

Discovery and Location

Lode Claims

2-1 Discovery: "No lode claim shall be located until after the discovery of a vein or lode within the limits of the claim, the object of which provision is evidently to prevent the appropriation of presumed mineral ground for speculative purposes to the exclusion of bona fide prospectors, before sufficient work has been done to determine whether a vein or lode really exists." (43 C.F.R. 3841.3-1) Obviously, then, the staking and recording of a claim without a discovery of mineral is to no avail, except that a discovery made prior to intervening rights perfects the location. A claimant dilligently trying to make a discovery will generally be protected.

Except for the minerals covered by the Leasing Act (1920), and common varieties which may be acquired under the Materials Act (1947 and 1955), "Whatever is recognized as a mineral by the standard authorities, whether metallic or other substance, when found on public lands in quantity and quality sufficient to render the lands valuable on account thereof, is treated as coming within the purview of the mining laws." (43 C.F.R. 3812.1)

Whether a mineral should be located as a lode or placer claim depends on the nature of the deposit.

Lodes are deposits of mineral in place, regardless of their origin. The mineral must be firmly contained or embraced in solid rock. This includes veins with distinct hanging and foot walls, replacement deposits in sedimentary formations, ancient stream channels now consolidated in sandstones, such as the uranium deposits of Wyoming, and disseminated deposits such as the copper porphyries of Arizona.

On the other hand, mechanical deposits of minerals such as gold contained in the gravels

of stream beds and alluvium deposits are properly located as placer claims. However, certain rock types, such as marble and perlite while mineral in place, are properly located as placers since the Act of 1892 provided for locating building stone under the placer mining laws. Included are bedded minerals not contained in rock in place, such as bentonite.

The discovery requirements for a lode claim are that the mineral must be in place. A discovery of float (a loose piece of ore from a vein) is insufficient. Merely a trace of mineral is insufficient. Discovery by geologic inference is insufficient. There must be an actual and physical exposure of a lode.

The discovery must be on vacant public domain, which includes patented surface lands with minerals reserved to the United States.

There have been many court cases and decisions as to what constitutes the discovery of a valuable mineral deposit and it can be a difficult and complicated matter. The general rule is stated in the famous *Castle v. Womble* Decision, 19 L.D. 455, 1894: "When minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine, the requirements of the statute have been met."

In the *Jefferson-Montana Copper Mines Co.* case, 41 L.D. 320, 1902, it was stated that the following elements of discovery are necessary:

1. There must be a vein or lode of quartz or other rock in place.
2. The quartz or other rock in place must carry gold or some other valuable mineral deposit.
3. The two preceding elements, when taken together, must be such as to warrant a

prudent man in the expenditure of his time and money in the effort to develop a valuable mine.”

The extent of discovery will vary with the situation to be considered and the type of mineral and deposit. For example, the requirement as between two claimants is far less than that between a claimant and the United States. A mineral of intrinsic value such as gold may well be considered under the rules set forth above, but a more common mineral would be further subjected to a test of marketability.

In the course of patent proceedings, a mineral examiner of the Bureau of Land Management, the Forest Service if the claim is in a national forest or the National Park Service if the claim is in a national park or monument, will make a field investigation to determine the validity of the claims in question.

Each location must be shown to be more valuable for minerals than for any other purpose and the burden of proof rests with the claimant. The claimant must be prepared to show the actual physical discovery and substantiate the value through assays, drill logs, etc.

The discovery need not be on the surface and may be made underground. In the case of blanket (horizontal) veins, the vein may be wider than the claim and discovery can be made anywhere within its boundaries. A discovery showing value and/or marketability may be anywhere within the claim. The discovery may be on the end line of a claim, but a single discovery cannot support more than one claim.

A discovery may be lost by the patenting of a junior claim in conflict, in which case a new discovery is required.

A claim cut in two by a non-mineral patent requires a discovery on each portion of the claim.

A claimant is entitled to possession as against third parties as long as he is diligently engaged in trying to make a discovery.

2-2 Discovery Work: 43 C.F.R. 3841.3-2 states:

“The claimant should, therefore, prior to locating his claim, unless the vein can be traced upon the surface, sink a shaft or run a tunnel or drift to a sufficient depth therein to discovery and develop a mineral-bearing vein, lode or crevice; should

determine, if possible, the general course of such vein in either direction from the point of discovery, by which direction he will be governed in marking the boundaries of his claim on the surface.”

Except for the foregoing, the matter of discovery work is left to State law. The general requirement was that the vein (deposit) be disclosed to a depth of ten feet, or deeper if necessary, in a shaft, cut or tunnel. In recent years the tendency is away from requiring discovery work. This was brought about largely through the destruction of the surface by bulldozers digging needless pits or cuts on uranium claims in order to satisfy State law.

Drill holes have also been substituted for the usual shaft, cut or tunnel. In some cases the filing of maps has been substituted for discovery work.

The statutory requirements for each State are given in Chapter I. This chapter and the statutes themselves should be checked for current requirements.

In any event, a discovery point (usually marked by a discovery monument, bearing a notice) should be selected by the claimant from which to recite the dimensions of his claim. If a discovery is made underground, the discovery work requirement is usually met by driving a drift or raise, or sinking a winze on the vein, for ten feet in length; the discovery point is then marked on the surface, with the dip of the vein, if any, projected to the surface.

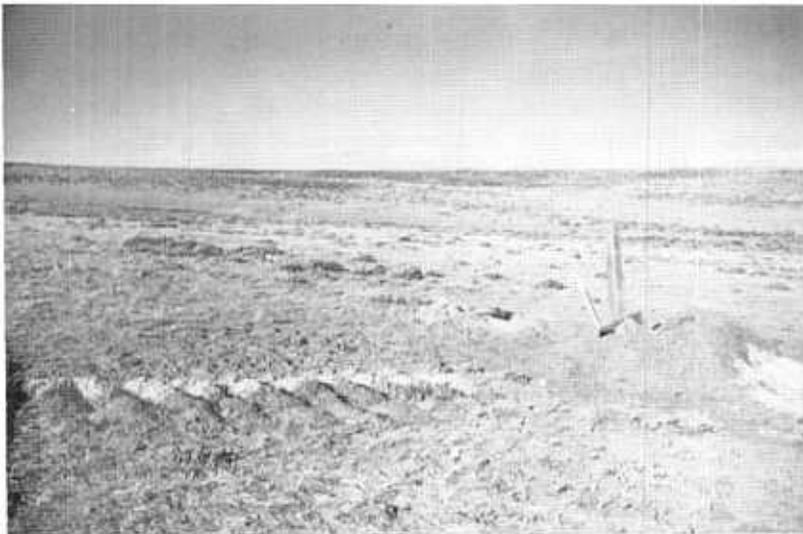
2-3 Location: 43 C.F.R. 3841.4-1 states: “From and after May 10, 1872, any person . . . may locate . . . a mining claim 1,500 linear feet along the . . . vein . . . ; or an association of persons . . . may make joint location of such claim of 1,500 feet, but in no event can a location of a vein or lode made after May 10, 1872, exceed 1,500 feet along the course thereof”

43 C.F.R. 3841.4-2 states: “No lode located after May 10, 1872 can exceed a parallelogram 1,500 feet in length by 600 feet in width, but whether surface ground of that width can be taken depends upon the local regulations or State or Territorial laws No such local regulations or State or Territorial laws shall limit a vein or lode claim to less than 1,500 feet . . . nor can surface rights be limited to less than 50 feet in width”



DISCOVERY CUT

Excavated by bulldozer, with discovery monument and location notice at the point of discovery.



DISCOVERY DRILL HOLE

Note the discovery monument in the hole and samples of cuttings taken at each 5 feet of depth.

43 C.F.R. 3841.4-3 further states: "With regard to the extent of surface ground . . . , the Act of May 10, 1872, provides that the lateral extent of locations of veins or lodes . . . shall in no case exceed 300 feet on each side of the middle of the vein at the surface, and that no such surface rights shall be limited by any mining regulations to less than 25 feet on each side of the middle of the vein at the surface . . . ; the end lines of such claims to be in all cases parallel to each other . . . ; and when the locator does not determine by exploration where the middle of the vein at the surface is, his discovery shaft must be assumed to mark such point."

The only State known to limit the width of claims at present is North Dakota which only allows 150 feet on each side of the vein.

While Wyoming allows the full width, the side lines must be equidistant from the discovery, i.e., a claim may not have 300 feet on one side and 200 feet on the other. Since the federal law limits the size to 300 feet on each side of the vein, if 200 feet is taken on one side, 400 cannot be taken on the other.

The length each way from the point of discovery may be any amount as long as the total does not exceed 1,500 feet.

There is no limit to the number of claims any individual, association or corporation may locate.

Figure 3 shows three different claim patterns, all of which meet federal requirements. Claim A is the usual rectangle with the full length and width, Claim B shows parallel end lines that are not at right angles to the lode line and side lines. While they are longer than 600 feet, the right angle distance on either side of the lode line is exactly 300 feet.

Claim C shows a break in bearing of the lode line at the center of the claim (it could be anywhere on the lode line). Like Claim B, the right angle width does not exceed 300 feet on either side of the center line for any portion of the claim.

Corners may be placed on patented land and on other claims in order to obtain the described pattern and achieve parallel end lines with extralateral rights. If the fee owner objects to monuments, witness corners may be used.

43 C.F.R. 3841.4-4 and 3841.4-5 give the minimum requirements for defining and monumenting locations including the recording of location notices. The laws of the various

states elaborate on these requirements giving minimum size of monuments and acceptable materials, specifying the points on the boundaries that shall be monumented, giving the contents required in the location certificates and setting time limits for completing discovery work and recording. (See Chapter I.)

A wood 4"×4" post at least four feet in length, well set in the ground, makes a good monument. It should be marked on the side facing the claim with the corner number and initial, if not the full name of the claim. Side centers may be marked S/C and end corners E/C, as required.

Discovery monuments are usually marked D.M. The markings can be painted, or scribed with a timber scriber. In a very active area where a number of claims are being staked, claimants often paint the tops of posts with a distinctive color so that they may be readily identified.

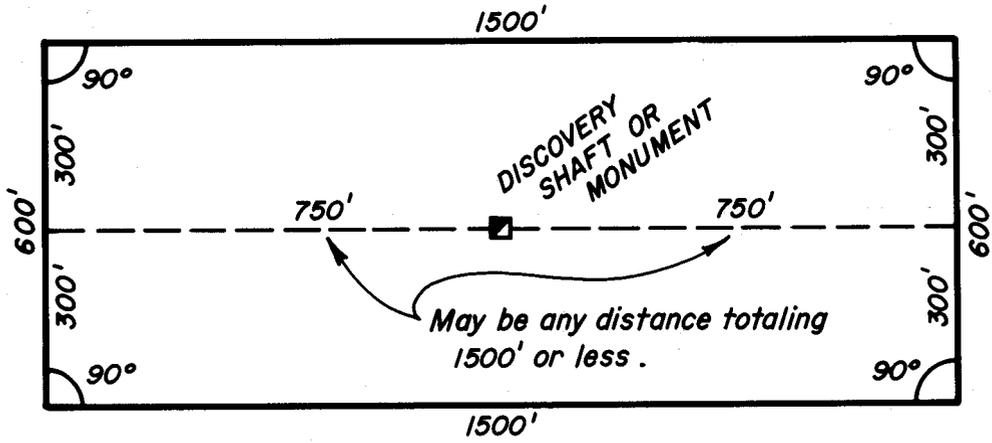
A simple way to lay out and monument a single claim is to begin at the discovery point and run out the desired distance each way along the lode line, then turn an angle of 90° and run each way 300 feet to the corners. (See Figure 4.)

A simple way to lay out a block of claims on a bedded deposit is to run out a common set of end lines and at 300 feet or less turn 90° and at 50 feet or less set a discovery monument. Continue this procedure until the end of the area is reached, then complete the survey by running the boundaries so that each corner is located and monumented. (See Figure 4.)

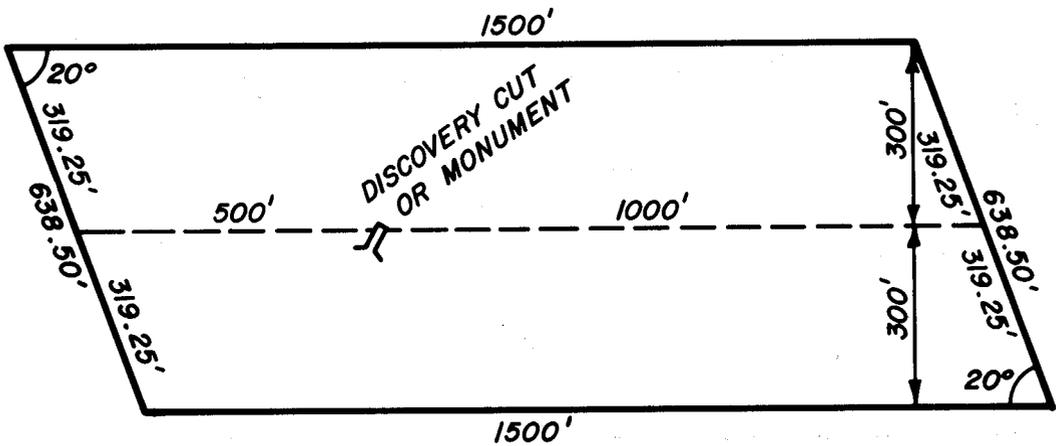
In staking a block of claims it is advisable to make them short of the 600' × 1500' so that minor errors in the location survey will not result in fractions caused by oversize claims.

There is no set rule for numbering corners, clockwise or counterclockwise, except that they be consecutive. In a block of claims corner numbers should be grouped, reducing the number of ties to a section corner or natural object.

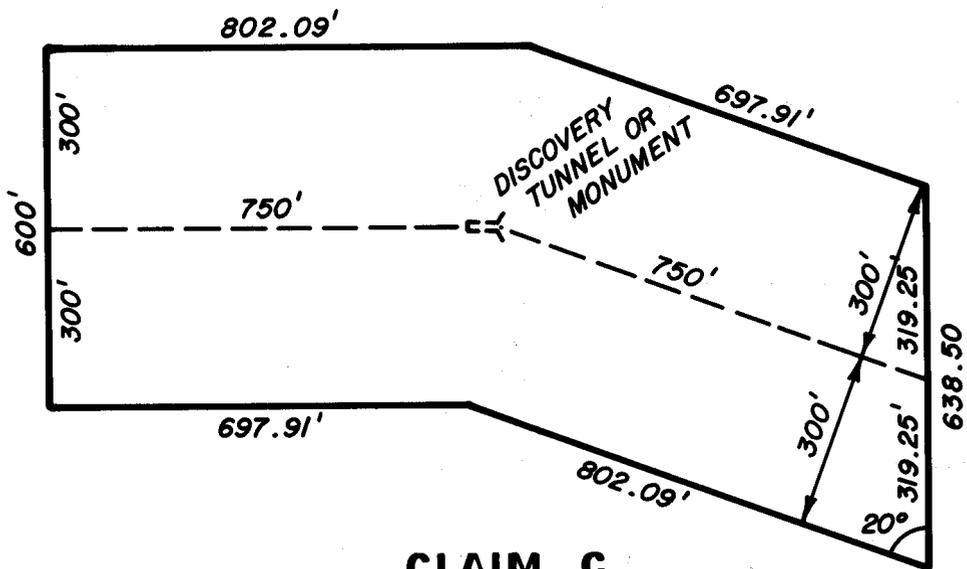
While 43 C.F.R. 3841.4-5 calls for a tie to a permanent, well-known point or object from the discovery, a tie from one of the corners is perfectly acceptable. In fact a metes and bounds description with bearings given at least to degrees and distances in feet, should be included in the location certificate. Avoid using such directions as southwesterly, northeasterly, northerly, etc. Acceptable location certificate



CLAIM A

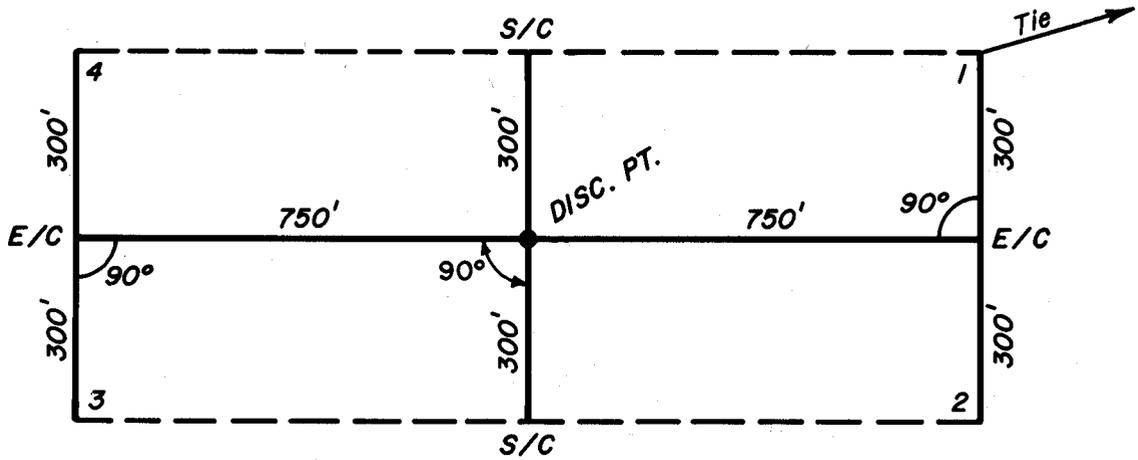


CLAIM B

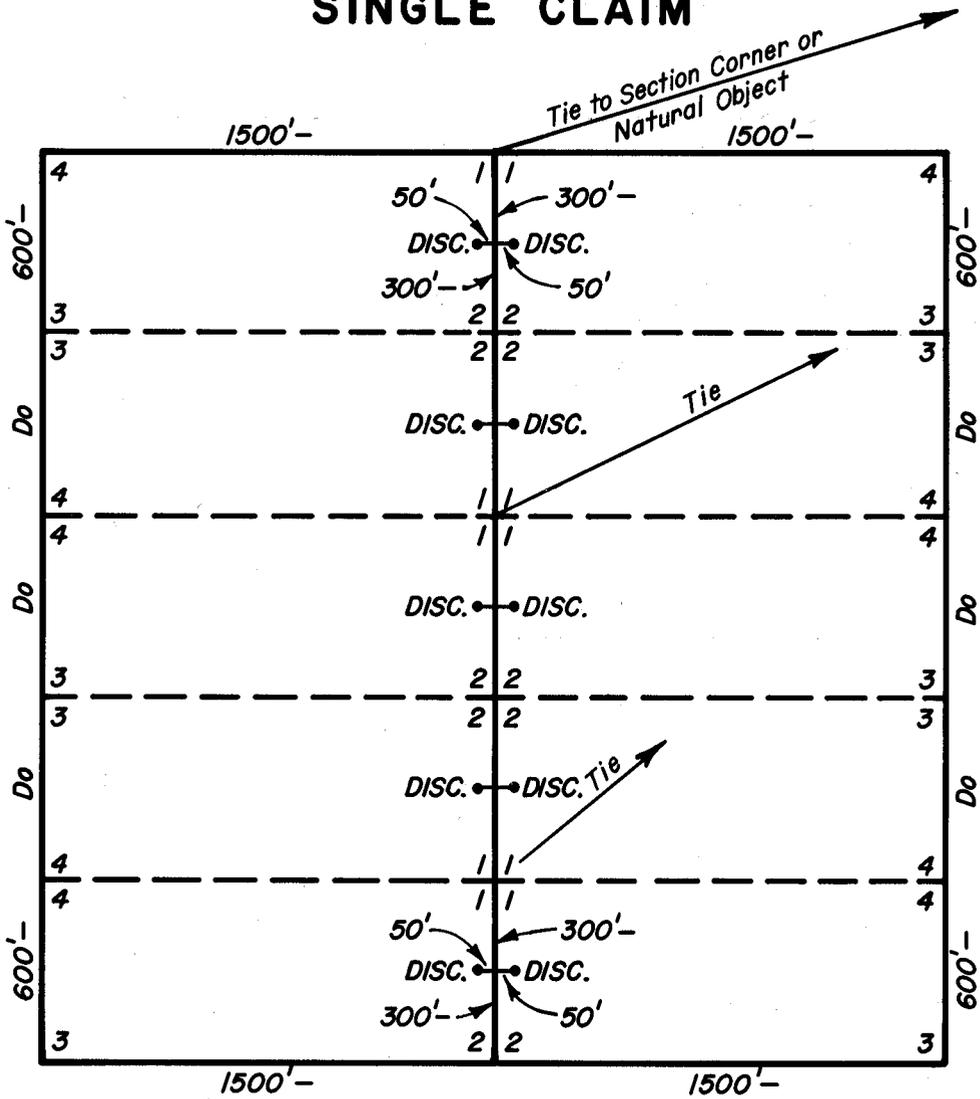


CLAIM C

FIG. 3



SINGLE CLAIM



BLOCK OF CLAIMS

FIG. 4

forms can usually be purchased at a local printer or stationery store.

The term "location notice" applies to the notice posted on the claim at the time of discovery. Some states require that a copy of this notice be recorded, while others provide for the filing of a location certificate after all discovery work has been completed and the boundaries monumented. Forms for the location notice, to be followed by the location certificate for Colorado, and a form for a California location notice, where a copy of the notice is recorded, are included in the appendix.

Placer Claims

2-4 Discovery: 43 C.F.R. 3842.1-1 states: "But one discovery of mineral is required to support a placer location, whether it be of 20 acres by an individual, or 160 acres or less by an association of persons." The discovery may be anywhere in the claim and must be more than a trace. Although it need not be commercial for purposes of location, commercial feasibility (or marketability) will be required for patent.

Known lodes are automatically excluded from placer locations. If any are known to exist they must be located as lode claims; the extent of surface ground may be the minimum, i.e., 25 ft. on either side of the vein.

A number of oil shale placer claims were in existence at the time the Mineral Leasing Act was passed in 1920, and have subsequently been patented. Many discontinued performing the annual assessment work on the theory that no one else could locate the claim. The Department of the Interior has recently ruled (*U.S. v. Frank W. Winnegar et al.*; 81 I.D. 370) that failure to develop an oil shale claim demonstrates that the deposit is not valuable and that the rule of the prudent man has not been met.

2-5 Discovery Work: As with lodes, the State requirements for discovery work have been eliminated for all but the State of Washington. However, sufficient excavation will be necessary to disclose a valuable deposit.

2-6 Location: The Act of 1870 limited placer claims to 160 acres, whether they be located by an individual or association; the Act of 1872 limited locations to 20 acres per person, with up to 160 acres for an association of eight persons. Therefore, two persons may take 40 acres; three take 60 acres; four take 80 acres, etc.

If practicable, placer claims shall conform to the legal subdivisions of the public land survey,

with ten acres being the smallest unit considered. If on unsurveyed lands, a placer claim should conform to the protracted survey. If on surveyed lands, no further description is necessary and the claim may proceed to patent on this basis. State law may require monumentation of the corners.

If on unsurveyed lands a mineral survey will be required before application for patent can be made. Further limitation on size of precious metal placers is imposed by the State of Alaska. There is no limit on the number of placer claims that may be located.

Where fractional lots of the public land survey are encountered, the rule of approximation may be applied to excess acreage. The rule is that the amount of excess may not exceed the amount of loss, if one of the subdivisions were eliminated. On the basis of ten acre tracts, the allowable excess would be 4.99 acres.

There are instances where conformity to the public land survey is not practical. These instances occur where conformity would take in a sizable amount of non-mineral ground, such as a gulch placer, where the claim is surrounded by prior locations or conformity would necessitate placing the lines on prior claims. In these cases, a metes and bounds description is proper, but with the following limitation: A location by one or two persons must be included within a square 40 acre tract; a location by three or four persons within two square 40 acre tracts placed end to end; a location by five or six persons within three square 40 acres tracts; seven or eight persons within four square 40 acre tracts. (43 C.F.R. 3842.1-5)

Regardless of the manner in which a placer is described, a location notice and/or certificate must be posted and filed for record. A sample certificate is included in the appendix.

Mill Sites

2-7 Authority: The Act of 1872 provided for five acre mill sites to be taken in conjunction with lode claims or for the purpose of building an ore reduction works (mill or smelter). The Act of 1960 further provided for mill sites taken in conjunction with placer claims, and further provided for the description to be in the same manner as the placer. This provided for describing mill sites by legal subdivisions, and in practice this method of description is extended to mill sites taken with lodes or for an ore reduction works. (Instruction Memo No. 72-151, 4/25/72.)

Land appropriated as a mill site must be non-mineral in character and the surface open to location under the mining laws. Once patented, it includes all minerals. Nominal values do not constitute mineral ground, nor does the fact that a mill site adjoins a lode or placer claim prove mineral ground. In patent proceedings, the mineral examiner may require drilling to provide the non-mineral character of the land.

As with lodes and placers, a location notice must be posted and recorded. (See appendix for sample.) State law may require monumentation, even if described by legal subdivisions.

2-8 Required Use: 43 C.F.R. 3844.1 states: "A millsite is required to be used or occupied distinctly and explicitly for mining or milling purposes in connection with the lode or placer claim with which it is associated. A custom or independent mill site may be located for the erection and maintenance of a quartz mill or reduction works."

There is no limit to the number of mill sites that may be located, so long as they are necessary for the operation of a mine or mill. Acceptable uses include tailings ponds, dumps, storage facilities, living quarters, etc.

Tunnel Sites

2-9 Possessory Right: The Act of 1872 gave the proprietors of a mining tunnel the possessory right to 1,500 feet of any blind lodes cut by the tunnel, not previously known to exist, for a distance of 3,000 feet from the portal, or first working face of the tunnel. Since the 1,500 feet could be taken in either direction from the line of the tunnel, this provided an exclusive area 3,000 feet square.

When a lode is discovered in the tunnel, it must be staked on the surface, and a notice posted on the surface at the projected point of discovery, either directly above or protracted on the dip of the vein.

Failure to work the tunnel for six months constitutes abandonment. A tunnel site may not be patented. (See appendix for sample location certificate.)

2-10 Location: 43 C.F.R. 3843.2 and 3843.3 provides for posting a notice at the portal of the tunnel, staking the claim and recording a copy of the notice with the proper local authorities. The Act of 1976 also requires recording with the Bureau of Land Management.

It is customary to stake the line of the tunnel at such intervals so that each succeeding stake or monument is visible from the last, beginning at the first working face and continuing 3,000 feet to the end. The four corners of the tunnel site should also be monumented.

Although not expressly provided for by law, a dump site of reasonable size may be located at the portal of the tunnel.

General

2-11 Recording of Claims: 43 C.F.R. 3841.4-6 states: "The location notice must be filed for record in all respects as required by State or Territorial laws, and local rules and regulations, if there be any." Although the foregoing is contained in that section pertaining to lode claims, the same applies to placer claims, mill sites and tunnel sites. All the state laws make provision for the recording of location notices, with the County Clerk and Recorder or his equivalent (Register of Deeds in North and South Dakota, County Auditor in the State of Washington). Should the claim fall in two counties, it is proper to record the original certificate in the county (and state) where the discovery lies.

The Federal Land Policy and Management Act of 1976 made the recordation of mining claims with the Bureau of Land Management mandatory. Unlike state requirements, failure to file for record with the Bureau of Land Management within the designated time makes the claim abandoned and void. The objective is stated in 43 C.F.R. 3833.0-2:

"An objective of these regulations is to determine the number and location of unpatented mining claims, mill sites or tunnel sites located on Federal lands to assist in the management of those lands and the mineral resources therein. Other objectives are to remove the cloud on the title to these lands because they are subject to mining claims that may have been abandoned and to keep the BLM abreast of transfers of interest in unpatented mining claims, mill site and tunnel sites

An abstract of the law is given in Chapter I. The proper State office of the Bureau of Land Management should be contacted to determine their requirements.

2-12 Assessment Work (Annual Labor): 43
C.F.R. 3851.1 states:

“In order to hold the possessory right to a lode or placer location made after May 10, 1872, not less than \$100 worth of labor must be performed or improvements made thereon annually. The period within which the work required to be done shall commence at 12 o'clock meridian on the first day of September succeeding the date of location of each claim. Where a number of contiguous claims are held in common, the aggregate expenditure that would be necessary to hold all the claims may be made on any one claim. Cornering locations are held not to be contiguous.”

Almost any type of improvement will count as assessment work. Development work in the form of shafts, cuts and tunnels definitely will count as well as drill holes. Roads, bridges, ore bins, etc., will also count. Recently, geological, geochemical and geophysical surveys have been included as qualifying for assessment work, although not for patent expenditure.

Reports by qualified experts conducting such surveys must be filed with the county recorder. Such work cannot apply to more than two consecutive years and no more than a total of five years. Work may be done in a common improvement, but such work must be of benefit to all claims of the common group. It may be outside the claims, such as a tunnel driven toward the group for the development of the claims at depth. Not all work qualifying for annual labor will qualify as patent expenditure.

Provision is made in state laws for the filing of an affidavit of assessment work and form of content is provided. A copy of said affidavit or other proof must also be filed with the Bureau of Land Management. In the past, the filing for record of the affidavit shifted the burden of

proof from the claimant to third parties and failure to file such an affidavit, or failure to do the work, did not invalidate the claim. Now, failure to do the work and file the necessary proof with the Bureau of Land Management will render the claim abandoned and void.

Notice of intent to hold must be filed with the Bureau of Land Management in the case of mill sites and tunnel sites and in the case of lodes or placers should the annual assessment work be suspended as it has in the past during time of war or economic stress.

2-13 Relocation, Amended Location, Additional Location Certificate: The terms “relocation” and “amended location” when made by the owner are synonymous. Generally, there is no relocation or amended location by the owner unless there is a change on the ground, such as a change in the boundaries or a change in the discovery. Such relocations or amended locations relate back to the original location and no existing rights are surrendered by such an amendment. If there is no change on the ground, and the change is only in the description, then an additional location certificate will suffice.

Amendments (or relocations) by the owner are made for the purpose of correcting any errors in the original location, description or record, changing the boundaries, or for the purpose of acquiring that part of any overlapping claim that has been abandoned. A relocation by the owner will not cure the lack of discovery or failure to do assessment work.

In the case of relocation of an abandoned claim by a third party, the discovery work should be extended or a new discovery made and the monuments should be checked to see that all are in place and in good condition. Such a relocation does not relate back to the original location.

State laws cover amendments and relocations and they should be checked for the requirements. (See appendix for sample Additional and Amended Location Certificate.)

