RESOURCE ESTIMATE FOR THE BLUE MOON MASSIVE SULPHIDE OCCURRENCE

Township 4 South, Range 16 East MDB&M
Mariposa County, California

Latitude: 37º34'N **Longitude: 120º15'W**

Submitted to:
Blue Moon Zinc Corp
1040 West Georgia - 15th Floor
Vancouver, BC V6E 4H1

5 October 2017 and Amended on November 14, 2018

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1.0 SUMMARY

The authors were retained by Mr. Patrick McGrath, President and CEO of Blue Moon Zinc Corp. to prepare a Technical Report on the Blue Moon deposit in California. The purpose of this report is to provide updated resource and current NI 43-101 technical report for Blue Moon Zinc Corp. (previously named Savant Explorations Ltd.) This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. Lawrence J. O'Connor of Reno, Nevada carried out three separate on-site examinations of the property between June 6th through the 8th, on July 25th and 26th, and from September 19th through 21st, 2017. While no additional drilling has been completed since the 2008 Resource estimate, author Gary Giroux has updated the resource using current metal prices and new CIM (2014) classification definitions.

The Blue Moon property hosts a polymetallic volcanogenic massive sulphide (VMS) deposit located in central California approximately 22 miles northeast of Merced and 120 miles east, southeast of San Francisco.

The Blue Moon deposit hosts an inferred resource of 7.8 million tons grading 4.95% Zn, 0.46% Cu, 0.29% Pb, 1.33 oz/ton Ag, and 0.04 oz/ton Au (8.1% ZnEq) within the mineralized zones and using a ZnEq cut-off of 4%. The resource estimate is shown below. See also Section 14, Mineral Resource Estimate for additional detail.

Table 1-1 Blue Moon Mineralized Portion of Blocks - Classified Inferred

Cut-Off ZnEq (%)	Tons > Cut-Off (tons)	Grade > Cut-Off						Contained Metal				
		Zn (%)	Cu (%)	Ag (oz/t)	Au (oz/t)	Pb (%)	ZnEq (%)	Mlbs Zn	Mlbs Cu	Mlbs Pb	Mozs Ag	Mozs Au
1.0	18,350,000	2.80	0.29	0.74	0.02	0.17	4.64	1028.33	105.70	61.66	13.56	0.367
2.0	13,060,000	3.60	0.34	0.97	0.03	0.22	5.93	939.54	89.85	56.16	12.72	0.353
3.0	9,380,000	4.44	0.41	1.21	0.03	0.27	7.29	833.13	77.67	50.28	11.34	0.310
4.0	**7,790,000**	**4.95**	**0.46**	**1.33**	**0.04**	**0.29**	**8.07**	**771.21**	**70.89**	**45.81**	**10.39**	**0.280**
5.0	6,490,000	5.44	0.50	1.44	0.04	0.32	8.79	706.63	64.25	41.28	9.35	0.247
6.0	5,330,000	5.95	0.53	1.54	0.04	0.34	9.51	634.70	56.50	36.35	8.19	0.213
7.0	4,200,000	6.54	0.57	1.63	0.04	0.36	10.33	549.19	47.96	30.41	6.83	0.176
8.0	3,090,000	7.21	0.63	1.78	0.05	0.38	11.34	445.52	38.75	23.67	5.51	0.142

The Blue Moon property is controlled by Blue Moon Zinc Corp. through its wholly owned subsidiary, Keystone Mines Inc., an Idaho Corporation. The property consists of three distinct land tenure components that cover approximately 445 acres, including:

1) Three patented mineral claims (American Eagle, Blue Bell, and Bonanza) owned 100% by Keystone Mines Inc.
2) Eight Federal Lode claims (Red Cloud 1-8) held 100% by Keystone Mines Inc. and subject to two 1% NSR agreements with private individuals, both capped at US$700,000.
3) 100% interest in the mineral rights from two Spanish Land Grants of the James Gann Jr. Trust of 1991, now owned by Keystone Mines Inc. in conjunction with a surface rights lease agreement, pursuant to an option purchase agreement completed in 2001 for US$300,000.

The Blue Moon deposit is one of numerous similar deposits and occurrences known to exist in the Foothills Massive Sulphide Belt along the eastern side of the Sierra Nevada Mountains of California. The property has a long history of exploration and saw small-scale mining during

World War II. Exploration, using modern models for genesis and controls of such deposits, during the 1980's and 1990's, led to an economic scoping study which indicated that additional drilling would be required so that a feasibility study can be completed. Previous exploration has defined numerous exploration targets, both as downward extensions of the Blue Moon deposit and along strike of the deposit within the favourable felsic volcanic rocks.

The main priority exploration target is the down dip continuation of the Blue Moon mineralization. Drilling is warranted to test for the continuation of the thin high-grade massive sulphide mineralization forming the East lens defined by holes CH-13, 14, 32, 56, and 58. The high gold and Zn/Zn + Cu and Pb/Zn + Pb ratios are suggestive that this mineralization occurs at the edge of a massive sulphide lens. The 690 feet long plunge length defined thus far in these drillholes is positive. The shaft pilot hole on section 8000N is well located to serve as a "mother" hole from which a series of fan holes could be completed to test this target.

The second high priority exploration target has been defined in the location of drillhole B 70, south of the American Eagle Zone. This target flanks a large domal thickening of aphyric rhyolite in a position similar to the location of the West and Main zones of the Blue Moon deposit. The extent of alteration and mineralization suggests a large mineralizing system in this area. Of particular interest is an 800 foot long coincident gold, zinc and copper anomaly covering the exhalite horizon south of the mineralized bodies which is untested by drilling. The anomaly is defined by values greater than 50 ppb gold, 256 ppm zinc and 100 ppm copper. This geochemical anomaly is also a coincident induced polarization chargeability anomaly as defined by greater than 15 milliseconds. The potential exists to expand the current resources.

The author completed three separate site visits during the summer of 2017 to confirm a variety of details and data relevant to the project as stipulated in previous reports. The visits included reviewing county assessor files and the U.S. Bureau of Land Management (BLM) land files for ownership verification, pulling drill core samples for review, verifying drill logs correspond with core runs, cross checking assay certificates with core, field checking of drill site locations with collar coordinates and visiting mineralized exposures in the Blue Moon, American Eagle, and the Lone Oak areas.

Given the advanced stage of this project, it is reasonable to carry out a preliminary economic assessment study to update the existing economic potential of the deposit.

It is recommended that at least two areas be further drilled to add to the potential resource on the property. These priority areas include the East zone extension and the B-70 target area which is located south and down dip of the well-defined resources. It is concluded that more drilling is required to increase the confidence in the Inferred Mineral Resources. The mineralized system remains open at depth and will require additional definition drilling.

An exploration program, consisting of 15 diamond drillholes for a total 17,200 feet is recommended. Inclusive of a contingency, preliminary geotechnical work, ARD studies, and metallurgical test work, the exploration program could cost approximately US$2,000,000.

2.0 INTRODUCTION

Blue Moon Zinc Corp. (BMZ), the successor in name to Savant Exploration Ltd. (Savant), holds the mineral rights to the Blue Moon massive sulphide occurrence in central California through its wholly owned subsidiary, Keystone Mines Inc.

Moose Mountain Technical Services (MMTS) completed a Resource estimation for the property in January 2008 (Morris and Giroux, 2008). The authors were retained by BMZ to update this report to be compliant with current regulations. No additional drilling has been completed since 2008.

BMZ has consolidated the exploration information for the property from previous owners and participants including Hecla Mining Co., Colony Pacific, Westmin, and Lac Minerals. BMZ has yet to conduct any exploration on the property.

Mr. Lawrence J. O'Connor conducted three site visits and made a detailed examination of the property on June 6th through June 8th, on July 25th and 26th, and on September 19th through 21st, 2017. During the site visits, sufficient opportunity was available to examine drill core from previous programs as well as conduct a general overview of the property including view selected drill sites and the condition of existing project infrastructure. Based on his experience, qualifications and review of the site and resulting data, the author, Mr. O'Connor, is of the opinion that the programs have been conducted in a professional manner and the quality and quantity of data and information produced from the efforts meet or exceed acceptable industry standards of that time. It is also believed that for the most part, the work has been directed or supervised by individuals who would fit the definition of Qualified Persons in their particular areas of responsibility as set out by the Instrument.

Much of the data has undergone thorough scrutiny by BMZ staff as well as certain data verification procedures by MMTS, see Data Verification, Item 12.

Sources of information are listed in the references, Item 27.

3.0 RELIANCE ON OTHER EXPERTS

The authors, not experts in legal matters, are required by NI 43-101 to include a description of the property title, terms of legal agreements and related information in Section 4.2 of this report. The authors have relied on property agreement information provided by Blue Moon and claim information from the U.S. BLM records and Mariposa County Assessor files to provide summaries of title, ownership and related information. A careful review of the Blue Moon claim title information was conducted by the authors during May of 2017 via examination of Mariposa County assessor files. The results of this review are discussed in Section 4.2 of this report. An independent verification of land title and tenure was not performed and as such this report does not represent a legal title opinion. This report has been prepared on the understanding that the property is, or will be, lawfully accessible for evaluation, development, mining, and processing.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Blue Moon project is located in eastern, central California along the eastern foothills of the Sierra Nevada Mountains. It is located at latitude 37°33'55 "N and longitude 120°15'22"W, approximately 120 miles south-southeast of San Francisco. The project is in Mariposa County, California and is situated within Township 4 South, Range 16 East (T4S, R16E), sections 19 and 30, as referenced to the Mount Diablo meridian and baseline of Public Land Survey System (PLSS). The historic and collapsed Blue Moon mine workings are denoted on the *Merced Falls* 7.5 minute USGS topographic map by two shaft symbols plotted in the SE corner of section 19.

The town of Mariposa is located sixteen miles east of the project, is the county seat, has a population of around 2,000 and a tourist based economy relying heavily on visitors to nearby Yosemite National Park. The town of Merced, with a population of around 80,000 inhabitants, is twenty two miles to the southwest of Blue Moon and has a diverse economy related to large scale agriculture and is home to University of California Merced. The local community of Hornitos with a population of about 75 and minimal services is situated about four miles south of the project.

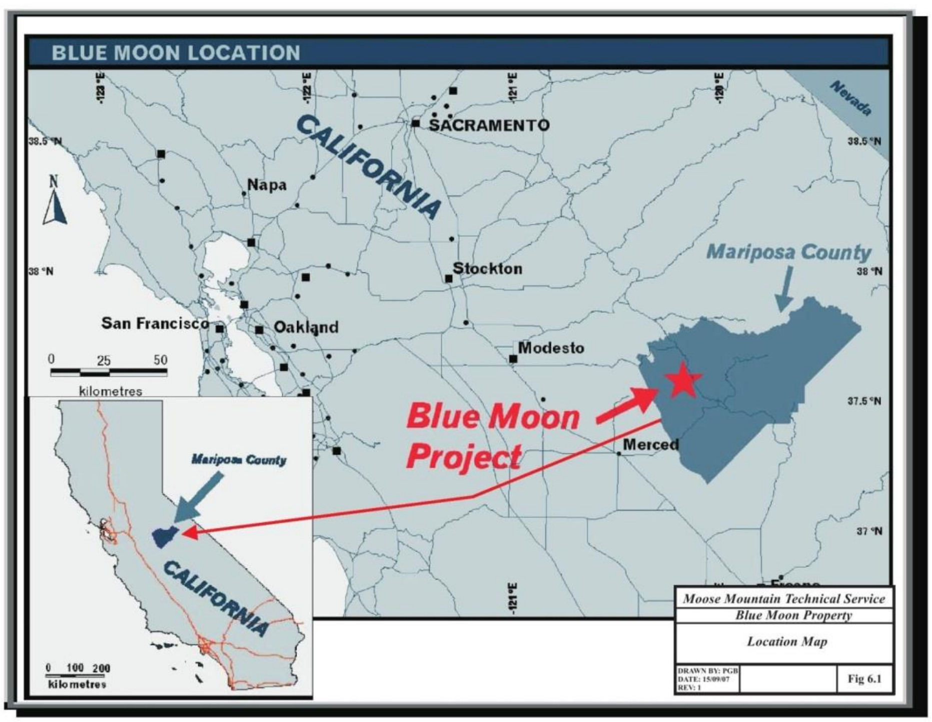

Figure 4-1 Location Map

4.2 Property Description and Mineral Tenure

The property was previously owned by Westmin Mines, Inc., an Idaho corporation and subsidiary of Westmin Resources, Inc. On September 12, 2002, Westmin Resources was acquired by Expatriate Resources Ltd., now Yukon Zinc Corporation. The acquisition was subject to a purchase agreement with Boliden Westmin (Canada) Limited, whereby Expatriate acquired 100% interest in Westmin Resources, Inc. in return for the issuance of 3 million common shares and the granting of a 0.5% net smelter return royalty capped at US$500,000 to Boliden Westmin. The subsidiary Westmin Mines, Inc. changed names to Keystone Mines, Inc, on October 25, 2002. In 2004, Expatriate transferred Keystone to Pacifica Resources Ltd., now ScoZinc Mining Ltd., through a Plan of Arrangement. Subsequently, in 2007, Pacifica through a Plan of Arrangement, transferred Keystone to Savant Explorations Ltd. Savant Explorations Ltd. changed names to Blue Moon Zinc Corp. on June 5, 2017. Currently the Blue Moon property is controlled by Blue Moon Zinc Corp. through its 100% ownership of the US subsidiary Keystone Mines, Inc., an Idaho Corporation. In 2017 Northern Empire Resources Corp. (NM) through an agreement with Imperial Metals Corporation, acquired a 10% net profits interest (NPI) in the Blue Moon project through the takeover of Imperial's Sterling Mines subsidiary. The NPI is only to be paid after deducting all operating expenses, all pre-production expenditures dating back to May 14, 1996 and all post-production expenditures. A finance charge of Prime plus one-half of one percent is also to be deducted before any NPI is paid. The NPI was repurchased and extinguished by Keystones Mines Inc. in January 2108 through the issuance of 3 million Blue Moon Zinc Corp. common shares and the payment of $20,000 cash to NM.

The Blue Moon property consists of three distinct land tenure components that cover 445 acres. These include:

1. Three deeded, patented mineral claims (American Eagle, Blue Bell, and Bonanza) owned 100% by Keystone Mines Inc, the company's wholly owned U.S. subsidiary.

2. Eight Federal Lode claims (Red Cloud 1-8) held 100% by Keystone Mines Inc and subject to two 1% NSR agreements with private individuals, both capped at US$700,000.

3. 100% interest in the mineral rights from two Spanish Land Grants of the James Gann Jr. Trust of 1991, now owned by Keystone Mines Inc. in conjunction with a surface rights lease agreement, pursuant to an option purchase agreement completed in 2001 for US$300,000.

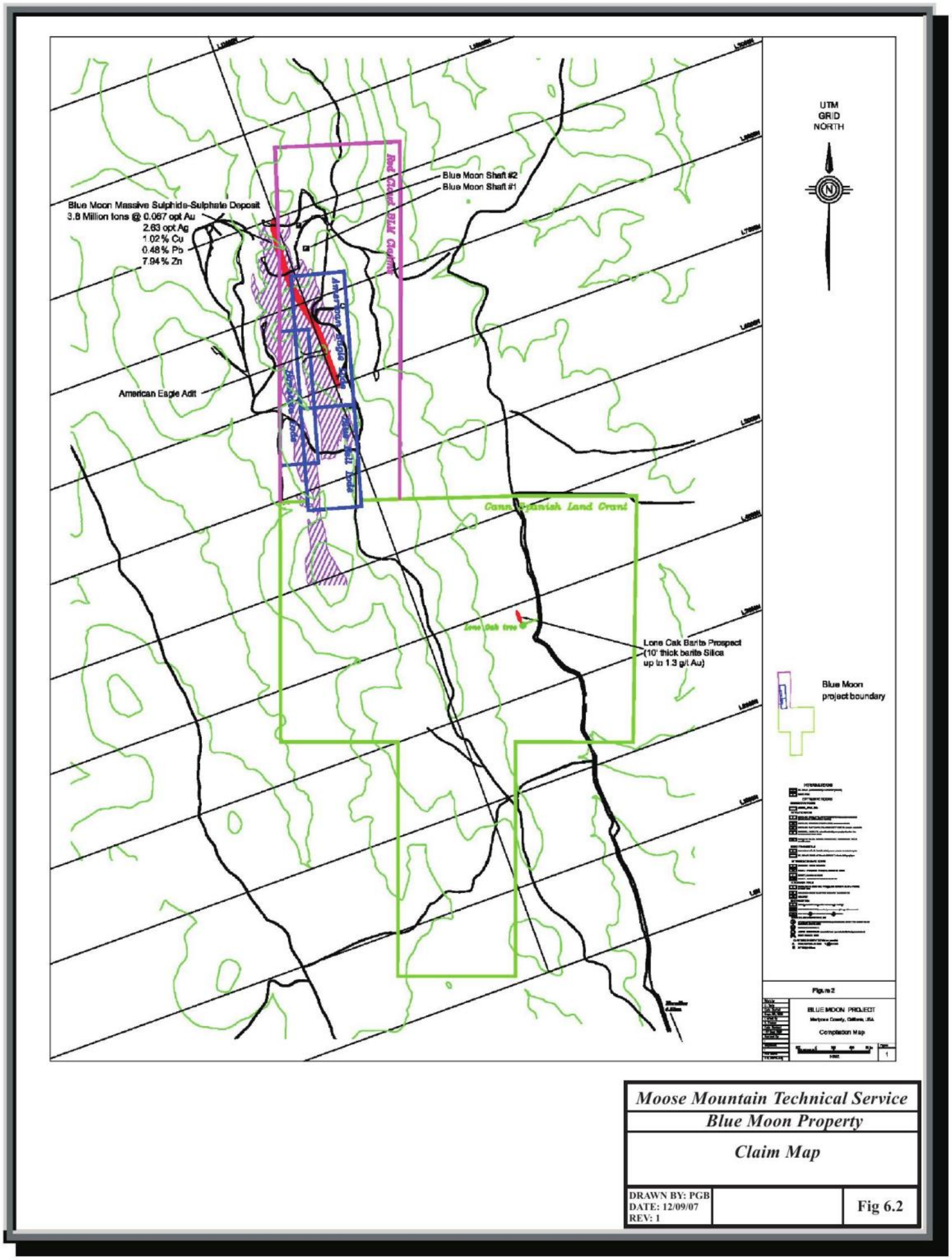

Figure 4-2 Claim Map

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

The Blue Moon property is located 22 miles northeast of Merced, California, and approximately 120 miles east-southeast of San Francisco, California.

Access to the Blue Moon project is via California County Route J16 also known as Hornitos Rd. and Bear Valley Rd. The road is a paved secondary highway between the communities of Hornitos and Bear Valley. Two miles north of Hornitos, at the intersection of J16 and Exchequer Rd., the project access consists of three miles of gravel roads consisting of county right-of-way across open, private ranch lands and BLM Federally managed ground.

5.2 Topography, Elevation and Vegetation

The Blue Moon project is located in the lower foothills of the western Sierra Nevada. The mineralized property generally coincides with and lies along a broad, prominent northwest trending ridgeline known as Bullion Hill. Elevations on the project site are between 1,420 feet and 1,180 feet above mean sea level. Lands falling away to the east and west are open, rolling hills covered with tall grasses and sparsely scattered oak trees with some pines. Drainage to the east and south is into Hornitos Creek and the San Joaquin river; to the east and north into Lake McClure behind the Exchequer dam on the Merced river; to the west into Lake Mcswain below Exchequer dam on the Merced River.

Photo 5-1 View from north side of project, looking north toward Bullion Hill.

Photo 5-2 View from south side of project looking southeast towards Lone Oak prospect.

5.3 Climate

The average yearly temperature for Hornitos, three miles south of the Blue Moon property, is 61° with an average maximum temperature of 100° in July and an average minimum of 34° in December and January. The average yearly precipitation for the area is approximately 19 inches with a high of 13.5 inches between December and the end of March, and a low of 0.5 inches in July and August. Precipitation generally comes as gentle falls rains between October and January and as occasional heavy downpours sometimes causing local flash flooding and small landslides or slumps. Rare occasional trace of snow can occur in winter. Summers are hot and dry.

5.4 Infrastructure

There are no services available at the project site. Electricity must be generated locally by diesel generators.

A small storage facility is in place on the site consisting of four steel, lockable, conex-type shipping containers used for core storage and temporary office space, and 400 linear feet of outdoor, steel core racks under corrugated, steel roofing.

Necessary additional rental equipment to adequately supply and support drilling campaigns has proven to be readily available nearby. Any future potential development beyond exploratory drilling will require additional infrastructure needs analyses.

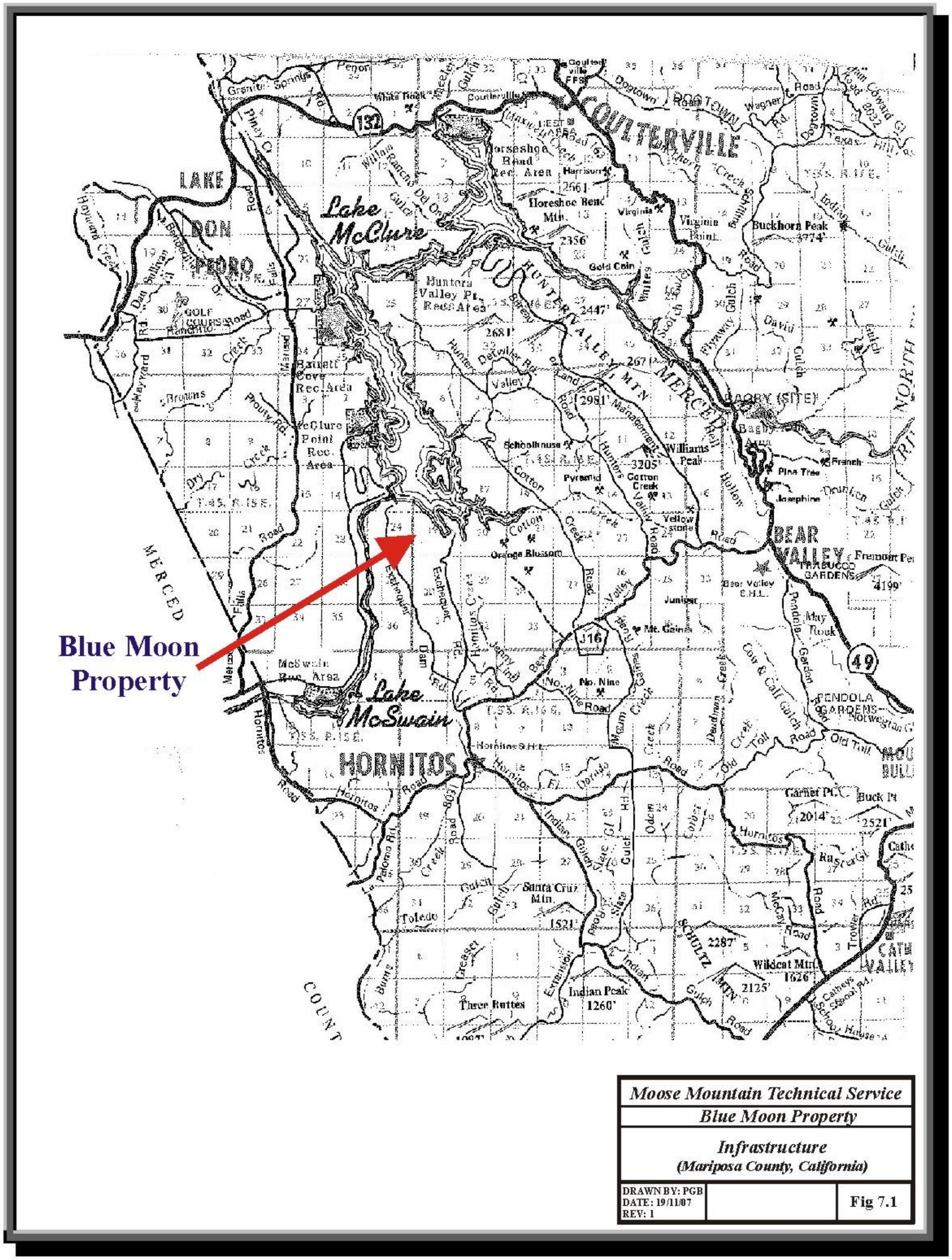

Figure 5-1 Infrastructure

6.0 HISTORY

The Blue Moon property, originally prospected in the 1930's experienced a small amount of mining for zinc during WWII. Hecla Mining Co. abandoned the mine in 1945 due to caving. The hiatus in activity following the cessation of mining on the Blue Moon deposit was broken when Amselco acquired the property and conducted soil geochemical and electromagnetic surveys and 4,161 feet of percussion drilling between 1976 and 1979. Between 1981 and 1984 Colony Pacific Explorations Ltd. conducted geological mapping, soil geochemical sampling, induced polarization and down hole EM geophysical surveys, and 33,385 feet of diamond drilling. This drilling was focused on testing the down dip extension of the mine area. Mr. Thomas Evans supervised this work and defines the steep plunge of the lenses to the south.

American Mine Services optioned the property from Colony Pacific in 1983 and calculated a geological and mineable reserve, as per 1983 criterions, as well as undertaking preliminary metallurgical studies, mine engineering and design studies and site facilities planning but subsequently defaulted on their option agreement in 1983. Westmin Resources Limited concluded an option on the property and conducted several exploration programs in the period 1984-1988 and completed 56,853 feet of diamond drilling expanding the resource base of the deposit and discovering the American Eagle lens and East lenses. The exploration work included recalculation of the mineral resource, and commencing engineering studies and conducting metallurgical, hydrological, and environmental baseline studies. In October 1987 Westmin terminated its option and converted its interest into an equity position in Colony. Colony Pacific continued with permitting of an underground exploration permit and made application for a permit for the underground development and exploration program.

More than $5 million in exploration was completed in the period (Thompson, 1995).

- In 1991 Lac Minerals optioned the property from Colony Pacific and carried out 19,654 feet of drilling in 15 holes. Lac also completed soil and rock geochemical surveys, and HLEM and magnetic surveys. Westmin re-acquired the property in May 1996 at a cost of $1.45M.

Following the repurchase in May of 1996, Westmin resumed evaluation of the development of the Blue Moon property, however as budgetary priorities were being focused on the company's discovery at the Wolverine deposit in the Yukon, exploration and development efforts were diverted away from Blue Moon. In February 1998, Westmin granted Augusta Metals Corporation an option on the Blue Moon property. Augusta, completed 2,470 feet of drilling in five holes on the Lone Oak barite-gold prospect southeast of the main VMS zone. Subsequently Augusta failed to fulfill its work commitments and the option was forfeited during 2000. The property has been dormant since that time.

Table 6-1 Summary of Blue Moon Property Ownership

Year	Owner&/or Operator
1890-1935	Local people (American Eagle claims)
1942	Red Cloud Mines
1943-1945	Hecla Mining Company
1976	Tom Evans & Norm Stevens (staked Red Cloud Claims)
1976	Amselco
1980	Denis Baxter
1981	Quail Hill Mining Corp. (wholly owned by Colony Pacific); Quail Hill also optioned American Eagle from J. Gann
1982	Quail Hill (Colony Pacific) optioned Gann Spanish Land Grant
1983	American Mine Services
1985	Westmin Resources, Inc. acquires an option on Porath-Cox property (north of Red Crow claims)
1984-1987	Westmin
1987-1990	Westmin/Colony Pacific joint venture
1990-1991	Lac Minerals, USA option agreement with Colony Pacific
1992	Quail Hill (Colony) acquires 100% interest in Red Cloud claims
1996	Westmin acquires 100% ownership from Colony Pacific Explorations Ltd.
1998	Boliden Limited acquires Westmin
1999-2001	Augusta Metals Incorporated acquires an option to earn a 70% interest in the property
2002	Expatriate Resources Ltd. purchases 100% interest in Westmin from Boliden
2004	Expatriate Resources Ltd. transferred ownership from Keystone Mines, Inc. to Pacifica Resources Ltd.
2007	Pacifica Resources Ltd. transferred Keystone Mines, Inc. to Savant Explorations Ltd.
2017	Savant Explorations Ltd. renamed Blue Moon Zinc Corp.
2018	Blue Moon Zinc Corp. buys back 10% NPI

Table 6-2 Summary of Previous Work, Blue Moon Property

Year	Work Completed	Claim	Operator
1890-1899	Prospecting, 950 feet of underground development and limited gold production	American Eagle	Local people
1930-1935	Prospecting, underground development, small tonnage of gold-silver-copper ore mined	Blue Moon	Local people
1942	11 surface and underground diamond drill holes (4,516.5 ft.)	Blue Moon	Red Cloud Mines
1944	7 surface diamond drill holes (2,800 ft.)	American Eagle	U.S. Bureau of Mines
1943-1945	Underground mine, production of 50,490.274 tonnes grading 2.126g/t Au, 128.588g/t Ag, 0.36% Cu, 0.48% Pb, 12.3% Zn	Blue Moon	Hecla Mining Company
1976-1979	Soil geochemical and EM surveys, 9 percussion drill holes (4,160.99 ft.)	Blue Moon, Amselco Hill	Amselco
1981-1983	Geological mapping, soil geochemistry, IP and down-hole EM geophysical surveys, 20 diamond drill holes (22,494.69 ft)	Blue Moon, American Eagle	Colony Pacific
1983	Determined geologic and mineable reserves, did site planning, and preliminary metallurgy	Blue Moon	American Mine Services
1984-1986	Geological mapping, 30 diamond drill holes (43,329.0 ft.), determined geologic and mineable reserves; did metallurgy, hydrology and base line environmental studies; initiated permitting for underground exploration	Blue Moon, American Eagle	Westmin Resources, Inc.
1987-1990	17 diamond drill holes (23,319.02 ft.), IP survey; completed permitting for underground exploration	Blue Moon	Colony Pacific
1990-1991	15 diamond drill holes (19,639.0 ft.), 2,500 ft. shaft pilot hole, soil geochemistry, rock lithogeochemistry	Blue Moon	Lac Minerals, USA
1999	5 diamond drill holes (2,471.0 ft.) on Lone Oak showing	Gann Spanish Land Grant	Augusta Metals Incorporated

The property is a former producer having produced 55,655 tons grading 0.062 oz/ton Au, 3.75 oz/ton Ag, 0.36% Cu, 0.48% Pb, 12.3% Zn (50,490.274 tonnes grading 2.126g/t Au, 128.588g/t Ag, 0.36% Cu, 0.48% Pb, 12.3% Zn). (Eric and Cox, 1948, p. 145) The mine operated between 1943 and 1945.

Photo 6-1 American Eagle mine entrance.

Photo 6-2 Blue Moon mine; historic shaft site.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The Blue Moon deposit is hosted by the Upper Jurassic Gopher Ridge Formation of the Western Block of the Sierra Foothills Metamorphic Belt. This belt extends for 186 miles along the western foothills of the Sierra Nevada Mountains and is approximately 9.5 miles wide. Along the length of the belt, clusters of Zn-Cu rich, polymetallic, massive sulphide deposits occur at approximately 25 mile intervals. Many mines were developed between 1860 and the mid 1900's along the belt. One of the largest was the Penn mine in Calaveras County north of Mariposa County, which produced 883,402 tonnes of Cu-Zn-Pb (Au-Ag) ore (Martin, 1988).

7.1 Property Geology

The Gopher Ridge Formation in the area of the Blue Moon deposit consists of a basal sequence of basalt and andesite overlain by a rhyolite, Figure 7.1. The rhyolite strata are up to 300m thick and host the Blue Moon deposit. The sulphide-sulphate mineralized lenses are hosted in the lower part of the felsic sequence. The felsic volcanic rocks are succeeded to the east by volcaniclastic rocks and ultimately by deep-water argillaceous, sedimentary rocks (Meade, 1996).

Strata at Blue Moon strike approximately 20° west of north, dip near vertically, face to the east and are tightly folded. Minor fold features suggest a steep, north plunge of the regional structure. All lithologies have undergone low grade metamorphism and the prefix "meta" is not applied to lithologic names for the sake brevity in writing. Lithologies observed at Blue Moon exhibit metamorphic characteristics of the lower greenschist facies.

The rhyolite strata have been subdivided on the basis of phenocryst mineralogy into three distinct units: aphyric rhyolite, feldspar porphyry rhyolite and quartz-feldspar porphyry rhyolite. The distinction of these different types of rhyolite allows the modeling of the depositional environment of the volcanic rocks at the time of the sulphide mineralization and the identification of stratigraphic horizons within the felsic rocks. More massive phases of aphyric rhyolite define rhyolite dome features that are flanked by clastic, fragmental facies. The thinning of the aphyric rhyolite proximal to the domes defines favourable environments for deposition of massive sulphide mineralization. Further up the stratigraphic sequence, massive feldspar porphyry rhyolite appears to define sill or dyke features that locally truncate sulphide mineralization.

Sericitic alteration and bleaching of the rhyolite strata cause wide ranges in the appearance of the various rhyolite rocks, and careful distinction of alteration changes versus changes in lithology is important to defining the volcanic stratigraphy.

Lateral to the sulphide mineralization are chemical sedimentary rocks containing hematite, magnetite, barite, silica and manganese minerals, which help define mineralized, potential ore type horizons. Sulphide-barite mineralization on the edges of massive sulphide mineralization grade laterally into hematite-jasper iron formation, which, in turn, grade into manganese-bearing siliceous tuffaceous rocks.

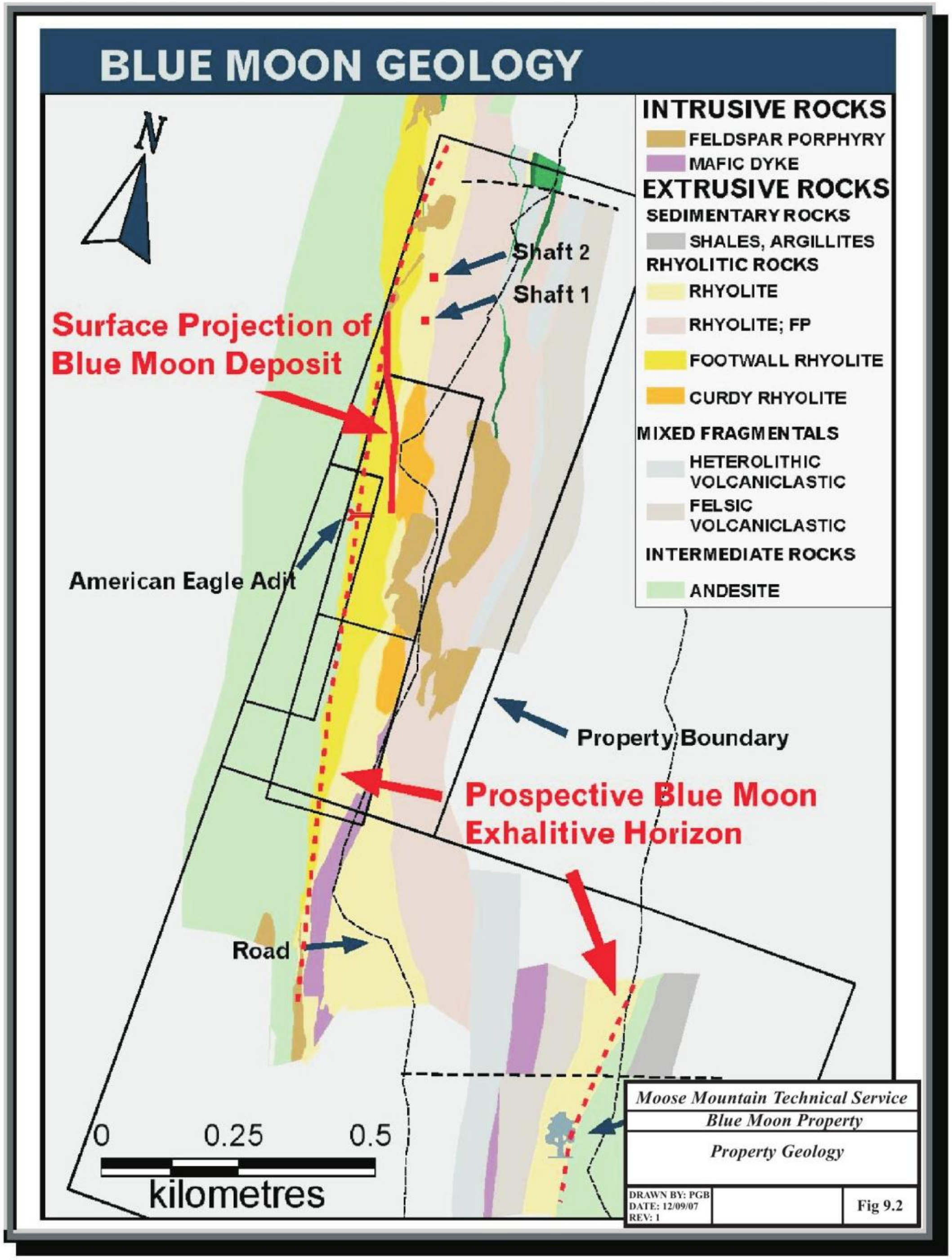

Figure 7-1 Property Geology (Meade, 2002)

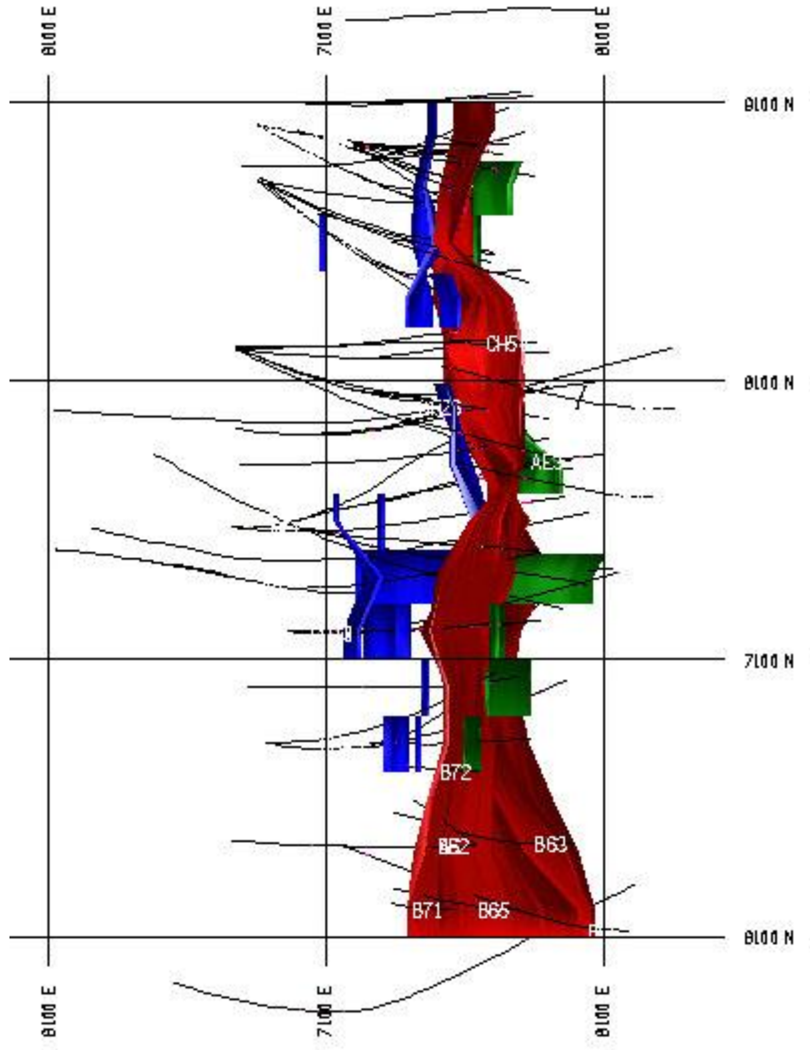

Figure 7-2 Plan view of mineralized zones (north to the top of the page, the main zone is red, east zone is green, and the west zone is blue, the grid is 1000’ x 1000’. (From Morris and Giroux, 2008)

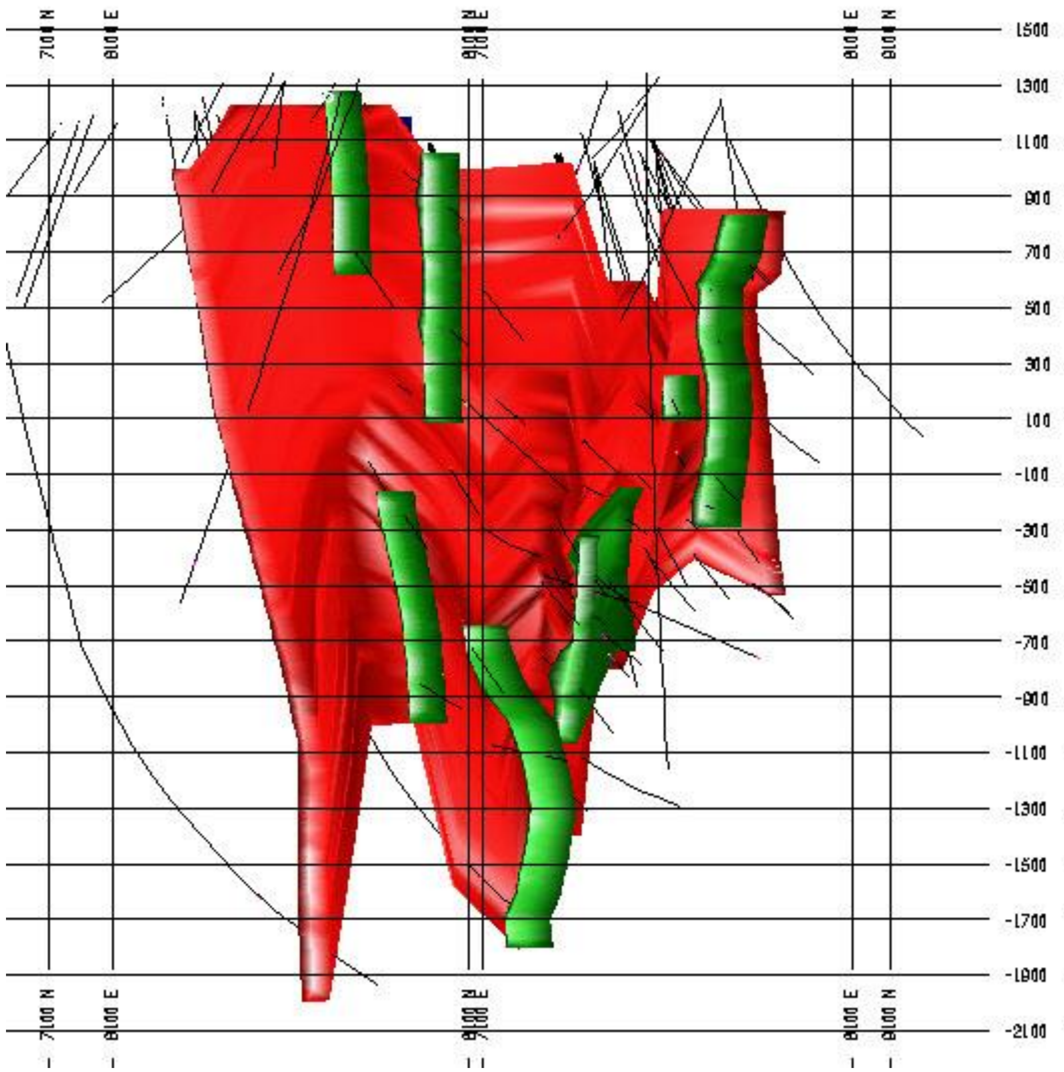

Figure 7-3 3D View of the three mineralized zones from the southeast (the main zone is red, east zone is green, and the west zone is blue, the grid is 200' vertical and 1000' east-west which is skewed because of the image rotation) (From Morris and Giroux, 2008).

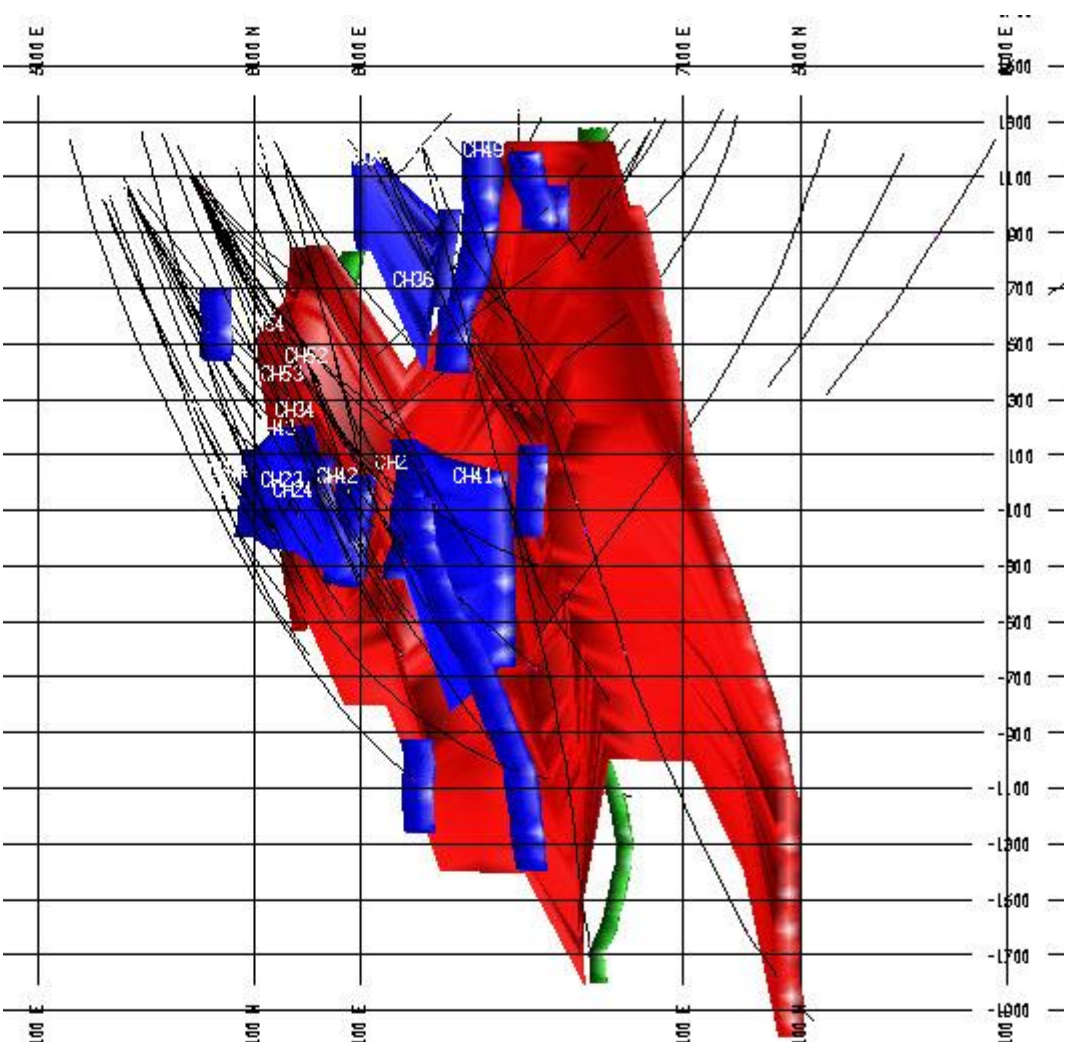

Figure 7-4 3D View of the mineralized zones from the southwest (the main zone is red, east zone is green, and the west zone is blue, the grid is 200’ vertical and 1000’ east-west which is skewed because of the image rotation). (From Morris and Giroux, 2008)

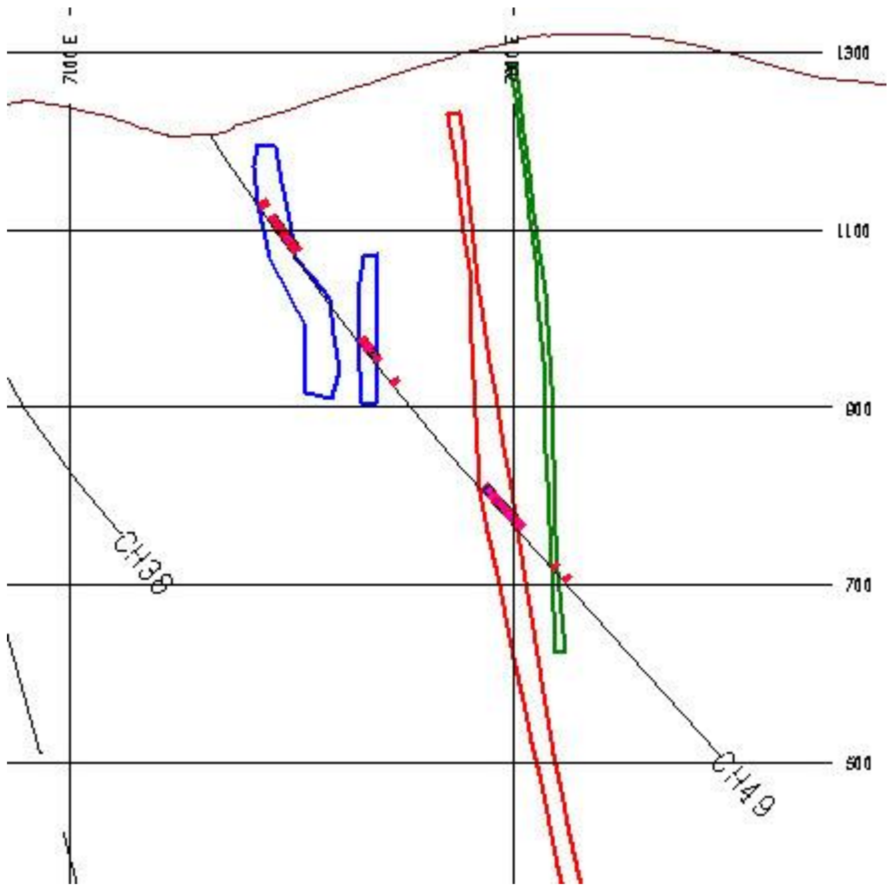

Figure 7-5 Cross-section 6800N, looking to the north (the main zone is red, east zone is green, and the west zone is blue, the grid is 200' vertical and 500' east-west). (From Morris and Giroux, 2008)

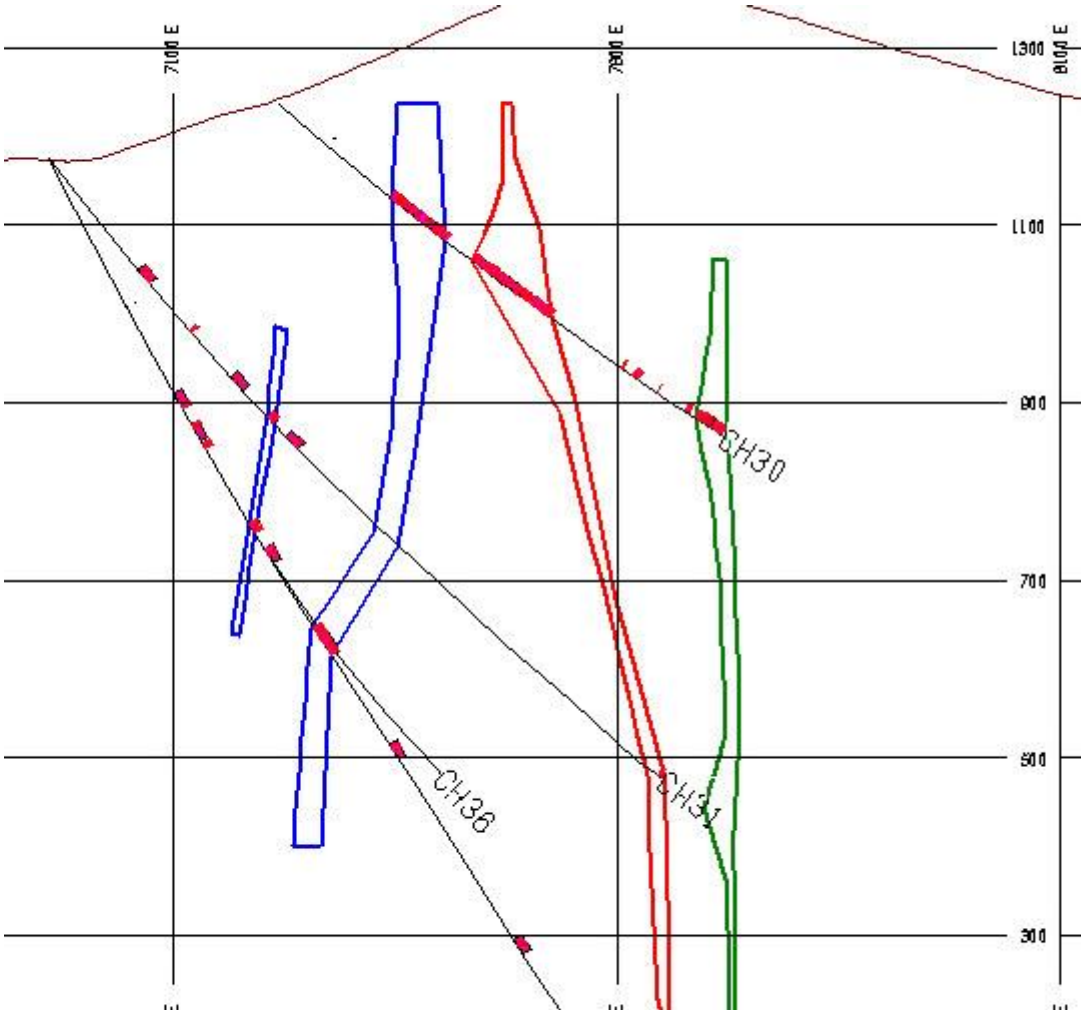

Figure 7-6 Cross-section 7200N, looking to the north (the main zone is red, east zone is green, and the west zone is blue, the grid is 200' vertical and 500' east-west (From Morris and Giroux, 2008)

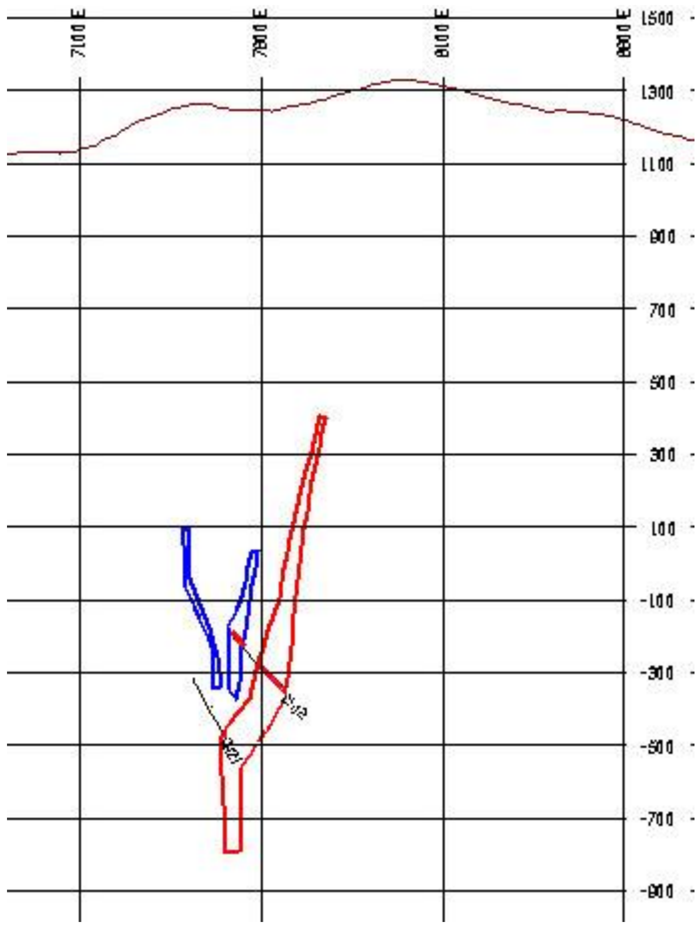

Figure 7-7 Cross-section 8400N (the main zone is red, east zone is green, and the west zone is blue, the grid is 200' vertical by 500' east-west). (From Morris and Giroux, 2008)

7.2 Mineralization

The Blue Moon deposit is a Kuroko-type volcanogenic massive sulphide deposit. The deposit is shown to have some similarities with the Lynx and Myra deposits at Myra Falls, Vancouver Island. Stacked sulphide-sulphate lenses occur in two or more horizons within a 50-180 foot stratigraphic interval. Four distinct lenses of massive sulphide mineralization have been identified; the West, Main, East and American Eagle zones. The American Eagle Zone appears to occur in the same stratigraphic position as the West Zone.

The West Zone occupies the lowest stratigraphic position and occurs near the base of the aphyric rhyolite sequence. The Main Zone lies stratigraphically above the West Zone and occurs with the first appearance of quartz and feldspar porphyry rhyolite. The East Zone lies stratigraphically above the Main Zone, although several authors have included it as part of the Main Zone. It is hosted entirely within feldspar porphyry rhyolite.

Massive sulphide mineralization consists of pyrite, sphalerite, chalcopyrite, galena, and minor tetrahedrite and bornite. Massive and semi-massive sulphides may be accompanied by purple anhydrite, gypsum or barite. Textures include massive, banded and clastic mineralization features.

Metal zoning in base or precious metal is poorly understood although there is a strong tendency for narrower mineralized zones to be relatively richer in gold and silver and to have barite gangue.

The potential ore horizons are enveloped by sericite-silica-pyrite alteration that extends laterally in the rhyolite stratigraphy at least as far as known mineralization and more than 490 feet into the footwall andesite. A stockwork sulphide feeder zone is not clearly identified within the footwall alteration zone. This discordant sericite altered zone is linked to a lower stratabound sericite altered zone in the footwall andesite which extends at least 0.7 miles to the south from the deposit and may be an important exploration guide to other mineralized centres.

The lower mineralized horizon (West and American Eagle zones) generally contains more pyrite, chalcopyrite, sphalerite, anhydrite and gypsum than the upper mineralized horizon (Main and East zones) which is comparatively enriched in galena, tetrahedrite and barite. Gold and silver grades can be significant in the lower horizon lenses but on average are three times greater in the upper horizon lenses.

A database of some 1,540 samples is available for the deposit. All of the samples are from drill core. Table 7-1 lists some general statistics.

Table 7-1 Summary Statistics from Drill Core, Blue Moon

Parameter	Minimum	Maximum	Mean	Stand. Dev.	C.V.
Sample length (ft)	0.4	21.3	3.78	1.78	0.47
Copper (%)	0.0	10.7	0.35	0.85	2.44
Zinc (%)	0.0	46.0	2.37	5.09	2.15
Lead (%)	0.0	6.4	0.14	0.47	3.48
Silver (oz/ton)	0.0	40.3	0.69	2.44	3.55
Gold (oz/ton)	0.0	1.04	0.019	0.06	3.19

Mineralization lithologies were observed by Morris during the site visit in drill core. The description of the mineralization appears applicable to the Blue Moon project.

8.0 DEPOSIT TYPES

The Blue Moon deposit is a Kuroko-type, polymetallic, volcanogenic, massive sulphide deposit, or VMS deposit. The sulphide-sulphate deposit is hosted in rhyolite. The ore minerals are pyrite, sphalerite, chalcopyrite, galena, and minor tetrahedrite and bornite. The associated sulphate minerals are barite, gypsum and purple anhydrite. To date, four lenses of mineralization have been identified within at least two, possibly three, horizons. The lenses are enveloped by sericite-silica-pyrite alteration. Gold and silver grades are significant in the lower horizon lenses but are, on average, three times greater in the upper horizon lenses.

The deposit type and model for Blue Moon is considered appropriate for a volcanogenic massive sulphide deposit.

9.0 EXPLORATION

Blue Moon has not carried out any exploration on the property.

Exploration of the Blue Moon Property by earlier owners includes geological mapping, soil geochemical surveys and geophysical surveys including an induced polarization survey and a down-hole electromagnetic survey.

Geological Mapping

Westmin Resources' geologists carried out several campaigns of geological mapping in the late 1980s and at Lone Oak in 1991. Mapping was at a scale of 1:500. A summary of the maps is shown in Figure 7.1.

Westmin's mapping found volcanic rocks of the Gopher Ridge Formation comprise basalt overlain by andesite and rhyolite. The rhyolite succession is 900-1000 feet thick in the vicinity of the West and Main zone mineral deposits and is divided into four units based on quartz and feldspar phenocryst content and texture. The most important unit is the footwall rhyolite because it is key to localizing ore. It is a distinctive aphyric (cherty) rhyolite, commonly banded and highly variable in colour. The top of the footwall rhyolite defines the West zone mineralized horizon. New zones of aphyric rhyolite to the south of Blue Moon, whether or not they are exactly correlative with the footwall rhyolite, are considered by the author to have better mineralization potential than other types of rhyolite.

The West zone horizon marks a sharp change in rhyolite stratigraphy at Blue Moon. Rhyolite above the West zone comprises clastic, sparsely feldspar porphyritic rhyolite ("curdy") rhyolite and quartz-feldspar porphyritic phases. The Main zone at Blue Moon lies above the West zone and occurs in sparsely porphyritic and curdy rhyolite 40 to 180 feet stratigraphically above the West zone. These phases of rhyolite are a less specific guide to ore. The footwall and curdy rhyolite appear to be domal features and either unit could host mineralization south of the American Eagle adit.

Intrusive rhyolite is prominent east and south of the Blue Moon deposits but should not be regarded as a negative feature to finding more ore. In fact it might be considered favourable because most of the copper-zinc ore bodies at the Penn deposit are closely associated with intrusive quartz porphyry rhyolite.

Geochemical Survey

Two soil geochemical surveys were completed, one by Colony Pacific in the early 1980s was limited to main deposit area and a later survey by Lac Minerals in 1991 that covered the entire property. In both surveys soil was collected from the "B" soil horizon. The analytical reports are no longer available; however as the surveys were conducted by reputable mining companies, the author has no reason to doubt their authenticity.

Little detail remains on the Colony Pacific survey other than the grid spacing of 400 feet by 50 feet and that only zinc, copper, silver and barium were analyzed by the atomic absorption method. Colony Pacific found a moderately strong copper-zinc soil anomaly overlies the andesite footwall alteration zone and the sub-crop of the mineral zones. It is 500–1000 feet wide and extends to the southern limit of the survey at that time.

Hydromorphic dispersion downslope has enhanced the extent of copper and zinc anomalies. Silver was not useful and barium was ineffective due to incorrect analytic procedure. Apparently no other elements such as lead were determined.
In the 1980’s.

Lac Minerals’ 1991 soil survey is more detailed (50 foot intervals on lines 200 foot apart), covered the entire property, employed better methodology (ICP and fire assay AA finish) and analyzed for gold, silver, copper, lead, zinc, manganese, arsenic, antimony, barium and mercury. The survey shows that zinc and copper are commonly subject to hydromorphic dispersion in this local California climate. The results for lead, one of the least mobile of the metals analyzed is shown in Figure 9.1. The anomalous results high-light the rhyolite – andesite contact as being favourable to mineralization, and indicate the metalliferous nature of this contact.

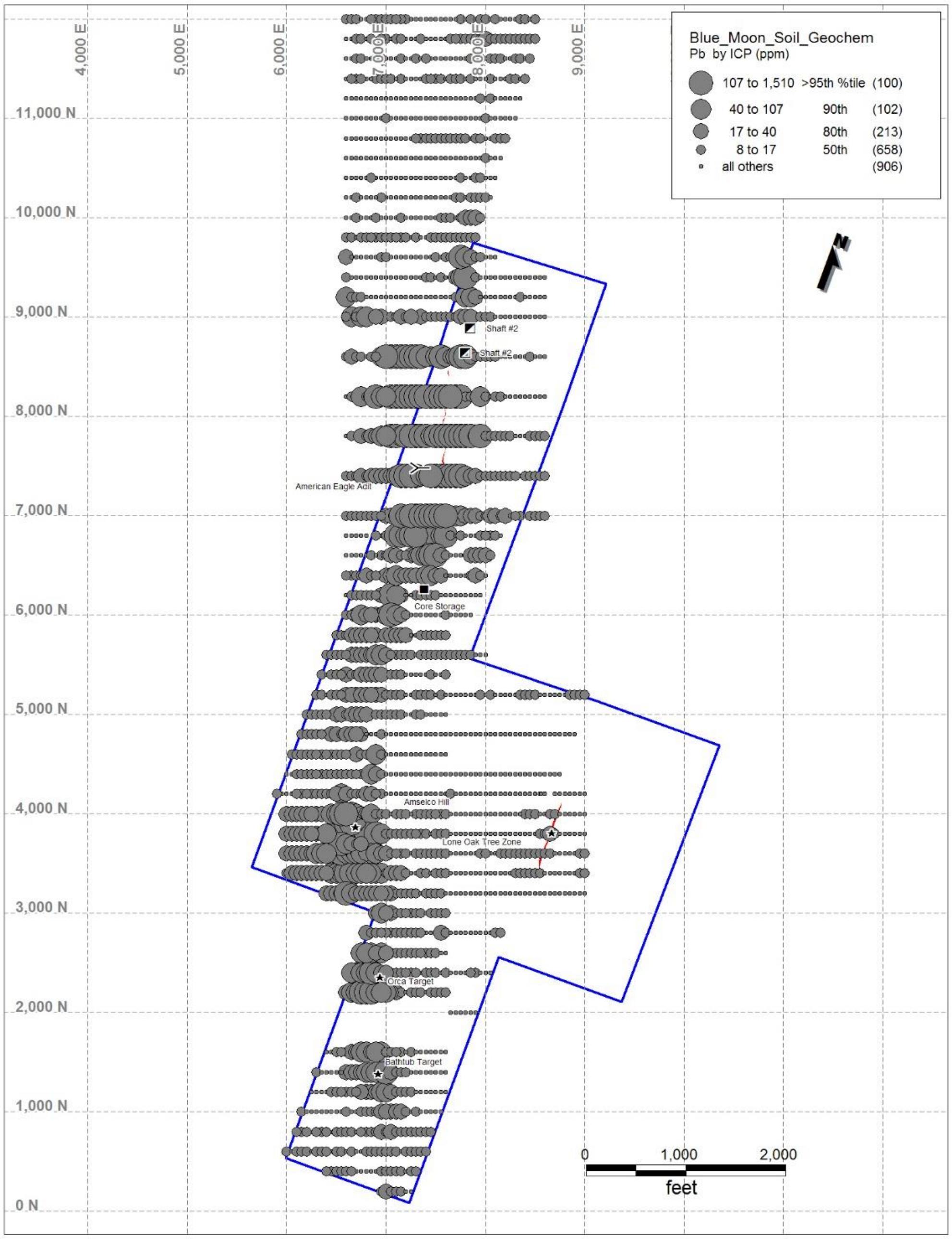

Figure 9-1 lead-in-soil results

Geophysical Surveys

Two induced polarization surveys were carried out over the deposit and along the southern extension of the favourable andesite – rhyolite contact. The surveys were pole – dipole surveys with a 50 foot "A" spacing along lines spaced 200 feet apart using n equal to 2. The earlier survey was by Lloyd Geophysics and the later one was by Scott Geophysics of Vancouver.

Lac Minerals in 1991 reprocessed Lloyd Geophysics IP survey and the Scott Geophysics IP survey. The pyrite-rich footwall alteration zone shows as a continuous chargeability anomaly. Depth of penetration was determined to be shallow and the data were considered by Lac geophysicists C.S. Ludwig and Marcia Walker to be better suited to interpretation of bedrock geology than selection of drill targets.

Walker conducted magnetic and VLF surveys over the property. Low-to-background magnetics occurs over a broad swath of the property from the northern property boundary to approximately 3000 feet south of the American Eagle adit in a zone 800-900 feet wide. Walker identified two weakly magnetic sub-units that might be due to alteration, at 5200N–6600N and 3200N-4800N. Both lie at 6600-7000E. These correspond with the Amselco Hill target recognized by Lac and the Amselco Hill North target.

Walker concluded that most VLF conductors are contacts between rock units rather than structures. There is good correlation with chargeability, resistivity and magnetic patterns.

Separate proprietary UTEM and borehole EM surveys were conducted by Lac Minerals (R. Knights, 1991) and Boliden (H. Sunden, 2000). UTEM anomalies are weak to moderate. Knights states they "have more of the appearance of being caused by bulk changes in rock unit conductivity than discrete conductive horizons" and are associated with footwall andesite and sedimentary rocks, including shale immediately west of Lone Oak. Sunden's EM anomalies are superimposed on geology in Figure 7. In contrast to Knights, Sunden cautiously recognized two discrete stronger conductors that he considered worthy of drill testing. Both are in close proximity to the "formational" footwall anomaly.

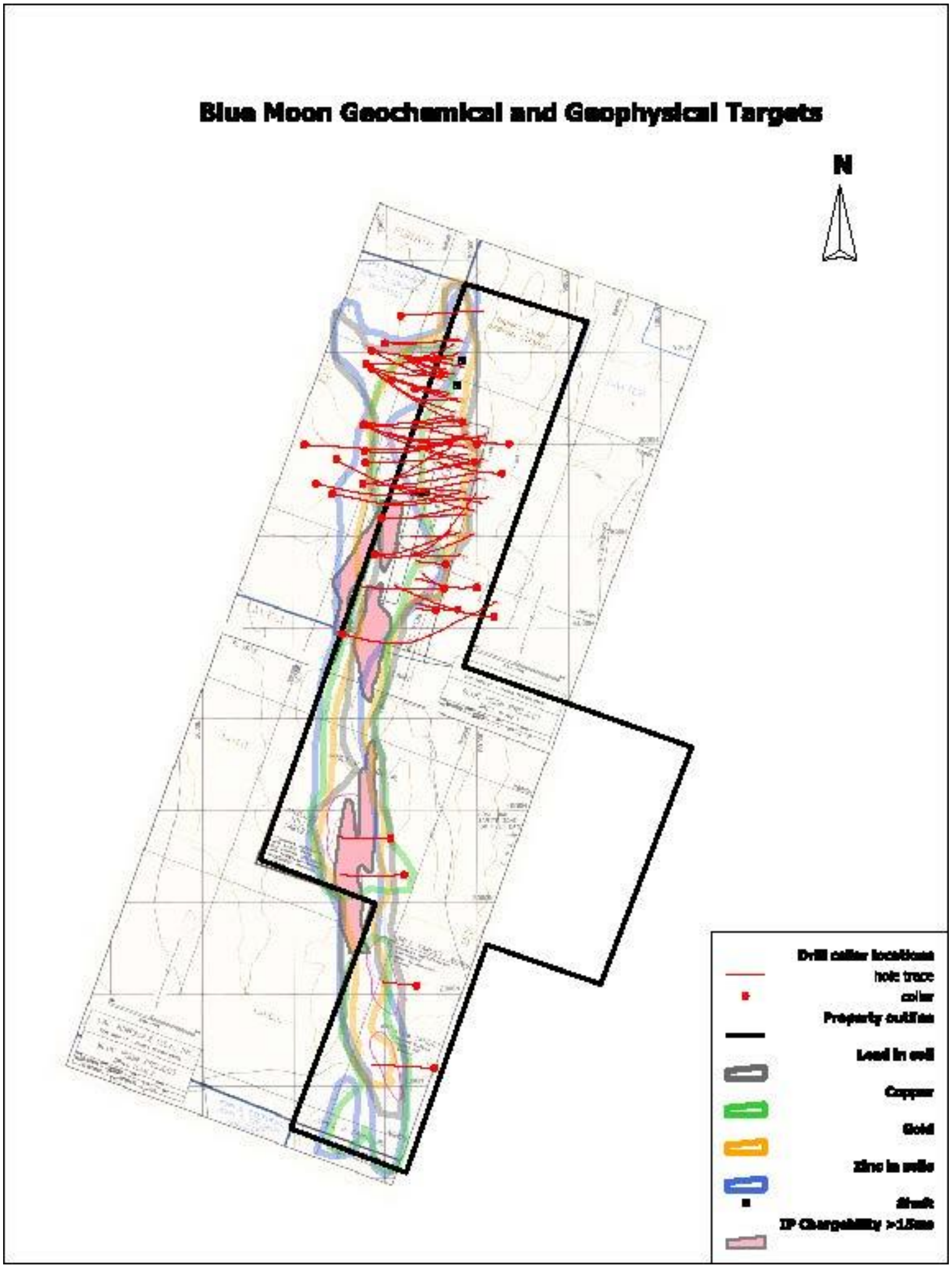

Figure 9-2 Compilation IP and soil geochemical results

10.0 DRILLING

All drilling on the property was completed by previous owners.

Drilling has occurred on the Blue Moon property since 1942 with a total of 122,730.2 feet of drilling in 113 drill holes. The majority of the holes were drilled in the Blue Moon deposit area. A few holes were drilled in the Amselco Hill and Lone Oak areas, targeting the favourable stratigraphic horizon. All the holes drilled on the Blue Moon property have been diamond holes of BQ and NQ core sizes, with the exception of the 9 holes drilled in 1979 by Amselco, which were percussion holes. As well, all the holes, with the exception of the Amselco holes, have had down-hole surveys. Only core holes drilled since 1979 were used in the resource calculation. Table 10.1 summarizes the history of drilling on the Blue Moon property.

Table 10-1 Summary of Drilling on Blue Moon property

Year	Operator	No. of Holes	Hole Numbers	Footage (ft)
1942	Red Cloud Mines	10	RC2 – RC8, 101-103	4,516.5
1944	US Bureau of Mines	7	1-7	2,800.0
1979	Amselco	9	79-1 – 79-9	4,161.0
1981	Colony Pacific	2	B1, B2	1,584.0
1982	Colony Pacific	12	AE1-AE3, B3-82 – B11-82	11,054.1
1983	Colony Pacific	6	B12-83 – B17-83	9,856.6
1984	Westmin	5	B18 – B22	10,891.7
1985	Westmin	10	CH13-14,17-18,23-28	10,307.5
1986	Westmin	15	AE 86 CH 1, B 86 CH 29 – B 86 CH 42	22,129.8
1987	Westmin	7	B 87 CH 43 – B 86 CH 49	6,872.0
1988	Westmin	10	B 88 CH 50 – B 88 CH 59	16,447.0
1991	Lac Minerals	15	B 91 CH 60 – B 91 CH 74	19,639.0
1999	Augusta	5	LO 99 CH 01 – LO 99 CH 05	2,471.0
	Totals	**113**		**122,730.2**

The location of the drill holes are shown in Figure 10.1

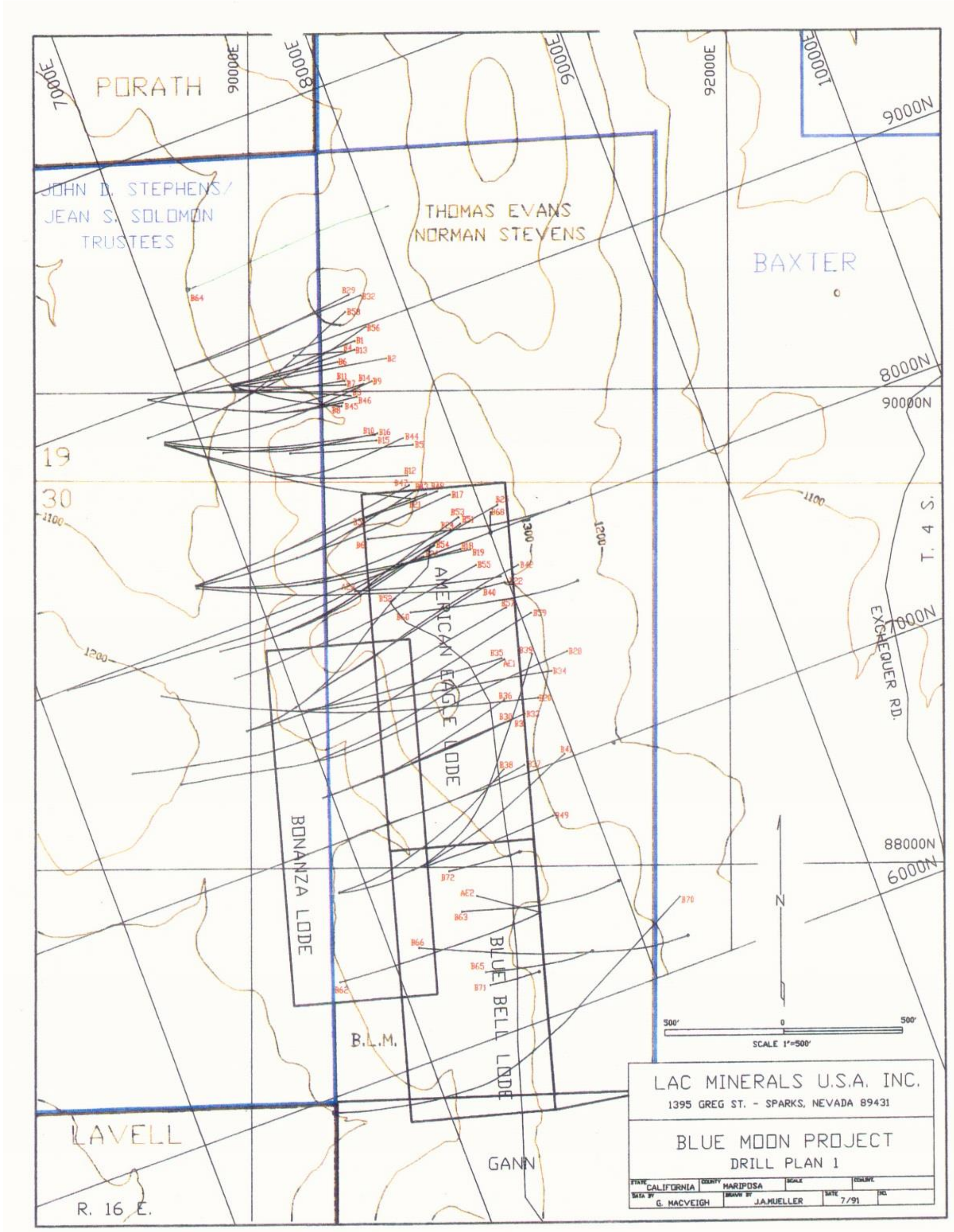

Figure 10-1 Drill Plan

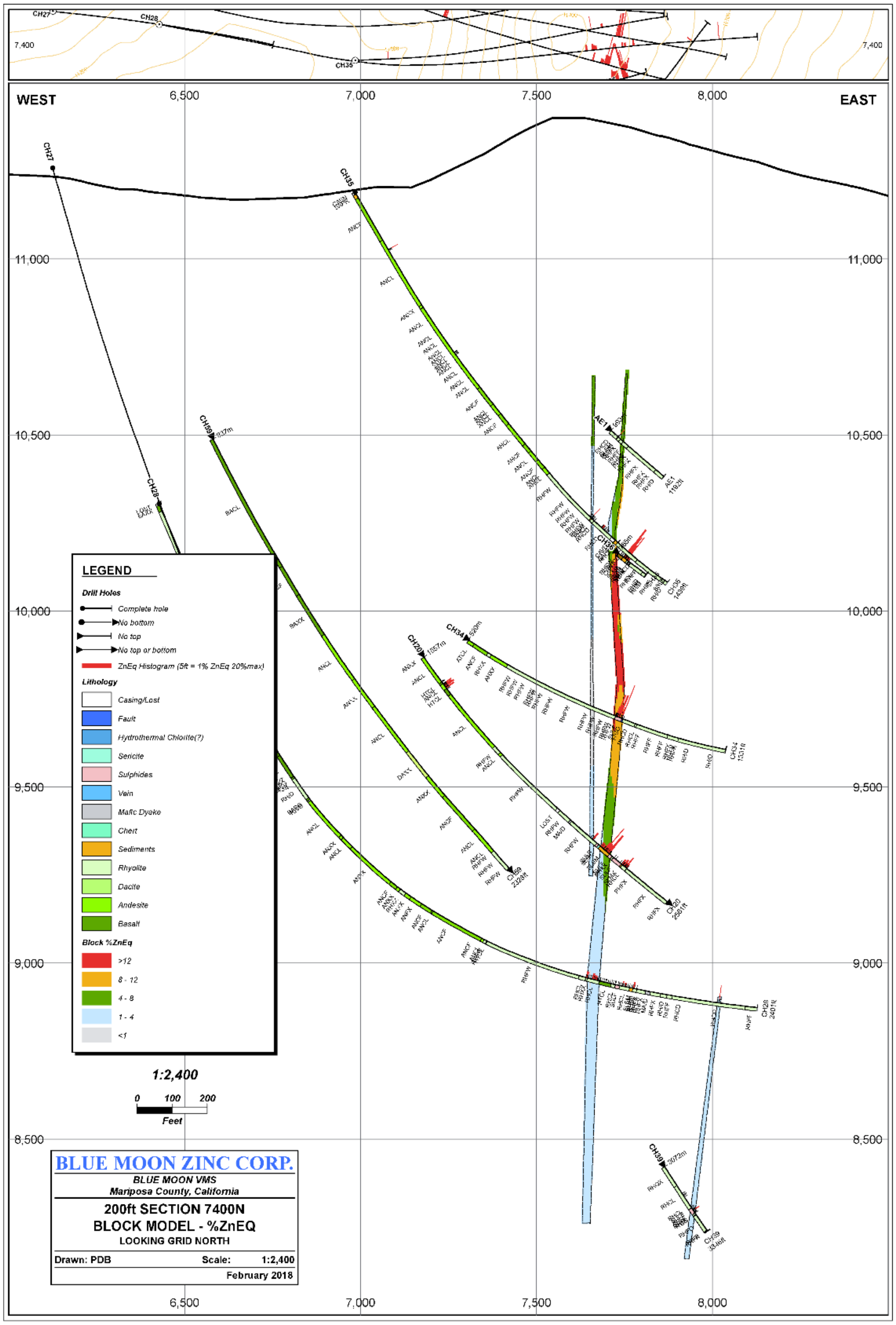

Figure 10-2 Cross Section 7400N

Drilling was carried out by a number of drill contractors including Coates Drilling, Justice Drilling, Tonto Drilling and Layne Christensen Drilling. The drills used included skid mounted BBS-1 and Longyear 38 and were moved between sites by a bulldozer. Core logging was done in Imperial units at an onsite core storage facility focused on key lithological units, massive and semi massive sulphide mineralization, structures such as faults and folding, core recovery and rock quality. Specific gravity measurements of select samples from zones of the massive and semi-massive sulphide mineralization were taken using a spring balance to determine mass, and a graduated cylinder of water to determine volume for each wax coated sample. Specific gravity, or density, was also determined for select samples of some non-mineralized lithologies.

Mineralized intervals were split in half either by a diamond saw in zones of visually stronger mineralization, or by mechanical splitter if apparently weaker mineralization. One half of the core was returned to the core box and stored on the property in a covered and sealed storage container. Non mineralized core was kept in racks outside. The mineralized sections remain undisturbed and provide a well-kept record of the key mineralized sections.

The collars of all of the drill holes used in the resource calculation were surveyed by Freeman & Seaman Land Surveyors, registered professional surveyor in the State of California. , With the exception of the Amselco holes, all holes used for the resource calculation have had down-hole, directional survey data acquired, information that allows the plotting of accurate drill hole path locations.

Photo 10-1 Core storage area on the Blue Moon Property

Review of drill logs from the holes used in the resource estimate show that recoveries were good and with few exceptions, better than 80%. The author did not see any drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

Evaluation of the drilling results shows the mineralization is a volcanogenic massive sulphide type occurring in several horizons over a 180 foot stratigraphic interval of a bimodal volcanic sequence. The principal horizons are the West zone, located in the lower most part of the rhyolite package near the contact with underlying andesite. The second important horizon is the Main Zone that lies between 50 and 100 feet apart. The massive sulphides and enclosing rhyolite are steeply dipping to the east in the southern part of the zone and become west dipping at the northern end of the deposit.

The mineralized horizons are traceable along strike for over 2000 feet. Individual lenses range from less than a foot to over 20 feet in thickness. Laterally, away from the massive sulphide lenses are exhalative horizons consisting of jasperoid and / or barite and anhydrite.

Relation to true thickness is discussed in Item 14.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Core from the drill holes was collected at the drilling rig by a company geologist and brought to the core logging facility on the Blue Moon property. It was cleaned, logged for rock type, structures and mineralization prior to a geologist marking out specific intervals for sampling based on sulphide content. Sampling of the core was done either by a hydraulic splitter if visually lower grade or sawn if deemed to be potentially higher grade. The core was sampled lengthwise with one half placed into a plastic sample bag with a sample tag. The other half was returned to the core box with a duplicate sample tag number for a permanent record. Standards and blank samples were not inserted in to the samples stream as this was not practice by the majority of mining companies at that time. Core with visual mineralization was stored in sea containers kept locked when the site was unattended. The saved mineralized sections of core remain on site in sea containers and were available for review by the author.

Samples for analysis were sent by truck to independent laboratories. Some of the earlier samples were sent to a Mineral Assay Office Inc., Nevada; however the majority of the core samples were analyzed by Chemex Labs (now ALS Laboratories) in Vancouver, Canada. Both laboratories were certified assayers within their respective jurisdictions and independent of the owners of the property. All assay data used in the resource calculation was generated via standard, industry accepted assaying techniques. Gold assaying used a 30g sample size for a fire assay with and atomic absorption spectrometry finish (FA-AAS). Silver and lead assays were generated with atomic absorption spectrometry (AAS). All other elements were assayed by inductively coupled plasma atomic emission spectroscopy (ICP-AES), including barium which required an additional, final gravimetric procedure. Known standards and blank samples were inserted into the sample stream by the laboratory for quality control.

One set of check assays h found includes 55 samples that were assayed by both Chemex Labs in Vancouver (Chemex) and Mineral Assay Office Inc. in Nevada (Mineral). Table 11-1 summarizes the results of the check assays.

Table 11-1 Summary Statistics, Check Assays, Blue Moon

Parameter	Cu	Zn	Ag	Au
Mean, Chemex	0.918	5.385	2.554	0.035
Mean, Mineral	0.970	5.500	2.433	0.038
Stand. Dev, Chemex	0.997	6.622	7.037	0.082
Stand. Dev, Mineral	1.066	6.653	7.009	0.094
CV, Chemex	1.09	1.23	2.76	2.31
CV, Mineral	1.10	1.21	2.88	2.44

A paired t-test was performed on the data to check bias between the labs. In all cases the difference between the labs is considered insignificant. Table 11-2 summarizes the results.

Table 11-2 Paired t-Test, Check Assays, Blue Moon

Element	Results
Cu	Mineral reports 0.05% higher than Chemex
Zn	No bias found between labs
Ag	Chemex reports 0.12 oz/ton higher than Mineral
Au	No bias found between labs

It is the author's opinion that the sample preparation, security and analytical procedures followed during the work on the property were the industry standard practice for that period of time and can be relied on as the work was done by professional geologists and assayers.

12.0 DATA VERIFICATION

Mr. Lawrence J. O'Connor completed three site visits and made a detailed examination of the property on June 6th through June 8th, on July 25th and 26th, and on September 19th through 21st, 2017. In addition to the site visits, Mr. O'Connor had access to the complete data base of the project including all original assay certificates, the original drill logs, the results of surveys of the original drill-hole locations by Freeman and Seaman Land Surveyors, and down-hole, directional survey results for all holes used in the resource calculations. As well as the original surveyors report on the drill-hole locations, Mr. O'Connor was also provided with a report of a 2018 survey commissioned by Blue Moon and completed by Jones Snyder and Associates, a registered land surveyor in the state of California. The 2018 survey included resurveying of 29 holes used in the current resource calculation as well as monuments established by the surveys of 1984 and 1991.

All mineralized intersections used in the resource calculation are preserved in a secured storage facility on the Blue Moon property and have not been exposed to the elements. As part of the verification process, the Author completed cross checks of the assay sample numbers recorded in the original assay certificates with drill logs and the sample tags in the core boxes for 30 of the mineralized intercepts. No discrepancies or errors were noted between the sample numbers on the tags in the core boxes and those recorded in the assay certificates. The Author did not note any visual discrepancies between what he observed in the core with that recorded in the drill logs and no assay with high zinc, copper or lead was noted to be at odds with what was observed by him in the drill core for that interval.

Mr. O'Connor reviewed the results of the 2018 drill-hole survey and compared them with the original surveys of 1984 and 1991. The results of the two surveys compare very closely and no material difference was found. As a check of the professional surveys, the Author checked the collar locations with a handheld GPS unit (Garmin Oregon 450t). The co-ordinates noted by Mr. O'Connor matched those of the earlier surveys.

As a check on core recoveries reported in the historical logs, the writer carried out spot checks of key mineralized sections in 25 holes of the 72 used in the resource calculation of this report. The core recovery noted by the Author match those reported in the historical logs. The author also checked the thicknesses of mineralization by measuring the angle between the core axis and the contact of massive sulphide zones with the bounding rhyolite host rocks.

Spot checking of 25 holes used in the resource calculation with respect to drill-hole length, azimuth and grid location found no material differences.

In the opinion of Mr. O'Connor the data used to estimate a resource correlates well with physical evidence found on site and is adequate for the purpose used in this technical report.

In general the database is considered good and the errors noted are not significant.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Complete and thorough metallurgical testing has not been finalized for the Blue Moon project.

Colony Pacific Explorations Ltd. undertook preliminary metallurgical test work in 1983. More definitive test work was completed by Lakefield Research, Peterborough, Ontario in August through November 1988 at the request of Westmin Resources Limited. As the 1988 metallurgical testing was more extensive and thorough, it supersedes the earlier Colony Pacific work.

In 1988, Westmin Resources sent two samples of mineralization to Lakefield Research in Ontario. The samples consisted of core and coarse reject material from earlier drilling. Material from both samples was crushed to minus 6 mesh and 10 kilograms were riffled for Bond Work Index determination. The remainder was crushed to minus 10 mesh and separated into subsamples for individual tests. Test charges were prepared of material ground to -200 mesh. Based on Lakefield's analyses the head grade of the two samples was as listed below:

Element	Sample 1	Sample 2
Copper %	1.71	0.34
Lead %	0.15	1.03
Zinc %	15.1	6.54
Sulphur %	24.1	11.5
Arsenic %	0.03	0.01
Antimony %	0.024	0.008
Gold gpt	8.00	6.35
Silver gpt	41.5	64.3
Specific gravity	3.51	3.56

Sample 1

The major sulphide minerals were pyrite, sphalerite and chalcopyrite. Galena tennatite / tetrahedrite and bornite were also present, but in very small amounts. This sample was a coarse grained, high sulphide sample.

Sample 2

Was of barite rich mineralization and was finer grained than Sample 1. Galena was present as a significant constituent, but the amount of tennatite was less than Sample 1.

Lakefield carried out 26 separate bench scale floatation tests to investigate the sequential flotation of copper and zinc from the two samples and the effect of grind, collector and depressant combinations.

In Sample 1, the zinc circuit test work methodology consisted of separating the copper-lead minerals followed by the making of a zinc concentrate. The results of a cycle test on Sample 1 indicated 93% Cu recovery in a concentrate analyzing 26.5% Cu, 2.35% Pb and 7.0% Zn. A high-grade zinc concentrate was produced in all tests. The cycle test results projected a 62% Zn concentrate representing 95% Zn recovery. The zinc concentrate is of good quality. Gold and silver recoveries in the copper concentrates were approximately 70% and 65% respectively.

The mineralogy of Sample 2 was more complex and fine-grained. The copper and lead floated slowly reducing selectivity in the copper-lead circuit. Secondary copper minerals were observed. Satisfactory copper-lead concentrates were produced with recoveries up to 93% of the copper and 95% of the lead in a cleaner concentrate; however, separation of the copper and lead from such products was difficult and insufficient sample was available to continue test work. As with Sample 1, a high quality zinc concentrate was produced following a conventional flow sheet. The zinc concentrate grade was also greater than 60%. The very high zinc grade in zinc concentrates in part reflects the relatively low iron content of sphalerite in the ores.

Analyses of the concentrate and pyrite tails shows deleterious metals principally arsenic and antimony that may results in penalties.

Concentrate Analyses %		
	Combined copper concentrate	Combined zinc concentrate
Sb	0.12	0.004
As	0.30	0.012
Fe	26.1	1.40
S	29.5	29.5
Bi	0.021	<0.002
Hg	0.0002	0.0014
F	0.022	0.023
Cl	<0.005	0.005
SiO_2	0.84	0.86
CaO	0.21	0.35
MgO	0.083	0.073
Al_2O_3	0.33	0.35
Cd	-	0.34

The Bond Work Index tests showed Sample 1 to be 8.6 while Sample 2 was 8.3.

Additional test work is warranted to determine a better means of achieving separation of the copper and lead in the bulk copper-lead concentrates. Alternatively, early separation of the lead may improve separation from copper.”

14.0 MINERAL RESOURCE ESTIMATES

Introduction

At the request of Patrick McGrath CEO of Blue Moon Zinc Corp., the 2008 resource estimate completed for the company has been adjusted to comply with changes in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted in 2014 and changes in National Instrument 43-101. There has been no additional drilling completed on the property since the 2008 Report (Morris and Giroux, Feb. 2008) so this resource estimate is still current. The Resource Tables have been adjusted to reflect long term metal prices and the Resource Classification has been amended to comply with changes made to the CIM Definition Standards (May 2014). The effective date of this resource is August 24, 2018.

Gary Giroux is the qualified person responsible for the Resource Estimate. Mr. Giroux is a qualified person by virtue of education, experience and membership in a professional association. He is independent of the company applying all of the tests in Section 1.5 of National Instrument 43-101. Mr. Giroux has not visited the Property.

The authors are not aware of any legal, political, environmental, or other risks that could materially affect the potential development of the mineral resource.

Data Analysis

A total of 82 drill holes that defined the mineralized solids were supplied totaling a combined 111,250 ft. with 1,540 assays (see Appendix 1 for a list of Drill Holes used in this resource estimate). All supplied units were Imperial and these units were used in this resource. Samples were assayed for Cu and Zn in percent and Au and Ag in ounces per ton. Data reported as -0.01 were considered below detection limit and set to one half the detection limit while those assays reported as 0.000 were considered missing data and set to blank.

The mineralization at Blue Moon is considered to be Kuroko-type volcanogenic massive sulphide mineralization present in three distinct lenses. These lenses have been modeled and coded Lens 1 to 3 with Lens 1 corresponding to the Main lens, Lens 2 corresponding to the West Lens and Lens 3 corresponding to the East Lens. From drill logs these three lenses were interpreted on cross sections based on Zn grades and then joined into a 3D geologic model. Assays were then back coded within each lens. The statistics for the combined mineralized zones and each individual zone is presented below along with the statistics of all material outside the mineralized zones considered waste.

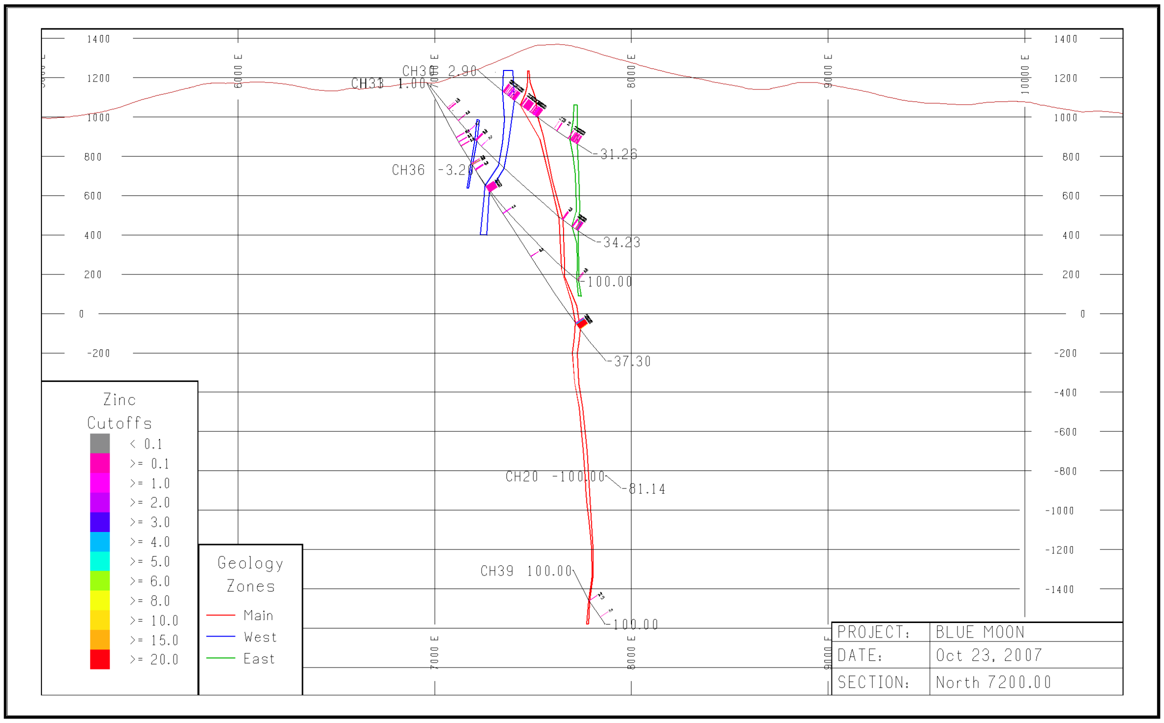

Figure 14-1 Cross section North 7200 showing drill hole traces with zinc assays and the three interpreted mineralized lenses (looking to the north, vertical scale shows a 200' grid while the horizontal scale is 1000').

Table 14-1 Summary of assay statistics for all zones

Zone	Variable	Number	Mean	S.D.	Minimum	Maximum	C.V.
All Mineralized Zones	Au (oz/t)	1,026	0.024	0.071	0.001	1.039	2.94
	Ag (oz/t)	1,015	0.852	2.775	0.001	40.30	3.26
	Cu (%)	1,009	0.417	0.924	0.001	10.70	2.22
	Zn (%)	1,026	3.112	5.726	0.001	46.00	1.84
	Pb (%)	1,032	0.152	0.510	0.001	6.40	3.34
Main Lens (1)	Au (oz/t)	674	0.024	0.058	0.001	0.58	2.45
	Ag (oz/t)	665	0.935	2.871	0.001	40.30	3.07
	Cu (%)	660	0.480	1.001	0.001	10.70	2.09
	Zn (%)	674	3.698	6.287	0.001	46.00	1.70
	Pb (%)	679	0.150	0.475	0.001	4.79	3.18
West Lens (2)	Au (oz/t)	207	0.008	0.128	0.001	0.10	1.65
	Ag (oz/t)	205	0.320	1.768	0.001	25.00	5.53
	Cu (%)	206	0.261	0.521	0.001	3.28	2.00
	Zn (%)	207	1.665	3.729	0.001	26.75	2.24
	Pb (%)	207	0.055	0.128	0.001	1.00	2.34
East Lens (3)	Au (oz/t)	145	0.049	0.136	0.001	1.04	2.76
	Ag (oz/t)	145	1.225	3.347	0.001	33.25	2.73
	Cu (%)	143	0.350	0.979	0.001	7.20	2.80
	Zn (%)	145	2.454	4.871	0.001	30.00	1.99
	Pb (%)	146	0.303	0.854	0.001	6.40	2.82
Waste	Au (oz/t)	801	0.005	0.016	0.001	0.302	3.45
	Ag (oz/t)	782	0.178	1.068	0.001	25.86	6.00
	Cu (%)	781	0.138	0.550	0.001	6.92	3.99
	Zn (%)	801	0.431	2.064	0.001	33.10	4.79
	Pb (%)	803	0.046	0.261	0.001	4.00	5.66

A correlation coefficient matrix was developed for each mineralized lens. Each variable within each lens was strongly skewed and as a result each was converted to a log value before the correlation matrix was developed.

Table 14-2 Summary of Correlation Coefficients for all Lenses.

Lens	Zn:Cu	Zn:Ag	Zn:Au	Cu:Ag	Cu:Au	Ag:Au	Ag:Pb
Main	0.7799	0.6205	0.5614	0.5115	0.5443	0.7149	0.6352
West	0.7606	0.6706	0.4609	0.7069	0.5172	0.5591	0.4075
East	0.7965	0.7719	0.6042	0.7231	0.5660	0.7455	0.7094

Each mineralized zone was evaluated independently using lognormal cumulative frequency plots to determine if capping was necessary and if so at what level. In all cases the grade distributions were positively skewed and a lognormal transform showed multiple overlapping populations. For each variable in each zone lognormal cumulative frequency plots were produced and partitioned. In each case multiple overlapping lognormal population were identified. Thresholds were chosen in each case to minimize high grade erratic assays. Table 14-3 shows the cap level for each variable in the three mineralized lenses and waste.

Table 14-3 Summary of capping levels for all zones.

Zone	Variable	Cap Threshold	Cap Value	Number Capped
Main	Au (oz/t)	2 S.D. A.M. P2	0.329 oz/t	5
	Ag (oz/t)	2 S.D. A.M .P2	17.70 oz/t	4
	Cu (%)	2 S.D. A.M. P3	4.4 %	9
	Zn (%)	2 S.D. A.M. P2	37.5 %	2
West	Au (oz/t)	2 S.D. A.M. P2	0.076 oz/t	1
	Ag (oz/t)	2 S.D. A.M. P2	1.97 oz/t	3
	Cu (%)	2 S.D. A.M. P2	2.41 %	3
	Zn (%)	2 S.D. A.M. P2	19.22 %	3
East	Au (oz/t)	2 S.D. A.M. P2	0.51 oz/t	2
	Ag (oz/t)	2 S.D. A.M. P2	10.30 oz/t	2
	Cu (%)	2 S.D. A.M. P2	2.81 %	4
	Zn (%)	2 S.D. A.M. P2	22.7 %	2
Waste	Au (oz/t)	2 S.D. A.M. P4	0.055 oz/t	9
	Ag (oz/t)	2 S.D. A.M. P3	4.3 oz/t	5
	Cu (%)	2 S.D. A.M. P3	2.40 %	10
	Zn (%)	2 S.D. A.M. P3	11.2 %	5

Note: 2 S.D.A.M.P2 refers to 2 standard deviations above mean of population 2

Lead values did not require capping. The effects of capping are shown in Table 14-4.

Table 14-4 Summary of capped assay statistics for all zones.

Zone	Variable	Number	Mean	S.D.	Minimum	Maximum	C.V.
All Mineralized Zones	Au (oz/t)	1,026	0.022	0.054	0.001	0.510	2.42
	Ag (oz/t)	1,015	0.761	1.995	0.001	17.70	2.62
	Cu (%)	1,009	0.386	0.739	0.001	4.40	1.92
	Zn (%)	1,026	3.073	5.552	0.001	37.50	1.81
Main Lens (1)	Au (oz/t)	674	0.023	0.051	0.001	0.329	2.25
	Ag (oz/t)	665	0.872	2.240	0.001	17.70	2.57
	Cu (%)	660	0.452	0.828	0.001	4.40	1.83
	Zn (%)	674	3.684	6.203	0.001	37.50	1.68
West Lens (2)	Au (oz/t)	207	0.008	0.012	0.001	0.076	1.59
	Ag (oz/t)	205	0.200	0.327	0.001	1.97	1.64
	Cu (%)	206	0.254	0.484	0.001	2.41	1.91
	Zn (%)	207	1.585	3.253	0.001	19.22	1.05
East Lens (3)	Au (oz/t)	145	0.042	0.089	0.001	0.51	2.11
	Ag (oz/t)	145	1.044	2.035	0.001	10.30	1.95
	Cu (%)	143	0.271	0.548	0.001	2.81	2.02
	Zn (%)	145	2.356	4.361	0.001	22.70	1.85
Waste	Au (oz/t)	801	0.004	0.008	0.001	0.055	2.07
	Ag (oz/t)	782	0.145	0.518	0.001	4.30	3.56
	Cu (%)	781	0.115	0.369	0.001	2.40	3.20
	Zn (%)	801	0.364	1.289	0.001	11.20	3.54

Composites

Uniform down hole composites 10 ft. in length were produced that honoured the boundaries of the three mineralized solids and waste. Small intervals at the solid boundaries were combined with the adjoining sample if less than 5 ft. to produce a uniform support of 10 ± 5 ft. The statistics for composites are shown below.

Table 14-5 Summary of 10 ft composite statistics for all zones.

Zone	Variable	Number	Mean	S.D.	Minimum	Maximum	C.V.
Main Lens	Au (oz/t)	296	0.024	0.045	0.001	0.269	1.88
	Ag (oz/t)	295	0.749	1.611	0.001	13.41	2.15
	Cu (%)	293	0.415	0.694	0.001	4.40	1.67
	Zn (%)	296	3.313	5.012	0.001	30.40	1.51
	Pb (%)	296	0.131	0.305	0.001	2.52	2.34
West Lens	Au (oz/t)	86	0.008	0.010	0.001	0.060	1.31
	Ag (oz/t)	86	0.189	0.231	0.001	1.12	1.22
	Cu (%)	86	0.221	0.335	0.001	1.65	1.52
	Zn (%)	86	1.467	2.140	0.001	12.09	1.46
	Pb (%)	86	0.053	0.095	0.001	0.54	1.77
East Lens	Au (oz/t)	56	0.041	0.065	0.001	0.266	1.57
	Ag (oz/t)	56	1.181	2.047	0.001	10.30	1.73
	Cu (%)	56	0.229	0.340	0.001	1.84	1.48
	Zn (%)	56	2.504	3.661	0.001	13.97	1.46
	Pb (%)	56	0.323	0.707	0.001	3.31	2.19
Waste	Au (oz/t)	8,565	0.001	0.001	0.001	0.048	1.02
	Ag (oz/t)	8,562	0.005	0.068	0.001	3.64	13.37
	Cu (%)	8,563	0.004	0.045	0.001	2.13	11.97
	Zn (%)	8,565	0.008	0.086	0.001	2.58	9.53
	Pb (%)	8,565	0.002	0.014	0.001	0.54	7.23

Note: Long intervals of un-assayed core were added to waste and assigned 0.001 in the Composite process. This accounts for the increased numbers of composites and the reduced grades. The fact some higher grades occur outside the mineralized zones accounts for the very high coefficients of variation in Ag, Cu, Zn and Pb within waste.

Variography

Pairwise relative semivariograms were produced for each variable within the Main Lens in three principal directions: along strike Grid N-S, down dip Grid 0 Dip -90 and across Dip Grid E-W. There were insufficient pairs in the across dip direction to model more than the first part of the semivariogram. Nested spherical models were fit to all structures and geometric anisotropy was demonstrated for each variable. Ranges along strike varied from 180 ft. for Cu to 600 ft. for Au while along the down dip direction ranges varied from a minimum 400 ft. for Ag to 600 ft. for Zn.

There were insufficient pairs to generate models for the other two zones (West and East Lenses). Since the sample statistics, strike, dip and correlation coefficients were similar in each zone to the Main zone the models for Main zone were applied to both other zones.

Table 14-6 Summary of Semivariogram Parameters for Main Lens

Zone	Variable	Azimuth	Dip	C_o	C_1	C_2	Short Range (ft.)	Long Range (ft.)
Main	Zn	0	0	0.40	0.40	0.25	60	300
		90	0	0.40	0.40	0.25	40	60
		0	-90	0.40	0.40	0.25	200	600
	Cu	0	0	0.20	0.60	0.20	100	180
		90	0	0.20	0.60	0.20	40	80
		0	-90	0.20	0.60	0.20	300	500
	Ag	0	0	0.40	0.40	0.30	100	500
		90	0	0.40	0.40	0.30	80	100
		0	-90	0.40	0.40	0.30	300	400
	Au	0	0	0.10	0.50	0.40	180	600
		90	0	0.10	0.50	0.40	100	200
		0	-90	0.10	0.50	0.40	300	500
	Pb	0	0	0.50	0.25	0.30	120	400
		90	0	0.50	0.25	0.30	20	50
		0	-90	0.50	0.25	0.30	150	300
Waste	Zn	Omni Directional		0.055	0.020	0.045	50	400
	Cu	Omni Directional		0.035	0.020	0.035	50	500
	Ag	Omni Directional		0.010	0.004	0.012	50	400
	Au	Omni Directional		0.050	0.010	0.055	50	400
	Pb	Omni Directional		0.025	0.018	0,.027	60	300

Bulk Density

A total of 297 specific gravity determinations were available for the Blue Moon Project. These measurements can be subdivided by mineralized lens and by assay grades.

Table 14-7 Specific gravity determinations sorted by Mineralized Zone

Zone	Number	Low	High	Average
Main	210	2.53	4.32	3.24
West	7	2.86	3.52	3.00
East	38	2.77	4.55	3.42
Waste	42	2.65	4.69	3.36

Ideally one could interpolate a SG into all blocks for each mineralized lens and a weighted average could be calculated based on the proportion of each zone within a block. Unfortunately the mineralized lenses are not sampled evenly and some contain insufficient data to allow for an estimate. Another approach is to assume the SG is proportional to the amount of massive sulphides present in the block. Since iron was not estimated the amount of pyrite cannot be used in this determination but the combined sum of zinc and copper could be used to estimate the amount of sulphides present. The table below breaks up the specific gravity measurements into a series of Zn + Cu grade ranges and shows a progressive increase in SG with increased sulphides. The SG for any given block could then be assigned based on the combined Zn + Cu estimated grade for the block.

Specific gravities were converted to the Imperial tonnage conversion factor by the following equation.

Tonnage Factor (cu. ft. / ton) = 2000 lbs/ton / (62.4 lbs/cu.ft. * SG)

Table 14-8 Specific gravity determinations sorted by Combined Zn + Cu Grade

ZN + CU RANGE	Number	Low	High	Average	Tonnage Conversion Factor (TF) (cu. ft. / ton)
0 – 1.0 %	65	2.53	4.48	3.07	10.44
1.0 – 2.0 %	46	2.67	4.37	3.11	10.31
2.0 – 10.0 %	100	2.59	4.69	3.26	9.83
10.0 – 20.0 %	50	2.86	4.25	3.41	9.40
> 20 %	33	3.32	4.55	3.75	8.55

The average specific gravity for 32 samples in waste was 3.16 giving a TF of 10.14 cu. ft/ton. This value was applied to the waste portions of blocks.

Block Model

A three dimensional block model with blocks 20 x 20 x 20 ft. in dimension was created to encompass the geologic solids. Each block was coded with the percentage of the block below topography. Each block was also coded with the mineralized zone code and the percentage of the block within that mineralized solid.

The block model origin was as follows:

Lower Left Corner of Model	5000 E	Column Size 20 ft.	275 cols.
	4800 N	Row Size 20 ft.	285 rows
Top of Model	1480	Level Size 20 ft.	174 levels
No Rotation			

Grade Interpolation

Grades for Zn, Cu, Pb, Ag and Au were interpolated into blocks by Ordinary Kriging. Within each mineralized zone, only composites from that zone were used in the kriging process.

Kriging was completed in a series of passes for each variable within each of the three mineralized zones and finally for the waste. A first pass was made using a search ellipse with dimensions equal to ¼ the semivariogram range in each of the three principal directions. The ellipse was aligned parallel to the three principal directions. If a minimum of 4 composites was found in the search the block was estimated. For blocks not estimated in pass 1 a second pass using dimensions for the search ellipse equal to ½ the semivariogram ranges. For blocks not estimated in Pass 2 a third pass using the full range was completed. Finally for blocks still not estimated a fourth pass using twice the range was run. In all passes if more than 12 composites were found the closest 12 were used. This process estimated grades for the part of each block within the mineralized solids.

For blocks with less than 100% of their volume contained within the mineralized solids, the waste portion of the block was estimated using only composites outside the mineralized solids. A weighted average grade for the total block was then estimated.

The search directions and distances for the West and East mineralized zones were taken from the variogram produced for the Main Zone. These search parameters and those for waste are shown below.

Table 14-9 Summary of Kriging Parameters

Zone	Variable	Pass	Az/Dip	Dist. (ft.)	Az/Dip	Dist. (ft.)	Az/Dip	Dist. (ft.)
Main, West and East	Zn	1	90/0	15	0/0	75	0/-90	150
		2	90/0	30	0/0	150	0/-90	300
		3	90/0	60	0/0	300	0/-90	600
		4	90/0	120	0/0	600	0/-90	1200
	Cu	1	90/0	20	0/0	45	0/-90	125
		2	90/0	40	0/0	90	0/-90	250
		3	90/0	80	0/0	180	0/-90	500
		4	90/0	160	0/0	600	0/-90	1200
	Ag	1	90/0	25	0/0	125	0/-90	100
		2	90/0	50	0/0	250	0/-90	200
		3	90/0	100	0/0	500	0/-90	400
		4	90/0	200	0/0	600	0/-90	1200
	Au	1	90/0	50	0/0	150	0/-90	125
		2	90/0	100	0/0	300	0/-90	250
		3	90/0	200	0/0	600	0/-90	500
		4	90/0	200	0/0	600	0/-90	1200
	Pb	1	90/0	12.5	0/0	100	0/-90	75
		2	90/0	25	0/0	200	0/-90	150
		3	90/0	50	0/0	400	0/-90	300
		4	90/0	200	0/0	600	0/-90	1200
Waste	Zn, Cu, Ag, Au,	1	Omni Directional			100		
		2	Omni Directional			200		
		3	Omni Directional			400		
		4	Omni Directional			800		
	Pb	1	Omni Directional			75		
		2	Omni Directional			150		
		3	Omni Directional			300		
		4	Omni Directional			800		

Classification

Introduction

Based on the study herein reported, delineated mineralization of the Blue Moon Project is classified as a resource according to the following definition from National Instrument 43-101 and CIM (2014):

"In this Instrument, the terms "Mineral Resource", "Inferred Mineral Resource", "Indicated Mineral Resource" and "Measured Mineral Resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards (May 2014) on Mineral Resources and Mineral Reserves adopted by CIM Council, as those definitions may be amended."

The terms Measured, Indicated and Inferred are defined by CIM (2014) as follows:
"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

"The term Mineral Resource covers mineralisation and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing. Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time."

Inferred Mineral Resource

"An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration."

"An 'Inferred Mineral Resource' is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101."

"There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource."

Indicated Mineral Resource

"An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve."

"Mineralisation may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralisation. The Qualified Person must recognise the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions."

Measured Mineral Resource

"A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve."

"Mineralisation or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralisation can be estimated to within close limits and that variation from the estimate

would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit."

Modifying Factors
"Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors."

Results

The geologic continuity of the Blue Moon deposit has been established through geologic mapping and logging of diamond drill core. Geologic solids describing mineralized lenses were produced from assays and drill logs and used to constrain the estimate. Grade continuity was quantified using semivariograms which are an aspect of data analysis that assist in defining the correlation and range of influence of a grade variable in various directions in three dimensions. Within the Main and West Zone blocks the geologic and grade continuity of blocks estimated in Pass 1 or Pass 2 for zinc, using search ellipses of up to ½ the semivariogram ranges could be classified as Indicated. However changes to the CIM definitions in 2014, "*An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions."* now require all blocks to be classified as Inferred since at this stage of the project information on mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors is not available to support a Preliminary Feasibility Study.

The results are summarized in a series of grade-tonnage tables. As the Blue Moon is a multi-variable deposit, with all variables contributing to the economic value, a method of combining the grades into one variable was required. A zinc equivalent value "ZnEq" was chosen making use of reasonable metal prices and estimated recoveries (the recoveries are discussed in Item 13). The parameters used were as follows:

Variable	**Metal Price**	**Recovery**	**Factor**
Zinc	$US1.30/pound	95% Recovery	24.70
Copper	$US 3.00/pound	93% Recovery	55.80
Lead	$US 1.00/pound	95% Recovery	19.00
Silver	$US 17.00/oz	65% Recovery	11.05
Gold	$US 1250.00/oz	70% Recovery	875.00

The metal prices and the recoveries selected represent reasonable estimates of long term metal prices and potential recoveries of metal in concentrate. Further study of both parameters is required to advance the project to the next phase.

The equation to calculate ZnEq was as follows:

ZnEq = (Zn% * 24.70 + Cu % * 55.80 + Pb% * 19.00 + Ag(oz/t) * 11.05 + Au(oz/t) * 875.00) / 24.70

Reasonable expectations of economic extraction can be determined by comparing the Blue Moon Deposit to a couple of producing mines. The first is the Bolanitos Mine located in central Mexico. At Bolanitos there are three epithermal vein deposits steeply dipping. The three mines are all ramp accessed with ore being within approximately 200 metres from surface. This is thought to be analogous to Blue Moon in that the production rate is 1,600 tpd using flotation technology and similar mining methods. Blue Moon will use longhole mining methods while Bolanitos uses longhole stopping but also the more expensive cut and fill method. Blue Moon will produce two concentrates whilst Bolanitos has a floatation plant which produces a bulk concentrate. Bolanitos operates three mines and transports ore an average distance of approximately 12 km to its plant whereas Blue Moon will operate a single mine with a plant located next to it. Bolanitos is mining veins from 1–12 metres thick whereas Blue Moon will mine an average deposit width of approximately 5 metres.

Bolanitos is currently using an $US85 per tonne cut-off grade which is higher than what is expected at Blue Moon due to the three smaller deposits they are mining, the cut and fill component of the mining operation and the 12 km haul to the processing plant.

A second analogous deposit might be Trevali Mining's Santander Mine in central Peru. The deposits are carbonate replacement zones and are steeply dipping. Measured and Indicated resources are about 3.8 Mt grading 4.85% Zn, 0.83% Pb and 1.23 oz/t Ag. It is thought this is a reasonable comparison because it is a base metal mine using similar mining methods with ramp access, as proposed at Blue Moon. The plant produces two concentrates, zinc and lead/silver with a slightly higher production rate of 2,000 tpd compared to the anticipated 1,600 tpd at Blue Moon. Operating costs are $US35 to $US40/tonne of mill feed whereas at Blue Moon the anticipated costs are in the $US70/ton range. The differences are mostly attributable to higher labour rates in California. The Santander Mine operates on grid power as will the Blue Moon.

While the Blue Moon deposit is a VMS and the two analogous examples discussed are an epithermal vein and carbonate replacement respectively, they both are mining underground on a narrow steeply dipping mineralized zone similar in geometry to Blue Moon, using mining methods likely to prove applicable to a potential, future Blue Moon mining operation.

At Blue Moon the longhole retreat mining method with cemented fill is envisioned (could be rockfill or could be cemented paste fill). Stopes will thus be longitudinal. Access to the mine would be provided by a ramp from surface; a shaft would be used for extraction of ore and waste. Ideally, the shaft would be centrally located between the lateral extremities in the footwall of the deposit. The ramp from surface would also be located in the footwall and not far from the shaft. Ideally sublevels would be driven in the deposit every 20 metres vertically and every third level would have a footwall extraction drift driven in the waste. Ore from the three sublevels would be drilled and blasted from the extremities of the mineralized zones retreating to the central ramp. Mucking at the extraction levels would be carried out through draw points into the lowest of the three sublevels. Cemented fill would be placed in each stope and allowed to cure before mining the adjacent stope longitudinally.

An economic cut-off grade can be determined by using the appropriate metal prices for zinc, copper, silver, lead and gold to determine a ZnEq (%) COG and the foreign exchange rate. Additional input parameters include operational costs comprised of:

- Mining
- Processing

- G & A

Mining

It's expected that with longhole retreat mining at the approximate rate of 1,500 tonnes per day, that costs might approximate $60.00/tonne. This includes drilling, blasting, loading, hauling and hoisting of all production ore. Additionally, it would include ore development on each sublevel and corresponding waste draw points on every third sublevel. Footwall extraction drifts would be capitalized. Lastly, general mine expenses should be included in mining operating costs. These costs are typical for this mining method applied to a deposit with this geometry at this production rate and independent of the mineral being mined.

Processing

It is envisioned that the mill would operate in the 1,500 tonne per day range. Assumed processing costs are based on other mills (in Canada/US) processing two concentrates. Processing cost assumptions were factored according to production rates and operating costs at these other plants. Processing costs include crushing, grinding, production of two concentrates, filtering and transport to a local concentrate shed. Processing costs are assumed to be $18.00/tonne.

G & A

G & A operating costs were based upon similar sized underground mines. For a production rate of 1,500 tpd, it's expected that G & A costs will be approximately $7.00/tonne.

COG Calculations

Using the following parameters:

Zinc price ($US/lb):	1.10
Exchange rate ($US/$C):	0.80
Zinc Recovery (%):	85.0
Operating Costs ($C/t):	85.00

The COG can be calculated as Total cost /metal price / recovery
COG ZnEq = 85$C * 0.80 / 1.10 /2.204/1000*100/ (85 / 100)
= 3.30% ZnEq.

As a result, an economic cut-off of 4% ZnEq would seem reasonable for the Blue Moon Deposit. The ZnEq cut-off value of 4 % has been highlighted to reflect a reasonable estimate of costs for an underground mining and milling operation. Further study is required to advance the project to the next phase.

The first Table 14-10 combines all three zones and describe the inferred resource present if you could mine to the mineralized solid boundaries. No external dilution has been applied.

Table 14-10 Blue Moon Mineralized Portion of Blocks - Classed Inferred

Cut-Off ZnEq (%)	Tons > Cut-Off (tons)	Grade > Cut-Off Zn (%)	Cu (%)	Ag (oz/t)	Au (oz/t)	Pb (%)	ZnEq (%)	Contained Metal Mlbs Zn	Mlbs Cu	Mlbs Pb	Mozs Ag	Mozs Au
1.0	18,350,000	2.80	0.29	0.74	0.02	0.17	4.64	1028.33	105.70	61.66	13.56	0.367
2.0	13,060,000	3.60	0.34	0.97	0.03	0.22	5.93	939.54	89.85	56.16	12.72	0.353
3.0	9,380,000	4.44	0.41	1.21	0.03	0.27	7.29	833.13	77.67	50.28	11.34	0.310
4.0	**7,790,000**	**4.95**	**0.46**	**1.33**	**0.04**	**0.29**	**8.07**	**771.21**	**70.89**	**45.81**	**10.39**	**0.280**
5.0	6,490,000	5.44	0.50	1.44	0.04	0.32	8.79	706.63	64.25	41.28	9.35	0.247
6.0	5,330,000	5.95	0.53	1.54	0.04	0.34	9.51	634.70	56.50	36.35	8.19	0.213
7.0	4,200,000	6.54	0.57	1.63	0.04	0.36	10.33	549.19	47.96	30.41	6.83	0.176
8.0	3,090,000	7.21	0.63	1.78	0.05	0.38	11.34	445.52	38.75	23.67	5.51	0.142

Finally the inferred resource within the mineralized solids has been subdivided by mineralized lens into Main, West and East in Tables 14-11 to 14-13.

Table 14-11 Blue Moon Main Zone Mineralized Portion of Blocks – Classed Inferred

Cut-Off ZnEq (%)	Tons > Cut-Off (tons)	Grade > Cut-Off Zn (%)	Cu (%)	Ag (oz/t)	Au (oz/t)	Pb (%)	ZnEq (%)	Contained Metal Mlbs Zn	Mlbs Cu	Mlbs Pb	Mozs Ag	Mozs Au
1.0	13,790,000	3.06	0.31	0.77	0.02	0.16	4.90	842.84	84.39	43.02	10.65	0.276
2.0	9,940,000	3.91	0.37	1.01	0.03	0.20	6.24	777.51	72.56	40.16	10.00	0.258
3.0	7,430,000	4.74	0.44	1.19	0.03	0.25	7.53	704.51	65.38	36.70	8.87	0.223
4.0	**6,290,000**	**5.24**	**0.48**	**1.30**	**0.03**	**0.27**	**8.26**	**658.94**	**60.51**	**34.09**	**8.16**	**0.201**
5.0	5,360,000	5.69	0.52	1.38	0.03	0.29	8.92	610.18	55.53	31.20	7.38	0.182
6.0	4,450,000	6.20	0.55	1.45	0.04	0.31	9.61	551.89	48.86	27.77	6.45	0.160
7.0	3,550,000	6.78	0.59	1.51	0.04	0.33	10.41	481.38	41.68	23.71	5.37	0.138
8.0	2,610,000	7.46	0.64	1.64	0.04	0.35	11.44	389.46	33.62	18.48	4.28	0.112

Table 14-12 Blue Moon West Zone Mineralized Portion of Blocks – Classed Inferred

Cut-Off ZnEq (%)	Tons > Cut-Off (tons)	Grade > Cut-Off Zn (%)	Cu (%)	Ag (oz/t)	Au (oz/t)	Pb (%)	ZnEq (%)	Contained Metal Mlbs Zn	Mlbs Cu	Mlbs Pb	Mozs Ag	Mozs Au
1.0	2,720,000	1.68	0.23	0.20	0.01	0.08	2.64	91.34	12.57	4.46	0.53	0.022
2.0	1,500,000	2.36	0.31	0.26	0.01	0.07	3.58	70.68	9.27	2.01	0.39	0.015
3.0	570,000	3.70	0.44	0.39	0.02	0.05	5.44	42.21	4.96	0.52	0.22	0.009
4.0	**360,000**	**4.55**	**0.53**	**0.46**	**0.02**	**0.04**	**6.68**	**32.77**	**3.82**	**0.25**	**0.16**	**0.007**
5.0	240,000	5.31	0.60	0.52	0.03	0.02	7.77	25.47	2.87	0.08	0.13	0.006
6.0	180,000	5.82	0.67	0.56	0.03	0.01	8.60	20.94	2.40	0.05	0.10	0.005
7.0	160,000	6.02	0.69	0.57	0.03	0.01	8.92	19.25	2.22	0.04	0.09	0.005
8.0	130,000	6.21	0.72	0.58	0.03	0.01	9.22	16.14	1.86	0.03	0.08	0.004

Table 14-13 Blue Moon East Zone Mineralized Portion of Blocks – Classed Inferred

Cut-Off ZnEq (%)	Tons > Cut-Off (tons)	Grade > Cut-Off						Contained Metal				
		Zn (%)	Cu (%)	Ag (oz/t)	Au (oz/t)	Pb (%)	ZnEq (%)	Mlbs Zn	Mlbs Cu	Mlbs Pb	Mozs Ag	Mozs Au
1.0	1,840,000	2.56	0.24	1.29	0.05	0.39	5.59	94.13	8.72	14.32	2.38	0.085
2.0	1,620,000	2.82	0.25	1.44	0.05	0.44	6.16	91.27	8.13	14.09	2.34	0.083
3.0	1,380,000	3.13	0.27	1.63	0.06	0.47	6.81	86.33	7.37	13.05	2.25	0.077
4.0	**1,140,000**	**3.50**	**0.29**	**1.81**	**0.06**	**0.50**	**7.47**	**79.73**	**6.54**	**11.47**	**2.06**	**0.068**
5.0	890,000	3.99	0.33	2.07	0.06	0.57	8.33	71.09	5.87	10.09	1.84	0.056
6.0	700,000	4.43	0.37	2.34	0.07	0.61	9.10	61.99	5.18	8.51	1.64	0.046
7.0	490,000	4.97	0.41	2.78	0.07	0.67	10.20	48.66	4.06	6.61	1.36	0.035
8.0	340,000	5.67	0.47	3.32	0.08	0.74	11.42	38.57	3.16	5.03	1.13	0.026

15.0 MINERAL RESERVES

Not applicable for a geologic resource.

16.0 MINING METHODS

Not applicable for a geologic resource.

17.0 RECOVERY METHODS

Not applicable for a geologic resource.

18.0 PROJECT INFRASTRUCTURE

Not applicable for a geologic resource.

19.0 MARKET STUDIES AND CONTRACTS

Not applicable for a geologic resource.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Not applicable for a geologic resource.

21.0 CAPITAL AND OPERATING COSTS

Not applicable for a geologic resource.

22.0 ECONOMIC ANALYSIS

Not applicable for a geologic resource.

23.0 ADJACENT PROPERTIES

At the present, there are no adjacent properties with similar mineralization to the Blue Moon property. However, when Blue Moon was mined during the Second World War, its ore was trucked to the nearby gold mine facility at the abandoned Jenny Lind Mine to be milled. The Jenny Lind Mine, which also included the Washington Mine with which it was consolidated, produced a recorded $1.1 million of gold before it closed in 1882. Mineralization at the Jenny Lind Mine was not similar to that at Blue Moon and may be classified as a low sulphidation vein system. The Washington-Jenny Lind simply had the nearest milling facility available at the time of Blue Moon mining operations.

The Blue Moon deposit is one of seventeen volcanic massive sulphide deposits known to exist in the Sierra Nevada Foothills copper-zinc belt of central California. Nearest of these to Blue Moon is the Akoz deposit which is located approximately 4 miles to the northwest. Akoz had small production, the zinc being marketed around 1915 as a cure all due to the local sphalerite’s triboluminescence property being mistaken for radium.

The Penn Mine, located 60 miles north of Blue Moon within the same belt of rocks had a similar short period of mining activity between 1943 and 1949 and produced 84,000 tons of ore with averaging grades of 5.58% Pb, 7.89% Zn, 2.05% Cu, 2.37 oz/t Ag and 0.07 oz/t Au. The Penn mine has produced 973,784 tons of ore since it’s discovery in 1861.

24.0 OTHER RELEVANT DATA AND INFORMATION

No relevant data or information has knowingly been omitted by the author.

25.0 INTERPRETATION AND CONCLUSIONS

The Blue Moon deposit hosts an inferred resource 7.8 million tons grading 4.95% Zn, 0.46% Cu, 0.29% Pb, 1.33 oz/ton Ag, and 0.04 oz/ton Au (8.1% ZnEq) within the mineralized zones and using a ZnEq cut-off of 4%.

Given the stage of this project, it may be reasonable to carry out a preliminary economic assessment study to determine the economic potential of the deposit.

Depending on the results of the preliminary economic assessment study, a drilling program may be required to increase the confidence in the resource estimate, produce more samples for metallurgical testing, as well as samples ABA testing of the lithologies.

26.0 RECOMMENDATIONS

Given the stage of this project, it may be reasonable to carry out a preliminary economic assessment study to determine the economic potential of the deposit.

Further drilling is warranted and a general summary of recommended drilling to fill-in gaps in the geological interpretation for the Blue Moon deposit is included in Table 26-1.

Table 26-1 Summary of Recommended Drilling

Shallow Drillholes	**Estimated DH Depth (ft)**
Section 7000	600
Section 7000	900
Section 7400	500
Section 7600	800
Section 7600	1200
Section 8000	500
Section 8200	500
Section 8400	700
Section 8800	500
Medium Depth Drillholes	
Section 7600	1000
Section 7800	1300
Section 8400	1200
Deep Drillholes	
South of Section 7000	2500
Section 8200	2500
Section 8600	2500
Total Drilling =	17,200

Using an estimated cost of $90/ft based upon recent proposals, the cost of the suggested drill program is estimated to be $1,548,000. With a contingency included and preliminary geotechnical, ARD, and metallurgical test work, the exploration program could cost approximately $2,000,000.

Given the stage of this project, new data generated as a result of the proposed exploration program should be compiled and consolidated with previous, vetted data, and should be used to complete a preliminary economic assessment study.

Table 26-2 Exploration Drilling Budget Recommendations

Expense category	**$US**
Drilling (17,200 ft)	$ 1,548,000
Planning, data compilation , modeling and reporting	$ 100,000
Permitting	$ 82,000
Camp logistics, management, drill platform excavation and reclamation	$ 150,000
Additional Metallurgical Testwork	$ 60,000
Acid Rock Drainage Testwork	$ 25,000
Geotechnical Study	$ 35,000
Preliminary Economic Assessment Study	$ 130,000
Total	$ 2,130,000

27.0 REFERENCES

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Terry, D.A., 1998, Exploration Proposal for the Blue Moon Project, Mariposa County, California, private company report for Boliden Limited, June 11, 1988.

Thompson, I.S. 1995, Valuation of the Blue Moon Property, California for Colony Pacific Explorations Ltd., private company report dated October 12, 1995.

28.0 CERTIFICATES

CERTIFICATE G.H. Giroux

I, G.H. Giroux, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:

1) I am a consulting geological engineer with an office at 982 Broadview Drive, North Vancouver, British Columbia.
2) I am a graduate of the University of British Columbia in 1970 with a B.A. Sc. and in 1984 with a M.A. Sc., both in Geological Engineering.
3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4) I have practiced my profession continuously since 1970. I have had over 40 years' experience estimating mineral resources. I have previously completed resource estimations on a wide variety of massive sulphide deposits including Myra Falls, Wolverine and Marg.
5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
6) This report titled "Resource Estimate for the Blue Moon Massive Sulphide Occurrence" dated October 5, 2017 and amended on November 14, 2018, is based on a study of the data and literature available on the Blue Moon Property. I am responsible for Section 14, outlining the resource estimation which was originally completed in Vancouver during 2007. This report has updated that resource to comply with 2014 CIM definitions and uses current metal prices to produce a resource with effective date August 2018. I have not visited the property.
7) I have previously estimated a Resource for this property in 2007.
8) As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
9) I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 14th day of November, 2018

"signed and sealed"

G. H. Giroux, P.Eng., MASc.

CERTIFICATE OF QUALIFICATION

I, Lawrence J. O'Connor of Reno, Nevada, USA do hereby certify that:

1. I am an independent consulting geologist with an office at 10220 Hawkeye Circle, Reno, Nevada, 89523 USA.

2. I graduated from Fort Lewis College in Durango, Colorado, USA and was awarded a Bachelor of Science degree in Geology in 1984.

3. I am in good standing as a Registered Member of the Society for Mining Metallurgy and Exploration (SME), R.M. #4063116.

4. I have practiced my profession within the natural resource industry continuously for the past 33 years. My experience includes exploration, property evaluations, surface and underground operations, ore control geology, resource/reserve modeling, mine engineering, process management, reclamation and closure, and mines management as G.M. and V.P. Ops. By reason of education and experience I am knowledgeable of massive sulphide deposits.

5. I am responsible for all sections of the report except for Section 14 of the technical report titled "Resource Estimate for the Blue Moon Massive Sulphide Occurrence", dated October 5th, 2017 and amended on November 14th, 2018.

6. I have personally inspected the Blue Moon Massive Sulphide project on June 6th, 7th and 8th, on July 25th and 26th, and on September 19th, 20th and 21st, 2017.

7. I am not independent of the company as I am a Technical Advisor to the company and have share options in the company.

8. I have had no previous involvement with the Blue Moon property that is the subject of this Technical Report.

9. I have read National Instrument 43-101 and Form 43-101F1 and, by reason of education and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

10. As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

DATED on this 14th day of November, 2018.

"signed and sealed"

Lawrence J. O'Connor, BSc, RM-SME

APPENDIX 1 – LIST OF DRILL HOLES USED IN ESTIMATE

HOLE	EASTING	NORTHING	ELEVATION	HOLE LENGTH (ft)
AE1	7031.9	7568.3	1231.2	1191.0
AE2	7640.7	6431.4	1315.9	584.3
AE3	7977.9	7813.8	1309.3	1053.8
B60	8271.2	7686.0	1229.7	959.0
B61	8350.6	8002.7	1229.8	1341.0
B62	7639.9	6431.9	1304.7	1195.0
B63	7991.2	6442.3	1319.8	1115.0
B64	7169.7	9398.3	1100.4	1408.0
B65	7787.0	6204.8	1339.4	702.0
B66	8185.2	6124.6	1271.5	2146.0
B67	7063.1	3699.6	1179.9	1002.0
B68	7999.7	7999.8	1338.6	2500.0
B69	7211.0	3304.7	1232.3	1152.0
B70	6550.6	5938.2	1097.5	3602.0
B71	7546.3	6201.8	1306.1	351.0
B72	7647.8	6698.8	1304.8	460.0
B73	7561.4	1217.5	1178.0	906.0
B74	7358.6	2108.3	1210.3	800.0
CH01	7201.5	8948.3	1099.6	748.0
CH02	7202.3	8950.4	1099.7	836.0
CH03	7201.6	8938.6	1099.4	732.5
CH04	7490.7	8982.8	1245.0	680.0
CH05	7333.9	8602.6	1229.1	903.0
CH06	7196.4	8958.7	1100.3	780.0
CH07	7196.6	8960.4	1100.1	879.0
CH08	7196.5	8959.4	1100.1	987.0
CH09	6858.4	8829.9	1049.6	1549.0
CH10	6858.1	8830.2	1049.3	1435.0
CH11	7000.0	9000.0	1054.3	1110.0
CH12	6856.8	8824.5	1049.4	1835.0
CH13	6855.7	9022.1	1034.2	1712.0
CH14	6856.6	9019.7	1034.7	1850.0
CH15	7072.4	8702.4	1121.6	1194.0
CH16	6856.6	8819.9	1050.2	1791.0
CH17	6777.2	8220.1	1090.5	2160.0
CH18	6777.7	8217.8	1090.7	2423.0
CH19	6778.0	8218.1	1091.3	1682.0
CH20	6477.4	7837.0	1213.9	2659.0
CH21	6853.8	8818.7	1051.6	2188.0
CH22	6772.3	8210.7	1092.5	2207.7

CH23	7170.1	8074.8	18.4	620.0
CH24	7211.6	8065.9	-17.0	1039.0
CH25	6120.0	7996.5	1236.4	3333.3
CH26	7611.0	8007.9	81.4	116.0
CH27	6124.6	7494.5	1260.0	1843.2
CH28	6426.8	7457.7	306.7	2401.0
CH29	7002.3	9099.9	1063.4	1139.7
CH30	7219.6	7197.1	1237.0	720.0
CH31	6960.5	7199.0	1174.5	1184.0
CH32	7001.0	9100.0	1063.0	1444.3
CH33	6959.6	7199.0	1174.3	1687.0
CH34	6943.4	7596.9	269.6	1331.0
CH35	6983.8	7355.2	1191.3	1439.0
CH36	7205.3	7203.2	733.3	889.0
CH37	6820.6	6999.8	1190.9	1842.0
CH38	6887.6	6802.2	1206.6	1355.5
CH39	6886.3	6800.2	1206.6	3346.0
CH40	6759.3	7573.9	1168.4	2436.8
CH41	7207.7	6784.4	28.5	1293.5
CH42	7142.0	7637.3	29.0	1191.0
CH43	7207.9	8184.0	200.0	776.0
CH44	7226.2	8544.2	55.0	974.0
CH45	7173.2	8856.4	217.6	713.0
CH46	7296.5	8800.8	-15.7	461.0
CH47	6772.2	8223.5	1090.5	1596.0
CH48	6772.2	8222.0	1090.5	1446.0
CH49	7256.7	6799.3	1207.3	906.0
CH50	7853.4	8238.7	1329.9	433.0
CH51	6772.3	7927.6	1130.4	2285.0
CH52	6986.7	7596.8	464.3	959.0
CH53	7070.6	7906.7	400.4	1326.0
CH54	6997.7	7907.7	574.2	1129.5
CH55	6789.3	7799.9	1149.5	2025.0
CH56	6797.9	8870.7	1044.7	1975.0
CH57	6761.9	7573.9	1169.0	2189.5
CH58	7211.8	8886.8	109.6	938.0
CH59	6253.5	7571.6	1255.7	3187.0
LO99-01	8950.0	3725.0	1160.0	358.0
LO99-02	9200.0	3610.0	1190.0	758.0
LO99-03	8975.0	4000.0	1160.0	315.0
LO99-04	8945.0	3400.0	1155.0	345.0
LO99-05	9135.0	3610.0	1170.0	695.0