

# GEOLOGICAL SURVEY OF WYOMING

SILVER CROWN MINING DISTRICT  
November 10, 1965

MR65-1

The district was organized April 4, 1879. Commencing at the S. E. corner of Sec. 1, Township 14, Range 70 west. 12 miles south, 12 miles west, 18 miles north, 12 miles east and 6 miles south to the point of beginning. The portion of the district that is well defined and mineralized, extends from Old North Crow Reservoir in a southerly direction, paralleling fairly near the boundary lines of Sections 35 and 36, Township 15, Sections 1 and 2, 11 and 12, 13 and 14, 23 and 24, 25 and 26, 35 and 36 all in Township 14. This zone is approximately one-fourth mile in width from the Happy Jack Road to the north and will average a mile or more in width from the Happy Jack Road to South Crow Creek.

Mineralization occurs in the fine-grained gneiss, the favorable host rock for mineral bearing solutions and is found in the fractured areas of the coarse grained gray granite. The Casper formation (limestone) and Fox Hills sandstone parallel along the eastern border and sediments extend to the east. The Sherman granite contacts the western portion of the zone and extends many miles to the west. The zone continues to the southwest across Township 13 to Highway 30 and on beyond the Colorado-Wyoming border. Very little prospecting has been done in this area, a gold placer plant operated near Ozone for a short time in 1935. A few shallow prospect holes have been dug and feldspar mined near the Colorado border. A mill was built at Tie Siding and some copper and gold ores were milled. Evidently there is a good zone of mineralization in the area, specimens of native copper have been found.

Moving back to the zone between South Crow Creek and the Happy Jack Road there is the Louise mine operated by Iver Johnson and his brothers-in-law the Richardsons, two shafts were sunk, some very good copper ore was milled thru the Copper King mill. There are no records of past production. They had good equipment for those days, there are two old boilers and other equipment there at the present time. One-fourth mile to the north. Steve and Frank Bon sunk a shaft on the London mine. In about 1915 Fred Roedel had the shaft sunk to about sixty feet, ore was found but not high enough grade to ship to a smelter. Both mines are in Section 35. In Section 36 and 1500 feet west of the Copper King shaft, the Orenogo Tunnel was driven for a distance of 500 feet. Some ore was found but the tunnel did not attain much depth and is in an area where the better grade of ore would be fairly deep. This work was done during the eighties and in the nineties a raise was stoped from near the face of the tunnel to the surface. The Orenogo Mining Company was controlled by the Sturgis family who lived in Cheyenne and then moved to New York City. William Sturgis Jr. until his death a few years ago was Vice-president of the First National Bank of New York City.

The Copper King Lode located October 10, 1881 by James Adams and developed by the Adams Copper Mining and Reduction Co. and later by the Hecla Consolidated Mining Co. The shaft was sunk to a depth of 157 feet and at the 80 foot level a drift was driven 80 feet to the south and 20 feet to the north. On the 130 foot level ore was mined from three areas, rooms to the south, northeast and a large room to the northwest. Ore was shipped to smelters and some ore milled thru the stamp mill that was built across the valley north of the Hecla School. The ore was not amenable to the process used and the tails assayed higher than the concentrates. Flotation of the sulphide ores would have been satisfactory but that process was not used until about 1907. There are no records

of past production. Horace Adams inherited the property and controlled it for about 40 years. Altho Adams probably had 50 mining claims he would try to contest practically every one who tried to prove-up on their homesteads, claiming the land was more valuable for mineral than grazing lands. Adams existed in some way until the early thirties, then went to the poor farm and died in 1935.

Sidney E. Bartlett of Long Beach, Calif. leased the Copper King property in 1937 and optioned it to the American Smelting and Refining Co. and they drilled five holes for a total footage of 1,400 feet but did not exercise the option to lease.

Mr. Bartlett died in 1947 and P. W. Dinneen and myself obtained a lease on the property. I went to Salt Lake City and A S & R permitted me to copy the drill logs from the drilling they had done. In 1950 we timbered the top of the shaft, dewatered and removed debris from the mine workings, making it accessable for examination for the first time since 1912.

In 1952 the Copper King Mining Co. was incorporated. Application was made to the Defense Minerals Exploration Administration for a loan amounting to 50 percent of the desired amount to explore the property by diamond drilling. The application for the loan was denied and we used money from the sale of stock to drill five holes at 200 foot intervals for a total footage of 2,630 feet, during the winter of 1952-53. Most of the area that has been drilled, estimated to be 6 million tons, is a low grade ore. There is a 50 to 60 foot width of higher grade ore that extends thru the central portion of the zone. This zone is cross-cut by the 80 and 130 foot levels of the shaft and diamond drill hole C 7. Average gold .139 ounces \$4.86, silver .429 ounces \$0.55, copper .76 per cent at 35.6 cents per pound \$5.41, total value per ton \$10.82.

In September of 1953 we were informed that an appropriation of \$20,000 had been approved by the Bureau of Mines for the Copper King property. These funds were used to map the indicated mineralized area, diamond drilling, core splitting and analysis of the cores. Three holes were drilled for a total footage of 2,630 feet during the winter of 1953-54. The Bureau of Mines Report, 5139, Copper King Mine, was published in June 1955.

In section 26 the Lennox and Steadman tunnel is on the north side of the canyon just above Crystal Lake Dam. In Section 24 and on the west side of the Red Canyon Road the Lennox tunnel was driven into Hecla Mountain for a distance of about 375 feet, good mineralization would have been encountered if they could have reached the vein exposed near the top of the mountain. The Carbonate Bell is in the northeast corner of this section. The Dan Joe is on the north side of the section and across the valley (Jaw Bone Gulch) from the Comstock and is reported to have produced \$500 in silver ore.

On Section 13 the King David Mine (Comstock since 1890) was located September 11, 1882 by my grandfather William M. Ferguson. My grandparents came to Cheyenne from Boston in 1875 and moved to where Granite Springs Reservoir is now in 1887. During the eighties the King David shaft was sunk to a depth of 126 feet and is reported to have produced several hundred tons of copper, gold and silver ore, one piece of copper glance (calcacite) as large as a good sized cook stove was lifted out of the shaft with ropes.



A \$5000 smelter was built on the property in 1885 and run successfully for one and one-half years until the water supply gave out. The smelter was taken down, moved and enlarged and run for some time, being supplied with ore from the King David and other mines in the district. Other claims located by my grandfather were the Beautiful Spring, Northampton, Eclipse, Jim Blaine, Boston, Wyoming (samples assayed 60 % copper), Star of the West, Crow Creek and Queen of Sheba.

In 1891 my grandfather died leaving my grandmother with 7 children the oldest 18 and the youngest two, \$300 in cash and \$200 in debts which she paid off. In the early nineteen hundreds a Vermont company managed by Theophilus Grout drove nearly 600 feet of tunnels on the Comstock and drained the shaft at the 100 foot level.

From 1914 to 1917 my uncle William W. Ferguson worked the Comstock with capital provided by Cheyenne residents. The shaft was sunk to a depth of 240 feet and drifts 200 feet on the 172 foot level and 400 feet on the 205 foot level were driven. One carload of ore shipped that had current values of gold \$29.05, silver \$14.21, copper \$5.26, value per ton \$48.52. A second carload was shipped with current values of \$1.74 in silver and \$56.96 per ton in copper. Lack of funds caused the mine to close.

In 1956 we incorporated the Good Venture Mining Co. and obtained a lease on the Comstock property. The shaft and drifts were dewatered and debris removed after being idle for 40 years. Track, air lines, lights and a hoist were installed. Some very high grade copper ore was mined but there did not seem to be sufficient ore for an operation. The surface and underground workings were surveyed and maps made, the map indicates that the old workings are on a stringer extending southwest from the main vein. A limited amount of core drilling will determine if that is true.

The Fairview mine is 300 yards west of the Comstock. The shaft is 70 feet deep with drifts. The formation and mineralization is identical with the Comstock. Ore was shipped from the mine during the winter of 1903-04. The vein appears to be very strong and should be core drilled.

In Section 23 the Farrell mine produced some very nice copper but the vein seems to be very narrow. John Morris sank the Rambler shaft to a depth of 80 feet, the ore contains copper, lead and zinc. Morris sank the Monte Cristo near the Happy Jack road and some molybdenum was found. During the thirties the Yellow Bird was sunk to nearly 200 feet in depth, I do not believe they followed the vein as there is no evidence of mineralization in the dump.

The Rambler, Yellow Bird and Monte Cristo are all in the Sherman granite. I have just mentioned properties where the shafts are 50 feet or more in depth and tunnels that are 50 feet or more in length, and could not estimate how many prospect holes in the district that are 5 to 20 feet in depth.

*Harry E. Ferguson*  
Harry E. Ferguson

# GOOD VENTURE MINING CO., INC.

## OFFICERS

PRESIDENT  
HARRY E. FERGUSON  
VICE-PRESIDENT  
T. L. "TED" JOHNSTON  
TREASURER  
HARRY E. RUCKMAN

Box 621 408 BOYD BLDG.

CHEYENNE, WYO.

COMSTOCK COPPER MINE  
Section 13, Town. 14, Range 70W.  
Silver Crown Mining District  
Laramie County, Wyoming

		Gold Oz.	Silver Oz.	Copper %
2-3-11	Assay Sample	.00	.00	66.60
4-18-15	" "	.03	.66	4.80
4-6-15	" "	.12	7.08	6.00
4-7-15	" "	.02	9.70	41.35
6-7-15	" "	.02	.50	2.01
7-25-17	" "	.04	.70	14.70
5-6-18	" "	.08	1.60	3.10
5-3-18	" "	.04	11.56	6.50
5-16-18	" "	Trace	2.80	6.90
6-13-49	" "	.02	1.20	4.00
6-13-49	" "	.02	1.00	6.00
6-13-49	" "	.02	1.00	3.50
5-13-55	" " from dump	.04	1.02	5.85
Samples assayed by AS&R Co. Omaha Plant.				
North drift, cross section of vein		.05	5.15	9.70
South drift winze		.07	1.93	8.70
North drift, wall rock		.00	.40	1.70
Bottom of shaft, 240 feet		.04	2.66	12.90
North Drift, 20 feet from shaft		Trace	14.00	18.20
South drift		.00	.20	.98
Shaft, 210 feet		.00	.50	.78
No description		.07	1.13	8.80
7-19-15	48,217 lbs. to AS&R Co.	.83	11.02	.74
3-14-16	25,114 lbs. to AS&R Co.	.00	1.35	8.00
10-11-18	Car Control	.04	1.25	5.74
6-29-20	Concentrates	.20	21.80	31.26
7-10-56	Selected Ore			21.41
8-31-56	Selected Ore			19.34
11-16-63	Selected Ore	3.75		45.00