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REPORT OF W. B. JENNESS, E. M.

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Tuscarora, Nev. July 15, 1907.

ITEM

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Dear Sir:

I take pleasure in submitting the following data on the New York group of lode mining claims, situated about 25 miles northwest Tuscarora, in Cornucopia mining district, Elko County, Nevada.

This mining district is the continuation, southwesterly, of the same mineral belt that starts at Mountain City on the North and extends entirely across the northern portion of Elko County, and in which are situated the large productive mines of Mountain City, Maggie Gulch, Columbia, Blue Jacket Canyon, Bull Run, Edgemont, etc.

With but few exceptions all of the rocks of this mineral belt and region might be classed under the head of andesites, as the most of the porphyries are only porphyritic quartz, bearing andesites. The tuffs, too, and most of the basalts are andesitic.

At Cornucopia these rocks are cut by dikes of quartz, porphyry and trachyte, the latter being of an older period, in my opinion, as there are two systems of mineral bearing veins (the easterly and westerly and the northerly and southerly) contacting with and cutting through the different formations. These conditions have created a most highly mineralized zone, from which there has been taken from \$1,500,000.00 to \$2,000,000.00 of gold and silver from the limited workings and crude explorations made when the property was worked thirty to thirty-five years ago.

The New York group consists of the Clarence, Antelope, John, Wyoming, Utah, Nevada, Flagstaff, Last Chance, New York and Chicago, ten claims in all and covering about 200 acres.

The CLARENCE (first located as the Hussey) joins the Leopard on the north, and is a continuation of the same vein. The trend of this vein is north and south and was worked from 1876 to 1878, producing \$84,477.58, as per bullion tax returns attached hereto. The main shaft on this claim was sunk to a depth of 500 feet, with but little stopping. At 200 below the surface the vein from four to six feet wide, which will assay from \$30.00 to \$40.00 per ton the entire width. The total gross product from this mine was about \$150,000.00, as much ore was mined by lessees and shipped out of the camp for treatment. This mine can be put on a paying basis at small expense, as the shaft below the collar is in good order.

The ANTELOPE (first located as the Panther); The trend of this vein is easterly and westerly, and covers a strong porphyry quartz dike its entire length, with several intersecting veins cutting it from north to south, all having produced rich ore at the points of intersection. The bullion tax returns show \$7,743.20, an average of \$135.00 per ton. As a large part of the ore from this property was taken out by lessees and sold to the Leopard mill, the above amount is but a small part of the production, which amounted to \$50,000.00 or more from the shallow



workings. This claim can be worked and developed advantageously through the Clarence shaft.

The JOHN (first located as the Republic): This location parallels the Leopard vein on the east, and was noted in the early history of the camp for the many tons of rich ore that was gathered from the surface. It contacts with the trachyte, and covers the ground that the rich east and west vein (known as the Ruby) worked in the Leopard mine, passes through. It has a shaft about 140 feet deep, but can be developed and worked from the Clarence shaft much cheaper and to better advantage.

The WYOMING covers a strong easterly and westerly contact vein, having andesite for the hanging and prophry for the foot wall. It is developed by a shaft about 30 feet deep.

The UTAH (first located as the Black Diamond): This claim has produced small lots of very high grade ore, assays running as high as \$27,000.00 per ton, \$600.00 of which was gold. It is developed by tunnel about 300 feet long. This tunnel will have to be extended about 150 feet, to intersect a north and south dike and contact, from where beyond any doubt the rich samples of ore came from. When this tunnel is extended to the dike above spoken of, it will have a depth of over 200 feet, at which points cross-cuts can be extended both north and south, to explore the Nevada, Wyoming and other veins that pass through this part of the group.

The NEVADA: This vein, or rather series of veins, as there are several of them, is the extension of the Antelope dike, east. This claim has been developed and work by several pits and shafts from 10 to 50 feet deep, all showing well defined veins, from 3- to 6 feet wide. And while there were many tons of ore shipped from this claim, I have no record of the amount. That it must have been quite large there is no doubt, as there are large dumps of second grade ore, running from \$20.00 to \$35.00 per ton, now on the claim.

The FLAGSTAFF; Is the continuation of the Nevada, east. It is developed by shaft about 30 feet deep, showing a vein fully 5 feet wide. Assays from the dump gave returns of \$4.67 to \$21.05 per ton. \$2.20 of the latter was gold. The Last Chance, New York and Chicago all show strong mineralized veins. And no doubt good pay ore bodies will be opened up when developed. The ground of these claims is also valuable, as it covers the old original town-side of Cornucopia. This townsite has been re-surveyed, plats made and recorded, and is made a part of the mining proposition.

The camp is well watered, with several living springs at or near the town, with Deep Creek  $2\frac{1}{2}$  miles away to the north, where the old Leopard Mill was located, and the Owyhee River  $3\frac{1}{2}$  miles away to the south, where a large flow of water can be had the whole year for milling purposes.

The camp is about 6,500 feet above sea level, easy of access, with good wagon roads to it. The mines take but little water, so that large pumping plants are not required.



The history of this camp, briefly, is this: In the year 1875 pay ore was discovered on the Leopard mine, which soon after passed into the hands of a stock company, which build a chlorination mill on Deep Creek, which turned out large profits, as will be seen by the bullion tax certificates herewith. After about four years of successful operation, gold was discovered at Tuscarora, Nevada, and the whole population stampeded to the gold camp, leaving mines, buildings and even household goods behind. Soon after, the mill burned down and the camp was abandoned. The mines have been idle ever since except as to the little desultory work done by prospectors and lessees.

The assay certificates attached hereto show returns from samples taken from croppings, dumps and old workings, and on the whole make a good showing in values.

The main shaft of the Leopard mine was sunk to a depth of 800 feet, with but little stoping below the 500 foot level. I am told by men who worked in the mine that there is a very large vein of milling ore below the 600 foot level, said to be 40 feet wide, with rich streaks of \$200.00 to \$300.00 ore running through the vein. These workings are not accessable, owing to the long time that the property has been idle.

With the fine showing made by the mines when worked, with the exceptionally favorable conditions for cheap development, with the high grade character of the ore, all combine to make the proposition an ideal one for the safe and profitable investment of the small amount of capital, to reopen the mines.

Very respectfully,

(Signed) W. B. Jenness, E. M.

LEOPARD MINE									
For quarter ending	June 30,	1875;	1289	tons;	gross	yield	\$112,543.72		
"	"	"	Sept. 30,	"	"	"	60,377.03		
"	"	"	Dec. 31	"	"	"	226,879.00		
"	"	"	Mar. 31	1876	1705	"	142,355.26		
"	"	"	Sept. 30	"	1491	"	104,594.62		
"	"	"	Dec. 31	"	1800	"	157,859.37		
"	"	"	Mar. 31	1877	1091	"	35,390.00		
"	"	"	Mar. 31	"	2374	Tailings	19,324.00		
"	"	"	June 30	"	210	"	2,100.00		
"	"	"	Sept. 30	"	225	"	3,375.00		
"	"	"	Dec. 30	"	1084	Gross	67,647.00		
"	"	"	Sept. 30	1878	1312	"	57,587.11		
"	"	"	Dec. 31	"	1302	"	44,528.49		
"	"	"	Sept 30	1879	174	"	6,331.35		
"	"	"	Dec. 31	"	773	"	18,577.56		
Total as per report...							\$1,059,729.51		



# HUSSEY MINE

For	quarter	ending	Mar 31,	1876,	12 tons;	gross	yield	1,501.08
"	"	"	Mar 31	1877	45 "	"	"	4,419.37
"	"	"	June 30	"	85 "	"	"	7,772.62
"	"	"	Mar. 30	1878	414 "	"	"	18,844.40
"	"	"	June 30	"	833 "	"	"	39,998.22
"	"	"	Sept 30	"	183 "	"	"	<u>11,941.89</u>

Total as per report.....\$ 84,477.58

## THE ONLY REPORT OF PANTHER MINE

For quarter ending March 31, 1877; 50 tons, gross yield \$6,743.20.

To the total of Leopard, \$1,059,729.51 should be added for quarter ending June 30, 1833, 1851 tons tailings \$8,904.93, making the grand total for Leopard \$1,068,634.44.

The above returns were taken from the Bullion Tax books of Elko County, Nevada, and it is safe to say that the values of ore produced were not any less than amounts shown above.

The Leopard Company owned the mill in which all ores of Cornucopia were treated. Therefore the Leopard Mine has a credit of about \$100,000.00 that belong to other mines. Of this amount \$25,000.00 to \$30,000.00 should be credited to the Panther for ore mined by lessees. The old Black Diamond mine produced a part, also the Republic and several others, making in all six or seven producing mines at the time they were worked and the above record was made.

(Signed) W. B. Jenness, E.M.

The following assays were made by S. A. Roseberry of Tuscarora, Nev., June 8, 1907, for W. B. Jenness, E.M. manager at that time of the Dexter Mines at Tuscarora, who sampled and reported on the New York group of mines at Cornucopia, Elko County, Nev. The original certificates are attached to his original report. This is a copy of the assay returns:

No. 1	Nevada, shaft on E. and	$\frac{1}{2}$ oz. silver	20c gold	
No. 2	Brownlee, Deep shaft,	$\frac{1}{2}$ oz. silver,	trace gold	
No. 3	Brownlee, No.1 discovery shaft;	o oz. silver	\$2.20	
		gold-----		\$2.57
No. 4	Antelope, No.2 Cut;	$\frac{1}{2}$ oz. silver,	20¢ gold-----	.53
Nov. 5	Antelope, shaft E. end;	90 oz. silver,	\$3.20 gold	\$61.70
No. 6	Nevada E. stope dump;	48 oz. silver,	\$4.33 gold---	35.53
No. 7	Nevada E. extension of;	29 oz. silver,	\$2.20 gold-	21.05
No. 8	Chicago No. 2	$1\frac{1}{2}$ oz. silver,	30¢ gold-----	1.28
No. 9	Chicago no. 1	" " "	Trace gold-----	.98
No. 10	Antelope Foot wall big cut,	2 oz. silver	Tr gold--	1.30
No. 11	" Windlass shaft;	113 oz. silver,		
		\$8.30 gold-----		81.75
No. 12	" Raker shaft,	263 oz. silver,		
		\$15.20 gold	Silver at 65¢-----	186.15

(Signed) S. A. Roseberry, Assayer



Under date of June 24th, 1907, the following assays were made by S. A. Roseberry for W. B/ Jenness:

No. 1	Utah, Tunnel No. 1; 1½ oz. silver, no gold--	.95
No. 2	" " " " Upraise; 3 oz. silver no gold-----	1.95
No. 3	" " " 2; Trace silver, no gold----	.00
No. 4	Antelope (Red quartz) Windlass shaft, no silver, no gold-----	.00
No. 5	" (White quartz) windlass shaft, 365 oz. silver, \$18.20 gold-----	255.45
No. 6	Brownlee, Discovery shaft; 3 oz. silver, \$3.50 gold-----	5.45
No. 7	Clarence, Dump; 6 oz. silver, 60¢ gold-----	4.50
No. 8	Brownlee No. 1 Discovery shaft, 4 oz. silver 45¢ gold-----	3.05
No. 9	Flagstaff, Dump; 6 1/3 oz. silver, 45¢ gold----	4.67
No. 10	Clarence, Tunnell, no silver, no gold-----	.00
No. 11	Antelope (Brown Quartz) Windlass shaft, no silver, no gold-----	.00
No. 12	New York, Discovery shaft; 1 oz. silver no gold-	.65
No. 13	Clarence Croppings near old road; 10½ oz. silver, \$3.20 gold-----	10.02
No. 14	John Mine, Dump sample; 32 oz. silver, \$3.60 gold, Silver at 65¢	24.40

(Signed) S. A. Roseberry, Assayer.

Under date of July 18, 1907, the following assays were made at Tuscarora, Nev. by B. P. Howell for W. B. Jenness:

Cornucopia, W B J % lead nil (fire assay)  
Clarence, Deep shaft; 1.96 oz. gold, 214.44 oz. silver.  
\$39.20 gold, \$178.58 silver  
Silver computed at 65¢ per oz.

Winnemucca, Nev., Nov. 1, 1919

Dear Sir:

Having secured a few weeks ago the original report of W. B. Jenness, E.M., on the New York group of claims situated in Cornucopia Mining District, Elko County, Nevada, and not securing the map which accompanied the report, it was necessary to make the following statement to explain what ground the New York group of claims covered at that time, and showing how it is now covered by the Cornucopia group of mining claims.

The ground which was covered by the New York group of claims in 1907, when the report was made, was relocated by Edward Peacock in June and July, 1913. The property since that time is known as the "Cornucopia Group," and so shows on the map. These claims show they are located more northerly and southerly than the New York group of claims, which was located more easterly and westerly. The map of the Cornucopia group shows the Daisy as the north extension of the Leopard, which was formerly known as the "Hussey Claim" and was then the Clarence claim of the New York group of claims.



The Antelope claim of the New York group (previously the Panther Company's Chloride claim) was an east and west location and is now covered by the north end of the Boston, Montana and part of the Ben Hur. The Raker shaft and the Antelope Windlass shaft, as mentioned in the attached assay certificate of the Jenness report, are on the north end of the Boston claim.

The John claim of the New York group (first located as the Republic) is now covered by the south end of the Boston claim, which parallels the Leopard on the east. The John mine dump sample as mentioned in the attached assay certificate of the report is on the Boston claim, near the center. The dump was made from a shaft 140 feet deep.

The Utah claim of the New York group (first located as the Black Diamond) parallels the Panther Company's Chloride claim on the south. It was also an east and west location. This ground is now covered by the Montana and Ben Hur claims.

The Nevada claim of the New York group was an east and west location, and is now covered by the southeast side of the Mohawk and southwest side of the Sioux claims and the north end of the Santa Rita claim. The Nevada "East stop dump sample" and "East extension of sample," as mentioned in the assay certificate attached to the report, are on the north end of the Montana claim.

The Flagstaff claim of the New York group was also an east and west location, and this claim is now covered by the north ends of the Ben Hur and Santa Rita claims.

The Last Chance, New York and Chicago claims of the New York group are covered by the Mayflower, Tampa and Victor claims

Very respectfully,

(Signed) EDWARD PEACOCK



REPORT OF EDWARD PEACOCK, E.M., ON "CORNUCOPIA  
GROUP" OF MINES AND LEOPARD PATENTED MINE.

Claims

The Cornucopia Group of mining claims comprises the following unpatented claims; Daisy, Boston, Montana, Ben Hur, Santa Rita, Mohawk, Sioux, Colorado, Bachelor, Mayflower, Yampa and Victor, each being practically 1500 feet long by 600 feet wide, having an area of about 240 acres.

Geography

The claims are situated in the Cornucopia Mining District, Elko County, Nevada, about twenty miles north of Tuscarora, sixty-five miles northwest of Elko and eighty-five miles a little north east of Red House station on the Western Pacific railroad. This station is about twenty-six miles east of Winnemucca, Nevada.

The mines are six miles south east of the L. L. ranch on the Owyhee River, and eight miles southwest of the Deep Creek stage station on the wagon road between Tuscarora and Edgement.

Accessibility

The mines are accessible the year around. There are three good wagon roads from the south and west, one being from Elko, one from Red House and the other from Winnemucca via Paradise Valley and the Little Humboldt River. There is also a wagon road from Idaho points to the north of the district.

Wagons can be driven anywhere on the claims. A telephone line crosses the claims from the Tuscarora to the L. L. Ranch. This line connects at Tuscarora for Elko and Winnemucca.

Geology

The mines lie in a group of small low hills on the extreme northern or northeastern end of the Independence Range of mountains, near the southeast end of the Owyhee desert, at an elevation of 6,500 feet, between Deep Creek on the north and east and the Owyhee River on the south and west. The mines are two miles from Deep Creek and about four miles from the Owyhee River. They are located on the same mineral belt, having the same formation as those of Tuscarora, with its gold and silver output of over \$50,000,000 and the Silver City mines of Idaho with nearly the same output. The Tuscarora mines are about sixteen miles in a straight line to the south, and the Silver City mines about sixty miles in a straight line north.

The U. S. Geological Survey of the Cornucopia District was made by William H. Emmons in the year 1908. The report of the survey was published in Bulletin No. 408, pages 62 to 65. In the report he published in Bulletin No. 408, pages 62 to 65 he treats very thoroughly on the geology of the district, but gives no information concerning the veins or workings of the mines, which were operated by vertical shafts and an incline shaft. The following is a partial report of that published in Bulletin No. 408:



"The mines of Cornucopia, about eight miles southwest of the stage station on Deep Creek, were operated actively in the Seventies, when they produced, it is said, over a million dollars in gold and silver. The ore was treated by pan amalgamation in a 20-stamp mill at Mill City, two miles below the town. The principal mines are the Leopard and the Panther, which were operated through shafts. The Leopard shaft is said to be 800 feet deep. When the camp was visited in 1908 all the deep workings were caved and only some shallow pits and surface stopes were accessible.

The country surrounding the Cornucopia district is a large area of low hills, which, in the main, are capped with rhyolite and obsidian. The rhyolite is cut by intrusive andesite, to which the accessible ore deposits are restricted. The exposure of the andesite shows white ore stained with yellowish iron oxides. Everywhere in the vicinity of the ore deposits the andesite is similarly decomposed, showing the leachings of the country rock is extensive near some of the ore deposits. Masses of quartz porphyry occur in the area of the andesite and are probably intruded into it.

The ore deposits are sheeted zones in decomposed andesite. The ore is white quartz, which carries a very small proportion of dark sulphides, forming narrow ribbons on the quartz. Pyrite, argentite and gray copper are present, and ruby silver is said to have been an important ore mineral. On the surface the ore minerals are mainly horn silver and a yellow mineral which is probably pyro-morphite. The proportions of sulphides present is very small, but they must have been rich, for the ore is said to have carried 400 ounces of silver to the ton of mill runs. The country rock along the vein is, however, silicified and otherwise altered by the vein forming solutions, and at some places carried workable values."

In addition to what the U. S. Geological report shows, there will be found on an examination three separate veins, whose course is northeast and southwest. The first or more westerly in the district is the Hussey-Leopard vein. This vein was formerly known as the "Ruby" vein. It has a dip of about 45 degrees to the northwest. This vein passes through the north end line of the Leopard near the northwest corner. The second northeast and southwest vein lies south of the Hussey-Leopard, being about 400 feet, and is known as the Leopard northeast and southwest vein.

The third northeast and southwest vein lies south of the Leopard northeast and southwest vein and passes through Silver Peak about 2,000 feet south of the Leopard vein. This vein can be traced on the surface by the quartz outcrop for a distance of over 4,000 feet and shows it to have a depth of over 1,500 feet. The surface quartz of the three veins all show values. They also show that they are not faulted by the north and south dykes which cross them, because the surface quartz on the line of the vein is unbroken. There are numerous veins having a northerly and southerly course crossing and starting from the northeast and southwest veins, and easterly and westerly veins.



The east and west veins were the ones that were prospected and worked in the early days, no attention being paid to the three northeast and southwest veins which show surface quartz having good values.

#### Mining Facilities

In the mining district good water for domestic purposes can be easily obtained by sinking wells. One well about twenty feet deep is now in use. It is within a few hundred feet of the mine.

Water for milling purposes on Deep Creek is about two miles from the mine. At this place was located the twenty-stamp mill which reduced the ore to bullion in the Seventies.

No water in the mines. It was not necessary to have pumps in the early days. All the water was handled in those days in sinking shafts and drainage was done by using buckets. This accounts for the mill being located on Deep Creek.

Water power for electric purposes can be secured within twelve miles of the mines. Here sufficient power can be generated for all the mining and milling work.

Timber for the mines in early days was hauled about twelve miles from the Centennial Range of Mountains northeast of the district. The timbers now to be used for mining and building purposes can be secured from the same range. Freight from Elko to the mines is  $3/4$ c a pound.

#### Development

The Leopard claim does not belong to the owner of the Cornucopia group. It is owned by another party. But a description is necessary to show its relation to the Daisy and the other claims.

The Leopard was located in 1873 and patented in 1876 on the showing of the north and south quartz outcrop, which is about 300 feet in length, 40 feet in width and dipping to the west. There are also two veins having a course of northeast and southwest crossing the Leopard in the north 400 feet, and about 400 feet apart; also a north and south vein parallel to the main vein about 200 feet to the east. The surface shows a large tonnage of quartz. The first shaft was sunk north of this about 25 feet south of the north endline. This shaft was about 620 feet deep. When the 220 foot level of the Leopard shaft was opened, they drifted a little east of south to cut the bottom of the incline winze sunk on the dip of the vein following this rich ore shoot down from the tunnel level a distance of 127 feet. They drifted northwest from the shaft at the 300 foot level and found a body of rich ore in the Hussey-Leopard vein, known at that time as the "Ruby" vein. The Leopard has not been worked since 1879. A lease could never be secured to work it, which accounts for the large tonnage of ore on the surface, it being too low in value for the company to work at that time. The vein which shows on the surface for 300 feet long and at least 40 feet wide, gave an average from four very large surface samples of \$4.40 in gold and \$14.54 in silver, or a total value of \$18.94 per ton. There was no ore milled from this mass of ore now showing in the surface workings. The ore that was mined in the deep Leopard



shaft and thrown to one side as waste, has the same appearance. This ore sampled at the deep shaft as follows: 0.20 oz. gold, 35.80 oz. silver, and in the surface workings about 200 feet northeast of the deep shaft the foot wall sampled 0.22 oz. gold, 45.48 oz. silver, showing ore of this kind and value could not be mined and milled at a profit at that time. The largest production from the Leopard of its four and one half years' work was made in the first year and a half (1875 and 1876), producing 8,092 tons from which they recovered a value of \$804,960.00 as shown by the Assessors' books of Elko County for tax purposes. (No accounts of previous yield). In 1877 it produced 2,175 tons, recovering a value of \$103,037.00. In 1878 it produced 2,614 tons, recovering a value of \$102,115.60. In 1879 it produced 947 tons, recovering a value of \$24,908.81. To these values saved in milling the ore, should be added the value of the tailings lost in milling, to get the values per ton of the ore treated. The samplings of the tailings shows that they have a value of \$19.00 per ton.

There is a known ore body in the Leopard which could not be mined and milled in the Seventies, having a known length of 300 feet, 40 feet wide and found and mined on the 600 foot level of the Leopard deep shaft. This ore sampled on the surface gave a value of \$18.94 per ton. According to the Bullion Tax Records of Elko County, Nevada, in the later Seventies, there were 3,561 tons of ore mined from the Leopard shaft, giving an average mill value of \$36.64 per ton. This value per ton was not enough to pay the cost of mining, hauling and milling in those days.

The Daisy claim, the north extension of the Leopard, formerly known as the Hussey, has a shaft about 500 feet deep. This shaft is caved at the collars, but can easily be reopened. It was reopened down to the 70 foot level about twenty years ago and some good ore shipped. At this depth on the Hussey-Leopard vein a good sized vein of ore was found having a value of \$60.00 per ton, which could not be profitably shipped at that time because there was no mill within forty miles. They made no effort to reach the 200 foot level, where in 1876, according to reports to the San Francisco Stock Exchange, they had from 20 to 30 feet of ore having a value of \$30.00 to \$40.00 per ton. The ore on this level is still there ready to be mined. In 1876 the cost of hauling, mining and milling this ore was equal to its value.

The limited work done on the Hussey shows there was shipped 1,574 tons from which was recovered \$84,519.16, as per the Bullion Tax Records of Elko County, Nevada. The red quartz now on the old Hussey dump, being ore taken out of the 200 foot level, sampled 0.1 oz. gold, 22.7 oz. silver. There is another vein showing north of the old Hussey shaft, near the wagon road, that gave values of \$16.00 to \$17.00 per ton (surface croppings). There was a vein found about 500 feet north of the old shaft, east of the gulch. This was found in a drift driven west from a winze 90 feet deep, sunk in the Hussey cross-cut tunnel about 150 feet from the portal. This ore had a value of \$50.00 to



\$80.00 per ton.

The Boston claim, located north and south. The north end was formerly part of the Panther Company's "Chloride" claim. The work done here is in a cut 65 feet long and 65 feet deep. Here can be seen a vein, the course of which is northwest, with a dip of about 65 degrees to the west. To the south of the location monument about 800 feet is the old Republic shaft, about 140 feet deep, showing a three foot vein. The dump of this shaft samples 0.20 oz. gold, 30 oz. silver and the vein for four feet wide and 100 feet deep sampled \$36.00 per ton. About 250 feet east of this shaft can be seen the quartz on the surface of the Leopard northeast and southwest vein, which crosses the Leopard and Boston claims. At a point east of the east side line of the Leopard and on Boston ground on the course of this vein, the surface quartz samples 0.20 oz. gold, and 25.44 oz. silver.

The Montana claim, located north and south, was formerly part of the Panther Company's Chloride. Here was found an ore shoot that was 50 feet long, from two to four feet wide, and which was mined to a depth of 240 feet, or 90 feet below the Mohawk tunnel level. That the ore is still in the bottom of the 90 foot winze, is claimed by miners who worked there. It can be reopened at a small cost. Ore from this shoot, having a value of from \$3,000 to 4,000 per ton, was shipped to the Selby Smelting Works in the early days. In a shaft 24 feet deep, about 150 feet east of this ore shoot, there is now opened in the north side of the shaft two feet of ore that sampled 0.10 oz. gold, 43.40 oz. silver. This ore could not be mined at a profit in the early days, when it cost \$40.00 to handle a ton of ore. At a point 300 feet south of the 24 foot shaft on the course of the Leopard northeast and southwest vein, the surface quartz sampled 0.04 oz. gold, 17.04 oz. silver. This northeast and southwest vein can be developed to a depth of 200 feet by driving ahead the east drift from the Mohawk tunnel. This drift would intersect the ore shoot 300 feet from this point, crossing the vein at a depth of 150 feet vertically. The east drift from this tunnel was driven only 100 feet east of this intersection, and is now 150 feet west from the Leopard northeast and southwest vein.

Ben Hur claim, located north and south, lies east of the Montana and parallel to it. There are several shafts on the east and west vein crossing the north end of the claim. These shafts show quartz from four to six feet wide, but having a low value, \$4.00 to \$5.00 per ton.

Santa Rita claim, located north and south, lies east of the Ben Hur and parallel to it. It was formerly known as the "Constitution." Here in early days were sunk quite a few shallow shafts, but at no place was the ore then found to go down. The vein has since been found. In a cut about 25 feet long and 15 feet deep near the location monument, a sample was taken from the north side of the cut that sampled 0.08 oz. gold, 22.64 oz. silver. A drift was started north from the bottom of this cut and the vein was found. In this drift about 10 feet long a sample was taken of two feet of ore from the center of the four and a half foot



vein which sampled 0.08 oz. gold, 38.48 oz. silver, and the full width of the four and one half foot vein sampled 0.08 oz. gold 15.32 oz. silver. I should judge that instead of a vein of four and one half feet, there is a vein of 15 feet, because the entire width has an average value of 0.08 oz. gold and 12 oz. silver. The quartz shows on the surface for a considerable area. There is no question but when this new find is developed there will be another mine opened which will equal or may be surpass the Leopard in output. It is located on the highest hill northeast of the Leopard, and all the indications on the surface, and character and value of the ore show this to be one of the best prospects for a mine in this district and section of Nevada, for years a section noted for its rich mines.

The Sioux claim, located east and west, joins the Santa Rita and Ben Hur on the north. Part of the Leopard northeast and southwest vein crosses this claim. There is a north and south andesite dyke which crosses the claim on the west end. There was some rich gold float found along the south side of the claim, but was never found in place. It may be found some day to have come from the Leopard northeast and southwest vein near the place where the float was found.

The Mohawk claim, located east and west, joins the Montana and Boston on the north. The tunnel that runs south over 350 feet and intersects the Montana ore shoot, is located on this claim. The surface of the claim is pretty well covered with debris and the many cross veins which cross it show only float quartz, in places.

Mayflower claim, located north and south, joins the west end of the Mohawk on the north side. There are veins on this property showing some iron. They are undeveloped. It is on this claim where the wells are located that were used for camp purposes and it is also the site of the old town of Cornucopia.

Victor claim, located north and south, joins the Mayflower on the north. There are quite a few cuts and shafts on this claim from which some very good ore was shipped in early days, and there still shows ore of good value in the different cuts.

Yampa claim, located north and south and joins the Daisy on the north. The large quartz vein which shows on the north end of the Daisy passes into this claim.

Colorado claim, located north and south, joins and parallels the north half of the Leopard and south half of the Daisy on the west. This claim is crossed by both the Leopard northeast and southwest vein and the Hussey-Leopard vein. The quartz of these veins does not show on the claim, as there is quite a flow of obsidian on the surface. Part of the old mine dumps are on this ground and the balance on the Daisy, as the north end-line of the Leopard is just 25 feet north of the Leopard shaft, so in early days the dumps were placed on the old Hussey claim (now the Daisy) and what is now the Colorado claim.

The Bachelor claim, located east and west, endlines on the west sideline of the south end of the Leopard, and joins the south endline of the Colorado on the north. The claim is crossed



by the Hussey-Leopard vein and the Leopard northeast and southwest vein. No quartz shows on the surface and, like the Colorado, it is covered with obsidian. A tunnel driven east about 200 feet long is in obsidian, which shows a heavy flow there.

#### SUMMARY

This is no prospecting proposition to find the ore, but one to reopen the old mines and develop the ore that was left in them in the Seventies, as it would not pay to work it in those days. It cost the Leopard \$20.00 to mine and mill a ton of ore, and the Hussey and Panther \$40.00 to mine and mill a ton of ore at the Leopard mill. The dumps of the various shafts and tunnels show the following tonnage and value of the silicious ore. These values were secured by sampling: There are 1000 tons of ore on the various dumps having a value of \$35.00 per ton, and upwards of 50,000 tons of ore on the dumps of the Leopard and Daisy having an average value of \$7.00 per ton. To determine the probable value of the ore left in the mines, the quartz on the dumps of the Boston, Montana, Ben Hur, Santa Rita and Daisy was assayed to find out the average value of rejected ore that could not be worked in the early days. The assays showed them to have a value of between \$25.00 and \$30.00 per ton and this value of ore should be found when the mines are reopened. These assays were confirmed when ore was found underground and in place. A profitable producing mine can be made by working the property in the following places and manner:

First. You have the ore in the Ruby vein on the Leopard, and this shows a value of over \$30.00 per ton. This can be opened and worked for a very small outlay by reopening the Hussey shaft.

Second. Use the Leopard tunnel to open the northeast and southwest vein. This vein on the surface shows 300 feet long and 40 feet wide, having a surface value of \$18.94 per ton. This will be development work on the ore known to be there and never worked.

Third. Reopen the Montana vein in the Montana tunnel. This should show ore in place having a value of about \$50.00 per ton when the vein is reopened. There is three feet of ore in a 24 foot shaft 200 feet east of the point of the tunnel intersection of the vein, which has a value of \$50.00 per ton. This ore was not taken out and milled, but left there.

Fourth; Santa Rita will be a developing proposition to open up the large ore body of \$20.00 ore now showing in an 18 feet deep cut and in a 15 foot cross cut north from this cut and in a caved shaft to the west. All places opened show this quartz porphyry.

Fifth: Reopen the old Hussey shaft down to the 200 feet level. There, ore having a value of \$60.00 per ton will be found ready to be stoped.



In conclusion, I would state that the large body of ore itself between the Leopard tunnel level and the surface (exclusive of the Ruby vein) justifies the installation of a 100 ton mill as well as the erection of the necessary buildings, quarters, etc. The work of extending the tunnel and making the necessary upraises to the surface can be done in the meantime, so that when the mill is completed this large tonnage of ore can be milled, thus putting the property on a paying basis.

Dated: Winnemucca, Nevada, November 23, 1922

EDWARD PEACOCK, E. M



REPORT OF T. S. O'BRIEN

San Francisco, California  
December 22, 1924

Mr. A. R. T. Lackie  
President Western Star Mining Company  
Warrington Apartments  
San Francisco, California

Dear Mr. Lackie:

With reference to the "Cornucopia Group of Mines" and Leopard Patented claim, in Elko County, Nevada, which the writer looked over with you on December 14, 1924, I wish to state that after seeing the ground, in sampling the Leopard outcrop and verifying the data contained in the reports of Edward Peacock and W. P. Jenness on this property, that it checks up one hundred percent on tonnage and values, and as these reports fully cover the location and geology of the district, it is needless to repeat it in this report.

Besides the Leopard mine the only check samples taken were on the "Boston," showing 50 cents gold and 55.98 oz. of silver per ton, which was considerably higher than claimed by Mr. Peacock.

Sample No. 3, dated 12-14-24, having a value of \$2.33, was wall rock from the 40 foot vein which was trammed out of the Leopard tunnel by Mr. Peacock, and indicated that the values in places extend from the vein out into the wall rock for a considerable distance.

The main object of my visit to these properties was to determine the value of the large outcrop of ore on the north end of the Leopard mine, as shown on the plan view sketch attached, which shows the vein to be 40 feet wide with a strike of North 20° East and a dip of approximately 65° Westerly. This vein passes through the Leopard and into the Daisy claim.

Point "A" on the outcrop of the vein is approximately 500 feet south of the north end line and is 175 feet higher in elevation than the portal of the Leopard tunnel. Point "B" is 300 feet north of point "A" and 128 feet higher in elevation than the portal of the Leopard tunnel. Between these points the vein shows a uniform width of 30 to 40 feet (see photo). Between the points "A" and "B" for the entire distance of 300 feet and covering the full width of the vein, trenches, open cuts, and shallow shafts from five to sixty feet deep have been cut in the ore body, thus exposing it in ideal condition for thorough sampling. As the whole mass of the dumps and outcrop in place is of the same character, I took two grab samples, each covering 40 feet wide by 150 feet long of the various dumps and outcrops in place in order to get the average value as it could be mined and delivered to the mill.

The average of these two samples as per duplicate assay report of Abbot A. Hanks, dated December 18 and 19, 1924, hereto attached, shows a value of \$15.17 gold and silver, which is ex-



ceptionally high and rarely found in an ore body of this size.

A number of samples of this same outcrop were taken in the past by Mr. Peacock covering a width of 15 feet which shows an average value of \$20.00 per ton, indicating that the center and most siliceous part of the vein contains the higher values.

The average depth of the ore body between the points "A" and "B" and down to the Leopard tunnel is 150 feet. Taking a safe width of 30 feet wide by 300 feet long by 150 feet deep and assuming 14 cubic feet per ton in place would show 96,428 tons above the Leopard tunnel level which is available for mining by the glory-hole method after the Leopard tunnel has been extended about 400 feet to point "A" and upraises run from it to the surface.

The gross value of the ore in this block of ground would be \$1,462,812.76 and the cost of mining and milling after the tunnel extension and upraises were completed would not exceed \$4.00 per ton, as the ore contains no interfering elements detrimental to the cyanide process. The tailing loss would not exceed \$1.00 per ton, making a total of \$5.00 per ton for working cost and tailing loss, leaving a net operating profit of \$980,672.76 from this block of ore between the Leopard and the surface outcrop.

From the reports of the former mine superintendent and old timers who worked in the Leopard mine, it is a well established fact that the Leopard tunnel was the original opening on the property and in driving this tunnel they struck a rich streak of high grade ore having an average width of three to four feet and a length of 200 feet. This ore did not extend very far above the tunnel level and it is very evident to me that the large number of trenches, open cuts, and shafts on the vein outcrop between the points "A" and "B" were made by the old timers in search of the high grade ore found in the tunnel. Not finding it, they sunk a winze from the tunnel to a depth of 127 feet, as shown on cross section attached. Later on the deep shaft was sunk and a drift from the 220 foot level was run to connect with the bottom of the winze as shown on the cross section. They also ran levels from the 300, 400 and 500 foot points in the shaft to the vein, from which the high grade streaks of ore were mined.

Mr. W. B. Jenness, in his report dated July 15, 1907, refers to statements of miners who worked in the mine, to the effect that below the 600 foot level there is a vein of milling ore 40 feet in width with rich streaks of \$200.00 to \$300.00 values running through the vein. This indicates to me that the streak of high grade ore which averages three to four feet wide and 200 feet long, extending from the tunnel level down to the 500 foot level in the shaft, split up into several small streaks, making it unprofitable to mine, for in order to get one ton of high grade ore, it was necessary to



take out from ten to fifteen tons of the lower grade mill ore, having values such as I sampled on the outcrop points "A" and "B". As ore of the value of \$15.17 per ton could not be handled at that time at a profit, even by the well known glory hole method, they were obliged to leave untouched the large tonnage between the Leopard tunnel level and the surface. If the ore between the tunnel and surface could not at that time be profitably mined and milled, then it can be safely assumed that similar ore below the Leopard tunnel level would also be left by them. However, modern machinery and mining methods now permit this ore to be mined and milled at a cost of \$5.00 per ton, including tailing loss.

Referring to the cross section, it is clearly shown that the surface vein outcropping at A-B and the workings on the vein in the tunnel and along the winze to a depth of 127 feet below the tunnel level is the same vein encountered below the 600 foot level in the shaft, and as the distance from the tunnel level to the 600 foot level of the shaft is approximately 600 feet on the slope of the vein, there would be 385,712 tons of ore in this block of ground and as the values of the high grade streaks maintained a value of from \$200.00 to \$300.00 per ton down to the 600 foot depth, it is reasonable to expect that the values of the entire vein will also hold up to the values as shown on the surface, thus giving a value of \$5,785,680.00 from the block of ore between the tunnel level and the 600 foot level in the shaft. This combined with the tonnage above the Leopard tunnel makes a total value of \$7,248,492.00 from the 600 foot level in the shaft to the surface outcrop A-B. This body of ore has been proven beyond doubt.

The geological conditions in this district (see U. S. Geological Bulletin 408) are favorable for the veins to extend to a depth of several thousand feet and with the fine surface showings existing on the various claims this group of properties has a wonderful potential value, for when the old Hussey mine, now known as the "Daisy", the "Boston", "Montana" "Santa Rita" and other mines of the group are reopened and further developed, it is reasonable to expect that with the excellent showing of mill ore on the surface of these claims, together with the known production of high grade ore from these properties, that a number of mines as good or better than the Leopard will be found.

The Leopard mine is well proven and of exceptional merit, and the only reason that it has been idle since 1880 is that it was owned ever since by a millionaire cattle man who died about a year ago and during his lifetime he would not sell except for a high, spot cash price and who refused to consider a working lease.

While it is not possible to prepare a detailed and itemized list of the various items of machinery and equipment with the cost until the cyanide tests now under way are completed, which will be several weeks and which will determine how fine it will be necessary to grind the ore in order to make a satisfactory recovery of the values, I could say that from my



experience in the installation of similar equipment, to extend a tunnel 400 feet with four upraises from it to the surface, equip the tunnel with track, cars, suitable air compressor, air drills and tools, install a 100 ton daily capacity modern cyanide mill with Deisel engine and electric generator to operate motors for the various units, together with oil and water storage tanks, pumps and pipe lines. automobile and truck, suitable camp buildings and equipment for employees, office and quarters for company officers and staff, and including the purchase price of the Leopard mine, will cost approximately \$300,000.00.

The net income from the 100 ton mill during the first two and one half years while working on the ore between the tunnel level and the outcrop A-B would be from \$25,000,000.00 to \$30,000.00 per month, or from \$300,000.00 to \$360,000.00 per year.

Later on when all the ore is mined from above the tunnel level, the mining cost would be approximately \$1.00 per ton higher or about \$3,000.00 per month less income.

In addition to the ore tonnage above described, there are now on the Leopard and Daisy dumps about 50,000 tons of ore, having an average value \$7.00 per ton. Allowing \$4.00 per ton for handling and treatment, these dumps alone have a net value of \$3.00 per ton, or \$150,000.00. In addition to these large dumps there are about 1,000 tons of ore scattered on the various claims, having a gross value of \$35.00 per ton. Allowing \$5.00 per ton for handling and treatment, this would leave a net value of \$30,000.00. Thus in the dumps alone there is a total net value of \$180,000.00.

In conclusion I will state that, basing my opinion on the excellent surface showing, the production from previous operations, the area and tonnage of undeveloped ore bodies, together with the favorably known geology of the district, I would say that this group of mines, when developed, will prove to be one of the most valuable mining properties in the country.

Very truly yours,

T. S. O'BRIEN.



CERTIFICATE OF ASSAY

ABBOT A. HANKS, INC.  
Assayers, Chemists, Engineers  
624 Sacramento Street  
San Francisco, Cal.

December 18, 1924

Deposited by T. S. O'Brien.

Sample of ORE Labty No.	Mark	GOLD, per ton of 2,000 lbs.		SILVER, per ton of 2,000 lbs.	
		Troy Ounces	Value at \$20.67 oz.	Troy Ounces	Value at 70¢ oz.
4123	A R T L No. 1	.11	\$2.27	14.99	10.49
4	" " " " " 2	.14	2.89	19.36	13.57
5	" " " " " 3	.015	.31	2.89	2.02
6	" " " " " 4	.025	.51	55.98	39.18

ABBOT A. HANKS, Inc.

(Signed) ABBOT A. HANKS

CERTIFICATE OF ASSAY

ABBOT A. HANKS, Inc.  
Assayers, Chemists, Engineers  
624 Sacramento Street  
San Francisco, Cal.

December 19, 1924

Sample of Ore Labty No.	Mark	GOLD, per ton of 2000 lbs.		SILVER, per ton of 2,000 lbs.	
		Troy Ounces	Value at \$20.67 oz.	Troy Ounces	Value at 70c oz.

REPEAT ASSAY ON NEW SAMPLE

4123	A R T L No. 1	.11	2.27	15.74	11.01
4	" " " " " 2	.15	3.10	21.55	15.08

ABBOT A. HANKS, Inc.

(Signed) ABBOT A. HANKS.



U. S. Geological Bulletins and Statements made by William Harvey Emmons, Ph.D., concerning the Geology of the Cornucopia Mining District in his book.

NOTE: Professor Emmons is now head of Geology and Mineralogy, University of Minnesota, was formerly geologist, section of Metalliferous Deposits, United States Geological Survey, and is the author of "Principals of Economic Geology" published in 1918, and other standard text books on the same subject.

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U. S. G. S. Bulletin No. 408, "A Reconnaissance of Some Mining camps in Elko, Lander and Eureka Counties, Nevada," by William H. Emmons, deals with the district in which the Cornucopia Group of mines are located. The survey was made in 1908 and the Bulletin was published in 1910. In this Bulletin Mr. Emmons describes the geology of this region, giving a brief resume of the geologic history. The deposition of ore deposits is described as occurring in two periods. The first or earliest deposition was formed when certain intrusions occurred in the Crataceous period. The most important mineral deposited in this period was gold.

The second deposition occurred in the Tertiary period. The igneous rock are in the main rhyolites, andesite and basalts. These rocks intruded into or were extruded over the country. During the activities of this time large ore deposits were formed which includes those at Cornucopia, Tuscarora, Good Hope, Falcon, Staffor, Lynn, Gold Circle and others. Silver is the most important ore mineral and associated with it is gold. There is only a small amount of base metals such as copper, lead, antimony, etc. present in these deposits. Rhyolite and andesite form the country rock and all the ore bodies are either in the andesite or in the rhyolite near by. The ore bodies are either fissure veins or sheeted zones.

"The Cornucopia Group of Mines, about eight miles southwest of Stage Station on Deep Creek, were operated actively in the Seventies, when they produced over a million dollars in silver. The ore was treated by pan amalgamation in a twenty stamp mill two miles below the town. The principal mines were the "Leopard" and the "Panther", which were operated through shafts. The "Leopard" shaft is eight hundred feet deep, but the opening is now caved and only the surface workings could be examined.

"The surrounding country is a large area of low hills capped by rhyolite and obsidian. The rhyolite has phenocrysts of quartz, oligoclase, pyroxense, magnetite and a little hornblende. This rhyolite is more basic than most rhyolites in the section. Its texture at times is visicular to pumiceous. The rhyolite is cut by intrusive andesites, a fresh outcrop of which is exposed near the ruins of the stone house.

"The ore is sheeted zones in the andesite. It is white quartz with sulphides forming narrow ribbons. Horn silver and pyromorphite are the ore minerals near the surface. The pro-



portion of sulphides is small, but very rich. This richness is evidenced by the fact that mill runs of this ore netted the operators four hundred ounces of silver to the ton of ore."

In "Principals of Economic Geology," by William H. Emmons, published in 1918, the type of ore bodies as are found at Cornucopia Group of Mines, is substantially described as follows:

The deposits of this kind have produced a large part of the world's silver and considerable amount of gold. They occur commonly in regions of late igneous activity. The ore bodies of this class are found at such mines as on the Comstock Lode and at Tuscarora, Tonopah and Goldfield, Nevada. The general shape of these deposits is sheet-like. They are short in thickness compared to length and depth. They may lie horizontal, vertical or at any angle between these two extremes. In size they range from small fissures to enormous bodies. The precipitating action is such as to throw the metals down in large rich masses. Indeed this class of deposit more than any other may be called the "Bonanza" groups.



BIENNIAL REPORT OF THE STATE MINERALOGIST  
OF THE STATE OF NEVADA FOR YEARS  
1873-1874. Pages 33-34.

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Cornucopia District.

Shortly after this district was discovered considerable excitement sprung up in regard to it, and quite a stampede was made to Cornucopia. The mineral belt was very quickly covered with locations and the most promising portions of it were claimed by several different parties. These adverse claims have been a very serious drawback to the prosperity of the district. In some instances the difficulties in regard to title have been settled amicably by the payment of money or otherwise.

Put still some of the most promising properties are closed with these adverse claims. The district was discovered in July, 1873 by Mr. Durfee, who, in conjunction with Mr. Furman of Elko, made two locations of one thousand five hundred feet each. One was named the Leopard on account of the spotted character of the ore, and the other the Chloride. Assays of some of the ore from the latter mine gave the astonishing results of seventeen thousand dollars per ton. The Leopard, however, is the principal claim in the district. A quartzite dyke cuts the hill in a northeast and southwest course, through a formation of porphyry. The locations are mostly made on this quartzite, which is about one hundred and fifty feet in width. Small veins of ore are found through the quartzite. Indeed, the whole mass of it assays from \$5.00 to \$10.00 per ton. In the Leopard Mine the vein of pay ore is from three to seven feet in width. One thousand five hundred tons of ore, which it is estimated will work one hundred dollars per ton, are now on the dumps ready to be hauled to the mill; and several hundred tons of the same character of ore are in sight in the mine which can easily be extracted. This Company has build recently a ten-stamp mill which started up last month. The mill is situated on Deep Creek, two and a half miles from the mines. The prospects of this Camp, at the present time are encouraging.

It is situated six miles from the south fork of the Owyhee River, and is surrounded by fine agricultural and grazing lands. The hills in which the mines are found are low and bare of wood. The usual sage brush of other districts is absent, but fine bunch grass takes its place, covering the hills to their summit. This district lies due north of the town of Elko, seventy miles.

In addition to the work being done on the Leopard, some work is also being done on the Chloride, Constitution and Mammoth.



BIENNIAL REPORT OF THE STATE MINERALOGIST  
OF THE STATE OF NEVADA FOR YEARS  
1875-6. Pages 20-21.

CORNUCOPIA DISTRICT.

"This district is a comparatively new one. It was discovered in 1873, at which time the Leopard and Chloride were located. It is situated seventy miles north of Elko, and twenty miles from Tuscarora. Great advance has been made here within the past two years. Enterprise and thrift are everywhere apparent, and a large town has sprung up in accordance with the wants and business requirements of the district. At the last election about 250 votes were polled here. This place is well supplied with stores, restaurants, lodging houses and saloons, and a stage line places it in communication with the railroad. The rock formation of the district is porphyry. The ore is rich, some of it assaying unusually high."

THE LEOPARD

"Was one of the first claims located. During the past two years it has produced a large amount of silver and has paid a number of dividends to the stockholders. For the year 1875 the yield was 3.096 tons of ore, of the value of \$400,299.00 and for the first quarter of 1876 it was 1,705 tons, valued at \$142,355.00. The product of the entire country for 1875 was \$527,000.00 so that it may be seen that the Leopard mine produces more than three times as much bullion as all the other mines in Elko County! The ore continues still as rich as ever, without any indications as yet of its having been exhausted. Excellent hoisting works are connected with the mine. The mill which was destroyed by fire in 1875 has been replaced by a larger one, which is now in excellent condition."

THE HUSSEY MINE (Now the Daisy)

"Work on the Hussey mine has also been energetically carried on. A shaft has been sunk over 500 feet deep. At a depth of 300 feet an excellent vein of quartz was cut, 50 feet below a drift was started next to top the quartz, the ledge dipping at an angle of 55 degrees. In the drift from the 500 foot level small veins of quartz were encountered in which was found some good ore. The new hoisting machinery works well, and is of sufficient capacity for working the mine to a considerable depth.

THE PANTHER (Now the Montana)

"Is situated north of the Hussey. A large amount of work has been done here. It is opened by a tunnel, and some good ore has been exposed, which is similar in grade to that of the other mines in the district."



THE REPUBLIC (Now the Boston)

"Has reached a considerable depth, and is still being pushed downward. The level from the bottom of the shaft shows a good large vein. Some ore from this mine was worked at the Leopard mill. A new discovery was lately made in it."

THOMPSON & WEST HISTORY OF NEVADA, 1881.

Page 9393

CORNUCOPIA DISTRICT.

"Cornucopia District was discovered in August, 1872, by Mart Durfee, and organized during the same month.

It lies about sixty five miles north of Carlin. There are at present only about ten miners at work in the district, though about fifty locations have been made. The principal mines are the Leopard, Hussey, Panther and Fisher, the first two being the only ones upon which work is now done. The quartz veins are found principally in porphyry and run northeast and southwest with the formation, and dip at an angle of 45 degrees to the southeast. The ores are mostly free milling, silver bearing, carrying some gold, and are worked by the roasting process.

The only quartz mill built in this district was by the Leopard Mining Company, first a ten-stamp which was consumed by fire and replaced by a twenty-stamp at a cost of \$163,000.00, which was likewise destroyed on the 11th of July, 1880. This company sunk a shaft on their mine a distance of 800 feet. The longest tunnel in the district is on the Fisher mine, which is 250 feet. Weights are received from the town of Carlin and are hauled to the district at a cost of two cents per pound. The ores are shipped to Bull Run and Tuscarora for working (18 to 25 miles).

Wood and timber are produced from the Jack Creek range of mountains, a distance of sixteen miles away.

The excitement incident to the discovery of this district, caused the building of the town of Cornucopia, which at one time in 1874 was quite lively and contained about 1,000 inhabitants, and polled a vote of 400. Considerable business was transacted during the excitement, requiring five stores and other buildings in proportion. It was a prosperous town until the destruction of the quartz mill, since when the population has steadily decreased until there are very few people left in the place. The census of 1880 places the number at 174. A fine two-story hotel, containing thirty rooms is the only one running at this time. In 1874 L. I. Hogle erected a large boarding house and saloon at a cost of \$8,000.00"