P. 0. Box tićb, Harren, Ariu. july $4,1935$.

NM Mine File No. 194

喕. John G. Barry Consulitng Gaologiat UEIL3 Zuiliting T1 Paao, Taxa

Deas 130. Barry:
Tas attacined roport covers ing rocent examination of tine



In arisiag this repart I haye asawad that the intarentad


 guide to the entiry distritt. So I consider any attempon my part to
 thia renort ganeral descriptiva and staborenta of geologie principles.

Part II of timis fepori is practically a suanserigt of uy
 such dowil ingy ald you in judging tito marita ol tino progarty.

> I haye rocosmonded that sin optor to purciatso thia

 of propit irom the property.

 Randat OFsbe
N.M. Bureau of Mines \& Mineral Resources Socorro, N.M. 87801 File Data Confidential Open $\qquad$

QUEPS VETH

## 

 AMD VEIF OUTCROPS.

EX
REMOALE ORMSEES

IITHRODNCTIOR.
The following report is the result of nine ciays field work alenz that part of the Queen Fein minch Dies beteen peep Creek end the Geronimo
 and stadan buryey of the mining locations on the vein and a preliminary study of the vein outcrops.

Oring to the linfted tinte available for this oxamination only those clane located on the queen vein froper, the couth of Deep cresk, fere
 Red Dog, and Fed Dory wo. 2) north of Deep Creel. And an eftermoon was spent likerise on the threo clains (Big Bear, Big Buck, and wone Star umatented)
 claiss is not critical in reacining a decision on the purchase of the growi. But these firy are desirabie should the cthere be gurchaged.

The mining ciaims on hagt part af the Gueen Fein betreen Deep Creek and Copper Creak were anmeyed along their conter lines in order to determine the extent and relitaty of the locations. The claim surver pas tied to the Tip mop clafornin hag already been tiec, by patert aurvey, to U. S.
 eievations for H . Burfy's mapa of the Quen Hine.

The outcrops were studied in en effort to comere frem aith the outcropa of the Queen Fein on tis Cooney property. Mr. Barry's recent report on the qucen Rino contains a very complete description of the geology of the diatrict tith particular emphais on the economic geology of the Gueen Vein. Wy work is in no way an attexpt to extend or add to his descriftions. Finther have I attempted, in sofer as I an abie, to epply iis criteria in my appraisal cithe ground now under consideration. Goologically there ere no essentisl fisforences tatween the vein couth of Copper Creek (the present property of tha Cooney Eining Co.) and time rein north from Copper Creek to Feep Creet. Economically, it remins to be proved that the voin norih of Coper Creez is crombenizy.

This report ia ciavided into two parts; part I cealing with the minios locations on the vein and part II being a description of the vein outcrops.

## Part I, ETHES LOCATICRS.

The mining clatis here engidered are the following:
Fatented Claizs

```
Tip Top (160)
Lucay Gues (121)
Lone Star (165)
```

| Not Paterited | Located | Recorded | Lecator |
| :---: | :---: | :---: | :---: |
|  | $6-25-34$ | g-18-34, EL, 1, 5.315 | Ghae. E. bucgiey |
| Euseel figer | 6-25-34 | 9-18-34, Bit.i, p.315 | Chas. E. Badgley |
| Carrie F , | 5-28-54 | 9-5-j4, Bix.is p.j持 | C. E. Badgley |
| Gold Cain | $4-20-34$ | 7-0-34, BL. 1: F.300 | E. L. Ish |
| Fer Deri | 3-16-34) | Book 1 |  |
| Fer Deal Fio. 2 | 3-16-34) | Fp. 275-277 | さ. ㅃ. Blalack |
| Feat Deal Ho 0.3 | $3-16-3 \frac{2}{5}$ ) | ¿ Dato? | Joel E. Witchell |



## SqATOS OF Pre kinide locirions

HARCELIA $\quad$. Pixis claim adjoins the Geronimo claim on the lattere nortin end-ine. It corers $6 ; 0$ Pect along the Queen Vein. Discovery work, location, and recording C.E.

RUSSEL ALASR Adjoins the Sicrella $\begin{aligned} & \text { H. on the lattere north end- }\end{aligned}$ line. Is supposed to cover 180 seet along the Queen Vein. 'Discovery' is on Ifp Top Patented claim, hence location is invalid. It hes bees recorded.

This clain is not included in options. If valic, cuit clain deed should be secured fror Chas. E. Eadgley the lacetor. If invalid, the open ground shouid be covered preferabiy by amonding the jazcella V. location, reEeting the corners on the latter, to include the open ground; or by properly locating a new claim. Coyering by anending tize werceila F. would be far less expensive. The safest course vould be to becure a quit clain deed from the locator, then arand the 解rcella $\%$. to cover all of the ground beiveen the Geronimo and Pip Pop Claime.
 Russel Alger minine claims and the patemted homestexd said to betong to ing. Tate. Patent on the homestead was iscued some trenty years ago and boundry wonuments have since cisappeared. From the information I was able to obtain I believe that the howestead boundries co not incluce any part of the Queen Vein outcrops, but that part of the marcella fi and Russei Alger ciaing eget of the croppings pould be in confict with tine homestead. At depth tho easterly dip of the vein rould take it inside of the horsestead. Subsurfoce

Tights to tinis might io obtained from tine omer at a nominal figure.
MIP TOP (167) mins is a patented mining claim. Extract of titio needed to show present status. the patent on the minirif cian matedates patent on the nomestard.

CARATE K. EGjoins tine mip Pop on the letters north endifne. It scvers 1083 feet along the course of the Cueen Vefn. Discovery and location coth 0.K. but it was not recorded nithin tine period raquired of law. Probably sefer to relocate this claim aiter purchase of quit claim deed from locetor. In any cabe adcitional ground to the morth should be added to thin clain efther by anending it or when relocating it.
 Queen Vein. Discovery 0. X. Location, as monuented, ia 80 feet in excess of the 1500 ffet gllowed by lew. fecoried O. K. South ondine ghould be moved to the north, the ground leit open to be covered as suggested thove in discussing the Carrie 筷. location.
 Lice Eoid Gain. Cover $37 t 0$ feet aiong the course of the Queen Tein. Discoveries and locations 0.F. Date of recording not kom by the mriter.

BIG STRIRE ACjoing kea Deal Fo. 3 on lativera north endine. Tas not arreyed. Diecovery and recoraing O. I.

RES DOG \& RED DOG fo. 2. Lacstion notices posted north of Big * atrike. Discovery hork and recording not yet done at time of examination. Pas not surveyed.

BIG $B E A R$, BIG BUCX, 0 LIONE STAR Unpatented, were not $\operatorname{surveyed.~}$ Tie to weatern endine of Big Bear ghome that the ending should be wicred westward 70 Peet to mace the clams contiguous with the Nex Deni Olair. LUCKT CUSS (161) \& LONE STAR (165) patented ciains. These were not surveyed. Fatert pighs shof positions and bouncies. Ertract of title needed to shcm present status. 雷ese claica $\mathfrak{a r e}$ to the west of the other aclaims in the group. They are not on what is considered the dueen vein proper.

If the oftion on the group is ezercieed it would be desirable to wake the entire group of clatrs contiguous either by locating a new cisim betseen the incizy Cuss and the Geronimo ciaims or by purciese if that ground has alreaty been located.

GERERAL REWARES CN LOCATIONS
Hining ciajus fastaiced by their locatcra usuelly corform only spproxieately and farallelisim of endlines. Finen considering a group of eupposedif contignous claims along one vein it is important that eacir ciaim as rommented shail not exced 1500 feet in length along the vein. Otherxise tiaere will be a strip of ground eubject to location eqparaing the ciaim which is too long from one of the adjoining ciaims. 敛 survey, as far as carried out, ghows that with the one excertion noted above tine claim here considered are wition the legal requirents as to lengin. Tis one discrepancy cen be eesily corrected.

The end lines of a rining claim mast be paraliel in order to
 ed biong a vein this means tiat sill of the endines should be parallem mith each other. The nortin endine of tio Tip Top patented claim rill govern the direation of the erdines of the clains north of it on the pueen Fein. A survegor should stake all of thase endinges so tingt they will be parallel with tie Tip Top Endlines. Since tio comer onments mark the direction of time endines the setting of there mocurants is a necessary part ci tire job of making the endinee parailel and ghould be surervised by the eurveycr. Full vidths of clajme will bleo be assured by his weaxurexents to cormer maruments.

Specificationc for claim nomments are clearly stated by the minint laps. These epecificutione are generally dieregarded prior to petert application, and eometimee by the mineral ourveyor, but much ocnfusion and many conplicts mey be eroided by the proper erection and maning of the monumenta.

Title to 180 feet along the Gueen Vein between the warcelle $\quad$. end the Tif Top cleins is questionable. Guit clain deed to the Russel Ager ciaim eroula be secured frcm the locator at roxingl cozt, then amerd the芘的cella

Litigation tight result from the failurs of the locstor to record the darie $\mathbb{N}$. location within the required pericd. I have been told that court decisions have been in favor of the first locator in similar csses where second locations mere atterrted. subsequent to the tardy recore ing. If this question camot be satiefectorily answered by the ettorneys, the claim in quection ehould be relocated.

The Goid Cain ciain is too long by fo feet. This can be corrected by emending or relocsting the Carrie 12 . claju and no ground will be lost.
mine western endine of the Big Eear clain should be moved to the تest to make the cleim contigucus mitin the jew Deal

All ot the ungatemtad clajin comers should be set by a surveyor to take in full vidths of location and to wike the endines parsilel whth the enclines of the Tip rop ciain.

All monumente should be properly erected end marked.

## part In, CUETP VEIN OUPCROFS

The outcron of the Queen Jein at the ncrith endine of the
 to the latters north endine on the eouth bank of Coger Greet. These outcrops are not bold, but are practicsily contimous across the clain, a distance of 60 feet. Nhe Eicth varies fron 2 to 6 ieet. Quartz conetitutes the greater part of the croppines, with sualier enounts of calcite evident in places. There are some ruge in tie cuertz, it is closer to the eramiar than to the chalcedonic rariety, and zn plewes consicerable anatiering has occurred. These cropings form the beckbone of twe low ridge going zom to Copper Creez.

Croseins tine Fussel Aleer Cuin the strike of the vein ewings to
H-ibst and wicening begine. Average with for the ten feet acroas the fuesel siger epprozimates a fect. In the creel bed the vein ia mane of guaxta ard calcites stringers mith harees of andesite, typical of rest of the creer-vein crossings in the district.
 to the bed of Copper Creek vary from 6 fec feet to 6517 feet.

On the nortin benk ef Copper Greet, ecing finto the Tif fop Clain, Ficieniag of tian vein continues fith the foot (wost) wall of the vein eringing
 Proportion of celcite is increasing as is the chalcedonic phese of gueriz. The croppings here atend out bolily from the nortin tenk os Copper Creek. Twa hundred feet north of thie croel the zone of gaarte-aicite croppines is epract fmately 50 fect wide mith celcite predominating. The outcron is not at all prominent. Tibe footwall streat is definitely on a due north strike and the
 to form two branches or the vein. For 5 foleet north of tha eplit only traces of each branch ci the vein gepear on the eurface. Near tiae center of the Tip Top Clain the western (foctwall) branch of the vein is joinea by enide ( $8^{2}-$
 nest of the junction I did tict find any signs of the footrall branch of tine Queen Vein. Tre calcite vein continues on its ncrtheast atrike beyoud the junction until it joins the kanging (eastern) branch of the Queen Vein. Beyond
 and at a dictance of 130 to $\$ 50$ feet irom the junction the oropxinge sinor 4 Peet to 6 feet of banden, chalcedcrin quartz and kighly silictified ancesite. North from tias point the evrength of the mineralization rapidly dies out End on the soith gione of a cmall crose gully noof feet ecuth of the fip fop north andine there are but fer tracee of the vein. Eviderity this cross Billy merks the course of 2 transverse pault wheh is probably post mineral. Inmediately north of the guily, but at a point further to trie east then indicried by its
laet appearance south of the gully, the vein outcrops prominently as chaicedonic çuartz mith some vags and little colcto. The cropping widens rapidiy toknrce the ncril to a ridith of 20 feet, then appeare to eniit end otrength in the brancies cifes out as they crosa the north endine of the app Top. There are traces of the eattern braxeh of the splitit in the sedide mich geparates the drainage ca Copper Creek and Etater Garion.

The western branch of the split, constituting the principal contimution of the queen Vein, for 500 feet north of the Tip Top Clain is indicated oniy by accasional pieces oin quartz flost and calcite bouldere. Kikway in the Cerrie li. Clain the vein again appears in place' with three feet of banded vaggy quartz and calcite showing in an inclined ehafit which is 30 Reet deep. Hocal dif here is $67^{\circ} \mathrm{E}$. Frorthwan fram tio chaty there is a zone 15 Peet rice co giariz etringers enclosing silicỉied sudesite malrock. The croppinge then narrow dow to a tigit, cascedonic quartz vein wich in placas pinches to 3 feet in micth and in otiar places salla to B feet wide. Oumptz atringers brancia out in to the Pootrall. Contimigg cortiatard the tight portion
 zone is 20 feet. The stringers vary in ficin from 2 inches to i2 inches. Approximately 75 of the zone is composed of included walroct (andesite). gins zene continues almost to twe north endine of the chrria h. Claim singe the discovery cut for tie cleim, on the north side ci a srall cross guily, exposes the vein as 5 feet of quarta and calctite. Fhe quarta is cenf-granular and contains woine vags.

Continuing north, going into tie Gold Ging Giain the cropaing increase in width and prominence. While in piacas the rein catcror pinches to
 in these mider cropinge io mare nearly chalcedonic, sud there we boge ancestat inclusiond in the rein. Crosaing the sande betwern he Copper Croet ana kater cunon drainage besins the foic again appears reuk at tive euriace.


tributary creek to niater cinon tho cusirta nidens to 8 feet and is bended, partly gramilar and partly chalcedonic. The apparent chanse to a more east coly strife on the south slopo of this onnon is largely due to micration with dip. Gliming ofi of the cafon to the nortin the main vein cropfing is Neak mith mithths of 1 to ? feet. Quartz atringere, ofenocts in to the hang ingwall, are 8 to 12 inches Fide.

At the south endine of the New neal Clesin, on top of the ridge the quartz cropping are 2 to 4 feet Fide. Going dom the south elope of the nert ceñon the outcrop increaes in width and reaches a maximur of 12 peet at a point 250 feet north of the endine. The quertz is banded and nigety. Focal cip is $65^{\circ}$ E. Just north of the nide croppings the vein splits and loses atrength as it continues dom the hillside. Trese is sorae evidence that the oastern (bengincwall) branch continues northeast and creps weakiy in placed on the Big Bear Claim. Eeituer brancin can be eeen in the bottor of the carco. On the north side of tine caron the rest branch egain ahowe as croppings of
 Dof Gulch formetion. and tinere are no sigen of the vein for a dietance of 300 Peet. Eere, well donn the Eouth olde of Fater Cañon, the vein appera as one Soot of quartz winch ridens to a six foot quartz vein fith many maesite inclusions at the sonth edge of the creek. The atrike of the vein here is
 a pieth of 2 to 3 fest. Fieze Iest seen the cropping hes a strike of $\mathrm{f}-10^{\circ}-\mathrm{E}$.


The Rem neal No. 2 Clain covers a gentle slope rising to the ricge fust south of Deep Creck. The Dog Gulch inormation is exposed over the grokiter part of this alope, 70 çucriz in place kas found here and only a few ecartered pieces of quartz $\mathfrak{i l l o s t}$ are to be seen on the couth ciope of this ridge.

Crossing the ridge and going down into Deep Creek ceston the
firat cropgings found were more than hale may dom the gide of the caron,

.io. ? feet nide und consiste of cuartz and calcite. It is exposed for a Iength
 ine vein crope prominently with wieths up to e feet. Shathered, rugej quertz
 One humpred and finty feet south of the crect the pein splita. Feaker mineral-
 the norih bent, then increeses in strength hicher ue or the north wati af the cencn. Two to three feet widtha of quartz outcrop for a ohert distence, them die out and it in difficult to trace this brench of the vein any further.
 2 feet of cemigramular bsnded onartur, is covered in the creein ted and for a anort dietance on the north benk. It then crone Fery boldip in a zone 20
 zono tinere is 7 to 10 feet of bunded guarta. Quartz stringers rith wallock Eetreen sake up the balance of the zone in the ritio of wow guartz to to f Fall rock. Horth of whese bold croppinge only the hangingrell stroak pereists ard it nerross and soon tiagpresrs.

Oמly a curbory azamination wa made ot the Bis Strive clesm and the tro Fed Dog cimins. to the north. Cropginge of calcito witu little custr seen on thin eramination my repreent the cortintetion ch the Cueen Wein north of Deep Creek oxnon.

On the threo cluims, Big Bear, Eig Buci, snd Lone Star unpat-
 small cuartz crophings possibly repreaent an eastern offshoot from the green Foin.

On the following page in the tabulated eumery Ere given elefations fof difierent secticne of the nutcrops. These ars important in
 tions on the fem Deal 1.0 . R are for the ground alone the centerline.
（keasurements in feet．）

| Cn Clsim | os Fiproximate |  |  |  |  | Reanrls |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Claim | Outerch | 県为。 | Eax | Ayer． |  |
| －Earcella | 600 | 690 | 2 | $\epsilon$ | $2-1 / 2$ | Eleve．6600－6550 Semi－granuler shat－ teré cuartz．Small amount of calcite． |
| Pussel Aiger | 120 | 150 | 6 | 10 | $\varepsilon$ | Elevs．6550－6517 <br> As ebove，tere calcite． |
| Tap Top | 1520 | 320 | 1 | 50 | 12 | Eleve．6517－6634 Cnelcedonic cuartz， much calcite． |
|  |  | 300 | 1 | 6 | 3 | Elevs．6700－6720 <br> bendec chalcezonic <br> quartz with calcite． |
|  |  | 450 | 2 | 20 | 7 | Elevs．6574－6760 Chaicedonic quartz． |
| Carrie 知。 | 1050 | 500 | 3 | 20 | 5 | Eleve．6745－6770 <br> Botin cisilcedonic so <br> granular cuarts，vuggy <br> t banded，soze culcite． <br> 維de zonee witi Eill－ <br> rociz incluaions． |
| Gold Cain | 1500 | 1580 | 1 | 2 | 5 | Eleva．663s－ 6755 <br> Banded ehalcedonic to vagey eramular guartz． Ruch calcite locally． |
| Sew Deal | 1310 | 450 | 1 | \％ | $4$ | Eleve．650n－6730 <br> Banded vuggy quartz． Some calcite． |
|  |  | 475 | 1 | 6 | $?$ | EIevs．650－664－ Crelecioric cuantz， calcite，\＆nceeite incls． |
| Nex Deal 2 | ：320 | － | － | － | － | Eleva ．6660－682 <br> Fo outcrops found． <br> Pog Gulch formation preajominates |
| Hew Deal | 10 | 235 | 1 | 8 | － 4 | Diers． $6180-630$ Banded，beni－Eranuler <br>  |
| Le Strike | ？？ | 250 | 2 | 20 | $\checkmark$ | Banded semi－grenuiar cuartz． tany inclueions． |

Frde the foregoing tabulation, excluaing the Big Strike ciair $\therefore$ : which mas not meacured, it appers tiat with a location length of $87 h^{\circ}$ faet along the Queen Vein there are 4795 seet of definite vein outarops.

CORCLUSIORS
Titles and locations are not all atricily in order but no great difficulty ehould be experienced in axing them so.

Excepting those in Deep Creek Cañon, the outcraps are above the elevtifon of the ore ehoata in the district as Eisciosed by path experience in the developeduines. Tine upper lixtt for cre on the property ef the Cooney Gining $C c$, is extinated at 6550 fect. Sampling rebults on the outcrops hers considered would be practicaily worthless. (No samples were taken during this exerination.)

Lengtis and widtins of outcropa and their otructural and mineralogical features (making tue allewance Sor elevtions) compare favarably sith those on the Cooney Liniry Co. Clains.

The very samil footege of exploration rorif done to date on inese cleims is abcye the elevation af rich ore might be expecteat to ocur.

Fifh expected favoratie levelopments in the Qusen Mine acquisition of the claiss here considered would be a very attractive speculation. Tithout such developments, exploration norih of Copper Creek must be clessed as mild-cstting.

Under present conditions to prove the existance of ore bodies on theae claims would require in the neighborhood of foc, oco for preliminary equipment and exploration werk, distributed as follows:

Shaft, to tit. deep, and drifitng on Gold Cain Claim

$$
\begin{aligned}
& 45,000 \\
& 15,000 \\
& \hline 80,000
\end{aligned}
$$

1002-isso fit. of tunneis frcm Deep Creek

Fith the pracely speculatire exploration work rectiring such on erount of capital it is çite erizent that pasments on acconnt of property during the period of exploration (i yesr to le months) mast be at a minimu
to encourage development of the claims.
Capital expenditure after exploration but before production
 probable that it would equal or exceed tat required for exploration.

St the present tire any diversion of needed finances or effort
 concerns this property and a severe handicap or the Queen kine.

## PECOMERMATIOKS

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

Gross payments on purchase price miring next eighteen monies should not exceed 10 , bet. Initial payment to be gal.

That there shall not be any requirements as to the emory of work to be gone on the property curing the first viz months of option.

Phis recomendation is subject also to attomey's weroval on


Respectfully submitted,


Registered Froiescional Engineer
P. O. BAx 486,

Fincren, Arizona.
July is i935.


