PINCOCK ALLEN & HOLT
Delivering smarter solutions

Candelaria Project
Technical Report

Prepared for
Silver Standard Resources Inc.

May 24, 2001
PAH Project No. 9814.00e

PINCOCK ALLEN & HOLT
Delivering smarter solutions

CANDELARIA PROJECT
TECHNICAL REPORT

Denver

Prepared for

Silver Standard Resources Inc.

Jersey City

Prepared by

Lima

Mark G. Stevens, P.G.

Santiago

May 24, 2001
PAH Project No. 9814.00e

Seattle

A Division of Hart Crowser
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228-1835
Fax 303.987.8907
Tel 303.986.6950

Vancouver, B.C.

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1.0 SUMMARY

Pincock, Allen & Holt (PAH) was retained by Silver Standard Resources Inc. (Silver Standard) to prepare an independent Technical Report that meets the requirements of Canadian National Instrument 43-101 (NI 43-101) for the Candelaria Project in Nevada, United States. The property was mined by underground methods during the late 1800s and early 1900s by various operators, using open-pit methods from 1980 to 1997, and is now in the process of reclamation. PAH initiated this review on January 17, 2001, with a site visit conducted on January 23-25, 2001 by Mark G. Stevens, P.G., Principal Geologist.

Silver Standard is currently in the process of purchasing the Candelaria Property from Kinross Gold Corporation (Kinross) and on April 2, 2001 notified Kinross of its intention to exercise its option to purchase the property, with a closing date before the end of May 2001. The project occurs on 47 patented and 256 unpatented federal mining claims situated on lands administered by the United States Bureau of Land Management located in the Candelaria Mining District of Mineral County and Esmeralda County, Nevada. Patented claims cover most of the immediate Northern Belle and Mount Diablo deposit areas. The claims are reported by R. T. Kemp (March 2000) to be in good standing and registered to Kinross Candelaria Mining Company, a wholly owned subsidiary of Kinross. PAH has no reason to believe that the claim status is not valid, but has not conducted a detailed review of the land title. Certain claims are subject to royalty obligations and payments. Silver Standard's land holding costs for Candelaria will total approximately $126,000 per year for the patented and unpatented claims and other costs. At this time, PAH is not aware of any undisclosed environmental liabilities based on review of general information. Silver Standard expects that continuing costs for reclamation and personnel at the site will be on the order of US$90,000 per year.

The geologic setting of west-central Nevada is characterized by displaced terrain tectonics reflected by multiple episodes of large scale thrust faulting and tectonic stacking, magmatism, and normal faulting. The deposits of the Candelaria Mining District host epigenetic silver mineralization of

early Cretaceous age, with quartz stockwork mineralization occurring in faulted and sheared zones related to regional thrusting. The remaining resource reported by Silver Standard for the Mount Diablo deposit occurs primarily in the Lower Candelaria Shear and consists of mixed oxide/sulfide and sulfide mineralization. The remaining resource reported by Silver Standard for the Northern Belle deposit occurs primarily in the Pickhandle Gulch Thrust and consists of mixed oxide/sulfide and sulfide mineralization.

Starting in the mid-1960s, a succession of mining companies showed interest in the district for large tonnage, low-grade silver mineralization. In 1976, Occidental Minerals Corporation (Oxymin), began exploration and extensive drilling, and over the following four years defined shallow low-grade deposits at Lucky Hill and Mount Diablo that were amenable to treatment by cyanide leaching. Open pit mining by Oxymin, and successor companies NERCO and Kinross, continued from 1979 to 1997, during which time various exploration drilling campaigns were conducted.

The Candelaria resource includes the remaining down-dip mineral resources for both the Mount Diablo and Northern Belle deposits, the remaining resources in two leach pads, and resources contained in two low-grade stockpiles. The Candelaria property contains a measured and indicated resource of 13.6 million tons averaging 3.23 ounces factored total silver per ton (opt Ag_{total}) and 0.003 ounces soluble gold per ton (opt $Au_{soluble}$), for 44.1 million ounces of silver or 46.6 million ounces of silver equivalent. Additionally, there is an inferred resource of 55.7 million tons averaging 1.49 opt Ag_{total} and 0.002 opt $Au_{soluble}$, for 82.3 million ounces of silver or 84.8 million ounces of silver equivalent. The total resource is summarized in Table 1-1.

PAH finds that the exploration sampling, sample analysis, and database construction for the Candelaria Project resources were generally conducted in a reasonable manner according to industry standard practices. As a result, PAH believes that the results provide an adequate database on which to base resource estimation. PAH finds that the resource estimates were prepared using standard engineering methods and provide an acceptable representation of the silver mineralization in the various resource areas. PAH believes that the classification of the lode resources meets the standards of NI 43-101 and the definitions of the Canadian Institute Of Mining, Metallurgy and Petroleum (CIM).

TABLE 1-1
Silver Standard Resources Inc.
Candelaria Project
Total Candelaria Resource

Area/Type	Classification	Tons	Factored Ag Grade (opt Ag_{total})	Sol. Au Grade (opt $Au_{soluble}$)	AgEq Grade (opt $AgEq_{total}$)	Ag Ounces (Ag_{total})	Ag Equiv. Ounces ($AgEq_{total}$)
Mount Diablo	Measured	3,391,000	4.44	0.004	4.67	15,054,000	15,838,000
	Indicated	10,231,185	2.84	0.003	3.01	29,005,000	30,796,000
	Subtot. M+Ind	13,623,000	3.23	0.003	3.42	44,060,000	46,633,000
Mount Diablo	Inferred	5,191,000	2.12	0.003	2.30	11,015,000	11,939,000
Northern Belle		9,162,000	2.26	0.002	2.37	20,661,000	21,714,000
Leach Pads		37,328,000	1.29	---	1.29	48,153,000	48,153,000
L.G. Stockpiles		4,000,000	0.75	---	0.75	3,000,000	3,000,000
	Subtot. Inf.	55,681,000	1.49	0.002	1.52	82,829,000	84,806,000

Note 1) Lode resources tabulated at a 0.5 opt $Ag_{soluble}$ cutoff grades, with only Ag_{total} shown in this table.
2) Leach pads and low grade stockpile resources tabulated for entire accumulation of material.
3) Total silver grades factored from soluble silver grades using regression formulas developed by Snowden.
4) Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1.

PAH concurs with Snowden's (May 10, 2001) recommendation that additional data be collected to support the factoring of the total silver grades from the soluble silver grades. PAH also concurs with Snowden's recommendations for additional density test work, the initial results of which suggest that the density is higher for the deeper mineralized material, which could result in a 10 percent increase in estimated resource tons, if verified.

At the date of this report, there are no estimated mineable reserves for the Candelaria silver project. The estimation of reserves will require the development of mining and metallurgical parameters and costs appropriate for the project.

Pending the successful acquisition of the property from Kinross, Silver Standard plans to hold the Candelaria property on a care and maintenance basis pending upward changes in the silver price. Until that time Silver Standard has no immediate plans for further exploration and evaluation of the resources. No exploration costs are anticipated at this time.

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 <u>General</u>

Pincock, Allen & Holt (PAH) has retained by Silver Standard Resources Inc. (Silver Standard) to prepare a Technical Report for the Candelaria Project, located in the state of Nevada, United States. The Candelaria Project consists of two resource areas, the Mount Diablo and the Northern Belle, both previously mined by underground and subsequently by open-pit mining methods, and now in the process of facility reclamation. The report was prepared for disclosure of resources as required by Canadian National Instrument 43-101 (NI 43-101) and conforms to Form 43-101F1 for technical reports.

PAH Principal Geologist and Qualified Person Mark G. Stevens, P.G., served as Qualified Person for this review and visited the project site on January 23-24, 2001. The site visit allowed PAH to observe first hand the site layout, status of operational activity, degree of exploration activity, and the nature of the deposits. PAH has acquired available data and reports from the Candelaria mine site, from Kinross Gold Corporation's office in Salt Lake City, from Silver Standard in Vancouver, and from various consultants used by Silver Standard (Snowden, R. Kemp).

2.2 <u>Terms and Definitions</u>

Silver Standard refers to Silver Standard Resources Inc., PAH refers to Pincock, Allen & Holt, Candelaria refers to the silver project located in Nevada, Kinross refers to Kinross Gold Corporation, KCA refers to Kappes, Cassiday & Associates, Snowden refers to Snowden Mining Industry Consultants, Mount Diablo and Northern Belle refers to the two silver deposits located at Candelaria.

2.3 <u>Units</u>

English units are used except where noted. Tonnages are short tons of 2,000 pounds. Precious metals are in troy ounces (oz) or troy ounces per short ton (opt). Base metals are in pounds or weight percent metal. All monetary values are in United States (US) dollars.

3.0 DISCLAIMER

This report was prepared for Silver Standard Resources Inc., ("Company") by the independent consulting firm of Pincock, Allen & Holt and is based in part on information not within the control of either the Company or PAH. While it is believed that the information contained herein will be reliable under the conditions and subject to the limitations set forth in herein, neither Company nor consultants guarantee the accuracy thereof. The use of this report or any information contained therein shall be at the user's sole risk, regardless of any fault or negligence of Company or the consultants.

4.0 PROPERTY DESCRIPTION AND LOCATION

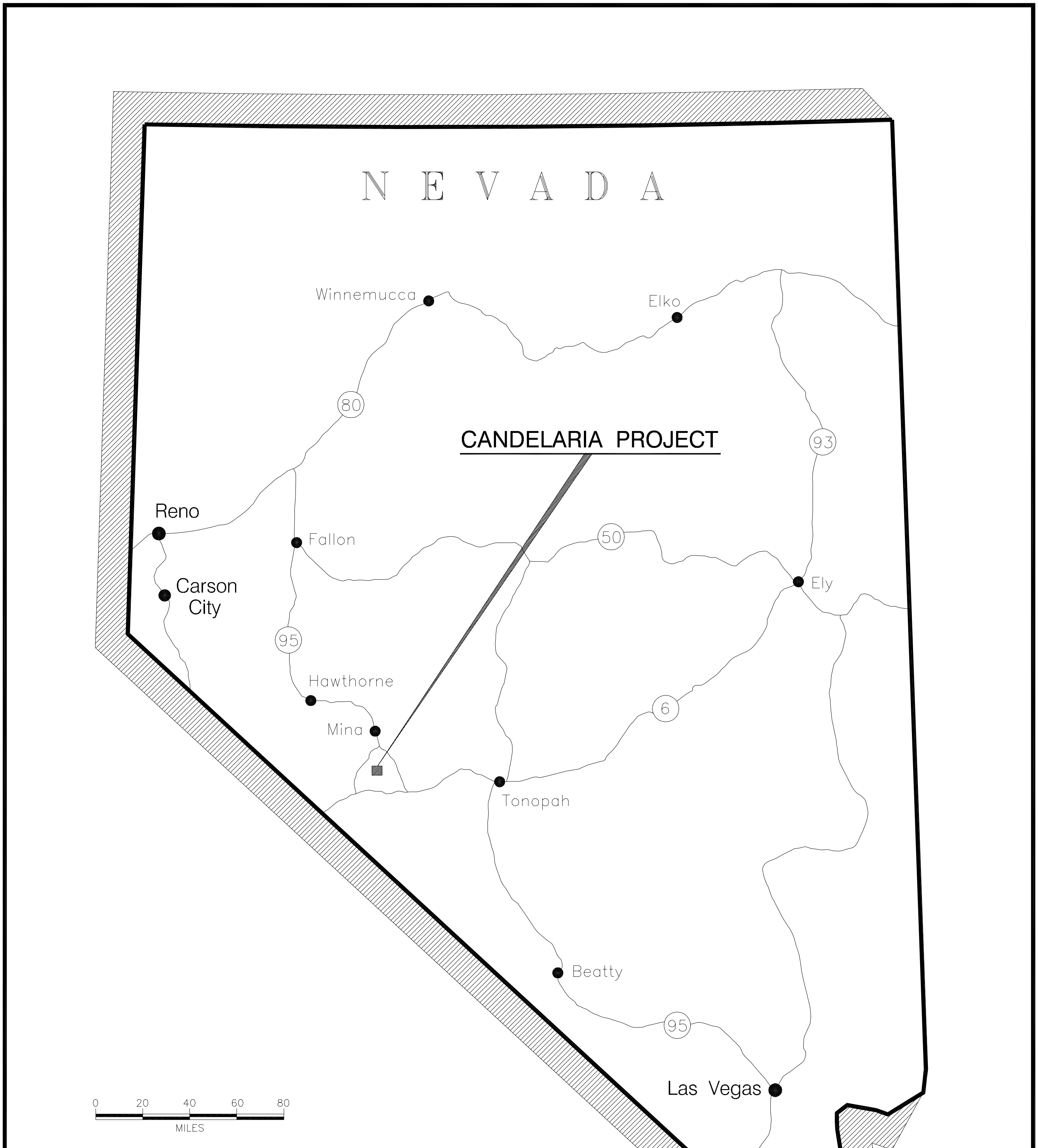
4.1 Location and Access

The Candelaria Project is located in west-central Nevada at latitude 38^{o} 10' north and longitude 118^{o} 05' west. The property occurs in the Candelaria Mining District of Mineral County and Esmeralda County in Township 4 North, Range 35 East and Township 3 North, Range 35 East. The project is approximately 130 miles southeast of the city of Reno, Nevada; 55 miles southeast of the town of Hawthorne, Nevada; and 20 miles south of the small town of Mina, Nevada. The general location of the property is shown in Figure 4-1. The deposit locations, mine facilities, and claim boundaries are shown in Figure 4-2.

Access to the property is via State Highway 95, east of Reno, Nevada. Approximately 15 miles south of the town of Mina is the property access road. The 6 mile access road is a paved road trending southwest from the state highway. Access around the site is by improved dirt/rock roads with admission controlled by gates at the edges of the property.

4.2 Climate And Physiography

The Candelaria Project is located in the Candelaria Hills characterized by gentle to moderate topography with locally steep to precipitous slopes. Elevations at the site range from 5,500 to 6,400 feet above mean sea level. The climate of the region is considered to be arid to semi-arid, typical of the Great Basin physiographic province. Temperatures range from summer time highs in the upper 90s degree Fahrenheit to winter time lows in the lower 10s degree Fahrenheit. Total annual precipitation, as measured at the Candelaria Mine between August 1992 and December 1998, averaged 4.23 inches. Annual lake evaporation, as measured 22 miles to the northeast at the town of Mina, typically is 50 to 55 inches. Vegetation in the Candelaria Hills consists predominantly of sagebrush and sparse grasses.



SILVER STANDARD RESOURCES INC.

Mineral & Esmeralda, Counties
Nevada, U.S.A.

CANDELARIA PROJECT
LOCATION MAP

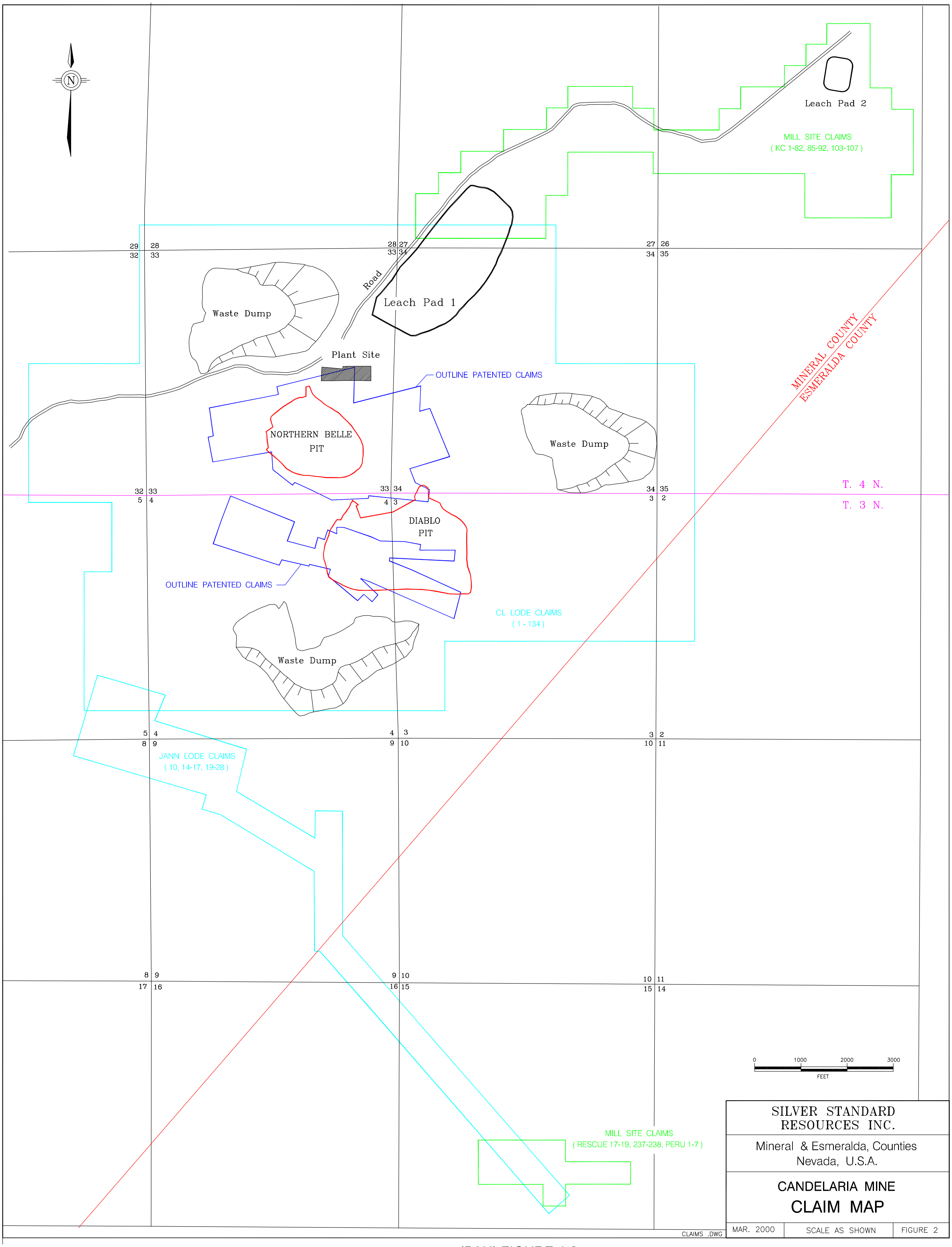
FEB. 2000	SCALE: AS SHOWN	FIGURE 1	LOC-MAP .DWG

(PAH) FIGURE 4-1

Reviewed by

PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

April/2001
9214.00



(PAH) FIGURE 4-2

Reviewed by

PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

April/2001
9214.00

4.3 Local Resources and Infrastructure

Complete infrastructure exists on site as a result of the previous mining operations. Silver Standard will acquire the mine infrastructure that is not reclaimed by Kinross, including power and water sources. A modular office complex is also on site. Nevada has human resources with mining experience as a result of the state's strong mining history.

4.4 Project Ownership

Silver Standard is currently in the process of purchasing the Candelaria Property from Kinross, and on April 2, 2001 notified Kinross of its intention to exercise its option to purchase the property, with a closing date before the end of May 2001. Under the revised terms of the purchase agreement, Silver Standard will make a US$100,000 cash payment, issue 600,000 units (each unit consists of one common share and one warrant exercisable at US$3.50 per share for one year) to Kinross, and deliver a US$300,000 note that matures in 12 months, payable in either cash or stock. Due to the number of land titles and permits, the two companies are cooperating on the most efficient methods to transfer titles and permits, and to arrange reclamation bonding. Silver Standard has pledged the property as collateral, pending completion of reclamation work by Kinross, and Silver Standard's successful arrangement of reclamation bonding.

Upon completion of the purchase of the property, Silver Standard will assume responsibility for the operation, establish the required reclamation bonding, and transfer the necessary operating and environmental permits to Silver Standard's wholly owned United States subsidiary company. No immediate production is planned by Silver Standard and any outstanding permits will need to be obtained at such time that an operational plan has been developed. PAH has not reviewed any of the pending agreements and has relied on Silver Standard's descriptions.

4.5 Land Tenure

The project occurs on 47 patented and 256 unpatented federal mining claims situated on lands administered by the United States Bureau of Land Management located in the Candelaria Mining District of Mineral County and Esmeralda County. The claims occur in Section 26, 27, 28, 29, 32, 33, 34, 35; Township 4 North; Range 35 East and Section 2, 3, 4, 5, 8, 9; Township 3 North; Range 35 East. Unpatented claims include both lode and mill site claims, including mill site claims KC 1-82, 85-92, 103-107; lode claims CM 1-134; lode claims Jann 10, 14-17, 19-28; mill site claims Rescue 17-19, 237-238, Peru 1-7. The claims cover an area of approximately 3,190 acres. Patented claims cover most of the immediate Northern Belle and Mount Diablo deposit areas. The claims are reported by R. T. Kemp (March 2000) to be in good standing and registered to Kinross. PAH has no reason to believe that the claim status is not valid, but has not conducted a detailed review of the land title.

Certain claims are subject to royalty obligations and payments. The Jed 12-16 claims are subject to a 3 percent net smelter return payable to Teck Resources USA. The Sesame 1-15 claims are subject to a charge of $0.01 per ton for waste rock dumped on these claims. Silver Standard reports that both of these claims groups were restaked and are now part of the CM lode claims.

Silver Standard's land holding costs for Candelaria will total approximately $126,000 per year for the patented and unpatented claims and other costs. For the patented claims, $96,000 per year is due for property tax assessments to Mineral County. For the unpatented claims, $26,500 per year is due for federal (United States Bureau of Land Management) and county (Mineral and Esmeralda Counties) claim holding fees. Other minor permits and fees are expected to have a cost of about $3,500 per year. Mineral County taxes are expected to decrease as reclamation continues and more of the existing mine facilities are removed.

4.6 Environmental Liabilities and Permitting

Currently, Kinross is in the process of reclaiming the property following the termination of their open-pit mining and heap-leaching operation. Kinross submitted the Final Permanent Closure Plan (Closure Plan) to the Nevada Department of Environmental Protection (NDEP) and the United States Bureau of Land Management (BLM) in June 1998. The plan was approved by NDEP in October 1998, but in October 1999 NDEP determined that the Closure Plan required further review under the considerations of the National Environmental Protection Act (NEPA), due to changes in the plan of operation for land application of excess leach pad drain down fluid. The BLM Environmental Assessment report for mine closure was issued on July 21, 2000 and reclamation has proceeded as planned. Silver Standard anticipates the completion of reclamation work by the end of September 2001.

Currently the waste rock dumps and haul roads have been recontoured and seeded; the larger leach pile has been rinsed, recontoured, and reseeded; the smaller leach pile is being rinsed and will be recontoured and reseeded. Silver Standard contracted Resource Concepts Inc. to conduct an environmental audit and their report dated May 31, 2000 indicated no significant areas of concern. Resource Concepts Inc. indicated that a number of the environmental and operating permits can be transferred to Silver Standard, including the reclamation permit, plan of operations, Class III landfill permit waiver, storm water permit, radio station license, water pollution control permit, and hazardous materials permit. Two permits cannot be transferred, including the air quality permit and artificial pond permit, and new applications must be made by Silver Standard. At this time, PAH is not aware of any undisclosed environmental liabilities based on review of general information. Silver Standard expects that continuing costs for reclamation and personnel at the site will be on the order of US$90,000 per year.

5.0 HISTORY

High grade silver mineralization was discovered at Candelaria in 1863 and the Candelaria Mining District was formed in 1864. The most important early producer, the Northern Belle deposit was located the following October by Alsop J. Holmes and was worked on a relatively small scale until 1874. In 1874, the Northern Belle Mill and Mining Company was incorporated to operate the mine on a larger scale. The following nine years were the most productive years of the underground mine, with mineralization produced from narrow oxidized high-grade lodes averaging 50 to 60 silver ounces per ton, and ore production rates on the order of 20,000 tons per year. In 1884, the mine was purchased by the Holmes Mining Company, but failed to achieve the previous production levels and the mine was closed in 1891.

To the southeast, almost continuous underground production came from the Mount Diablo Mine from 1873 to 1892, with peak production during the 1880s. Several other prospects and small operations were also active during this time with limited production. By the late 1880s to early 1890s, the bonanza oxide deposits were becoming exhausted as the deeper workings increasingly encountered sulfide mineralization not amenable to milling. The district went into rapid decline as the silver grades dropped, along with the silver prices of the day.

From the 1880s to the mid-1960s mining activity at Candelaria was intermittent and small scale. The Lucky Hill Mine's primary underground production was between 1920 and 1924. The total historic production of the district through 1954 (excluding more recent open pit production) has been estimated to be 468,000 tons of ore, with the most important producer by far having been the Northern Belle mine, followed in decreasing importance by the Mount Diablo, the Lucky Hill, and the Potosi mines.

Starting in the mid-1960s, a succession of mining companies showed interest in the district for large tonnage, low grade silver mineralization, including El Paso Natural Gas Company and Superior Oil in 1967, Callahan Mining Company in 1969, AMAX Exploration in 1970, and Congdon and Carey

Ltd. of Denver from 1971 to 1976. In 1976, Congdon and Carey entered into a limited partnership with Occidental Minerals Corporation (Oxymin), the latter being the operator, and over the following four years conducted exploration and extensive drilling to define shallow low-grade deposits at Lucky Hill and Mount Diablo that were amenable to treatment by cyanide leaching. Plant construction began in 1979 and the first doré bullion was poured in 1980. Initial mine production was planned at 2.0 million tons per year, which allowed the operation to become the seventh largest United States silver mine of that time.

In 1982, depressed silver prices forced Oxymin to suspend mining operations. In that same year NERCO Minerals Company (NERCO) acquired Oxymin's majority interest in the mine and restarted mining operations in early 1983 on additional reserves defined at the Mount Diablo and Lucky Hill pits. In late 1983 NERCO purchased Congdon and Carey's minority interest to become the sole owner of the mine. In 1985, NERCO began mining the Northern Belle pit. By 1987, NERCO was mining at a production rate of 5.5 million tons of ore per year from the Mount Diablo and Northern Belle pits. Mine production continued until 1989 for Northern Belle and 1990 for Mount Diablo, when once again low silver prices forced suspension of all mining operations. NERCO was subsequently taken over by AMAX Minerals, which was in turn acquired by Kinross.

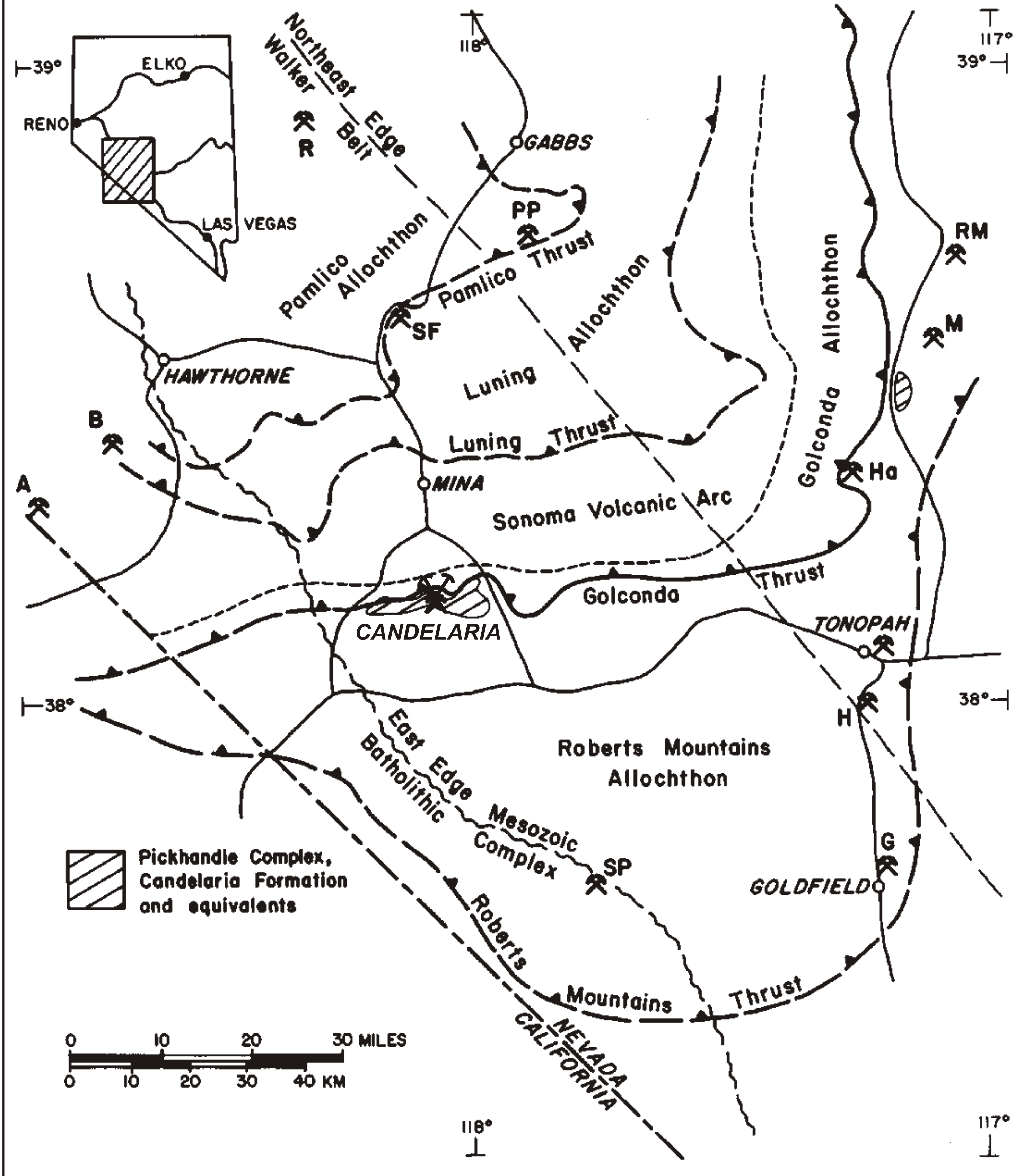
A limited exploration program by Kinross defined additional reserves below the Northern Belle pit and mining operations were resumed in January 1994. Kinross production was primarily from the from the Northern Belle pit, with lesser production from the Mount Diablo, and the small "J", and Georgine pits. A maximum annual production rate of 4.3 million tons of ore reported for the year of 1996. Reserves of oxide material declined until mining ceased at the end of April 1997, with stockpiled ore crushed and hauled to the leach pads during the month of May. Processing of leach solutions from the pads continued through February 1999. Kinross reported their total mine production to be 12.7 million tons averaging 1.42 ounces of soluble silver per ton and 0.005 ounces of soluble gold per ton, for a total of 18.0 million ounces of contained silver and 65,000 ounces of contained gold (May 1997 Kinross Monthly Mine Report). Kinross is currently completing the process of permanent closure and reclamation of the operation.

6.0 GEOLOGIC SETTING

The geologic setting of west-central Nevada is characterized by displaced terrain tectonics reflected by multiple episodes of large scale thrust faulting and tectonic stacking, magmatism, and normal faulting. Five Paleozoic and Mesozoic thrust sheets are recognized and from the structurally lowest upwards are: the Roberts Mountain allochthon, the Golconda allochthon, the Sonoma volcanic arc, the Luning allochthon, and the Pamlico allochthon (Figure 6-1). In this area, the northerly structural trend typical of most of Nevada abruptly changes to an easterly trend, known as the Mina deflection, and this is the dominant structural trend in the Candelaria Hills.

The Roberts Mountain allochthon consists of the Palmetto Formation, an Ordovician age, deep water deposition chert-argillite-dolomite sequence, which is tectonically interleaved with stratigraphic slices of Devonian age limestone and calcarenite. This assemblage is a tectonic-stratigraphic equivalent of the Valmy and Vinini Formations of central Nevada and was emplaced along the Roberts Mountain Thrust fault during the mid-Paleozoic Antler Orogeny.

A younger sequence of Permian and Triassic age marine sediments, the Diablo and Candelaria Formations, was deposited unconformably on the Roberts Mountain allochthon. The Diablo Formation is a coarse grained siliclastic unit generally less than 30 feet thick. It, in turn, is overlain conformably by the early Triassic Candelaria Formation, an upward coarsening marine sequence, with a thickness of up to 3,000 feet. The Candelaria Formation has been divided into four members (Speed, 1984). Member 1 is the basal unit and is the principal host to mineralization at Candelaria, and consists of 200 to 250 feet of thin-bedded carbonaceous, calcareous mudstones; with thin limestone beds in the lower part; and a thin chert fragmental bed in the upper part. The upper members of the Candelaria Formation consist of thin-bedded mudstone in Member 2, bedded feldspathic sandstone in Member 3, and feldspathic mudstone and pebbly sandstone in Member 4.



(after Moeller, 1986)

Prepared by	Prepared for		Date of Issue
PINCOCK, ALLEN & HOLT 274 Union Boulevard, Suite 200 Lakewood, Colorado 80228 Phone (303) 986-6950	***SILVER STANDARD RESOURCES***	**FIGURE 6-1** **REGIONAL GEOLOGIC SETTING OF THE CANDELARIA DISTRICT**	**Apr/2001**
Project No. **9814.00**	Project Name Candelaria Project		Drawing Name **Fig6-1.cdr**

The Golconda allochthon was structurally emplaced upon the Candelaria Formation during the lower Triassic Sonoma Orogeny. The Golconda allochthon in the Candelaria Hills consists of the Pickhandle Gulch Complex, a Mississippian- to early Triassic-age tectonic mélange that comprises the sole plate of the Golconda allochthon. The Pickhandle Gulch Complex consists of a 1,600 foot thick structurally disrupted sequence with slices and blocks of Mississippian to early Triassic sediments within a serpentinite complex, and represents the emplacement from the north of the Sonoma volcanic arc. The structural base of the complex is marked by the Pickhandle Gulch Thrust fault, while the structural top is marked by the Golconda Thrust. A related structural zone, the Lower Candelaria Shear zone or "LCS," occurs in the lower part of the Member 1 of the Candelaria Formation and is the main host for mineralization in the district. Above the Golconda Thrust, are a sequence of Mississippian to Permian age sedimentary and volcanic rocks that are exposed elsewhere, but have been eroded from the Candelaria Hills.

During Jurassic and Cretaceous time the Sierran magmatic arc developed along the western United States, immediately to the west of the project location. Felsic intrusions of batholithic proportions are generally of Jurassic age (150 and 200 million years ago) and are restricted to the extreme west part of the state. In the Candelaria Hills it is believed that associated back arc subsidence and sediment accumulation occurred, mixed with episodic periods of volcanism. The Luning and Pamlico allochthons, present to the north of the Candelaria Hills, represent the later Mesozoic age thrusting of the sedimentary and volcanic rocks.

A series of stocks and small plutons of intermediate composition were emplaced during Cretaceous time in west-central Nevada. In the deposit area, these rocks range in composition from granite to diorite, fine grained to porphyritic, and are referred to as the "mine sequence intrusives." These intrusions occur as individual sills and dikes focused along the east-west striking and north dipping trend of thrust faulting of the lower Candelaria Formation. Sills up to 150-feet thick and 2,500 feet long occur primarily along the Pickhandle Gulch Thrust at the upper contact of the Candelaria Formation, in the lower Candelaria Formation near the contact with the Diablo Formation, and variably within Member 1 and the lower part of Member 2 of the Candelaria Formation. Dikes up to

100 feet wide locally cut the Palmetto and Candelaria Formations and appear to be feeders for the sills. Mine intrusives predate mineralization and are themselves hydrothermally altered and weakly mineralized.

Major uplift occurred during the late Cretaceous to early Oligocene time, with the erosion of all the postulated Jurassic and Cretaceous sediments and volcanics, together with an unknown thickness of the Golconda and Roberts Mountain allochthons. This event allowed for post-mineral shearing along mineralized structural zones and exposed the Candelaria mineralization to significant surface weathering and oxidation. Subsequently in Oligocene time, this deeply weathered erosional paleosurface was buried under voluminous felsic to intermediate composition ash-flow tuffs, with thicknesses up to 2,000 feet. This was followed in Miocene time by the deposition of a sequence of andesitic flows and pyroclastics.

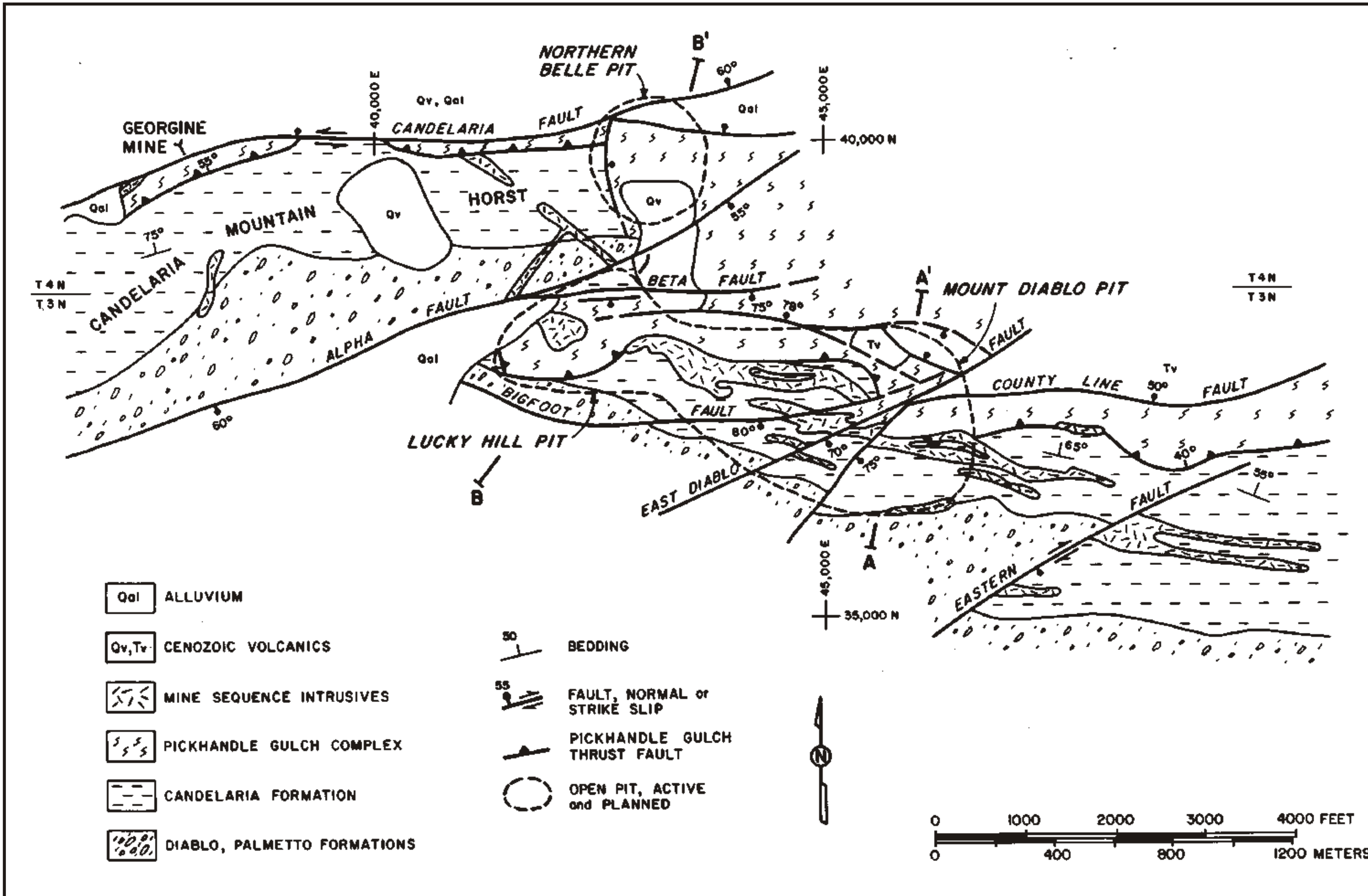
Miocene, Pliocene, and Recent age regional extensional tectonics resulted in "Basin and Range" normal faulting. This event is characterized by the relative uplift and erosion of ranges and the contemporaneous subsidence and alluvial filling of basins. Local volcanism resulted in a capping of basalt flows in the ranges.

7.0 DEPOSIT TYPES

The deposits of the Candelaria Mining District host epigenetic silver mineralization of early Cretaceous age, with quartz stockwork mineralization occurring in faulted and sheared zones related to regional thrusting. Pre-mineral thrusts and thrust-related structures of the Lower Candelaria Shear and the Pickhandle Gulch Thrust provided ground preparation for the introduction of hydrothermal fluids. Figure 7-1 shows a simplified geologic map of the Candelaria district (Moeller, 1986) and Figure 7-2 shows generalized geologic cross sections through the deposits (Moeller, 1986).

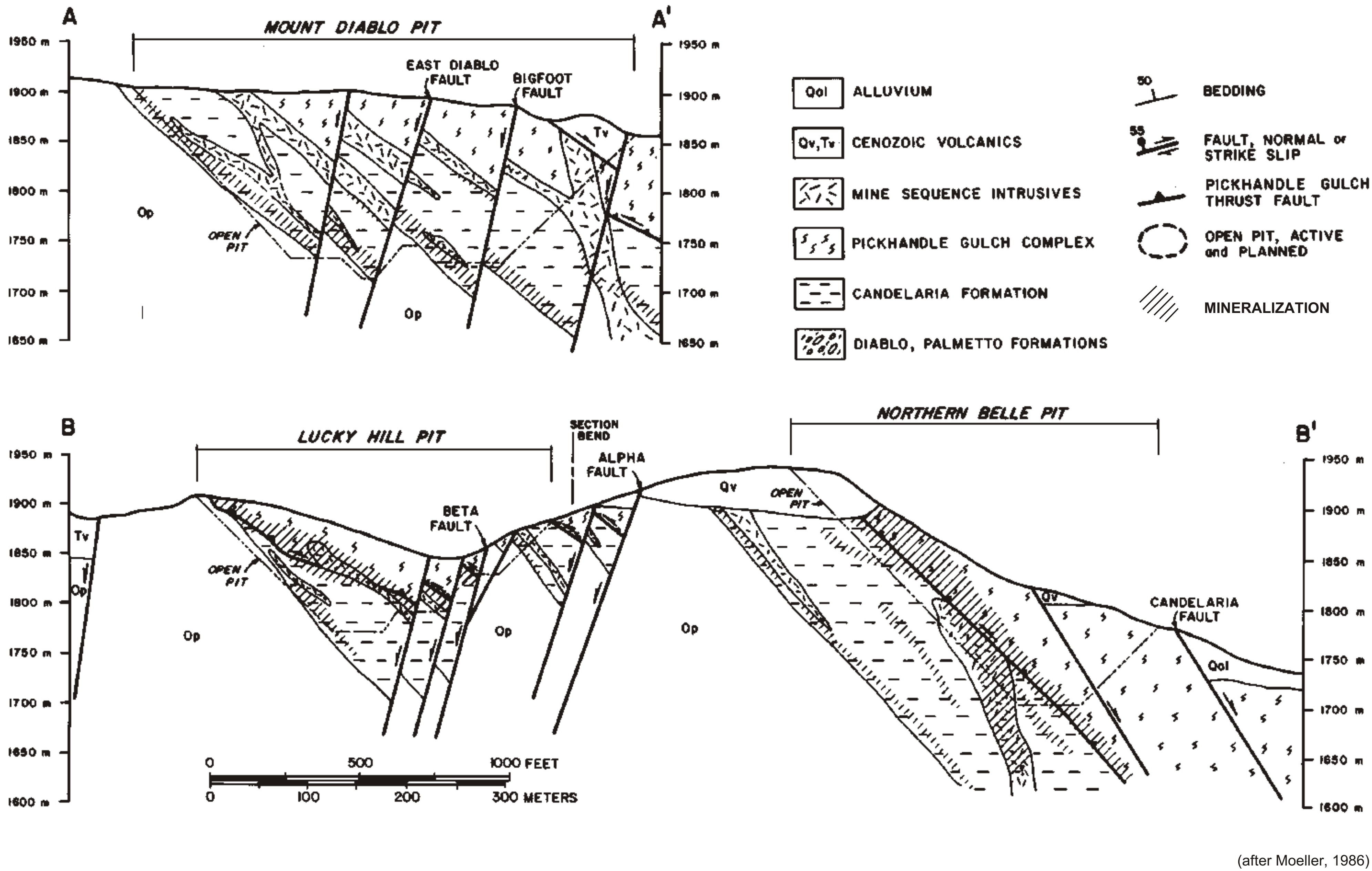
The Lower Candelaria Shear is the main mineralized structure in the Candelaria district and is developed parallel to bedding within the lower half of Member 1 of the Candelaria Formation. The shear zone is present throughout the district and ranges in thickness from 3 feet to a maximum of over 100 feet in the Mount Diablo pit and dips from 20 to 60 degrees to the north. In some areas, the shear zone is at the base on Member 1 of the Candelaria Formation where deformation was focused immediately above the massive Diablo Formation. In other areas it is as much as 60 feet above the base of Member 1, but is always lower than a cherty fragmental marker bed. Within the shear zone, bedding is thoroughly disrupted and individual lithologies can be difficult to distinguish, with small rootless folds common.

The Pickhandle Gulch Thrust is a lesser mineralized structure in the Candelaria district and occurs where the Pickhandle Gulch Complex was thrust over the Candelaria Formation. The thrust is characterized by a generally sharp break between little-deformed sediments in the footwall of the thrust and strongly sheared serpentinite in the hanging wall of the thrust, with deformation focused within the lower 130 feet of the over-thrusted plate. Many secondary shear zones parallel to the main thrust are present in this sequence. The thrust plane is usually within a few degrees of the bedding plane of the Candelaria sediments, and both dip between 20 and 75 degrees to the north. The Pickhandle Gulch Thrust does, however, variably cut downward through the Candelaria



(after Moeller, 1986)

Prepared by	Prepared for		Date of Issue
PINCOCK, ALLEN & HOLT 274 Union Boulevard, Suite 200 Lakewood, Colorado 80228 Phone (303) 986-6950	**SILVER STANDARD RESOURCES**	**FIGURE 7-1** **GENERALIZED SURFACE GEOLOGY OF THE CANDELARIA DISTRICT**	**Apr/2001**
Project No. **9814.00**	Project Name Candelaria Project		Drawing Name **Fig7-1.cdr**



Prepared by

PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

Project No. 9814.00

Prepared for

SILVER STANDARD RESOURCES

Project Name

Candelaria Project

FIGURE 7-2
GENERALIZED GEOLOGIC CROSS SECTION THROUGH THE CANDELARIA DISTRICT

Date of Issue

Apr/2001

Drawing Name

Fig7-2.cdr

Formation sediment sequence and locally, as in the Lucky Hill pit, rests directly on rocks of the Diablo and Palmetto Formations.

Minor mineralization occurs in the mine intrusives that were emplaced before or possibly around the same time as the early Cretaceous hydrothermal mineralization event. The intrusive sills were emplaced into the same structural zones that allowed for the introduction of the hydrothermal solutions that formed the mineralization. As such, there is a close association between mineralization and intrusives.

The Candelaria mineralization formed as continuous, tabular-shaped, structural zones with original dimensions of approximately 20,000 feet along strike and 2,500 feet down dip. The north-dipping structural zones were subsequently displaced by faulting, forming structural blocks that were progressively uplifted to the north by several east-northeast trending normal faults. The most significant of these are the East Diablo, Bigfoot, Beta, and Alpha faults, which generally trend east-northeast, dip 60 to 80 degrees to the southeast, and have displacements of 50 to 300 feet. Evidence indicates that these faults were formed during the late Cretaceous to early Tertiary uplift event, with some reactivation during late Tertiary to Recent Basin and Range tectonic activity.

The dipping mineralized zones have been subjected to post-mineral shearing that has disrupted the mineralization. Subsequent weathering and oxidation of the mineralized zone occurred during two distinct periods of time. The first was during a late Cretaceous to early Tertiary erosional event, after which the paleo-erosional surface was capped by younger volcanic rocks. The second followed the Tertiary to Recent erosional period during which the mineralized zones were again exposed at the surface. Partial to complete oxidation of the deposits extends down to depths of about 650 feet.

8.0 MINERALIZATION

8.1 General

In the Mount Diablo area, mineralization is best developed in the Lower Candelaria Shear, with very minor mineralization in the Pickhandle Gulch Thrust. In this area, the Lower Candelaria Shear reaches a thickness of 115 feet, with the boundaries of mineralization corresponding closely to the limits of shear-related deformation. Within the Lower Candelaria Shear Member 1 sediments and intrusives show strong sericite alteration, which bleaches the rock and obscures original features. Age dating of secondary sericite from altered quartz monzonite porphyry provides an early Cretaceous date (126 million years ago) and is believed to be the age of the mineralization (Moeller, 1986). The resource reported by Silver Standard for the Mount Diablo deposit occurs primarily in the Lower Candelaria Shear at depth and consists of transitional oxide/sulfide and sulfide mineralization.

In the Northern Belle and Lucky Hill pit areas, mineralization is best developed in the Pickhandle Gulch Trust zone. In this area, the Pickhandle Gulch Thrust zone reaches a thickness of 115 feet. The Lower Candelaria Shear, however, is less than 10 feet thick, but is locally mineralized. The resource reported by Silver Standard for the Northern Belle deposit occurs primarily in the Pickhandle Gulch Thrust at depth and consists of mixed oxide/sulfide and sulfide mineralization.

8.2 Lower Candelaria Shear Zone

Within the Lower Candelaria Shear zone, sediments of Member 1 of the Candelaria Formation and associated intrusives show strong sericite alteration which bleaches the rock and obscures their original features, silicification in the form of quartz vein stockworking, and dolomitization (Thomson, 1990). Mineralization within the oxidized upper part of the Lower Candelaria Shear consists of fractured and partly brecciated gossanous sediments, which are riddled with small, irregular, milky white quartz veins, with ubiquitous coatings and impregnations of iron, with lesser manganese oxides. The iron oxides consist of hematite, goethite, limonite, and jarosite, as well as a variety of lead, zinc and copper oxides, all derived from original sulfides. Silver occurs predominantly as native silver and in cerargyrite, occurring as free grains ranging in size from a few microns to a few hundred microns (average size 10 to 40 microns). Silver grades from the open pit operations have typically ranged from 2 to 8 ounces of silver per ton, with local areas of higher grade in excess of 50 ounces silver per ton. Locally in the oxidized zone, relict lenses of fresh sulfide-bearing material are preserved. The silver mineralization of the oxidized zones typically has a low gold content, with average ratios of 400 to 1 silver to gold.

Within, and marginal to, the Lower Candelaria Shear zone are irregular and discontinuous high-grade lenses and shoots of more massive iron and manganese-iron oxides with dolomite and quartz gangue. These high-grade zones were the focus of early underground mining and consisted of lenses and shoots 2 to 10 feet thick, with strikes of up to 100 feet, and dip extents of several hundred feet. Many of the high-grade lenses may be the due to the replacement of narrow limestone beds that occur in Member 1 of the Candelaria Formation (Thomson, 1990). As in the surrounding oxidized shear zone, silver occurs predominantly as native silver and in cerargyrite.

The Lower Candelaria Shear zone below the zone of oxidation consists of a stockwork of narrow, white-grey pyritic quartz veins in black, sooty carbonaceous siltstones. Sulfides occur as disseminations, clots, and massive lenses of pyrite, with lesser jamesonite, tetrahedrite, stibnite, argentite, and covellite. Except for covellite, these minerals all occur as inclusions encapsulated within pyrite and or quartz. The maximum size of the base metal sulfide/sulfosalt inclusions is a few tens of microns. Minor sphalerite, chalcopyrite, and galena have also been identified. Silver occurs primarily as argentite inclusions in pyrite (Thomson, 1990).

High-grade mineralization below the zone of oxidation consists of crudely banded lenses of sulfides and gangue. Sulfides may be disseminated or may form discontinuous massive layers up to 2 feet thick. Sulfides include pyrite, sphalerite, galena, and jamesonite, with minor chalcopyrite and arsenopyrite. The gangue is mainly dolomite with lesser quartz. The high-grade sulfides typically range from 30 to 60 ounces of silver per ton. Silver appears to occur in galena and jamesonite, and as argentite, but its various occurrences are not well documented.

8.3 Pickhandle Gulch Thrust Zone

The rocks of the Pickhandle Gulch Thrust zone show widespread serpentinization that is considered to be largely pre-mineralization in nature. Above the Pickhandle Gulch Thrust, up to 260 feet of the Pickhandle Gulch Complex have been overprinted by quartz-dolomite alteration, which in places totally obscures the original character of the ultramafics (Thompson, 1990). Quartz stockworking is not as well developed in the Pickhandle Gulch Thrust zone. Mineralization in the oxidized upper part of the zone is contained in stockworks and fractures, with ubiquitous coatings and impregnations of manganese and lesser iron oxides. The manganese and iron oxides, as well as a variety of lead, zinc and copper oxides, are all derived from original sulfides. In addition, nickel and chromium oxides are characteristic in this zone. Silver occurs predominantly as native silver and in cerargyrite. Both occur as free grains ranging in size from a few microns to a few hundred microns (average size 10 to 40 microns).

Below the zone of oxidation in the Northern Belle deposit, mineralization was reported from earlier underground mining to consist of crude banding of sulfides and gangue, hosted by sheared serpentinite and underlying carbonaceous siltstones, with local massive lenses of sulfides up to 1.5 feet thick. The sulfides consist primarily of pyrite, with lessor sphalerite, galena, and chalcopyrite, with minor amounts of jamesonite and arsenopyrite. Multiple generations of quartz and dolomite gangue are present (Moeller, 1986). Silver appears to occur in galena and jamesonite, and likely as argentite, but its various occurrences are not well documented.

9.0 EXPLORATION

Starting in the mid-1960s a succession of mining companies showed interest in the district for large tonnage, low-grade silver mineralization, as discussed in Section 5. In 1976, Oxymin began exploration and extensive drilling and over the following four years defined shallow low-grade deposits at Lucky Hill and Mount Diablo that were amenable to treatment by cyanide leaching. Open pit mining by Oxymin, and successor companies NERCO, and Kinross continued from 1979 to 1997, during which time various exploration drilling campaigns were conducted.

Kinross conducted most of the drilling in the deeper parts of the Mount Diablo deposit, below the current pit limits, in the area of the current activity by Silver Standard resources. Kinross also conducted limited drilling in the deeper parts of the Northern Belle deposit, below the current pit limits, in the area of the current Silver Standard resources.

Silver Standard conducted limited twin drilling and sample reanalysis as part of their due diligence effort in late 1999 and through early 2000 (Kemp, 2000). Pending the successful acquisition of the property from Kinross, Silver Standard plans to hold the Candelaria property on a care and maintenance basis pending upward changes in the silver price. Until that time Silver Standard has no immediate plans for further exploration and evaluation of the resources. No exploration costs are anticipated at this time.

10.0 DRILLING

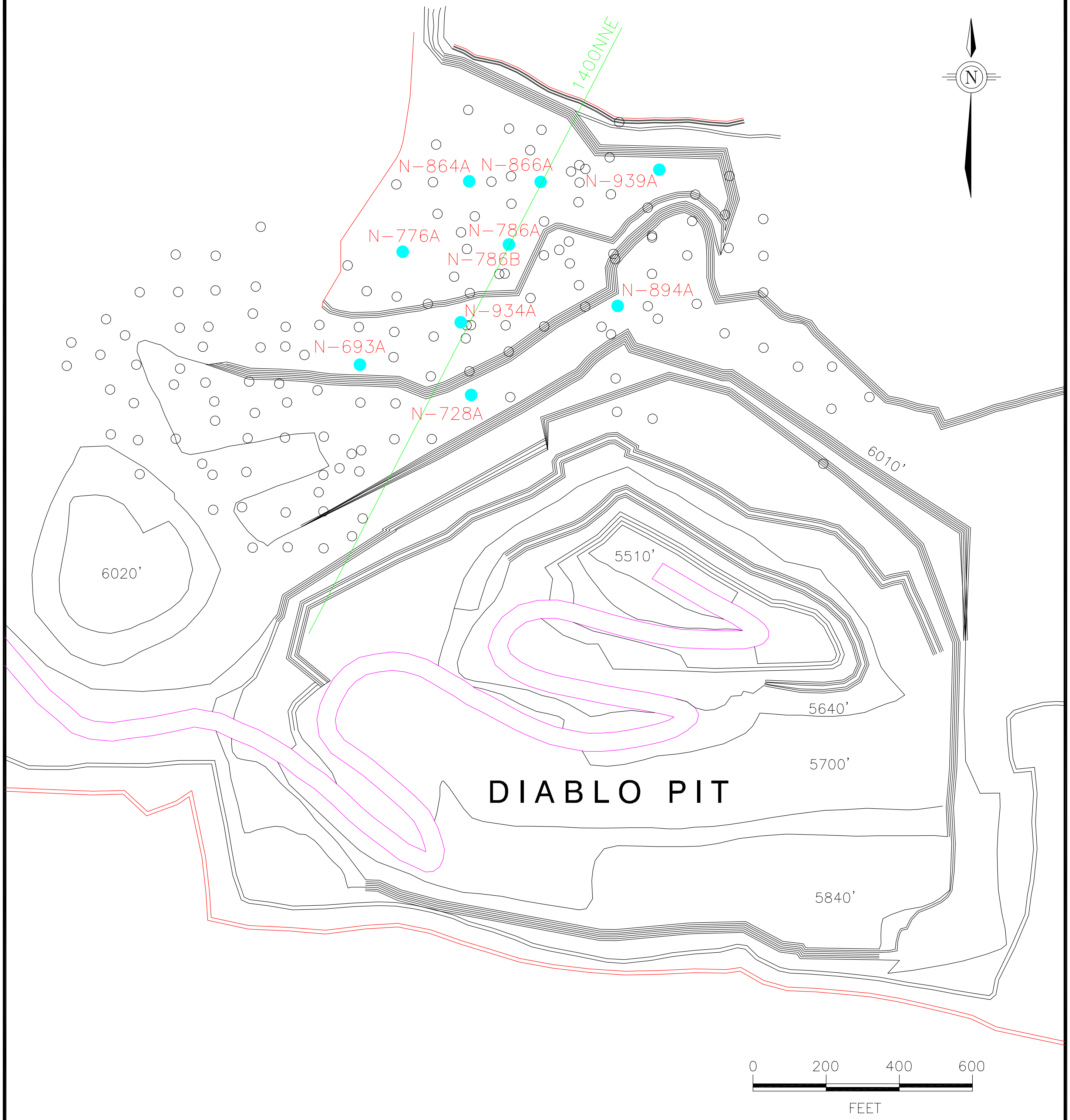
In 1976, the initial Oxymin partnership drilled approximately 50 wide-spaced air rotary holes in the Lucky Hill and Mount Diablo deposits to establish the continuity of the mineralization. An analytical laboratory was set up in Hawthorne for sample preparation and sodium cyanide leach-atomic absorption silver and gold analysis. Detailed drilling was conducted by the partnership from 1977 to 1978. Approximately 135 air rotary holes were drilled at approximately 30.5 meter (100 foot) centers. Little documentation remains as to the drilling procedures used during this period; however, PAH notes that the results of the drilling and reassaying provided the confidence needed to proceed with the development of the project. PAH notes that many of these holes were drilled to delineate the more near-surface parts of the mineralized zones contained in the Lucky Hill, Mount Diablo, and Northern Belle pit areas.

Additional exploration drilling around the pit areas, including down-dip extensions of the mineralized zones, was conducted by NERCO, and subsequently by Kinross. This drilling is more relevant to the current Silver Standard resources. Drilling in the Mount Diablo deposit has been largely by rotary methods, with reverse circulation methods used in the deeper zones. Drilling in the Northern Belle deposit has been largely by reverse circulation methods due to the presence of surficial loose basaltic colluvium and numerous underground workings. It was reported (Warner, 1991) that great care was taken in rotary drilling to maintain a dry hole in order to minimize down-hole contamination. Below depths of 100 to 200 feet, reverse circulation holes were reported to have been drilled wet, with care taken between samples to flush the hole of excess cuttings and routine washing of sample catching/splitting equipment. Drill samples were collected at 5-foot intervals, with the samples delivered to the on-site laboratory. Limited details on the historical drilling are readily available at this point in time.

From late 1999 to early 2000, Silver Standard conducted deep drilling to the north of the Mount Diablo pit as part of their due diligence of the project. Ten holes were drilled for a total of 6,465 feet, primarily by reverse circulation methods, although two short intervals in two of the holes were cored. All holes were drilled within a 10-foot radius of an original Kinross hole at the collar, but were not down-hole surveyed, making comparative analysis somewhat inconclusive, as some down-hole drift could have occurred. Mineralized drill hole intersections varied from 60 to 120 feet and generally corroborated earlier Kinross drilling in demonstrating the down dip continuity of the Lower Candelaria Shear mineralization below the pit-bottom limits. Silver grades, however, were consistently lower in the Silver Standard drilling. The Silver Standard due diligence drilling was included in the drill hole database for current resource estimation.

The current drill hole database for the combined Mount Diablo and Northern Belle areas includes a total of 771 drill holes for a total of 358,050 feet of drilling, containing 64,923 sampled intervals. Separate data files exist for both the Mount Diablo and the Northern Belle deposits, with some holes shared by both files. This data was used by Snowden to estimate the remaining resources for both deposits. Figure 10-1 shows the location of Mount Diablo drill holes in the area of the current Silver Standard resource. Figure 10-2 shows a representative, northeasterly-oriented drill hole section through the Mount Diablo resource area. Figure 10-3 shows the location of Northern Belle drill holes in the area of the current Silver Standard resource. Figure 10-4 shows a representative, northerly oriented drill hole through the Northern Belle resource area.

Many, but not all, of the drill holes in the deeper resource area have been down-hole surveyed to assess drill hole deviation. Exploration studies in 1989 and 1990 found that deeper drill holes were deviating by significant amounts and needed to be surveyed down-hole to accurately handle the resulting drill hole data. Because of the control afforded by the surveyed holes, PAH does not believe that this is a major problem but notes that future drilling should include down-hole surveying.



● SILVER STANDARD VERIFICATION DRILLING

○ PREVIOUS EXPLORATION DRILLING

SILVER STANDARD RESOURCES INC.

Mineral & Esmeralda, Counties
Nevada, U.S.A.

CANDELARIA MINE

DEEP DIABLO

DRILLING IN CURRENT RESOURCE

FEB. 2000	SCALE AS SHOWN	DIABLO-200

Reviewed by (PAH) FIGURE 10-1

PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

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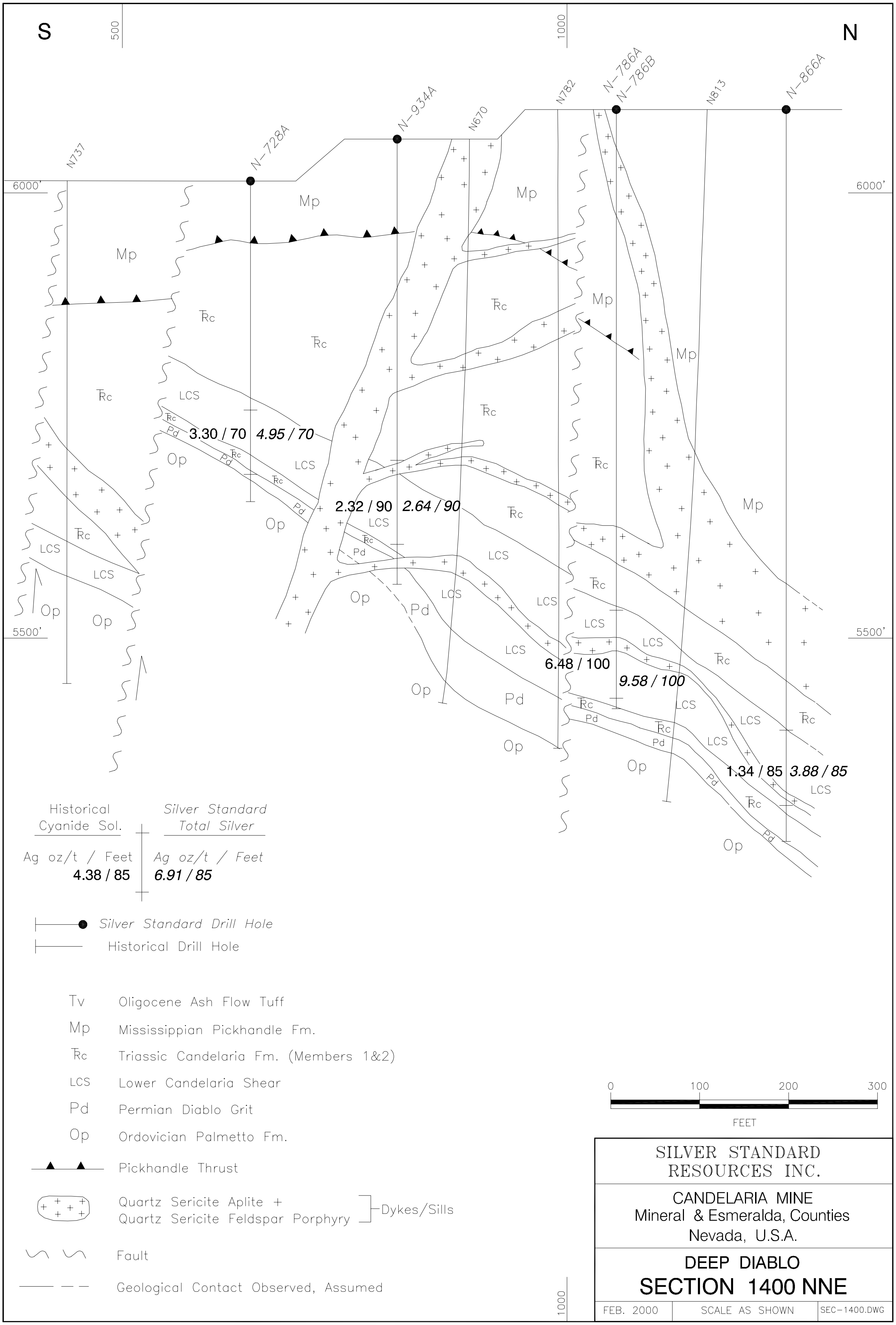

(PAH) FIGURE 10-2

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PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

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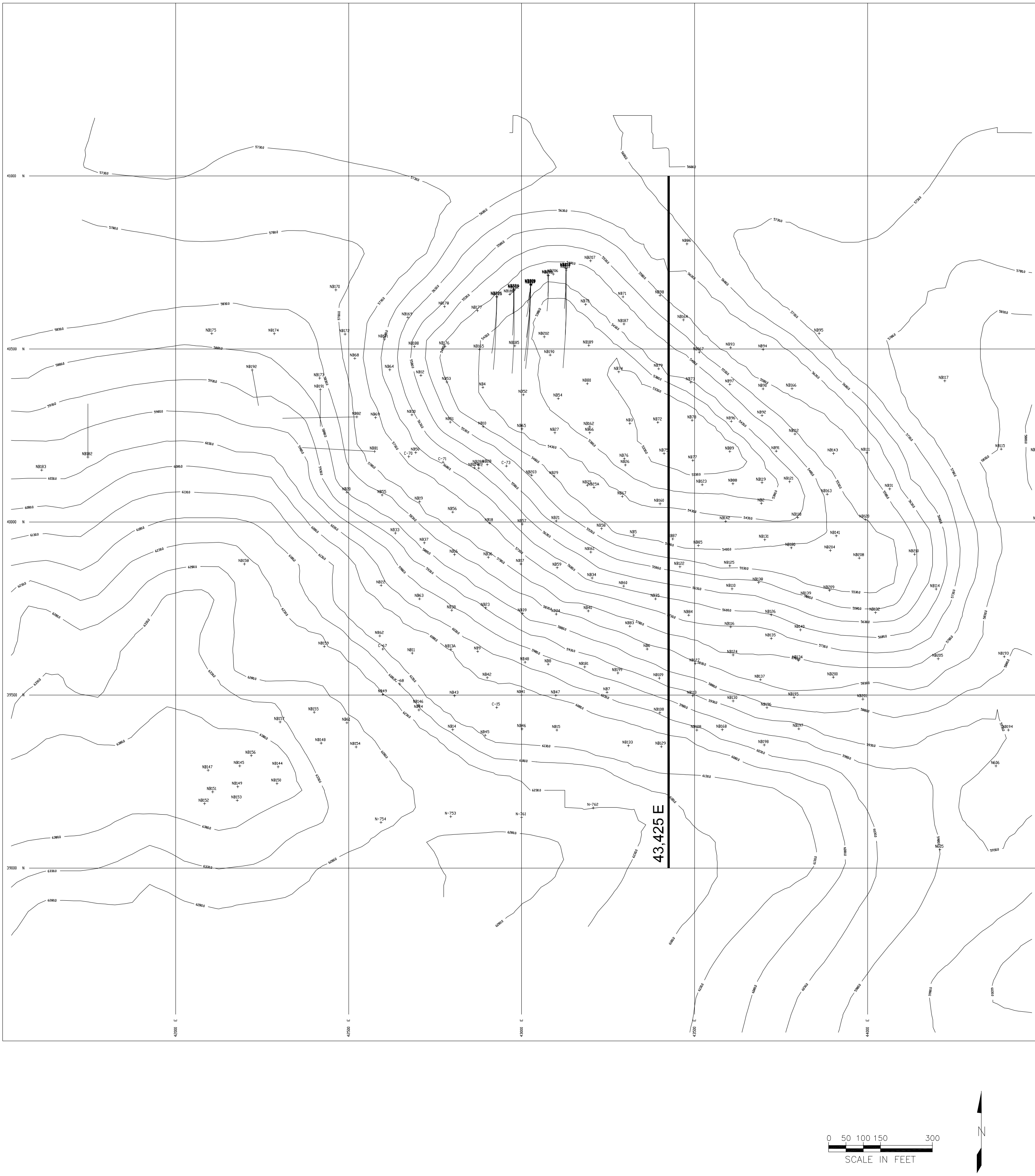

Prepared by
PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

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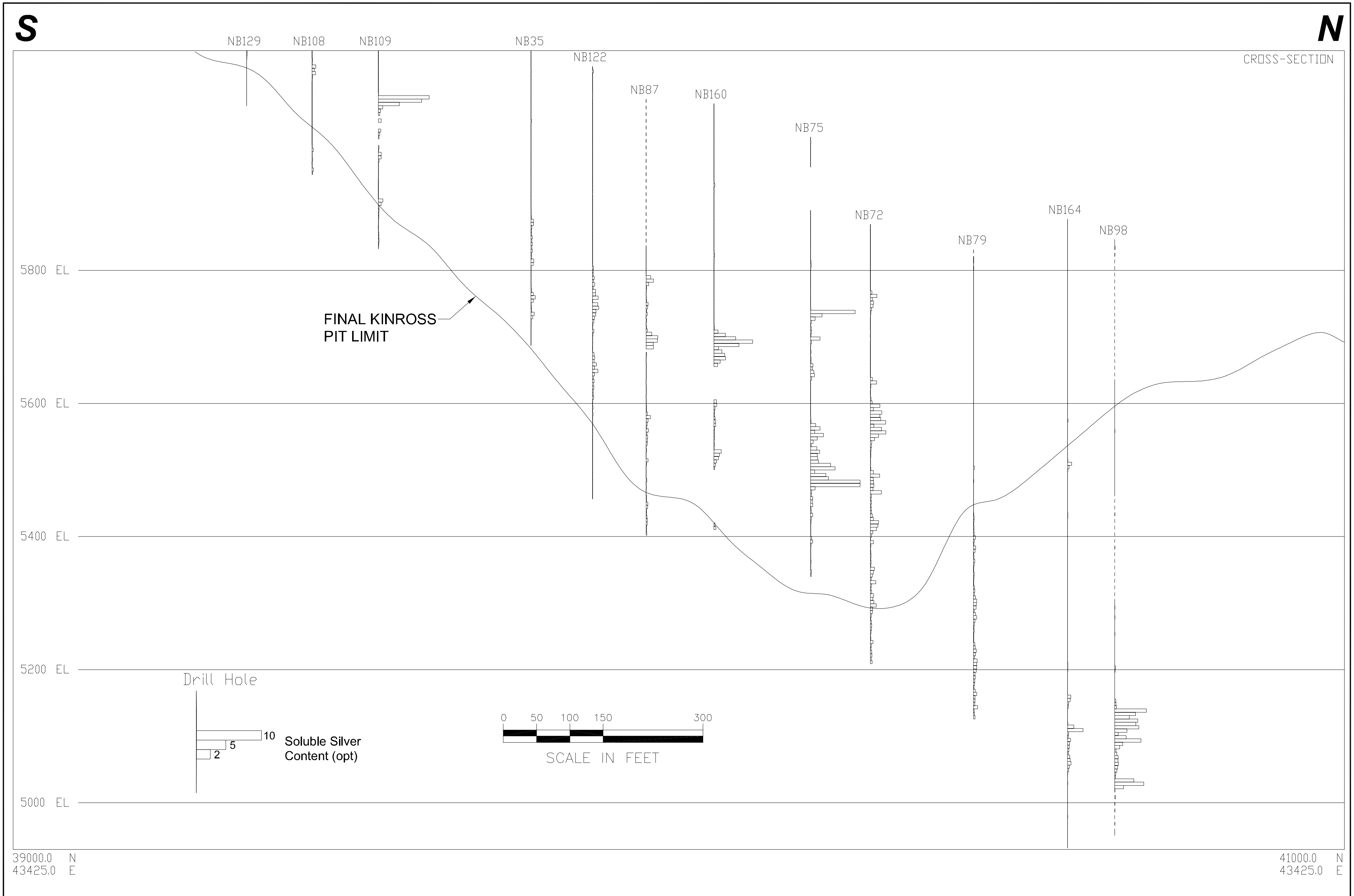
Project Name
Candelaria Project

FIGURE 10-3
CANDELARIA MINE - NORTHERN BELLE
DRILLING IN CURRENT RESOURCE

Date of Issue
May/2001

Drawing Name
Fig10-3.dwg



Prepared by *PINCOCK, ALLEN & HOLT* 274 Union Boulevard, Suite 200 Lakewood, Colorado 80228 Phone (303) 986-6950	Prepared for ***SILVER STANDARD RESOURCES*** Project Name Candelaria Project	FIGURE 10-4 CANDELARIA MINE - NORTHERN BELLE DRILL HOLE SECTION (43425 E)	Date of Issue May/2001 Drawing Name Fig10-4.dwg
Proejct No. 9814.00			

11.0 SAMPLING METHOD AND APPROACH

Drill hole sampling at the Candelaria project has been carried out over more than a 20-year period by several different companies that conducted the open pit mining operations. Most of the drilling consisted of reverse circulation holes. Below depths of approximately 200 feet in the Northern Belle area and likely a little deeper in the Mount Diablo area, reverse circulation holes have been drilled wet. Care was reportedly taken to ensure that quality samples were taken from the wet drilling where contamination can be a problem, although there is limited data available on the methodologies that can be reviewed and/or verified. The sampling procedures, sample preparation, and analysis are reported (Hamrey, 2001, personal communication) to have been conducted consistently through the years and to follow standard engineering practices.

Density testing was conducted early in the evaluation of the project in order to derive a tonnage factor for converting estimated volumes into tons, however, the actual density test work is no longer readily available for review. The resulting 13.5-cubic-feet-per-ton tonnage factor has been used during the entire duration of the open-pit mining operation. Mine production-resource model reconciliations have indicated this factor has been appropriate for oxidized material removed during the course of previous open-pit mining. Limited new density information from Mount Diablo suggests that the deeper mixed oxide/sulfide and sulfide material is more dense and that a tonnage factor may actually be on the order of 12.0- to 12.5-cubic-feet-per-ton, which if verified could result in a 10 percent increase in estimated resource tons.

12.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Exploration drill hole cuttings were collected at 5-foot intervals and split on site, with an approximately 9 kilogram (20 pound) sample collected in a cloth sack for laboratory analysis, while a duplicate sample was saved in the field. The samples were taken to the on-site mine laboratory and allowed to air dry before further sample preparation. The samples were then split to 1 kilogram (2.5 pounds) using a riffle splitter, oven dried for 10 hours at 150 degrees centigrade, and then crushed to 6.4 millimeters (1/4 inch). A 300-gram split was then pulverized to 100 percent minus-80 mesh and the resulting pulp placed in a wire topped envelope.

All samples contained in the exploration database were analyzed using a hot cyanide leach-atomic absorption method. The cyanide leach procedure was used as the primary method of analysis for exploration, as well as blasthole, and mill head analyses throughout the mine life in order to provide a quantitative determination of the leachable silver and gold content. For each individual analysis 20 grams of sample pulp was placed in a centrifuge tube and 20 milliliters of hot 1 percent concentration NaCN solution added. The tubes were shaken for 30 minutes and then centrifuged for 15 minutes to produce a clear solution for atomic absorption analysis of the leached silver and gold. Fire assay samples have historically been prepared on a limited basis as a comparison of the hot cyanide leach-atomic absorption method.

Kinross reported (1994) that several levels of check analysis were historically practiced at Candelaria. These include: repeat analysis of the original drill sample pulps at both an outside commercial laboratory and in-house at the company's laboratory, analysis of duplicate drill samples, and twinning of specific drill holes. Good correlations were reported by Kinross (1994) between originals and duplicates. The mine assayer, since start up (Hamrey, 2001, personal communication), reported that checks were routinely conducted and compared well, with no indication of specific problems; however, the actual check assay information has been lost in the Kinross mine closure process.

Much of the laboratory has currently been dismantled as part of the permanent facility closure by Kinross and it was not possible to see the actual sample preparation and analysis in progress. PAH believes that project sampling and analysis procedures have been conducted according to standard industry practices.

13.0 DATA VERIFICATION

In late 1999 to early 2000, Silver Standard conducted deep drilling to the north of the Mount Diablo pit as part of their due diligence of the project. Ten holes were drilled for a total of 6,465 feet, primarily by reverse circulation methods, although two short intervals in two of the holes were cored. All holes were drilled within a 10-foot radius of an original Kinross hole at the collar, but were not down-hole surveyed, making comparative analysis somewhat inconclusive, as some down-hole drift could have occurred. Mineralized drill hole intersections varied from 60 to 120 feet and generally corroborated earlier Kinross drilling in demonstrating the down-dip continuity of the Lower Candelaria Shear mineralization below the pit bottom limits. Silver grades, however, were consistently lower in the Silver Standard drilling. Snowden found that database revision was necessary for previous holes that showed possible down-hole contamination from mineralized intercepts found higher up the hole, as compared to the Silver Standard twin hole. For the intervals in question, the original hole sample grade and the twin hole sample grade were compared at a given depth and the lower of the two values was assigned to the original hole. Both the adjusted original hole and the twin hole were included in the database.

PAH did not collect any independent samples for data corroboration. Well known mining companies have explored and mined the deposits over the last 25 years and the assay results have been consistent with actual mine production. PAH has found no inconsistencies in the data that would indicate that the data are significantly in error or not representative of the deposits.

As a check of data entry and data base integrity, PAH visually compared grade values contained in the current computer database with the laboratory assay sheets for eight randomly selected holes. The results of the comparison found no significant errors that would indicate problematic data entry.

14.0 ADJACENT PROPERTIES

The mineral claim package controlled currently by Kinross, and under option by Silver Standard, consolidates the three most historically significant silver deposits of the Candelaria district, including the Northern Belle, Mount Diablo, and Lucky Hill deposits. Less significant mines and prospects occur on adjacent properties, but have not been investigated as part of this evaluation.

15.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Candelaria deposits have been mined by open-pit methods and processed by heap leaching over a period of approximately 20 years. Extensive metallurgical test work was conducted as part of the initial feasibility study and additional test work has been conducted throughout the years. Even more relevantly, there is now actual heap leach production experience for the operation. PAH notes that the test work and plant production figures are based on both total silver grades obtained from fire assay methods and leachable silver grades obtained from hot cyanide leach methods.

Feasibility laboratory test work and field pilot testing predicted, on a fire assay basis, metallurgical recoveries of 42 percent for the silver. Recovery projections by NERCO in 1984 indicated an expected total recovery, on a cyanide soluble basis, in the high 70s for silver. Kinross, on a cyanide soluble basis, had been projecting 81 percent for silver. KCA, in a letter report dated June 11, 1999, finds that to date for the existing Leach Pad 1, a silver recovery of 51.5 percent, on a fire assay basis; and 86.2 percent, on a cyanide soluble basis; and considered the leach pad essentially complete in the recovery of leachable silver. KCA also found that to date for the existing Leach Pad 2, a silver recovery of 42.4 percent, on a fire assay basis; and 71.3 percent, on a cyanide soluble basis; and considered the leach pad to still contain a limited amount of leachable silver.

Silver Standard is evaluating possible processing techniques and scenarios for the processing of additional lode and stockpile material, as well as the further processing of the leach pads. A January 6, 2000 KCA report to Silver Standard provided a scoping level study of capital costs, operating costs, and silver production estimates for heap leaching additional lode material, as well as further leaching of Leach Pad 2, at a processing rate of 2.0 million tons per year. A metallurgical recovery of 81 percent for silver, on a cyanide soluble basis, based on historical test work and actual mine production, was used for this evaluation.

A January 31, 2000 KCA report to Silver Standard provided a scoping level study of operating costs for processing lode, stockpile, and leach pad material through the use of grinding, flotation, roasting, and cyanide leaching, at a processing rate of 2.0 million tons per year. A metallurgical recovery of 75 percent for silver, on a fire assay basis; based on projection and experience with other similar operations, was used for this evaluation.

Silver Standard continues to evaluate possible processing techniques for the lode, stockpile, and leach pad material at Candelaria. At this time several options are under consideration and further evaluation will be required to determine the most appropriate technologies.

16.0 MINERAL RESOURCES

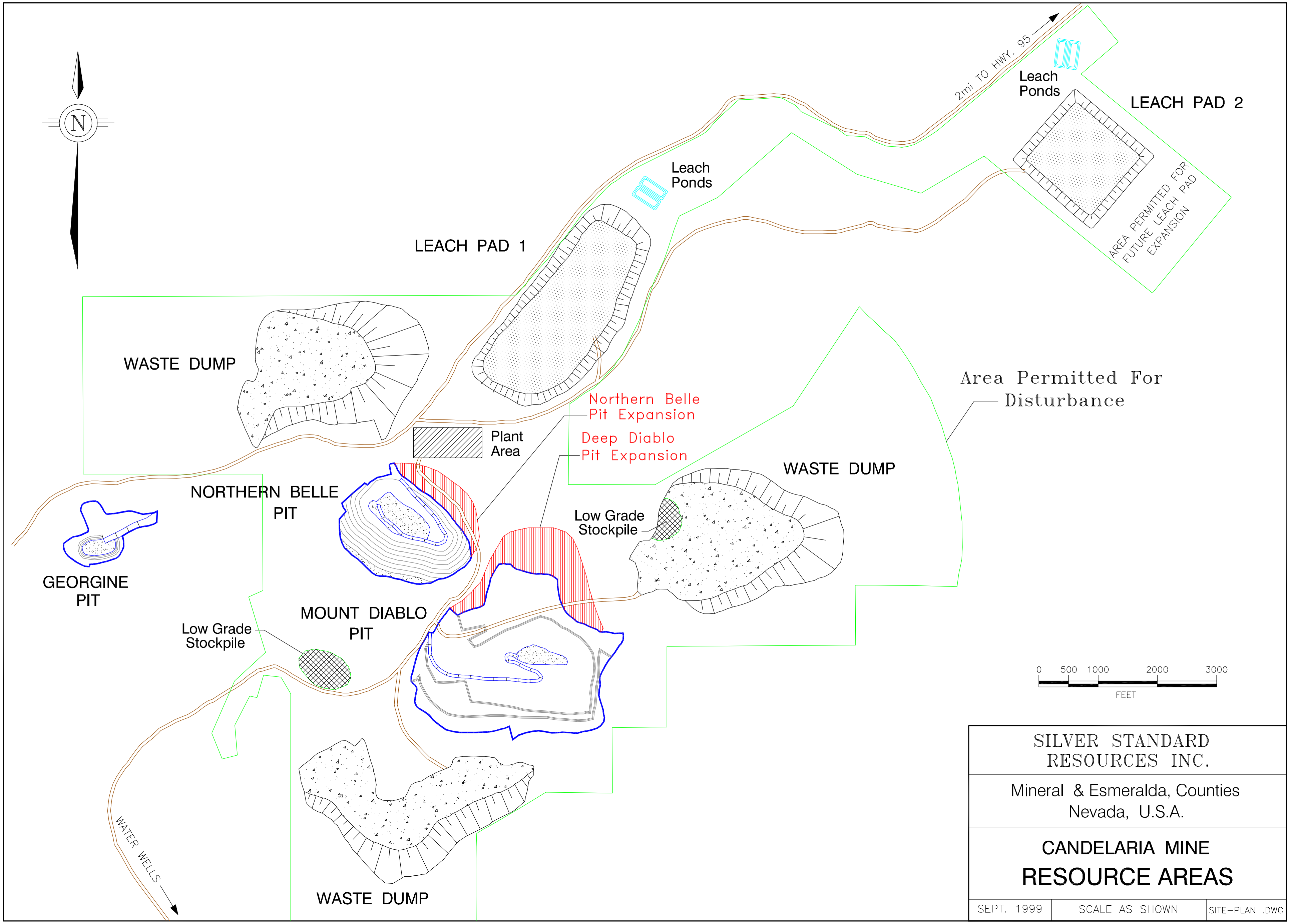
16.1 General

The Candelaria deposit was originally mined by selective underground methods around in the late 1800s and early 1900s, and by open-pit methods from 1980 to 1997. The dipping mineralized zones for both the Mount Diablo and Northern Belle deposits continue at depth beyond the margins of the current pit limits. Estimates of the remaining down-dip mineral resources have been made for both the Mount Diablo and Northern Belle deposits by Snowden. In addition, resources have been estimated for two heap leach pads and two low-grade stockpiles by KCA and Kinross, respectively, with resource classification by PAH. Figure 16-1 shows the relative location of the various resource areas.

PAH notes that since the initial feasibility study, silver grades used in the resource and reserve estimates and production records at Candelaria have been based on soluble (leachable) silver grades ($Ag_{soluble}$) and gold grades ($Au_{soluble}$) obtained from hot cyanide leach methods, since the previous open-pit operation's focus for processing was on heap leaching the silver. Previous resource and reserve estimates combined the cyanide soluble silver grades with the gold grade converted to a silver equivalent to produce silver equivalent grades ($AgEq_{soluble}$). Silver Standard may use other processing methods and as a result has prepared resource estimates based on factored total silver grades (Ag_{total}) and factored total silver equivalent grades ($AgEq_{total}$).

16.2 Mount (Deep) Diablo Deposit Resource

The remaining Mount (Deep) Diablo deposit consists of the down dip extension of the Lower Candelaria Shear and related mineralization, where it continues to depth beyond the existing open pit limits. In 1999, Snowden initially estimated a resource for the remaining deposit, which was updated in 2001 by Snowden. The current Snowden resource estimate incorporates further information on



(PAH) FIGURE 16-1

Reviewed by

PINCOCK, ALLEN & HOLT
274 Union Boulevard, Suite 200
Lakewood, Colorado 80228
Phone (303) 986-6950

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the sampling and geology, revises the regression formula used to convert soluble silver ($Ag_{soluble}$) into total silver (Ag_{total}), and applies topography from the final pit configuration (May 1997 surface). PAH notes that this topography adequately covered the resource area, but did not cover the entire model area.

The Snowden resource model was based on sampling data from 538 drill holes undertaken by previous owners and updated by Snowden to include the ten Silver Standard verification holes drilled in late 1999 and early 2000, for a total of 548 holes. PAH notes that some of the original holes are duplicated for use in the Northern Belle database. Snowden found that database revision was necessary for previous holes that showed possible down hole contamination from mineralized intercepts found higher up the hole, as compared to the Silver Standard twin holes. For the intervals in question, the original hole sample grade and the twin hole sample grade were compared at a given depth and the lower of the two values was assigned to the original hole. Both the adjusted original hole and the twin hole were included in the database. The sample data was then composited into 10-foot lengths. PAH's review of composite data found two high-grade outliers, which were addressed by Snowden during the subsequent grade estimation procedure.

Geologic solids models were originally constructed by Kinross and were modified slightly by Snowden. Three grade zones were defined, including a higher grade, lower grade, and background zones. Complete details of the grade zones are no longer readily available from Kinross. Snowden used the grade zones to control the grade assignment during the grade estimation process. Block models were set up with block dimensions of 25 feet by 25 feet in plan and 10 feet in height. PAH finds that the grade zones are reasonable delineations of deposit trends.

Ordinary kriging was used to interpolate the soluble silver ($Ag_{soluble}$) and soluble gold ($Au_{soluble}$) grades in the block model. A lognormal short-cut technique was used, whereby the variogram sill values are converted from the log variograms while applying a 97.5^{th} percentile top-cut to the composite data. This in effect caps any high grade outliers in the composite data to limit their effect on the model. The grade zones were used to control the grade assignment, with only composites of a specific grade zone used to estimate grade within the same grade zone in the model. The maximum search range used in the higher-grade zone was 235 feet, in the lower-grade zone it was 1,000 feet, and in the background zone it was 350 feet. From the review of the available geology, and of the geostatistics for the Mount Diablo deposit, PAH believes that some of these distances tend to be excessive. PAH found, however, that model blocks more than 300 feet from the nearest composite only constituted 3 percent of the total number of estimated blocks and were assigned to an inferred category and as such PAH does not believe that this is an important issue. PAH reviewed the composite and model statistics and found them to be reasonable.

Snowden factored the soluble silver ($Ag_{soluble}$) model to create a total silver (Ag_{total}) model, since total silver (Ag_{total}) did not exist in the drill hole database for direct estimation. For the Mount Diablo deposit, Snowden conducted a statistical analysis of historical exploration drill hole sample grades for which both cyanide soluble silver and total silver (fire assay) grades were measured in order to derive a regression formula for the factoring of the cyanide soluble silver to factored total silver. For the silver regression formula, 15 drill holes in the down-dip part of the deposit were used, including nine holes drilled by Silver Standard and six holes drilled previously by Kinross. This analysis resulted in the following formula for the deep Mount Diablo mineralization: $Ag_{total} = 1.536\ Ag_{soluble} + 0.5382$. PAH reviewed the basis for this equation and found it to be reasonable. PAH notes however, that the regression is based on limited sample grade data and concurs with Snowden's recommendation to collect and analyze additional data.

Snowden used both the factored total silver (Ag_{total}) model and the soluble gold ($Au_{soluble}$) model to create a factored total silver equivalent ($AgEq_{total}$) model. Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1, based on a \$260 per ounce gold price and \$4.50 per ounce silver price. Soluble gold ($Au_{soluble}$) grades were used because data for calculating a factored gold grade is insufficient at this time and further data collection is necessary. PAH notes that the use of the soluble gold ($Au_{soluble}$) grades results in a more conservative result.

Mount Diablo resources were classified based on a combination of the block distance to the closest composite value and the number of composite values used in the estimation of the block as shown in Table 16-1. Based on reviews of geologic sampling information and geostatistical data, PAH concurs with Snowden that this classification is reasonable and that it meets the definitions of measured, indicated, and inferred mineral resources as stated by National Instrument 43-101 and as defined by the CIM.

TABLE 16-1
Silver Standard Resources Inc.
Candelaria Project
Mount Diablo Resource Classification Basis

Classification	Distance Of Nearest Composite (feet)	Number Of Composites Used
Measured	0 – 25	> 5
Measured	25 – 50	> 10
Indicated	25 – 50	< 10
Indicated	50 – 125	5 – 30
Inferred	> 125	All

The Snowden resource estimate for the remaining Mount Diablo resource is summarized in Table 16-2. The resource includes all material in the model above a 0.5 ounce per ton (opt) soluble silver ($Ag_{soluble}$) and below the final pit limits from topography of May 1997, regardless of mineability. A soluble silver ($Ag_{soluble}$) cutoff grade was applied because of its historical usage for open-pit mining, rather than a factored total silver (Ag_{total}) cutoff grade, which PAH believes is acceptable. A constant density factor of 13.50 cubic feet per ton was applied based on historical usage for open-pit mining and historical density testing, the results of which are no longer readily available.

TABLE 16-2 Silver Standard Resources Inc. Candelaria Project Mount Diablo Deposit Resource						
Classification	Tons	CN Soluble Ag (opt)	CN Soluble Au (opt)	Factored Total Ag (opt Ag_{total})	Factored Total Ag Equivalent (opt $AgEq_{total}$)	Factored Total Ag Equivalent Ounces ($AgEq_{total}$)
Measured	3,391,000	2.54	0.004	4.44	4.67	15,838,000
Indicated	10,231,000	1.50	0.003	2.84	3.01	30,796,000
Subtotal M+I	13,623,000	1.76	0.003	3.23	3.42	46,633,000
Inferred	5,191,000	1.031	0.003	2.12	2.30	11,939,000

Note: 1) Resource estimated by Snowden (Snowden, May 10, 2001)
2) Resource for all material below the end of mine surface as of May 8, 1997.
3) Resource tabulated at a cutoff grade of 0.5 opt $Ag_{soluble}$.
4) Total silver grades factored from soluble silver grades using regression formula (Ag_{total}=1.536$Ag_{soluble)}$+0.5382) developed by Snowden.
5) Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1.

16.3 Northern Belle Deposit Resource

The remaining Northern Belle deposit consists of the down dip extension of the Pickhandle Gulch Thrust and related mineralization, where it continues to depth beyond the existing open-pit limits. In 1999, Snowden initially estimated a resource for the remaining deposit, which was updated in 2001 by Snowden. The current Snowden estimate revises the regression formula used to convert soluble silver ($Ag_{soluble}$) into total silver (Ag_{total}) and applies topography from the final pit configuration (May 1997 surface). PAH notes that this topography adequately covered the resource area, but did not cover the entire model area.

The Snowden resource model was based on sampling data from 226 drill holes undertaken by previous owners, with no new verification drilling by Silver Standard. PAH notes that some of these hole are duplicated for use in the Mount Diablo database. No current adjustments were made to the database and it remains as it was from the previous 1999 work by Snowden. The sample data was then composited into 5-foot lengths for the current effort. PAH's review of composite data found one high-grade outlier, which were addressed by Snowden during the subsequent grade estimation procedure.

Geologic solids models were originally constructed by Kinross and were modified slightly by Snowden. Five zones were defined, including upper undifferentiated hanging wall (overburden), higher grade, intermediate grade, lower grade, and lower undifferentiated material below the current pit topography. Complete details of the grade zones are no longer readily available from Kinross. Snowden used the zones to control the grade assignment during the grade estimation process. Block models were set up with block dimensions of 50- by 50-feet in plan and 20 feet in height. PAH finds that the grade zones are reasonable delineations of deposit trends; however, PAH believes that the block size is sufficiently large that appropriate geologic and grade resolution of the deposit is starting to be lost and recommends that a smaller block size be considered for future model revisions.

Multiple indicator kriging was used to interpolate the soluble silver ($Ag_{soluble}$) and soluble gold ($Au_{soluble}$) grades in the block model. The Northern Belle grade models for soluble silver ($Ag_{soluble}$) and soluble gold ($Au_{soluble}$) were constructed previously in 1999 by Snowden and were not changed for the current 2001 estimation. A lognormal short-cut technique was used, whereby the variogram sill values are converted from the log variograms while applying a 97.5^{th} percentile top-cut to the composite data. This, in effect, caps any high-grade outliers in the composite data to limit their effect on the model. The grade zones were used to control the grade assignment, with only composites of a specific grade zone used to estimate grade within the same grade zone in the model. The maximum search range used in the higher-grade zone was 85 feet, in the intermediate-grade zone it was 120 feet, in the lower-grade zone it was 140 feet, and in the lower undifferentiated material below the current pit topography (most significant for current estimate) it was 260 feet. From the review of the available geology and of the geostatistics for the Northern Belle deposit, PAH believes that some of these distances tend to be excessive. PAH found, however, that model blocks more than 300 feet from the nearest composite only constituted 3 percent of the total number of estimated blocks and were assigned to an inferred category, and as such PAH does not believe that this is an important issue. PAH reviewed the composite and model statistics and found them to be reasonable.

Snowden factored the soluble silver ($Ag_{soluble}$) model to create a total silver (Ag_{total}) model, since total silver (Ag_{total}) did not exist in the drill hole database for direct estimation. For the Northern Belle deposit, Snowden conducted a statistical analysis of historical daily mill head grades for which both cyanide soluble silver and total silver (fire assay) grades were measured to derive a regression formula for the factoring of the cyanide soluble silver to factored total silver. The silver regression used mill head analyses from March to May 1997, representing the last Kinross production from the bottom of the Northern Belle pit. This analysis resulted in the following formula for the deep Northern Belle mineralization: $Ag_{total} = 1.788\ Ag_{soluble} + 0.1677$. PAH reviewed the basis for this equation and found it to be reasonable. PAH notes, however, that the regression is based on limited sample grade data and concurs with Snowden's recommendation to collect and analyze additional data.

Snowden used both the factored total silver (Ag_{total}) model and the soluble gold ($Au_{soluble}$) model to create a factored total silver equivalent ($AgEq_{total}$) model. Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1, based on a \$260 per ounce gold price/\$4.50 per ounce silver price. Soluble gold ($Au_{soluble}$) grades were used because data for calculating a factored gold grade is insufficient at this time and further data collection is necessary. PAH notes that the use of the soluble gold ($Au_{soluble}$) grades results in a more conservative result.

Northern Belle resources were all classified as inferred due to the limited verification of previous samples, lack of current verification sampling, and lack of geologic information on the creation of the geologic model.

The Snowden resource estimate for the remaining Northern Belle resource is summarized in Table 16-3. The resource includes all material in the model above a 0.5 opt soluble silver ($Ag_{soluble}$) and below the final pit limits from topography of May 1997, regardless of mineability. A soluble silver ($Ag_{soluble}$) cutoff grade was applied because of its historical usage for open-pit mining, rather than a factored total silver (Ag_{total}) cutoff grade, which PAH believes is acceptable. A constant tonnage factor of 13.50 cubic feet per ton was applied based on historical usage for open pit mining and historical density testing, the results of which are no longer readily available.

TABLE 16-3
Silver Standard Resources Inc.
Candelaria Project
Northern Belle Deposit Resource

Classification	Tons	CN Soluble Ag (opt)	CN Soluble Au (opt)	Factored Total Ag (opt Ag_{total})	Factored Total Ag Equivalent (opt $AgEq_{total}$)	Factored Total Ag Equivalent Ounces ($AgEq_{total}$)
Inferred	9,162,000	1.17	0.002	2.26	2.37	21,714,000

Note: 1) Resource estimated by Snowden (Snowden, May 10, 2001)
2) Resource for all material below the end of mine surface as of May 8, 1997.
3) Resource tabulated at a cutoff grade of 0.5 opt $Ag_{soluble}$.
4) Total silver grades factored from soluble silver grades using regression formula (Ag_{total}=1.788$Ag_{soluble)}$+0.1677) developed by Snowden.
5) Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1.

16.4 Leach Pad Resource

Ore grade material from the open-pit mining of the Candelaria pits was placed on two large pads for the heap leaching of the silver mineralization. The Leach Pad 1 covers 136 acres and is located 300 feet to the northeast of the plant area, while Leach Pad 2 covers 70 acres and is located 1,100 feet to the northeast of the plant area. Ore placed on the heaps was above a variable cutoff grade that ranged between 0.5 to 0.65 opt equivalent $Ag_{soluble}$ (0.77 to 1.00 opt Ag_{total}) and was crushed to minus one inch, agglomerated, and preconditioned with caustic sodium cyanide solution prior to placement. Ore on the heaps was then subjected to downward percolating, weak, cyanide solutions that leached soluble silver minerals, but left insoluble silver minerals.

Leach Pad 1 was constructed from ore mined from 1980 to October 1990 (Oxymin and NERCO) and included material from the Lucky Hill and Mount Diablo pits, and minor production from the

Northern Belle pit. KCA (June 11, 1999) reported that production records indicated that a total of 24.6 million tons was placed on the heap that contained 63.4 million ounces of silver based upon total silver analysis (fire assay) and 37.9 million ounces of silver based upon soluble silver analysis (cyanide analysis). This data indicates that the average total silver grade was 2.57 opt Ag_{total} and that the average soluble silver grade was 1.54 opt $Ag_{soluble}$ for the material originally placed on this leach pad.

Leaching of Leach Pad 1 recovered a total of 32.6 million ounces of silver, through September 1996. This silver production indicates that 51.5 percent of the total silver content has been recovered by the heap leaching operation, while 86.2 percent of the soluble silver content has been recovered. KCA (June 11, 1999) believes that these results indicate that heap leachable silver recovery is probably complete for Leach Pad 1. The remaining insoluble silver mineralization would need to be processed in the future by a different process such as a mill.

Leach Pad 2 was constructed from ore mined from 1993 to May 1997 (Kinross) and included material from the production of the Northern Belle pit, with lesser material from Mount Diablo, and minor material from the "J", and Georgine pits. KCA (June 11, 1999) reported that production records indicate that a total of 12.7 million tons was placed on the heap that contained 30.3 million ounces of silver based upon total silver analysis (fire assay) and 18.0 million ounces of silver based upon soluble silver analysis (cyanide analysis). This data indicates that the average total silver grade was 2.39 opt Ag_{total} and that the average soluble silver grade was 1.42 opt $Ag_{soluble}$ for the material originally placed on this leach pad.

Leaching of Leach Pad 2 recovered a total of 12.9 million ounces of silver, through January 1999. This silver production indicates that 42.4 percent of the total silver content has been recovered by the heap leaching operation, while 71.3 percent of the soluble silver content has been recovered. KCA (June 11, 1999) believes that these results indicate that a minor amount of heap leachable silver remains in Leach Pad 2; however, the heap is in the process of being reclaimed. The remaining soluble and insoluble silver mineralization would need to be processed in the future by a different process such as a mill.

Based on the review of the leach pads conducted by KCA (June 11, 1999), PAH has tabulated the remaining silver resource contained in the leach pads. Table 16-4 summarizes this leach pad resource. Because of the limited degree of actual sampling of the heaps and the degree of calculation from production records for the leach pads, PAH considers these resources to be of an inferred confidence category. Gold content is assumed to be zero, a conservative assumption, due to the lack of gold data being reported by the KCA review.

TABLE 16-4
Silver Standard Resources Inc.
Candelaria Project
Leach Pad Resource (Inferred)

Leach Pad	Tons	Total Silver (opt Ag_{total})	Total Silver Ounces (Ag_{total})
Leach Pad 1	24,633,000	1.25	30,732,000
Leach Pad 2	12,695,000	1.37	17,446,000
Total	37,328,000	1.29	48,153,000

Note: 1) A silver equivalent grade and silver equivalent contained ounces were not estimated due to lack of gold data.

16.5 Low Grade Stockpile Resource

Sub-ore grade material from the open-pit mining of the Lucky Hill and Mount Diablo pit was placed in two known stockpiles during the period from the start of production in the late 1970s until the middle to late 1980s. This was done in the event that if silver prices increased then the stockpile material could be processed economically. This material remains in two stockpiles, the larger of which is referred to as the W3 Stockpile, located to the south of the Lucky Hill and Northern Belle pits, and the smaller W6 Stockpile, located to the east of the Mount Diablo pit. Pit material placed in the stockpiles ranged from a variable cutoff grade between 0.5 to 0.65 opt equivalent $Ag_{soluble}$ (0.77 to 1.00 opt Ag_{total}) down to 0.3 opt equivalent $Ag_{soluble}$ (0.45 opt Ag_{total}).

Data and documentation concerning the stockpiled material is limited and incomplete. Kinross conducted a preliminary evaluation of the stockpile from maps, memos, and verbal discussion (Hughes, November 29, 1994). Kinross estimated stockpile tons by evaluating the as-built volumes and applying a tonnage factor of 1.65 tons per cubic yard. One of the stockpiles was drilled in 1983 using reverse circulation drilling and established that stockpile grades were 30 percent higher than production records indicated, which was believed to be due to imperfect ore control practices that resulted in some ore being lost into the low grade stockpiles. Stockpile grades were estimated by Kinross (Hughes, November 29, 1994) to be approximately 0.45 opt $Ag_{soluble}$. In order to convert soluble silver grade to total silver grade, PAH has applied a factor (1 opt $Ag_{soluble}$ = 1.673 opt Ag_{total}) based on information that KCA (June 11, 1999) derived for the Leach Pad 1 that was built at the same time as the stockpiles. The stockpile resource is summarized in Table 16-5. Because of the limited and incomplete nature of the data on the low grade stockpiles, PAH considers these resources to be of an inferred confidence category. Gold content is assumed to be zero, a conservative assumption, due to lack of gold data being reported by Kinross.

TABLE 16-5
Silver Standard Resources Inc.
Candelaria Project
Stockpile Resource (Inferred)

Stockpile	Tons	Factored Total Silver (opt Ag_{total})	Total Silver Ounces (Ag_{total})
W3	2,500,000	0.75	1,875,000
W6	1,500,000	0.75	1,125,000
Total	4,000,000	0.75	3,000,000

Note: 1) A silver equivalent grade and silver equivalent contained ounces were not estimated due to lack of gold data.

16.6 Resource Summary

The Candelaria resource includes the remaining down-dip mineral resources for both the Mount Diablo and Northern Belle deposits, the remaining resources in two leach pads, and resource contained in two low grade stockpiles. The Candelaria property contains a measured and indicated resource of 13.6 million tons averaging 3.23 opt Ag_{total} and 0.003 opt $Au_{soluble}$, for 44.1 million ounces of silver or 46.6 million ounces of silver equivalent. Additionally, there is an inferred resource of 55.7 million tons averaging 1.49 opt Ag_{total} and 0.002 opt $Au_{soluble}$, for 82.3 million ounces of silver or 84.8 million ounces of silver equivalent. The total resource is summarized in Table 16-6.

TABLE 16-6
Silver Standard Resources Inc.
Candelaria Project
Total Candelaria Resource

Area/Type	Classification	Tons	Factored Ag Grade (opt Ag_{total})	Sol. Au Grade (opt $Au_{soluble}$)	AgEq Grade (opt $AgEq_{total}$)	Ag Ounces (Ag_{total})	Ag Equiv. Ounces ($AgEq_{total}$)
Mount Diablo	Measured	3,391,000	4.44	0.004	4.67	15,054,000	15,838,000
	Indicated	10,231,185	2.84	0.003	3.01	29,005,000	30,796,000
	Subtot. M+Ind	13,623,000	3.23	0.003	3.42	44,060,000	46,633,000
Mount Diablo	Inferred	5,191,000	2.12	0.003	2.30	11,015,000	11,939,000
Northern Belle		9,162,000	2.26	0.002	2.37	20,661,000	21,714,000
Leach Pads		37,328,000	1.29	---	1.29	48,153,000	48,153,000
L.G. Stockpiles		4,000,000	0.75	---	0.75	3,000,000	3,000,000
	Subtot. Inf.	55,681,000	1.49	0.002	1.52	82,829,000	84,806,000

Note 1) Lode resources tabulated at a 0.5 opt $Ag_{soluble}$ cutoff grades, with only Ag_{total} shown in this table.
2) Leach pads and low grade stockpile resources tabulated for entire accumulation of material.
3) Total silver grades factored from soluble silver grades using regression formulas developed by Snowden.
4) Silver equivalent grade includes the contribution from the gold grade (soluble) using an Ag:Au equivalency ratio of 57.8:1.

PAH finds that the exploration sampling, sample analysis, and database construction for the Candelaria Project resources were generally conducted in a reasonable manner according to industry standard practices. As a result, PAH believes that the results provide an adequate database on which to base resource estimation. PAH finds that the resource estimates were prepared using standard engineering methods and provides an acceptable representation of the silver mineralization in the various resource areas. PAH believes that the classification of the lode resources meets the standards of NI 43-101 and the definitions of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM).

16.7 Mineable Reserves

As of the date of this report, there are no estimated mineable reserves for the Candelaria silver project. The estimation of reserves will require the development of mining and metallurgical parameters and costs appropriate for the project.

17.0 OTHER RELEVANT DATA AND INFORMATION

Numerous reports and information exist for the Candelaria project, many from the development and operation of the open-pit and heap-leach facility from 1980 to 1997, others dating back to earlier underground activity of the late 1800s and early 1900s. As a result of the closure of the mining operation by Kinross, and the release of mine personnel familiar with the deposits, there has been a loss of information regarding the project. Information relevant to the current resources pertains to the down-dip zones of both the Lower Candelaria Shear and the Pickhandle Gulch Thrust. PAH has reviewed as many relevant documents related to these resource areas as were readily available and these are listed in the references section of this report.

18.0 INTERPRETATION AND CONCLUSIONS

Silver Standard is currently in the process of purchasing the Candelaria Property from Kinross Gold Corporation (Kinross) and has recently notified Kinross of its intention to exercise its option to purchase the property, with a closing date before the end of May 2001. The property was mined by underground methods during the late 1800s and early 1900s, and was mined by open-pit methods from 1980 to 1997 and is now in the process of reclamation from the most recent mining activities. As a result of these operations there is good project infrastructure. In addition, many of the operational permits are transferable to Silver Standard, with the exception of the air quality permit and artificial pond permit, and new applications must be made by Silver Standard.

The deposits of the Candelaria Mining District host epigenetic silver mineralization of early Cretaceous age, with quartz stockwork mineralization occurring in faulted and sheared zones related to regional thrusting. Pre-mineral thrusts and thrust related structures of the Lower Candelaria Shear and Pickhandle Gulch Thrust provided ground preparation for the introduction of hydrothermal fluids. The Candelaria project was explored and open-pit mined for much of the last 25 years by a succession of mining companies. The sampling procedures, sample preparation, and analysis have been reported to have been conducted consistently through the years and follow standard engineering practices.

The northward dipping Mount Diablo and Northern Belle mineralized zones continue at depth beyond the margins of the current pit limits. Estimates of the remaining down-dip mineral resources have been determined for both the Mount Diablo and Northern Belle deposits by Snowden. In addition, resources have been estimated for two heap-leach pads and two low-grade stockpiles by KCA and Kinross, respectively, with modifications by PAH. The Candelaria property is estimated to contain a measured and indicated resource of 13.6 million tons averaging 3.23 opt Ag_{total} and 0.003 opt $Au_{soluble}$, for 44.1 million ounces of silver or 46.6 million ounces of silver equivalent. Additionally, there is an inferred resource of 55.7 million tons averaging 1.49 opt Ag_{total} and 0.002

opt $Au_{soluble}$, for 82.3 million ounces of silver or 84.8 million ounces of silver equivalent. PAH believes that additional exploration potential exists outside of these resource areas in the Candelaria District.

PAH finds that the exploration sampling, sample analysis, and database construction for the Candelaria Project resources were generally conducted in a reasonable manner according to industry standard practices. As a result, PAH believes that the results provide an adequate database on which to base resource estimation. PAH finds that the resource estimates were prepared using standard engineering methods and provide an acceptable representation of the silver mineralization in the various resource areas. PAH believes that the classification of the lode resources meets the standards of NI 43-101 and the definitions of the Canadian Institute Of Mining, Metallurgy and Petroleum (CIM).

As of the date of this report, there are no estimated mineable reserves for the Candelaria silver project. The estimation of reserves will require the development of mining and metallurgical parameters and costs appropriate for the project.

19.0 RECOMMENDATIONS

Since the initial feasibility study, resource and reserve estimates for Candelaria have been estimated based on leachable silver grades obtained from hot cyanide leach methods, since the previous open-pit operation's focus for processing was on heap leaching the silver. Silver Standard may use other processing methods and as a result has prepared resource estimates based on factored total silver grades and factored total silver equivalent grades. PAH concurs with Snowden's recommendation that additional data be collected to support the factoring of the total silver grades from the soluble silver grades.

A constant tonnage factor of 13.50 cubic feet per ton was applied based on historical usage for open pit mining and historical density testing. Mine production reconciliation indicates this factor has been appropriate for oxidized material closer to the surface. Limited new density information from Mount Diablo suggests that the deeper mixed oxide/sulfide and sulfide material is more dense and that a tonnage factor may actually be on the order of 12.0 to 12.5-cubic-feet-per-ton, which if verified, could result in a 10 percent increase in estimated resource tons. PAH concurs with Snowden's recommendation for further density test work of deep mineralized material.

Pending the successful purchase of the property from Kinross before the end of May 2001, Silver Standard plans to hold the Candelaria property on a care and maintenance basis pending upward changes in the silver price. Until that time Silver Standard has no immediate plans for further exploration and evaluation of the resources. No explorations costs are expected at this time.

20.0 REFERENCES

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21.0 ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

The Candelaria project does not contain any mineable reserves at this time and is not currently in production or being developed for production in the immediate future. Pending the successful completion of further exploration and evaluation, the project could be considered for development. At this point in time, however, these additional requirements are not relevant to this project.

22.0 ILLUSTRATIONS

Illustrations have been included in the sections in which they were referenced. No other illustrations are presented in this section.

23.0 CERTIFICATE OF QUALIFICATION

Mark G. Stevens, P.G.
274 Union Blvd., Suite 200
Lakewood, Colorado, USA
Phone: 303-986-6950
Fax: 303-297-8907

CERTIFICATE OF AUTHOR

I, Mark G. Stevens, P.G., am a Professional Geoscientist and Principal Geologist for Pincock, Allen & Holt of 274 Union Blvd., Suite 200, Lakewood, Colorado, USA.

I am:

1. A Professional Geologist (PG-651) in the state of Wyoming, USA, a member of the American Institute Of Professional Geologists (CPG-08388), a member of the American Institute Of Mining, Metallurgical, and Petroleum Engineers, Inc. (SME), and a member of the Society Of Economic Geologists (SEG).

2. I graduated from Colorado State University with a Bachelor of Science degree in geology in 1977 and subsequently obtained a Master of Science degree in geology from the University of Utah 1981, and I have practiced my profession continuously since 1981.

3. Since 1981, I have been involved in mineral exploration and evaluation of mineral properties for gold, silver, copper, lead, zinc; in the United States, Canada, Mexico, Costa Rica, Panama, Peru, Chile, Spain, Sweden, Portugal, Kazakhstan, Russia, and Australia.

4. As a result of my experience and qualification I am a Qualified Person as defined in N.P. 43-101.

5. I am presently a Consulting Geologist with the international resource and mining consulting company of Pincock, Allen & Holt, and have been so since March 1988.

6. From January 23, 2001 to January 25, 2001, I visited the Candelaria Project of Kinross Gold Corporation (for which Silver Standard has an option to purchase), located in the Candelaria Mining District of Mineral and Esmeralda Counties, Nevada, USA; for the purposes of observing site layout and infrastructure, examining the deposit geology, inspecting exploration drilling locations, reviewing available exploration and resource information and data.

7. This report was prepared under my direct supervision in consultation with technical specialists who are Qualified Persons who have not visited the project site.

8. One of the Qualified Persons is Robert L. Sandefur, P.E., a geostatistician who graduated with a B.S. from the Colorado School of Mines in 1966 and a M.S. from the Colorado

School of Mines in 1972. Mr. Sandefur is a member of the American Institute Of Mining, Metallurgical, and Petroleum Engineers, Inc. (SME), International Association of Mathematical Geologists, and a registered professional engineer in the state of Colorado. Mr. Sandefur has over 31 years of experience in geologic and mining data handling and evaluation.

9. Some of the information respecting resources or information contained in the report was obtained at the project site from Kinross Gold Corporation's site representatives, C. R. Schultz, Project Reclamation Superintendent, and Rick Hamrey, Lab Supervisor. Additional information was obtained from Kinross Gold Corporation's Salt Lake City representatives, Ryan Mc Dermott, Technical Services Group. Resource estimates were provided by Snowden Geological And Mining Consultants. Silver Standard has provided miscellaneous information and data. The sources of all information not based on personal examination are quoted in the report. The information provided by the various parties is to the best of my knowledge and experience correct.

10. In the disclosure of information relating to permitting, legal, title, action and related issues I have relied on general information provided to me by independent consultant R. T. Kemp of Vancouver, B.C. in a report (not a legal review) dated March, 2000. The author disclaims responsibility for such information.

11. In the disclosure of environmental and related issues I have relied on information provided to me by the consulting economists firm of Resource Concepts, Inc. of Vancouver, B.C. in a report dated May 31, 2000. The author disclaims responsibility for such information.

12. I am not aware of any material fact or material change with respect to the subject matter of this technical report which is not reflected in this report, the omission to disclose which would make this report misleading.

13. I am independent of Silver Standard Resources Inc. in accordance with the application of Section 1.5 of National Instrument 43-101.

14. I have not previously examined the Candelaria Project.

15. I have read National Instrument 43-101, Form 43-101FI and this report has been prepared in compliance with NI 43-101 and Form 43-101FI.

Dated at Denver, Colorado, this 24th day of May 2001.

____

Mark G. Stevens
Pincock, Allen & Holt
May 24, 2001