TECHNICAL REPORT
PRELIMINARY ECONOMIC ASSESSMENT
SUMMIT GOLD-SILVER PROJECT
GRANT AND HIDALGO COUNTIES
NEW MEXICO

PREPARED FOR

SANTA FE GOLD CORPORATION

LORDSBURG, NEW MEXICO

AND

CANARC RESOURCE CORPORATION

VANCOUVER, BRITISH COLUMBIA

PREPARED BY

DOUGLAS F. IRVING, P.E.
SUSAN C. BIRD, P.ENG. **TRACEY D. MEINTJES, P.ENG.**

CHAPMAN, WOOD AND GRISWOLD, INC.

ALBUQUERQUE, NEW MEXICO

SEPTEMBER 17, 2014

CERTIFICATES OF QUALIFIED PERSONS

DOUGLAS F. IRVING
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CERTIFICATE OF AUTHOR AND QUALIFIED PERSON

I, Douglas F. Irving, P.E., do hereby certify that I am the Principal Author of the report titled "**TECHNICAL REPORT, PRELIMINARY ECONOMIC ASSESSMENT, SUMMIT GOLD, SILVER PROJECT, GRANT AND HIDALGO COUNTIES, NEW MEXICO**." I further certify that:

1. I am President of:

   Chapman, Wood and Griswold, Inc.
   Consulting Mining Engineers and Geologists
   4015 Carlisle Blvd. NE, Suite C
   Albuquerque, New Mexico 87107
   Phone No. (505) 883-0220

2. I graduated with a degree in Geological Engineering (B.A.Sc.) from the University of British Columbia in 1960.

3. I am a Registered Professional Engineer in the State of New Mexico (Registration No. 8101) and have been since 1982. I was a Registered Professional Engineer in the Province of British Columbia Registration No. 5002 in the period 1964 to 2013 and resigned in good standing effective January 1, 2014. I am a Life Member (No. 93536) of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and a Member (No. 1563110) of the Society for Mining, Metallurgy, and Exploration, Inc. (SME).

4. I have worked as a geologist and engineer continuously since my graduation from University in 1960, a period of 54 years. I have had extensive world-wide experience in the evaluation of base- and precious-metal deposits, including exploration, operations, resource/reserve studies, capital and operating costs, and project feasibility studies for both open-pit and underground mining operations. Professional experience relative to this Technical Report includes:

   a. Evaluation of vein-type, epithermal, precious-metal deposits in the Creede and Platoro Districts of Colorado; the Mogollon District of New Mexico; the Wallapai District of Arizona; the Cucurpe, Tajitos and Altar Districts of Sonora, Mexico; and the San Miguel District of El Salvador.

   b. Operational and evaluation experience in underground mines in Canada, USA, Mexico, Peru, Bolivia, Chile and Venezuela.

   c. Extensive experience in the estimation of mineral resources/reserves for both open pit and underground operations.

   d. Economic evaluation of mineral deposits including capital- and operating-cost estimates and present-value analyses in feasibility studies.

5. I have also had extensive experience in the evaluation of uranium deposits and deposits of industrial minerals; and I have testified as an Expert Witness in several mining and mineral-related lawsuits.

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

7. I accept responsibility for the preparation of the Technical Report titled, **"Technical Report, Preliminary Economic Assessment, Summit Gold-Silver Project, Grant and Hidalgo Counties, New Mexico"** dated September 17, 2014. I am directly responsible for Sections 1 to 12, 15, 16, and 18 through 27.

8. I have visited, examined, sampled and conducted various studies on the Summit Mine and the Steeple Rock Mining District since 1974. My current involvement with the Summit property has been for Santa Fe Gold Corp. (formerly AZCO Mining Inc.) beginning in September 2006. Since that time I have assisted in the preparation of a Preliminary Feasibility Study (April 2007) and two Technical Reports (October 2009 and May 2011) on the Summit Project. I have visited both the mine and millsite on numerous occasions, the latest being July 8-9, 2014.

9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the portions of the Technical Report for which I am responsible contain all of the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

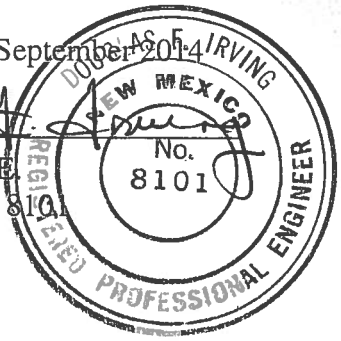
10. I am independent of Santa Fe Gold Corporation, Lordsburg Mining Company and Canarc Resources Corporation, as described in Section 1.5 of NI 43-101 and do not own any of their stocks or shares.

11. I have read NI 43-101, and the Technical Report has been prepared in compliance with that instrument.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their website accessible by the public, of the Technical Report.

Dated this 18 day of September 2014

Douglas F. Irving, P.E.
NM Registration No. 8101



SUSAN C. BIRD
Moose Mountain Technical Services**.**
1752 Armstrong Ave.,
Victoria, B.C.

I, Susan C. Bird, M.Sc., P.Eng., do hereby certify that as a co-author of the report titled **TECHNICAL REPORT, PRELIMINARY ECONOMIC ASSESSMENT, SUMMIT GOLD-SILVER PROJECT, GRANT AND HIDALGO COUNTIES, NEW MEXICO**:

1. I am a Principal of Moose Mountain Technical Services, residing at 1752 Armstrong Ave., Victoria, B.C.
2. I graduated with a Geologic Engineering degree (B.Sc.) from the Queen's University in 1989.
3. I graduated with a M.Sc. in Mining from Queen's University in 1993.
4. I am a member of the Association of Professional Engineers and Geoscientists of B.C. (No. 25007).
5. I have worked as an engineering geologist for a total of 18 years since my graduation from university.
6. My past experience with Au-Ag vein deposits includes resource/reserve reporting and engineering work on the Pinguino deposit in Argentina. I have also completed resource estimates for a number of deposits including: Rosemont, Gibraltar, CY-Storie and Ilovitza.
7. I have read the definition of "qualified person" set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a "qualified person."
8. I am responsible for Section 14 of this report titled "**Technical Report, Preliminary Economic Assessment, Summit Gold-Silver Project, Grant and Hidalgo Counties, New Mexico**" date September 17, 2014.
9. I am independent of Santa Fe Gold Corporation, Lordsburg Mining Company and Canarc Resources Corporation, as described in Section 1.5 of NI 43-101 and do not own any of their stocks or shares. I work as a geological and mining consultant to the mining industry.
10. To the best of my knowledge, information and belief at the effective date, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Dated this 19 day of September 2014

(Original Signed)
Susan C. Bird, M.Sc., P.Eng.
B.C. Registration No. 25007

I, **Tracey D Meintjes**, of Vancouver, BC, do hereby certify that as a co-author of the report titled TECHNICAL REPORT, PRELIMINARY ECONOMIC ASSESSMENT, SUMMIT GOLD-SILVER PROJECT, GRANT AND HIDALGO COUNTIES, NEW MEXICO:

1. I am a Metallurgical Engineer with Moose Mountain Technical Services with a business address at 1975 1st Avenue South, Cranbrook, BC, V1C 6Y3.
2. This certificate applies to the technical report entitled "Technical Report Summit Gold-Silver Project Grant And Hidalgo Counties New Mexico" dated September 17, 2014 (the "Technical Report").
3. I am a graduate of the Technikon Witwatersrand, (NHD Extraction Metallurgy – 1996)
4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (#37018).
5. My relevant experience includes process engineering, operation, and supervision, and mine engineering in South Africa and North America. I have been working in my profession continuously since 1996. In particular I have process experience in a number of Gold and Silver projects Canada, the US and Mexico.
6. I am a "Qualified Person" for the purposes of National Instrument 43-101 (the "Instrument").
7. I have not visited the Summit property.
8. I am responsible for Sections 13 and 17 of the Technical Report.
9. I am independent of Santa Fe Gold Corporation Lordsburg, New Mexico And Canarc Resource Corporation, Vancouver, British Columbia as defined by Section 1.5 of the Instrument.
10. I have had no previous involvement with the property that is the subject of the Technical Report.
11. I have read the Instrument and the Technical Report has been prepared in compliance with the Instrument.
12. As of the date of this certificate, 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.

Dated this 19 th day of September, 2014 at Vancouver, Canada

(Original Signed)

Tracey D Meintjes, P.Eng.

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1.0 SUMMARY

a. The Summit gold-silver project is located in Grant and Hidalgo Counties, New Mexico, USA, near the town of Lordsburg. The project is owned by The Lordsburg Mining Company, a wholly-owned subsidiary of Santa Fe Gold Corp. of Lordsburg, New Mexico.

b. Lordsburg Mining owns the Summit Mine and acquired it through a lease-purchase agreement. The property is subject to three royalty interests. The senior interest is a 5% NSR with a balance owing of approximately $2.75 million. The subordinate interest is a Net Proceeds royalty for material direct shipped to smelters without beneficiation. The Net Proceeds royalty ranges from 5% to 10% with a cap of $2.4 million. A third royalty is a one-percent-of proceeds interest payable to Mr. Pierce Carson. The millsite property, situated near Lordsburg, is owned by Lordsburg Mining.

c. The mine is in an advanced state of development and has achieved limited stope production. The operation was temporarily suspended in November 2013 pending a corporate and operational reorganization. Mine production to date totals 180,315 tons of mineralized low-grade development rock combined with some stoped material. The material is trucked from the mine to the mill, a distance of 57 miles, of which 15 miles is over gravel road. The 240-ton-per-day flotation mill is operational and has processed approximately 110,926 tons. As of May 1, 2014, there has been 698 tons of high-value, precious-metal concentrate produced and sold to overseas smelters. The Lordsburg Mining Company sells concentrates to two smelters, the Aurubis AG smelter in Germany, and the L.S. Nikko smelter in Korea. In addition to the tons milled, approximately 69,765 tons of precious-metal-bearing silica-flux have been sold to Arizona copper smelters in the period 2010 through 2013.

d. Gold and silver mineralization occur primarily in the footwall and center portions of a 50- to 100-foot-wide fault zone cutting through mid-Tertiary-age andesitic host rocks. The structure strikes northwesterly and dips at 75° to 80° to the northeast. The mineralization being developed occurs in a vein-like deposit extending along 2000 feet of the structure and over a vertical distance of 1000 feet.

e. Mineralization occurs in an epithermal, low-sulfidation system containing less than 1% of total sulfide minerals. The mineral host is a multi-episodic, highly siliceous, vuggy and colloform-banded breccia. Calcite is a common gangue constituent, particularly in the upper parts of the system. Silver occurs as argentite-acanthite and gold occurs primarily as electrum.

f. Exploratory drilling by several companies in the 1980's and early 1990's outlined a zone of economically attractive mineralization. Lordsburg Mining acquired the property in 2006 for the purpose of developing a mine. A used flotation mill was purchased in 2006, refurbished, and erected on Company-owned property south of Lordsburg.

g. The estimated **Mineral Resource** is summarized in Tables 1.1 and 1.2 for in-situ **Indicated and Inferred Resources** respectively. The cutoff grade used as the base case for the resource is 0.14 opt Au equivalent and is highlighted in the Tables. That cutoff grade is based on the estimated operating cost, a $1200-per-ounce gold price, a 78% metallurgical-recovery factor and the estimated NSR value of the concentrate shipped.

The Mineral Resource table summarizes both the in situ and the diluted tons and grade. The diluted tons also assume 90% of the minable resource is recovered. The reported metal is based on the diluted, minable material. Mining assumed a 6-foot-minimum width with an average dilution of 15%. Individual assay intercepts have been capped to maximum values of 0.45 opt Au and 45.0 opt Ag.

Table 1.1: Indicated Resource by Au Equivalent Grade
(Diluted Tons Adjusted for Pillar Loss)

Class	Au Equiv. Cutoff (opt)	Total Tons above Cutoff	In Situ Grades			Diluted Tons above Cutoff			Ounces of Metal	
			AUEQV	Au	Ag		Au	Ag	Au	Ag
			(opt)	(opt)	(opt)		(opt)	(opt)		
Indicated	**0.140**	**212,800**	**0.251**	**0.132**	**7.157**	**220,239**	**0.117**	**6.373**	**25,702**	**1,403,583**
	0.160	175,206	0.272	0.142	7.834	181,331	0.125	6.948	22,721	1,259,888
	0.180	151,402	0.288	0.149	8.353	156,694	0.132	7.389	20,605	1,157,812

Table 1.2: Inferred Resource by Au Equivalent Grade
(Diluted Tons Adjusted for Pillar Loss)

Class	Au Equivalent Cutoff (opt)	Total Tons above Cutoff	In Situ Grades			Diluted Tons above Cutoff			Ounces of Metal	
			AUEQV	Au	Ag		Au	Ag	Au	Ag
			(opt)	(opt)	(opt)		(opt)	(opt)		
Inferred	**0.140**	**627,209**	**0.277**	**0.128**	**8.935**	**649,136**	**0.114**	**7.884**	**73,742**	**5,117,787**
	0.160	532,669	0.290	0.135	9.333	551,290	0.119	8.222	65,659	4,532,710
	0.180	480,012	0.303	0.140	9.829	496,793	0.123	8.644	61,205	4,294,277

Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Due to the uncertainty that may be associated with Inferred mineral resources it cannot be assumed that all or any part of Inferred mineral resources will be upgraded to an Indicated or Measured resource.

h. Other mineralization occurs adjacent to and in close proximity to the identified **Mineral Resources**. However, further definition by surface and/or underground drilling will be required in order to classify this mineralization as a **Mineral Resource**.

i. One of the resource blocks up to 30 feet wide has been mined by long-hole stoping. This stope (S-1) was mined along a strike of up to 300 feet and a vertical extent of 200 feet. The stope proved the efficacy of the long-hole mining method, the favorable ground conditions, and the continuity of mineralization in the vicinity of mineralized core holes.

j. Milling of low-grade, and frequently oxidized, mine-development rock has demonstrated that the gold and silver mineralization is recoverable into a marketable concentrate. Although metal recoveries to date have only averaged in the order of 67%-69% due in part to the oxidized nature of the material milled, and to a number of other processing issues, recoveries of at least 78% are believed to be attainable at the average resource grade.

k. The average grade of the 698 tons of concentrate produced through June 2014 is 9.9 oz Au and 498 oz Ag per ton.

l. All operating permits and certificates for the various components of the project have been received.

m. Capital investment in the project to date is $20,260,000.

n. The Preliminary Economic Assessment (PEA) of the project suggests that it could be economic at metal prices of $1200 and $20 per ounce for gold and silver, respectively. The production rate of 144,000 tons per year is used in the assessment. Costs used for this assessment were determined from the last three years of operating data as well as quotations from contractors anticipated to perform portions of the work. The projected direct operating cost is estimated at $126.41 per ton. Capital costs are estimated at $4.2 million, and additional working capital of $4.5 million is indicated. A pretax economic evaluation for the Project base case was prepared (Table 22.1). That case shows a cumulative pre-tax net operating income of $79 million which provides an internal rate of return of 29% and a net present value of $52 million at a 10% compound discount rate. The cash cost to produce an ounce of gold equivalent is estimated at US $578.

This preliminary economic assessment is based on resources, not reserves, and a portion of the modeled resources in the mine plan are in the inferred resource category. Given the inherent uncertainties of resources, especially inferred resources compared to reserves, the Summit mine project cannot yet be considered to have proven economic viability.

o. The preliminary assessment indicates that the Summit base case has potential for positive results and therefore further work is recommended to optimize the project and complete a feasibility study. Santa Fe is contemplating additional diamond drilling to upgrade the current inferred resources into a measured and indicated category, but it should be understood that **there is no certainty that the drill program will be successful**.

p. It is recommended that a 10-hole surface drilling program be conducted to better define and upgrade the resources in the main part of the deposit. The estimated cost for drilling is $682,000. It is further recommended that a long-hole drilling program should be an integral part of any future underground mine development. A cost of $3,000,000 is estimated for that purpose. It is further recommended that additional metallurgical testing be conducted to better define expected recoveries.

2.0 INTRODUCTION

2.1 General

This Technical Report has been prepared at the request of Catalin Chiloflishchi, CEO of both Santa Fe Gold Corporation, P.O. Box 129, Lordsburg, New Mexico 88045 and Canarc Resources Corporation, Suite 301, 700 W. Pender Street, Vancouver, BC V6C 1G8. The report has been prepared under the direction of Douglas F. Irving, P.E., of Chapman, Wood and Griswold, Inc. (CWG), Consulting Mining Engineers and Geologists of Albuquerque, New Mexico, and deals exclusively with the new Summit mine-mill project situated in Grant and Hidalgo Counties, New Mexico. The project is owned by The Lordsburg Mining Company (Lordsburg), a wholly-owned subsidiary of Santa Fe Gold Corporation (Santa Fe Gold). The underground gold-silver mine is currently in an advanced state of development and early stage of production. The mill and associated tailings facility operated from March of 2010 through November of 2013. The mill is 57 miles by road south of the mine. Operations were temporarily suspended pending additional financing arrangements. Since November 2013 the project has been on care and maintenance. The mine needs additional capital investment before operations can be resumed, whereas the mill can be restarted immediately.

The report follows the format and content required for **Technical Reports** stipulated under Canada's **National Instrument 43-101 Standards of Disclosure for Mineral Projects, and Form 43-101 F1 Technical Report** (effective June 30, 2011). The lead author of the report, Douglas F. Irving, P.E., is a Qualified Person under the definitions in Part 1.1 of National Instrument 43-101. Neither CWG nor the authors of this report have any relationship, either direct or indirect, to Santa Fe Gold or Canarc Resources.

2.2 Purpose

The purpose of this report is to provide Santa Fe Gold and Canarc Resources with the technical support required by publicly-listed companies for one of their projects, in this case the Summit gold-silver, mine-mill project.

2.3 Sources of Information

The principal sources of information that support this Technical Report are:

1. Preliminary Feasibility Study, (Not NI 43-101 compliant), Summit Mine-Mill Project, Grant and Hidalgo Counties, New Mexico, April 2007; prepared by Chapman, Wood and Griswold, Inc. for AZCO Mining Inc.
2. Technical Report, Summit Gold-Silver Project, Grant and Hidalgo Counties, New Mexico, May 17, 2011; prepared by Chapman, Wood and Griswold, Inc. for Santa Fe Gold Corporation.
3. Lordsburg Mining Company's records and reports pertaining to mine development, mill construction, and current operations.
4. Geologic mapping and drill-hole records of Inspiration Mining Company (1983-1984); and Nova Gold Resources Inc. and Biron Bay Resources Ltd. (1987-1992).
5. Reports on the Summit Gold-Silver Project by MPH Consulting Limited of Toronto for Biron Bay Resources Ltd. (1992).
6. Studies on the Summit Mine by St. Cloud Mining Company (1993-2005).
7. Metallurgical studies on the Summit Mine gold-silver ores by Dr. Robert Shantz (1997, 2006, and 2011).
8. Metallurgical reports of studies by SGS Metcon (2013).

2.4 Qualifications of Consultants

Douglas F. Irving, P.E., supervised the preparation of this report. Mr. Irving is a Geological Engineer by training, was a Registered Professional Engineer (P.Eng.)[1] in British Columbia from 1964 to 2013, and is a Registered Professional Engineer (P.E.) in the state of New Mexico. He has over 50 years of experience in all facets of the mining industry, with specific experience in the geology of mineral deposits and the preparation of mineral-resource estimates in a large variety of deposits including precious-metal, epithermal, vein-type deposits of which the Summit Mine, the subject of this report, is a classic example.

[1] Mr. Irving was a Registered Professional Engineer (P.Eng. No. 5002) in British Columbia in the period 1964 to 2013. He resigned in good standing in 2013.

Mr. Irving first examined the Summit Mine in late 1974 as part of an examination of the Steeple Rock Mining District. A review of a proposed underground-development project at the Summit Mine was made for St. Cloud Mining Company in 1995. Since September 2006 the author has made numerous visits to both the Summit Mine and the Banner Millsite in conjunction with the preparation of a Preliminary Feasibility Study (Non-NI 43-101 compliant), and the ongoing mine-development and mill-construction activities for the project owner, Santa Fe Gold Corp. (formerly AZCO Mining Inc.). The latest visit to the project was July 7-8, 2014.

During the most recent visit, Mr. Irving was accompanied by Messrs. John White, Project Manager and Mr. Jack W. Burgess, Consulting Mining Engineer who assisted Santa Fe Gold in the initial underground mine planning. An inspection of the underground workings was made on July 7. The main access and haulageway to the 5300-foot level were examined. Two of the development levels, the 5550 and 5450, were visited, as were the S-1 and S-2 stope blocks. Typical gold-silver mineralization was observed at a working face on the 5550-foot level. The ventilation raise and secondary escapeway were also examined. The mine workings are flooded below the 5300-foot level.

On July 8, the mill and tailings facilities were examined, including the new decant cells which allow for the dewatering and dry stacking of tailings. Of note is the excellent care and maintenance (neatness) of the milling complex.

Mr. Irving is the principal author of the Technical Report and is responsible for the preparation of Sections 1 to 12, 15, 16, and 18 through 27.

Susan C. Bird, P.Eng., is a Geological and Mining Engineer with two decades of experience in the mining industry, including resource estimation, mine planning, cash-flow analysis, and geotechnical engineering. She has worked in operations at Elk Valley Coal as a long-range mine planner and resource modeler. Consulting work has included long-range planning using Q'pit and MineSight at both operating mines and PEA through Feasibility level studies. She has been the Resource QP on several deposits including porphyry copper, epithermal gold, and polymetallic deposits. Ms. Bird has a Master's

Degree in Geotechnical Engineering and has past experience on resource/reserve reporting and engineering work with Au-Ag vein deposits including: Pinguino, Rosemont, Gibraltar, CY-Storie and Ilovitza.

Ms. Bird is a Principal of Moose Mountain Technical Services. She performed the resource estimate and was the primary author of Section 14 of this report. She did not visit the mine property because of the limited scope of her work.

Tracey D. Meintjes, P.Eng., is an Extraction Metallurgical Engineer with 18 years' experience including process operations, process design and optimization, due diligence studies, and project management. He has been consulting for 12 years providing metallurgical and mine planning expertise to more than 50 mining projects in North America, South America, and Southern Africa. Prior to consulting Mr. Meintjes obtained operations experience at Teck's Trail operations (Canada), Richards Bay Minerals (Rio Tinto and BHP) in South Africa, and Vaal Reefs Mining Company (Anglo Gold Ashanti) in South Africa. He has worked with major and junior mining companies on gold, silver, copper, lead, molybdenum, uranium, coal, oil sands, diamonds, and rare earths projects.

Mr. Meintjes is a Principal of Moose Mountain Technical Services. He has not visited the mine site, but has reviewed the metallurgical data and test work performed; and examined the mill-process equipment design and flow sheet and the mill-operating results in preparation of Sections 13 and 17. He also reviewed the preliminary economic assessment as a part of his involvement with the preparation of the report. The limited scope of his work did not require a visit to the site.

All of the above Consultants are Qualified Persons as defined in Section 1.1 of National Instrument 43-101 and all are Independent of the property owner Santa Fe Gold Corp. and its wholly-owned subsidiary, The Lordsburg Mining Company, and of Canarc Resource Corp., applying all of the tests in Section 1.4 of the same Instrument.

All units of value and measure used in the report are expressed in United States dollars and in the English system of measure as used in the United States, unless otherwise noted.

3.0 RELIANCE ON OTHER EXPERTS

3.1 Other Experts

N/A

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Summit Mine Property

4.1.1 Location

The Summit Mine property comprises several groups of patented and unpatented lode mining claims covering approximately 1000 net acres situated in Sections 25, 26, 27, 35 and 36, Township 16 South, Range 21 West, New Mexico Principal Meridian, Grant County, New Mexico. The location can be found on the Steeple Rock and Crookson Peak 7.5 minute topographic quadrangle sheets produced by the United States Geological Survey at a scale of 1:24000 (Figure 4.1). The property is located in the Steeple Rock Mining District.

4.1.2 Ownership

The various groups of mining claims comprising the property are listed in Table 4.1 and shown in Figure 4.1. A description of the claim groups and relevant information follows.

a. The Summit Group of 10 patented lode mining claims, patented October 23, 1899 and containing 118.917 acres.

b. The Summit Minerals Group of 14 unpatented lode mining claims, which include the New Summit, Norman King and Ruby Red groups, some relocated on January 27, 2004 and others relocated and/or amended on December 6, 2007.

c. The NG Group of 12 unpatented lode mining claims, relocated on January 27, 2004. One of the group, NG #41, was amended on December 6, 2007. These 12 claims are from the remainder of a much larger claim block originally located in 1988.

d. The SF Group of 36 unpatented lode mining claims located by Lordsburg Mining Company on December 6 and 7, 2007. This group was located to cover the northwesterly extension of the Summit structure and to provide additional coverage around the existing holdings.

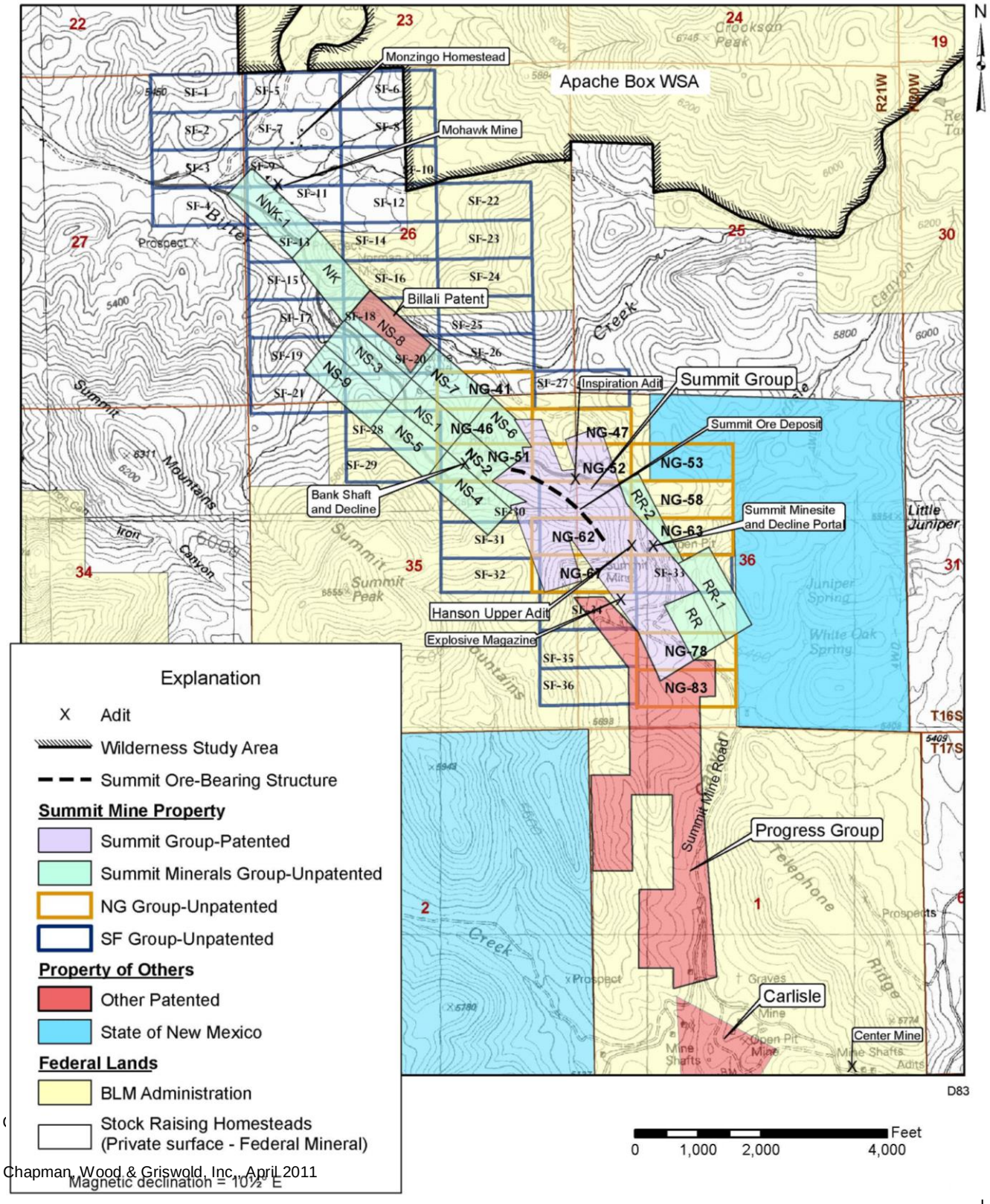


FIGURE 4.1:
Summit Mine Property Map, Grant County, New Mexico

Table 4.1: Mining claims of the Summit Mine Property

	Claim Name	Status	Location Date	NMMC No.	Area (acres)
1. Summit Group – Mineral Survey No. 1010; Patent No. 31629, Oct. 23, 1899					
	Alta Lode	Patent	Sept. 26, 1894	1010-A	14.049
	Surprise Lode	Patent	Aug. 8, 1894	1010-B	10.920
	Surprise Tunnel Lode	Patent	Jan. 9, 1895	1010-C	10.675
	Summit Lode	Patent	Aug. 8, 1894	1010-D	9.547
	Summit Tunnel Lode	Patent	Jan. 9, 1895	1010-E	9.367
	Apex Lode	Patent	Aug. 23, 1894	1010-F	10.980
	Irish Jew Lode	Patent	Mar. 5, 1896	1010-G	18.274
	Puzzle Lode	Patent	Jan. 2, 1896	1010-H	10.430
	Black Spar Lode	Patent	Oct. 31, 1894	1010-I	7.224
	Jack Pot Lode	Patent	Jan. 2, 1896	1010-J	17.451
	Total Summit Group – 10 claims				118.917
2. Summit Minerals Group – 14 claims					
	New Summit No. 1	Location (A)*	Jan. 27, 2004	170464	
	New Summit No. 2	Location	Jan. 27, 2004	170463	
	New Summit No. 3	Location (A)	Jan. 27, 2004	170462	
	New Summit No. 4	Location	Jan. 27, 2004	170461	
	New Summit No. 5	Location	Jan. 27, 2004	170460	
	New Summit No. 6	Location	Jan. 27, 2004	170459	
	New Summit No. 7	Location (A)	Jan. 27, 2004	170458	
	New Summit No. 8	Location	Dec. 6, 2007	182112	
	New Summit No. 9	Location	Jan. 27, 2004	170450	
	Norman King	Location (A)	Jan. 27, 2004	170439	
	New Norman King No. 1	Location	Dec. 6, 2007	182111	
	Ruby Red	Location	Jan. 27, 2004	170445	
	Ruby Red No. 1	Location	Jan. 27, 2004	170446	
	Ruby Red No. 2	Location	Jan. 27, 2004	170447	
3. NG Group – 12 claims					
	NG #41	Location (A)*	Jan. 27, 2004	170449	
	NG #46	Location	Jan. 27, 2004	170448	
	NG #47	Location	Jan. 27, 2004	170456	
	NG #51	Location	Jan. 27, 2004	170457	
	NG #52	Location	Jan. 27, 2004	170454	
	NG #53	Location	Jan. 27, 2004	170455	
	NG #58	Location	Jan. 27, 2004	170453	
	NG #62	Location	Jan. 27, 2004	170452	
	NG #63	Location	Jan. 27, 2004	170444	
	NG #67	Location	Jan. 27, 2004	170443	
	NG #78	Location	Jan. 27, 2004	170442	
	NG #83	Location	Jan. 27, 2004	170441	
4. SF Group – 36 claims					
	SF 1 to SF 36	Locations	Dec. 6 & 7, 2007	181990-182025	

*A – Amended location December 6, 2007

Many of the unpatented claims are in partial conflict with each other and with the Summit patented group; and with patented claims held by others, notably the Billali patent and the northern portion of the patented Progress Group. An unresolved conflict over the same ground in the vicinity of the Bank mine involves Lordsburg's unpatented New Summit No. 1 and an unpatented claim held by others, the Lost New Summit No. 1. Both claims are current in the records of the Bureau of Land Management (BLM).

The 10 patented claims of the Summit Group contain all of the mineral resources that are the subject of this report. Lordsburg owns the Summit Group, subject to royalty payments.

The unpatented mining claims are held by Lordsburg under rights granted by the U.S. Mining Law. Some of these claims lie on land administered by the BLM, Las Cruces District office and others lie on Stock Raising Homestead Entries in which the minerals are owned by the United States and the surface is privately held (see Figure 4.1). A right to enter and surface-use agreements are required with the land owner.

The unpatented mining claims are held by paying an annual Maintenance Fee to the BLM prior to August 31 of each year. Those fees of $155 per claim for the 2015 assessment year have been paid. The patented claims are subject to annual property taxes payable to Grant County.

Mining claims must be physically marked on the ground with corner posts and/or stone monuments. Several of the original survey corners for patent of the Summit Group were located. Those corners are inscribed stones set in the ground and marked by an adjacent mound of rocks. The unpatented claims, all of which have been recently located, are marked with 4-foot-high, 2-inch, wood posts. Although surveys of unpatented claims are not required, the location on the ground with respect to the general land survey system is usually well known because the claims were located using hand-held GPS units with a tie to surveyed (brass caps) section corners.

The Summit gold-silver deposit and the locations of the mine entries are shown on Figure 4.1.

4.1.3 Royalties and Obligations

The Summit Group of patented claims is subject to three royalty interests:

a. Hanson Group – a 5% NSR interest with an end price of $2,750,000.

b. Royal Group – a 5% to 10% "Net Proceeds" payment subordinate to the Hanson Group for broken and/or crushed but otherwise unbeneficiated mineralized rock shipped and sold direct to a smelter, to an end price of $2,400,000.

c. Pierce Carson – a 1% royalty payment on all production with no cap.

The Hanson Group royalty interest also includes any production which may occur from the 14 unpatented claims of the Summit Minerals Group. The Royal Group interest applies to properties within 5 miles of the Summit Mine.

Proposed amendments to the existing U.S. Mining Law include a royalty reservation on all locatable Federal minerals. The Summit mineral resource as defined in this report occurs entirely within the patented Summit Group and would not be subject to a Federal royalty.

Production from the property is subject to New Mexico State severance and resource excise taxes (see Section 21.0).

The property is the subject of a financing agreement with Sandstorm Resources Limited in which Sandstorm has a call on some of the gold production at specified prices. The property is also subject to a financing agreement with Waterton Global Value, LP (see Section 24.0).

4.1.4 Environmental Liabilities

Environmental liabilities at the mine include the closing or safeguarding of all mine entries and the grading, contouring, and seeding of all mine-related surface disturbance at the end of mine life. The mine has a surface disturbance of less than 10 acres, and is classified under New Mexico state statutes as a "Minimal Impact Existing Mine." A closure plan has been submitted to the New Mexico Mining and Minerals Division, and a reclamation bond of $95,175 was provided to that agency on December 23, 2013.

4.1.5 Operating Permits

The mine site is fully permitted and operates under the following Registrations and Permits:

a. Minimal Impact Existing Mine Permit, No. GR011ME, issued by the New Mexico Mining and Minerals Division.

b. Explosives use Permit No. 5-NM-001-33-3A-00279, issued by the Bureau of Alcohol, Tobacco, Firearms and Explosives, a branch of the Department of Homeland Security.

c. New Mexico Air Quality Control Permit, No. 3807M2, issued by the Air Quality Bureau of the New Mexico Environment Department.

d. Stormwater Notice of Intent (NOI) administered by the Environmental Protection Agency under permit tracking number NMR12A765.

e. Mine Water Discharge. An NOI to discharge was filed with the New Mexico Environment Department on January 21, 2014. On March 2, 2014 Lordsburg Mining Company received a determination letter from the New Mexico Environment Department stating that on the basis of sampling results and the planned method of discharge, a discharge permit is not required. Discharge from the mine to surface will require acquisition of water rights to cover the volume of water discharged. This transaction is regulated by the New Mexico Office of the State Engineer.

f. The mine is registered with the Mine Safety and Health Administration (MSHA), No. 29-02356.

Should the need arise to expand the site onto adjoining BLM-administered Federal land, permits and reclamation bonding will be necessary with the BLM.

The Summit Mine road is a County Road. The road makes several at-grade crossings of a local, ephemeral drainage and does not require an Army Corps of Engineers Section 404 Permit under the Clean Water Act. Lordsburg Mining Company has a maintenance agreement with Grant County to allow Lordsburg Mining Company to perform maintenance on the road. That agreement is presently being updated to incorporate the latest BLM standards for road maintenance.

4.2 Lordsburg Property

4.2.1 Location

The Lordsburg property consists of approximately 1300 acres of patented lode-mining claims and 200 acres of unpatented lode-mining claims (Figure 4.2). The property is situated in Section 7, Township 23 South, Range 18 West and Sections 11, 12, 13, 14, 23, and 24, Township 23 South, Range 19 West, New Mexico Principal Meridian, Hidalgo County, New Mexico. The location can be found on the Lordsburg and Gary 7.5 minute topographic quadrangle sheets published by the United States Geological Survey at a scale of 1:24000.

4.2.2 Ownership

Lordsburg Mining Company owns approximately 1100 acres of patented mining claims, and an additional 200 acres of unpatented claims (Figure 4.2).

Lordsburg also has held leases on three other groups of patented and unpatented claims totaling approximately 300 acres. The three groups of claims are the Comstock, Henry Clay and Battle Ship. These three leases have lapsed and will need to be renewed to maintain control of these claim groups.

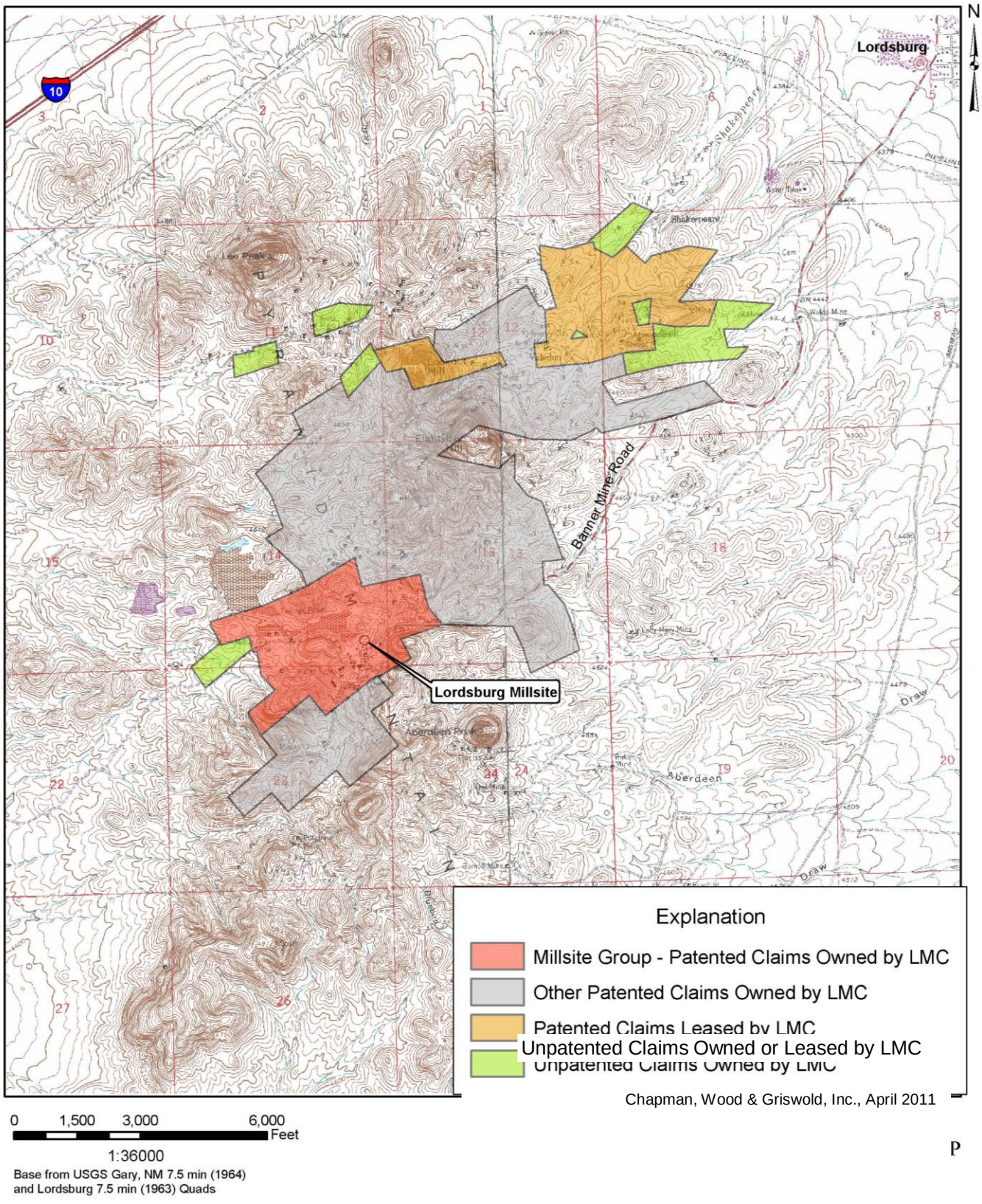


FIGURE 4.2:
Lordsburg Mining Company Property Map, Hidalgo County, New Mexico

4.2.3 Land and Mineral Tenure

Lordsburg Mining Company's patented property is owned in fee, i.e., surface and minerals, by Lordsburg Mining. The unpatented claims are held by location under the U.S. Mining Law and are on ground administered by the BLM.

The Lordsburg millsite property, also known as the Banner millsite, sits on a 257-acre parcel of the patented claims. A portion of this parcel is currently used as a millsite and tailings facility for the processing of the Summit Mine production. The site also houses the Summit Project operating office. The patented claims of the millsite property are listed in Table 4.2 and are shown in Figure 4.3.

The patented claims are private property and are subject to County property taxes. The unpatented claims are subject to an Annual Maintenance Fee of $155 per claim, payable by August 31 of each year to the BLM. The 2015 fees have been paid.

Several of the patented claim corners in the millsite claim block were found. They are marked by a mound of stones adjacent to an inscribed rock set in the ground.

The 300 acres of leased claims are subject to annual lease payments and a production royalty, should mineral production ever occur.

The mill-water supply is pumped from the Bonney Mine shaft which sits adjacent to the mill. Lordsburg controls the rights to 194 acre-feet of water per annum.

4.2.4 Mineral-Related Features

The Lordsburg property contains numerous, old, gold and copper prospects plus underground mine workings extending along a strike length of 3 miles and to depths of 2000 feet. Although there is geological potential for finding base- and precious-metal mineralization, there are no identified mineral resources on the property.

Table 4.2: Partial List of Patented Mining Claims at the Lordsburg Property
(Millsite and tailings facility area – see Figure 4.3)

Claim Name	Location Date	Mineral Survey No.	Patent No. and Date
Johannesburg	Sept. 5, 1921	1871	904000 – Sept. 25, 1923
Nellie Gray Group		1870	884351 – Oct. 25, 1922
Nellie Gray	Jan. 1, 1916		
Congress	Nov. 25, 1919		
March No. 1	Mar. 1, 1916		
March No. 2	Mar. 1, 1916		
August	Aug. 2, 1914	1914	968385 – Oct. 28, 1925
Bonney Group			567465 – Feb. 16, 1917
Sunrise	Aug. 10, 1903		
Shoo Fly	Feb. 18, 1899		
Lone	Feb. 14, 1899		
Teddy	Aug. 5, 1905		
Cochise	Aug. 10, 1903		
Chance	Jan. 1, 1915	1945	985750 – Aug 22, 1926
August No. 2	Aug. 2, 1914	1917	973416 – ?
Manilla Group[1]		1913/2075	1113546 – Mar. 23, 1942
Manilla	Oct. 29, 1927		
Bonney Extension	Oct. 29, 1927		
Oro Alto No. 3[2]	Oct. 29, 1910	2074	1113729 – April 17, 1942
Total area = 257 acres			

[1] The Manilla Group contains 8 claims, 2 of which are in the Millsite Group

[2] Part of the Eldorado Group of 9 claims

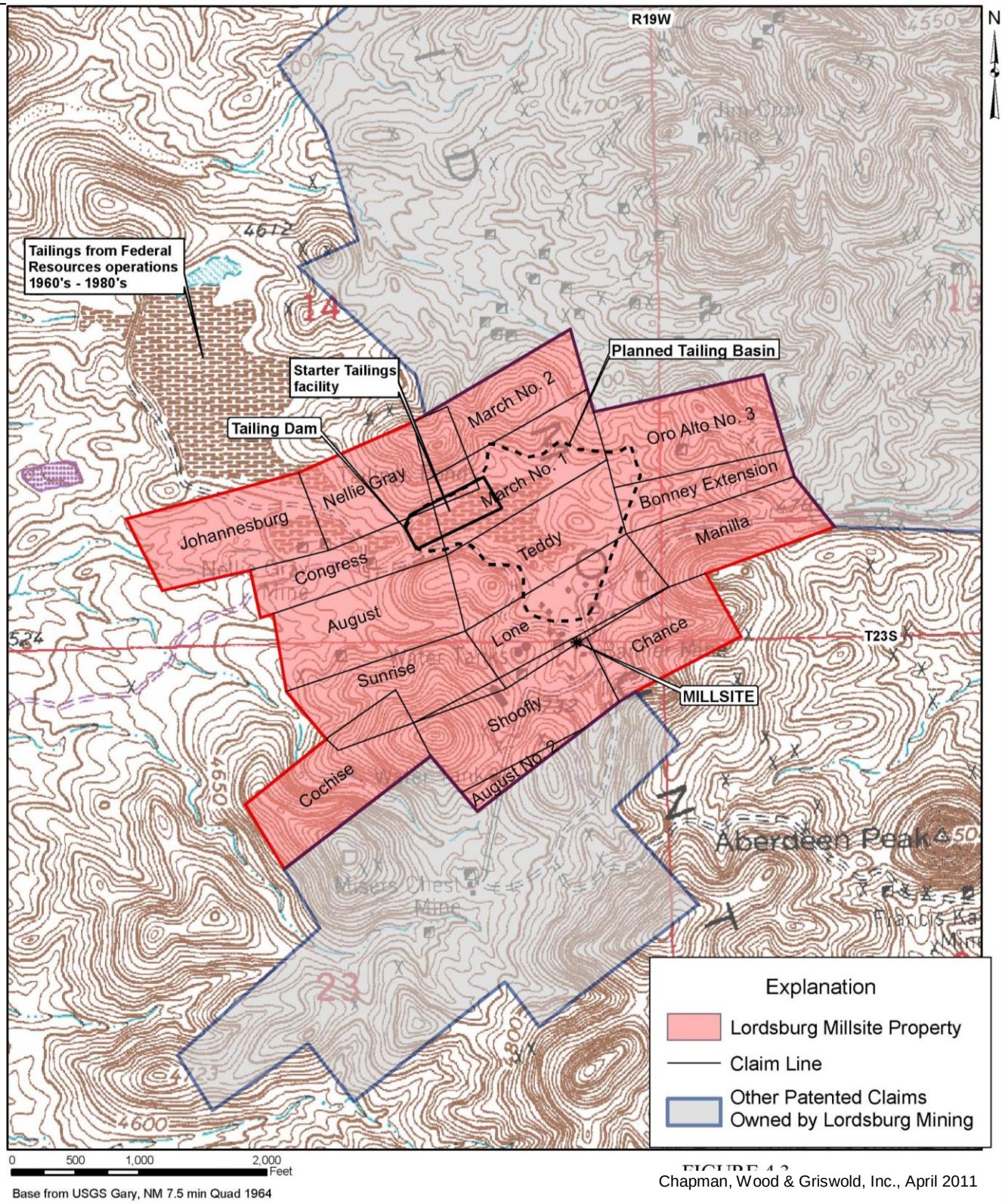


FIGURE 4.3:
Lordsburg Millsite – Property Map, Hidalgo County, New Mexico

4.2.5 Environment Liabilities

Lordsburg Mining, under its approved operating plan, will be allowed to leave intact the mill building and other structures under a post-mine land-use classification of "Industrial," but will be required to reclaim the tailings facility to a condition of a "self-sustaining ecosystem." A reclamation bond of $231,000 has been posted with the State Mining and Minerals Division and the Environment Department. The bond requirement is administered by the New Mexico Mining and Minerals Division (MMD) under permit No. HI001RE. This permit is presently in the final stage of a revision to allow raising of the tailings dam and the operation of a decant cell to provide for dry stacking of tailings outside of the lined impoundment. Additional financial assurance in the amount of $145,989 remains to be placed with MMD to complete this permitting.

4.2.6 Operating Permits

The millsite and tailings facility are fully permitted and operations are being conducted under the following Registrations and Permits.

a. A revised Existing Mine Operations Permit, No. HI001RE; issued under the New Mexico Mining Act by the New Mexico Mining and Minerals Division. A revision of this permit is pending following the placement of $145,989 of financial assurance by Lordsburg Mining Company.

b. A Groundwater Discharge Permit, No. DP-1651, covering the millsite and tailings; issued by the New Mexico Environment Department (NMED). This permit is renewable every 5 years. The permit was renewed on May 2, 2014.

c. An Air Quality Control Permit, No. 0882-M3, for the millsite facilities; issued by NMED Air Quality Division.

d. Tailings dam and impoundment certification and license to operate, No. D-670; issued by the Office of the New Mexico State Engineer.

e. Stormwater NOI administered by the US EPA permit number NMR05HA95

f. Mine Registration No. 29-02357; issued by MSHA.

The Army Corp. of Engineers, as regulator of the Clean Waters Act, determined that the drainage channel used for the tailings facility does not require a Section 404 Permit.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Summit Mine Property

5.1.1 Accessibility

The Summit Mine is situated in the Steeple Rock Mining District of Grant County, New Mexico, 16 miles by road northeast of the town of Duncan, Arizona (Figure 5.1). Access from Duncan is northeasterly on paved Arizona State Highway 75 (the Clifton-Morenci Road) for 1.2 miles to Carlisle Road; thence northeasterly on Carlisle Road, a good gravel road, for 13.5 miles of which the first 5 miles are in Arizona; thence north for 1.5 miles on Summit Peak Road to the property. Carlisle and Summit Peak roads are County roads, maintained by the respective counties with assistance from Lordsburg Mining.

The mine site is also accessible along the Bitter Creek road, a poorly maintained public road which serves several ranches. The distance from Duncan is 26 miles by travelling 11 miles north on State Highway 75 and thence 15 miles easterly on the Bitter Creek road.

Silver City, the county seat of Grant County, with a population of about 10,000 people, is located 49 airline miles and 94 road miles east of the mine.

5.1.2 Climate

The Summit Mine lies in the high mountain desert of the southwestern United States. Mean temperatures range from 40°F in the winter to 75°F in summer with average winter low temperatures being about 20°F and average summer highs being about 90°F. Annual precipitation is approximately 14 inches, half of which falls in the July-September period. Occasional light snow occurs during the winter months.

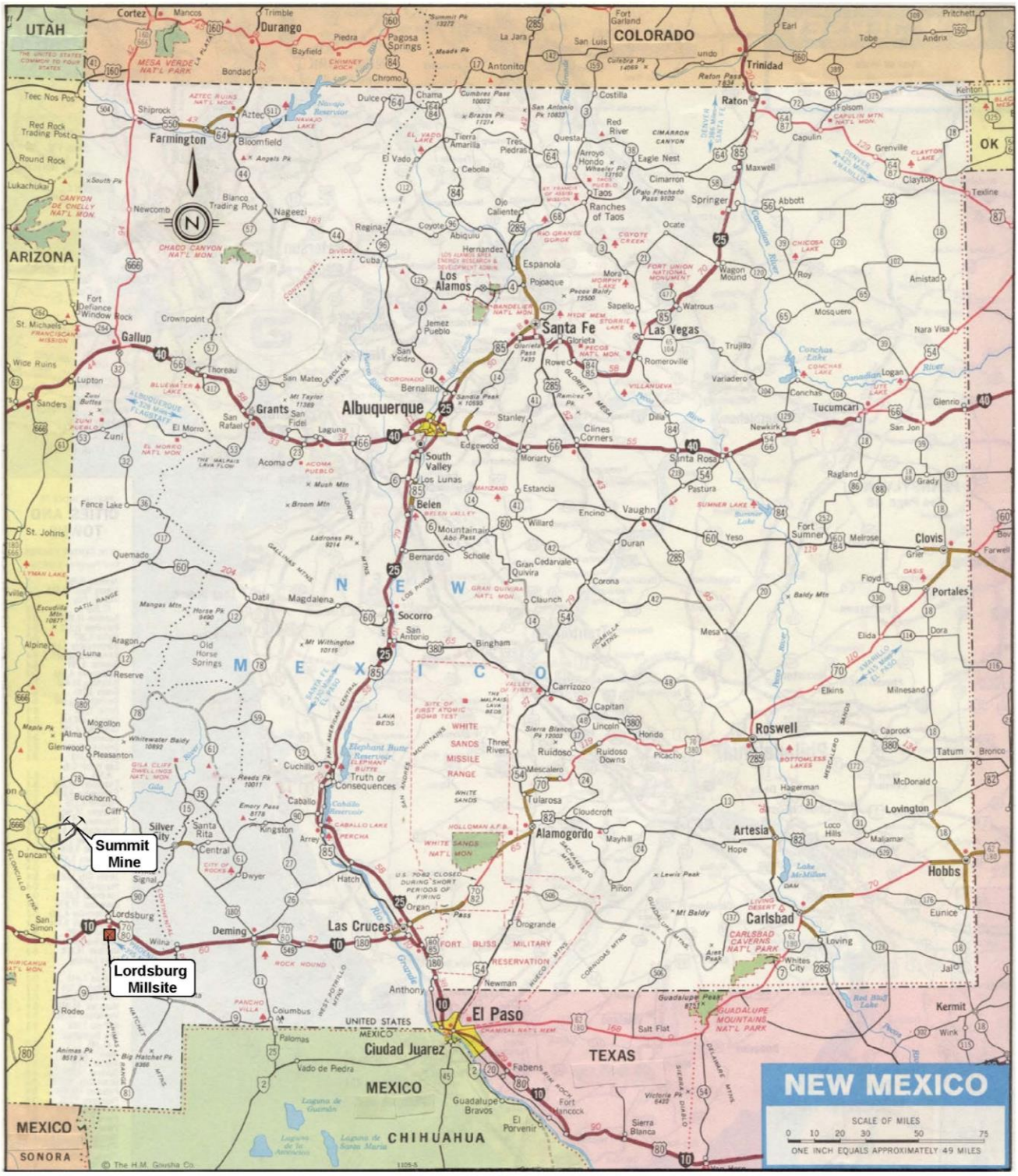


FIGURE 5.1:
State of New Mexico Showing Location of the Summit Gold-Silver Mine-Mill Project

5.1.3 Physical Features

The property is situated at a drainage divide on the east slope of the Summit Mountains. The topography is rugged, accentuated by steep-walled canyons and prominent ridges. Relief in the area is about 1000 feet, typically ranging in elevation from 5300 to 6300 feet. Elevation on nearby Summit Peak is 6555 feet. The Summit Mine site and decline portal are at 5570 feet elevation (see photos in Figure 5.2).

The mountain slopes contain a light growth of piñon, juniper, scrub oak and various cacti.

There are no permanent streams in the mine area. Surface drainage is to the south into Carlisle Canyon and northwest into Bitter Creek, both draining to the Gila River. The mine workings encountered water at an elevation of approximately 5300 feet. The main portal is at an elevation of 5575 feet, and the Inspiration portal is at an elevation of about 5750 feet.

5.1.4 Local Resources and Infrastructure

Duncan and the surrounding agricultural area lie in the Gila River valley and support a population of about 1000 people. Mine personnel commute daily from Duncan. The company provides a transport van. The large, open-pit, Morenci copper mine owned by Freeport McMoRan Copper and Gold Inc. lies 30 miles north of Duncan near the Town of Clifton.

The primary use of the land in the mine area is for cattle ranching. The nearest residents to the mine site are 2 miles to the northwest in the Bitter Creek drainage. The southern boundary of the Apache Box Wilderness Study Area lies one mile north of the mine site. The mine and all of the surface facilities lie on patented mining claims controlled by Lordsburg Mining. The mine site lies against Federally-managed lands. The site, although adequate for now, may need enlarging to accommodate additional rock-storage needs. In that event, a surface-use permit may need to be obtained from the BLM. Once the initial stopes have been completed, it is anticipated that all mine waste will be used to backfill stopes in the mine.

Summit mine site (looking N30°W). Left to right are the office trailer, change room and shop. The decline portal is behind the change room.

Main decline portal; looking southwest.

FIGURE 5.2:
Photographs of Summit Mine Site

Gold-silver-bearing material is hauled from the mine to the Lordsburg millsite for processing and beneficiating.

Water for the mining operation historically has been hauled in from Duncan, AZ. Water is present in the mine and can be utilized underground. Use of this water for surface facilities such as the mine dry and dust control is permitted provided a water right is acquired and transferred to the mine site for such purposes. Water rights are regulated by the NM Office of the State Engineer. Electric power is generated on site. The local electric cooperative in conjunction with Lordsburg is planning an electric power line up Bitter Creek to the mine, a distance of 15 miles. Design of the line is complete, and acquisition of rights of way is nearly complete. Public notice and all environmental and cultural evaluations for the right of way across Federal land (BLM administered) are complete and have been accepted by the BLM. Issuance of the final permit is pending, subject to the final payment for permit costs and the execution of documents by authorized agents. A cellular communications relay station has been established to provide telephone and broad-band service.

5.2 Lordsburg (Banner) Millsite Property

5.2.1 Accessibility

The Banner Millsite, on which a mill has been constructed for processing the Summit Mine production, is situated 4.8 miles by paved road southwest of the town of Lordsburg, Hidalgo County, New Mexico (Figure 5.3).

The millsite is 57 miles by road from the Summit Mine. The truck haul to the mill involves 15 miles of gravel road from the mine to Arizona State Highway 75; then 1.2 miles to U.S. Hwy. 70 at Duncan; then 36 miles southeasterly to Lordsburg on U.S. Hwy. 70; and finally 4.8 miles on paved New Mexico Highway 494 to the millsite. The road from Lordsburg to the millsite is also known as the Banner Mine road, and it terminates at the millsite.

Lordsburg operations office at the millsite; looking west.

Lordsburg (Banner) millsite; looking S 25°W; the Banner shaft (water source) and old hoist house in center; ball mill, mill building and shop to left; crushing plant and mill head tank to right.

FIGURE 5.3:
Photographs of Lordsburg Millsite

5.2.2 Climate

The area lies near the Continental Divide. The climate is typical of the higher southwest desert, having hot summers and cool to warm winters. Average temperatures range from 45°F in winter to 80°F in mid-summer. Winter low temperatures average about 25°F and summer highs average about 95°F. Annual precipitation is about 12 inches, half of which falls in the July-October period. Winter snowstorms are uncommon.

5.2.3 Physical Features

The millsite sits at the head of a small basin surrounded by low, rounded hills. Elevation at the site is 4700 feet and the tops of the nearby hills are at an elevation of about 5000 feet. The basin drains to the west into the Animas Valley playa. The lower part of the basin was historically used as a tailings repository and is now the site of a new tailings facility for the Summit project.

The millsite area contains a light growth of juniper trees, mesquite brush, and several varieties of cactus.

There are no perennial streams in the area and the drainages run only in response to heavy showers from thunderstorms. The permanent water table at the millsite is 750 feet below surface at the Bonney No. 2 shaft.

5.2.4 Local Resources and Infrastructure

Lordsburg, the Hidalgo-County seat, is situated on Interstate Highway 10, U.S. Highway 70, and the Southern Pacific Railroad. An airport with a paved runway suitable for light- to medium-sized aircraft serves the town. Lordsburg has a population of about 3000 people.

The mill site, including the tailings facility, is situated on patented mining claims owned by Lordsburg Mining Company and contains a recently refurbished 240-ton-per-day sulfide flotation mill (Figure 5.3), an office, assay lab, and a shop/warehouse. The tailing facility lies immediately northwest of the millsite.

Electric power is supplied by Public Service Company of New Mexico (PNM). A one-half-mile long, 2000 KVA line has been built to the site by PNM from an upgraded, electric-power service facility located at the north end of the property.

Process water for the milling operation is obtained from the Bonney No. 2 mine shaft adjacent to the mill. Lordsburg Mining holds a Declaration of Owner of Underground Water Right, Declaration No. 12-84 date stamped May 29, 1991, Office of the State Engineer (OSE) File No A-00663, for the appropriation and use of 194 acre feet per annum. Lordsburg also holds a Surface Water right of 4.8 acre feet per annum per OSE File No SP-5014 for operation of the lined tailing impoundment. The surface right was issued as part of the original dam permitting process. The underground right is presently included in a process of formal adjudication of water rights for the Animas Valley by the OSE.

Project management and operating personnel live in Lordsburg.

6.0 HISTORY

6.1 Steeple Rock District

The earliest records indicate that miners and prospectors were established in the area by 1860 (Gillerman, 1964). The best known mine in the District was the Carlisle, situated 1.5 miles south of the Summit Mine (Figure 4.1). It was producing prior to 1880 and during the period 1880-1897 there was a stamp mill and smelter on site. Precious and base metals (lead, zinc and copper) occurred in siliceous mineralized shoots within a brecciated fault structure. Several other well-known mines in the District include the Center, Pennsylvania, East Camp and Jim Crow-Imperial. All of these contained siliceous gold-silver ores with or without base metals in vein-like structures associated with prominent fault systems. Many of these mines were developed to depths of 300 to 600 feet.

Although production records prior to 1904 are sketchy, the U.S. Bureau of Mines has estimated that between 1880 and 1986, metal production from the Steeple Rock District was approximately (Santa Fe Gold Corp. Form 10K, June 30, 2010):

Gold	–	148,000	ounces
Silver	–	3,300,000	ounces
Lead	–	5,000,000	pounds
Copper	–	1,200,000	pounds
Zinc	–	4,000,000	pounds

Most of the above metal was reportedly produced from the Carlisle mine.

The Mohawk mine situated 1.5 miles northwest of the Summit Mine lies along the East Camp fault, the same fault system which hosts the Summit Mine. The Mohawk lies on property controlled by Lordsburg Mining. It was a fluorspar mine which last operated in 1945 and produced about 3000 tons of fluorspar grading 65 to 70 percent fluorite (Gillerman, 1964). Additional fluorspar production has also been reported from other properties in the District.

6.2 Summit Property

6.2.1 Early History

From the time of its discovery in the late 1800's and up until 1970, only sporadic, surface and near-surface exploratory work had been done on the Summit property. A number of shallow shafts had been sunk on surface outcrops and two lower-level, crosscut-adits driven, the Summit and the Apex. These two adits were apparently driven about 1920. Approximately 750 feet of drifting was done on the vein, mostly in the Summit Mine. No production is recorded.

6.2.2 Hanson Period

In 1976, the Hanson family of Duncan, Arizona leased the property and did some underground mining. During the late 1970's – early 1980's they shipped about 30,000 tons of siliceous, precious-metal flux grading 0.103 oz Au and 4.96 oz Ag per ton to the ASARCO smelter at El Paso, Texas (Inspiration Mines, Inc., 1984). The Hansons also started development of a lower-level crosscut and drove a 10-ft by 10-ft decline 170 feet into the hillside. All of this work was done in the vicinity of the original Summit Mine.

6.2.3 Inspiration Mines Period

Inspiration Mines, Inc., with a copper smelter at Globe, Arizona, optioned the property from the Hansons and in 1983-1984 spent about $1.5 million exploring the property. Using rubber-tired equipment, they drove a 240-foot decline-crosscut beneath the Apex adit and drove 850 feet of drift, all at a size of 15 by 15 feet. Additionally, 17 small crosscuts (7 ft x 6 ft) totalling 450 feet were driven to explore the vein zone. This work was done at the 5730-foot level. Included in their work was 5328 feet of drilling in 13 holes to intersect the vein structure at and below the 5730 level. These holes were partially drilled with a down-hole hammer and then cored through the vein system.

6.2.4 Hecla Mines and Noranda Mines Investigations

In 1984-1985, Hecla Mining Company mapped and sampled the Summit property and recommended a drilling program (M. R. Wilson). However, drilling was not carried out and Hecla dropped its option. In 1986(?) Noranda Mines examined the property and did some sampling.

6.2.5 Nova Gold and Biron Bay Period

In 1987, Nova Gold Resources Inc. optioned the property and negotiated several agreements on other properties in the Steeple Rock District. Nova Gold carried out drilling to intersect the Summit structure beneath the resource that Inspiration had defined and was successful in discovering gold and silver mineralization of significantly higher grade. Biron Bay Resources Ltd. joined Nova Gold in 1989 and these two Canadian companies continued the exploratory work. By 1992 the joint venture had spent over $7 million, most of it on the Summit property and the northwest extension of the structure to the Billali and Mohawk mines. Although a significant amount of geology, geophysics and aerial mapping was done, most of the money was spent drilling 103 core holes for 98,826 feet. In 1992 Biron Bay retained MPH Consulting Ltd. of Toronto to examine the data and prepare a resource estimate.

A discussion of the resource estimate by Brereton and Grant, Professional Engineers with MPH Consulting, is not relevant because the estimate is historical, uses terminology which is no longer acceptable, is not NI 43-101 compliant and therefore cannot be relied upon.

6.2.6 St. Cloud Mining Company

St. Cloud Mining Company (St. Cloud) examined and studied the property on several occasions beginning about 1986. St. Cloud, and its subsidiary, Lordsburg Mining Company, seriously considered mining the Summit deposit and shipping a precious-metal-bearing silica-flux to local copper smelters. In 2000, Lordsburg Mining Company entertained the idea of milling the Summit material in the St. Cloud flotation mill which was to be relocated to the Company's Lordsburg millsite (the Banner millsite). However, combinations of continuing low gold and silver prices, the closing of copper smelters, and onerous property agreements precluded project development.

6.2.7 Current Project Status

In 2006, AZCO Mining Inc., an Arizona-based mining company, acquired the Summit property from the successors to Nova Gold Resources and Biron Bay Resources. Concurrently, AZCO also acquired Lordsburg Mining Company and most of its assets from St. Cloud Mining Company, and purchased the grinding and flotation section of the St. Cloud mill located at Winston, New Mexico. In 2007, AZCO changed its name to Santa Fe Gold Corp. and moved its head office to Albuquerque, New Mexico. Development of the Summit Mine and construction of the associated Banner mill began in early 2008. The mine is currently in an advanced stage of development and the mill and tailings facilities are operational. In November 2013 operations were temporarily suspended pending a corporate reorganization and the acquisition of additional operating capital. At the time of closure, limited stoping had commenced in three blocks and the mine had shipped 180,690 tons of gold-silver bearing material to the Lordsburg mill. Of that total, 110,926 tons were processed to produce 697.9 tons of high grade gold-silver concentrate, most of which was sold to the Arubis smelter in Germany. Prior to the suspension of operations, several shipments of concentrate were sold to the L.S. Nikko smelter in South Korea. The balance of the mine production, approximately 70,000 tons, was crushed, sized, and sold as a precious-metal-bearing silica-flux to area copper smelters owned by Asarco and Freeport-McMoRan. A few hundred tons of material remain in various stockpiles at the Banner mill site and the transfer point in Duncan, AZ.

6.3 Lordsburg Property

The mining history of the Lordsburg property, although very significant to the mining history of New Mexico, is not relevant to the development of the Summit Mine other than as a site on which to process the Summit material. Santa Fe Gold's purchase of Lordsburg Mining Company in 2006 included only 257 acres of the total Lordsburg-area holdings, sufficient land at the old Banner/Federal Resources site on which to construct a mill and related facilities (see Figure 4.3). The old mill and many of the buildings had previously been dismantled and/or demolished during mine-reclamation activities at the site. In 2008, Lordsburg Mining purchased the balance of the St. Cloud holdings in the Lordsburg District, including land holdings and crushing and screening equipment. The two-stage, crushing-and-screening plant has been relocated to the Banner Millsite. The St. Cloud mill has been relocated, refurbished and erected at the millsite. A new tailings impoundment facility has been constructed in the old Banner tailings site. Milling of mine-development rock commenced in March of 2010.

Lordsburg Mining currently owns approximately 1100 acres of contiguous, patented, lode-mining claims and 200 acres of unpatented lode-mining claims in the Lordsburg District.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

Numerous studies of the geology and mineral deposits of the Steeple Rock District have been made. However, no composite geologic maps have been produced on the USGS system of 7.5-minute quadrangle sheets (1:24000 scale). Figure 7.1 is a portion of the Geologic Map of Western Grant County produced at a scale of 1 inch = 2 miles (Gillerman). Much of the following information was extracted from the 1992 report on the Summit Mine prepared by MPH Consulting (Brereton and Grant).

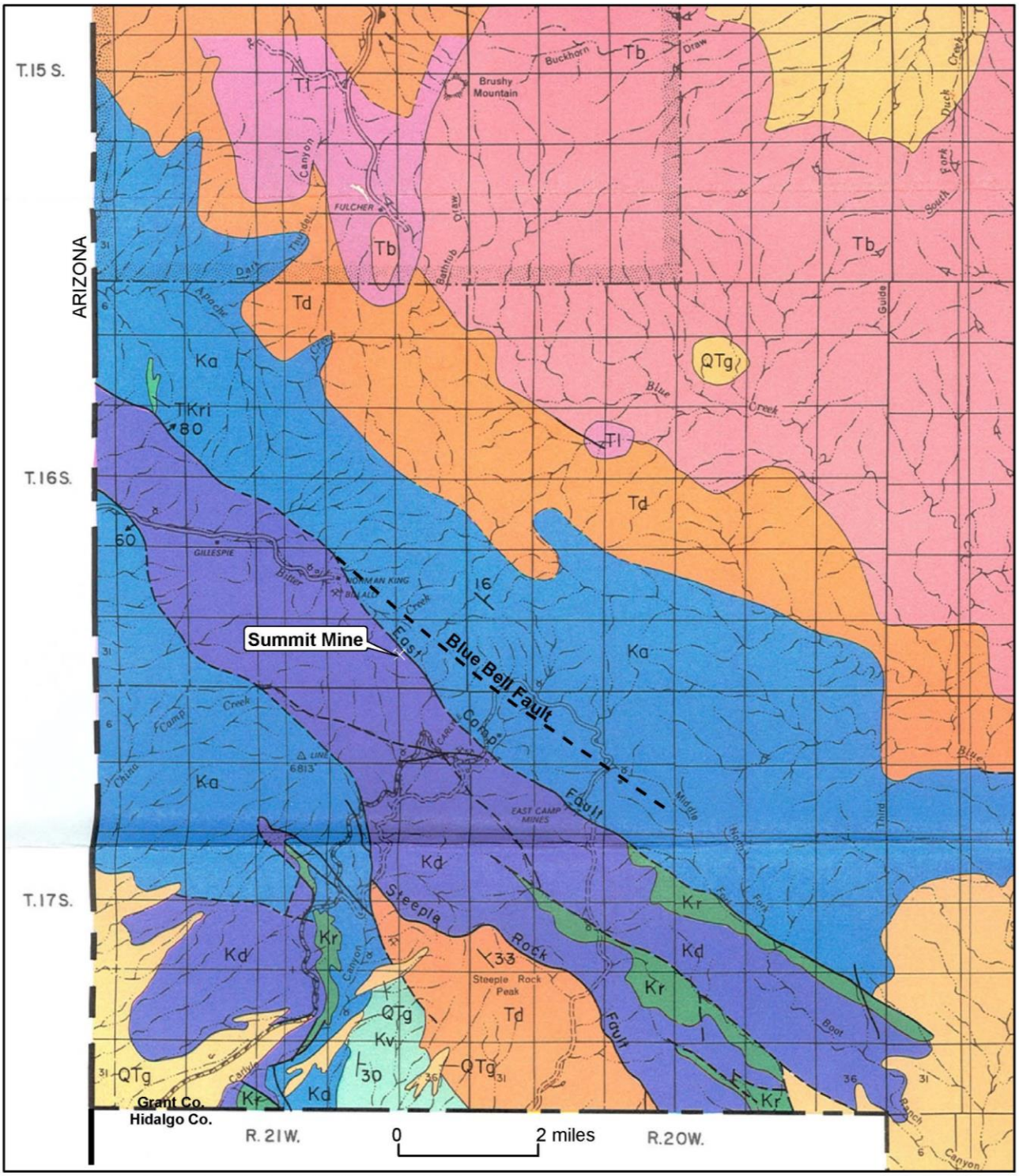
7.1 Regional Geologic Setting

The Summit Mine and Steeple Rock District lie on the southern edge of the mid-Tertiary-age, Datil-Mogollon volcanic field. The volcanic sequence comprises up to 8,000 feet of highly diverse volcanic and volcaniclastic rocks representing multiple eruptions from different vents. Thick sequences of andesitic and dacitic lava flows are interbedded with volcaniclastic and fluvial sediments. The flow rocks are typically porphyritic. Numerous high-silica rhyolites (Miocene-age) have intruded the lava flows. Thin tuffaceous units are associated with some of these intrusive bodies. The rock units generally trend northwesterly and dip moderately to gently to the northeast.

Small outcrops of Precambrian igneous rocks, Cretaceous sedimentary rocks and Cretaceous-Eocene sedimentary rocks crop out south of the district. Although these rocks are not exposed in the Steeple Rock district, they probably underlie the thick Tertiary volcanic sequence exposed in the district.

Regional, normal faults in the area trend northwesterly.

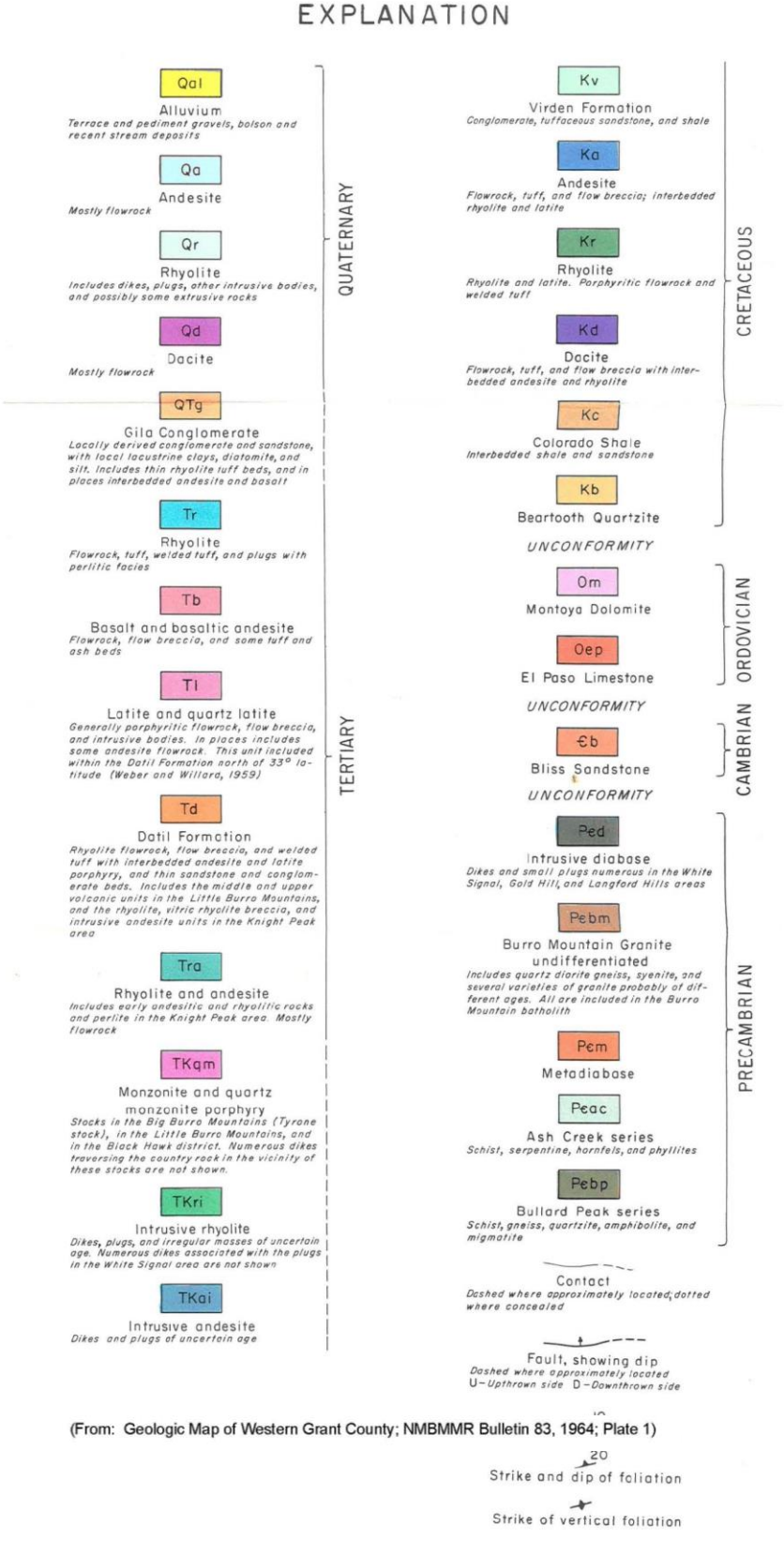
The large, Morenci porphyry-copper deposit lies 25 miles northwest of the Summit Mine. The Morenci District contains a cluster of several Cretaceous/Tertiary-age granitic intrusives.



(From: Geologic Map of Western Grant County; NMBMMR Bulletin 83, 1964; Plate 1)

Chapman, Wood & Griswold, Inc., April 2011

FIGURE 7.1:
Geology of the Steeple Rock Area, Grant County, New Mexico



(From: Geologic Map of Western Grant County; NMBMMR Bulletin 83, 1964; Plate 1)

7.2 Local Geology

In the vicinity of the Summit Mine, the rock units are typically interbedded dacitic to andesitic flows, flow breccias and tuffs with a 15º to 30º northeasterly dip. The two main faults in the area are the East Camp/Blue Bell Fault and the Steeple Rock Fault, the latter located parallel to and about 2.5 miles to the southwest of the former (Figure 7.1). Both faults trend northwesterly with the East Camp/Blue Bell Fault dipping steeply to the northeast and the Steeple Rock Fault steeply to the southwest. These appear to be bounding faults for a large horst-like feature which contains the Steeple Rock mining area.

At the Summit Mine, the Summit fault, which is a segment of the East Camp fault, is marked by a prominent, northwest-striking, siliceous zone of quartz-carbonate veins, stockworks and breccias up to 100 feet wide. The zone typically dips 70°-80° northeast and can be traced for over 3000 feet (Figure 7.2). The zone is carbonate-rich near surface and becomes increasingly silica-rich with depth. In the vicinity of the structure, the host volcanic rocks are weakly to moderately hydrothermally altered with silicification predominating over argillization.

To the northwest, in the vicinity of the Bank mine, the Summit structure is offset by a strong east-west-striking and south-dipping fault zone (Figure 7.2). North of this feature, the mineralized structure continues for several thousand feet and is known as the Billali-Norman King structure.

One notable feature of the Summit structure in the mine area is a prominent flexure which changes the strike of the structure from N 42º W to N 85º W. It is in this area where much of the mineralization is located.

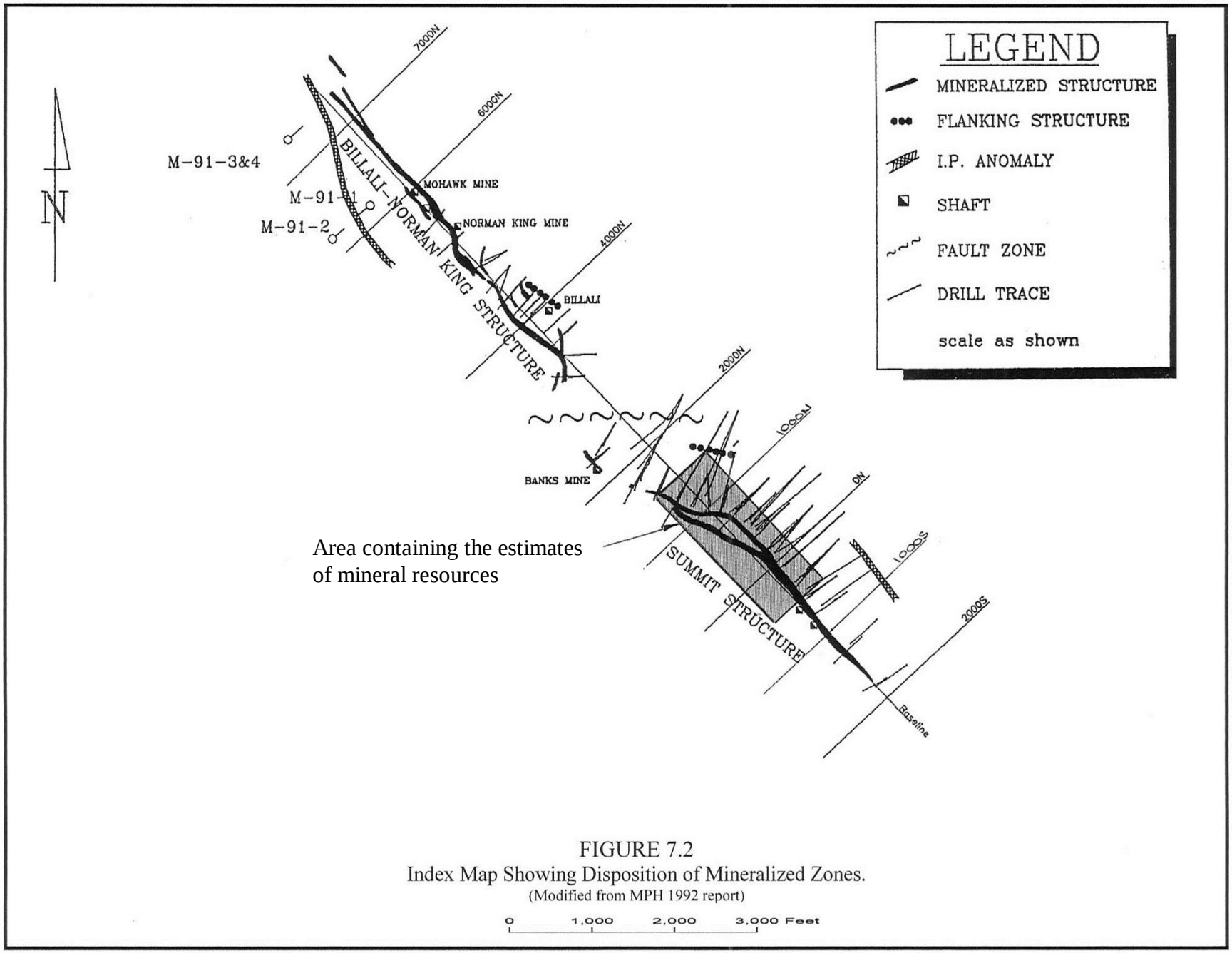


FIGURE 7.2
Index Map Showing Disposition of Mineralized Zones.
(Modified from MPH 1992 report)

7.3 Mineralization

Gold and silver mineralization occur in an epithermal, low-sulfidation system containing less than 1% very-fine-grained, disseminated pyrite and trace amounts of galena, sphalerite and chalcopyrite. Most of the gold and silver mineralization occurs as grey streaks of finely-divided sulfide minerals in brecciated quartz and other siliceous material. Lesser amounts are associated with calcite. Brecciation and silicification have occurred in multiple episodes. Chalcedonic banding is common and late-stage crystalline quartz, frequently amethystine, fills vugs. Oxidation in the form of iron and manganese oxides is prevalent throughout the mineralized zone and is quite strong in the Inspiration level (elevation 5750 feet). At the water table (elevation 5300 feet), oxidation, although still present, is greatly reduced.

Figure 7.3 is a photograph of a highly mineralized face on the 5550 Level of the mine showing both resilicfied mineralized breccias and colloform-banded mineralization.

A study of mineralization in the Steeple Rock District done by Pittsburg Mineral and Environmental Technology (Baum, 1988) indicates that gold occurs as electrum (a natural, gold-silver mineral alloy) associated with the silver sulfides argentite-acanthite and with pyrite. Gold also occurs as ultrafine disseminations, particularly in silica veinlets and occasionally in brecciated carbonate. Some silver and gold mineralization reportedly occurs with hydrous iron and manganese oxides.

The principle control for the mineralization is the high-angle Summit fault structure which, through recurrent movement accompanied by multi-episodic periods of silicification, resulted in sheet-like zones of siliceous breccias. Tensional stress, probably caused by a flexure in the structure, created the porosity needed for the transmission of siliceous and precious-metal-bearing fluids. Detailed mapping and sampling of the underground development headings by the mine geologists has provided insight into the evolution of the Summit structure. As the fault system developed, lithic-quartz breccias initially filled the open space and are now seen on both the hangingwall and footwall of the structure. Continuing tectonic and mineralizing events resulted in the sequential development of quartz-lithic breccias, precious-metal mineralization, quartz-vein breccias, and quartz-carbonate breccias. The last major mineralizing event was the emplacement in the central part of the structure of a dyke-like body of iron-carbonate-hosted, quartz-pebble breccia.

Post-mineral faulting, some of it at very acute angles to the structure, offsets the mineralization. An idealized cross section of the Summit structure following the introduction of precious-metal mineralization is shown in Figure 7.4.

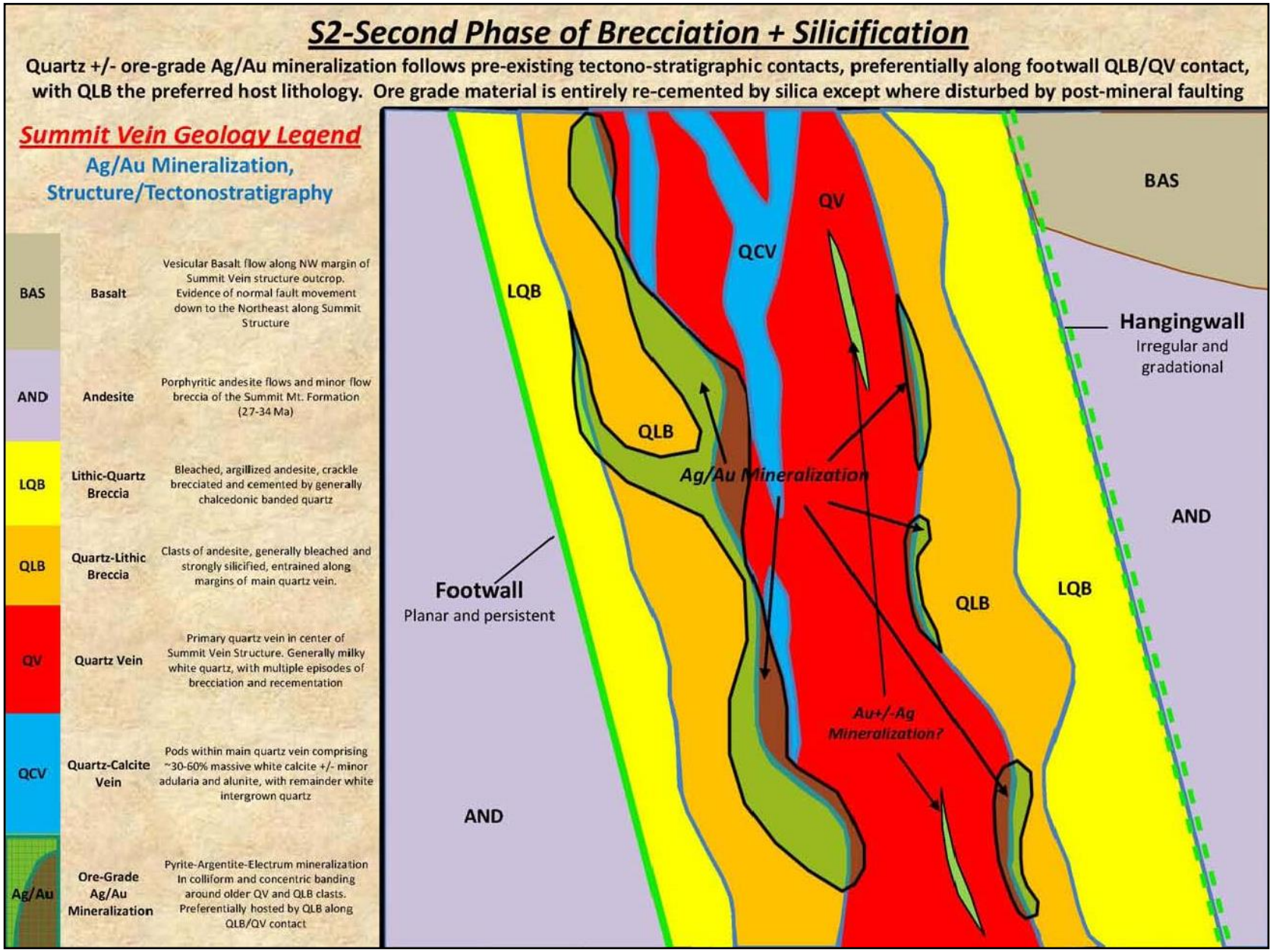
Mineralization is mostly confined to the siliceous breccias of the Summit fault structure. In the vicinity of the Summit gold-silver deposit, the wall rocks to the fault structure are a moderately northeast-dipping sequence of dacitic to andesitic flows and flow breccias. For distances of 50 to 100 feet into both the hangingwall and footwall of the fault structure, the host rocks are silicified and quartz-vein stockworked. Argillic alteration is noted locally.

Most of the gold-silver mineralization occurs within a 1000-foot-vertical zone and bottoms out at about the 4600/4800-foot elevation (for reference, the Inspiration level is at an elevation of 5730 feet and the maximum surface elevation is approximately 6200 feet). The main concentration of precious-metal mineralization occurs within quartz-lithic breccias in the footwall portion of the structure where it appears to be reasonably continuous over a strike length of 1500 feet and a vertical extent of 500 to 1000 feet. Mineralization having grades exceeding 0.05 oz Au-equivalent are found across true widths of 5 to 30 feet and average 10 to 15 feet. Discontinuous zones, based on the existing 200- to 300-foot drill-hole spacing, occur towards the hangingwall portion of the structure, particularly in the northern section of the Summit Mine. Drilling also identified gold-bearing quartz veins within the footwall andesites. One notable intersection occurs about 50 feet into the footwall on Section 400N (Hole S90-3). An interval of 10.9 feet (true width) containing argillically altered and quartz-vein-stockworked andesite-porphyry with pyrite veinlets assays 0.290 oz Au and 0.47 oz Ag per ton. The extent of this mineralization is unknown but demonstrates the need for close-spaced, long-hole drilling during mining operations. Figure 7.5 shows a typical drill-hole cross section on Line 400 North (from MPH).

As is typical of precious-metal deposits, mineralization is erratic and drill-core intervals of 2 to 4 feet can contain values exceeding 0.50 oz Au and 30 oz Ag per ton.

Highly mineralized face on the 5550 Level. Note the highly brecciated structure. The black breccia fragments in the quartz and the black colloform banding are gold-silver mineralization associated with very fine-grained pyrite. This zone is near the base of oxidation.

FIGURE 7.3:
Photograph of Mineralized Drift Face



Prepared by S. Bourque. December 2010

FIGURE 7.4:
Idealized Cross Section of Summit Structure at Phase 2

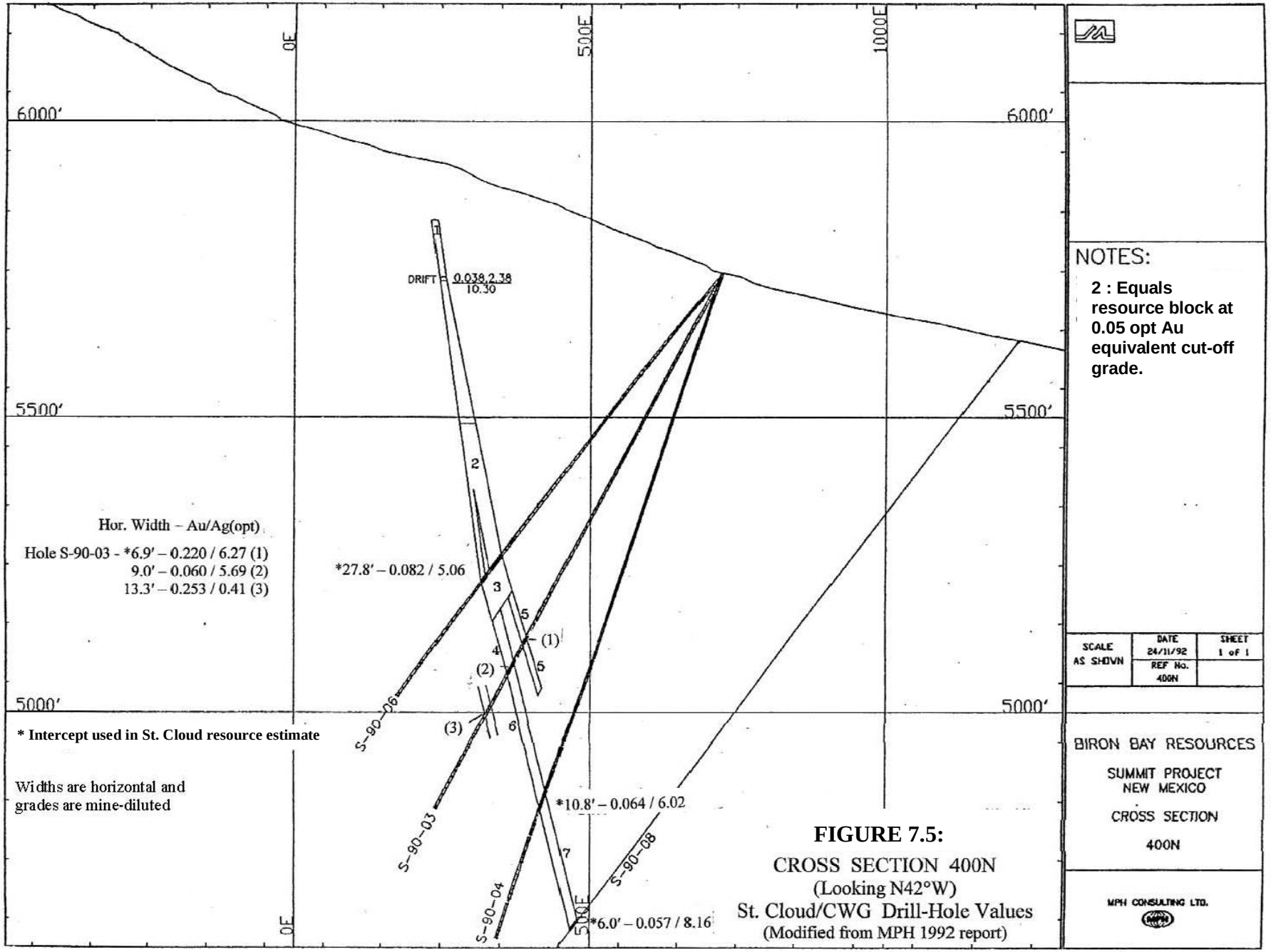


FIGURE 7.5:
CROSS SECTION 400N
(Looking N42°W)
St. Cloud/CWG Drill-Hole Values
(Modified from MPH 1992 report)

8.0 DEPOSIT TYPES

The Summit gold-silver deposit is a structurally-controlled, vein-type deposit occurring in the lower-footwall portion of a 50- to 100-foot-wide, steeply-dipping, siliceous fault breccia within a segment of the northwesterly striking Summit fault. A flexure in the structure may have provided some of the conduits for ascending mineralizing solutions. The model for the deposit is a low-sulfidation, epithermal system in which gold and silver mineralization associated with silica were deposited within an approximate 1000-foot vertical zone governed by temperature and pressure. Above this zone the system is notably calcareous, and the mineralization is low grade and erratically distributed. Below the mineralized zone, on the basis of limited drilling, the structure appears to be virtually barren.

The mine is being developed in the footwall section of a 2000-foot-long segment of the Summit structure. The vein-like mineralized zone dips 70°-80° to the northeast. Other parallel, vein-like breccia zones containing significant mineralization occur in the hangingwall section of the structure. Mineralized quartz veins also are known to occur in the footwall andesite. These other veins and vein-like structures are a part of the deposit model and will be the focus of additional exploration both within the mine area and northwesterly along the structure. Vein-type breccias and stockwork mineralization occur at several locations for 5000 feet from the Summit Mine, notably at the Bank Mine, the Billali, the Norman King, and the Mohawk (see Figure 7.2). With the exception of the Billali patented claim and the Bank unpatented claim, this zone is controlled by Lordsburg Mining.

To the southeast of the mine, the Summit structure lies on patented claims owned by others and is marked by a zone of intense argillic alteration with only minor silica and/or carbonate mineralization.

9.0 EXPLORATION

No exploration work has been done on the Summit property either by Santa Fe Gold Corporation or its subsidiary, Lordsburg Mining. Lordsburg's efforts have been directed towards developing the Summit Mine to production.

Prior exploration work, which broadly defined the mineral deposit currently under development, was done principally in the period 1983-1991 by Inspiration Mines Inc., Nova Gold Resources Inc., and Biron Bay Resources Ltd. (see Section 6.0, History). That work and the results of it have been thoroughly reviewed by the principal author of this report, Douglas F. Irving, P.E.

10.0 DRILLING AND UNDERGROUND SAMPLING

All of the exploratory drilling on the Summit Mine was done by Inspiration Mines and the Nova Gold-Biron Bay Joint Venture. Most of the drill-hole logs exist in the files of Lordsburg Mining. The logs are descriptive, detailed and professional. The author has examined most of the logs in detail, in particular on those sections drilled through the Summit structure where most of the mineralization occurs.

10.1 Inspiration Period

Drilling on the Summit Mine property by Inspiration Mines, Inc. (1983-1984) was designed to test the Summit structure between the 5500- and 5700-foot elevations. Thirteen holes totaling 5328 feet were drilled into and through the structure. Most of the holes were drilled with a down-hole hammer to a point near the hangingwall of the structure, then cased and completed by coring through the structure with a diamond drill. A down-hole survey was done on most of the holes. Core recovery was reported to be excellent for the most part. The holes were drilled perpendicular to the strike of the structure and at angles of minus 15° to 45°. The true width of individual sample intervals ranges from the actual measured length to 87% of the core interval for holes drilled at minus 45°. The structure and the mineralized portions typically strike northwesterly and dip 75° to the northeast.

Inspiration's drilling identified significant gold-silver mineralization in three vertically oriented shoots along a strike length of 1800 feet in the Summit structure. The Company geologists noted that the mineralization appeared to be limited along strike in both directions but open down dip.

10.2 Nova Gold-Biron Bay Period

Nova Gold and Biron Bay (1988-1991) drilled 74 core holes totaling approximately 78,000 feet into the Summit structure for the purpose of further defining the zones of mineralization identified by Inspiration Mines. The drilling was predominantly NX wireline (44 mm diam. core), or BX wireline (33 mm diam. core) in the lower sections of

some deep holes. Many holes exceeded 1000 feet in depth. For the most part holes were drilled perpendicular to the strike of the structure and at angles ranging between minus 45° and minus 65°. All holes were down-hole surveyed with a Sperry-Sun camera. Core recovery was reported to have been good to very good.

The core was stored in the Inspiration level of the Summit Mine and over time it has been vandalized and destroyed. The core was split and assayed through the Summit structural zone of brecciation, quartz-vein stockworks, silicification and mineralization. In the mineralized zones, the core was quartered and used for metallurgical studies and confirmatory analyses. The drilling by Nova Gold and Biron Bay was successful in outlining the basic zones of mineralization in the Summit deposit and establishing a lower limit to the precious-metal horizon. Drill-hole penetration points are typically spaced at 200- to 300-foot intervals.

10.3 Commentary on Drilling

The drilling and core sampling protocol of both Inspiration Mines and the Nova Gold – Biron Bay programs was under the direction and supervision of industry professionals. Examination by the author of core, drill-hole logs, and sampling intervals indicates that the work was done methodically and professionally. Sample intervals were selected based on geology and mineralization. The intervals selected by the Inspiration geologists are more variable than those for the Nova Gold – Biron Bay work, ranging from 2 to 10 feet versus 3 to 5 feet for the latter. Obvious intervals of strong mineralization were usually sampled separately. A plan view showing the locations of holes drilled on section lines is provided in Figure 10.1. Two representative cross sections showing holes drilled and assay intervals are provided in Figures 10.2 and 10.3.

Core sampling was conducted through the Summit structural zone and into both walls in zones of quartz-vein stockworks within the volcanic host rocks. All veins intersected in the holes were routinely sampled. The Summit structure is typically 40- to 80-feet wide and sampling was frequently done on 100 to 250 feet of core in each hole. The number of core intervals sampled exceeds 2000.

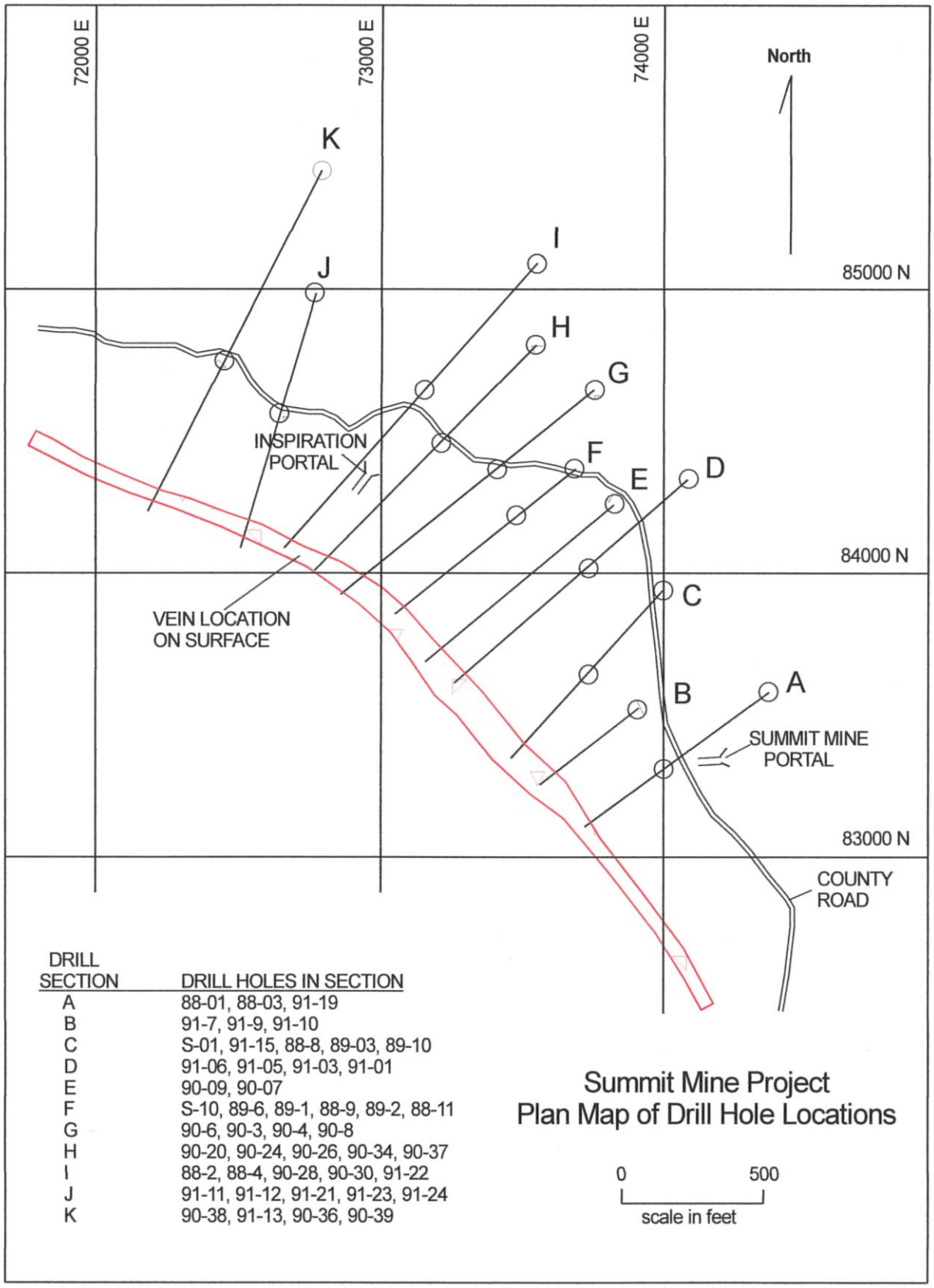
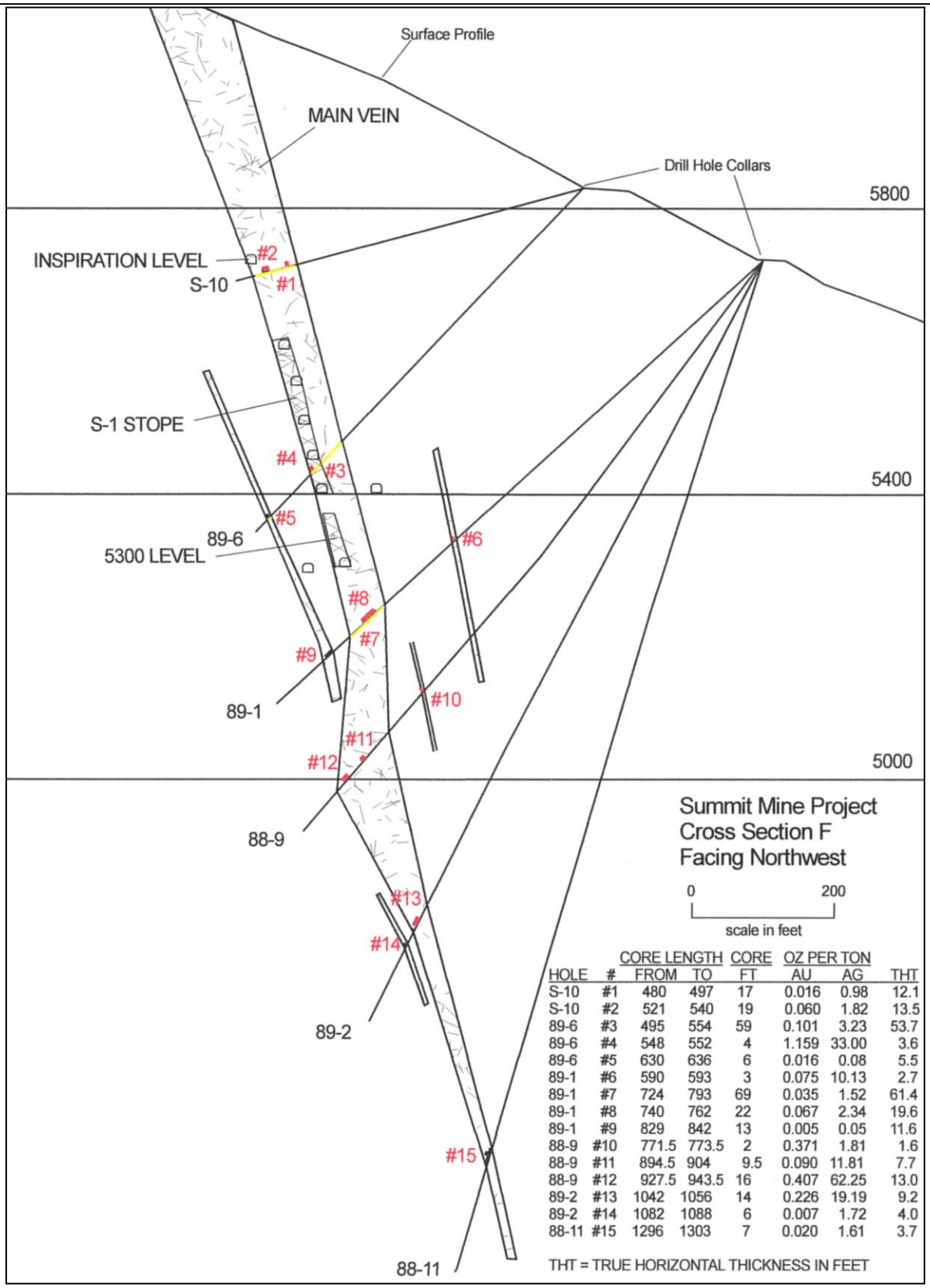


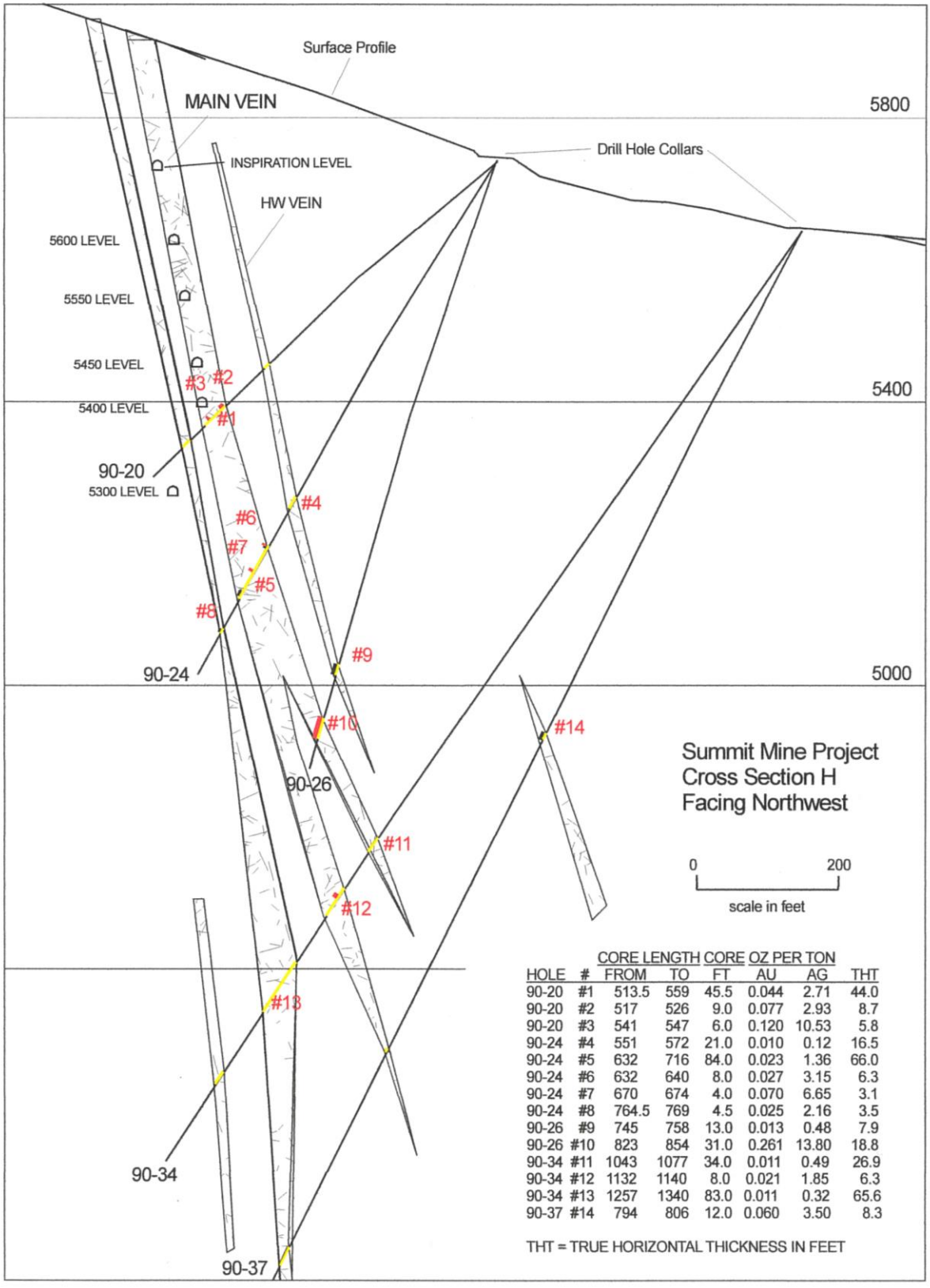
FIGURE 10.1:
Plan view of drill hole locations, Summit Mine.



HOLE	#	CORE LENGTH FROM	TO	CORE FT	OZ PER TON AU	AG	THT
S-10	#1	480	497	17	0.016	0.98	12.1
S-10	#2	521	540	19	0.060	1.82	13.5
89-6	#3	495	554	59	0.101	3.23	53.7
89-6	#4	548	552	4	1.159	33.00	3.6
89-6	#5	630	636	6	0.016	0.08	5.5
89-1	#6	590	593	3	0.075	10.13	2.7
89-1	#7	724	793	69	0.035	1.52	61.4
89-1	#8	740	762	22	0.067	2.34	19.6
89-1	#9	829	842	13	0.005	0.05	11.6
88-9	#10	771.5	773.5	2	0.371	1.81	1.6
88-9	#11	894.5	904	9.5	0.090	11.81	7.7
88-9	#12	927.5	943.5	16	0.407	62.25	13.0
89-2	#13	1042	1056	14	0.226	19.19	9.2
89-2	#14	1082	1088	6	0.007	1.72	4.0
88-11	#15	1296	1303	7	0.020	1.61	3.7

THT = TRUE HORIZONTAL THICKNESS IN FEET

FIGURE 10.2:
Cross section F, showing surface core holes with assay intervals, Summit Mine.



HOLE	#	CORE LENGTH FROM	TO	CORE FT	OZ PER TON AU	AG	THT
90-20	#1	513.5	559	45.5	0.044	2.71	44.0
90-20	#2	517	526	9.0	0.077	2.93	8.7
90-20	#3	541	547	6.0	0.120	10.53	5.8
90-24	#4	551	572	21.0	0.010	0.12	16.5
90-24	#5	632	716	84.0	0.023	1.36	66.0
90-24	#6	632	640	8.0	0.027	3.15	6.3
90-24	#7	670	674	4.0	0.070	6.65	3.1
90-24	#8	764.5	769	4.5	0.025	2.16	3.5
90-26	#9	745	758	13.0	0.013	0.48	7.9
90-26	#10	823	854	31.0	0.261	13.80	18.8
90-34	#11	1043	1077	34.0	0.011	0.49	26.9
90-34	#12	1132	1140	8.0	0.021	1.85	6.3
90-34	#13	1257	1340	83.0	0.011	0.32	65.6
90-37	#14	794	806	12.0	0.060	3.50	8.3

THT = TRUE HORIZONTAL THICKNESS IN FEET

FIGURE 10.3:
Cross section H, showing surface core holes with assay intervals, Summit Mine.

Other than drill-hole spacing, there are no apparent factors involving the drilling, sampling or recovery that could materially impact the accuracy and reliability of the results. Overall core recovery in zones of mineralization appears to have been good to very good, usually being in the range of 90-100 percent. The quality of the core samples is very good and the samples are representative of the intervals cored. There are no factors to suggest that samples could show a bias.

10.4 Underground Sampling

In addition to the drilling programs conducted on the property, Inspiration Mines during its development of the 5730 level (Inspiration level), sampled the face, back and both walls after each round. Hecla Mines mapped and sampled the Inspiration level, as did Noranda Mines and Nova Gold. Nova Gold also extensively sampled portions of the surface exposures on the Summit structure. In the 1990's, St. Cloud Mining Company check sampled parts of the Inspiration level. Current mine development work within the structure is routinely sampled, including the muck piles from each round. Short test holes (6 to 18 feet long) are routinely drilled into each rib and sampled. In the stopes, the 50-foot-long, vertical blastholes are sampled in 5- to 6-foot intervals.

The Inspiration and Hanson underground workings are accessible and provide geological information on the Summit structure and the distribution of mineralization at the 5730 foot elevation. New mine development in the structure between elevations of 5300 and 5600 feet is confirming widths, horizontal and vertical continuity, and grade of the mineralization as defined by drilling.

Extensive underground development and sampling has been conducted in the upper N-1 Resource Area. (See Section 16, Figure 16.1 and Section 12, Table 12.4) The grade of this block is based upon over 1,100 underground mine samples. This block represents about 20% or 200,000 tons of the estimated in situ resource.

All of the identified mineral resources currently being developed lie below the 5730 level (Inspiration level).

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

About 80% of the Summit Mine resource estimate is based on the results of core drilling programs conducted by Nova Gold and Biron Bay in the 1988-1991 period. Four holes from the Inspiration Mines 1983-1984 program were also used. The other 20% of the resource estimate is based on underground sampling done by The Lordsburg Mining Company during the current mine-development program.

11.1 Drill-Hole Data Base

In 1992, MPH Consulting Ltd. of Toronto did a very thorough evaluation of the 1988-1991 assay data base that was developed for the Summit Mine project. The author has reviewed that work, found it to be thorough, and concurs in MPH's summary statement:

> "In summary, MPH's review of the fire assay results from the various programs completed since 1988 has not revealed any major inconsistencies between laboratories that cannot be accounted for by natural variations to be expected in this type of gold deposit. In fact the various comparisons of fire assay results indicate good repeatability and suggest that the nugget effect is, on average, not of major concern in this deposit."

Examination of some of the drill core by the author reveals that it was split with a core-splitter, probably hydraulic, and one-half removed and sent for assay. Some of the core remaining in the mineralized zones was quartered with a diamond saw. Much of the quartered core that was removed was used for metallurgical test work.

Samples for assay were shipped to a variety of laboratories during the drilling campaigns and were routinely fire-assayed for gold and silver.

1. Inspiration Mines program (1983-1984) – Assaying done at Inspiration's lab in Globe, Arizona.
2. Skyline Laboratories, Tucson, Arizona – Arizona Registered Assayers; a well-known and highly-respected lab.
3. Jacobs Assay Office, Tucson, Arizona – Arizona Registered Assayers; a well-known and highly-respected lab.
4. Williams Assay Lab, York Valley, Arizona – Arizona Registered Assayers (no longer in business).
5. Bondar-Clegg Laboratories, Denver, Colorado – a highly-respected lab (now owned by ALS Chemex).
6. Accurassay Laboratories, Kirkland Lake, Ontario – a well-known and respected lab.

Bondar-Clegg is now a part of ALS Chemex Labs and has ISO 9001:2000 certification. Both Accurassay and Skyline Labs have ISO 17025 Accreditation. Skyline Labs and Jacobs Assay are, and have been for a long time, certified with the Arizona State Board of Registration as Registered Assayers.

Almost all of the drill-core samples in the 1989-1991/92 period were fire assayed at Jacobs Assay Office in Tucson with checks being done at several labs. No serious bias from lab to lab was noted. A 1992 check of 33 sample rejects from Jacobs was done at Accurassay and showed identical averages of 0.028 oz Au/ton (excluding one high-grade sample which assayed 1.087 oz Au/ton at Accurassay versus 1.159 oz/ton at Jacobs). Silver assays were also within acceptable limits of repeatability, averaging 2.175 oz/ton at Accurassay versus 2.984 oz/ton at Jacobs.

The author has no specific knowledge or information on the sampling protocol, security, analytical work and/or quality-control measures that were in place at the time most of the relevant data were obtained (1988-1992). However, drill-core logging, sampling, splitting, bagging, labeling, recordation, storage, shipping and handling were all done by and/or supervised by industry professionals. The laboratories used for most of the analytical work were, and still are, certified or registered assayers and have strict procedures in place for the receiving, handling, preparation and storage of samples. Additionally, those laboratories have routine quality-control/quality-assurance procedures that are used on each batch of samples being analyzed. Samples showing abnormally high values within a batch are typically reassayed.

It is the author's opinion that the sample preparation, handling, security and analytical procedures were performed by industry professionals and that the analytical results obtained from those samples can be confidently relied upon for estimating the quality of the **Mineral Resources**.

No employee, officer, director or associate of Santa Fe Gold Corp. has had any involvement in the preparation of the core samples, either at the property or in the laboratories, that constitute the primary basis upon which the Summit Mine is being developed.

11.2 Underground Development Data Base

About 20% of the estimated resource is based upon face samples collected underground during development drifting. Samples are collected across the full width of the face in geologically determined intervals that typically average about 3' in length. Sampling is done by or under the direction of the mine geologist. Samples are brought to the surface, tagged and secured in sample bags and transported directly to the company laboratory located at the Banner mill. All samples received at the lab are logged in and are given an internal number by the lab to ensure proper tracking to avoid misidentification. All samples are prepared following industry standard procedures. Mine samples are analyzed using standard fire assay with gravimetric silver and an Atomic Adsorption finish for gold. The laboratory routinely sends samples to commercial laboratories for check assays. In addition, the mill lab performs all of the smelter exchange assays for the company, and consistently compares well with assays provided by Aurubus, L.S. Nikko, Asarco and Freeport-McMoRan.

The chip samples utilized in the resource estimates represent average values over approximately 80 ft, sampled every 3 ft at approximately 8-ft intervals. A single averaged value was thus defined for the chip samples over each 80 feet of drift length. For consistency in utilization of the underground data, all sample intervals across each underground face were utilized in the averages, even intervals that were below cutoff. Probe holes drilled into the ribs and assayed for silver and gold were not included in the averages, even intervals that were above cutoff. Thus, a mining dilution is incorporated into the data set before input into the resource calculation, and a portion of mineralized intervals identified outside of the current mine openings, represented by probe holes drilled into the ribs, have been excluded.

12.0 DATA VERIFICATION

12.1 Pre-2008 Work

The principal author of this report has been involved as a Consultant on the Summit mine-mill project since September 2006 and was the lead author of a 2007 preliminary study (non NI 43-101 compliant) done for the project. The author has relied almost exclusively on the drill-hole and assay data base contained in the records and files of Lordsburg Mining Company. Those files and records had been maintained by St. Cloud Mining Company on behalf of Lordsburg Mining, which at the time was a wholly-owned subsidiary of St. Cloud Mining. Verification of the original drill-hole assays is virtually impossible because most of the mineralized core intercepts were removed by others in the intervening years for confirmation of the original data and/or metallurgical studies. However, the author has been able to examine the original drill-hole geologic logs and the laboratory analytical sheets which accompany those logs, thus confirming that the data are real.

Most of the drill core from the 1988-1991 drilling program has been vandalized and destroyed. In 2006, portions of the intact drill core were examined by the author and a few remaining sections of the quarter core were obtained for assaying and bench-scale metallurgical test work. The original sample rejects from the assayed core intervals are no longer available. Assay checks on the three intervals selected for metallurgical testing show comparable results (Table 12.1). The intervals were from Drill Hole 90-28 which penetrated the mineralization near the north edge of the Main Resource Block.

Table 12.1: Comparison of core samples from Hole 90-28

		Nova Gold 1990		CWG 2006	
Interval (ft)	**Length (ft)**	**Au (oz/t)**	**Ag (oz/t)**	**Au (oz/t)**	**Ag (oz/t)**
544-550	6.0	0.062	3.05	0.086	4.22
829.5-838.0	8.5	0.084	6.03	0.048	4.72
838.0-847.00	9.0	0.053	3.37	0.043	2.50
Avg. Thick. and Wtd. Avg. Grade	**7.8**	**0.067**	**4.25**	**0.056**	**3.74**

Assays by Jacobs Assay Office, Tucson, Arizona.
Values are in troy ounces per short ton.

The author also took samples from selected places in the Inspiration level, both for confirmation of earlier sampling results and for metallurgical test work.

All of the samples taken by the author were under his control and either delivered directly to the laboratory or shipped by bonded carrier (UPS) to the laboratory. Analytical work was done by Skyline Labs and Jacobs Assay, both Arizona Registered Assayers located in Tucson, Arizona. The analytical results and the metallurgical test work confirmed the comparable work done in the 1980's and 1990's. No individuals from either Santa Fe Gold or Lordsburg Mining had any involvement in the selection, taking, custody, transport or assaying of any of the samples.

The author has examined the drill-hole geologic and assay logs in the Summit Mine files and compiled some of that information onto selected cross sections for the purposes of studying the deposit geometry, the continuity of mineralization, and for the verification of work done by others. Missing from the files are the drill logs of the 1991 drilling program on the Summit deposit. Two of those holes contain mineralized intercepts which are included in the estimate of **Mineral Resources**. However, assay and geologic data from those two holes are preserved on cross sections prepared by MPH Consulting.

12.2 Mine Development

The Summit Mine is now in an advanced state of development and has achieved a limited level of stope production. At the time operations were temporarily suspended (Nov. 8, 2013), the mine had shipped 180,315 tons of material grading 0.083 oz Au and 4.44 oz Ag per ton. More than half of that material came from drift development which included significant quantities of diluting material. Further, during the mining operations (stoping), the planned cutoff grade of 0.14 oz Au-equivalent per ton was not adhered to. Since the inception of development, the author has made periodic visits to the mine to examine and sample development headings.

During a mine visit on November 16, 2010, the author examined portions of the footwall-zone mineralization at the 5450-level E-1 crosscut area in Stope Block S-1 (See Section 16,

Fig. 16.1). Five, panel-chip samples were taken along 31.1 feet of the south wall of the crosscut beginning in the footwall contact zone between the argillically-altered and quartz-vein-stockworked andesite and the lithic-quartz breccia. Sampling progressed easterly through quartz-lithic breccia, quartz-vein breccia, and quartz-carbonate breccia to the center of the structure. Sample breaks were made at lithologic boundaries. Comparative results with the mine sampling are shown below in Table 12.2.

Table 12.2: Comparative Results with Mine Sampling

Sample Location		Mine		CWG	
Distance (ft)	**Length (ft)**	**Au (oz/ton)**	**Ag (oz/ton)**	**Au (oz/ton)**	**Ag (oz/ton)**
0-6.5	6.5	0.008	0.54	0.026	0.96
6.5-10.1	3.6	0.010	0.24	0.054	2.67
10.1-18.1	8.0	0.096	2.69	0.039	1.38
18.1-24.6	6.5	0.226	8.40	0.080	2.83
24.6-31.1	6.5	0.082	3.27	0.010	0.50
Wtd. Avg. Grade	**31.1**	**0.092**	**3.27**	**0.041**	**1.56**

The S-1 stope was developed on the basis of three upper level mineralized drill holes. An NI 43-101 resource was not available at the time of the development of this stope. The extent of the mineralized zone was identified by drift development on 5 levels spanning a vertical extent of 200'. An estimate of anticipated stope tons and grade was calculated by Lordsburg Mining Company after development was completed but prior to stoping. Mining in the S-1 stope began at the end of 2011 and was completed in January 2013. Muck grab samples were collected for each shift that stope muck was surfaced. Two to three replicate grab samples were routinely collected for each shift to account for variability of such sample type, and comparison of replicates generally did not show significant variation. Table 12.3 provides the preproduction estimate and compares that to the actual stope production as determined by the average of grab muck samples.

The comparison shows that the tons produced were essentially equivalent to the tons predicted by the undiluted estimate. The grade produced in terms of equivalent gold was 10.6% lower than the estimate. This result is considered favorable for the long-hole mining method, and can be accounted for in the resource estimate by applying a dilution factor.

Table 12.3: Comparison of S-1 Stope Production to Preproduction Estimate Based Upon Level Development Assays

Description	Avg Width (Ft)	Tons	Avg Grade (oz/ton)		
			Au	Ag	Au Equiv
Estimate Unadjusted*	15.3	93,196	0.090	4.99	0.173
Estimate Adjusted**	12	67,965	0.110	6.49	0.218
Actual Stope Production***	N/A	68,028	0.103	5.52	0.195
% Variance Actual From Adjusted		**0.1%**	**-6.4%**	**-14.9%**	**-10.6%**

* Average of all face samples collected from development levels. **Includes** waste dilution taken while drifting at actual grade.
** Average of all face samples collected from development levels. **Excludes** waste dilution taken while drifting at actual grade.
*** Average of muck samples collected from material stoped.

Beginning in 2012 and continuing in 2013 the 5600, 5550 and 5450 development levels were driven by The Lordsburg Mining Company northwesterly along the Summit vein structure in what is now called the N-1 Resource Area (Section 16, Fig 16.1). Face sampling as the development progressed shows an extensive strike length of mineralization. A comparison of mineralized drill holes in the vicinity of this drift development is provided in Table 12.4. The average of approximately 500' of strike length in each of the three drifts combined is compared to the average of the three closest mineralized drill intervals. When averaged assays are converted to equivalent gold for comparative purposes, and then weighted for difference in average thickness, the metal values of the drill holes compared to the drift-face average are virtually identical. This provides a strong positive verification of historical drill results by current underground development work.

Assaying of samples at the Summit project mine-mill laboratory is checking well with the outside labs, including the smelter labs, on both flux and concentrate shipments.

Table 12.4: Comparison of Level Development Assays (2012-2013) to Adjacent Drill Intercepts in the N-1 Resource Area

Comparison of Drill Hole Intercepts with Development Drift Sampling

Average of Adjacent Drill Hole Mineralization:

		Grade (oz/ton)			
Hole No.	**Thick (ft)***	**Au**	**Ag**	**AU EQ****	**Feet x AU EQ**
91-11	11.4	0.214	16.42	0.488	5.56
88-13	14.0	0.079	6.29	0.184	2.57
90-35	11.5	0.085	4.51	0.160	1.84
	12.3	**0.123**	**8.86**	**0.270**	**3.32**

Average of Three Development Levels Over Approx 500' of Strike Length:

		Grade (oz/ton)			
Level***	**Thick (ft)***	**Au**	**Ag**	**AU EQ****	**Feet x AU EQ**
5600	13.5	0.206	9.24	0.360	4.86
5550	13.1	0.150	6.56	0.259	3.40
5450	12.5	0.085	3.59	0.145	1.81
	13.0	**0.149**	**6.54**	**0.257**	**3.36**

* Horizontal thickness

** AU EQ is gold equivalent determined by applying a factor of 1/60 to the silver value

*** Levels 5600, 5550 and 5450 were driven and sampled by LMC in 2012 and 2013

In the opinion of the author, the data relied on and which form the basis of this study have been substantially verified and provide an adequate base on which to continue the development of the project. The current underground-development work is substantiating earlier projections that are based entirely on the exploratory-drilling programs conducted in the periods 1983-1984 and 1988-1991.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Material from the Summit Mine has been processed at mineral processing facilities constructed in 2009/2010. The processing facilities are 4.8 miles southwest of the town of Lordsburg, New Mexico.

The milling operation has been producing two products for sale to smelters since 2010. A direct shipping smelter flux is sold to area smelters after crushing and screening to a specified size and a flotation concentrate which is produced from processing of the remainder of the material.

Approximately 40% of the run of mine production is sold as flux and the balance is processed in the 240 ton per day grinding and flotation plant designed to treat a planned average 7.50 OPT Ag and 0.115 OPT Au mill feed and produce a high grade precious metals concentrate.

Between March 2010 and November 2013 the mill has processed a total of 110,343 tons of underground development muck through the grinding and flotation plant.

Flotation test work was conducted on drill core from the Summit deposit in 1997 and 2006 prior to the development of the mine. Further process test work was carried out by SGS Metcon in 2013.

13.2 Mineralization Characterization

Gold and silver mineralization occur in an epithermal, low-sulfidation system containing less than 1% very-fine-grained, disseminated pyrite and trace amounts of galena, sphalerite and chalcopyrite. Most of the gold and silver mineralization occurs as grey streaks of finely-divided sulfide minerals in brecciated quartz and other siliceous material. Lesser amounts are associated with calcite.

The deposit occurs in a quartz vein and averages more than 85% silica content. For this reason it is a desirable flux agent for copper smelters located in the area.

The Summit mineralization is very clean and contains no deleterious substances that would affect processing.

13.3 Metallurgical Testing

Prior to the development of the Summit project, Dr. Shantz had performed laboratory flotation testing on samples from the Summit deposit in 1997 and 2006.

Two series of Metallurgical testing were conducted by Dr. Robert Shantz to test the flotation response for the Summit material. The first tests were conducted in 1997 for St Cloud Mining and a second series was conducted in 2006 for AZCO Mining (name was later changed to Santa Fe Gold). The results of the flotation test work are summarized in Table 13.1.

Table 13.1: Comparisons of 1997 and 2006 Rougher Flotation Test work Results

Test Work	Head Grade		Tails Grade		Recovery		Oxidation Level Comparison
	Ag	Au	Ag	Au	Ag	Au	
	OPT	OPT	OPT	OPT	%	%	
1997 St Cloud	7.82	0.16	1.57	0.02	80.5	86.6	Fresh Drill Core - Unoxidized
2006 Drill Core Average	3.81	0.06	0.70	0.01	83.6	86.3	Older Drill Core - Some surface Oxidation
2006 Inspiration Tunnel Chip	4.61	0.06	1.55	0.02	70.8	70.8	Exposed Historic Tunnel Walls - Mostly Highly Oxidized

The 1997 St Cloud test work was conducted on the fresh drill core from the main portion of the deposit, and are the samples that most closely represent the character and nature of the bulk of the mineralized material to be mined.

Test work conducted in 2006 on historic drill core confirms the 1997 metallurgical response of the mineralization to flotation.

The results from chip samples collected in 2006 from the walls of the historic Inspiration tunnel excavation, which is located above the deposit and does not represent the recoveries anticipated from the main body. The Inspiration Tunnel Chip flotation recoveries were much lower due to lower grades and increased level of oxidation.

SGS test work in 2013 included a froth flotation study and agitated cyanide leach testing on composite samples collected from mill feed material sourced from a combination of mine development areas, mostly oxidized. Agitated cyanide leach testing was also conducted on an Au-Ag concentrate composite sample and flotation tailings collected from the Summit Mine process plant. The SGS test work confirmed that gold and silver s from the Summit Mine are amenable to flotation and agitated cyanide leach (the current plan does not include cyanide leaching or Summit Mine concentrates). Locked cycle tests at SGS achieved an average 75% recovery of Au and 70% recovery of Ag. Results from the SGS test work were used to guide the plant performance improvements achieved on development rock in 2014.

13.4 Results From Processing of Development Rock

The mill has processed underground development rock since 2010. As expected, development rock grades have been significantly lower than mill feed grades anticipated from the main resource body. The low grades, intermittent higher level of oxidation, and disruptive plant operation resulted in poor recoveries. Plant operating performance since 2010 is summarized in Table 13.2.

Table 13.2 shows that mill feed grades have steadily improved. A steady improvement of Silver and Gold recoveries has been achieved as the mine development progress deeper and approaches the main resource area. The recovery improvements are attributed to in improved grades, reduced level of oxidation, reduced grind size and increased flotation retention time.

Table 13.2: Summary of grinding and flotation of development rock, 2010 to 2013

		Assays (oz. per ton)							
		Silver			Gold			Recovery	
	Feed, dst	Feed	Conc	Tails	Feed	Conc	Tails	Gold	Silver
2010	18,573	3.50	583.5	1.35	0.056	10.0	0.019	60.5	65.0
2011	22,635	4.22	521.9	1.56	0.068	9.4	0.021	62.7	68.8
2012	44,007	4.60	492.3	1.42	0.092	9.8	0.029	69.1	68.4
2013	25,128	3.75	424.2	1.09	0.092	10.4	0.026	70.9	71.4
Total Average	110,343	4.14	498.2	1.36	0.081	9.9	0.025	66.8	68.6
Aug	1,810	3.89	538.1	1.08	0.084	12.0	0.021	72.4	75.3
Sep	1,374	3.96	373.5	1.12	0.106	10.4	0.027	72.0	75.1
Oct	3,409	4.07	433.7	1.04	0.105	11.5	0.024	74.7	76.8
Total Average	6,593	4.00	449.8	1.07	0.099	11.4	0.024	73.5	76.1

13.5 Process Criteria

The crushing plant is anticipated to continue producing salable flux at an approximate 40% yield.

Performance of the grinding and flotation plant is expected to steadily improve as mining approaches the main resource area and the mill begins operating continuously. Mill feed grades are expected to increase and level of oxidation decrease.

Based on the flotation test work conducted on original drill core, flotation recoveries of 82% for Ag and 83% for Au are reasonable for the main resource.

The PEA uses 78% recovery for both Ag and Au which is lower than the estimate for the main resource to account for the occasional inclusion of low grade or oxidized material, particularly during early development.

14.0 MINERAL RESOURCE ESTIMATES

The Mineral Resource Estimate for the Summit deposit has been prepared by Susan C. Bird, P.Eng, of Moose Mountain Technical Services (MMTS), an independent Qualified Person under the standards set forth in Canadian NI 43-101.

The resource model is built using MineSight®, an industry standard in geologic modeling and mine planning software. The three dimensional Summit deposit block model is rotated 50 degrees counter-clockwise (to the NW). The model has block dimensions of 5 ft x 10 ft x 5 ft to approximate minimum mining dimensions and allow sufficient accuracy. Percent modeling is used to code the percent of the block above the required cutoff, and thus to reflect accurately the portion of the block within the mineralized veins.

The block model is based on Imperial coordinates converted from NMSP West Zone, NAD 83 and has an origin at: 23,745,000 East; 681,800 North; with elevations from 4500 to 6250 feet. The volume modeled covers the extent of the main mineralized zone.

The geologic model consists of one major and two minors veins, created to account for both the Au equivalent cutoff grade of 0.14 opt Au Equivalent and the minimum mining width of 6 feet. There is no differentiation of material into oxide, mixed or sulfide zones due to a lack of clearly defined boundaries. The assumed recovery when calculating the necessary cutoff grade accounts for minor amounts of oxidized material to be processed.

Statistical analyses (cumulative probability plots, histograms, and classic statistical values) of the assay and composite data are used to confirm the vein boundaries, the Au and Ag capping values, and the compositing method used. Assays are composited across the vein into a single composite value. The composites are used to create correlograms for Au and Ag grades using the MSDA module of the MineSight®, thus establishing rotation and search parameters for the block model interpolation. The composites used during interpolation are limited by the vein coding. The resource is then classified as Measured, Indicated or Inferred based on variogram parameters and in accordance with the CIM Definition Standards (CIM, 2014).

Validation of the model is completed by comparison of the Ordinary Kriged (OK) values with Nearest Neighbor (NN) interpolated block values, by the use of swath plots and statistical grade comparisons. A visual inspection in section and plan throughout the deposit was performed to compare the modeled grades with the assay data. In addition, average grades for each data set were compared.

14.1 Drill Hole Database and Geologic Model

The data base consists of assay intervals from 84 drill holes and over 2,000 ft of underground chip sampling for a total of 3,151 ft of assay data within the modeled veins. The assay data have been used to define the mineralized zones geologically, using a Au-Equivalent cutoff grade of 0.14 opt. Un-assayed intervals are given a "missing" code of -1 so that they are not included in the statistics.

Interpretation of the mineralization was completed on sections aligned with each drillhole of consequence. Polylines created from the assays have been snapped in three dimensions to the exact location of the assay intercept, thus ensuring that the entire assay is coded within the vein. In creating the mineralization boundary, in each case, a 6 ft minimum horizontal width has been used. In some cases, this resulted in assays included that are below the cutoff. There are a total of 27 sections used to interpret the mineralized outlines, as illustrated in Figure 14.1.

The polylines interpreted on section are then linked together to create three dimensional solids. One major vein and two less extensive veins have been interpreted. Only one of the minor veins is within the Property Boundary. The interpretation of the two veins within the property boundary is illustrated in 3D, looking north in Figure 14.2. Plotted are the main vein (blue), the minor vein (magenta), the DH traces (white) and the trace of the section used in interpretation (black).

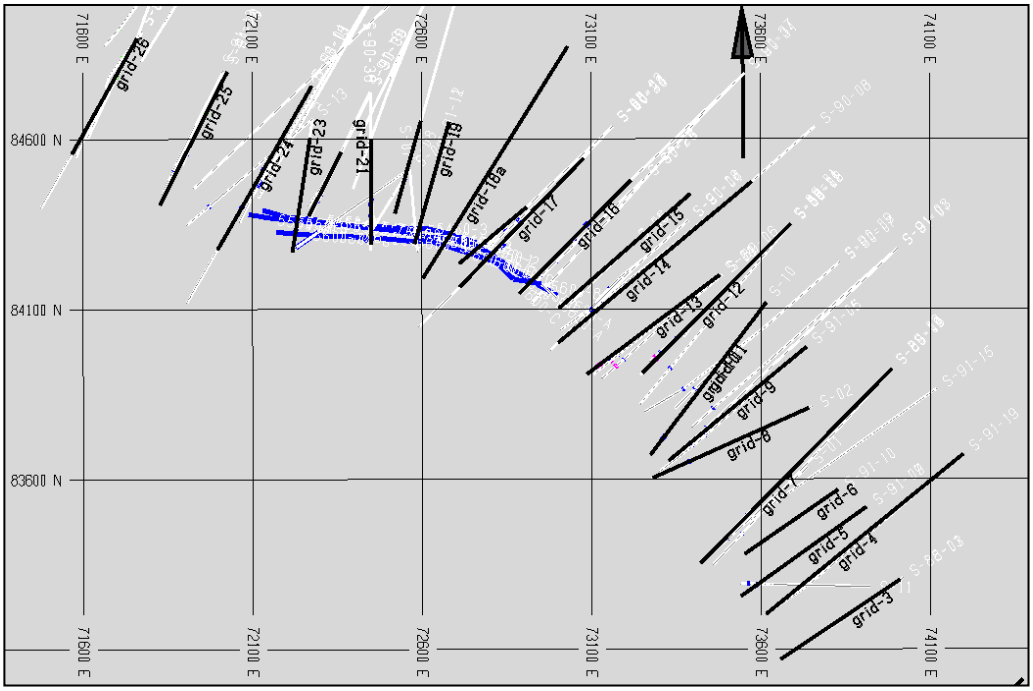


FIGURE 14.1:
Plan Map of DHs (white), Underground Samples (blue) and
Sections Used in Interpretation (black)

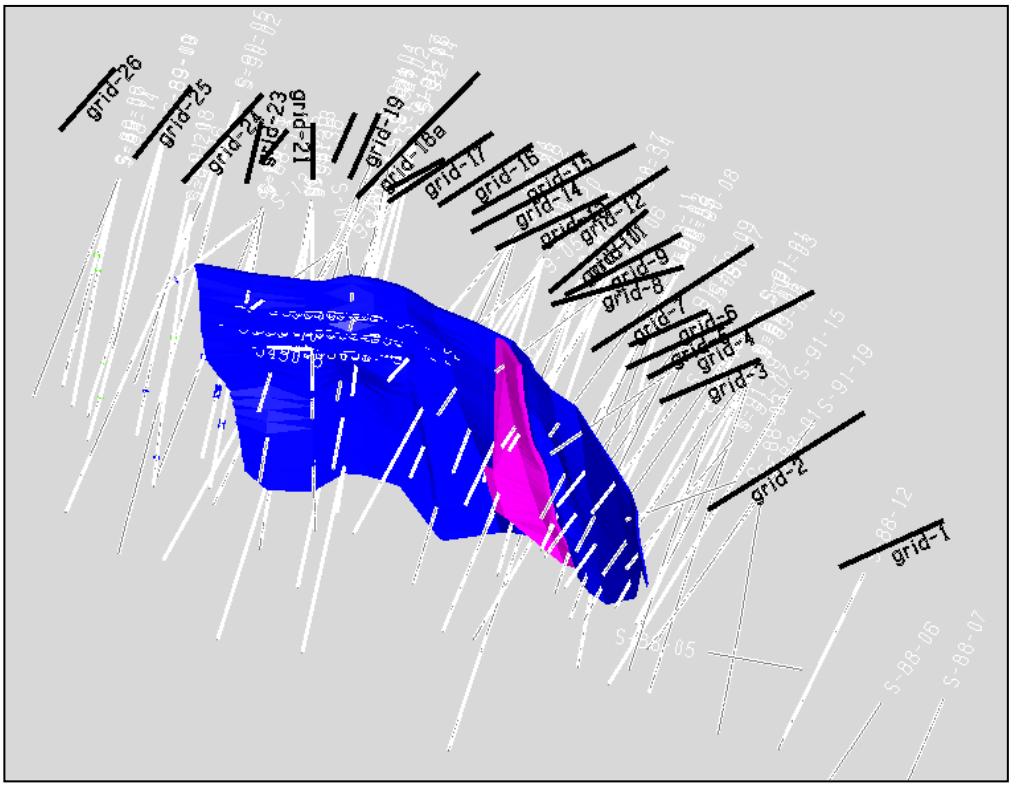


FIGURE 14.2:
Three Dimension View of main Vein (blue) minor vein (magenta),
DHs (white) and Sections used in Interpretation (black)

14.1.1 Assay Statistics

Cumulative Probability Plots (CPP) have been made to determine the high-grade outlier threshold. This is then used as the value to cut the assay data for Au and Ag. Cutting values of the assay at 0.45 opt Au and 45 opt Ag resulted in 7 and 13 assay sample grades to be reduced to the cutoff value for Au and Ag respectively. Figures 14.3 and 14.4 illustrate CPP plots for each metal.

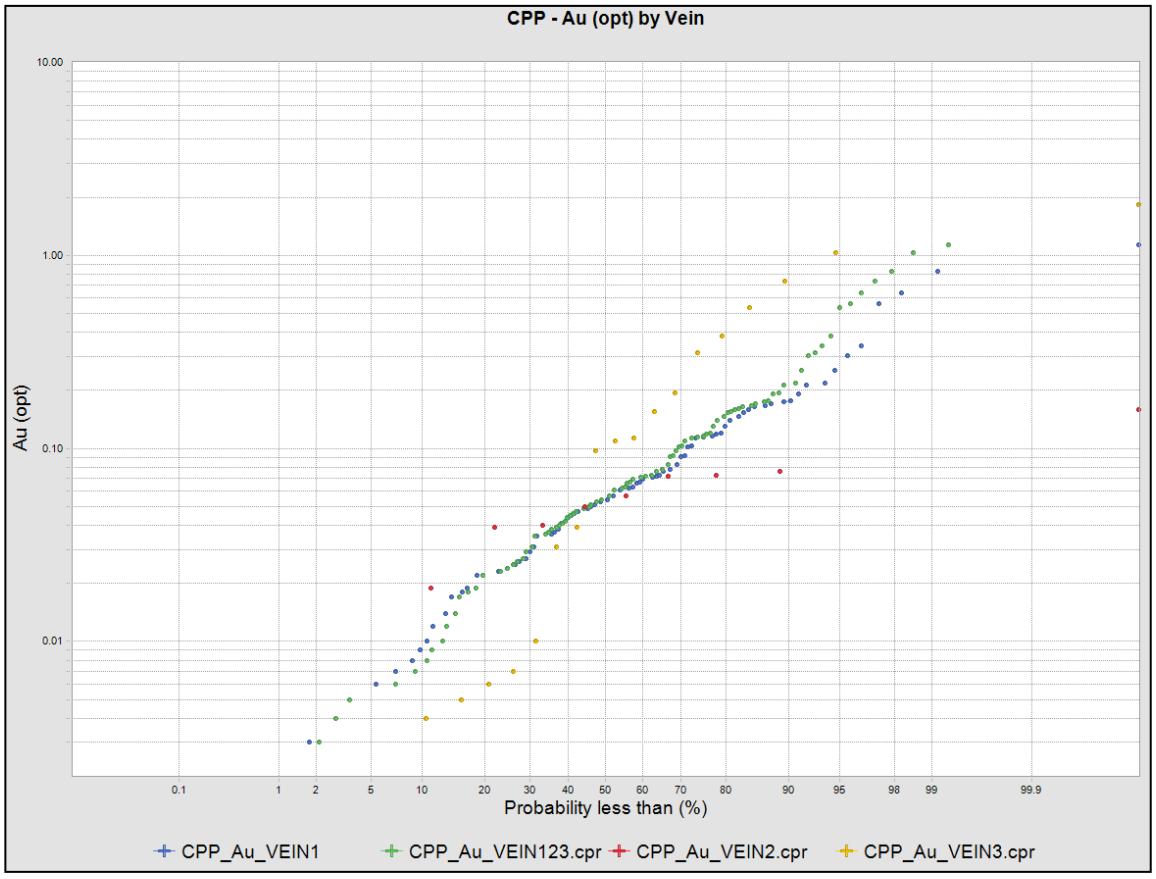


FIGURE 14.3:
CPP of the Assay Au Grade

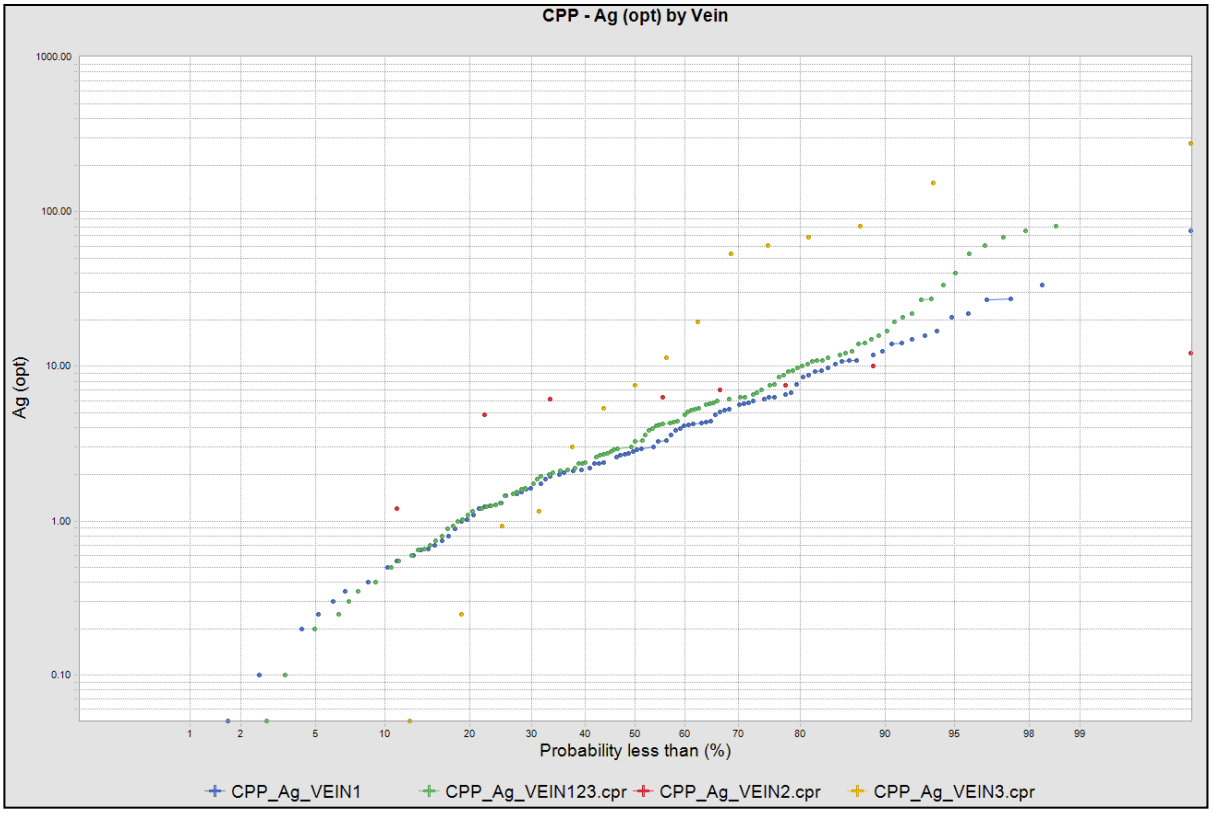


FIGURE 14.4:
CPP of the Assay Ag Grade

14.1.2 Compositing of Drill Hole Data

Compositing is done across the length of the vein, using the downhole length for weighting. The veins are coded to the composites based on the assay code. Table 14.1 below compares the assay grade for all veins to the composite vein. This table indicates that the composite grades for both Au and Ag are within 3% of the assay grades.

Table 14.1: Comparison and Summary of Capped Assay and Composite Statistics

Parameter	Au Grade Stats			Ag Grade Stats		
	Assay	Composite	Difference	Assay	Composite	Difference
Minimum (opt)	0.001	0.004	75%	0.050	0.050	0%
Maximum (opt)	0.450	0.450	0%	45.000	29.360	-53%
Weighted mean (opt)	0.086	0.084	-3%	4.579	4.427	-3%
Weighted CV	0.981	0.901	-9%	1.325	1.110	-19%

14.2 Variography

In order to determine the directional properties of the deposit, correlograms have been created for both Au and Ag. It was found that there is insufficient data to produce reliable correlograms by vein separately. Therefore, the main vein (Vein 1) is used to select the rotational and kriging parameters for all veins.

The veins within the Summit deposit area strike generally approximately N40W and dip steeply to the east. A spherical model is used to obtain the best fit in all cases. Variography adheres to the vein orientation, as is indicated in the summary of parameters listed in Table 14.2. The major axis of the spheroid plunges down- dip at N50E at 85 degrees, with the minor axis along strike.

Downhole correlograms for all DHs combined together are used to define the nugget used in Ordinary Kriging (OK). Figures 14.5 and 14.6 show the downhole correlograms for Au and Ag respectively. The major and minor axes correlograms and corresponding spherical models are illustrated in Figures 14.7 and 14.8 for each metal. Insufficient data did not allow a "vertical" variograms across the vein to be built. Therefore a value of 50 ft was used as the range for this axis, in order to contain the width of the vein.

Table 14.2: Variogram Parameters

Metal	Rotation (GSLIB-MS)		Axis	Range (ft)	Nugget	Total Sill	Sill 1
Au	Major Axis Strike Major Axis Dip Minor Axis Dip	50 -85 0	Major Minor Vertical	210 105 50	0.15	1	0.85
Ag	Major Axis Strike Major Axis Dip Minor Axis Dip	50 -85 0	Major Minor Vertical	230 110 50	0.15	1	0.85

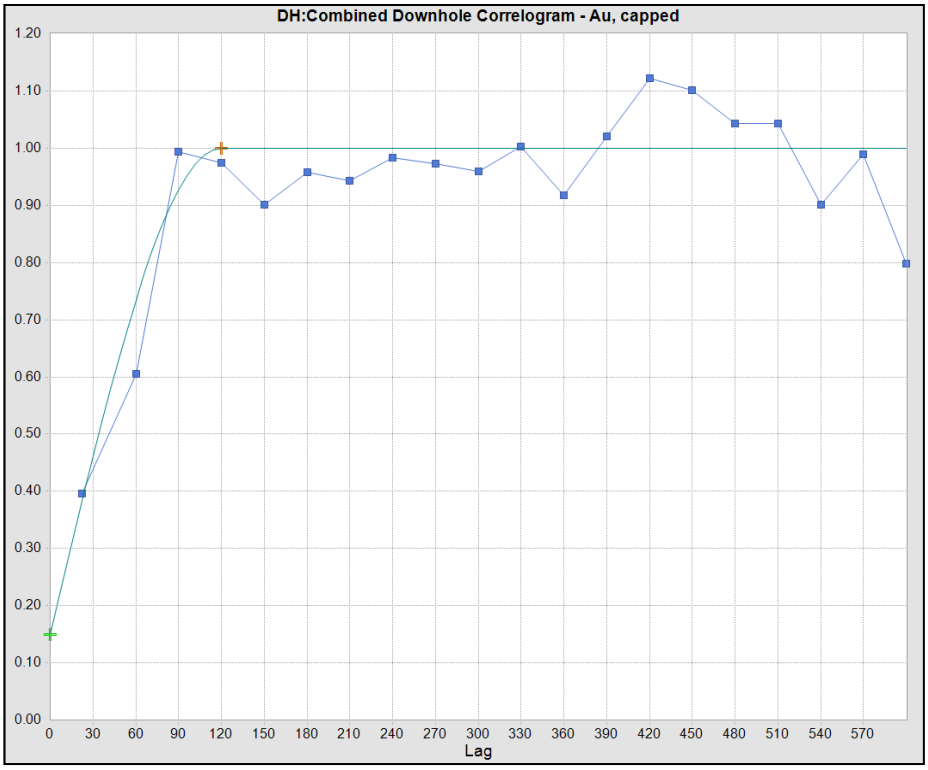


FIGURE 14.5:
Downhole Correlogram for Au – Nugget =0.15

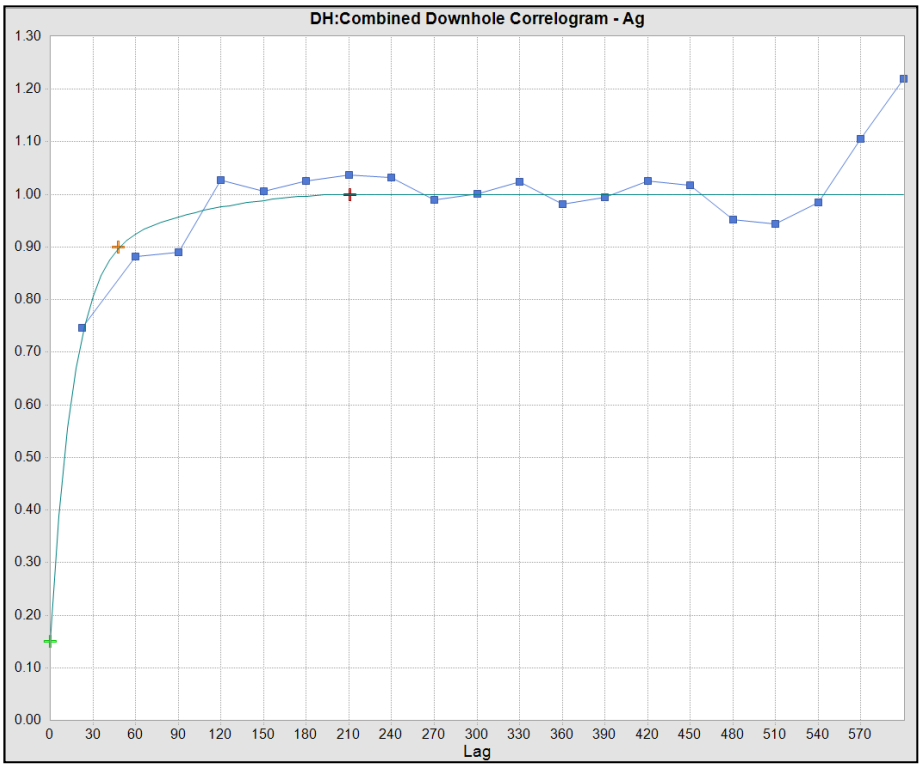


FIGURE 14.6:
Downhole Correlogram for Ag – Nugget =0.15

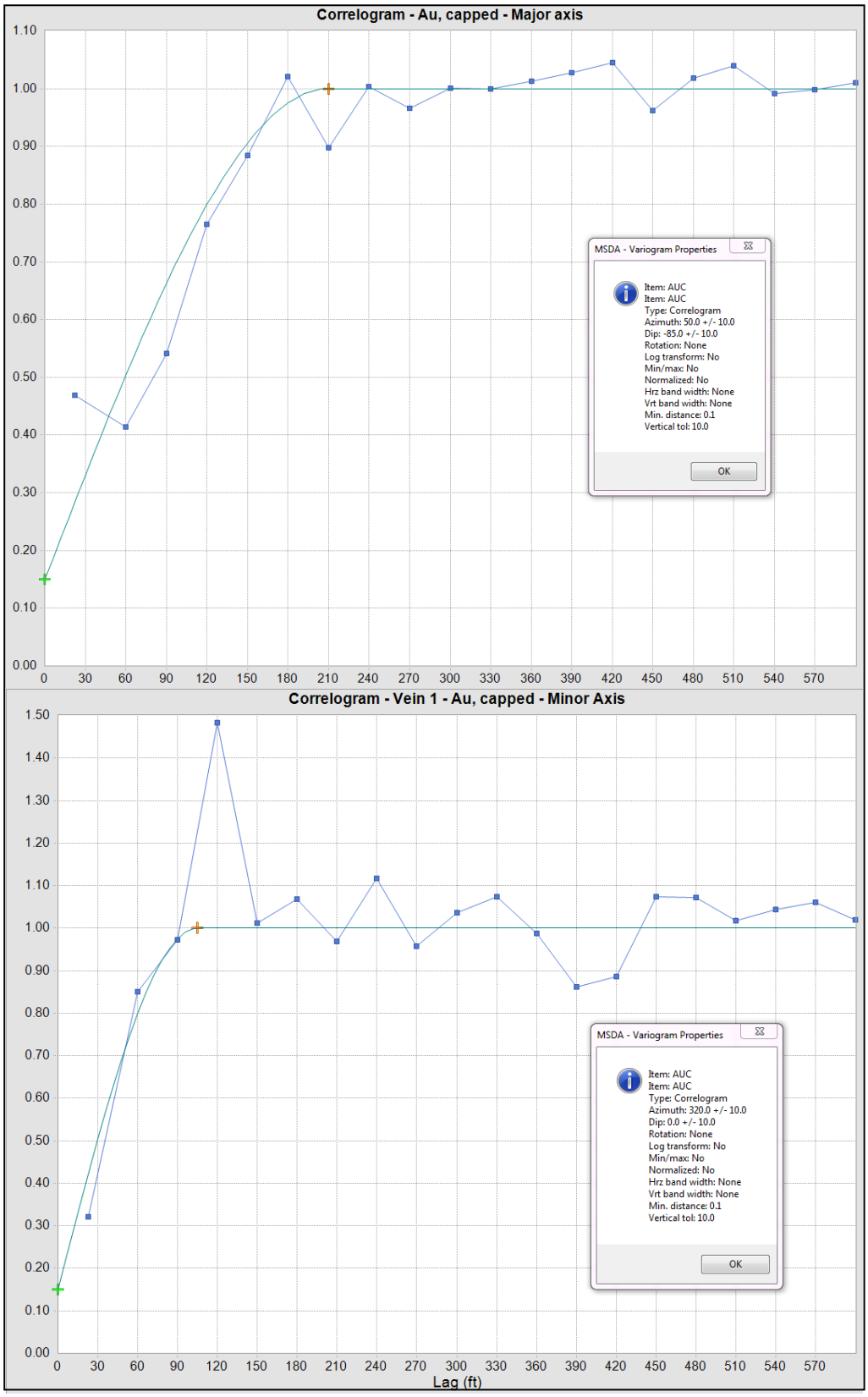


FIGURE 14.7:
Correlograms for Major and Minor Axis - Au

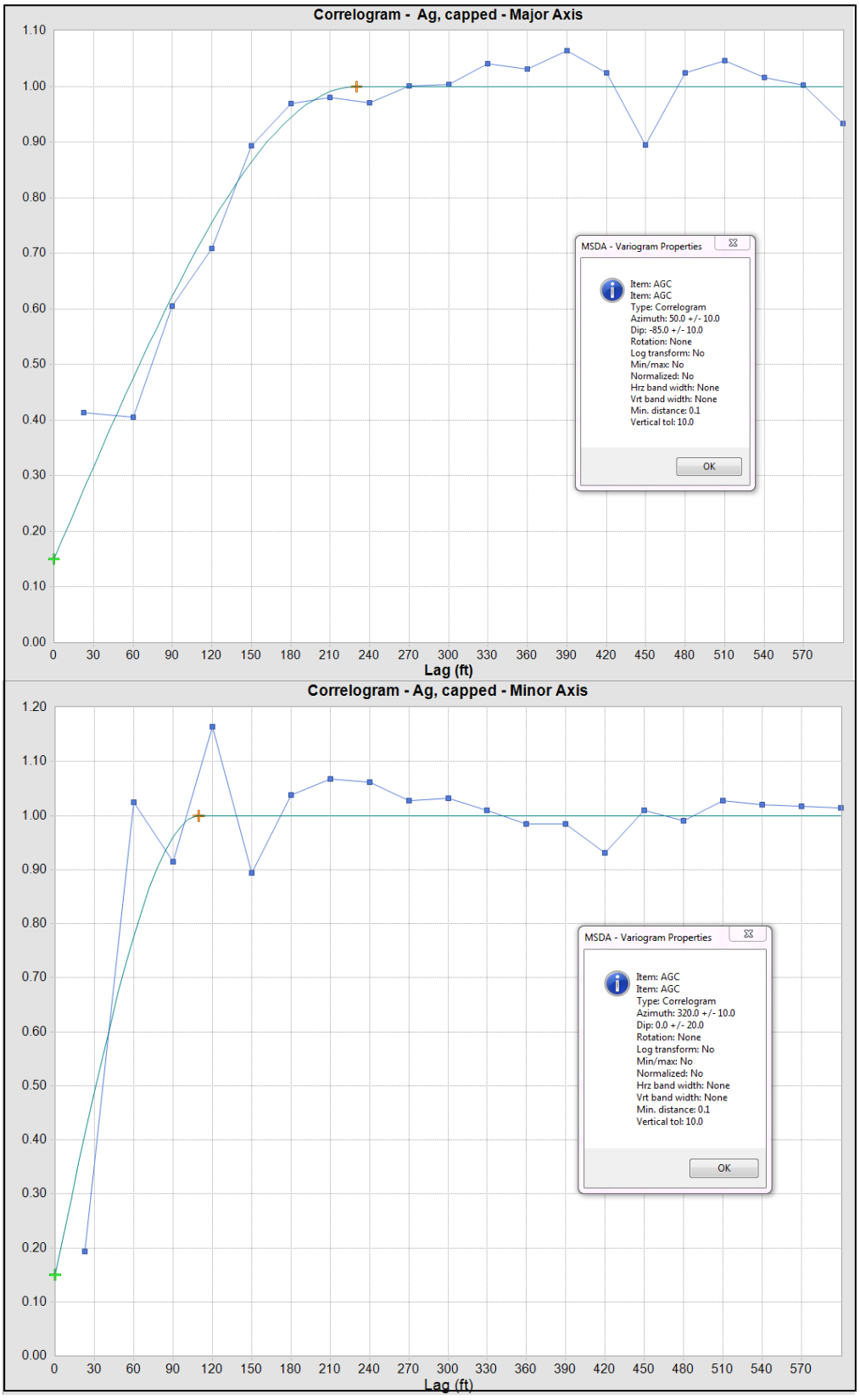


FIGURE 14.8:
Correlograms for Major and Minor Axis – Ag

14.3 Block Model Interpolation and Resource Classification

The Summit deposit block model is based on Imperial coordinates converted from NMSP West Zone, NAD 83. The origin is a truncated coordinate at: 745,000 East; 81,800 North; with elevations from 4500 to 6250 feet. The volume modeled covers the extent of the main mineralized zone. The model dimensions from the origin are given in Table 14.3.

Table 14.3: Block Model Dimensions

Direction	Maximum (ft)	Block Dimension (ft)	No. of Blocks
Easting	3,000	5	600
Northing	5,000	10	500
Elevation	1,750	5	350

The block model is coded according to vein, based on the wire-frame solids built using the assay data at a Au-Equivalent cutoff of 0.14 opt, and a minimum mining width of 6 ft horizontal. Figure 14.9 is a plan map showing the interpreted veins and DH data with the block model extents in blue.

The topographic surface is based on an aerial survey flown by Cooper Aerial Surveys Company of Tucson, Arizona in 2012 at 10-foot contour intervals covering the project area. The percent of the block below topography is calculated into the model blocks.

The percent of the block that is within an existing stope or underground development is also stored in the model and used to reduce the resource by the mined-out portion of the block.

Specific gravity values are assumed to be constant for all blocks. Due to the vuggy nature of the mineralized rocks, the tonnage factor is assumed to be 12.5 cu ft per ton.

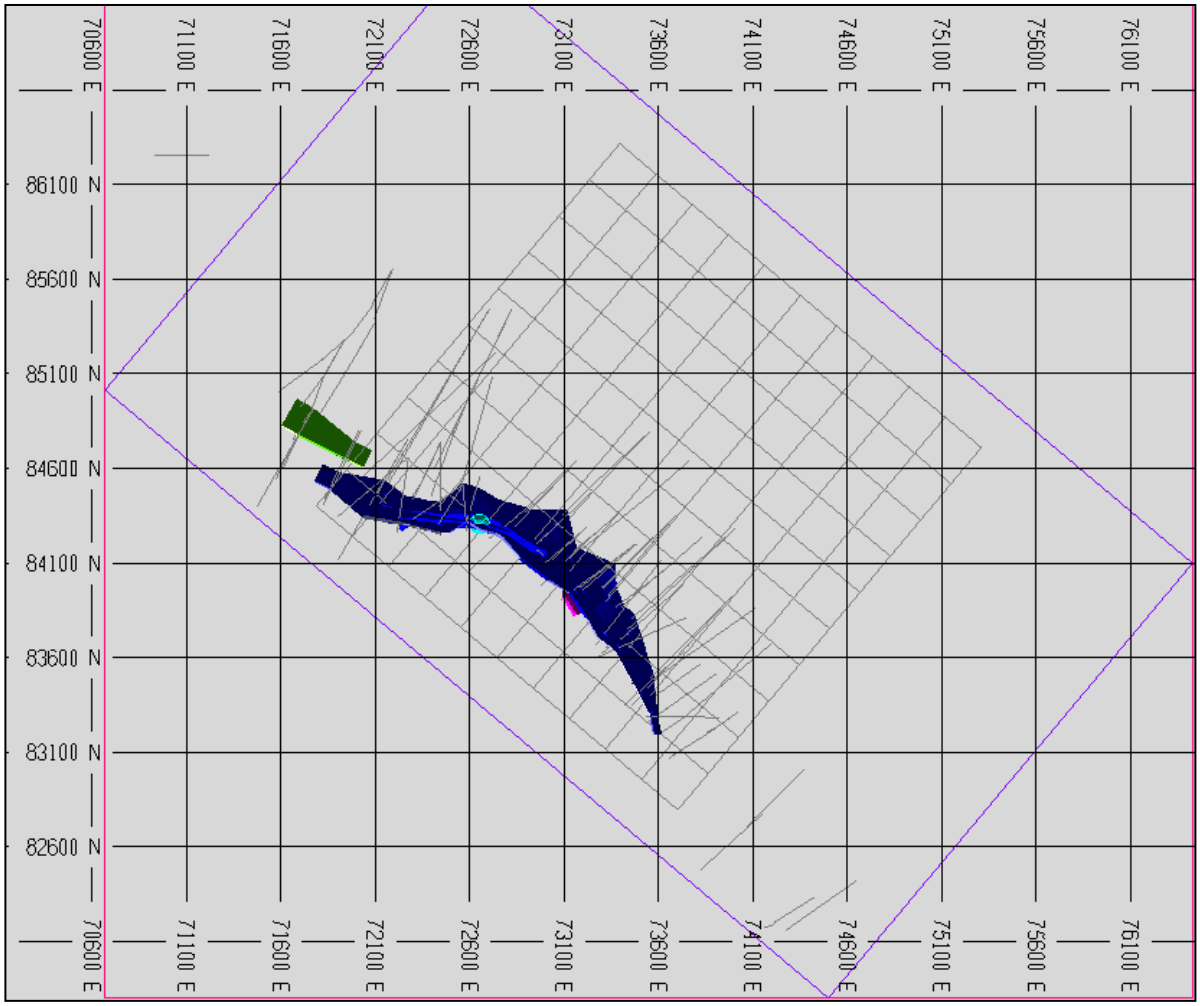


FIGURE 14.9:
Plan View showing Model Boundary, Interpreted Veins and Assay Data

The interpolation is completed using ordinary kriging (OK) in 4 passes with search parameters based on the variogram parameters. The first pass maximum search distances are equal to 1/3 the range of the variograms, and the 2nd pass have a maximum search distance equal to the 2/3 of the range. The 3rd pass allows composite to the full range and the 4th pass allows to 1.2 times the full range. Restrictions on the search distances and number of composites used in each pass are summarized in Table 14.4 and Table 14.5 below. The selection of a composite for interpolation is also restricted by the vein code, which is required to match the block model codes.

Table 14.4: Interpolation Search Parameters

Interpolation Pass	Distances to Closest Composite (ft)					
	Au			Ag		
	Major	Minor	Vertical	Major	Minor	Vertical
Variogram Range	210	105	50	230	110	50
Pass 1 - Measured	70	35	50	76.67	36.67	50
Pass 2 - Indicated	140	70	50	153.33	73.33	50
Pass 3 - Inferred	210	105	50	230	110	50
Pass 4 -Inferred	252	126	50	276	132	50

Table 14.5: Interpolation Composite Restrictions

Interpolation Pass	Au and Ag			
	Min Comps	Max Comps	Max/DH	Max/Quad
Pass 1	3	12	1	3
Pass 2	2	12	1	6
Pass 3	2	9	1	---
Pass 4	1	9	1	---

14.3.1 Resource Classification

Classification of the resource into Measured, Indicated, and Inferred is based on the variogram parameters and restrictions on the number of composites and drill holes used in each pass of the interpolation. The resource is classified according to its interpolation pass. The block is classed as Indicated if the interpolation is completed by Pass 2 and Inferred for Pass 3 and Pass 4. There are no blocks that received a Pass 1 interpolation, and therefore there are no Measured resources.

Blocks surrounding the underground chip samples were redefined as Indicated. This is done because the chip samples represent average values over approximately 80 ft, sampled every 3 ft at approximately 8-ft intervals. The single averaged values defined for the chip sample over this length, therefore represent a large number of samples. The majority of the Indicated material is adjacent to the underground workings which were sampled, as is indicated in the Figure 14.0. Note that the area of the underground that is not within the vein is not included in the Indicated classification.

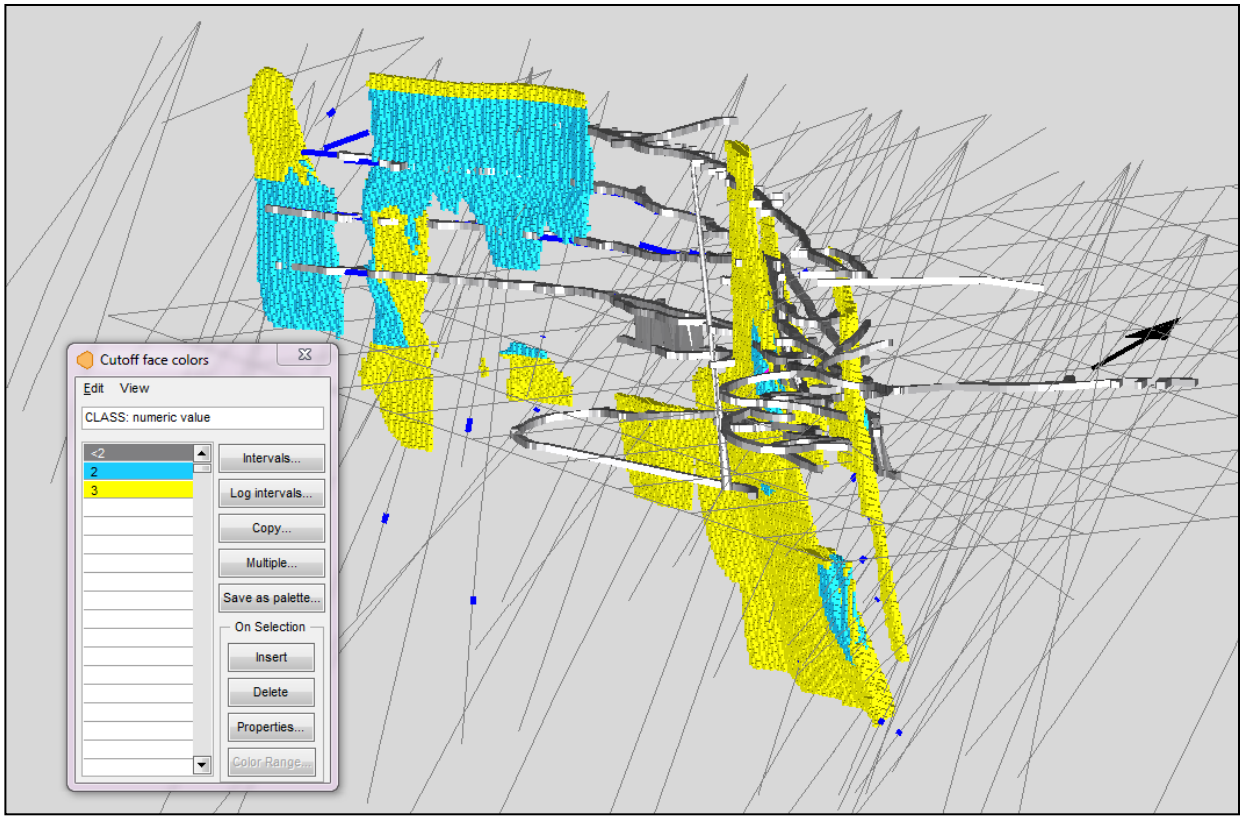


FIGURE 14.10:
3D View of Block Classification, 2=Indicated, 3=Inferred

The definition of Indicated and Inferred used to classify the resource is in accordance with that of the CIM Definition Standards (CIM, 2005, 2014).

14.4 Block Model Validation

Validation of the model is completed by comparison of mean grades, swath plots, grade-tonnage curve comparisons, and visual inspection in section and plan across the extent of the model.

14.4.1 Comparison of Mean Grades

The following table compares the block model interpolated values for the kriged grades (OK) and Nearest Neighbor (NN) for blocks within mineralized vein boundaries. The Nearest Neighbor interpolation is essentially the composite data, de-clustered to remove any bias in the drilling locations. Each metal and zone indicates good correlation between

the OK grade and the de-clustered composite data as summarized in Table 14.6, with the OK interpolation showing slightly lower grades, to account for the volume-variance effect of the larger sample size of the mining unit compared to the composite. Correcting the Nearest Neighbor data for the Volume-Variance effect is not implemented because a block percent model is used, and therefore the mining unit is not constant.

Table 14.6: Comparison of OK grades with NN Grades within Mineralized Veins

Parameters	Grades (opt)				Difference (%)	
	Au-OK	Au-NN	Ag-OK	Ag-NN	Au	Ag
Minimum (opt)	0.004	0.004	0.05	0.05	0%	0%
Maximum (opt)	0.45	0.45	29.36	29.36	0%	0%
Weighted Mean (opt)	0.092	0.0949	5.751	5.921	-3%	-3%
Weighted CV	0.6972	0.8444	0.938	1.046	-21%	-12%

14.4.2 Grade-Tonnage Curves

Grade-tonnage curves are used to compare distribution data of the interpolated OK grades with the Nearest Neighbor distributions.

Figures 14.11 and 14.12 illustrate the grade-tonnage curves for Au and Ag respectively. Each plot indicates that the OK grades are slightly lower than the NN grades throughout the grade distribution. As with the mean grade comparison, this is to be expected, and accounts for the internal smoothing of the model during interpolation of the OK grades to a larger sample size.

14.4.3 Swath Plots

Swath plots through the block model are created in the N-S and E-W directions for the two metals, in order to compare the OK grades to those interpolated by the Nearest Neighbor (NN). These are illustrated in Figures 14.13 and 14.14 for Au and Ag respectively. The swath plots indicate no global bias in the OK grade values, and good correlation throughout the main body of the data.

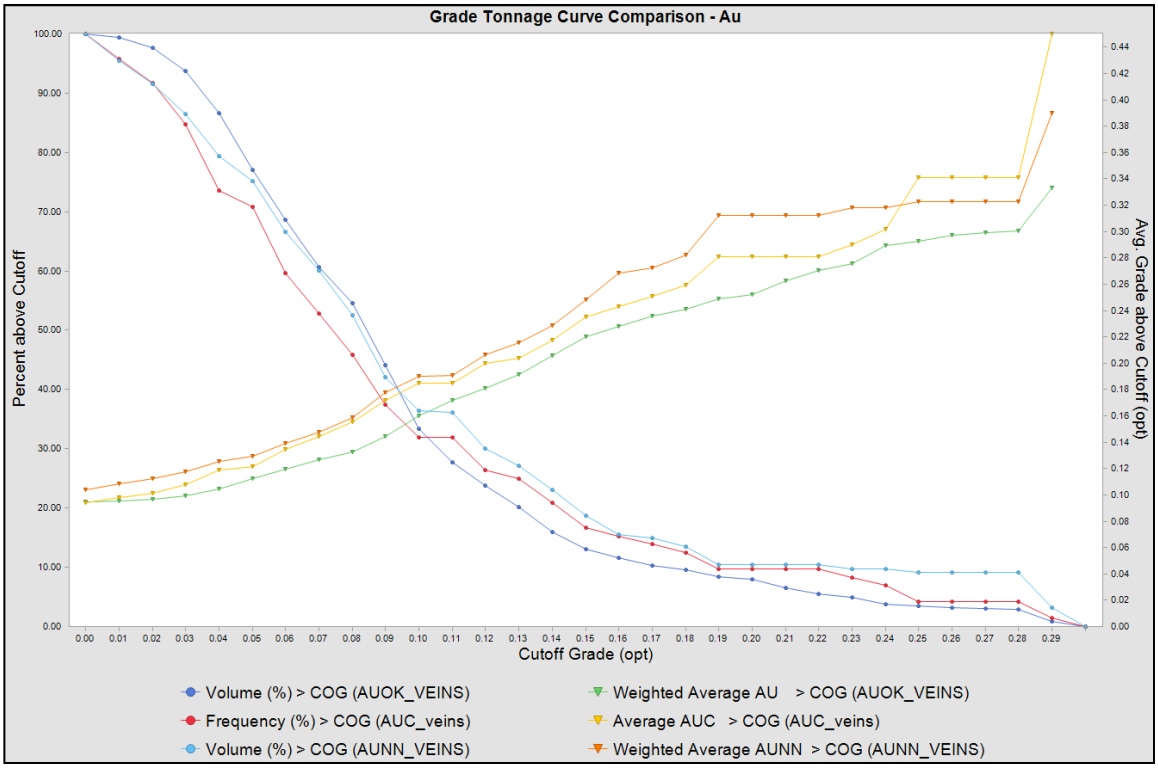


FIGURE 14.11:
Grade-Tonnage Curve for Au

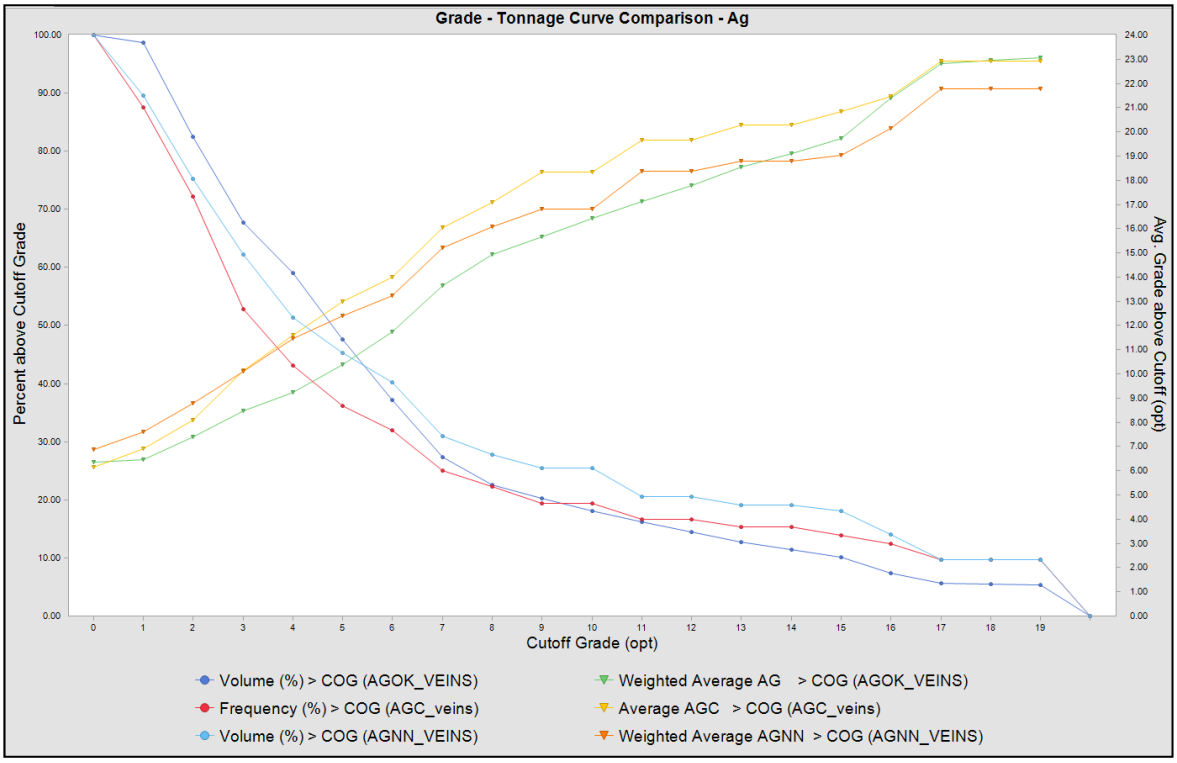


FIGURE 14.12:
Grade-Tonnage Curve for Ag

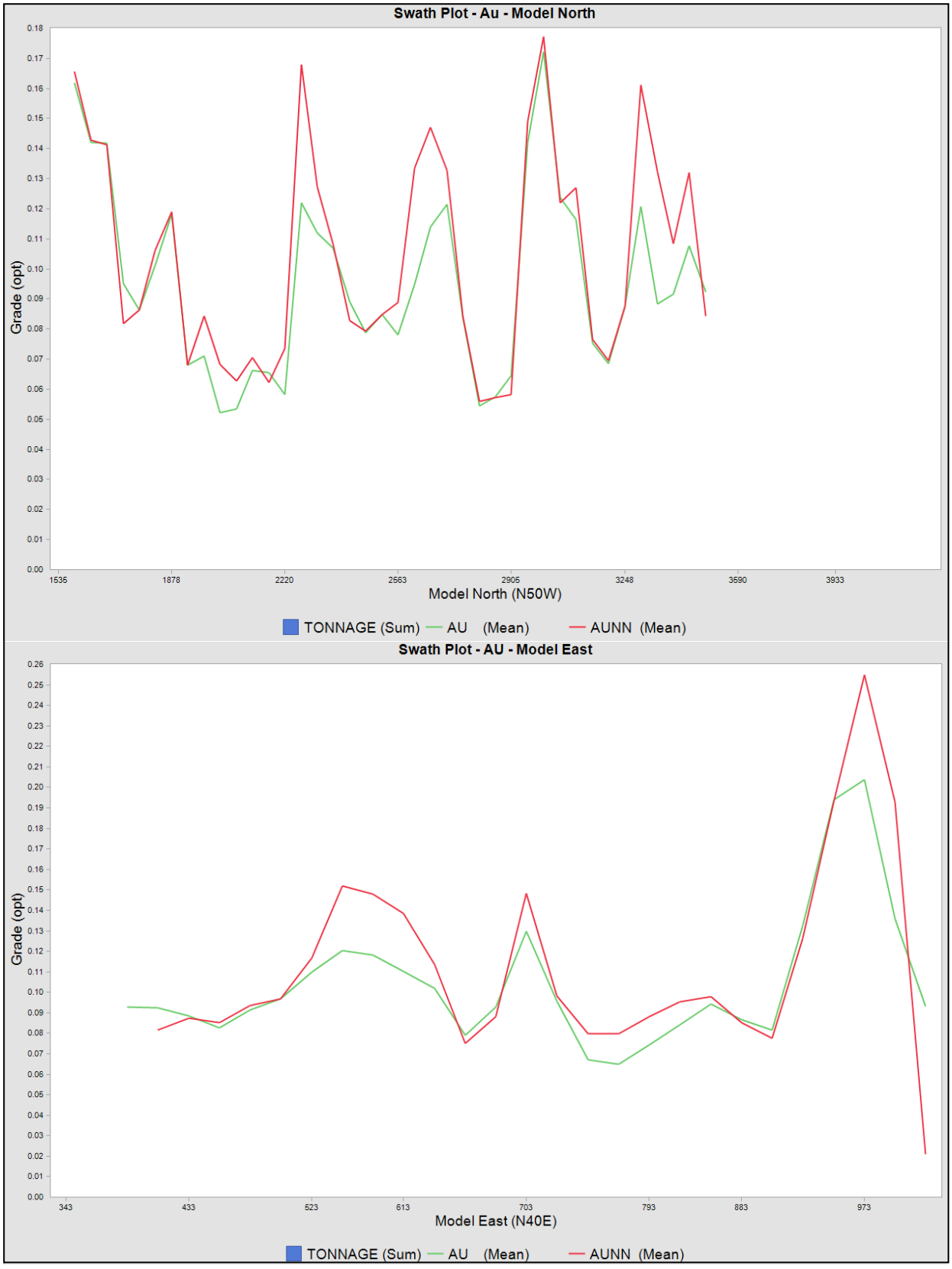


FIGURE 14.13:
Swath Plots Comparing OK and NN Grades – Au

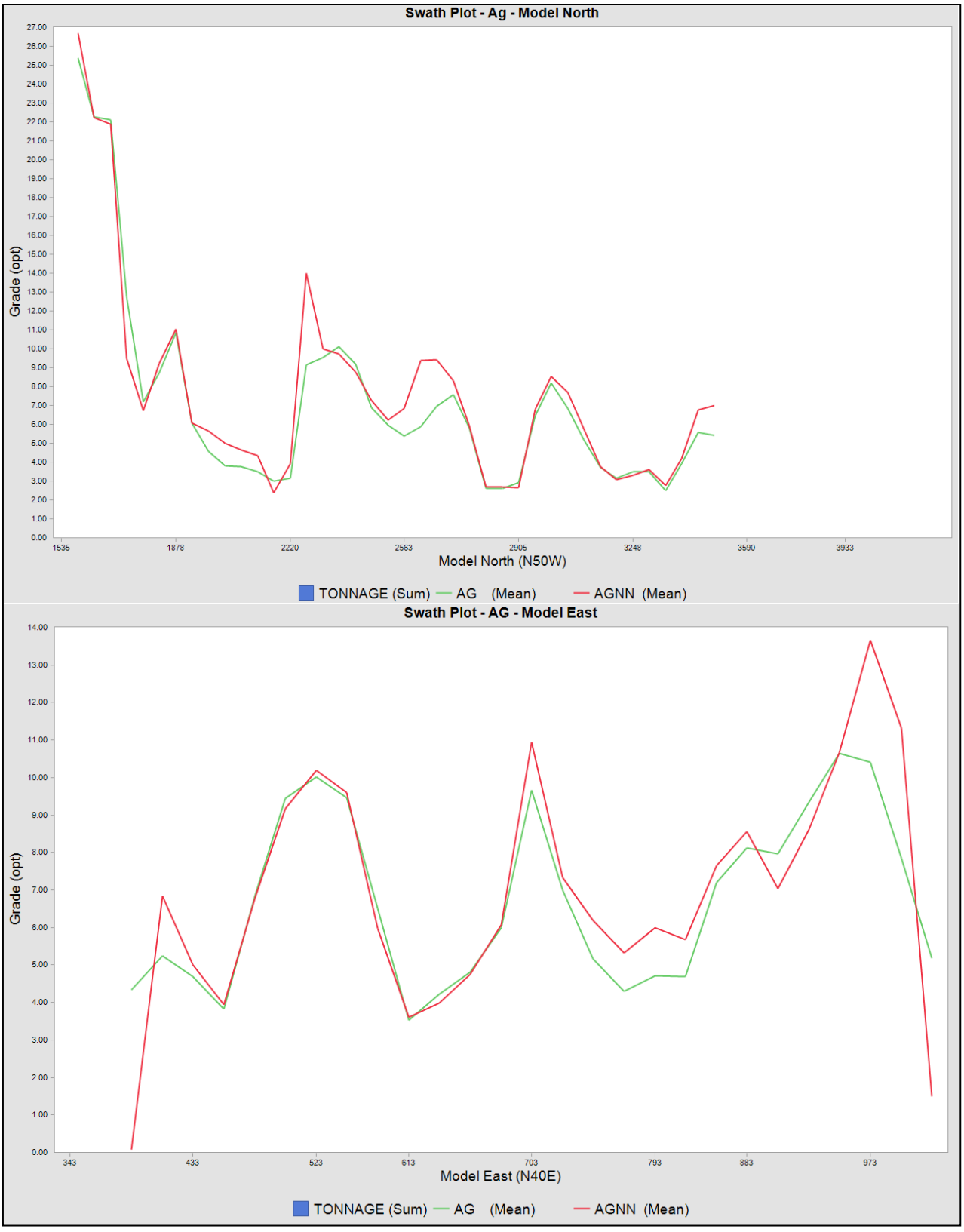


FIGURE 14.14:
Swath Plots Comparing OK and NN Grades - Ag

14.4.4 Visual Validation

A series of non-orthogonal sections (as shown on the plan map of Figure 14.1) and plans (every 100') have been used to inspect the ordinary kriged (OK) block model grades with the drill hole data. Figures 14.15 through 14.17 give examples of this comparison for the equivalent Au grade at the non-orthogonal sections 9, 15 and 18. The drill hole projection is 20' from the section in each case. Figure 14.18 is a plan of the kriged Au-equivalent grade at the 5,000 ft elevation.

Plots throughout the model confirmed that the block model grades corresponded very well with the assayed grades.

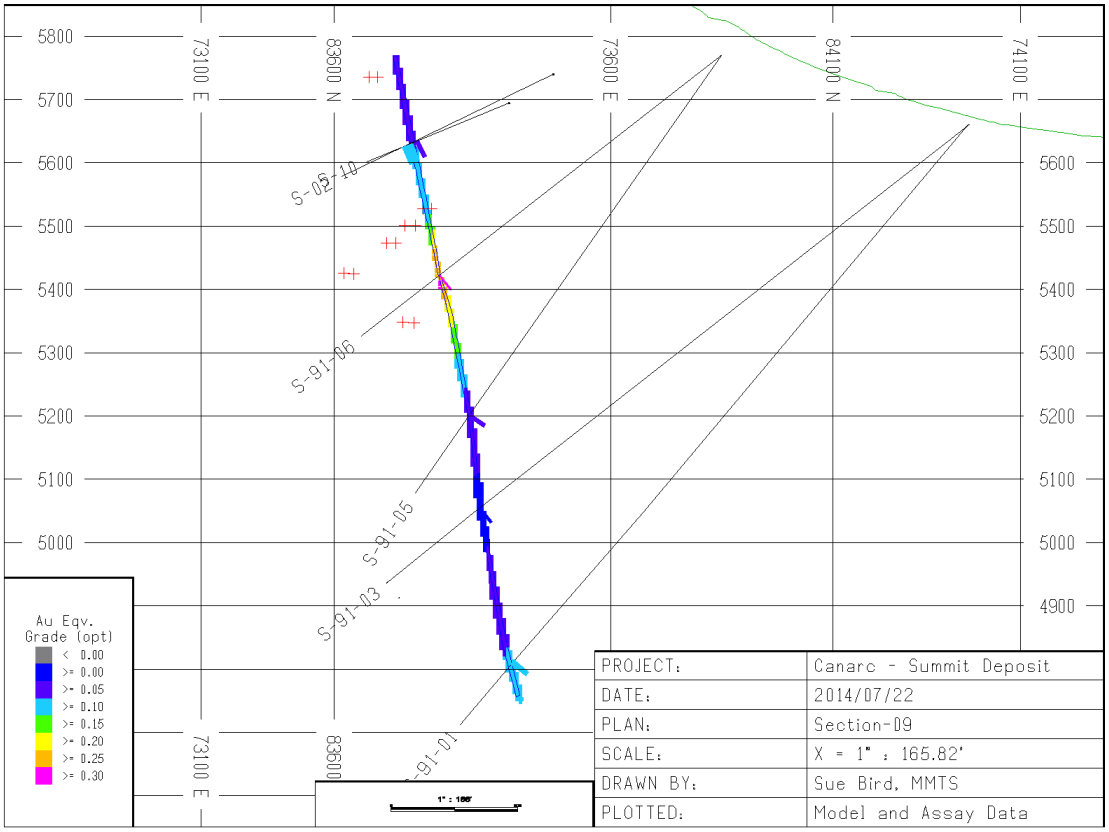


FIGURE 14.15:
Non-orthogonal Section #9 – Au Equivalent Grade - Assays and Block Model

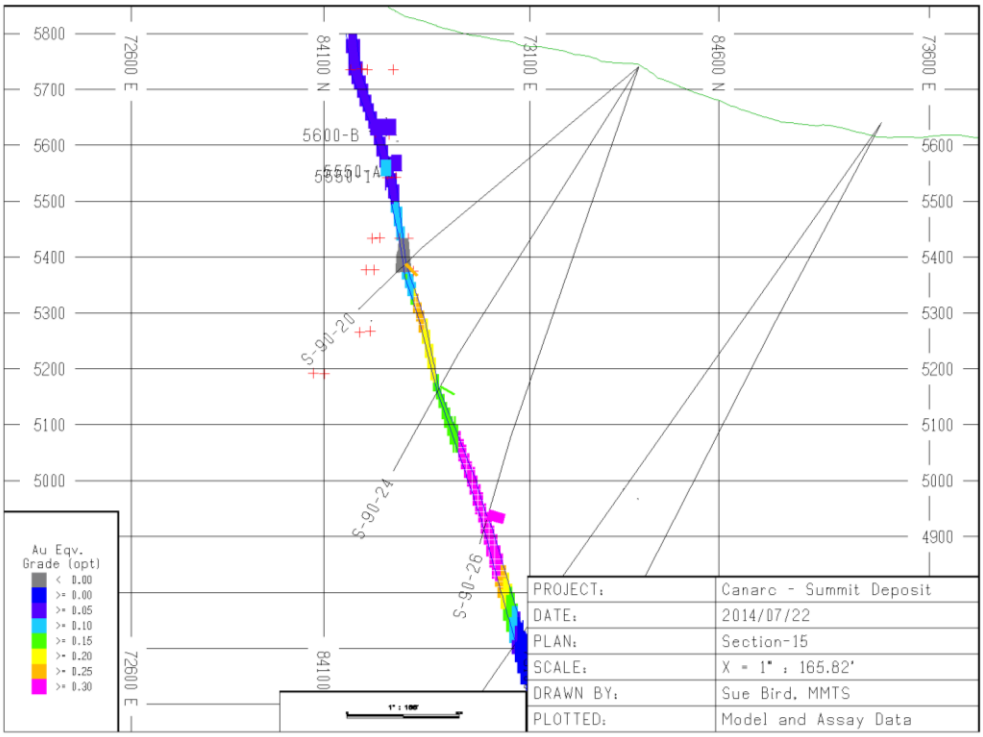


FIGURE 14.16:
Non-orthogonal Section #15 Au Equivalent Grade - Assays and Block Model

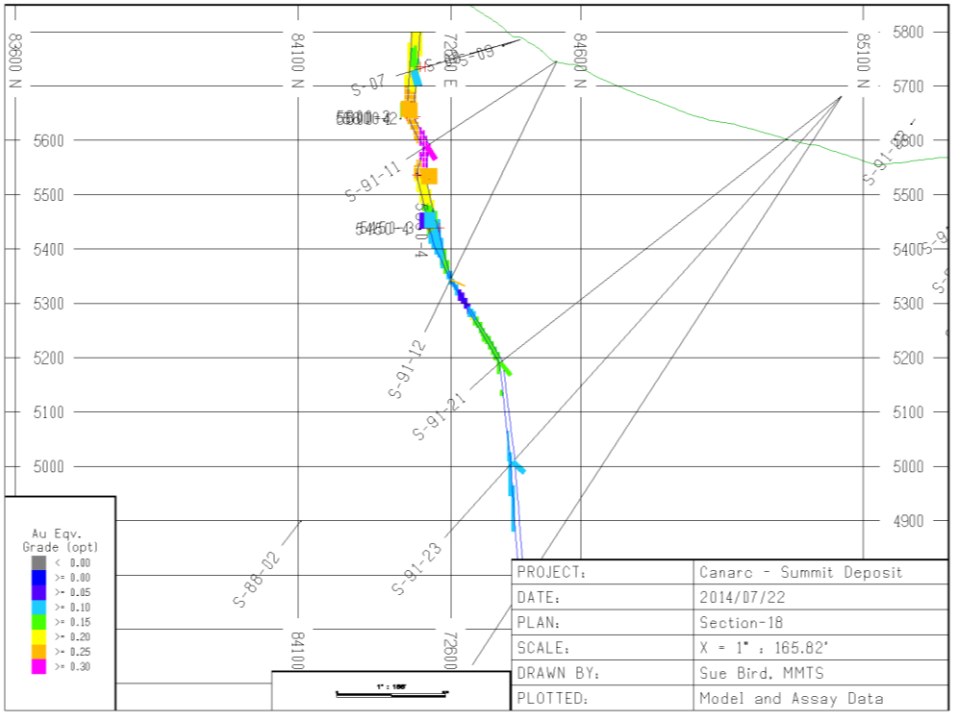


FIGURE 14.17:
Non-orthogonal Section #18 – Au Equivalent Grade - Assays and Block Model

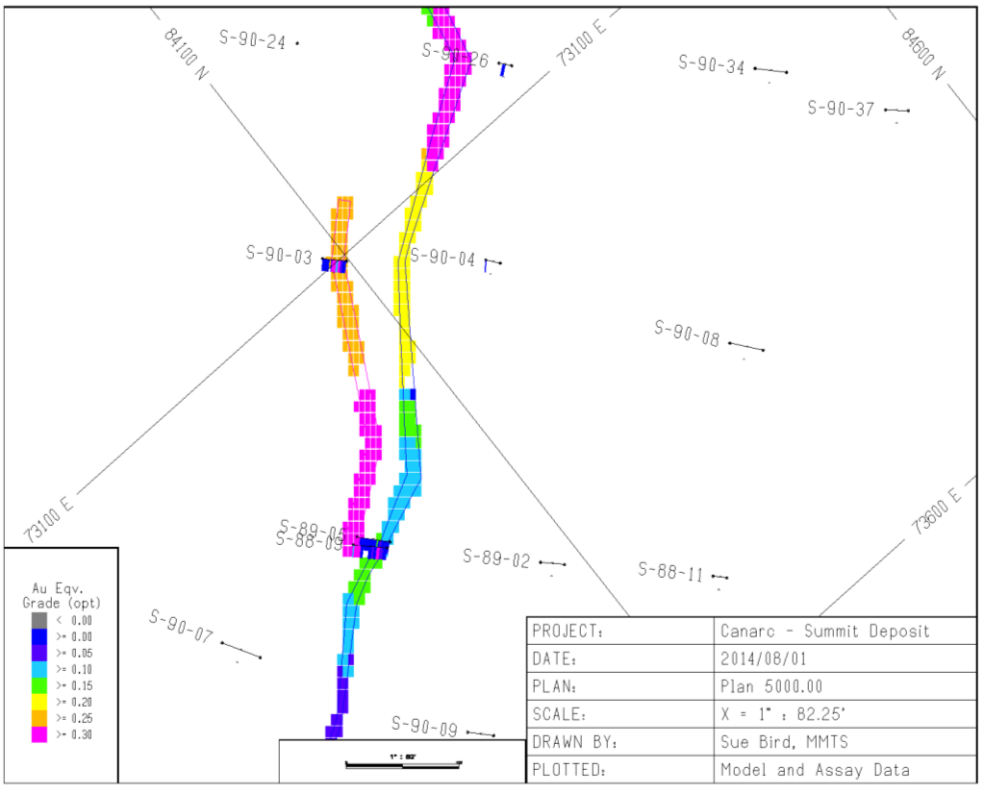


FIGURE 14.18:
Plan at 5000 Elevation Au Equivalent Grade - Assays and Block Model

14.5 Mineral Resource Estimate

The final resource model has an effective date of August 27, 2014.

Veins have not been modeled above the 5800 ft elevation due to lack of data and previous stoping above this elevation. The resource is also restricted by the property boundaries and at a lower elevation of 4800 ft due to lack of data below this depth.

In order to ensure that the mineral resource has the potential to be extracted from underground methods, gradeshells of the material above cutoff have been used. Any volumes of blocks that are not cohesive for at least a stope volume have been removed from the resource. This has been done by creating shapes around these blocks and making the mineral percent within these blocks null. The remaining mineral percent is reduced by the amount previously mined. Figure 14.19 illustrates the resulting gradeshell for the 0.14 opt Au Equivalent cutoff.

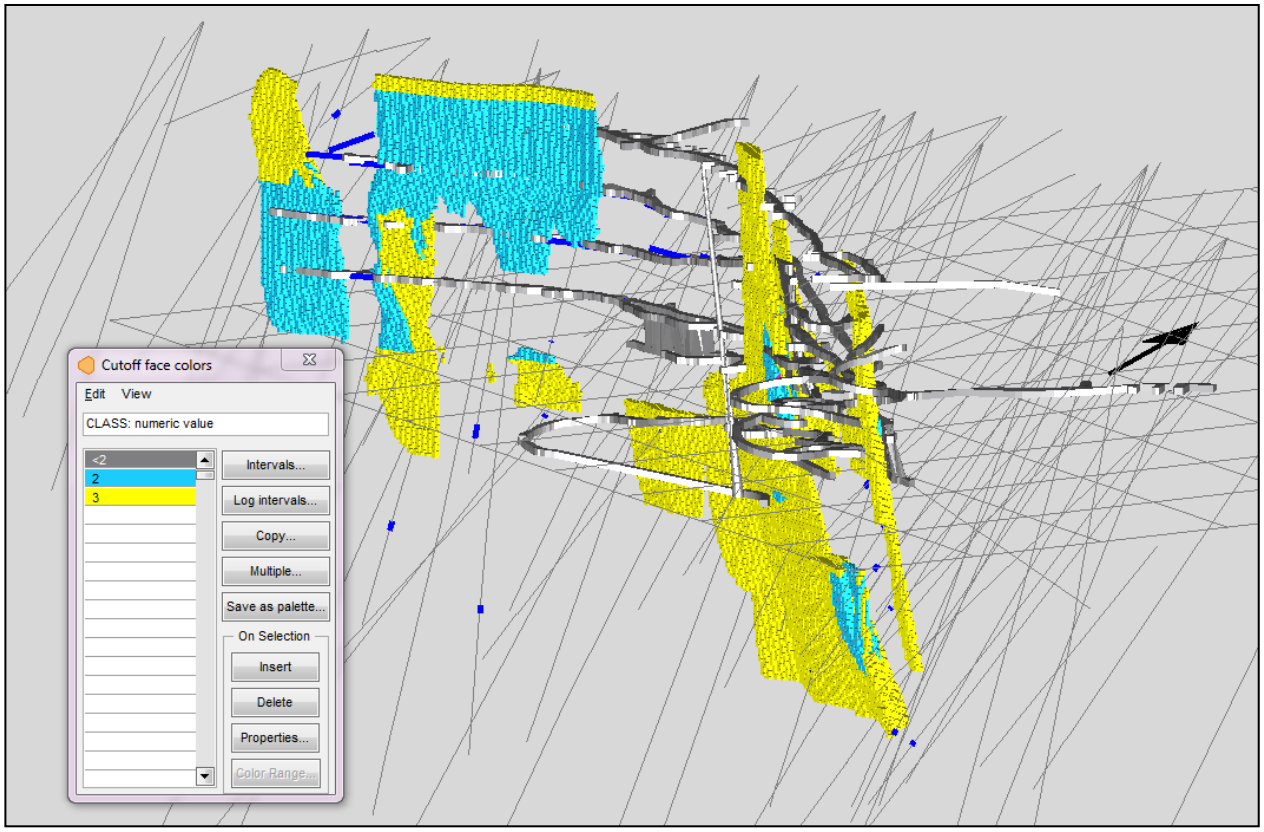


FIGURE 14.19:
Three Dimension View of Blocks within Resource
above 0.14 opt Au Equivalent Cutoff

Dilution is applied to all blocks at 15% dilution, with dilution grades for Au and Ag of 0.031 opt and 1.93 opt respectively. These dilution grade values are calculated based on assayed intervals that are not within an interpreted vein.

A mining loss of 10% of the diluted, in-place **Mineral Resource** is applied to account for the loss of resource in pillars.

The in situ resource is classified as Measured, Indicated or Inferred corresponding to Canadian NI 43-101 standards (CIM, 2014). The resource by equivalent gold grade for the Summit deposit is summarized in Tables 14.7 and 14.8 for Indicated and Inferred mineral resources respectively. The tables present a range of cutoffs, of which the base case equivalent gold is highlighted in each table. These cutoffs are sufficient to cover the current smelter terms, development, mining, and processing plus G&A costs

Table 14.7: Indicated Resource by Au Equivalent Grade
(Diluted Tons Adjusted for Pillar Loss)

Class	Au Equiv. Cutoff (opt)	Total Tons above Cutoff	In Situ Grades			Diluted Tons above Cutoff			Ounces of Metal	
			AUEQV	Au	Ag		Au	Ag	Au	Ag
			(opt)	(opt)	(opt)		(opt)	(opt)		
Indicated	0.140	212,800	0.251	0.132	7.157	220,239	0.117	6.373	25,702	1,403,583
	0.160	175,206	0.272	0.142	7.834	181,331	0.125	6.948	22,721	1,259,888
	0.180	151,402	0.288	0.149	8.353	156,694	0.132	7.389	20,605	1,157,816

Table 14.8: Inferred Resource by Au Equivalent Grade
(Diluted Tons Adjusted for Pillar Loss)

Class	Au Equivalent Cutoff (opt)	Total Tons above Cutoff	In Situ Grades			Diluted Tons above Cutoff			Ounces of Metal	
			AUEQV	Au	Ag		Au	Ag	Au	Ag
			(opt)	(opt)	(opt)		(opt)	(opt)		
Inferred	0.140	627,209	0.277	0.128	8.935	649,136	0.114	7.884	73,742	5,117,787
	0.160	532,669	0.290	0.135	9.333	551,290	0.119	8.222	65,659	4,532,710
	0.180	480,012	0.303	0.140	9.829	496,793	0.123	8.644	61,205	4,294,277

Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Due to the uncertainty that may be associated with Inferred mineral resources it cannot be assumed that all or any part of Inferred mineral resources will be upgraded to an Indicated or Measured resource.

14.6 Other Comments

The author does not know of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other risks that could materially affect the potential development of the Mineral Resources. Both the mine and the mill sites are fully permitted and in compliance with the rules and regulations of the United States, the State of New Mexico, and the respective Counties in which the operations exist. Neither of the operating sites nor the access to those sites is in or crosses through any environmentally-sensitive areas. Title to the properties is believed to be secure.

The estimates of **Mineral Resources** are not expected to be materially affected by any mining, metallurgical, infrastructure or other relevant factors, except for metal prices. The project economics are very sensitive to metal prices and a drop in the gold price to less than $980 per ounce, with a comparable drop in the silver price, would seriously affect the project economics. The need to raise the cutoff grade to provide an adequate economic return on the investment would significantly diminish the estimated quantity of the **Mineral Resource**.

15.0 MINERAL RESERVE ESTIMATES

The Summit property has no Mineral Reserves as defined under the CIM Definition Standards for Mineral Resources and Mineral Reserves.

16.0 MINING METHODS

16.1 Introduction

The Summit Mine is an underground operation in an advanced stage of development. At full production, the mine is expected to produce 144,000 tons per year. The mine is operated utilizing mobile, rubber-tired, diesel equipment.

Because of its remote location, power must be generated on site. Currently, a primary 600 KW generator and a secondary 275 KW generator provide power, which at times is inadequate. Estimated cost is about $0.20 per KW-Hr. due mainly to the cost of diesel fuel.

Design and permitting for construction of a commercial power line has been completed. The area supplier, Duncan Electric Co-Op, has quoted a cost of $0.07 per KW-Hr. based on use of about 1000 KW. Cost estimate for the line construction is about $900,000 with three months for construction. Permits for the power line to cross a portion of BLM-managed Federal land are in the final stages.

Other infrastructure needs include two 150 HP electric compressors to replace a rented 900 CFM 200 HP portable compressor.

Ground water was encountered at about the 5300-foot level in the mine, thus alleviating the need to haul water from Duncan for underground use in drills and on haulageways. The water meets drinking-water standards and could also be used for domestic purposes. Excess water will be disposed of by means of an evaporation system, thus eliminating the need for a mine-water discharge permit. However, the mine will have to buy or lease a water right in order to use or dispose of water at surface. As the mine deepens, it is anticipated that a water right of up to 130 acre feet per year may be required (equivalent to 80 gpm).

16.2 Primary Development Plan

The main access and principal haulage is a -10% truck decline, 12 feet wide by 13 feet high, and collared at a sill elevation of 5560 feet above sea level. It was driven westward about 700 feet and in February 2009 intersected the Summit structure and Resource Block S-2 at about elevation 5510 feet.

After intersecting the mineralization, the primary-development haulageway was driven northwesterly at a minus-15% grade in the Summit structure for 400 feet. The decline was then spiraled downwards to the 5400-foot level and then driven northwesterly for 1200 feet to the northwestern edge of the principal resource block. At that point it was turned 180 degrees on a nominal 50-foot radius and driven downward to the southeast. At the time the operations were suspended in November 2013, the decline had advanced 130 feet from the switchback position to an elevation of 5200 feet. The main decline is being driven in the footwall parallel to the Summit structure and at a distance of about 40 feet from the structural footwall.

The decline haulageway will continue downwards in this fashion until the lower limits of the identified resource have been reached, currently estimated to be at about elevation 4650 feet. This will require about 3700 feet of additional main haulageway (Figure 16.1).

Mine development must also provide for ventilation and secondary escapeways. An incline ramp at +20% was driven to the southeast from the initial decline entryway and then turned back to the northwest to a point below the old Summit Mine upper adit known as the Hanson Level (elevation 5714). A connecting raise 47 feet long was driven to provide a secondary escapeway and ventilation exhaust.

To the northwest, as development proceeded into the known resource blocks, a 10-foot diameter ventilation raise was upreamed 290 feet at an inclination of 80 degrees from the 5450 level to the Inspiration Level at an elevation of 5730 feet. The raise has been extended downwards to the 5280-foot level using long-hole drill-and-blast methods. The raise is completely laddered and is equipped at the top with a 200-HP, 84-inch fan to provide the principal ventilation for the mine.

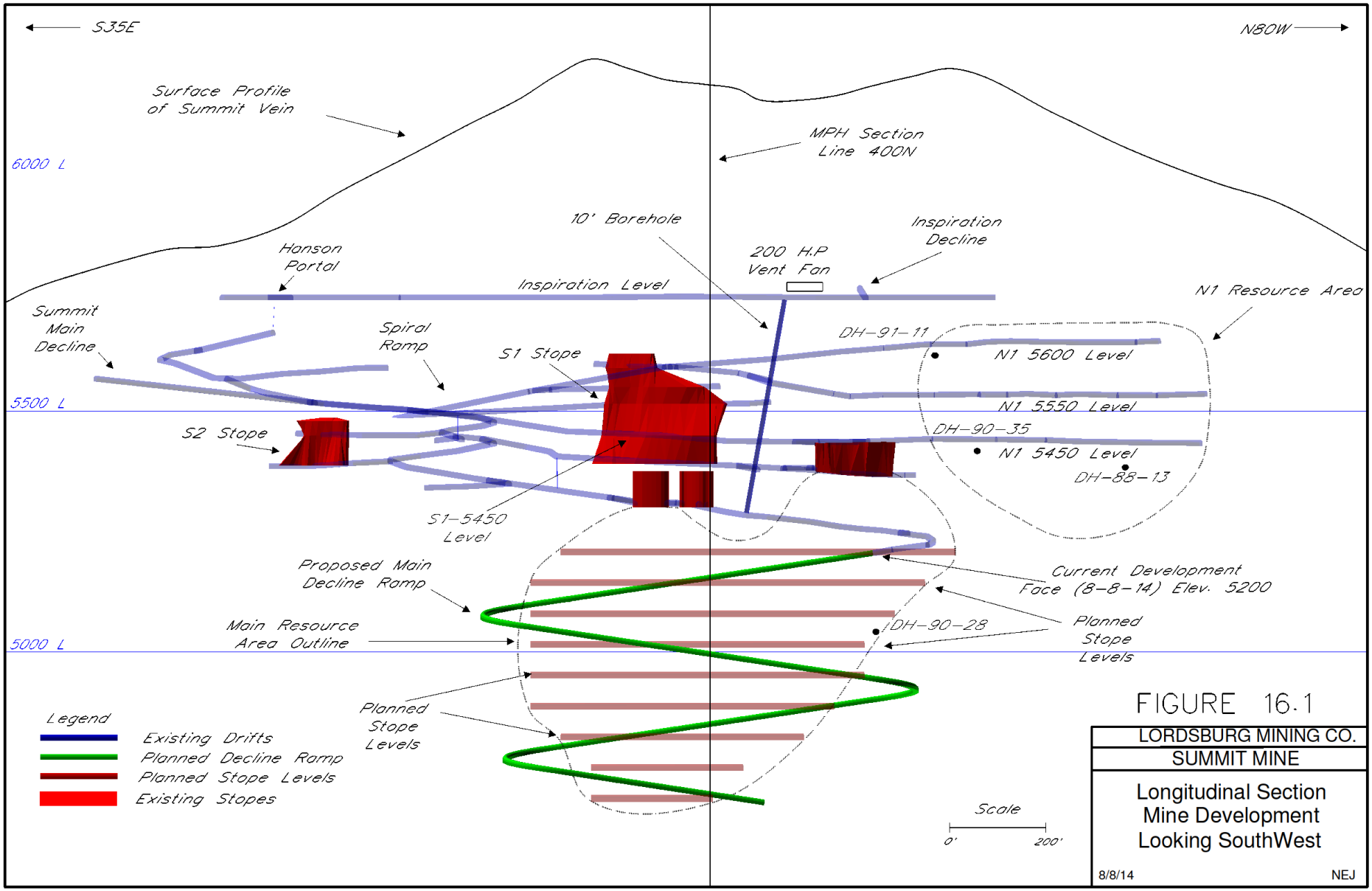


FIGURE 16.1:
Longitudinal Section of the Summit Mine.

16.3 Current Status

Operations at the mine were temporarily suspended on November 8, 2013 pending new financial arrangements. At the time of closure, as mentioned above, the main decline haulageway had reached an elevation of 5200 feet. Underground development workings totaled approximately 15,000 feet (Figure 16.1).

Water was intersected below the 5300-foot level. The main decline was advanced in the footwall to the 5200-foot level and a series of 4-inch diameter test holes was drilled into the vein zone. These produced 40 to 60 gallons per minute of good quality water. The water is entirely fracture-controlled and pumping tests plus other experience in the district indicate that once the water table is lowered in the vein zone, the sustained water inflow will be in the order of 20 gpm. The current water level in the main decline is at approximately the 5300-foot elevation.

16.4 Mine Production

Since the inception of mining in 2010, the mine has produced 180,315 tons of material grading 0.083 oz Au per ton and 4.44 oz Ag per ton. A yearly summary by fiscal year (July 1 – June 30) is given in Table 16.1.

Production to date has averaged nearly 50% below the projected mine-diluted resource grade. The principal reasons for this difference are twofold:

1. More than half of the production has come from drift development which includes a significant amount of material that was peripheral to the original resource blocks and was low grade.

2. The cutoff grade used in the limited amount of actual stoping that has been done was below the original resource cutoff grade of 0.14 oz Au equivalent per ton (based on a Ag:Au ratio of 60:1). The actual cutoff grade that was utilized was in the range of 0.05 to 0.075 oz Au equivalent per ton.

Table 16.1: Summary of Summit Mine Production By Fiscal Year
(Fiscal Year Ending 2010 Thru Fiscal Year Ending 2014)

Ending Year	Destination	Product	Tons	Grade (oz/t) Ag	Au
2010	Mill		6,554	2.87	0.048
2010 Total Mine Production			**6,554**	**2.87**	**0.048**
2011	Asarco	Flux	5,125	7.09	0.096
	FMI	Flux	2,241	5.08	0.060
	Mill	Concentrate	22,411	4.06	0.064
2011 Total Mine Production			**29,777**	**4.65**	**0.069**
2012	Asarco	Flux	12,016	5.42	0.081
	FMI	Flux	12,606	4.45	0.081
	Mill	Concentrate	30,057	4.24	0.079
2012 Total Mine Production			**54,679**	**4.55**	**0.080**
2013	Asarco	Flux	10,238	4.63	0.096
	FMI	Flux	21,224	4.78	0.089
	Mill	Concentrate	42,176	4.42	0.094
2013 Total Mine Production			**73,638**	**4.55**	**0.093**
2014	Asarco	Flux	2,129	4.12	0.108
	FMI	Flux	4,186	4.07	0.085
	Mill	Concentrate	9,727	3.63	0.089
2014 Total Mine Production			**16,042**	**3.81**	**0.091**
Total To Date			**180,690**	**4.44**	**0.083**

16.5 Mining Plan

16.5.1 Long-Hole Stoping

The development plan for the Summit Mine is based on a vertical, long-hole-stoping method. Figure 16.1 shows the general layout for developing the main resource zone. A small resource block was developed and mined as the S-1 stope to evaluate the method. The procedure and comments follow.

- Near horizontal 13-ft by 14-ft drifts are driven at approximately 65-ft vertical intervals along the strike length of the mineralized shoot. This provides for about a 50-ft vertical stope panel for each level.

- A drawpoint level is planned for every fourth level or approximately every 200 feet vertically. These levels will be driven parallel to the stope block at a distance of about 40 feet into the structural footwall. Drawpoints will be driven on about 45-foot centers, providing a nominal 30-foot-diameter pillar between the stope and the access drift.

- To date, the ground conditions have proved to be favorable. The S-1 stope was mined vertically for 200 feet and horizontally for 300 feet and continues to stand open a year after completion of mining and the pulling of pillars. Nowhere in the mine development has a broken zone been encountered that requires more than split-set rockbolts with mat or wire mesh. In most cases the ground stands open without ground control. However, in several areas split-set bolting with or without mats and mesh has been done as a safety precaution. There are local areas that will air-slack with time and thus need periodic checking with a scaling bar.

- The stope is drilled downward beginning from the first level above the drawpoint level. As one level is mined back, the next level can begin, so that multiple levels can be worked at the same time. The top level will require drilling both down and up holes to complete the stoping panel below the sill pillar left by the drawpoint level of the panel above.

- Blasthole diameters in the range of 3.5 to 4 inches are utilized. A 4-foot burden on blast holes appears to be best to avoid incomplete breakage, although this may be increased if the larger diameter hole is used. A spacing greater than the burden is utilized, typically 5 to 6 feet.

- Cuttings from all blastholes are sampled on 5- to 6-foot intervals (depending upon drill-rod length), and assayed for silver and gold. Portions of outside holes can be loaded and shot based upon the assay results and the cutoff chosen. The hangingwall and footwall of the vein are not defined by a slip to which blasting would automatically break. Thus, the grade of material broken can be controlled by the above method. The drill used for blasthole drilling should have a setup for good sample collection.

- When appropriate, once a stope block has been completed, development waste can be backfilled into the stope panel.

16.5.2 Cut-and-Fill Stoping

Some of the Resource Blocks may be better suited to a more selective mining method. The S-2 stope, which is smaller, narrower, and higher grade, has been developed for cut-and-fill mining. The block will be mined from bottom to top with waste development rock being used for fill.

16.5.3 Narrow Vein Stoping

Some lenses of above-cutoff-grade mineralization with widths of 8 feet or less occur in close proximity to the minable resources. These likely will be mined with jack-leg drills or with single-boom jumbos designed for narrow widths.

16.6 Ventilation

Currently, ventilation for the mine is provided by an 84-inch, 200 HP axial-vane fan located in the Inspiration Level at the top of the 10-foot-diameter bored raise. Fresh air is pushed into the mine, and 50 to 150 HP auxiliary fans deliver fresh air to the working faces through 36-inch vent tubing. Total airflow is about 200,000 cubic feet per minute and is exhausted through the main entry portal and the escape raise, both situated in the southern end of the mine.

16.7 Ground Control

In general, rock and ground conditions at the Summit Mine are very good and require only wire mesh and/or plates with 6-foot-long, split-set bolts at a few locations where the rock is broken. No fault zones or heavy ground have been encountered to date. Careful barring down after blasting to provide a safe work place is a strong part of the miner's routine.

16.8 Safety and Compliance

Although the mine had its share of typical start-up problems associated with hiring and training a new crew and establishing a relationship with MSHA, it has maintained a good safety record. As of this writing (August 2014), the mine is compliant and has no outstanding citations.

Because the mine location is remote and a long distance from the nearest operating underground mine, a fully-equipped Mine Rescue Station has been developed on site. Mine-rescue training is done at the mine. The operation is affiliated with other underground mine-rescue teams located in New Mexico through a cooperative agreement with the New Mexico Mine Rescue Association.

16.9 Manpower & Contract Mining

In the past operating period from January 2010 to November 2013, the greatest operating problem was a lack of output from the mine. This was due to two factors:

1. Poor availability of mechanized equipment
2. Inexperienced workforce

Improvements in personnel occurred over time, but lack of quality equipment was an on-going problem.

At the time that operations were temporarily suspended in November 2013, the mine had a manpower complement of 30. Full employment had reached a total of 50 people. The operation was non-union and had no bonus system. The operation is currently on a "standby" status.

Future operating plans include utilization of a mining contractor who could provide the personnel and equipment necessary to operate the mine and ensure that production goals are met. Lordsburg Mining Company would provide supervision for mine planning and grade control by a cadre of seven people as follows:

Manager – 1
Geologists – 4
Techs – 2

At this time, breakdown of the contractor workforce is unknown. The contract would be based on unit costs.

16.10 Mine Equipment

The mine contractor will supply all of the necessary equipment to operate the mine. However, the existing ventilation system will remain in place. As of August 1, 2014 the major equipment remaining at the mine includes the following:

Surface:

1 – Cat 966G front-end loader (4 cu yd)
1 – John Deere motor grader
1 – Cat 275 KW generator
1 – Water truck – 4000 gal.

Underground:

1 – Tamrock single-boom, diesel-hydraulic drill jumbo
1 – Terex two-boom electric-hydraulic drill jumbo
1 – Terex TY55-19 forklift
1 – Cat D-3 dozer
1 – EJC LHD – 2 cu yd
1 – Wagner LHD – 6 cu yd
1 – Young haul truck – 12 ton
1 – Getman scissor lift
1 – Cubex Aries 5541 down-the-hole drill
1 – Kubota ATV personnel transport

Much of this equipment is not in satisfactory operating condition and will not be used by the contractor. The primary pieces of equipment that the contractor will have to supply are:

2 – 4 cu yd LHD's
3 – 15- to 18- ton capacity trucks
1 – single-boom drill jumbo
1 – Cubex or similar blasthole drill

16.11 Mining Dilution and Mining Losses

A 15% dilution factor has been applied to the in situ resource (Tables 14.7 and 14.8). The experience of the S-1 stope provided in Table 12.3 indicates a dilution factor of 10.6% which can be expected for the long hole stoping method. The mineralization encountered in the S-1 stope and in the upper N-1 development area demonstrates sufficient continuity between levels to support the planned mining method with dilution factors within the range of 10% to 15%.

Experience gained in the S-1 stope block using the long-hole stoping method has demonstrated the appropriateness of this method for extracting much of the Summit resource. A mine plan has been developed to place a drawpoint level every 200 feet vertically. A sill pillar with a vertical thickness approximately equal to the width of the overlying stope or drift will be left in place. This width averages 13 to 15 feet, and represents a mining loss of 6 to 7.5%. A mining loss of 10% is utilized in the resource estimate provided in Tables 14.7 and 14.8. This higher loss provides for the possibility of additional pillars that may be purposely or inadvertently left in the general course of mining.

For the purposes of a Preliminary Economic Assessment, given the recent mining results, the dilution factor and mining loss used for the resource assessment are considered adequate.

17.0 RECOVERY METHODS

17.1 Introduction

The processing plant, which operated from March 2010 to October 2013, produces two separate products for sale to local and overseas smelters.

A simplified flow sheet diagram of the process-plant flow sheet is shown in Figure 17.1. A detailed grinding and flotation flow sheet is shown in Figure 17.2.

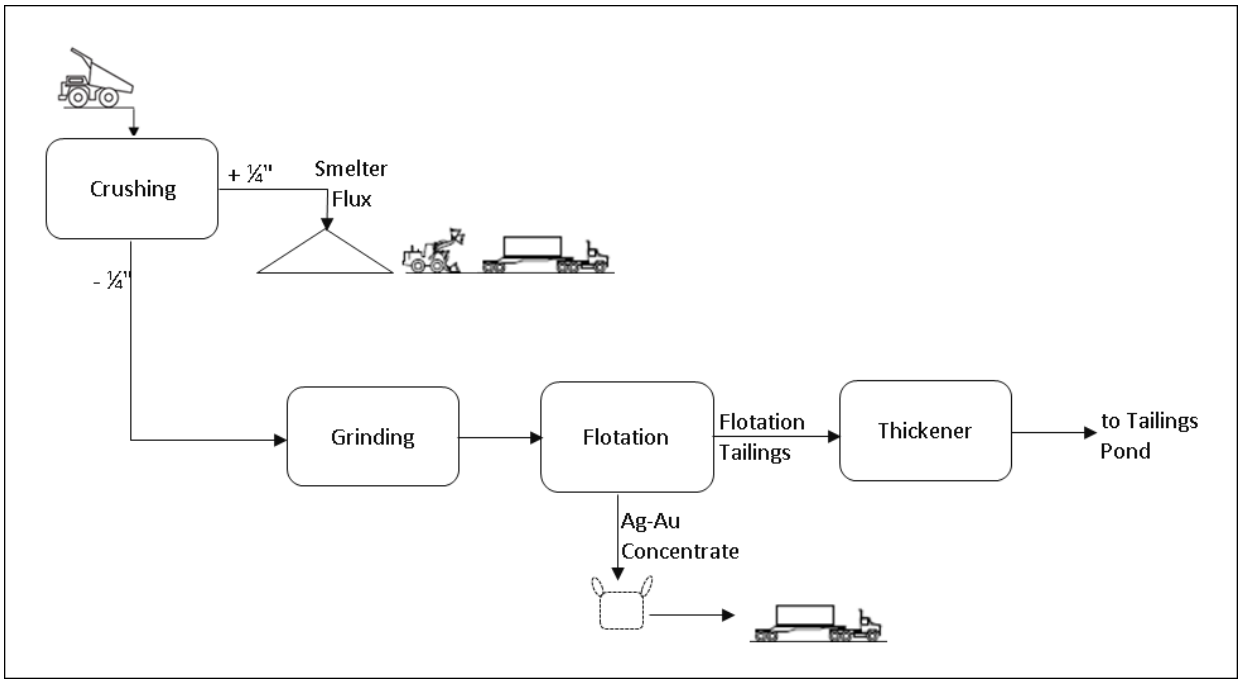


FIGURE 17.1:
Simplified Process Plant Flow Sheet

Processing involves crushing run of mine material through a jaw and cone crusher in closed circuit with a triple-deck screen. The ball mill feed material is crushed to minus 1/4 inch while the smelter flux is sized to minus 3/8 and plus 1/4 inch. Fines remaining from crushing of flux are added to the mill feed stockpile.

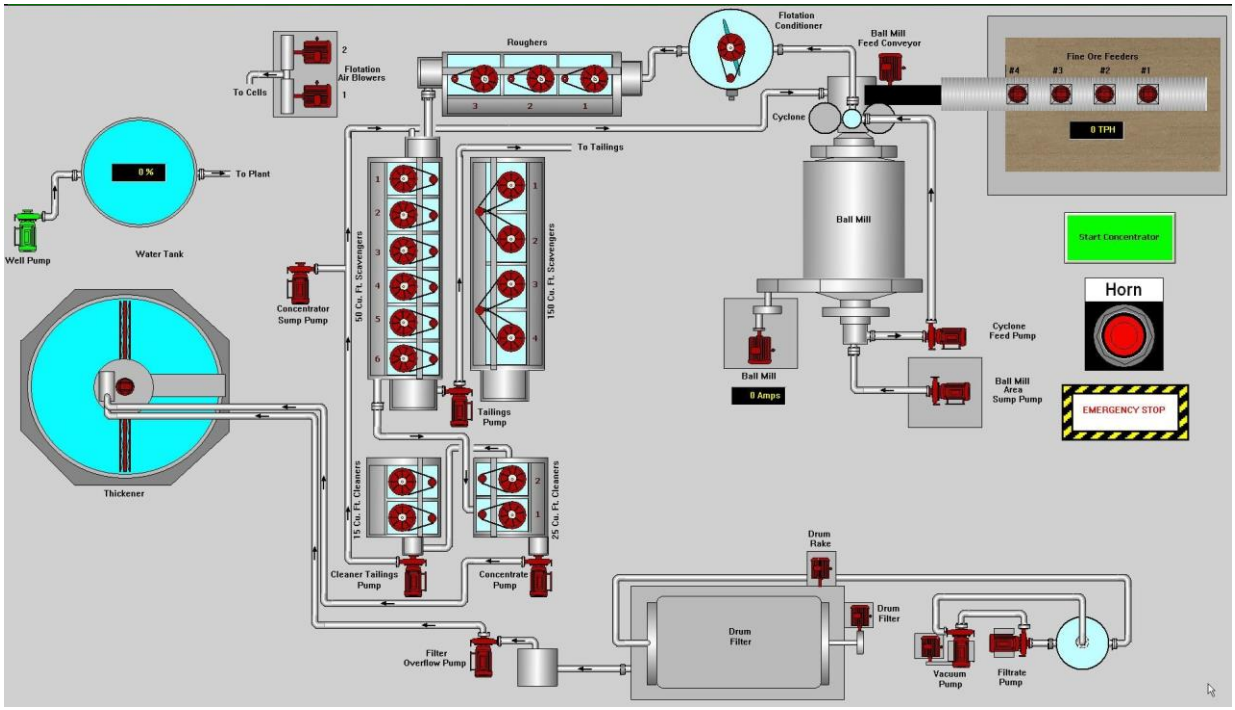


FIGURE 17.2:
Grinding and Flotation Flow Sheet

The minus 1/4 inch crusher fines are fed through a ball mill for grinding to 80% minus 100 mesh and fed through a rougher, scavenger and cleaner flotation circuit. The cleaner concentrate is dewatered in a thickener and drum filter and air dried to 8% moisture for shipment.

Concentrate is loaded into one ton super sacks and loaded into a sea container for shipment to overseas smelter in 20-ton lots.

Smelter flux is loaded onto highway trucks for delivery to the smelters.

Tailings from the process flows by gravity into a lined tailings storage facility.

Operations to date have shipped 69,765 tons of flux to smelters containing 360,000 ounces of silver and 5580 ounces of gold and the processing of an additional 110,315 tons of material in the grinding and flotation plant to produce 446 tons of concentrate containing 340,526 ounces of silver and 6,819 ounces of gold.

Flux Shipments were made to both Freeport McMoRan (FMI) at the Miami smelter operation, and to Asarco at the Hayden smelter operation, both in Arizona.

Both smelters have expressed interest in continuing flux shipments once operations resume.

17.2 Lordsburg Millsite – General

The Lordsburg millsite is situated 4.8 miles southwest of the town of Lordsburg and is at the site of the former Banner Mining Company and Federal Resources Bonney copper mine and mill.

Lordsburg Mining purchased the grinding and flotation section of the 400-ton-per-day St. Cloud Mining Company mill located at Winston, New Mexico. The equipment was dismantled and moved to the old Banner millsite where it was refurbished. A new building was purchased, concrete poured, and the mill reconstructed. A two-stage portable crushing plant located at the nearby St. Cloud aggregate quarry was purchased, refurbished, and moved to the new millsite. A shop and analytical laboratory were built. The former Banner mine-manager's house was repaired and made into the project office. A lined, stormwater-catchment pond was constructed adjacent to the millsite. A lined, tailings-impoundment facility was constructed in the original Banner tailings basin.

17.3 Crushing and Screening

Production from the Summit Mine is received in 24-ton-capacity, highway haul trucks. The material is dumped and pushed into stockpiles with a front-end loader.

Mine-run material is fed by front-end loader into a portable, two-stage, Cedar Rapids crushing-screening plant. A nominal minus 3/8-inch product is stockpiled by a stacker conveyor over a mill feed reclaim tunnel. Storage capacity is about 4000 tons. The crushing plant has a 25 x 40-inch jaw crusher and a 45-inch cone crusher operating in a closed-circuit system.

A portion of the minus 3/8 inch is screened to 3/8 inch x ¼ inch and stockpiled separately in the mill yard for shipment as flux

The crushing plant can process 50 tons per hour and will operate one shift per day, 5 days per week.

17.4 Grinding and Flotation

Vibrating feeders in the mill feed reclaim tunnel place the fine crushed material onto a conveyor for transport to a 7-ft x 10-ft, 300 H.P., rubber-lined ball mill where the feed is ground to a nominal 80% passing 100 mesh. The ball mill discharge goes to a conditioner tank and then to banks of Denver flotation cells including roughers, scavengers and cleaners. The flotation concentrate is pumped to a 24-ft x 10 ft-diameter, concentrate thickener for storage and thickening.

The principal reagents used in the flotation process are:

- Potassium amyl xanthate (KAX) – collector/promoter; 0.05 lb/ton
- Dithiolphosphate (Aero 3477) – promoter; 0.067 lb/ton
- Frother (Flomin F-160) – flotation reagent; 0.052 lb/ton
- Soda ash – pH control; used periodically.

The milling section can process 240 tons per day and will operate 7 days per week, 24 hours per day once in full production. Photographs of portions of the milling section are in Figure 17.3.

17.5 Concentrate Production and Handling

The operation at full capacity should produce 2 to 4 tons of concentrate per day. As concentrate is accumulated in the thickener, it will be pumped periodically to a drum filter for drying. The dried concentrate, about 16% moisture, drops into a locked, concentrate storage room (Figure 17.4). Concentrates are solar dried, bagged in one-ton super-sacks (Figure 17.3), and shipped in a locked shipping container in 20-ton lots.

7-ft x 10-ft, 300 HP, Denver ball mill.

A portion of the flotation section in the mill with bagged concentrate.

FIGURE 17.3:
Photographs of Denver Ball Mill and Flotation Cells

A 1000-ton lot of sized silica flux ready for shipment.
The grade is approximately 0.10 oz Au per ton and 10 oz Ag per ton.

Ten tons of flotation concentrate.
The grade is approximately 9 oz Au per ton and 500 oz Ag per ton.

FIGURE 17.4:
Photographs Showing Silica Flux and Gold-Silver Flotation Concentrate

17.6 Silica flux

In addition to conventional milling, the Company has been producing a precious-metal-bearing silica flux for sale to the two Arizona copper smelters. Mine-run oxidized material is trucked to the Lordsburg millsite where it is crushed and screened to specifications and then trucked to the smelters. Crushing and screening results in upgrading the silica content by removing a portion of the carbonate gangue. The screened fines are transferred to the mill-feed stockpile for milling.

Flux shipments through November, 2013 are shown in Table 17.1.

Table 17.1: Silica Flux Sales
Lordsburg Operation
(Shipments through November 2013)

		Grade		
Company	**Tons**	**oz Au/ton**	**oz Ag/ton**	**% Silica**
Asarco	29,508	0.086	5.64	88
FMI	40,257	0.075	4.81	88
Total	**69,765**	**0.080**	**5.16**	**88**

17.7 Manpower

The Lordsburg millsite complex, which includes the Summit project operations office, currently has 2 people on the payroll (Table 17.2). At full production 23 people will be required for 24-hour-per-day operations. The labor force is obtained from the nearby city of Lordsburg. The operation is non-union. Wages and salaries are competitive for comparable jobs.

Table 17.2: Projected Workforce at the Lordsburg Millsite

Classification	Number
Manager	1
Administration	2
Mill operators	4
Mill Helpers	4
Equipment Operators	4
Maintenance	2
Electrician*	1
Laboratory*	4
Safety Officer*	1
Total	**23**

*These positions serve the mine and the mill.

18.0 PROJECT INFRASTRUCTURE

18.1 General

The Summit Mine is situated 57 miles from the Lordsburg processing-plant facilities. The sites are connected by major highway routes with the final 15 miles from Duncan, Arizona to the Summit Mine property being along County gravel roads.

The Summit Mine has operated on diesel-generated power to date and it is to be connected to the power grid about six months after production resumes. Permitting for the power line has recently been completed. Construction of the power line is the only major infrastructure need for the Summit Mine.

The Lordsburg mill is on the local power grid, and is connected by paved road to the interstate highway system and the mainline of the Southern Pacific Railroad.

The mine and mill facilities both have telephone and internet services.

The tailings facility at the plant site is nearing its capacity and will need to be enlarged as described below.

18.2 Tailings Facility

Mill tailings are gravity fed in a 4-inch-diameter PVC pipe to a tailings impoundment facility located approximately 1200 feet northwest of the mill (Figure 4.3). Figure 18.1 shows the mill site, tailings facility and storm water-diversion channels. Photographs of the tailings area are in Figure 18.2. The impoundment was constructed on company-owned property (patented mining claims) within the tailings basin that had been used to deposit the original Banner tailings. At a narrow point in the former arroyo (gully), the old tailings were excavated to bedrock and a rockfill dam constructed. A new tailings basin was excavated into the old tailings and lined with a 60-mil-thick HDPE membrane. The tailings dam, tailings basin and stormwater-diversion channels were designed by Easterling Consultants LLC in association with Metric Corp., Engineering and Environmental Consultants of Albuquerque, New Mexico. The dam was certified by the Office of the State Engineer and licensed to operate (License No. D-670). The discharge of tailings has been approved by the Groundwater Bureau of the New Mexico Environment Department under Groundwater Discharge Permit No. DP-1651 (renewed on May 2, 2014 for 5 years).

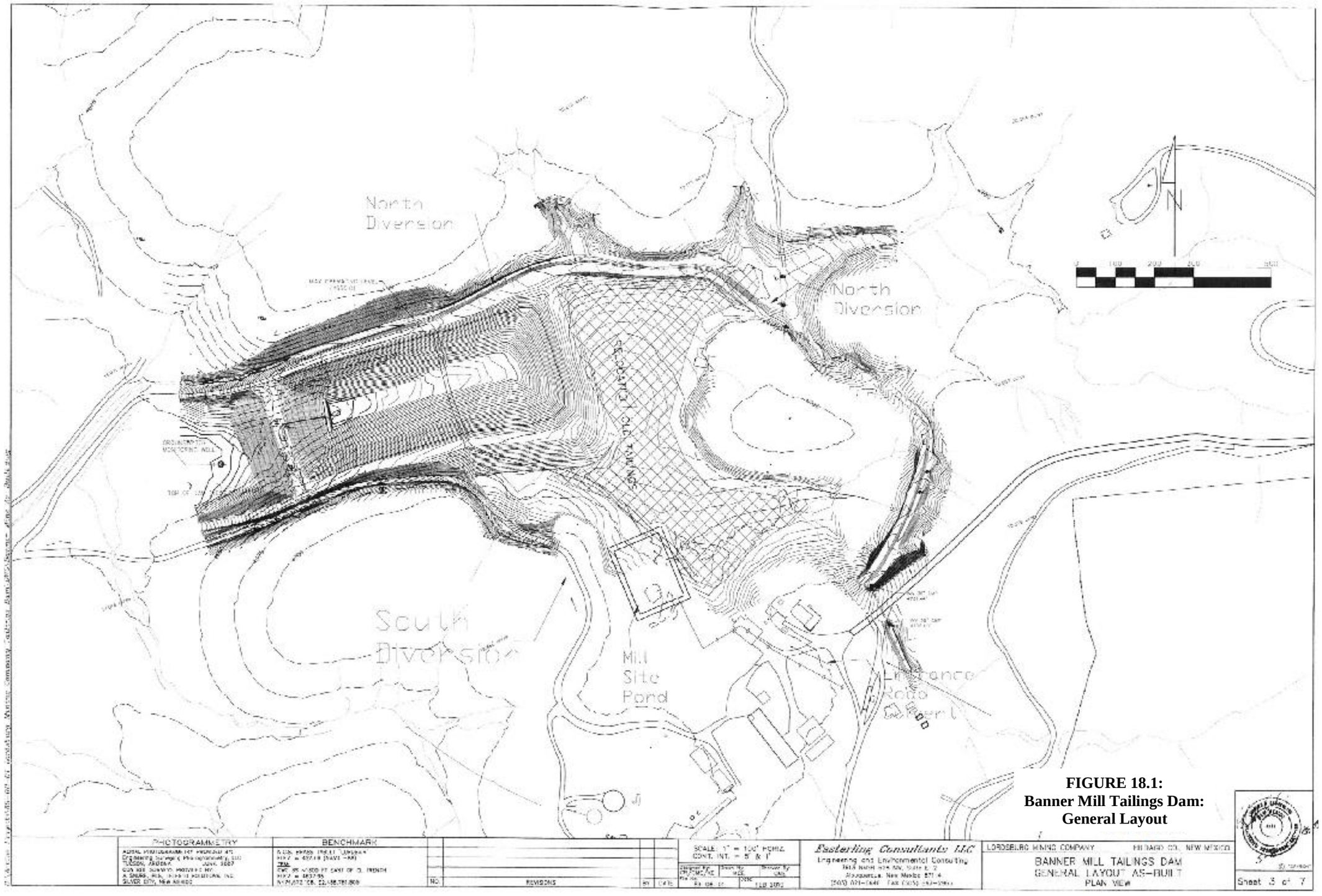


FIGURE 18.1:
Banner Mill Tailings Dam:
General Layout

Mill-tailings facility looking west (July 8, 2014)

Tailings decant-cell under construction; looking S 25°W (July 8, 2014).

FIGURE 18.2:
Photographs of the Mill-Tailings Facilities.

The tailings facility as constructed has been filled to near capacity. The tailings dam will need to be raised to increase capacity. To extend the life of the existing tailings impoundment, a dry stacking system has been designed and approved by the New Mexico Environment Department. The facility was under construction at the time milling operations were suspended.

18.3 Electric Power

Electric power for the mill and related facilities is supplied under contract by Public Service Company of New Mexico. A demand charge for up to 75 KW is assessed at $1256.35 per month. Additional demand will cost $14.88 per KW. Power consumption charges will be approximately $0.05 per KWH. The Lordsburg facility has about 1000 connected horsepower.

The Summit Mine currently operates on generated electric power. A 600 KW and a 275 KW diesel powered generator sets are located at the mine site. Duncan Valley Electric Coop has quoted a price of $0.07 per KWH for grid power based upon a use of 1000 KW. The 15-mile line has an estimated construction cost of $900,000. The right-of-way and construction permit are in the final stages of approval.

18.4 Water Supply

Water for the mill is obtained from the old Bonney Mine underground workings which lie adjacent to and beneath the mill. The water table is 750 feet below surface. A pump has been set at about 1000 feet in the Bonney No. 2 shaft. Fresh water from the shaft and reclaim water from the tailings dam are pumped to two head tanks situated above the mill. An estimated 75 gpm of fresh makeup water is required for the milling operation.

Lordsburg holds a Declaration of Owner of Underground Water Right, Declaration No. 12-84 date stamped May 29, 1991, for the appropriation and use of 194 acre feet per annum.

Water at the mine is pumped from the underground workings. The company has to obtain a water right to discharge to the surface.

18.5 Trucking

Mine production is trucked from the mine to the mill, a distance of 57 miles, by contract trucker, Rocky Mountain Transport Inc. Heavy duty 24-ton-capacity trucks haul the rock from the mine over the 15 mile gravel road to a transfer point near the junction of Carlisle Road and Arizonan State Highway 75 at Duncan, AZ. At the point the material is transferred from stockpiles into regular highway trucks (24-ton capacity) for the 42-mile haul to the Lordsburg mill.

Although the 15 miles of gravel road is a County-maintained public road, Lordsburg Mining provides a fair share of in-kind maintenance.

18.6 Ancillary Facilities

18.6.1 Mill Office

The former Mine Manager's residence was refurbished and now functions as the Project office. Telephone and broadband cable service have been installed.

18.6.2 Assay Laboratory

An assay laboratory was constructed on site and contains a sample preparation room, a fire-assay facility, wet lab prep room, an atomic adsorption analytical unit room, and gold balance room. The laboratory also is equipped with bench scale flotation test equipment. Also on site is a pilot flotation mill with a capacity of 40 to 80 pounds per hour.

18.6.3 Other Facilities

The mill complex has a shop, a warehouse and a truck scale. Separate areas within the millsite are set aside for stockpiles of mine-run material and sized silica flux.

The mine has two office trailers (10 x 32 feet and 12 x 48 feet), a shower and change room, a maintenance shop building, and adequate room for stockpiling mine-run materials. Waste rock has been placed over the margin of the yard area, but in the future much of the waste rock will be back-filled in mined out stopes. Cap and powder magazines are located approximately 1,500 feet from the mine area in a gated off secure area.

18.7 Security and Safety

The millsite and tailings areas are surrounded by a 7-foot-high, chain-link fence. The concentrate-storage room in the mill is locked and is only accessible to authorized personnel.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Concentrate Sales

Concentrates have been sold under contract to the German smelter, Aurubis AG, and also to the Korean smelter, L.S. Nikko. The high-value, precious-metal concentrate contains no deleterious elements and is not subject to any penalties. Charges and deductions for freight, insurance, handling, smelting and refining are standard for the industry.

As of June 30, 2014, 697.9 dry tons of concentrate had been shipped grading 9.9 oz Au and 498 oz Ag per ton. The contract with L.S. Nikko for concentrate sales remains in force as of the date of this report. The terms with L.S. Nikko are as follow:

Metal Payment:	96% of silver and gold value using spot London metal price
Treatment Charge:	$350.00 per ton
Refining Charge:	$0.50 per ounce Ag
	$7.00 per ounce Au

Lordsburg Mining Company also has a letter of intent and terms from Sumitomo Corporation to purchase concentrate with the percentage of metal payment terms that are comparable to L.S. Nikko. The Sumitomo agreement contains faster payment for 75% of the estimated value, which is more favorable than the L.S. Nikko agreement.

19.2 Silica Flux Sales

19.2.1 Asarco Contract

Since 2011, Asarco's Hayden, Arizona smelter agreed to purchase 1000 tons per month of sized silica flux. The contract terms for handling, smelting and refining are standard industry terms. The material is clean and free of deleterious elements, thus avoiding smelter penalties.

Shipments to Asarco from 2010 through 2013 total 29,508 tons assaying 0.086 oz Au per ton, 5.64 oz Ag per ton, and about 88% insolubles per ton.

19.2.2 Freeport McMoRan Purchases

Shipments to Freeport McMoRan's (FMI) Miami, Arizona copper operations from 2010 through 2013 total 40,256.7 dry tons of silica flux grading 0.075 oz Au and 4.81 oz Ag per ton.

FMI has agreed, on an open contract, to purchase 3000 tons of material per month. The terms are standard for the industry.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL IMPACT

20.1 Summit Mine

Under the New Mexico Mining Act, most mineral-related activities are regulated. Financial assurance, such as a surety bond, to the extent of the estimated cost of reclamation of the site by a contractor must be placed with the Mining and Minerals Division of the Department of Energy, Minerals and Natural Resources and with the Environment Department. Lordsburg Mining Company has submitted a plan for post-mine reclamation to the Mining and Minerals Division with a cost estimate for purposes of providing financial assurance. An interim bond in the amount of $95,175 has been provided by Lordsburg Mining Company to the Mining and Minerals Division. Following reclamation, the site must be monitored for a minimum of 12 years to assure that revegetation and erosion control are adequate in order to return the site to a condition of a "self-sustaining ecosystem."

The mine site is fully permitted and operates under the following Registrations and Permits:

a. Minimal Impact Existing Mine Permit, No. GR011ME, issued by the New Mexico Mining and Minerals Division.

b. Explosives use Permit No. 5-NM-001-33-3A-00279, issued by the Bureau of Alcohol, Tobacco, Firearms and Explosives, a branch of the Department of Homeland Security.

c. New Mexico Air Quality Control Permit, No. 3807M2, issued by the Air Quality Bureau of the New Mexico Environment Department.

d. Stormwater Notice of Intent (NOI) administered by the Environmental Protection Agency under permit tracking number NMR12A765.

e. Mine Water Discharge. An NOI to discharge was filed with the New Mexico Environment Department on January 21, 2014. On March 2, 2014 Lordsburg Mining Company received a determination letter from the New Mexico Environment Department stating that on the basis of sampling and the proposed discharge plan, no discharge permit is required. Discharge from the mine to surface will require acquisition of water rights to cover the volume of water discharged. This transaction is regulated by the New Mexico Office of the State Engineer.

f. The mine is registered with the Mine Safety and Health Administration (MSHA), No. 29-02356.

Should the need arise to expand the site onto adjoining BLM-administered Federal land, permits and reclamation bonding will be necessary with the BLM.

The Summit Mine road is a County Road. The road makes several at-grade crossings of a local, ephemeral drainage and does not require an Army Corps of Engineers Section 404 Permit under the Clean Water Act. Lordsburg Mining Company has a maintenance agreement with Grant County to allow Lordsburg Mining Company to perform maintenance on the road. That agreement is presently being updated to incorporate the latest BLM standards for road maintenance that includes environmental protections.

20.2 Lordsburg Millsite

Reclamation bonds totaling $231,000 have been posted for the Lordsburg millsite and tailings facility. Those bonds are posted jointly with the New Mexico Environment Department and the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department. Additional bonding of $145,989 has been agreed to by MMD and Lordsburg Mining Company per draft Permit Revision 14-1 to Permit No. HI001RE. The final revision document will be executed once the financial assurance has been put into place.

The millsite and tailings facility are fully permitted and operations are being conducted under the following Registrations and Permits.

a. A revised Existing Mine Operations Permit, No. HI001RE; issued under the New Mexico Mining Act by the New Mexico Mining and Minerals Division. A revision of this permit is pending placement of $145,989 of financial assurance by Lordsburg Mining Company.

b. A Groundwater Discharge Permit, No. DP-1651, covering the millsite and tailings; issued by the New Mexico Environment Department (NMED). This permit is renewable every 5 years. The permit was renewed on May 2, 2014.

c. An Air Quality Control Permit, No. 0882-M3, for the millsite facilities; issued by NMED Air Quality Division.

d. Tailings dam and impoundment certification and license to operate, No. D-670; issued by the Office of the New Mexico State Engineer.

e. Stormwater NOI administered by the US EPA permit number NMR05HA95

f. Mine Registration No. 29-02357; issued by MSHA.

The Army Corp. of Engineers, as regulator of the Clean Waters Act, determined that the drainage channel used for the tailings facility does not require a Section 404 Permit.

20.3 Social Impact

The environmental impact of the operations results in relatively small disturbances, and the mined rock and process materials involved do not represent or create environmentally hazardous conditions. The millsite and tailings facility are located on land that has been utilized for mining milling purposes for over 80 years, and is located in a mining district that has been active for nearly 150 years.

The communities of Duncan, Arizona and Lordsburg, New Mexico are dependent upon well-paying mining jobs provided by companies such as Freeport McMoRan, and have been supportive of the mine and mill operations. Several permit applications filed throughout the past six years have included public notices soliciting comments from individuals and local governmental entities. There have been no negative comments submitted in response to the public notices. The economy in the area is relatively depressed. The Summit project when in full production will provide direct employment for about 70 people, including contractors. The jobs that this project represents are welcomed by local residents and officials. The operations represent over $4,000,000 in payrolls and several hundred thousand dollars in tax revenues per year.

21.0 CAPITAL AND OPERATING COSTS

21.1 Capital Cost Estimates

The Summit Mine project is expected to achieve full production of 400 tons per day within 6 months of restart of operations. The mine is in an advanced state of development and early production, and requires additional capital expense to bring it to full production. A summary of those casts are provided in Table 21.1.

Table 21.1: Capital Costs for Restart of Operations

Item		Cost
Surface Drilling Program at Mine; 10 holes	$	682,000
Mine Infrastructure Upgrades incl Powerline	$	1,426,750
Haul Road Improvements	$	91,590
Mill Tailings Expansion	$	963,000
Mill Testing and Improvements	$	918,000
Contingencies	$	169,967
Total	**$**	**4,251,307**

Sustaining capital costs will include infrastructure improvements and additional drilling at the mine, and enlargement of the tailings facility at the mill. An initial 10-hole surface drilling program has been designed to better define the resources in the Main Resource area. This drilling, if successful, would probably allow some of the Inferred Resources to be upgraded to Indicated Resources. A cost for this program is estimated at $682,000.

Additional mine production equipment will not be required due to the utilization of a contractor for underground development and production mining.

With most of the project construction either completed or nearing completion, much of the capital cost is known. The cost to date plus an estimate of the cost to complete has been supplied by Santa Fe Gold and is summarized in Table 21.2. Working capital is required to sustain operations until the mine reaches full production. Capital cost estimates are based upon actual quotations from equipment suppliers, contractors, and design engineers who have had direct involvement with the project in the past, or are

currently involved with design of the capital projects planned. Working capital requirements are determined from the economic modeling of the project by month from restart to completion. The economic model is provided in Section 22 **Economic Analysis**.

Table 21.2: Total Estimated Capital Costs

a. Summit Mine	
Amount spent to date (June 30, 2014)	$ 11,006,000
Estimated additional mine infrastructure	$ 1,518,340
Resource confirmation drilling	$ 682,000
Mine total	$ 13,206,340
b. Lordsburg Millsite	
Amount spent to date (June 30, 2014)	$ 9,254,000
Est. tailings, other mill improvements and contingency	$ 2,050,967
Mill total	$ 11,304,967
c. Working Capital	
Six months requirements	$ 4,500,000
d. Capital cost summary	
Amount spent to June 30, 2014	$ 20,260,000
Estimated cost to complete	$ 4,251,307
Total estimated capital cost	**$ 24,511,307**
Add working capital estimate	$ 4,500,000
Total project capital requirements	**$ 29,011,307**

21.2 Operating Cost Estimates

Operating costs for the mine are based primarily on hard quotation proposals for contract mining from reputable contractors who are well experienced in underground hard rock drift and raise development and production stoping. Additional mine costs are provided for owner onsite management and administration, as well as provision of power and initial infrastructure. Mill costs are based upon actual costs experienced during the previous three years of operation at the Banner mill (2011-2013).

Flux sales and costs are based upon actual experience and existing smelter contracts. Flux is produced by crushing and resizing the mineralized material. The flux is then transported by truck to the receiving smelters. Mining costs and trucking to the mill site for crushing and sizing are the same as that for milling. The sizing process sends 60% of mineralized material to the mill and 40% of mineralized material to flux. Contracts with the smelters provide for monthly amounts of 1,000 tons to Asarco and 3,000 tons to Freeport McMoRan. Trucking is done by contractor, and the contract rates to the smelters are $23.50 for the Freeport McMoRan smelter and $33.00 for the Asarco smelter. In the economic model presented in Section 22, transportation costs are deducted as part of the net-smelter-payment calculation. Thus, the costs provided below show only the mill option. However, trucking flux versus milling and mill recoveries are similar in the net economic result, and the economic model utilized in Section 22 proportionally accounts for the two sales options. Operating costs are provided below.

a. Summary

	$/ton-milled
Mining (contract incl. development)	64.09
Material haul (contract)	18.50
Milling	25.35
Contingency	10.18
General and administrative cost	8.29
Total direct operating cost	**126.41**
Royalties	8.54
Direct taxes	2.07
Total estimated operating cost	**$ 137.02**

b. Mining cost

Development	$	13.25
Production Mining		38.00
Drilling		3.50
Electric Power		4.34
Management, engineering, geology		5.00
Total Estimated Mining Cost		**$64.09 per ton**

c. Haul to Mill

Contract trucking ($17.50/ton + fuel adj.) **$18.50 per ton**

d. Milling cost (includes crushing)

Labor and supervision	$	9.52
Electric power		5.00
Milling supplies (reagents, balls, liners, etc.)		7.83
Assaying		1.20
Outside services, security and contingencies		1.80
Total Estimated Milling Cost	**$**	**25.35 per ton**

e. Contingency

A 10% contingency has been added to items b, c and d and has been computed from the cash flow model over the projected operating life **$ 10.18 per ton**

f. Other general and admin. expense

General manager, accounting, clerical, office expense, consulting, and other services **$ 8.29 per ton**

g. Royalties

As discussed in Section 4.1.3, the Summit Mine is subject to production royalties payable to the former property owners. Those royalties are based on the net-smelter-return (NSR) value. The primary royalty is a 5% NSR to a remainder of about $2,750,000. A subordinated 5% Net Proceeds royalty for unprocessed ores applies to an end price of $2,400,000. The Sandstorm obligation is anticipated to be converted to a 3% NSR for the life of the operation. There is also a 1% royalty payable to Carson. Total royalties calculated to be paid out over the life of the presently identified Resource is $7,427,108. On a per ton basis, the royalties average $8.54/ton produced.

Average royalty payable on 869,375 tons **$ 8.54 per ton**

h. Direct taxes (base case)

Production from the Summit Mine is subject to three New Mexico taxes:

a. Severance tax

Gold = 0.20% of (the recovered value less a deduct of 50% of the sales value).

Silver = 0.20% of 80% of (recovered value less a deduct of 50% of the sales value).

b. Resource excise tax

The rate is 0.75% of the taxable value (net-smelter-return value)

c. Ad Valorem (Property tax)

A complex taxation formula based on assessed property valuation and units of annual production.

Metal prices impact the amount of the above taxes. The total direct-tax burden is estimated to be in the order of 1% of the net-smelter-return value.

Severance tax	$0.15	
Resource excise tax	1.45	
Ad valorem taxes (est.)	0.47	
Total estimated direct taxes	**$ 2.07 per ton**	
Total estimated operating cost per ton		**$ 137.02**

21.3 Sustaining Capital Expense Estimate

1. Plant and equipment; $100,000/year for a 6-year life	$ 600,000
2. Additional reclamation at end of project	150,000
Total estimated additional capital expense	**$ 750,000**

22.0 ECONOMIC ANALYSIS

22.1 Introduction

This Preliminary Economic Assessment (PEA) is based primarily on Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Thus, there is no certainty that the results of this PEA will be realized. Additional drilling and underground development will be required to upgrade the Inferred Mineral Resources to the Indicated category. Although funds are budgeted within the economic model for confirmation drilling, there is no assurance that the drilling will be successful.

The Project economics and sensitivity to metal prices, metallurgical recovery, and operating costs were studied through a series of cash-flow analyses. A base case (Table 22.1) was developed using a gold price of $1,200 per ounce, this being less than the 3-year, trailing-average price (about $1,550) for 2011, 2012 and 2013. The gold-to-silver price-ratio for those three years has averaged approximately 60:1. Silver values are adjusted accordingly as gold values are varied for sensitivity analysis.

The impact of the gold price on the cash flow was examined at gold prices of $1,400, $1,300, $1,100 and $1,000 per troy ounce, these being $100 and $200 higher and lower than the base case. A 5% change in the metallurgical recovery either side of the base case of 78% was also evaluated, as well as a 10% plus or minus change in operating costs.

Santa Fe Gold has a large tax-loss position and will not have to pay any income taxes at the currently projected profit levels. As a result, the cash flows are after-tax. They include the initial and ongoing capital costs but do not incorporate allowances for depletion, depreciation and amortization.

Table 22.1: Summit Project – Base Case After-tax Economic Evaluation

The Lordsburg Mining Company					
Economic Production Forecast		**Note that this model is part of a preliminary**			
Summit	Only	**economic assessment that relies upon Inferred**			
Tons/Month:	12000	**Resources that are considered too speculative to have**			
		certainty that the results herein will be realized.			
Assumptions:		**Summary of Cash Flow Model Results:**			
$ 1,200	Gold Price per Troy Ounce				
$ 20.00	Silver Price per Troy Ounce	**Total Ounces Gold Mined**			**99,804**
60%	Percent Ore to Mill	**Total Ounces Silver Mined**			**6,520,311**
40%	Percent Ore to Flux	**Total Equivalent Ounces Gold Sold**			**180,957**
78%	Percent Recovery Au	**Total Net Project Revenue**		**$**	**183,880,330**
78%	Percent Recovery Ag	**Total Cash Operating Costs**		**$**	**104,533,326**
100	:1 Concentration Ratio	**Avg Operating Costs per Equiv Au**		**$**	**578**
869375	Tons Include Inferred Res.	**Total Net Operating Income (NOI)**		**$**	**79,347,004**
0.115	Resource opt Au	**Total Obligations and Cap Ex Paid**		**$**	**42,766,307**
7.5	Resource opt Ag	**Total Net Cumulative Cash Flow**		**$**	**36,580,698**
		NPV of NOI		**$**	**51,755,383**
		Tons Mined			
		Indicated Tons			**220,239**
		Au OPT			**0.117**
		Ag OPT			**6.373**
		Inferred Tons			**649,136**
		Au OPT			**0.114**
		Ag OPT			**7.884**

Tab Index:	
Cash Flow	Cash Flow Projection by Month
Au	Production of ounces of Au per month based upon the tonnage projection tab
Ag	Production of ounces of Ag per month based upon the tonnage projection tab
Tons	Production schedule by month including drift development and stoping
Cap Ex	Capital expenditures and related costs
Devel	Schedule of Summit mine drift development for both waste and ore drifting
Oblg	Schedule of payments of short term, long term, and other Project obligations
SumA	Summary by year of cashflow projection
Financing	Summary of existing and proposed new financing

Definitions for Summary of Cash Flow Model Results table above:	
(All values for the line items in the summary table come directly from the Cashflow model CF tab)	
Total Tons Mined	Total ore production from the mine(s)
Total Ounces Gold Mined	Total gold content of ore production from mine
Total Ounces Silver Mined	Total silver content of ore production from mine
Total Equivalent Ounces Gold Sold	Total Ag/Au sold as Equiv Au using ratio 60:1
Total Net Project Revenue	NSR after royalties, severance tax, transport to smelter
Total Cash Operating Costs	Includes all mining, milling, trucking to mill/crusher and
Avg Operating Costs per Equiv Au	Total Cash Op Costs divided by eq. ounces Au mined
Total Net Operating Income	Net Project Revenue minus Cash Operating Costs
Total Obligations and Cap Ex Paid	Total of capital expenses other than drift development,
Total Net Cash Flow	Net Operating Income minus Obligations and Cap Ex Paid

Table 22.1: Summit Project – Base Case Economic Evaluation (cont.)

The Lordsburg Mining Company											
Economic Production Forecast											
Cash Flow Projection											
Description	**Input 1**	**Input2**		2014	2015	2016	2017	2018	2019	2020	2021
Mine Production											
Indicated Tons			220,239	4,071	46,821	48,856	48,856	48,856	22,778		-
Au OPT			0.117	0.117	0.117	0.117	0.117	0.117	0.117		
Ag OPT			6.373	6.373	6.373	6.373	6.373	6.373	6.373		
Inferred Tons			649,136	7,929	91,179	95,144	95,144	95,144	121,222	143,375	-
Au OPT			0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.115	
Ag OPT			7.884	7.884	7.884	7.884	7.884	7.884	7.884	7.500	
Total Ounces Au	(See Au Tab)		99,804	1,378	15,842	16,531	16,531	16,531	16,531	16,459	-
Total Ounces Ag	(See Ag Tab)		6,520,311	90,000	1,035,000	1,080,000	1,080,000	1,080,000	1,080,000	1,075,311	-
Mill Production											
Tons	60%	of Mine Prod	521,625	7,200	82,800	86,400	86,400	86,400	86,400	86,025	-
Ounces Au	78%	Recovery	46,708	645	7,414	7,737	7,737	7,737	7,737	7,703	-
Ounces Ag	78%	Recovery	3,051,506	42,120	484,380	505,440	505,440	505,440	505,440	503,246	-
Concentrate Produced											
Tons	100	Conc Ratio	5,216	72	828	864	864	864	864	860	-
Ounces Au			46,708	645	7,414	7,737	7,737	7,737	7,737	7,703	-
Ounces Ag			3,051,506	42,120	484,380	505,440	505,440	505,440	505,440	503,246	-
Concentrate Payments											
Au Pay (Price,% Pay,Ref Chg)	$ 1,200	96.00%	$ 8.00	368,778	8,113,116	8,850,672	8,850,672	8,850,672	8,850,672	8,850,672	699,129
Ag Pay (Price,% Pay,Ref Chg)	$ 20.00	96.00%	$ 1.20	379,080	8,339,760	9,097,920	9,097,920	9,097,920	9,097,920	9,097,920	718,660
Treatment Charge	$ 522	per Ton		(18,792)	(413,424)	(451,008)	(451,008)	(451,008)	(451,008)	(451,008)	(35,626)
Lot Charge	$ 37.50	per Ton		(1,350)	(29,700)	(32,400)	(32,400)	(32,400)	(32,400)	(32,400)	(2,559)
Net Smelter Payment				727,716	16,009,752	17,465,184	17,465,184	17,465,184	17,465,184	17,465,184	1,379,604
Transportation to Smelter	$ 240	per Ton		(8,640)	(190,080)	(207,360)	(207,360)	(207,360)	(207,360)	(207,360)	(16,380)
NSR (Net Smelter Return) Concentrate			104,191,094	719,076	15,819,672	17,257,824	17,257,824	17,257,824	17,257,824	17,257,824	1,363,224
Flux Produced											
Tons	40%	of Mine Prod	347,750	4,800	55,200	57,600	57,600	57,600	57,600	57,350	-
Ounces Au			39,922	551	6,337	6,612	6,612	6,612	6,612	6,584	-
Ounces Ag			2,608,124	36,000	414,000	432,000	432,000	432,000	432,000	430,124	-
Flux Payments Asarco											
Tons				-	10,000	12,000	12,000	12,000	12,000	12,000	3,000
Au Pay (Deduct,% Pay,Ref Chg)	0.02	92%	$ 5.00	-	1,236,304	1,483,565	1,483,565	1,483,565	1,483,565	1,483,565	370,891
Ag Pay (Deduct,% Pay,Ref Chg)	0.5	92%	$ 0.35	-	663,750	796,500	796,500	796,500	796,500	796,500	199,125
Treatment Charge	$ 15.00	per Ton		-	(150,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(45,000)
Net Smelter Payment				-	1,760,054	2,112,065	2,112,065	2,112,065	2,112,065	2,112,065	528,016
Transportation to Smelter	$ 33.00	per Ton		-	(330,000)	(396,000)	(396,000)	(396,000)	(396,000)	(396,000)	(99,000)
NSR (Net Smelter Return) Asarco			10,439,395	-	1,430,054	1,716,065	1,716,065	1,716,065	1,716,065	1,716,065	429,016
Flux Payments FMI											
Tons				-	35,600	45,600	45,600	45,600	45,600	45,600	11,150
Au Pay (Deduct,% Pay,Ref Chg)	0.02	90%	$ 6.50	-	4,387,036	5,619,416	5,619,416	5,619,416	5,619,416	5,619,416	1,374,035
Ag Pay (Deduct,% Pay,Ref Chg)	0.5	90%	$ 0.50	-	4,672,404	5,984,905	5,984,905	5,984,905	5,984,905	5,984,905	1,463,403
Treatment Charge	$ (4.50)	per Ton		-	160,200	205,200	205,200	205,200	205,200	205,200	50,175
Net Smelter Payment				-	9,255,241	11,855,121	11,855,121	11,855,121	11,855,121	11,855,121	2,898,763
Transportation to Smelter	$ 23.50	per Ton		-	(836,600)	(1,071,600)	(1,071,600)	(1,071,600)	(1,071,600)	(1,071,600)	(262,023)
NSR (Net Smelter Return) FMI			64,972,984	-	8,418,641	10,783,521	10,783,521	10,783,521	10,783,521	10,783,521	2,636,740
Total NSR Payments			179,603,473	719,076	25,668,367	29,757,410	29,757,410	29,757,410	29,757,410	29,757,410	4,428,980
Resource Taxes and Royalties											
NM Severance Tax	1.0%		(1,796,035)	(7,191)	(256,684)	(297,574)	(297,574)	(297,574)	(297,574)	(297,574)	(44,290)
Summit	5%	2050000	(2,050,000)	(35,954)	(1,283,418)	(730,628)	-	-	-	-	-
Sandstorm- gold delivery	116.67	oz Au/mo out	(6,513,318)	-	(280,008)	(1,680,048)	(1,680,048)	(1,680,048)	(830,916)	(289,800)	(72,450)
Sandstorm- gold payment	400	$/oz Au in	3,033,420	-	93,336	560,016	560,016	560,016	560,016	560,016	140,004
Carson	1%		(1,897,210)	(7,277)	(270,250)	(314,324)	(314,324)	(314,324)	(314,324)	(314,324)	(48,064)
Total Taxes and Royalties			(9,173,543)	(50,422)	(1,997,024)	(2,462,558)	(1,731,930)	(1,731,930)	(882,798)	(341,682)	24,800
Net NSR After Resource Taxes and Royalties			170,380,330	668,654	23,671,342	27,294,852	28,025,480	28,025,480	28,874,612	29,415,728	4,404,181
Re-start Working Capital Infusion			12,000,000	12,000,000							
Working Capital Contingency			1,500,000	1,500,000	-	-	-	-	-	-	-
NET PROJECT REVENUE			183,880,330	14,168,654	23,671,342	27,294,852	28,025,480	28,025,480	28,874,612	29,415,728	4,404,181
Mining Costs											
Contractor Mobilization	90000	$	90,000	90,000	-	-	-	-	-	-	-
Contractor Devel. Waste	1087	$/Ft	11,435,240	2,174,000	4,782,800	2,695,760	1,347,880	434,800	-	-	-
Contractor Ore Mining	38.03	$/ton	33,062,324	456,360	5,248,140	5,476,320	5,476,320	5,476,320	5,476,320	5,452,544	-
Contractor Explore Drilling	3.50	$/ton	3,042,812	42,000	483,000	504,000	504,000	504,000	504,000	501,812	-
LMC Site Costs	4.96	$/ton	4,312,099	59,520	684,480	714,240	714,240	714,240	714,240	711,139	-
Generator Power	100000	$/month	600,000	300,000	300,000	-	-	-	-	-	-
Commercial Electric	46000	$/month	3,174,000	-	414,000	552,000	552,000	552,000	552,000	552,000	-
Milling Costs											
Crushing (Fixed plus Per Ton)	18000	2.42	3,453,887	83,040	549,960	564,480	564,480	564,480	564,480	562,967	-
Milling (Fixed plus Per Ton)	69120	13.50	12,225,936	304,560	1,947,240	1,995,840	1,995,840	1,995,840	1,995,840	1,990,776	-
Misc.		0.65	999,781	13,800	158,700	165,600	165,600	165,600	165,600	164,881	-
Transportation Costs											
Mine to Mill	18.50		9,650,060	133,200	1,531,800	1,598,400	1,598,400	1,598,400	1,598,400	1,591,460	-
Mine to Crusher	18.50		6,433,374	88,800	1,021,200	1,065,600	1,065,600	1,065,600	1,065,600	1,060,974	-
Contingency	5%		8,847,951	374,528	1,712,132	1,533,224	1,398,436	1,307,128	1,263,648	1,258,855	-
G & A (Fixed plus Per Ton)	82400	1.18	7,205,862	261,360	1,151,640	1,158,720	1,158,720	1,158,720	1,158,720	1,157,982	-
TOTAL CASH OPERATING COSTS (Some Items Depreciable)			104,533,326	4,381,168	19,985,092	18,024,184	16,541,516	15,537,128	15,058,848	15,005,390	-
Equivalent Ounces Gold Sold to Smelters			180,957	2,498	28,724	29,973	29,973	29,973	29,973	29,843	-
CASH OPERATING COSTS PER EQUIVALENT OUNCE AU			578	1,754	696	601	552	518	502	503	-
NET OPERATING INCOME (NOI)			79,347,005	9,787,486	3,686,250	9,270,668	11,483,964	12,488,352	13,815,764	14,410,338	4,404,181
CUMULATIVE NOI				9,787,486	13,473,737	22,744,405	34,228,369	46,716,721	60,532,485	74,942,824	79,347,005
Obligations and Capital Costs											
Capital Expenses Summit Restart	(From Cap Ex Tab)		4,251,307	3,810,307	231,000	126,000	84,000	-	-	-	-
Accounts Payable	(From Oblg Tab)		3,640,000	1,950,000	1,290,000	400,000	-	-	-	-	-
Long Term Repayments	(From Oblg Tab)		27,525,000	550,000	1,650,000	1,650,000	13,275,000	10,400,000	-	-	-
Mine Reclamation	$ 150,000	$ 50,000	150,000	-	-	-	-	-	-	-	150,000
Total Capital and Obligations			42,766,307	6,310,307	3,971,000	4,576,000	15,759,000	12,000,000	-	-	150,000
CUMULATIVE NET CASH FLOW*			36,580,698	3,477,179	3,192,430	7,887,098	3,612,062	4,100,414	17,487,058	32,187,197	36,580,698
* Net after payment of all indebtedness and payback of new investments											

The elements of the model are summarized as follow:

- Mined tons at 12,000 tons per month using diluted tons after pillar loss
- Initial 6-month ramp up from 2,000 to 12,000 tons, increasing 2,000 tons per month
- Grade at diluted estimated resource grade
- 60% of mine production to mill and 40% of mine production to flux
- 78% recovery at mill
- Smelter payments per existing concentrate and flux contracts
- Net NSR calculated after taxes and royalties are deducted per prevailing rates/contracts
- Mining costs per Contractor quotations plus Owner administrative site costs
- Mine electrical costs per generating experience and Duncan Coop quotation
- Milling costs per past three years experience
- Transportation per prevailing rates that include an escalator
- Contingency at 10%
- G and A costs per past three years experience
- Net NSR less operating costs produce Net Operating Income
- Capital expenses for restart and sustaining capital
- Payment of short- and long-term indebtedness including all amortization costs
- Payback of anticipated New Financing including amortization costs
- Cumulative Net Cash Flow after payment of all amortized financing obligations

22.2 Base Case

Mine Production – Indicated resources 220,239 tons at 0.117 Opt Au & 6.37 OPT Ag

- Inferred resources: 649,136 tons at 0.114 opt Au & 7.88 OPT ag

Average grade	0.115 oz Au/ton and 7.50 oz Ag/ton
Metallurgical recovery	78% for both Au and Ag
Net smelter return	Calculated per smelter contract terms
Gold price (below 3-year trailing average)	$1200 per troy ounce
Silver price (indexed to Au at 60:1 ratio)	$20.00 per troy ounce
Annual production	144,000 tons

22.3 Project Economics

An economic evaluation for the Project base case was prepared (Table 22.1). That case shows a cumulative after-tax net operating income of $79 million which provides an internal rate of return of 29% and a net present value of $52 million at a 10% compound discount rate. The cash cost to produce an ounce of gold-equivalent is $578.

All production from the Project is subject to production royalties payable to several private parties as discussed in Sections 4.1.3 and 21.2g of this report. The estimated royalty cost over the life of the minable resource of 869,375 tons is $7,427,000 or $8.54 per ton mined and processed. Direct taxes levied by the State of New Mexico on production are detailed in section 21.2h of the report and are estimated at $2.07 per ton. There are no direct Federal taxes.

The sensitivities to metal price, metallurgical recovery, and direct-operating costs are shown in Tables 22.2.

A $100 change in the gold price results in a $16 million change to the cumulative cash flow for the project over its 6.6-year life. An increase or decrease of 5% in the metallurgical recovery factor changes the cumulative cash flow by $7 million (base case). A 10% change in the direct-operating costs impacts the cumulative cash flow by approximately $10 million.

22.4 Payback Period

The base case for the Summit project shows that the invested capital will be returned in 4 years from restart.

Table 22.2: Summit Project – Project Economic Sensitivity

Summit Mine Sensitivity Analysis (From Base Case)

Sensitivity to Change In Price

	Base Case	$100 Lower	$200 Lower	$100 Higher	$200 Higher
Gold Price	$ 1,200	$ 1,100	$ 1,000	$ 1,300	$ 1,400
Total Net Operating Income (NOI)	$ 79,347,004	$ 63,695,218	$ 48,043,432	$ 94,998,790	$ 110,650,576
Total Net Cumulative Cash Flow	$ 36,580,697	$ 20,928,911	$ 5,277,125	$ 52,232,483	$ 67,884,269
NOI NPV @ 10% discount rate	$ 51,755,383	$ 41,570,097	$ 31,384,812	$ 61,940,668	$ 72,125,954
Years to Payout	4	4.8	6.2	3.4	2.9

Sensitivity to Change In Mill Recovery (From Base Case)

	Base Case	5% Lower	5% Higher
Gold Price	$ 1,200	$ 1,200	$ 1,200
Total Net Operating Income (NOI)	$ 79,347,004	$ 72,539,680	$ 85,154,328
Total Net Cumulative Cash Flow	$ 36,580,697	$ 29,773,373	$ 43,388,021
NOI NPV @ 10% discount rate	$ 51,755,383	$ 47,288,818	$ 56,221,948
Years to Payout	4	4.4	3.8

Sensitivity to Change In Costs (From Base Case)

	Base Case	10% Higher	10% Lower
Gold Price	$ 1,200	$ 1,200	$ 1,200
Total Net Operating Income (NOI)	$ 79,347,004	$ 68,893,672	$ 89,800,337
Total Net Cumulative Cash Flow	$ 36,580,697	$ 26,127,365	$ 47,034,030
NOI NPV @ 10% discount rate	$ 51,755,383	$ 44,636,663	$ 58,874,103
Years to Payout	4	4.5	3.5

23.0 ADJACENT PROPERTIES

23.1 Billali Claim

A patented mining claim known as the Billali lies within the Summit property owned by Lordsburg Mining and is one-half mile to the northwest of the Summit deposit (Figure 4.1). The Billali, which is owned by others and is not a part of the Summit property controlled by Lordsburg, is situated on the same structural zone as the Summit. Drilling in the 1988-1991 period by the Nova Gold – Biron Bay joint venture (Figure 7.2) identified very significant but erratically distributed gold-silver mineralization in quartz-carbonate vein zones. The mineralization is similar to that found in the Summit deposit (MPH Consulting, 1992).

The author made a very brief examination of the Billali property on November 17, 2010 with one of the owners, Mr. Les Billingsley. Several of the drill-hole collars from the 1990-1991 drilling program were found.

Twenty four of the drill-hole logs from the 1990-1991 drilling program on the southern part of the claim were examined and it was concluded that additional drilling will be needed to define the structural continuity of the mineralization.

Specific information regarding the results of drilling, including historical estimates of the resources, cannot be discussed because, to the author's knowledge, that information has not been publicly disclosed by the owners.

23.2 Other Properties

Adjoining the Summit property to the southeast is the Progress Group of patented claims (Figure 4.1). The Summit structure, although topographically subdued, continues through this group and contains several gold-silver prospects. However, to the best of the author's knowledge, there are no identified mineral resources on the claim group.

24.0 OTHER RELEVANT DATA AND INFORMATION

24.1 Loan Agreements

The Summit and Lordsburg properties are security for a loan agreement between Santa Fe Gold Corporation and Waterton Global Value, LP. This security is further extended to Sandstorm Resources Limited through an intercreditor agreement between Waterton and Sandstorm. Santa Fe Gold has other outstanding indebtedness that is not directly securitized by the subject properties.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Interpretation

Development of the Summit gold-silver project began in late 2008. The mine is fully permitted and a process plant has been constructed. Development work in the structure confirms the interpretation of the deposit model, i.e., a steeply-dipping zone of siliceous breccias in the Summit vein structure. Gold and silver mineralization occur in a low-sulfidation, epithermal system across widths of up to 30 feet, with economic grades having been intersected in development headings over widths of 6 to 20 feet. As expected, the tenor of mineralization is highly variable over distances of a few feet.

25.2 Comparison of Resource Estimates to Mine Development

Since the inception of mine development in late 2008, The Lordsburg Mining Company has completed some 15,000 feet of drifting in the Summit structure on several levels between elevations 5400 and 5600 feet. These drifts, nominally 12 feet high by 13 feet wide, have exposed most of the mineralized width of the resources defined by diamond drilling in the uppermost parts of the deposit. Mapping and sampling confirm surface drill hole intercepts. Comparative data from two development areas are shown in Tables 25.1 and 25.2.

Description	Avg Width In Feet	Tons	Average Grade (oz/ton)		
			Au	Ag	Au Eq.*
Estimate Unadjusted**	15	93,196	0.090	4.99	0.173
Estimate Adjusted***	12	67,965	0.110	6.49	0.218
Actual Stope Production****	N/A	68,028	0.103	5.52	0.195
% Variance Actual From Adjusted		**0.1%**	**-6.4%**	**-14.9%**	**-10.6%**

Table 25.1: Comparison of S-1 Stope Production to Preproduction Estimate Based Upon Level Development Assays

* Au Equivalent using Ag/60
** Average of all face samples collected from development levels. **Includes** waste dilution taken while drifting at actual grade.
*** Average of all face samples collected from development levels. **Excludes** waste dilution taken while drifting at actual grade.
**** Average of muck samples collected from material stoped.

Comparison of Drill-Hole Intercepts with Development-Drift Sampling

Average of Adjacent Drill-Hole Mineralization:

		Grade (oz/ton)			
Hole No.	**Thick (ft)***	**Au**	**Ag**	**AU EQ****	**Feet x AU EQ**
91-11	11.4	0.214	16.42	0.488	5.56
88-13	14.0	0.079	6.29	0.184	2.57
90-35	11.5	0.085	4.51	0.160	1.84
Wtd. Avg.	**12.3**	**0.123**	**8.86**	**0.270**	**3.32**

Average of Three Development Levels Over Approx 500' of Strike Length:

		Grade (oz/ton)			
Level***	**Thick (ft)***	**Au**	**Ag**	**AU EQ****	**Feet x AU EQ**
5600	13.5	0.206	9.24	0.360	4.86
5550	13.1	0.150	6.56	0.259	3.40
5450	12.5	0.085	3.59	0.145	1.81
Wtd. Avg.	**13.0**	**0.149**	**6.54**	**0.257**	**3.36**

Table 25.2: Comparison of Level Development Assays (2012-2013) to Adjacent Drill Intercepts in the N-1 Stope Block Area

* Horizontal thickness

** AU EQ is gold equivalent determined by applying a factor of 1/60 to the silver value

*** Levels 5600, 5550 and 5450 were driven and sampled by LMC in 2012 and 2013

25.3 Data Density and Reliability

The grade and location of mineralization, and thus the estimates of mineral resources as interpreted from exploration drill-hole data, are being confirmed. The existing drill-hole data-base, including the drill-hole density and the analytical data, are proving to be reliable and adequate for the purpose of basic mine planning and primary development. Underground development is, however, confirming the need for closer-spaced drilling. That drilling will also provide valuable information on the location, quality, and quantity of nearby mineralization, some of which has been identified but never quantified due to insufficient data.

25.4 Project Risks

The project economics are very sensitive to the prices of gold and silver. A drop in the gold price to under $1,000 per ounce with a comparable drop in the silver price to $16.67 per ounce (60:1 Au:Ag) would seriously jeopardize the project's economic potential.

The deposit lacks sufficient drilling to place most of the resource into the Indicated and Measured categories; and then through a Project Feasibility Study to convert those Resources to Reserves, and thus provide a higher degree of confidence in the overall project economics. The Company plans on drilling 10 holes from surface into the main resource area. That drilling may provide a higher level of confidence in the quality and quantity of the resource. Additionally, mineralized core will be available for metallurgical test work. However, there is no assurance that the drilling will achieve the desired results.

The ability to mine the deposit under the planned long-hole stoping method is not considered to pose any significant risk. However, in the event of mine operation, grade control will need close supervision in order to maintain the projected minable-resource grade.

The portion of the deposit above the main-resource body has higher levels of oxidation and reduced metallurgical recoveries. The transition from high levels of oxidation to low

levels of oxidation is not well defined. It is possible that process metallurgical recoveries will continue to be lower than the PEA recovery assumption.

The decision to place the mine into production by the issuer was made without a Feasibility Study per NI 43-101 guidelines. Going into production without such a feasibility study entails a higher degree of financial risk and potential for failure.

25.5 Conclusions

The PEA suggests the project could be economic at gold and silver prices of $1200 and $20.00 per ounce, respectively. At those metal prices, the Project PEA indicates a cash cost to produce an ounce of gold-equivalent of $578.

However, the PEA is preliminary in nature, and the results are based predominantly on Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Further, there is no certainty that the results of the PEA can be achieved.

26.0 RECOMMENDATIONS

The following are specific recommendations to move the project forward:

26.1 Exploration Drilling

A surface diamond drilling program is recommended to upgrade the resource and thoroughly test the Summit structure. A Phase 1 surface-drilling program with to better define and upgrade the resource in the main area of the deposit is estimated to cost $682,000, and take 2 to 3 months to complete.

26.2 Underground Development Drilling

Any future mining should include an ongoing underground long-hole drilling program to better define the deposit.. The cost for this is estimated to be approximately $3,000,000.

26.3 Operations Performance Improvements Recommendations

Additional metallurgical testing should be conducted on the various types of mineralization to optimize the metal recovery. The cost for additional metallurgical testing is estimated at $250,000.

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