

Bristlecone Pines at timberline on the south flank of Mt. Bross looking south. Sheep Mountain is the peak in the upper right of the photograph.

ADVANCED TOPICS AND CASE HISTORIES IN MINERAL SURVEY RESURVEYS COURSE OUTLINE AND OBJECTIVES

D. Rectifying the GLO Policy

1. The Act of April 28, 1904 and the importance of original accessions. Does the Act give mineral survey corners special status?
2. Department of the Interior Land Decisions after the Act.
 - a. Sinnott v. Jewett (33 L.D. 91)
 - b. Drogheda & West Monroe Extension (33 L.D. 183)
 - i. Revision of Paragraph 147 of the Mining Circular
 - ii. Instructions issued to Colorado U.S. Deputy Mineral Surveyors
 - c. United States Mining Co. v. Wall (39 L.D. 546)

Bristlecone Pines at timberline on the south flank of Mt. Cross looking northwest.

THE MINING REPORTER ARTICLES 1903 - 1904

- **Records Vs. Monuments - December 10, 1903**
- **The Groves Case - December 24, 1903**
- **Land Office Rulings In Patent Cases - January 14, 1904**
- **Land Office Ruling Of June 1899 - January 21, 1904**
- **The Effect Of The Land Office Rulings - January 28, 1904**
- **The Necessity Of Preserving Monuments In Good Condition February 4, 1904**
- **What The Government Is Actually Doing To Mineral Patents February 4, 1904**
- **The Standpoint Of The Deputy Mineral Surveyor - February 11, 1904**

The Mining Reporter was a weekly trade journal published in Denver, CO. Beginning in late 1903 and continuing through the fall of 1904 a series of articles on the Binger Hermann policy were published in *The Mining Reporter*. The articles discussed many of the negative impacts of the policy. Two solutions were developed to end the General Land Office practice.

The first was an administrative attempt to end the policy by submitting a case to the GLO Commissioner that was so egregious that the Land Office would concede the folly of the policy. The second was to petition Congress to enact legislation that forced the GLO to terminate the policy.

Several articles published in *The Mining Reporter* are listed on this and the next slide. They are available in a separate PDF file with the course materials for those interested in reading period articles on the effects of the Binger Hermann policy.

Note: Cor. No. 3, King William Lode, Sur. No. 5387.

THE MINING REPORTER ARTICLES 1903 – 1904 (Cont.)

- **Monuments Records And The Locus Of Mining Claims February 18, 1904**
- **Mine Monuments - March 24, 1904**
- **The New Mineral Law Relative To Patents - May 5, 1904**
- **Test Suit Brought To Secure Interpretation Of New Brooks Act - May 12, 1904**
- **Record v. Monument - August 25, 1904**
- **Surveying For Patent - October 6, 1904**

Note: Cor. No. 1, Little Johnnie, No. 2, Sur. No. 15092 (also, Cor. No. 4, Little Johnnie No. 3, Sur. No. 17716).

WHAT THE GOVERNMENT IS ACTUALLY DOING TO MINERAL PATENTS.

The diagrams shown are enlarged copies of some of those used by the United States Mining Department, and the Denver Chamber of Commerce before the House Committee on the Executive of January 21st. They were used for the purpose of showing the practical workings of the present department system, which starts patented mining claims from their true

and plainly show the difference between the map, the claims of the land section, and the position of the survey, the government now declares that they actually are satisfied.

Figure 4 represents a section of land as established on the ground by its official survey system. It also shows the various parcels of claim in this land section in their true relation to each other, as they are actually calculated by mathematical and trigonometric means, as they would be found by any competent surveyor of the ground.

Map A.



Section 4, Township 16 South, Range 69 West, Cripple Creek District, showing patented claims as they are staked on the ground, according to reports filed in the Mineral Division, United States Surveyor General's Office.

position, and they show the lines which the claims do not occupy on the ground.

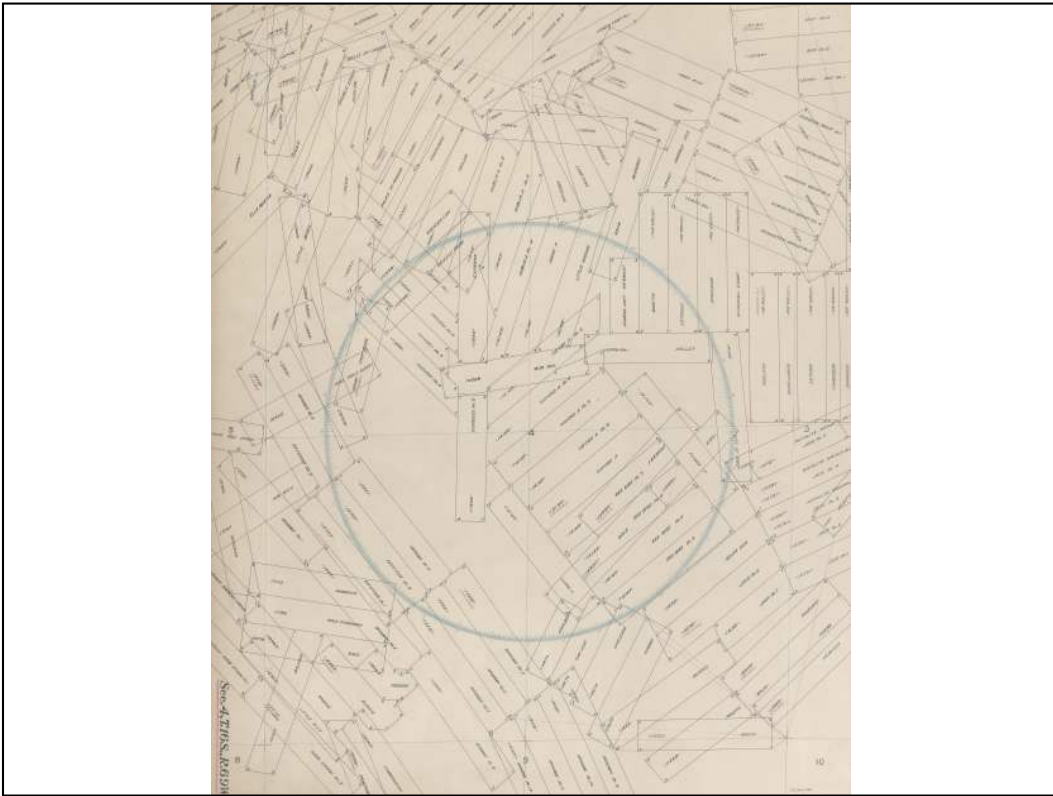
Fig. 4 represents a section of land as established on the ground by its official survey system, and the various parcels of claim in this land section in their true relation to each other, as they are actually calculated by mathematical and trigonometric means, as they would be found by any competent surveyor of the ground.

Fig. 4 represents a section of land as established on the ground by its official survey system, and the various parcels of claim in this land section in their true relation to each other, as they are actually calculated by mathematical and trigonometric means, as they would be found by any competent surveyor of the ground.

An article that showed how the Binger Hermann policy had adversely affected the mining industry. Not only did the policy show erroneous positions for prior patented mining claims, those erroneous positions onto ground actually open to mineral entry precluded future entry to that ground.

The article, "What The Government Is Actually Doing To Mineral Patents" was not signed but was written by a past U.S. Deputy Mineral Surveyor, Arthur J. Hoskin who surveyed in the Cripple Creek, CO area. From *The Mining Reporter*, Vol. XLIX, No. 5, February 4, 1904, pp. 108-109.

Note: The "X" on the plat is an area in the SW ¼ of Sec. 4, T. 16 S., R. 69 W., 6th P.M. open to mineral entry that a mining claimant is interested in claiming under the U.S. Mining Laws.

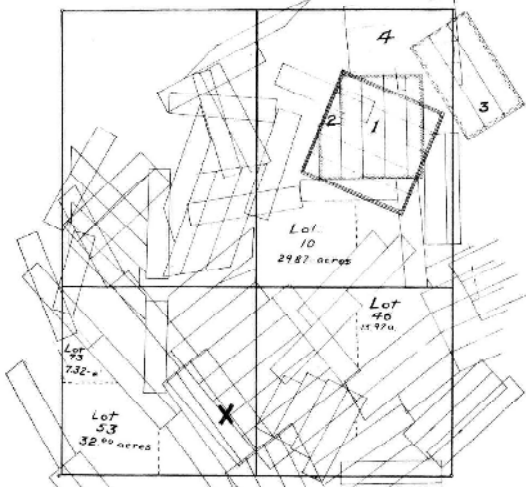


Connected sheet of Sec. 4, T. 16 S., R. 69 W., 6th P.M. that shows the true positions of the mining claims and is the same as the sketch diagram on the previous page.

the section do not constitute a partition, and in respect to the dip, the surveyor has no authority to alter the line of the dip.

Figure 3 is a vertical map of the same idealized land section showing the same claims, but in a nearly different arrangement. Claim 1 is taken from a line, section and placed at top of Group 4, and thus covers the entire right line in the

vertical diagram in Washington. Map B is substituted therefore as the official segregation sheet by which the government determines who has the mineral, who has the surface and who has the water, and who has the right to take minerals from the surface, and upon a legal basis. Map A is a section, map B is a group, map A is created by the land department, map B is adapted. Claims are thereby settled about the alleged mineral.



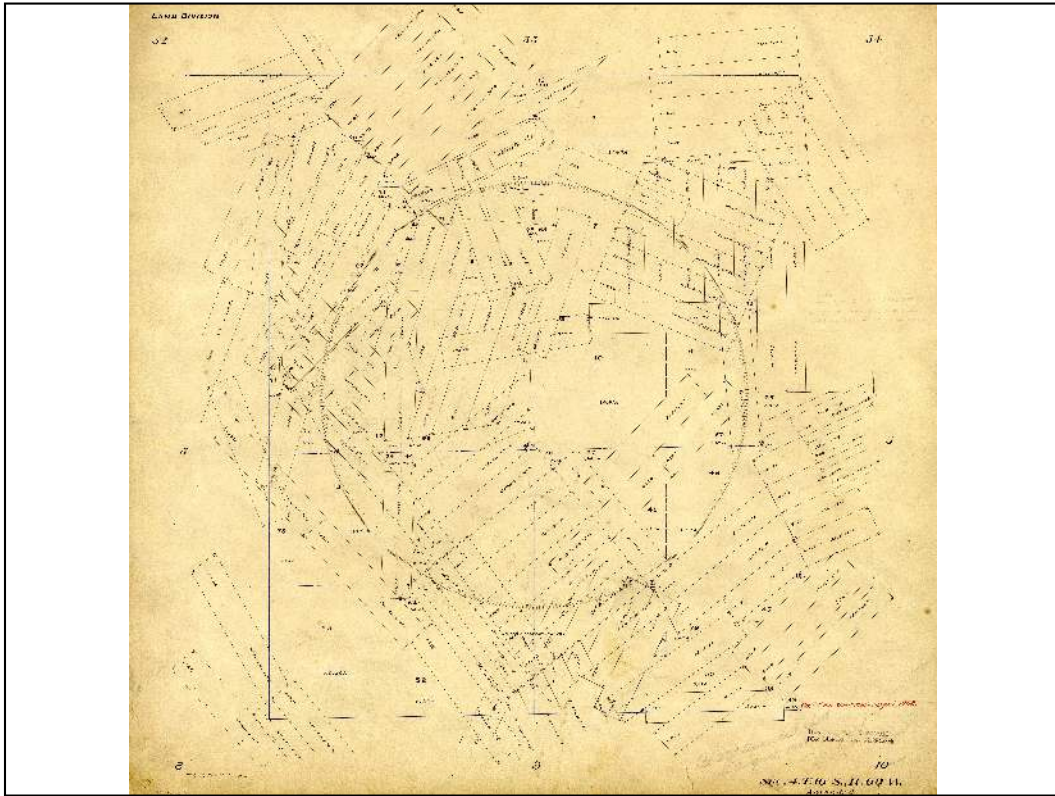
Section 4 Township 40 North, Range 69 West, Cripple Creek District, showing claims as they are now served by the Department to be patented, according to the mineral segregation diagram of the Land Division of the United States Survey General's Office.

and to the up 4 is like a small island there is a top of a 4. Of the 100 gate to, certain shows that it and one which exceeds the construction, 250 1A, 10, 29 and 27, containing some other areas, and there is no other, although some of the areas is in possession of the Patent claims. Of the area land, the tract marked 27 is covered by the unpatented claim on map 4. The unpatented claims are shown from the survey for the section and diagram 11 shows the same as is described by various patents.

Although map A is constructed from claims, and is found in the field by every mineral survey, it is not the official diagram of the mineral rights, which is patented, it is now open to acquisition, and may be mineral or surface. Claims which are actually patented and open to acquisition, to be patented to claims which are patented different times.

It should be stated in conclusion that the conditions which obtain as to section 4 also obtain, in varying degrees, as to every one of the fifty land sections which cover the Cripple Creek situation, and as to every land section in all the mineral districts of Colorado and every other mining state.

This sketch shows the patent description positions of the patented claims and are based upon an idealized section. In this scenario, the "X" is no longer located on open ground and the Land Office voided the unpatented lode claims staked to claim the area. Depicting the patent description positions in an idealized section created a "no man's land" where it was impossible to secure the mineral rights to a valuable mineralized area south of Cripple Creek, CO.



Segregation diagram of Sec. 4, T. 16 S., R. 69 W., 6th P.M. that shows the patent description positions of the mining claims and is the same as the sketch diagram on the previous page.

Note: The lower left portion of the segregation diagram shows that it was prepared and amended by J.S.W. on Jan 23, 1902 a draughtsman in the Colorado Surveyor General office. A later 2nd amended segregation diagram of this section was made in August 1908.

THE GROVES CASE

The "mining men of the West" were determined to see the General Land Office policy overturned and mounted a two-prong attack to attain their goal. The Groves case was selected to be the administrative appeal case.

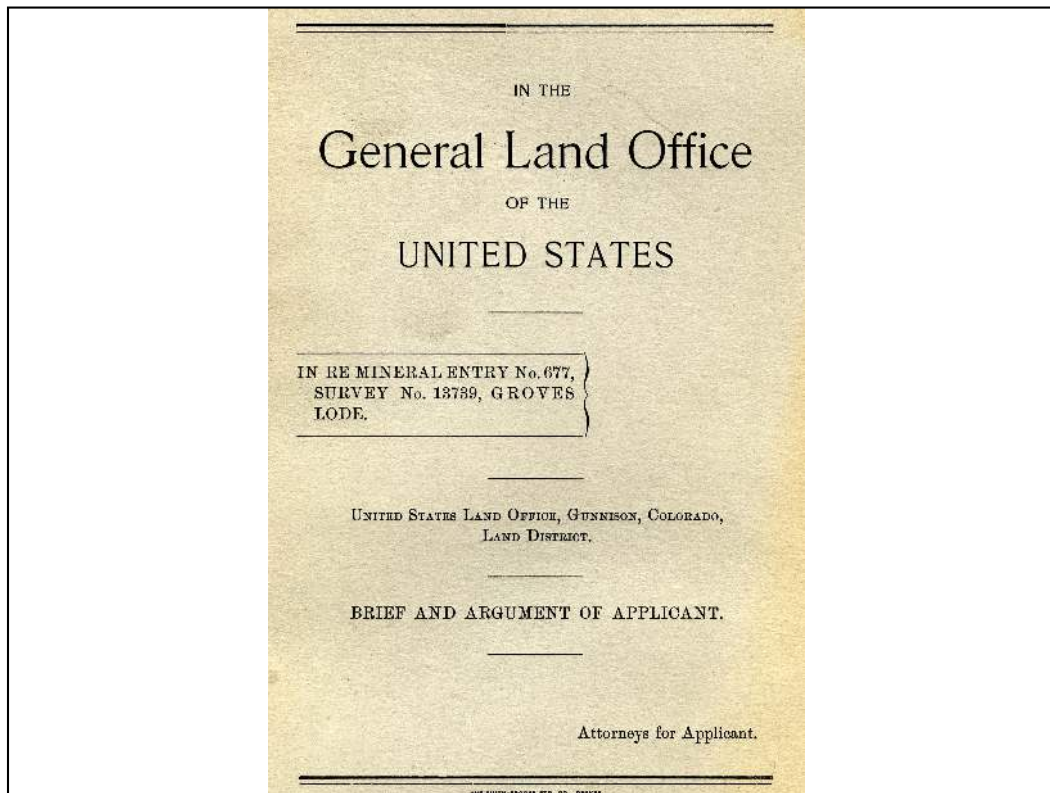
It was selected for its impact, both for the grievous error depicted on the Groves plat and the teary, emotional plight of the owner who was a mere miner's widow without means! It had all the elements of the Dudley Do-Right cartoon with the men of the Land Office playing the role of Snidely Whiplash and Alzina Dilley playing Nell, the damsel in distress. The Colorado Mine Operators' Association (funding the effort) and the Colorado Society of United States Deputy Mineral Surveyors tag-teamed as the hero Dudley Do-Right. The mineral surveyor of the Groves Lode Claim was George R. DeNise who was President of the CSUSDMS. The deputy mineral surveyors banded together since as a group they could voice their displeasure at the GLO policy. As individual mineral surveyors, they were bound by their sworn duty to follow the GLO instructions.

THE GROVES CASE (Cont.)

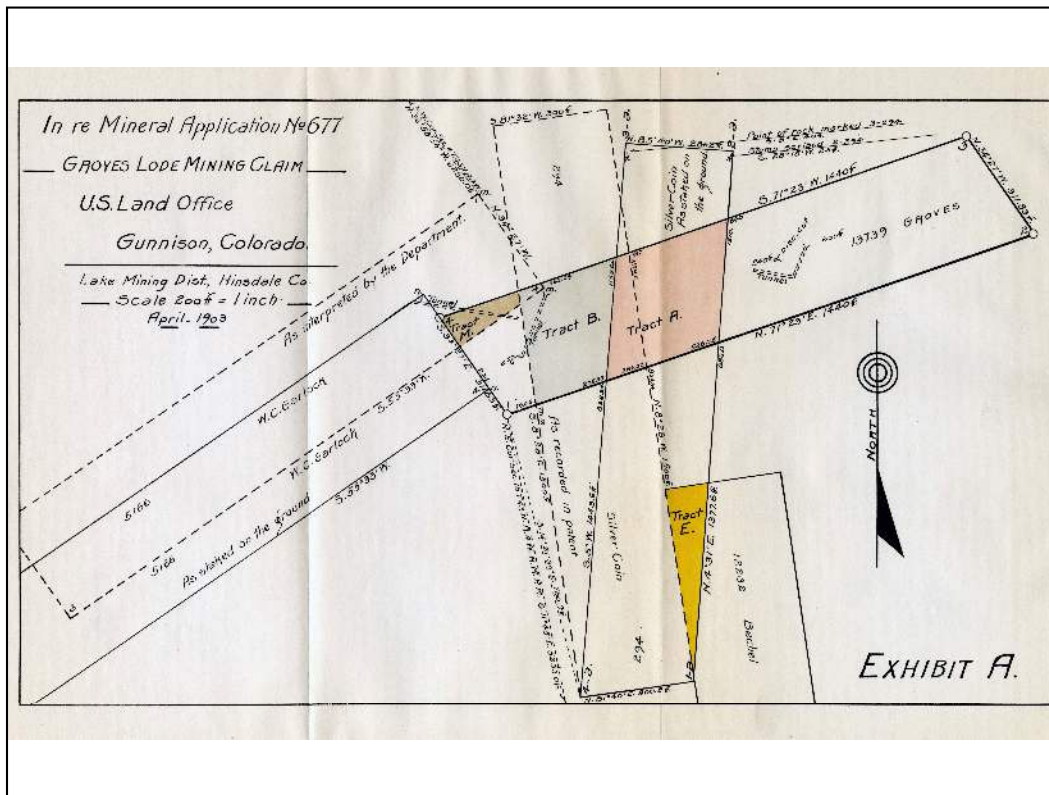
The Groves case was published as a Christmas story on December 24, 1903 in *The Mining Reporter*. Mr. A.W. Warwick, the editor of *The Mining Reporter* concluded his article with, "Right and justice must prevail." Research of the Groves case unearthed a copy of the, "Brief and Argument of Applicant" and inside the back cover is a sticker with, "Compliments of Geo. R. DeNise, 306 E. & C. Bldg., Denver, Colo."

This case was *worse* than the Lucky Strike quasi-contest case as approx. 27,000 ft. of traverse was used by the GLO to show the relative positions of the Groves Lode to the W.C. Garlock Lode, when in reality they shared a common end line! The Exhibit A map shows the reason for the error in the position of the Silver Coin. The bearings in the original survey are magnetic, but reported as true bearings. Therefore, the Silver Coin was shown on the plat of the Groves Lode as if the bearings were true bearings!

Also, note that the surveyor showed the original accessories at the north end line of the Silver Coin on the Exhibit A map.



Cover page of the brief submitted to the General Land Office with the hope that the Land Office will overturn the Binger Hermann policy. Unfortunately, the GLO Commissioner was not able to rule on the case because a previous Department of the Interior land decision, Mono Fraction Lode Mining Claim (31 L.D. 121) was decided by Ethan Allen Hitchcock, the Secretary of the Department of the Interior. The case languished in the Secretary's office leaving Congressional legislation as the only path to correct the, "evil foisted upon the mining industry."



Sketch map submitted with the Groves brief showing the two positions of the Silver Coin Lode, Sur. No. 295.

The sketch used tracting to distinguish between the positions of the Silver Coin Lode and showed the positions of the original accessories at the north end line of the Silver Coin Lode.

Note: The position of the W.C. Garlock Lode, Sur. No. 5166, "as interpreted by the Department" with respect to the Groves Lode, Sur. No. 13739 is based on the 6200+ ft. connection between Cor. No. 1 of the W.C. Garlock Lode to the NW Cor., Sec. 4, T. 43 N., R. 4 W., New Mexico P.M., the record dimensions on the township subdivision plat (1882) from the NW Cor. Sec. 4 to the NE Cor. Sec. 16 and then 5200+ ft. to Cor. No. 1, Groves Lode. The computed connection of N. 16°18' E., 345.3 ft. was therefore based on a combination of 27,000 ft. of traverse and record information! The amended survey of the Groves Lode showed that Cor. No. 4, W.C. Garlock as staked bears from Cor. No. 1, Groves Lode, N. 34°27' W., 87.8 ft.

ACT OF APRIL 28, 1904

30 USC Sec. 34

TITLE 30 - MINERAL LANDS AND MINING

CHAPTER 2 - MINERAL LANDS & REGULATIONS IN GENERAL

Sec. 34. Description of vein claims on surveyed and unsurveyed lands; monuments on ground to govern conflicting calls

The description of vein or lode claims upon surveyed lands shall designate the location of the claims with reference to the lines of the public survey, but need not conform therewith; but where patents have been or shall be issued for claims upon unsurveyed lands, the Director of the Bureau of Land Management in extending the public survey, shall adjust the same to the boundaries of said patented claims so as in no case to interfere with or change the true location of such claims as they are officially established upon the ground.

ACT OF APRIL 28, 1904 (Cont.)

30 USC Sec. 34

TITLE 30 - MINERAL LANDS AND MINING

CHAPTER 2 - MINERAL LANDS & REGULATIONS IN GENERAL

Where patents have issued for mineral lands, those lands only shall be segregated and shall be deemed to be patented which are bounded by the lines actually marked, defined, and established upon the ground by the monuments of the official survey upon which the patent grant is based, and the Director of the Bureau of Land Management in executing subsequent patent surveys, whether upon surveyed or unsurveyed lands, shall be governed accordingly.

The said monuments shall at all times constitute the highest authority as to what land is patented, and in case of any conflict between the said monuments of such patented claims and the descriptions of said claims in the patents issued therefor the monuments on the ground shall govern, and erroneous or inconsistent descriptions or calls in the patent descriptions shall give way thereto.

Act of April 28, 1904 (Cont.)

Questions:

Does the Act grant mineral survey corners special status?

When the Act states that the monuments on the ground shall be the superior evidence of what ground was patented, should that include corners of senior claims?

For example, if the mineral survey field notes include a call to a senior line, does that mean that the monuments marking that senior line also control what ground has been patented?

If corners to senior claims are included, does that mean that corners to junior claims should be included in fixing the locus of the senior claim? Or should junior corners be regarded as witnessing the senior line, but not controlling it?

ACT OF APRIL 28, 1904 (Cont.)

Questions (cont):

If the answer to the previous question is yes, should a monument of the junior mining claim that doesn't reach the senior line (i.e. there is a gap between the junior and senior claims) be regarded as a closing corner?

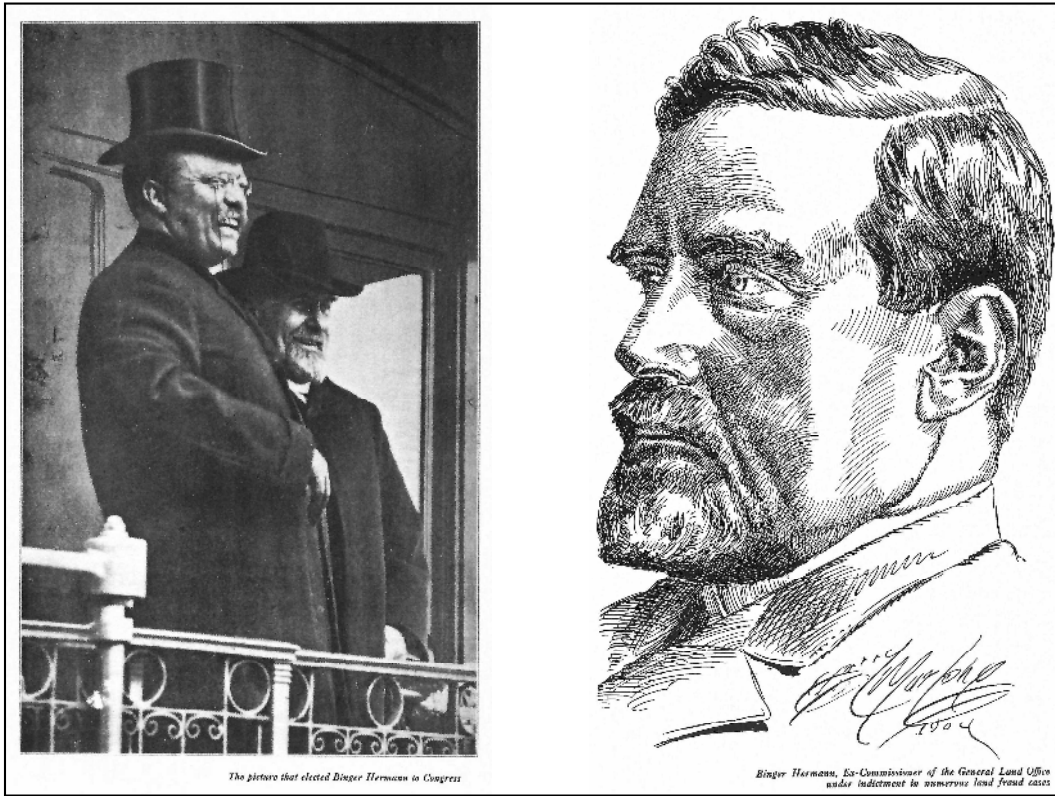
Or should the call to the senior line be governed by the clause, "calls in the patent descriptions shall give way thereto" and, therefore, the junior corner as established by the U.S. Deputy Mineral Survey should be treated as a control corner of the senior claim's boundary line?

Thankfully, this policy only lasted five years!

Binger Hermann's resignation was accepted at the end of January 1903 after the DOI Secretary, Ethan Allen Hitchcock requested it early in 1902. On January 11, 1903, Thomas H. Tongue died. He had replaced Binger Hermann in 1897 as U.S. Congressman for the 1st Congressional District in Oregon.

Mr. Hermann reportedly won the special election to replace Mr. Tongue by posing next to Teddy Roosevelt during a campaign stop in Portland Oregon. At that moment, a photographer snapped a photo of the two men. Mr. Hermann circulated the photograph throughout his district to show voters that Teddy supported him. Ironically, Mr. Hermann voted on the Act of April 28, 1904 that rescinded his ill-conceived policy.

In 1905, he was indicted for accepting bribes during his tenure as GLO Commissioner. His alleged crimes were documented by S.A. Puter in, "Looters of the Public Domain". In 1910, a jury failed to return a verdict and the case was dismissed.



The infamous photograph of President Roosevelt and his recently resigned Commissioner of the General Land Office from S.A. Puter's book, "Looters of the Public Domain", page 386. The sketch to the right is from page 62 of the same book.

DEPARTMENT OF INTERIOR LAND DECISIONS THAT CORRECTED THE PROBLEMS INHERENT IN THE BINGER HERMANN POLICY

Two situations must be dealt with separately to correct the problems created by the Binger Hermann Policy.

The first is the situation where there is a real conflict between two claims on the ground, but the theoretical positions show no conflict. This situation is dealt with in the *Sinnott v. Jewett* land decision.

The second is the situation where there is no real conflict between the two claims on the ground, but the theoretical positions do show a conflict (e.g. in the "expressly excepting and excluding" clause of the patent). This situation is dealt with in the *Drogheda & West Monroe Extension* land decision (included in Paragraph 147 revision of the Mining Circular).

**DROGHEDA & WEST MONROE EXTENSION
DOI 33 L.D. 183 – AUGUST 11, 1904**

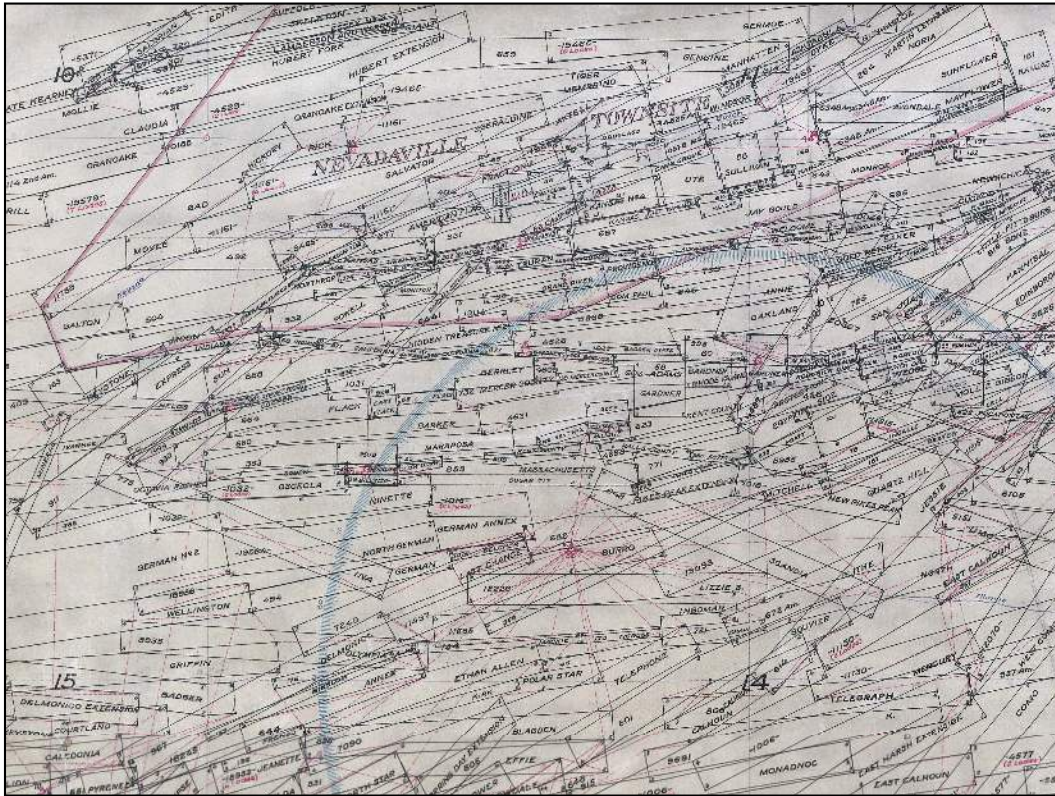
The survey of a mining claim, whereby record conflicts with prior surveys are made to appear which are alleged to have no existence in fact, can be approved by the surveyor-general only when it is determined, agreeably to the principle of the case of Sinnott *v.* Jewett, what conflicts therewith, if any, must be recognized, and the conditions are shown accordingly.

https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/doi_decisions_033.pdf (Page 209 of PDF file)

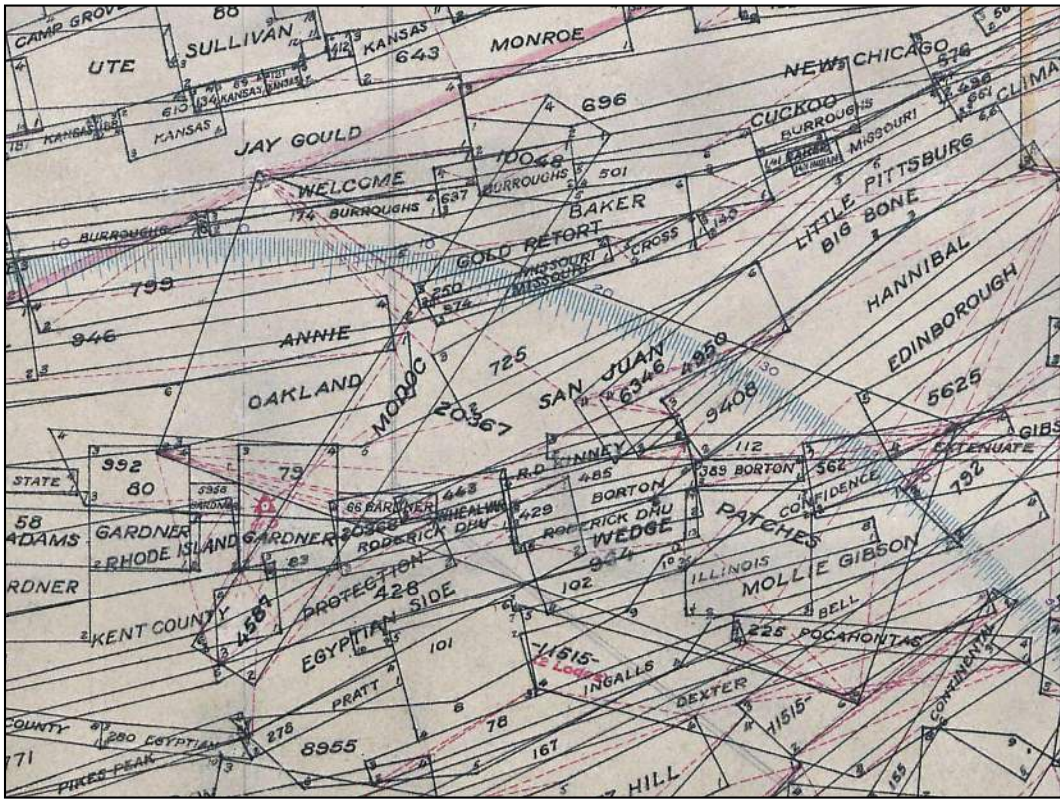
13654 Sur. No.	CLAIMANT Charles Horning.		Mineral Surveyor	
	Drogheda.			
West Monroe Extension.				
		Abandoned		
Location: Sec. , T. , R.	DATES ORDER	RETURNS FILED	RET'D. FOR CORRECTION	SURVEY APPROVED:
	11-23-99			ORIGINAL SURVEY Plat. Bk. No.
County:	AM. ORDERS			Field Bk. No.
Mng. Dist.	7-25-06			AM. Plat. Bk. No.
Land. Dist. , M. E. No.				Field Bk. No.
Date of Patent 19 , No.	Misc. 64266 8276-07 GLO. 5327-5472-5562-5731-5911-6061-6927-7687 '01 '02 '04 '06			

BLM index card of the Drogheda and West Monroe Extension lode claims, Sur. No. 13654 showing that the mineral survey was never approved. The precise location of the two claims is not known except for references to the prior official surveys in some of the ten GLO Departmental letters issued for this case from March 26, 1901 through August 30, 1908 The case is also referenced as Quasi Contest No. 2028 in the GLO Departmental letters.

Note: The two lode claims were eventually abandoned with the only remaining evidence of their positions being the location certificates recorded by the Gilpin County Clerk and Recorder and the correspondence from the Colorado Surveyor General to the GLO Commissioner referenced in the GLO Departmental letters.



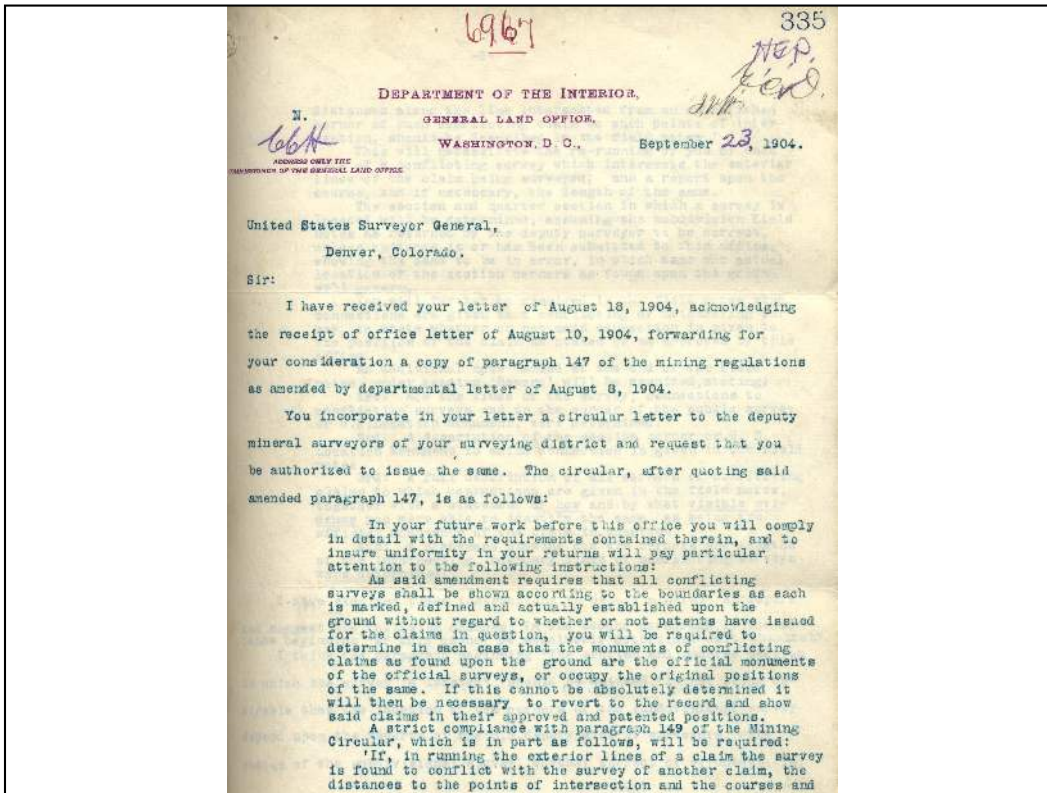
Connected sheet of the NW¹/₄ of Sec. 14, T. 3 S., R. 73 W., 6th P.M. with the Nevadaville Townsite along the top of the drawing. From the information described in the Quasi Contest No. 2028 correspondence, the Drogheda and West Monroe Extension are most likely located along the southern boundary of the Nevadaville Townsite between the Indiana lode claims and the Monroe lode claims.



Close-up view of the connected sheet. The two claims are likely to the north and west of the Patches Lode, Sur. No. 20367.

**DROGHEDA & WEST MONROE EXTENSION
PARAGRAPH 147 OF THE MINING CIRCULAR MODIFIED**

If an official mineral survey has been made in the vicinity, within a reasonable distance, a further connecting line should be run to some corner thereof; and in like manner all conflicting surveys and locations should be so connected, and the corner with which connection is made in each case described. Such connections will be made, and conflicts shown according to the boundaries of the neighboring or conflicting claims as each is marked, defined, and actually established upon the ground. The mineral surveyor will fully and specifically state in his return *how* and by what *visible evidence* he was able to identify on the ground the several conflicting surveys and those which appear according to their returned tie or boundary lines to conflict, if they were so identified, and report errors or discrepancies found by him in any such surveys. In the survey of contiguous claims which constitute a consolidated group, where corners are common, bearings should be mentioned but once.



On August 18, 1904, the Colorado Surveyor General submitted draft circular instructions to the GLO Commissioner's office in response to the revision to Paragraph 147 issued with the Drogheda and West Monroe Extension land decision. This GLO Departmental Letter "N" (Index No. 6967) issued on September 23, 1904 approved the draft with two changes.

distances along the line intersected from an established corner of such conflicting claim to such points of intersection, should be described in the field notes.'

This will necessitate the re-running by you of each line of a conflicting survey which intersects the exterior lines of the claim being surveyed; and a report upon the course, and if necessary, the length of the same.

The section and quarter section in which a survey is located will be determined, assuming the subdivision field notes as returned by the deputy surveyor to be correct, unless evidence is or has been submitted to this office, showing the same to be in error, in which case the actual location of the section corners as found upon the ground will govern.

You will further be required in the field notes, when connections are given to a conflicting or neighboring survey, to state whether or not said connection is given to the position of the claim as staked or as approved by this office.

An additional note added at the end of the field notes, under heading 'Report' will be required, stating:

- 1st: How the lines of the survey, connections to conflicting surveys and to the corner of the public survey or U.S. Location Monument, were determined.
- 2nd: A description of the section corner or U. S. Location Monument to which connection is given in the field notes.
- 3rd: A full description of all corners of conflicting claims to which connections are given in the field notes, together with a statement of how and by what visible evidence you were able to identify the same as being the official monuments of the claim in question.
- 4th: A statement showing how the corners and lengths of the intersecting boundary lines of conflicting surveys were determined.

I have examined these instructions to deputy mineral surveyors and suggest the following changes: In the second paragraph, in the sentence beginning "if this cannot be absolutely determined" omit "absolutely".

I think the paragraph beginning "The section and quarter section in which the survey is located" should be omitted, it not being desirable that the location of the corners of the subdivisional survey depend upon the reports of the U.S. deputy mineral surveyors. The status of the subdivisional survey, whether correct or erroneous, is

The changes to the circular instructions were removal of the word, "absolutely" in the second paragraph and removal of the paragraph starting with "The section and quarter section in which the survey is located...."

Note: The paragraph to be omitted required mineral surveyors to report the actual positions of rectangular survey corners when evidence indicated that the field notes were in error. The Commissioner's opinion was that it was not, "desirable that the locations of the corners of the subdivisional survey depend upon the reports of U.S. deputy mineral surveyors."

not affected by the provisions of said amended paragraph 147. In this connection your attention is invited to the case of the Mary Darling Lode (31 L.D.64).

If the changes suggested are made there would appear to be no objection to the instructions so far as I can now determine. It may be well to state here that if the report of the deputy mineral surveyor is unsatisfactory with respect to the locus on the ground of prior adjoining or conflicting surveys, indicating a failure to make a thorough search for the monuments thereof, or there is evidence in your office showing facts different from those reported, a further examination and report should be required before the survey is finally acted upon.

Very respectfully,

J. H. Finkle
Assistant Commissioner.

The Departmental Letter "N" concludes with a statement that mineral surveyors shall make a thorough search of monuments of prior official surveys and if not, an additional examination should be required before approving the survey.

A note appended to the field notes of survey states that--

This survey does not show the positions of the various conflicting claims as surveyed, patented and fully identified on the ground but as required by the Honorable Commissioner of the General Land Office fictitious positions are shown according to ties given to far distant, poorly established, shifting monuments, supposed to be corners of the public survey.

It is presumed that it is the purpose of the deputy surveyor who made the survey to show the conflicting claims in accordance with their descriptions and not as identified upon the ground and in the positions that they are understood to be by persons acquainted therewith.

According to paragraph 147 of the Regulations, amended August 8, 1904, conflicting claims will be excluded in accordance with their positions as identified and monumented upon the ground, and in order that the correct position may be accurately known it is provided that--

Excerpt from GLO Departmental Letter "N" indexed 6951, dated September 12, 1904. The survey referred to is of the Mars Hill, Friend in Need, Invincible No. 2, Bunker Hill, Golden Leaf, Golden Leaf No. 2 and New lodes, Sur. No. 16100 that is located west of Boulder, CO.

Note: The surveyor's note was included in the field notes of Sur. No. 16100 prepared by U.S. Deputy Mineral Surveyor O.F. Shattuck and approved on January 3, 1903. The notation was not responded to until after Paragraph 147 of the mining regulations was amended on August 8, 1904 in compliance with the provisions of the Act of April 28, 1904.

**Excerpts from *CIRCULAR INSTRUCTIONS*
*TO U.S. DEPUTY MINERAL SURVEYORS FOR THE DISTRICT OF COLORADO***

[Amended Paragraph 147 of Mining Regulations] requires that all conflicting surveys shall be shown according to the boundaries as each is marked, defined and actually established upon the ground without regard to whether or not patents have issued for the claims in question; you will be required to determine in each case that the monuments of conflicting claims as found upon the ground are official monuments of the official surveys, or occupy the original positions of the same.

You will further be required in the field notes, when connections are given to a conflicting or neighboring survey, to state whether or not said connection is given to the position of the claim as staked or as approved by this office.

An additional note added at the end of the field notes, under heading "Report" will be required, stating:

1. How the lines of the survey, connections to conflicting surveys and to the corner of the public survey or U. S. Location Monument, were determined.
2. A description of the section corner or U. S. Location Monument to which connection is given in the field notes.
3. A full description of all corners of conflicting claims to which connections are given in the field notes, together with a statement of how and by what visible evidence you were able to identify the same as being the official monuments of the claim in question.
4. A statement showing how the courses and lengths of the intersecting boundary lines of conflicting surveys were determined.

The changes were made to the circular instructions and forwarded to the U.S. Deputy Mineral Surveyors for the District of Colorado at the end of September 1904.

Note: The instructions were also published under the title, "Surveying for Patent," in *The Mining Reporter*, Vol. L, No. 14, October 6, 1904, pp. 346-347 with the following footnote, "This circular finally puts into force the regulation which does away with the establishment of the locus of the claim by tie to the section corner, especially when the claim under survey conflicts with another."

Report.

1st - This survey was made by running line 3-4 of Sun Flower no. 2 lode and the end lines of each claim. Direct connection on the ground was made with Cor. nos. 1 and 4 Sur. no. 571 Jay Gauled lode, Cor. no. 2 Sur. no. 8413 Enterprise lode, Cor. no. 4 Sur. no. 926a. Tanner Boy lode, Cor. no. 1 Night Hawk lode and Cor. no. 2 May Queen no. 4 lode. Cor. nos. 1 and 2 of Sur. no. 2179 Three Rivers lode have been carried away by snow slides. The courses of lines 2-3 Sur. no. 8413 Enterprise lode, 1-2, 3-4 and 4-1 Night Hawk lode and 1-2 and 2-3 May Queen no. 4 lodes were determined on the ground.

The "Report" section required by the circular instructions issued by John F. Vivian at the end of September 1904 were appended to the end of the official field notes. Circa 1932, this section was renamed to "Other Corner Descriptions."

This example of a "Report" section is from the official field notes of the Sun Flower No. 1 and Sun Flower No. 2 lodes, Sur. No. 17480 that was approved on January 24, 1905.

Connection to $\frac{1}{4}$ Cor. was made by a
 traverse from Cor. no. 4 Sun Flower no. 2
 lode.

2nd The $\frac{5}{8}$ Cor. Sec. 33 is a schist stone
 8x6 ins. projecting 6 ins. out of the ground
 with mound of stone, chiseled $\frac{1}{4}$ on
 North face. There are two bearing
 trees to this corner each blazed and
 scented B. T. $\frac{1}{4}$

3rd - Cor. no. 1 Sun no. 571 Jay Gould lode,
 is a granite stone 8x6 ft. projecting 14
 ins. out of the ground with mound of
 stone, chiseled $\frac{1}{571}$. Cor. no. 4 Sun. no.
 571 Jay Gould lode is a granite stone
 15x6 ins. projecting 18 ins. out of slide
 rock with mound of stone chiseled
 $\frac{4}{571}$. Cor. no. 4 Sun. no. 926 A Tanner

Continuation of the "Report" section. In addition to the descriptions of corners of prior official surveys are descriptions of the accessories set for those corners to verify that the found monuments still occupy the positions established by the other deputy mineral surveyor.

Box lode is a granite stone 8x12 ins. pro-
jecting 12 ins. out of the ground with
mound of stone chiseled $\frac{1}{4}$ in. There are
two bearing trees to this corner.
Cor. no. 2 Sur. no. 8413 Enterprise lode
is a schist stone 26x18x5 ins., set in
the ground with mound of stone, chis-
eled $\frac{3}{4}$ in. This corner has a bearing
tree and rock as described in its offi-
cial field note. Cor. no. 3 Sur.
no. 8413 Enterprise lode is a quartz
stone 24x9x7 ins. set in slide rock
with mound of stone, chiseled $\frac{3}{4}$ in.
Tie from Cor. no. 4 Summit lode
to Cor. no. 1 as patented, Sur. no. 2179
Three Rivers lode was computed
using the tie from Cor. no. 1 of said
Sur. no. 2179 to $\frac{1}{4}$ corner as given
in its patent.
4th The courses and lengths of the
intersecting boundary lines of con-
flicting surveys were determined
on the ground.

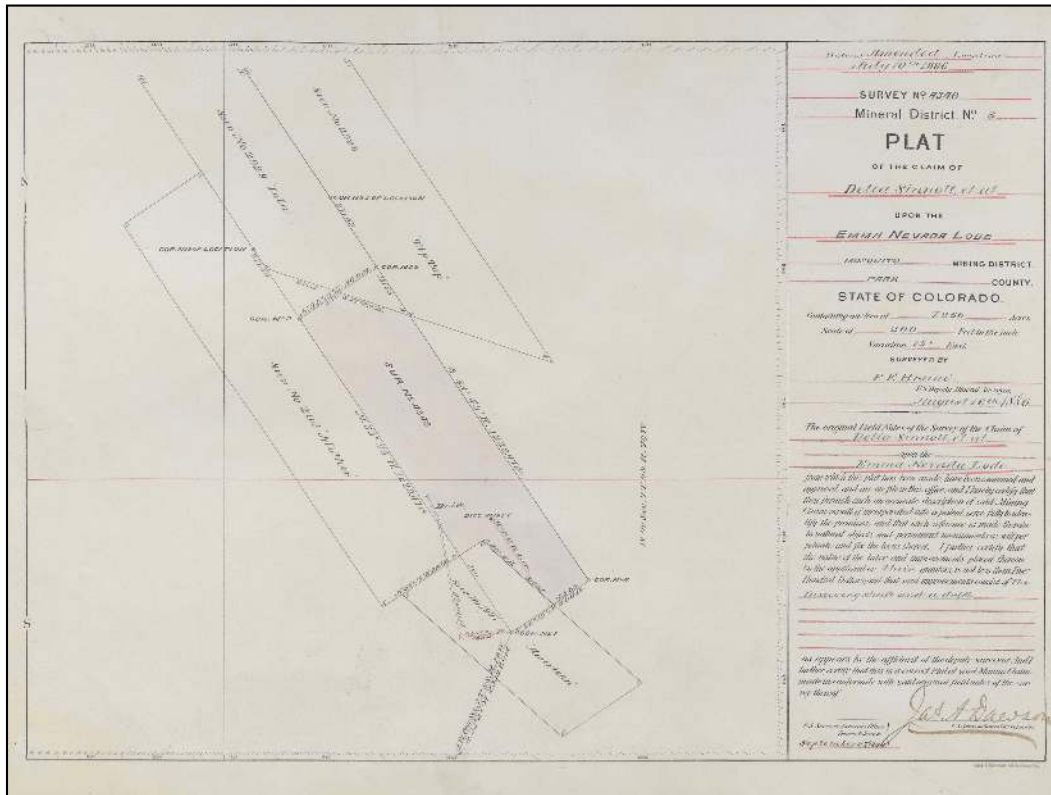
Continuation of the "Report" section. The position of the Three Rivers Lode, Sur. No. 2179 was not found and shown at its computed position through its connection to the $\frac{1}{4}$ corner as described in its patent.

SINNOTT V. JEWETT
DOI 33 L.D. 91 – JULY 12, 1904

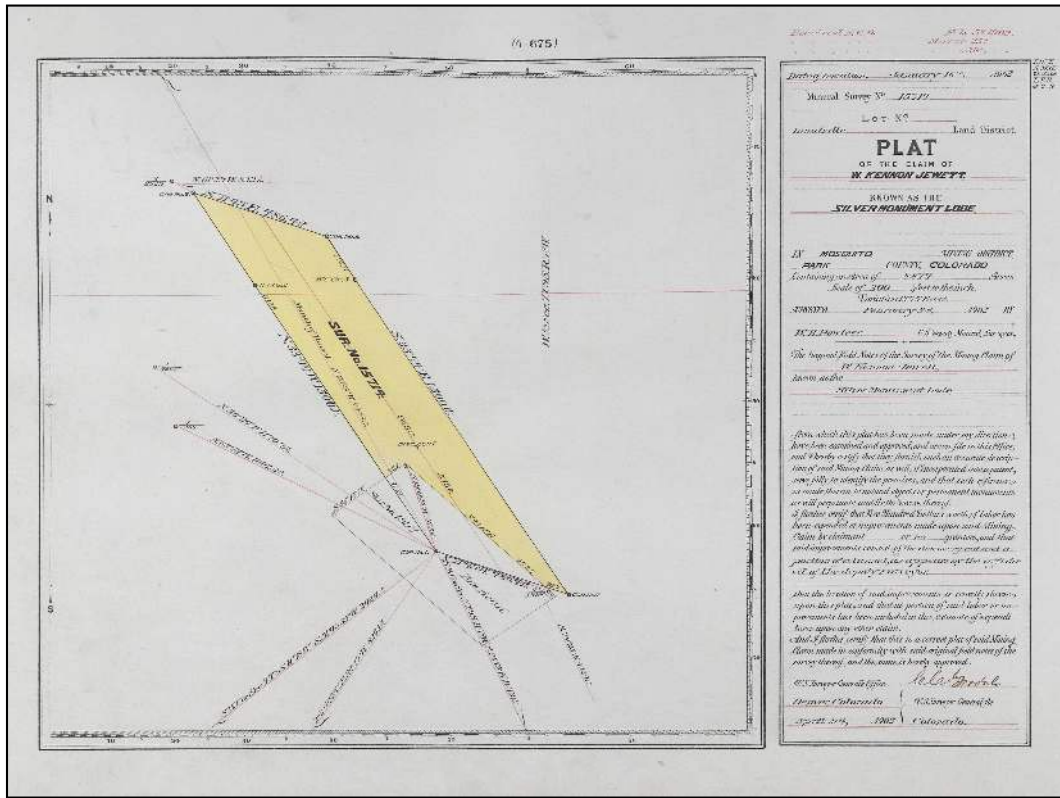
In case of variance between the *locus* of a patented mining claim as indicated by the tie line described in the patent, from a corner of the claim to a corner of the public survey or a United States mineral monument, and as defined upon the ground, the land department will regard as constituting the patented claim, and will not receive further application for patent to, the tract of land embraced in the survey and bounded by the lines actually marked, defined, and established on the ground by monuments substantially within the requirements under the law and official regulations and corresponding to the description thereof in the patent.

This is an excellent DOI land decision to read in its entirety. It describes many precedents supporting the boundary law principle that monuments control over course and distance. The decision also states that the appellee was unable to cite a single decision to the contrary.

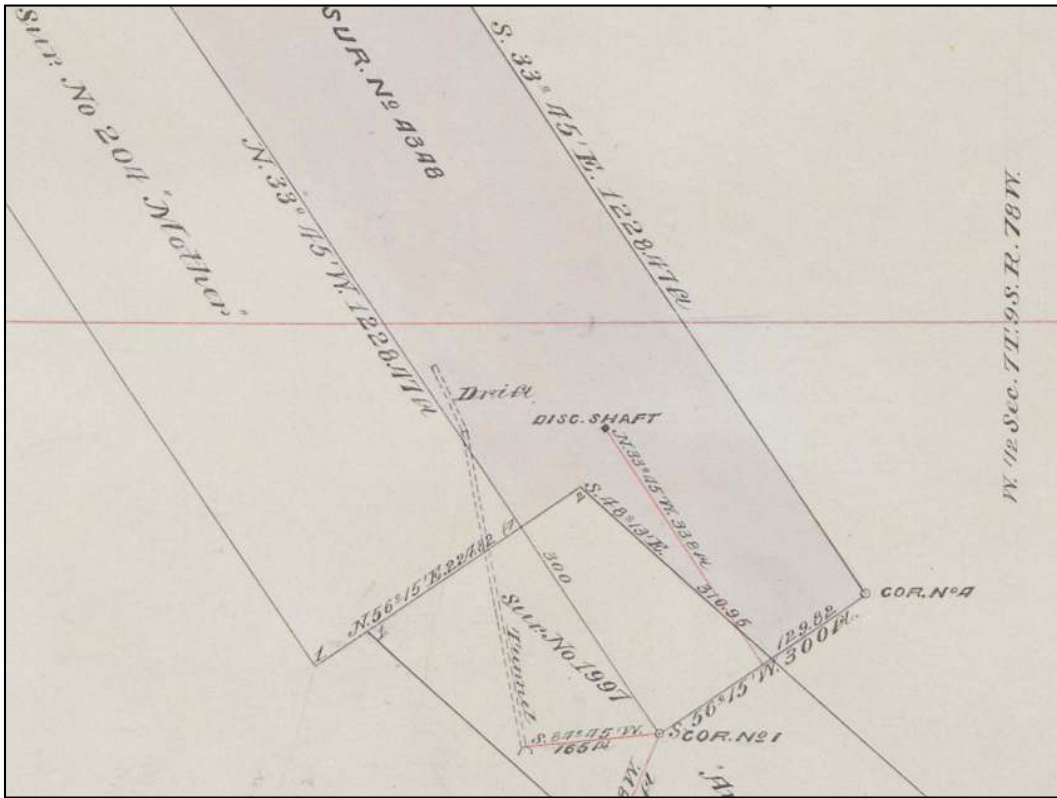
https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/doi_decisions_033.pdf (Page 117 of PDF file)



Plat of the Emma Nevada Lode, Sur. No. 4348 showing a connection made to the SW Cor. Sec. 7, T. 9 S., R. 78 W., 6th P.M. This claim was discovered on July 2, 1885, an amended location filed on July 10, 1886, survey conducted on August 16, 1886, survey approved on September 2, 1886, mineral entry date of December 14, 1886, and patent date of June 4, 1889.

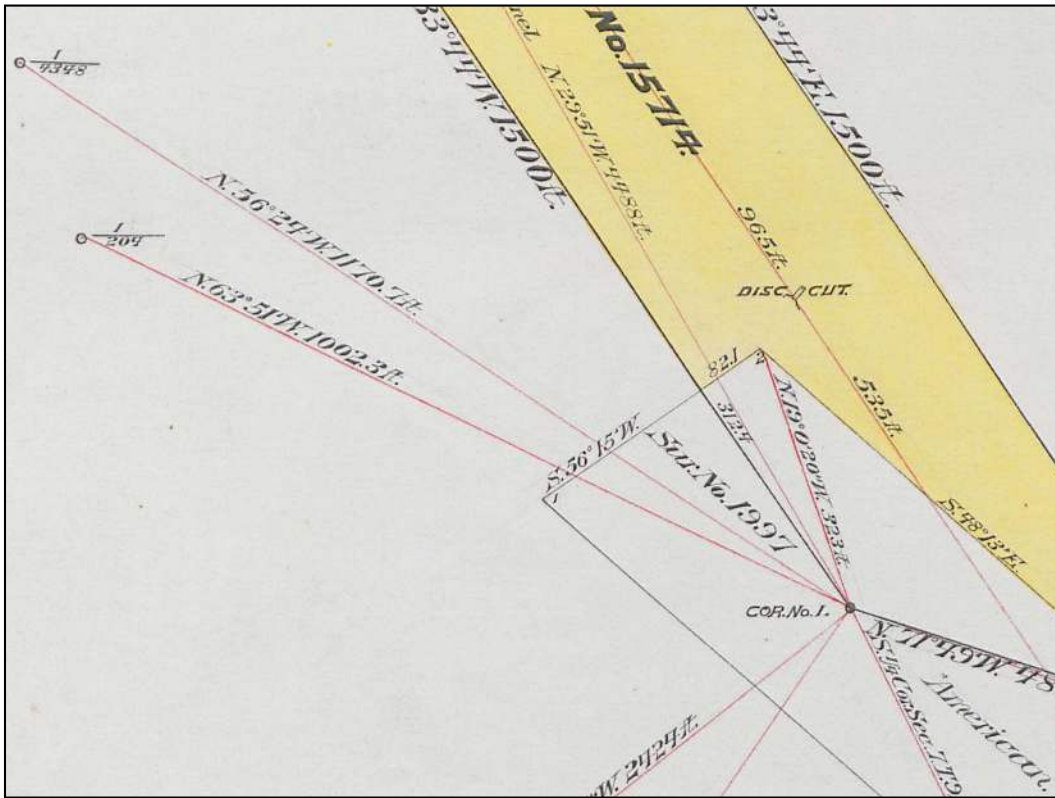


Plat of the Silver Monument Lode, Sur. No. 15714 showing a connection made to the SW Cor. Sec. 7, T. 9 S., R. 78 W., 6th P.M. This claim was discovered on January 6, 1902, survey conducted February 1-3, 1902, survey approved on April 21, 1902, and mineral entry date of April 28, 1902. The *Sinnott v. Jewett* land decision issued on July 12, 1904 voided the claim.



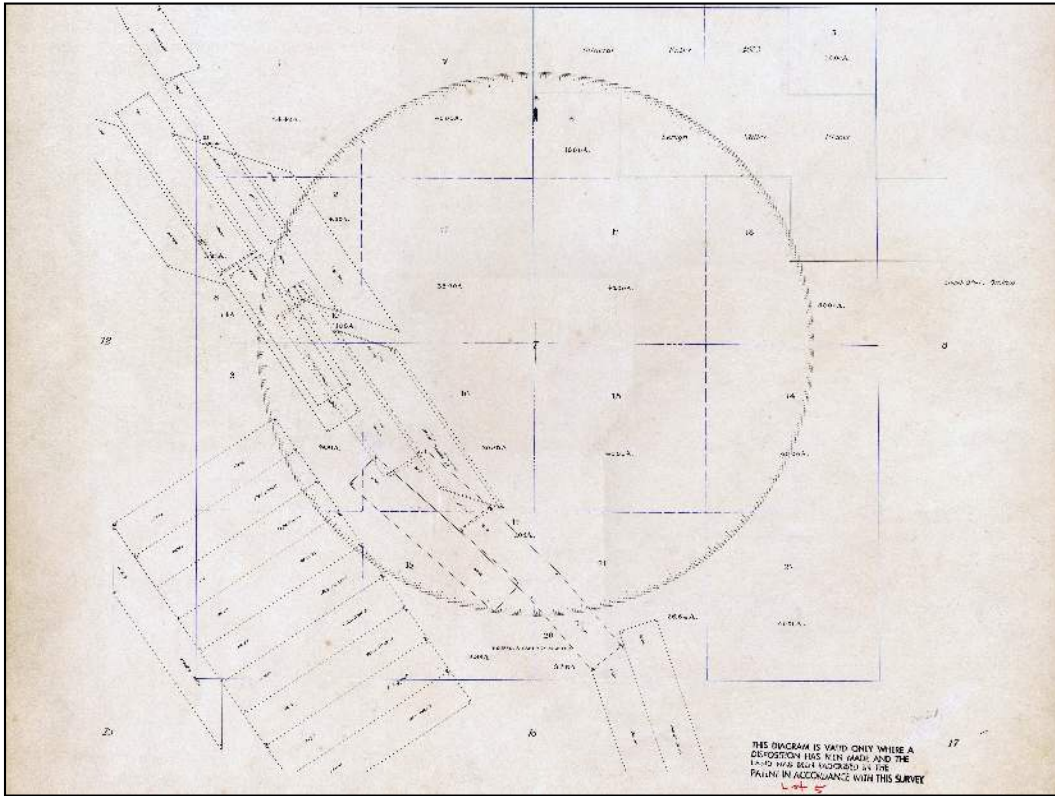
Close-up view of the Emma Nevada Lode showing it being contiguous with the Mother Lode, Sur. No. 204 and overlapping the American Lode, Sur. No. 1997.

Note the positions of Cor. No. 1, American Lode and the Emma Nevada discovery shaft.

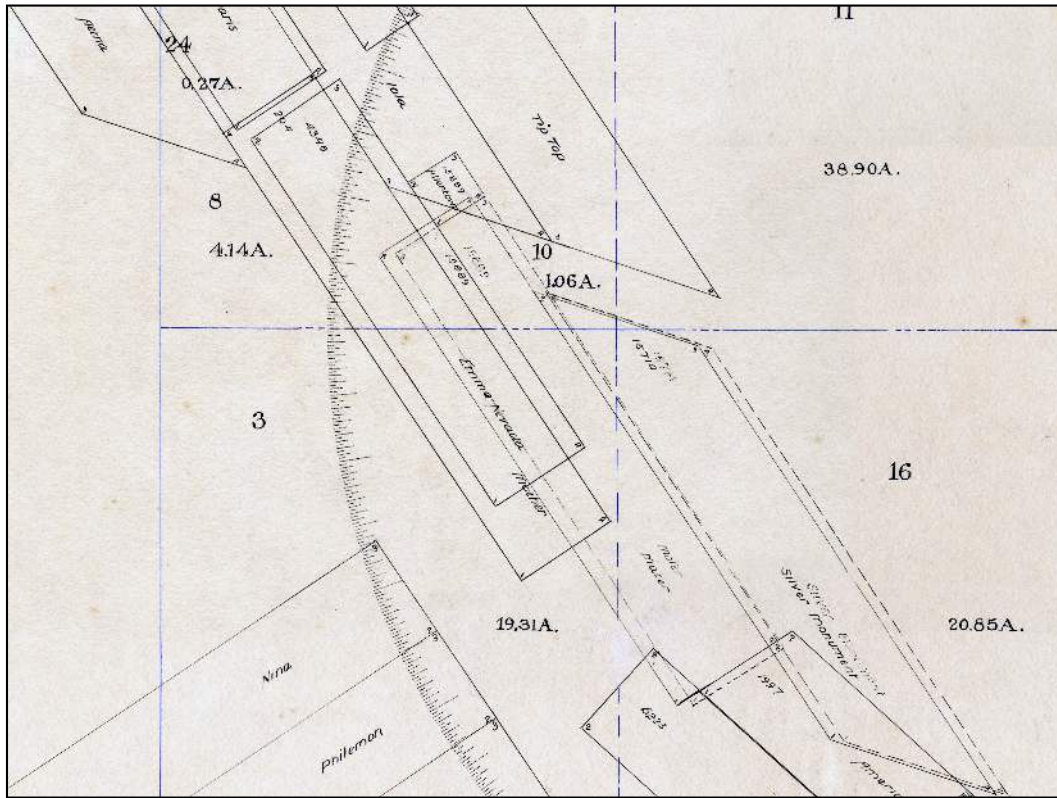


Close-up view of the Silver Monument Lode showing it overlapping the American Lode, Sur. No. 1997. Note the positions of Cor. No. 1, American Lode and the Silver Monument discovery cut. The Silver Monument discovery cut is only 15 ft. from the Emma Nevada discovery shaft.

Note: The tie from Cor. No. 1, Silver Monument to Cor. No. 1, Emma Nevada Lode is $N. 56^{\circ} 24' W$, 1170.7 ft. This tie is to the patent description position of the Emma Nevada Lode. Based upon a 2009 field survey the connection between the two corners, "as staked" is $N. 26^{\circ} 33' W$, 20.26 ft.

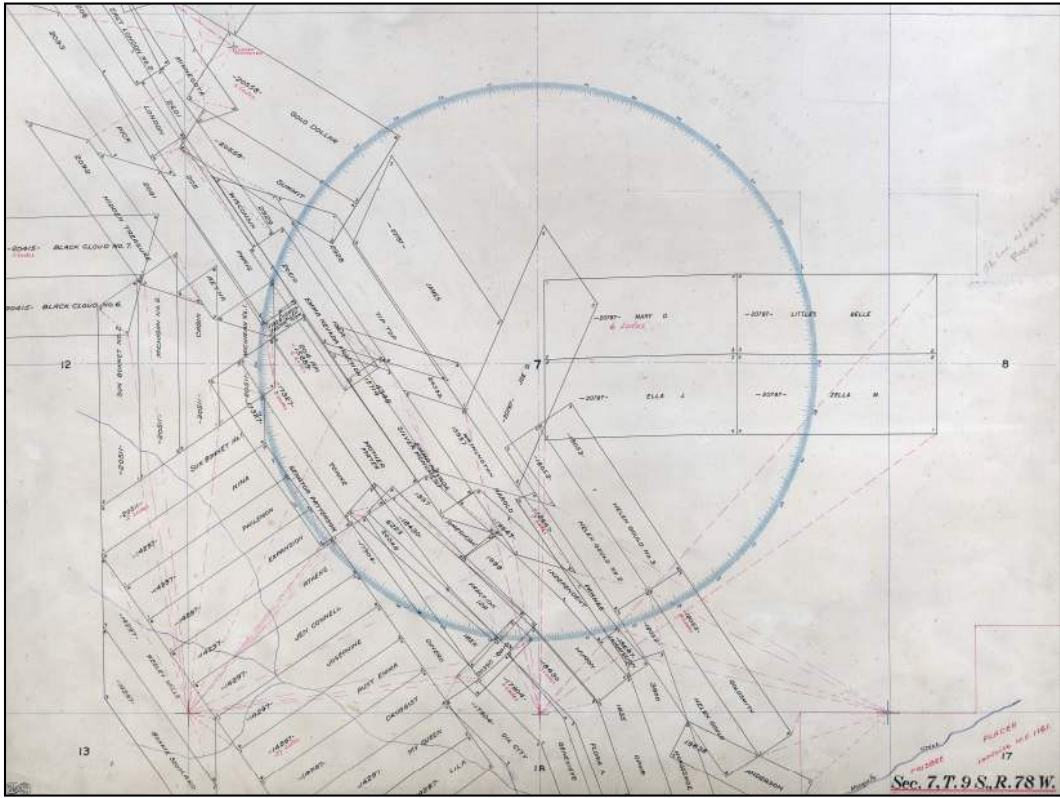


Segregation diagram of Sec. 7, T. 9 S., R. 78 W., 6th P.M. prepared in July 1902 showing the patent description positions of the mining claims.

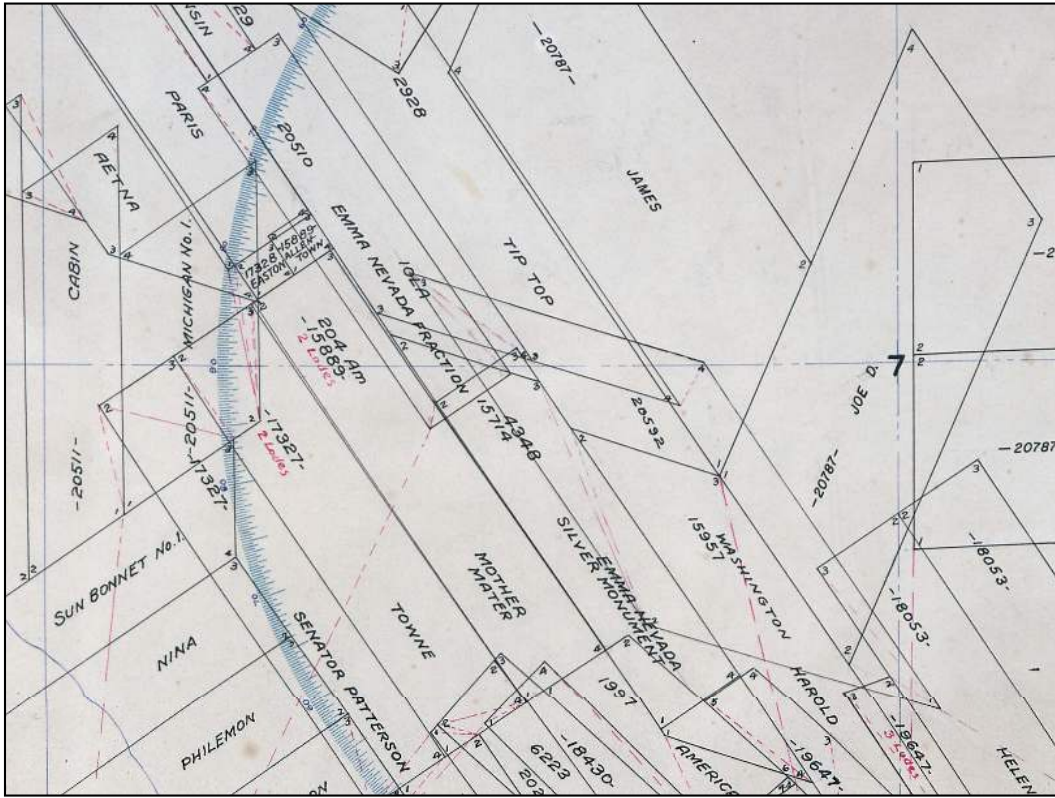


Close-up view of the segregation diagram showing the patent description position of the Emma Nevada Lode, Sur. No. 4348 and Mother Lode, Sur. No. 204 in relation to the plat of the Silver Monument Lode, Sur. No. 15714.

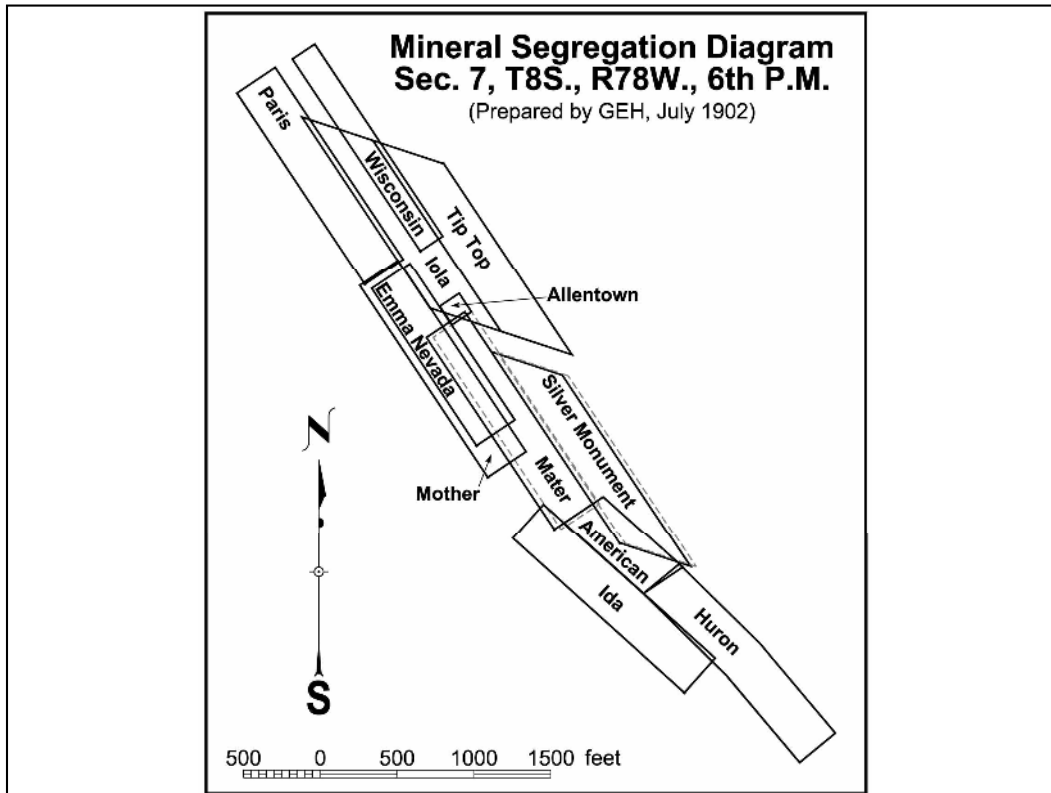
Note: No information is given for the dashed positions of the Silver Monument Lode and the Mater Lode, Sur. No. 15889.



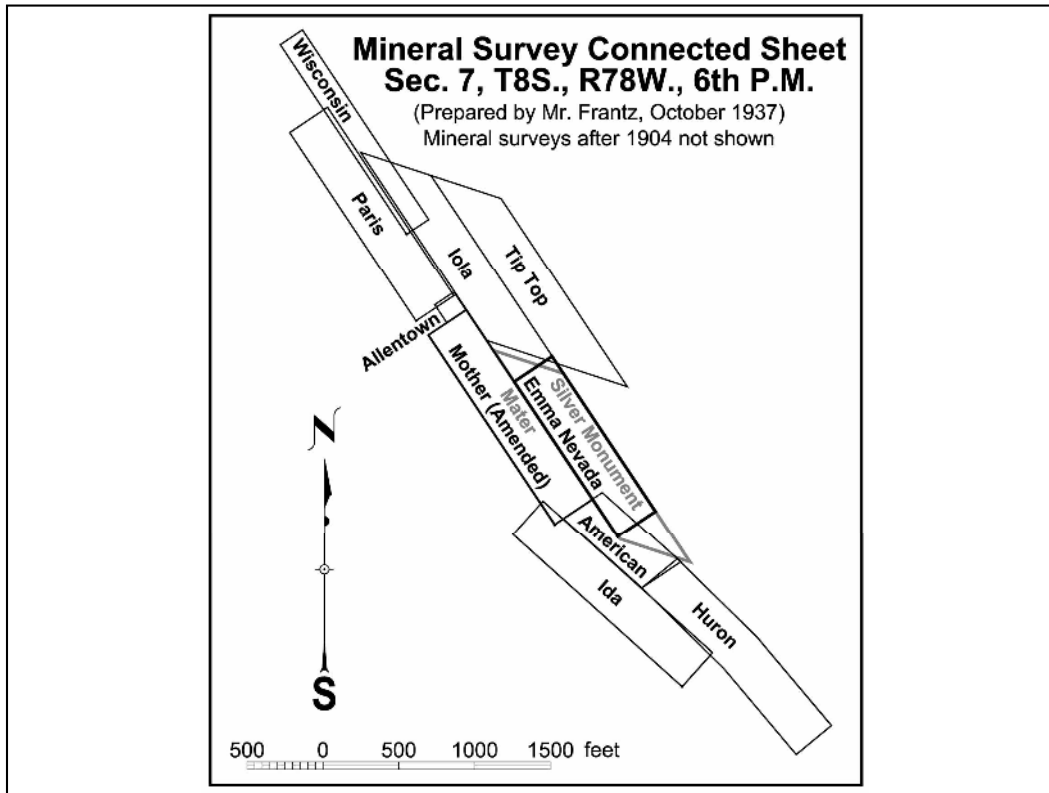
Connected Sheet of Sec. 7, T. 9 S., R. 78 W., 6th P.M. prepared in October 1937 showing all the approved mineral surveys in the section.



Close-up view of the connected sheet showing all the approved mineral surveys in the area of the Emma Nevada Lode and the Silver Monument Lode. The connected sheet shows the two lode claims essentially occupying the same ground.



Sketch of segregation diagram of Sec. 7, T. 9 S., R. 78 W., 6th P.M. prepared by GEH in July 1902 showing the patent description positions of all mining claims in relation to the Silver Monument Lode.



Sketch of connected Sheet of Sec. 7, T. 9 S., R. 78 W., 6th P.M. prepared showing only the mineral surveys approved through 1904 (same claims as shown on the segregation diagram sketch).



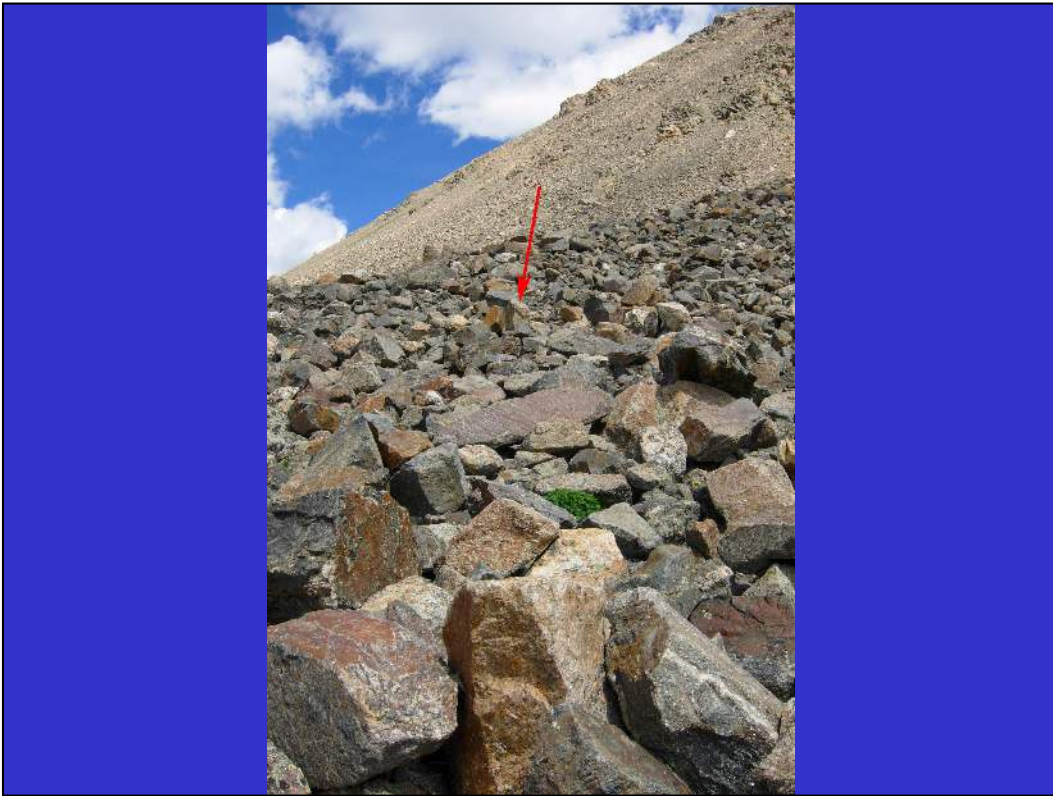
Photograph of Cor. No. 1, Emma Nevada Lode, Sur. No. 4348 a quartz monzonite porphyry stone chiseled "No 1 x 4348".

Note: From Cor. No. 1, Emma Nevada Lode to SW Cor. Sec. 7 – S. $51^{\circ}17'10''$ W., 2427.42 ft. (record S. $23^{\circ}27'$ W., 2339.20 ft.). The mineral surveyor who conducted this survey often had errors in his surveys, esp. long connections to PLSS corners.



Photograph of Cor. No. 4, Emma Nevada Lode, Sur. No. 4348 a quartz monzonite porphyry stone chiseled "No 4 x 4348".

Note: From Cor. No. 4 to Cor. No. 1, Emma Nevada Lode – S. 55°54' W., 300.61 ft. (record S. 56°15' W., 300.0 ft.).



Photograph taken at Cor. No. 1, Silver Monument Lode, Sur. No. 15714 (in center foreground) looking to the north-northwest with an arrow pointing to Cor. No. 1, Emma Nevada Lode, Sur. No. 4348.

Note: Measured tie is N. $26^{\circ}27'$ W., 20.26 ft; record tie is N. $56^{\circ}24'$ W., 1170.7 ft.



Photograph of Cor. No. 1, Silver Monument Lode, Sur. No. 15714 a quartz monzonite porphyry stone chiseled "1 15714" on the vertical face and a chiseled "X" on the top face that marks the corner position.

Note: From Cor. No. 1, Silver Monument Lode to SW Cor. Sec. 7 – S. $51^{\circ}45'15''$ W., 2423.23 ft. (record S. $51^{\circ}49'35''$ W., 2424.0 ft.).



Photograph of a permanent backsight erected at the SW Cor. Sec. 7, T. 9 S., R. 78 W., 6th P.M. looking to the northeast at the mining claims described above with London Mountain in the background.



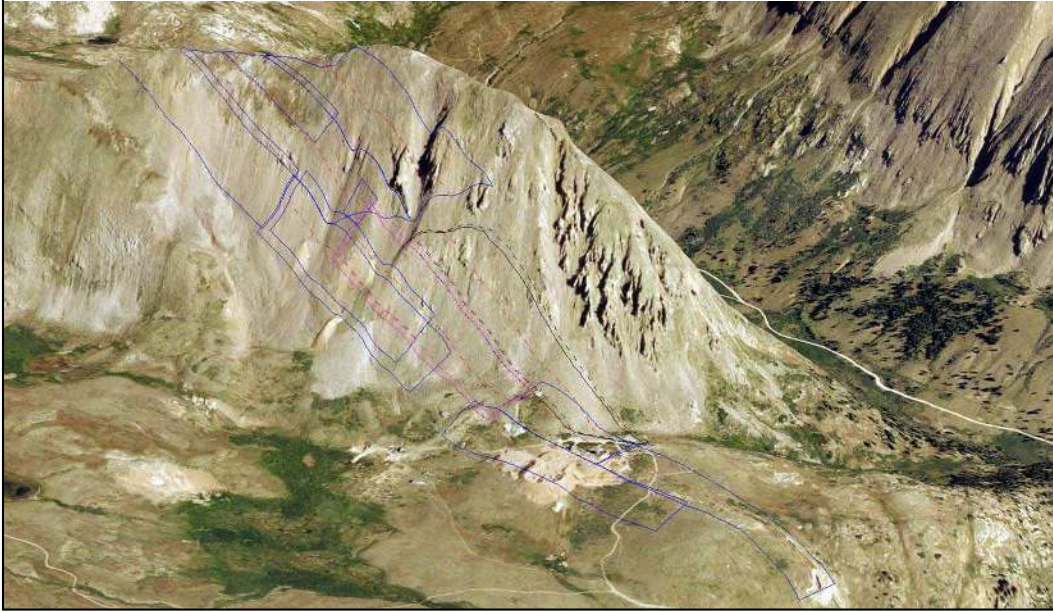
Photograph of the SW Cor., Sec. 7, T. 9 S., R. 78 W., 6th P.M., a granite stone 10" x 5" and projecting 8" above ground. The north, vertical face (nearest field book) shows two horizontal grooves highlighted by moss.

Note: Corner is located in a boggy area of American Flats at an elevation of 11,989.1 ft. (NAVD88).



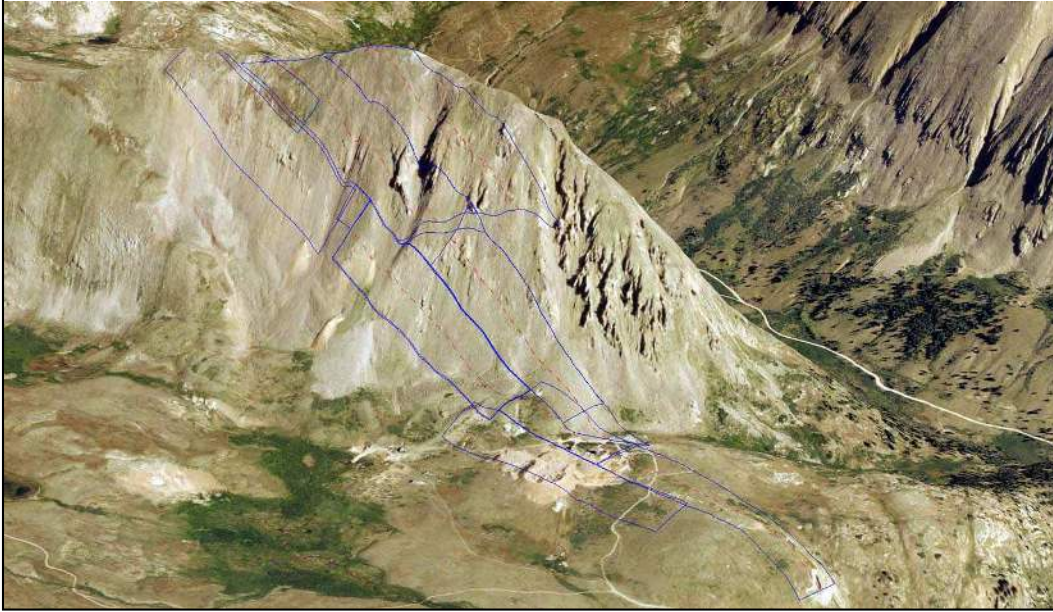
Photograph of the SW Cor., Sec. 7, T. 9 S., R. 78 W., 6th P.M., a granite stone 10" x 5" and projecting 8" above ground. The south, vertical face (near face) shows four horizontal grooves, which shows it to be two miles from the NW township corner and four miles from the SW township corner.

Theoretical Positions



Three-dimensional depiction of the patent description positions of the circa 1904 mining claims on the southwest flank of London Mountain.

Actual Positions



Three-dimensional depiction of the as staked positions of the circa 1904 mining claims on the southwest flank of London Mountain. Many of the mining claims lie in a scree slope.

Note: The SW Cor. of Sec. 7 is located near the bottom of the image in the dark green area.

THE MOTHER AND MATER LODES CASE HISTORY

These nearby mining claims have no direct connection to the Sinnott v. Jewett land decision, but a similar problem. In April 1902 it was discovered that the record position of the Mother Lode, Sur. No. 204 was N. 53°49' W., 591.1 ft. from its monumented position and the length of the Mother Lode was 1624 ft. rather than 1500 ft. Because the Mother Lode was located on the London Fault that had an average assay of 2 oz. of Au and 2 oz. of Ag per ton, W. Kenyon Jewett (also the owner of the Silver Monument) fearful of losing a portion of his Mother Lode created a 124 ft. gap between the Mother Lode and the Paris Lode, Sur. No. 205. The Mater Lode, Sur. No. 15889 was staked over the monumented position of the Mother Lode to preserve his valuable asset. The field notes of the Mother and Paris Lodes confirm that they originally shared a common end line.

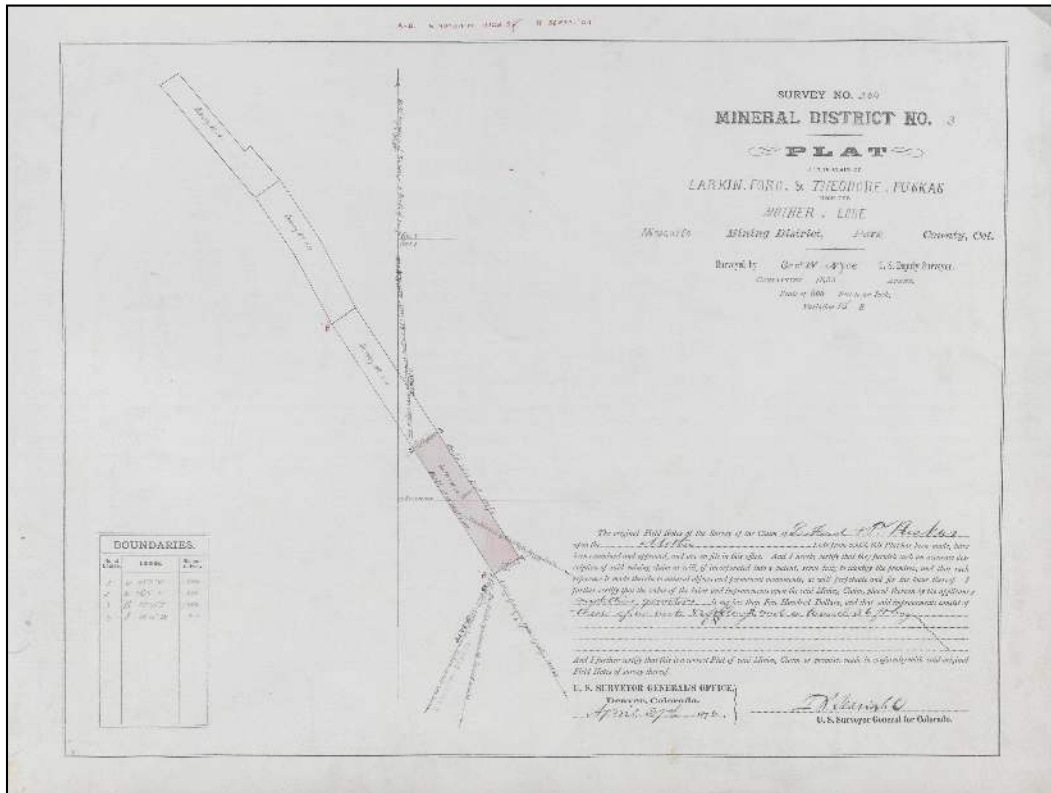
The Allentown Lode, Sur. No. 15889 was intended to reclaim the gap created in 1902, but Mr. Jewett ran into a problem. The patent description positions of the Mother Lode, Iola Lode, Sur. No. 2929, and Emma Nevada Lode, Sur. No. 4348 inconveniently fell across the gap. Immediately after the Binger Hermann period, on September 1, 1904 the Colorado Surveyor General issued a survey order for the Easton Lode, Sur. No. 17328 to finally reclaim most of the gap remaining between the Mother and Paris lodes.

Now for Something Strange

CLAIMANT		Mineral Surveyor	
204			
Sur. No. 3	Larkin Ford and Theodore Puskas	G. W. Nyce	
Mother		10B	Z
Amended survey ordered 7-22-07 To bring the claim as staked down to the statutory length of 1500 ft. Sec. 5	app. 7/12-07	242	615
Order Am. Sur. 7-22-07	GLO 8324 7-8-07		
M Location: Sec. 7 , T. 9 S , R. 78		DATES ORDER	RETURNS FILED
		2-8-76	RET'D. FOR CORRECTION
County: Park		AM ORDERS	SURVEY APPROVED: 4-29-76
Mng. Dist. Mosquito			ORIGINAL SURVEY
Land. Dist. Leadville , M. E. No. 110			Plat. Bk. No.
Date of Patent June 1, 1878 19 , No. 2852			Field Bk. No.
		Misc.	

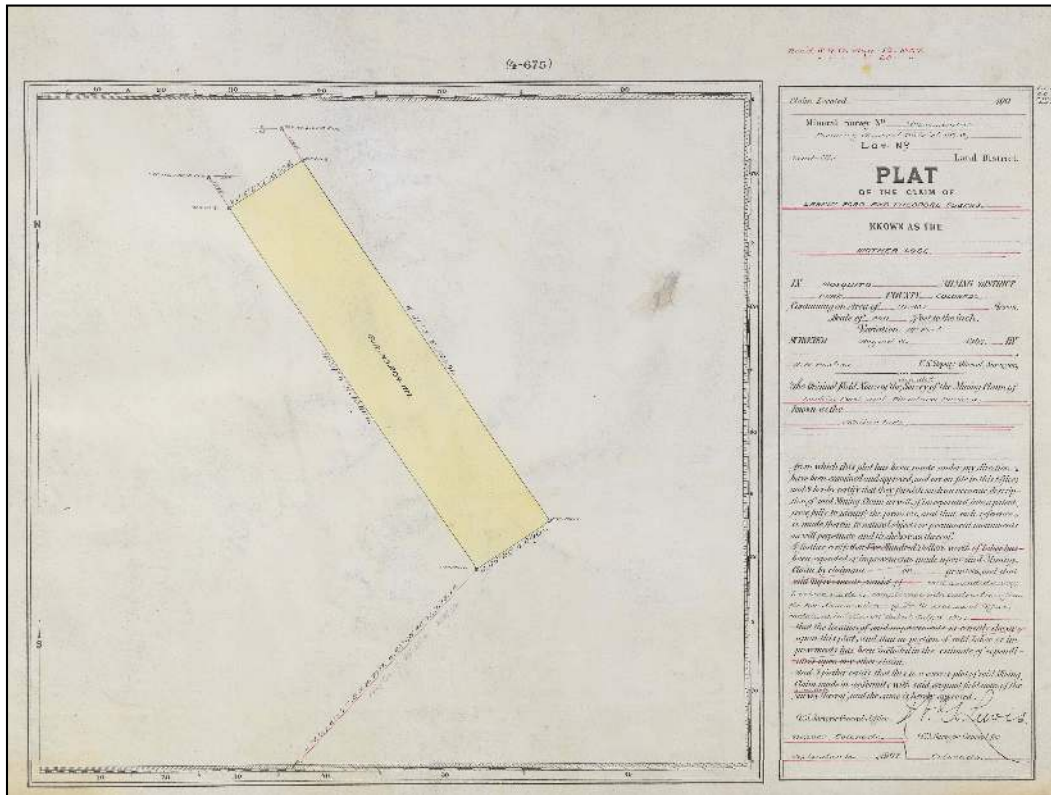
BLM index card for the Mother Lode, Sur. No. 204 showing that the survey was approved on April 29, 1876 and patented on June 1, 1878.

Note: An amended survey was ordered on July 22, 1907 to bring the length of the Mother Lode from 1624 ft. down to the statutory maximum of 1500 ft. allowed by the 1872 Mining Law. The amended survey was conducted to fix the earlier creation of a gap and subsequent acquisition of the gap by two lode claims.



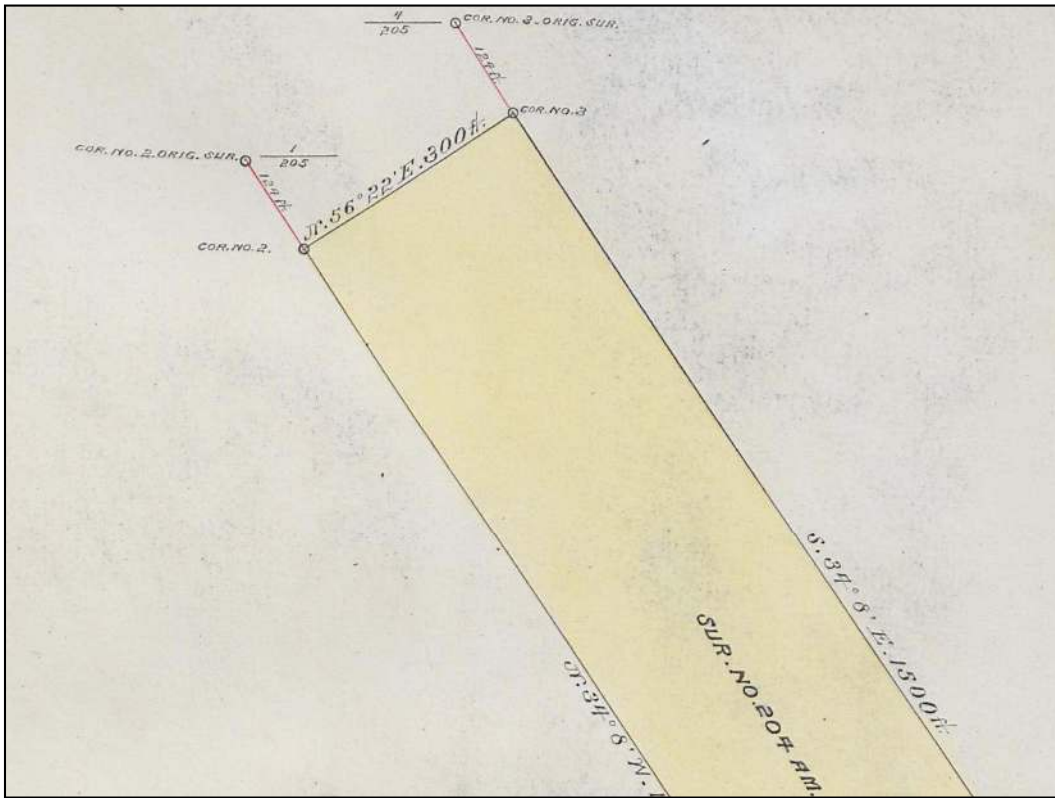
Plat of the original survey of the Mother Lode, Sur. No. 204, approved on April 29, 1876.

Note: The marginal notation in red ink shows a correction to the course and distance between Cor. No. 1, Mother Lode and Cor. No. 2 Paris Lode, Sur. No. 205 of N. 33°44' W., 3128.5 ft. The material error was reported in letter report 56872 by U.S. Deputy Mineral Surveyor W.H. Powless during his survey of the Easton Lode, Sur. No. 17328. The corrected course and distance are the computed resultant of retraced Line 1-2, Mother Lode, (N. 34°8' W., 1624 ft.) and retraced Line 1-2 of the Paris Lode, (N. 33°21' W., 1504.5 ft.).

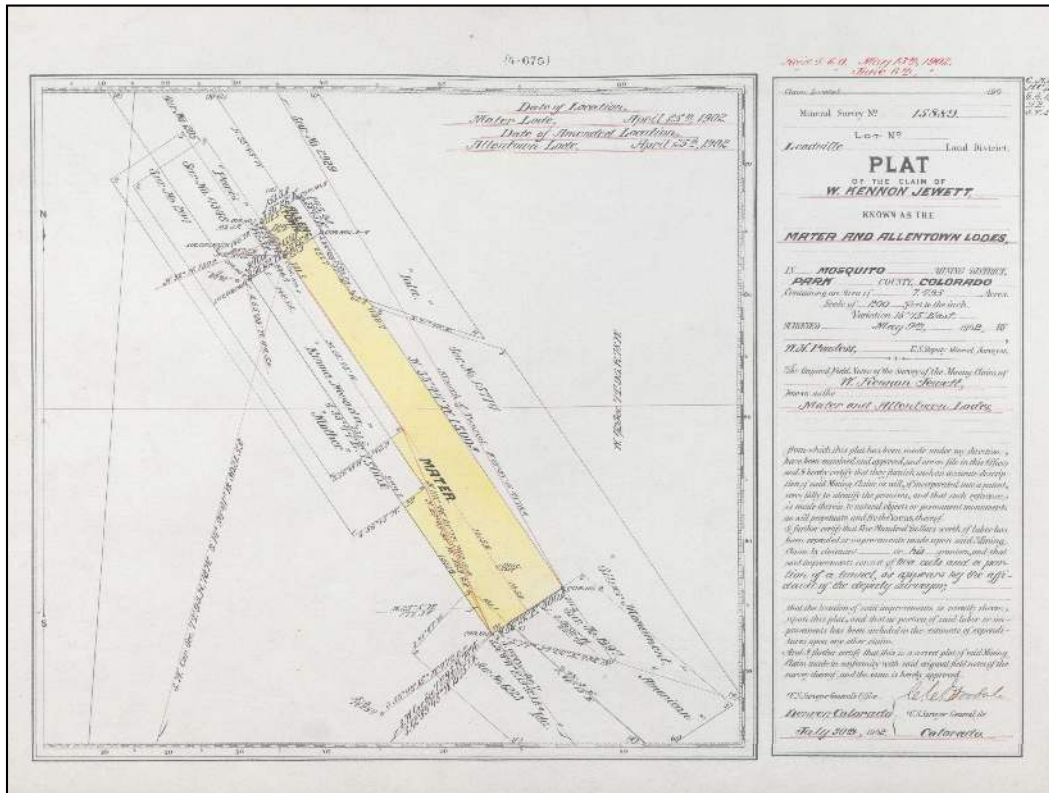


Plat of the amended survey of the Mother Lode, Sur. No. 204, approved on September 12, 1907.

Note: The bearing of Line 1-2 of the amended survey matches the retraced bearing for Line 1-2 of the original survey of the Mother Lode as described in the "Report" section of the Eaton Lode, Sur. No. 17328 field notes.



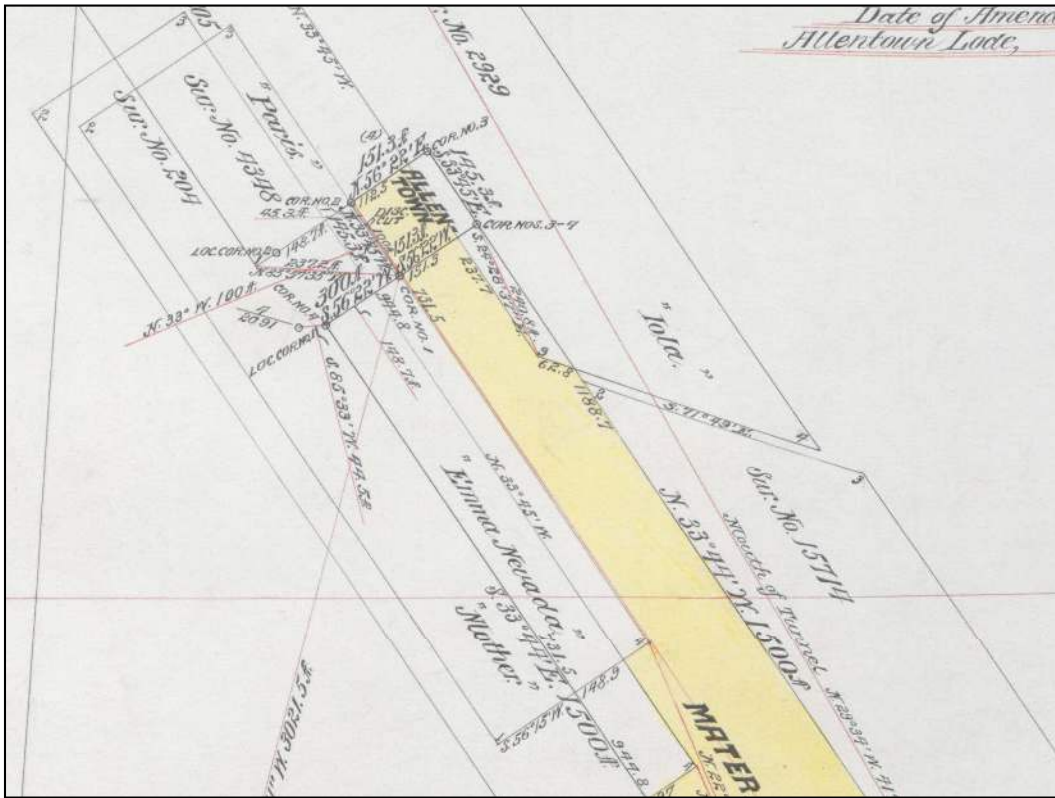
Close-up view of the amended survey of the Mother Lode that shows Cor. No. 1, Paris Lode, Sur. No. 205 is common to the original Cor. No. 2, Mother Lode and Cor. No. 4, Paris Lode is common to the original Cor. No. 3, Mother Lode.



Plat of the Mater and Allentown lodes, Sur. No. 15889. This plat shows the madness of complying with a policy where patent description positions of prior official surveys are held over their monumented positions.

The Mater Lode was intended to claim the same ground as the monumented position of the Mother Lode, while excluding the northerly 124 ft. that was in excess of the statutory maximum length of 1500 ft. for lode claims. The Allentown Lode was located to claim that "statutory gap" that was created out of fear because the length of the Mother Lode was 124 ft. too long. Neither of these goals were fully accomplished because the patent description positions of the Mother Lode, the Iola Lode, Sur. No. 2929, and the Emma Nevada Lode, Sur. No. 4348 conflicted with the two lode claims in Sur. No. 15889.

This plat is the height of irony as the mineral survey vainly attempts to fix a problem created by ignoring the sanctity of monuments over course and distance by additional application of that erroneous policy.



Close-up view of the plat for Sur. No. 15889, showing the created gap between the Mother and Paris lodes and the conflicts with the patent description positions of the Mother, Iola and Emma Nevada lodes that preclude the Allentown Lode from claiming the entirety of the newly created gap.

Survey No. 15889.

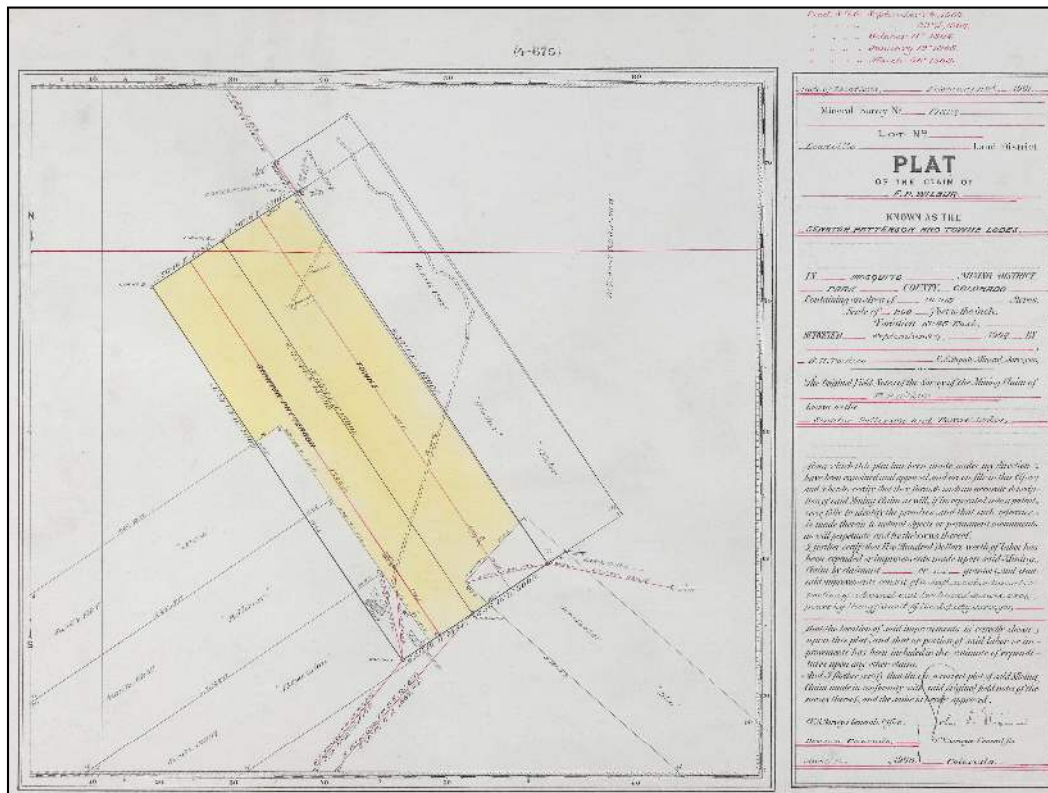
Feet.

Mater Lode.

Beginning at Cor. no. 1
 A granite stone 30x10x8 ins., set 18 ins.
 in slide rock with mound of stone,
 chiseled $\frac{1}{15899}$, whence
 The S.W. Cor. Sec. 7, T. 9 S., R. 78 W. of the
 6th Principal Meridian, bears S. 42°
 59' 45" W. 2175.1 ft.
 The S $\frac{1}{4}$ Cor. said Sec. 7, bears S. 36' 6" 41"
 E. 1972.1 ft.
 Cor. no. 4 Sur. no. 204, Mother Lode,
 W. Kennon Jewett, claimant, bears
 N. 23° 49' 30" W. 563.6 ft.
 Cor. no. 4 Sur. no. 4348, Emma Neva-
 da lode, claimants unknown, bears
 N. 22° 46' 21" W. 782.8 ft.

Field notes for the Mater Lode, Sur. No. 15889 that describes Cor. No. 1 as, "A granite stone 30 x 10 x 8 ins., set 18 ins. in slide rock with mound of stone, chiseled $\frac{1}{15899}$ (*sic*)."
 The chiseled survey number should be "15889."

Note: The field notes of the Mother Lode, Sur. No. 204 describes Cor. No. 1 as, "a granite stone 30 x 8 x 10 inches set in mound of stone chiseled $\frac{1}{204}$."



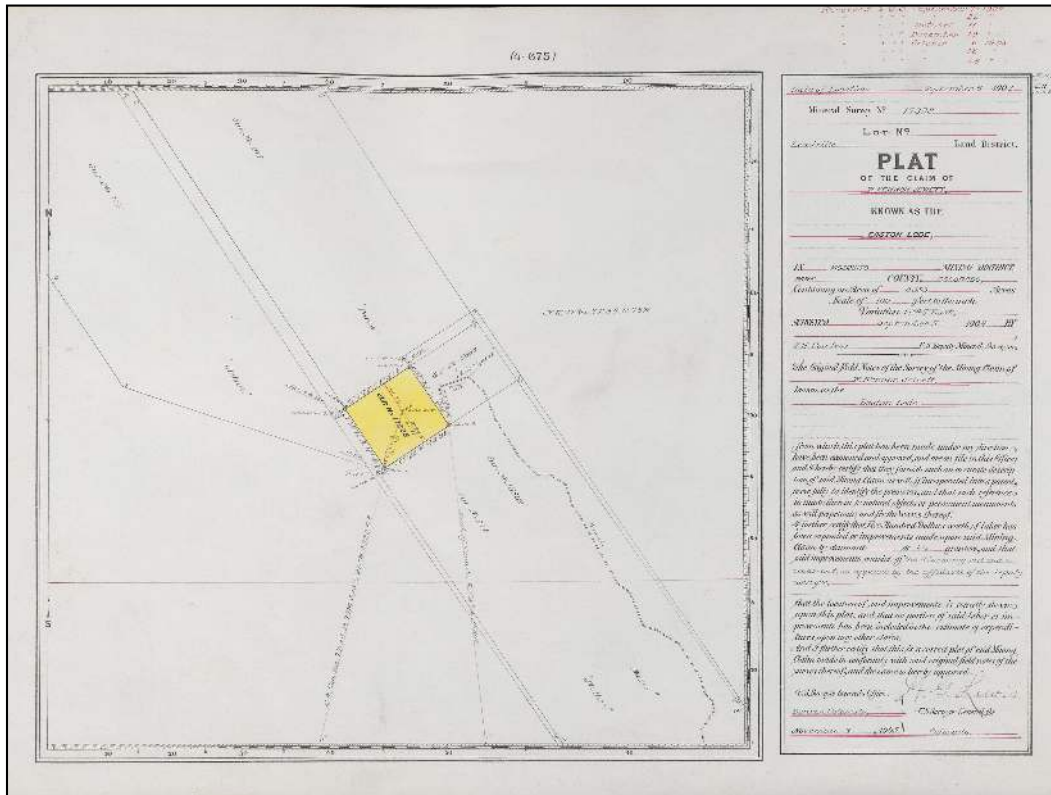
Plat of the Senator Patterson and Towne lodes, Sur. No. 17327. This survey was conducted during the transition immediately after the Binger Hermann policy ended. The mineral surveyor submitted his preliminary plat and draft field notes a total of five times until the survey was approved on April 19, 1905. The field notes include full descriptions of all found corners, lines surveyed and any material errors in the newly required "Report" section.

1500 To Cor. no. 4
 Identical with Cor. no. 1 Sur. no. 204
 Mother lode, as staked and with
 Cor. no. 1 Sur. no. 15889, Mater lode,
 as staked.
 A schist stone 30 x 10 x 8 ins., set 18 ins
 in the ground with mound of stone, chise-
 led $\frac{4}{17327}$, $\frac{1}{204}$ and $\frac{1}{15889}$, whence
 Cor. no. 1 Sur. no. 4348 Emma Nevada
 lode, as staked, Delia Bennett et al.,
 claimants, bears S. 78° 44' E. 424.3 ft.
 Cor. no. 2 Sur. no. 6223, Ida lode, as
 staked, bears S. 77° 5' W. 282.24 ft.
 Cor. no. 1 Sur. no. 1997 American lode,
 as staked, claimants unknown, bears
 N. 56° 22' E. 75 ft.
 Dyer Peak bears S. 28° W.
 North Gemini Peak bears S. 11° 31' W.
 Pennsylvania Butte bears S. 31° 47' E.

Excerpt of the field notes that describes Cor. No. 4 of the Towne Lode, Sur. No. 17327 as being, "a schist stone 30 x 10 x 8 ins., set 18 ins. in the ground with mound of stone chiseled 4/17327, 1/204 and 1/15889."

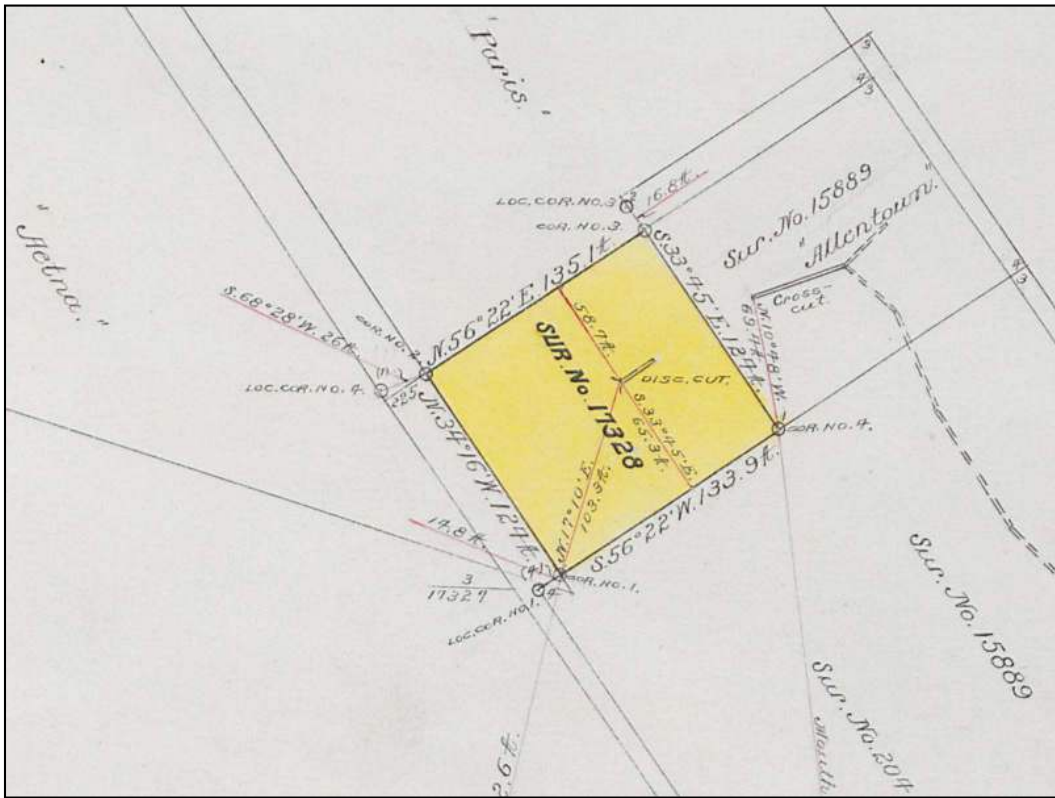
Yes, Cor. No. 4 of the Towne Lode is "Identical with Cor. No. 1 Sur. No. 204 Mother Lode, as staked and with Cor. No. 1 Sur. No. 15889, Mater Lode, as staked!"

Note: The "as staked" notations complied with one of the new requirements in the instructions issued by John F. Vivian, U.S. Surveyor General for the District of Colorado to verify that the corners were the original established corners of the prior official surveys.



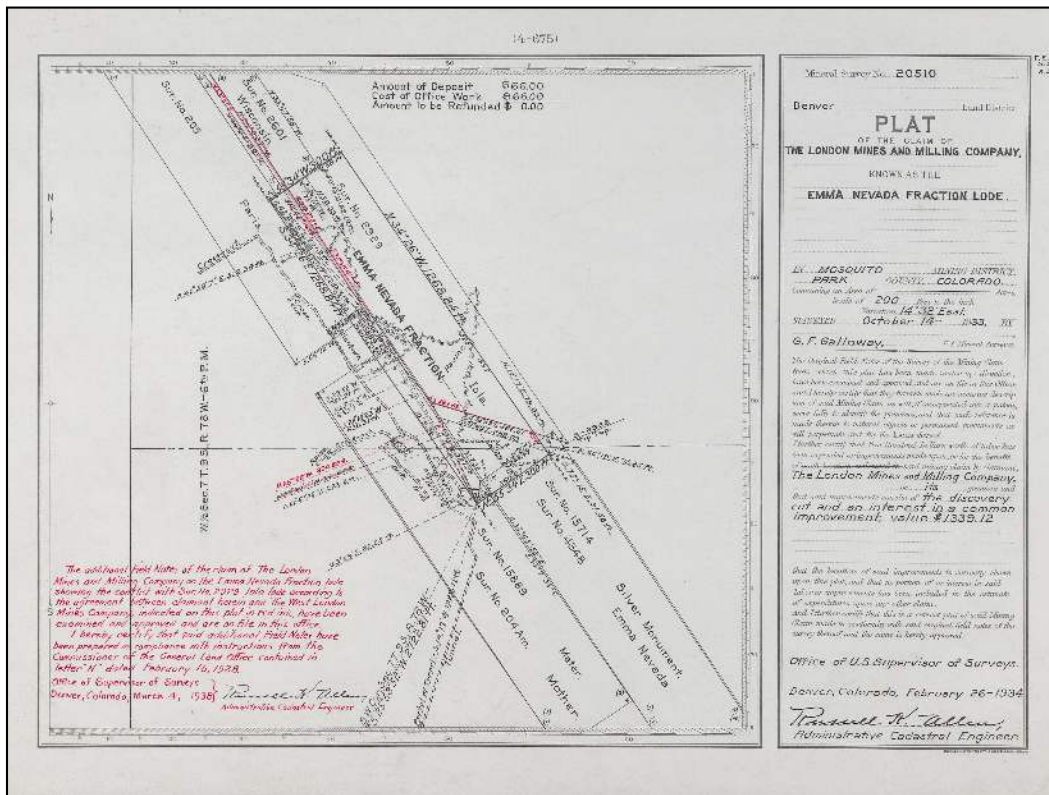
Plat of the Easton Lode, Sur. No. 17328. This lode claim was located on September 6, 1902, but a mineral survey order was not issued until September 1, 1904 because the created gap was not recognized as ground open for mineral entry by the GLO until the end of the Binger Hermann policy.

Note: There appear to be several concerns about this small claim that reclaimed the gap created when the Mother Lode, Sur. No. 204 was shortened in 1902. W.H. Powless submitted his returns to the Colorado Surveyor General seven times before the mineral survey was finally approved on November 5, 1905.



Close-up view of the Easton Lode showing the relationships with several senior claims.

Note: The fact that only Cor. No. 4 of the Easton Lode is coincident with its location corner indicates that there were multiple interpretations for the positions of the patented claims surrounding the Easton Lode. This may explain in part why Deputy Powless submitted draft returns seven times over the course of 13 months before the mineral survey was finally accepted by the Surveyor General.



Plat of the Emma Nevada Fraction Lode, Sur. No. 20510, survey approved February 26, 1934. Having the term "fraction" as part of the lode claim name is appropriate as the patent expressly excepts and excludes seven lode mining claims for a patented acreage of 1.064 acres.

Note: The expressly excepted and excluded claims are: Mother Lode, Sur. No. 204 Amended, Paris Lode, Sur. No. 205, Wisconsin Lode, Sur. No. 2601, Iola Lode, Sur. No. 2929, Emma Nevada Lode, Sur. No. 4348 and the Mater and Allentown lodes, Sur. No. 15889.

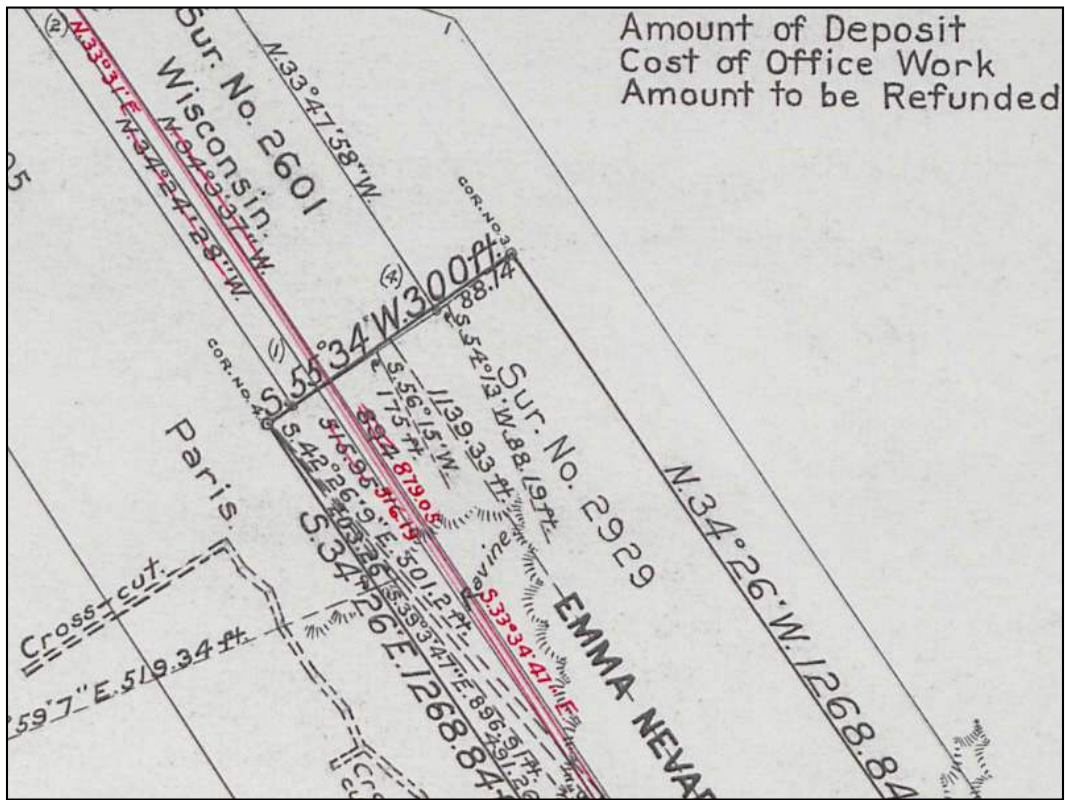
W. 1/2 Sec. 7

~~N. 25° 22' W.~~
~~N. 23° 30' W. 38 ft.~~
~~N. 22° 57' 35" W. 323.8 ft.~~

N. 9° 29' E.

S The additional Field Notes of the claim of The London
 Mines and Milling Company on the Emma Nevada Fraction lode
 showing the conflict with Sur. No. 2929 lola lode according to
 the agreement between claimant herein and The West London
 Mines Company, indicated on this plat in red ink, have been
 examined and approved and are on file in this office.
 I hereby certify that said additional Field Notes have
 been prepared in compliance with instructions from the
 Commissioner of the General Land Office contained in
 letter "N" dated February 15, 1938.
 Office of Supervisor of Surveys }
 Denver, Colorado, March 4, 1938 } *Russell H. Allen*
 Administrative Cadastral Engineer.

Close-up view showing an additional certification in red ink of changes in seven dimensions on the plat, dated March 4, 1938.



Close-up view of the plat showing four of the corrected dimensions. The additional field notes describe a revised position for the Iola Lode, Sur. No. 2929.

COPY

February 15, 1938

Denver 046585 "N" RLF

District Cadastral Engineer, Re Amendment of mineral survey
Public Survey Office Field notes
Denver, Colorado

Sir:

Reference is made to mineral survey No. 20510, Emma Nevada Fraction lode under mineral entry, Denver 046585, of the London Mines and Milling Company and to adjoining mineral survey No. 2929 for the Iola Lode claim.

A protest was filed by The West London Mines Company against the issuance of patent to The London Mines and Milling Company for the Emma Nevada Fraction lode mining claim. The protest was, on October 22, 1934, forwarded to you for appropriate action under Sections 162 and 163 of the mining regulations.

In a letter of October 29, 1934, the Administrative Cadastral Engineer stated that apparently the controversy is not one concerning the efficiency of the surveyor or the accuracy of his work, but merely questioned the methods employed by the surveyor in fixing the position of lost or questionable corners of prior patented mineral surveys, and that in his opinion the controversy did not come within the purview of Secs. 162 and 163 of the mining regulations but is clearly one for the courts to

First page of a GLO Commissioner's Departmental Letter "N" to the District Cadastral Engineer, Public Survey Office, Denver Colorado. The letter is in response to a protest by the owner of the Iola Lode, Sur. No. 2929. The protest was not related to the accuracy of the mineral surveyor's field survey of the Emma Nevada Fraction Lode, but rather to the methods employed by the mineral surveyor (Gerald F. Galloway) in fixing the position of lost or questionable corners.

decide. Action on the entry has been suspended pending proof of settlement of the controversy.

There was received in this office, January 17, 1938, a certified copy of an agreement signed by the parties in the controversy and a letter from A.G. Galloway, United States mineral surveyor at Alma, Colorado, in which he states that an agreement has been reached by the two companies and that The London Mines and Milling Company has requested him to recompute and amend the survey. A copy of the agreement is enclosed for your information. It is considered as a request for an amended survey. In order, therefore, to provide a proper description, you are authorized to take the necessary steps to have an amended survey made in accordance with the agreement. The plat of survey with the record is enclosed for amendment in accordance with the amended survey.

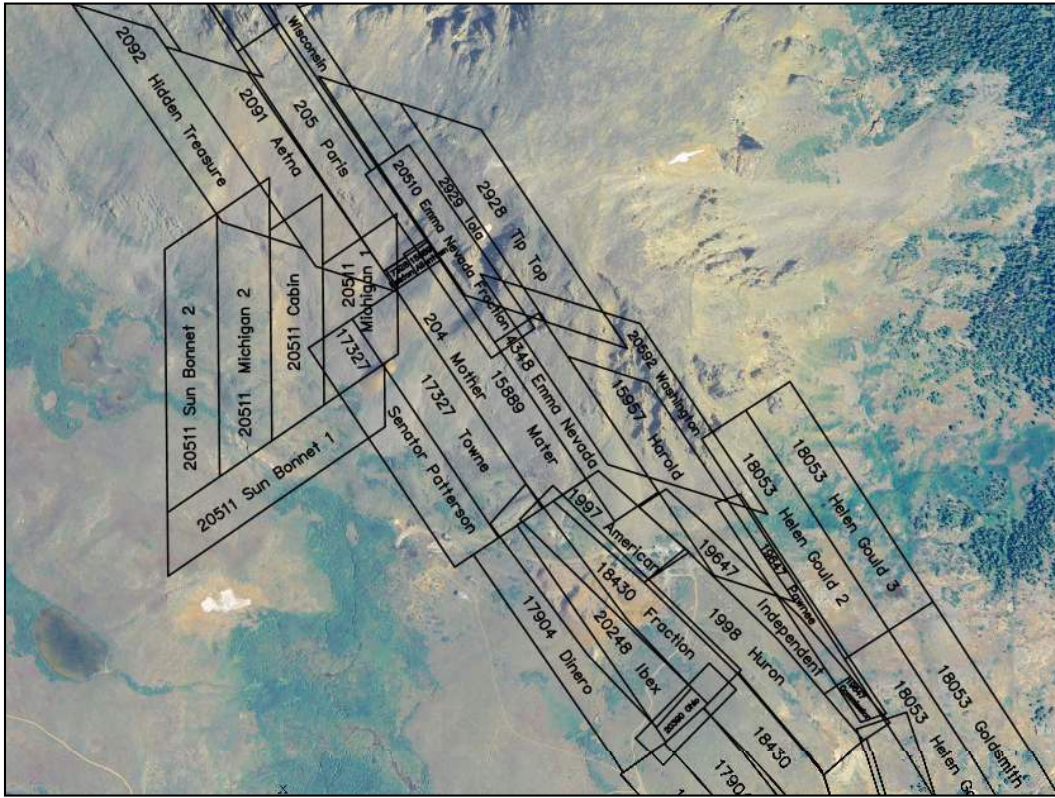
Any change made on the plat should be indicated by distinctive markings. Your certificate bearing current date showing the amendment should be attached thereto and a supplemental sheet showing the amendment should be furnished with the field notes. You will also recall the plat involving mineral survey No. 20510, make appropriate notations thereon and return it to the proper office for filing.

Very respectfully,

Signed: Fred W. Johnson,
Commissioner.

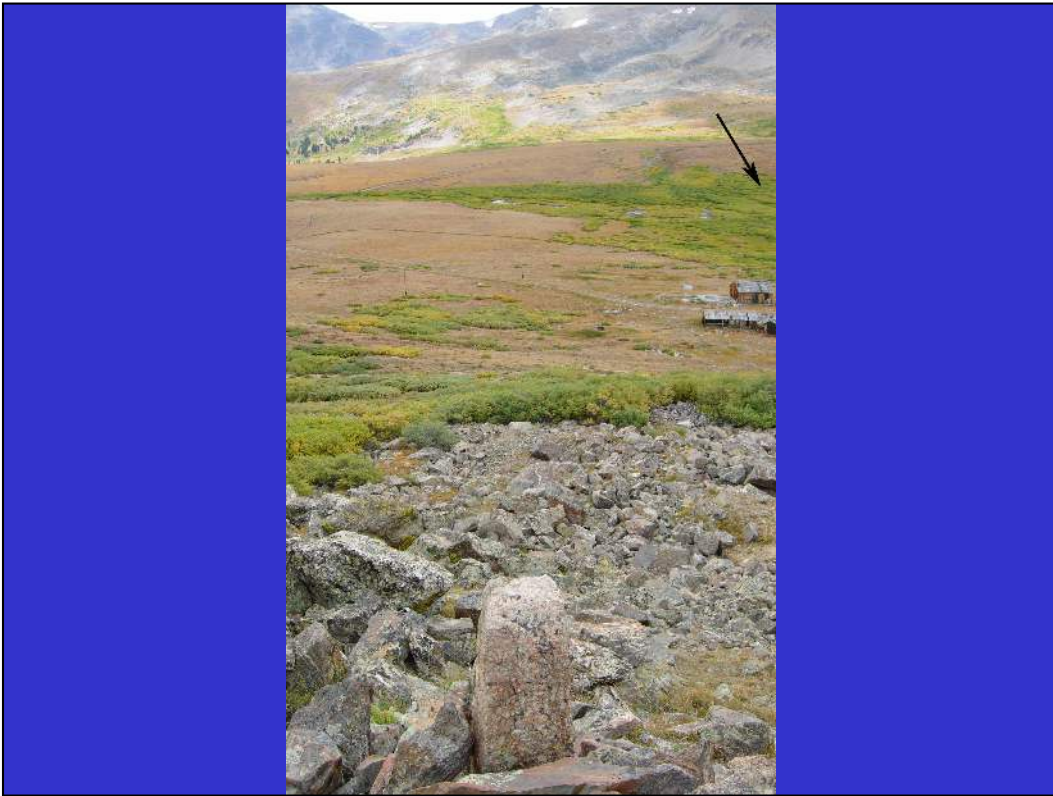
Second page of GLO Departmental Letter "N".

Note: The GLO Commissioner did not find any fault in the methods employed by Deputy Galloway in reestablishing the lost corners. The landowners came to an agreement regarding the positions of the lost and/or questionable corners. Finding no issues with the agreement between the private parties, the Commissioner authorized the District Cadastral Engineer to, "have an amended survey made in accordance with the agreement."



Plot of the patented mining claims along the London Fault (orientation is NNW to SSE) in the vicinity of the Mother Lode, the first lode mining claim located in Sec. 7. The SW Cor., Sec. 7, T. 9 S., R. 78 W., 6th P.M. is marked by an "x" at the bottom, left center of the image.

Note: The imagery is National Agriculture Imagery Program (NAIP) flown in the fall 2009.



Photograph of Cor. No. 1, Mother Lode, Sur. No. 204, Cor. No. 1, Mater Lode, Sur. No. 15889, and Cor. No. 4, Towne Lode, Sur. No. 17327; a quartz monzonite porphyry stone 30 x 10 x 8 ins.

Note: The arrow in the upper right points to the SW Cor., Sec. 7, T. 9 S., R. 78 W., 6th P.M., a granite stone.



Close-up photograph of the east face that is chiseled "1 - 204 AM."

Note: Connections to SW Cor., Sec. 7

S. $42^{\circ}56'26''$ W., 2174.60 ft. (measured, 2009)

S. $27^{\circ}25'$ W., 2185.32 ft. (record Mother Lode)

S. $42^{\circ}59'45''$ W., 2175.10 ft. (record Mother Lode Amended)



Close-up photograph of the top face that is chiseled "1 – 15889"
Note: Record connection to SW Cor., Sec. 7 is S. 42°59'45" W.,
2175.10 ft.



Close-up photograph of the west face that is chiseled "4 – 17327".



Photograph of Cor. No. 4, Mother Lode, Sur. No. 204 and Cor. No. 2, Mater Lode, Sur. No. 15889; a quartz monzonite porphyry stone 24 x 10 x 12 ins.

Note: From Cor. No. 4, Mother Lode Amended / Cor. No. 2, Mater Lode to Cors. Nos. 1 and 1, Mother Lode Amended and Mater Lode.

S. 56°08'20" W., 298.71 ft. (measured)

S. 56°15' W., 300.0 ft. (record Line 4-1 Mother Lode)

S. 56°22' E., 300.0 ft. (record Line 1-2 Mother Lode Amended)

N. 56°22' E., 300.0 ft. (record Line 1-2 Mater Lode)



Close-up photograph of the south face that is chiseled "4 - 204 AM."



Close-up photograph of the west, sloping face that is chiseled "2
- 15889."

**UNITED STATES MINING CO. v. WALL
DOI 39 L.D. 546 – MARCH 6, 1911**

CONFLICTING MINING CLAIMS – LOCUS OF CLAIM

The position of conflicting mining claims, and their positions with relation to each other, must be determined as the claims are defined and established on the ground, and all errors of description of the position of any of the claims, and of conflicts among them, must give thereto.

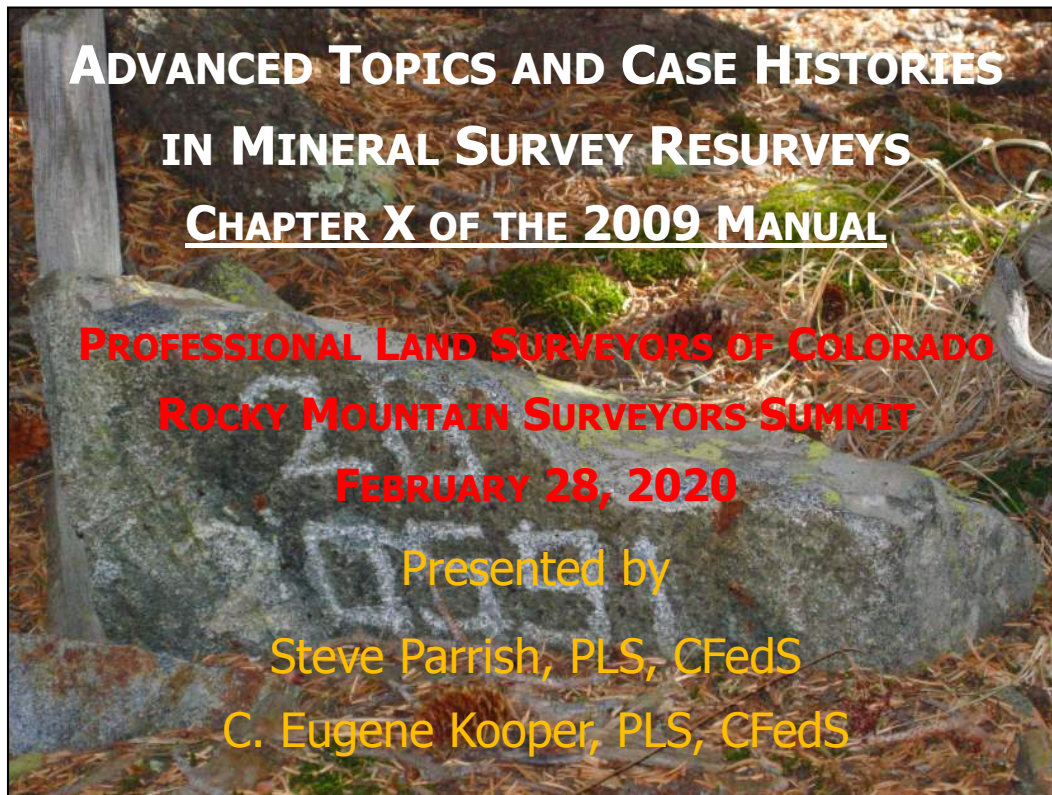
This was as much a personal vendetta between Enos Wall and Albert F. Holden, president of the United States Mining Co. over extralateral rights litigation at the Bingham Canyon Mine. For more information see "History of the Bingham Mining District," Wilbur H. Smith Papers Univ. of Utah.

<http://hickmanmuseum.homestead.com/files/BILLINGS.WHS.htm>

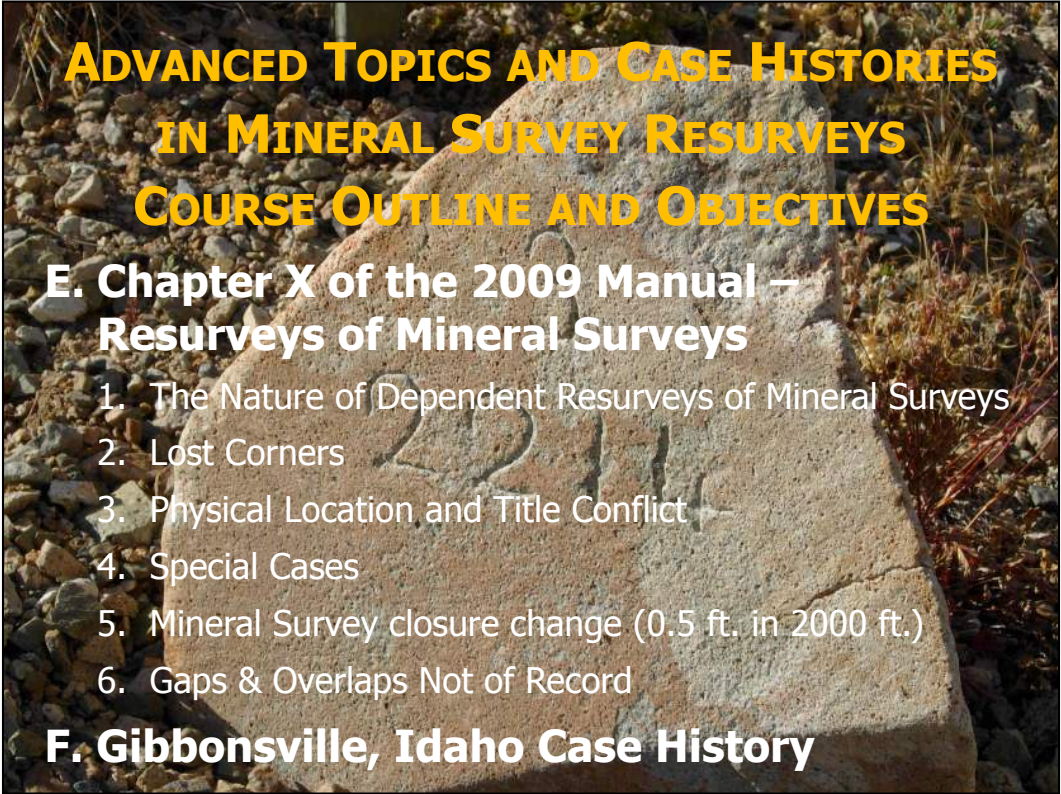
This Utah land decision confirms the decision made in *Sinnott v. Jewett*. The claims are located in Bingham Canyon, Utah.

Note: All the lode mining claims that are part of this land decision are within the current open pit of the Kennecott Copper Mine.

https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/doi_decisions_039.pdf (Page 566 of PDF file)



Photograph of Cor. No. 2 of the Bushwhacker Lode, Sur. No. 20591 located in Buckskin Gulch, approximately 3½ miles northwest of Alma, CO.



**ADVANCED TOPICS AND CASE HISTORIES
IN MINERAL SURVEY RESURVEYS
COURSE OUTLINE AND OBJECTIVES**

**E. Chapter X of the 2009 Manual –
Resurveys of Mineral Surveys**

1. The Nature of Dependent Resurveys of Mineral Surveys
2. Lost Corners
3. Physical Location and Title Conflict
4. Special Cases
5. Mineral Survey closure change (0.5 ft. in 2000 ft.)
6. Gaps & Overlaps Not of Record

F. Gibbonsville, Idaho Case History

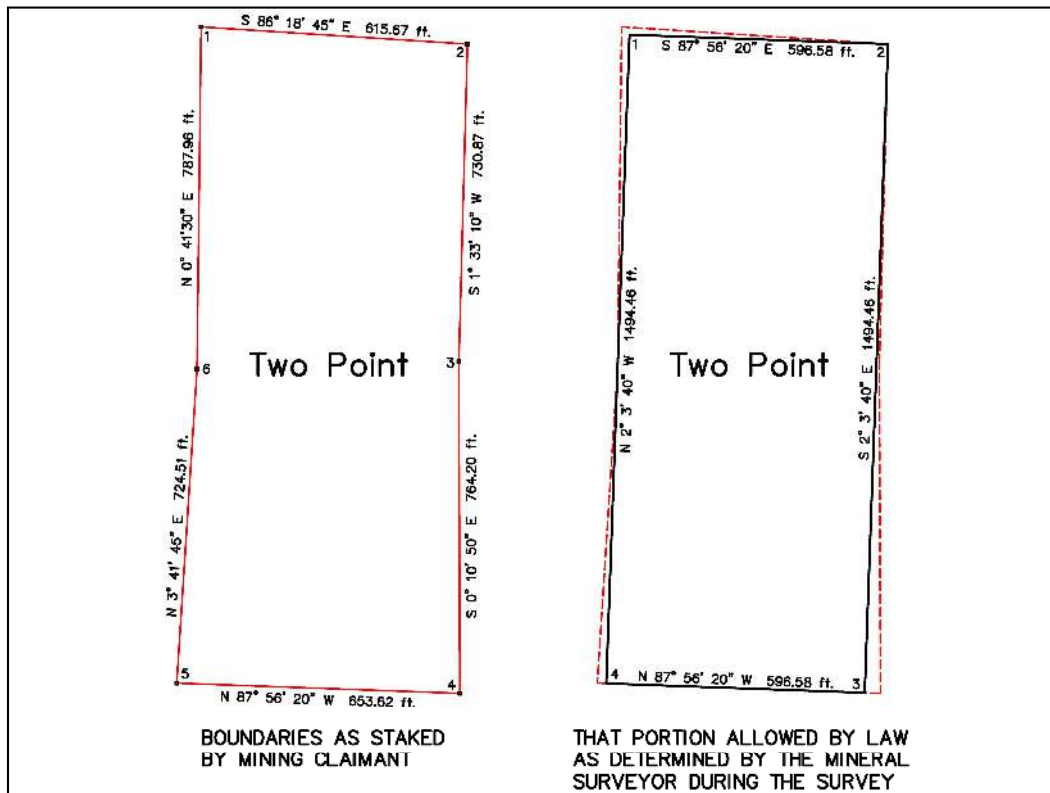
Photograph of Cor. No. 3, Last Chance Lode, Sur. No. 2214 located on the south spur of Mt. Bross, 3 miles northwest of Alma, CO.

MANUAL OF SURVEYING INSTRUCTIONS, 2009

CHAPTER X - MINERAL SEGREGATION SURVEYS

The sections on "Mineral Segregation Surveys" is contained in Secs. 10-94 through 10-100. Although they are the exclusive purview of BLM Cadastral surveyors, they may provide the private surveyor with valuable guidance when dealing with unpatented mining claims that have been excluded in a patent of mineral lands, particularly in how to cast off any statutory excess in the size of the unpatented mining claim to conform to the mining laws and regulations.

When there is evidence of the location of the unpatented mining claim, the excluded area cannot exceed the statutory limits of 1500 feet along the lode and up to 300 feet each side of the lode. Additional information is included in sections 10-116, 10-131 and 10-197, which are part of the instructions to U.S. Mineral Surveyors conducting a mineral patent application survey.



Sketch of the unpatented lode claim, Two Point that was surveyed by the mining claimant and has excess in both the length and width of the claim as authorized by the 1872 Mining Law. The sketch to the right shows how a mineral surveyor might cast off the excess to comply with the statutory limits.

Note: The U.S. Mineral Surveyor had to fit the final claim geometry within the envelope of the location surveyed by the claimant and keep the end lines substantially parallel.

MANUAL OF SURVEYING INSTRUCTIONS, 2009

CHAPTER X - MINERAL SURVEYS

The specifics on surveying and reporting conflicts with prior official surveys are discussed in sections 10-144 through 10-151 under the topic heading, "Conflicts". Only the lines of prior official surveys in conflict with the patent survey are retraced. If, after a diligent search the necessary corners controlling a line in conflict cannot be found, they must be reestablished.

Reestablishing lost corners of conflicting mineral surveys is a new requirement for the mineral surveyor. In the past, if the mineral surveyor was unable to find the controlling corners, he would report the record position of the senior conflicting lines in his field notes. If the mineral survey was conducted after August 1904, the field notes will contain a section (either named "Report" or "Other Corner Descriptions"). The section describes which corners were found, what lines are as previously reported and any lines that have material errors.

CHAPTER X - RESURVEYS OF MINERAL LANDS

The remaining discussion covers the sections, "Resurveys-Mineral Lands" (Sections 10-208 through 10-229) and "Special Cases" (Sections 10-230 to 10-231). There are four topic headings in the resurveys section:

- The Nature of Dependent Resurveys of Mineral Surveys (Secs. 10-208 to 10-212);
- Lost Corners (Secs. 10-213 to 10-214);
- Physical Location and Title Conflicts (Secs. 10-215 to 10-223); and
- Gaps and Overlaps Not of Record" (Secs. 10-224 to 10-229).

The 2009 Manual is the first manual to include instructions on the resurvey of mineral lands. Prior to this, the only GLO/BLM guidance on mineral survey resurveys was, "Mineral Survey Procedures Guide" by John V. Meldrum, 1980. Resurveys are discussed in Chapter VI of the guide and comprise a total of 4 pages (2 pages are diagrams).

CHAPTER X - RESURVEYS OF MINERAL LANDS

The introductory material is contained in the Chapter X topic, "The Nature of Dependent Resurveys of Mineral Surveys" (10-208 to 10-212). It states that dependent resurveys of mining claims follow the same basic rules as dependent resurveys of the rectangular PLSS (see Chapters V, VI and VII). It adds an additional condition for lode mining claims that the end lines must be substantially parallel. This is to preserve the bona fide rights to the subsurface mineral estate.

The U.S. mining laws grant a mining claimant the right to follow the vein/lode at depth. In other words, the discovery of a locatable mineral in a mineralized vein grants the claimant the right to follow that vein at depth regardless of where it may roam. If the mineralized vein is not vertical it will eventually extend beyond one of the lode claim side lines. This right is referred to as extralateral rights.

CHAPTER X - RESURVEYS OF MINERAL LANDS

Under the 1872 Mining Law, the claimant has a right to mine the portion of any lode or vein that apexes within the surface extents of a lode mining claim controlled by the claimant. The introduction also includes the text of the Act of April 28, 1904 and the important DOI Land Decision, *Sinnott v. Jewett* (33 L.D. 91).

The Act is only two paragraphs long and one might wonder why it was enacted. Congress was genuinely perplexed as to why the legislation was eagerly sought by the mining industry since case law was abundantly clear on the subject. The mining industry persuaded Congress that a misguided General Land Office policy was, "foisting an evil upon the mining industry", which necessitated the statutory remedy.

CHAPTER X - LOST CORNERS

The first paragraph of Sec. 10-212 discusses how to reestablish lost lode claim corners.

There is no hard and fast rule for reestablishing lost corners of lode mining claims. The method should be selected that will give the best results, bearing in mind that end lines of lode claims should remain substantially parallel, if parallel by record. When the original surveys were made faithfully, the application of the principles of parallelism, record distances, record angular relationships, and record relationships between the claim and the workings on it, in combination with the presumption that the original intent was to be conformable with the statutes governing dimensions and area, should substantially meet the objectives stated above.

CHAPTER X - LOST CORNERS

The supplemental reading materials to the course includes John V. Meldrum's book, "Mineral Survey Procedures Guide." Chapter VI, Resurveys contains diagrams of various geometries of lode claims with lost corners and the default suggested method of reestablishing those corners.

It is curious that the 2009 Manual does not include the diagrams. Perhaps a future addendum will reference the diagrams. For restoring lost corners of irregular mining claims (e.g. gulch placers and mill sites), "the secondary methods of broken boundary adjustments covered in sections 7-53 and 7-54 should be considered."

Resurveys

6-1 Restoration of Lost Corners: There is no hard and fast rule for establishing missing corners of mining claims. The method should be selected that will give the best results, bearing in mind that end lines should remain substantially parallel. Ordinarily, the mineral surveyor should not remonument a restored corner; at least, it should not be done without the full knowledge and approval of the owner. A cadastral surveyor may remonument a corner if it is necessary to delineate the boundary between public and private land. As with all lost corners, the corner of a mineral survey should be reestablished from the best available evidence and in such a configuration that will place the lines as nearly as possible to their original position. The ties to bearing trees and objects should be used first. In fact, if such accessories are present the corner is not lost.

Second in order of preference is the use of short ties to or from adjoining surveys. A word of caution in using other mineral survey ties: In Colorado, and presumably in other states, there was a period where the short ties to conflicting surveys were calculated through the section corner tie. Such calculated ties should not be used. This period is not exactly known, but it ran approximately from 1898 to April 28, 1904. If a report of other surveys was contained in the field notes, the ties were not calculated. At the end of this period, it can be determined if calculations were used. It is not so easy to distinguish between the methods of survey at the beginning of the period since it was not customary to report on other surveys. In any event, the short tie should not be used unless the corner tied to (or from) is recovered. If no corners can be found, the section corner tie may be used, but it is the tie of last resort. In such cases, all lines are shown as approved.

In Figure 7, several conditions are illustrated. In situation A, only one corner is recovered, no other corners or accessories can be found nor are there any short ties available. In the absence of further collateral evidence, the three missing corners must be reestablished at record bearings and distances from the recovered Corner No. 1.

In situation B, Corners Nos. 1 and 2 can be recovered. Lines 4-1 and 2-3 should be shown at the record distance, regardless of the length of line 1-2. The bearings of lines 4-1 and 2-3 may be the record bearing or at the same variation from the record as line 1-2. If this was a rectangular claim, then the bearing of the missing lines probably should be at right angles to line 1-2, unless this would give a distorted relationship between the claim and the workings on it, particularly the discovery. Line 3-4 should be shown parallel and of equal length to line 1-2.

In situation C, Corners Nos. 1 and 4 are recovered. Line 2-3 should be shown parallel and of equal length to line 4-1, if the record was such. Lines 1-2 and 3-4 should be shown at the record distance, and at the record bearing or with the same variance found for line 4-1.

In situation D two corners are again recovered, but they are opposite corners, Nos. 1 and 3. Missing Corner Nos. 2 and 4 can be restored by using the *Greene Boundary* method. See Section 5-44 of the *Manual of Surveying Instructions*. They can also be shown at the record bearing and distance from Cors. Nos. 1 and 3, using either the end lines or side lines, with the resulting missing lines being the bearing and distance required to close. The method selected should restore the lines in the best relative position to the workings.

In situation E, three corners, 1, 2 and 4, are recovered. Line 2-3 is shown parallel and of

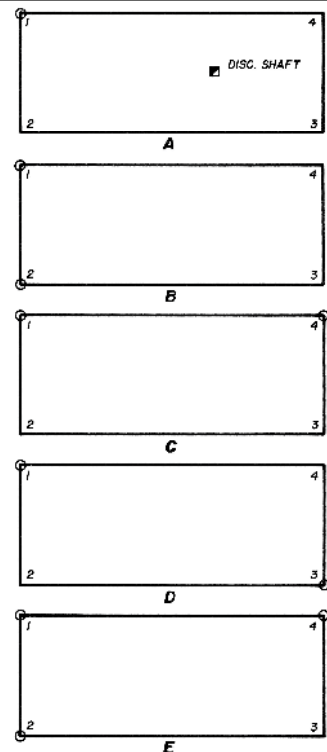


FIG. 7

From John Meldrum's, "Mineral Survey Procedures Guide" Chapter VI includes suggestions on how best to reestablish lost or missing corners under several scenarios depicted in Figure 7.

Note: It is important to evaluate the position of the mining improvements listed in the official field notes for all five scenarios, but especially for situations where the positions of the lost corners can either be reestablished at record bearings from the found corners or at the same variation from the record as the found line(s).

RESURVEYS

equal length to line 4-1. Line 3-4 is shown parallel and of equal length to Line 1-2.

In restoring corners of irregular claims, such as metes and bounds placers, the broken boundary (non-riparian) or the Grant Boundary method should be used. It may also be applied to lode claims if the above methods do not give adequate results.

In reestablishing corners of a block of claims, the rules of proportionate measurement may be applied. In Figure 8, missing Corner No. 2 of claims E, F, G and H can be restored by double proportion. Missing Corner No. 1 of claims A and B may also be restored by double proportion; since there is no corner beyond this corner, the record distance from Corner No. 2 would have to be used in this direction. Corner No. 1 might also be established at the record bearing and distance from Corner No. 2, or lines 1-2 of claims A and B could be made parallel and of equal length to line 3-4 of claim A. Since missing Corner No. 3 of claims B and D is on an end line, single proportionate measurement might be considered. See the Manual of Surveying Instructions for proportionate methods, pp. 134-136.

6-2 Township Resurveys with Mineral Surveys: Prior to field work, all unpatented mineral surveys embracing claims that have been declared null and void should be cancelled, leaving only valid existing claims and patents to be segregated. Restoration of missing corners should only be made where they are necessary to control the boundaries between private and public land, including the boundaries between public land and unpatented valid mineral surveys. Segregation surveys of unsurveyed

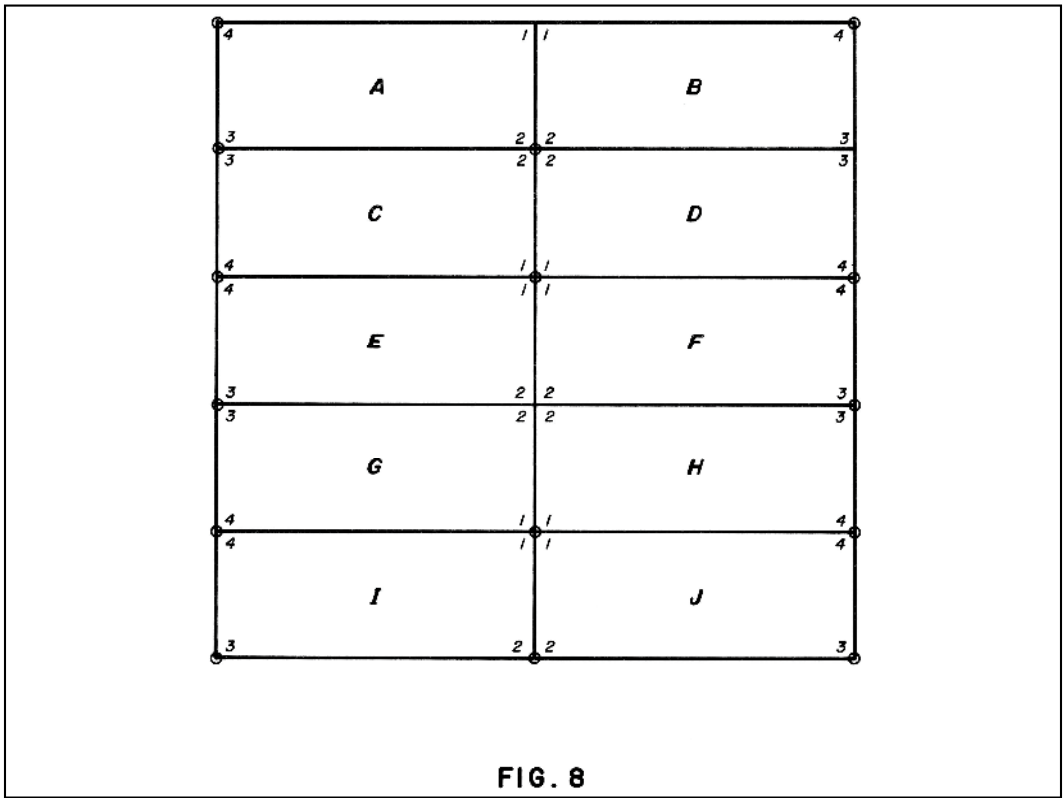
mining claims may be requested to accommodate administrative actions. If possible, the owners of the mining claims should be advised of the resurvey and given an opportunity to express their opinions as to the position of missing corners.

6-3 Mineral Segregation Surveys: Sections 7-39 to 7-44 inclusive, of the Manual of Surveying Instructions adequately covers this subject. Segregation surveys are not undertaken unless there is a need for them arising from administrative action involving the adjoining land. Very often it will be necessary to make the survey within the boundaries as they are marked on the ground due to inaccuracies in the location survey. The early township surveys in California often segregated unsurveyed mining claims showing them on the township plats without supporting field notes. Resurveys of such segregations may be required based on the evidence found in the field.

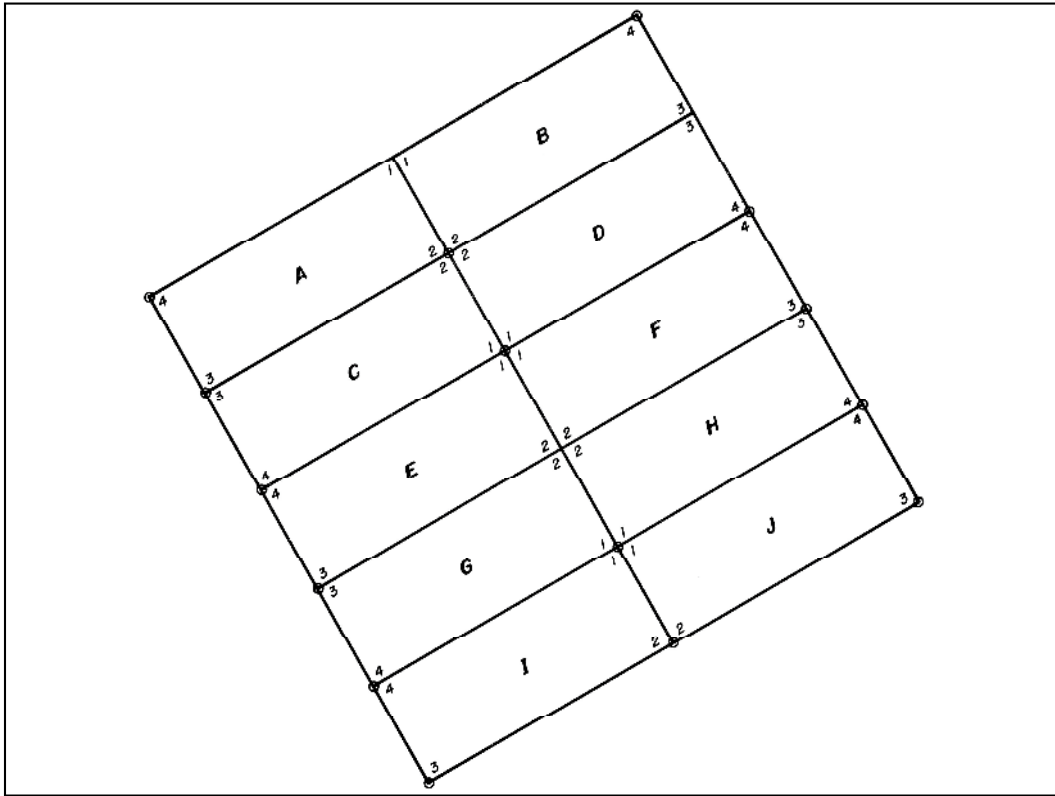
6-4 Supplemental Plats: When supplemental plats are required segregating mineral surveys, all such surveys must be segregated. Again, it is desirable that mineral surveys embracing invalid claims be cancelled. The need to lot a cancelled mineral survey will also require a supplemental plat.

6-5 Correcting Errors in Patented Mineral Surveys: As a general rule, the record of a patented mineral survey should not be changed or amended. When such errors are discovered, a pencil notation on the index card and/or on the field notes may be appropriate. Reported errors generally stand on their own merit and are contained in the field notes of the reporting survey.

The remainder of section 6.1 deals with restoring corners of irregular claims such as metes-and-bounds placer claims and mill sites, and the proportionate methods used to reestablish corners of a block of claims as depicted in Figure 8.



Scenarios where single and double proportionate methods are the appropriate methods for reestablishing lost corners in a block of claims.



Since lode claims are oriented along mineralized veins, it is uncommon for the boundary lines to be oriented to the cardinal directions. A clockwise rotation of 30° of this block of claims will make the computation of cardinal equivalents easier when using double proportion to reestablish the lost Cors. Nos. 2 of claims E, F, G and H.

CHAPTER X - RESURVEY OF MINERAL LANDS

The next topic under the resurvey of mineral lands is, "Physical Location and Title Conflicts" (Secs. 10-215 to 10-223). This topic covers the issue of seniority and what factors the resurveyor must evaluate in order to determine which patentee owns the area in conflict between two or more lode claims. The last paragraph in Section 10-215 provides a brief summary.

As a general rule, "first in time, first in right" will determine the priority of conflicting mining claims or sites. Determining the extent of rights to a mining claim or site typically depends on evidence gathered from prior sequential grants and surveys.

CHAPTER X - RESURVEY OF MINERAL LANDS

The mineral lands tenure system is unique, esp. with respect to lode mining claims. The claimant of a lode claim is attempting to acquire their full right under the mining laws to the subsurface mineral estate. In order to acquire their full right, the claim stakes set on the surface are often in conflict with other claims.

It was customary in mining camps that a claimant was allowed to peaceably trespass upon and across the claim(s) of others to set his stakes. This principle is supported by the U.S. Supreme Court in *Del Monte Mining & Milling Co. vs. Last Chance Mining & Milling* (171 US 55), 1898.

SPECIAL CASES (SECS. 10-230 & 10-231)

It is informative to jump to the last topic in Chapter X, "Special Cases" (Secs. 10-230 and 10-231) before discussing the topic "Gaps and Overlaps Not of Record". Section 10-230 is key to applying the resurvey rules and instructions laid out in Chapter X. None of the rules and instructions should be strictly adhered to, but rather, "experience, thoroughness and good judgment are indispensable for the successful retracement and recover of any survey..." and therefore, judgment should temper the rules.

*It is an axiom among experienced cadastral and mineral surveyors that the true location of the original lines and corners can be restored, if the original survey was made faithfully, and was supported by a reasonably good field-note record. That is the condition for which the basic principles have been outlined, and for which the rules have been laid down. The rules cannot be elaborated to reconstruct a grossly erroneous survey or a survey having **fictitious** field notes.*

SPECIAL CASES (SECS. 10-230 & 10-231)

First, a comment on the last part of the above quote emphasized by underlining. During the time period from July 1899 to August 1904 fictitious field notes were the rule rather than the exception for mineral surveys where there is a conflict with a prior official survey. The July 1899 beginning date only applies to Colorado. In other western states, the beginning date is likely some time in 1900. The fiction does not lie with the position of the mining claim being surveyed, but with the practice of showing theoretical positions of prior official surveys.

The manner in which the U.S. Deputy Mineral Surveyor was forced to report the conflicts with prior official surveys followed this general form. He connected his survey to each of the corners of the PLSS that the prior official surveys were tied to. Using those measured connection(s) the deputy fixed the record positions of the prior patented surveys as if playing the child's game "pin the tail on the donkey."

SPECIAL CASES (SECS. 10-230 & 10-231)

In other words, the deputy started with his surveyed position of the PLSS corner(s) and then computed the position of the senior claim from the PLSS control corner based solely on the record information of the prior survey. Where the computed senior survey draped across his survey is where he described it to be in his field notes and on his preliminary plat (i.e. the deputy falsified his returns in compliance with his sworn duty to follow all instructions issued by the GLO). The senior survey's original monuments were ignored.

At least in Colorado this was not a rare occurrence as more than 4000 mineral survey orders were issued during the 5+ years that the policy was enforced by the GLO. There were also approx. 620 amended surveys and amended plats conducted during that timeframe. The previously discussed Act of April 28, 1904 overturned this policy and required the General Land Office to promulgate new rules and policy via the *Sinnott v. Jewett* and *Drogheda and West Monroe Extension* land decisions.

SPECIAL CASES (SECS. 10-230 & 10-231)

Section 10-231 is directed at the BLM Cadastral surveyor engaged in an official dependent resurvey, but the sentence equally applies to private surveyors.

When the surveyor encounters unusual situations, or finds it difficult to apply the normal rules for good faith location and substantially as approved or for the restoration of lost corners, the surveyor will report the facts to the proper administrative office.

Almost every mineral survey has the potential of bordering the Public Lands. The proper "administrative office" for private surveyors to contact would be the state Branch Cadastral Chief. The Branch Cadastral Chief is the person delegated (through the authority assigned by Congress to the Department of the Interior Secretary) to determine the extents of the Public Lands in the state(s) they are assigned.

SPECIAL CASES (SECS. 10-230 & 10-231)

The GLO policy was brought up while discussing the "Special Cases" expressly to show that there was a policy in force for five years that required U.S. Deputy Mineral Surveyors to falsify the positions of senior conflicting claims. The 2009 Manual does not make any mention of what is referred to as the "Binger Hermann" policy, which is named after the Hon. Commissioner of the General Land Office, Mr. Binger Hermann who served from 1897 to 1903. The Act of April 28, 1904 and the *Sinnott v. Jewett* Land Decision are cited under "Resurveys", but no mention is made as to why they were enacted and promulgated, nor is any mention made of what they "cured".

The fact that the U.S. Surveyor General for the District of Utah stated in his official annual reports of 1901, 1902 and 1903 that the deputies under his charge were forced to "falsify their returns" is startling. Their only other choice was to resign. Writings of the time mentioned that some deputies did just that.

SPECIAL CASES (SECS. 10-230 & 10-231)

Since the penultimate section in Chapter X mentions, "fictitious field notes", the Binger Hermann policy was addressed there. Suggested updates to the mineral resurvey sections of the 2009 Manual are to add the lost corner illustrations in Chapter VI of Meldrum's guide and information on the Binger Hermann policy.

Otherwise, section 10-214 contains no context and therefore, is ambiguous. If taken literally, virtually every mineral survey before August 1904 (when the "Report" section describing other found corner monuments was added) is suspect regarding its ties to other mineral surveys.

10-214. Caution should be exercised in the use of any ties to or from adjoining surveys when the descriptions for the conflicting claim corners, PLSS corners, or mineral monuments are not mentioned in the field notes memorandum and may in fact have only been calculated and not surveyed on the ground. Such calculated ties, as a rule, should not be used.

**TO BEND
OR
NOT TO BEND

THAT IS THE
QUESTION!?!**

GAPS AND OVERLAPS NOT OF RECORD

10-224. Patented and unpatented claims and sites were often surveyed as contiguous to each other by sequential surveys. When the record is clear that monuments were set to mark corners common to two claims, the presumption is that the claim line as marked is common to the two claims. Experienced surveyors know in the case of offset claim corners along a boundary between contiguous claims that, after monumentation, technical gaps or overlaps will exist. These are not legal or title conflicts. It is known that **every measurement contains some error** and it is impossible to put a monument exactly on the straight line between two other monuments; slight variations in direction or distance are unavoidable and acceptable.

GAPS AND OVERLAPS NOT OF RECORD

10-224 (cont.) During the retracement, the extent of the falling of the intermediate monument from the straight line between the two other monuments is measured. **An analysis of conditions will be conducted and a determination made as to whether the line is common to the two claims** or the error is so gross as to impair a legal right as to position so that the claims were never contiguous.

GAPS AND OVERLAPS NOT OF RECORD

10-225. When the relationship between the monuments is substantially as approved, and there is no evidence of fraud, mistake or gross error, the line running through the intermediate monument, as measured, will be returned as common to the claims.

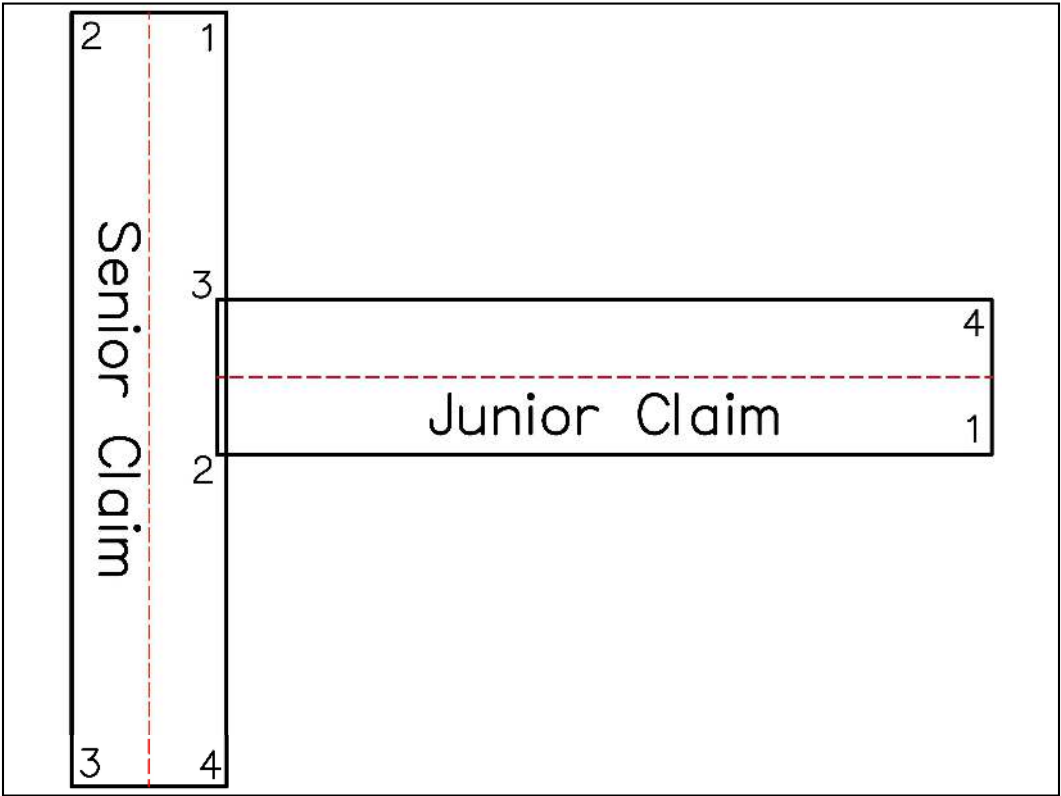
When determining whether the conditions found during the retracement are substantially as approved, **the surveyor shall be guided by law, rules, official policy, effect on extralateral rights**, and survey principles thereof.

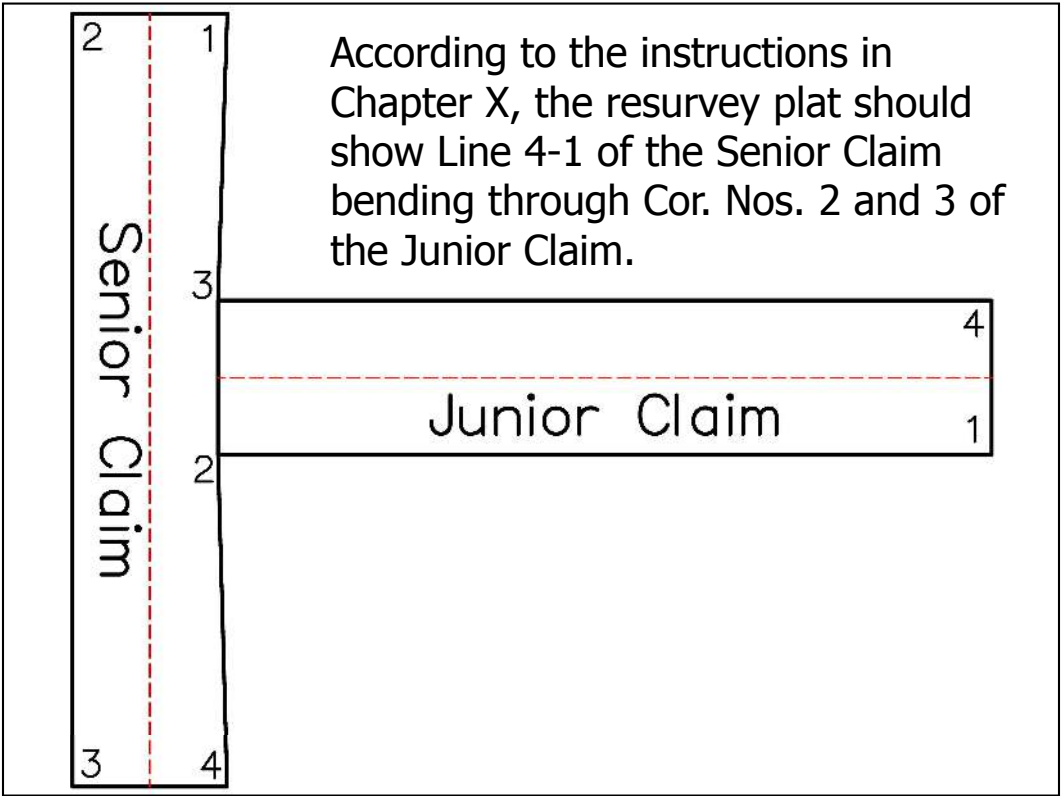
EXAMPLES OF TECHNICAL GAPS AND OVERLAPS

EXAMPLE 1 - JUNIOR CLAIM OVERLAPS SENIOR CLAIM.

This first example is a situation where the field notes and patent for the Junior Claim state, "thence from Cor. No. 1 due west 1500 ft. to a point on Line 4-1 of the Senior Claim, thence due north 300 ft. along said Line 4-1 of the Senior Claim to Cor. No. 3, from which Cor. No. 1 of the Senior Claim bears due north 580 ft...." The field notes and patent clearly indicate that Line 4-1 of the Senior Claim is contiguous with Line 2-3 of the Junior Claim.

A careful retracement of the two lode claims found all 8 corners in their officially established positions, which shows a technical overlap of the Junior Claim onto the Senior Claim. The red dashed lines are the lode lines of the two claims.





While the Manual instructions state that this is proper, one interpretation is that doing so violates the Act of April 28, 1904. Original, undisturbed monuments are the supreme evidence of what land was conveyed in the patent and there is no indication that the lines of the survey are to be regarded as anything other than straight lines between the corners.

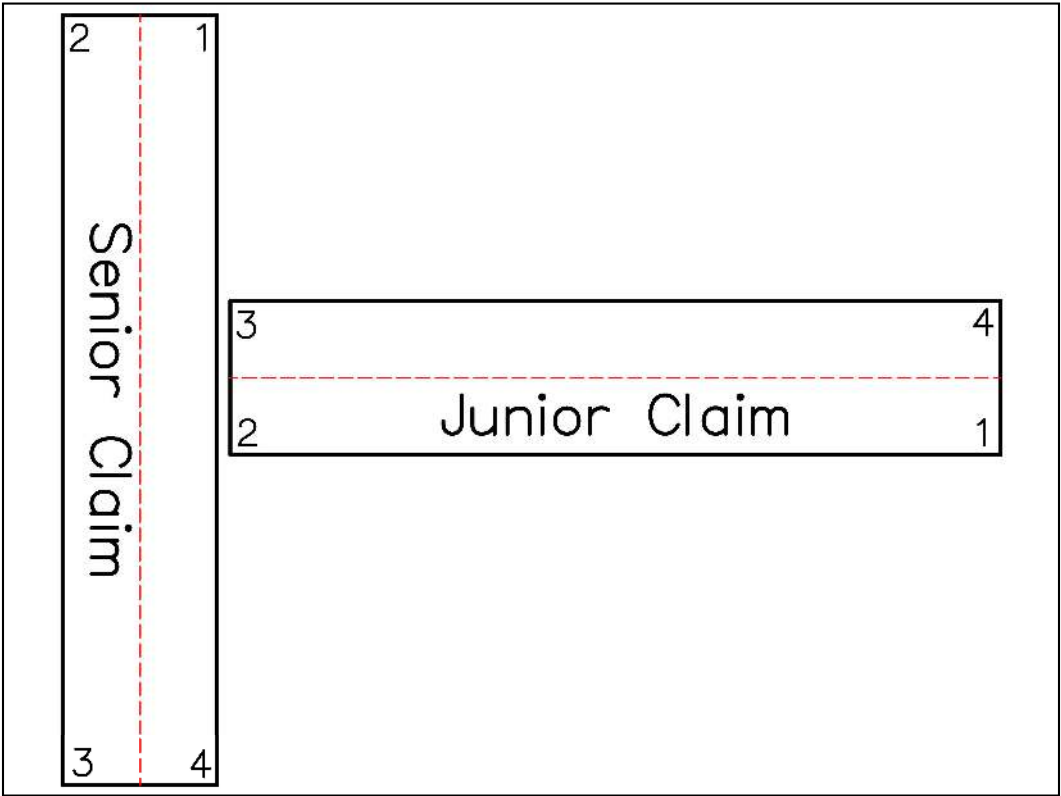
Also, since a federal patent is regarded as a quit claim deed, the Federal Government cannot convey the area in conflict to the junior claim after it was previously conveyed to the senior claim. And since both claims are patented, the Federal Government no longer has jurisdiction and therefore, the BLM may not have the authority to bend the senior line through the junior monuments in this example. See *Steele v. Smelting Co.* 1882; 1 Sup. Ct. 389, 106 U.S. 447, 454, 27 L. Ed. 226.

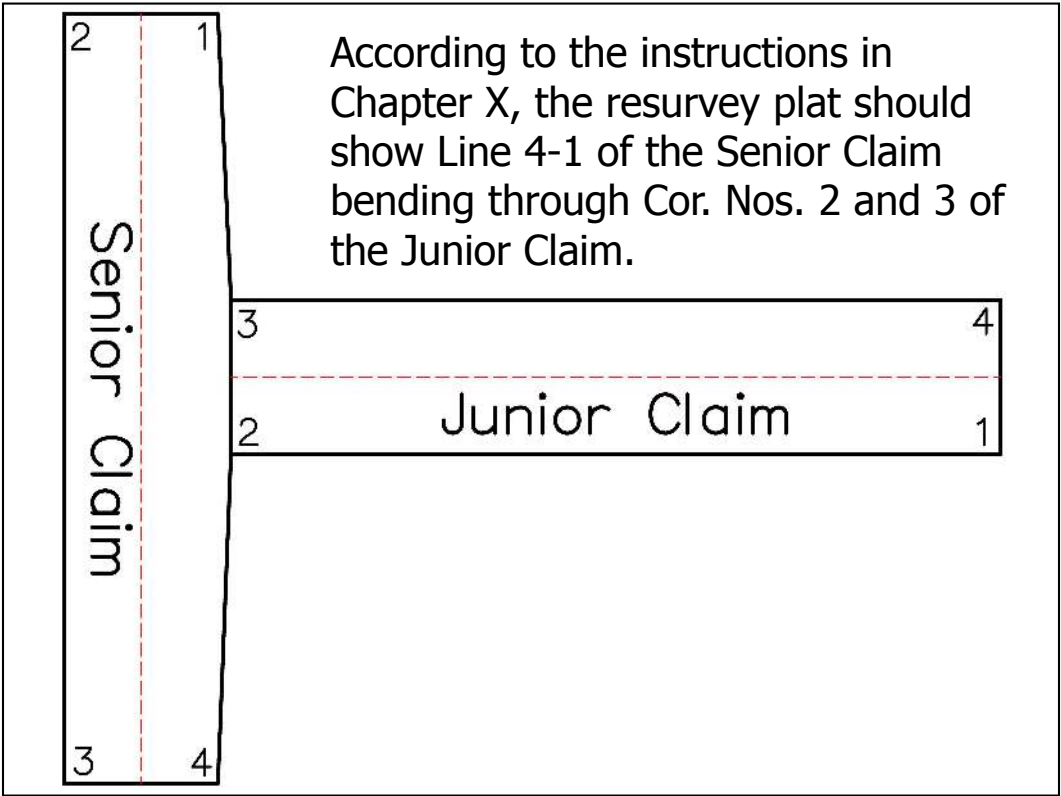
Would it be better to treat the technical overlap example the same as an intentional overlap and hold the lines as depicted in the first figure so that the conflict belongs to the senior claim?

EXAMPLE 2 - TECHNICAL GAP BETWEEN JUNIOR CLAIM AND SENIOR CLAIM

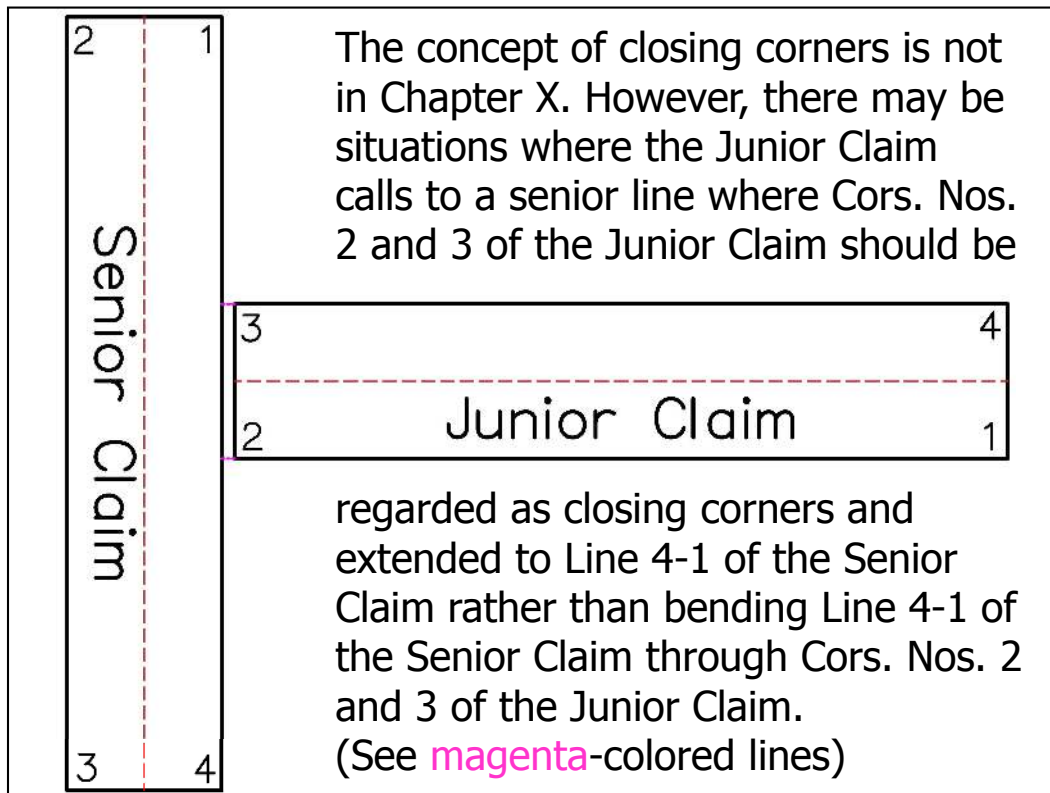
The second example is a situation where the field notes and patent for the Junior Claim state, "thence from Cor. No. 1 due west 1500 ft. to a point on Line 4-1 of the Senior Claim, thence due north 300 ft. along said Line 4-1 of the Senior Claim to Cor. No. 3, from which Cor. No. 1 of the Senior Claim bears due north 580 ft...." The field notes and patent clearly indicate that Line 4-1 of the Senior Claim is contiguous with Line 2-3 of the Junior Claim.

A careful retracement of the two lode claims found all 8 corners in their officially established positions, which shows a technical gap between the junior lode and the senior lode. The red dashed lines are the lode lines of the two claims.





According to the instructions in Chapter X, the resurvey plat should show Line 4-1 of the Senior Claim bending through Cor. Nos. 2 and 3 of the Junior Claim.



There are additional considerations that may change that opinion. One being whether the distance from Cor. No. 1 of the Junior Claim along Line 1-2 until it intersects Line 4-1 of the Senior Claim is longer than 1500.0 ft., which is the statutory limit under the U.S. 1872 Mining Law.

While some may regard the area of the gap as *de minimus*, one preference would be to maintain the geometry of lode claims as contemplated in the U.S. Mining Law of 1872 and regard the junior intermediate corners as closing corners.

Regarding the above examples, if Cors. Nos. 2 and 3 of the Junior Claim were not found, would your solution be to place them on Line 4-1 of the Senior Claim? Even when the length of Line 4-1 is greater than 1500 feet?

For this given set of facts, a BLM surveyor conducting an official resurvey should be within their right to bend the senior line through the junior intermediate corners. It also meets the intent of the Federal Government as outlined in the first paragraph of Sec 10-229 to not, "retain unmanageable slivers of land...."

From the perspective of a private surveyor it is uncertain if they have the authority to bend Line 4-1 of the Senior Claim through Cor. Nos. 2 and 3 of the Junior Claim. Again, one interpretation of the Act of April 28, 1904 is that calls to a senior line incorporate the monuments of that senior line with the junior claim monuments and as such, Lines 1-2 and 3-4 should close upon Line 4-1 of the Senior Claim.

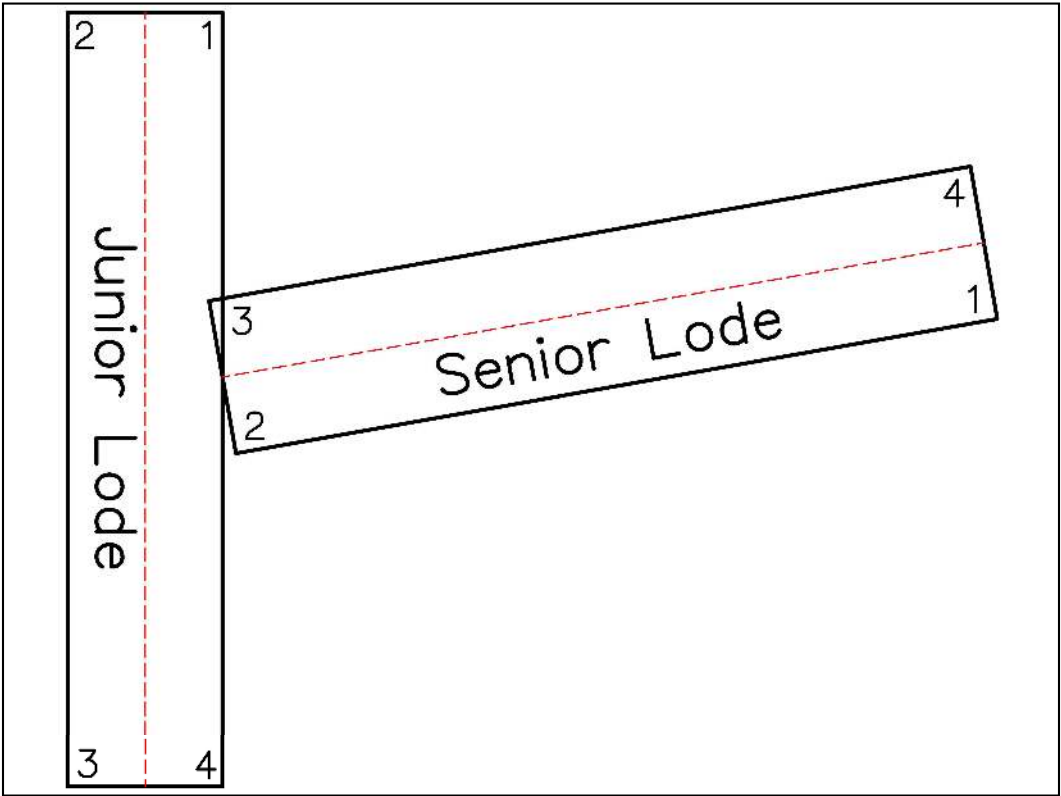
EXAMPLE 3 - TECHNICAL GAP AND OVERLAP BETWEEN JUNIOR CLAIM AND SENIOR CLAIM

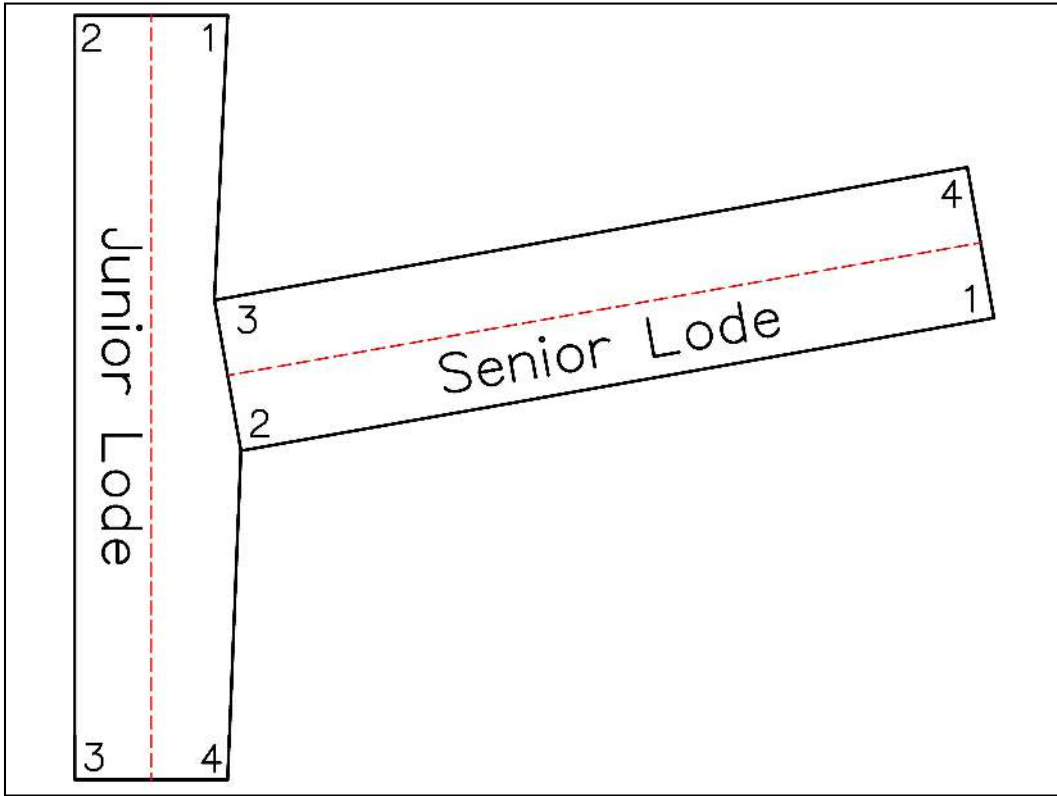
Example 2 had the Junior Claim corners being intermediate monuments while this example has the Senior Claim corners as the intermediate monuments. For this technical gap & overlap example, the senior monuments cannot be considered as closing corners. For the two claims to share a common line, the field notes for the Junior Claim must call the Senior Claim corners as being on the Junior line. Otherwise, the conditions in Sec. 10-224 are not met.

In this example, the field notes and patent for the Junior Claim state:

Thence from Cor. No. 4 due north 580 ft. to Cor. No. 2 of the Senior Claim, thence 300 ft. to Cor. No. 3 of the Senior Claim, thence 620 ft. to Cor. No. 1, being the point of beginning.

The Junior Claim field notes and patent also note that all lines were run directly on the ground, which indicate that Line 4-1 of the Junior Claim is common with Line 2-3 of the Senior Claim. A careful retracement of the two lode claims found all 8 corners in their officially established positions, which shows a technical gap and overlap between the Junior Claim and the Senior Claim.





Since Cors. Nos. 2 and 3 of the Senior Claim cannot be regarded as closing corners, the only two options available are to leave the technical overlap and gap or to bend Line 4-1 of the Junior Claim through Cors. Nos. 2 and 3 of the Senior Claim.

In this case, another boundary principle may be controlling. The resurveyor does not need to *bend* the junior line per the rules in Chapter X because the position of the line as run and established on the ground is controlling.

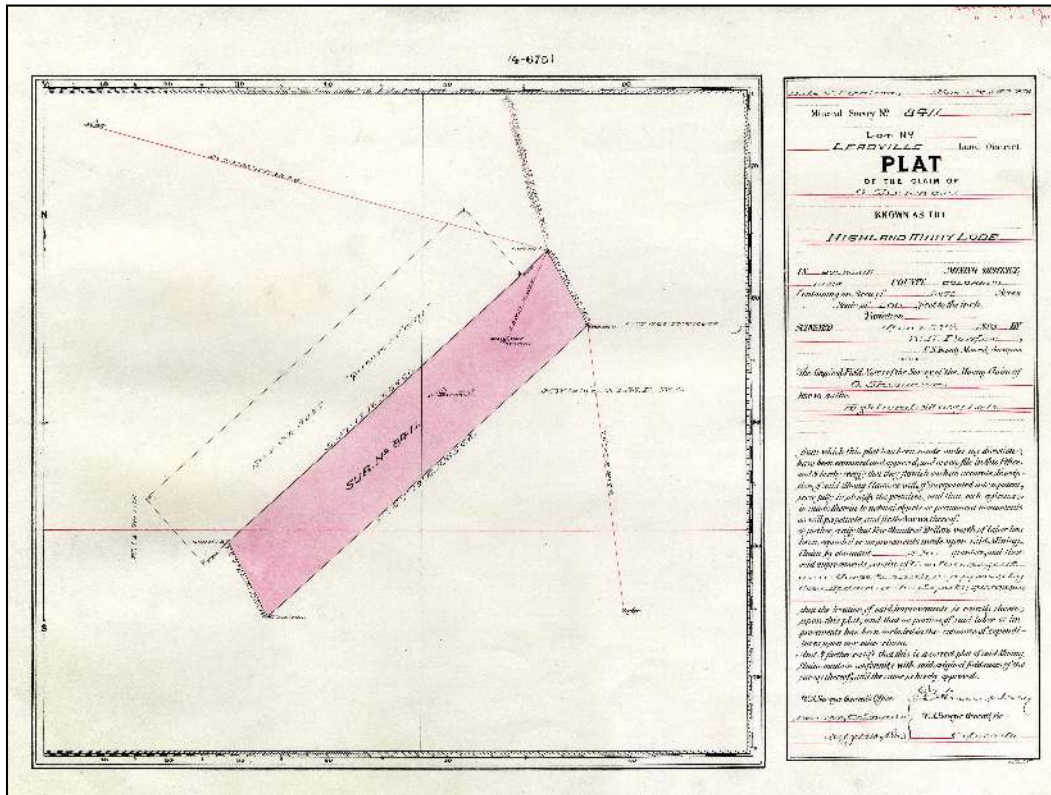
Therefore, Cors. Nos. 2 and 3 of the Senior Line act the same as line trees in a rectangular PLSS survey and as such, they are properly regarded as angle points in Line 4-1 of the Junior Lode.

EXAMPLE 4 - TECHNICAL OVERLAP OF END LINES BETWEEN JUNIOR CLAIM AND SENIOR CLAIM

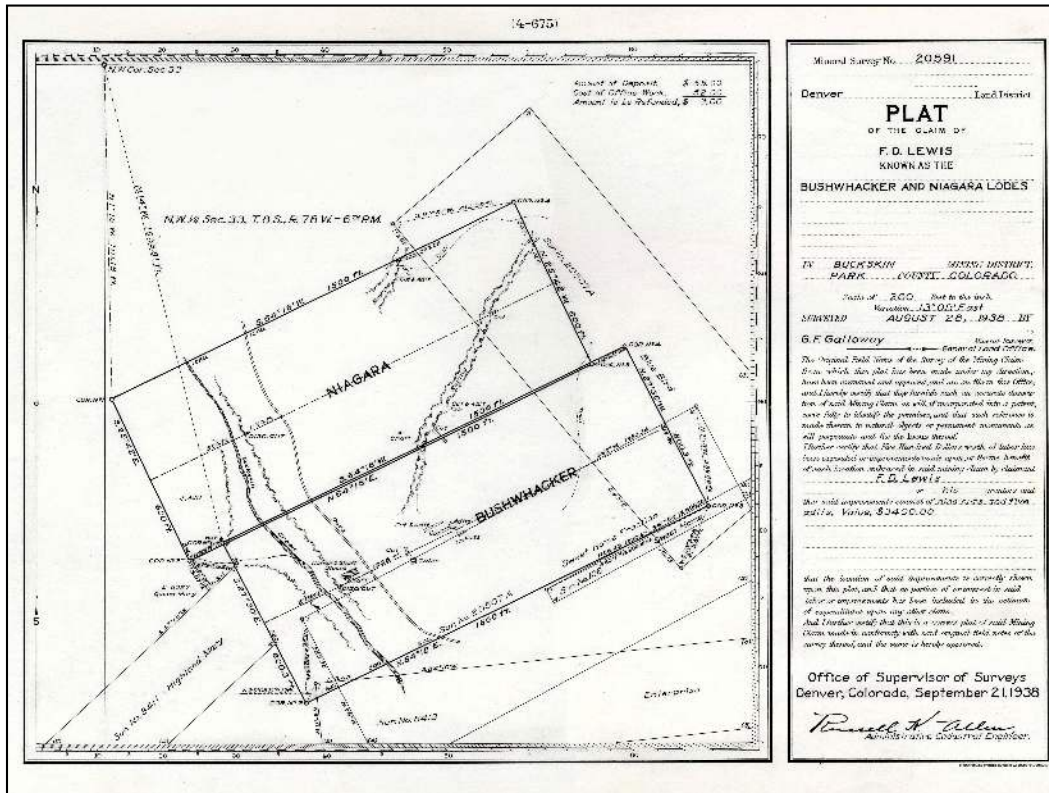
Example 3 had the usual situation of a side line and an end line. In this case both lines are end lines and the Senior Claim corners are the intermediate monuments. This is a common example in Colorado where the widths of lode claims changed over time.

In this case, the Highland Mary lode claim (senior in right) was restricted to a maximum width of 300 feet and the Bushwhacker lode claim (junior in right) has the maximum width authorized by the 1872 Mining Law of 600 feet. For this technical overlap example, the senior monuments cannot be considered as closing corners.

The official field notes of the Bushwhacker Lode, Sur. No. 20591 are listed below and show that Line 1-2 was run directly on the ground and through Cors. Nos. 1 and 4 of the Highland Mary Lode, Sur. No. 8411. All four corners were found and all, but Cor. No. 4 of the Highland Mary Lode were intact. The original bearing rock of Cor. No. 4 of the Highland Mary Lode was used to reestablish the monument in its original position.



Plat of the Highland Mary Lode, Sur. No. 8411, approved July 12, 1893.



Plat of the Bushwhacker and Niagara lodes, Sur. No. 20591, approved September 21, 1938 showing Line 1-2 of the Bushwhacker Lode to be contiguous with Line 4-1 of the Highland Mary Lode, Sur. No. 8411.

All lines and connections of this survey were run by direct methods.

The magnetic variation observed at each corner of the survey gave the uniform value of $N.13^{\circ}9'E.$

:30. BUSHWHACKER-LODE.

Beginning at Cor.No.1, of the Bushwhacker lode, where I, set a granite stone, 24x14x7 ins., 12 ins. in the ground surrounded with a mound of stones, for Cor.No.1, mkd. 1-B-20591, from which,

The NW.Cor.to Sec.33, T.8-S., R.78-W. of the 6th. Prin.Mer. bears $N.14^{\circ}W.$ 1638.81 ft. dist., a granite stone 16x12x8 ins. marked as described in the official records.

Cor.No.2 of Niagara lode, of this survey, bears $S.61^{\circ}12'W.$ 127.74 ft. dist.;

Thence $S.27^{\circ}30'E.$

6.91 Intersect line 2-3 of Niagara lode of this survey;

75.00 Stream, 16 ins. wide, flows westerly;

90.00 Cor.No.1 of Sur.No.8411 Highland Mary lode;

380.00 Cor.No.4 of Sur.No.8411 Highland Mary lode;

600.30 Cor.No.2, set a granite stone, 24x18x9 ins., 12 ins. in the ground surrounded with a mound of stones, for Cor.No.2, mkd. 2-B-20591, from which,

Official field notes of the Bushwhacker Lode, Sur. No. 20591 showing Line 1-2 being run through Line 4-1 of the Highland Mary Lode, Sur. No. 8411.

Note: The statement in the preamble of the field notes states that all lines were run by direct methods.

OTHER CORNER DESCRIPTIONS.

Sur.No.106 Sweet Home lode:- Cor.No.1 was found firmly set and properly marked. Cor.No.2 has been destroyed. Line 1-2 is shown to be N.61°58'E., as fixed in Sur.No. 20507 A. instead of N.63°03'E. as approved.

Sur.No.5027 Queen Mary lode:- Cors.Nos.2 and 3 were not found. The position of Cor.No.2 was taken as S.47°-18'W. 119.4ft. from Cor.No.1 of Sur.No.8411 Highland Mary lode, as approved, and line 2-3 was taken as N.41°W. as approved.

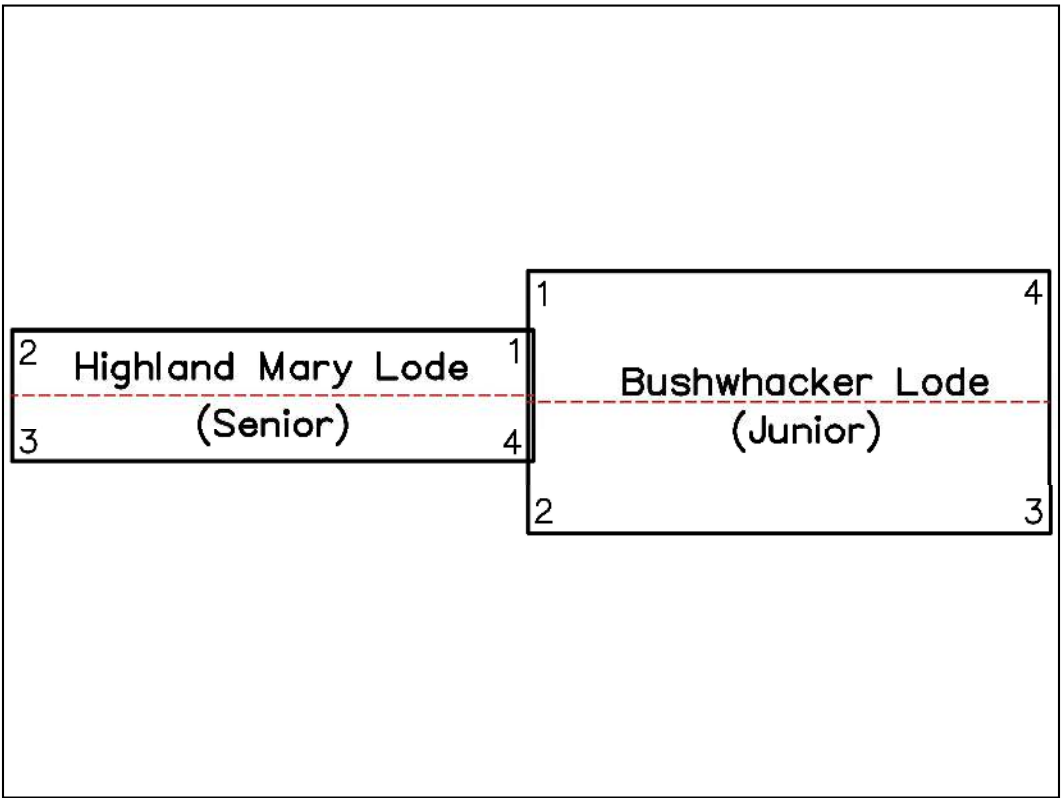
Sur.No.8411 Highland Mary lode:- Cors.Nos.1 and 4 were found firmly set and properly marked. Line 4-1 is N.27°30' W. 290ft. as approved. From Cor.No.1 the NW.Cor. of Sec. 33 bears N.14°42'W. 1726.47ft. instead of N.14°10'W. 1728.6ft., as approved.

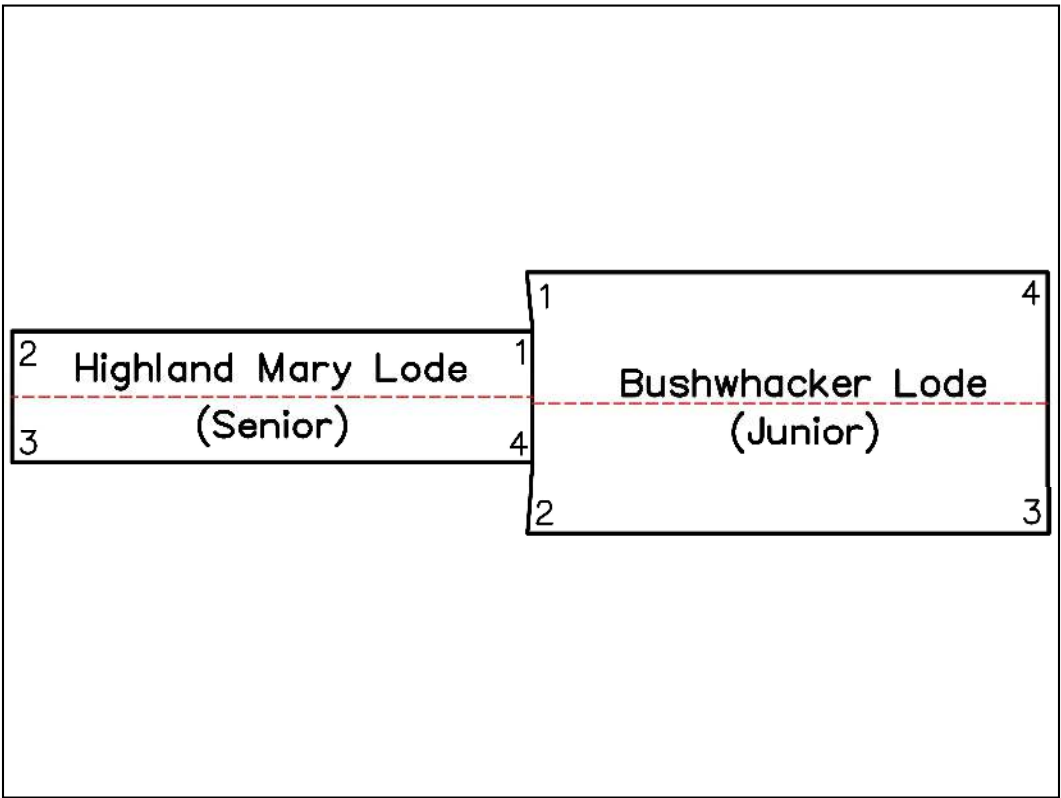
Sur.No.8413 Enterprise lode:- Cors.Nos. 1,2 and 4 were found firmly set and properly marked. Line 1-2 bears S.6°10'E. instead of S.5°36'E as approved, and line 4-1 bears S.84°10'W. instead of S.84°24'W. as approved. From Cor.No.1, the NW.Cor.of Sec.33 bears N.18°53'W. 2175.46ft. instead of N.18°26'W. 2176.6ft., as approved.

Sur.No.20507 A. Sweet Home Fraction and Blue Bird lodes:- Cors.Nos.1 and 2, and 1 and 4 of the Sweet Home Fraction and Blue Bird lodes respectively were found firmly set and properly marked, and the lines 1-2 and 4-1 are correct as approved.

Other Corner Descriptions section of the official field notes of the Bushwhacker and Niagara lodes, Sur. No. 20591.

Note: The description for Sur. No. 8411 states that both Cors. Nos. 1 and 4 of the Highland Mary Lode were found firmly set and properly marked and that Line 4-1 was measured and found to be N. 27°30' W. 290 ft. as approved.





Since Cors. Nos. 1 and 4 of the Highland Mary Lode cannot be regarded as closing corners, the only two options available are to leave the technical overlap or to bend Line 1-2 of the Bushwhacker Lode through Cors. Nos. 1 and 4 of the Highland Mary Lode.

In this case, the location of Line 1-2 of the Bushwhacker Lode is fixed as run and established on the ground.

Therefore, Cors. Nos. 1 and 4 of the Highland Mary Lode act the same as line trees in a rectangular PLSS survey and are angle points in Line 1-2 of the Bushwhacker Lode.

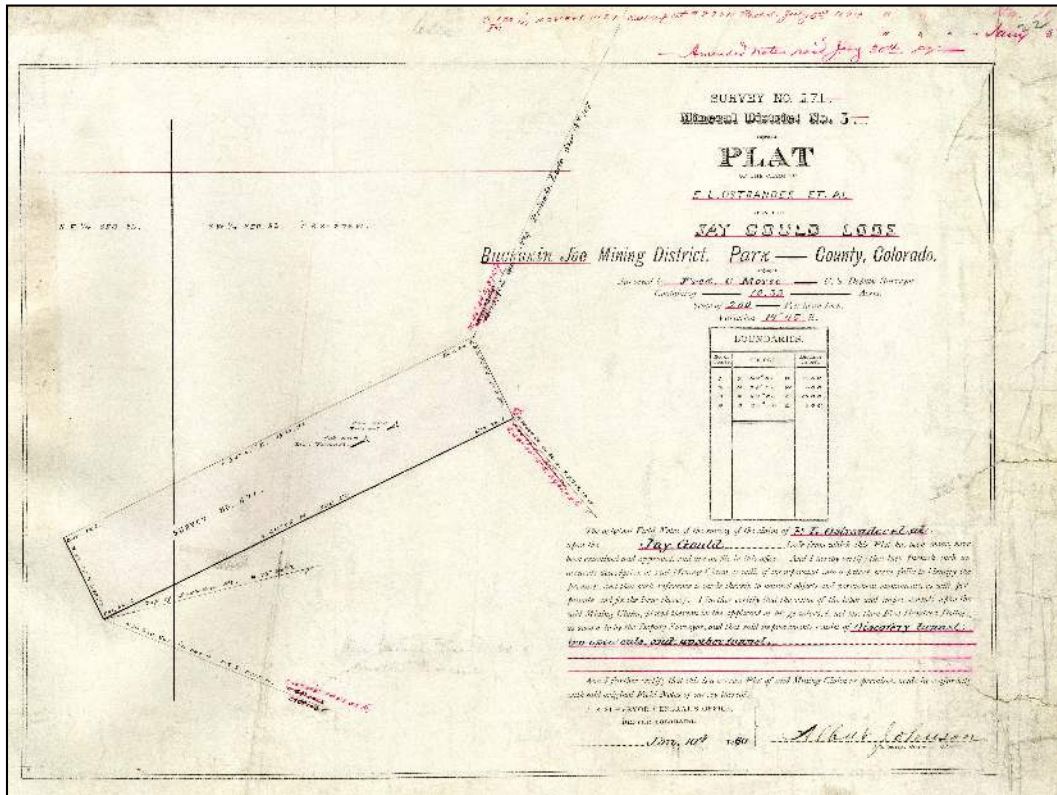
EXAMPLE OF THE RECORD SHOWING THE TWO LINES ARE COMMON, BUT THE JUNIOR LINE WAS NOT RUN

This last example is left as additional food for thought when contemplating bending the lines of one mineral survey through the intermediate corners of another survey.

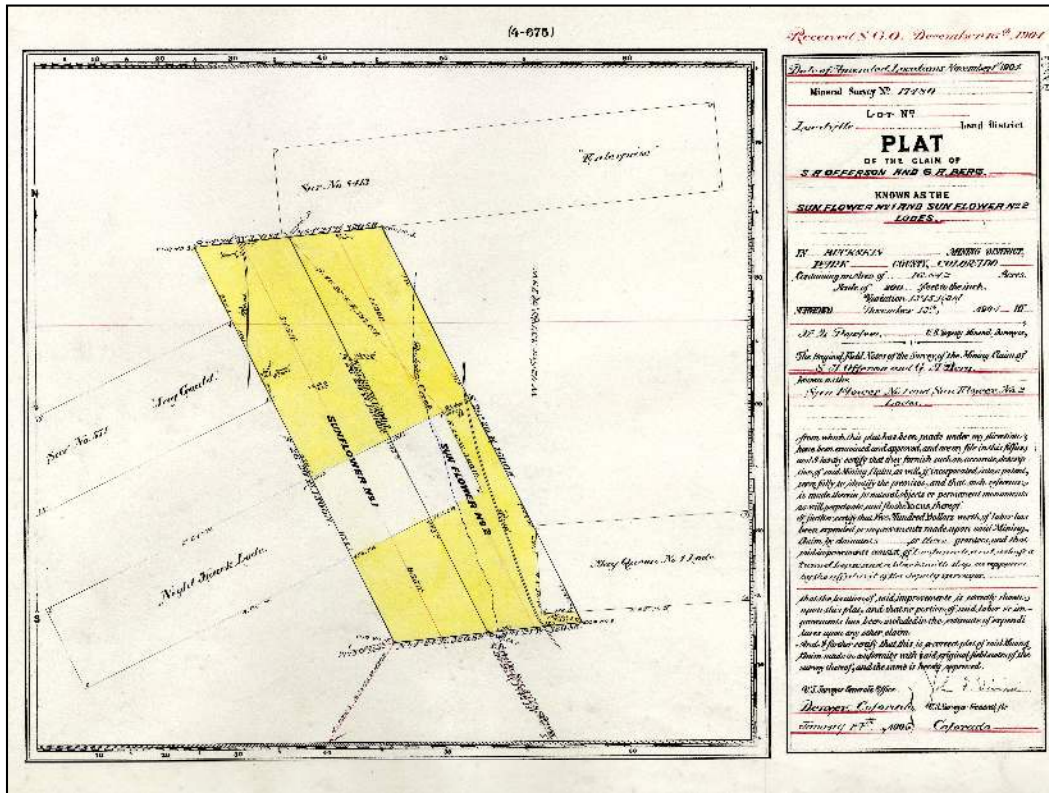
In this example, the "Report" section of the official field notes of the Sun Flower No. 1 and Sun Flower No. 2 lodes, Sur. No. 17480 explicitly states which lines of the survey were run on the ground. The survey commenced at Cor. No. 4 of the Sun Flower No. 2 and ran along Line 3-4. The end lines of both claims were stubbed out from this line.

The common side line of the two claims (Line 1-2) and Line 3-4 of the Sun Flower No. 1 lode were not directly run. The call is that Line 4-1 of the Jay Gould Lode, Sur. No. 571 is on Line 3-4 of the Sun Flower No. 1 Lode.

Should this be treated the same way as the previous examples of gaps and overlaps not of record with Cors. Nos. 1 and 4 of the Jay Gould held as angle points in Line 3-4 of the Sun Flower No. 1?



Plat of the Jay Gould Lode, Sur. No. 571 located 3 1/2 miles northwest of Alma, CO.



Plat of the Sun Flower No. 1 and Sun Flower No. 2 lodes, Sur. No. 17480, which was surveyed and approved after the Binger Hermann policy was rescinded.

Note: There are two exclusions of unsurveyed lode claims (the Night Hawk and May Queen No. 4 lodes). The record positions of those lode claims as documented in the field notes of Sur. No. 17480 should be used if the original location posts of the unsurveyed claims are not found.

Report.

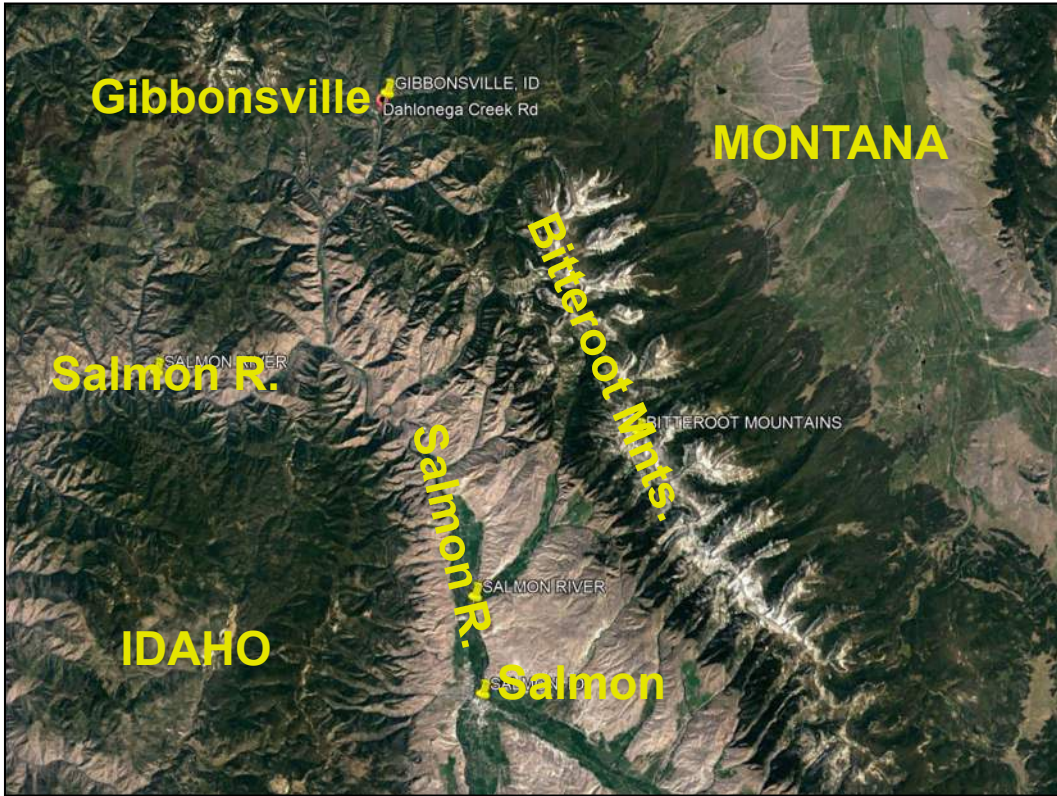
1st - This survey was made by running line 3-4 of Sun Flower no. 2 lode and the end lines of each claim. Direct connection on the ground was made with Cors. nos. 1 and 4 Sur. no. 571 Jay Gould lode, Cors. no. 2 Sur. no. 8413 Enterprise lode, Cors. no. 4 Sur. no. 926a. Tanner Boy lode, Cors. no. 1 Night Hawk lode and Cors. no. 2 May Queen no. 4 lode. Cors. nos. 1 and 2 of Sur. no. 2179 Three Rivers lode have been carried away by snow slides. The courses of lines 2-3 Sur. no. 8413 Enterprise lode, 1-2, 3-4 and 4-1 Night Hawk lode and 1-2 and 2-3 May Queen no. 4 lodes were determined on the ground.

Excerpt from the "Report" section of the field notes for Sur. No. 17480. It includes a statement of what lines were run.

Note: In this case, the positions of Cors. Nos. 1 and 4 of the Jay Gould Lode, Sur. No. 571 were made by direct connections on the ground. However, it appears that Line 3-4 of the Sun Flower No. 1 lode was not run (or not completely run) on the ground.



Not uncommon, yet unique in their purpose and survey rules and applications, mineral surveys offer challenges somewhat different from sectionalized lands in the Public Land Survey System (PLSS) of “township and ranges.” The frequency of gaps and overlaps (intended and unintended) inundates the complex staking of mineral surveys in an area containing valuable mineral deposits that is open to exploration and discovery activities under the various mineral survey laws.

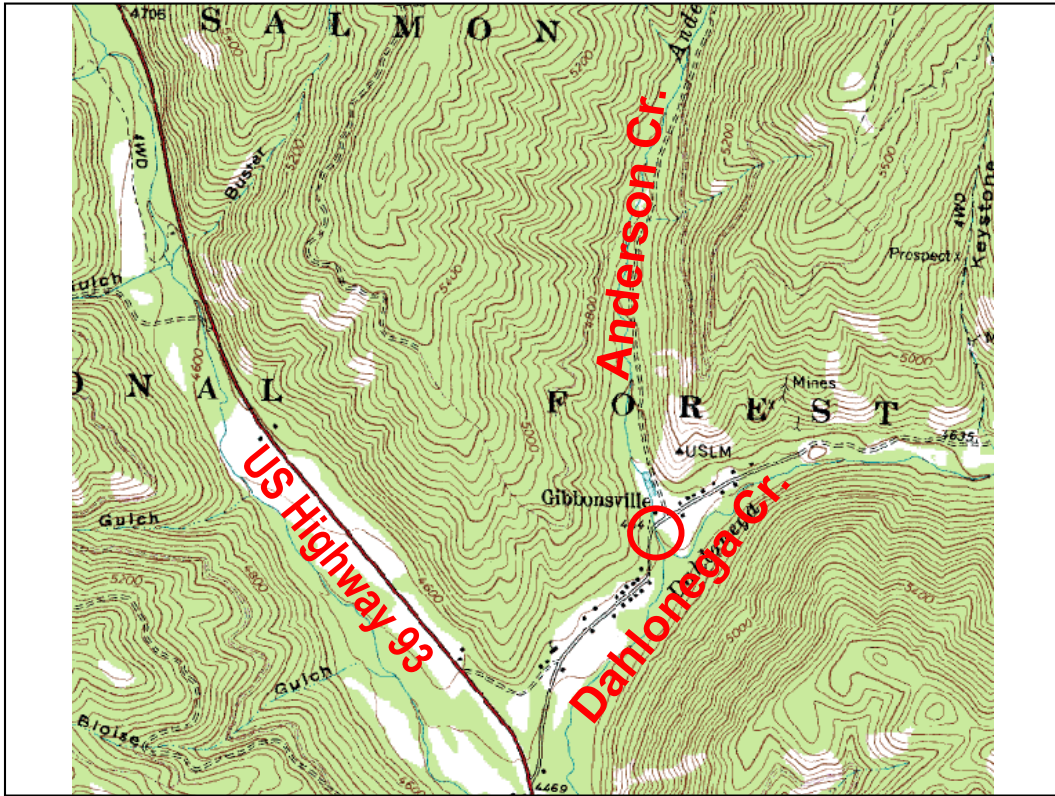


Gibbonsville, Idaho, located about 33 miles north of Salmon, Idaho and just east of US Highway 93 (Lewis & Clark Trail).

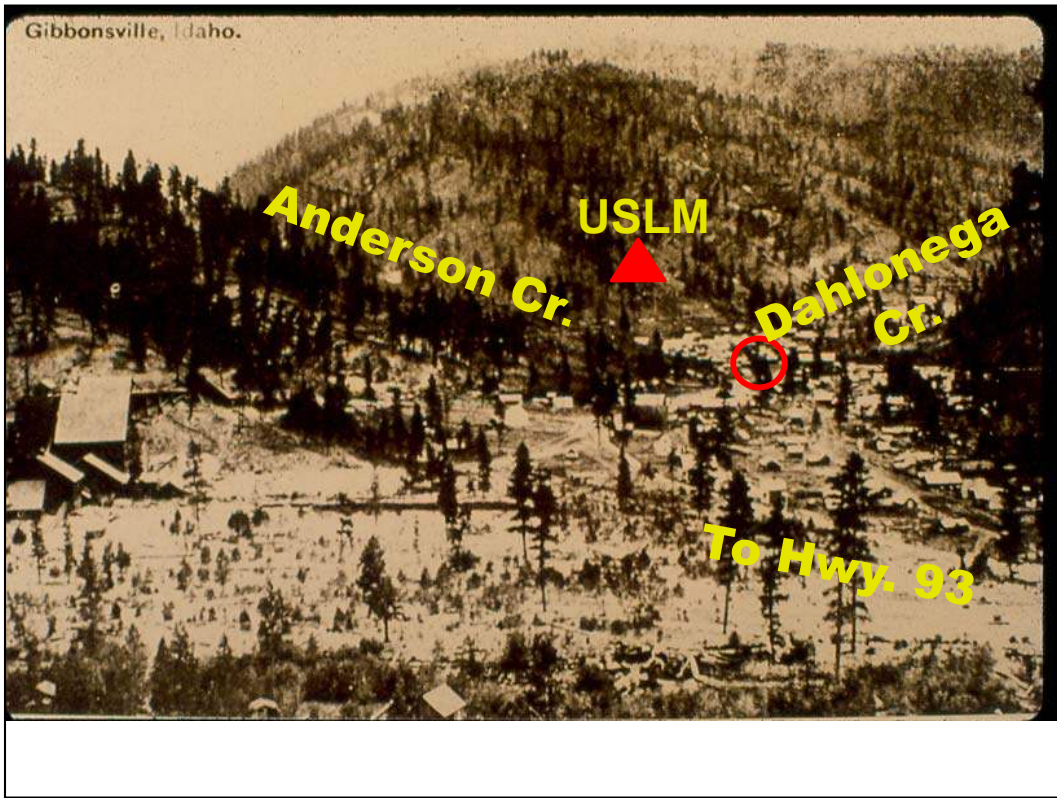


On an early spring day in 1979 Salmon National Forest personnel saw logging trucks, loaded with freshly cut timber, exiting the Dahlongega Creek Road, onto US Highway 93 and heading north towards Montana. They drove up the Dahlongega Creek Road and found a timber harvest operation that had obviously been active for several late winter months. There was no permit filed with the Salmon National Forest. Further inspection revealed that the logging trucks were driving through local creek beds causing creek bottom damage and downstream contamination. A drive north, along the Anderson Creek road, revealed that many of the harvested trees appeared to be coming from US Forest Service lands on the steep hillside west of Anderson Creek. IT APPEARED THAT THERE WAS AN ACTIVE TIMBER HARVESTING TRESSPASS ON FOREST SERVICE LANDS.

The red circle is at the junction of the Dahlongega Creek Road and the Anderson Creek Road and will approximate the same location in the next several slides.



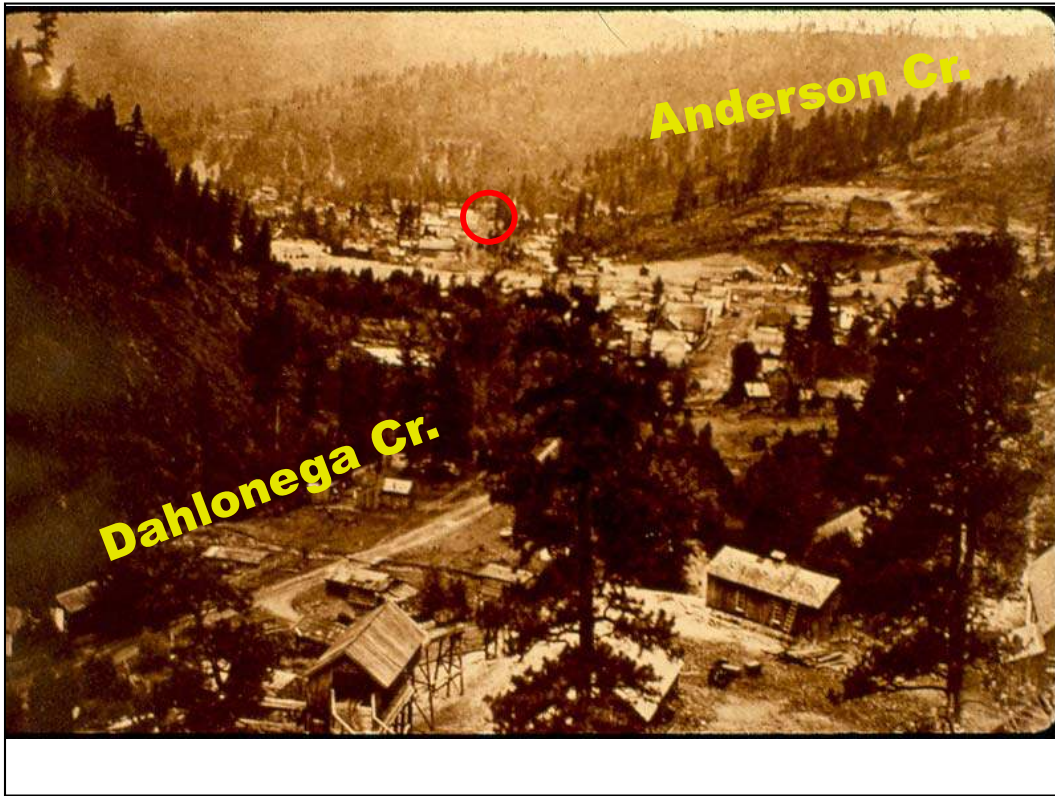
USGS 7-1/2' Topographic Map of the general Gibbonsville area.



Northerly view of Gibbonsville circa approximately 1900.



Oblique Google Earth view northerly in the Gibbonsville area.



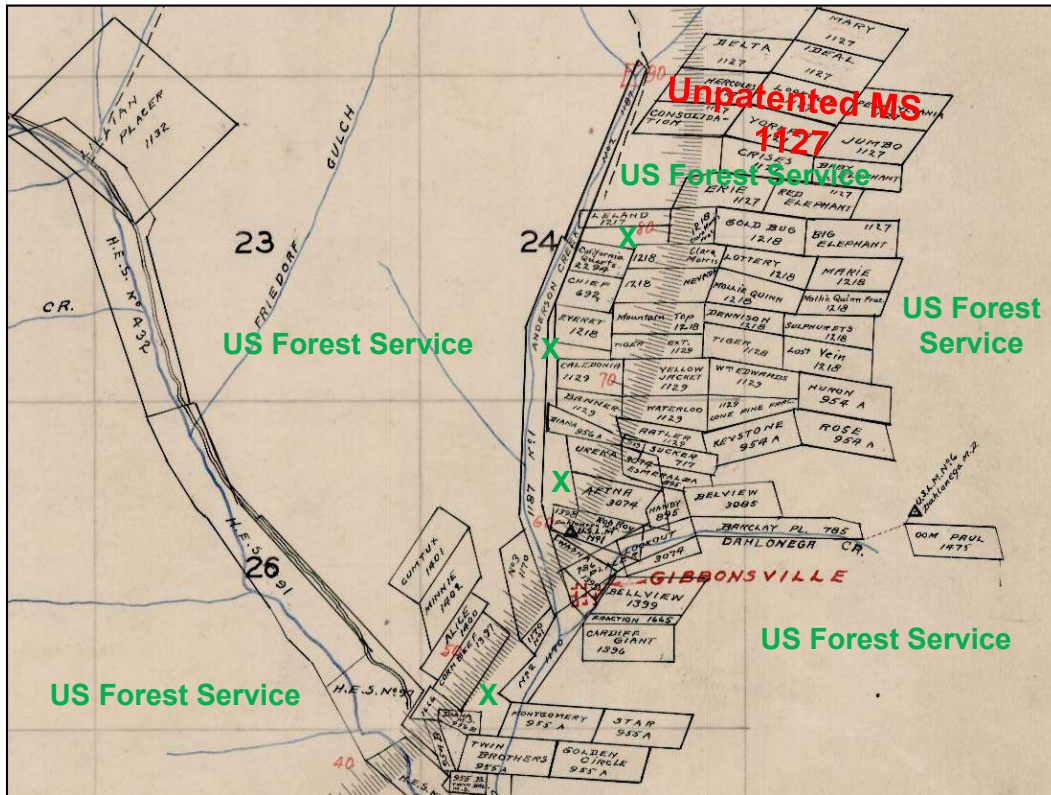
West-southwesterly view of Gibbonsville circa approximately 1900.



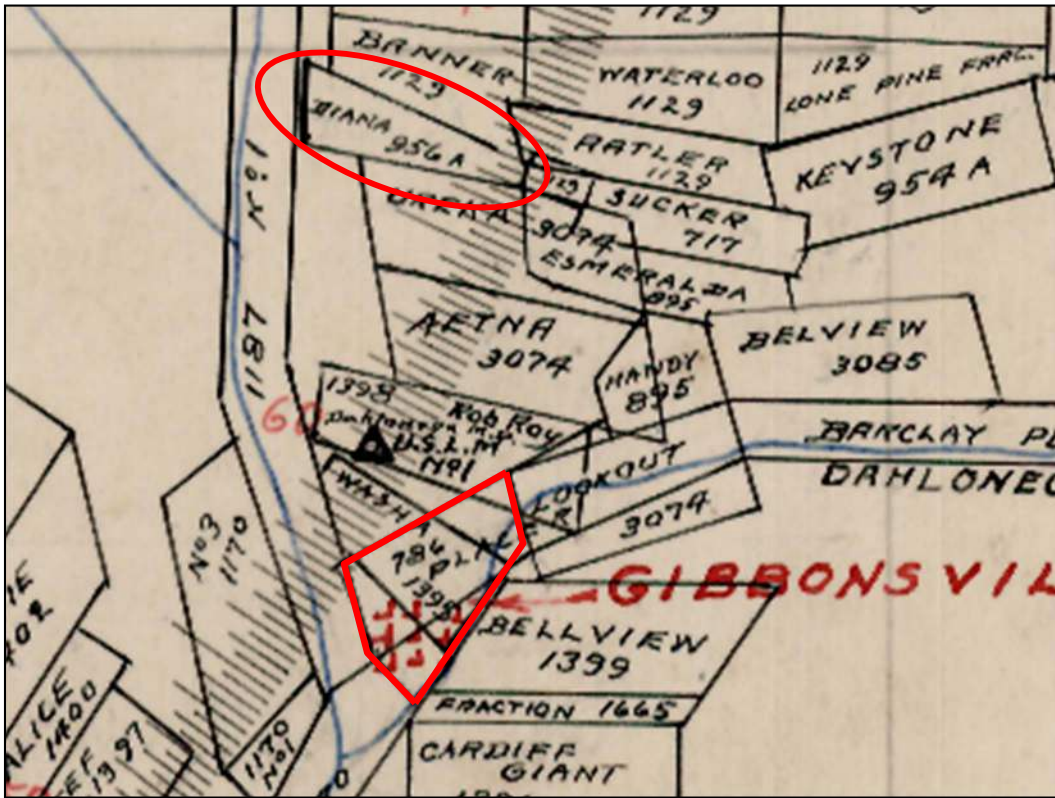
Oblique Google Earth view west-southwesterly in the Gibbonsville area.



Mineral Survey Connecting Sheet for T. 26 N., R. 21 E., Boise Meridian, (Lemhi County), Idaho.

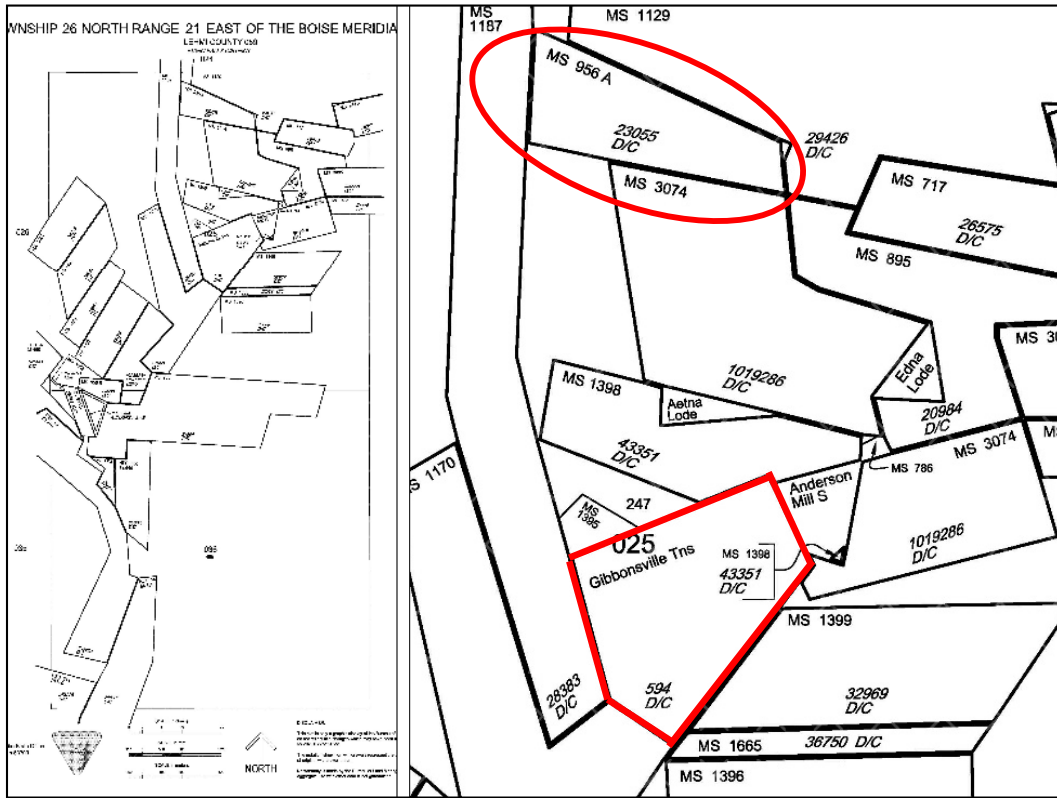


Enlargement of Gibbonsville, Idaho Mineral Survey and Homestead Entry Survey Complex. Mineral Survey No. 1127 (the 14 Lodes in the upper right of this slide) was surveyed and the plat and field notes were approved by the Surveyor General's Office. However, the (14) Lode claims were not patented. A few original corner monuments of MS 1127 were found and became useful in locating corners of MS 1217 and 1218 that had been disturbed and difficult to identify due to the timber harvesting activity.

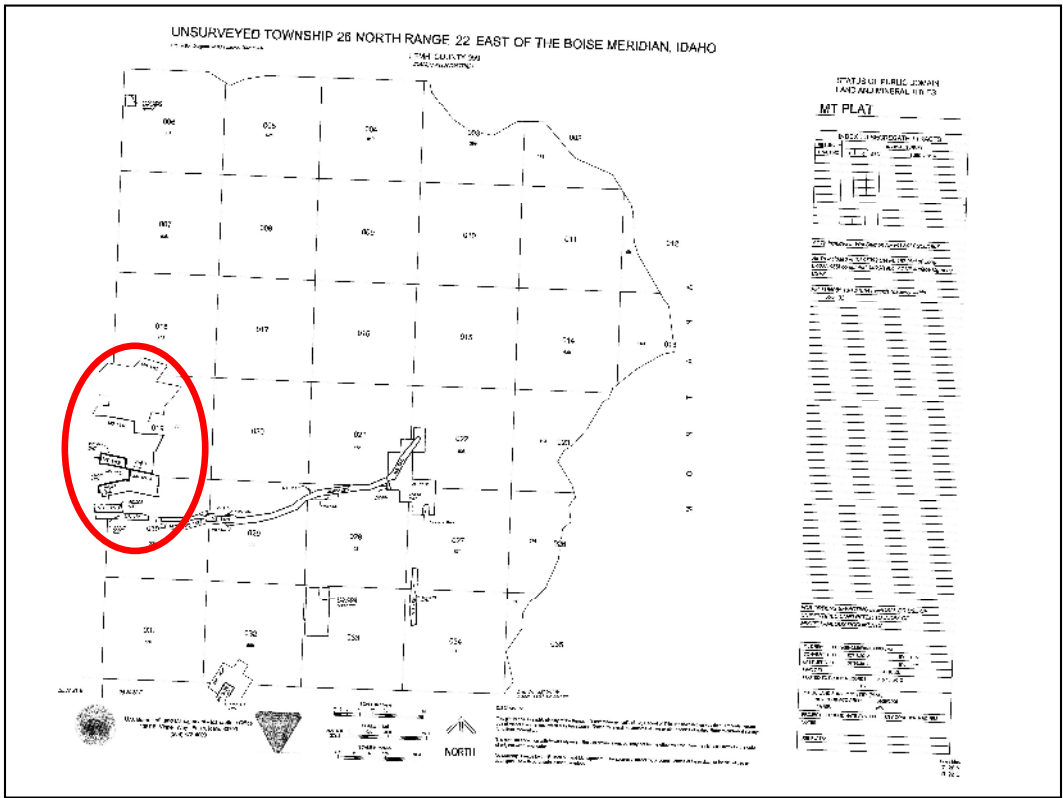


The original Gibbonsville Townsite is surrounded by Mining Claims and its location is indicated by the nine red backwards “L” figures and highlighted with red lines.

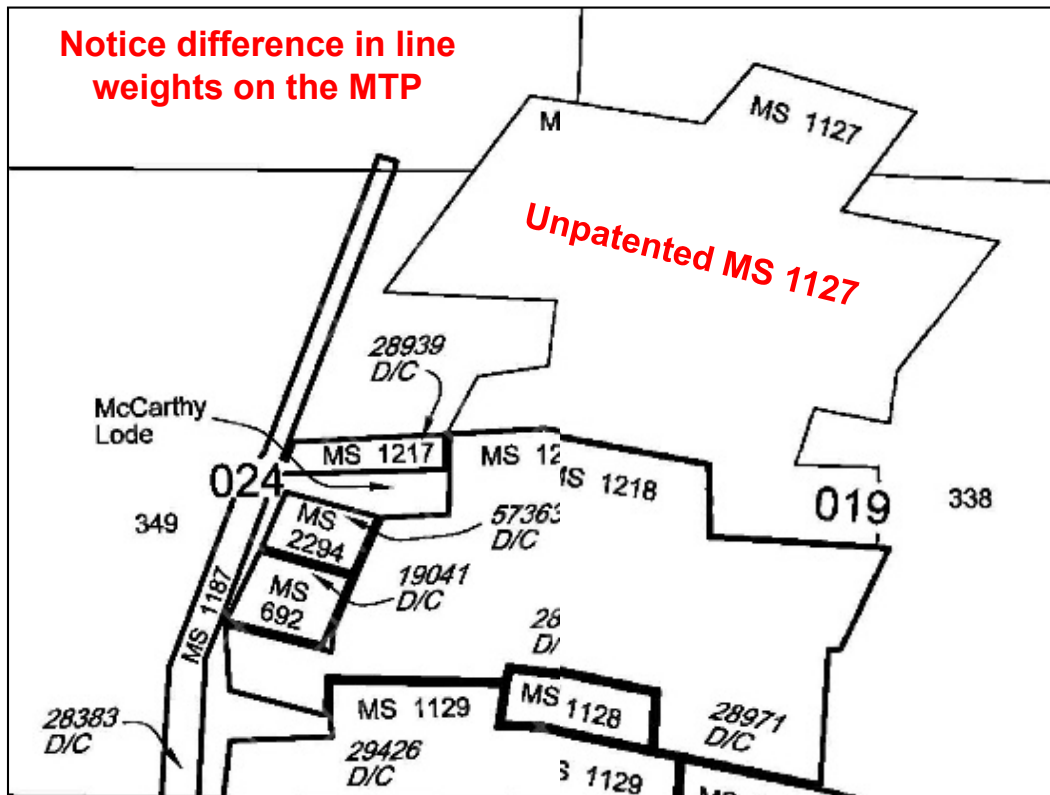
The Diana Lode, 956A, is sandwiched between Mineral Claims 1129, 1187, and 3074.



Portion of the enlarged area of sheet two of the Master Title Plat (on the left) and an enlargement of two areas to be discussed in further detail within a portion of Unsurveyed T26N, R21E, Boise Meridian, ID.



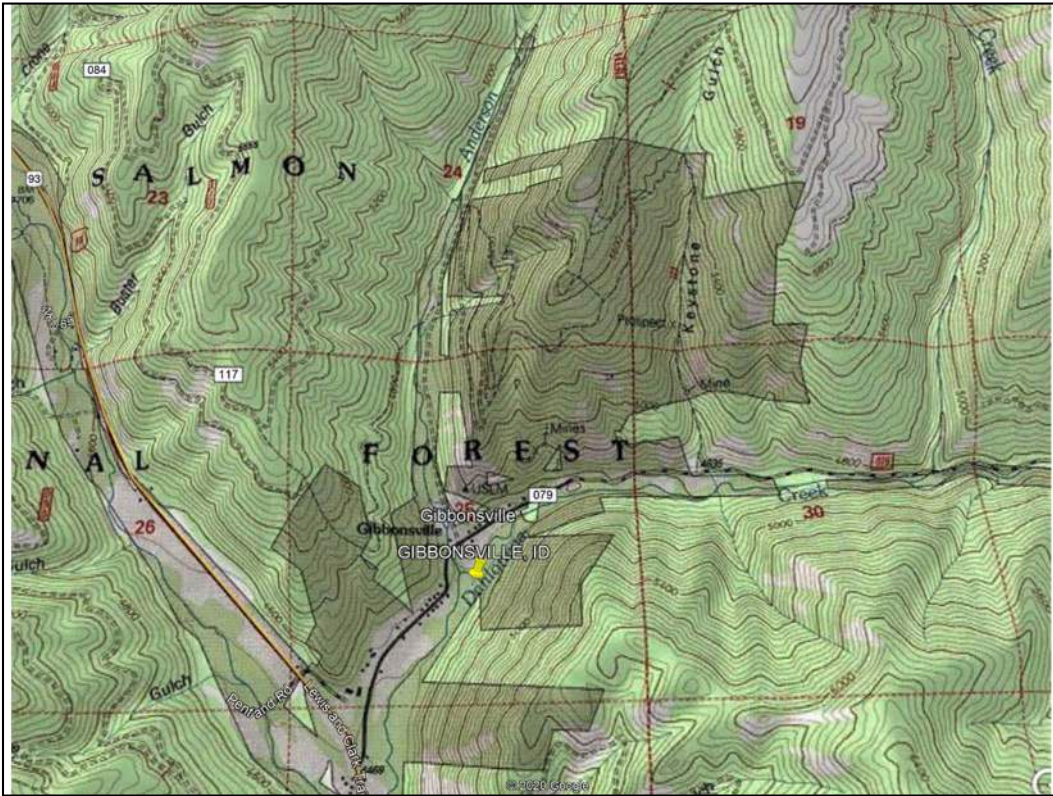
Master Title Plat for Unsurveyed T26N, R22E.



There are three basic line weights shown on this enlargement of a portion of two adjacent Master Title Plats (MTPs). The narrowest line weights are the projected section lines (these mineral survey claims are in an unsurveyed township) and the lines around all but the southern line of “Unpatented Mineral Survey No. 1129.

The next heaviest line weight is around the portions of patented lands that boarder federal interest lands.

The heaviest line weight is between the portions of patented lands that share a common boundary.



Gibbonsville mineral survey complex overlaid on a USGS quadrangle map. Note the steep, timbered hillside along the western side of Anderson Creek north-northwest of Gibbonsville (most of the western portion of Section 24 and the northwestern portion of Section 25. This steep hillside area is Salmon National Forest Land.

Since $20^{\circ}37'N$
 67 To Corner No. 1 identical with location corner
Cor. No. 1
 Set a post 12 ins square $4\frac{1}{2}$
 ft long $1\frac{1}{2}$ ft in the ground
 with mound of earth around
 same marked 1-956 A from
 which a pine tree 18 ins in
 diam blazed and marked
 1-956 A. B. J. bears $20^{\circ}N$
 140 ft distant
 A pine tree 8 ft in diam
 blazed and marked 1-
 956 A. B. J. bears
 $20^{\circ}N$ 30 ft distant

Corner No. 1 - "Set a post 12 ins square 4-1/2 ft long 1-1/2 ft in the ground with mound of earth..." and scribed 2 bearing trees.

Thence No. 37.6.
67 To center end stake previously
Set Sep. from which center of
267 To Corner No. 2 identical **Cor. No. 2**
with location corner
at pine stump in place
18 ins in diam 3 1/2 ft
high marked 2-456A
There were no bearing
objects available for
references near this
corner

Sets wood post at "center end" then to Corner No. 2 (NE corner) "A pine stump in place 18 ins in diam 3-1/2 ft high..."

Cor. No. 3

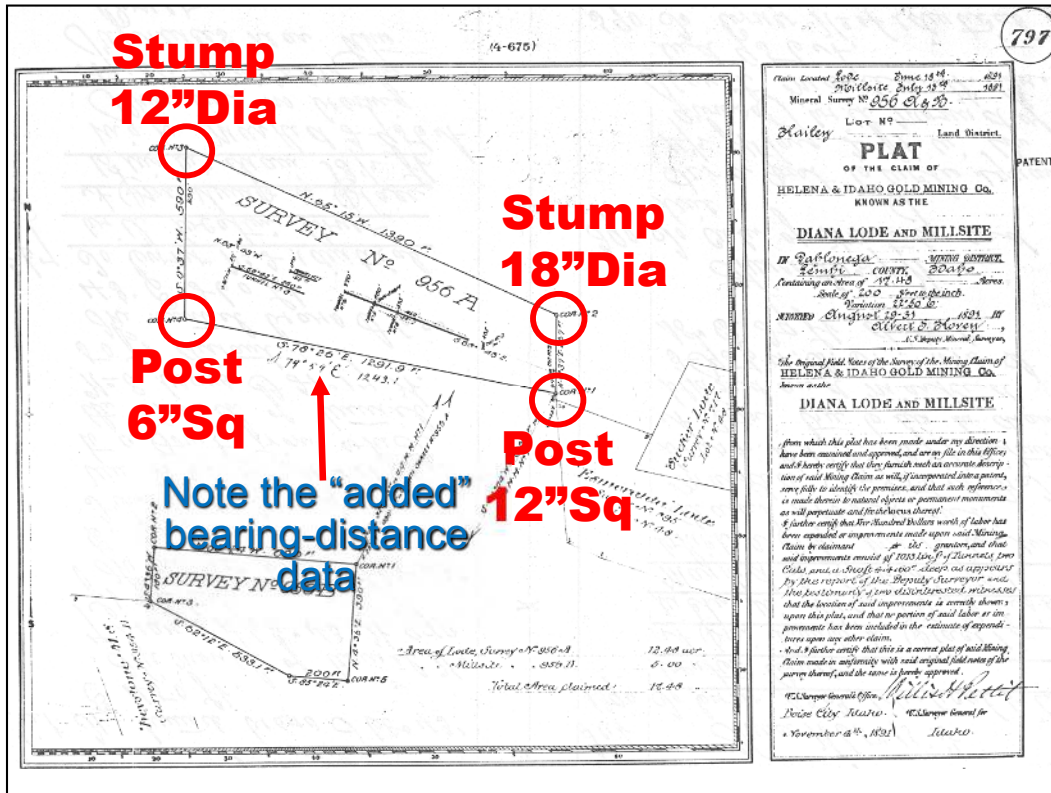
Feb 1890 Thence $N 65^{\circ} 15' W$.
 To corner No 3 identical with
 location corner
 A pine stump in place 12
 inches in diam 3 ft high
 marked B-956 A. B. J.
 which a pine tree 17 ins in
 diam blazed and
 marked B-956 A. B. J.
 bears $N 1^{\circ} W$. 13 ft distant
 A pine tree 6 ins in diam
 blazed and marked
 B-956 A. B. J. bears S
 $18^{\circ} E$. 39 ft distant

 Thence $S 0^{\circ} 37' W$.
 To center of waterly end
 line.
 Set a post 6 inches square

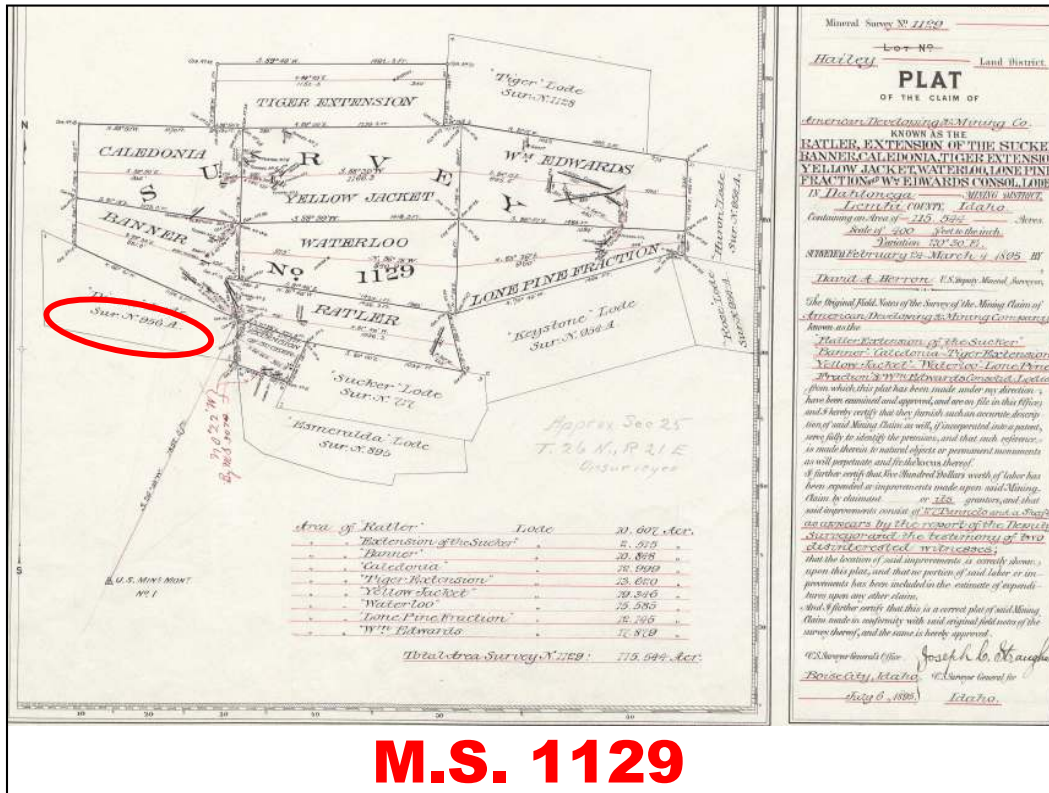
Corner No. 3 (NW corner) "A pine stump in place inches in diam 3 ft high..." and scribed 2 bearing trees.

590 To Corner No 4 identical
 with weatoni Corner **Cor. No. 4**
 Set 1 pine post 6 ins square
 4 1/2 ft long 2 ft in the
 ground with mound of
 stone marked 4-956 A
 from which a pine tree
 2 1/2 ft in diam blazed
 and marked 4-956 A. B.
 I. bears N 18° W. 10 ft distant
 A pine tree 12 ins in
 diam. blazed and marked
 4-956 A. B. I. bears
 S 13° 20' E 87 ft distant

Corner No. 4 - "Set a pine post 6 ins square 4-1/2 ft long 2 ft in the ground with mound of stone..." and scribed 2 bearing trees.



Summary of the monuments set at the four (4) corners of MS 956A Diana Lode. Note the added bearing-distance data. We will discuss this a little later.

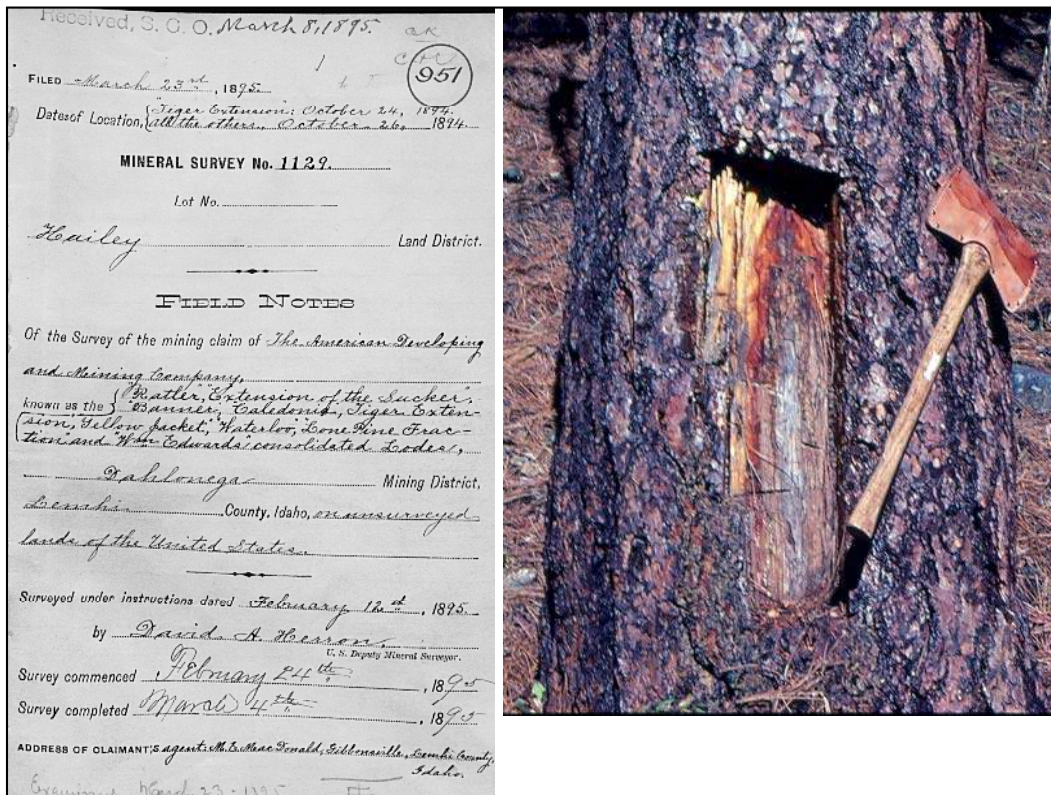


M.S. 1129

Let's examine Mineral Survey No. 1129 that connects along portions of the north and east sides of MS 956A Diana Lode.



While searching for the 18" diameter pine stump, 3-1/2' high, at Corner No. 2 of MS 956A, we found a 20" diameter pine with an open blaze and visible scribing "956A."



Corner 2 of 956A was supposed to be an 18” diameter pine stump scribed “2 956A.”

Noting that MS 1129 bordered MS 956A on a portion of the east and north lines we referred to the descriptions of the corners for “Ratler, Extension of the Sucker, and Banner Lodes.” This 20” diameter pine, with open blaze and visible scribing, was determined to be the corner common to 2/956 A, 1/1129, and 13/1129 as described in the field notes for MS 1129. No evidence of the 18” diameter scribed pine post could be found.

M.S. 1129
Ratler Lode

Thence S. 15° 11' E.

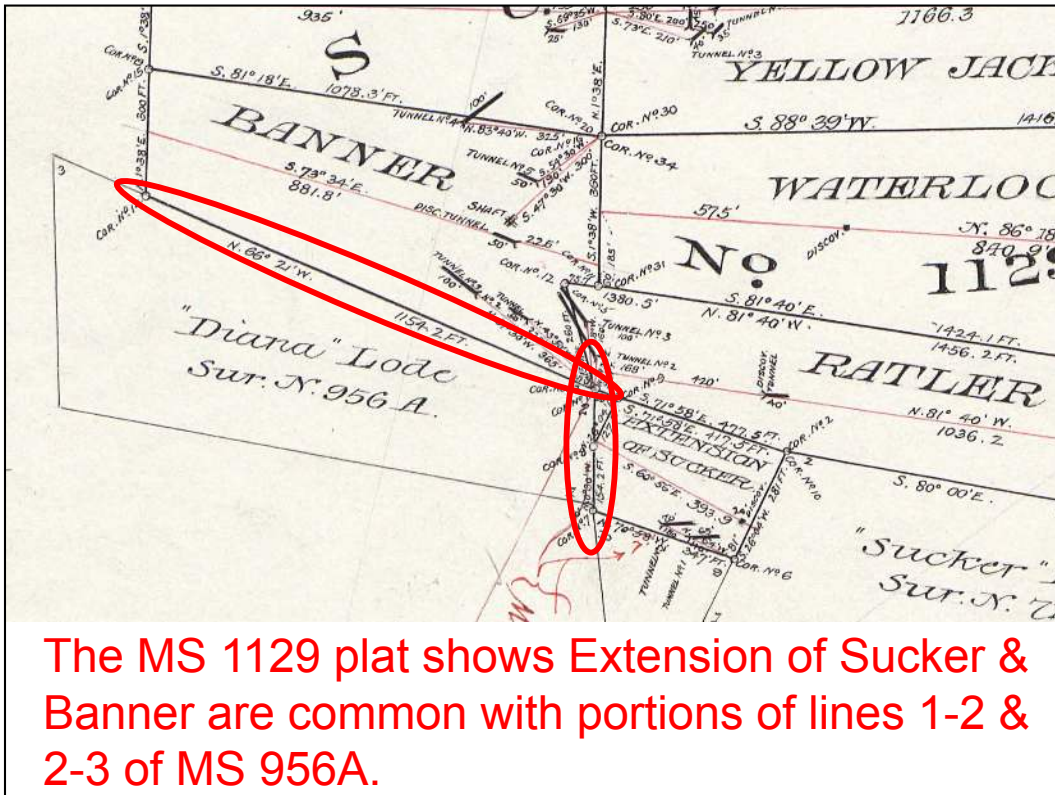
50 To corner no. 1 of claim, identical with
~~corner no. 2 sur. no. 956 H Diana Lode,~~
~~and with corner no. 13 Banner Lode~~
~~sur. no. 1129~~
 a pine tree, marked + $\frac{2}{956 H}$, $\frac{1}{1129}$, $\frac{13}{1129}$
 The south west location corner bears
 S. 0° 30' E 112 ft.
 U.S.M.M. no. 1 bear S. 76° 03' W. 185 ft. 5 ft.
 Tunnel no. 2, 4 x 7 ft., 168 ft. long bear N. 13° 05' E
 8 ft., course of tunnel N. 30° W.
 Tunnel no 3, 4 x 7 ft., 100 ft. long, bear

Field notes for Corner 1, Ratler Lode, MS 1129 described as a pine tree (no diameter given) marked (scribed) 2/956 A, 1/1129, 13/1129.

260	<p>To corner mo. 13 of claim, identical with southeast location corner and with corner mo. 1 Banner lode and corner mo. 2. Surv. mo 956 F. a pine tree marked + $\frac{2}{956A}$, $\frac{13}{1129}$ Tunnel mo. 2, 4 x 7 ft., 50 ft. long bears $74.43.50^m$. 225 ft. course of tunnel 11.65^m. Tunnel mo. 3, 4 x 7 ft., 100 ft. long bears $71.51.30^m$. 365 ft. course of tunnel 11.50^m.</p> <p style="text-align: center;">Thence $11.66.21^m$.</p> <p>along line 2-3, Surv. mo. 956 A</p>	<p>M.S. 1129 Banner Lode</p>
1154.2	<p>To corner mo. 14 of claim, identical with south west location corner, a porphyry stone 6 x 8 x 20 ins., 16 ins. in ground and marked $\frac{14}{1129}$ a fir tree, 10 ins. diam., flayed and marked $\frac{14}{1129}$ B.N. bears west 3 ft.</p>	

Field notes for Corner 13, Banner Lode, MS 1129 described as a pine tree (no diameter given) marked (scribed) 2/956 A, 1/1129, 13/1129.

Thence along Line 2-3, MS 956A, to corner 14 of the Banner Lode.



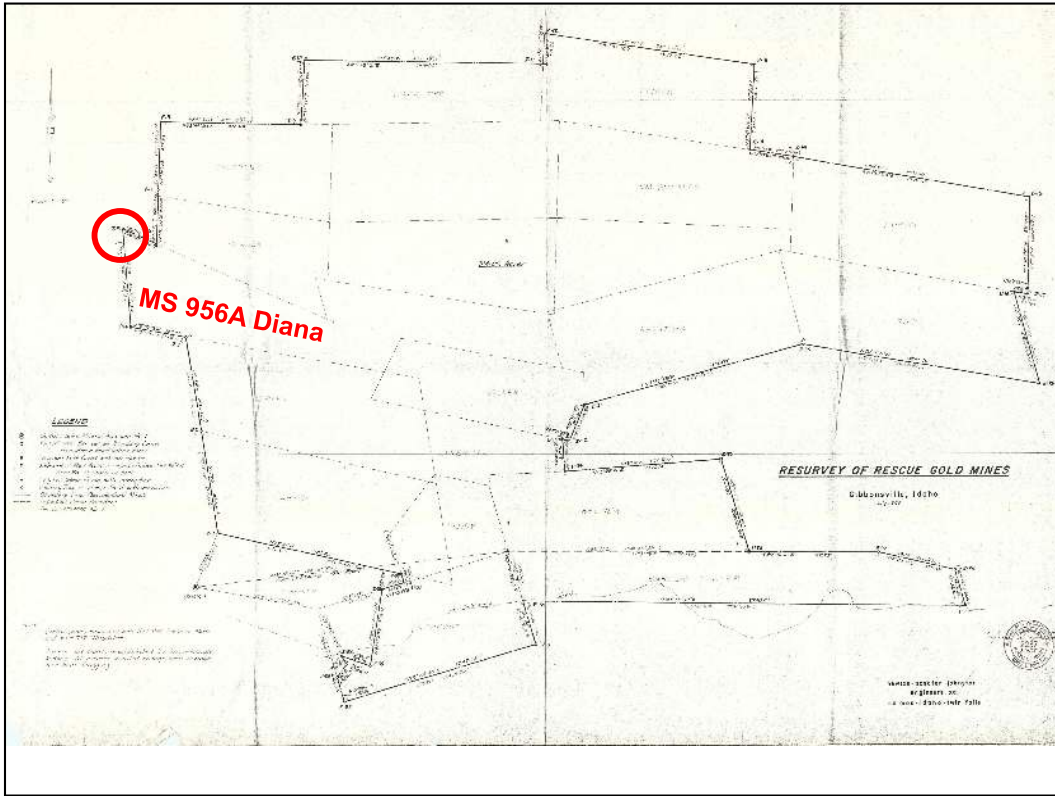
1/956 (MS 956A), 1/1129 (Ratler), and 13/1129 (Banner) are common corners and 1/1129 (Banner) is shown and called for as being on Line 2-3 of MS 956A Diana Lode.



Corner 8/1129 of Extension of Sucker is on line 1-2 of MS 956S, Diana Lode.

We can see that Corner 1 of MS 956A is common with Corner 1 Ratler/Corner 13 Banner of MS 1129.

There is also a triangle of "Public Domain Land" (132.8' x 60' x 127') sandwiched between MS 956A and MS 1129. This area is approximately 3810 square feet (0.087 acre, more or less).



We acquired a copy of an unrecorded survey, by a local private surveyor, dated July 1975. MS 956A Diana Lode Corner No. 3 is circled above.

RESURVEY OF RESCUE GOLD MINES

Gibbonsville, Idaho

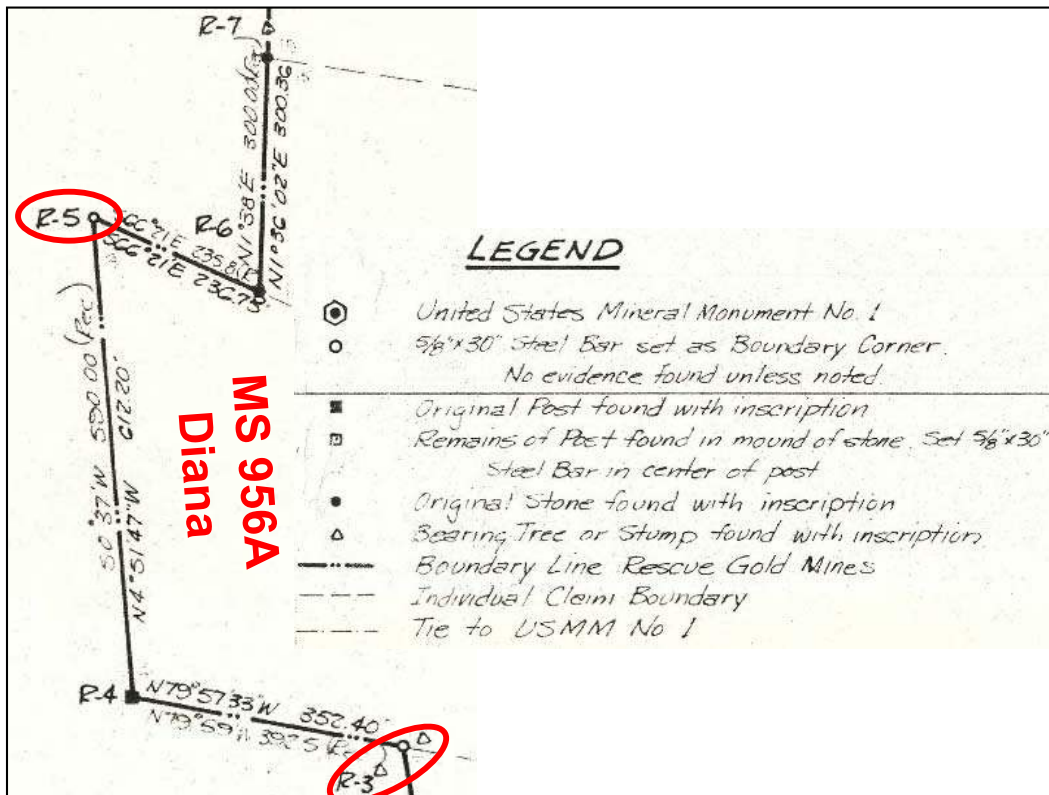
July 1975

Note:

Control points measured with H.P. 5800 Distance Meter
and Wild T-2 Theodolite

Corners, not found, re-established by Proportionate
Method. All corners painted orange with orange
and blue flagging.

Enlargement of a few notes on the unrecorded plat.



Note the record (S 0°37' W, 590.00') and measured (N 4°51'47" W, 612.20') data between R-4 (a found corner for Corner 4/956A) and R-5 (a set corner for 3/956A).

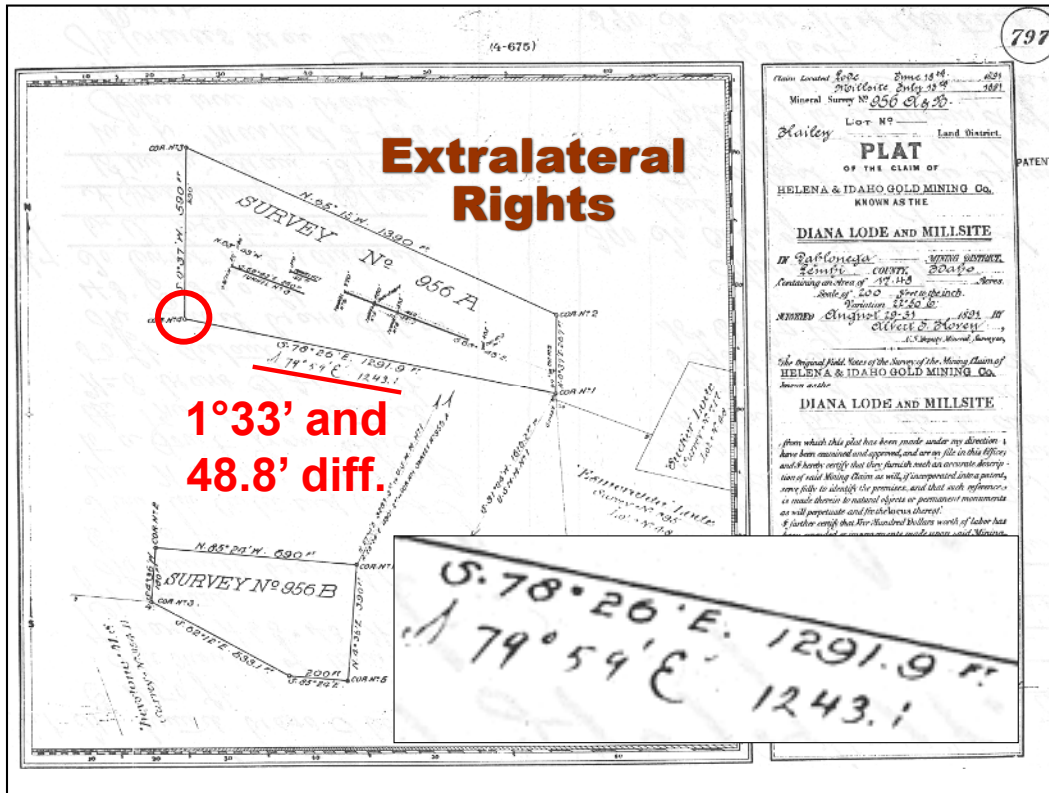
R-3 was set from two original bearing trees. R-4 is an original post. R-5 is a 5/8" x 30" Steel Bar (no evidence found).



Bent rebar in mound of stone, with orange & blue flagging per “Note” on unrecorded plat, set by a local private surveyor, in 1975, for Corner No. 3, MS 956A Diana Lode.

Examination of the unrecorded plat shows that Corner 3 MS 956A was reestablished at near exact distance computed from the record distance between line 2-3, MS 956A, minus the record distance between line 13-14, MS 1129 (Banner) and on the extension of said 13-14 line.

This solution creates an end line dimension that is rotated approximately 5-1/2 degrees counterclockwise, and 22.2 feet longer than the record data for line 3-4 of the MS 956A Diana Lode.



Corner No. 4 of MS 956A was found firmly set in an embedded mound of stone with evidence of one original bearing tree (badly decomposed, no visible scribing).

Notice the added bearing and distance along the south line of MS 956A. There is a 1°33' bearing and 48.8 feet difference between the record and the added bearing/distance note along line 4-1 of MS 956A Diana Lode.

With this information we found corner 14/1129 (Banner) and measured the calculated distance from said corner to 3/956A (235.8 feet), minus the shortage noted along line 4-1/956A (235.8 – 48.8 = 187 feet). Measuring the 187 feet on an extended line from line 13-14/1129 we fell within 1 foot of a recently (low) cut pine stump with a portion of an overgrown blaze previously cut out and lying alongside the pine stump. There was no visible scribing on the blaze that someone had previously examined. We concluded that Corner 3, MS 956A, may have been upgraded during the MS 1129 survey and this pine stump was accepted as the best available evidence of the location of said Corner 3.

With this decision the “Extralateral Rights” have been shortened approximately 50 feet. We did not make this decision lightly.



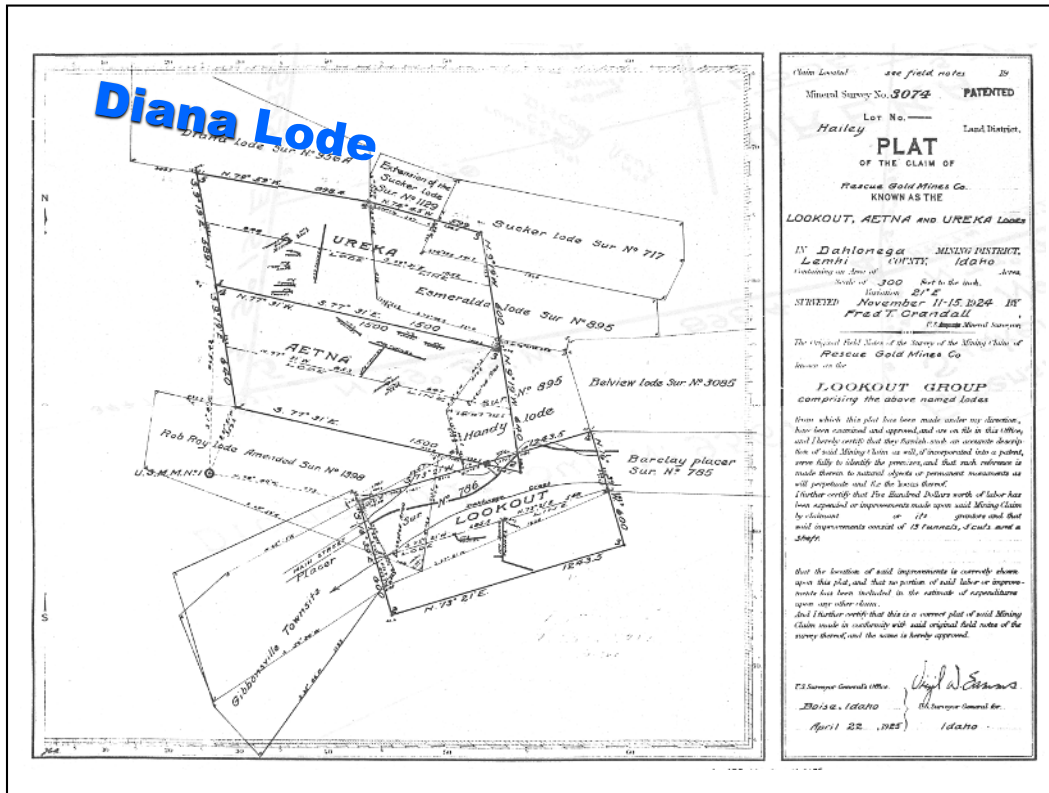
The low-cut pine stump with the portion cut out revealing a flat face at about 5 inched into the stump.



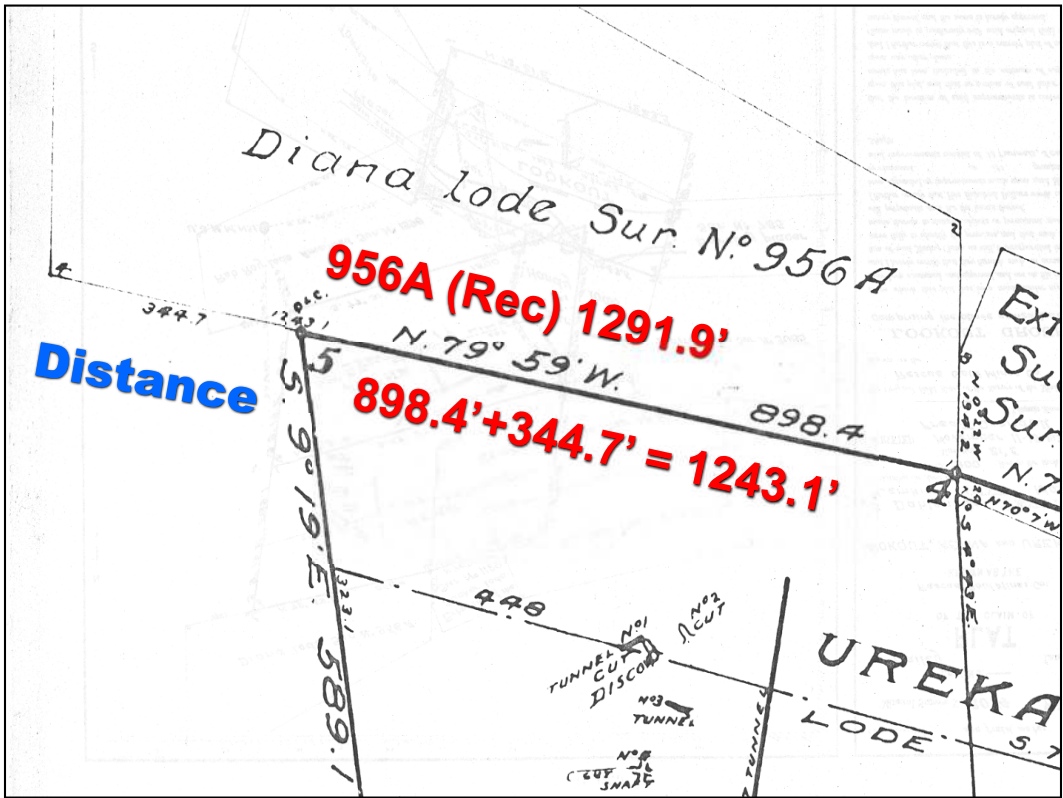
A vertical view of the overgrowth seam and the flat face on the suspected (accepted) pine tree stump for Corner 3, MS 956A.



Original scribed wood post for Corner No. 4 (SW corner) of MS 956A, on left, and surveyor pointing to the rotted remains of a bearing tree witnessing said Corner No. 4.



A portion of Mineral Survey 3074 is noted as being common with line 4-1 of MS 956A. Let's examine the field notes along line 4-5 of MS 3074 Ureka Lode.



It appears that Corner 4, MS 956A was tied in during the survey of MS 3074, Ureka Lode, while at Corner 5 of said Lode. Let's examine the field notes for the Ureka Lode.

898.4 Along line 1-4, Survey No. 956 A. Diana Lode.
To Cor. No. 5.
A fir post, 4 ft. long, 6 ins. sq., set 2 ft. in the
ground, with mound of earth, scribed 5-3074.
A yellow pine, 24 ins. diam., bears S.33° W.,
38 ft. dist.
A fir, 30 ins. diam., bears N.71° E. 31 ft.
dist., both blazed and scribed 5-3074 B T.
Location Cor., a pine post, 5 ft. long, marked NW.
Cor. Ureke Lode, bears N.9°19' W. 23 ft. dist.
Cor. No. 4, Survey No. 956 A, Diana Lode, bears N.79°
59' W. 344.7 ft. dist.
Thence S 9° 19' E. EXHIBIT #

Do you believe this is an actual tie? Let's read another portion of the field notes that should never be overlooked – the "REPORT" that begins on page 14 of the field notes.

REPORT.

The exterior lines of these claims were run directly upon the ground and the several corners established as stated in my field notes. Where corners are fir or pine posts, the number of the corner and survey number are scribed on the face of post facing the center of the claim. Where the corner is identical with the rock corner previously set, I chiseled the corner number and survey number on the rock as nearly as possible facing the claim.

I find the lines of adjoining surveys to be as follows:

SURVEY NO. 3074

Line 7-8, is N.0°22' W. in place of N.0°30' W. 154.2 ft.

Survey No. 956 A, Diana Iode:

Line 4-1, is S.79°59' E. 1243.1 ft. in place of S.78° 26' E. 1291.9 ft. I measure this line twice to be sure of no error. Cor. No. 4, is a post, 6 ins. square, scribed 4-956A, with two bearing trees.

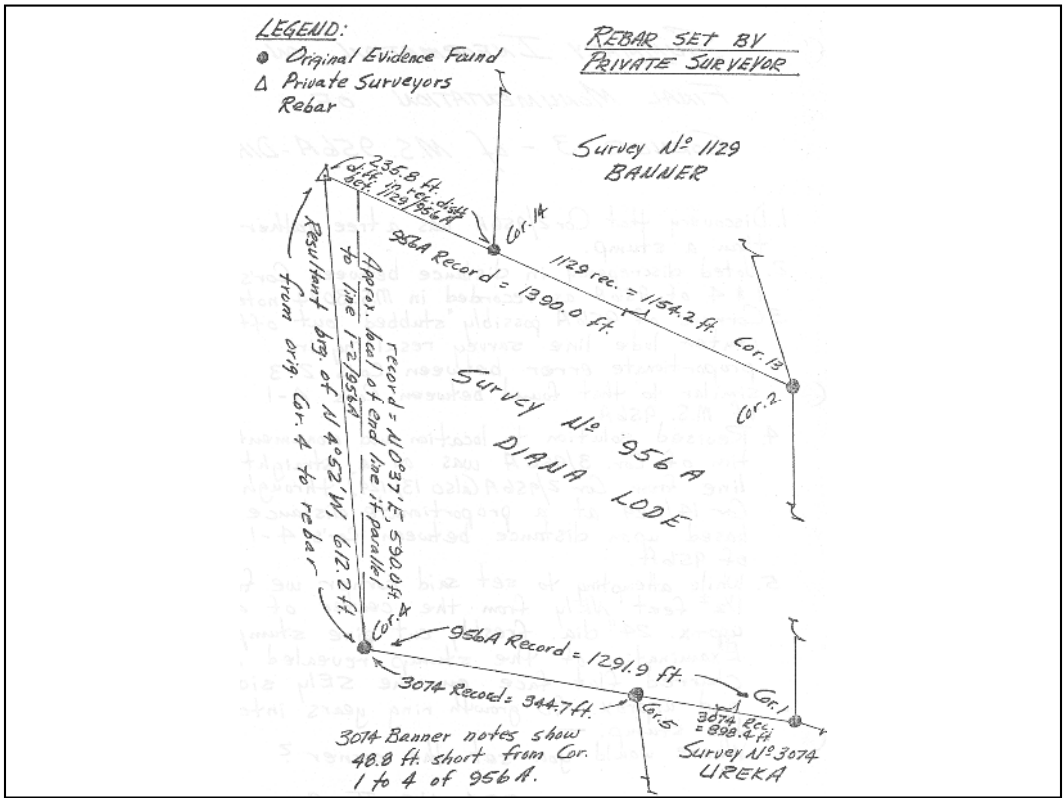
This tie was faithfully made as evidenced by the 1975 unrecorded survey and our 1979 dependent resurvey.



The rebar set by the surveyor during his unrecorded survey of this block of mineral surveys. The surveyor in the upper left is examining the remains of one of the original bearing trees for Corner 5, MS 3074, Ureka Lode.

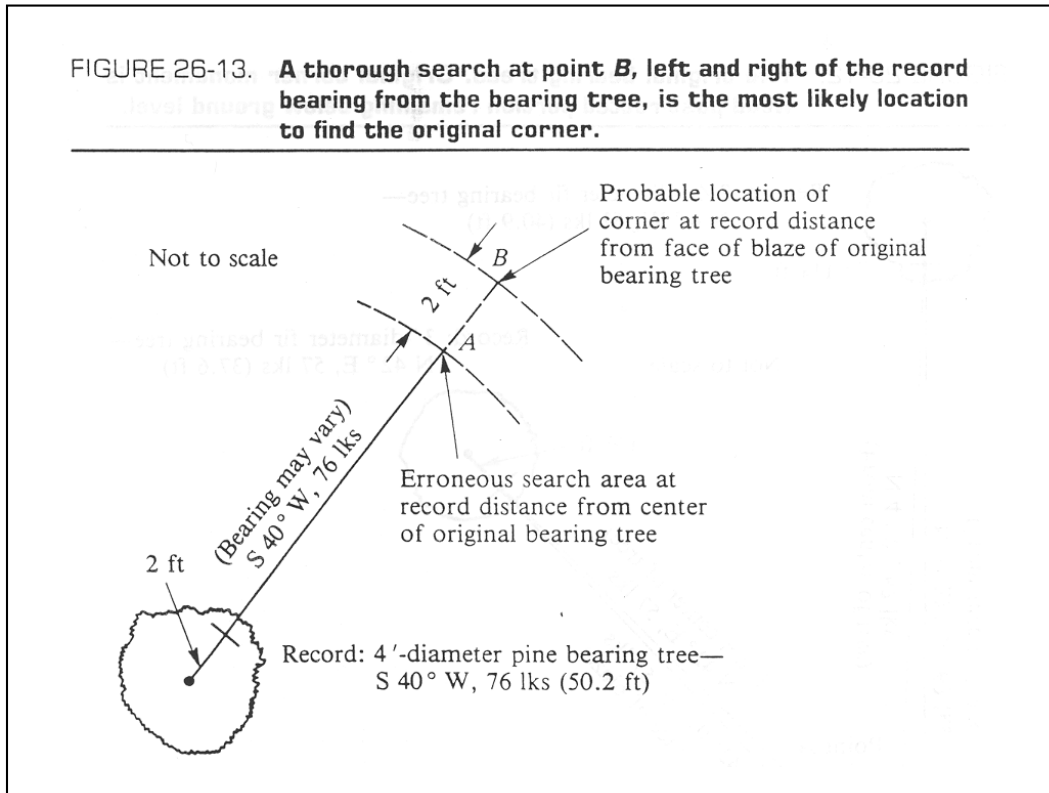


Forest Service Bearing Tree sign and one of the bearing trees for Corner 5, MS 3074, Ureka Lode.



Summary diagram for Corners 3 and 4 of MS 956A Diana Lode.

FIGURE 26-13. **A thorough search at point *B*, left and right of the record bearing from the bearing tree, is the most likely location to find the original corner.**



Typically, measurements to a mineral survey bearing tree are made to an “X” on the face of the blaze – not the center of the tree as directed for corners of sectionalized township surveys.






Freshly cut bearing tree for the remains of the sub-surface mineral survey corner post.



Remains of a sub-surface mineral survey corner post found by intersecting a distance-distance tie from the nearest found mineral survey corners.

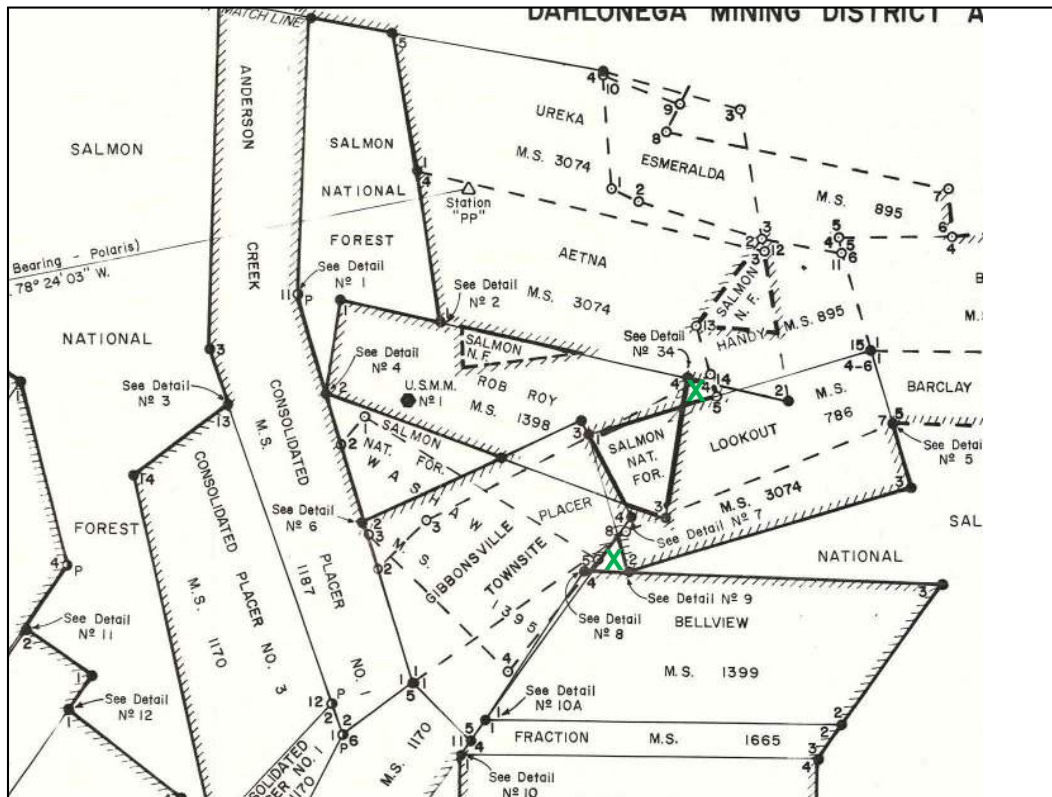


Distant surveyor next to one of two mineral survey bearing trees that were 15° apart, same species and similar distance from the mineral survey corner that appears to have been destroyed during the recent road construction. To determine which bearing tree was discovered required ties to the nearest found mineral survey corners then calculating a position for the missing mineral survey corner. Both bearing trees were marked identically.

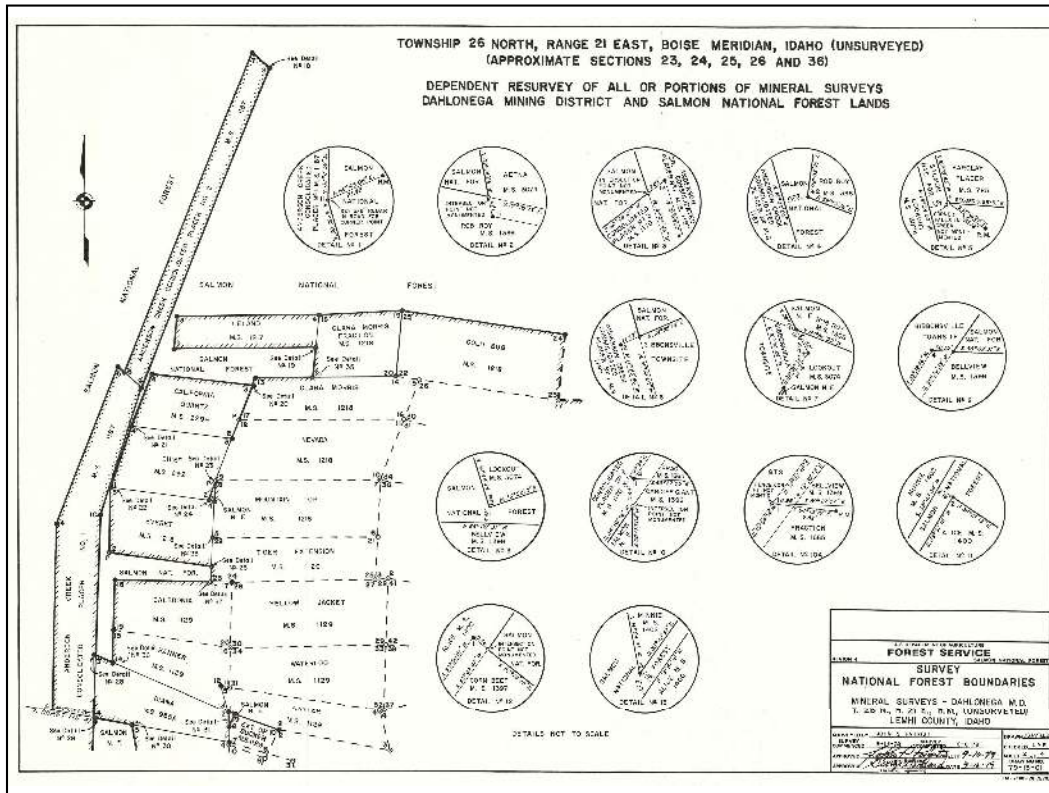
LEGEND	BASIS OF BEARING:
● MONUMENTED CORNER (30" PIPE / 3/4" DIA. CAP - IRON OR ALUMINUM) - REESTABLISHED FROM ORIGINAL EVIDENCE.	Basis of Bearing was determined from a Polaris Observation on May 20, 1979 between Control Station "PP" and Corner 4 of M.S. 1401 resulting in a Bearing of S. 78° 24' 03" W. along said line.
○ MONUMENTED CORNER (30" ALUMINUM PIPE / 3/4" DIA. ALUMINUM CAP) REESTABLISHED BY B.L.M. "MANUAL" PROCEDURES FOR LOST CORNERS	
⊙ PROJECTED CORNER - NOT SEARCHED FOR	
● U.S. MINERAL MONUMENT (30" IRON PIPE / 3/4" DIA. BRASS CAP) - REMONUMENTE BY B.L.M.	
△ FOREST SERVICE CONTROL STATION - 1979	
 NATIONAL FOREST PROPERTY LINE - SURVEYED	
 NATIONAL FOREST PROPERTY LINE - NOT SURVEYED	
4. 	
	COUNTY RECORD CERTIFICATION:
	INSTRUMENT NUMBER <u>148247</u>
	TIME <u>11:50 A.M.</u> DATE <u>SEPTEMBER 19, 1979</u>
	BOOK <u>1</u> PAGE(S) <u>17, 18, 19 & 20</u>
	RECORDS OF LEMHI COUNTY, STATE OF IDAHO
	for: <u>ELEANOR ALDOUS, Co. Clk.</u> RECORDER
	by: s/ <u>ALBERTA WIEDERRICK, Deputy</u>
	U. S. DEPARTMENT OF AGRICULTURE FOREST SERVICE REGION 4 SALMON NATIONAL FOREST
	SURVEY NATIONAL FOREST BOUNDARIES
	MINERAL SURVEYS - DAHLONEGA M.D. T. 26 N., R. 21 E., B.M., (UNSURVEYED) LEMHI COUNTY, IDAHO
	SURVEYED BY <u>JOHN S. PARRISH</u>
	SURVEY COMMENCED <u>5-14-79</u> SURVEY COMPLETED <u>6-6-79</u>
	APPROVED <u>[Signature]</u> DATE <u>9-10-79</u>
	APPROVED <u>[Signature]</u> DATE <u>9-10-79</u>
	DRAWN <u>J.S.P./R.L.B.</u>
	CHECKED <u>J.P.F.</u>
	SHEET <u>1</u> of <u>4</u>
	DRAWING NO. <u>79-13-01</u>

After the suspected illegal timber harvest was discovered, and reported to the proper Forest Service legal authorities, a Federal Judge ordered that the area of suspected illegal timber harvesting be identified and platted within 5 weeks. The dependent resurvey spanned 24 "long days" with 35 Forest Service surveyors and survey technicians. Immediately thereafter the dependent resurvey plat was completed and preparations for a federal court case were initiated.

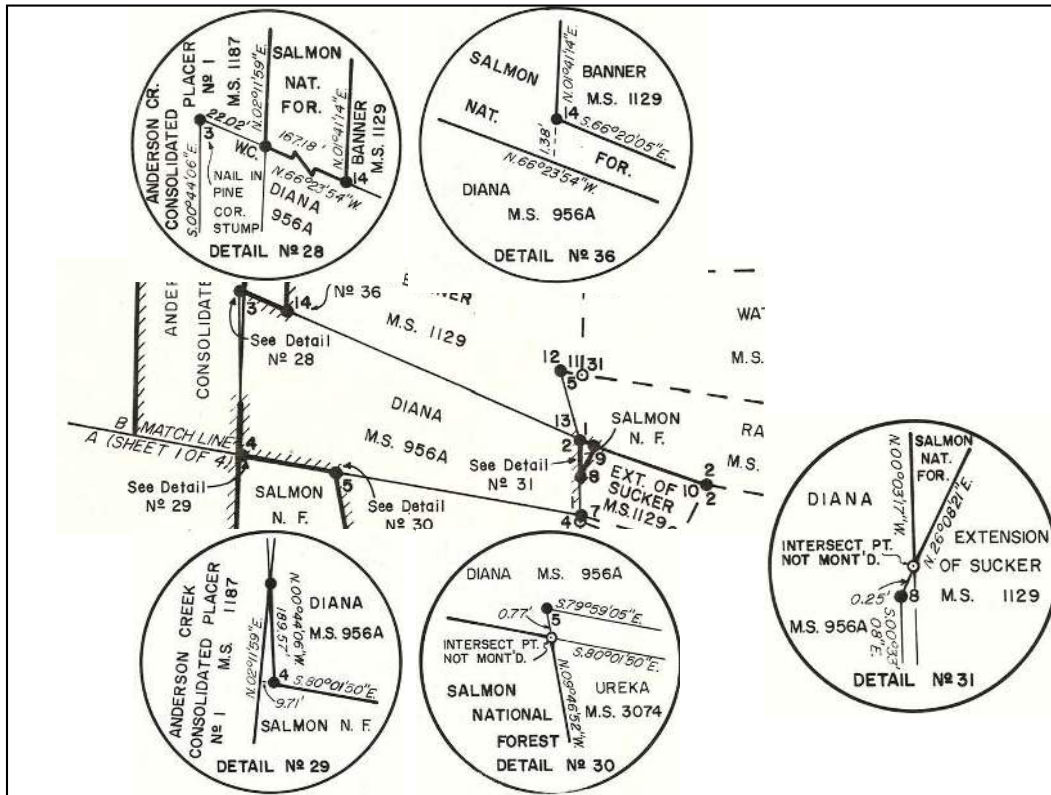
Enlargements of portions of the 1979 Forest Service Dependent Resurvey of a portion of the Mineral Surveys in the vicinity of Gibbonsville, Idaho.



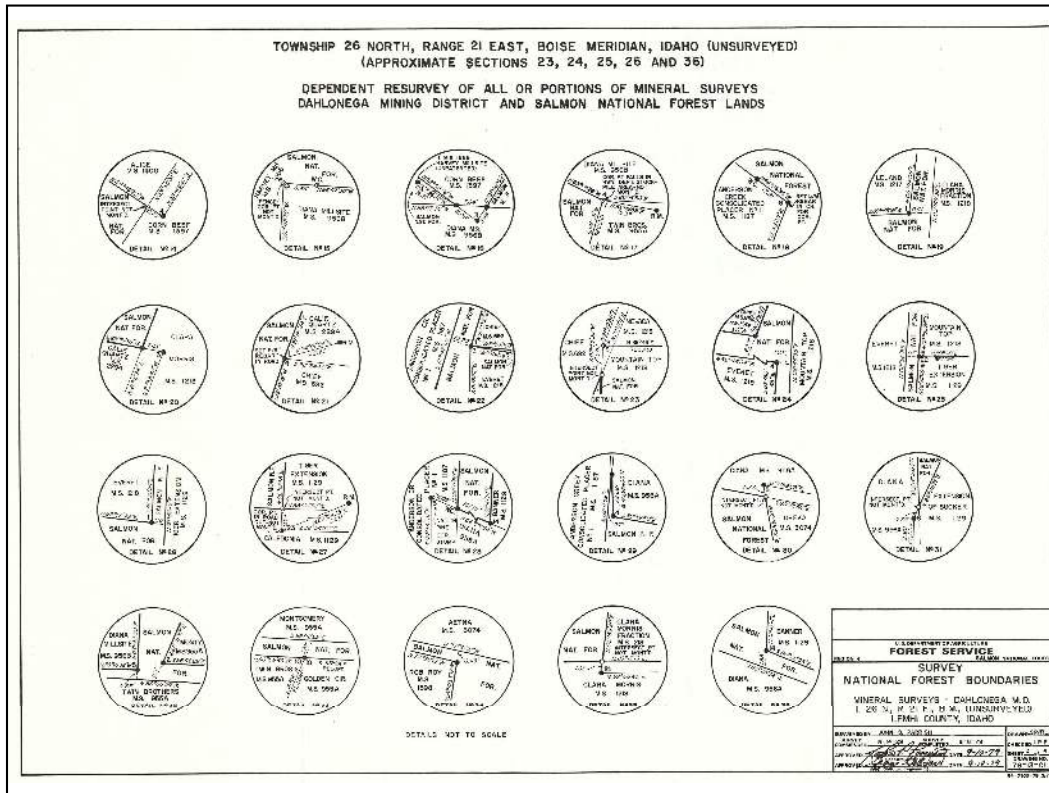
Sheet 1 of 1979 Dependent Resurvey of all or portions of 37 different Mineral Surveys and 1 Townsite Survey.



Sheet 2 of 1979 Dependent Resurvey. Details reveal several gaps and overlaps not of record.



Sheet 2 of 1979 Dependent Resurvey. Details reveal several gaps and overlaps not of record.



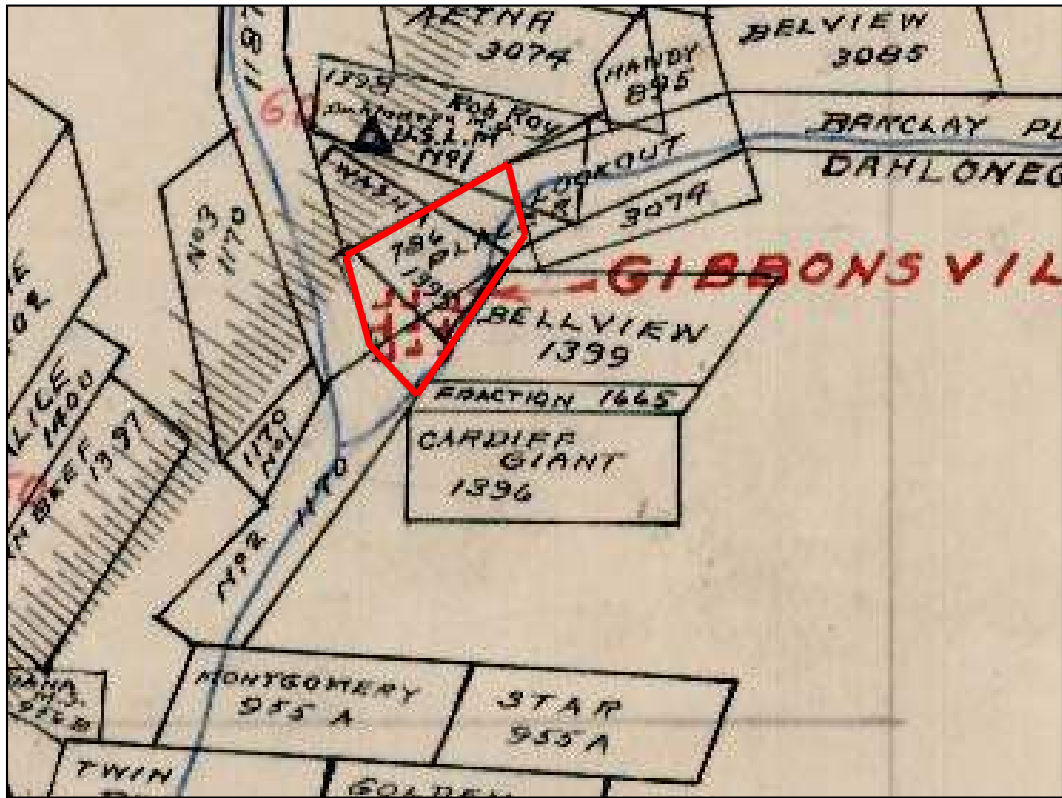
Sheet 3 of 1979 Dependent Resurvey. More gaps and overlaps not of record.

TOWNSHIP 26 NORTH, RANGE 21 EAST, BOISE MERIDIAN, IDAHO (UNSURVEYED)
(APPROXIMATE SECTIONS 23, 24, 26, 28 AND 36)

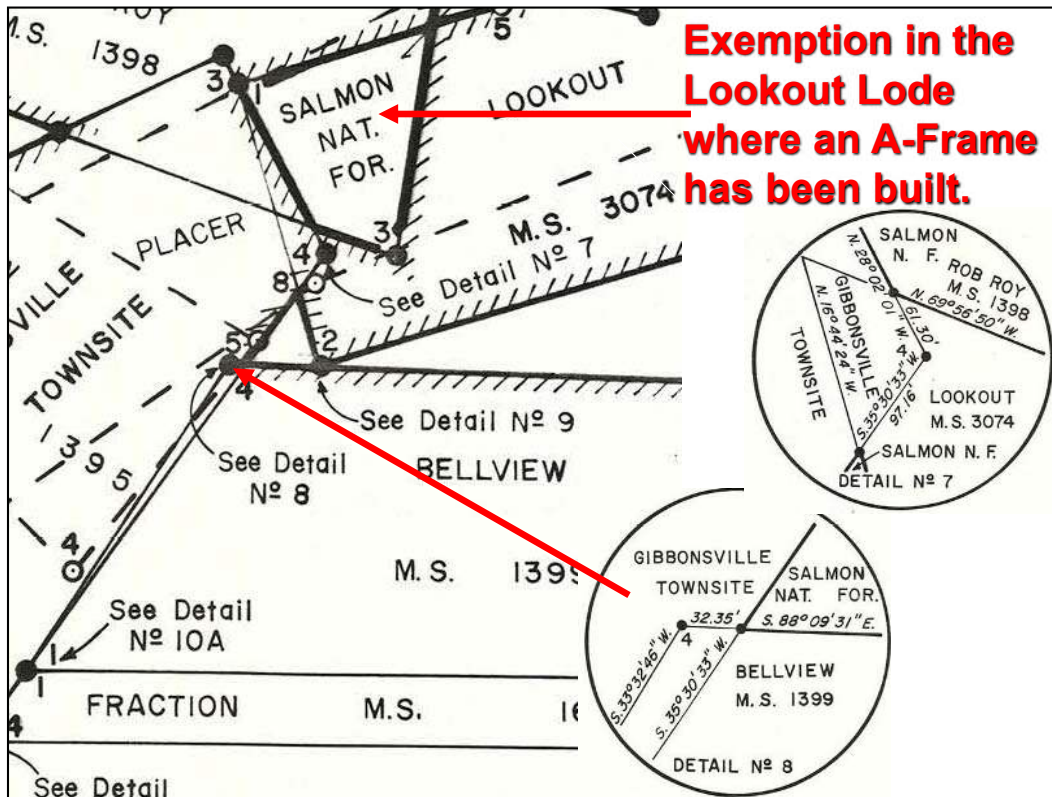
DEPENDENT RESURVEY OF ALL OR PORTIONS OF MINERAL SURVEYS
DAHLONEGA MINING DISTRICT AND SALMON NATIONAL FOREST LANDS

CON. COR.	RECORD BEARING	DISTANCE	SURVEY BEARING	DISTANCE	CON. COR.	RECORD BEARING	DISTANCE	SURVEY BEARING	DISTANCE	CON. COR.	RECORD BEARING	DISTANCE	SURVEY BEARING	DISTANCE	CON. COR.	RECORD BEARING	DISTANCE	SURVEY BEARING	DISTANCE	CON. COR.	RECORD BEARING	DISTANCE	SURVEY BEARING	DISTANCE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
M. S. 882 OHM					GOLDEN CIRCLE					TIGER EXTENSION					MOUNTAIN TOP					M. S. 1402 MINNE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1.2	S 131° 15'	500.0	S 80° 54' 30"	555.14	16.1	S 89° 05'	134.00	16.2	S 85° 58'	146.00	16.3	S 85° 58'	146.00	16.4	S 85° 58'	146.00	16.5	S 85° 58'	146.00	16.6	S 85° 58'	146.00	16.7	S 85° 58'	146.00	16.8	S 85° 58'	146.00	16.9	S 85° 58'	146.00	17.0	S 85° 58'	146.00	17.1	S 85° 58'	146.00	17.2	S 85° 58'	146.00	17.3	S 85° 58'	146.00	17.4	S 85° 58'	146.00	17.5	S 85° 58'	146.00	17.6	S 85° 58'	146.00	17.7	S 85° 58'	146.00	17.8	S 85° 58'	146.00	17.9	S 85° 58'	146.00	18.0	S 85° 58'	146.00	18.1	S 85° 58'	146.00	18.2	S 85° 58'	146.00	18.3	S 85° 58'	146.00	18.4	S 85° 58'	146.00	18.5	S 85° 58'	146.00	18.6	S 85° 58'	146.00	18.7	S 85° 58'	146.00	18.8	S 85° 58'	146.00	18.9	S 85° 58'	146.00	19.0	S 85° 58'	146.00	19.1	S 85° 58'	146.00	19.2	S 85° 58'	146.00	19.3	S 85° 58'	146.00	19.4	S 85° 58'	146.00	19.5	S 85° 58'	146.00	19.6	S 85° 58'	146.00	19.7	S 85° 58'	146.00	19.8	S 85° 58'	146.00	19.9	S 85° 58'	146.00	20.0	S 85° 58'	146.00	20.1	S 85° 58'	146.00	20.2	S 85° 58'	146.00	20.3	S 85° 58'	146.00	20.4	S 85° 58'	146.00	20.5	S 85° 58'	146.00	20.6	S 85° 58'	146.00	20.7	S 85° 58'	146.00	20.8	S 85° 58'	146.00	20.9	S 85° 58'	146.00	21.0	S 85° 58'	146.00	21.1	S 85° 58'	146.00	21.2	S 85° 58'	146.00	21.3	S 85° 58'	146.00	21.4	S 85° 58'	146.00	21.5	S 85° 58'	146.00	21.6	S 85° 58'	146.00	21.7	S 85° 58'	146.00	21.8	S 85° 58'	146.00	21.9	S 85° 58'	146.00	22.0	S 85° 58'	146.00	22.1	S 85° 58'	146.00	22.2	S 85° 58'	146.00	22.3	S 85° 58'	146.00	22.4	S 85° 58'	146.00	22.5	S 85° 58'	146.00	22.6	S 85° 58'	146.00	22.7	S 85° 58'	146.00	22.8	S 85° 58'	146.00	22.9	S 85° 58'	146.00	23.0	S 85° 58'	146.00	23.1	S 85° 58'	146.00	23.2	S 85° 58'	146.00	23.3	S 85° 58'	146.00	23.4	S 85° 58'	146.00	23.5	S 85° 58'	146.00	23.6	S 85° 58'	146.00	23.7	S 85° 58'	146.00	23.8	S 85° 58'	146.00	23.9	S 85° 58'	146.00	24.0	S 85° 58'	146.00	24.1	S 85° 58'	146.00	24.2	S 85° 58'	146.00	24.3	S 85° 58'	146.00	24.4	S 85° 58'	146.00	24.5	S 85° 58'	146.00	24.6	S 85° 58'	146.00	24.7	S 85° 58'	146.00	24.8	S 85° 58'	146.00	24.9	S 85° 58'	146.00	25.0	S 85° 58'	146.00	25.1	S 85° 58'	146.00	25.2	S 85° 58'	146.00	25.3	S 85° 58'	146.00	25.4	S 85° 58'	146.00	25.5	S 85° 58'	146.00	25.6	S 85° 58'	146.00	25.7	S 85° 58'	146.00	25.8	S 85° 58'	146.00	25.9	S 85° 58'	146.00	26.0	S 85° 58'	146.00	26.1	S 85° 58'	146.00	26.2	S 85° 58'	146.00	26.3	S 85° 58'	146.00	26.4	S 85° 58'	146.00	26.5	S 85° 58'	146.00	26.6	S 85° 58'	146.00	26.7	S 85° 58'	146.00	26.8	S 85° 58'	146.00	26.9	S 85° 58'	146.00	27.0	S 85° 58'	146.00	27.1	S 85° 58'	146.00	27.2	S 85° 58'	146.00	27.3	S 85° 58'	146.00	27.4	S 85° 58'	146.00	27.5	S 85° 58'	146.00	27.6	S 85° 58'	146.00	27.7	S 85° 58'	146.00	27.8	S 85° 58'	146.00	27.9	S 85° 58'	146.00	28.0	S 85° 58'	146.00	28.1	S 85° 58'	146.00	28.2	S 85° 58'	146.00	28.3	S 85° 58'	146.00	28.4	S 85° 58'	146.00	28.5	S 85° 58'	146.00	28.6	S 85° 58'	146.00	28.7	S 85° 58'	146.00	28.8	S 85° 58'	146.00	28.9	S 85° 58'	146.00	29.0	S 85° 58'	146.00	29.1	S 85° 58'	146.00	29.2	S 85° 58'	146.00	29.3	S 85° 58'	146.00	29.4	S 85° 58'	146.00	29.5	S 85° 58'	146.00	29.6	S 85° 58'	146.00	29.7	S 85° 58'	146.00	29.8	S 85° 58'	146.00	29.9	S 85° 58'	146.00	30.0	S 85° 58'	146.00	30.1	S 85° 58'	146.00	30.2	S 85° 58'	146.00	30.3	S 85° 58'	146.00	30.4	S 85° 58'	146.00	30.5	S 85° 58'	146.00	30.6	S 85° 58'	146.00	30.7	S 85° 58'	146.00	30.8	S 85° 58'	146.00	30.9	S 85° 58'	146.00	31.0	S 85° 58'	146.00	31.1	S 85° 58'	146.00	31.2	S 85° 58'	146.00	31.3	S 85° 58'	146.00	31.4	S 85° 58'	146.00	31.5	S 85° 58'	146.00	31.6	S 85° 58'	146.00	31.7	S 85° 58'	146.00	31.8	S 85° 58'	146.00	31.9	S 85° 58'	146.00	32.0	S 85° 58'	146.00	32.1	S 85° 58'	146.00	32.2	S 85° 58'	146.00	32.3	S 85° 58'	146.00	32.4	S 85° 58'	146.00	32.5	S 85° 58'	146.00	32.6	S 85° 58'	146.00	32.7	S 85° 58'	146.00	32.8	S 85° 58'	146.00	32.9	S 85° 58'	146.00	33.0	S 85° 58'	146.00	33.1	S 85° 58'	146.00	33.2	S 85° 58'	146.00	33.3	S 85° 58'	146.00	33.4	S 85° 58'	146.00	33.5	S 85° 58'	146.00	33.6	S 85° 58'	146.00	33.7	S 85° 58'	146.00	33.8	S 85° 58'	146.00	33.9	S 85° 58'	146.00	34.0	S 85° 58'	146.00	34.1	S 85° 58'	146.00	34.2	S 85° 58'	146.00	34.3	S 85° 58'	146.00	34.4	S 85° 58'	146.00	34.5	S 85° 58'	146.00	34.6	S 85° 58'	146.00	34.7	S 85° 58'	146.00	34.8	S 85° 58'	146.00	34.9	S 85° 58'	146.00	35.0	S 85° 58'	146.00	35.1	S 85° 58'	146.00	35.2	S 85° 58'	146.00	35.3	S 85° 58'	146.00	35.4	S 85° 58'	146.00	35.5	S 85° 58'	146.00	35.6	S 85° 58'	146.00	35.7	S 85° 58'	146.00	35.8	S 85° 58'	146.00	35.9	S 85° 58'	146.00	36.0	S 85° 58'	146.00	36.1	S 85° 58'	146.00	36.2	S 85° 58'	146.00	36.3	S 85° 58'	146.00	36.4	S 85° 58'	146.00	36.5	S 85° 58'	146.00	36.6	S 85° 58'	146.00	36.7	S 85° 58'	146.00	36.8	S 85° 58'	146.00	36.9	S 85° 58'	146.00	37.0	S 85° 58'	146.00

Sheet 4 of 1979 Dependent Resurvey. Table of record and measured bearings and distances along all or portions of 37 mining claims.

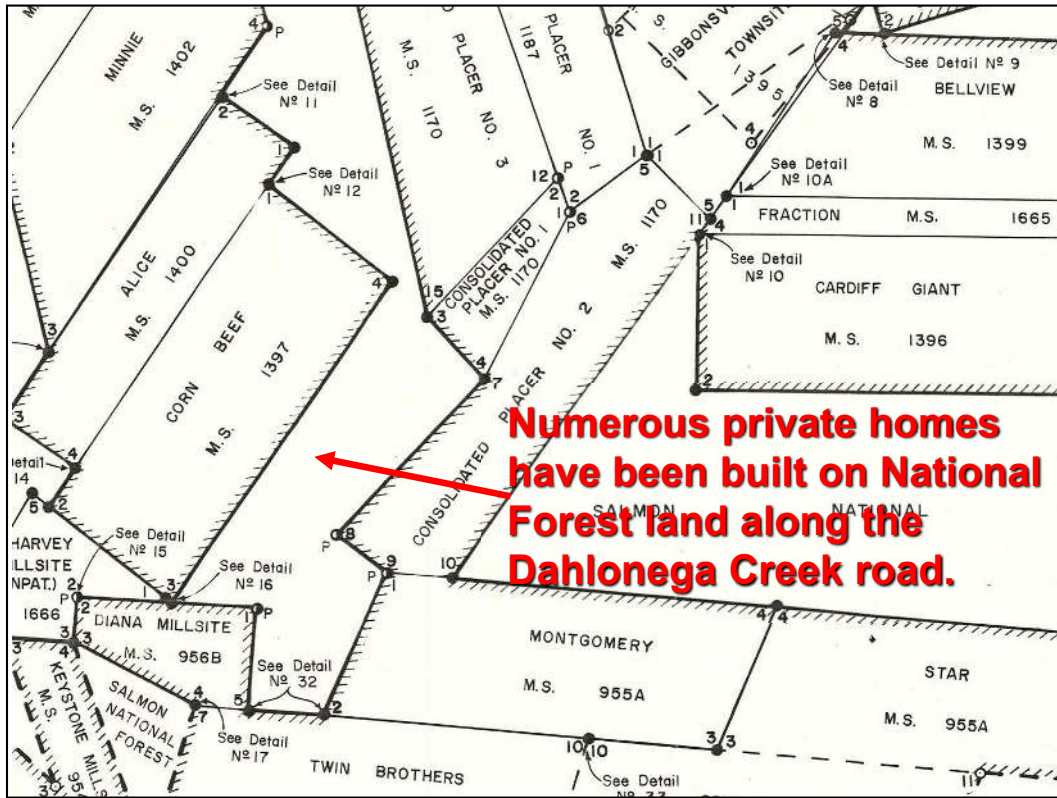


The original Gibbonsville Townsite is surrounded by Mining Claims and its location is indicated by the nine red backwards "L" figures and highlighted with red lines.



An exemption in MS 3074 Lookout that has been overlooked and an A-Frame home has been built on Forest Service land.

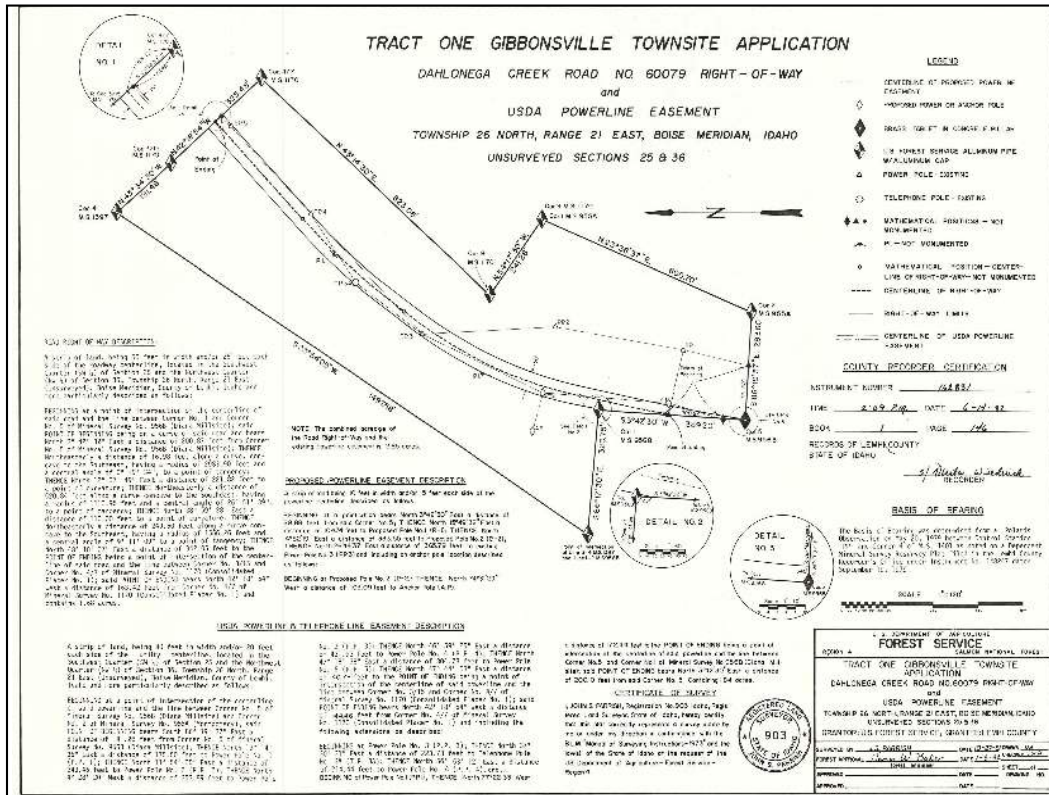
The Bellview MS 1399 is found to be encroached 32.35 feet into the Gibbonsville Townsite.



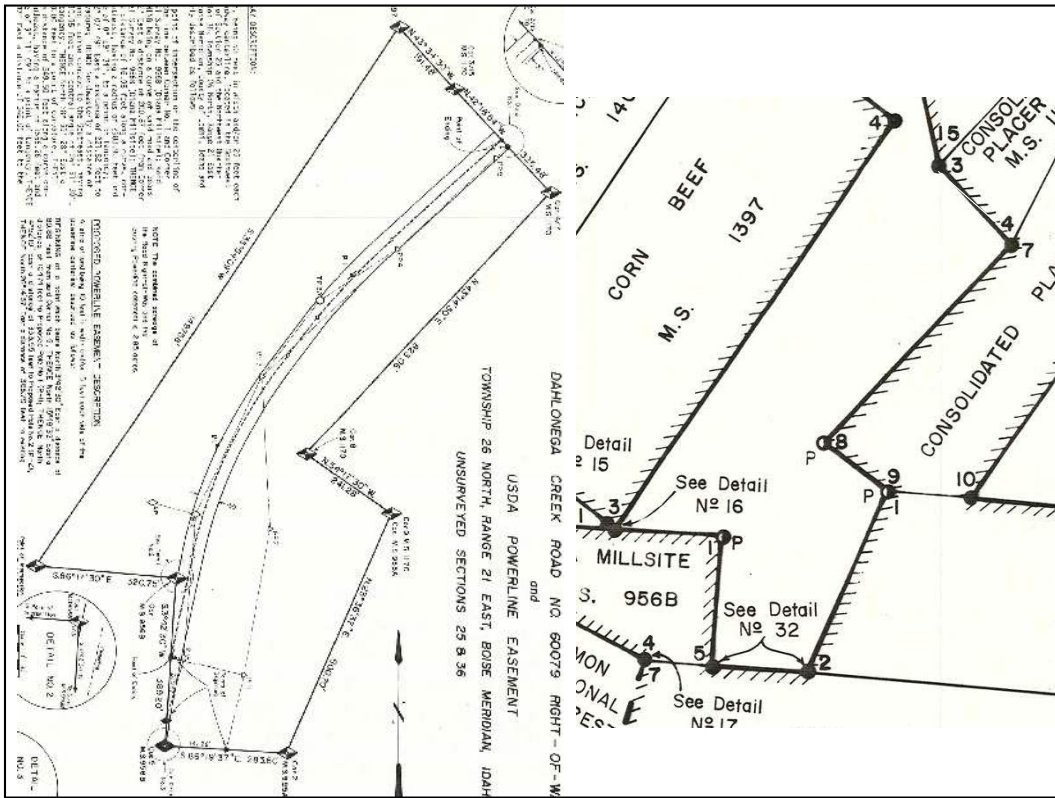
Our dependent resurvey provided an opportunity to resolve a trespass problem that has existed for many years along the road to the community of Gibbonsville.



Numerous private homes have been built on Salmon National Forest land along both sides of the Dahlonaga Creek road. The Forest Service agreed to sell the land to Lemhi County – not the individual homeowners. After an appraisal by the Forest Service monies from the landowners was deposited in an escrow account payable to the Forest Service. The lot surveys and deeds were then the responsibility of Lemhi County and the individual homeowners.



“TRACT ONE GIBBONSVILLE TOWNSITE APPLICATION” was prepared, including the location of the existing road and utilities. This served as the basic reference document for purchase of the Forest Service land by Lemhi County, Idaho.



The Tract One Gibbonsville Townsite Application plat shown oriented in relationship to the Dependent Resurvey plat.