LBSR: OTC Markets

Welcome to the Hay Mountain Project, centered within the "Great Cluster" of Copper Resources

Consider where Hay Mountain is while reviewing the SRK Consulting Technical Report

James A. Briscoe CEO/Chief Geologist

Analysis and calculation of what the potential is for the Hay Mountain Project can be made based on the US Geological Survey's study of the mines of the area. This recent publication identifies and names the "Great Cluster" of copper resources. The following image below expands on the USGS's work and lists numerous other mines and prospects in Arizona and northern Mexico.

The USGS publication map comes from identifying historic production from at least 37 porphyry copper mines in S E Arizona and northern Mexico containing 240 million metric tons (tonnes) of copper, divided by 37 deposits in the Great Copper – Gold cluster is an average of copper content of 6.5 million metric tons copper = 14.3 Billion lbs. copper @ a deemed price of $6/pound or = $86 Billion dollars per deposit in the Great Cluster. *See USGS publication Circular 1380, Chapter 7: "United States–Mexican Borderlands—Facing tomorrow's challenges through USGS science"*

In mining exploration, you must go where the copper is. It is common to use the term "Elephant Country." It is clear from the US Geological Survey study that the Great Copper (& Gold – our term) Cluster is one of the largest concentrations of porphyry copper deposits in the world. We don't know precisely why it is here – but a proliferation of volcanic caldera structures, one of which is the Tombstone Caldera, which I was the first one to identify from geologic features I was familiar with from working in the McDermitt Caldera on the Oregon – Nevada border in the mid-1970s. Much of the features of the Tombstone Caldera have been eroded away, but enough are still present to be an indicator. Our Hay Mountain Project lies almost dead center in the "Great Cluster" and it has all the characteristics that define it as a porphyry copper deposit. For Hay Mountain, because it is so large in relation to the footprints of other mines like Morenci and Bingham Canyon Utah, it could contain based on this logic, much more than the average.

Geologic mineral exploration is performed by becoming familiar with the geology of existing mines. Over my decades of exploration experience, I have looked at all the mines in this area at least once and sometimes 4 to 5 times or more. There are subtle indicators that I observe that are not recognized by less experienced explorers. Further during work to date we have identified new exploration indicators which are so confidential and important to our investors and venture partners we cannot yet mention them.

After 10 long years of work in getting this wonderful land package together and following our 43-101 style report in collaboration with SRK Consulting, we have completed all the recommendations except drilling and we are now ready to drill holes on a grid across the targets on the property.

We believe we will discover a world class base and precious metal deposit that will extend from near the surface to great depth. Our magnetic susceptibility geophysics allows us to "see distorted limestone beds which appear to be mineralized and these are one of our top priorities. Further, if the Excelsior project at Johnson Camp succeeds in their in-place (called in situ) copper leaching, that may be a technology we can use on our shallow oxide ores in limestone.

The USGS maps of the "Great Cluster" and the Forward portion of the Technical Report follow, so you can see what we had planned all along. The detailed report is full of technical things that most layman will find tedious and boring. But if you would like to delve into more detail, simply send your e-mail and phone number to Tracy and she will forward it to you. But I must warn you it is about 150 pages.

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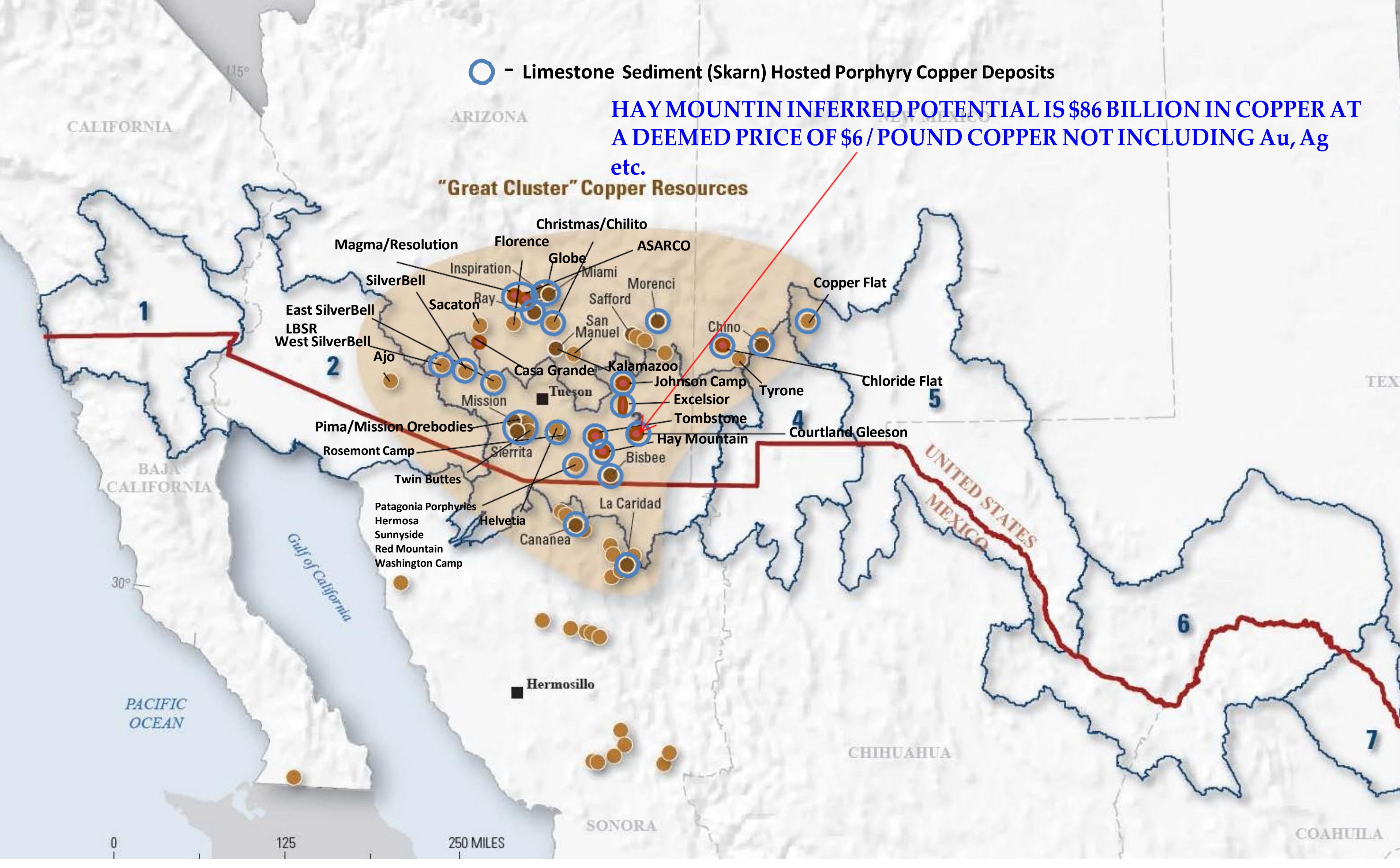
RISK FACTORS FOR OUR COMPANY ARE SET OUT IN OUR 10-K AND OTHER PERIODIC FILINGS WITH THE SEC ON EDGAR.



- Limestone Sediment (Skarn) Hosted Porphyry Copper Deposits
HAY MOUNTIN INFERRED POTENTIAL IS $86 BILLION IN COPPER AT A DEEMED PRICE OF $6 / POUND COPPER NOT INCLUDING Au, Ag etc.
"Great Cluster" Copper Resources
CALIFORNIA
ARIZONA
NEW MEXICO
115°
1
2
4
5
6
7
Christmas/Chilito
Magma/Resolution
Florence
ASARCO
Globe
Inspiration
Miami
Morenci
SilverBell
Ray
Safford
Sacaton
East SilverBell
San Manuel
LBSR
West SilverBell
Chino
Copper Flat
Ajo
Casa Grande
Kalamazoo
Johnson Camp
Tyrone
Chloride Flat
Mission
Tucson
Excelsior
Pima/Mission Orebodies
Tombstone
Courtland Gleeson
Hay Mountain
Rosemont Camp
Sierrita
Bisbee
Twin Buttes
La Caridad
Patagonia Porphyries
Hermosa
Sunnyside
Red Mountain
Washington Camp
Helvetia
Cananea
BAJA CALIFORNIA
Gulf of California
30°
UNITED STATES
MEXICO
TEX
Hermosillo
PACIFIC OCEAN
CHIHUAHUA
SONORA
COAHUILA
0
125
250 MILES

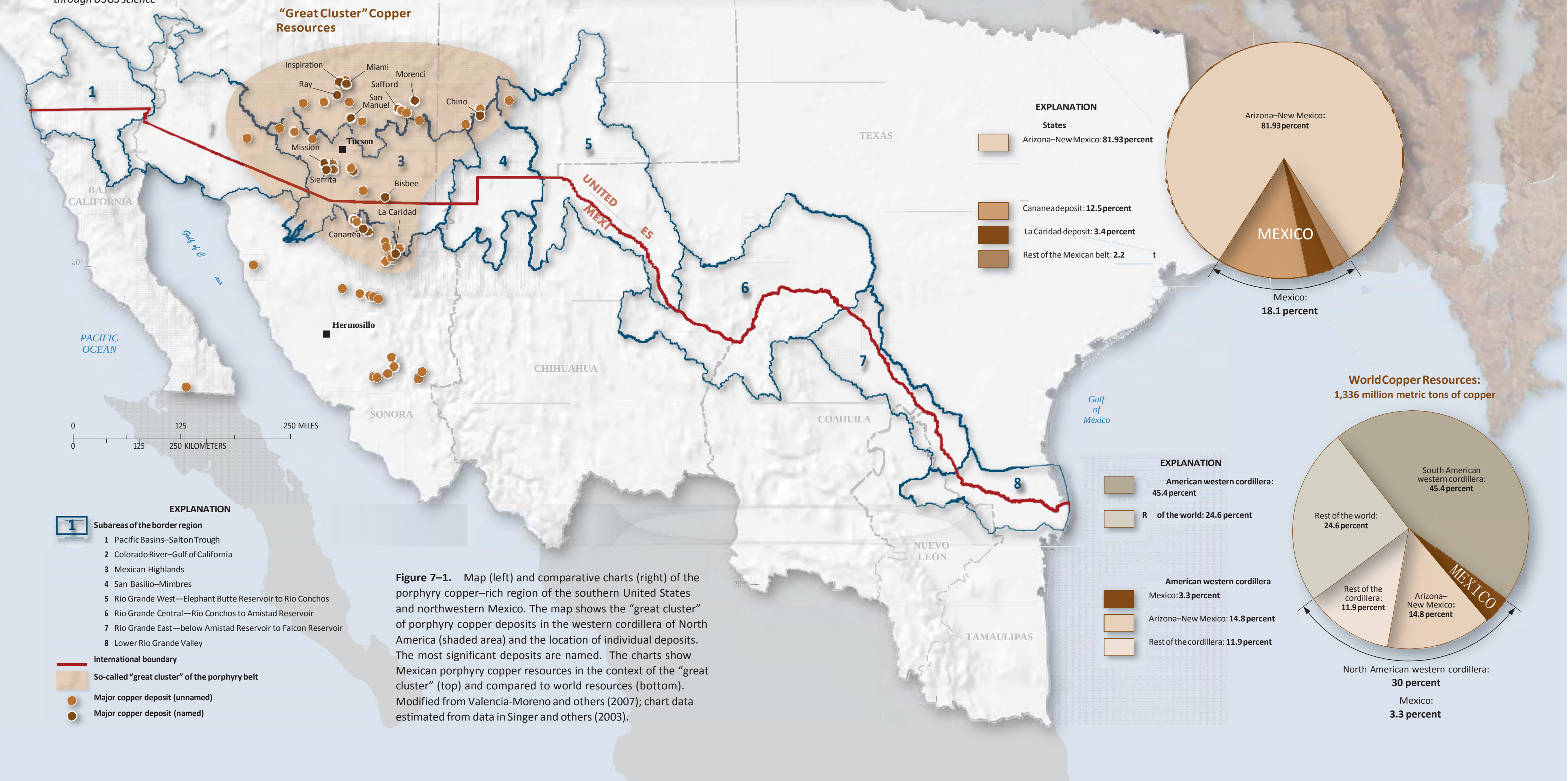


Figure 7–1. Map (left) and comparative charts (right) of the porphyry copper–rich region of the southern United States and northwestern Mexico. The map shows the "great cluster" of porphyry copper deposits in the western cordillera of North America (shaded area) and the location of individual deposits. The most significant deposits are named. The charts show Mexican porphyry copper resources in the context of the "great cluster" (top) and compared to world resources (bottom). Modified from Valencia-Moreno and others (2007); chart data estimated from data in Singer and others (2003).

Hay Mountain Exploration Report
Tombstone District, Arizona

Report Prepared for

Liberty Start Uranium & Metals Corp.

Report Prepared by

SRK Consulting (U.S.), Inc.
173300.030
August 31, 2011

Hay Mountain Exploration Report
Tombstone District, Arizona

Liberty Star Uranium & Metals Corp.

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1 Summary (Item 3) THIS IS THE BODY OF THE REPORT

Liberty Star Uranium & Metals Corporation (Liberty Star) of Tucson, Arizona, retained SRK Consulting (U.S.), Inc. (SRK) to prepare a Technical Report on Exploration at the Hay Mountain project in the Tombstone mining district of southeastern Arizona. The report follows the format of a Canadian National Instrument 43-101 Technical Report for the convenience of those who regularly use these reports.

The Hay Mountain project is an early stage, conceptual exploration target based on geological, geophysical, and geochemical data compiled by James A. Briscoe, Chief Executive Officer, Liberty Star (formerly JABA (US) Inc. (JABA) (Briscoe, 1993a, 1993b, 1994).

Section 1 summarizes this Technical Report.

1.1 Property Description and Location

The Hay Mountain project is located southeast of the town of Tombstone, Cochise County, Arizona, with a center at approximately latitude 31º39'15" N and longitude 110º00'10" W. Tombstone is approximately 72 miles (mi) southeast of Tucson (Figure 1-1). The Hay Mountain project area (Figure 1-2) is on two U. S. Geological Survey (USGS) 7 ½ minute topographic maps, Tombstone and Hay Mountain quadrangles. It is located in parts of Sections (Secs.) 23, 22, 21, 20, 29, 28, 27, 26, 35, 34, 33, and 32 in Township 20 South (T20S), Range 23 East (R22E), and in parts of Secs. 2, 3, 4, and 5, T21S, R23E, Gila and Salt River Meridian. The Tombstone Southeast and Potter Mountain quadrangles are immediately south of the Hay Mountain project area. The Hay Mountain project area is shown on Figure 1-2.

1.2 Ownership

Mineral exploration rights are under investigation by a contractor for Liberty Star. The Hay Mountain area of interest covers about 7,500 acres (a little over 12 square miles) southeast of the historic Tombstone mining district.

1.3 Mineralization and Geology

The target is a porphyry copper deposit related to a fracture system in an eroded caldera margin. Exploration to date has been regional-scale airborne geophysical surveys, geochemical, and biogeochemical surveys. Previous exploration for gold (Au) included geochemical, geophysical, and geological surveys and drilling on the Zebra and Redrock Canyon projects that are within the Hay Mountain project area.

The principal past production from the Tombstone mining district has been silver (Ag) from high grade veins associated with the intersection of north-northeast-striking fissures and andesite dikes with the fractured crests of northwest-trending anticlines (Butler and others, 1938). This mineralization has been dated at 74.5 million years ago (Ma) and alteration at 72 Ma (Newell, 1974). It is probably related to the intrusion of the Schieffelin Granodiorite and associated tuff, the Uncle Sam Tuff, which have been dated at 76 Ma and 73.5 Ma (Creasey and Kistler, 1962; Marvin and others, 1973).

A later period of mineralization was likely associated with the Tombstone rhyolite, dated at 66.6 Ma (Marvin and Cole, 1978) or 63 Ma (Newell, 1974) and the associated Extension/Comstock quartz monzonite porphyry in the eastern part of the district, dated at 62.8 ± 2.6 Ma (Drewes and others, 1985). This younger date is typical of the age of mineralization of porphyry copper deposits throughout southeastern Arizona. Liberty Star's exploration model focuses on porphyry copper mineralization that is centered on structural intersections created by fracture systems associated with emplacement of 74 Ma calderas in the Tombstone district.

Numerous publications describe the general geology and mining of the Tombstone mining district. The early reports focused on the central mining district where the more productive Ag mines were located (Blake, 1882a; Church, 1903; Ransome, 1920; Butler and others, 1938; and Gilluly, 1956). Additional research has been conducted by graduate students (economic geology by Newell, 1974, and hydrology by Hollyday, 1963), U.S. Geological Survey (USGS) geologists (Force, 1996), and Arizona Bureau of Mines researchers (manganese [Mn] deposits by Wilson and Butler, 1930).

The oldest rocks in the Tombstone Hills are the phyllites and metarhyolites of the Pinal Schist, which was dated at 1,695 Ma in the nearby Little Dragoon Mountains (Silver, 1967). It is intruded by granite, which may be similar to the granite dated at 1,420 Ma in the nearby Little Dragoon Mountains (Silver, 1978). The Precambrian rocks are unconformably overlain in the Tombstone Hills by a thick sequence of Paleozoic quartzite, limestone, and siltstone ranging in age from Cambrian (about 500 Ma) through Permian (about 250 Ma). These sedimentary rocks generally are excellent hosts to mineralization, as the limestone beds are reactive and the more resistant quartzite beds fracture easily under tectonic stress and provide pathways for veins and mineralization.

In southern Arizona, five mountain building episodes occurred during the Mesozoic and Cenozoic, bringing various types of structures, igneous rocks, and mineralization with each orogenic episode (Keith and Wilt, 1986). The Nevadan orogeny (approximately 190 to 145 Ma) in the Triassic and Jurassic was responsible for the copper-gold (Cu-Au) porphyry mineralization at nearby Bisbee and Courtland-Gleeson, but no rocks have been dated of this age in the Tombstone Hills. The Sevier orogeny (approximately 145 to 85 Ma) was mostly active in Nevada and Utah (Armstrong, 1972) and no rocks of this age have been dated in the Tombstone Hills.

The Laramide orogeny (85-43 Ma) is represented in the Tombstone Hills by two structural and mineralization types. The east-west faulting that uplifted Government Butte was emplaced early in the Laramide and may be related to early movement on the Prompter fault. The Ag mineralization in the main district was emplaced in association with northeast structures and caldera volcanism and intrusive rocks (74 Ma). A later intrusion of quartz monzonite porphyry and rhyolite (63 Ma) in the northern and eastern Tombstone Hills is of the same age and style as the porphyry copper mineralization that was emplaced throughout southern Arizona at that time period.

Cenozoic Orogenies in southern Arizona include the Galiuro (mid-Tertiary) orogeny (37-13 Ma) and Basin and Range Disturbance (13-5 Ma) (Keith and Wilt, 1985). The Galiuro orogeny is responsible for the epithermal precious metal mineralization in the Swisshelm Mountains of southeastern Arizona. However, no mineralization or igneous rocks of this age have been identified in the Tombstone Hills. The Basin and Range Disturbance is characterized by basalts and the development of thick basin-fill formation. There is usually no mineralization associated with the Late Tertiary, other than industrial minerals and aggregate associated with sedimentary basin-fill deposits.

1.4 Exploration Concept and Status

The exploration concept pursued by Liberty Star in the Hay Mountain project area focuses on the potential for a porphyry copper deposit under the basin-fill deposits. Evidence for this Cu mineralization is the high Cu and molybdenum (Mo) values in mesquite twigs as reported by Newell (1974). Potential in the district is for carbonate-hosted replacement-type porphyry copper mineralization at intermediate to moderate depth, as well as for shallow chalcocite blanket porphyry type mineralization (Guilbert, 1993).

Geochemical and geophysical surveys in the Tombstone district have been interpreted by Liberty Star to indicate a potential center of porphyry copper mineralization in the Hay Mountain project area. Liberty Star believes that porphyry copper mineralization has been emplaced into structures prepared by the eruption and collapse of the Tombstone caldera. This concept was based on research conducted by James A. Briscoe, Chief Executive Officer of Liberty Star, into caldera volcanism that is physically associated with porphyry copper deposits in southern Arizona and other areas of the world along the Pacific "Ring of Fire". Exploration at the Hay Mountain project focuses on geophysical surveys and metal zoning revealed by the geochemical sampling programs. The surveys suggest the presence of centers of potential porphyry copper mineralization at several centers in the Tombstone area (Guilbert, 1993).

The status of the Hay Mountain project is a grass-roots exploration target, with geochemical, alteration, and metal zoning patterns indicative of potential porphyry copper mineralization.

1.5 Mineral Resources

The Hay Mountain project is in the exploration phase. The best targets, as identified by the geochemical sampling, have yet to be drilled. Therefore, no indicated or inferred mineral resources have been delineated.

1.6 Development and Operations

No development has been started on the surface. No facilities or operations are currently in place on the Liberty Star claims.

1.7 Exploration Potential

There is potential to drill the favorable geochemical targets and discover porphyry copper mineralization. It is possible that a deposit could be discovered that would be amenable to underground mining. Numerous mining companies have pursued Ag, Au, and Cu mineralization targets in the Tombstone district, but none have yet drilled for Cu in the Hay Mountain area.

1.8 Conclusions and Recommendations

The Liberty Star exploration plan includes scout drilling on the most promising of the geochemical anomalies. Liberty Star's goal is drillhole discovery of a potentially productive porphyry copper deposit that would warrant additional exploration drilling, deposit delineation, and scoping level studies. Ultimately, the goal is to define Cu resources of sufficient size and grade to allow for conducting a feasibility study, obtaining permits, and designing and constructing a mine.

SRK has reviewed the existing data and recommends the proposed exploration drilling program. SRK concludes the project information generated to date has defined exploration concepts that are worthy of follow-up work by exploration drilling.

The Hay Mountain project represents a beginning exploration project with a limited amount of historical and current data. The data are insufficient to take the property to resource classification by current industry standards.

SRK makes the following recommendations. Details are in relevant sections of the report.

- Conduct helicopter-borne ZTEM (helicopter-borne Audio Frequency Magnetics (AFMAG) Z-axis Tipper Electromagnetic) geophysical surveying;
- Conduct biogeochemical and soil surveys to be analyzed for 64 elements;
- Data reduction and analysis by appropriate computer techniques;
- Use industry-standard software mapping and record-keeping;
- Conduct vertical diamond core drilling into bedrock;
- Conduct appropriate downhole surveys;

- Conduct drill logging in digital format logs;
- Develop Standard Operating Procedures for sampling and QA/QC programs;
- Analyze the half-core samples from bedrock portions of the drill hole, for at least ten drill holes; and

  Compare assay results of duplicate samples from two laboratories to determine analytical precision.

PROJECT LOCATION

REFERENCES

1. SRK (2008)

GENERAL NOTES

1. THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE BASED ON AVAILABLE INFORMATION.

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Tombstone, Arizona

Location map of the Tombstone district, Arizona

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Hay Mountain Exploration Report

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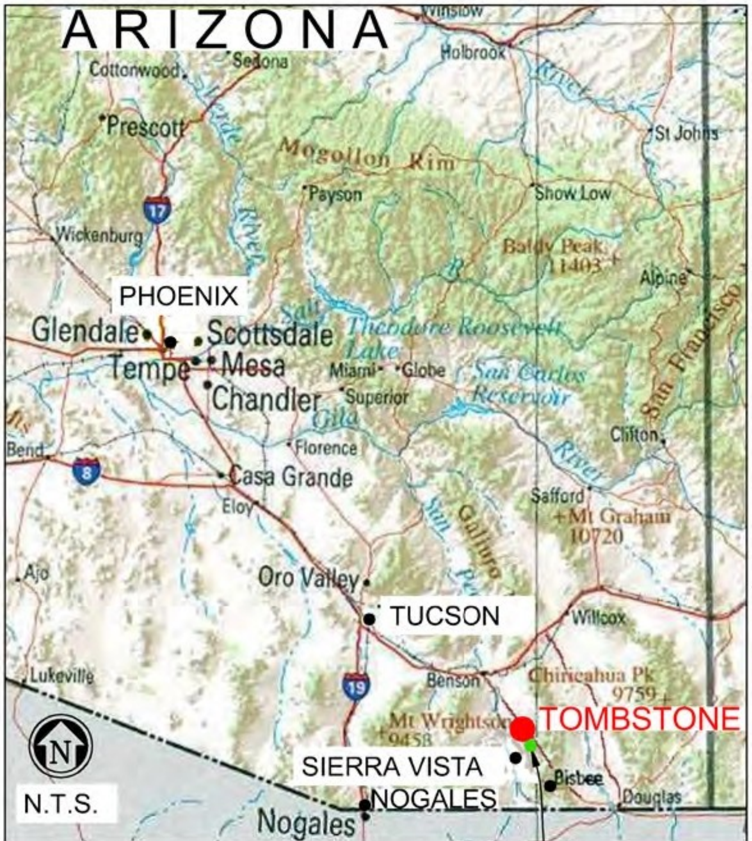

REFERENCES

1. SRK (2008)
2. LIBERTY STAR DATA FILES
3. USGS 7Yz MINUTE QUADRANGLES (SRK LIBRARY)

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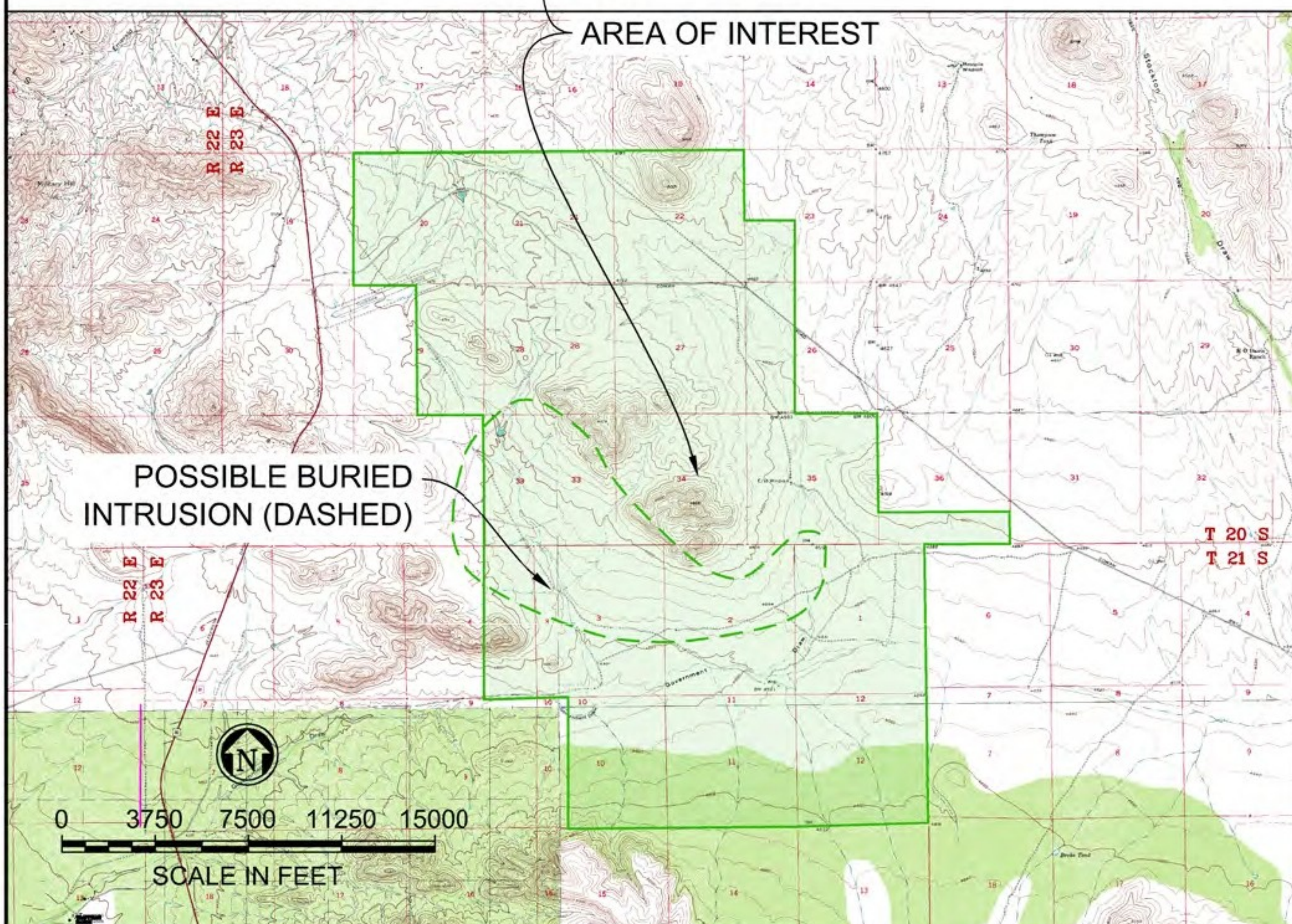
2. THE DRAWING IS IN UTM NAO 27 COORDINATES, ARIZONA ZONE 12N, FEET.

EXPLANATION

HAY MOUNTAIN AREA OF INTEREST



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Tombstone, Arizona

Location of Hay Mountain area of interest Tombstone Arizona

SRK JOB NO.: 173300.03 Task 600 Internal Control Number 3

FILE NAME: 1-2 Location of Hay Mountain area of interest, Tombstone, Arizona

Hay Mountain Exploration Report

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