CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

02/27/90

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BLACK BEAR GROUP

ALTERNATE NAMES:
LUTZ TUNNEL

COCHISE COUNTY MILS NUMBER: 123

LOCATION: TOWNSHIP 23 S RANGE 20 E SECTION 35 QUARTER SW
LATITUDE: N 31DEG 23MIN 03SEC LONGITUDE: W 110DEG 17MIN 09SEC
TOPO MAP NAME: MILLER PEAK - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
COPPER
SILVER

BIBLIOGRAPHY:
KEITH, S.B., 1973, AZBM BULL. 187, P. 66
ADMMR BLACK BEAR GROUP FILE

INTERIOR GEOLOGICAL SURVEY WASHINGTON, D. C. 1959
MR 6614

1 MILE

5000 6000 7000 FEET

1 KILOMETER

FEET

ROAD CLASSIF

Medium-duty — — — Li

Unimproved dirt

State R

ARIZONA

QUADRANGLE LOCATION

MILLE

NE/4 SU

N312

ACCURACY STANDARDS

COLORADO OR WASHINGTON 25, D. C.

MBOLS IS AVAILABLE ON REQUEST

Miller Peak, 7.5'

DONLON LoBIONDO
exploration/mining geologist

1621 Entrada Once
Tucson, Arizona 85718
(602) 299-6351

MEMORANDUM REPORT
ON THE
LAST CHANCE CLAIM,
BLACK BEAR GROUP
COCHISE COUNTY, ARIZONA

FOR: TOMBSTONE MINERAL RESERVES, INC.

DATA BY: DONLON LoBIONDO

DATE: OCTOBER 23, 1971

Donlon LoBiondo

REGISTERED GEOLOGIST
CERTIFICATE NO.
7231
DONLON
LOBIONDO
Date Signed 10/23/71
Arizona U. S. A.

MEMORANDUM REPORT ON THE
LAST CHANCE CLAIM, BLACK BEAR GROUP
COCHISE COUNTY, ARIZONA

CONCLUSIONS: Copper mineralization (predominantly oxide) in a hematite and hematite-altered limestone gangue occurs most abundantly in a zone about 160 feet long and up to 50 feet wide. Reconnaissance data result in an estimate of 6000 (±20%) indicated and inferred tons (with possibilities for additions) and a grade between 0.5% and 1.0% Cu.

INTRODUCTION: On October 19, 1971, the writer was guided to the workings by Mr. Charles Freesh, board chairman of the company, and an employee, Mr. Steve Henderson. The field work was requested to be completed in one day and approximately six hours were spent on inspecting the mineralization and on reconnaissance sampling of the deposit. No work was possible outside the immediate area of the hematite zone because of the time requirements.

GEOLOGY AND RESERVE ESTIMATION: The deposit is an irregular replacement of limestone (Escabrosa?) within and along wnat appears to be an undulating, flat-lying (bedding plane?) fault about 30 feet thick. There is some indication that steeper faults, more or less parallel in strike to the N 60 W trend of the replacement zone, may have provided additional structural

control. A Laramide quartz monzonite lies above and below the deposit but the distances were not ascertained. Hematite, both massive and earthy, makes up the vast bulk of the metallic mineralization. Copper occurs as chalcopyrite altering to bornite, chalcocite and the oxides, melaconite and malachite. Traces of chrysocolla and asurite were found also. Chalcopyrite and its commonest alteration product, melaconite, were seen only in minor amounts as pods and disseminations in replacement quartz veins and silicified/silicated limestone. Malachite is the most widespread copper mineral, occurring as stains, crusts, and as disseminated grains. The latter is commonest in masses of mixed grainy hematite and altered limestone. The grains are much less conspicuous than the showy, transported stains and crusts. Copper minerals are found throughout the hematized rock, but they have a very uneven distribution. Several large blocks of weakly silicated limestone occur within the mineralized zone.

Time lack permitted only reconnaissance sampling and estimating methods to be used. Along the surface sample lines, enough random rock chips were taken to fill a large sample bag (10-15 lbs.) except on line 0+00 where outcrops were scanty. In the walls of cuts leading to adits and in the adits themselves the walls were sampled by taking two or three chips from top to bottom of each wall every two or three feet along a wall. The west wall of adit #3 was excluded as it was in the limestone contact out of the hematite body. Measurements were by Brunton and tape supplemented by pacing. Although the methods were somewhat crude their results do serve to indicate the grades

and tonnage that might be expected. The assays correspond in a general way to visible differences in copper content. Some surface leaching undoubtedly has taken place and is reflected in some of the assay results. The adits, because they have acted as preferential routes for water flow and capillary movement of copper ions may have been preferentially enriched. A reserve estimate calculated on two different bases gives about 6000 tons (±20%) of indicated and inferred tons with a grade between 0.5% and 1.0% Cu. The important factors affecting the precision of the estimate are as follows:

1. Wide range in density between crystalline hematite, earthy hematite, and impure mixtures of hematite and silicated limestone and unknown ratios of these to one another which seriously affects the tonnage factor figure (cubic feet per ton).
2. Considerable variability on copper content over short distances.
3. Unknown size of blocks of limestone within the mineralized zone.
4. Unknown position of the concealed contact to the south of the exposed mineralization.

It is possible that extensions to the deposit exist in a south-southwest direction (normal to the long axis) and it is recommended that this exploration be undertaken after the more detailed sampling mentioned below is accomplisned. Drilling, preferably from the surface, can test this possibility relatively cheaply. Careful attention to complete sample collec-

tion is necessary because of the friability of the copper minerals. Increasing the number of sample stations (especially with drilling) and locating them accurately in the known mineralization is necessary to refine both tonnage and grade estimates.

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5675

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Tombstone Mineral Reserve
Mr. Charlie Freesh
4750 N. Black Canyon Hwy.
Phoenix, Arizona

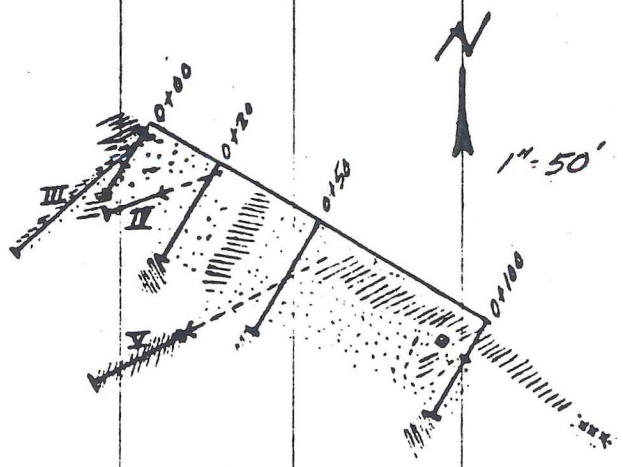
CC: D. LoBiondo

JOB # 010246
RECEIVED 10-20-71
REPORTED 10-23-71

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	Sulfide Sulfur %	MOLYBDENUM %
BB:	LOCATION						
1	0+00 ★	.08		.30		.09	
2	0+20	.06		.27		.09	
3	0+50	.08		.43		.12	
4	0+100	.52		2.76		.16	
5	ADIT V	.68		1.79		.15	
6	ADIT IV	.62		1.08		.16	
7	ADIT III	Trace		<.01		.19	

SOIL

★ ON TRAIL, EVEN WITH WEST WALL OF ADIT III

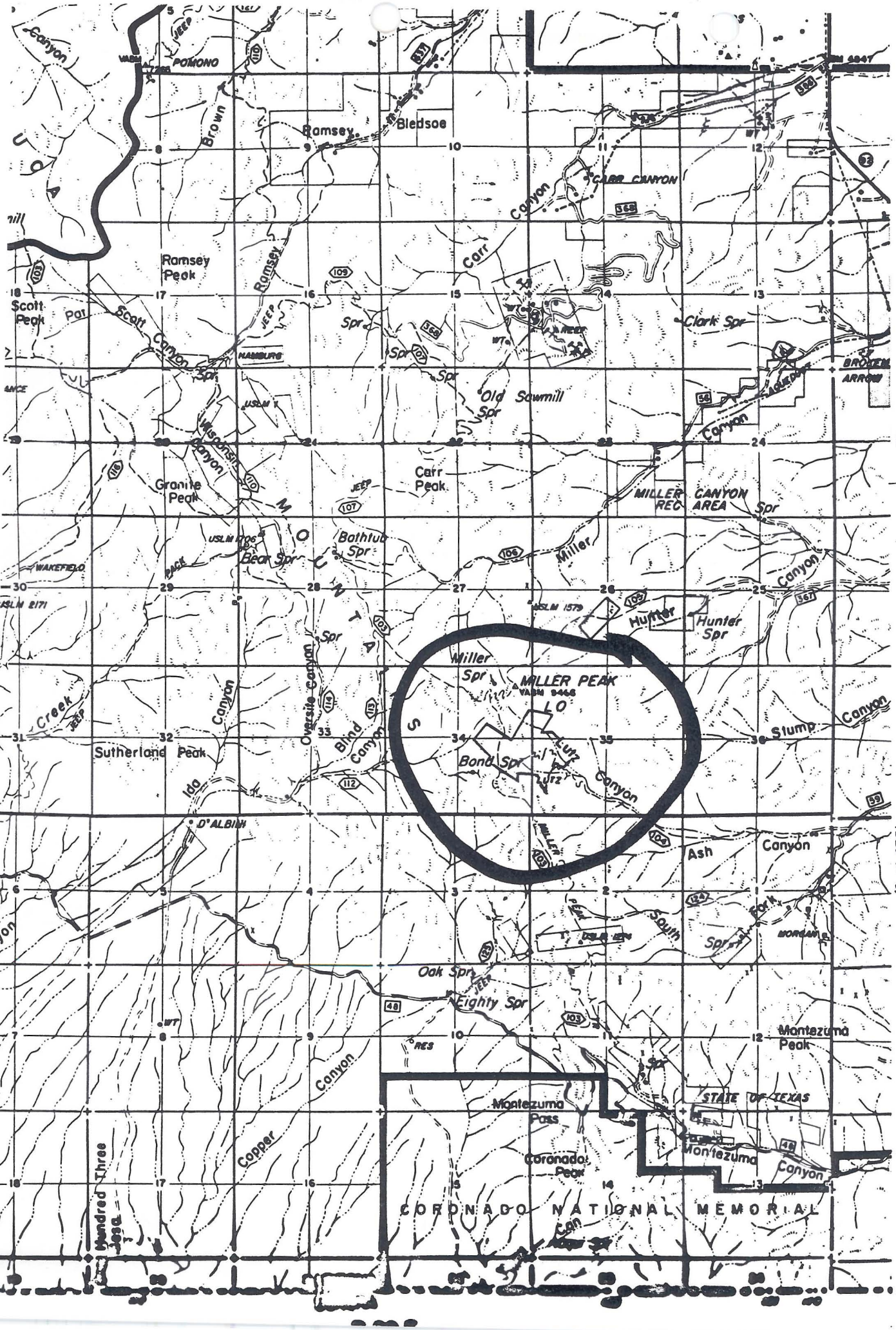


SKETCH MAP OF REPORT AREA

CHARGE $ 63.00

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE


POMONO
Ramsey
Bledsoe
Brown
Canyon
CARR CANYON
Carr
Ramsey Peak
Scott Peak
Scott Canyon
Ramsey
Clark Spr
Old Sawmill Spr
HAMBURG
BROKEN ARROW
Granite Peak
Carr Peak
MILLER CANYON AREA
Bathtub Spr
Bear Spr
Miller
Hunter
Hunter Spr
Miller Spr
MILLER PEAK
VABM 9466
Overzie Canyon
Blind Canyon
Bond Spr
Stump Canyon
Sutherland Peak
Ida
D'ALBINI
Ash Canyon
South Fork
Oak Spr
Eighty Spr
Montezuma Peak
Montezuma Pass
STATE OF TEXAS
Montezuma Canyon
Coronado Peak
Copper Canyon
Three Hundred Jose
CORONADO NATIONAL MEMORIAL
T. 23 S.
T. 24 S.
(Quad 475)

Box 657
Tombstone, Arizona
Ph. 602/457-2264

TO THE READER:

The purpose of this little prospectus is to acquaint exploration offices and mining firms with an interesting copper prospect which is the property of this writer.

LOCATION--

The area involved is located in Sections 34 and 35, R20E, T23S, of Cochise County, Arizona. It is reached by trail westward up Ash Canyon in the Huachuca Mountains and is in the general vicinity of Miller Peak.

LAND STATUS--

The property, known as the Black Bear Group and consisting of the patented claims White Fawn, Pine Tree, Mountain Lion, Lost Chance, Mammoth and New Strike No. Two were located between October 6, 1897 and January 1, 1901. Total acreage is 101.895. The Forest Service purchased the surface of these claims and the writer purchased the mineral rights. The Forest Service admits that the holder of the minerals has the right to ingress and egress to this property and has agreed that a road may be constructed to replace the old trail; and that the owner of the minerals may prospect for and/or mine and remove the minerals from this acreage. No conflict is apparent.

HISTORY--

After several years' search the writer has concluded that there is no existing written record of the activities on these claims. It is known that the Lutz Tunnel was driven about 1902. Some production is believed to have been made from surface workings on the Lost Chance Claim in the early 1930's with values chiefly in silver.

INVESTIGATION--

Accompanying this is a brief report made in 1971 by Donlon LoBiondo. Since then a major mining firm has done additional geological reconnaissance of the Lost Chance claim and made an oral report that was encouraging from the standpoint of increased values in silver and grade of copper. Tonnage estimates were most encouraging. They also reported that they felt it was "too small for their planning but that it might well be very interesting to a somewhat smaller firm."

CONCLUSION--

I am interested is showing this property to any firm that desires to look at it. I believe it to be an interesting prospect and am realistic about my plans for it.

Cordially,

Wayne Winters