P. O. Box 486, Warren, Ariz. July 1, 1933.

NM Mine File No. 194

Mr. John G. Barry Consulting Geologist Mills Building El Paso, Texas

Dear Mr. Barry:

The attached report covers my recent examination of the mining claims on the Queen Vein north of the present property of the Cooney Mining Co., Inc.

In priting this report I have assumed that the interested reader is familiar with your own recent report on the Queen Mine. While your report is primarily a detailed study of conditions at the Queen Mine its scope is so broad and thorough that it may be used as a complete guide to the entire district. So I consider any attempt on my part to cover the same ground futile and beside the point, and have omitted from this report general descriptions and statements of geologic principles.

Part II of this report is practically a transcript of my field notes on the Queen Vein cuterops. It is included in the hope that such detail may aid you in judging the merits of the property.

I have recommended that an option to purchase this property be seemed if satisfactory terms can be arranged. In doing this I have in mind not so much the nearby but rather the future possibilities of profit from the property.

Respectfully yours

Randall Omster

N.M. Bureau of Mines & Mineral Resources Socorro, N.M. 87801 File Data

Confidential

)pen

QUEEN VEIN

COPPER CREEK TO DEEP CREEK

PRELIMINARY REPORT ON MINING LOCATIONS

AND VEIN OUTCROPS.

BY

RANDALL ORMSBEE

INTRODUCTION.

The following report is the result of nine days field work along that part of the Queen Vein which lies between Deep Creek and the Geronimo Claim of the Cooney Mining Co., Inc. The field work included both a transit and stadia survey of the mining locations on the vein and a preliminary study of the vein outcrops.

Owing to the limited time available for this examination only those claims located on the Queen Vein proper, and south of Deep Creek, were surveyed. One forenoon was spent traversing the three claims (Big Strike, Red Dog, and Red Dog No.2) north of Deep Creek. And an afternoon was spent likewise on the three claims (Big Bear, Big Buck, and Lone Star unpatented) located in Water Cañon east of the New Deal claim. The value of these six claims is not critical in reaching a decision on the purchase of the group. But these six are desirable should the others be purchased.

The mining claims on that part of the Queen Vein between Deep Creek and Copper Creek were surveyed along their center lines in order to determine the extent and validity of the locations. The claim survey was tied to the Tip Top claim which has already been tied, by patent survey, to U.S. Mineral Monument No.1. Datum for elevations is the same used in calculating elevations for Mr. Barry's maps of the Queen Mine.

The outcrops were studied in an effort to compare them with the outcrops of the Queen Vein on the Cooney property. Mr. Barry's recent report on the Queen Mine contains a very complete description of the geology of the district with particular emphasis on the economic geology of the Queen Vein. My work is in no way an attempt to extend or add to his descriptions. Rather have I attempted, in so far as I am able, to apply his criteria in my appraisal of the ground now under consideration. Geologically there are no essential differences between the vein south of Copper Creek (the present property of the Cooney Mining Co.) and the vein north from Copper Creek to Leep Creek. Economically, it remains to be proved that the vein north of Copper Creek is ore-bearing.

This report is divided into two parts; part I dealing with the mining locations on the vein and part II being a description of the vein outcrops.

Part I, MINING LOCATIONS.

The mining claims here considered are the following:

Patented Claims

Tip Top (160)

Lucky Cuss (161)

Lone Star (165)

Not Patented	Located	Recorded	Locator	
Karcella W.	6-25-34	9-18-34, Bk.1, p.315	Chae. E. Badgley	
Russel Alger	6-25-34	9-18-34, Bk.1, p.315	Chas. E. Badgley	
Carrie M,	5-28-54	9-5-34, Bk.1, p.314	C. E. Badgley	
Gold Cain	4-20-34	7-9-34, Bk.1, p.300	E. L. Ish	
Kes Deal	3-16-54)	Book 1	C. W. Mitchell	
New Deal No.2	3-16-34	pp. 276-277	J. T. Blalock	
Res Deal No.3	3-16-34)	i Deto?	Joel E. Mitchell	

Not Patented	Located	Recorded	Lcca	tor
Big Strike	5-16-54	4-21-34, BE.1,	p.280 Wesley E.	5 Thelis Cook
Red Dog	about 5-26-3	not yet		
Red Dog No.2)		200 300		
Big Besr	5-9-35	5-24-35, Bk.i,	p.363 J. S.	Dugan
Big Buck	5-9-35	5-24-55, Bk.1,	p.363 J. S.	Dugan
Lone Star	5-9-35	5-24-35, Bk.1,	p.363 J.S.	Dugan

STATUS OF THE MINING LOCATIONS

MARCELLA W. This claim adjoins the Geronimo claim on the latters north end-line. It covers 690 feet along the Queen Vein. Discovery work, location, and recording C.K.

RUSSEL ALGER Adjoins the Marcella W. on the latters north endline. Is supposed to cover 180 feet along the Queen Vein. 'Discovery' is on Tip Top Patented claim, hence location is invalid. It has been recorded.

This claim is not included in options. If valid, quit claim deed should be secured from Chas. E. Badgley the locator. If invalid, the open ground should be covered preferably by amending the Marcella W. location, resetting the corners on the latter, to include the open ground; or by properly locating a new claim. Covering by amending the Marcella W. would be far less expensive. The safest course would be to secure a quit claim deed from the locator, then amend the Marcella W. to cover all of the ground between the Geronimo and Tip Top Claims.

Russel Alger mining claims and the patented homesterd said to belong to Wm.

Tate. Patent on the homestead was issued some twenty years ago and boundry monuments have since disappeared. From the information I was able to obtain I believe that the homestead boundries do not include any part of the Queen Vein outcrops, but that part of the Marcella W. and Russel Alger claims east of the croppings would be in conflict with the homestead. At depth the easterly dip of the vein would take it inside of the homestead. Subsurface

rights to this might be obtained from the owner at a nominal figure.

TIP TOP (162) This is a patented mining claim. Extract of title needed to show present status. The patent on the mining claim antedates patent on the homestead.

CARRIE M. Adjoins the Tip Top on the latters north endline. It covers 1083 feet along the course of the Queen Vein. Discovery and location both O.K. but it was not recorded within the period required by law. Probably safer to relocate this claim after purchase of quit claim deed from locator. In any case additional ground to the north should be added to this claim either by amending it or when relocating it.

GOLD CAIN North of the Carrie M. Covers 1500 feet along the Queen Vein. Discovery O.K. Location, as monumented, is 80 feet in excess of the 1500 feet allowed by law. Recorded O.K. South endline should be moved to the north, the ground left open to be covered as suggested above in discussing the Carrie M. location.

NEW DEAL, NEW DEAL NO. 2, & NEW DEAL NO. 3, successively north of the Gold Cain. Cover 3710 feet along the course of the Queen Vein. Discoveries and locations O.K. Date of recording not known by the writer.

BIG STRIKE Adjoins Few Deal No. 3 on latters north endline. Was not surveyed. Discovery and recording O.K.

RED DOG & RED DOG NO. 2. Location notices posted north of Big strike. Discovery work and recording not yet done at time of examination. Was not surveyed.

BIG BEAR, BIG BUCK, & LONE STAR Unpatented, were not surveyed.

Tie to western endline of Big Bear shows that the endline should be moved at
westward 70 feet to make the claims contiguous with the New Deal Claim.

LUCKY CUSS (161) & LONE STAR (165) patented claims. These were not surveyed. Patent plats show positions and boundries. Extract of title needed to show present status. These claims are to the west of the other claims in the group. They are not on what is considered the Queen Vein proper.

If the option on the group is exercised it would be desirable to make the entire group of claims contiguous either by locating a new claim between the lucky Cuss and the Geronino claims or by purchase if that ground has already been located.

GENERAL REMARKS ON LOCATIONS

Eining claims as staked by their locators usually conform only approximately with the legal requirements regarding dimensions, monuments, and parallelism of endlines. When considering a group of supposedly contiguous claims along one vein it is important that each claim as monumented shall not exceed 1500 feet in length along the vein. Otherwise there will be a strip of ground subject to location separating the claim which is too long from one of the adjoining claims. My survey, as far as carried out, shows that with the one exception noted above the claims here considered are within the legal requirements as to length. This one discrepancy can be easily corrected.

The end lines of a mining claim must be parallel in order to secure the full benefits of the apex law. As regards a group of claims located along a vein this means that all of the endlines should be parallel with each other. The north endline of the Tip Top patented claim will govern the direction of the endlines of the claims north of it on the Queen Vein. A surveyor should stake all of these endlines so that they will be parallel with the Tip Top Endlines. Since the corner magnaments mark the direction of the endlines the setting of these monuments is a necessary part of the job of making the endlines parallel and should be supervised by the surveyor. Full widths of claims will also be assured by his measurements to corner monuments.

Specifications for claim monuments are clearly stated by the mining laws. These specifications are generally disregarded prior to patent application, and sometimes by the mineral surveyor, but much confusion and many conflicts may be avoided by the proper erection and marking of the monuments.

Title to 180 feet along the Queen Vein between the Marcella W. and the Tip Top claims is questionable. Quit claim deed to the Russel Alger claim should be secured from the locator at nominal cost, then amend the Marcella W. claim to cover this ground.

Litigation might result from the failure of the locator to record the Carrie M. location within the required period. I have been told that court decisions have been in favor of the first locator in similar cases where second locations were attempted subsequent to the tardy recording. If this question cannot be satisfactorily answered by the attorneys, the claim in question should be relocated.

The Gold Cain claim is too long by 80 feet. This can be corrected by amending or relocating the Carrie M. claim and no ground will be lost.

The western endline of the Big Bear claim should be moved to the west to make the claim contiguous with the New Deal

All of the unpatented claim corners should be set by a surveyor to take in full widths of location and to make the endlines perallel with the endlines of the Tip Top claim.

All monuments should be properly erected and marked.

Part II. QUEEN VEIN OUTCROPS

The outcrop of the Queen Vein at the north endline of the Geronimo claim continues, with a strike of N-20°-E, across the Marcella W. to the latters north endline on the south bank of Copper Creek. These outcrops are not bold, but are practically continuous across the claim, a distance of 690 feet. The width varies from 2 to 6 feet. Quartz constitutes the greater part of the croppings, with smaller amounts of calcite evident in places. There are some vugs in the quartz, it is closer to the granular than to the chalcedonic variety, and in places considerable shattering has occurred. These croppings form the backbone of the low ridge going down to Copper Creek.

Crossing the Russel Alger Claim the strike of the vein swings to N-10°-E and widening begins. Average width for the 180 feet across the Russel Alger approximates 8 feet. In the creek bed the vein is a zone of quartz and calcite stringers with horses of andesite, typical of most of the creek-vein crossings in the district.

Elevations on the croppings from the south end of the Marcella W. to the bed of Copper Creek vary from 6680 feet to 6517 feet.

On the north bank of Copper Creek, going into the Tip Top Claim. widening of the vein continues with the foot (west) wall of the vein swinging to a due north strike. There are more wallrock inclusions in the zone, the proportion of calcite is increasing as is the chalcedonic phase of quartz. The croppings here stand out boldly from the north bank of Copper Creek. Two hundred feet north of the creek the zone of quartz-calcite croppings is approximately 50 feet wide with calcite predominating. The outcrop is not at all prominent. The footwall streak is definitely on a due north strike and the hangingwall streak bears N-15°-E. The foot and hanging streaks are separating to form two branches of the vein. For 500 feet north of this split only traces of each branch of the vein appear on the surface. Wear the center of the Tip Top Claim the western (footwall) branch of the vein is joined by a wide (8'-12') calcite vein coming in from the southwest with a strike of N-40°-E. Northwest of the junction I did not find any signs of the footwall branch of the Queen Vein. The calcite vein continues on its northeast strike beyond the junction until it joins the banging (eastern) branch of the Queen Vein. Beyond this latter junction the hangingwall branch evings a little towards the east and at a distance of 150 to 150 feet from the junction the croppings show 4 feet to 6 feet of banded, chalcedonic quartz and highly silicified andesite. North from this point the strength of the mineralization rapidly dies out and on the south slope of a small cross gully 200 feet south of the Tip Top north endline there are but few traces of the vein. Evidently this cross gully marks the course of a transverse fault which is probably post mineral. Immediately north of the gully, but at a point further to the east than indicated by its

last appearance south of the gully, the vein outcrops prominently as chalcedcnic quartz with some vugs and little calcite. The cropping widens rapidly
towards the north to a width of 20 feet, then appears to split and strength in
the branches dies out as they cross the north endline of the Tip Top. There are
traces of the eastern branch of the split in the saddle which separates the
drainage of Copper Creek and Water Caffon.

The western branch of the split, constituting the principal continuation of the Queen Vein, for 500 feet north of the Tip Top Claim is indicated only by occasional pieces of quartz float and calcite boulders. Midway in the Carrie M. Claim the vein again appears 'in place' with three feet of banded vuggy quartz and calcite showing in an inclined shaft which is 30 feet deep. Local dir here is 67° E. Northward from the shaft there is a zone 15 feet wide of quartz stringers enclosing silicified andesite wallrock. The croppings then narrow down to a tight, chalcedonic quartz vein which in places pinches to 3 feet in width and in other places swells to 8 feet wide. Quartz stringers branch cut in to the footwall. Continuing northward the tight portion of the vein is succeeded by a zone of quartz stringers. Maximum width of the zone is 20 feet. The stringers vary in width from 2 inches to 12 inches. Approximately 75% of the zone is composed of included wallrock (andesite). This zone continues almost to the north endline of the Carrie M. Claim where the discovery cut for the claim, on the north side of a small cross gully, exposes the vein as 5 feet of quartz and calcite. The quartz is semi-granular and contains some vugs.

increase in width and prominence. While in places the vein cutcrop pinches to a width of 3 feet, for the greater part 6 to 12 feet widths prevail. The quartz in these wider croppings is more nearly chalcedonic, and there are some andesite inclusiond in the vein. Crossing the saddle between the Copper Creek and Water Camon drainage basins the vein again appears weak at the surface.

Across the knoll north of the saddle the croppings are 2 to 4 feet wide, of almost granular, shattered quartz. Dropping off the knoll into the first

partly granular and partly chalcedonic. The apparent change to a more easterly strike on the south slope of this canon is largely due to migration with dip. Climbing out of the canon to the north the main vein cropping is weak with widths of 1 to 2 feet. Quartz stringers, offshoots in to the hangingwall, are 8 to 12 inches wide.

At the south endline of the New Deal Claim, on top of the ridge the quartz cropping are 2 to 4 feet wide. Going down the south slope of the mext cesson the outcrop increases in width and reaches a maximum of 12 feet at a point 250 feet north of the endline. The quartz is banded and vuggy. Local dip is 65° E. Just north of the wide croppings the vein splits and loses strength as it continues down the hillside. There is some evidence that the eastern (hangingwall) branch continues northeast and crops weakly in places on the Big Bear Claim. Neither branch can be seen in the bottom of the caffon. On the north side of the cenon the west branch again shows as croppings of quartz, 2 to 3 feet wide. Seventy feet up the hillside this disappears in the Dog Gulch formation and there are no signs of the vein for a distance of 300 feet. Here, well down the south side of Water Canon, the vein appears as one foot of quartz which widens to a six foot quartz vein with many andesite inclusions at the south edge of the creek. The strike of the vein here is N-28°-W., dip 68° N.E. For 350 feet northwest of the creek the wein crops for a width of 2 to 3 feet. Where last seen the cropping has a strike of K-10°-E. This is just south of the New Deal No. 2 Claim.

The New Deal No.2 Claim covers a gentle slope rising to the ridge just south of Deep Creek. The Dog Gulch formation is exposed over the greater part of this slope. No quartz in place was found here and only a few scattered pieces of quartz float are to be seen on the south slope of this ridge.

Crossing the ridge and going down into Deep Creek caffor the first croppings found were more than half way down the side of the caffor, north of the center of the New Deal No. 5 Claim. There the vein is 18 inches

to 2 feet wide and consists of quartz and calcite. It is exposed for a length of 100 feet. Lower down the side of the caffon, on the scuth side of the creek, the vein crops prominently with widths up to 8 feet. Shattered, vuggy quartz is the principal constituent of the vein. The etrike of the vein is E-12°-E. One hundred and fifty feet south of the creek the vein splits. Weaker mineralization continues to the creek on the N-12°-E strike, practically dies out on the north bank, then increases in strength higher up on the north wall of the caffon. Two to three feet widths of quartz caterop for a short distance, then die out and it is difficult to trace this branch of the vein any further.

The eastern branch, with a strike of N-15°-E and consisting of 2 feet of semigranular banded quartz, is covered in the creek bed and for a short distance on the north bank. It then crops very boldly in a zone 20 feet wide. The strike here is N-28°-E, dip 78° S.E. On the hangingwall of the zone there is 7 to 10 feet of banded quartz. Quartz stringers with wallrock between make up the balance of the zone in the ratio of 40% quartz to 60% wall rock. North of these bold croppings only the hangingwall streak persists and it narrows and soon disappears.

Only a cursory examination was made of the Big Strike claim and the two Red Dog claims to the north. Croppings of calcite with little quartz seen on this examination may represent the continuation of the Queen Vein north of Deep Creek cañon.

On the three claims, Big Bear, Big Buck, and Lone Star unpatented, which are to the east of the New Deal Claim in Water Caffon occasional small quartz croppings possibly represent an eastern offshoot from the Queen Vein.

On the following page in the tabulated summary are given elevations for different sections of the outcrops. These are important in considering both strength and characteristics of the outcrops. The elevations on the New Deal No. 2 are for the ground along the centerline.

TABULATED SULMARY OF OUTCROPS

(Keasurements in feet.)

			App	roximat	te	
	No. of the last of	th of		of Out	. •	
On Claim	Clain	Outcrep	Kin.	Hax.	Aver.	Remarks
Mercella V.	6 90	690	2	6	2-1/2	Eleva. 6680 - 6550 Semi-granular shat- tered quartz. Small amount of calcite.
Russel Alger	180	150	6	10	3	Elevs. 6550 - 6517 As above, more calcite.
Tip Top	1500	300	1	50	12	Eleva. 6517 - 6634 Chalcedonic quartz, much calcite.
		200	1	6	3	Elevs. 6700 - 6720 Bended chalcedonic quartz with calcite.
		150	2	50	7	Elevs. 6674 - 6700 Chalcedonic quartz.
Carrie E.	1080	520	3	20	5	Elevs. 6745 - 6770 Both chalcedonic & granular quarts, vuggy & banded, some calcite. Wide zones with wall-rock inclusions.
Gold Cain	1530	1589	1	13	5	Elevs. 6638 - 6765 Banded chalcedonic to vuggy granular quartz. Nuch calcite locally.
New Deal	1310	450	1	12	4	Eleve. 6590 - 6730 Banded vuggy quartz. Some calcite.
		475	1	6	2	Eleve. 6560 - 6640 Chalcedonic quartz, calcite, andesite incls.
New Deal 2	1320			•		Eleva. 6660 - 6820 No outcrope found. Dog Gulch formation predominates
Kew Deal 3	1080	25 0	1	8	4	Elevs. 6180 - 6300 Banded, semi-granular quartz, vasgy.
Cig Strike	. ??	150	2	20	3	Banded semi-granular quartz. Many inclusions.

From the foregoing tabulation, excluding the Big Strike claim which was not measured, it appears that with a location length of 8740 feet along the Queen Vein there are 4795 feet of definite vein outcrops.

CONCLUSIONS

Titles and locations are not all strictly in order but no great difficulty should be experienced in making them so.

Excepting those in Deep Creek Cañon, the outcrops are above the elevation of the ore shoots in the district as disclosed by past experience in the developed mines. The upper limit for ore on the property of the Cooney mining Co. is extinated at 6550 feet. Sampling results on the outcrops here considered would be practically worthless. (No samples were taken during this examination.)

Lengths and widths of outcrops and their structural and mineralogical features (making due allowance for elevations) compare favorably with those on the Cooney Mining Co. Claims.

The very small footage of exploration work done to date on these claims is above the elevation at which ore might be expected to occur.

With expected favorable developments in the Queen Mine acquieition of the claims here considered would be a very attractive speculation. Without such developments, exploration north of Copper Creek must be classed as wild-catting.

Under present conditions to prove the existance of ore bodies on these claims would require in the neighborhood of \$60,000 for preliminary equipment and exploration work, distributed as follows:

Shaft, 400 ft. deep, and drifting on Gold Cain Claim \$45,000
1000 -1500 ft. of tunnels from Beep Creek 15,000

Eith the purely speculative exploration work requiring such an amount of capital it is quite evident that payments on account of property during the period of exploration (1 year to 18 months) must be at a minimum

to encourage development of the claims.

Capital expenditure after exploration but before production might be obtained is difficult to estimate at the present time but it is probable that it would equal or exceed that required for exploration.

At the present time any diversion of needed finances or effort from the Queen Mine to this property would be unwarranted extravagance as concerns this property and a severe handicap on the Queen Mine.

RECOMMENDATIONS

I recommend that an option to purchase these claims be obtained subject to the following terms:

Gross payments on purchase price during next eighteen months should not exceed \$10,000. Initial payment to be small.

That there shall not be any requirements as to the emount of work to be done on the property during the first siz months of option.

This recommendation is subject also to attorney's approval of title to Russel Alger Claim and validity of Carrie M. location.

Respectfully submitted.

Randall Ormsbee

Handall Comstee

Registered Professional Engineer P. O. Box 486, Warren, Arizona.

July 1, 1935.

