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Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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PHOTOGRAPHS TAKEN MARCH 7TH & 8TH, 1945.

~~A-173-48~~
A-123-48

photos IN Archives

From point on common line 30' west of northeast corner of Morning Star. looking west along common line. Note that there is no work at point 217' from corner which is 33' this side of pit.

~~A-173-46~~
A-1234-9

From same location, but looking southwest to show surface of Morning Star Claim and their working on left side of picture.

PHOTOGRAPHS TAKEN MARCH 7TH & 8TH, 1945.

~~A-173-48~~
A-123-48

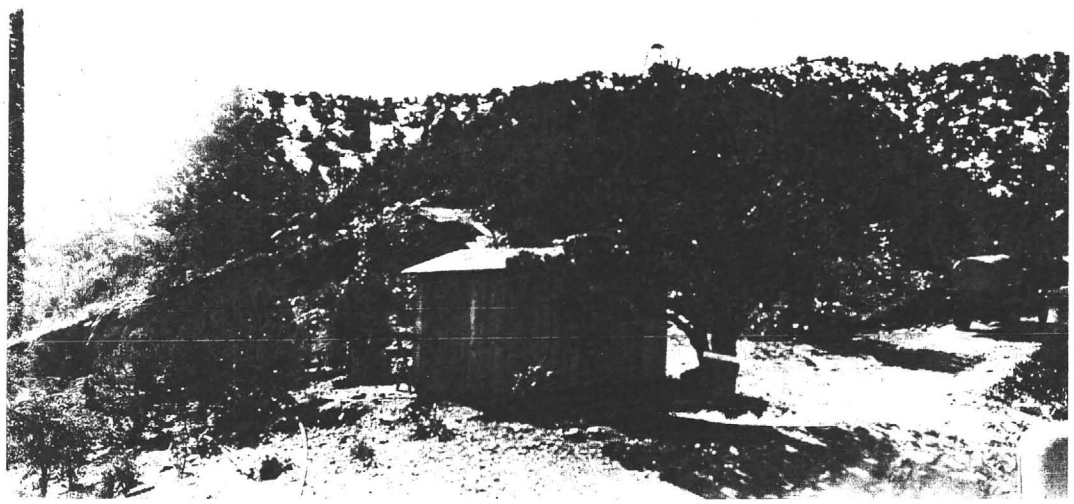
From point on common line 30' west of northeast corner of Morning Star. looking west along common line. Note that there is no work at point 217' from corner which is 33' this side of pit.

~~A-173-49~~
A-123-49

From same location, but looking southwest to show surface of Morning Star Claim and their working on left side of picture.

PHOTOGRAPHS TAKEN MARCH 7th & 8th. 1945

~~A-123-47~~
A-123-50



From point on road on Pure Gold Claim west of the workings and looking southeast along slope of hill and toward trespass pit.

PHOTOGRAPHS TAKEN MARCH 7th & 8th, 1945

A.123-50
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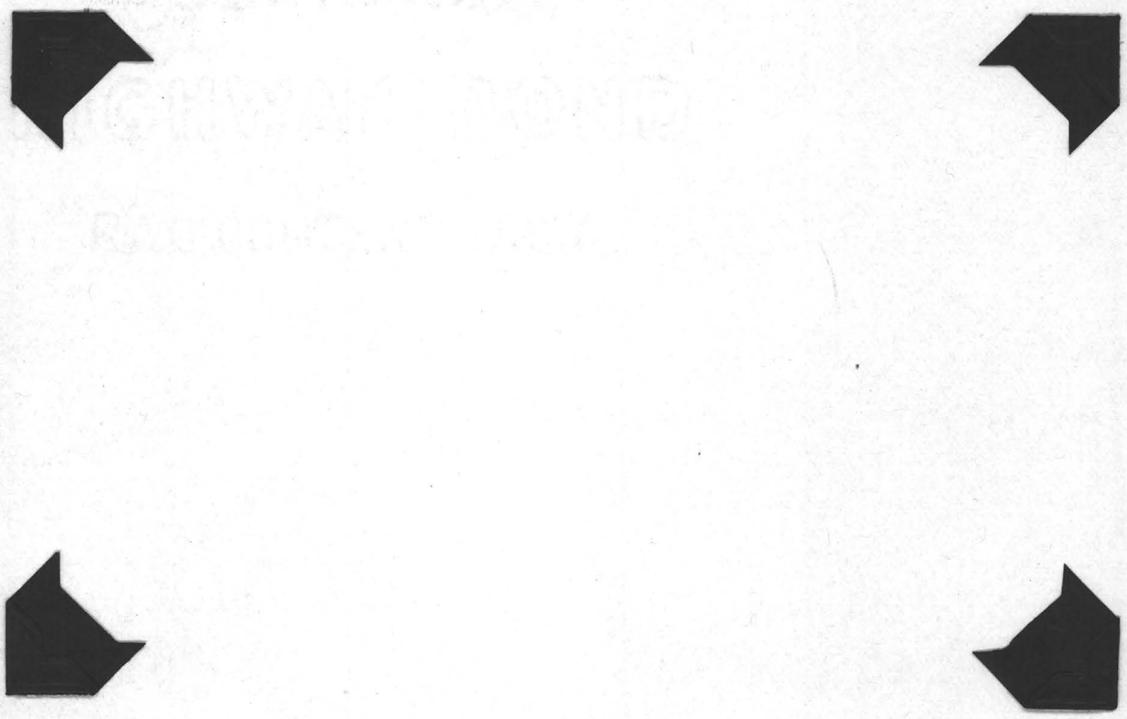

From point on road on Pure Gold Claim west of the workings and looking southeast along slope of hill and toward trespass pit.

COPY

LAW OFFICES OF
ELLINWOOD & ROSS
807 TITLE & TRUST BUILDING
PHOENIX, ARIZONA

May 9, 1946

Mr. W. S. Tubach
114 West Fifth Street
Santa Ana, California

re: Forcey vs. Molson

Dear Mr. Tubach:

Enclosed please find copy of letter dated May 8, 1946 from Judge C. C. Faires to Messrs. Fennemore, Craig, Allen and Bledsoe advising of his decision in favor of the defendant and cross-complainant in the above action.

In substance the Court has found that the defendant has established a vein apexing on the Pure Gold Claim and that the plaintiffs are not entitled to recover any damages on account of the alleged trespass. The Court also found the defendant was entitled to a decree quieting his title to alleged vein.

As soon as the decree has been prepared and entered, we will furnish you copy thereof.

Yours very truly,

ELLINWOOD & ROSS

By

WAE:hl
Encl.1
cc: Mr. G.M.Colvocoresses
Encl. 1

file

RESTRICTIVE ALLOCATION* relaxed as

Tungsten Production Goes Over the Top

May 8, 1946

Messrs. Fennemore, Craig, Allen and Bledsoe,
Attorneys at Law,
Phoenix, National Building,
Phoenix, Arizona

Gentlemen:

Re: Forcey vs. Molson

Recognizing the importance of the Forcey vs. Molson litigation, I ask your indulgence in making these off the record observations.

I was content to state briefly my conclusions on the main issues for reasons based upon long experience on the Bench. In my early experience I was wont to write opinions but halted the practice when the Supreme Court reversed me in a Graham County appeal on a point of law not touched upon in the briefs nor considered by the Court.

As you well know, the Supreme Court occasionally affirms on the assumption that the Trial Court must have found so and so in support of the judgment, though no findings were made. To reach erroneous conclusions and give the wrong reasons is somewhat embarrassing.

At the Judicial Conference at Tucson Judge LaPrade commented that the members of the Supreme Court other than the writer of the opinion had no time to examine the transcript which, of course, is a sound argument for increasing the number of Judges, but somewhat disconcerting, to say the least, to the lawyers practicing before the Court.

In this case I contemplate that due to the limited findings it will necessitate the reading of the transcript by each member of the Supreme Court.

Have happily discovered that able counsel can do a very much better job than the Judge in the preparation of the judgment, if given an inkling of the conclusions on the issues on which the case was tried, so am imposing upon counsel for the defendants to prepare the judgment. In the event that I have overlooked any material findings, upon my attention being called to the oversight will promptly review the record and supply same.

Messrs. Fennemore, Craig, Allen and Bledsoe (2)

In conclusion, I mention that I was present at the trial of the Iron Cap case in this Court and, without appearing facetious, have felt that I was swimming against the current from the opening bit of testimony and have had at times, when attempting to reconcile the testimony of the expert witnesses and the conflicting decisions, a feeling of being submerged.

Cordially yours,

C. C. FAIRES.

CCF/JM

cc Ellinwood and Ross
Darnell and Robertson
Clifton R. McFall
Tom K. Richey

October 4, 1945

Mr. William A. Evans
c/o Ellinwood & Ross
807 Title and Trust Building
Phoenix, Arizona

RE: Morning Star

Dear Mr. Evans:

I thank you very much for sending me a copy of your brief in this case and I have just finished going thru same with much interest.

It seems to me that you have covered the matter in a very thorough and convincing manner and I feel sure that Judge Faires will be properly impressed.

Whenever you receive a copy of the defendants brief I would like, if possible, to borrow same for a day or two in order to look it over and probably make some suggestions.

I spent last week in Inspiration in Connection with their tax valuation suit which will be an interesting case since it involves several factors which are quite different from those in the case of the United Verde.

Personal regards.

Sincerely,

GMC/tar

LAW OFFICES OF
ELLINWOOD & ROSS
807 TITLE & TRUST BUILDING
PHOENIX, ARIZONA

September 22, 1945.

Hon. C. C. Faires,
Judge of the Superior Court,
Globe, Arizona.

Re: Forcey v. Molson

Dear Judge Faires:

We enclose herewith PLAINTIFFS' BRIEF in the above-entitled action. A copy of this brief is being mailed to all interested parties.

Yours very truly,

ELLINWOOD & ROSS,

By WILLIAM A. EVANS

WAE - GRH
Enc

cc: Fennemore, Craig, Allen & Bledsoe
Darnell & Robertson
C. R. McFall
Tom K. Richey

bc: W. S. Tubach
G. M. Colvocoresses

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA,

IN AND FOR THE COUNTY OF PIMA.

L. M. FORCEY, et al.,

Plaintiffs and Counter-defendants,

- vs -

EDWARD H. MOLSON, doing business under the name and style of Modina Tungsten Mine,

Defendant and Counter-claimant.

No. 25215

PLAINTIFFS' BRIEF

STATEMENT OF FACTS

The Morning Star claim was located February 26, 1883, and patented October 12, 1903. During the period involved in this action, it was owned by plaintiff, Elizabeth L. Wood, and was in the possession of the remaining plaintiffs under leasehold. The Pure Gold claim was located June 1908, and patented in 1945, and during the period involved in the action was owned by the defendant.

Both of these claims are located in the Old Hat Mining District, Pinal County, Arizona. The north side line of the Morning Star claim runs due east and west and constitutes the south side line of the Pure Gold claim with common corners at

each end of this line. Each claim has parallel end lines, but the end lines of the two claims do not have the same course.

Probably the most pronounced geological feature in the vicinity of the two claims is the Mogul fault, with respect to which there was little, if any, disagreement between the witnesses for the respective parties. The fault extends for many miles, having a trend north of west with a dip of approximately 30° southwesterly and bringing the limestone on the south into contact with the granite on the north. Theoretically, it is the plane on which massive, extended block movement occurred between these two formations.

Actually, the fault cannot be represented by a plane, the terminal edge of which at the surface of the ground is a line; instead, the extensive block movement occurring on the plane created a shattered or brecciated area between the two blocks characterized as the fault zone. This zone is 40 feet or more in width and consists of rock and gangue composed of granite and limestone broken from the adjacent blocks to the north and south. The material in the fault zone was classified by plaintiffs' witnesses as predominently granite and by defendant's witnesses as predominently limestone.

The footwall of the fault zone is the contact of the fault breccia with the granite to the north and is shown on defendant's maps and model in evidence as the contact between the area colored yellow and the area colored blue. The hanging wall contact of the fault breccia with the limestone to the south is depicted as the contact between the area

above referred to as colored blue and the area colored in red to designate defendant's alleged vein. The hanging wall of the fault breccia therefore becomes the footwall of the area which defendant claims as his vein, and we believe there is substantial agreement between the parties in this regard.

The limestone block extending along the southerly side of the Mogul fault zone is 300 feet or more in width in the vicinity here under consideration, being in turn bounded on the south by a massive body of quartzite. During the period of the fault movement, this limestone block was subjected to severe stress, which resulted in shattering evidenced by primary fracture planes roughly parallel to the trend of the fault zone and irregular cross-fractures converging with and intersecting the primary fracture planes.

Silica and mineral bearing solutions disseminated through the limestone block producing general silicification throughout but varying in intensity. The limestone block was found to be highly silicified for a distance extending perhaps 100 or 150 feet south of the fault and becoming less silicified as the quartzite mass bounding the lime block on the south is approached (Tr. 190, 216). In referring to the map marked Defendant's Exhibit "8" for Identification, which was prepared from Mr. Stevens' basic map, Mr. Colvocoresses described the portion of the limestone block shown thereon as follows:

> "Now, the character of all of this rock in the vicinity of these workings, practically all of the rock shown on this map to the south of the fault line is very similar except for the -- for the percentage of silica. In other words, it is what I would call silicified limestone

but in my analysis of samples I found, for example, that the silica content in some cases ran as high as 94% and in other cases it is down to 76%. When we got into 92 and 94%, some might prefer to call that quartz or quartzite, but I prefer to call it highly silicified limestone." (Tr. 190)

Throughout this lime block, there is general dissemination of scheelite mineralization, so that some scheelite showing can be found almost any place. At various places on and below the surface, higher concentrations of scheelite mineralization are found (Tr. 527) usually associated with more intense silicification and varying in concentration with the degree of silicification (Tr. 620, 652).

Areas at which surface outcroppings and mining operations indicated scheelite of sufficient concentration to be characterized as ore are shown on the map in evidence marked Plaintiffs' Exhibit "J". The areas in which mining operations occurred, disclosing more extensive deposition of ore having commercial values, are shown on this map and, as of an earlier date, on the sketch prepared by Mr. Colvocoresses dated May 7 and constituting Plaintiffs' Exhibit "A" in evidence. On Plaintiffs' Exhibit "J", areas in which Mr. Colvocoresses found ore had been extracted are shown in crosshatching, subject to the limitation that the crosshatched areas shown as points of ore occurrences in the Pure Gold pit are not to be considered in evidence, as Mr. Colvocoresses' location thereof was not based entirely on his own observations. Also, there is indicated by penciled "X" marks on Plaintiffs' Exhibit "J" outcrops of ore described by Mr. Henderson, some of which have been mined as shallow pockets.

In the fall of 1943, the defendant commenced mining operations on a large outcrop boulder on the Pure Gold claim adjacent to the common side line in the area of what is now the pit. The ground in the vicinity of this boulder, except where the boulder projected above the surface, was covered with growth, soil and float rock so that the extent of the commercial ore body indicated by the outcrop boulder could not then be estimated. By March, 1944, the operation had developed into a pit, the exterior limits of which as of that date are designated on the map marked Plaintiffs' and Defendant's Exhibit "A" and Defendant's Exhibit "21" in evidence by a line with short regularly spaced lines extending at right angles therefrom towards the words "Glory Hole Perimeter - March 1944". It is to be noted that on this map, the south edge of the pit extends for a distance of roughly 50 feet from 6 inches to a maximum of 4 feet to the north of the common side line.

Early in April, 1944, the defendant requested permission of plaintiffs to cross over the common side line and mine the extension into the Morning Star ground of the ore encountered in the pit. This permission was denied by the plaintiffs, but nevertheless the defendant deliberately and wilfully proceeded to mine ore in the south face of the pit from the Morning Star ground.

On May 7, 1944, Mr. Colvocoresses, at the request of the plaintiffs, made an examination of the property to determine the nature and extent of the trespass committed by defendant. He was accompanied on this examination by Mr.

H. C. Henderson, the engineer in charge of plaintiffs' operations. Mr. Colvocoresses was able to identify the location of the common side line by the stakes placed by Stevens, the surveyor, and by use of a Brunton compass, and by means of both taped and visual measurements determined the extent of the trespass at that time. His observations and determinations were reduced to a map (Plaintiffs' Exhibit "E") dated May 7, 1944. At that time, the rim of the pit extended across the common side line in Morning Star ground for a length of 25 or 30 feet to a depth of 3½ to 4 feet. Beginning about 5 feet below the rim, the defendant, by undercutting, had extended the trespass along the common side line for a length of 50 to 60 feet and to a depth of 10 to 12 feet.

Mr. Colvocoresses estimated that by May 7, 1944, the defendant had removed in excess of 1,000 tons of material from Morning Star ground in the pit trespass area, of which 450 to 500 tons represented ore (Tr. 62), and Mr. Henderson corroborated this estimate. As the first shipment to the mill of extralateral ore was made by the defendant on May 7, 1944, (Tr. 10) and the ore bin into which admitted extralateral ore was segregated held but a relatively small quantity of ore, this 450 to 500 tons mined prior to May 7, 1944, was necessarily in addition to that admitted by defendant to have been mined and shipped subsequent to that date. The average grade of ore shipped by defendant during April, 1944, was 1.32% WO_3 and the average grade shipped by defendant in May, 1944, exclusive of admittedly extralateral ore, was 1.10% WO_3. However, in

these months, the defendant was also mining and shipping ore from his westerly workings commonly referred to as the "north-south drift" (Tr. 50-51, 300), which ran lower in grade than the average pit ore. The average grade of all ore mined by defendant was approximately 1.56% WO_3.

Between May 7, 1944, and July 1, 1944, defendant admitted to mining and shipping 498 tons of extralateral ore from the pit within the Morning Star ground (Tr. 26), having an average grade of 1.06% WO_3. During the period between April 1, 1944, and July 1, 1944, the United States, through Metals Reserve Company, was purchasing scheelite ore at the Tucson stock pile at a price of $24.00 per unit of WO_3 content, a unit being the equivalent of 1% per ton. Against this price, there was charged 15% per unit, plus $5.00 for chemical treatment, freight and handling and $3.00 per ton of ore for milling. The normal trucking charge (without bonus payable under special arrangement for excess haulage) from the mine to Tucson was $3.00 per ton of ore.

In addition to mining extralateral ore from the pit, the defendant, between about the last of June, 1944, and August or September of that year, mined and shipped 574 tons of extralateral ore. This ore was mined by entering under the Morning Star claim from the face of the pit through a natural crevice or water course a distance of approximately 50 feet from the common side line and drifting or stoping at right angles to the water course northwesterly approximately 40 feet and southeasterly approximately 25 feet on what was described

as the "plank level". This ore was mined largely after the Government discontinued its ore purchase program and the defendant testified that his transportation and milling costs on this ore exceeded the amount he realized from it.

The plaintiffs instituted this suit to recover damages for the unlawful trespass and the conversion of ore extracted by defendant from within the Morning Star claim. The defendant, in his answer, sought to justify the alleged trespass by asserting the extralateral right to follow an alleged vein on its dip beyond the common side line and by way of cross-complaint seeks to quiet title to this vein.

A R G U M E N T

Plaintiffs, without doubt, have established a prima facie case. They have shown the alleged trespass and the deliberate and wilful extraction of ore by defendant from within the vertical side lines of the Morning Star claim. In the absence of anything further, they would be entitled to recover damages for the value of the ore involved.

Measure of Damages

It is the general rule that where ore is knowingly extracted from the property of another, the measure of damages is the value of the ore less costs of transportation to smelter and sorting, but without deducting the cost of mining.

The Benson Mining, etc. Co.
v. The Atla M. & S. Co.,
(Ariz.) 36 L. ed. 762;

Elkhorn-Hazard Coal Co. v.
Kentucky, etc. Co.,
20 F. (2d) 67.

Ordinarily, the time of conversion is the time considered in determining the value of the property in an action for conversion.

53 Am. Jur., Trover and Conversion,
Para. 98.

Where defendant, knowing that his right to mine on certain property is contested, deliberately mingles the minerals taken therefrom with other minerals, he may be held liable in damages for the total value of so much of the intermixed products as are not strictly proved to have come from his property.

40 C. J., Mines and Minerals,
Para. 468;

St. Clair v. Cash, etc. Co.,
(Colo.) 47 P. 466.

Plaintiffs' witnesses estimated in excess of 1,000 tons of extralateral material had been removed prior to May 7, 1944. However, they considered approximately 450 tons of this as ore. This was mixed by defendant with other ore extracted and shipped by him. There is no way humanly possible to determine the WO_3 content of this ore, and, consequently, under the rules above-stated, plaintiffs are entitled to attribute to it a value at least equivalent to the average value of 1.56% WO_3 of the ore mined and shipped by defendant.

All of this ore was mined and shipped during the period when the Government was paying not less than $24.00

per unit of W O_3. Application of the Government price to this ore gives the following value for it:

450 tons at 1.56 W O_3 = 702 units W O_3
702 units at $24.00 = gross value $16,848.00

Deduct:

15% penalty	=	$2,527.20	
$3.00 per ton for milling	=	1,350.00	
$5.00 per unit for chemical treatment, freight and handling	=	3,510.00	
$3.00 per ton for trucking	=	1,350.00	
Total deductions		$8,737.20	8,737.20
Net value of ore			$ 8,110.80

In addition to the above, there was the 498 tons of extralateral pit ore averaging 1.06 W O_3 which was mined prior to July 1, 1944, and was qualified for sale to the Government and, therefore, was of the following value:

498 tons at 1.06 W O_3 = 527.88 units W O_3
527.88 units at $24.00 = gross value $12,669.12

Deduct:

15% penalty	=	$1,900.37	
$3.00 per ton for milling	=	1,494.00	
$5.00 per unit for chemical treatment, freight and handling	=	2,639.40	
$3.00 per ton for trucking	=	1,494.00	
Total deductions		$7,527.77	7,527.77
Net value of ore			$ 5,141.35

Plaintiffs do not consider the 574 tons of ore mined by defendant from the plank level and having an average of .86% W O_3 to be valueless by any means, but inasmuch as this ore was mined after July 1, 1944, and defendant testified he sustained a loss with respect thereto prior to deduction of costs of mining,

only a nominal value can be attributed to this ore for the purpose of this litigation.

It is, therefore, submitted that the value of the trespass ore for which plaintiffs should be compensated, as shown by the evidence in this case, is not less than $13,252.15.

The Vein Theory of Defense

Defendant sought to justify his trespass and conversion on the theory that he was merely asserting extralateral rights to a vein apexing in the Pure Gold claim. To substantiate this, defendant caused to be prepared and introduced in evidence an elaborate model and a series of maps showing what he designated as a quartz-scheelite vein with a strike roughly paralleling the Mogul fault and with a well-defined footwall and hanging wall. Plaintiffs can only praise the craftsmanship of these exhibits and must admit that if defendant could establish in fact a vein such as that idealized on the model and maps presented by him, he would have extralateral rights to the vein. As this is the only possible justification which defendant could assert to his wilful trespass, it is only natural that he should go to such lengths to exhibit a vein and in so doing to portray one which, regardless of the quirks and turns necessary to be made, would encompass all of the trespass ore.

However, it is the position of plaintiffs that the deposits of scheelite ore extracted from these properties are not vein deposits; that no such vein exists as is idealized by defendant's maps and model, and even should the ore deposits

in controversy be held to constitute a vein, that the apex of any such vein is bisected in the vicinity of the trespass ore bodies by the common side line, thereby making the vertical downward extension of the common side line the limit of defendant's rights to the vein.

That the burden is on defendant to prove the existence of the vein claimed by him as justification for his trespass is clear. That he must also show the alleged vein does in fact include the trespass ore is well expressed in Grand Central Min. Co. v. Mammoth Min. Co., 83 P. 648 at page 677, as follows:

> " * * * but where one claims what prima facie belongs to his neighbor, because of an apex in the claimant's location, a more rigid rule of construction against the claimant prevails, and, as we have already observed, he has the burden to show, not merely that the vein on its dip may include the ore bodies in the adjoining ground, but that in fact it does so include them. Until he established such fact beyond reasonable controversy, he has no rights outside his side lines in another's ground. * * * "

Just what constitutes a vein or lode is not a matter of simple definition. Possibly as satisfactory a definition as can be had is that given by Mr. Colvocoresses on cross-examination (Tr. 181-182), as follows:

> " * * * Now, when I speak of a true vein, I mean a definite volume or area with a class of material containing commercially valuable ore enclosed between walls of such a different character as to make the vein material distinctive from the wall rock. In other words, having a foot-wall and a hanging wall, also having a certain direction known as a strike horizontally and a certain direction downward known as a dip, and as is well known, a great many ore deposits are contained in well-defined veins. Others are sometimes found in (as) disseminated ore in formations that are not veins at all."

Although the opinion itself is exceedingly extended, a summary of the judicial definition of a vein is to be found in Grand Central Min. Co. v. Mammoth Min. Co., (supra) at page 677, as follows:

> "In all these definitions, as will be noticed, the essential elements of a vein are mineral or mineral-bearing rock and boundaries, and no doubt that, when one of these elements is well established, 'very slight evidence may be accepted as to the existence of the other.' It would seem, therefore, that where one claims extra-lateral rights under the acts of Congress, because of a vein existing and apexing in his ground, but which has no well-defined boundaries, he, when his claim is controverted, must, in order to exercise such rights, show a ledge or body of mineral or mineral-bearing rock of such value as will distinguish it from the country rock, or from the general mass of the mountain. The material must in texture and value be such as to show the existence of a vein, and the mere fact, as has been stated, or proof of the fact, that the rock is broken, shattered, and fissured, and mixed with calcareous substance, though it may show a conglomerate mass, does not establish, in the sense of the statutes, a vein. When, however, the walls or boundaries are well-defined, the vein differentiated from the adjacent country, and the kind of material mentioned constitutes the filling, evidence of slight value in mineral will, it seems, be sufficient."

It is apparent from the above and other definitions of a vein that the essential requirement is the existence of walls or boundaries clearly separating the vein material from the adjoining or wall formation. A homely analogy would be to a sandwich. The bread constitutes the walls and the filling constitutes the vein. If the filling is a slice of ham, representing the ore, the ham would be analogous to a vein characterized and determined by the limits of mineralization. The ore itself marks the limit of the vein. On the other hand, if the filling is a chopped ham spread in which the ham, for the purpose of our example, represents the commercial ore and

the other ingredients of the spread, such as mayonnaise, represents the material in which the ore (ham) is found, it is the filling and not the ore alone which constitutes the vein, and it is characterized as such by the fact that it has well-defined walls. If, however, we take a piece of raisin bread, or a loaf of it, and we consider the raisins as ore disseminated throughout the loaf, we do not have anything resembling a vein, unless we think of the wrapping paper around the loaf as its walls.

Now then, under what category are the ore deposits here in controversy to be placed? It is apparent from the testimony and the exhibits that the footwall of the defendant's alleged vein is the hanging wall of the Mogul fault zone. That this is a well-defined wall or boundary is not questioned, and the fact that it does exist, extending for miles across the country, may be conceded as half proof. But where is the well-defined wall on the other side of his alleged vein that defendant shows so clearly on his model and maps?

Before attempting to answer this question, it might be well to inquire as to just what it is that defendant relies upon as constituting his filling, his vein material. Taking the first of the two alternative requirements, namely, the existence of a continuous body of ore, the boundaries of which are readily distinguishable by their mineral content, it becomes immediately apparent that this is not the criteria used by defendant in establishing the alleged hanging wall of his vein, for the following reasons:

(1) Commencing with the southeasterly end of defendant's alleged vein on its strike, we find an open cut and short stub tunnel within the Morning Star ground. About 18 feet back from the face of the stub tunnel is what was described as a little re-entry. Extending from the face of the tunnel in a westerly direction for approximately 20 feet is a drill hole, the cuttings from which were collected at 4 foot intervals and collectively assayed as one sample. The stub tunnel from the re-entry to the face and the drill hole extending 20 feet further in an easterly direction are right in the middle of defendant's alleged vein, making a total distance of 38 feet. From the re-entry to the face of the stub tunnel, there was no ore extracted and shipped. Specks of scheelite were in it, but not enough to ship (Tr. 566, 567). In the hope of finding ore, the drill hole was extended, but the sample taken for the length of this drill hole ran only .07% WO_3, less than one-tenth of 1%. Here we have 32 feet of proven ground in defendant's vein having no mineral value. That this is the case is substantiated by the further fact that plaintiffs, during a period in which the Government was paying an extraordinary and exhorbitant price for scheelite, discontinued shipments or further mining from this portion of the alleged vein.

(2) Proceeding then to the portion of the alleged vein lying on the Pure Gold claim between the common side line and the east end of the pit, we find an area embraced in the vein about 30 feet in length and as much as 8 feet in width. There is no evidence to the effect that this section of the vein

contained any value at all. Instead of attempting to extract ore from this section of the vein, which the defendant most certainly would have done to take advantage of the Government price had there been mineral value, he invaded plaintiffs' property further to the west.

(3) Proceeding further to the west, we find a large area of the pit floor extending from about the point the September, 1944, pit limit crosses the common side line northwesterly to the road bottomed in defendant's alleged vein. Yet, defendant made no attempt to mine ore from this section of his alleged vein. The reason for this is apparent from the following testimony (Tr. 196) of Mr. Colvocoresses:

> " * * * For example, over in here there is a large part of this area that you can get into and examine, and the floor of the present floor of the Glory Hole is limestone, and it is barren limestone. I don't mean it might not contain one or two one-hundredths of one percent of WO_3, because a great deal of that limestone carries that, but it is not ore and can't be so considered by any stretch of imagination."

and possibly more clearly from his testimony on cross-examination (Tr. 219,220), from which we quote as follows:

> " * * * In the main pit the principal ore-body lying to the east there went down apparently to a maximum of about 35 feet below the surface. That brings it down to about the level of the plank level, and by the plank level there are limestone areas which appear to have been at the bottom of the ore-body. They mined down to the level and quit, as they naturally would do when the ore pinched out. That would be the maximum. Now, those other sections lying off further to the west and northwest were much shallower than that, not more than 10 or 15 feet deep, and you can still see limestone with practically no ore, except where the lime is covered over with debris."

(4) Defendant's Exhibit "26" is a picture of the area at the west end of the pit and on it is marked what purports

to be the hanging wall and the footwall of the vein with what is designated as "quartz vein in between". The man in the picture is standing with his hand on a little patch of ore practically on the footwall side of the alleged vein which can readily be distinguished from the balance of the purported vein material by its color. But how can the mass of material, other than this one little patch shown in this picture as a part of the vein, be distinguished from the so-called hanging wall or footwall appearing in the picture? If this section of the vein carried WO_3 values sufficient to distinguish it from the so-called hanging wall, why did not the defendant shovel it into his mine car and load it out rather than driving a tunnel and mining in the north-south drift further to the west at what necessarily involved far greater cost? This same area, right in the center of the west end of the alleged vein, is shown in the panorama of the south wall of the pit constituting Plaintiffs' Exhibit "K". Mr. Ewing's testimony (Tr. 672-673) regarding the material shown in these pictures in the westerly portion of the vein was as follows:

> "Q. Mr. Ewing, those boulders are not, of course, out of the ore. They are not ore, are they, boulders are not ore?
>
> "A. No, sir.
>
> "Q. But they did come from within the area shown in pink on the map, did they not?
>
> "A. They did."

(5) Proceeding now to the plank level and the intermediate level extending southeasterly from the pit, we find

30 feet or more of vein material exposed in the water course practically barren of scheelite (Tr. 207). Mr. Flagg testified that in both of these levels, only a scattering of scheelite could be found under the lamp (Tr. 605-606). The showing of a small scattering of scheelite under the lamp is insignificant, particularly in view of Mr. Prisbee's testimony that material carrying as low as two-tenths of 1% will lamp well at night. It seems self-evident that had there been any substantial quantity of scheelite mineralization in this area of the alleged vein, defendant would have mined it rather than drifting off of the end of the water course for 40 feet to the northwest and 30 feet to the southeast just to mine material carrying only an average of .85% W O_3.

(6) The holes which defendant drilled on plaintiffs' property were extended through the vein material vertically and horizontally. These drill holes are in the portion of the alleged vein material with which defendant had not otherwise tampered and can, therefore, be assumed to depict to some degree the condition in areas in which the evidence has been removed by defendant's mining activities. The samples of the cores in these drill holes is most revealing, particularly in view of the defendant's testimony that he only sampled core sections which showed scheelite reaction under the lamp which looked commercial in appearance (Tr. 345). Those drill holes and the assay results of core sections are shown in Defendant's Exhibits "17", "20" and "23". We find on them large segments of the vein material containing less than one-tenth of 1% W O_3.

(7) On the other hand, we find outside of the alleged vein and roughly paralleling it, a series of samples taken by Mr. Pennybaker, four of which exceed three-tenths of 1% and all of which are one-tenth of 1% or better. We find a raise designated on the maps in evidence as "#5 Raise to Surface", located about 15 feet to the southwest of the hanging wall of the alleged vein from which Mr. Flagg cut samples between the surface and a depth of 6 or 7 feet which showed a moderate amount of scheelite, "some pieces were very bright and others would be just pinpoints in them" (Tr. 612). Just to the south of this raise, there is an outcrop bisected by the common side line which is designated on the map marked Defendant's Exhibit "21" by outline in pencil with the number "2" in the center. Mr. Flagg cut a sample from this outcrop on the Morning Star side which assayed .95% W O_3 (Tr. 620). Slightly further to the west, just to the south of the point designated on the common side line on Plaintiffs' Exhibit "J" by the number "400 Feet" is a pit in which silicified material was found which Mr. Flagg testified "showed quite a little bit of scheelite" (Tr. 612).

(8) Finally, Mr. Pennybaker, the geologist who was principally responsible for mapping the alleged vein, himself testified that he would classify rock having less than two-tenths of 1% W O_3 as a part of his vein if it were within the vein walls (Tr. 390). It is apparent from this that mineral value sufficient to distinguish the alleged vein from the wall material was not the criteria by which the existence of the vein was determined, particularly in view of the testimony of Mr.

Colvocoresses that nearly all of the mineralized band of limestone between the quartzite on the south and the hanging wall of the Mogul fault on the north carries a low percentage of scheelite, ".01, maybe, .02 or .03" (Tr. 653), and Mr. Henderson's testimony that "I don't think you could get a complete blank in the lime" (Tr. 527).

If, then, we cannot define the alleged vein as characterized by the WO_3 mineralization of the vein material, thus segregating it from the purported hanging wall, it becomes necessary to find something else to differentiate it from the adjacent country. In other words, defendant must establish a vein material essentially different from the adjoining rock and having well-defined walls or boundaries. Again, defendant's proof falls far short of meeting this requirement.

(1) Mr. A. L. Flagg, a witness for plaintiffs, was probably the best qualified to testify regarding mineralogical conditions. He had specialized to quite an extent in mineralogy and was President of the Mineralogical Society of Arizona and also of the Rocky Mountain Federation of Mineralogists. Mr. Flagg testified that in his examination of the open cut tunnel at the southeast end of the vein, he could find no visual indication of a quartz-scheelite vein or of the hanging wall of such a vein (Tr. 590). He examined the surface of the ground between the northwesterly end of the open cut and the pit and could find nothing which he could identify positively as any hanging wall (Tr. 593). He studied closely the face of the south wall of the pit (Tr. 595), and testified regarding it (Tr. 596) as follows:

"Q. And what was the character and nature of the face of that wall?

"A. Very uniform.

"Q. What was the type of that material?

"A. Highly silicious material.

"Q. Was that wall fairly vertical through there?

"A. Very nearly so, yes.

"Q. And did you see anything at all along that wall indicating the existence of a hanging-wall of a quartz-scheelite vein?

"A. No.

"Q. Was there any structural difference indicated in the wall along that area?

"A. Only just the normal fracturing that would be in block faulting of the limestone.

"Q. When you refer to that as being highly silicious material, it was highly silicified limestone, was it?

"A. I should say it was, yes."

In the plank level he encountered four fracture planes bounding the mined area, which he considered more or less limited or controlled deposition of the ore mined (Tr. 605). The fracture plane appearing at the end of the water course, which defendant's witnesses pointed to as being one of a few places where the purported vein hanging wall was marked was "just one of those numerous fractures which are to be found almost anywhere in the block south of the Mogul fault" (Tr. 604).

In the north-south drift at the extreme westerly end of defendant's alleged vein, Mr. Flagg found a contact between silicified material and unsilicified limestone. He

described it as a place where the silicification of the limestone had ended in sharp contact with the gray limestone (Tr. 619). However, the strike of this contact was approximately at right angles to the long axis of the pit (Tr. 619) and he could find no evidence that this contact was connected with anything in the pit (Tr. 619). In his examination, he could find no indication of a quartz-scheelite vein and nothing sufficiently conclusive which he could consider the hanging wall of any such vein (Tr. 623).

(2) Mr. Colvocoresses, a witness for the plaintiffs and a mining engineer of many years experience, testified on direct examination (Tr. 654) to the results of his careful examination of the area in controversy as follows:

> "Q. Now, calling your attention to the area in the vicinity of the open pit workings near the common sideline of the two properties, do you find anything there indicative of a quartz-scheelite vein?
>
> "A. I was absolutely unable to find anything indicative of a quartz-scheelite vein or any type of vein, as I understand the term 'vein'.
>
> "Q. And do you agree with Mr. Flagg - - are your findings the same as Mr. Flagg, to the effect that he was unable to locate or identify any hanging-wall as depicted on the model and on the maps placed in evidence by the defendants?
>
> "A. I could find nothing that corresponded to a hanging-wall on the ground, and I saw nothing which corresponds to the hanging-wall as shown in that model."

In view of Mr. Colvocoresses definition of a vein heretofore quoted, there can be no question as to his concept of the term. If there was any doubt that Mr. Colvocoresses' concept of a vein differed from the legal concept thereof, it should be removed entirely by the following testimony given by him (Tr. 656-657) on cross-examination:

"Q. The only reason, then, you do not call that a vein is the same reason Mr. Flagg gave, that you were unable to find a defined hanging-wall?

"A. No, I will go further than that. There is not only a (no) hanging-wall, but there is no suggestion of any band or seam of material which is sufficiently distinctive as compared to the surrounding material on the hanging-wall side to be classed as a vein filling. Perhaps I don't quite understand your question, but you have, for example, out here in one of the hills where you have an underlying bed of granite, and on top of that granite where you have a diorite intrusion, or, perhaps, limestone laid down.

"Now, you can call the underlying granite a foot-wall, if you like, but that does not make the overlying material a vein or anything resembling a vein. It is merely a change in formation, and in that (this) case you have a basal formation of granite, then breccia, and then on top of that you have a formation of limestone, but there is no possible connection between that limestone overlying the breccia and what we commonly say, either legally or in engineering parlance, be termed a vein."

(3) Defendant introduced in evidence certain pictures purporting to show his alleged vein material and the hanging-wall contact. These consist of Defendant's Exhibits "26" and "28" in evidence. There is also in evidence Plaintiffs' Exhibit "K" consisting of a panorama of the south face of the pit. Although defendant has marked the hanging-wall contact of his vein on his exhibits, we defy anyone to point out vein material in these pictures which can be distinguished from the purported foot-wall material. Rock variegated as to color and texture may be seen throughout and, based on these variegations, lines might be drawn following almost any pattern.

(4) Defendant's witnesses described three places where they claim to have located a distinct hanging-wall contact of what they contend constituted their quartz-scheelite vein. One of these was in the pit proper and was described as a band

of material high in W O_3 concentration about 2 feet in width between the so-called horse of waste and the alleged hanging wall. It is submitted that this is but a narrow pocket of ore, which, because of its heavy W O_3 concentration, naturally would be expected to be distinguishable from the surrounding material. If this could be regarded as fixing the hanging wall of a quartz-scheelite vein, why does not defendant place walls of his vein around the pocket of ore which is so clearly shown in his Exhibit "26"? The patch of ore which Mr. Pennybaker described in the middle of the picture on which the man's hand rests is clearly distinguishable in appearance from the rest of the alleged vein material.

The second place where the hanging wall is well-defined according to defendant's witnesses was at almost the top of the bulge at the end of the plank level where a contact is described. But, as already notified, this was identified by Mr. Colvocoresses as merely a fracture plane in the limestone, similar to many others to be found throughout the entire block. Why should this be selected by defendant as a point indicating a well-defined hanging wall any more than the equally pronounced fracture planes in the northwesterly side of the plank level drift both to the north and south of the water course?

The third place where the hanging wall was identified as distinct by defendant's witnesses was in the north-south drift. But, as has already been pointed out, this so-called hanging wall was identified by Messrs. Flagg and Colvocoresses as another fracture plane with a strike at approximately right

angles to the strike of the alleged vein material, and with no apparent connection with the balance of the hanging wall as depicted by defendant.

A perusal of the testimony of defendant's witnesses will disclose that the location and existence of the hanging-wall contact of their alleged vein was predicated almost entirely on lamping. Thus, Mr. Frisbee testified (Tr. 483-484) on cross-examination:

> "Q. You can locate a distinct hanging-wall throughout the entire course of the vein as you have shown it there, can you?
>
> "A. I can locate a distinct hanging-wall throughout the course of the vein, except for this spot here (indicating), with the aid of the lamp.
>
> "Q. With the aid of the lamp?
>
> "A. Yes."

Now, the only thing that is determined by lamping is the existence of some degree of W O_3 mineralization. Therefore, we are confronted with a very anomalous situation. As previously shown, the existence of any particular concentration of W O_3 mineralization is not determinative of the limits or walls of defendant's alleged vein. Scheelite reaction under the lamp can be encountered almost any place in the limestone block in this vicinity, both within and outside the purported limits of defendant's vein. And yet, in large measure, defendant's witnesses identify the vein material solely by means of scheelite reaction under the lamp. Small wonder that defendant's vein hanging wall is to be found wherever most suitable for his purposes.

Mr. Frisbee's description of the vein material (Tr. 462) appears to us to be quite enlightening, and we quote from his testimony as follows:

> " * * * There are lower grade zones in it, but the vein material itself from the southeast end of the Morning Star open-cut to the northwest end of the north-south drift is, without doubt, confined within definite walls, a very definite foot-wall, and in two or three places a distinct hanging-wall, and the material encased by those walls seem to have the characteristics of a vein in all places with the exception of some lower grade portions which is less silicified than others." (Emphasis supplied.)

Here we have, over a distance of 320 feet, a distinct hanging wall in two or three places. The material encased by this distinct hanging wall (distinct in only two or three places at best, according to Mr. Frisbee) has the characteristics of a vein except for some lower grade portions which are less silicified. As we have already pointed out, these two or three places where the hanging wall is supposedly distinct do not represent a hanging wall at all. But, assuming otherwise, for the purpose of argument, where is the hanging wall of the alleged vein throughout the rest of the 320 feet of its alleged length? And by the same token, where is the vein in those places which Mr. Frisbee referred to as being lower grade portions less silicified? Although religiously using the word "vein" with every other breath, Mr. Frisbee was, in fact, describing a series of pockets or deposits of ore, erratically distributed in the silicified limestone, and not a distinctive vein material with well-defined walls. We are certain that any court would have difficulty in finding the essential elements of a vein in light of the all-inclusive exceptions expressed by Mr. Frisbee in the course of his description above quoted.

(5) It is further submitted that there is no such thing in this vicinity as a quartz vein, irrespective of the propensity of defendant's witnesses to characterize it as such. Mr. Prisbee testified he did not run any sample of the purported vein material for silica content or quartz (Tr. 470) and that he would rely on a mineralogist for classification of the material (Tr. 469). Mr. Flagg, a mineralogist, testified that he examined microscopically a great many more than a hundred specimens of the material which he described as highly silicified (Tr. 615) and the only ones which he would classify as quartz vein material were from an outcrop on the Morning Star ground, 10 or 12 feet north of the common side line and from a point just beyond the elbow in the lower adit tunnel, together with some fragments not in place which he found in the Morning Star opencut (Tr. 616). Instead, substantially all of the limestone block lying to the south of the hanging wall of the Mogul fault zone has been subjected to silicification in greater or lesser degree (Flagg, Tr. 620, Colvocoresses 652). This condition was well described by Mr. Colvocoresses (Tr. 651) as follows:

> " * * * Some of that area, as I found from some of my samples, contained over 90% SiO_2 and only a comparatively small amount of lime, CaO. On the other hand, there is a graduation from that point back toward the normal limestone which had a much higher content CaO and a much lower content in SiO_2, and while I don't think it is always the rule, I would say that almost invariably the high silica content is accompanied by a higher percentage of scheelite, and as far as the genesis of that ore goes, Mr. Flagg and I are in entire agreement. As far as the nature of the ore deposits, I think we are entirely in agreement."

The gradation in the degree of silicification and accompanying scheelite was further described by Mr. Colvocoresses (Tr. 653) as follows:

" * * * There are areas of much more intense silification (silicification), where the content of scheelite increases, and as far as I have been able to see, it nearly always increases and decreases gradually and there may be instances where there is a sharp line of demarkation, but I was not able to observe them, and in the center or heart of that silicified zone, one has a body that is sufficiently rich to constitute ore."

In view of the testimony of Messrs. Flagg and Colvocoresses as to the genesis of the ore deposits, that there exists such gradation in silicification and extent of mineralization is but natural. Throughout the limestone block are to be found a great many fractures and the extent of crushing of the lime was naturally greatest where the fracture places intersected and would diminish outward from that point. As the amount of crushing of the material more or less controlled the extent of silicification and mineral deposition (Tr. 621), as the amount of crushing diminished with distance from points of intersecting fractures, we would expect to find the gradual reduction in the degree of silicification. This was described by Mr. Colvocoresses (Tr. 655) as follows:

"MR. EVANS: In that silicified zone you would expect to find in the vicinity of ore deposits a gradation downward on silicification and scheelite minerlization?

"A. I would in a great majority of circumstances. The rate of gradation would doubtless vary. It might vary to a fairly large extent, but generally speaking that would be the character of the deposit, a gradation, rather than any sharp cut-off."

If then, defendant's alleged vein material consists of a silicified limestone rather than a distinct quartz, what degree of silicification is to govern in determining where the vein material ends and the hanging wall begins, particularly where within the vein

material, as admitted by defendant's witnesses, there is no uniformity in the extent of silicification (Tr. 374,412)?

(6) If, in fact, there existed a quartz-scheelite vein such as defendant depicts, its presence could readily have been established by analysis of a series of samples cut from above and below the hanging-wall contact of the alleged vein. Defendant placed in evidence the analyses for WO_3 content of a number of samples (showing large portions of his vein material as lower in WO_3 content than his hanging-wall material), but did not offer one iota of testimony as to the analyses of the quartz or lime content of his alleged vein material or hanging-wall material. The burden was upon defendant to prove the existence of his alleged quartz-scheelite vein and such analyses would clearly prove or disprove it. The fact that defendant failed to cause such analyses to be made, or, if he did make them, the fact that he did not see fit to place the results in evidence, suggests his alleged vein would not stand the test.

Neither did defendant place in evidence any samples of his quartz vein material or of his hanging-wall material. If they were visually distinguishable, such samples in evidence would readily establish that fact. Could it be that defendant well realized that plaintiffs could readily produce samples of rock from within defendant's vein identical in appearance and texture with those exhibited by defendant as hanging-wall material and also samples from the alleged hanging wall identical with those exhibited by defendant within the vein? The very fact that defendant's witnesses in most instances were unable

to identify their purported vein except by lamping (which, as we have pointed out, means nothing) would indicate this was the case. How, then, can it be said that defendant has sustained his burden of proof?

It is submitted that, all of his colored maps and elaborate model notwithstanding, defendant has utterly failed to establish the existence of any vein such as depicted thereon. That the extent of $W O_3$ mineralization does not control the location of his purported vein material is clear. That he has not established it as a vein of quartz, or any other type of material clearly distinguishable from the surrounding rock, is equally apparent. He, therefore, has drawn a hanging wall which will encompass those areas in which he has trespassed. To do this, and yet to tie it into geological conditions readily observable, the course or strike of his hanging wall is found at different points to proceed in every direction of the compass. Thus, he ties it into the fracture plan found in the north-south drift having a strike nearly north and south. In order to keep it from crossing over the common side line in those portions of the pit in which the trespass occurs, the strike of his hanging wall is changed to approximately due east, nearly paralleling the common side line for a distance of 50 feet, but always from 6 inches to a maximum of 4 feet on the Pure Gold side. Yet, directly down the dip from the point where this strange phenomena is involved, we find the strike of his hanging wall at the southeast end of the plank level drift taking an abrupt right angle turn from a southeasterly course to a northeasterly course in order to accommodate itself to a fracture plane there readily discernible, and thence proceeding on its new course for a distance

of some 10 or 15 feet and, again, to accommodate itself to another readily discernible fracture plane making another right angle turn and proceeding northwesterly, back in the direction it came from for some 20 feet, following which it again makes a complete half-circle to resume its previous course. It is fantastic! Its very course leads to the belief that the primary motive in its conception was the inclusion of all trespass areas without placing the apex beyond the common side line. Desirable as such a result might be from defendant's standpoint, it has yet to be established as a basis for extralateral rights.

If, then, we have no vein such as depicted by defendant, what is the character of the ore deposits? This is succinctly described by Mr. Colvocoresses, (Tr. 222-223) as follows:

> " * * * Practically all of that limestone in that area south of the Mogul Fault breccia is a mineralized zone. It was susceptible to leaching and replacement of the original soluble constitutents by the ores, in this case, was scheelite, and these deposit replacements in limestone, they are very common occurrences in many parts of the world, not only scheelite, but the copper ores and many other types of ores. Lead and silver replacements of limestone are formed in pockets, kidneys, detached masses. Some of them have compared them to the appearance of plums (in a) plum pudding, and they do not have any of the characteristics of a vein. That is true in this particular case and in many other similar deposits."

And Mr. Flagg summarized his concept of the origin of the ore deposits and described the character of them (Tr. 641-642) as follows:

> "Q. Now, Mr. Flagg, referring to the graduation outwards of the silification (silicification) of (in) this fracture zone, did you find that condition to exist generally throughout this mineralized zone?

"A. Yes, I found it could be observed in the field and in specimens under the microscope without any preparation. It could be observed there.

"Q. And within the areas where you have converging fractures and these cross-fractures, why is it that you get a higher degree of mineralization in there than in the area where it is disseminated downwards?

"A. It has greater porosity. It is like a sponge. A sponge will soak up more water than a piece of glass will.

"Q. Now, as a result of the fracture and cross-fracturing throughout that mineralized zone, do you find and would you expect to find areas in which you have this sponge-like effect produced?

"A. You do find them and probably would find more if they were prospecting for it.

"Q. And you believed Mr. Colvocoresses, when he, in his testimony, characterized that as being more or less like plums found scattered through a pudding?

"A. That is a fair illustration.

"Q. Is that your concept of the nature of the ore deposition in the mineralized zone?

"A. Yes."

In short, returning to the homely analogy drawn in the early part of this brief, we have the limestone block between the Mogul fault zone on the north and the quartzite on the south, representing the loaf of raisin bread and scattered throughout it, we find sporadically distributed pockets in which the silicification and WO_3 mineralization generally disseminated in the limestone reaches higher concentrations. These are the raisins. But these deposits are not veins, nor, as we have seen, can the distinguishing features of a vein be attributed to them.

The Split Apex

Even should we assume the existence of a vein in the vicinity of the common side line, it is the contention of

plaintiffs that the apex thereof in the immediate area of the trespass ore body is split by the common side line. In other words, the hanging wall of defendant's alleged vein, instead of crossing the common side line on the surface at the point depicted by defendant on his maps and model, continues on its westerly course south of the common side line within the Morning Star claim at least beyond the pit trespass area. That this is the case is evident from the following:

(1) On March 7, 1944, when Mr. Colvocoresses examined the pit, the south wall then extended some distance over the common side line as shown on the sketch he prepared at that time, constituting Plaintiffs' Exhibit "A" in evidence. As shown on his cross-section of the pit in Plaintiffs' Exhibit "A", ore was found in the south face of the pit extending to the surface. Mr. Colvocoresses testified on direct examination (Tr. 63) as follows:

> " * * * The south wall of that dip (pit), as one looked at it from the pit and also as one examined it from the top as far as you could, but it would not be very safe to do, but right on the edge there was ore to be seen on the rim of that pit at that time south of the common side-line; that is, on the Morning Star ground."

Again, on cross-examination, Mr. Colvocoresses testified (Tr. 67-68, 177-178) regarding ore occurrences along the rim of the pit and in the south face of it on the Morning Star claim as follows:

> "Q. Now did I understand you to say that at the time of your inspection you found ore throughout the rim?
>
> "A. No, sir; I found some ore at points along the rim.

"Q. Along the rim?

"A. Yes, sir, that is along the rim of the pit, both where it had crossed the line and where it was still on the Pure Gold side of the line.

"Q. Was that ore on the surface or on the face of the cut?

"A. Well, it was both. It was on the face of the cut coming right up to the surface.

"Q. And then over the surface?

"A. Over the surface, not to any great extent, because there was an overburden of dirt and loose float material throughout a great part of that line and you could not see what that out-crop of solid rock was except at a few points. I did observe it at some points.

"Q. But on the face of the cut back across the Morning Star line you observed ore clear up to the point of the over-burden?

"A. I definitely did.

"Q. From what point did you make that observation?

"A. From standing in the pit, just below it."

(Tr. 67-68).

"Q. How extensive were the evidences of it above the surface of the ground?

"A. There was no evidence above the surface of the ground. The evidence came to the surface in the form of out-crop rock.

"Q. And you found out-crops at that point?

"A. At intervals, yes.

"Q. On the south side of the common side-line?

"A. On the south side of the common side-line. All the rest of this north of the side-line had already been caved in before I visited the location on the first occasion."

(Tr. 177-178).

Mr. Henderson, who accompanied Mr. Colvocoresses on his examination on March 7, 1944, corroborated the above testimony (Tr. 531-532) as follows:

"Q. And at that time, had the south wall of the pit crossed over the common side-line on the surface?

"A. Yes, it had.

"Q. Did you examine it with respect to the common side-line?

"A. Yes, we did.

"Q. And how was the common side-line shown at that time along the surface?

"A. There was a space there about 20 or 25 feet that was over the side-line.

"Q. And about how far over the side-line at the fartherest point?

"A. Oh, it was about 3 or 4 feet."

(Tr. 531).

"Q. Now, did you and Mr. Colvocoresses inspect the south wall of the pit where it crossed the surface with ore showing?

"A. Yes, we did.

"Q. Could you see ore in the face of the pit in the area where it had crossed the common side-line?

"A. Yes, we could.

"Q. And where did that ore extend?

"A. From the bottom of the pit up to the top.

"Q. Did the ore showing go all the way up to the top?

"A. Yes, it did."

(Tr. 531-532).

(2) In the middle of 1943, when Mr. Henderson, on behalf of the plaintiffs, was looking for outcrops carrying

WO_3 mineralization preparatory to embarking on a mining program, he encountered and lamped the prominent outcrop boulder. This boulder jutted above the slope of the hill, the north face dropping off almost vertically and the south face extending back toward the slope of the hill. After locating this outcrop boulder, plaintiffs caused the common side line to be surveyed and after the line was established, Mr. Henderson then determined the location of the outcrops in the vicinity of the common side line. He testified regarding these examinations (Tr. 521) as follows:

> " * * * We had Stevens out there to establish the line, to find out whether this outcrop -- this main out-crop in here was on our side or on their side, and, so, after he established the lines, why, we went out and did some work to find out just exactly where those outcrops were, down in here and along in here and up in here (indicating on map).
>
> "Q. With reference to the out-crop in the vicinity of the pit area, could you state whether or not you found that ore out-crop was on your side of the line or on the Morning Star side of the line?
>
> "A. Yes, it was on both sides, just at about this point here and here (indicating).
>
> "Q. What proportion, I mean, on which claim did the greater part of the out-cropping appear?
>
> "A. On the Pure Gold side."

Mr. Henderson delineated in pencil the approximate location of this outcrop on Defendant's Exhibit "21" and identified it by the penciled number "1". He further testified that the surface of the ground surrounding the more prominent outcrop boulder was generally covered with dirt and boulders. He further described the appearance of this outcrop boulder on cross-examination (Tr. 555) as follows:

"A. No. In other words, that (the outcrop boulder) graduated off to the south, so it wasn't prominent. In other words, we were down here and there was no high boulder on our side.

"Q. It was a little out-crop on your side graduating up to a high point on the Pure Gold side?

"A. That is right."

(3) Proceeding westerly along the common side line, we find just south of the common side line and outside the present rim of the pit an outcrop of rock in place, the sample from which assayed .95% WO_3.

(4) The common side line in the vicinity of the open pit was located in 1883 and fixed beyond change when the patent survey was made in 1903, many years before anyone conceived of the existence of a scheelite deposit adjacent thereto. Yet, after crossing the common side line, defendant would have us believe that the hanging wall of the vein at its apex after proceeding 50 feet along the common side line was still only 6 inches to the north of it in Pure Gold ground. It is almost beyond the realm of plausibility that the north side line of the Morning Star claim could have been established to coincide so closely with the hanging wall of defendant's vein.

(5) We have already discussed the many and frequent changes in the course established by defendant for his hanging wall on its strike. These changes are particularly marked on the plank level directly down the dip from the purported east-west course of the vein on the surface paralleling the common side line. It is inconceivable that the north-south strike of the hanging wall shown by defendant along the southeast

face of the plank level drift would conveniently disappear between that point and the surface so as to accommodate itself to a course paralleling the common side line.

It is submitted that the evidence shows ore at the surface within the Morning Star ground where defendant's alleged apex crosses the common side line east of the pit, again directly south of the common side line where the pit wall extended across it on March 7, 1944, and again south of the common side line just west of the present pit limits. That this must be the case is corroborated by the incredible coincidence claimed by defendant of the south line of the apex proceeding for 50 feet parallel to but only between 6 inches to 4 feet within the common side line on the Pure Gold claim, in spite of the gyrations it makes elsewhere throughout its entire course, particularly on its alleged dip but a short distance below the surface in the plank level. If any vein such as defendant seeks to establish does exist, then these outcrops and ore showings at surface must constitute a part of it and the apex of such vein in the area of the trespass would be bisected by the common side line.

The apex of a vein is the highest point in the ascent along the line of the dip and beyond which the vein extends no further.

> "The apex of the ideal vein within the location is a surface bounded by the walls of the vein and the end lines of the location. This surface is, of course, irregular. It may be higher at one place within the boundaries than it is at another; but the mere elevation of the upper edge of the vein at different points within the location is of no moment. * * * The fact that the exposed edge of

the vein is ragged, or that the surface of the outcrop is higher in one place above a given datum plane than it is in another, makes no difference in the principle." (Lindley on Mines, Vol. I, Para. 309, p. 685).

" * * * An apex is, on cited authority, defined to be 'all that portion of a terminal edge of a vein from which the vein has extension downward in the direction of the dip'". (Stewart Min. Co. v. Ontario Min. Co., 237 U. S. 348, 59 L. ed. 989 at 995.)

Where a vein is bisected by a common side line, the senior locator has the extralateral rights to the entire vein.

Lawson v. United States Min. Co., 207 U. S. 1, 52 L. ed. 65;

Tom Reed Gold Mines Co. v. United Eastern Mining Co., 209 F. 283, 293;

St. Louis Min. Co. v. Montana Min. Co., 104 F. 664.

In the present case there is no question but that the Morning Star was the senior location. As the purported dip of the defendant's alleged vein is toward the Morning Star claim, plaintiffs would have no extralateral rights within the Pure Gold claim, but, likewise, defendant, as the owner of the junior location, would have no extralateral rights in the Morning Star ground. In such circumstances, the vertical side line delimits the rights to both parties to the vein and defendant, upon invading plaintiffs' ground, did so only as a wilful trespasser.

Respectfully submitted,

DARNELL & ROBERTSON,
C. R. McFALL,
Attorneys for Plaintiff,
Elizabeth L. Wood.

ELLINWOOD & ROSS

WILLIAM A. EVANS

Attorneys for Plaintiffs, L. M. Forcey, Walter S. Tubach, William Iverson, Lester H. Murman, Huber G. Wilson and Louise A. Wilson, his wife, George H. Veeh and Florence M. Veeh, his wife, and Frank P. Borchard and Myrtle P. Bochard, his wife, co-partners doing business under the name and style of Morning Star Mining Company.

September 11, 1945

Mr. William Evans
Ellinwood & Ross
Title and Trust Building
Phoenix, Arizona

RE: Morning Star

Dear Mr. Evans:

I am sending you herewith two copies of the notes which I made after reading over the transcript of testimony taken at the Morning Star trial.

I had to sandwich this work in with a lot of other things and will ask you to excuse the confusing form in which it is prepared also, I may have made some mistakes in noting the pages for reference in connection with the testimony.

I thought that perhaps some of my comment would be helpful in preparing your brief, but, I expect that you would have noted all the points which I did as well as many others. I surely hope that the judgment of the Court will be in our favor.

Yours,

Colvig

Notes re Trial of Morning Star Trespass Suit

Morning Star (Forcey et al)
vs.
Pure Gold (Molson et al)

From transcript of testimony given at trial in Tucson May 7 - 12, 1945.

HISTORY

The following facts seem to be undisputed:

In August 1943 Molson was operating on the Maudina Claim and prospecting on the Pure Gold Claim, while the Morning Star Claim was being worked, under lease, by the Rivera Brothers and examined by Henderman who had formed the Morning Star Partnership which was negotiating to take over the lease from the Riveras.

At about this time a large and prominent outcrop of high grade scheelite ore was discovered close to the common side line of the Morning Star and Pure Gold Claims and this line was rerun and staked by surveyor Stevens, from whose survey it appeared that the bulk of the visible outcrop (or all of it according to some of the witnesses) was on the Pure Gold Claim.

The Pure Gold people then proceeded to mine out the ore under this outcrop in a large open pit which they later connected up with some old workings which were so located as to serve as a haulage level. From this pit they mined and shipped some 6500 tons of ore which averaged 1.58% WO_3.

Meanwhile the Morning Star people had mined ore from an open cut on their ground lying some distance southeast of the pit toward which the cut was advanced and when ore

petered out a sub-tunnel was run to the north-west from a distance of 25 ' and then a 16' drill hole was pushed that much further in the same direction. According to Forcey the average grade of the ore mined from the open cut was 0.88% WO_3 and some similar ore was left on the wall and along the floor, but only a little pay ore was found in the stub-tunnel, and the samples from the drill hole averaged 0.07% WO_3 so that there appeared to be a gap of almost 50' with an off-set of 35' between the ore shoot or pocket which was mined for a length of 65' in the open cut and the ore which was mined in the pit for a greater length.

In April of 1944 the Pure Gold Company had mined all the pit ore which was most easily accessible on their side of the line to which line the pit now extended, although they still had some ore left in the floor of the pit. Having convinced themselves that they had opened up a true vein of which the apex was wholly on their property they notified the Morning Star Company that they proposed to continue mining on down along the dip of this vein to the south-west and under the Morning Star Claim in accordance with extra lateral rights conferred by the Apex Law.

The Morning Star Company denied that any such vein or extra right existed at this point and warned that any entry or removal of ore from under the surface of their claim would consitiute a trespass. But the Pure Gold Company prodeeded to undercut the south wall of the pit which subsequently caved across the side line and to remove ore from the Morning Star ground while at the same time continuing to mine a small quantity of ore from other sections of their own property.

The total quantity of extra lateral ore mined and marketed was 1072 tons according to Molson (page 23 and seq) but since the average grade of same was only about o.929%,- while mining and treatment costs were high and the value of tungsten ore took a big drop on Aptil 30, 1944 and another crop on June 30, 1944, it was Molson's testimony that they sustained a ~~heavy~~ financial loss of $20,099.57 (page 115) through this extra lateral operation which had been carried on over the protest of the Morning Star Company and under the threat of a suit for trespass and damages.

No ore has recently been mined by either company and the condition of the workings in the immediate vicinity of the common side line is much the same as it was on May 7th, 1944, except that large blocks of material have caved from the south wall of the pit, - which now extends over the line at the surface for a length of 75' and to a maximum distance of 16' and these blocks and fragments now cover a large portion of the floor of the pit. Meanwhile some underground development work has served to disclose the conditions on the lower levels down to the old adit which serves as the main haulage drift and cross-cut.

GEOLOGY

All witnesses agreed that the ore bearing zone was limited on its footwall (north-east side) by the Mogul Fault on the hanging wall of which is usually found a gouge or selvage of clay below which there is a zone of crushed and brecciated material, (mostly granite) some 40' or more in width lying on a true foot wall of solid and undisturbed granite. The

fault strikes in a north-westerly, south-easterly direction and dips to the south-west from 40 to 60°.

On the south-west or hanging wall side of the Mogul Fault lies a large block of silicious limestone which has been much disturbed, shattered and cross-faulted, especially, near to the Mogul Fault and which extends back south-west from the said fault for some 300 to 400 ' beyond which less shattered quartzite is found.

The deposits of commercial scheelite ore occur with extra silica as replacements in the limestone and in the case of the pit deposit it is claimed by the defendents that there is a well defined quartz-scheelite vein following along the hanging wall of the Mogul Fault for a distance of over 300' while the plaintiff contends that the ore found in the pit was merely a large pocket or shoot similar to the other pockets mined in the open cut, in the Rivera workings and elsewhere, that the values and alleged vein material are not continuous or even similar throughout this distance and that there is no true quartz vein nor any hanging wall to the various showing of higher grade ore from which in all directions (except into the Mogul Fault) there are merely gradations of values to the non-commercial and less silicious limestone which nearly always contains traces or small fractions of one per cent of scheelite.

Hence the geological point at issue is the character of the main or pit deposit, - is it or is it not a vein?

The other essential point at issue is purely

a question of fact, namely, the original location and extent of the outcrop.

THE ALLEGED VEIN

This structure is described in detail by Pennybaker (page 313 et seq) with reference to geological maps and a model which were prepared under his direction. He claimed to have traced this vein from the Morning Star open cut to beyond the west end of the pit (some 325'). In general the said vein had a northwesterly-southeasterly strike, a dip of 40 to 45° to the southwest and a varying width which might average 10 to 12' with a central pay-stretch of richer material 2 to 4' in width. The foot wall of the vein consisted of the gouge and crushed rock on the hanging wall of the Mogul Fault which could be noted almost continuously on the surface and often in the underground workings. The vein filling was hard quartz with scheelite and the hanging wall was silicified and shattered limestone, differing from the quartz by its darker color and much softer texture and carrying little or no value in WO_3. The picture as painted by Pennybaker on direct examination seemed logical and quite complete but during his cross-examination many improbilities and inconsistencies were developed as follows:

(1) The ore occurrences (except near the center of the pit) instead of being continuous were often scattered through the vein at irregular intervals between larger areas of nearly barren or much lower grade material (page 330 to 336).

(2) His description of the ore in the Morning Star open cut was not clear (page 332)nor was it confirmed by

any of the defendent's other witnesses while much of it was refuted by the witnesses for the plaintiff and he admitted that between this opencut and the stub-tunnel at its end he had to project the vein by guess to the east end of the pit.

(3) His location of the hanging wall of the vein in the south wall of the pit as drawn in on the photos and colored on the model was almost entirely the result of visual inspection although this was occasionally confirmed by lamping and by scratching the rock with his pick (page 383).

(4) Below the underground workings where the only development work consisted of drill holes he continued to project a solid vein even though most of the samples from these drill holes were barren or carried less than 0.05% WO_3 (around page 350).

(5) The strike which he gives to the hanging wall of this vein is actually fantastic (although he merely calls it "wavy") since along the outcrop after crossing the side line from the Morning Star, it goes northwest on the surface for some distance in the Pure Gold Claim, then turns back toward the side line with a course of almost S 45° W until it is only 6" from side line, then goes due west for 10', swings back to 35° W and continues on that course to beyond the west end of the pit.

Underground the course is even more erratic, as illustrated by the model on which he attempted to trace the vein but under close questioning from Mr. Evans, admitted (page 420) that the could only identify the hanging wall underground at one point on the plank level and again much further to the west in the north-south drift after it had made a sharp turn to ~~the north-west~~ almost due north. The

strike of the vein as Pennybaker described it, thus appeared to have turned in a complete semi-circle within a distance of 35', (from North 75° West to West 20° East) and although he tried to explain this remarkable condition by referring to the "bulges in the vein" (page 425) it became obvious that his line showing the hanging wall had been plotted by speculative projections from only a very few points where his vein material could actually be identified by a visual examination (which indicated quartz) and he admitted that at some of those locations the material would not assay as much as 0.02 W O_3.

Similar irregularities are often noticed in veins where there has been a lot of post-mineral faulting but since all of the witnesses testified that there were no such faults in this locality there arises a strong presumption that the existence of this hanging wall was largely invented by Pennybaker to support a theory which lacked factual basis. Pennybaker admitted that only his location and projection of the foot wall (Mogul Fault brecchia and gouge) was supported by the evidence of the drill holes (page 433) and in regard to the foot wall there is no dispute.

Pennybaker (page 429) admitted that he had not made any critical examination of the Rivera workings or any of the other openings from which scheelite had been mined in that vicinity but he thought that the geological conditions at the Rivera workings were different from those at the pit. The seven samples which he took in his so-called hanging wall showed low values, the highest being 0.36 W O_3 but this, it should be noted, is richer than many of the samples which were taken in this vein and which in some cases (page 390)

contained as little as 0.02 W O_3.

Frisbie (page 453)confirmed the opinion of Pennybaker in a general way and since his first visit in had
August 1943 he/classed the pit deposit as a scheelite vein with a hanging wall of blue limestone (page 435).

On subsequent visits (page 460 and seq) Frisbie confirmed this opinion by lamping and was able to trace the foot wall of the vein along the Mogul Fault for a length of 320' while he traced the hanging wall limestone along the south wall of the pit and noted it also on the plank level. He was uncertain as to whether the vein filling was really quartz or highly silicified limestone and stated that the lamp would detect the presence of scheelite equally well in either formation and would show color when the percentage of W O_3 was as low as 0.02. He agreed that the ore was probably formed as a replacement deposit in limestone and admitted that some of the drill holes which were represented on the maps and model as being in the "vein" were actually sunk in material that carried little or no scheelite. Ewing (page 230 - 263) testified that in his opinion the pit deposit was a true vein of scheelite ore with well defined foot and hanging wall although his description of the latter was rather vague. Colvocoresses testified that he had examined the property on three occasions, the first of which was on May 7th, 1944 when the southern wall of the pit had caved almost 4' across the common side line for a distance of some 16'.

Neither on the wall of the pit, nor on the surface nor in the underground workings had he been able to recognize any vein and it was his opinion that there was no

vein at all but that the scheelite had all been deposited in pockets or short irregular shoots with the values (except where the ore was bounded by the Mogul Fault) gradually fading out into the silicified limestone.

Henderson (page 576) whose education and experience should qualify him as an expert witness testified that when he first saw the newly discovered outcrop (about August 1943) the showing of scheelite, which was mostly on the Pure Gold Claim, extended across the side line in what is now the pit area and he lamped this ore on the Morning Star as well as on the Pure Gold Claim.

He described (page 524) the fractured and silified limestone lying along the hanging wall side of the Mogul Fault in which there are several shoots of scheelite ore associated with small cross faults, fissures and caves or vugs in the limestone.

He had examined all of the scheelite workings in this district including the old Maudina, which is nearly a mile away from the pit but also on the hanging wall of the Mogul Fault, and he had never found a true vein of scheelite ore but merely the disseminated deposits which are replacements in the limestone with pockets that represent the richer concentrations.

In the pit area(page 527) he has always recognized that the gouge between the line and the granite along the hanging wall of the Mogul Fault represented the foot wall of the ore zone but this deposit which is like all the others although larger, is not in the form of a vein and has no hanging wall at all and (page 564) it never even occurred

to him until this controversy arose that anyone would make such a claim as he had never found any vein in these blocks of limestone.

Flagg, after having qualified as an expert, described in detail (page 588 and seq) his examination of the property in April 1945 beginning with the Morning Star open cut where he noted the Mogul Fault brecchia and then lamped the walls of the cut where he found some patches of scheelite but no sign of a quartz scheelite vein nor any hanging wall (page 590) since the material above the ore-showings was similar to that which extended down to the fault gouge or brecchia.

The ore showings seemed to peter out near the end of the open cut and he found almost no ore along the stub-tunnel which was all in silicified limestone with shattering and cross faulting and he traced that formation from the open cut through to the pit without noting any vein although there was a patch of ore at the east end of the pit which Colvocoresses photographed and sampled on both sides of the line and another similar patch of ore was to be seen a little further west on the south wall of the pit (page 602).

In the plank level and drifts and also along the intermediate level ore showings were also confined to scattered patches limited by local fractures and cross-faults and most of them appeared to be low grade.

Flagg described (page 670 and seq) the other showings around the workings ;- e.g. in the raise near the road and in the lower adit (page 614) around the contact of the limestone and fault brecchia and these appeared to be separate

pockets having no connection with each other or with the pit deposit, and here again, he found no vein. In the Rivera workings he found some quartz which contained specks of copper and lead sulfide but little or no scheelite remained since the ore pockets had been mined from the shattered and silicified limestone.

His examination of the north-south drift at the west end of the pit showed that here the ore-shoot had run at right angles to the side line and that it was merely another replacement deposit in the silicified limestone governed by a cross fault and in no way connected with the larger body of ore that had been mined in the pit.

A sample of ore from the outcrop near the raise (close to the road) which was cut on the Morning Star ground carried 0.95% WO_3.

Flagg thinks that all of these ore deposits were replacements in the limestone controlled and limited by its fractures and cross faults and that the pit deposit was of the same type as the others (page 623) only larger and was not in the form of a vein since there was no hanging wall (page 636). He agreed that the brecchia and gouge along the Mogul Fault formed the foot wall of the ore zone in which were found all the deposits of pay ore (page 640). He thought that the cross fractured limestone probably extended some 300' southwest from the Mogul Fault to a point where the formation became a quartzite and that all of this limestone might be classed as a mineralized or ore bearing zone but actually he could find no hanging wall connecting the ore deposits, and hence there was no vein (page 644). He agreed with Colvocoresses in saying that the ore occurred in scattered pockets dis-

tributed somewhat like the plums in a plum pudding. Colvocoresses (recalled) (page 650 and seq,) fully agreed with Flagg in respect to the genesis of the ore and type of deposit but pointed out that the solubility of the limestone may have also been a factor in determining the extent of the replacement and the limits of the pay-shoots. He repeated a general description of the mineralized zone in which it was perfectly possible that ore might have been deposited in the form of a vein (page 654) but emphasized the fact that such a vein must have a hanging wall as well as a foot wall and that in this case the Mogul Fault brecchia was merely the underlying formation and that he had been absolutely unable to find any true vein in its vicinity or any hanging wall (page 663) to the pit deposit.

LOCATION OF ORIGINAL OUTCROP ~~or APEX~~ OF PIT DEPOSIT

When this outcrop was first discovered in August 1943 a survey of the common side line was made and Ewing, Frisbie and Pennybaker claim that the showing was all on the north side of the line, i.e. on the Pure Gold Claim, while Henderson was equally positive that it extended for a short distance, almost 5', on the Morning Star Claim. Colvocoresses, although he did not visit the property until May 7th, 1944 testified (page 55 and seq) that at that time ore was showing on the surface of this south wall of the partially caved pit some 4' across the line. Some 60' to the east of this point Colvocoresses later cut outcrop samples on both sides of the line which showed commercial ore and also at a point 40' to the west a sample on the Morning Star side which assayed 0.95% WO_3. The taking of these samples was witnessed and

confirmed by Flagg and Henderson and the existence of the last mentioned outcrop straddling the line was admitted by Pennybaker, although, he claimed that this ore showing was not a part of the main deposit which had been mined in the pit. Henderson confirmed (page 531 and seq) Colvocoresses' description of the pit as of May 7th, 1944 and noted surface ore crossing the line at a point close to "Raise # 1" on the map and a similar outcrop straddled the line some distance further to the west.

He stated (page 580) that he had noted and lamped this pit outcrop before Stevens reran the common side line but it was not until then that he was positive of the location of that side line and recognized the fact that there was outcrop ore on both sides of it. Colvocoresses (page 175 and seq) illustrated his testimony with a sketch map made in May 1944 and testified that ~~almost~~ most of this had been taken from other maps and the location of the workings was not accurately placed in reppect to the corner, - yet the portion which showed the contact of the pit and the common side line had been surveyed with a Brunton transit and tape and was accurate to within a few inches.

With reference to his other maps (page 175 - 230) he admitted that many of the surface outcrops shown on the big map of the claims had been plotted in according to information obtained from others and that the same was true in respect to some of the original limits of the pit ore, which could no longer be seen but that otherwise these maps were made from his personal observation accompanied by Flagg and Henderson who witnessed his taking of the samples that were plotted on

the maps. (Statement was confirmed by Flagg and Henderson).

His statement that in May 1944 quite a lot of ore was visible in the floor of the pit was confirmed by Ewing (page 266) and on page 272 he also confirmed the opinion of Colvocoress that the dividing line between ore and waste could be judged quite well by visual inspection and the same admission was made by Pennybaker.

Frisbie (recalled) page 666 stated that when the perimeter of the pit was within 15' of the common side line the outcrop had been removed. This seems to flatly contradict his former testimony which was to the effect that the outcrop extended close up to the line, while Pennybaker testified that it came to within 6' of the line for a length of 10' and Colvocoresses and Henderson testified that it crossed the line.

Ewing (page 672) testified that the boulders now fallen into the pit are not ore although, he admitted that many of these came from the area which is marked as the vein on the map and in the model. The series of so-called "hanging-wall samples" posted on one of the exhibit maps would seem to have little or no value since many of them were taken by Ewing and Frisbie shortly before the trial and since the south rim of the pit had then caved back 10' or more from the line for a considerable distance some of the samples were cut nearly 20' south of the line and no one has claimed that the outcrop of ore ever extended so far in that direction. The original outcrop of the pit deposit has been destroyed and the testimony in respect to its original location and extent

is obviously contradictory, but, both photographs and samples confirm the fact that the outcrop still crosses the line at the east end of the pit and again to the west of the pit and the crossing at this last location was admitted by Pennybaker and (I think) by Frisbie or Ewing. Therefore it follows that if these locations are not a part of the alleged vein there is no true vein of ore at all but merely a series of scattered pockets and if they should be held to form a part of a vein then this vein very obviously straddles the common side line and we have a "split apex" with the Morning Star conceded to be the senior location.

Appropriate comment will doubtless be in order concerning the very peculiar business policy which Molson followed after April 1944 when, with pay ore still left in his own ground, (according to Ewing page 300 and seq) he umdertook and continued for some time to mine and market at a loss the extra-lateral ore from the Morning Star. Perhaps a desire to collect the $6,000 debt owed him by Jacobs (which for a time he entirely failed to recall) may have had some bearing on the subject, but this and his other explanation are by no means satisfactory.

Molson (recalled) (page 675) testified further in respect to these shipments and stated that in his opinion, based on the recent drill holes, there remained in the pit vein below the present workings a big block of extra-lateral ore (some 20' in width) amounting to 8,000 tons which he would expect to mine and market at a profit of $240.000. He admitted that all of the extra lateral ore which he had mined to date had

netted a substantial loss, also, that the great bulk of both the core and sludge samples from the drill holes (which were supposed to be drilled in the vein) assayed less than 0.05 WO_3 and many other samples appeared to the eye to be so poor that they were not assayed. He agreed that these drill holes seemed to indicate that they would have to mine a width of 40 to 50 ' of waste or very low grade material in order to take out a width of 5 to 10' of ore that would run over 1%, but, he vaguely hinted that new and secret methods of mining and milling had been recently developed and would permit him to make good on his otherwise absurd estimate (page 687).

Thus it might be noted that Molson figures that the remaining extra-lateral ore will yield a profit of $30 per ton, and, if such a figure can properly be used in computing the value of the ore which he has already mined from the Morning Star, it would appear that he has damaged that property to the extent of over $30,000, provided the Court should hold that this extra-lateral ore was illegally mined and marketed.

Petitioner's 8

COPY OF BRIEF OF DEFENDANT AND COUNTER-CLAIMANT

Case of L. M. Forcey vs. Edward H. Molson

(11)

Plaintiffs state, both in this portion of their argument and subsequently (Plaintiffs' Brief 30), that the fluorescent lamp is worthless to the miner or engineer in assisting him to determine the presence of mineral-bearing rock. It is interesting to note in this respect that all of the mining people invoved in this controversy, when attempting to find ore used the mineral light -- even Mr. Henderson used it.

(13-14)

The sixth and seventh reasons proposed by plaintiffs fail as reasons why the vein mined by the defendant and counter-claimant is not a continuous body of mineral-bearing rock in the general mass of the mountain. Plaintiffs' position is again not supported by the record.

The eighth reason proposed by plaintiffs is based upon the testimony of Mr. Pennebaker to the effect that the finding of extremely low-grade material within the vein would not change his opinion as to the existence of the vein. It is further based upon the testimony of Mr. Colvocoresses that the entire area is in his opinion mineralized to a certain extent. It is further based upon the opinion of the witness Henderson that he did not "think you could get a complete blank in the lime" (Tr. 527). It is obvious that the mere finding of traces of mineral elsewhere is not evidence that the vein does not exist or that the vein worked was not a continuous body of mineral-bearing rock. If we were to follow plaintiffs' reasoning on this point it would logically follow that because through the Old Hat Mining District minerals are generally disseminated, there can be no vein. Such a proposition is obviously fallacious, yet it directly follows the plaintiffs' line of argument. It is equally fallacious to say that because there are lean or almost barren areas within the continuous ore body, that the body cannot be classified as a vein because of its

alleged failure of continuity. Certainly in the mining industry it is common knowledge, to the extent that this Court could take judicial notice thereof, that barren areas are often found within a vein, but this fact does not preclude the ore body from in fact being a vein. These barren areas are usually referred to as "horses" and are not unusual (Tr. 485).

(15-17)

6,753 tons were removed from the Pure Gold side of the operation. This tonnage was ore (Tr. 106). 1,072 tons of extra-lateral ore were removed (Tr. 106). Thus there was a total tonnage of 7,825 tons mined by the defendant and counter-claimant with an overall average of 1.58% WO_3 (Tr. 490). There was no difficulty in the mining operation in distinguishing this ore body from the general mass of the mountain (Tr. 294, 312). It was adequately demonstrated by defendant and counter-claimant to be a fact that the exposed portion in the vein at the present time represents a continuous ore body. A practical demonstration of this fact may be found in a review of the evidence adduced from the several witnesses, comparing it with the plans of the workings in evidence. Both Messrs. Colvocoresses and Flagg found areas throughout the workings where they discovered ore in place. It will be noted that the examination of Mr. Colvocoresses was largely composed of visual inspections made in the day time, although he used the mineral light wherever it was possible for him to do so. Such an examination Mr. Colvocoresses considers to be inaccurate (Tr. 88). Mr. Colvocoresses was also confronted with considerable danger in the conduct of his examination, and because of such danger was not able to make a more thorough examination (Tr. 60, 63, 87, 184, 186). It will be noted that both Messrs. Colvocoresses and Flagg used the lamp extensively to substantiate their lack of findings. Mr. Flagg was called to the area in controversy for one examination, which was conducted under difficult circumstances (Tr. 584, 588, 600, 605, 606). The first day of Mr. Flagg's visit was spent in orientation. Considerable time was spent on the second day on the Rivera workings in the

Morning Star property (Tr. 610), and the third and last day consisted of a more hurried re-examination of a portion of the area in question with further examination of neighboring ground (Tr. 617). The material which had formerly filled the excavated area had been removed (Tr. 643) at the time of Mr. Flagg's examination. Nevertheless with all his handicaps Mr. Flagg was able to find ore in place in many of the exposed portions of the vein. It was Mr. Flagg's conclusion from his examination, and if the excavated areas had contained ore, that there was in fact a vein; that the only reason he had not concluded that a vein did in fact exist was that he could not find a clearly defined hanging-wall (Tr. 643-644).

The fact that the ore body was continuous is thoroughly established not only by the testimony of the witnesses Colvocoresses and Flagg, but by the testimony of Messrs. Molson, Ewing, Frisbie and Pennebaker, which latter testimony was given after thorough familiarity and thorough investigation of the property from the time of discovery of the outcrop to the time of trial. The continuity of the ore deposit which constitutes the vein in question is well summed up in the conclusions of Mr. Frisbie, who, it will be recalled, after numerous careful examinations, was thoroughly familiar with the property, the ore produced, and the mining operation. Mr. Frisbie's conclusions are as follows:

> "Q Now, Mr. Frisbee, as a result of your investigation at that time, what were your conclusions with respect to the continuity of the vein and the ore material?
>
> A Well, it seems apparent to me that beginning on the southeast end of the open pit on the Morning Star ground, to a point at the northwest end of the Morning Star ground, and to a point 5 feet northwest of the end of the open-cut where I lamped scheelite on the surface and quarts vein material, that is without doubt continuous, and then in this little open-cut on the surface the vein material is covered with soil and detrital material, but in digging around there you can find quartz vein material underneath the soil that will lamp under the light, and in some spots it lamps good and in some spots it lamps much leaner, and that is also true in this area between this little cut marked in the map and this southeast end of the open pit, and it is without doubt continuous from the southeast end of the open pit to the northwest end of the so-called north-south drift. There are lower grade zones in it, but the vein material itself from the southeast end of the Morning Star open-cut to the northwest end of the North-south drift is, without doubt, confined within definite walls, a very definite foot-wall, and in two or three places a distinct hanging-wall, and the material encased by those walls seem to have the characteristics of a vein in all places with the exception of some lower

grade portions which is less silicified than others.

Q Now, relating to the continuity of this vein material and in the area southeasterly from the side-line of the Morning Star property, that is covered over with surface?

A Surface soil.

Q And you dug around, you say, and found --

A (Interrupting) I dug around through this surface soil last night and chipped off pieces of quartz material in place and could lamp scheelite in place in the vein material.

Q So it is then your conclusion, Mr. Frisbee, that this vein, as depicted on Defendant's Exhibit No. 1, is a continuous vein from the point at which it starts as depicted in pink over the Pure Gold property across the common side-line, down to the easterly end of the Morning Star open-cut?

A It is.

Q What was your answer?

A It is at least that long.

Q. And by that you mean, it could possibly be longer?

A It could possibly be longer.

Q Now, Mr. Frisbee, how far is it -- have you any measurements that you have made, or do you know the distance of the vein on its strike as it has been disclosed?

A It measures from the northwest end of the north-south drift to the southeast end of the Morning Star open pit 320 and some feet.

THE COURT: 321?

A 320 and some feet.

(19)

Q Now, Mr. Frisbee, could you tell whether or not the vein -- in what direction the vein dipped generally?

A Well, generally it dips to the southwest at a relatively flat angle, and studying the projections as made by Mr. Pennebaker, checked in the various raises and checked on the surface projected downwards, it seems reasonable to think that that vein has this regular dip of between 30 to 40 degrees.

MR. EVENS: Which wall?

A The foot-wall.

MR. CRAIG: Now, Mr. Frisbee, these underground workings which you observed in the mine and from your observation of those workings, could you conclude whether or not they were within the walls of the vein as you have described them?

A Well, this plank level drift is within the walls of the vein. The intermediate level appears to be within the walls of the vein; the north-south drift seems to be within the walls of the vein."

(Tr. 461-467)

(19-20)

Plaintiffs' and counter-defendants' next proposition is that there is in fact no vein as contended by defendant and counter-claimant, because there is no hanging wall to defendant and counter-claimant's vein.

Plaintiffs purport to give six reasons why no hanging wall exists. First, because thw witness Flagg found no hanging wall throughout the strike of the vein. Second, because the witness Colvocoresses found no hanging wall throughout the strike of the vein. Third, because plaintiffs cannot see the hanging wall in the pictures introduced in evidence. Fourth, because three of the places established as the hanging wall by the defendant and counter-claimant are claimed to be insufficient to definitely establish a hanging wall. Fifth and sixth, because the plaintiffs and counter-defendants do not consider the vein material to be quartz or that the vein is not a quartz-scheelite vein as referred to by defendant and counter-claimant.

We do not question the integrity of the witness Flagg in his testimony in this case with respect to his findings as a result of his examination. We earnestly submit, however, that the plaintiffs and counter-defendants provided the witness Flagg with proper facilities, and had they given him adequate time to thoroughly examine the premises, his additional findings would have undoubtedly supported the position of the defendant and counter-claimant to an even greater degree than is disclosed in the present record.

(24)

It will be noted that all of the reasons submitted by plaintiffs and counter-defendants for their position that no hanging wall exists on the property are based upon negative evidence. Opposed to this, the record discloses that the defendant and counter-claimant has established the fact to be by positive evidence that the hanging wall exists and that there is in fact a vein as alleged by the defendant and counter-claimant. Plaintiffs' and counter-defendants' position with respect to the hanging wall is obviously untenable in view of the record.

The record discloses then that defendant and counter-claimant by competent evidence has established that a vein does in

fact exist, which vein apexes upon the Pure Gold ground with its strike on a Northwesterly-Southeasterly direction and with a Southerly dip as depicted on defendant and counter-claimant's Exhibit No. 1 in evidence. Having established the dip of the vein as it presently is shown by the mining operations, it may be assumed that the vein will continue on its present dip until the development thereof shows the dip to have taken another course, or where the development discloses the vein to have ceased. Brewster vs. Shoemaker, 63 Pac. 309.

(28)

Throughout their argument plaintiffs rely upon the testimony of the witness Colvocoresses and his examination, alleged to have been made March 7, 1944. Plaintiffs allege in their argument that the perimeter of the pit or glory hole had crossed the common sideline before March 7, 1944. In this, plaintiffs are patently in error. The witness Colvocoresses' first visit to the area in question was on May 7, 1944 and he so testified (Tr. 56). The survey conducted by Mr. Stevens, and which all of the parties agreed was correct, discloses the perimeter of the glory hole had not crossed the sideline at the time of the survey on March 21st to 23d, 1944 (Tr. 322).

There is absolutely no evidence in this record that the hanging wall is any place other than as proven by defendant and counter-claimant. The examination of the witness Colvocoresses was largely approximation as has already been shown. The plan exhibits introduced by the witness Colvocoresses were the result of approximations and hearsay. Plaintiffs' Exhibit E was prepared by Mr. Colvocoresses as of May 7, 1944, and was a sketch based upon approximations as appears on its face and by Mr. Colvocoresses' testimony (Tr. 57, 59, 78-79). Mr. Colvocoresses' approximations of the ore in the face of the pit were made by looking at it some distance away (Tr. 67). Plaintiffs' Exhibit J in evidence was prepared by Mr. Colvocoresses and the hatched areas which he placed thereon were so placed as a result of hearsay and approximation (Tr. 175), and the hatched areas are not in evidence (Tr. 508).

CONCLUSION (39-40)

In conclusion, defendant and counter-claimant earnestly submits that he has in fact proven a vein to exist in the manner and place depicted on the exhibits of the defendant and counter-claimant in evidence; that in this case defendant and counter-claimant has established a continuous ore body with walls upon each side thereof; that the vein so established crosses the common sideline of the Pure Gold and Morning Star properties as disclosed in the exhibits in evidence and as set forth in the diagram, supra; that the law applicable to these facts grants to the defendant and counter-claimant the right to mine the vein extralaterally upon its dip into the Morning Star ground; that no trespass was in fact committed by the defendant and counter-claimant, but that he has the right to mine his vein as established without interference by the plaintiffs, or any of them.

Morning Star

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA,

IN AND FOR THE COUNTY OF PIMA.

L. M. FORCEY, et al., Plaintiffs and Counter-defendants, - vs - EDWARD H. MOLSON, doing business under the name and style of Modina Tungsten Mine, Defendant and Counter-claimant.	No. 25215 REPLY BRIEF Nov 20' 45

Continuity of the Vein

Defendant devotes pages 3 to 26, inclusive, of his brief to a discussion entitled "Continuity of the Vein". In this discussion defendant does not take issue with plaintiffs' definition of a vein, but seemingly defendant does not appreciate that in order to justify his extralateral invasion of plaintiffs' property, and even more his attempt to quiet title, the burden of proof is upon him to establish by a preponderance of the evidence the existence and continuity of a vein meeting the requirements of that definition and apexing exclusively within defendant's property to the extent of the segment claimed by him. Defendant largely contents himself with an attempted refutation of the many points of weakness which plaintiffs

pointed out were to be found in the proof on which defendant rests his case. Those points of weakness can well be resolved by the Court without further detailed discussion in this brief.

As stressed in plaintiffs' opening brief, the model and maps which defendant placed in evidence are not substantive proof, but merely serve to illustrate defendant's theory. In an action of this type, they were admissible for this purpose. But an examination of the photographs in evidence will not disclose any mining operation conducted by defendant on any such neat and precise lines as he represents on his model. Neither will an examination of these photographs nor a reading of the testimony of any of the witnesses disclose a definite or precise hanging wall of his alleged vein such as defendant depicts on the surface within the area shaded in pink; nor the existence of any continuous body of ore or vein material distinctive from defendant's alleged hanging wall; nor either the downward or lateral extension of any continuous ore deposit or vein material. The Court, in its consideration of this case, should therefore view defendant's model and maps only as illustrative of defendant's theory, and should avoid the persuasive effect which the technique and workmanship exhibited in their preparation might otherwise have.

Defendant must rest his case then only on the fact that he mined ore from within what he depicts as a vein and the opinion of Messrs. Pennybaker and Frisbee that the area shaded in pink represents a "true vein" bounded by foot and hanging walls readily distinguishing the vein from the remainder

of the shattered limestone block constituting the hanging wall of the Mogul fault. The lack of evidence to support that opinion and the inconsistencies upon which it is based have been adequately presented in plaintiffs' opening brief. That the existence of the alleged vein cannot be predicated upon either the metal values it carried, the distinctive character of the vein material, or the geological formations involved is apparent from the testimony of the two witnesses upon whom defendant relies for his case. Messrs. Colvocoresses and Flagg, at least equally experienced and qualified in their fields as defendant's witnesses, found nothing resembling a vein such as claimed by defendant.

The question of the existence of any vein such as is claimed by defendant can far better be determined on the basis of what is now in place rather than from what has been taken out. Evidence as to the character, nature and location of ore and purported vein material in the portions of the alleged vein mined out by defendant is now gone. But by far the greater part of the defendant's alleged vein has not been mined, and we can examine it. Defendant does not distinguish the mined portion from the rest of the alleged vein, so what we now find in the remaining portion of the alleged vein should fairly well characterize the mined out portions.

<u>The horizontal and vertical drill holes in the purported vein material immediately underlying the mined out areas do not disclose the existence of any vein</u>. These holes were drilled by defendant, the cores were sampled and assayed by him and the evidence of them was placed in the record by him. Whenever

the appearance of the core sections indicated the possibility of ore, the core sections were assayed. These core sections disclosed irregular and sporadic occurrences of ore without continuity, pattern or connection with each other -- ore in patches, pockets or seams -- with material of little or no value lying in between. Neither do these core samples show any difference between the rock carrying little or no value and the rock which defendant represents as his hanging-wall material.

The horizontal hole drilled by plaintiffs for a distance of twenty feet westerly from the face of the stub tunnel off the open cut, all within defendant's alleged vein, discloses material of little or no value. Throughout the segment of the alleged vein lying to the west of defendant's open pit we find large blocks of material in the form of boulders which defendant claims came from his alleged hanging wall, but which, although identical to the hanging wall, we submit constituted a part of the vein material. We find no material within the alleged vein in place which Mr. Flagg, after microscopic examinations of many samples, could distinguish from defendant's purported hanging-wall material or which Mr. Colvocoresses could identify as distinguishing a vein from the mass of the mountain.

Defendant's witnesses did not attempt to make any explanation of the genesis of the ore deposition and silicification to be found in the alleged vein. If a vein, such as defendant claims, existed in fact, its very existence could be supported by a study of the general geological conditions and of the reasons for and manner of its formation. It is not only

significant that defendant's witnesses did not attempt any explanation of the reasons for the existence of a vein such as they claimed, but, in Mr. Pennybaker's case at least, examinations were confined to the immediate vicinity of the alleged vein and no study was made of the general geology or of the limestone block on the hanging wall of the Mogul fault.

On the other hand, the examination made by Messrs. Colvocoresses and Flagg not only included the immediate area of defendant's alleged vein, but also a study of ore occurrences throughout the limestone block on the hanging-wall side of the Mogul fault. Their findings of silicification and mineralization generally disseminated in varying concentrations throughout the limestone, as well as their conclusions as to the cause for this phenomena are discussed in plaintiffs' opening brief and need not be again reviewed here.

It is not incumbent upon plaintiffs in this case to prove the non-existence of a vein such as claimed by defendant or to prove the genesis and nature of such ore deposits as may be encountered within the vertical side lines of plaintiffs' property. Nevertheless, it is submitted that if any vein can be said to have been established by the evidence, that vein consists of the limestone lying between the granite on the north comprising the footwall of the Mogul fault and the quartzite on the south, throughout which there occurs general dissemination of scheelite with higher concentrations of value in the form of pockets, vugs and kidneys, at irregular intervals without regularity of shape or pattern, and which the miner could expect to encounter if he

prospected for them, but which are not in and of themselves veins having defined courses, strikes, dips or continuity.

The question of extralateral rights with respect to such deposits has been before the courts on more than one occasion. Thus, in Hyman v. Wheeler, 29 F. 347, the court said on page 354:

> "If, as contended by defendants, the ore of that mountain is distributed throughout the blue and brown limestones somewhat unequally, but nevertheless generally, and the occurrence of rich ore in the Emma works is fortuitous and accidental, other considerations arise of which it is not necessary to speak at length. In that case the entire body of blue and brown limestone is taken to be ore-bearing rock, and the plaintiff can assert no claim to it outside his own location. * * * "

Probably the first case involving deposits of this type was Eureka Consol. Min. Co. v. Richmond Min. Co. (Case No. 4,548) 8 Fed. Cas. 819, which involved apical rights to mineral deposits disseminated in a limestone block at points between five hundred and eight hundred feet in width, bounded on the south by a wall of quartzite and on the north by a belt of clay or shale. The following quotations from the opinion disclose the facts considered and the conclusions reached by the court:

> "The limestone found between these two limits -- the wall of quartzite and the seam of clay or shale -- has, at some period of the world's history, been subjected to some dynamic force of nature, by which it has been broken up, crushed, disintegrated, and fissured in all directions, so as to destroy, except in places of a few feet each, so far as explorations show, all traces of stratification; thus specially fitting it, according to the testimony of the men of science, to whom we have listened, for the reception of the mineral which, in ages past, came up from the depths below in solution, and was deposited in it. * * * " (Page 823)

> "Throughout this zone of limestone, as we have already stated, mineral is found in the numerous fissures of

the rock. According to the opinions of all the scientific men who have been examined, this mineral was brought up in solution from the dpeths of the earth below, and would therefore naturally be very irregularly deposited in the fissures of the crushed matter, as these fissures are in every variety of form and size, and would also find its way in minute particles in the loose material of the rock. The evidence shows that it is sufficiently diffused to justify giving to the limestone the general designation of mineralized matter -- metal-bearing rock. * * * " (Page 824)

"Our judgment being that the limestone zone in Ruby Hill, in Eureka district, lying between the quartzite and the shale, constitutes, within the meaning of the acts of congress, one lode of rock bearing metal, we proceed to consider the rights conveyed to the parties by their respective patents from the United States. * * *"(Page 825)

Again, in United States Min. Co. v. Lawson, 134 F. 769, there was involved a block of limestone one hundred to two hundred feet in width confined between well-defined walls of quartzite and in which there were several disputed ore bodies. Plaintiff insisted the limestone constituted a single broad lode, whereas the defendant contended that it embraced several distinct veins apexing within defendant's property and with respect to which defendant claimed extralateral rights against plaintiff. In sustaining the position of the plaintiff, the court said:

"A careful examination and consideration of the evidence clearly convinces us that the stratum of limestone constitutes a single broad vein or lode of mineral bearing rock extending from the quartzite on one side to the quartzite on the other. The limestone has been profoundly broken, altered, and mineralized, and has thereby obtained an individuality which, apart from other differences, clearly distinguishes it from the neighboring rock. There is a local absence of ore in places, a continuous occurrence of it in others, and a seeming local occurrence of it in still others, but the ore bodies are not separated, one from another, by any defined boundaries. As in Eureka Consolidated Mining Co. v. Richmond Mining Co., 8 Fed. Cas 819, 825 (No. 4, 548), there are parts of one greater deposit, which permeates, in a greater or less degree, with occasional intervening spaces of barren rock, the whole mass of limestone. As shown by extensive exploration and actual mining, the mineralization

has been so general that its only defined limits are the quartzite walls which bound the limestone, and within it one may reasonably expect to encounter ore by driving or cross-cutting in any direction.

"In addition to the many small fissures which exist only in the limestone and extend in every direction, other ore-bearing fissures of approximately a northerly and southerly direction are found in the quartzite, and it is the contention of the defendants that these extend through the limestone, that its mineralization is due to them and occurred at the same time and in the same manner as did the deposition of the ore in them, and that the ore bodies in the limestone are lateral continuations or appendages of these cross-fissure veins. Of this it is sufficient to say that, whatever may have been the mineralizing process, the alteration and mineralization of the limestone were so general and extensive as to convert it into a single broad vein or lode within which the cross-fissure veins are without defined boundaries, and so far lose their identity that they cannot be distinguished from the larger ore bodies therein. * * * "

In Utah Consol. Min. Co. v. Utah Apex Min. Co., 285 F. 249, there was involved a limestone bed lying between quartzite walls and having an average thickness of two hundred fifty feet. The bed extended in an east and west course about two thousand feet and had a dip to the north of thirty degrees. The bed was associated with an east and west fissure, known as the Leadville fissure, which was the probable channel through which the mineralizing solutions reached the limestone bed. The parties conceded the limestone bed was a lode, but appellee contended it had been cut off at the nine hundred foot level by a porphyry dike. Appellee's contention was sustained, but the following quotations are taken from the opinion:

"Appellee does not deny but admits that the limestone bed outcrops, -- has its apex on appellant's mining claims, that on its dip it extends into appellee's ground, and that the larger part of the ore in controversy was found in the bed along the Leadville fault. It is further conceded that the limestone bed is a lode as defined in

the cases supra, down to what is known as the ninth or 900-foot level of appellant's mine, and to still further depths to the east; * * * ". (Page 251)

" * * * Continuity of a lode does not depend on the mineral deposits being in contact throughout or uninterrupted. They are usually found here and there apart from each other and variable in volume and richness. But as a rule ore deposits in a vein or lode are interrelated mineralogically, showing a general like condition throughout the one mass of rock, where it is mineralized and where it is not, as to its recipiency to mineralizing processes, though the extent of their operation may be greater at one place than at another. Fissures or seams through which the mineralizing solutions have passed, sometimes so narrow and tight that it is difficult to discover and follow them, frequently lead from one deposit to another not far away. That, we understand, is the prevailing condition in bedded formation of the large proportions we have here, when transformed into mineral lodes. * * * " (Page 252)

It is difficult to perceive what bearing the case of Bunker Hill & S. M. & C. Co. v. Empire State-Idaho M. & D. Co., 134 F. 268, cited by defendant, has on the issues here involved. There was not involved in that case a bed or block of limestone or other material bounded on each side by a distinct hanging wall and footwall such as in the present case. Instead, the court pointed out "that it has no distinct hanging wall cannot be doubted". Therefore, the court held against defendant's contention but did not attempt to define the limits of the vein, saying:

" * * * So far as can thus be concluded from all the evidence of ore developments at and within a reasonable distance below the surface in the Stemwinder, I doubt that the apex proper in that claim exceeds 250 to 300 feet in width. Suppose, however, that it does extend beyond the west line of the claim, the only effect would be, under the holding of the Court of Appeals in the King Case, 114 Fed. 417, 52 C. C. A. 219, that, if defendant owns that surface, it would own so much of the apex as lies within it. What its underground rights would be is a problem I am not called upon now to solve." (Page 273)

Actually the case is authority in support of plaintiffs' position. It is submitted that defendant, in the

instant case, has not satisfactorily proved the existence of any well-defined hanging wall of his alleged vein. The evidence shows silicification and mineralization in what defendant contends is the hanging wall of his alleged vein just as extensive as the silicification and mineralization encountered in large portions of the so-called vein material. Under these circumstances and in view of the origin and nature of the mineralization found to exist in the limestone block, it is incredulous that a distinct line of demarcation can be selected paralleling the common side line for a distance of fifty feet and from six inches to four feet within defendant's claim such as would constitute the hanging-wall boundary of a true vein.

On page 25 and 26 of his brief, defendant discusses the extent of the extralateral rights which would accrue to him if he had in fact within his property the apex of a vein such as is depicted on the plat which he attaches to this discussion. On the basis of this assumption, defendant's conclusion and plat are correct with one exception, namely, that the line parallel to the Pure Gold end line which limits defendant's extralateral rights to the east should be drawn from the point his alleged hanging wall crosses the common side line rather than from the point his alleged footwall crosses the side line. The segment of the alleged vein between these two points represents a split apex and plaintiffs are the owners of all that portion of this segment of the alleged vein lying within the vertical boundaries of their claim.

The Split Apex Theory

Defendant makes the same error pointed out above in his discussion on page 30 of his brief under the heading "The Split Apex Proposition". Plaintiffs contend that if any vein such as claimed by defendant does exist, the hanging wall of such vein crosses the common side line to the west of line stake elevation 168.9. In such case, defendant's extralateral rights would be limited by a line parallel to the Pure Gold end line drawn from the point the hanging wall crosses the common side line. If this line were drawn from line stake elevation 165.9, for example, all of the segment of the vein lying to the south of the common side line and to the east of the limiting line would belong to plaintiffs. Contrary to defendant's contention, this would include substantially all of the pit trespass area and the greater part of the plank level trespass area.

The Question of Damages

Defendant deliberately and intentionally mined ore from plaintiffs' property. He was specifically refused permission to do so. In entering upon plaintiffs' property he was presumed to be a trespasser unless he could prove a valid right to mine down on the dip of a segment of a vein apexing wholly within his property. The law and the notice given him by plaintiffs both told him "hands off anything within plaintiffs' property unless you can prove that it belongs to you - otherwise you enter at your peril".

Of the cases cited by defendant, only three involve trespasses under claim of extralateral right. In both Fitzgerald

v. Clark, 42 P. 273, and So. Nevada, etc. v. Holmes, etc., 73 P. 759, the defendant in each case appealed from a judgment for damages based on the value of the ore after deducting cost of mining and, consequently, the issue of whether mining costs were properly deductible was not involved in either case, plaintiffs apparently having been content with their recovery. In Liberty Bell Min. Co. v. Smuggler-Union Min. Co., 203 F. 795, the court sustained judgment for the value of the ore without deduction of mining costs.

The remaining cases cited by defendant deal with unintentional trespass involving excusable mistake as to the location of property lines or as to title and where the trespass occurred without knowledge of another's possession or claim of ownership. That is not the case here. In the instant case, defendant, after having been expressly refused permission to do so, intentionally mined ore from the property of plaintiffs and he should not be permitted to recoup from the ore the costs incurred by him in making the trespass.

In Alta M. & S. Co. v. Benson M. & S. Co., 2 Ariz. 362, 16 P. 565, the defendant mined from plaintiff's property under what defendant erroneously presumed a valid relocation, knowing at the time that plaintiff was claiming ownership by reason of prior location. The Supreme Court of Arizona, in holding plaintiff was entitled to recover the value of the ore without deduction of mining costs in spite of defendant's contention that he acted under a bona fide claim of right, said:

" * * * He is presumed to have known that appellee's grantors had entered the Alta mine in the United States land office; had paid the purchase money for the same, and had gotten a certificate from the government to that effect; that, under the law, on January 1, 1883, when he attempted to relocate the mine, no assessment work had to be done upon it, for it had ceased to be a part of the public domain, and therefore was not subject to relocation; and that, under the law, 'there can be no such thing as an adverse holding where the party knows he has no title,' and no such thing as good faith in such holding. Certainly, if the mine was not subject to location, he could gain no title by attempting to locate it. All this Scott and the appellant, through Salisbury, its president and manager, knew, or should have known, -- are presumed to have known, -- and must be held responsible for not knowing. See Deffebeck v. Hawke, 115 U. S. 392, 6 Sup. St. Rep. 95; Witherspoon v. Duncan, 4 Wall. 210; Carroll v. Safford, 3 How. 441; Courchaine v. Mining Co., 4 Nev. 369; Kahn v. Telegraph Co., 2 Utah, 174; Stark v. Starrs, 6 Wall. 418.

"We are inclined to the belief that this was willful, deliberate, and intelligent trespass. At all events, we are certain no injustice has been done to appellant. The judgment is therefore affirmed." (Page 569)

Defendant's Cross-Complaint

Defendant seeks to quiet title to the portion of his purported vein alleged to be found within plaintiffs' property. We have already noted the great variations which defendant admits to exist in the course of the purported hanging wall of his alleged vein, both on the surface and underground, and the convenient manner in which it adjusts its course to include all trespass areas and to accommodate itself to the numerous cross-faults and fracture planes identified by plaintiffs' witnesses. We have also noted the remarkable lack of continuity of ore within the unmined portions of the alleged vein explored by drill holes.

It is submitted that from the evidence in this case, if a decree was entered quieting title as prayed for, and

defendant should mine within plaintiffs' property, there is only one person who could possibly determine whether defendant was mining within or without the vein to which title had been quieted. That person would be Mr. Pennybaker, and we are at a loss to know from the evidence in this case what criteria he might use to determine whether his client's operations were within or without the vein other than the welfare and best interests of that client.

There is nothing to support the extension of a vein indefinitely downward under plaintiffs' property as shown on defendant's maps and model. No exploration work has been done to establish any such extension. The quirks and turns which defendant admits exist in his alleged vein where it can be inspected from surface workings might be even more exaggerated at undeveloped points.

The following statement from Arizona Commercial Min. Co. v. Iron Cap Copper Co., 232 P. 545 at 551, is particularly pertinent at this point:

> " * * * These underground, undisclosed, and unknowable properties are not the subject of testimony as to their position or value; they are not the subject of dispute because not susceptible of examination and inquiry. They cannot therefore be disposed of by judicial decree, since such a decree would be without hearing, or the possibility of hearing, and the owner might lose his property without his day in court. It may safely be assumed that this statute, providing a form of action to quiet title, provides only for adjusting property rights which are in being and that may be the subject of intelligent inquiry. This judgment, so far as it affects mineral lodes undisclosed by development, deprives the owner of his property without opportunity to be heard. This phase of the judgment is objectionable, not only because it makes an impossible disposition of property as between the litigants, but it assumes to nullify a statutory right. The statute provides a guide for determining the ownership of the vein when it is uncovered, and its relation to the apex is ascertained. R. S. U. S., Sec. 2322.

The effect of this judgment is to repeal the operation of the statute as to the veins affected by it, so that, when they are developed and their relations to their apices are known, the statute shall not act upon them. They are divested of rights with which the statute has invested them."

We submit that defendant has failed to justify his trespass by proof of a valid extralateral right to the ore which he extracted from plaintiffs' property and has fallen far short of proof of the essential elements of a vein based upon which this Court, or any disinterested third party, could ever define the limits thereof for the purpose of entry of a decree quieting title against plaintiffs herein.

Respectfully submitted.

ELLINWOOD & ROSS

WILLIAM A. EVANS

Attorneys for Plaintiffs, L. M. Porcey, Walter S. Tubach, William Iverson, Lester H. Murman, Huber G. Wilson and Louise A. Wilson, his wife, George H. Veeh and Florence M. Veeh, his wife, and Frank P. Borchard and Myrtle F. Borchard, his wife, co-partners doing business under the name and style of Morning Star Mining Company.

DARNELL & ROBERTSON,
C. R. McFALL,
Attorneys for Plaintiff, Elizabeth L. Wood.

December 20, 1945

Mr. William A. Evans
Ellinwood and Ross Law Offices
Title and Trust Building
Phoenix, Arizona

RE: Morning Star

Dear Evans:

I have returned the last brief of the defendant sent me with your letter of December 11 and of which I have had portions copied for my files. The following comment on same may have some interest.

It seems to me that in this brief the defendant merely repeats and emphasizes its belief that the testimony of their witness had conclusively proved the existance and location of a true vein with apex on the Pure Gold Claim, and that the contradictory testimony which we offered was quite worthless largely because it was based on a mistaken theory that a vein must have a hanging wall as well as a foot wall, and it will thus resemble a "ham sandwich", to which simile they devote a lot of sarcasm that I am sure you are more than competent to answer in kind. It is certainly my very definite conviction that every true vein must have both a hanging wall and a foot wall in order to qualify as such from either a geological or a legal standpoint, otherwise, it merely becomes a more or less mineralized formation overlying the lower formation and can not be classified as a vein nor entitled to extra lateral rights.

In this case I think that both Flagg and I made it clear that there was no true hanging wall and that the defendant's witnesses failed to convincingly refute our statements; even though they claimed to have found a hanging wall at certain isolated points from which they inferred the existance and course of the hanging wall throughout the entire length that was depicted on their model. But this model did not conform to the testimony of even their own witness as shown by the record.

In reference to the criticism of your definition of a "split apex" (Page 12 of the brief), we certainly showed that the common sideline divided the vein lengthwise over certain sections, and they admit that both Frisbie and I found high grade ore on both sides of the line along the surface of the alleged vein so that its apex was certainly split along the length at those particular points.

In respect to the comment on the application to quiet title, it seems obvious that there are no extra lateral rights if the existance of a true vein as claimed by the defendant has not been proved, and they are evidentally assuming that the Court will follow their argument in respect to the existance and location of the vein when they say that it cannot properly adjudicate the right of the defendant to follow this alleged vein into the property of the plaintiff.

If I understand the situation correctly you will be entitled to file one more brief with the Court before he gives the matter final consideration and I sincerely hope that the result will be favorable to our clients.

Sincerely,

GMC: IW

LAW OFFICES OF
Ellinwood & Ross
8TH FLOOR TITLE & TRUST BUILDING
Phoenix, Arizona

EVERETT E. ELLINWOOD, 1862-1943
JOHN MASON ROSS, 1874-1944

WILLIAM A. EVANS
NORMAN S. HULL
DENISON KITCHEL
FRANK J. RYLEY
★ JOSEPH S. JENCKES, JR.

★ EVERETT M. ROSS
GEORGE E. WOOD
WILLIAM SPAID
W. H. MESSINGER
★ IN MILITARY SERVICE

December 11, 1945.

Mr. G. M. Colvocoresses,
Luhrs Tower,
Phoenix, Arizona.

Dear Mr. Colvocoresses:

Enclosed please find copy of reply brief which I received yesterday and which I thought you might be interested in looking over.

I would appreciate return of this brief after you have finished with it.

Yours very truly,

William A. Evans

WAE - GRH
Enc

PORTIONS OF REPLY BRIEF OF DEFENDANT AND COUNTER-CLAIMANT

In the case of FORCEY vs. MOLSON

CONTINUITY OF THE VEIN

-1-

Throughout their Opening Brief, and again in their Reply Brief plaintiffs refer to defendant and counter-claimant's "theory" of the case. By refusing to recognize the proff established by the evidence adduced by defendant and counter-claimant, and by the use of the word "theory", plaintiffs apparently are attempting to discredit the evidence in the record. It is apparently with this same attitude that plaintiffs attack the authenticity of the exhibits introduced in evidence by defendant and counter-claimant. A review of plaintiffs' comments discloses that apparently their chief concern is with the colors chosen by defendant and counter-claimant in illustrating what was actually found upon the ground by the defendant and counter-claimant. The record discloses that the exhibits introduced by defendant and counter-claimant were scale exhibits and were proprely identified, and the information depicted thereon was explained by competent witnesses so as to properly admit them in evidence. The exhibits of defendant and counter-claimant are properly in evidence for such consideration as the Court might desire to give them, just as are the exhibits of plaintiffs and counter-defendants, regardless of what plaintiffs have to say upon the subject in their Reply Brief.

In the opening paragraph of plaintiffs' Reply Brief it is stated, in referring to defendant's brief:

> "In this discussion defendant does not take issue with plaintiffs' definition of a vein, but seemingly defendant dows not appreciate that in order to justify his extralateral invasion of plaintiffs' property, and even more his attempt to quiet title, the burden of proof is upon him to establish by a preponderance of the evidence the existence and continuity of a vein meeting the requirements of that definition and apexing exclusively within defendant's property to the extent of the segment claimed by him."

With the above supposititious statement as a premise, plaintiffs proceed with sophistic syllogism to a conclusion as false as the premise. In this action defendant, plaintiffs and the Courts are governed, controlled and bound not by "plaintiffs' definition of a vein", but by the definition of a vein established by the Federal Supreme Court in construing a Federal Statute granting extralateral rights to miners on the federal public lands, and followed by the Supreme Court of Arizona. Tom Reed Gold Mines Co. vs. United Eastern Min. Co., 24 Ariz. 269, 209 Pac. 283.

There are several questions to be answered to determine what the judgment shall be in this action. The questions are:

1. Is the body of mineral-bearing rock in the Pure Gold Claim lying along the North side of the common sideline of the Pure Gold and Morning Star Mining Claims and crossing said sideline into the Morning Star claim on its stride or course, a vein within the terms of the Act of Congress?

What is a vein?

The first opinion of the United States Supreme Court decided January 25, 1886 clearly defining a lode or vein is found in Iron Silver Mining Company vs. Cheesman, 116 U. S. 529; 29 L. Ed. 712, 6 Sup. Ct. 481, where Mr. Justice Miller says:

> "What constitutes a lode or vein of mineral matter has been no easy thing to define. In this court no clear definition has been given. On the circuit it has been often attempted."

and following proceeds to analyze the problem.

In the analysis, the instructions of the court below are taken up, summarized and some pertinent portions are quoted and adopted, among which the following is an excerpt:

> "To determine whether a lode or vein exists, it is necessary to define those terms; and as to that, it is enough to say that a lode or vein is a body of mineral or mineral bearing rock, within defined boundaries in the general mass of the mountain. In this definition the elements are the body of mineral or mineral bearing rock and the boundaries;

with either of these things well established, very slight evidence may be accepted as to the existence of the other.

A body of mineral or mineral bearing rock in the general mass of the mountain, so far as it may continue unbroken and without interruption may be regarded as a lode, whatever the boundaries may be.

In the existence of such body, and to the extent of it, boundaries are implied. On the other hand, with well defined boundaries, very slight evidence of ore within such boundaries will prove the existence of a lode. Such boundaries constitute a fissure and if in such fissure ore is found, although at considerable intervals and in small quantities, it is called a lode or vein."

On December 23, 1886, in Hyman vs. Wheeler, 29 Fed. Rep. 347, Judge Hallett in his charge to the jury said:

"It is apparent, however, that, upon any issue touching the existence of a lode or vein in a place designated, a question whether it has one characteristic or antoher is a part only of a main question, and, in the presence of other unquestioned elements establishing the existence of a lode or vein, an issue of that kind becomes immaterial.

To illustrate that matter, it may be said that, with ore in mass and position in the body of the mountain, no other fact is required to prove the existence of a lode of the dimensions of the ore. As far as it prevails, the ore is a lode, whatever its form or structure may be, and it is not at all necessary to decide any question of fissure, contacts, selvages, slickensides, or other marks of distinction, in order to establish its character. As was said in another case in this Court:

> 'A body of mineral or mineral bearing rock, in the general mass of the mountain, so far as it may continue unbroken, and without interruption, may be regarded as a lode, whatever the boundaries may be. In the existence of such body, and to the extent of it, boundaries are implied.'"

"* * * Whether it is in the form of a broken mass of blue and brown lime, between regular walls of the same rocks, or a part of such strata in solid formation, mineralized by replacement of some of their constituents with valuable metals, the result is the same, and the name which science may apply to it is of no importance. An impregnation, to the extent to which it may be traced as a body of ore, is fully within the broad terms of the act of Congress as any other form of deposit."

As to the ham sandwich proposition, it would appear that this analogy is based on the false premise of a pure theoretical, ideal, scientific definition of what a vein "ought to be" and is a part and parcel of the sophistry that permeates the entire structure of plaintiffs' contentions and arguments.

However, since red points are obsolete we need not concern ourselves further with such hammy ideology.

The testimony of Messrs. Colvocoresses and Flagg was most learned and scientific and their reputations entitle their testimony to attentive consideration, but unfortunately it was based on the ideology of a ham sandwich vein (as established by Mr. Richard Fennemore's cross-examination of Mr. Flagg and his cross-examination of Mr. Colvocoresses, who agreed with Mr. Flagg's testimony) and so falls into line and substance with the sophism of the contentions and arguments of plaintiffs.

The value of Mr. Henderson's testimony, which was given from memory exclusively, without notes, measurements, memoranda or records, may be computed in terms of his statement that he could not remember with what degree he was graduated from his University.

Plaintiffs and counter-defendants in their Reply Brief seek to rely upon the broad zone or broad lode theory. The cases which support this theory and cited in part by plaintiffs arose from circumstances entirely different from those in the case at bar. The broad lode cases had reference to specific areas, largely in the State of Utah, and not comparable to the facts of the instant case where a definitely defined vein has been established by competent and unrefuted evidence. These cases are of value only

to the extent of assisting in the determination of the definition of a vein as hereinbefore set forth.

Thre great weight of the evidence in this case is to the effect that there is a vein as established by the defendant and counter-claimant. There can be no such broad zone as plaintiffs and conter-defendants now contend, for the reason that there is no evidence in the record to support such a contention. There is absolutely no evidence of a hanging wall except where the defendant and counter-claimant has proven it to be. There is no evidence of the continuity of an ore body except as the defendant and counter-claimant has proven it to be.

THE SPLIT APEX

Plaintiffs' Reply Brief (p. 10) in referring to the plat accompanying defendant's brief, makes the astounding statement that "the segment of the alleged vein between these two points represents a split apex (Ital. ours) and plaintiffs are the owners, etc."

The word "split" signifies to divide lengthwise, to separate from end to end, and not to divide laterally -- from side to side as is the case here.

The plat referred to correctly represents the situation in strict accord with reason and the authorities cited.

The only place where the split apex question could arise in this action is in the event the bulge of the vein where it is close to the sideline bulged over the line, and that that event does not occur is amply established by the direct, positive, definite testimony of Messrs. Ewing, Frisbie and Pennebaker, and the fact that there was no ore on the surface on the Morning Star to be mined except where our vein crossed the sideline on its strike into the Morning Star ground, at which place Colvocoresses and Frisbie found high-grade ore in the vein on each side of the

line. This possibility may be further rejected for the reason that ther is nothihg in the record to show the width of the vein at this particular point other than as is disclosed by the evidence presented by the defendant and counter-claimant herein.

COUNTER-CLAIMANT'S RIGHT TO QUIET TITLE

Counter-defendants contend that this Court cannot properly adjudicate the right of the counter-claimant to follow his vein extralaterally upon its dip. Counter-claimant's right is established by law, according to the statutes cited in counter-claimant's Opening Brief. As is stated by the Court in Arizona Comm. Min. Co. vs. Iron Cap Copper Co., 232 Pac. 545, 27 Ariz. 202, and cited by counter-defendant: "The statute provides a guide for determining the ownership of the vein when it is uncovered, and its relation to the apex is ascertained." In the instant case counter-claimant has uncovered the vein, he has established its relation to the apex upon his ground. Obviously the Court cannot in metes and bounds determine counter-claimant's rights in those portions underground that are wholly undeveloped. The present operation on the property in question shows the vein to exist. The cores from the drill holes indicate the vein continues in its present general dip. The Court can certainly, in line with the rights given by law, decree that counter-claimant may follow his vein as provided by law. Obviously, should the vein end or the course of the dip change from downward to upward, under the law counter-claimant's right to follow the vein would cease. Were the Court to adopt counter-defendants' reasoning upon this question, the statutes granting extralateral rights would be valueless and there would be no way of operation the properties upon which they attach.

CONCLUSION

It is earnestly submitted that the defendant and counter-claimant in this case has established the facts to be that upon the Pure Gold Mining Claim there was discovered the apex of a scheelite vein, which upon its strike southeasterly crossed the common sideline into the Morning Star claim, and which upon its dip passed in a Southerly direction into the Morning Star Claim; that upon an application of the existing law to these facts defendant and counter-claimant has the right to follow the vein upon its dip extralaterally within the boundaries of the Morning Star Claim.

May 9th, 1944

STATEMENT OF ACCOUNT

Ellinwood & Ross, Attorneys
Title & Trust Building
Phoenix, Arizona

Attention Joseph S. Jenckes, Jr.

to

G. M. Colvocoresses

Re: Morning Star Mining Company

To examination and report on trespass situation as per agreement . . . . . $150.00.

(3 copies of report and map delivered with this account)

Received Payment:

June 1st, 1944

Mr. Joseph S. Jenckes, Jr., Attorney
Ellinwood & Ross
Title & Trust Building
Phoenix, Arizona

File

Re: Morning Star Mining Company

Dear Mr. Jenckes:

This morning I received the checks endorsed from your office aggregating $150.00 completing payment for the examination of the Morning Star property. I am forwarding the receipted statement of account as requested to Mr. Forcey at Oracle.

I thank you very much for attention to this matter and sincerely hope that my visit will prove to be of some value to the Morning Star Company. I believe that I gave them good advice, particularly since I subsequently investigated some similar litigation respecting the apex line of ore deposits of a similar nature, and the problem of the respective rights of the Morning Star and the Pure Gold people is decidedly complicated and would seem to be suitable for compromise settlement rather than by means of litigation.

Please let me know if there is anything more that I can do in respect to this matter, and accept my thanks for having been employed to make the investigation.

With personal regards.

Yours very truly,

GMC/b

October 7th, 1944

Mr. William A. Evans
c/o Ellinwood & Ross Attorneys
Title & Trust Building
Phoenix, Arizona

Re: Morning Star Trespass Suit
L. M. Forcey et al. vs Molson

Dear Mr. Evans:

I have carefully examined the documents which you sent me with your letter of October 5th and have reviewed my file on this subject, especially my letter to Joseph Jenckes, Jr. of your firm, dated May 9th, 1944.

In respect to the Defendants' Answer to the Complaint I wish to make the following comment:--According to my limited observations which confirmed statements made by Eldred D. Wilson in Arizona Bureau of Mines Bulletin (Vol. XII #2) the Mogul Fault outcrops on the Pure Gold Claim about 300' north of the Morning Star line. This Fault strikes west to northwest and dips steeply to the south so that it must cross the common side line of the Pure Gold and Morning Star over 500' below the surface at which depth the formation is wholly unexplored. The Mogul Fault lies along a contact between the Apache sandstone, limestone and quartzite on the footwall side to the south and the pre-Cambrian granite which forms the hanging wall north of the fault.

Therefore the alleged apex or outcrop of the trespass-ore-body is not "immediately south of the Mogul Fault" as stated on page 3 of Defendants' Answer, but actually it is nearly or quite 300' south of this fault and while there may be a genetic connection between the fault and the trespass-ore-body there is no physical connection between them as far as can be ascertained from an examination of the surface and the accessible underground workings.

Defendant goes on to say that the "apex of this vein is located within the Pure Gold Claim in a northwest-southwest direction and intersects the common side line of the Morning Star and Pure Gold Claim at a point approximately 217' west of the southeast corner of the Pure Gold Mining Claim". (This being also the north-east corner of the Morning Star Claim which corner has been clearly monumented by the Deputy Mineral Surveyer and is marked with the number of the Patent Survey,--1836.)

Since the alleged apex of this trespass-ore-body, which has now been mined out,--could not have been more than a maximum of 30' north of the common side line, as noted by my examination, and the course or strike of the vein is claimed to be northwest-~~southwest~~ east it follows that

the apex or outcrop of this vein (if any such vein exists) would of necessity intersect and cross the said common side line at a point some 30 to 60' further to the east and that much nearer to the common corner mentioned above. If such were actually the case then we should have a situation where the apex of the vein would cross the side line and since there is no evidence that the said vein extends for a sufficient length in either direction to cross the east end line of the Morning Star or the west end line of the Pure Gold it might be argued that in reppect to this vein only, the common side line should be treated as an end line which would give no extralateral rights to either claim.

According to my approximate measurements the actual point of trespass was located nearly 350' instead of 217' west of the corner post and between the open pit and the said corner I saw no evidence that any outcrop crossed the line or passed anywhere near it; altho there is a well defined vein lying some 300' to the south on the Morning Star Claims with strike north 65° west and dip about 50° to the south.

However, I still maintain that the trespass-ore-body is not a "vein, lode or ledge" within the legal meaning of those synonomous terms but is merely a detached kidney or pocket of ore deposited as a replacement in the limestone and of irregular shape and size with no strike, dip, footwall or hanging wall and that it cannot be traced beyond the limits of the open stope either along the surface or downward to a point where an adit drift passes almost directly below the workings.

If this fact can be established by competent testimony it is evident that the Defendant could claim no extra-lateral rights at the point of trespass and would be liable as stated in the complaint.

In any event the Defendant has not only followed down the ore in the trespass-ore-body but has also removed some of the surface rock from the Morning Star Claim as well as on the Pure Gold Claim and in so doing has obliterated important evidence as to the character of the surface and of any apex or ledge of which they allege to have existed.

Should your clients desire to have me give expert testimony at the trial of this case I would wish to thoroughly prepare myself by:--

(1) Obtaining and examining the Patent Survey Maps and notes of the Morning Star and Pure Gold Mining Claims.

(2) Studying the recent geological report on this property of which I am told that copies are on file with the Arizona Bureau of Mines in Tucson.

(3) Make another and much more thorough physical examination of the property which would require a two-day trip and enable me to prepare accurate maps and other pertinent exhibits and support my proposed testimony by legal and geological references.

My charges for work of this nature are $100.00 per day and expenses for field and court work away from Phoenix, and $75.00 per day for office work.

In as much as I have a number of engagements for November, I should much prefer to complete my preparation as above during the month of October even though the trial of the case may not follow until several weeks later, and I shall be glad to have you advise me as soon as possible as to whether or not your clients wish to have me proceed.

Yours very truly,

GMC/b