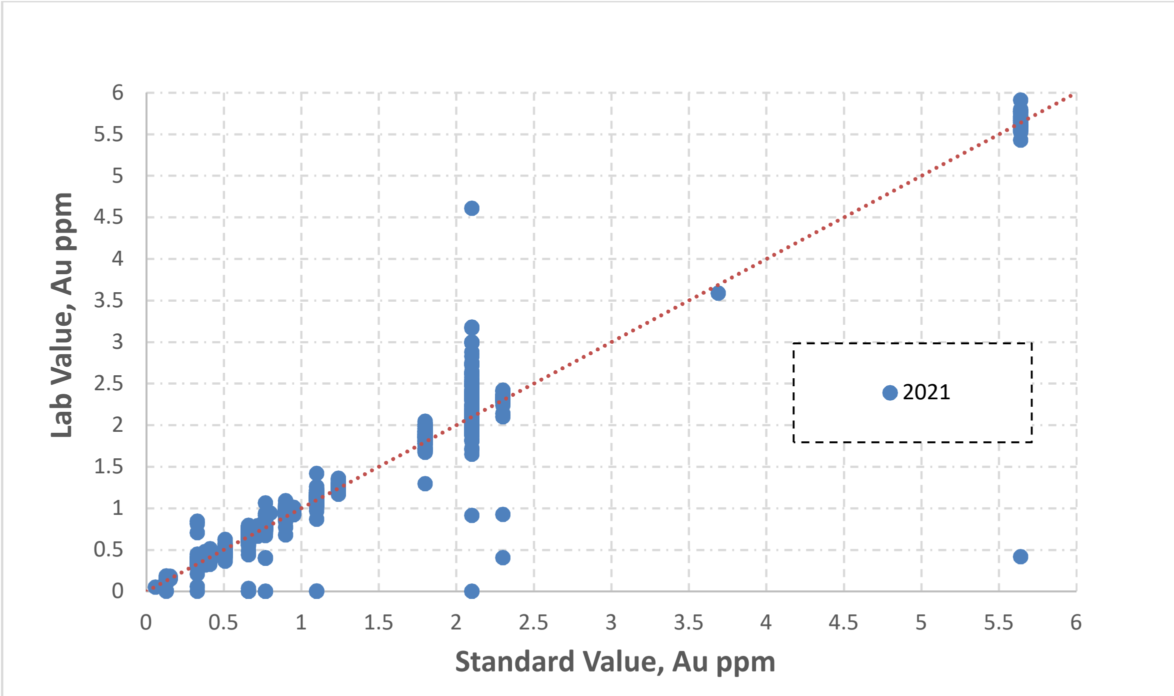
No	Provider	Standards	Au ppb	STDEV	No	Provider	Standards	Au ppb	STDEV
1	MEG	10.03	60	6	12	MEG	17.21	1100	62
2	MEG	11.13	1800	81	13	MEG	17.23	130	6
3	MEG	11.29	3689	405	14	MEG	19.05	660	46
4	MEG	11.34	2100	253	15	MEG	19.07	330	16
5	MEG	12.13	900	67	16	KLEN	Ko78659	950	25
6	MEG	12.25	720	32	17	KLEN	Ko78529	2300	40
7	MEG	13.03	1800	107	18	KLEN	Ko73987	5640	160
8	MEG	17.01	380	15	19	KLEN	Ko 79027	1240	46
9	MEG	17.02	510	30	20	KLEN	Ko 77672	413	12
10	MEG	17.08	410	14	21	KLEN	Ko 74217	154	9
11	MEG	17.09	770	38					

The standards are in pulp form, each contained within small individual sample bags. These bags were placed within the GRC sample bags with company tags inserted along with the standard. Although sample standards are readily identifiable as standards, the assay values are unknown to the analyzing laboratory (Photo 11-4).

Photo 11-4: Some of the CRMs Used in the 2021 Drilling Campaign

Figure 11-3 shows a scatter plot of the certified value for each assay standard compared to the assay value obtained. The laboratory's analytical results generally correlate well with the standard values with few outliers. A 45-degree line represents an excellent correlation between the standard assay certified value and actual assay results. This line passes through all of the sample sets, with the majority of the points directly adjacent to the line, indicating acceptable accuracy performance for the standards. Larger scatter is seen as the grade of the samples increases. Although the increase in scatter is within an acceptable range in the opinion of the GRE's QP, the scatter mainly is related to seven standard samples with sample ID 217760, 290945, 291680, 291685, 291780, 307845, and 308005. All but one of these standards has re-assay results (#217760); therefore, GRE's QP recommends a re-assay program for all these standards by another certified Lab.

Figure 11-3: Assay Standard Results (2021)



GRE selected some additional control charts to monitor the analytical performance of an individual CRM in 2021. Control lines are also plotted on the chart for the expected value of the CRM, two standard deviations above and below the expected value, and three standard deviations above and below the expected value. CRM assay results are plotted in order of analysis. Control charts at various grades for the 2021 campaign of work are presented for select CRMs (outlined in Table 11-2) are shown in Figure 11-4 to Figure 11-14.

Table 11-2: CRMs Selected by GRE for control charts

CRM	Au Value (ppm)	No. CRMs	Campaign
13.03	1.8	46	2021
19.05	0.66	108	
12.25	0.72	42	
17.02	0.51	42	
12.13	0.9	79	
11.13	1.8	48	
17.21	1.1	149	
17.09	0.77	154	
11.34	2.1	148	
Ko 78659	0.94	32	
Ko 79027	1.24	30	

Figure 11-4: CRM 13.03 (2021) FA-ICP-ES

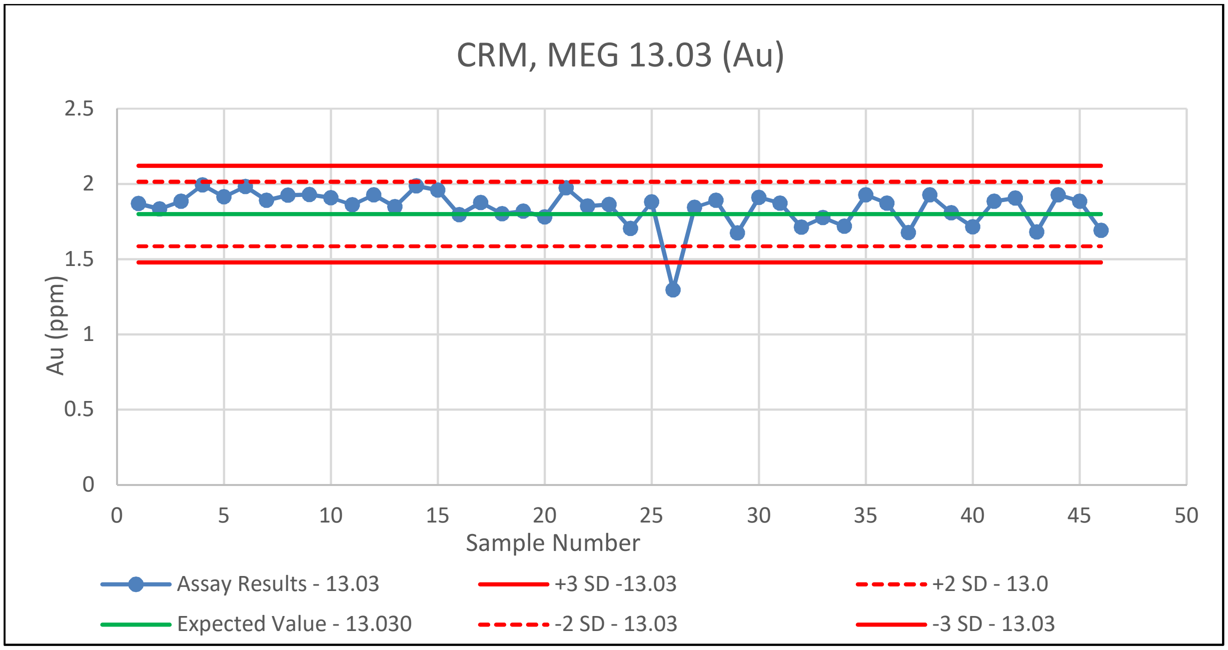


Figure 11-5: CRM 19.05 (2021) FA-ICP-ES

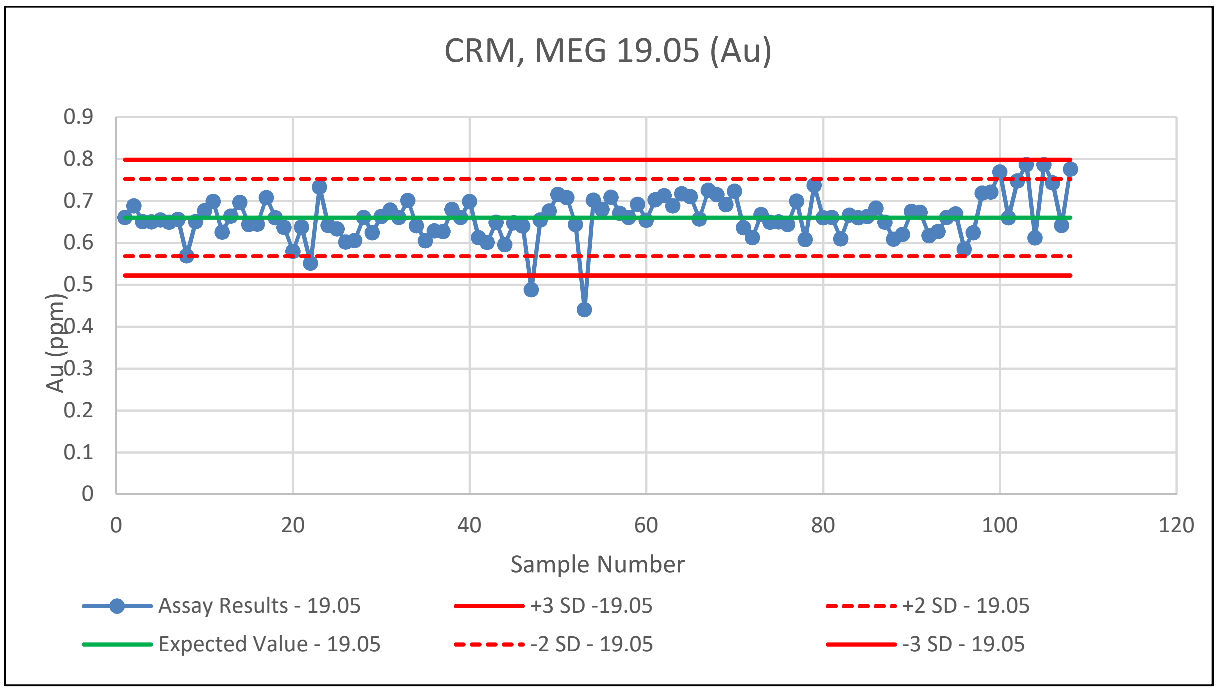


Figure 11-6: CRM 12.25 (2021) FA-ICP-ES

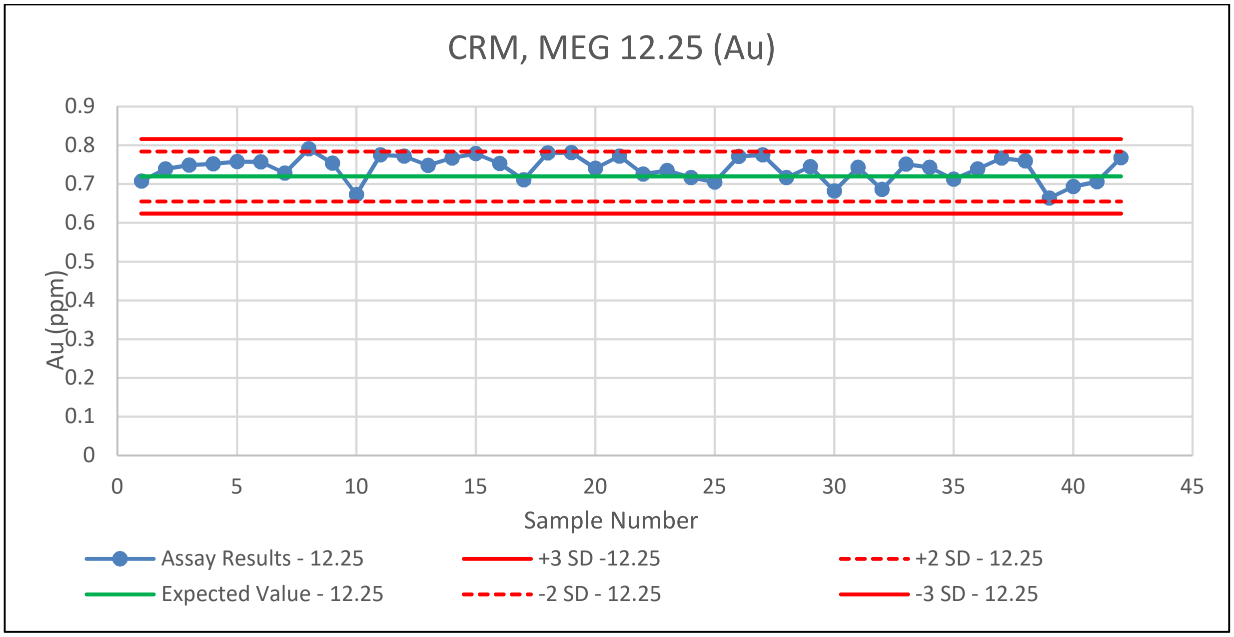


Figure 11-7: CRM 17.02 (2021) FA-ICP-ES

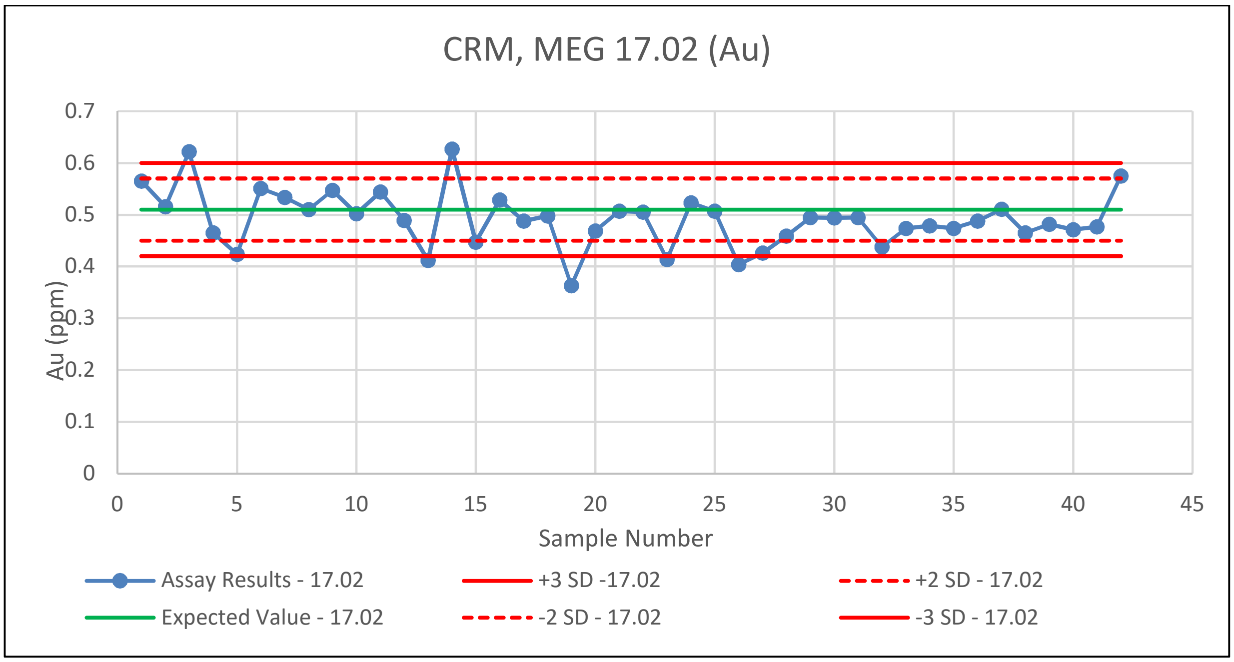


Figure 11-8: CRM 12.13 (2021) FA-ICP-ES

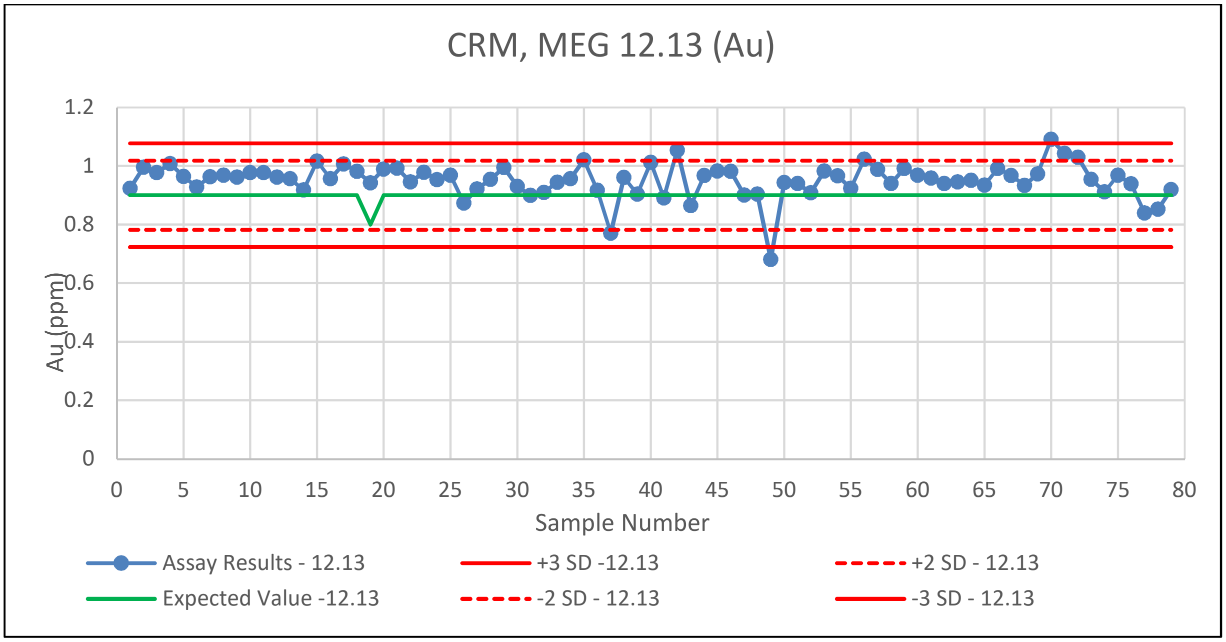


Figure 11-9: CRM 11.13 (2021) FA-ICP-ES

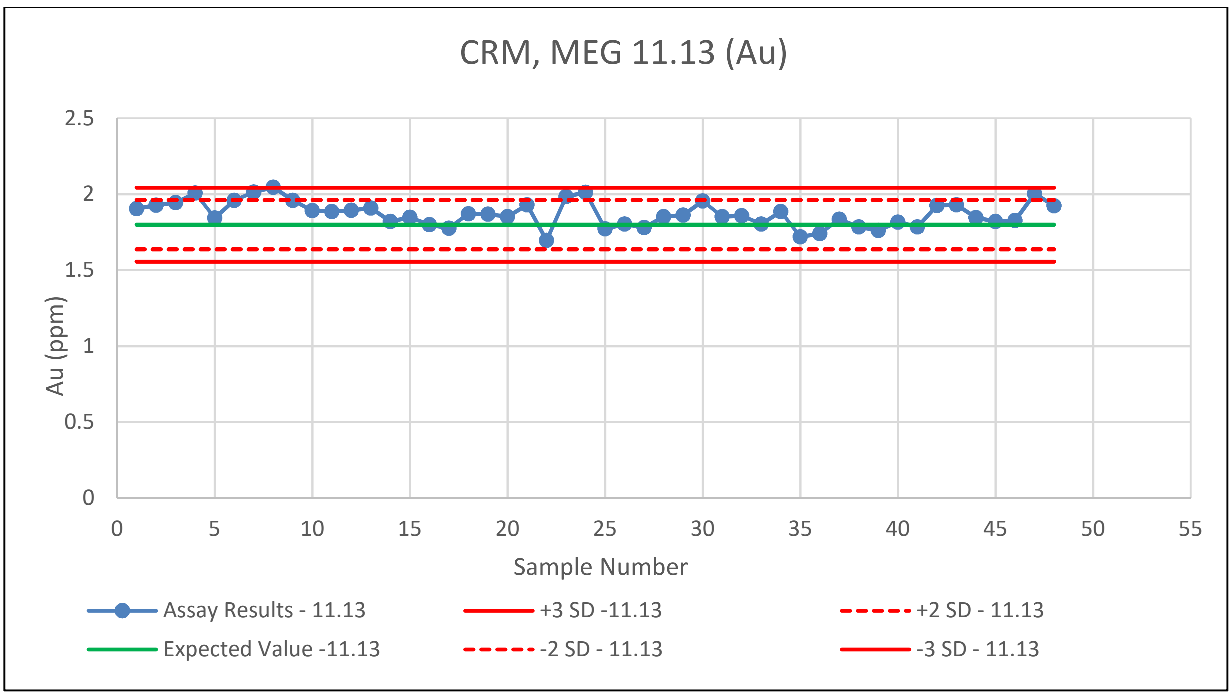


Figure 11-10: CRM 17.21 (2021) FA-ICP-ES

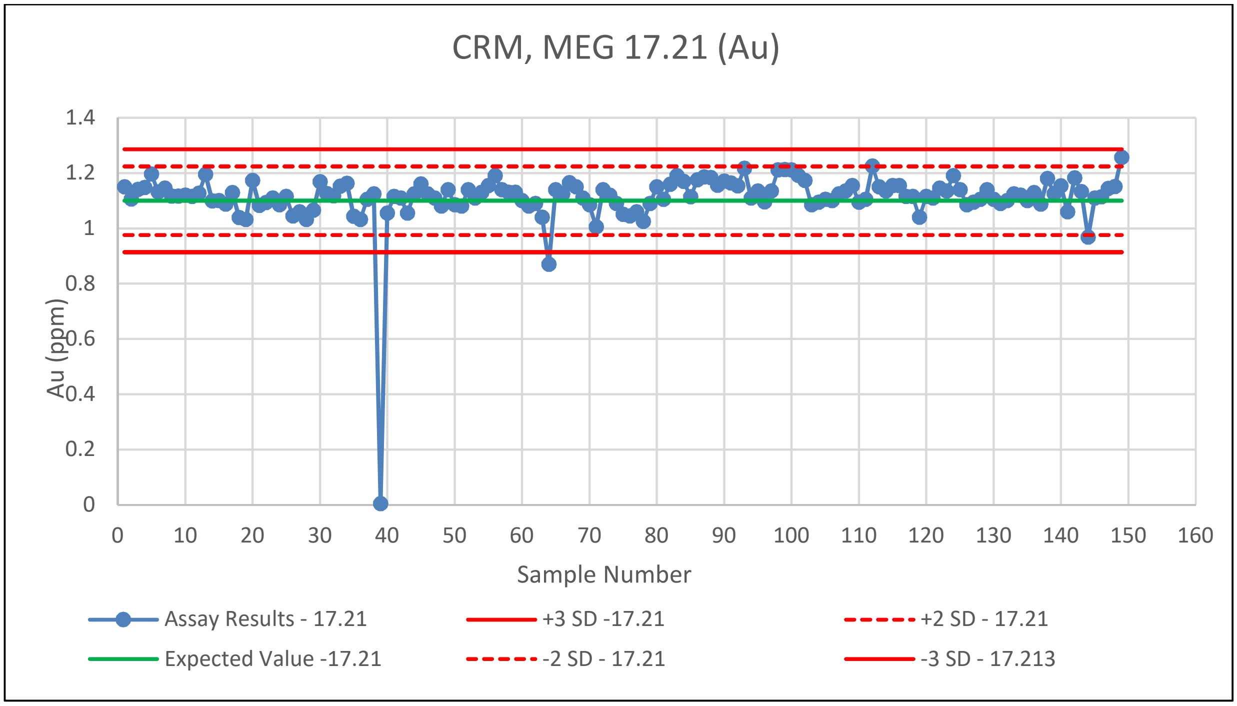


Figure 11-11: CRM 17.09 (2021) FA-ICP-ES

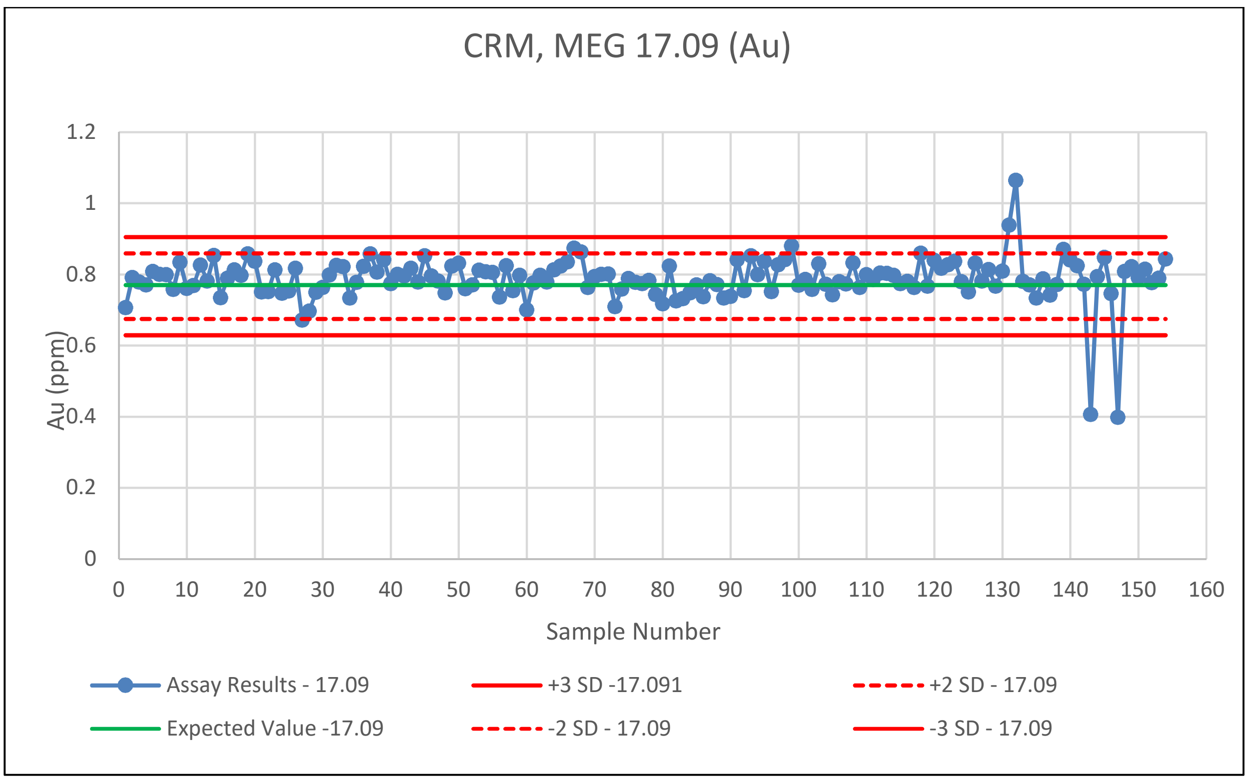


Figure 11-12: CRM 11.34 (2021) FA-ICP-ES

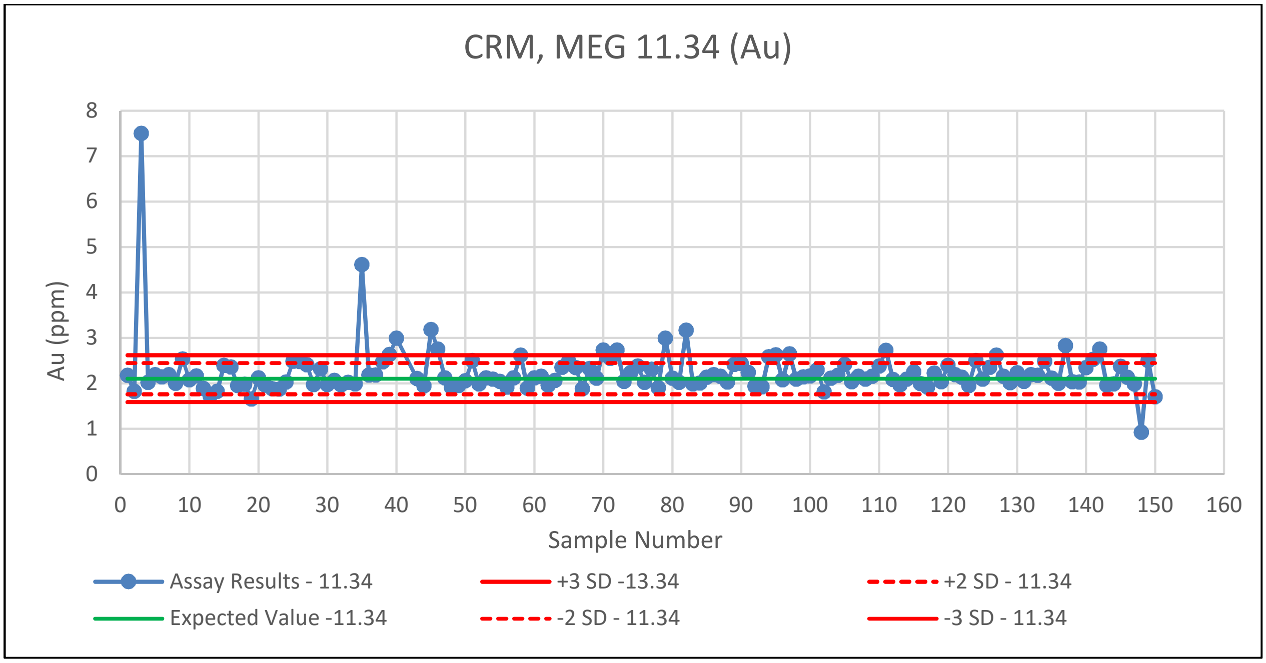


Figure 11-13: CRM Ko78659 (2021) FA-ICP-ES

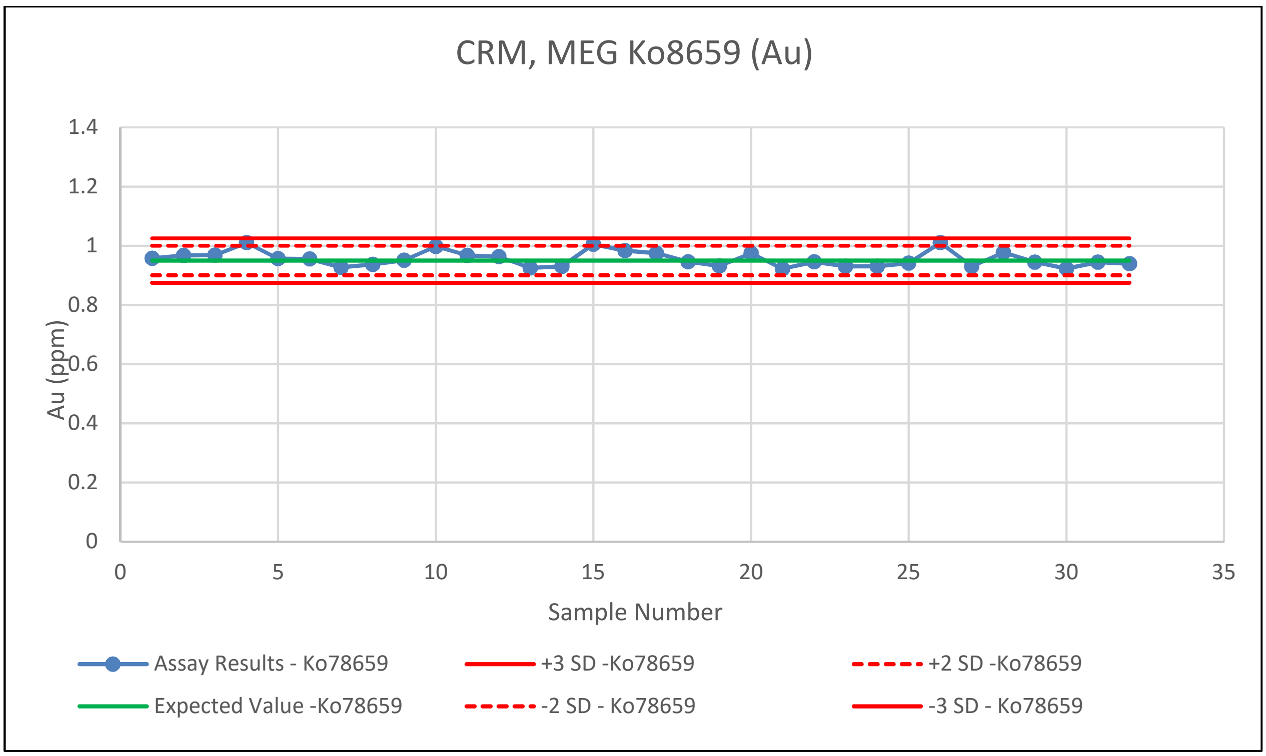
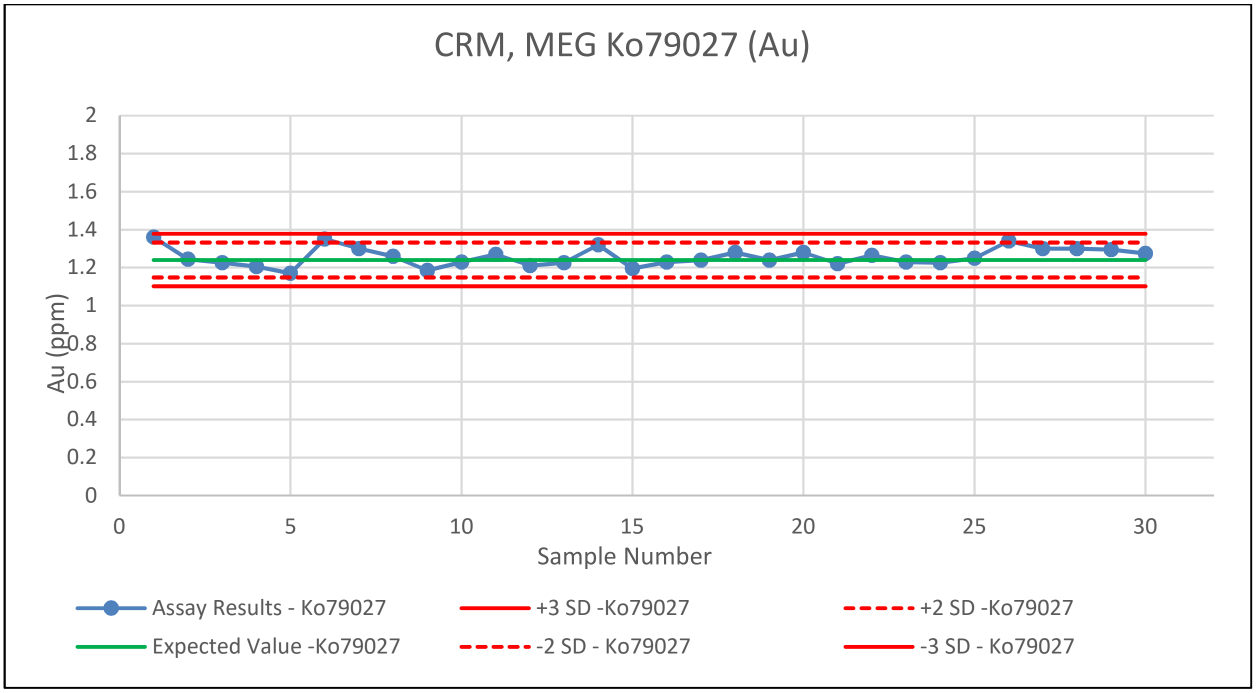


Figure 11-14: CRM Ko79027 (2021) FA-ICP-ES



In general, CRMs show reasonable analytical accuracy but relatively poor precision when compared against the certified standard deviation. This poor precision occurs in a number of CRMs from two laboratories for 2021 drilling programs. At this time, it is not possible to definitely determine the cause of CRM high failure rate.

11.2.4.2.2 Silver Standards Analysis

As mentioned before, all CRMs purchased from MEG have two certifications for gold and silver. Thus 978 CRMs out of a total of 1,379 CRMs have also silver certifications.

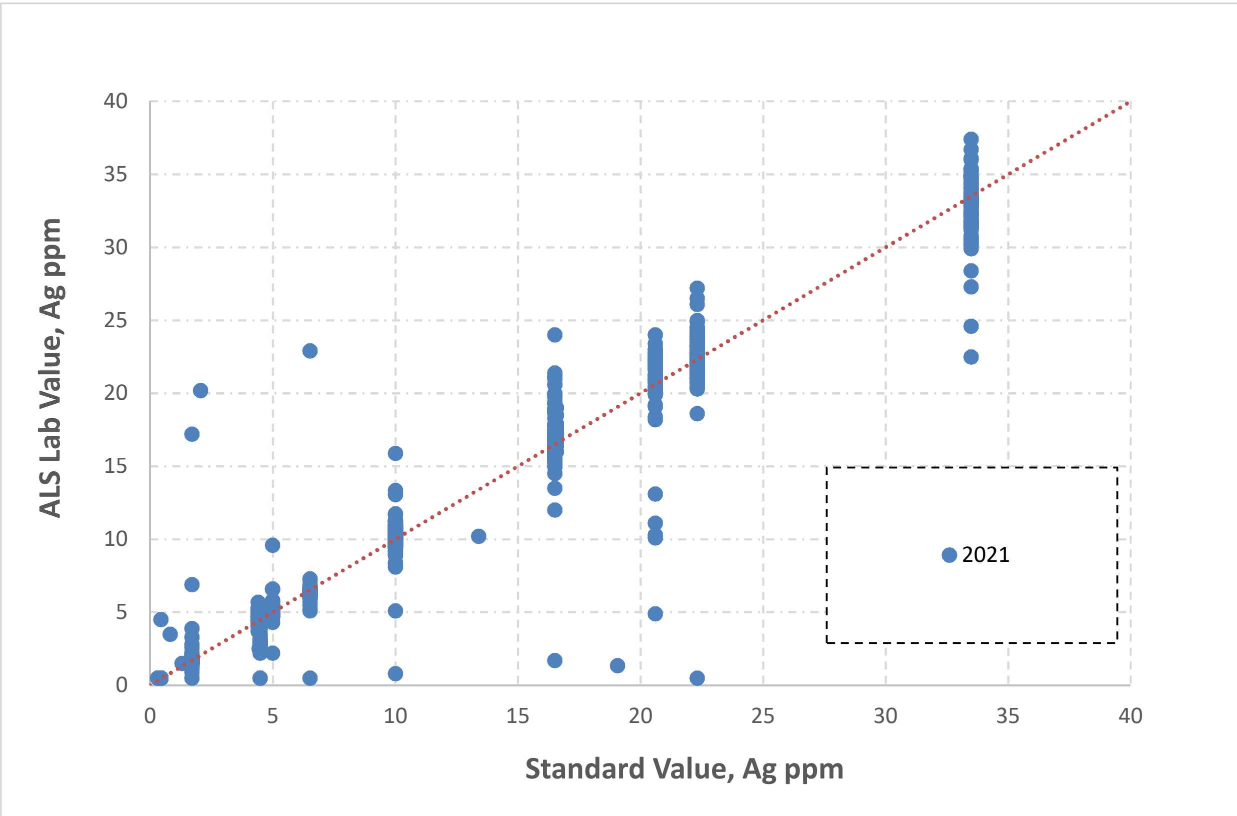
CRMs prepared from MEG, Inc. have silver standard values ranging from 0.44 to 33.49 ppm, most with reported standard deviations. A total of 14 different silver CRMs was used at the property in 2021 (Table 11-3). As with the gold, standards values are certified for silver using conventional industry-standard "round robin" assay methods.

Table 11-3: CRMs Used in 2021 Drilling Campaign

No	Standards	Ag ppm	STDEV	No	Standards	Ag ppm	STDEV
1	10.03	4.48	No Data	8	17.01	6.525	0.294
2	11.13	20.6	1.3	9	17.02	4.993	0.281
3	11.29	13.4	0.9	10	17.08	0.439	No Data
4	11.34	10	0.8	11	17.09	16.71	1.376
5	12.13	33.49	3.28	12	17.21	22.594	1.356
6	12.25	4.4	0.85	13	19.05	1.7	No Data
7	13.03	4.48	0.56	14	19.07	1.3	No Data

Figure 11-15 shows a scatter plot of the certified value for each assay standard compared to the assay value obtained. A 45-degree line represents an acceptable correlation between the silver standard assay certified value and actual assay results considering silver standard deviations. This line passes through most of the sample sets, with the majority of the points directly adjacent to the line, indicating acceptable accuracy performance for the silver standards.

Figure 11-15: Assay Standard Results (2021)



GRE selected some additional control charts to monitor the analytical performance of an individual silver CRM in 2021. CRM assay results are plotted in order of analysis. Control charts at various grades for the 2021 campaign of work are presented for select CRMs (outlined in Table 11-4) are shown in Figure 11-16 to Figure 11-23.

Table 11-4: CRMs Selected by GRE for control charts

CRM	Ag Value (ppm)	No. CRMs	Campaign
13.03	4.48	46	2021
12.25	4.4	41	
17.02	4.993	43	
12.13	33.49	79	
11.13	20.6	11.13	
17.21	22.31	150	
17.09	16.71	156	
11.34	10	151	

Figure 11-16: CRM 13.03 (2021) FA-ICP-ES

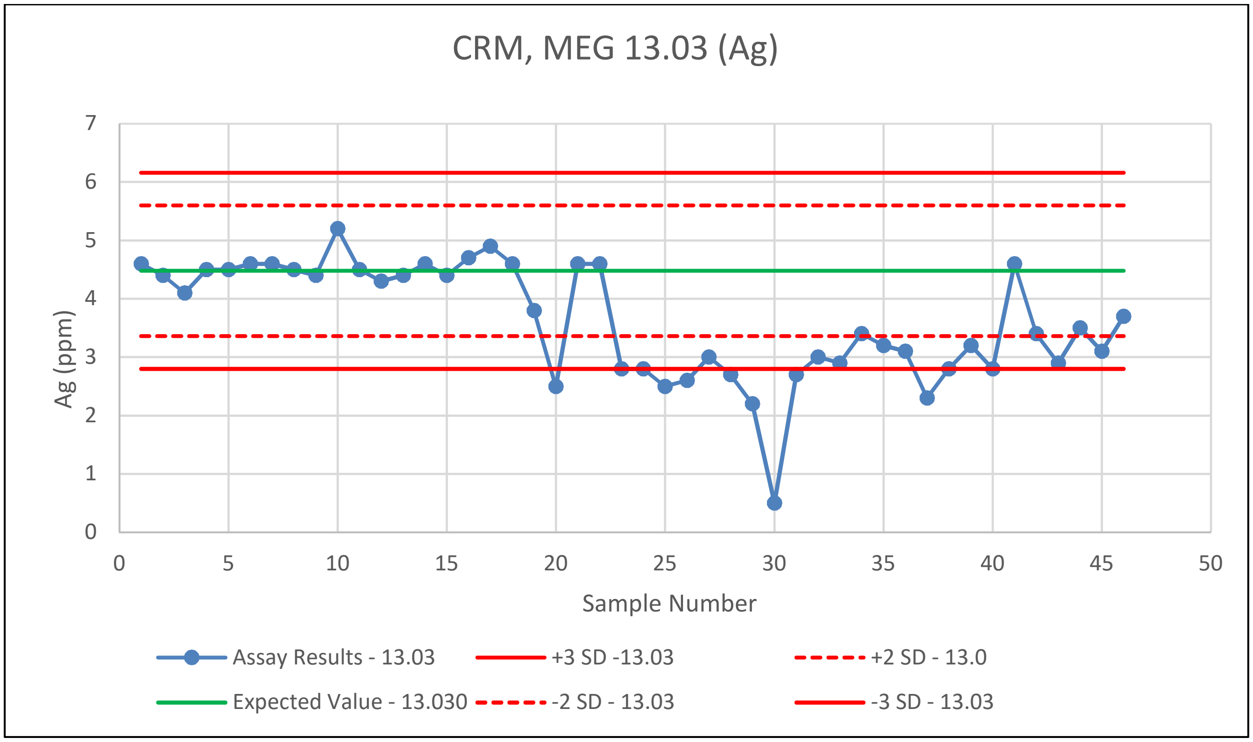


Figure 11-17: CRM 12.25 (2021) FA-ICP-ES

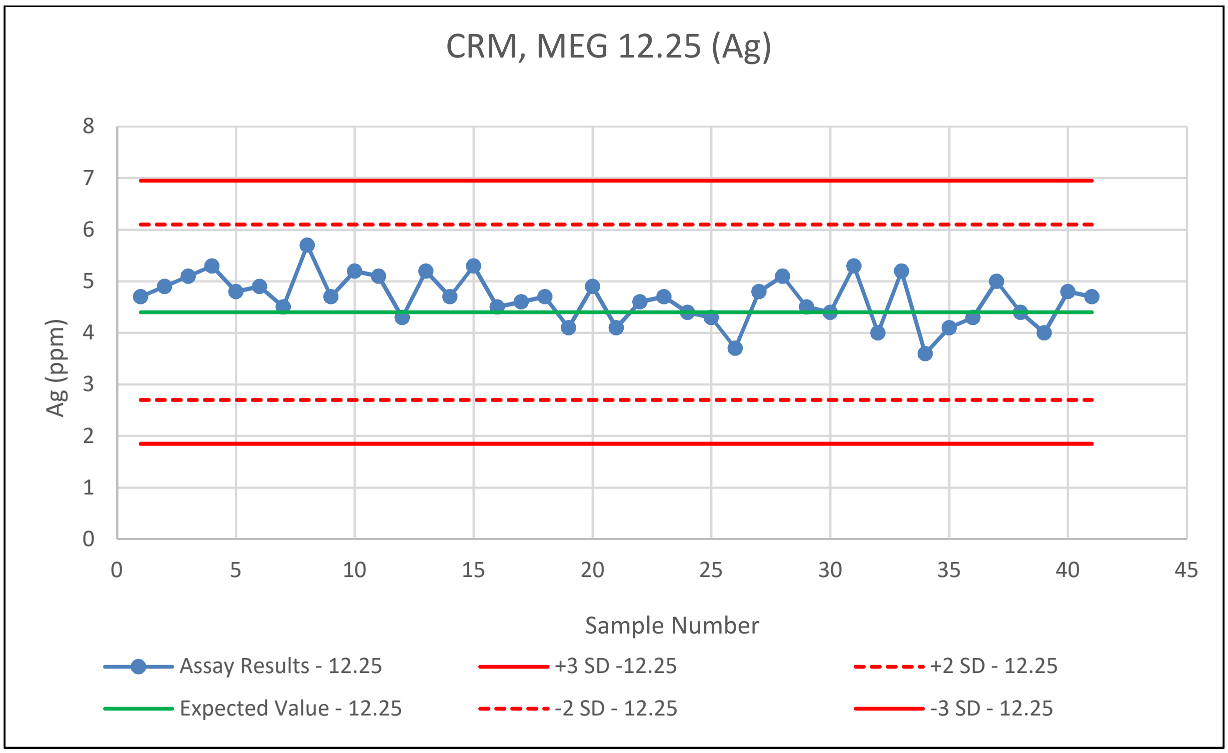


Figure 11-18: CRM 17.02 (2021) FA-ICP-ES

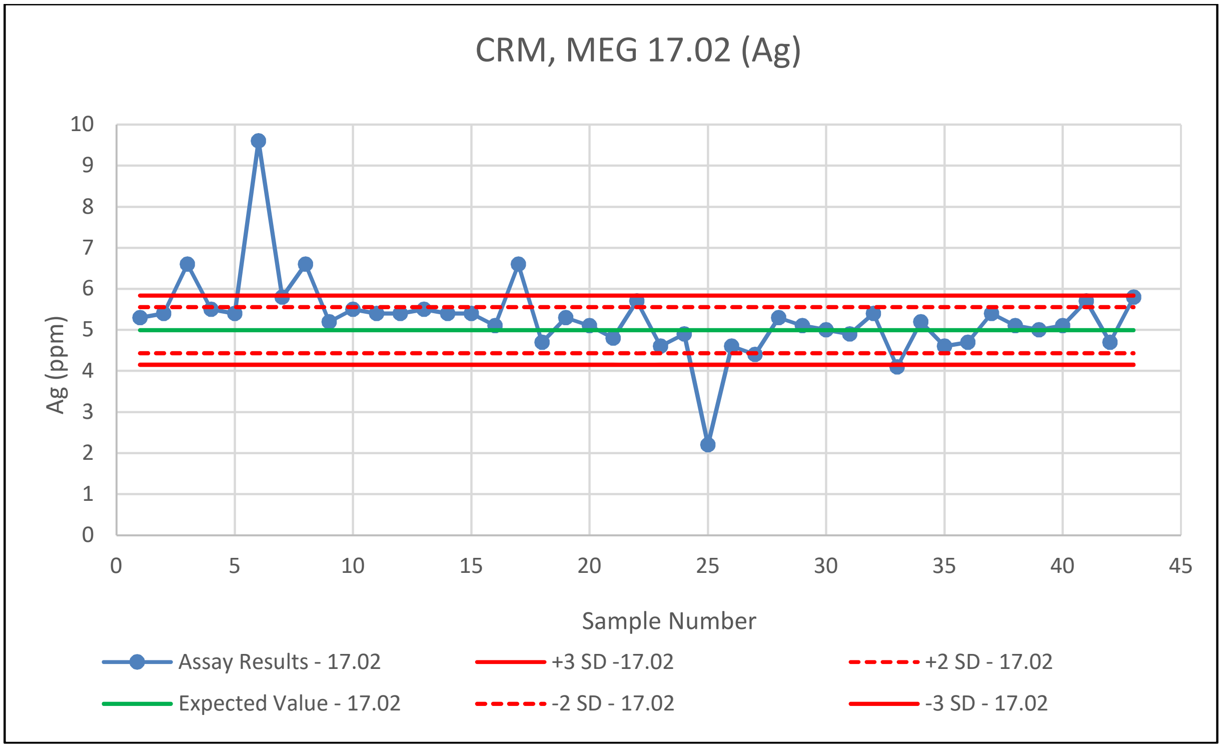


Figure 11-19: CRM 12.13 (2021) FA-ICP-ES

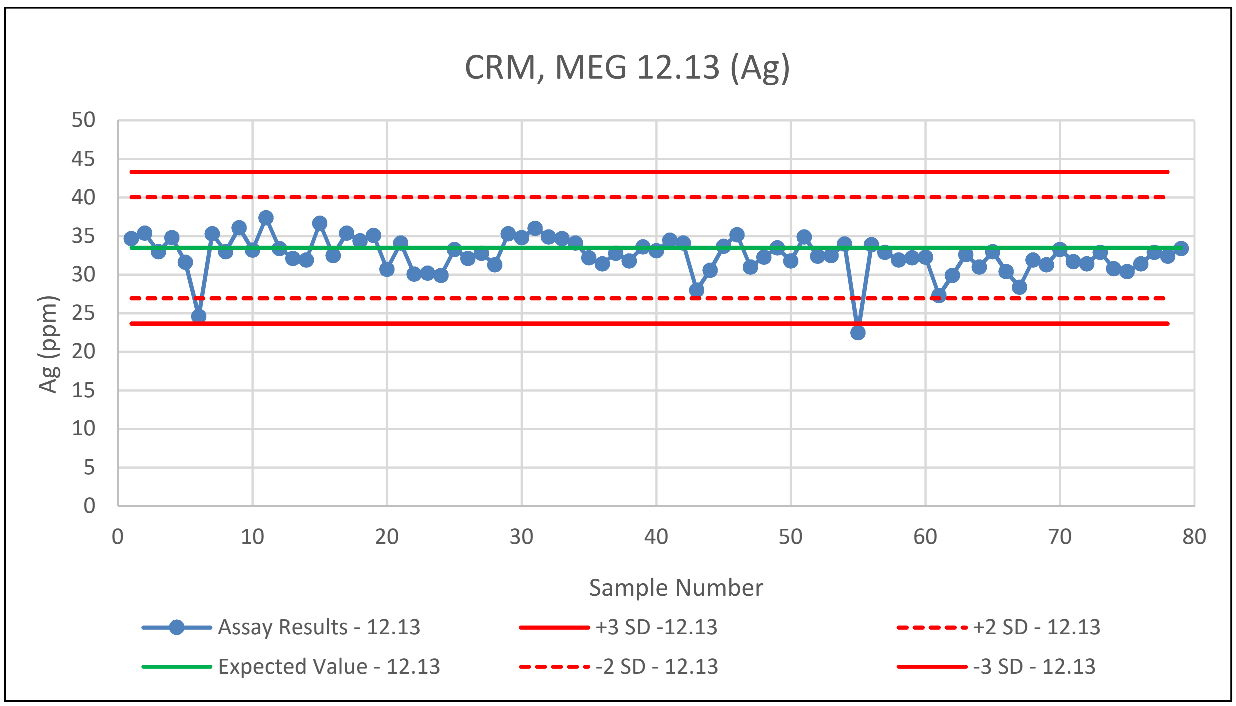


Figure 11-20: CRM 11.13 (2021) FA-ICP-ES

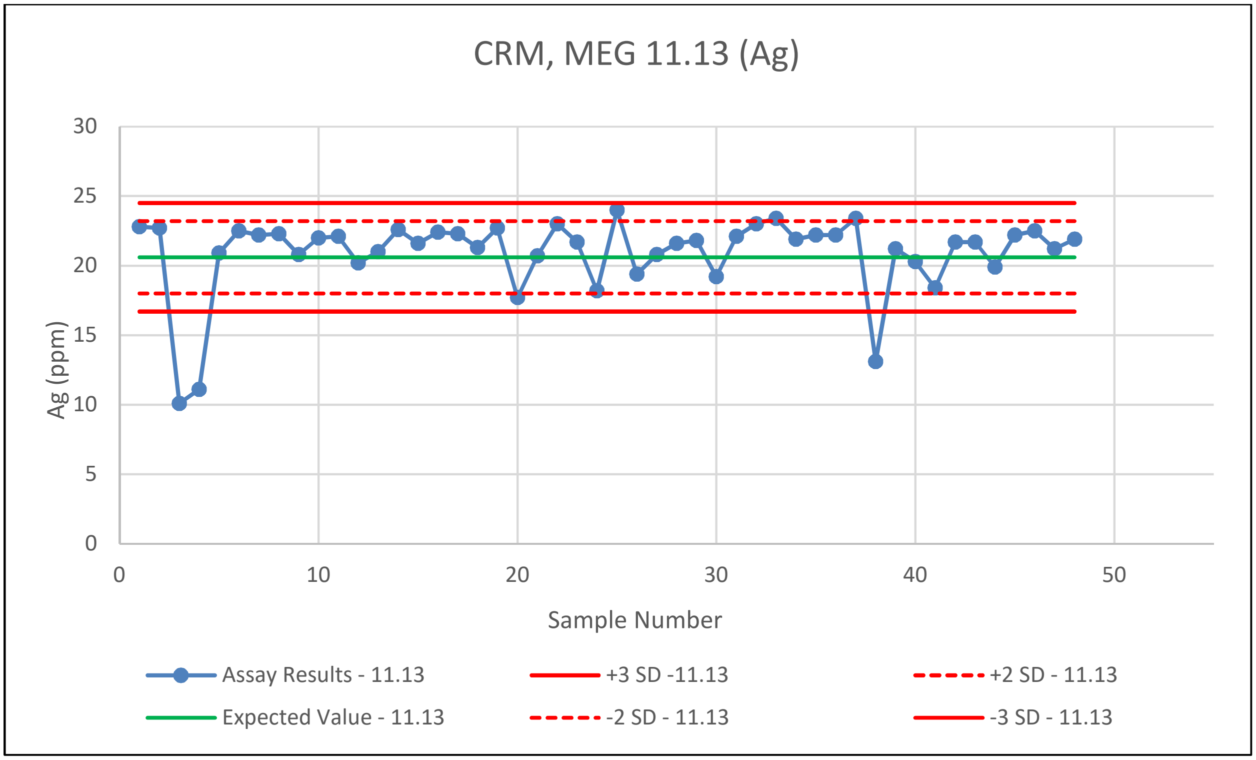


Figure 11-21: CRM 17.21 (2021) FA-ICP-ES

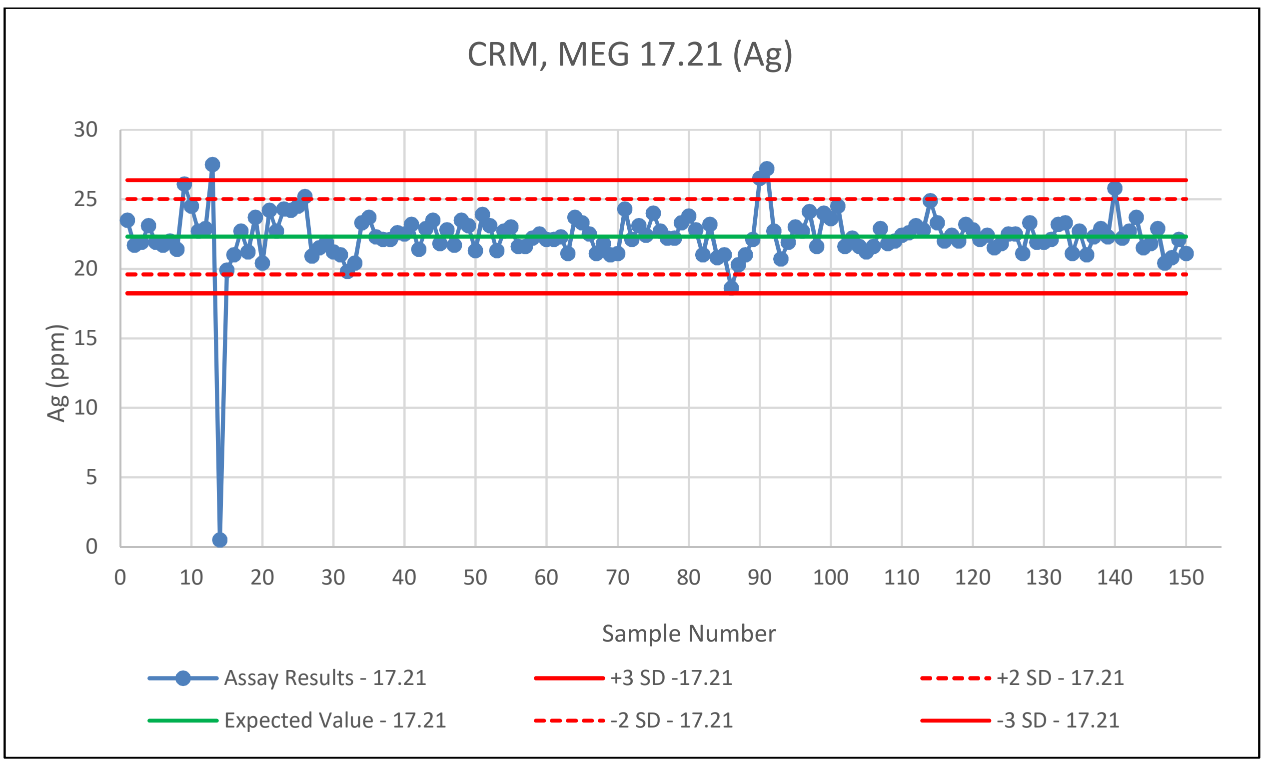


Figure 11-22: CRM 17.09 (2021) FA-ICP-ES

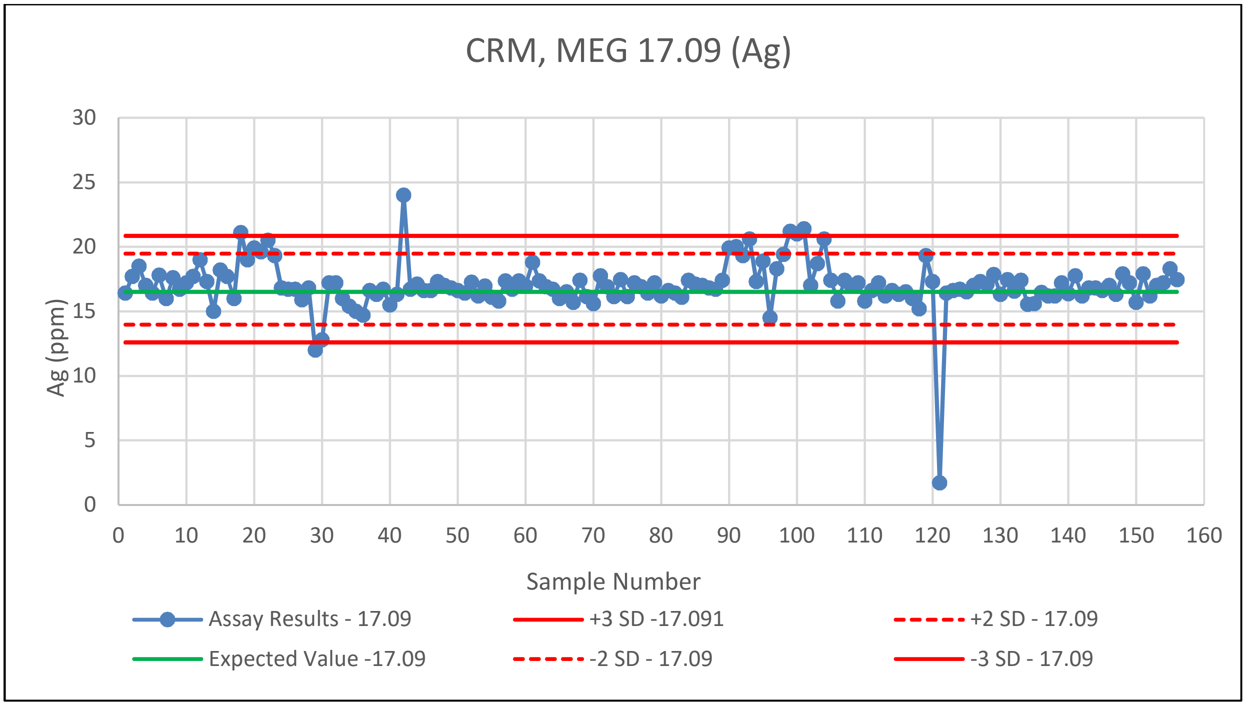
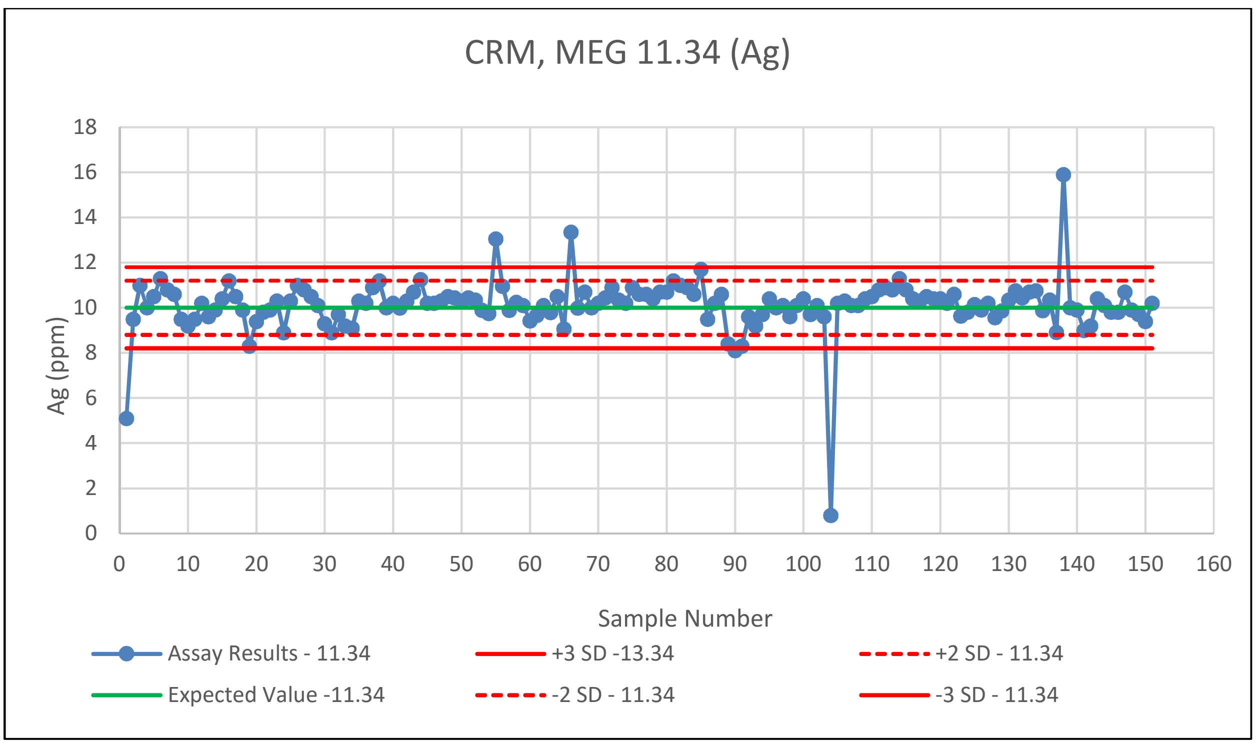


Figure 11-23: CRM 11.34 (2021) FA-ICP-ES



Silver CRMs also show reasonable analytical accuracy but relatively poor precision when compared against the certified standard deviation.

11.2.5 QA/QC QP Opinion on Adequacy (2021)

QA/QC procedure samples (standards and blanks) were inserted at a rate of two standards and one blank for every 20 interval samples. In the 2021 RC drill program, no duplicate field sample was inserted into the stream sample. The program protocol of one standard, one duplicate, and one blank sample inserted every 20 interval samples is within industry standards and is recommended for any drilling campaign in the future.

During the 2021 RC drill program, a total of 13,702 samples were analyzed at the ALS and Paragon laboratories: 687 of these were blanks, 1,379 were certified reference material, and the remaining 11,636 were samples collected from drill chip samples. In addition, no duplicate field sample was inserted into stream samples in this program. The GRE QP believes this rate of blank and standard sample insertion fully covers industry standards and is excellent.

GRE evaluation of 2021 RC drilling programs shows:

- Blank material assays indicated no contamination occurred from sample to sample.
- In general, assaying of standard material produced no systematic errors. As mentioned above, CRMs show reasonable analytical accuracy but relatively poor precision when compared against the certified standard deviation. GRE’s QP recommends a re-assay program for all these standards with values out of +/-3 STDEV by another certified Lab. If the results for some of the CRMs still is out of the acceptable range, those would be better to be omitted for future drilling campaigns.
- In any future drilling programs, considering sample preparation procedure, insertion of one field duplicate for every 20 interval samples is highly recommended.

In the opinion of the GRE QP responsible for this section, the analytical procedures were appropriate and consistent with standard industry practice. The sampling has been carried out by trained technical staff under the supervision of the senior geologist and in a manner that meets or exceeds common industry standards. Samples are properly identified and transported securely from the site to the labs. In conclusion, these results indicate assay values for gold and silver are satisfactory for resource evaluation, with indications where future protocol could be improved. However, there are no fatal flaws that would preclude the calculation of a Mineral Resource.

GRE believes the following recommendations should be considered for future drilling activities:

- Review and evaluation of the laboratory process should be ongoing, including occasional visits to the laboratories involved.
- For this type of mineralization, inhomogeneous gold distribution in quartz veinlets, preparing homogenous coarse and pulp samples at a single lab is highly recommended. GRE recommends sending spot check quarter chip samples to the second certified laboratory to periodically check the preparation process and the amount of the assays.
- In future RC drilling campaigns, the program protocol of one standard, one duplicate, and one blank sample inserted every 20 chip samples is recommended.

12.0 DATA VERIFICATION

GRE's QP, Dr. Hamid Samari, conducted an on-site inspection of the Project and GRC's Cedar City office from 20 to 23 February 2022, accompanied by GRC's senior geologist, Jacklyn Kennicott. The QP conducted this field visit mainly to check all 2021 exploration programs, including the validation and accuracy of collar coordinates, new geological maps, and geological logging.

12.1 Collar Coordinate Validation

GRE used a handheld GPS, model Garmin 64st, to check the coordinates at each drill location, while a Brunton Compass was used to measure the azimuth and plunge of one casing left at hole CR-21-004.

Geographic coordinates for 23 of the 82 existing drill hole collar locations (2021) were recorded in the field using a hand-held GPS unit. The average variance between field collar coordinates and collar coordinates contained in the project database is roughly 4.7 meters, which is within the expected margin of error (Table 12-1). The average variance between field collar elevation and those contained in the project database is 7.2 meters, which is within the expected margin of error. The measured the casing azimuth and plunge for hole CR-21-004 shows the exact amounts contained in the data base, which is 270/50 (Photo 12-1).

Most of the drill hole collars are not well marked in the field, some have no marker at all, and some have wooden sticks (Photo 12-1).

The GRE QP recommends that all drill hole collars be marked using PVC at least for the upper one meter of the drill hole and the collars be cemented to protect the PVC from any movement.

Since the 2021 collars have not yet been surveyed, the GRE QP also recommends that for the 2021 and future drill programs, holes be surveyed using a "differential GPS." These points should then be compared to the digital topography in areas where LIDAR data is available. Any inconsistencies between the data set should then be reconciled. In areas where only topography data from the magnetic VTEM survey was complete, the differential GPS would likely provide a more accurate representation of the terrain and should be added to the data set to generate the topography in these areas.

Table 12-1: Collar Coordinates Inspections

General Hole Information			GRC Database, UTM NAD 27			Hand-held GPS Data, UTM NAD 27			Distance Difference (m)	Elevation Difference (m)
No.	Hole ID	Zone	Easting	Northing	Elevation (m)	Easting	Northing	Elevation (m)		
1	J-21-001	North Jumbo	760970	7498171	2045	760966	4198168	2040	5.0	5.0
2	J-21-002	North Jumbo	761241	4198454	2076	761235	4198456	2088	6.3	12.0
3	J-21-003	North Jumbo	761075	4198412	2088	761071	4198412	2081	4.0	7.0
4	J-21-008	North Jumbo	761094	4198611	2064	761089	4198608	2055	5.8	9.0
5	E-21-001	South Jumbo	760654	4195873	1950	460654	4195873	1959	0.0	9.0
6	E-21-03	South Jumbo	760697	4196227	1979	760693	4196225	1978	4.5	1.0
7	E-21-004	South Jumbo	760638	4196233	1957	760635	4196228	1970	5.8	13.0
8	E-21-005	South Jumbo	760674	4196195	1964	760672	4196795	1971	2.0	7.0
9	E-21-008	South Jumbo	760727	4195872	1950	760722	4195879	1965	8.6	15.0

10	E-21-009	South Jumbo	760724	4195876	1950	760720	4195883	1966	8.1	16.0
11	E-21-010	South Jumbo	760755	4195920	1970	760753	4195924	1975	4.5	5.0
12	E-21-014	South Jumbo	760508	4196691	1991	760507	4196691	1986	1.0	5.0
13	SS-21-001	Central Jumbo	760641	4197350	2007	760638	4197351	1998	3.2	9.0
14	CR-21-001	Charlie Ross	758968	4199359	2128	758964	4199359	2140	4.0	12.0
15	CR-21-003	Charlie Ross	758831	4199381	2148	758831	4199375	2150	6.0	2.0
16	CR-21-004	Charlie Ross	758815	4199520	2153	758807	4199519	2155	8.1	2.0
17	CR-21-005	Charlie Ross	758648	4199295	2123	758645	4199288	2128	7.6	5.0
18	CR-21-006	Charlie Ross	758630	4199373	2112	758633	4199375	2124	3.6	12.0
19	CR-21-016	Charlie Ross	758623	4199369	2122	758621	4199373	2125	4.5	3.0
20	CR-21-017	Charlie Ross	758608	4199459	2134	758610	4199459	2139	2.0	5.0
21	CR-21-018	Charlie Ross	758567	4199566	2138	758567	4199562	2144	4.0	6.0
22	CR-21-019	Charlie Ross	758594	4199600	2154	758590	4199594	2155	7.2	1.0
23	CR-21-022	Charlie Ross	758572	4199397	No Data	758573	4199398	2131	1.4	--
								Maximum Difference	8.6	16.0
								Minimum Difference	0.0	1.0
								Average Difference	4.7	7.2

Photo 12-1: Inspection of the Collars Coordinates

A view from Drilling Pads and Their Access Road on Charlie Ross Target

location of Hole CR-21-005

Hole CR-21-004 (Azimuth and Plunge: 265/50)

Location of Hole J-21-008

Location of Hole E-21-010

12.2 Geological Data Verification and Interpretation

12.2.1 Geological Map Accuracy

The GRE QP, Dr. Samari, conducted a ten-day geological fieldwork proramme at the property previously, in April 2017, to prepare a structural geology report for the project. That fieldwork confirmed geologic reports and maps of the project area (GRE, 2015)).

On February 20, 2022, the GRE QP spent one full day at the project to check 2021 drill collars and new geological and alteration maps prepared by GRC for exploration targets Jumbo, Charlie Ross, and South Jumbo. The GRE QP also allocated two days of his site visit from 21 to 22 February 2022 at GRC's office in Cedar city, where several chip trays were visually inspected.

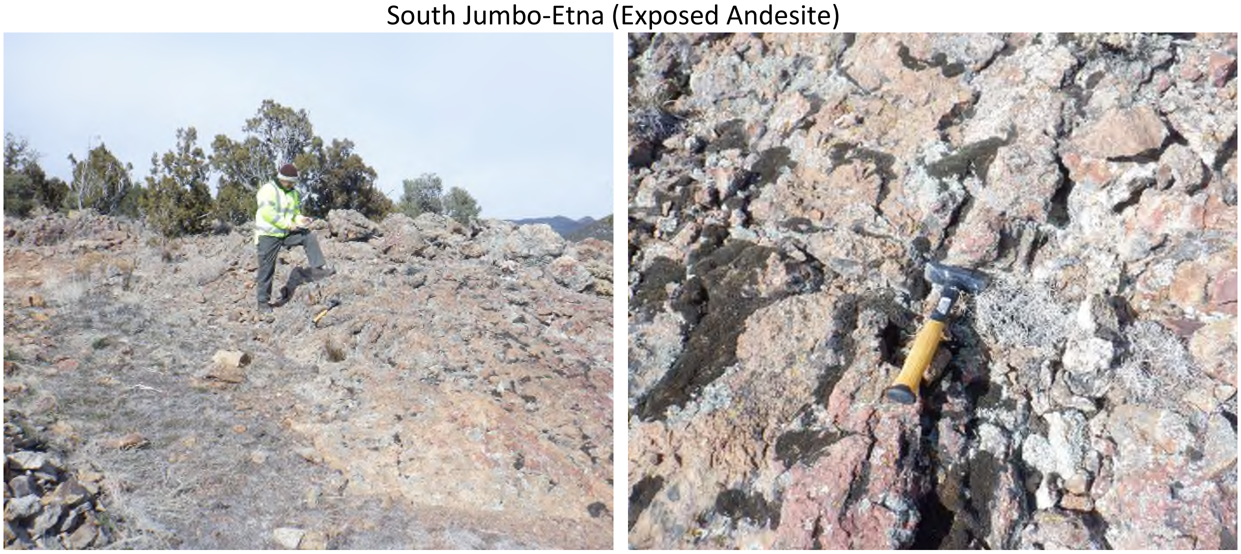
During the site visit, field visit observations generally confirmed updated maps on the geology of the project area. The lithology of exposed bedrock, alteration types, and significant structural features is consistent with descriptions provided in previous project reports (GRE, 2015) and updated maps in 2021. Dr. Samari did not see any evidence in the field that might significantly alter or refute the current interpretation of the local geologic setting (Photo 12-2).

Photo 12-2: GRE's QP Geological Inspections in 2022

Charlie Ross (lithic Tuff)

Jumbo (Silicified Ridge)

South Jumbo-Etna (Exposed Andesite)



12.2.2 Geological Logging Accuracy

GRE's QP compared the RC chip samples in chip trays to the geologic logs. A total of two hundred forty-six sample intervals from 15 different drill holes of the 2021 drilling campaign were selected for visual inspection. These intervals were selected based on reviewing all drill hole logs and original assay results (Table 12-2). The RC chip samples in RC chip trays were inspected by the QP using a stereo microscope (MEIJI TECHNO) in the GRC's Cedar City office (Photo 12-3). The sample intervals selected contained a range of assay values, lithology, alteration, and mineralization (Photo 12-4, Photo 12-5, and Photo 12-6).

Table 12-2: RC Chip Sample Intervals Selected for Visual Inspection

Target	Hole ID	From (ft)	To (ft)	# Intervals
Charlie Ross	CR-21-004	350	400	10
	CR-21-005	400	450	10
	CR-21-013	600	650	10
	CR-21-008	500	550	10
	CR-21-008	550	600	10
	CR-21-008	600	650	10
North Jumbo	J-21-001	400	450	10
	J-21-001	450	500	10
	J-21-001	750	800	4
	J-21-001	800	820	10
	J-21-006	450	500	10
	J-21-006	500	550	10
	J-21-006	550	600	10
	J-21-009	550	600	10
	J-21-016	500	550	10
	J-21-016	550	600	10
South Jumbo	E-21-001	300	350	10
	E-21-002	0	50	10
	E-21-003	50	100	10
	E-21-003	100	150	10
	E-21-005	0	50	10
	E-21-007	150	200	10
	E-21-007	200	210	2
	E-21-008	250	300	10
	E-21-016	50	100	10
	E-21-016	100	150	10
			Total	246

Photo 12-3: Visual Inspection of RC Chip Samples in Chip Trays Using Stereo Microscope in GRC's Office in Cedar City

Photo 12-4: Sixty RC Chip Sample Intervals in Chip Trays Selected from four Holes at Charlie Ross

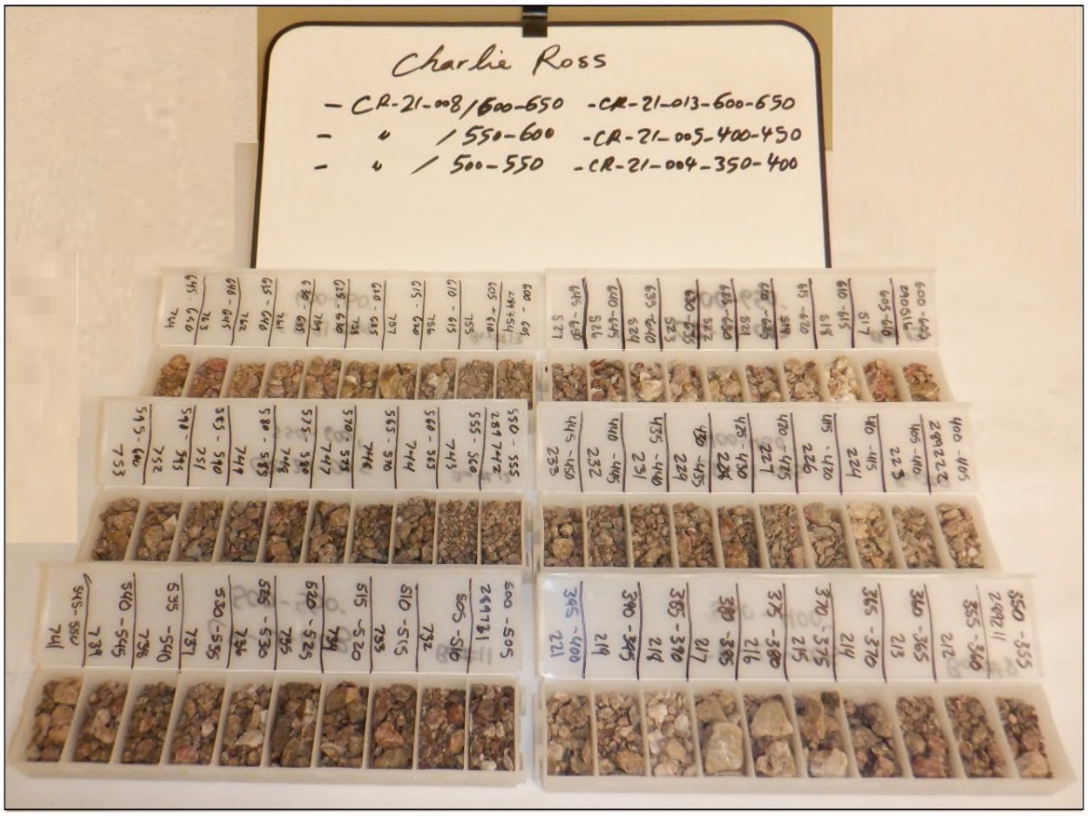


Photo 12-5: Ninety-Four RC Chip Sample Intervals in Chip Trays Selected from Four Holes at Jumbo

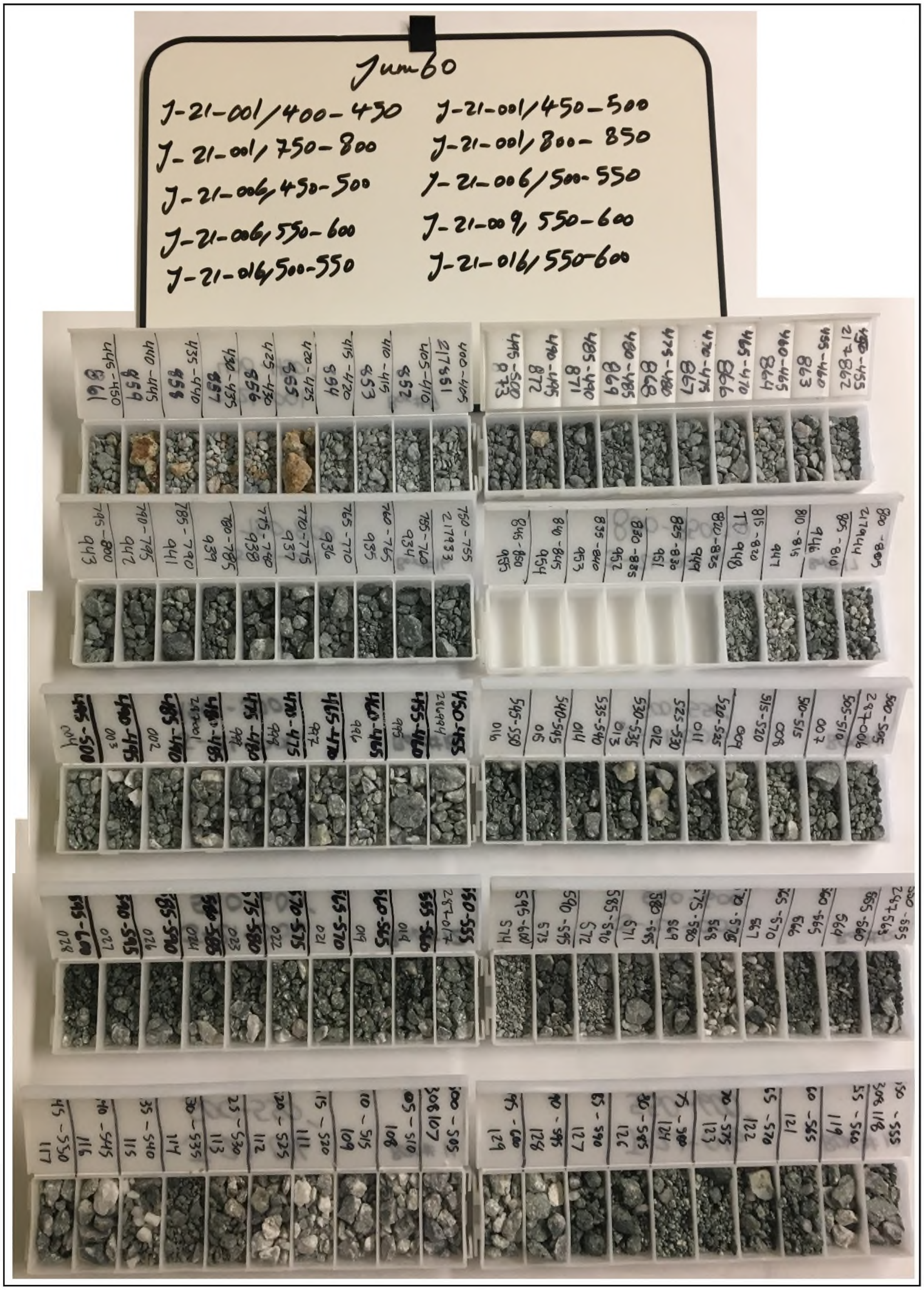
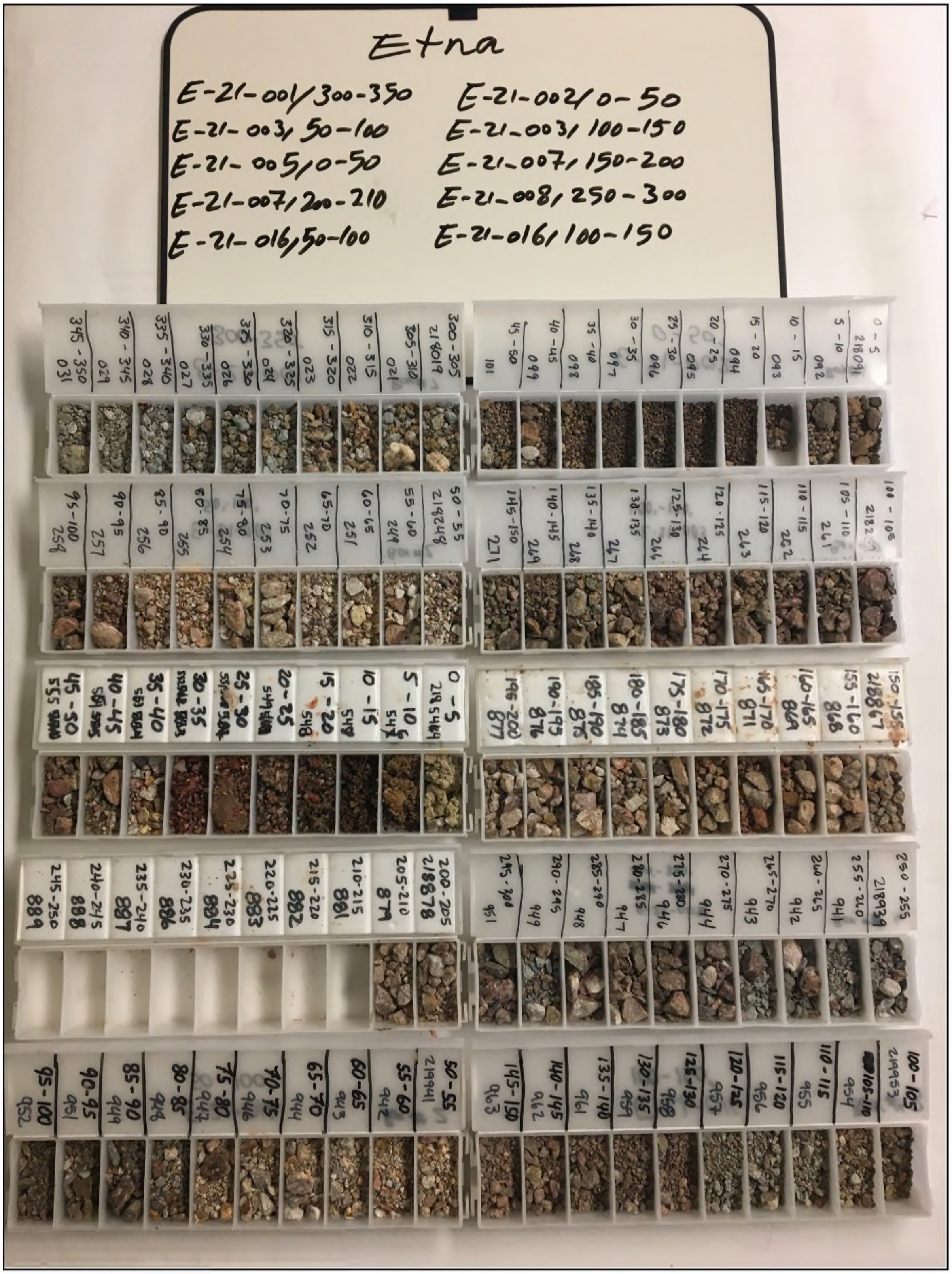


Photo 12-6: Ninety-Two RC Sample Chip Intervals in Chip Trays Selected from Seven Holes at Etna



Although most of the chip sample intervals inspected accurately reflect the lithologies, alteration, mineralization, structure, and sample descriptions recorded on the associated drill hole logs and within the project database, some inconsistencies were seen, including:

- Some intervals from a lithology point of view have been logged, but no samples were taken from these sample intervals. It seems they are related to voids or some issues related to drilling. If these intervals were logged based on a few rock traces, it would be better to have an explanation about the lack of sampling added to the database (e.g., in hole J-16-007, intervals from 0-385).
- Some sample intervals in Jumbo were logged as granodiorite; due to the size and alteration of chip samples, it was hard for the QP to distinguish the actual texture of the rock. Therefore, GRE recommends considering a few core drillings for the future drilling program to study a few thin sections from different lithologies across the property.

12.3 Database Audit

A total of 59,571.19 feet (18,157.3 metres) containing 13,702 assay samples in 82 drill holes has been completed at the Gold Spring Project in 2021. There are complete excel files of the 2021 drilling campaign in the GRC database, including collars, survey, downhole survey, assays, lithology, alteration, mineralization, and structure.

Dr. Hamid Samari completed a manual audit of the digital project database provided by GRC by comparing original assay certificates from ALS and Paragon laboratories to corresponding information contained in the database.

Original laboratory assay certificates are available for the GRC 2021 drill program, including 41 certificate PDF files from ALS Laboratory and 25 certificate PDF files from Paragon. A random manual audit examined ten certificate's PDF files from ALS Laboratory and ten certificate's PDF files from Paragon and revealed no discrepancies between the hard-copy information and digital data for the GRC program at the Gold Spring project.

12.4 QP Opinions on Adequacy

Based on their area of expertise, the QPs present the following opinions on data verification and adequacy.

Based on the results of the QP's check of the sampling practices, verification of drill hole collars in the field, visual examination of selected RC chip sample intervals, and the results of both manual and mechanical database audit efforts, the QP considers the collar, lithology, and assay data contained in the project database to be reasonably accurate and suitable for use in estimating mineral resources.

12.4.1 Verification by Dr. Hamid Samari – Geology and Drilling QP

The database audit work completed to date indicates that occasional inconsistencies and/or erroneous entries are not in the data entry process. The QP recommends that GRC establish a routine, internal mechanical audit procedure to check for overlaps, gaps, total drill hole length inconsistencies, non-numeric assay values, or any missing information in the database. After any significant update to the database, the internal mechanical audit should be carried out. The results of each audit, including any corrective actions taken, should be documented to provide a running log of the database validation.

12.4.2 Verification by Dr. Todd Harvey – Metallurgy QP

Dr. Todd Harvey, the Metallurgy QP, believes that the metallurgical testing was completed for the Gold Springs project by a number of well-known commercial metallurgical laboratories. Dr. Harvey reviewed the sample selection and compositing used in the metallurgical test work and found that the selection of samples was representative for this type of deposit and geology. The QPs found the metallurgical testwork and samples to be representative spatially with a spread of grades from very low grade to high grade that is typical for the grades found in the Gold Springs targets. Dr. Harvey also reviewed the process for preparing sample composites and found the selection of fresh core to be suitable for this level of study. Dr. Harvey, while performing their data analysis, performed several mathematical tests to validate the metallurgical balances presented in the test work and they found the data presented in the metallurgical reports to be consistent with practices performed by reputable independent test laboratories. A complete discussion of the test work is provided in Section 13.0. Though much of the work is historical in nature, the work appears to be professionally completed and is well documented, is supported by production data, and is suitable for estimation of heap leach.

12.4.3 Verification by Terre Lane – Mineral Resource Estimate QP

Based on the results of Dr. Samari's check of the sampling practices, verification of drill hole collars in the field, results of the check assay analysis, visual examination of selected core intervals, and the results of both manual and mechanical database audit efforts, Ms. Lane considers the collar, lithology, and assay data contained in the project database to be reasonably accurate and suitable for use in estimating mineral resources.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Bottle Roll Tests 2012

In 2012, GSLLC conducted a series of metallurgical tests designed to assess the recoverability of gold by bottle roll testing using cyanidation. This work was completed by Inspectorate Labs of Sparks, Nevada. Tests were completed on 4,748 samples collected from available RC chips from the 2012 drill program at the Grey Eagle and Jumbo targets. Additional samples were included from a trench at the Grey Eagle target. All samples had previously been analyzed by fire assay methods.

These bottle roll tests used a sample size of one kilogram. Previous fire assays were based on a 30-gram sample. The average cyanide recovery for all gold samples tested was 90% (33%-98%). Except for one test, all results showed greater than 77% recovery. Gold grades calculated from the cyanide recoveries increased by an average of 15% over the original fire assays for values >0.2 g/t Au. Gold grades ranged from 0.043 g/t to 13.056 g/t in the original results, providing a broad range of values for the test work. Samples in this test came from drill holes GE-12-001, GE-12-002, J-12-004, and J-12-005, as well as the Grey Eagle trench.

The one-kilogram samples were ground to 85% less than 200 mesh, then subjected to cyanidation for 72 hours, with gold assays taken at 24, 48, and 72 hours. The residue or tail was also assayed. The vast majority of the gold was recovered in the first 24 hours with only an additional 3% of the gold being recovered between 24 and 48 hours and little additional recovery between 48 and 72 hours, indicating rapid availability of the gold at the 200-mesh size. Recoveries were very uniform, with only a slight increase in recovery with grade.

13.2 Bottle Roll Tests 2013

During 2013, GSLLC conducted further metallurgical tests utilizing KCA of Reno, Nevada. These tests were conducted on seven samples collected from the RC chips from the 2012 drill program at the Grey Eagle and Jumbo targets. Tests were carried out on RC chips rather than pulverized material as had been used in previous metallurgical tests.

Five-kilogram samples were subjected to cyanidation bottle roll testing using agitation for one minute every hour for 40 days. The average gold extraction in the Grey Eagle target (Nevada) was 71% (range: 38%-83%). For the Jumbo (Utah) target, the results were 88% and 89% for the two tests. Gold grades for all the tests ranged between 0.16 g/t and 6.2 g/t. These values are based upon calculated heads. Tested sizes ranged from 0.76 millimetres to 8.6 millimetres.

Silver extractions for the same samples were much more variable and lower than gold, as was anticipated from previous work. There is a significant difference in silver extraction between Grey Eagle and Jumbo, with much higher extractions coming from Jumbo. The average silver extraction from Grey Eagle was 21% and from Jumbo was 54%. Further testing will be needed to determine the basis for these differences.

13.3 Column Tests 2015

During 2015, KCA completed a set of column leach tests on three samples each from Jumbo and Grey Eagle. The material was crushed to 100% passing 9.5 millimetres and was leached in columns 75 millimetres in diameter and 0.6 metres in height. The material leached quickly, and most of the gold leaching occurred within the first 20 days (84% to 97% of total leached) and was substantially completed in 60 days. Silver leaching was typically much slower. The cyanide concentration was increased at approximately day 85, which did result in an increase in silver recovery, resulting in a 10% increase. Unfortunately, this change in reagent concentration significantly increased the cyanide consumption (KCA, 2015). Using a simple average, gold recovery for the Grey Eagle and Jumbo area were 77% and 68%, respectively. This does not consider weighting of the recovery by proportion of ore type as unique ore types were not separately weighed prior to combining for testing. Globally between the two resource areas, the recovery averaged 73% for gold. Silver recovery averaged 16% and 47% for Grey Eagle and Jumbo, respectively. The cause for the lower silver recovery experienced for Grey Eagle is unknown at this time. Table 13-1: presents the results of this test program.

Table 13-1: 2015 KCA Column Tests

Sample Description	Crush Size (mm)	Days of Leach	Calculated Head (Gold g/t)	Calculated Head (Silver g/t)	Extracted Gold	Extracted Silver	Consumption NaCN (Kg/t)	Cement Addition (Kg/t)
GE Trench 1	9.5	141	2.548	12.01	82%	23%	14.31	2.01
GE Trench 2	9.5	141	2.446	12.00	87%	15%	13.60	2.05
GE Trench 3	9.5	141	0.899	11.01	63%	9%	11.61	1.95
Jumbo Met Samples 1-4	9.5	141	0.679	12.52	92%	37%	14.61	2.02
Jumbo Met Samples 5-7	9.5	141	0.843	17.28	56%	45%	12.04	2.03
Jumbo Met Samples 8-11	9.5	141	0.370	20.33	57%	58%	12.69	2.01

NaCN – sodium cyanide

Figure 13-1 and Figure 13-2 show the gold and silver extractions for the GE Trench and Met Sample materials.

Figure 13-1: GE Trench and Met Samples Gold Extraction Column Leach Results

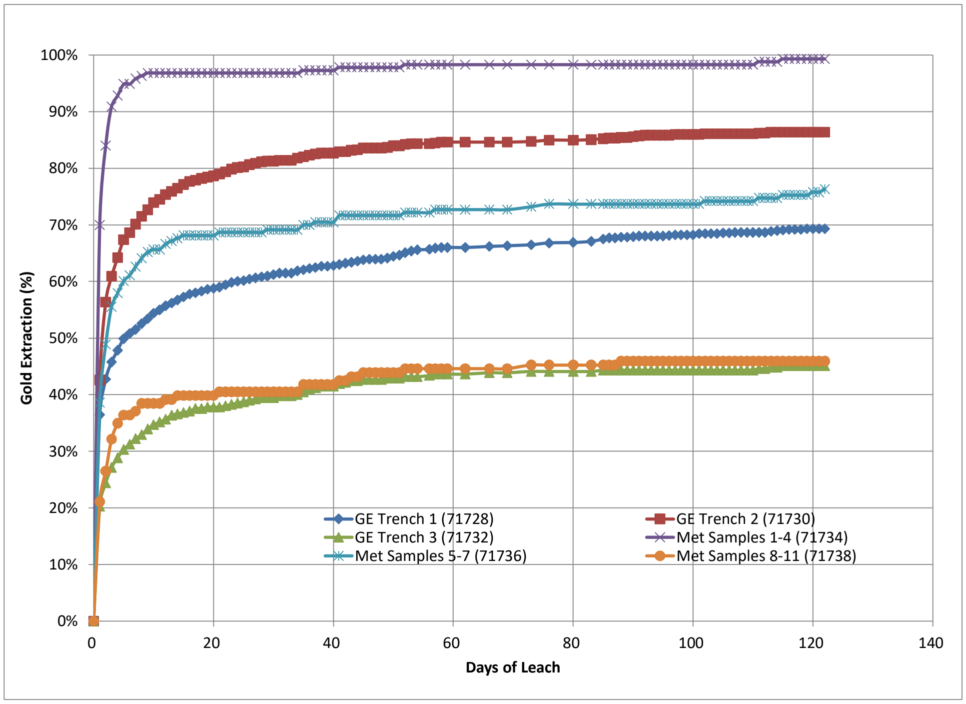
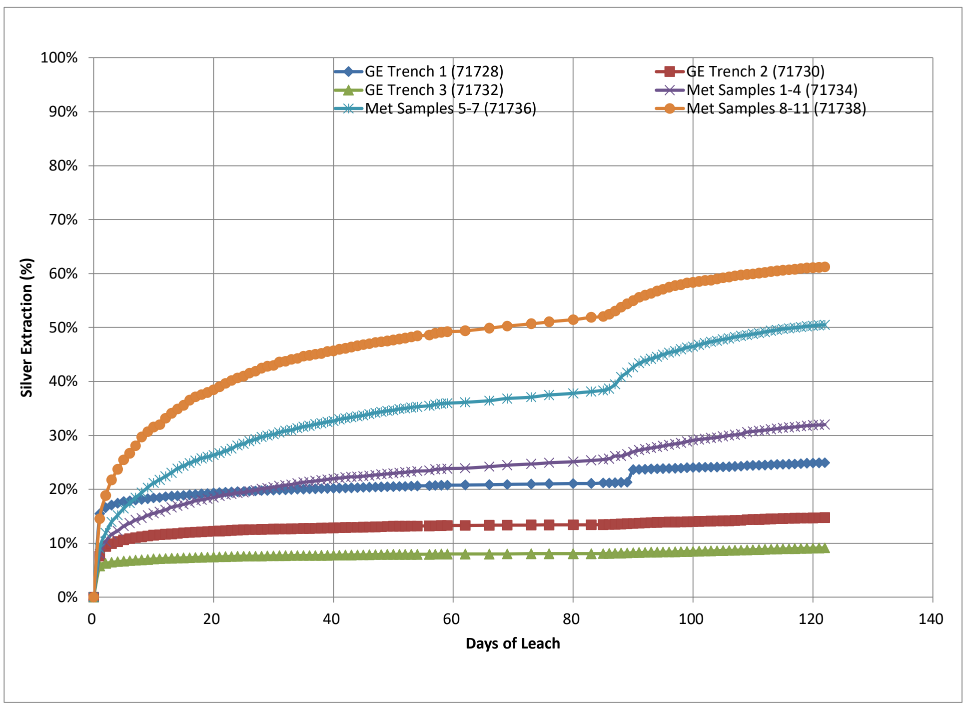


Figure 13-2: GE Trench and Met Samples Silver Extraction Column Leach Results



13.4 Column Tests 2016

Additional column testing was completed in 2016 using RDi of Denver, Colorado. The metallurgical tests were conducted over 282 days to look at extraction rates over the short term and long term after a "rest period" in which no additional cyanide solution was applied. The extraction values are shown below in Table 13-2:.

Table 13-2: Jumbo Estimated Gold Extractions

Column	Final Extraction*		Calculated Head Grade	
	Gold (%)	Silver (%)	Gold (g/t)	Silver (g/t)
#1	94.3	34.3	1.09	24.3
#2	66.9	53.4	0.54	20.6
#3	81.9	59.8	0.23	11.9

* extractions after 157 days of leaching and 125 days of rest

The three columns covered a wide range of grades varying from 1.09 g/t to 0.23 g/t gold, with good recoveries even from the lower grade material. Approximately 22 kilograms (kg) of each type of mineralized material, crushed to a P_{80} of ¾ inches, were loaded into 4-inch diameter columns approximately 6 feet high. The final extractions over time are shown in Table 13-3:.

Table 13-3: Large Column Extraction Detail Data with Rest Periods

Column	43 day Extraction		84-day Extraction		282-day Extraction after rest period*		Calculated Head Grade	
	Gold %	Silver %	Gold %	Silver %	Gold %	Silver %	Gold g/t	Silver g/t
1	90.1	25.3	90.6	28.4	94.3	34.3	1.09	24.3
2	62.5	35.4	62.5	43.3	66.9	53.4	0.54	20.6
3	76.8	39.9	76.8	48.0	81.9	59.8	0.23	11.9

*Leach sequence included 84 days of leaching followed by 35-day rest, followed by 44 days of leaching, followed by a second rest period of 90 days, followed by a further 29 days of leaching.

The material was leached and sampled over a long-time frame to evaluate how much more gold and silver could be extracted over time and after rest periods during which the cyanide solution is not circulated. As can be seen in Table 13-2 and Table 13-3, gold recoveries increased several percent after the rest period, and silver recoveries increased significantly, with increases in the double-digit percentages. Approximately 90% of the gold recovery was achieved in the first 12 to 18 days. Figure 13-3 to Figure 13-5 show the column leach results for the Jumbo composites.

Table 13-4 shows the reagent consumptions for the column tests at various periods during the tests. These reagent consumptions are high by column leaching standards because a high cyanide concentration was employed in an attempt to extract additional silver. Cyanide consumption in the production environment has been shown to typically be one-third of laboratory consumptions.

Additional Static Bucket Tests were completed by RDi during 2016. Bucket tests are used to assist in identifying a reasonable crush size for future conventional column testing. Recoveries do not necessarily represent those recoveries to be expected during column testing. Grey Eagle was a series of four tests with each test representing the four crush sizes. Jumbo was a series of six tests, again with each test consisting of four crush sizes. A summary of the results is presented in Table 13-5.

Apart from material used for one series of tests for Grey Eagle, all the samples were less than 0.40 grams per tonne, and the majority were less than 0.30 grams per tonne. The selected samples for Grey Eagle appear to perform poorly. Previously tested samples exhibited good results (see Table 13-1:). Additional column tests are planned as part of the work program going forward.

Figure 13-3: Jumbo Composite 1 Column Leach Results

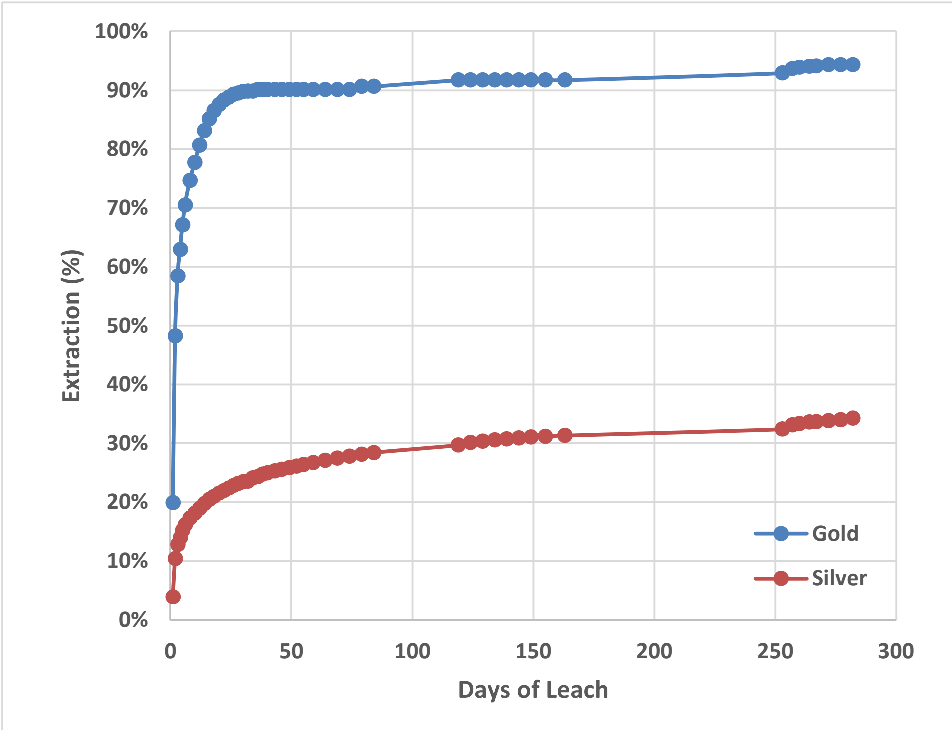


Figure 13-4: Jumbo Composite 2 Column Leach Results

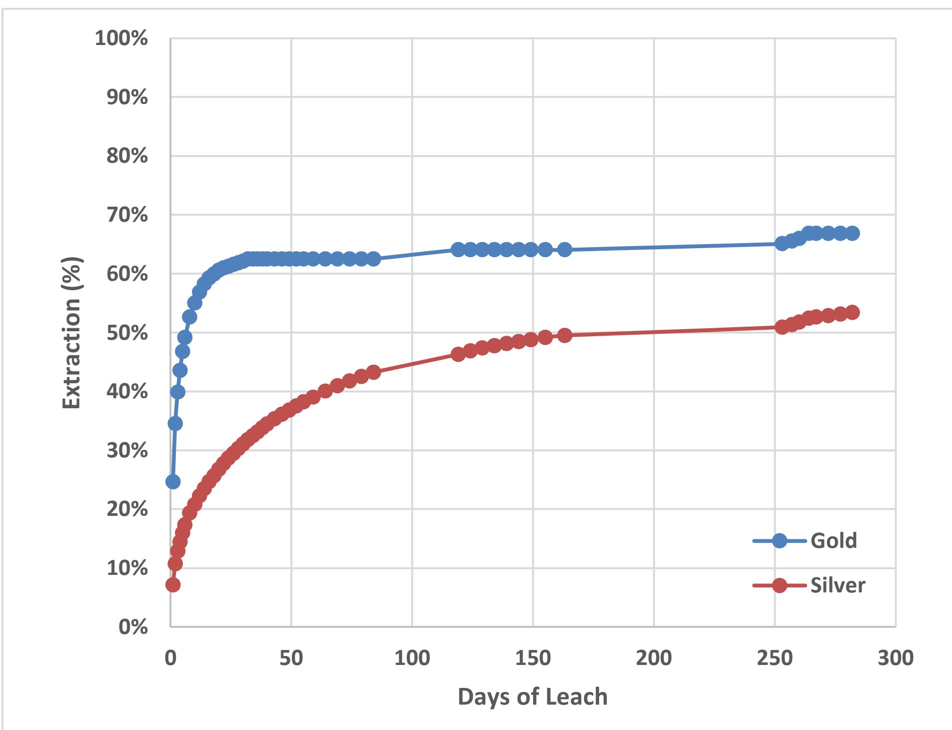


Figure 13-5 Jumbo Composite 3 Column Leach Results

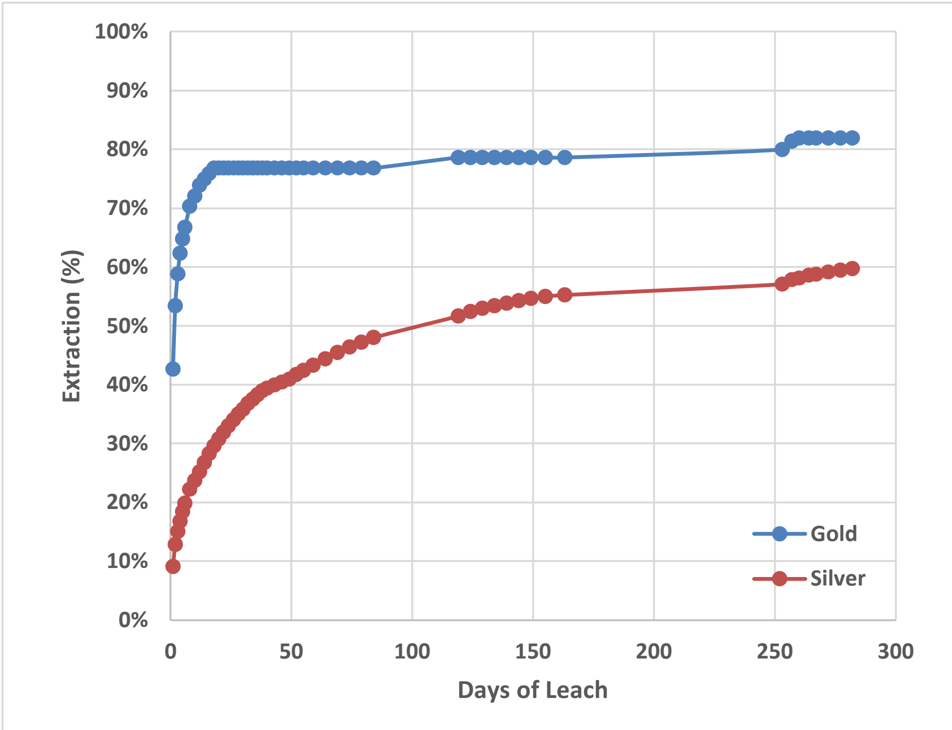


Table 13-4: Large Column Reagent Consumptions

Composite	43 days		84 days		282 days	
	Cyanide (kg/t)	Lime (kg/t)	Cyanide (kg/t)	Lime (kg/t)	Cyanide (kg/t)	Lime (kg/t)
1	1.63	1.99	2.97	3.62	5.79	7.07
2	1.28	1.84	2.51	3.60	4.80	4.80
3	1.32	1.82	2.62	3.60	5.06	6.97

Table 13-5: Static Bucket Test Results

	Grey Eagle	Jumbo
Grade Range g/t	0.17 – 2.6	0.10 – 5.3
Test Size		
3 MM	39.2 – 46.8%	65.7 – 96.1%
3/8 INCH	16.6 – 47.0%	53.5 – 82.5%
¾ INCH	21.2 – 51.1%	66.0 – 90.0%
1 INCH	15.1 – 20.8%	21.7 – 78.4%

Of the material tested thus far there have been no deleterious elements identified that would interfere with metal recovery.

The project has limited metallurgical testing. GRE recommends that a complete metallurgical test program be completed to identify and test the various ore types to determine crush size, leach cycle, recovery and reagent consumption. Samples for this work should be collected during the next drill campaign.

13.5 Recommended Metallurgical Variables

The following parameters have been used in the development of the design criteria for this project:

Gold Recovery System

- Merrill-Crowe

Heap Leach Time

- Primary Period: 45 days
- Total Period: 135 days

Irrigation

- Rate: 12 litres per hour per square metre (lph/m2) (0.005 gallons per minute per square foot [gpm/ft^2])

Size

- Crush Size: 12 mm (approximately 1.2 inch)
- ROM: as received

Extraction

Crush

- Gold: 73%
- Silver: 40%

ROM

- Gold: 40%
- Silver: 20%

Reagent Consumptions

Crush

- Cyanide: 0.4 kg/t
- Lime: 0.75 kg/t

ROM

- Cyanide: 0.2 kg/t
- Lime: 0.5 kg/t

14.0 MINERAL RESOURCE ESTIMATES

The updated 2022 Mineral Resource Estimate for the Etna and Jumbo resource area of the Gold Springs Project and the Mineral Resource Estimate for the Charlie Ross and White Point resource area of the Gold Springs Project are presented herein. The Mineral Resource Estimate was completed under the direction of Terre Lane, Principal of GRE and a NI 43-101 Qualified Person, using all available results as per the effective date of each zone. The main objective was to publish revised Mineral Resource Estimates for the above-mentioned resource area.

This updated Mineral Resource Estimate integrates 2,794 meters of new drilling completed in the Etna resource area and 7,153 meters of new drilling completed in the Jumbo resource area. In the Charlie Ross resource area, 4,701 meters of drilling were used to create the Mineral Resource Estimate, and in the White Point resource area, 2,037 meters of drilling were used to create the Mineral Resource Estimate.

This technical report is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves under National Instrument 43-101.

This section also updates the constraining pits for the Grey Eagle and Thor resource areas and the Mineral Resources within those constraining pits. The original Mineral Resource Estimates for Grey Eagle and Thor were also performed by Terre Lane.

The Authors do not know of any environmental, permitting, legal, title, surface access, taxation, socio-economic, marketing, or political issue that could materially affect the information contained in this technical report.

14.1 Methodology

The Mineral Resource Estimate for the Gold Springs resource areas and geostatistical study detailed in this report were performed using Leapfrog® Geo and Leapfrog® Edge software. Leapfrog® Geo was used to creating the geologic model, and Leapfrog® Edge was used for geostatistical analysis and grade modeling in the block model.

14.2 Bulk Density

14.2.1 2015 Specific Gravity Estimates

Specific gravity measurements were conducted on four core holes drilled in November 2014, as well as on a series of surface samples collected from various sites on the North and South Jumbo targets. In addition, KCA performed numerous specific gravity tests on samples from the Grey Eagle trench and core from hole J-11-001C. For the 2014 core drilling, a core sample was selected for specific gravity tests at approximately five-foot intervals from each core hole drilled and given a sequential number from 1-273 and described by Drill Hole, Footage, Lithology, and Mineralization Type. The series of Jumbo surface samples was numbered sequentially from 274-315 and described by Geographical Reference or Drill Pad ID, GPS Location, Lithology, and Mineralization Type.

Measurements were conducted using a Veritas S3201 Precision Balance (+/- 0.1 g) with a normal surface weighing pan and an undercarriage hook for under balance weighing of a suspended sample submerged in water. The Veritas balance was leveled and plugged into a 110-volt power source for a minimum of 0.5 hours to allow for machine electronic stabilization and was then calibrated using the auto-calibration function with a high precision 1 kg +/- 0.1 g stainless steel standard weight. A sheet of clean velum weighing-paper was zeroed out using the zero-tare function key. A 5-gallon bucket of water was placed under the Veritas balance, and a 30-inch hooked copper wire, which would subsequently be used to support a rock sample suspended in water, was hung from the under balance hook and weighed while partly submerged in water to give a wire weight. Ideally, the fresh water should be at 4^{o} C, but the water temperature during the weighing ranged from 2 to 4^{o}C; however, the error induced by the minor difference is minimal.

Specific gravity, also called relative density, is the ratio of the density of a substance to that of a standard substance. The usual standard of comparison for solids and liquids is water at 4^{o}C (39.2^{o}F), which has a density of 1.000 kg per liter (62.4 pounds per cubic foot). (Encyclopedia Britannica)

The specific gravity is calculated using the following formula: $SG = \frac{Dry\ Weight}{Dry\ Weight-(Wet\ Weight-Wire\ Weight)}$.

14.2.1.1 Procedure for Competent Samples

1. Weigh dry sample in air on upper balance tray with tared weighing paper. Record weight.
2. Secure sample in copper wire “cage,” hook wire with sample into balance hook, and submerge the suspended sample entirely into underlying bucket. Record weight.
3. Calculate SG.

14.2.1.2 Procedure for Porous-Poorly Indurated Samples

1. Weigh dry sample in air on upper balance tray with tared weighing paper. Record weight.
2. Dip porous tuff sample in melted wax bath until completely coated. Weigh and record weight.
3. Secure sample in copper wire “cage,” hook wire with sample into balance hook, and submerge the suspended sample entirely into underlying bucket. Record weight.
4. $SG = \frac{Dry\ Weight}{Dry\ Weight-(Wet\ Weight-Wire\ Weight)}$

There is a minor error introduced by coating the sample with wax in that it decreases the overall density of the sample by adding a low density material, but the weight of the wax added ranged from 0.7% to 1.6 % of the total sample dry weight, and the error is considered insignificant for the calculated specific gravities of the post mineral, low density tuffs.

In addition to the specific gravity work performed by GRC, a series of core samples from the 2011 drilling at Jumbo, trench samples from Grey Eagle, and surface samples of the post mineral tuff were submitted to KCA for SG testing. A summary of the work as presented in their report, Gold Springs Project Report of Metallurgical Test work (2014) is provided below.

Rock density tests were completed on specimens selected by the client prior to the test program. The specimens selected were whole shapes or broken pieces and exhibited sufficient structural integrity to permit handling. Rock densities were determined utilizing the wax immersion test method (ASTM Method C914, Standard Test Method for Rock Density and Volume of Solid Refractories by Wax Immersion).

Each specimen was tested as follows:

1. The test specimen was dried to a constant weight by heating to 104° to remove entrapped moisture. Any loose material or soil was removed from the test specimen. The dried specimen was then weighed for an initial weight, W.
2. The test specimen was then coated with wax by submersion in the container of melted wax. A wax coated weight, P, of the test specimen was then measured.
3. A counterbalanced device was then utilized to suspend the sample in water and measure the water-immersed weight of the wax-coated specimen, S.
4. Since 1 cubic centimeter of water weighs 1 gram, the total volume, V1, of the wax coated test specimen (specimen including the wax coating) was calculated in cubic centimeter as follows:
   $V1 = P - S$
5. Given K is the density of the wax, the volume of the wax coating on the test specimen, V2, was calculated in cubic centimeter as follows:
   $V2 = (P - W)/K$
6. The volume of the test specimen, V, was then calculated by subtracting the volume of the wax coating (Step 5) from the total volume (Step 4).
   $V = V1 - V2$
7. The rock density, D, of the test specimen in grams per cubic centimeter (g/cm3) was calculated as the quotient of the initial weight divided by the volume of the test specimen, excluding the volume of wax.
   $D = W/V$

Measured SGs for each lithology type were averaged to obtain representative SGs by mineralization type which was defined in the 2015 PEA (GRE, 2015), as shown in Table 14-1.

Table 14-1: Gold Springs Specific Gravity by Mineralization Type

Mineralization Codes	Description/ Subsets	Average Specific Gravity (g/cm^3)
J-0		
	Andesite	2.46
	Rhyolite	1.90
	Tuff	1.93
J-1	Oxidized quartz	2.43
J-2	Unoxidized quartz	2.49
J-3	Quartz vein	2.52
J-4	Stockwork/breccia	2.49
J-5	Oxidized footwall	2.50
J-6	Unoxidized footwall	2.60
GE-0		
	Andesite	2.42
	Red Andesite Fault	2.45
	Tuff	1.62

Mineralization Codes	Description/ Subsets	Average Specific Gravity (g/cm^3)
GE-1	Quartz calcite vein	2.54
GE-2	Stockwork/breccia	2.51
GE-3	Quartz vein	2.54
GE-4	Andesite	2.46

14.2.2 Specific Gravity Estimate

The 2015 Mineral Resource Estimate and PEA (GRE, 2015) specific gravity data was available for the Grey Eagle and Jumbo resource areas only, and no additional data or testing for specific gravity has been completed since then. Because this report includes two resource areas for which specific gravity data is unavailable, and because the data that is available for Jumbo is limited, GRE calculated a weighted average specific gravity for the Jumbo and Grey Eagle mineralized zones and then reduced that value by approximately 3% to obtain a conservative value of 2.4 g/cm3 for all mineralized blocks in each block model.

14.3 South Jumbo

14.3.1 Block Model

The block model was constructed with block dimensions of 5 meters by 5 meters by 5 meters. Blocks were located relative to the LIDAR elevation model. Each of the blocks was assigned fields to contain gold and silver grades for each estimation method, resource classification, rock density, block tonnage, contained ounces, lithology, and lithology groups. The block model has the attributes shown in Table 14-2. Topography was derived from 1-metre LIDAR data.

Table 14-2: Block Model Attributes – South Jumbo

	X	Y	Z
South Jumbo			
Lower left coordinate	760,100	4,195,405	1,405
Column/Row/Level size (m)	5	5	5
Number of columns/rows/levels	249	380	136

14.3.2 Geological Model

A geologic model was created for South Jumbo which contained new drill hole data from the 2021 exploration drilling. The model was completed using LeapFrog® software (Leapfrog). Drill hole information for the entire Gold Springs Project was uploaded into Leapfrog, including collar, assay, survey, and lithology. The lithology logs for the drill holes contain detailed lithologies consisting of multiple types of andesite, rhyolite, quartz veins, and breccias to distinguish discrete volcanic flows and structurally controlled silicified features. GRE's QP Dr. Hamid Samari visually reviewed the data in Leapfrog to correlate lithologic and structural controls with mineralized intervals. The initial review showed mineralization spanning several discrete lithologies and structural features and did not show a clear correlation with mineralization. However, when grouping the lithology and structures into the host and non-mineralized areas, a clear correlation was revealed for each of the model areas. Table 14-3 lists the defined lithology groups.

Table 14-3: Lithology Groups – South Jumbo

Mineralized Hosts	Non-Mineralized
Andesite Host	EFW
Other Hosts	Post Mineral
Rhyolite	Post Mineral TPL
Vein	Post Mineral VFG

Within the Mineralized Host, a solid was created using LeapFrog® to create the 3D shape of the high-grade materials within the host rock. The isosurface was created using the samples where the gold grade was more than 0.1 ppm.

The mineralized zone in South Jumbo consists of silicification and re-cemented breccias and stockwork zones that grade into variably argillized andesite. With no single dominant vein in the Etna target, the mineralization was characterized by a large block of silicified andesite that was shattered and brecciated by movement along two structures trending at 340^{o} on the east and west sides of the Etna ridge. Mineralization is hosted by silicified andesite, which originally appears to have been strongly jointed prior to silicification and subsequently fractured. Typically, mineralization is found within silicified andesite with hydrothermal brecciation and crosscutting stockwork and sheeted veins. Several crosscutting dikes identified in drilling appear to utilize the same fractures and joints as the hydrothermal fluids and show weak to moderate, pervasive propylitic alteration.

The GRE QP coded the block model into Mineralized Zones and Non-Mineralized Zones and created a solid for high-grade material based on the assay gold grade of more than 0.1 ppm. Based on these wireframes, a geologic model was created as shown in Figure 14-1. Figure 14-2 shows the section view of the South Jumbo geological model.

Figure 14-1: South Jumbo (Etna) Geological Model

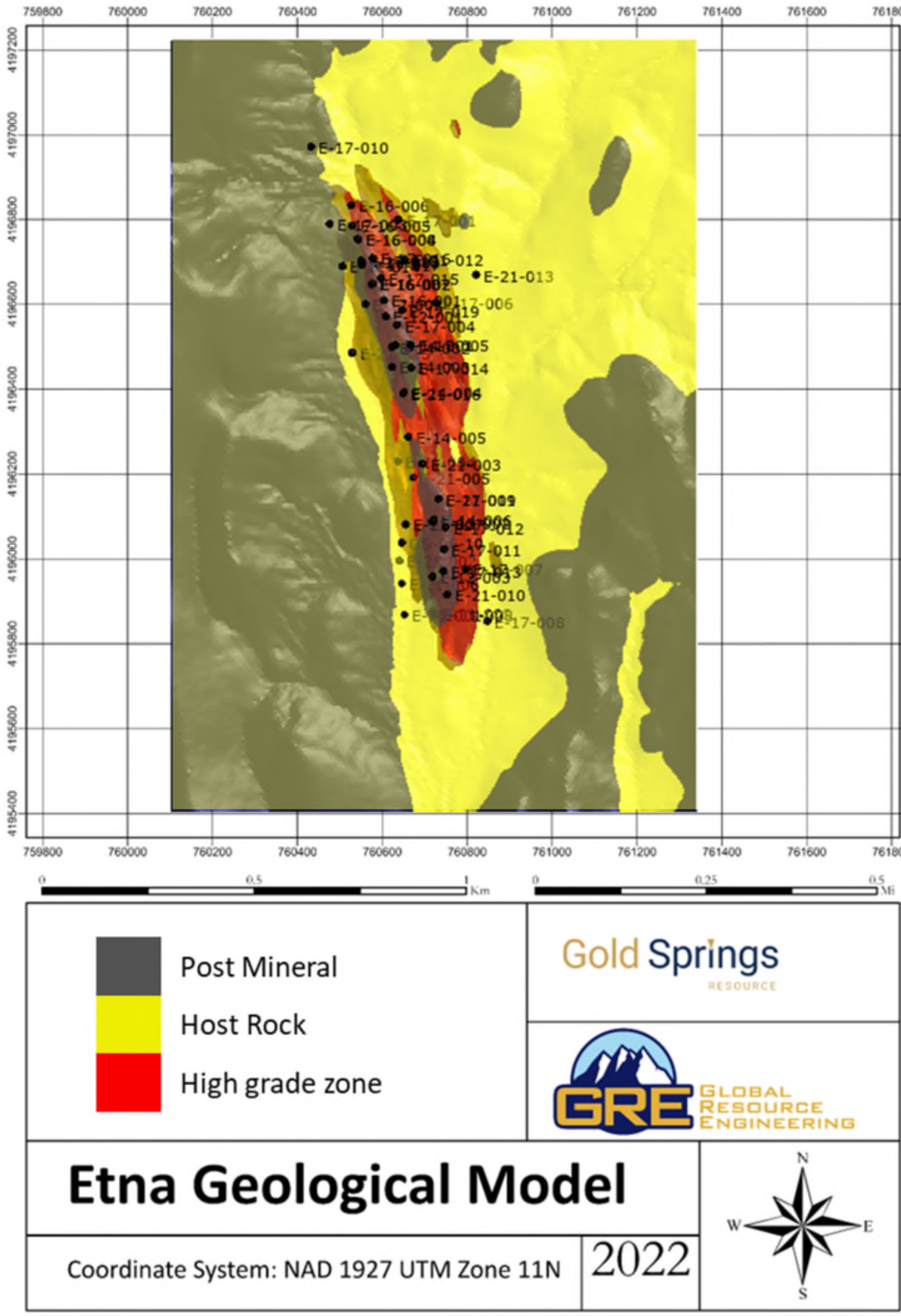
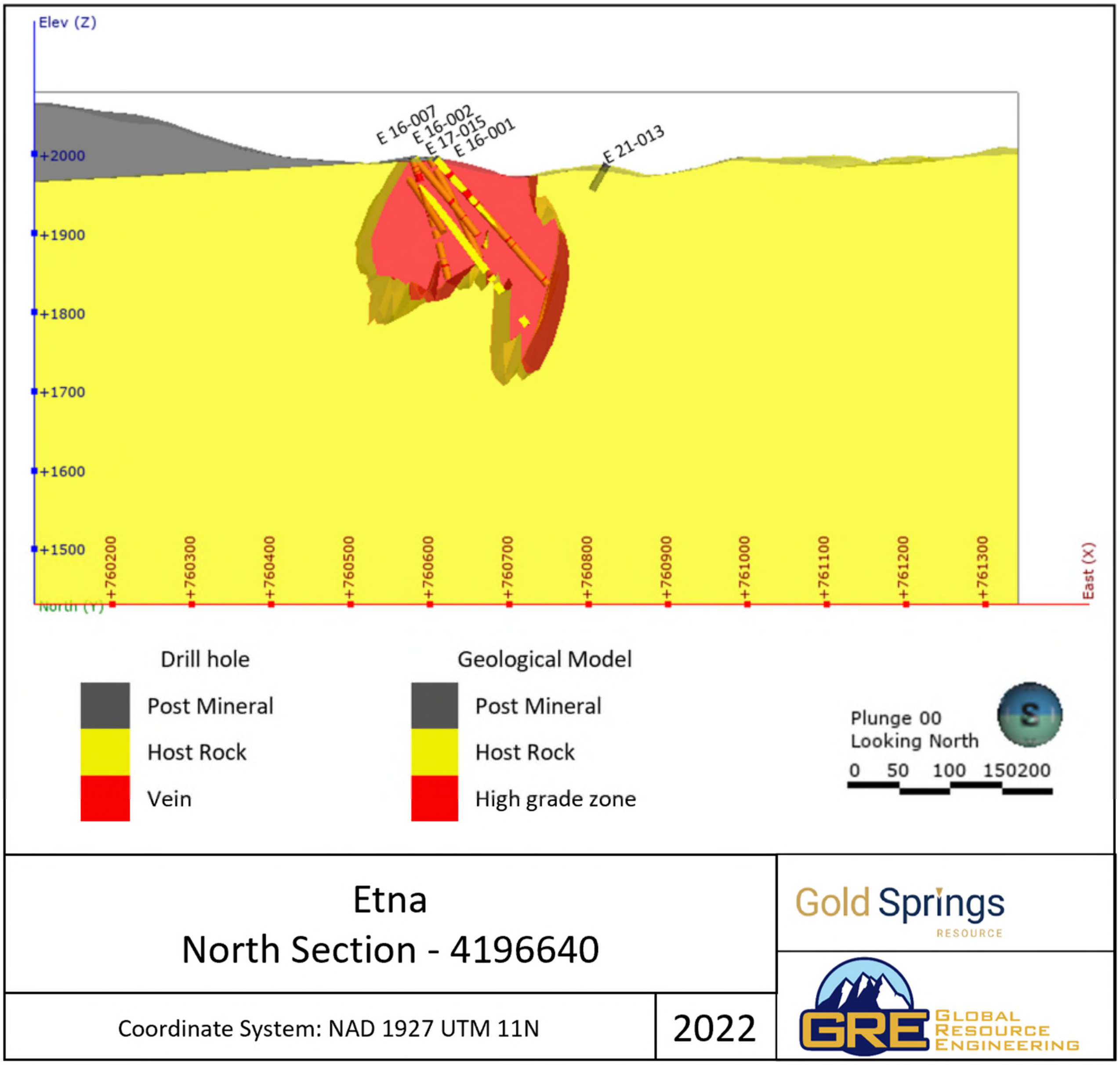


Figure 14-2: Section view South Jumbo (Etna) Geological Model



14.3.3 Drill Hole Sample Database

The drill hole database was provided by GRC and verified by Dr. Samari. The database contained collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the South Jumbo area total 8,665 meters. There are 5,374 gold and 5,041 silver assay data values in the Etna database. Figure 14-3 shows the drill hole locations and Table 14-4 shows the yearly summary of the drill hole database in South Jumbo.

Figure 14-3: Drill Hole Location – South Jumbo (Etna)

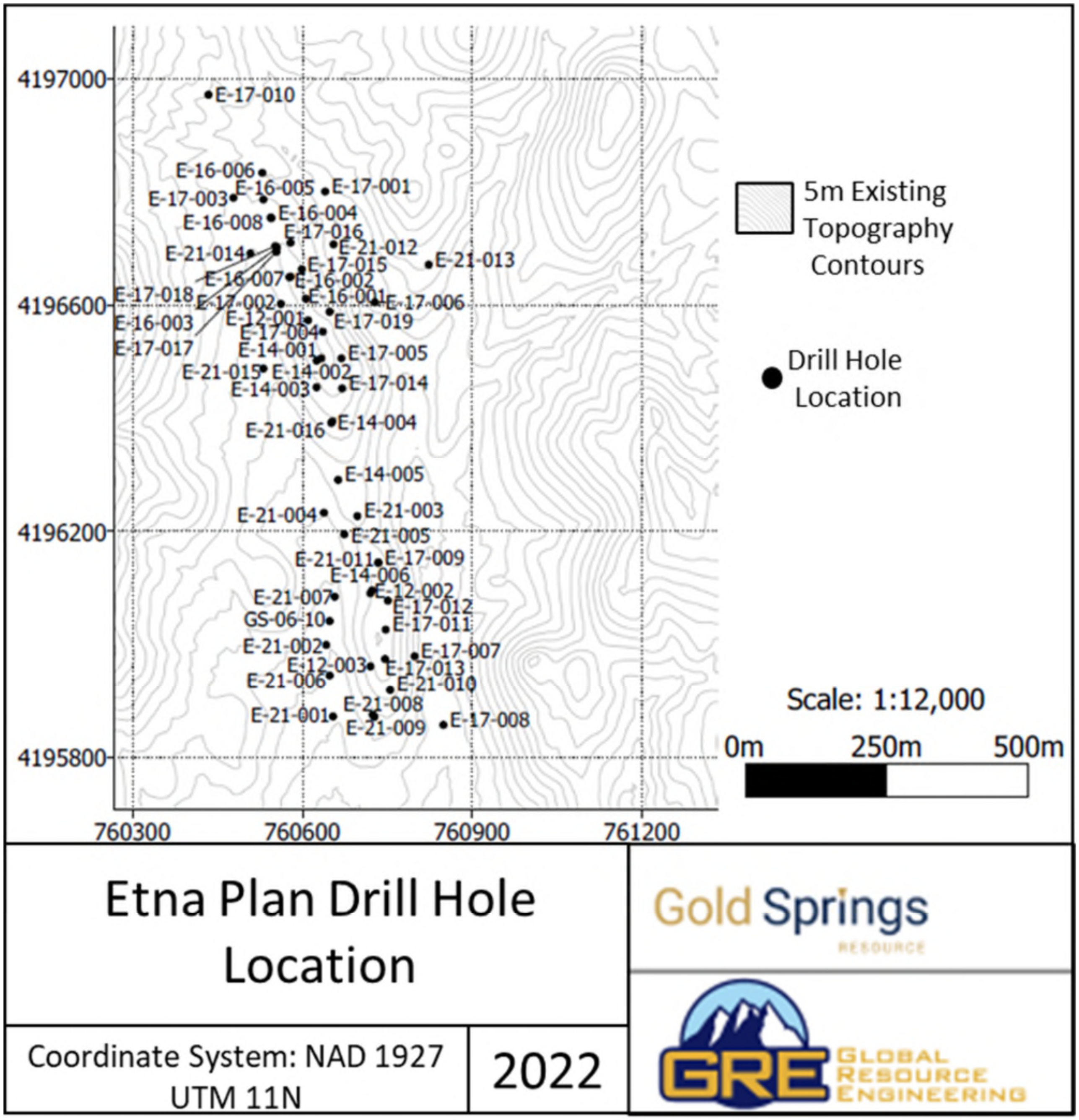


Table 14-4: Summary of the Drill Hole Database for South Jumbo

Years	Number of Drill holes	Total Drilling (Meters)	Number of Gold Assays	Number of Silver Assays
2006	1	66	43	43
2010	-	-	-	-
2011	-	-	-	-
2012	3	418	267	262
2013	-	-	-	-
2014	6	811	527	530

Years	Number of Drill holes	Total Drilling (Meters)	Number of Gold Assays	Number of Silver Assays
2015	-	-	-	-
2016	8	1,381	869	750
2017	19	3,187	1,862	1,659
2021	16	2,802	1,806	1,797
Total	**53**	**8,665**	**5,374**	**5,041**

14.3.4 High-Grade Capping

Very high-grade assay values can, if they are outliers, bias grade estimation. Statistical methods for grade estimation, however, are relatively insensitive to a low number of very high values. To determine if grade capping is necessary, GRE produced cumulative frequency plots of the data for each deposit. If the cumulative frequency plots form a relatively straight line, capping is unnecessary; but if there is a break in the upper end, that is usually an indication that grade capping should be performed.

14.3.4.1 Gold

Figure 14-4 shows a histogram of the South Jumbo gold assay data, and Figure 14-5 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the South Jumbo gold data forms a log-normal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. After reviewing the sample distribution, the GRE QP capped the composite grade at 15,000 ppb.

Figure 14-4: Histogram of South Jumbo Gold Assay Data > 5ppb

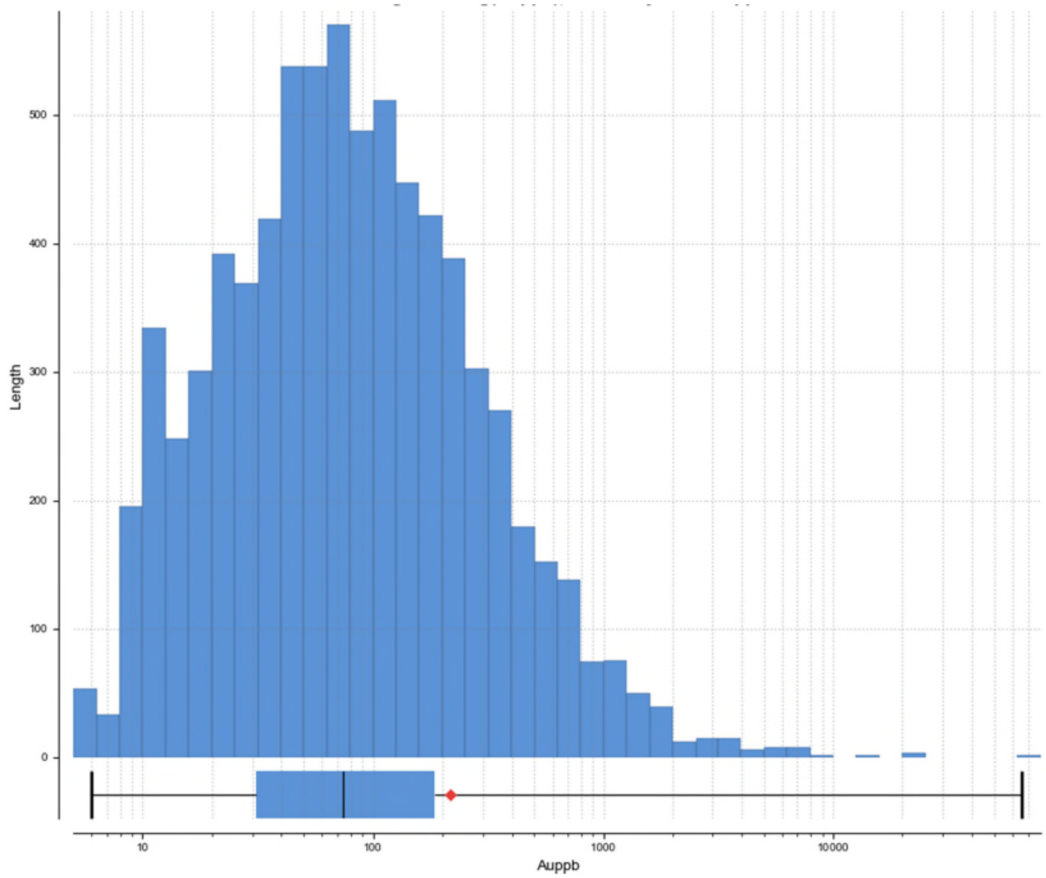
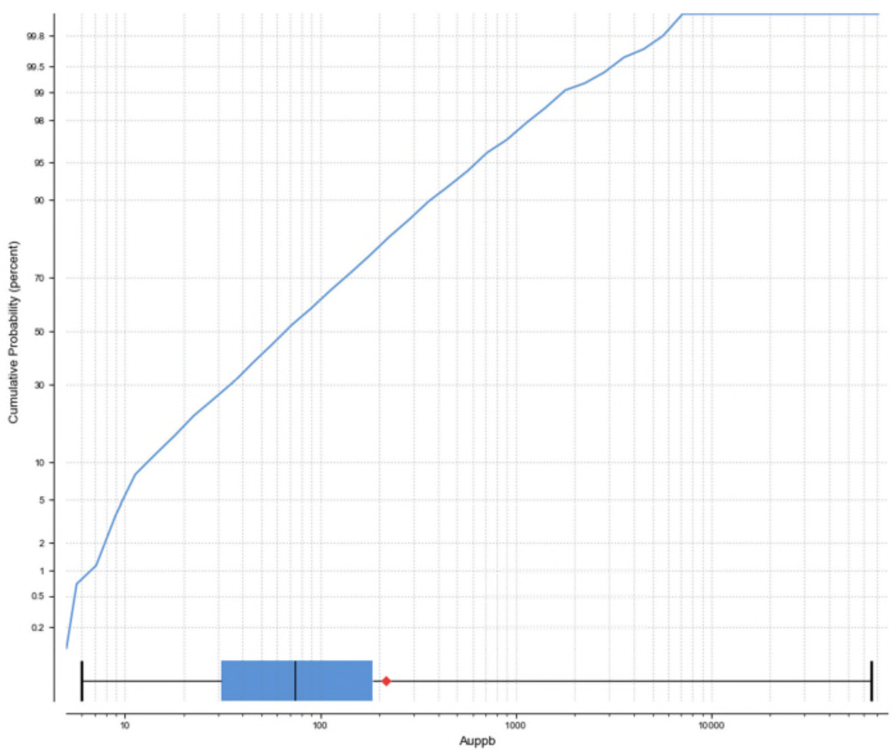


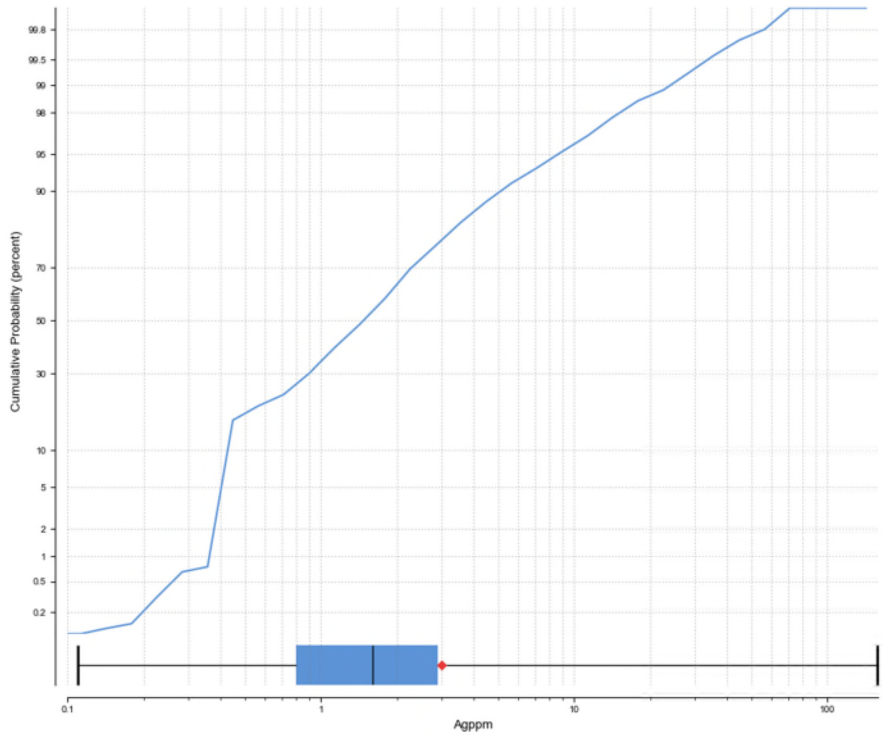
Figure 14-5: Cumulative Frequency Plot of South Jumbo Gold Assay Data > 5 ppb



14.3.4.2 Silver

The silver assay data has very few high values; therefore, the author recommends no grade capping for silver. A silver cumulative frequency plot, from the South Jumbo resource area, is provided in Figure 14-6.

Figure 14-6: Cumulative Frequency Plot of South Jumbo Silver Assay Data > 0.1 ppm



14.3.5 Compositing

Compositing sample assay intervals to larger intervals is typically required to accurately model open pit minable deposits and is viewed by the geostatistical community as one of the first steps required to perform a geostatistical Mineral Resource Estimate.

The Gold Springs assaying was performed almost exclusively using 1.52-meter-long sample intervals and assayed using a 30-gram fire assay. This small sample will have higher variability (higher and lower grade) than a larger open pit minable volume due to the size of the mining equipment and its ability to selectively mine a discrete volume.

The South Jumbo data was composited into 4.57-meter (15-foot) lengths. The change of support, or a correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. As shown in Table 14-5, the spread and variability of each metal are reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-5: Sample and Composite Summary Statistics in South Jumbo High-Grade Area

	Au (ppb)		Ag (ppm)	
Statistics	Uncomposited	Composited	Uncomposited	Composited
Count	5002	1676	4711	1583
Length	7,618.52	7,626.52	7,175.03	7,208.29
Mean	215.00	215.20	3.16	3.17
SD	1,118.57	667.35	6.14	4.52
CV	5.20	3.10	1.94	1.43
Variance	1,251,194.07	445,350.37	37.74	20.45
Minimum	2.00	3.02	0.01	0.07
Q1	28.00	37.98	0.90	1.05
Q2	73.00	87.18	1.70	1.84
Q3	185.00	210.26	3.10	3.38
Maximum	65,360.00	15,000.00	157.50	57.32

14.3.6 Variography

GRE completed variography on the composite values using Leapfrog® Edge software. The analysis was used to determine the size and orientation of the search ellipsoid for the ID2.5 grade estimate. First, experimental correlograms were examined in all azimuth directions in increments of 30 degrees from 0 to 330 and dip increments of 15 degrees from 0 to 90. Afterward, the direction with the greatest continuity was further analyzed at whole number increments and the ellipse orientation was established. Distances were set from the correlogram pairs for the 3 axes.

The range for each variogram was found using a global variogram. The nugget was determined by examining the downhole variograms and determining where the short-range trend crossed the y-axis.

Figure 14-7 and Figure 14-8 show the correlograms for gold and silver at South Jumbo, respectively. The resulting parameters are shown in Table 14-6.

Table 14-6: Open Pit Variogram Parameters - South Jumbo

Target	Sub-Domain	Dip	Dip Azimuth	Pitch	Major Axis	Semi-Major Axis	Minor Axis
Etna	Host Rock	60	60	145	130	80	60
	High-grade zone	60	60	145	130	80	60

Figure 14-7: Directional Correlograms for Major, Semi-Major, and Minor Axes for Gold at South Jumbo

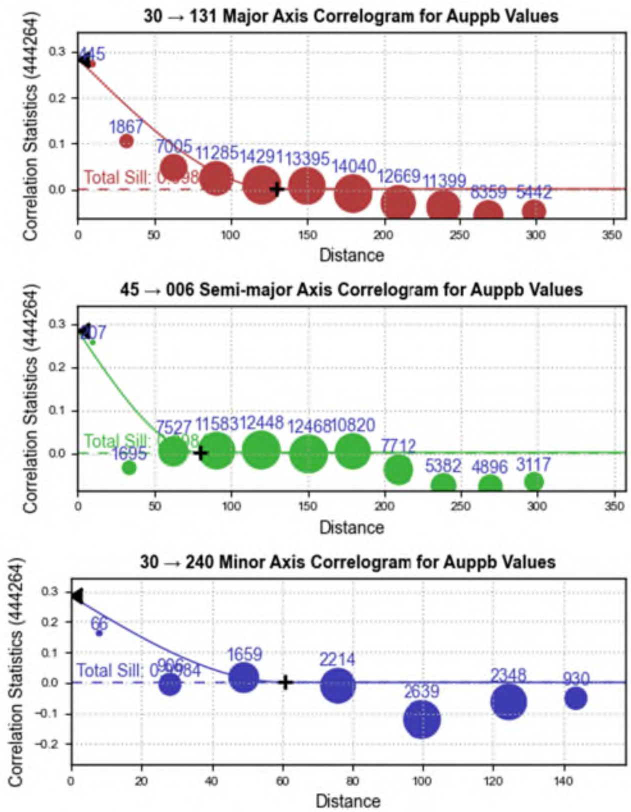
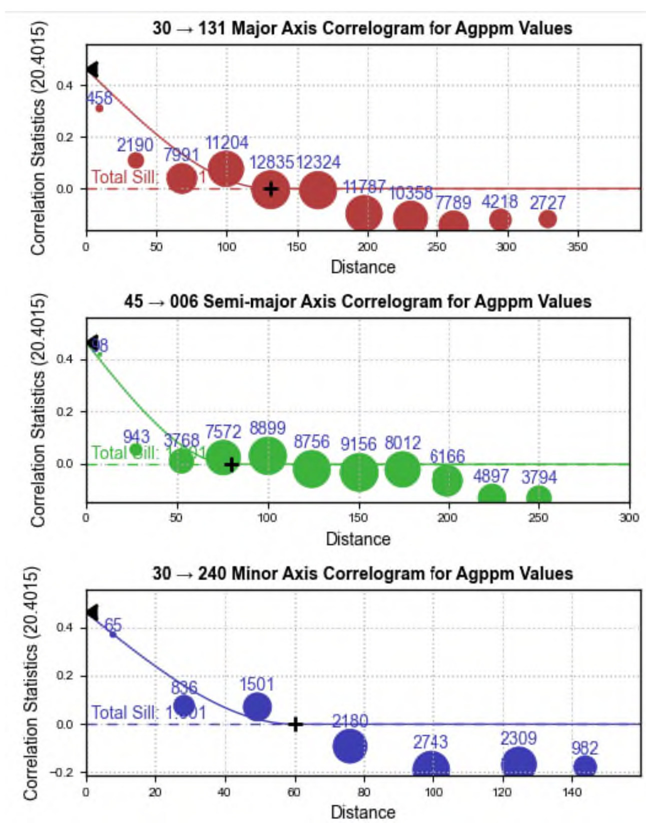


Figure 14-8: Directional Correlograms for Major, Semi-Major, and Minor Axes for Silver at South Jumbo



14.3.7 Grade Modelling

Using Leapfrog, the GRE QP modeled gold and silver grades into the block model using ID2.5 and OK interpolators. The search parameters are identified in Table 14-7.

Table 14-7: ID2.5 Search Parameters - South Jumbo

Target	Pass	Area	Length			Direction			Max Samples	Min Samples	Max samples per hole
			Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch			
Etna	Pass 1	Host Rock	130	80	60	60	60	145	15	4	3
		High-grade zone	130	80	60	60	60	145	15	4	3
	Pass 2	High-grade zone	260	160	120	60	60	145	15	1	-

For each estimate, the GRE QP first estimated the blocks only within the high-grade zone, grams of gold and silver contained were calculated from the modeled grades using the block specific gravity, followed by a second pass in the high-grade zone. Then the estimation was done in the host rock and rhyolite.

The GRE QP chose the ID2.5 method with 2 holes required as the preferred method because it had better local variability that more closely fit the data.

14.3.8 Model Validation

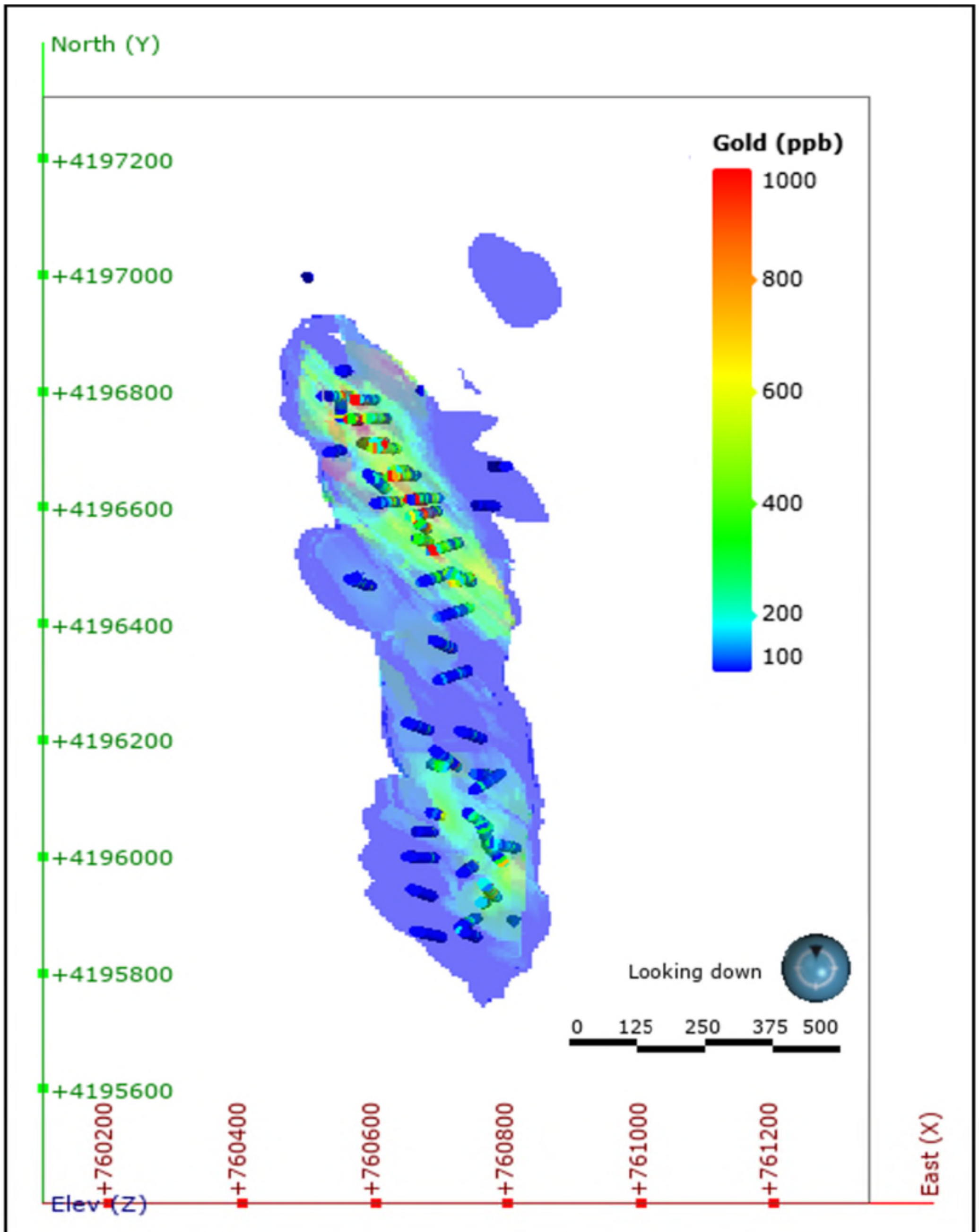
Validation of the estimated block grades for Gold Springs was completed for each of the targets. The resource block model estimate was validated by:

- Completing a series of visual inspections by comparisons of gold assay and composite grades to estimated block values across the deposit in both horizontal and vertical sections.
- Statistical comparison of parameters such as means, quantiles, and variance between 15-foot composites, Inverse Distance with the power 2.5 (ID2.5), and Ordinary Kriged (OK) estimators to ensure that the grade estimations are representative of the composites they are based on.
- Comparing average composite sample values with average estimated block grades along east, north, and elevation orientations using swath grade trend plots.

14.3.8.1 Visual Inspection

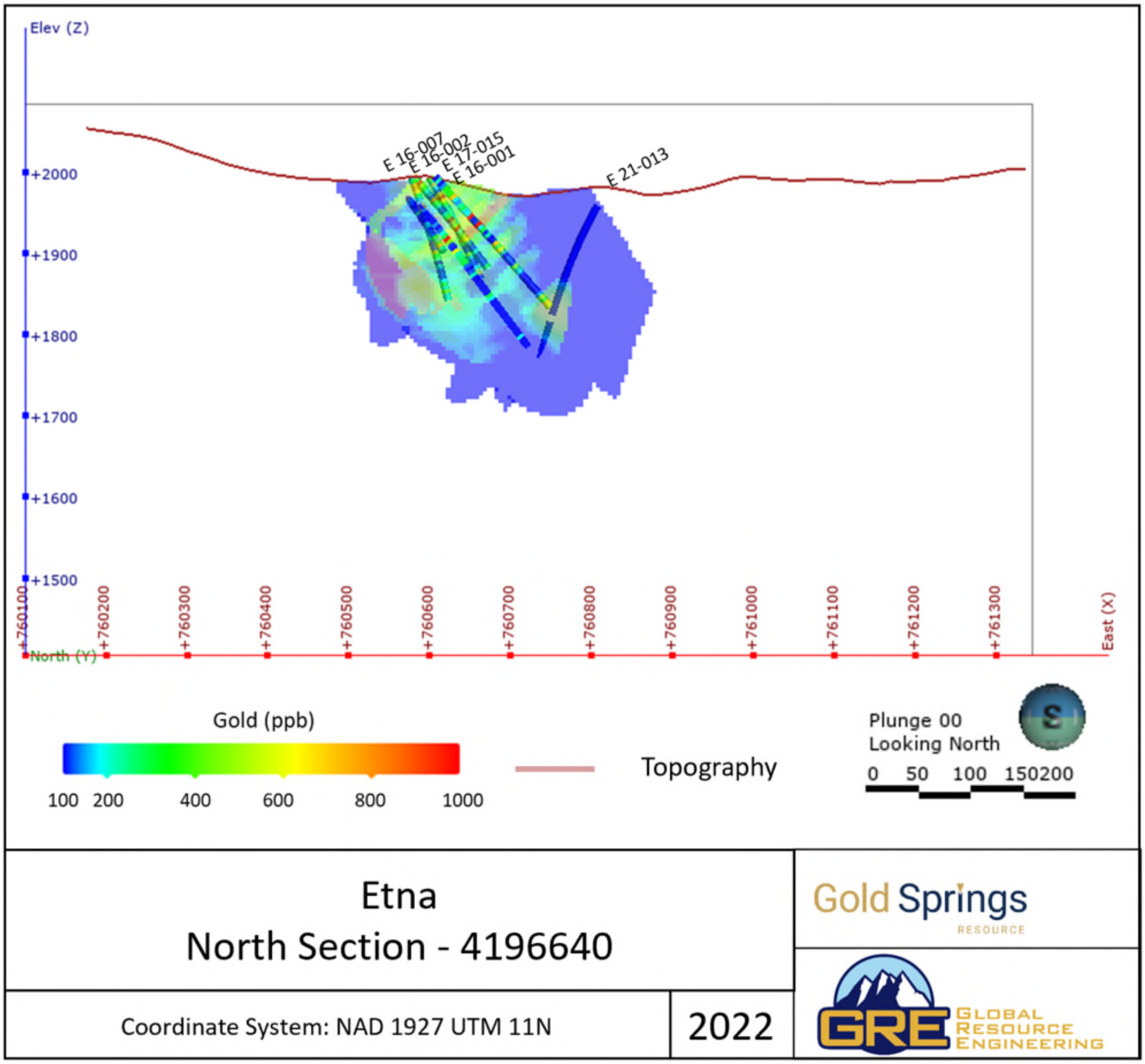
The block models were examined in plan and section views to compare to drill hole locations and grades. Plan views and section views for South Jumbo zone are shown in Figure 14-9 and Figure 14-10. Comparison of the model grade from the assays did not reveal any major discrepancies.

Figure 14-9: South Jumbo (Etna) Visual Comparison Composite to Block Model Grade Plan View



Etna Plan View Section - 1920		Gold Springs RESOURCE
Coordinate System: NAD 1927 UTM 11N	2022	GRE GLOBAL RESOURCE ENGINEERING

Figure 14-10: South Jumbo (Etna) Section Composites and Block Model Cross Section

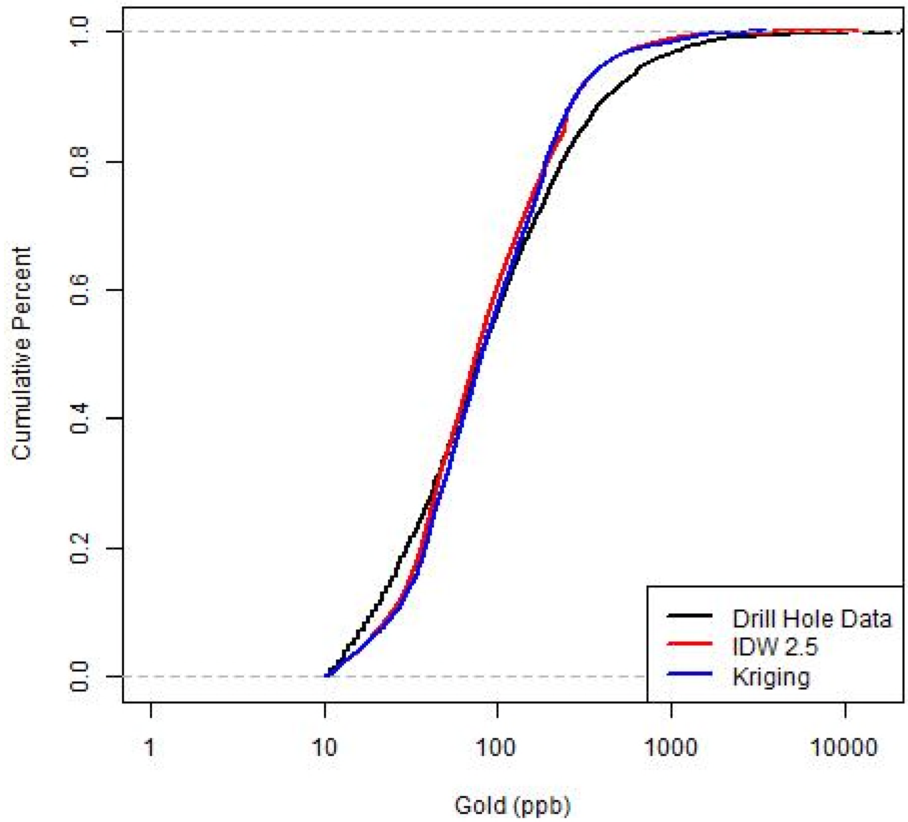


14.3.8.2 Statistical Comparison

To ensure that the grade estimations are representative of the composites they are based on and validate the resource estimation results, the block model grade estimation statistics were analyzed.

Figure 14-11 show the cumulative frequency plots of the block model grades for each of the two modeling methods and also show the cumulative frequency plot of the drill hole composite data for South Jumbo.

Figure 14-11: South Jumbo Cumulative Frequency Plot Comparison for the Two Modeling Methods

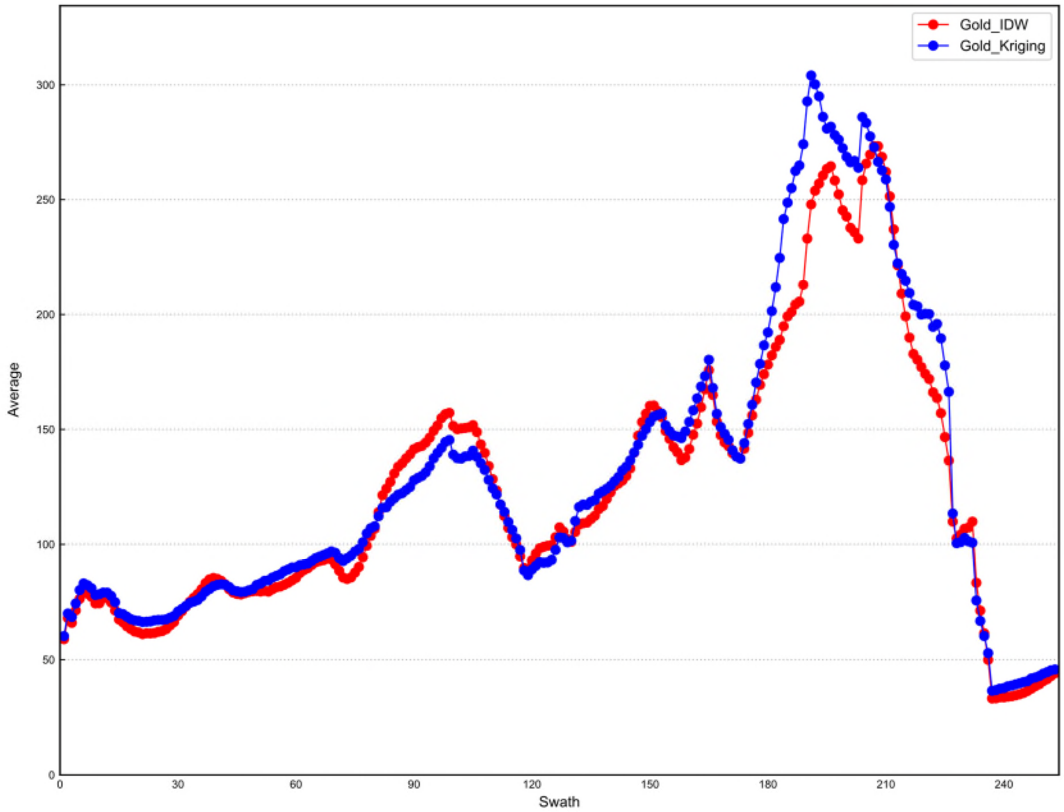


The results indicate that the ordinary kriging method does not capture the high value areas as well as the ID2.5 method, but both methods produce similar average grades.

14.3.8.3 Swath Plots

The GRE QP validated the modeling results by comparing the results of each modeling method and by generating swath plots. A swath plot is a sectional slice through the block model that shows the average grade for the blocks in the swath. Figure 14-12 show the swath plot for gold in South Jumbo.

Figure 14-12: Swath Plot for Gold in South Jumbo



14.3.9 Resource Catgories

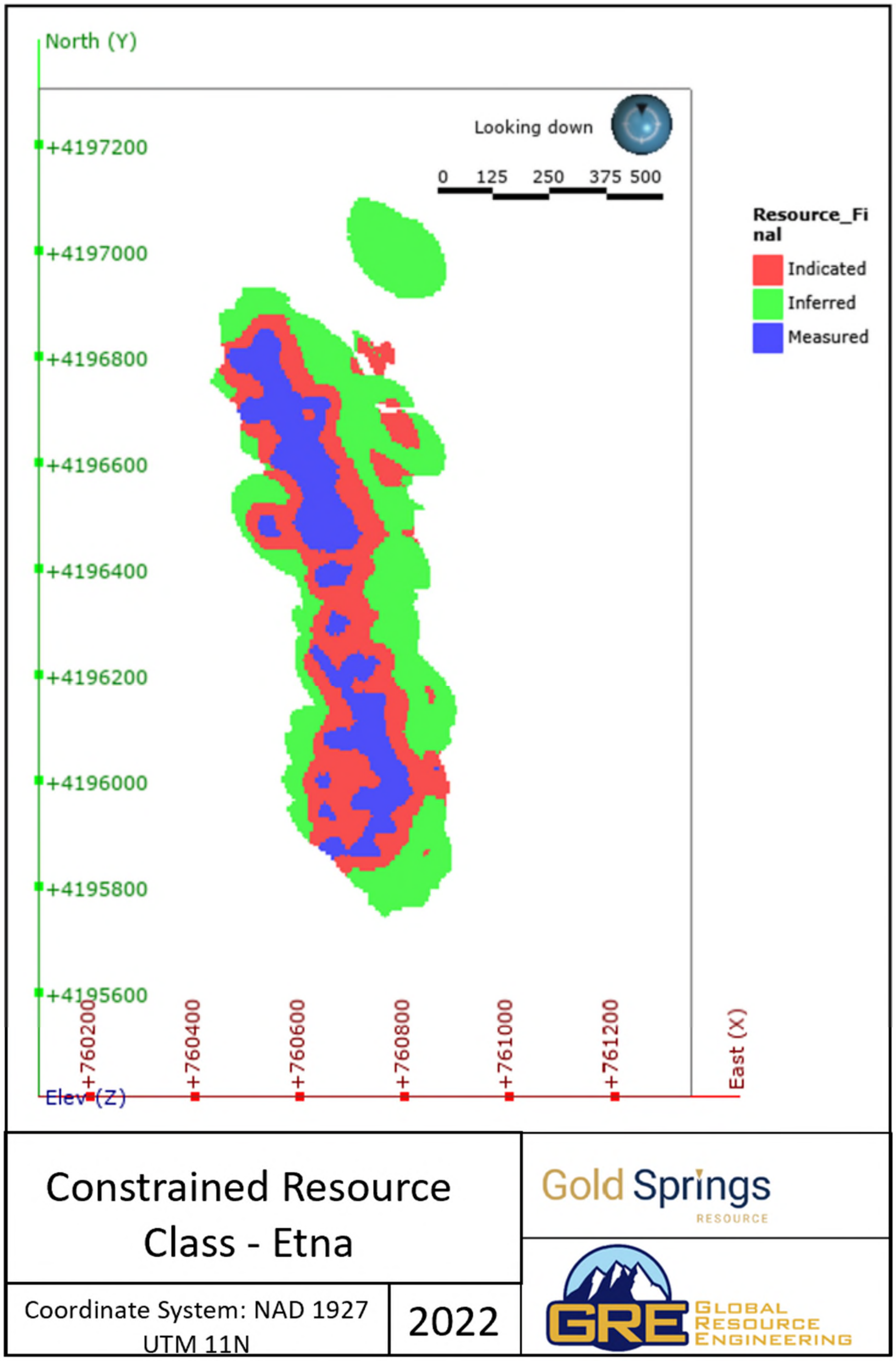
Mineral resource classification involved a two-step process using minimum distances and minimum numbers of samples to define resource classification initially before applying a numeric indicator model to define a more continuous and reasonable resource classification. In the first step, these distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 metres from the drill holes
- Indicated: average distance between 25 and 50 metres from the drill holes
- Inferred: average distance between 50 and 100 metres from the drill holes

In the second step, a continuous solid was creted using the resource classification from step 1. The solid was created using the numerical model in Leapfrog, where an isotropic search was used along with an interpolant distance of 2000, which was based on the average continuity of grade seen in the deposit.

No numeric indicator model was constructed for the inferred resource class, rather it was defined as any block with a calculated gold grade that did not fall within the measured or indicated numeric indicator domains that had a calculated gold grade. A plan view of the estimated resource classes is shown in Figure 14-13.

Figure 14-13: Constrained Resource Class for South Jumbo (Etna)



14.4 North Jumbo

14.4.1 Block Model

The block model was constructed with block dimensions of 5 meters by 5 meters by 5 meters. Blocks were located relative to the LIDAR elevation model. Each of the blocks was assigned fields to contain gold and silver grades for each estimation method, resource classification, rock density, block tonnage, contained ounces, lithology, and lithology groups. The block model has the attributes shown in Table 14-8. Topography was derived from 1-metre LIDAR data.

Table 14-8: Block Model Attributes – North Jumbo

	X	Y	Z
North Jumbo			
Lower left coordinate	760,435	4,197,310	1,685
Column/Row/Level size (m)	5	5	5
Number of columns/rows/levels	307	659	137

14.4.2 Geological Model

A geologic model was created for North Jumbo which contained new drill hole data from the 2021 exploration drilling. The model was completed using LeapFrog® software (Leapfrog). Drill hole information for the entire Gold Springs Project was uploaded into Leapfrog, including collar, assay, survey, and lithology. The lithology logs for the drill holes contain detailed lithologies consisting of multiple types of andesite, rhyolite, quartz veins, and breccias to distinguish discrete volcanic flows and structurally controlled silicified features. GRE's QP Dr. Hamid Samari visually reviewed the data in Leapfrog to correlate lithologic and structural controls with mineralized intervals. The initial review showed mineralization spanning several discrete lithologies and structural features and did not show a clear correlation with mineralization. However, when grouping the lithology and structures into the host and non-mineralized areas, a clear correlation was revealed for each of the model areas. Table 14-9 lists the defined lithology groups.

Table 14-9: Lithology Groups – North Jumbo

Mineralized Hosts	Non-Mineralized
Andesite Host	EFW
Other Hosts	Post Mineral
Rhyolite	Post Mineral TPL
Vein	Post Mineral VFG
VFG Andesite	
Granodiorite Intrusive	

Within the Mineralized Host, a solid was created using LeapFrog® to create the 3D shape of the high-grade materials within the host rock. The isosurface was created using the samples where the gold grade was more than 0.1 ppm.

In North Jumbo, mineralization is associated with siliceous micro-breccias and hairline silica fractures, which may indicate significant over-pressuring of the hydrothermal system and fluid being released during hydrofracturing events into the surrounding wallrock. These structural zones occur in areas of apparent higher permeability distant from the main structural conduits and host gold mineralization in the stockworks, breccias, and disseminated in altered wallrock. Wallrock alteration surrounding the North Jumbo vein system typically extends outward from the vein into the adjacent andesite wallrock up to 200 meters.

The GRE QP coded the block model into Mineralized Zones and Non-Mineralized Zones and created a solid for high-grade material based on the assay gold grade of more than 0.1 ppm. Based on these wireframes, a geologic model was created as shown in Figure 14-14. Figure 14-15 shows the section view of the North Jumbo geological model.

Figure 14-14: North Jumbo Geological Model

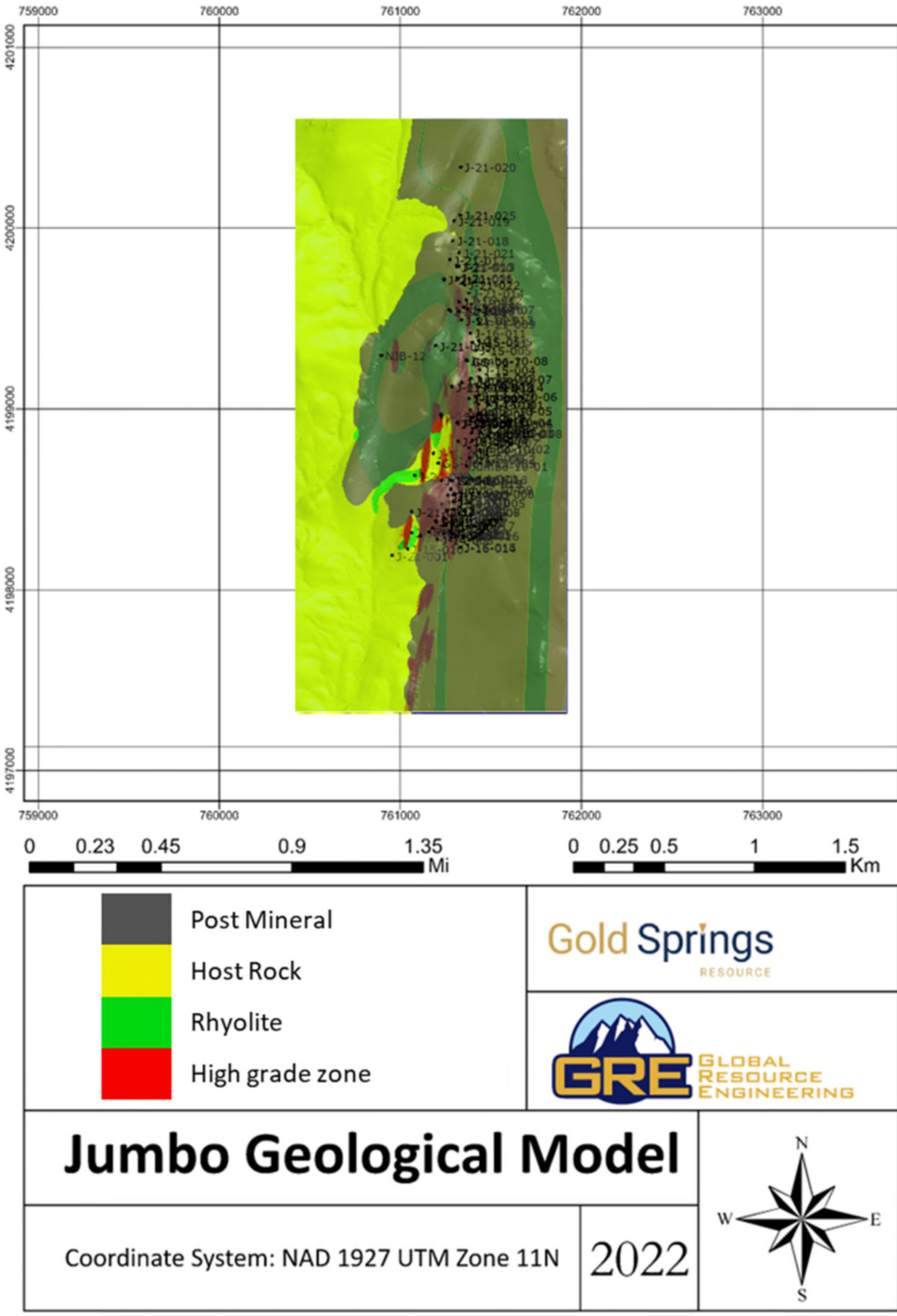
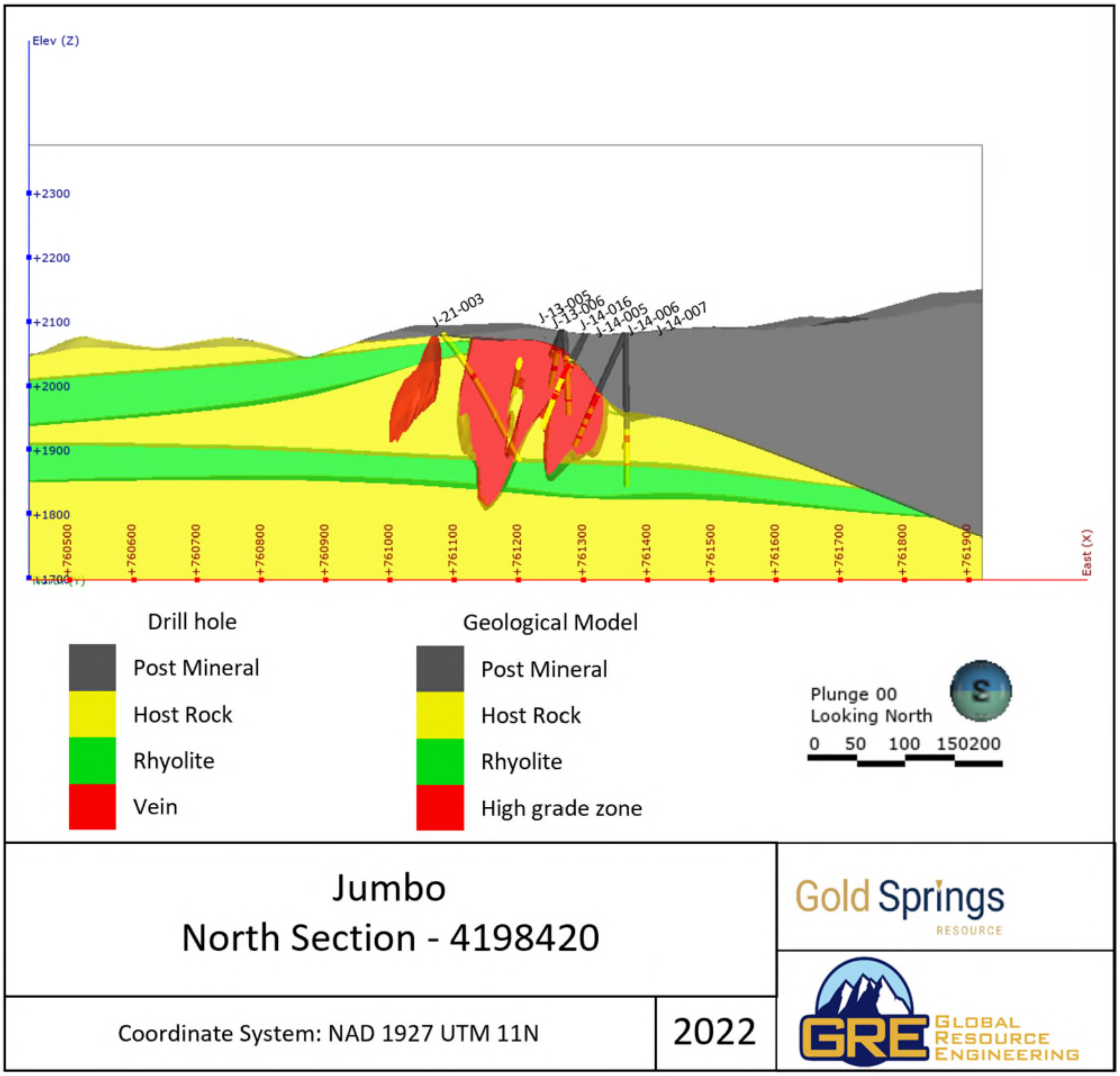


Figure 14-15: Section view North Jumbo Geological Model



14.4.3 Drill Hole Sample database

The drill hole database was provided by GRC and verified by Dr. Samari. The database contained collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the Jumbo area total 21,213 meters. There are 12,556 gold and 12,272 silver assay data values in the North Jumbo database. Figure 14-16 shows the drill hole locations and Table 14-10 shows the yearly summary of the drill hole database for North Jumbo.

Figure 14-16: Drill hole Location – North Jumbo

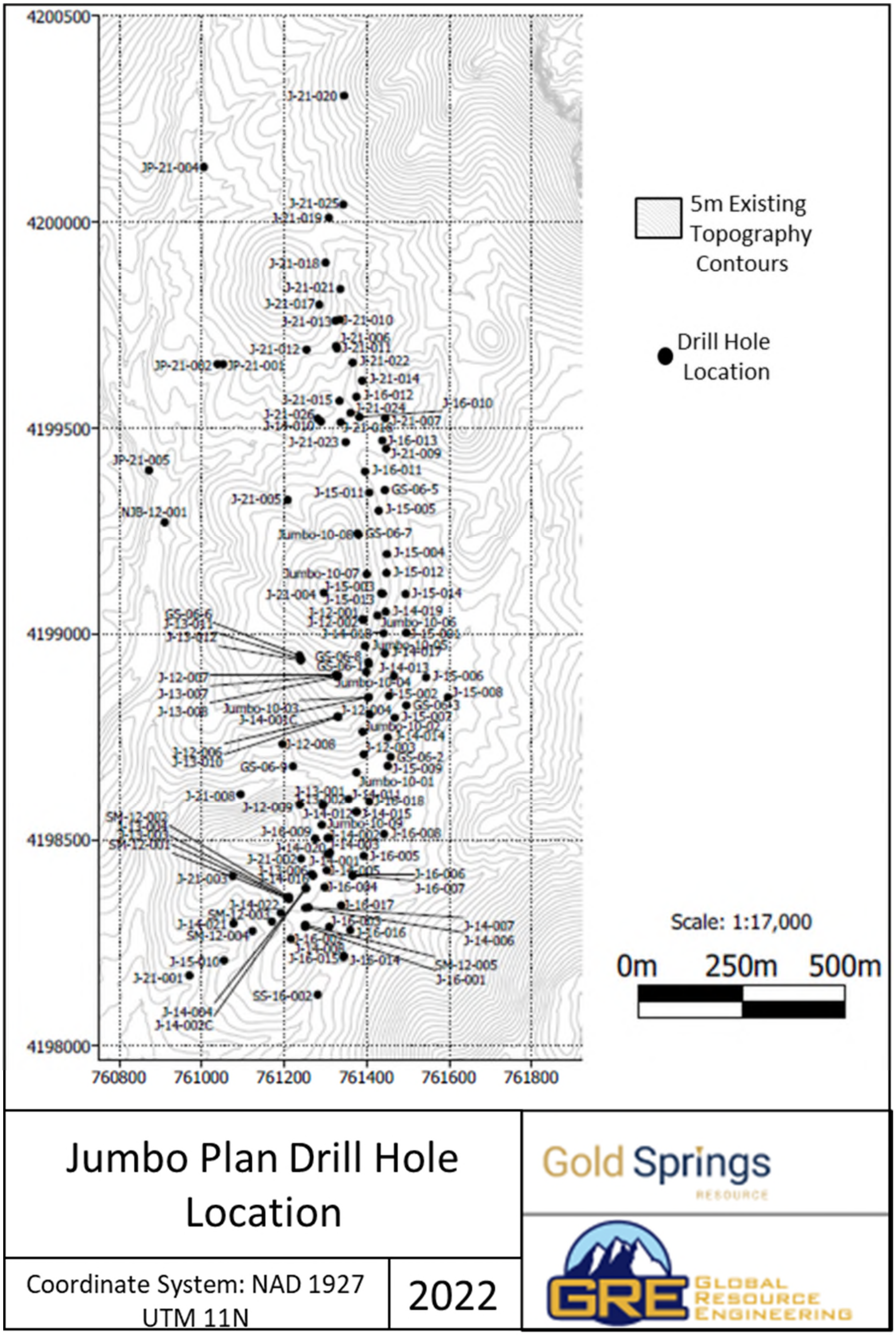


Table 14-10: Summary of the Drill hole database for North Jumbo

Years	Number of Drill holes	Total Drilling (Meters)	Number of Gold Assays	Number of Silver Assays
2006	8	1,093	714	703
2010	9	1,547	907	911
2011	1	51	42	42
2012	15	2,092	1,261	1,229
2013	12	1,387	858	743
2014	24	3,074	1,750	1,794
2015	14	2,531	1,466	1,314
2016	18	2,277	1,139	937
2017	-	-	-	-
2021	26	7,161	4,419	4,599
Total	**127**	**21,213**	**12,556**	**12,272**

14.4.4 High-Grade Capping

Very high-grade assay values can, if they are outliers, bias grade estimation. Statistical methods for grade estimation, however, are relatively insensitive to a low number of very high values. To determine if grade capping is necessary, GRE produced cumulative frequency plots of the data for each deposit. If the cumulative frequency plots form a relatively straight line, capping is unnecessary; but if there is a break in the upper end, that is usually an indication that grade capping should be performed.

14.4.4.1 Gold

Figure 14-17 shows a histogram of the North Jumbo gold assay data, and Figure 14-18 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the North Jumbo gold data forms a log-normal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. After reviewing the sample distribution, the GRE QP capped the composite grade at 15,000 ppb.

Figure 14-17: Histogram of North Jumbo Gold Assay Data > 5ppb

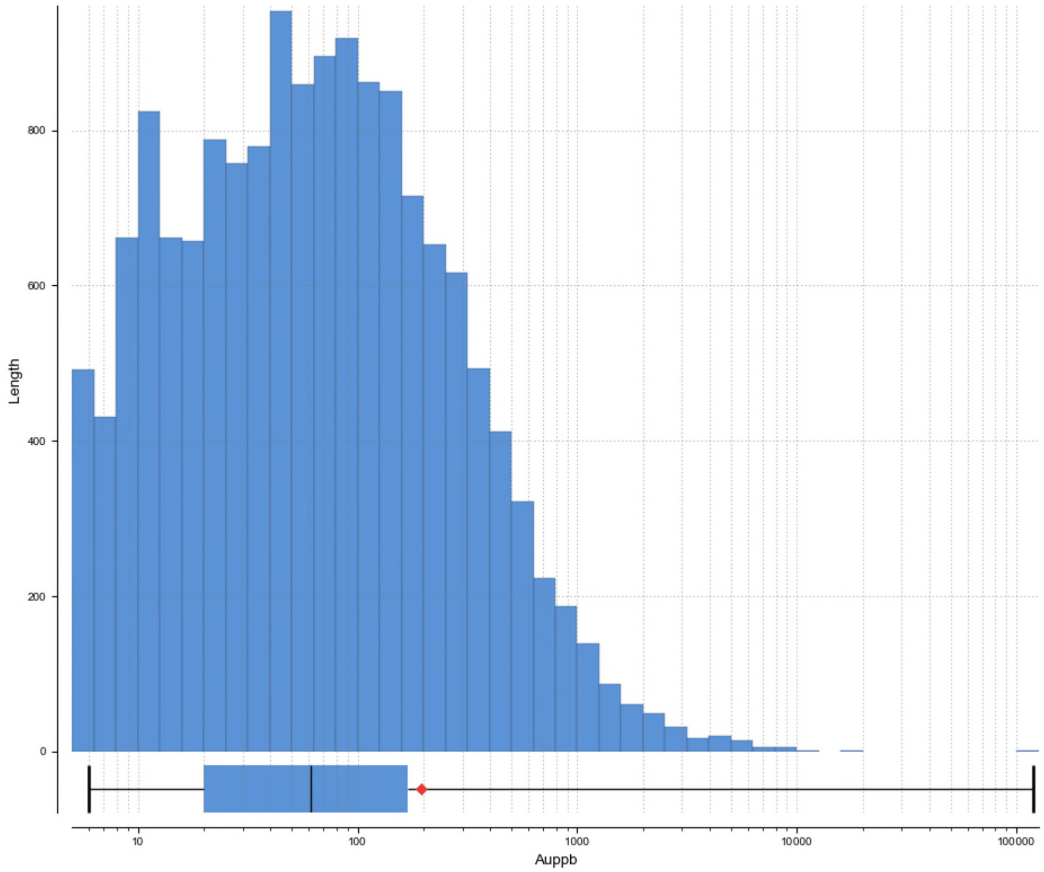
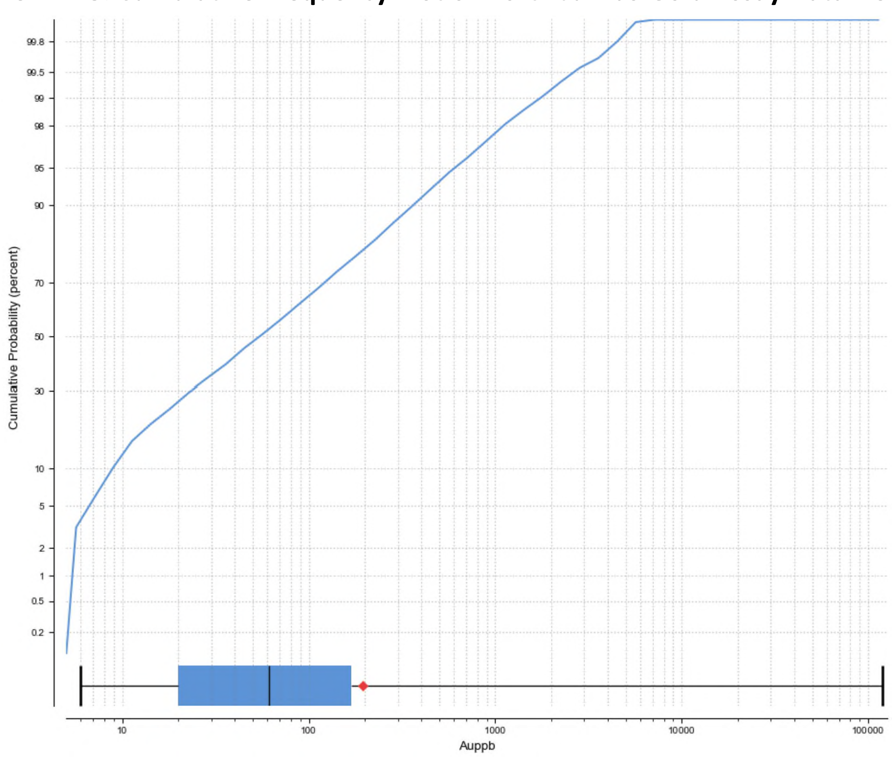


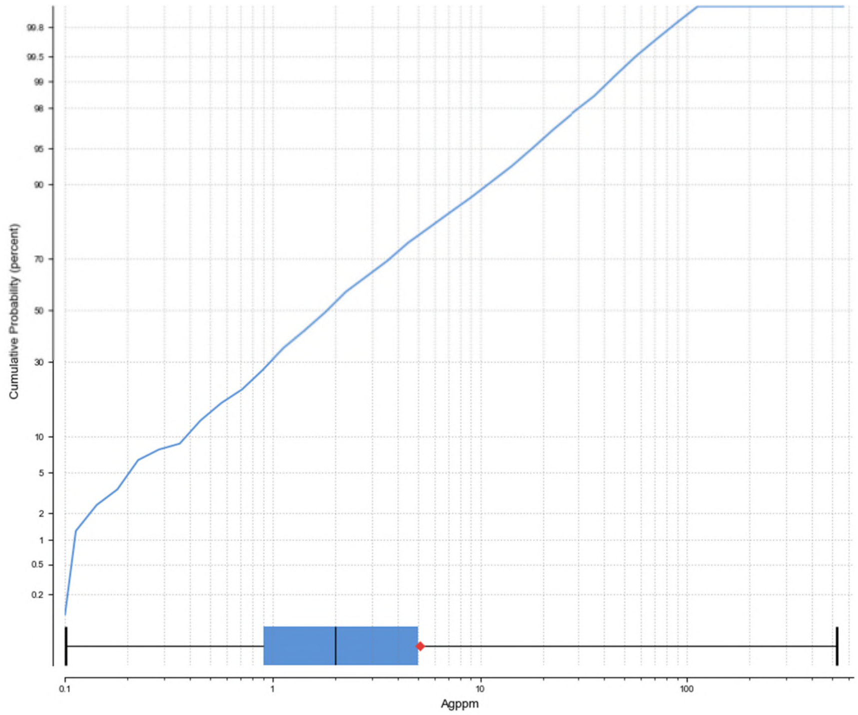
Figure 14-18: Cumulative Frequency Plot of North Jumbo Gold Assay Data > 5 ppb



14.4.4.2 Silver

The silver assay data has very few high values; therefore, the author recommends no grade capping for silver. A silver cumulative frequency plot, from the North Jumbo resource area, is provided in Figure 14-19.

Figure 14-19: Cumulative Frequency Plot of North Jumbo Silver Assay Data > 0.1 ppm



14.4.5 Compositing

Compositing sample assay intervals to larger intervals is typically required to accurately model open pit minable deposits and is viewed by the geostatistical community as one of the first steps required to perform a geostatistical Mineral Resource Estimate.

The Gold Springs assaying was performed almost exclusively using 1.52-meter-long sample intervals and assayed using a 30-gram fire assay. This small sample will have higher variability (higher and lower grade) than a larger open pit minable volume due to the size of the mining equipment and its ability to selectively mine a discrete volume.

The North Jumbo data was composited into 4.57-meter (15-foot) lengths. The change of support, or a correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. As shown in Table 14-11, the spread and variability of each metal are reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-11: Sample and Composite Summary Statistics in North Jumbo High-Grade Area

Statistics	Au (ppb)		Ag (ppm)	
	Uncomposited	Composited	Uncomposited	Composited
Count	10365	3526	9719	3292
Length	15,870.20	15,984.52	14,876.77	14,928.10
Mean	195.39	194.73	5.22	5.20
SD	1270.02	742.31	11.10	9.11
CV	6.50	3.81	2.13	1.75
Variance	1,612,943.79	551,026.64	123.24	82.97
Minimum	1.00	1.00	0.01	0.04
Q1	19.00	26.22	0.90	1.08
Q2	60.00	75.39	2.10	2.34
Q3	168.00	198.33	5.10	5.53
Maximum	118,951.00	15,000.00	524.00	270.58

14.4.6 Variography

The GRE QP completed variography on the composite values using Leapfrog® Edge software. The analysis was used to determine the size and orientation of the search ellipsoid for the ID2.5 grade estimate. First, experimental correlograms were examined in all azimuth directions in increments of 30 degrees from 0 to 330 and dip increments of 15 degrees from 0 to 90. Afterward, the direction with the greatest continuity was further analyzed at whole number increments and the ellipse orientation was established. Distances were set from the correlogram pairs for the 3 axes.

The range for each variogram was found using a global variogram. The nugget was determined by examining the downhole variograms and determining where the short-range trend crossed the y-axis.

Figure 14-20 and Figure 14-21 show the correlograms for gold and silver at North Jumbo, respectively.

The resulting parameters are shown in Table 14-12.

Table 14-12: Open Pit Variogram Parameters – North Jumbo

Target	Sub-Domain	Dip	Dip Azimuth	Pitch	Major Axis	Semi-Major Axis	Minor Axis
Jumbo	Host Rock	75	275	0	140	80	50
	Rhyolite	75	275	0	140	80	50
	High-grade zone	75	275	0	140	80	50

Figure 14-20: Directional Correlograms for Major, Semi-Major, and Minor Axes for Gold at North Jumbo

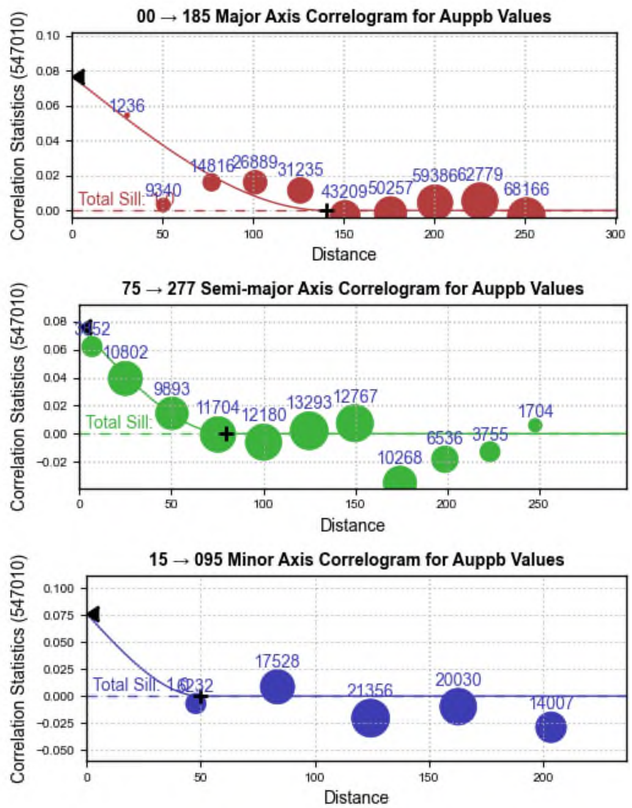
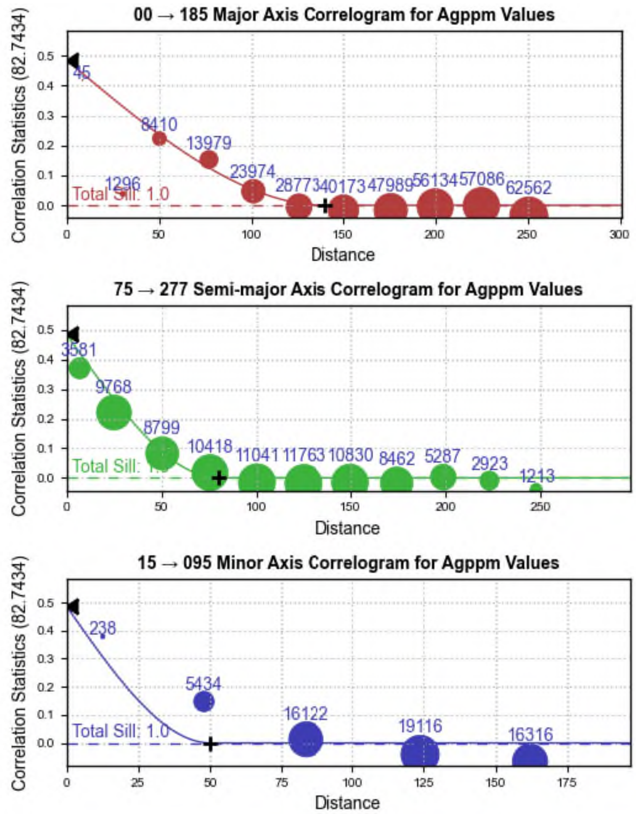


Figure 14-21: Directional Correlograms for Major, Semi-Major, and Minor Axes for Silver at North Jumbo



14.4.7 Grade Modelling

Using Leapfrog, the GRE QP modeled gold and silver grades into the block model using ID2.5 and OK interpolators. The search parameters are identified in Table 14-13.

Table 14-13: ID2.5 Search Parameters – North Jumbo

Target	Pass	Area	Length			Direction			Max Samples	Min Samples	Max samples per hole
			Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch			
Jumbo	Pass 1	Host Rock	140	80	50	75	275	0	15	4	3
		Rhyolite	140	80	50	75	275	0	15	4	3
		High-grade zone	140	80	50	75	275	0	15	4	3
	Pass 2	High-grade zone	280	160	100	75	275	0	15	1	-

For each estimate, the GRE QP first estimated the blocks only within the high-grade zone, grams of gold and silver contained were calculated from the modeled grades using the block specific gravity, followed by a second pass in the high-grade zone. Then the estimation was done in the host rock and rhyolite.

The GRE QP chose the ID2.5 method with 2 holes required as the preferred method because it had better local variability that more closely fit the data.

14.4.8 Model Validation

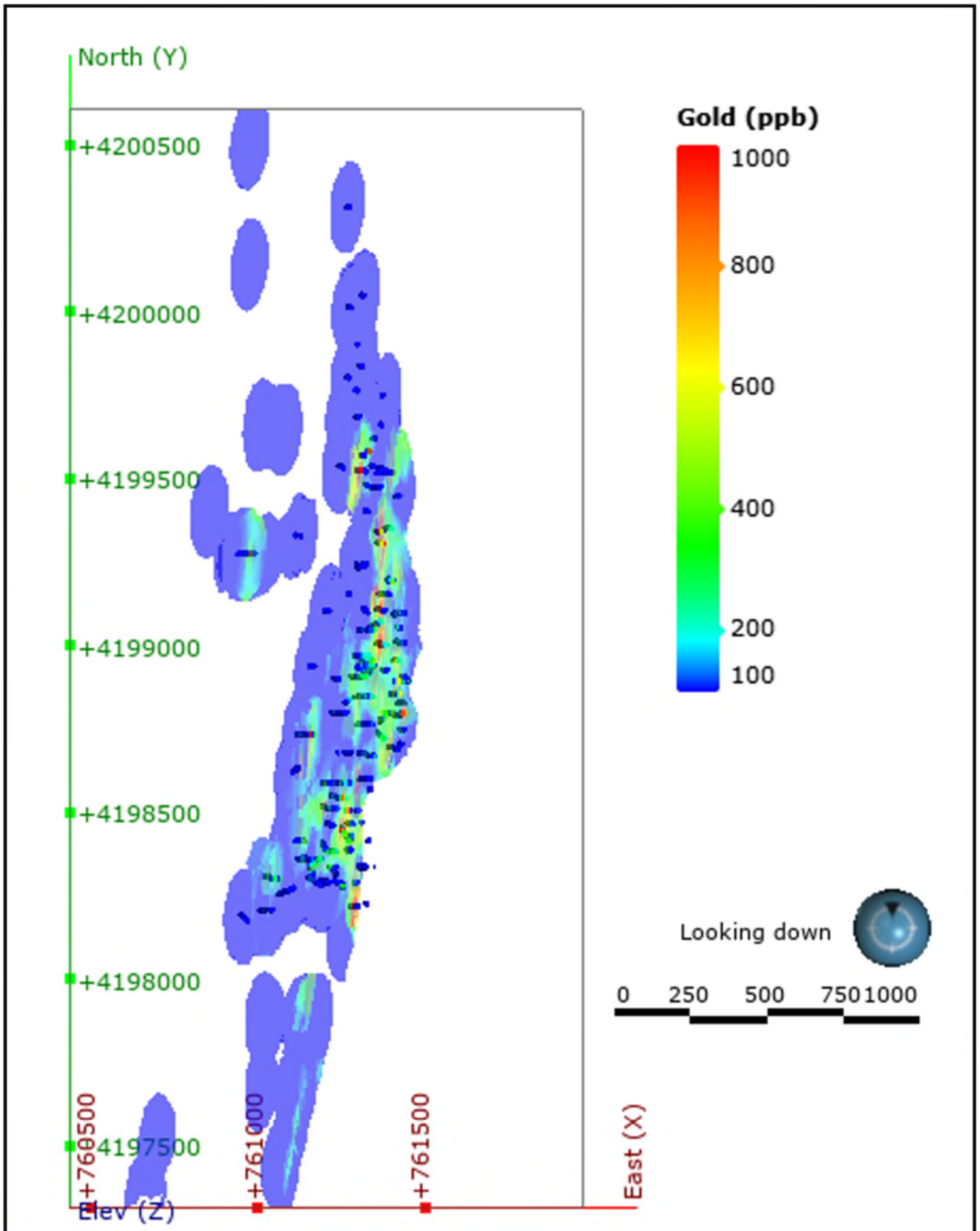
Validation of the estimated block grades for Gold Springs was completed for each of the targets. The resource block model estimate was validated by:

- Completing a series of visual inspections by comparisons of gold assay and composite grades to estimated block values across the deposit in both horizontal and vertical sections.
- Statistical comparison of parameters such as means, quantiles, and variance between 15-foot composites, ID2.5, and OK estimators to ensure that the grade estimations are representative of the composites they are based on.
- Comparing average composite sample values with average estimated block grades along east, north, and elevation orientations using swath grade trend plots.

14.4.8.1 Visual Inspection

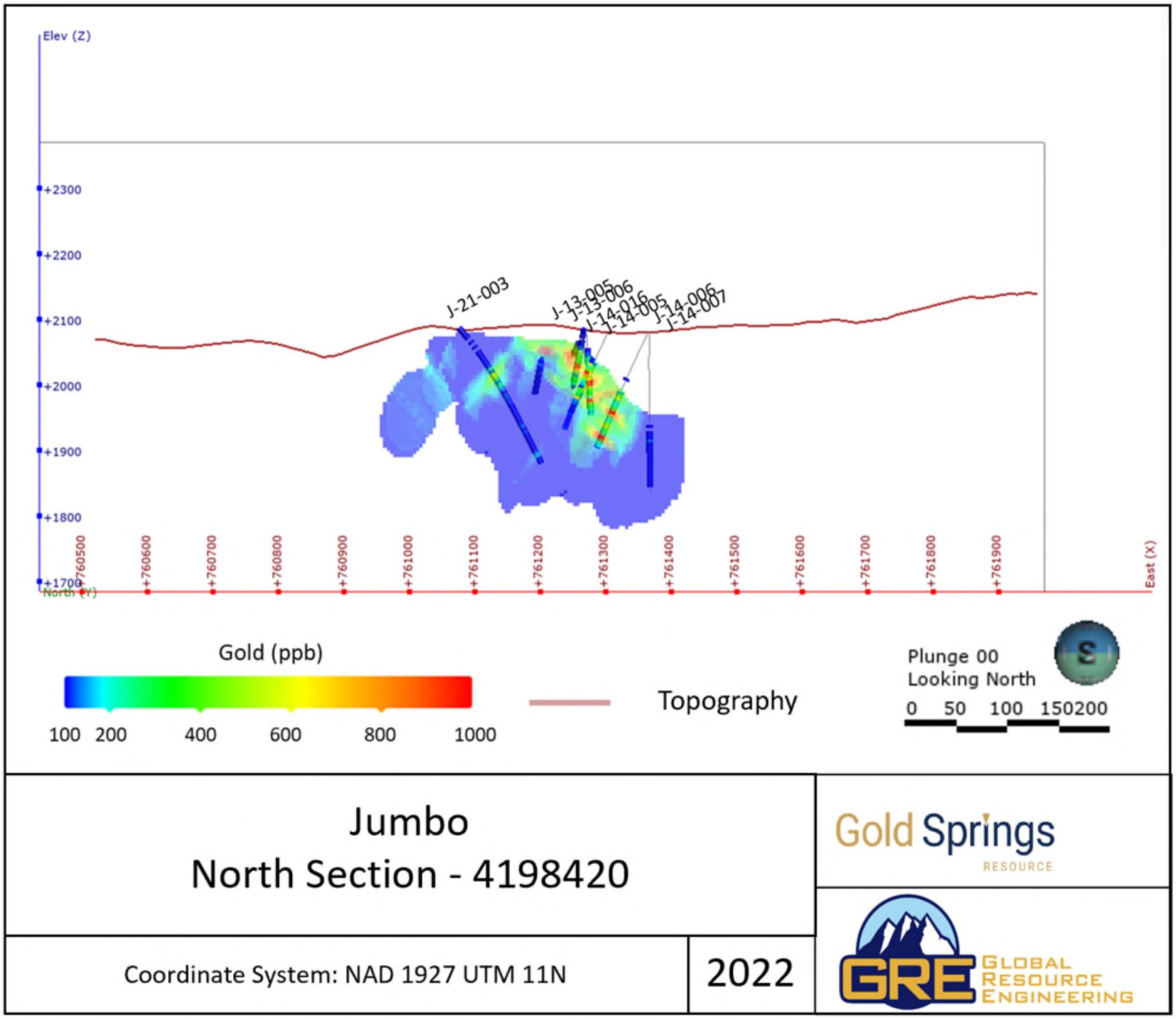
The block models were examined in plan and section views to compare to drill hole locations and grades. Plan views and section views for each of the targets are shown in Figure 14-22 and Figure 14-23. Comparison of the model grade from the assays did not reveal any major discrepancies.

Figure 14-22: North Jumbo Visual Comparison Composite to Block Model Grade Plan View



Jumbo Plan View Section - 2020		Gold Springs RESOURCE / GRE Global Resource Engineering
Coordinate System: NAD 1927 UTM 11N	2022	

Figure 14-23: North Jumbo Section Composites and Block Model Cross Section

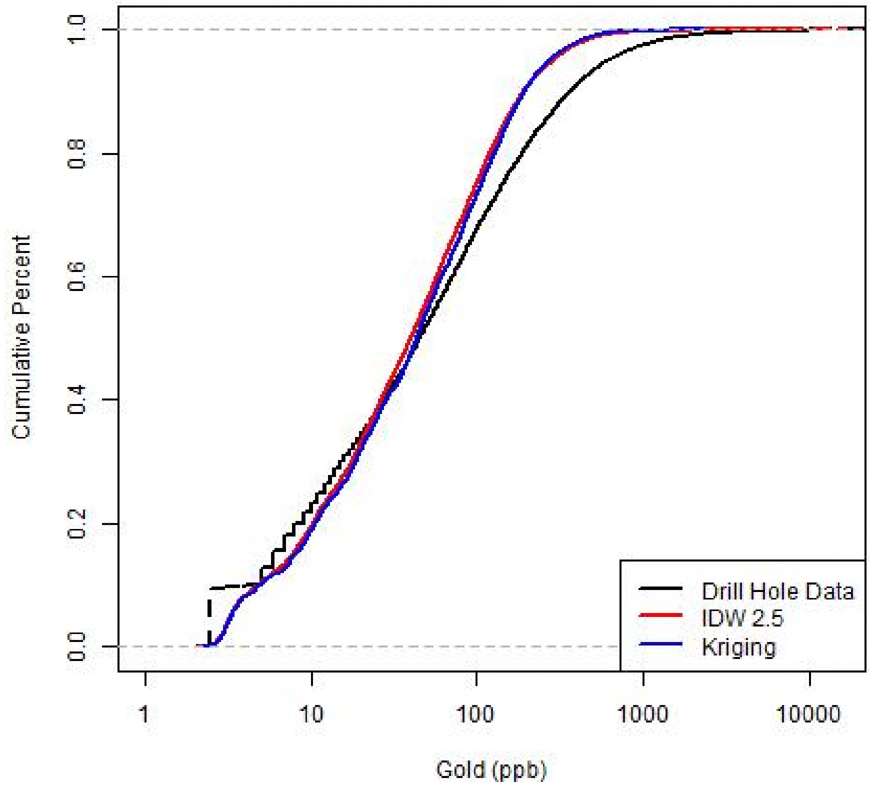


14.4.8.2 Statistical Comparison

To ensure that the grade estimations are representative of the composites they are based on and validate the resource estimation results, the block model grade estimation statistics were analyzed.

Figure 14-24 show the cumulative frequency plots of the block model grades for each of the two modeling methods and also show the cumulative frequency plot of the drill hole composite data for North Jumbo.

Figure 14-24: North Jumbo Cumulative Frequency Plot Comparison for the Two Modeling Methods

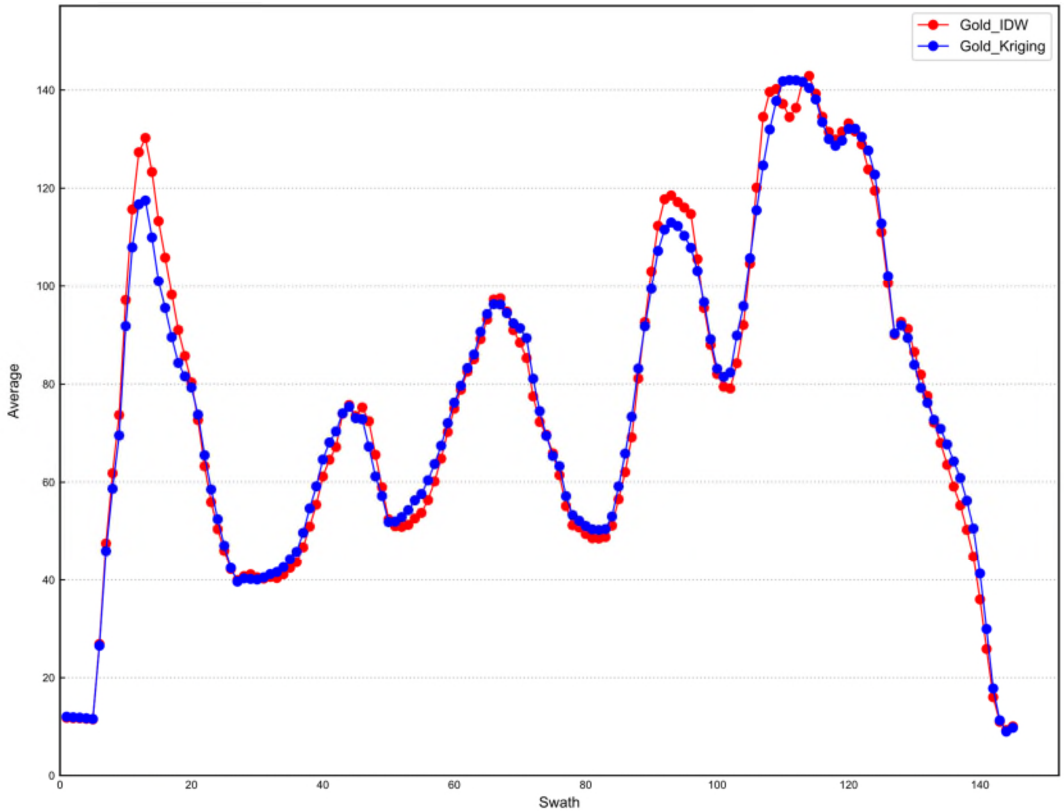


The results indicate that the ordinary kriging method does not capture the high value areas as well as the ID2.5 method, but both methods produce similar average grades.

14.4.8.3 Swath Plots

The GRE QP validated the modeling results by comparing the results of each modeling method and by generating swath plots. A swath plot is a sectional slice through the block model that shows the average grade for the blocks in the swath. Figure 14-25 show the swath plot for gold in North Jumbo.

Figure 14-25: Swath Plot for Gold in North Jumbo



14.4.9 Resource Catgories

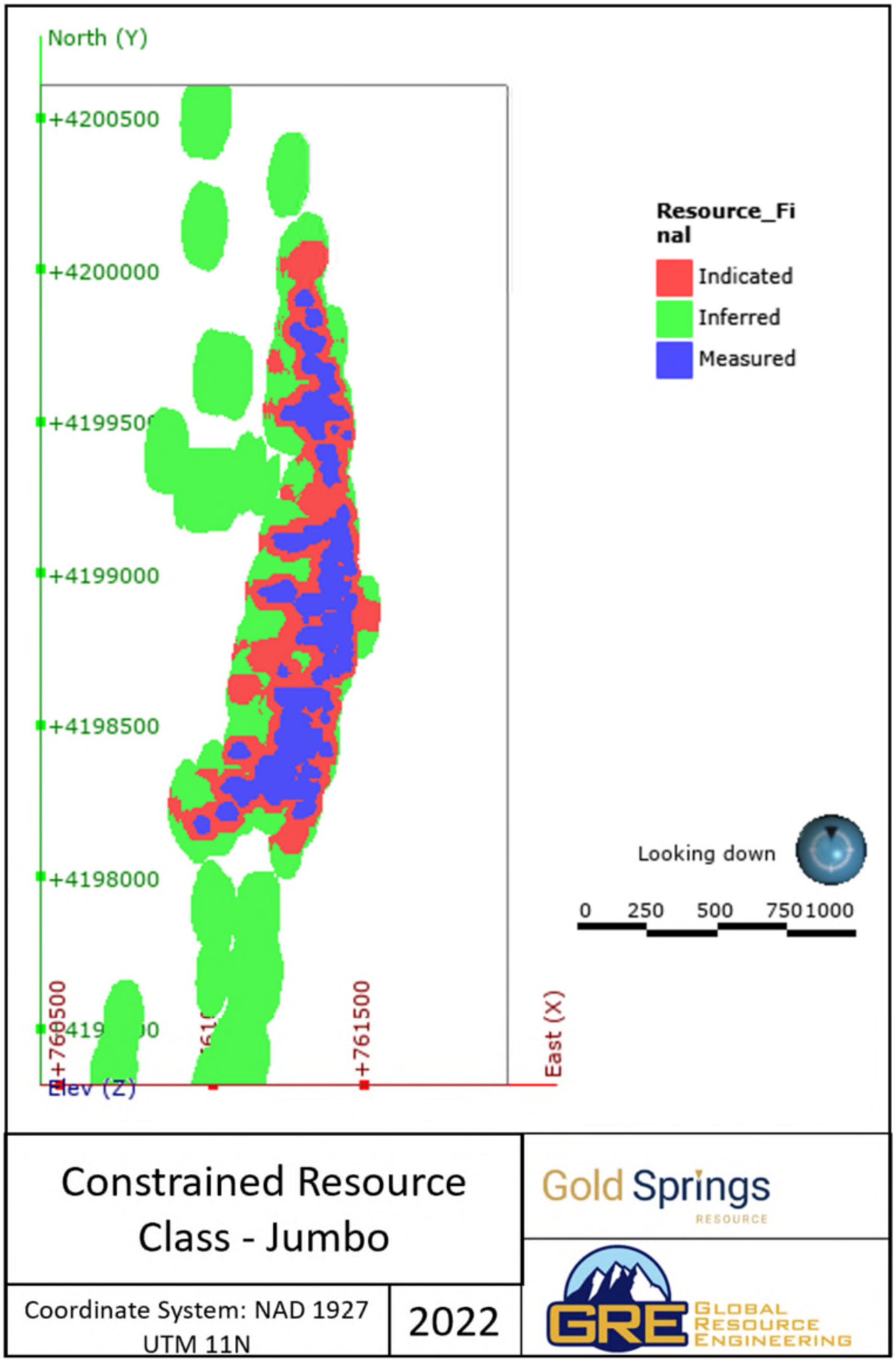
Mineral resource classification involved a two-step process using minimum distances and minimum numbers of samples to define resource classification initially before applying a numeric indicator model to define a more continuous and reasonable resource classification. In the first step, these distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 metres from the drill holes
- Indicated: average distance between 25 and 50 metres from the drill holes
- Inferred: average distance between 50 and 100 metres from the drill holes

In the second step, a continuous solid was creted using the resource classification from step 1. The solid was created using the numerical model in Leapfrog, where an isotropic search was used along with an interpolant distance of 2000, which was based on the average continuity of grade seen in the deposit.

No numeric indicator model was constructed for the inferred resource class, rather it was defined as any block with a calculated gold grade that did not fall within the measured or indicated numeric indicator domains that had a calculated gold grade. A plan view of the estimated resource classes is shown in Figure 14-26.

Figure 14-26: Constrained Resource Class for North Jumbo



14.5 Carlie Ross

14.5.1 Block Model

The block model was constructed with block dimensions of 5 meters by 5 meters by 5 meters. Blocks were located relative to the LIDAR elevation model. Each of the blocks was assigned fields to contain gold and silver grades for each estimation method, resource classification, rock density, block tonnage, contained ounces, lithology, and lithology groups. The block model has the attributes shown in Table 14-14. Topography was derived from 1-metre LIDAR data.

Table 14-14: Block Model Attributes – Charlie Ross

	X	Y	Z
Charlie Ross			
Lower left coordinate	757,960	4,198,820	1,725
Column/Row/Level size (m)	5	5	5
Number of columns/rows/levels	264	242	101

14.5.2 Geological Model

A geologic model was created for Charlie Ross which contained new drill hole data from the 2021 exploration drilling. The model was completed using LeapFrog® software (Leapfrog). Drill hole information for the entire Gold Springs Project was uploaded into Leapfrog, including collar, assay, survey, and lithology. The lithology logs for the drill holes contain detailed lithologies consisting of multiple types of andesite, rhyolite, quartz veins, and breccias to distinguish discrete volcanic flows and structurally controlled silicified features. GRE's QP Dr. Hamid Samari visually reviewed the data in Leapfrog to correlate lithologic and structural controls with mineralized intervals. The initial review showed mineralization spanning several discrete lithologies and structural features and did not show a clear correlation with mineralization. However, when grouping the lithology and structures into the host and non-mineralized areas, a clear correlation was revealed for each of the model areas. Table 14-15 lists the defined lithology groups.

Table 14-15: Lithology Groups – Charlie Ross

Mineralized Hosts	Non-Mineralized
Andesite Host	Post Mineral
Other Hosts	Post Mineral TPL
Rhyolite	Post Mineral VFG
Vein	

Within the Mineralized Host, a solid was created using LeapFrog® to create the 3D shape of the high-grade materials within the host rock. The isosurface was created using the samples where the gold grade was more than 0.1 ppm.

Gold mineralization in Charlie Ross is controlled by several major north-south trending veins which are surrounded by zones of brecciation and stockwork vein development, all of which can host gold mineralization. The southern half of the system is exposed on the surface, with several historical workings having exploited high-grade portions of the veins. To the north, the system is obscured by younger post-mineral rocks.

The GRE QP coded the block model into Mineralized Zones and Non-Mineralized Zones and created a solid for high-grade material based on the assay gold grade of more than 0.1 ppm. Based on these wireframes, a geologic model was created as shown in Figure 14-27. Figure 14-28 shows the section view of the Charlie Ross geological model.

Figure 14-27: Charlie Ross Geological Model

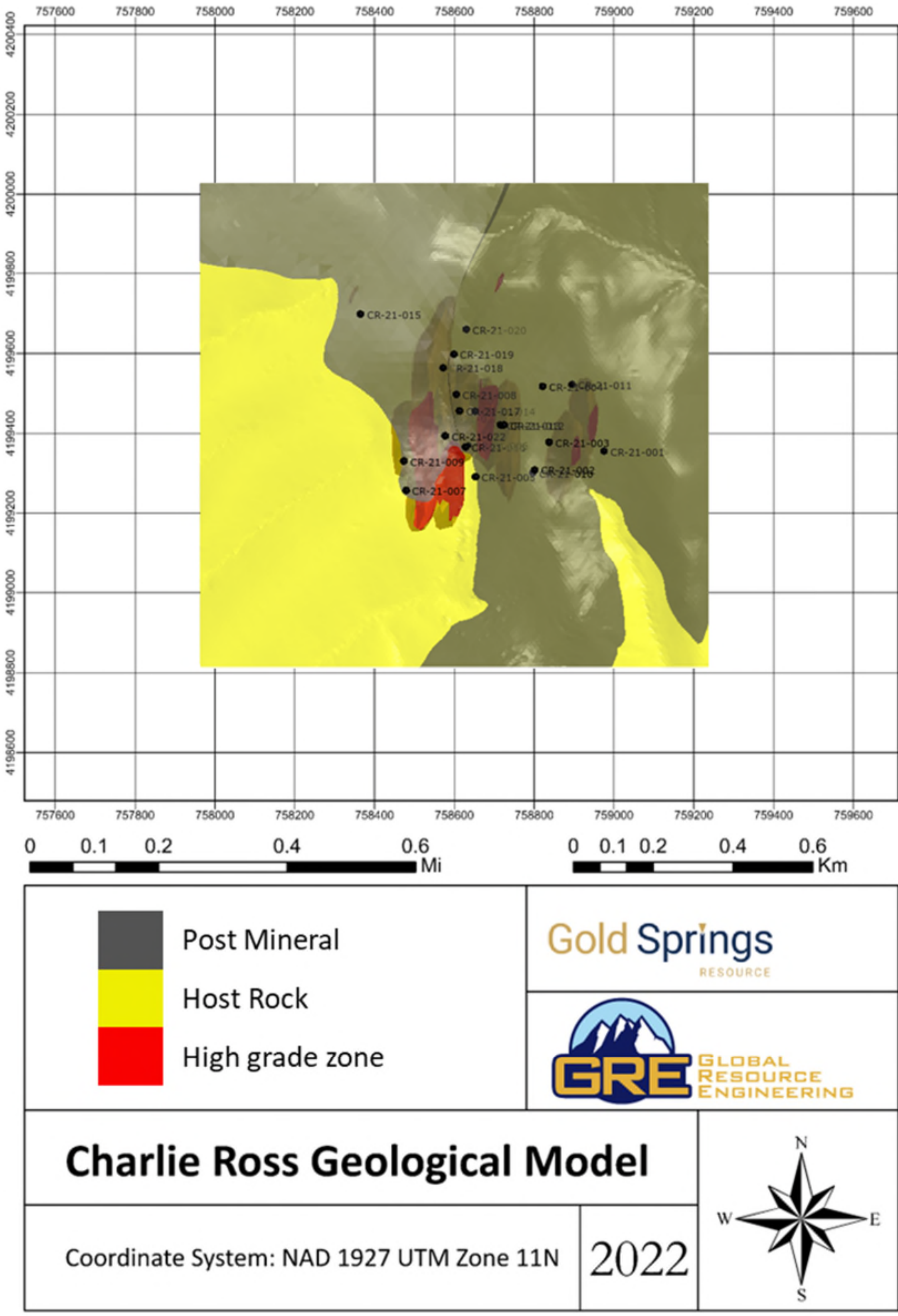
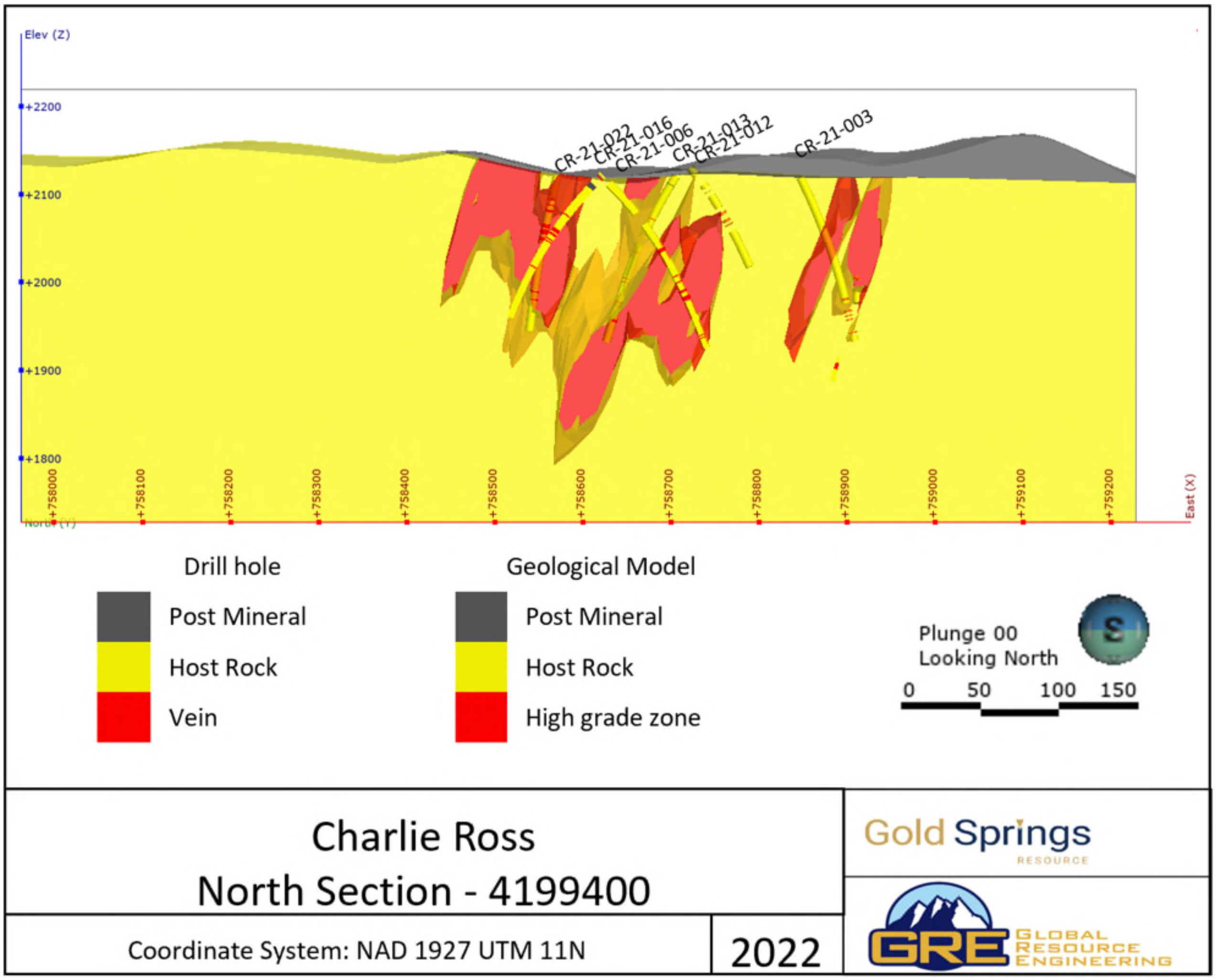


Figure 14-28: Section view Charlie Ross Geological Model



14.5.3 Drill Hole Sample Database

The drill hole database was provided by GRC and verified by Dr. Samari. The database contained collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the Charlie Ross area total 4,749 meters. There are 3,116 gold and 3,108 silver assay data values in the Charlie Ross database. Figure 14-29 shows the drill hole locations and Table 14-16 shows the yearly summary of the drill hole database for Charlie Ross.

Figure 14-29: Drill Hole Location – Charlie Ross

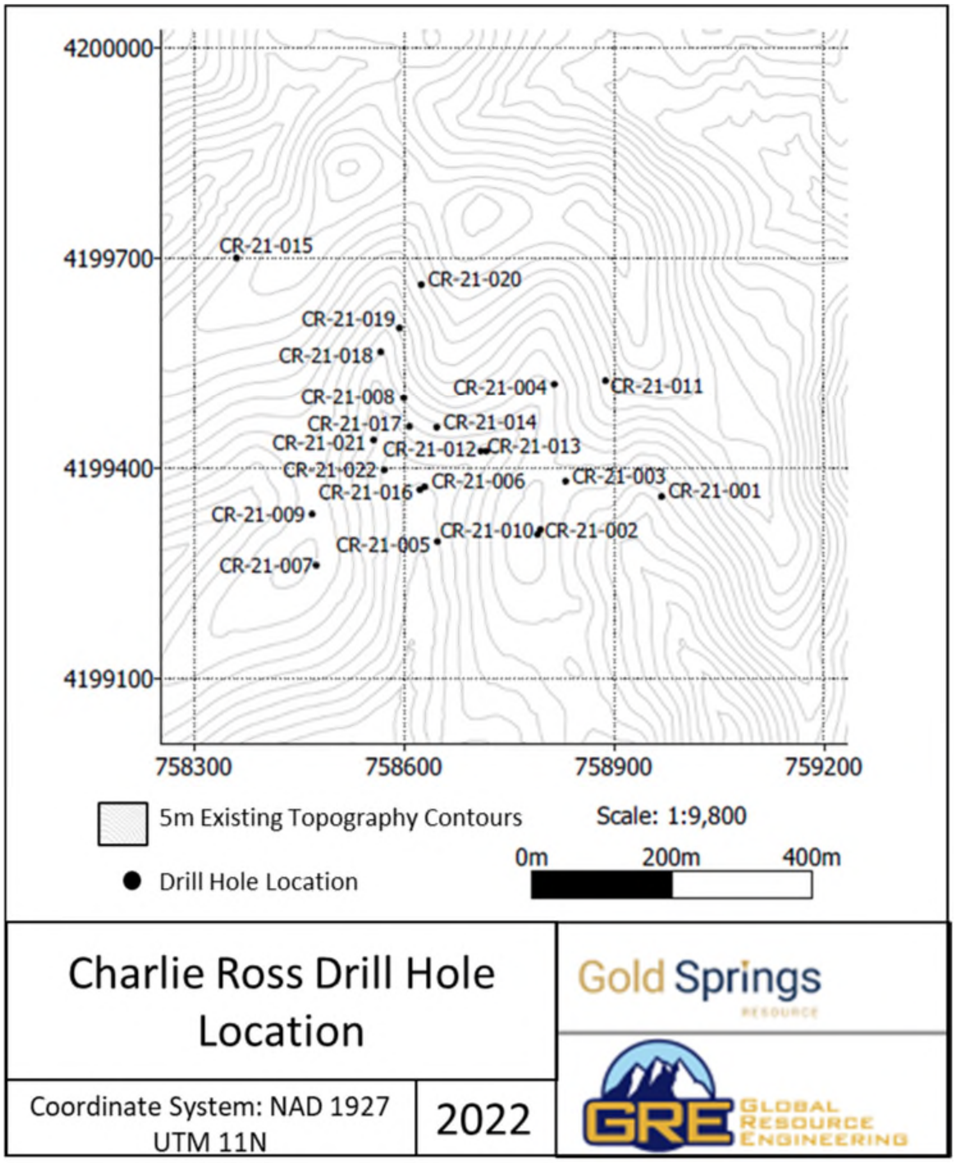


Table 14-16: Summary of the Drill Hole Database for Charlie Ross

Years	Number of Drill holes	Total Drilling (Meters)	Number of Gold Assays	Number of Silver Assays
2006	-	-	-	-
2010	-	-	-	-
2011	-	-	-	-
2012	-	-	-	-
2013	-	-	-	-
2014	-	-	-	-
2015	-	-	-	-
2016	-	-	-	-
2017	-	-	-	-
2021	22	4,749	3,116	3,108
Total	**22**	**4,749**	**3,116**	**3,108**

14.5.4 High-Grade Capping

Very high-grade assay values can, if they are outliers, bias grade estimation. Statistical methods for grade estimation, however, are relatively insensitive to a low number of very high values. To determine if grade capping is necessary, GRE produced cumulative frequency plots of the data for each deposit. If the cumulative frequency plots form a relatively straight line, capping is unnecessary; but if there is a break in the upper end, that is usually an indication that grade capping should be performed.

14.5.4.1 Gold

Figure 14-30 shows a histogram of the Charlie Ross gold assay data and Figure 14-31 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the Charlie Ross gold data forms a log-normal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. After reviewing the sample distribution, gold grades were not capped.

Figure 14-30: Histogram of Charlie Ross Gold Assay Data > 5ppb

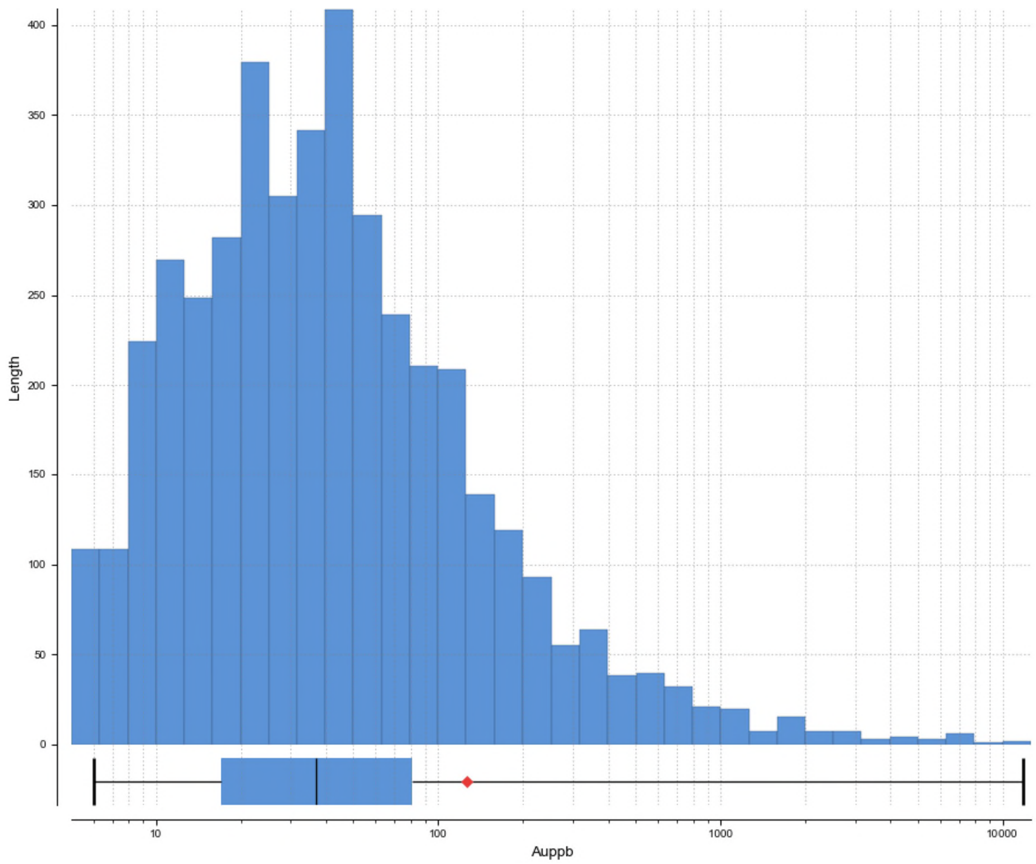
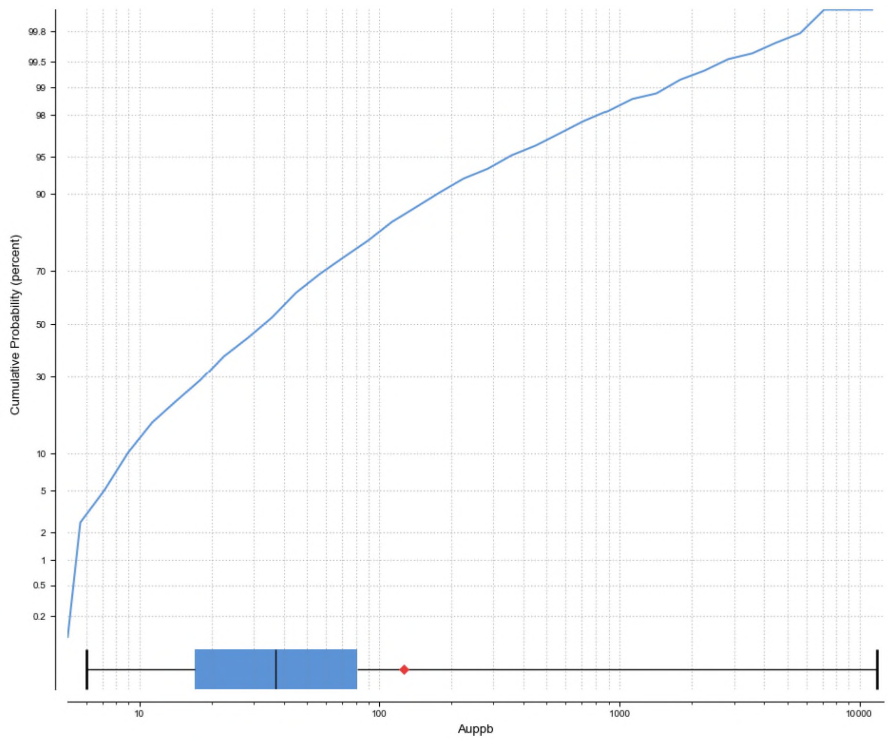


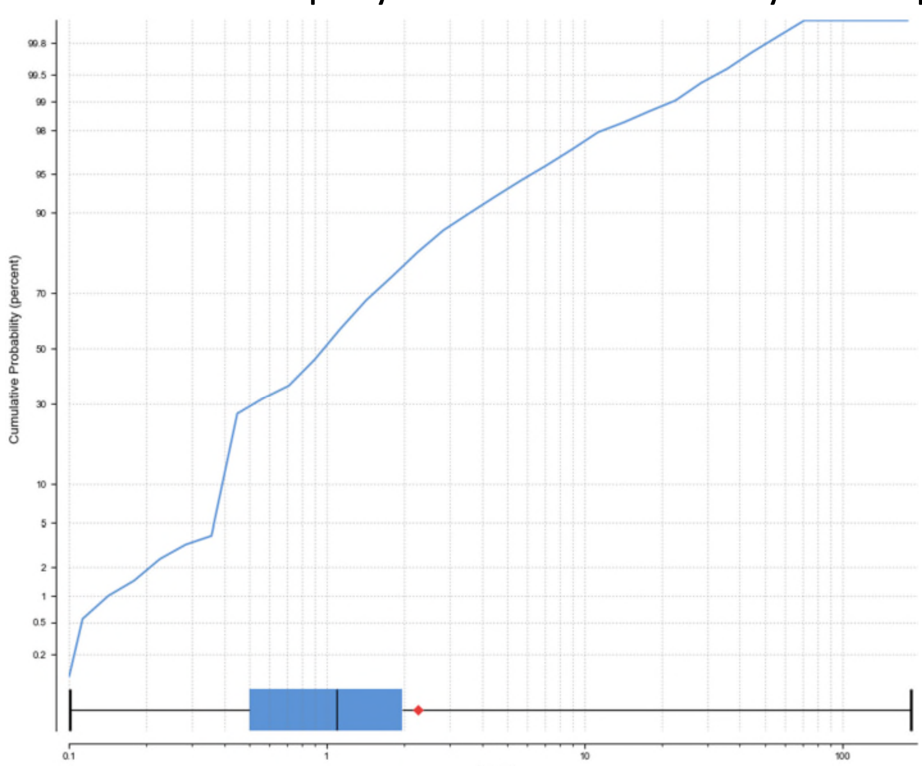
Figure 14-31: Cumulative Frequency Plot of Charlie Ross Gold Assay Data > 5 ppb



14.5.4.2 Silver

The silver assay data has very few high values; therefore, the author recommends no grade capping for silver. A silver cumulative frequency plot, from the Charlie Ross resource area, is provided in Figure 14-32.

Figure 14-32: Cumulative Frequency Plot of Charlie Ross Silver Assay Data > 0.1 ppm



14.5.5 Compositing

Compositing sample assay intervals to larger intervals is typically required to accurately model open pit minable deposits and is viewed by the geostatistical community as one of the first steps required to perform a geostatistical Mineral Resource Estimate.

The Gold Springs assaying was performed almost exclusively using 1.52-meter-long sample intervals and assayed using a 30-gram fire assay. This small sample will have higher variability (higher and lower grade) than a larger open pit minable volume due to the size of the mining equipment and its ability to selectively mine a discrete volume.

The Charlie Ross data was composited into 4.57-meter (15-foot) lengths. The change of support, or a correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. As shown in Table 14-17, the spread and variability of each metal are reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-17: Sample and Composite Summary Statistics in Charlie Ross High-Grade Area

	Au (ppb)		Ag (ppm)	
Statistics	Uncomposited	Composited	Uncomposited	Composited
Count	2705	909	2697	907
Length	4,122.44	4,140.52	4,110.25	4,131.38
Mean	141.08	141.47	2.66	2.67
SD	536.63	408.38	6.42	5.07
CV	3.80	2.89	2.42	1.90
Variance	287,976.91	166,777.36	41.26	25.71
Minimum	2.50	2.52	0.06	0.08
Q1	20.00	24.53	0.80	0.83
Q2	42.00	50.01	1.30	1.43
Q3	95.00	98.05	2.37	2.48
Maximum	11,800.00	5,137.52	185.00	65.86

14.5.6 Variography

The GRE QP completed variography on the composite values using Leapfrog® Edge software. The analysis was used to determine the size and orientation of the search ellipsoid for the ID2.5 grade estimate. First, experimental correlograms were examined in all azimuth directions in increments of 30 degrees from 0 to 330 and dip increments of 15 degrees from 0 to 90. Afterward, the direction with the greatest continuity was further analyzed at whole number increments and the ellipse orientation was established. Distances were set from the correlogram pairs for the 3 axes.

The range for each variogram was found using a global variogram. The nugget was determined by examining the downhole variograms and determining where the short-range trend crossed the y-axis.

Figure 14-33 and Figure 14-34 show the correlograms for gold and silver at Charlie Ross, respectively. The resulting parameters are shown in Table 14-18.

Table 14-18: Open Pit Variogram Parameters – Charlie Ross

Target	Sub-Domain	Dip	Dip Azimuth	Pitch	Major Axis	Semi-Major Axis	Minor Axis
Charlie Ross	Host Rock	75	275	145	150	100	60
	High-grade zone	75	275	145	150	100	60

Figure 14-33: Directional Correlograms for Major, Semi-Major, and Minor Axes for Gold at Charlie Ross

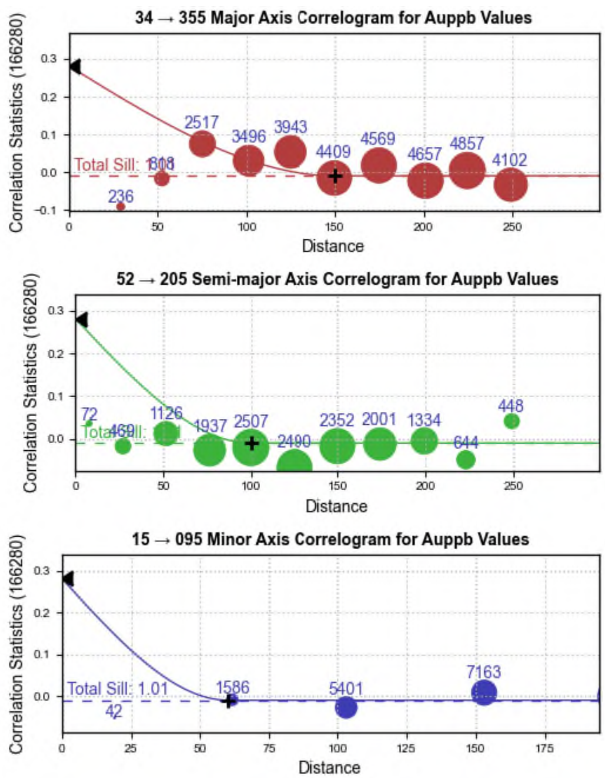
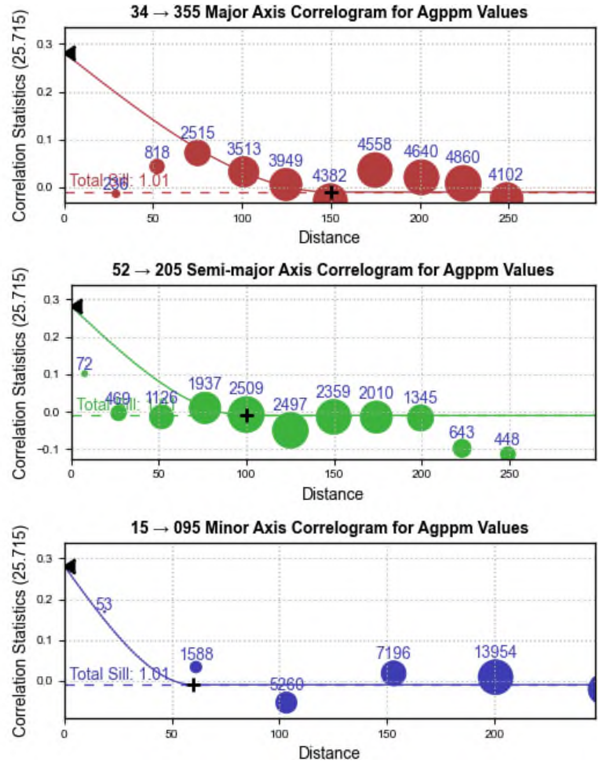


Figure 14-34: Directional Correlograms for Major, Semi-Major, and Minor Axes for Silver at Charlie Ross



14.5.7 Grade Modelling

Using Leapfrog, the GRE QP modeled gold and silver grades into the block model using ID2.5 and OK interpolators. The search parameters are identified in Table 14-19.

Table 14-19: ID2.5 Search Parameters – Charlie Ross

Target	Pass	Area	Length			Direction			Max Samples	Min Samples	Max samples per hole
			Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch			
Charlie Ross	Pass 1	Host Rock	150	100	60	75	275	145	15	4	3
		High-grade zone	150	100	60	75	275	145	15	4	3
	Pass 2	High-grade zone	300	200	120	75	275	145	15	1	-

For each estimate, the GRE QP first estimated the blocks only within the high-grade zone, grams of gold and silver contained were calculated from the modeled grades using the block specific gravity, followed by a second pass in the high-grade zone. Then the estimation was done in the host rock and rhyolite.

The GRE QP chose the ID2.5 method with 2 holes required as the preferred method because it had better local variability that more closely fit the data.

14.5.8 Model Validation

Validation of the estimated block grades for Gold Springs was completed for each of the targets. The resource block model estimate was validated by:

- Completing a series of visual inspections by comparisons of gold assay and composite grades to estimated block values across the deposit in both horizontal and vertical sections.
- Statistical comparison of parameters such as means, quantiles, and variance between 15-foot composites, ID2.5, and OK estimators to ensure that the grade estimations are representative of the composites they are based on.
- Comparing average composite sample values with average estimated block grades along east, north, and elevation orientations using swath grade trend plots.

14.5.8.1 Visual Inspection

The block models were examined in plan and section views to compare to drill hole locations and grades. Plan views and section views for each of the targets are shown in Figure 14-35 and Figure 14-36. Comparison of the model grade from the assays did not reveal any major discrepancies.

Figure 14-35: Charlie Ross Visual Comparison Composite to Block Model Grade Plan View Section

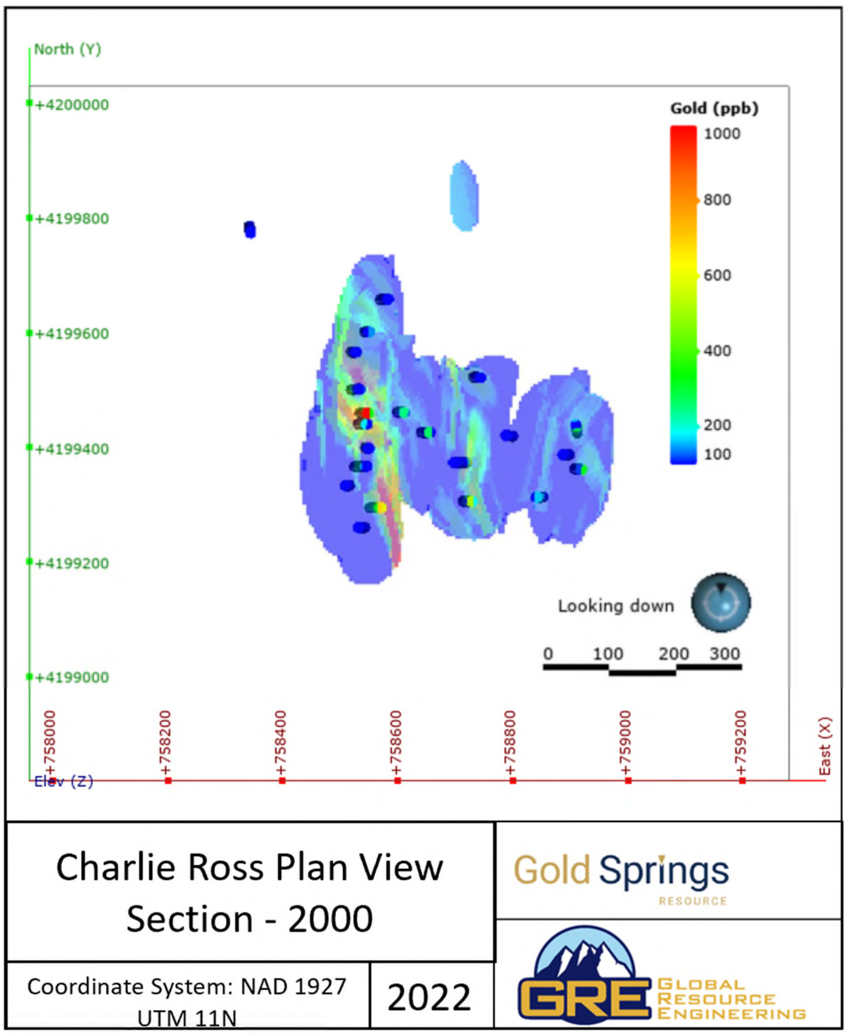
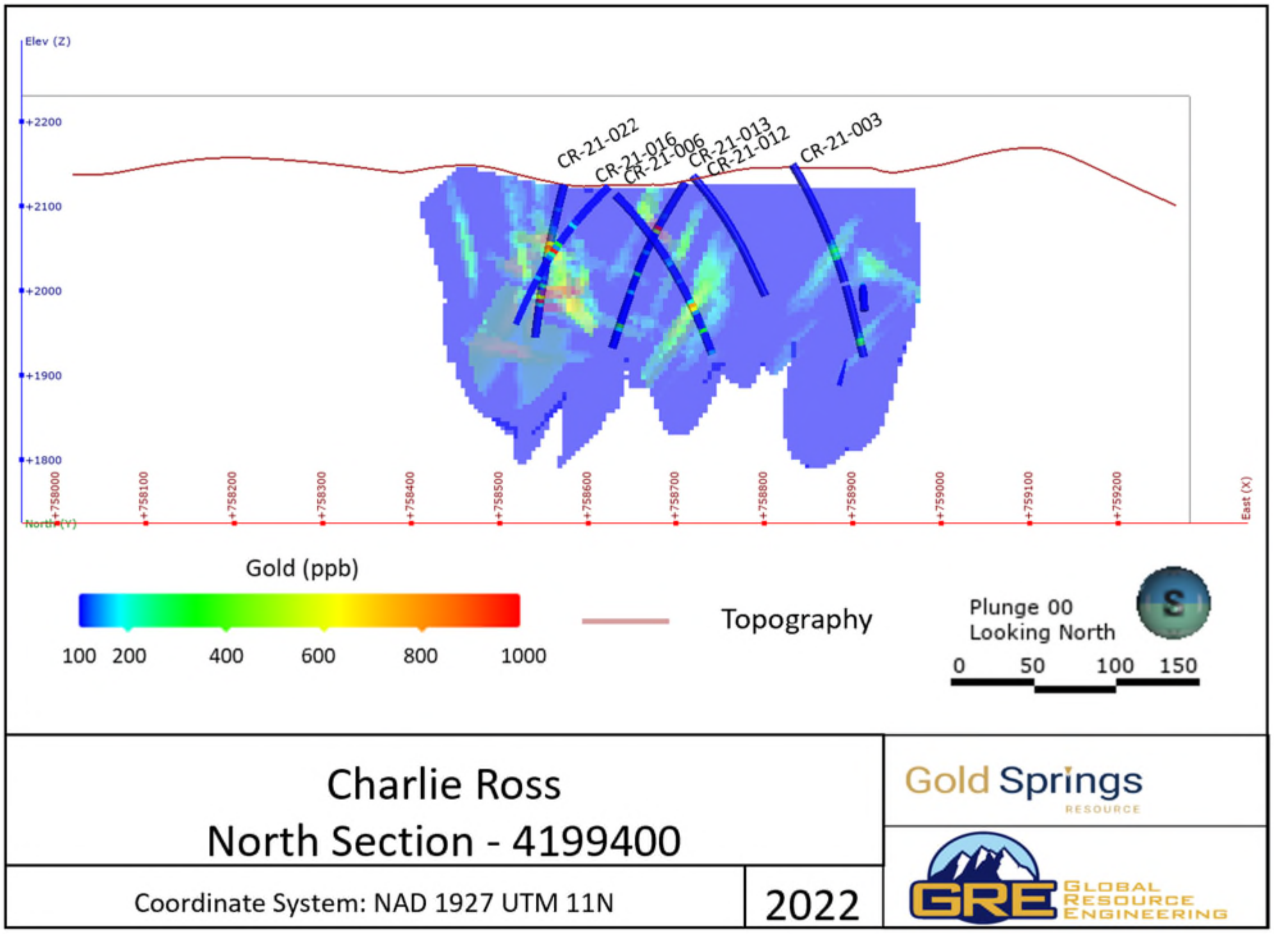


Figure 14-36: Charlie Ross Section Composites and Block Model Cross Section

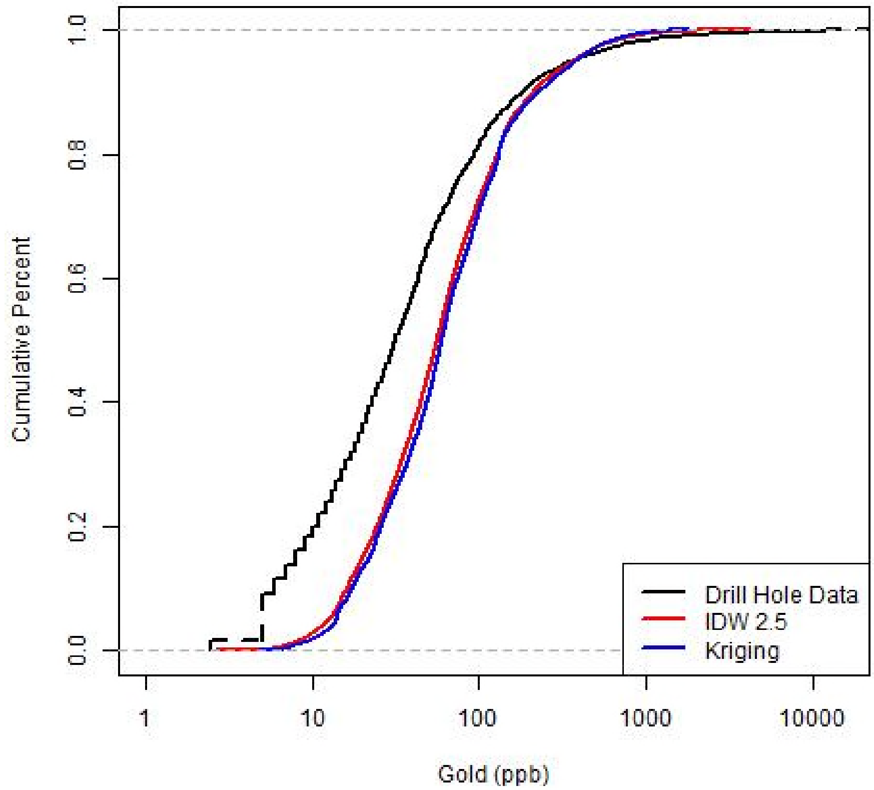


14.5.8.2 Statistical Comparison

To ensure that the grade estimations are representative of the composites they are based on and validate the resource estimation results, the block model grade estimation statistics were analyzed.

Figure 14-37 show the cumulative frequency plots of the block model grades for each of the two modeling methods and also show the cumulative frequency plot of the drill hole composite data for Charlie Ross.

Figure 14-37: Charlie Ross Cumulative Frequency Plot Comparison for the Two Modeling Methods

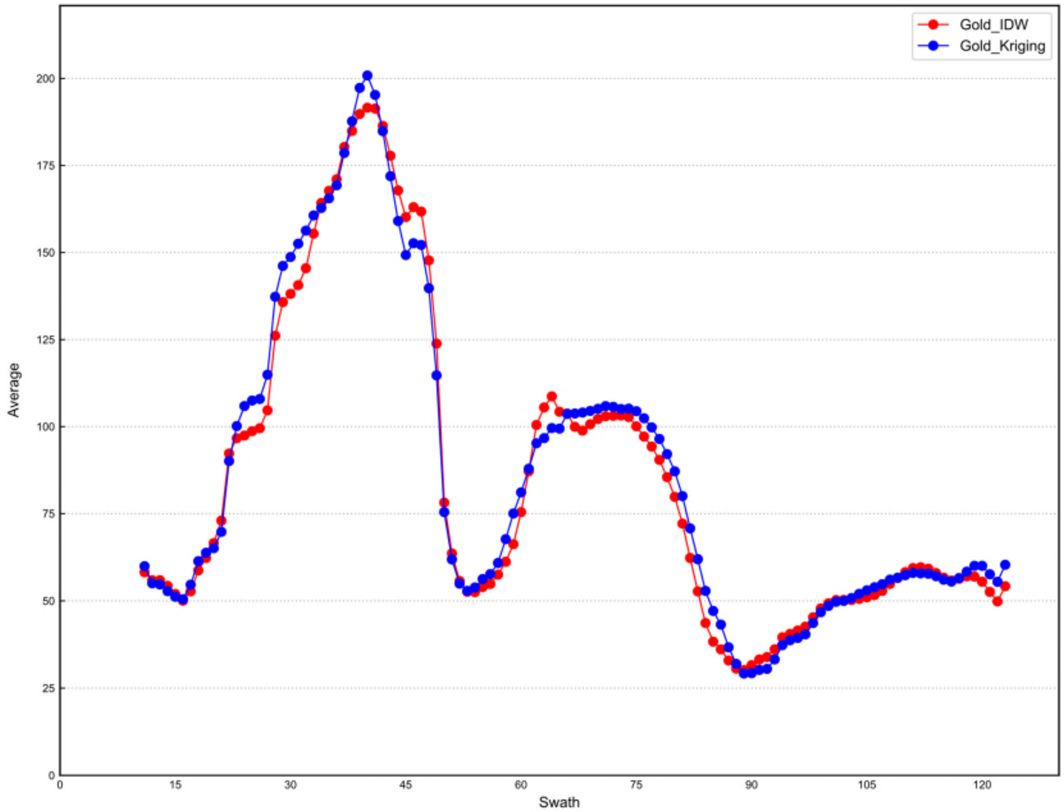


The results indicate that the ordinary kriging method does not capture the high value areas as well as the ID2.5 method, but both methods produce similar average grades.

14.5.8.3 Swath Plots

The GRE QP validated the modeling results by comparing the results of each modeling method and by generating swath plots. A swath plot is a sectional slice through the block model that shows the average grade for the blocks in the swath. Figure 14-38 show the swath plot for gold Charlie Ross.

Figure 14-38: Swath Plot for Gold in Charlie Ross



14.5.9 Resource Catgories

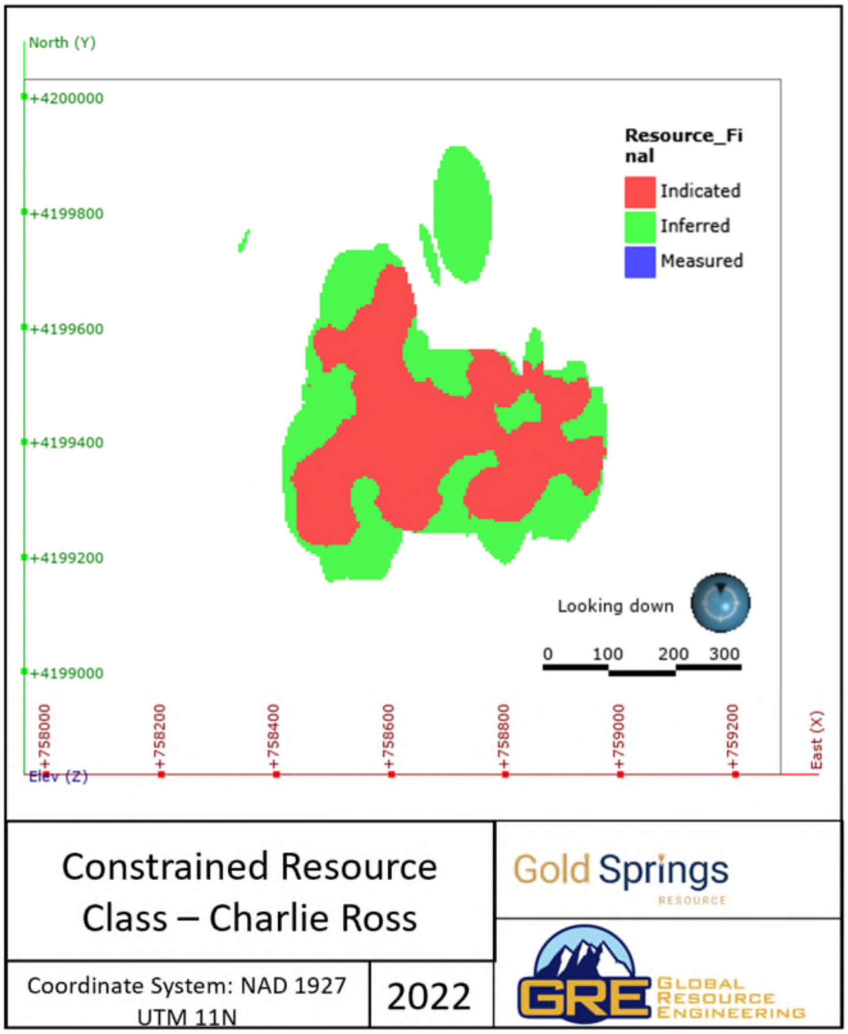
Mineral resource classification involved a two-step process using minimum distances and minimum numbers of samples to define resource classification initially before applying a numeric indicator model to define a more continuous and reasonable resource classification. In the first step, these distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 metres from the drill holes
- Indicated: average distance between 25 and 50 metres from the drill holes
- Inferred: average distance between 50 and 100 metres from the drill holes

In the second step, a continuous solid was creted using the resource classification from step 1. The solid was created using the numerical model in Leapfrog, where an isotropic search was used along with an interpolant distance of 2000, which was based on the average continuity of grade seen in the deposit.

No numeric indicator model was constructed for the inferred resource class, rather it was defined as any block with a calculated gold grade that did not fall within the measured or indicated numeric indicator domains that had a calculated gold grade. A plan view of the estimated resource classes is shown in Figure 14-39.

Figure 14-39: Constrained Resource Class for Charlie Ross



14.6 White Point

14.6.1 Block Model

The block model was constructed with block dimensions of 5 meters by 5 meters by 5 meters. Blocks were located relative to the LIDAR elevation model. Each of the blocks was assigned fields to contain gold and silver grades for each estimation method, resource classification, rock density, block tonnage, contained ounces, lithology, and lithology groups. The block model has the attributes shown in Table 14-20. Topography was derived from 1-metre LIDAR data.

Table 14-20: Block Model Attributes – White Point

	X	Y	Z
White Point			
Lower left coordinate	756,025	4,200,645	1,845
Column/Row/Level size (m)	5	5	5
Number of columns/rows/levels	125	128	68

14.6.2 Geological Model

A geologic model was created for White point which contained new drill hole data from the 2021 exploration drilling. The model was completed using LeapFrog® software (Leapfrog). Drill hole information for the entire Gold Springs Project was uploaded into Leapfrog, including collar, assay, survey, and lithology. The lithology logs for the drill holes contain detailed lithologies consisting of multiple types of andesite, rhyolite, quartz veins, and breccias to distinguish discrete volcanic flows and structurally controlled silicified features. GRE's QP Dr. Hamid Samari visually reviewed the data in Leapfrog to correlate lithologic and structural controls with mineralized intervals. The initial review showed mineralization spanning several discrete lithologies and structural features and did not show a clear correlation with mineralization. However, when grouping the lithology and structures into the host and non-mineralized areas, a clear correlation was revealed for each of the model areas. Table 14-21 lists the defined lithology groups.

Table 14-21: Lithology Groups – White Point

Mineralized Hosts	Non-Mineralized
Andesite Host	Post Mineral
Other Hosts	Post Mineral TPL
Rhyolite	Post Mineral VFG
Vein	

Within the Mineralized Host, a solid was created using LeapFrog® to create the 3D shape of the high-grade materials within the host rock. The isosurface was created using the samples where the gold grade was more than 0.1 ppm.

The mineralization in White Point is characterized by a 3-meter-wide north-south to northeast striking quartz-calcite vein system with an intersecting 5-meter-wide north 35° east quartz-calcite vein. In addition, there is a surrounding zone of sheeted northeast-trending quartz-calcite veins exposed in GRC drill roads and pads that can be traced for 300 meters along strike to the south, where it is obscured by post-mineral volcanic flows and colluvium. The host rock to veining is a weakly altered, moderately to strongly oxidized andesite. This andesite host rock is strongly silicified directly adjacent to veining, but alteration weakens quickly away from vein walls. Oxidation within the host rock is widespread. The sheeted vein systems observed at the surface are bound within sets of radial and ring faults related to the caldera collapse. Complexities in faulting displaces mineralization to the north and accommodate down dropping to the west and south.

The GRE QP coded the block model into Mineralized Zones and Non-Mineralized Zones. GRE also created a solid for high-grade material based on the assay gold grade of more than 0.1 ppm. Based on these wireframes, a geologic model was created as shown in Figure 7-31. Figure 14-41 shows the section view of the White Point geological model.

Figure 14-40: White Point Geological Model

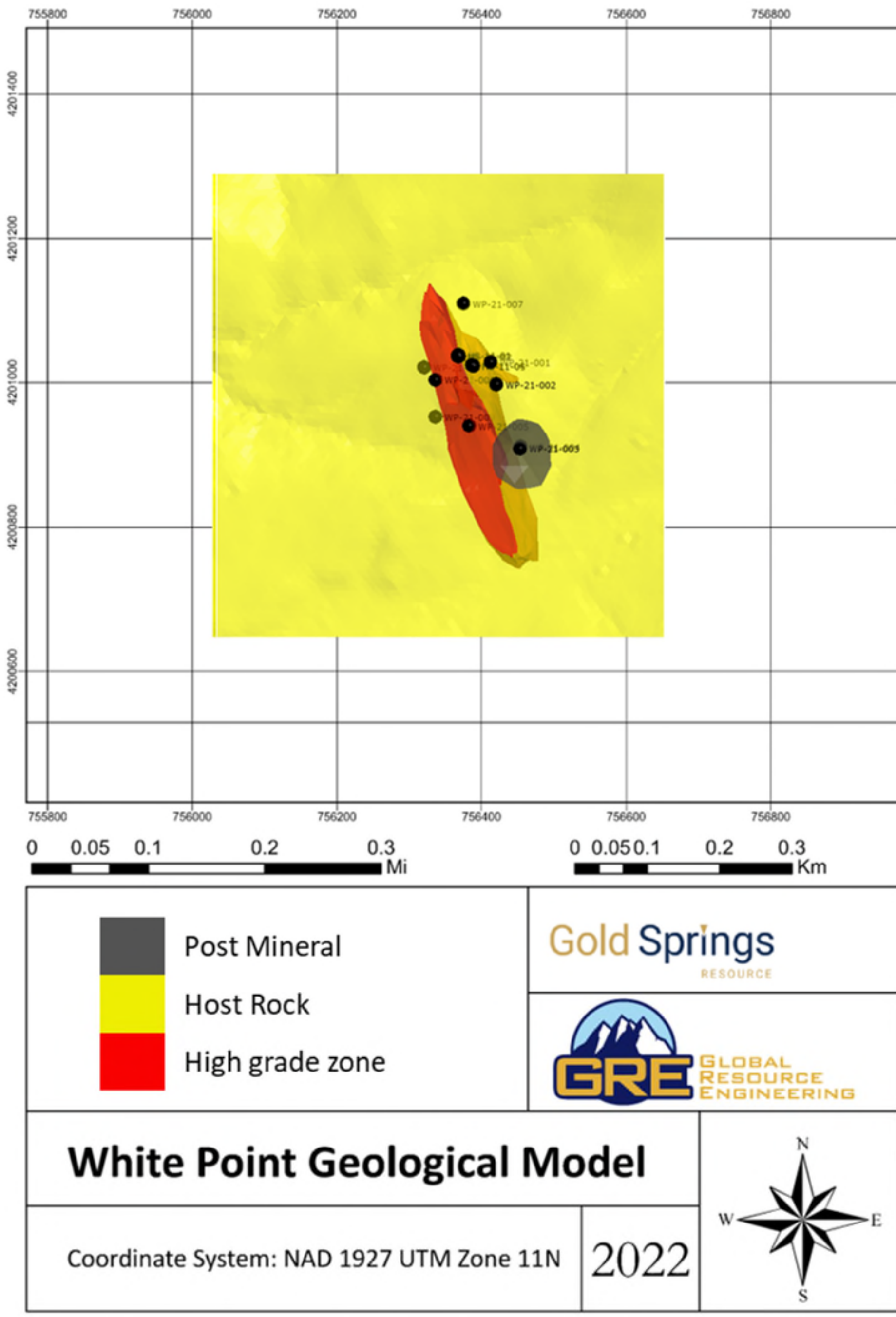
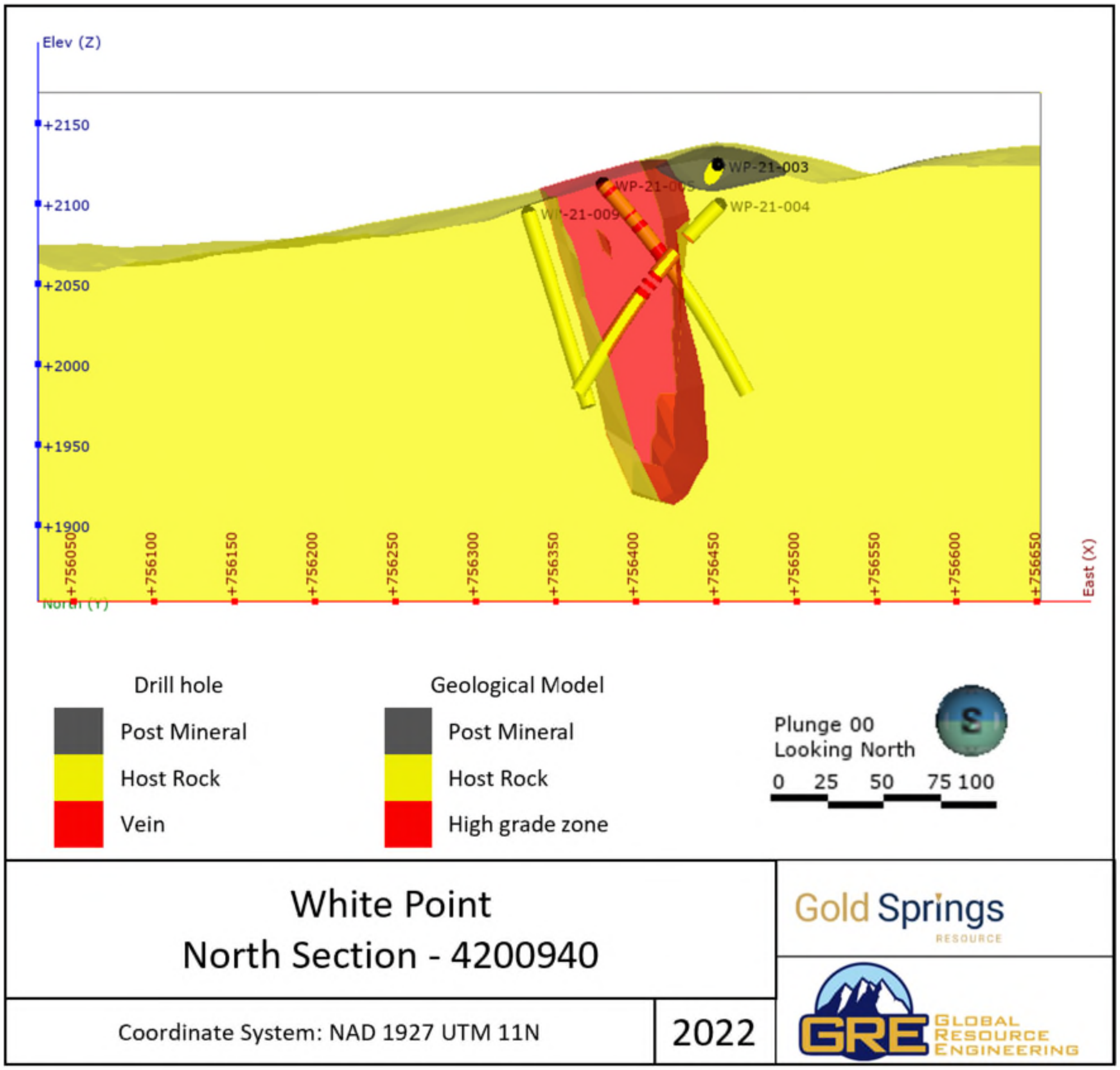


Figure 14-41: Section view White Point Geological Model



14.6.3 Drill Hole Sample Database

The drill hole database was provided by GRC and verified by Dr. Samari. The database contained collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the White Point area total 2,041 meters. There are 1,292 gold and 1,289 silver assay data values in the White Point database. Figure 14-42 shows the drill hole locations and Table 14-22 shows the yearly summary of the drill hole database for White point.

Figure 14-42: Drill Hole Location – White Point

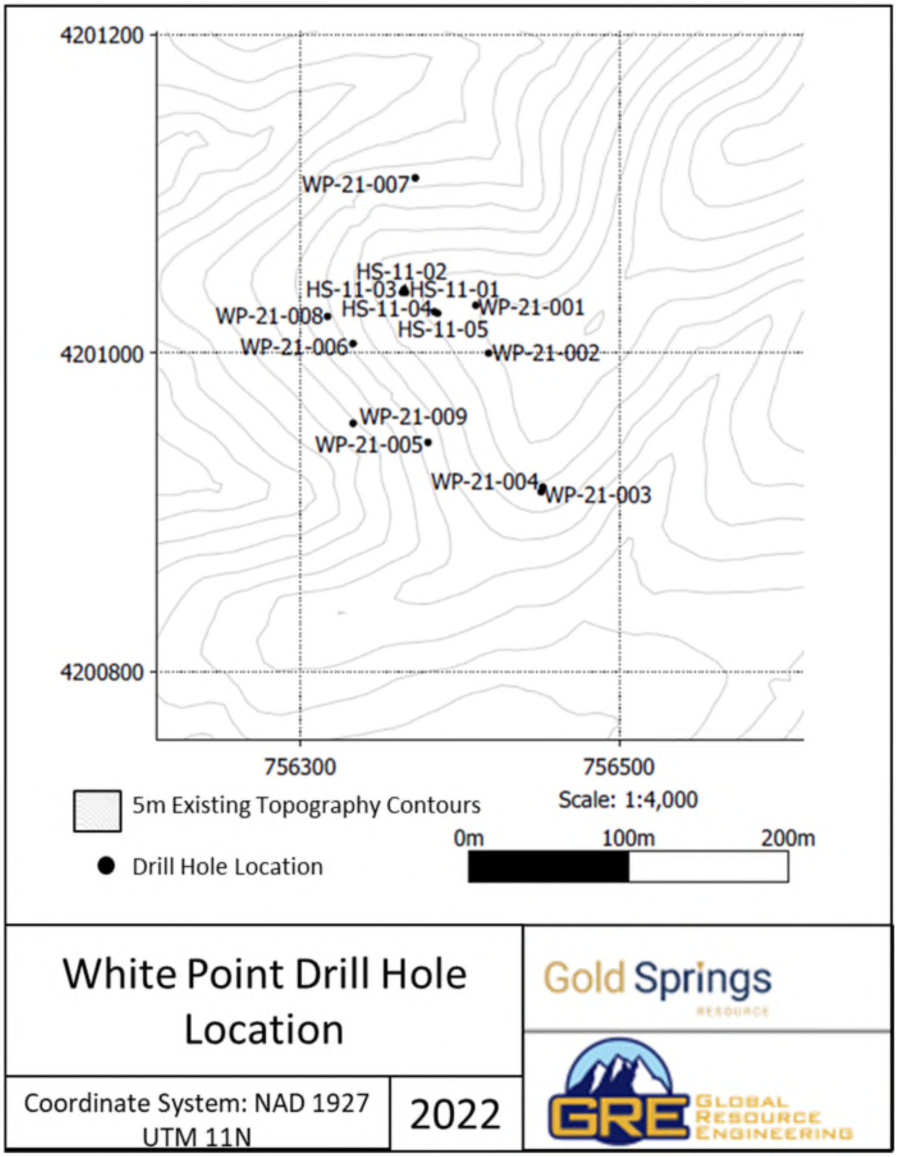


Table 14-22: Summary of the Drill Hole Database for White Point

Years	Number of Drill holes	Total Drilling (Meters)	Number of Gold Assays	Number of Silver Assays
2006	-	-	-	-
2010	-	-	-	-
2011	5	429	234	232
2012	-	-	-	-
2013	-	-	-	-
2014	-	-	-	-
2015	-	-	-	-
2016	-	-	-	-
2017	-	-	-	-
2021	9	1,612	1,058	1,057
Total	**14**	**2,041**	**1,292**	**1,289**

14.6.4 High-Grade Capping

Very high-grade assay values can, if they are outliers, bias grade estimation. Statistical methods for grade estimation, however, are relatively insensitive to a low number of very high values. To determine if grade capping is necessary, GRE produced cumulative frequency plots of the data for each deposit. If the cumulative frequency plots form a relatively straight line, capping is unnecessary; but if there is a break in the upper end, that is usually an indication that grade capping should be performed.

14.6.4.1 Gold

Figure 14-43 shows a histogram of the White Point gold assay data and Figure 14-44 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the White Point gold data forms a log-normal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. After reviewing the sample distribution, gold grades were not capped.

Figure 14-43: Histogram of White Point Gold Assay Data > 5ppb

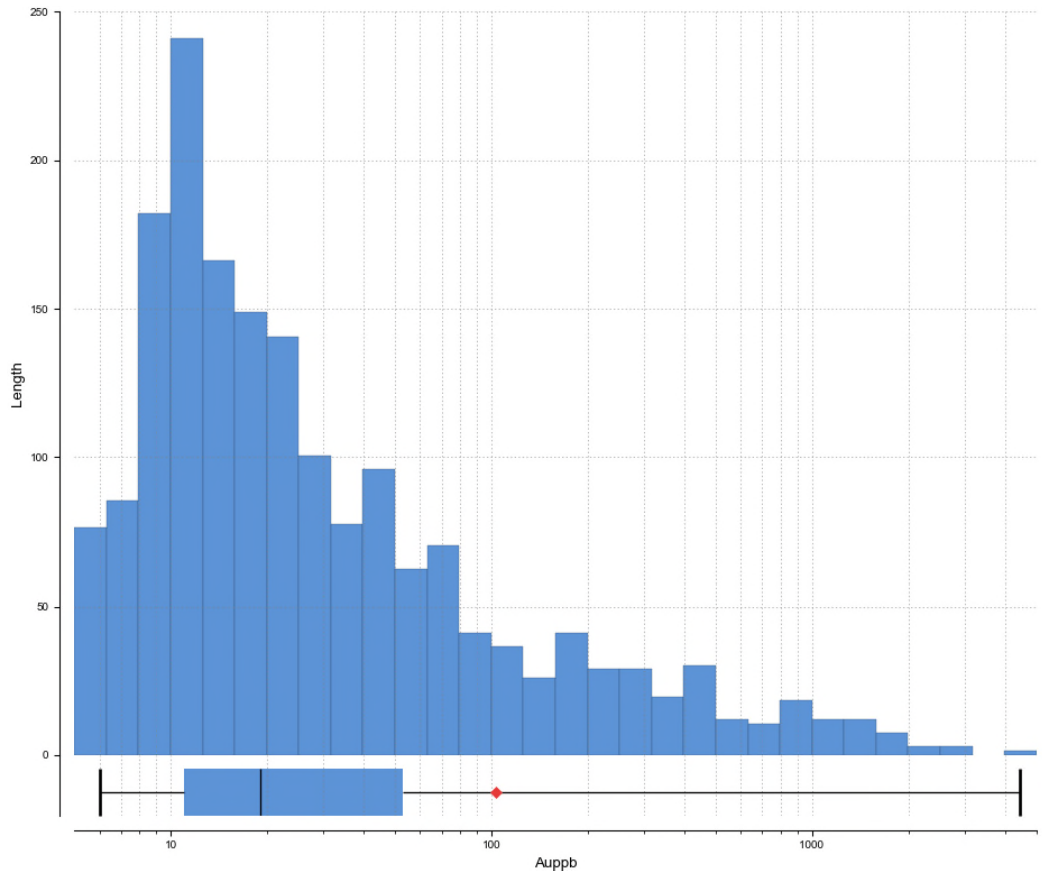
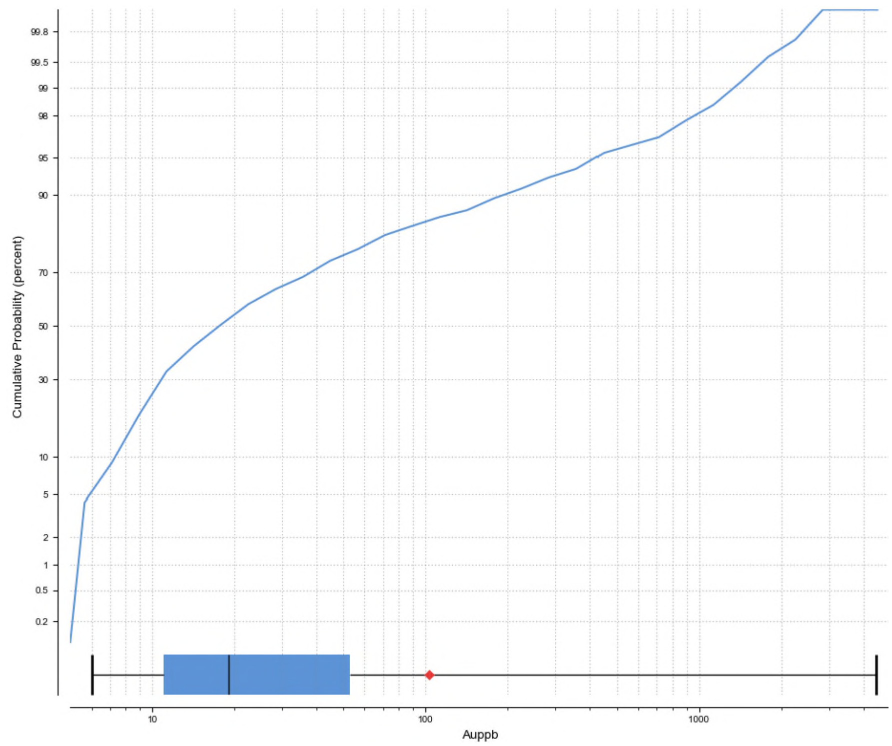


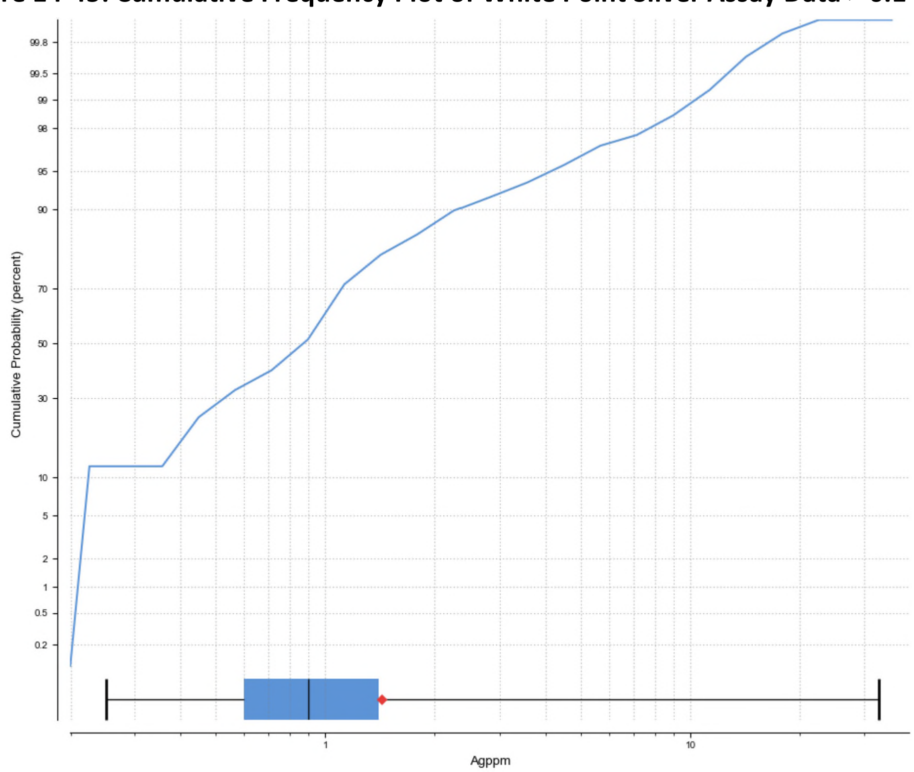
Figure 14-44: Cumulative Frequency Plot of White Point Gold Assay Data > 5 ppb



14.6.4.2 Silver

The silver assay data has very few high values; therefore, the author recommends no grade capping for silver. A silver cumulative frequency plot, from the White Point resource area, is provided in Figure 14-45.

Figure 14-45: Cumulative Frequency Plot of White Point Silver Assay Data > 0.1 ppm



14.6.5 Compositing

Compositing sample assay intervals to larger intervals is typically required to accurately model open pit minable deposits and is viewed by the geostatistical community as one of the first steps required to perform a geostatistical Mineral Resource Estimate.

The Gold Springs assaying was performed almost exclusively using 1.52-meter-long sample intervals and assayed using a 30-gram fire assay. This small sample will have higher variability (higher and lower grade) than a larger open pit minable volume due to the size of the mining equipment and its ability to selectively mine a discrete volume.

The White Point data was composited into 4.57-meter (15-foot) lengths. The change of support, or a correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. As shown in Table 14-23, the spread and variability of each metal are reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-23: Sample and Composite Summary Statistics in White Point High-Grade Area

	Au (ppb)		Ag (ppm)	
Statistics	Uncomposited	Composited	Uncomposited	Composited
Count	641	215	641	215
Length	976.78	979.62	976.78	979.62
Mean	125.20	125.27	1.76	1.76
SD	319.34	292.04	2.76	2.35
CV	2.55	2.33	1.56	1.34
Variance	101,975.51	85,288.94	7.60	5.53
Minimum	2.50	2.50	0.25	0.25
Q1	9.00	10.71	0.60	0.59
Q2	22.00	27.48	0.90	0.97
Q3	70.00	93.92	1.70	1.70
Maximum	2,940.00	2,566.32	33.00	16.70

14.6.6 Variography

The GRE QP completed variography on the composite values using Leapfrog® Edge software. The analysis was used to determine the size and orientation of the search ellipsoid for the ID2.5 grade estimate. First, experimental correlograms were examined in all azimuth directions in increments of 30 degrees from 0 to 330 and dip increments of 15 degrees from 0 to 90. Afterward, the direction with the greatest continuity was further analyzed at whole number increments and the ellipse orientation was established. Distances were set from the correlogram pairs for the 3 axes.

The range for each variogram was found using a global variogram. The nugget was determined by examining the downhole variograms and determining where the short-range trend crossed the y-axis.

Figure 14-46 and Figure 14-47 show the correlograms for gold and silver at White Point, respectively. The resulting parameters are shown in Table 14-24.

Table 14-24: Open Pit Variogram Parameters – White Point

Target	Sub-Domain	Dip	Dip Azimuth	Pitch	Major Axis	Semi-Major Axis	Minor Axis
White Point	Host Rock	75	125	155	75	125	155
	High-grade zone	75	125	155	75	125	155

Figure 14-46: Directional Correlograms for Major, Semi-Major, and Minor Axes for Gold at White Point

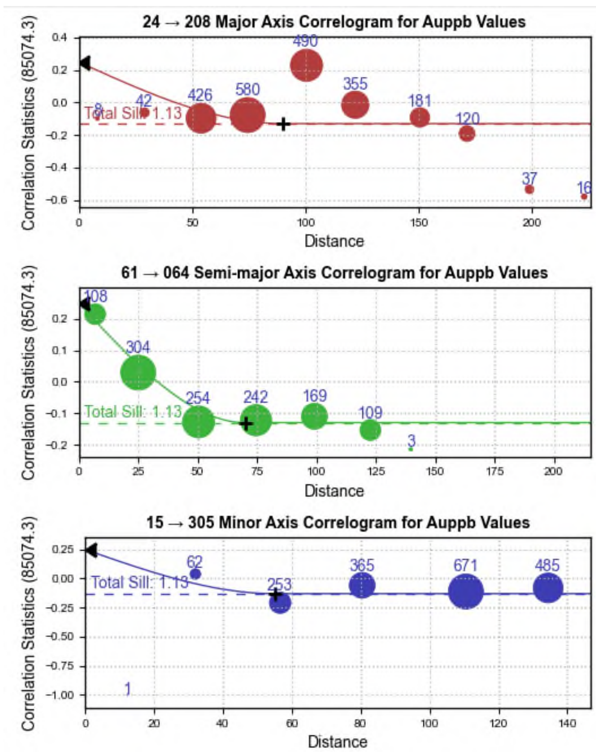
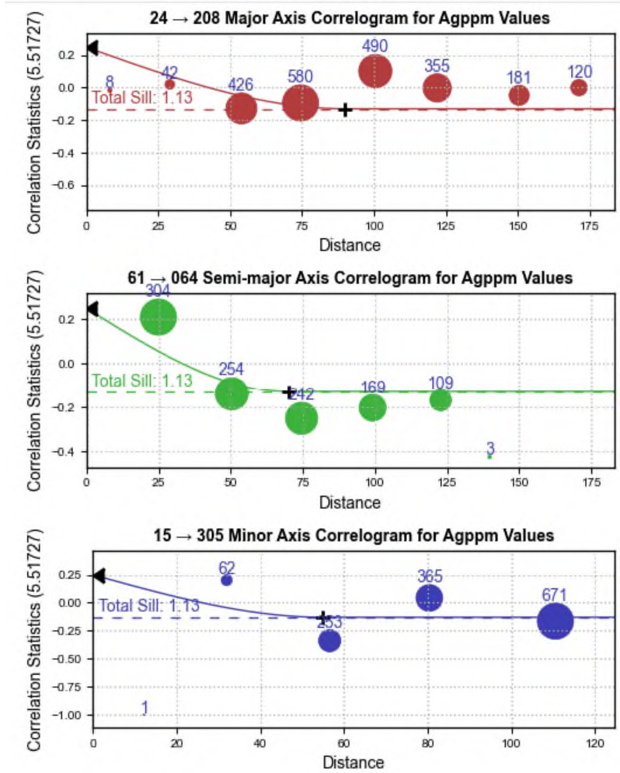


Figure 14-47: Directional Correlograms for Major, Semi-Major, and Minor Axes for Silver at White Point



14.6.7 Grade Modelling

Using Leapfrog, the GRE QP modeled gold and silver grades into the block model using ID2.5 and OK interpolators. The search parameters are identified in Table 14-25.

Table 14-25: ID2.5 Search Parameters – White Point

Target	Pass	Area	Length			Direction			Max Samples	Min Samples	Max samples per hole
			Major	Semi-Major	Minor	Dip	Dip Azimuth	Pitch			
White Point	Pass 1	Host Rock	90	70	55	75	125	155	15	4	3
		High-grade zone	90	70	55	75	125	155	15	4	3
	Pass 2	High-grade zone	180	140	110	75	125	155	15	1	-

For each estimate, the GRE QP first estimated the blocks only within the high-grade zone, grams of gold and silver contained were calculated from the modeled grades using the block specific gravity, followed by a second pass in the high-grade zone. Then the estimation was done in the host rock and rhyolite.

The GRE QP chose the ID2.5 method with 2 holes required as the preferred method because it had better local variability that more closely fit the data.

14.6.8 Model Validation

Validation of the estimated block grades for Gold Springs was completed for each of the targets. The resource block model estimate was validated by:

- Completing a series of visual inspections by comparisons of gold assay and composite grades to estimated block values across the deposit in both horizontal and vertical sections.
- Statistical comparison of parameters such as means, quantiles, and variance between 15-foot composites, ID2.5, and OK estimators to ensure that the grade estimations are representative of the composites they are based on.
- Comparing average composite sample values with average estimated block grades along east, north, and elevation orientations using swath grade trend plots.

14.6.8.1 Visual Inspection

The block models were examined in plan and section views to compare to drill hole locations and grades. Plan views and section views for each of the targets are shown in Figure 14-48 and Figure 14-49. Comparison of the model grade from the assays did not reveal any major discrepancies.

Figure 14-48: White Point Visual Comparison Composite to Block Model Grade Plan View

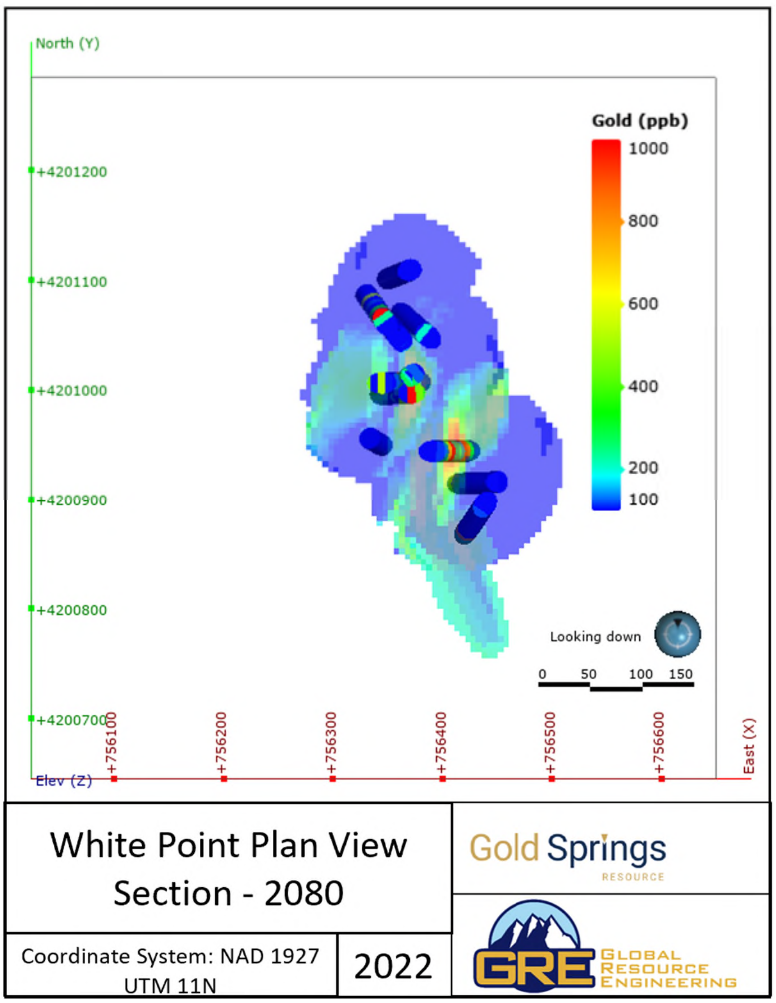
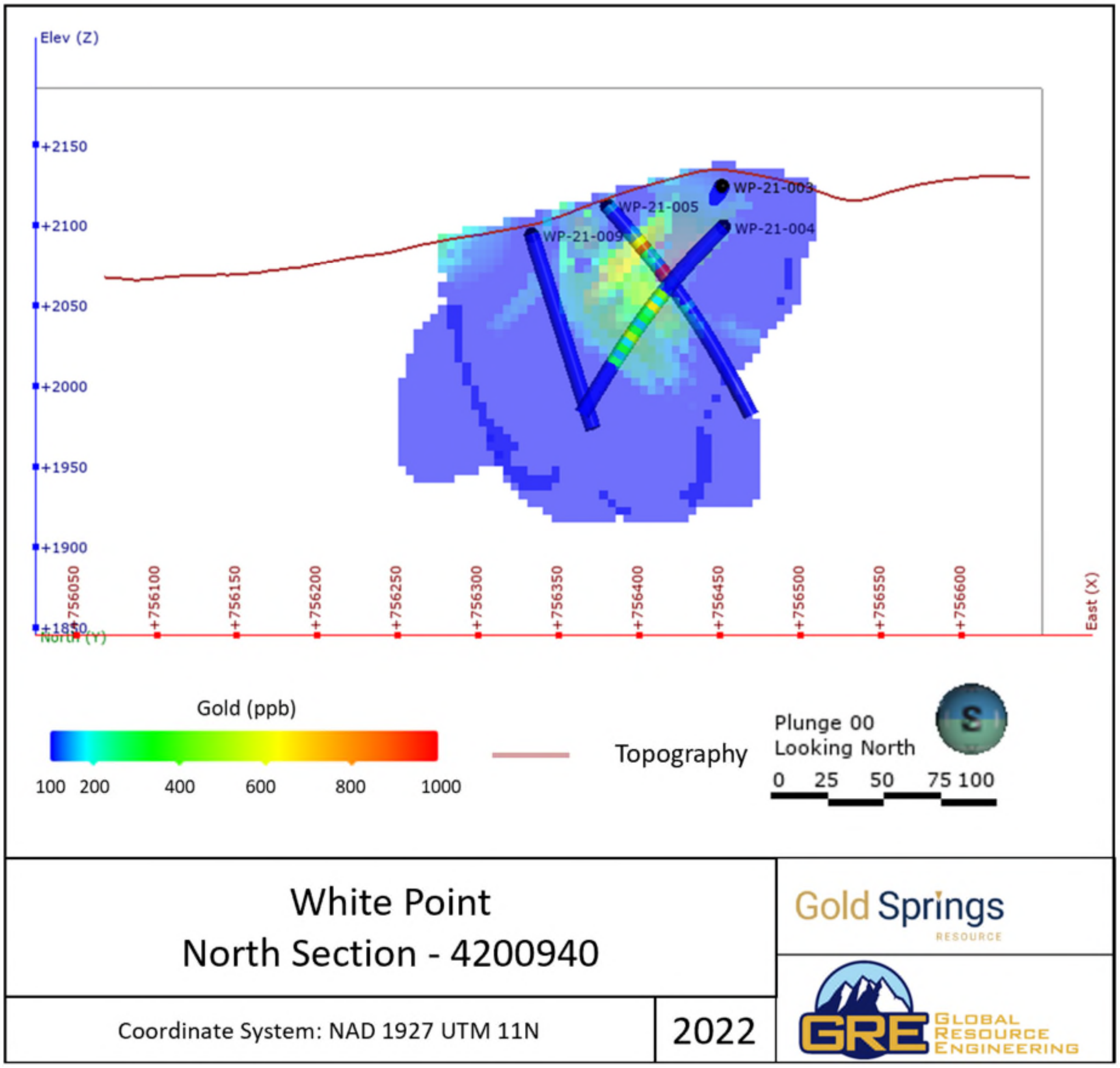


Figure 14-49: White Point Section Composites and Block Model Cross Section

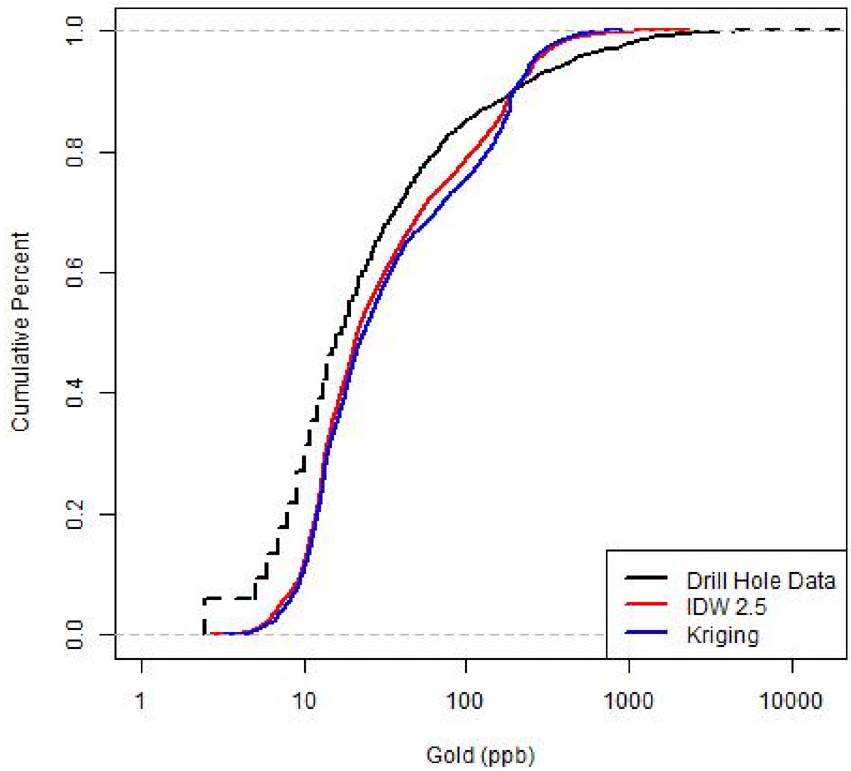


14.6.8.2 Statistical Comparison

To ensure that the grade estimations are representative of the composites they are based on and validate the resource estimation results, the block model grade estimation statistics were analyzed.

Figure 14-50 show the cumulative frequency plots of the block model grades for each of the two modeling methods and also show the cumulative frequency plot of the drill hole composite data for White Point.

Figure 14-50: White Point Cumulative Frequency Plot Comparison for the Two Modeling Methods

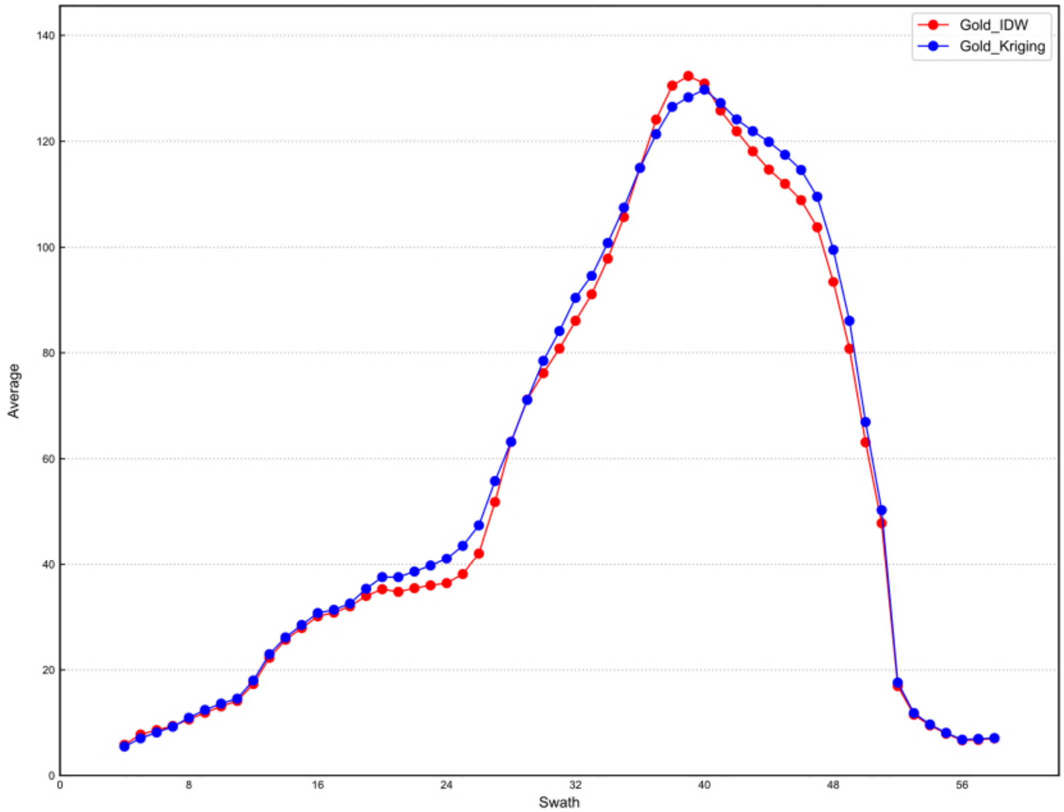


The results indicate that the ordinary kriging method does not capture the high value areas as well as the ID2.5 method, but both methods produce similar average grades.

14.6.8.3 Swath Plots

The GRE QP validated the modeling results by comparing the results of each modeling method and by generating swath plots. A swath plot is a sectional slice through the block model that shows the average grade for the blocks in the swath. Figure 14-51 show the swath plots for gold in White Point.

Figure 14-51: Swath Plot for Gold in White Point



14.6.9 Resource Catgories

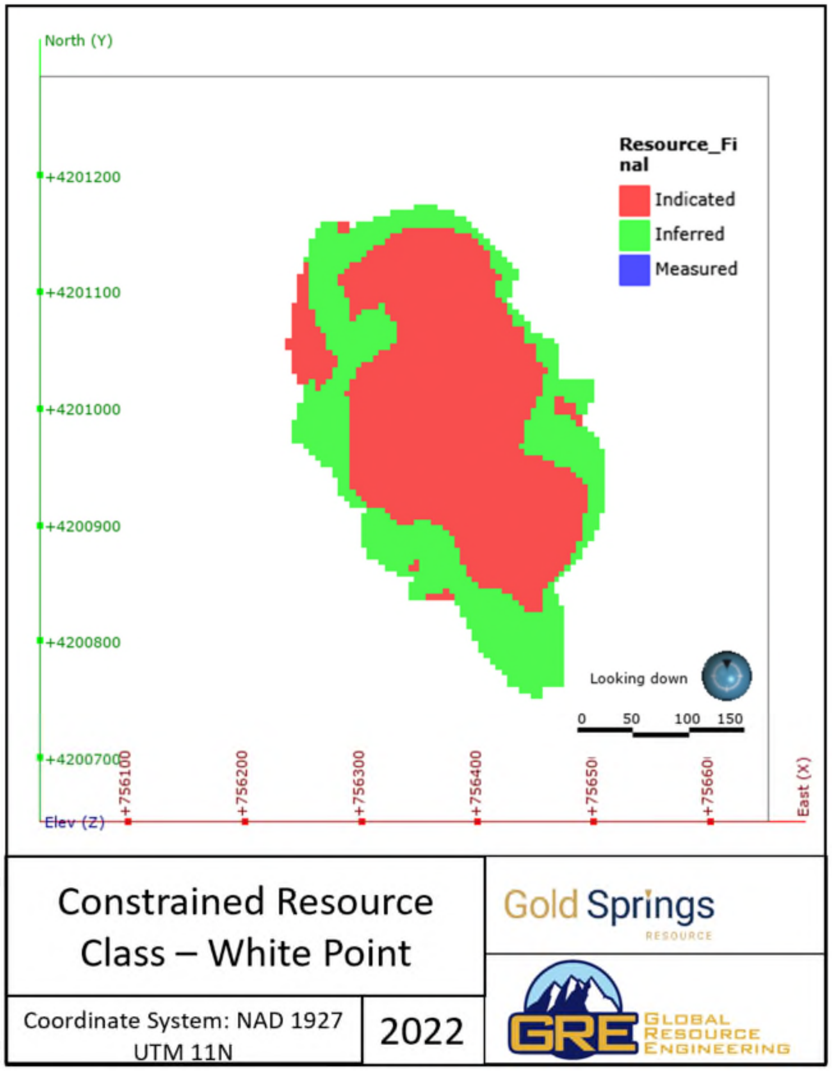
Mineral resource classification involved a two-step process using minimum distances and minimum numbers of samples to define resource classification initially before applying a numeric indicator model to define a more continuous and reasonable resource classification. In the first step, these distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 metres from the drill holes
- Indicated: average distance between 25 and 50 metres from the drill holes
- Inferred: average distance between 50 and 100 metres from the drill holes

In the second step, a continuous solid was creted using the resource classification from step 1. The solid was created using the numerical model in Leapfrog, where an isotropic search was used along with an interpolant distance of 2000, which was based on the average continuity of grade seen in the deposit.

No numeric indicator model was constructed for the inferred resource class, rather it was defined as any block with a calculated gold grade that did not fall within the measured or indicated numeric indicator domains that had a calculated gold grade. A plan view of the estimated resource classes is shown in Figure 14-52.

Figure 14-52: Constrained Resource Class for White Point



14.7 Grey Eagle

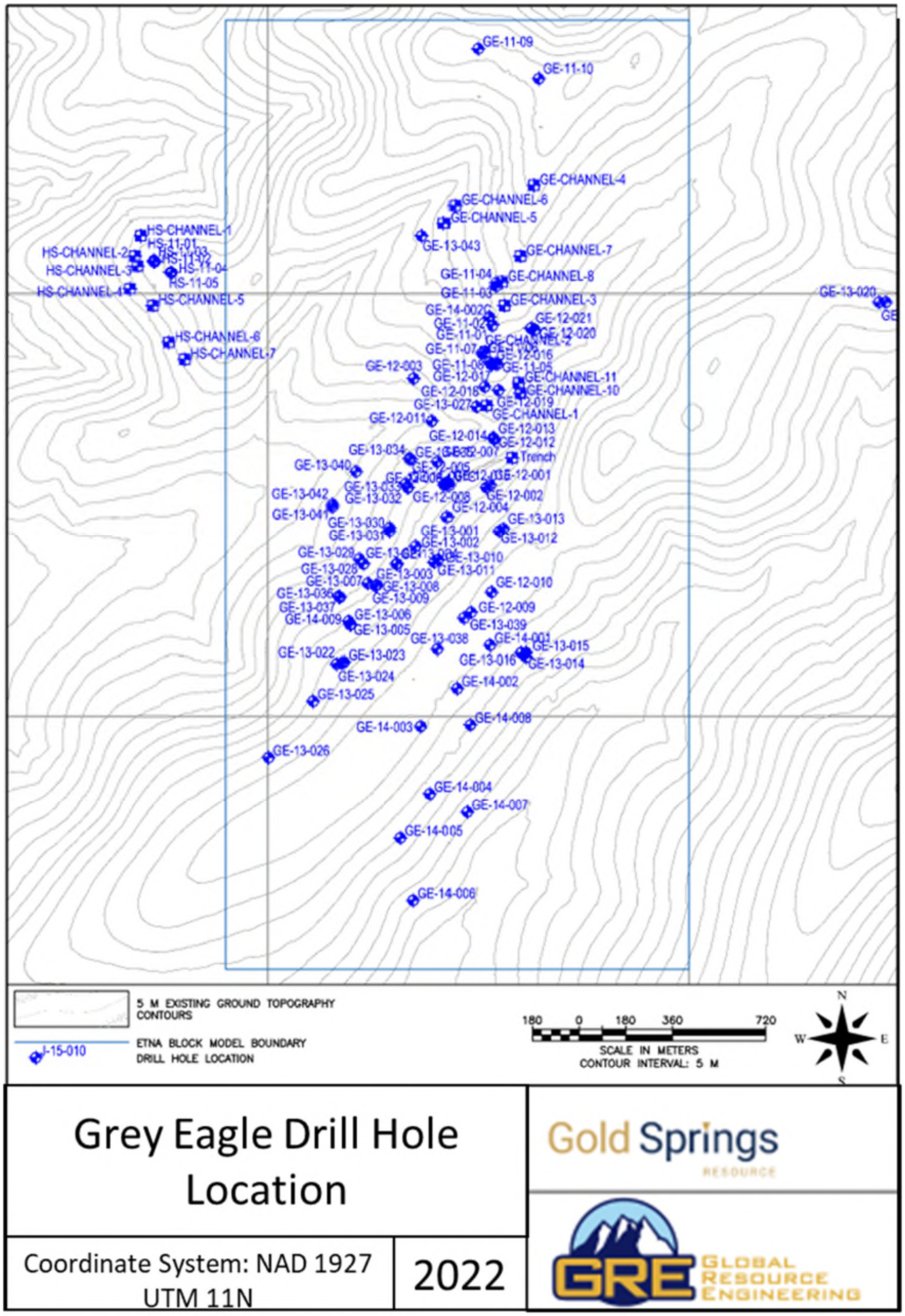
The Grey Eagle resource estimate was completed in 2015 (GRE, 2015) and has not been updated for this report. The information presented here was taken from the 2015 PEA.

The Grey Eagle block model extents and drill hole locations are shown on Figure 14-53. The Grey Eagle block model attributes are listed in Table 14-26.

Table 14-26: Grey Eagle Block Model Attributes

	X	Y	Z
Lower Left Coordinate	756,450	4,200,200	2,200
Column/Row/Lelve size (m)	5	5	5
Number of Columns/rows/levels	110	225	70

Figure 14-53: Drill Hole Location – Grey Eagle



14.7.1 Drill Hole Sample Database

Grey Eagle data provided by TMI, and verified by Kurt Katsura, included drill hole data for 85 drill holes and 10 trenches, collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. Topography was derived from 1-meter LIDAR data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the Grey Eagle area total 12,290 meters, and the channels total 110.83 meters. The database includes nine RC and two diamond drill holes completed at Grey Eagle in 2014 totaling 1,702.61 meters. The Grey Eagle drill holes are up to 262 meters deep, and all but four (GE-13-017 through GE-13-020) are within the block model limits. Recent drill hole collar locations were surveyed by Platt & Platt Inc., professional surveyors, using Trimble surveying instrumentation. Historic drill hole collar locations were surveyed in a similar manner.

14.7.2 Methodology

The 2014 Mineral Resource Estimate and geostatistical study was performed using the Aranz Geo Ltd. Leapfrog® and Techbase Intl.® software packages. GRE created wireframe solids of the lithologies using Leapfrog, then imported the domain codes into Techbase for the resource estimation.

Using Techbase, GRE modeled gold and silver grades into the Grey Eagle block model using Inverse Distance cubed (ID3), Ordinary Kriging (OK), and Nearest Neighbor (NN) interpolators.

14.7.3 High Grade Capping

Figure 14-54 shows a histogram of the Grey Eagle gold assay data, and Figure 14-55 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the Grey Eagle gold data forms a log-normal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. There are five gold sample values greater than 10,000 ppb. The high assay values are believed to be a valid part of the data set. The impact of including them uncut in the composites is negligible to the overall resource estimate.

Figure 14-54: Histogram of Grey Eagle Gold Assay Data > 50 ppb

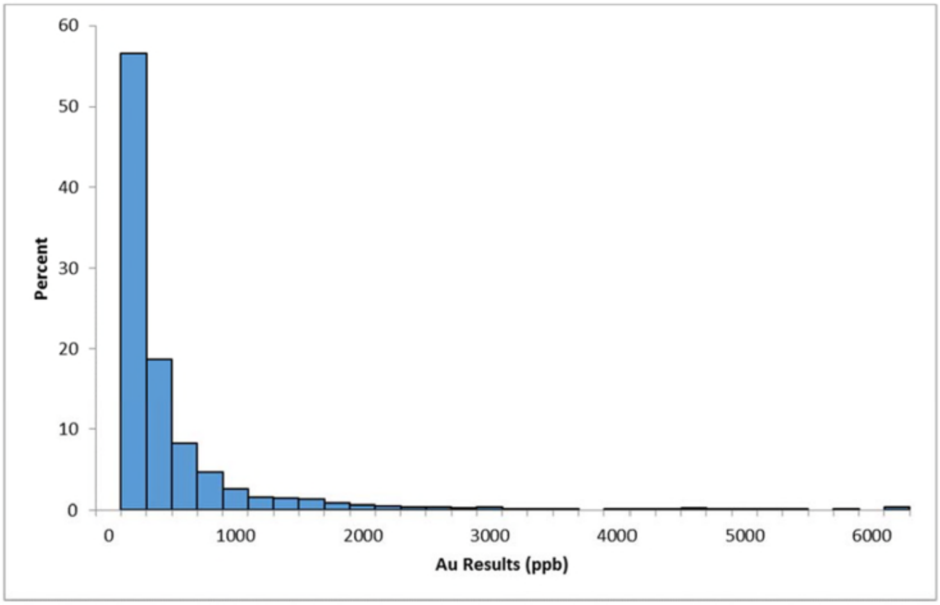


Figure 14-55: Cumulative Frequency Plot of Grey Eagle Gold Assay Data > 5 ppb

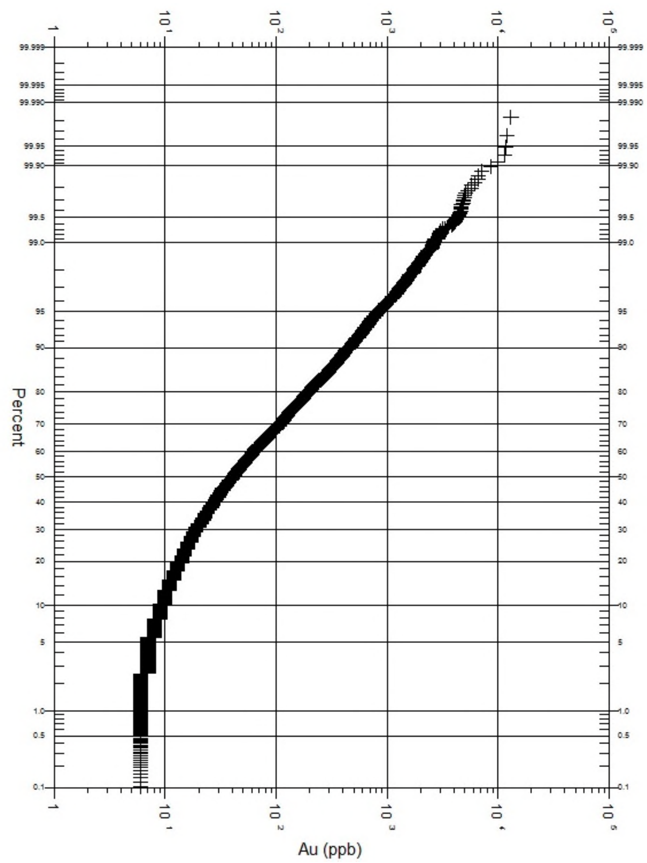
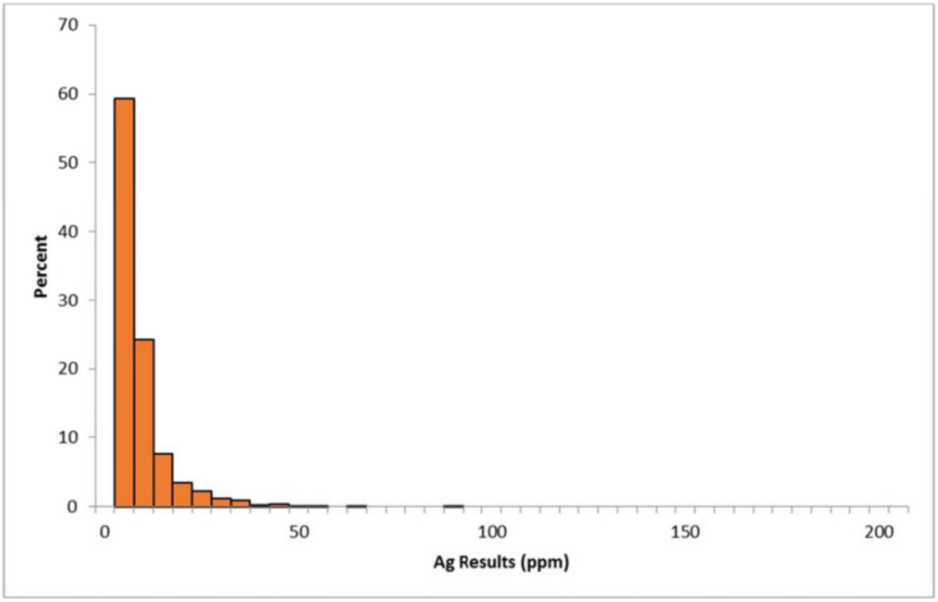


Figure 14-56 shows a histogram of the Grey Eagle silver assay data. These charts indicate that the Grey Eagle silver data forms a log-normal distribution with very few outliers. There are no silver sample values greater than 200 ppm. All assay values are believed to be a valid part of the data set.

Figure 14-56: Histogram of Grey Eagle Silver Assay Data > 2 ppm



14.7.4 Compositing

The Grey Eagle data was composited into 4.57-meter (15-foot) lengths. The change of support, or correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from a small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. Table 14-27 compares the sample and composite statistics. As shown in the table, the spread and variability of each metal is reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-27: Sample and Composite Summary Statistics – Grey Eagle

Statistics	Sample Values		4.57 Meter Composite Interval	
	Au (ppb)	Ag (ppm)	Au (ppb)	Ag (ppm)
Number	7,586	7,586	2,572	2,515
Mean	157.40	2.43	16.30	2.51
Standard Deviation	567.49	4.62	456.59	4.23
Variance	322,047.21	21.30	208,474.43	17.85
Maximum	15,000	89.2	7,838	59.63
Minimum	0	0	0	0
Range	15,000	89.2	7,838	59.63
Coefficient of Variance	360.54	190.06	280.16	168.20

Au – Gold, Ag – Silver, ppb – parts per billion, ppm – parts per million

14.7.5 Variography

Sill values were evaluated using global omni-directional variograms, and the nugget was evaluated using down-hole variograms, which best represent the inherent short-scale variability within the mineralized areas. Ellipsoid axis ratios were based upon variograms created for both of the angles normal to the primary axis. The model results were then used for the search and variography parameters for modeling the gold and silver grades into the block model. The primary axis length search parameter was set at the maximum of the modeled range or 150 meters.

A summary of the search parameters is presented in Table 14-28.

Table 14-28: Grey Eagle Model Search Parameters

Deposit	Length			Dip		Azimuth
	U	V	W	U	V	
Grey Eagle	150	150	45	40	30	300

14.7.6 Specific Gravity

The procedure for determining specific gravity is described in Section 14.2.1. In the 2015 Resource Estimate and PEA, the Grey Eagle resource areas were coded with mineralization types, and specific gravities were calculated for each mineralization type.

14.7.7 Mineralized Zone Block Model

Because the SGs for the deposits were broken down by mineralization types and lithologies, it was necessary to model the mineralization types and lithologies into the block model so that each block could be assigned a specific gravity value. Mineralization types and lithologies were estimated from the composite data into the block model using an inverse distance cubed (ID3) algorithm and the search parameters and anisotropies. Mineralization types and lithologies representing tuff were not modeled into the block models; instead, a tuff bounding surface contoured from drill hole intercepts was used to delineate all tuff blocks. The ID3 model generated more geologically reasonable zones for the non-tuff mineralization types and lithologies throughout the block model and was therefore used.

After modeling the mineralization types and lithologies into the block models, each block was assigned the specific gravity associated with the mineralization type and lithology present within it. For blocks above the tuff bounding surface, the appropriate tuff SG was applied.

Block model cross-sections showing modeled mineralization types and lithologies were determined to not adequately represent the geology of the deposits, particularly within the mineralized areas, so the ID3 modeled mineralization types and lithologies were not used directly to model gold and silver grades into the block model. Instead, an intermediate step of defining a “mineralization zone” was undertaken, as described below.

Mineralization types, lithologies, and gold and silver grades from the assay data were loaded into LeapFrog™ software for 3-D contouring of the drill hole data. Figure 14-57 show 3-D representation of the Grey Eagle drill holes, with mineralization types shown using various colors. GRE and TMI selected intervals on each drill hole that were primarily vein or stockwork (mineralization types GE-1, GE-2, and

GE-3) and then used LeapFrog to model bounding surfaces at the tops and bottoms of those intervals. A 3-D representation of the results are shown in Figure 14-58. The area between the two bounding surfaces creates a solid that represents the Mineralization Zone for each deposit.

Parameters for the two bounding surfaces were exported to Maptek Vulcan™ software, where solids were created and all of the block model blocks within the two surfaces were tagged as being within the Mineralization Zone and all those outside the surfaces were tagged as being outside the Mineralization Zone. The tagged block models were exported to Techbase for use in the gold and silver grade estimation.

Figure 14-57: 3-D Representation of the Grey Eagle Drill Holes with Mineralization Types

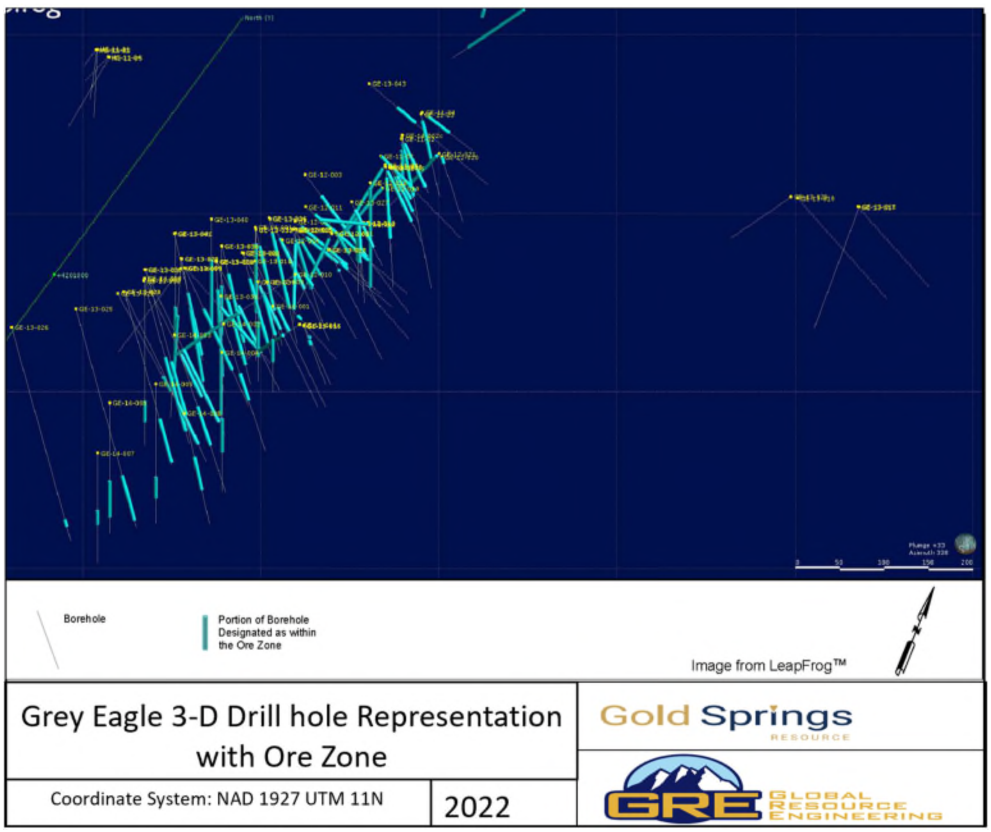
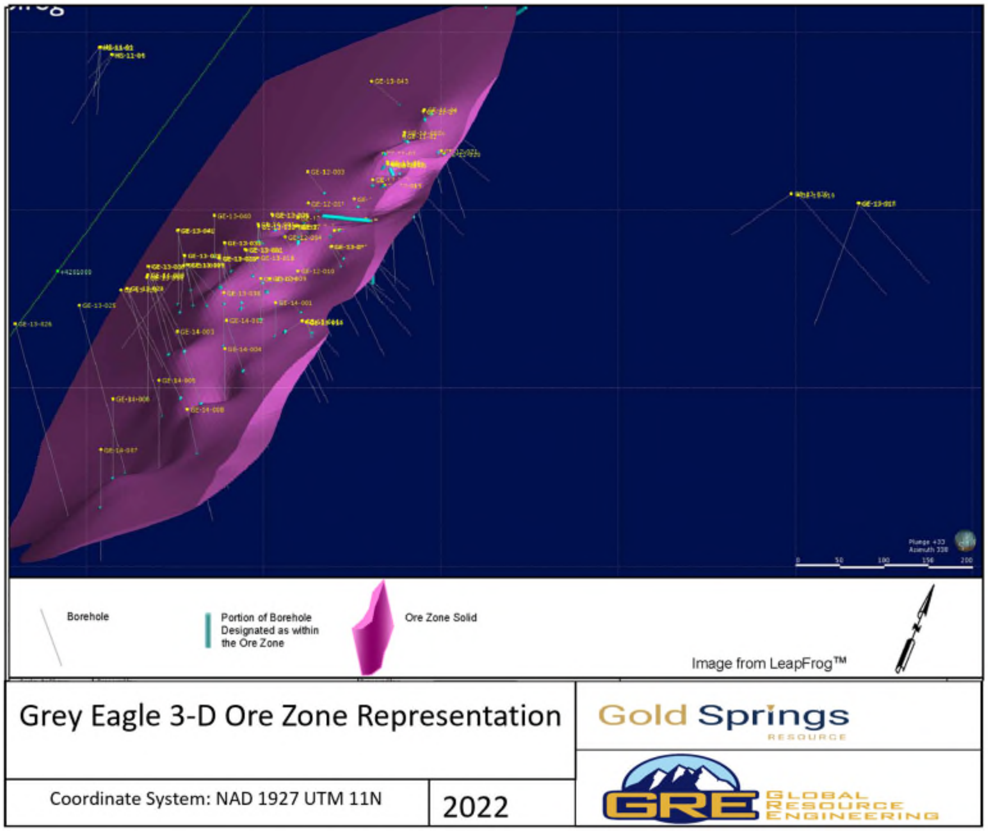


Figure 14-58: 3-D Representation of the Mineralization Zone Modeling



14.7.8 Gold and Silver Resource Modeling

GRE used four methods to estimate grade for both gold and silver within the Grey Eagle block model to compare and validate the estimate. GRE chose the ID3 method as the preferred method because it had better local variability that more closely fit the data. The four estimation methods use were:

- Kriging with one drill hole required: Kriging was used to estimate the gold and silver grade in all model blocks of the Grey Eagle mineralized body. Parameters for the kriging include the nugget, sill, and range, as well as the anisotropy of the ellipsoid defining the spatial variability. For Grey Eagle, these were determined by variogram analysis and by considering the expected variation based on the site geology. For each block in the block model, the estimate required a minimum of two and a maximum of 10 samples within the search ellipsoid. The search parameters and anisotropy are identified in Table 14-28.
- Kriging with a minimum of two drill holes required: The search parameters and anisotropy are identified in Table 14-28. For each block in the block model, the estimation required a minimum of five and a maximum of 10 samples, with a maximum of four samples per drill hole, within the search ellipsoid.
- Inverse distance cubed (ID3) with a minimum of one drill hole required: The inverse distance cubed method was used to estimate gold and silver grade in all model blocks of the Grey Eagle mineralized body. The inverse distance cubed estimate required a minimum of two and a maximum of 10 samples within the search ellipsoid.

- Nearest neighbor with one drill hole required: Nearest neighbor estimates were performed for gold and silver in the Grey Eagle block model as a means of validating the other estimates. Within a specified search ellipsoid, each block in the block model was assigned the gold and silver grade of the sample nearest to the block centroid.

For each estimate, GRE first modeled the gold and silver grades of blocks within the Mineralization Zone solid, then modeled blocks outside the Mineralization Zone. Troy ounces of gold and silver contained were calculated from the modeled grades using the block specific gravity.

14.7.9 Resoure Categories

As part of the inverse distance cubed estimation, the average distance to composites was stored in the model. These distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 meters from the drill holes
- Indicated: average distance between 25 and 50 meters from the drill holes
- Inferred: average distance between 50 and 100 meters from the drill holes

Each block was tagged with a numeric code for the appropriate resource category: 1 for measured, 2 for indicated, and 3 for inferred.

14.7.10 Removal of Grade from Tuff

The Grey Eagle deposit is partially overlain by unmineralized ash flow tuff. Model blocks located below the ground surface and above the base of the tuff were tagged within the block model as being part of the tuff strata, and the gold and silver grade of tuff was set to zero.

14.8 Thor

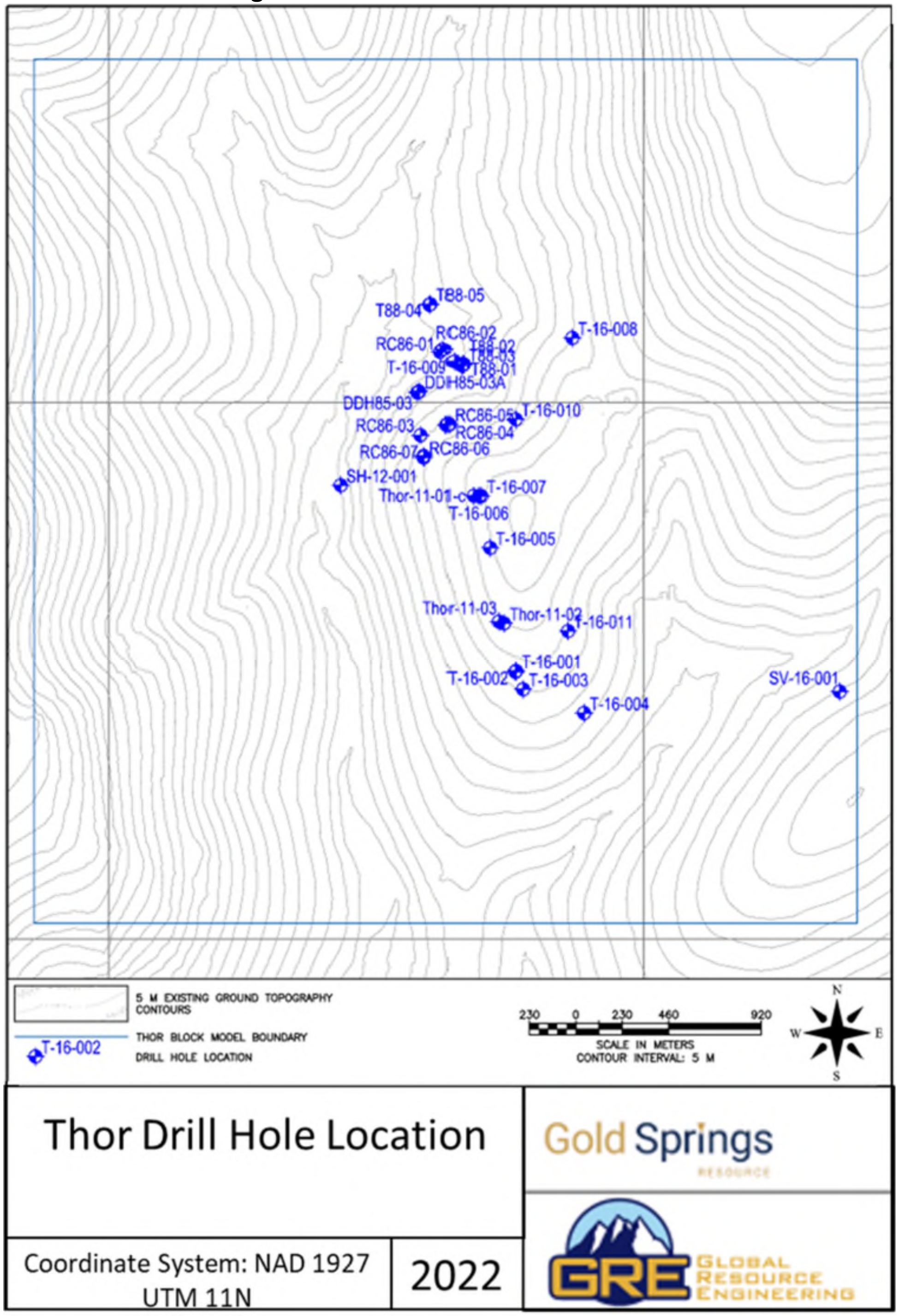
The Thor resource estimate was completed in 2017 (GRE, 2017a) and has not been updated for this report. The information presented here was taken from the 2017 Technical Report.

The Thor block model extents and drill hole locations are shown on Figure 14-59. The Thor block model attributes are listed in Table 14-29.

Table 14-29: Thor Block Model Attributes

	X	Y	Z
Lower Left Coordinate	758,930	4,198,015	1,640
Column/Row/Lelve size (m)	5	5	5
Number of Columns/rows/levels	154	161	108

Figure 14-59: Drill Hole Location – Thor



14.8.1 Drill Hole Sample Database

Thor data provided by TMI, and verified by Kurt Katsura, included drill hole data for 28 drill holes, collar coordinates, drill hole direction (azimuth and dip), lithology, and sampling and assay data. Topography was derived from 1-meter LIDAR data. The assay data included hole ID, gold in ppb, and silver in ppm.

The drill holes in the Thor area total 2,890.03 metres. The database includes 14 RC drill holes completed in 2016 totaling 2,256 metres. Recent drill hole collar locations were surveyed by Platt & Platt Inc., professional surveyors, using Trimble surveying instrumentation. Historic drill hole collar locations were surveyed in a similar manner. Downhole surveys were conducted on all of the 2016 Thor drill holes.

There are 1,233 gold and silver assay data values in the Thor database.

14.8.2 Methodology

The 2017 Mineral Resource Estimate and geostatistical study detailed in this report was performed using the Aranz Geo Ltd. Leapfrog® and Techbase Intl.® software packages for the Thor resource are uses the Leapfrog and MicroModel® software packages. Differences in plots and model outputs shown in this section are due to the use of difference software packages.

14.8.3 High Grade Capping

Figure 14-60 shows a histogram of the Thor gold assay data, and Figure 14-61 displays the cumulative frequency plot of all gold samples above 5 ppb. These charts indicate that the Thor gold data forms a lognormal distribution with very few outliers. The data approximates a straight line, which is consistent with a log-normal distribution and a single population. There is one assay value above 215,000 ppb that does not fit the linear trend and is considered an outlier. Removing that value indicates a more realistic population maximum value of 20,000 ppb. Thus, the author recommends capping gold at a grade of 20,000 ppb for Thor. However, the impact of including the outlying value in the composites is negligible to the overall resource estimate.

Figure 14-60: Histogram of Thor Gold Assay Data > 5 ppb

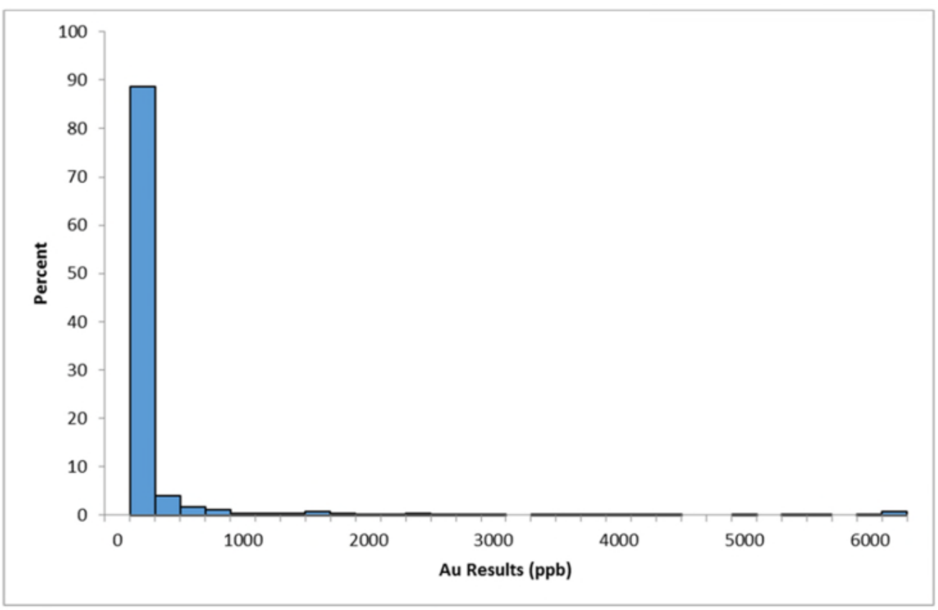
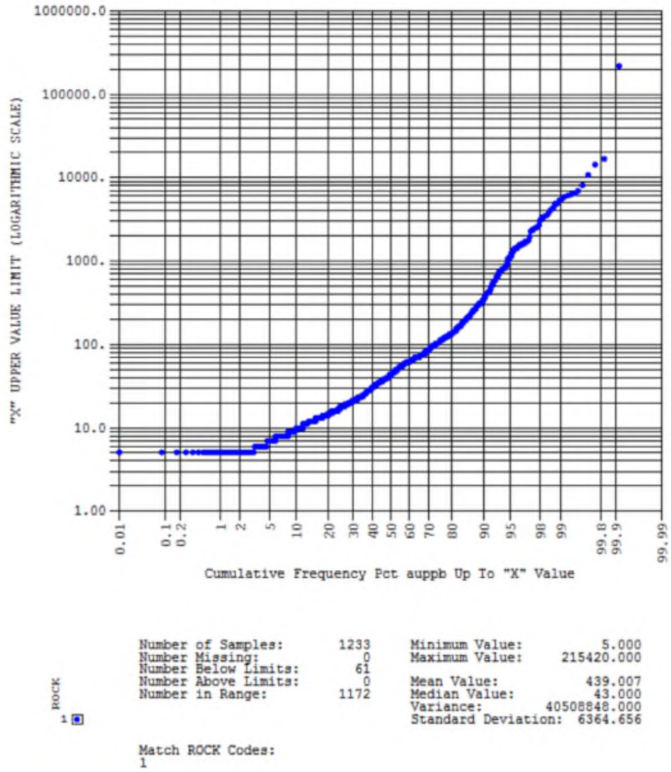
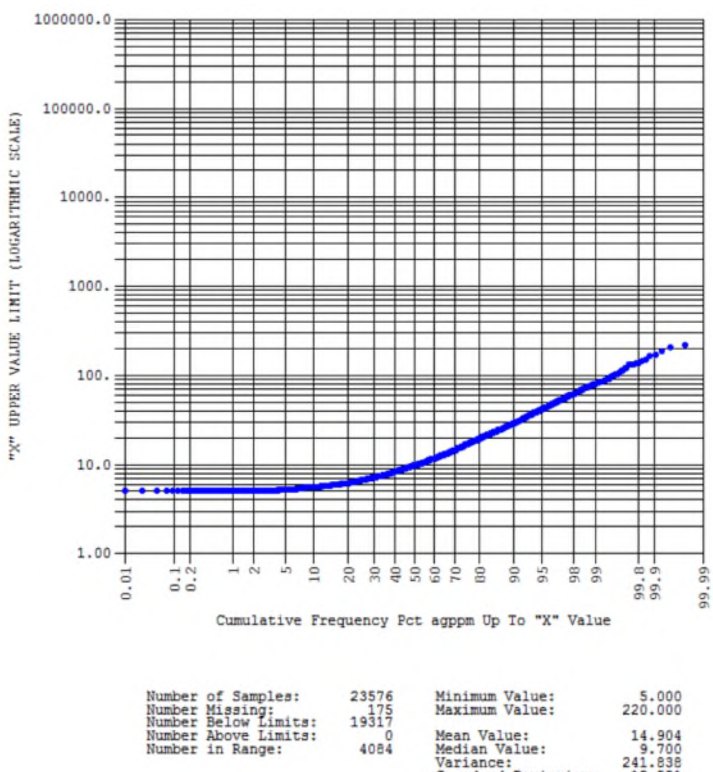


Figure 14-61: Cumulative Frequency Plot of Thor Gold Assay Data > 5 ppb



The silver assay data has very few high values; therefore, the author recommends no grade capping for silver. A silver cumulative frequency plot, from all three resource areas, is provided as Figure 14-62.

Figure 14-62: Cumulative Frequency Plot of Silver Assay Data > 2 ppm



14.8.4 Compositing

The Thor data was composited into 4.57-meter (15-foot) lengths. The change of support, or correction for volume variance, will affect the spread and symmetry of the distribution, but should not result in drastic changes to the mean value. When moving from a small sample size to a larger volume, a reduction in the spread and variability of the data set is expected. To verify an appropriate change from the sample data set to the composited values, a set of summary statistics was performed for the metals to be estimated. Table 14-30 compares the sample and composite statistics. As shown in the table, the spread and variability of each metal is reduced, with no significant change in the mean value, indicating that the 4.57-meter composite length is an appropriate selection.

Table 14-30: Sample and Composite Summary Statistics – Thor

Statistics	Sample Values		4.57 Meter Composite Interval	
	Au (ppb)	Ag (ppm)	Au (ppb)	Ag (ppm)
Number	1,233	1,233	423	423
Mean	258.82	4.47	211.20	3.72
Standard Deviation	1,130.03	15.48	611.04	9.82
Variance	1,277,080	239.54	373,369	96.44
Maximum	20,000	220	7,853.9	89.21
Minimum	0	0	0	0
Range	20,000	220	7,853.9	89.21
Coefficient of Variance	436.62	346.34	289.31	264.28

Au – Gold, Ag – Silver, ppb – parts per billion, ppm – parts per million

14.8.5 Variography

GRE completed variography on the composites values after capping was applied using Sage 2001 Software developed by Dr. Edward Isaaks. The analysis was used to determine the size and orientation of the search ellipsoid for the ID2.5 grade estimate. First, an omnidirectional analysis was performed on the entire data set to obtain the maximum search distance for the grade estimate. Afterwards, each area was analyzed separately to determine the orientation and relative length of the search ellipsoid axes using the maximum search distance. The omnidirectional analysis was performed using lag distance of 35 meters to provide a mixture of samples both down dip and along strike. The analysis indicates a maximum range of 100 metres.

A summary of the search parameters is presented in Table 14-31.

Table 14-31: Thor Model Search Parameters

Deposit	Length			Dip		Azimuth	Max. Samples	Min. Samples	Max. Samples per Hole
	U	V	W	U	V				
Thor	100	85	25	30	0	90	6	4	3

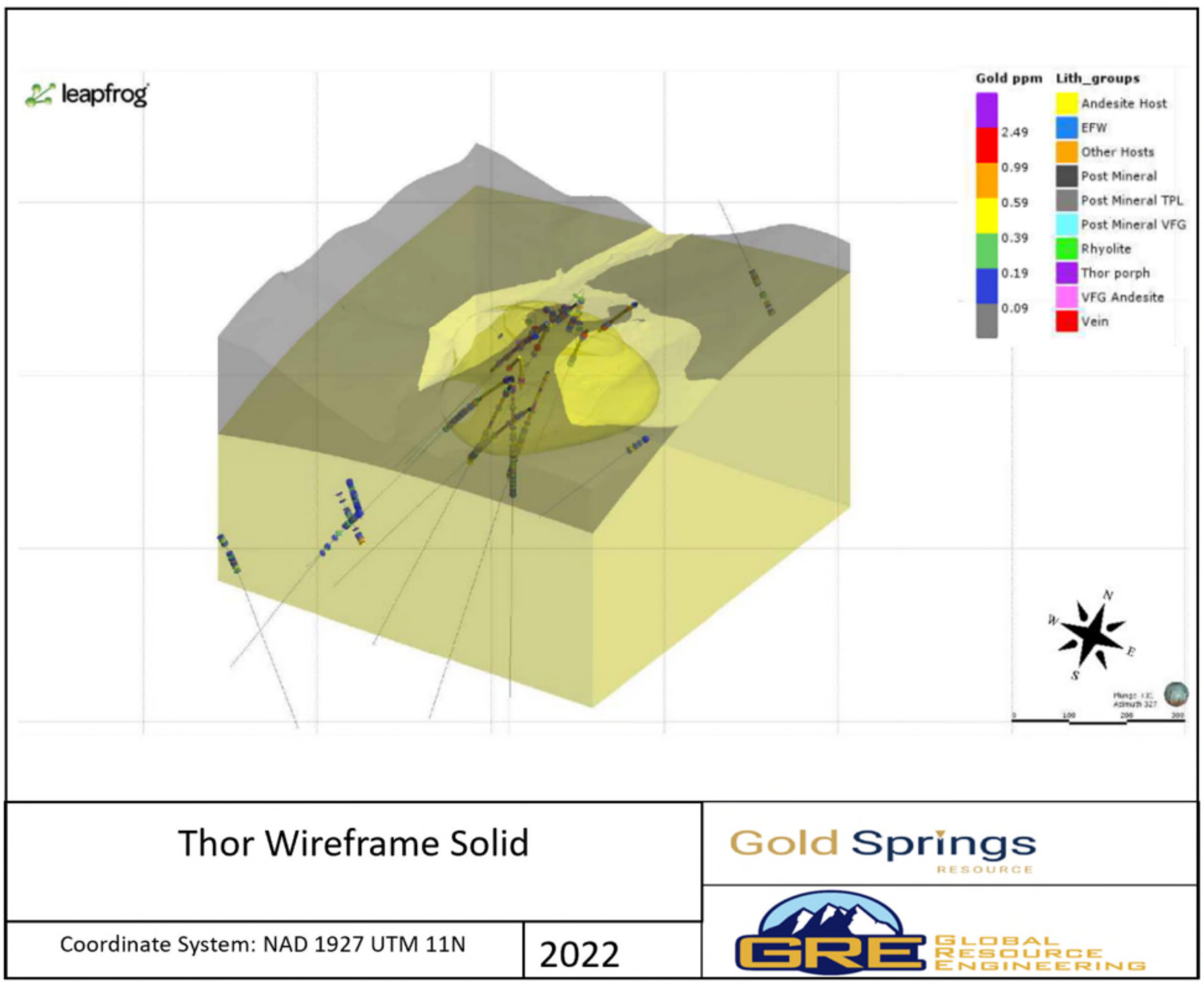
14.8.6 Specific Gravity

The procedure for determining specific gravity is described in Section 14.2.1. In the 2015 Resource Estimate and PEA, the Thor resource areas were coded with mineralization types, and specific gravities were calculated for each mineralization type.

14.8.7 Gold and Silver Resource Modeling

Thor contains the Andesite Host, Other Hosts, Vein, Thor Porphyry, and Post Mineral lithologic groups. The Post Mineral group overlies the area but has been completely eroded along the valley floors that run north-south through the model area, exposing the Andesite Host group at the surface. The Andesite Host group contains intermittent occurrences of the Vein and Other Hosts groups. The Thor Porphyry is contained within the Andesite host, has a north-south strike, and dips to the east around 20 degrees. The Thor Porphyry is generally devoid of mineralization, containing only sparse intercepts of mostly low grade gold values. GRE coded the block models into Mineralized Zones and Non-Mineralized Zones based on the wireframes created in the geologic models. An isometric view of the Thor wireframe solids created in Leapfrog is shown in Figure 14-63.

Figure 14-63: Wireframe Solid for the Thor



Using MicroModel, GRE modeled gold and silver grades into the Thor block model using ID2.5, OK, and NN interpolators. For each estimate, GRE first estimated the blocks only within the Mineralized Zone. Troy ounces of gold and silver contained were calculated from the modeled grades using the block specific gravity. GRE chose the ID2.5 method with 2 holes required as the preferred method because it had better local variability that more closely fit the data.

14.8.8 Resoure Categories

As part of the ID2.5 estimation, the average distance to composites was stored in the model. These distances were then used to establish the resource category, as follows:

- Measured: average distance less than 25 meters from the drill holes
- Indicated: average distance between 25 and 50 meters from the drill holes
- Inferred: average distance between 50 and 100 meters from the drill holes

Each block was tagged with a numeric code for the appropriate resource category: 1 for measured, 2 for indicated, and 3 for inferred.

14.9 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) defines a mineral resource as: “a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.” The mineral resources may be impacted by further infill and exploration drilling that may result in increase or decrease in future resource evaluations. The mineral resources may also be affected by subsequent assessment of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Mineral reserves can only be estimated based on the results of an economic evaluation as part of a Preliminary Feasibility Study or Feasibility Study. As a result, no mineral reserves have been estimated as part of this study. There is no certainty that all or any part of the mineral resources will be converted into a mineral reserve.

The requirement, “reasonable prospects for eventual economic extraction,” generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at a cutoff grade considering appropriate extraction scenarios and processing recoveries. To meet this requirement, Ms. Lane of GRE considered that major portions of the Granite Creek deposit are amenable for open pit extraction.

To determine the quantities of material offering “reasonable prospects for eventual economic extraction” by an open pit, Ms. Lane of GRE constructed open pit scenarios developed from the resource block model estimate using Whittle’s Lerchs-Grossman miner “Pit Optimizer” software. Reasonable mining assumptions were applied to evaluate the portions of the block model (Measured, Indicated, and Inferred blocks) that could be “reasonably expected” to be mined from an open pit. The optimization parameters presented in Table 14-32 were selected based on experience and the results of the 2020 PEA. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cutoff grade. Ms. Lane of GRE considersconsidered that the blocks located within the resulting conceptual pit envelope show "reasonable prospects for economic extraction" and can be reported as a mineral resource.

Table 14-32: Gold Springs Resource Parameters for Open Pit Optimization

Parameter	Items	Unit	Value
Costs	Mining Cost (waste/mineralized material)	$/tonne mined	1.5
	Cost Adjustment Factor (CAF) for Post Mineral material		0.5893*
	Merrill-Crowe Processing**	$/tonne mineralized material treated	3.94
Recovery	Gold – Mineralized material	%	73
	Gold – Post Mineral material	%	5
	Silver – Mineralized material	%	40
	Silver – Post Mineral material	%	5
Revenue	Gold price	$/oz	1,700
	Gold payable	%	98
	Silver price	$/oz	21.50
	Silver payable	%	95
Royalty	Total royalty (simplified)	%	0
Slope angles	Slope Angle	degrees	45
Limits	Merrill-Crowe	tonnes per year	4,560,000

* The Cost Adjustment Factor for Post-Mineral material was calculated from costs in the 2020 PEA.

** Costs include $0.65/tonne for admin costs

Due to the large ratio of deposit size to block size and method of grade estimation, the grade model is fully diluted, and the resource is 100% recoverable as estimated.

The Gold Springs open pit mineral resource constrained by a Whittle pit shell that corresponds to a gold price of $1,800 per troy ounce is shown in Table 14-33. The reader is cautioned that the results from the pit optimization are used solely for testing the "reasonable prospects for eventual economic extraction" by an open pit and do not represent an attempt to estimate mineral reserves. There are presently no mineral reserves on the project.

The results at a gold grade cutoff of 0.25 g/t are considered the "base case" for each target area except Thor, for which the results at a gold grade cutoff of 0.20 g/t are considered the "base case." These "base case" mineral resources are bolded Table 14-33.

Table 14-33: June 13, 2022 Updated Mineral Resource– $1800 Au Pit Constrained

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
Charlie Ross	Measured	0.1	0	0	0		0	0	
		0.15	0	0	0		0	0	
		0.2	0	0	0		0	0	
		0.25	**0**	**0**	**0**		**0**	**0**	
		0.3	0	0	0		0	0	

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
	Indicated	0.1	11,922	123	3,825	0.32	1,795	55,820	4.68
		0.15	8,133	108	3,363	0.41	1,404	43,677	5.37
		0.2	6,250	97.7	3,040	0.49	1,162	36,154	5.78
		0.25	**4,943**	**88.3**	**2,746**	**0.56**	**990**	**30,808**	**6.23**
		0.3	4,013	80.1	2,492	0.62	860	26,748	6.67
	M&I	0.1	11,922	123	3,825	0.32	1,795	55,820	4.68
		0.15	8,133	108	3,363	0.41	1,404	43,677	5.37
		0.2	6,250	97.7	3,040	0.49	1,162	36,154	5.78
		0.25	**4,943**	**88.3**	**2,746**	**0.56**	**990**	**30,808**	**6.23**
		0.3	4,013	80.1	2,492	0.62	860	26,748	6.67
	Inferred	0.1	2,986	30.5	950	0.32	489	15,216	5.10
		0.15	1,847	26.1	813	0.44	384	11,939	6.46
		0.2	1,373	23.5	731	0.53	338	10,520	7.66
		0.25	**1,122**	**21.7**	**675**	**0.60**	**313**	**9,740**	**8.68**
		0.3	958	20.3	630	0.66	293	9,112	9.51
South Jumbo	Measured	0.1	14,324	157	4,889	0.34	2,024	62,959	4.40
		0.15	11,291	145	4,510	0.40	1,768	55,003	4.87
		0.2	8,588	130	4,041	0.47	1,497	46,548	5.42
		0.25	**6,457**	**115**	**3,563**	**0.55**	**1,244**	**38,684**	**5.99**
		0.3	4,908	101	3,140	0.64	1,039	32,309	6.58
	Indicated	0.1	14,117	146	4,527	0.32	1,659	51,608	3.66
		0.15	10,729	132	4,107	0.38	1,381	42,965	4.00
		0.2	7,936	116	3,620	0.46	1,104	34,347	4.33
		0.25	**5,657**	**100**	**3,111**	**0.55**	**849**	**26,399**	**4.67**
		0.3	4,036	85.9	2,670	0.66	666	20,725	5.13
	M&I	0.1	28,441	303	9,417	0.33	3,683	114,567	4.03
		0.15	22,020	277	8,617	0.39	3,150	97,968	4.45
		0.2	16,524	246	7,661	0.46	2,601	80,895	4.90
		0.25	**12,115**	**215**	**6,674**	**0.55**	**2,092**	**65,083**	**5.37**
		0.3	8,944	187	5,810	0.65	1,705	53,034	5.93
	Inferred	0.1	6,017	51.9	1,614	0.27	529	16,440	2.73
		0.15	4,631	46.5	1,447	0.31	423	13,169	2.84
		0.2	3,774	41.7	1,298	0.34	349	10,852	2.88
		0.25	**2,929**	**35.5**	**1,103**	**0.38**	**282**	**8,768**	**2.99**
		0.3	1,353	21.8	677	0.50	175	5,430	4.01
Grey Eagle	Measured	0.1	4,325	67.7	2,105	0.49	837	26,043	6.02
		0.15	3,860	65.8	2,046	0.53	795	24,714	6.40
		0.2	3,321	62.8	1,952	0.59	730	22,695	6.83
		0.25	**2,852**	**59.4**	**1,847**	**0.65**	**663**	**20,633**	**7.23**
		0.3	2,476	56.1	1,744	0.70	602	18,740	7.57
	Indicated	0.1	6,687	96.5	3,002	0.45	1,248	38,808	5.80
		0.15	5,788	92.9	2,889	0.50	1,165	36,246	6.26
		0.2	5,065	88.8	2,763	0.55	1,085	33,749	6.66
		0.25	**4,433**	**84.3**	**2,621**	**0.59**	**1,002**	**31,177**	**7.03**
		0.3	3,897	79.5	2,474	0.63	919	28,584	7.33

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
	M&I	0.1	11,012	164	5,107	0.46	2,085	64,851	5.89
		0.15	9,649	159	4,935	0.51	1,960	60,960	6.32
		0.2	8,386	152	4,715	0.56	1,815	56,444	6.73
		0.25	**7,285**	**144**	**4,468**	**0.61**	**1,666**	**51,809**	**7.11**
		0.3	6,373	136	4,218	0.66	1,522	47,324	7.43
	Inferred	0.1	1,321	12.7	394	0.30	208	6,469	4.90
		0.15	1,080	11.7	365	0.34	186	5,777	5.35
		0.2	927	10.9	338	0.36	170	5,273	5.69
		0.25	**783**	**9.8**	**305**	**0.39**	**148**	**4,613**	**5.90**
		0.3	652	8.7	269	0.41	127	3,959	6.07
North Jumbo	Measured	0.1	39,984	366	11,391	0.28	9,298	289,213	7.23
		0.15	28,859	322	10,010	0.35	7,921	246,362	8.54
		0.2	21,148	279	8,672	0.41	6,641	206,548	9.77
		0.25	**15,752**	**240**	**7,466**	**0.47**	**5,510**	**171,370**	**10.88**
		0.3	11,892	206	6,410	0.54	4,535	141,042	11.86
	Indicated	0.1	21,229	149	4,639	0.22	3,296	102,509	4.83
		0.15	13,489	119	3,697	0.27	2,422	75,318	5.58
		0.2	8,597	91.5	2,846	0.33	1,728	53,740	6.25
		0.25	**5,509**	**69.4**	**2,160**	**0.39**	**1,209**	**37,592**	**6.82**
		0.3	3,763	54.1	1,683	0.45	881	27,409	7.28
	M&I	0.1	61,213	515	16,029	0.26	12,594	391,722	6.40
		0.15	42,347	441	13,707	0.32	10,342	321,680	7.60
		0.2	29,745	370	11,518	0.39	8,368	260,288	8.75
		0.25	**21,261**	**309**	**9,626**	**0.45**	**6,718**	**208,962**	**9.83**
		0.3	15,655	260	8,093	0.52	5,416	168,451	10.76
	Inferred	0.1	6,825	46.8	1,454	0.21	794	24,692	3.62
		0.15	4,341	37.0	1,149	0.26	564	17,541	4.04
		0.2	2,662	27.6	859	0.32	367	11,407	4.29
		0.25	**1,725**	**20.9**	**649**	**0.38**	**250**	**7,783**	**4.51**
		0.3	1,093	15.3	476	0.44	168	5,221	4.78
Thor	Measured	0.1	2,648	31.2	969	0.37	512	15,932	6.02
		0.15	2,018	28.6	891	0.44	464	14,419	7.15
		0.2	**1,432**	**25.4**	**790**	**0.55**	**409**	**12,727**	**8.89**
		0.25	1,107	23.1	718	0.65	373	11,594	10.48
		0.3	894	21.2	660	0.74	344	10,715	11.99
	Indicated	0.1	4,146	43.2	1,343	0.32	610	18,984	4.58
		0.15	3,183	39.3	1,223	0.38	531	16,503	5.18
		0.2	**2,245**	**34.1**	**1,061**	**0.47**	**452**	**14,059**	**6.26**
		0.25	1,650	29.9	929	0.56	394	12,259	7.43
		0.3	1,272	26.6	826	0.65	347	10,800	8.49
	M&I	0.1	6,794	74.4	2,313	0.34	1,123	34,917	5.14
		0.15	5,201	68.0	2,115	0.41	994	30,922	5.95
		0.2	**3,677**	**59.5**	**1,851**	**0.50**	**861**	**26,786**	**7.29**
		0.25	2,757	52.9	1,647	0.60	767	23,853	8.65
		0.3	2,166	47.8	1,486	0.69	692	21,515	9.93

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)
	Inferred	0.1	3,530	43.4	1,350	0.38	506	15,738	4.46
		0.15	2,728	40.3	1,253	0.46	448	13,949	5.11
		0.2	**1,963**	**36.0**	**1,121**	**0.57**	**394**	**12,255**	**6.24**
		0.25	1,549	33.1	1,029	0.66	364	11,308	7.30
		0.3	1,333	31.2	969	0.73	340	10,577	7.94
White Point	Measured	0.1	0	0	0		0	0	
		0.15	0	0	0		0	0	
		0.2	0	0	0		0	0	
		0.25	**0**	**0**	**0**		**0**	**0**	
		0.3	0	0	0		0	0	
	Indicated	0.1	2,702	24.1	748	0.28	270	8,388	3.10
		0.15	2,189	22.0	685	0.31	232	7,230	3.30
		0.2	1,753	19.6	609	0.35	197	6,129	3.50
		0.25	**1,274**	**16.1**	**501**	**0.39**	**156**	**4,846**	**3.81**
		0.3	845	12.4	385	0.46	114	3,554	4.21
	M&I	0.1	2,702	24.1	748	0.28	270	8,388	3.10
		0.15	2,189	22.0	685	0.31	232	7,230	3.30
		0.2	1,753	19.6	609	0.35	197	6,129	3.50
		0.25	**1,274**	**16.1**	**501**	**0.39**	**156**	**4,846**	**3.81**
		0.3	845	12.4	385	0.46	114	3,554	4.21
	Inferred	0.1	580	3.8	119	0.21	28.4	884	1.52
		0.15	458	3.3	103	0.23	23.7	736	1.60
		0.2	235	2.0	62	0.26	15.7	490	2.08
		0.25	**113**	**1.1**	**36**	**0.31**	**9.8**	**305**	**2.69**
		0.3	51	0.6	19	0.38	5.5	170	3.33
Total	Measured	0.1	61,281	622	19,354	0.32	12,672	394,147	6.43
		0.15	46,028	561	17,457	0.38	10,947	340,498	7.40
		0.2	34,489	497	15,454	0.45	9,276	288,518	8.37
		0.25	26,168	437	13,594	0.52	7,789	242,281	9.26
		0.3	20,170	384	11,954	0.59	6,520	202,805	10.05
	Indicated	0.1	60,803	581	18,085	0.30	8,877	276,116	4.54
		0.15	43,510	513	15,965	0.37	7,135	221,938	5.10
		0.2	31,846	448	13,939	0.44	5,729	178,177	5.59
		0.25	23,466	388	12,068	0.51	4,600	143,081	6.10
		0.3	17,826	339	10,529	0.59	3,788	117,821	6.61
	M&I	0.1	122,084	1,204	37,439	0.31	21,549	670,263	5.49
		0.15	89,538	1,075	33,422	0.37	18,083	562,436	6.28
		0.2	66,335	945	29,393	0.44	15,005	466,694	7.04
		0.25	49,634	825	25,662	0.52	12,390	385,361	7.76
		0.3	37,995	723	22,483	0.59	10,308	320,626	8.44
	Inferred	0.1	21,260	189	5,880	0.28	2,554	79,439	3.74
		0.15	15,086	165	5,130	0.34	2,029	63,111	4.18
		0.2	10,934	142	4,409	0.40	1,633	50,797	4.65
		0.25	8,220	122	3,797	0.46	1,367	42,518	5.17
		0.3	5,440	98	3,041	0.56	1,108	34,470	6.34

Target	Resource Category	Cutoff Grade (Au ppm)	Mineralized Tonnes (1000s)	Au oz (1000s)	Au g (1000s)	Au Grade (gpt)	Ag oz (1000s)	Ag g (1000s)	Ag Grade (gpt)

1) The effective date of the Mineral Resources Estimate is June 13, 2022.

2) The Qualified Person for the estimate is Terre Lane QP-MMSA of GRE.

3) Mineral resources are not ore reserves and are not demonstrably economically recoverable.

4) Mineral resources are reported at variable cutoff grades, an assumed gold price of 1,800 $/tr. oz, using variable recovery, a slope angle of 45 degrees, 98% payable gold, 95% payable silver, 0% royalty, $1.5/tonne mining costs, 0.5893 mining CAF for Post-Mineral material, and Merrill-Crowe processing cost $3.94 per tonne (includes admin).

15.0 MINERAL RESERVE ESTIMATES

"Mineral reserves" differ from "Mineral Resources" in that Mineral Reserves are known to be economically feasible for extraction. The CIM Definition Standards require the completion of a Preliminary Feasibility Study (PFS) as the minimum prerequisite for the conversion of Mineral Resources to Mineral Reserves. At this time, a PFS has not been completed for the Gold Springs project. Therefore, reserve estimates have not been made.

16.0 MINING METHODS

The Gold Springs deposit is a near-surface epithermal gold system most suitable for open pit mining and heap leach gold recovery. This report, however, is not an advanced stage report, so this Section is not included.

17.0 RECOVERY METHODS

This report is not an advanced stage report, so this Section is not included.

18.0 ROJECT INFRASTRUCTURE

This report is not an advanced stage report, so this Section is not included.

19.0 MARKET STUDIES AND CONTRACTS

This report is not an advanced stage report, so this Section is not included.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This report is not an advanced stage report, so this Section is not included.

21.0 CAPITAL AND OPERATING COSTS

This report is not an advanced stage report, so this Section is not included.

22.0 ECONOMIC ANALYSIS

This report is not an advanced stage report, so this Section is not included.

23.0 ADJACENT PROPERTIES

There are no significant gold properties or mines within the vicinity of the Gold Springs Project.

24.0 OTHER RELEVANT DATA AND INFORMATION

Section 27, References, provides a list of documents that were consulted in support of the MRE. No further data or information is necessary, in the opinion of the Authors, to make the MRE understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The 2021 drilling program shows important results because it confirmed the gold mineralization potential and included some high-grade intervals in North Jumbo and South Jumbo. It has also provided good data and confirmation on the gold mineralization potential in Charlie Ross and White Point.

The 2021 drilling program in Jumbo extends the known mineralization areas in the north, south, west, and at depth. In Etna, the 2021 drill program extends to the existing resource to the south, west, east, and at depth, and fills the gap zone located in the central portion of the resource. In white Point, the 2021 drill program determined the depth of the mineralized zones seen on the surface and extended under post-mineral cover. Significant gold mineralization was observed at White Point. The 2021 drilling program made an initial discovery of the gold system in the Charlie Ross.

Highlights of the 2021 drilling program include:

South Jumbo (Etna)

- E-21-004 7.6 meters @ 1.58 g/t Au and 8.3 g/t Ag and
  13.6 meters@ 0.97 g/t Au 2.6 g/t Ag
- E-21-005 4.6 meters @ 0.46 g/t Au and 8.2 g/t Ag and
  7.6 meters @ 0.63 g/t Au and 7.2 g/t Ag
- E-21-007 9.1 meters @ 0.58 g/t Au and 6.7 g/t Ag
- E-21-011 20.9 meters @ 0.67 g/t Au and 4.2 g/t Ag
- E-21-012 56.4 meters @ 0.58 g/t Au and 12.1 g/t Ag and
  19.8 meters @ 5.2 g/t Au and 12.4 g/t Ag
- E-21-016 16.8 meters @ 0.51 g/t Au and 3.3 g/t Ag

North Jumbo/Tremor

- J-21-003 10.7 meters @ 0.62 g/t Au and 7.91 g/tAg
- J-21-006 24.4 meters @ 5.95 g/t Au and 66.5 g/t Ag
- including 4.6 meters @ 27.3 g/t Au and 259.4 g/t Ag and
  82.3 meters @ 0.52 g/t Au and 4.7 g/t Ag
- J-21-015 163.1 meters @ 0.93 g/t Au and 5.1 g/t Ag
- including 33.5 meters @ 1.32 g/t Au and 7.4 g/t Ag

Charlie Ross

- CR-21-005 45.7 meters @ 0.98 g/t Au and 13.4 g/t Ag
- including 15.2 meters @ 2.14 g/t Au and 30.0 g/t Ag
- CR-21-008 15.3 meters @ 1.16 g/t Au and 7.4 g/t Ag
- CR-21-017 16.7 meters @ 1.82 g/t Au and 19.8 g/t Ag and
  13.7 meters @ 1.55 g/t Au and 9.2 g/t Ag and

10.7 meters @ 2.19 g/t Au and 9.4 g/t Ag

- CR-21-022 15.2 meters @ 1.56 g/t Au and 13.8 g/t Ag and

  10.6 meters @ 2.43 g/t Au and 9.6 g/t Ag

White Point

- WP-21-002 13.7 meters @ 0.62 g/t Au and 6.0 g/t Ag
- WP-21-003 19.9 meters @ 0.5 g/t Au and 4.3 g/t Ag and

  7.6 meters @ 0.56 g/t Au and 3.9 g/t Ag
- WP-21-004 51.8 meters @ 0.32 g/t Au and 3.7 g/t Ag
- WP-21-005 36.6 meters @ 0.74 g/t Au and 5.8 g/t Ag
- WP-21-006 15.3 meters @ 1.31 g/t Au and 6.5 g/t Ag

26.0 RECOMMENDATIONS

tabulates the estimated costs to complete an intensive 2-year program designed to maximize the resource within the project area. Components of which would include:

- 70,000 metres of RC and 10,700 metres of diamond (core) drilling
- Expanding ground geophysical coverage to all priority drill targets
- Expanding detailed structural mapping to develop new targets in areas with post-mineral cover
- Completing baseline studies
- Completing all drill related permitting
- Completing comprehensive metallurgical testing
- Securing mining permits
- Producing a Prefeasibility Study (PFS)
- Clearing all cultural sites within the resource and mine plan areas
- Mitigating all significant cultural sites within the resource and mine plan areas

Table 26-1 Estimated Costs to Complete the 2-year program

Exploration Cost Area	Year		
	2022	2023	Total
Drilling, Surface Sampling, and geochemistry Down-Hole Surveys	$4,585,900	$7,079,450	$12,295,350
Land and Option Payments	$399,840	$274,840	$674,680
Staffing & HHRR Travel Meals	$600,000	$613,000	$1,213,000
Reclamation, Environmental	$35,000	$48,000	$83,000
Camp Operations	$54,000	$60,000	$114,000
Geophysics	$240,000	$ -	$240,000
Capital-Asset Purchases	$162,000	$32,000	$194,000
43-101 Technical Reports	$200,000	$250,000	$450,000
Cultural Surveys	$200,000	$200,000	$400,000
Baseline Studies and Obtaining Permits	$400,000	$395,000	$795,000
Metallurgy	$250,000	$250,000	$500,000
Permitting and Consultants	$84,000	$58,000	$142,000
Information Technology & Miscellaneous	$17,000	$17,000	$34,000
Totals	$7,227,740	$9,907,290	$17,135,030

26.1 Drilling

Drilling requirements have been estimated to move the project forward rapidly with the goal of developing a +2,500,000-ounce gold resource by the end of 2023. This will be achieved by deploying 3 RC drills to continue resource expansion in the Jumbo trend and to investigate the other high priority targets. This program would provide for 70,000 metres of RC drilling in approximately 500 holes and 10,700 metres of diamond (core) drilling in 70 holes. Sequencing for the program would be to initially focus on the Jumbo Trend and completely define the total resource within this 5+ kilometre trend. Drilling would advance to other high priority targets within Nevada based on priorities developed through geologic, geophysical, geochemical and structural studies.

Geotechnical HQ size core will be used to define the acceptable slopes within the planned open pits. Core provides a better view of the geology than RC chips. A portion of the core will be consumed for metallurgical column testing.

26.2 Metallurgical Testing

A limited amount of metallurgical testing has been completed on the Gold Springs project. To advance the project, it will be necessary to complete additional column testing on the six resource areas. It is anticipated that core from North and South Jumbo, Thor, Grey Eagle, Charlie Ross, White Point and other resource areas that may be developed will be collected for test columns. These additional tests will better define extraction and reagent consumption

26.3 Baseline Cultural / Environmental

Cultural and biological surveys have been completed as part of clearance for exploration sampling and drilling for 2017. Work should be continued on studies to establish baseline studies towards an Environmental Impact Statement (EIS). An estimate has been made to fund these activities. Many of these studies will be carried out over multiple years to create baseline studies sufficient to use in an EIS.

26.4 Land Work

Allowances have been made to keep land ownership and title current along with acquisition.

26.5 Utilities

GSLLC has acquired 965 acre-feet of water in the Escalante water basin within Nevada and leased another 1,600 acre-feet of water in Utah, also within the Escalante basin. These water rights are sufficient to run a large-scale heap leach mining operation capable of producing +150,000 ounces of gold/year.

GSLLC has contacted power companies in Nevada and Utah about bringing power to the site. In Nevada, there is an old power line easement that was used to bring power to the historic Jennie mill. In Utah, power can be brought in along Gold Springs road, which is a county easement, for a reasonable price and with the possible effect of an easier and more streamlined permitting process.

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CERTIFICATE OF QUALIFIED PERSON

I, Terre A. Lane, of 600 Grant St., Suite 975, Denver, Colorado, 80203, the co-author of the report entitled "Mineral Resource Estimate NI 43-101 Technical Report, Gold Springs Property, Utah-Nevada, USA" with an effective date of June 13, 2022 and an issue date of July 11, 2022 (the "Technical Report"), DO HEREBY CERTIFY THAT:

1. I am a MMSA Qualified Professional in Ore Reserves and Mining, #01407QP, and I am a Registered Member of the Society for Mining, Metallurgy, and Exploration
2. I hold a degree of Bachelor of Science (1982) in Mining Engineering from Michigan Technological University.
3. I have practiced my profession since 1982 in capacities from mining engineer to senior management positions for engineering, mine development, exploration, and mining companies. My relevant experience for the purpose of this PEA is as the resource estimator, mine planner, and economic modeler with 25 or more years of experience in each area.
4. I have taken classes in geology, structural geology, mineralogy, Mineral Resource estimation in university, and have taken several short courses in geostatistics subsequently.
5. I have worked in geology, managed geologic teams, created lithological and structural models, and I have been involved in or conducted the estimation of resources for several hundred projects at locations in North America, Central America, South America, Africa, Australian/New Zealand, India, China, Russia and Europe using nearly all estimation techniques.
6. I have estimated resources for many epithermal style gold deposits including, Santa Fe, Relief Canyon, Gilt Edge, Buffalo Valley, Golden Reward, Idaho Almaden, Aurora, and others, and have oversaw the resource estimate of many other similar gold deposits.
7. I have created or overseen the development of mine plans for several hundred open pit and underground projects and operating mines.
8. I have been involved in or managed several hundred studies including scoping studies, prefeasibility studies, and feasibility studies.
9. I have been involved with the mine development, construction, startup, and operation of several mines.
10. I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by reason of my education, affiliation with a professional organization (as defined in National Instrument 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101.
11. I most recently visited the Gold Springs property in February 2014 for one day and have reviewed previous geological data, geochemical results, metallurgical and technical reports on the subject property.
12. I am responsible for Sections 1.0, 1.1, 1.4, 1.5, 1.6, 2, 3, 4, 5, 14, 15, 16, and 18 through 27 of the Technical Report.
13. I am independent of Gold Springs Resource Corp. as described in section 1.5 by National Instrument 43-101.
14. I performed a Resource Estimate Technical Report for the Gold Springs project in 2014, a Mineral

Resource Estimate and a PEA for the Gold Springs project in 2015, and an Amended Resource Estimate and PEA for the Gold Springs project in 2017 and 2020.

15. I have read National Instrument 43-101 and Form 43-101F1. The Technical Report has been prepared in compliance with the National Instrument 43-101 and Form 43-101F1.
16. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Terre A. Lane

"Terre A. Lane"

Mining Engineer

Global Resource Engineering, Ltd.

Denver, Colorado

Date of Signing: July 11, 2022

CERTIFICATE OF QUALIFIED PERSON

I, Hamid Samari, PhD, of 600 Grant St., Suite 975, Denver, Colorado, 80203, the co-author of the report entitled "Mineral Resource Estimate Technical Report, Gold Springs Property, Utah-Nevada, USA" with an effective date of June 13, 2022 and an issue date of July 11, 2022 (the "Technical Report"), DO HEREBY CERTIFY THAT:

1. I am a MMSA Qualified Professional in Geology, #01519QP.
2. I hold a degree of PhD of Science (2000) in geology (Tectonics - structural geology) from Tehran Azad University (Sciences & Research Branch).
3. I have practiced my profession since 1994 in capacities from expert of geology to senior geologist and project manager positions for geology, seismic hazard assessment and mining exploration.
4. I have practiced area of geology, mining, and civil industry for over 20 years. I have worked for Azad University, Mahallat branch as assistant professor and head of geology department for 19 years, for Tamavan consulting engineers as senior geologist for 12 years, and for Global Resource Engineering for nearly four years. I have worked on geologic reports and resource statements for silver and gold deposits in the United States and Latin America. This includes epithermal silver deposits in Peru, gold deposits in Nevada and Utah, and mixed precious metals deposits elsewhere in the Western Hemisphere.
5. I have been involved with many studies including scoping studies, prefeasibility studies, and feasibility studies.
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by reason of my education, affiliation with a professional organization (as defined in National Instrument 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101.
7. I visited the Gold Spring Property in 2017 for 10 days and from 20 to 23 February 2022 and conducted a field reconnaissance of the Gold Spring site. The 2017 site visit focused on the structural geology studies of the property and the 2022 site visit focused on checking the 2021 drilling and exploration campaign. I checked validation and accuracy of RC collars coordinates, prepared geologic maps, including formations, lithologies, structures, and mineralization within the property and geologic logging for three exploration targets of Jumbo, Charlie Ross, and South Jumbo.
8. I am responsible for Sections 1.2 and 6 through 12 of the Mineral Resource Estimate Technical Report.
9. I am independent of Gold Springs Resource Corp. as described in section 1.5 by National Instrument 43-101.
10. I have previously provided geological expertise to GRC for the Project.
11. I have read National Instrument 43-101 and Form 43-101F1. The Technical Report has been prepared in compliance with the National Instrument 43-101 and Form 43-101F1.
12. As of the date of this certificate and as of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information required to be disclosed to make the report not misleading.

Hamid Samari, PhD

"Hamid Samari"

Geologist
Global Resource Engineering, Ltd.
Denver, Colorado
Date of Signing: July 11, 2022

CERTIFICATE OF QUALIFIED PERSON

I, J. Todd Harvey, of 600 Grant Street, Suite 975, Denver, CO 80203, the co-author of the report entitled "Mineral Resource Estimate NI 43-101 Technical Report, Gold Springs Property, Utah-Nevada, USA" with an effective date of June 13, 2022 and an issue date of July 11, 2022 (the "Technical Report"), DO HEREBY CERTIFY THAT:

1. I am currently employed as Principal Process and Mining Engineer by Global Resource Engineering, Ltd.
2. I graduated with Ph.D. in Mining Engineering from the Queen's University at Kingston in 1994, a Master's degree in Mining Engineering from the Queen's University at Kingston in 1990 and a Bachelors degree in Mining Engineering in 1988 all with a specialization in mineral processing. I also hold a degree in Metallurgical Engineering and Computer Science from Ryerson University in Toronto Canada graduating in 1986 as well as an MBA from the University of New Brunswick in Saint John Canada graduating in 2001.
3. I have worked as a Process Engineer for over 35 years since my graduation from university. My relevant experience includes process due diligence/competent persons evaluations of developmental phase and operational phase mines throughout the world, including mines in the USA, Canada, Kazakhstan, Brazil, Mexico, and Africa to name a few. I have a wide range of experience in multiple mineral fields including precious metal processing and base metals such as copper, lead, and zinc.
4. I am a Registered Member (No. 04144120) of the Society for Mining, Metallurgy & Exploration Inc. (SME). I am also a member of the Association for Mineral Exploration (AME), Minerals Engineering Journal Review Board, and the Journal of Hydrometallurgy Review Board.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by reason of my education, affiliation with a professional organization (as defined in National Instrument 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101.
6. I have not visited the Gold Springs Property.
7. I am responsible for Sections 1.3, 13, and 17 of the Technical Report.
8. I am independent of Gold Springs Resource Corp. as described in section 1.5 by National Instrument 43-101.
9. I previously co-authored the updated Preliminary Economic Assessments for the Gold Springs project in 2015 and 2020.
10. I have read National Instrument 43-101 and Form 43-101F1. The Technical Report has been prepared in compliance with the National Instrument 43-101 and Form 43-101F1.
11. As of the date of this certificate and as of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information required to be disclosed to make the report not misleading.

J. Todd Harvey

"J. Todd Harvey"

Metallurgist

Global Resource Engineering, Ltd.

Denver, Colorado

Date of Signing: July 11, 2022