



YOUR FILE ..... Circular  
OUR FILE ..... Letter  
No. 282

April 18, 1978

CIRCULAR LETTER TO ALL BRITISH COLUMBIA LAND SURVEYORS

Dear Sir:

Re: General Instructions Respecting the Survey of  
Mineral Claims and 2 Post Claims

The attached B.C. Reg. 49/78 appeared in the B.C. Gazette of February 28, 1978, and applies to the new Mineral Act which came into force on January 1, 1978.

These Instructions have been consolidated to cover surveys under the unit system (Mineral Claims) and for 2 Post Claims, and thus supersede B.C. Regs. 778/75 and 783/75.

Henceforth, District Lot numbers will not be assigned to either type of claim being surveyed. The claim description is to be based on U.T.M. coordinates of the S.W. corner of the surveyed area. It is for this reason that Sec. 4.11 requires as much information as space permits on the post cap be shown for identification purposes.

Any unused District Lot numbers presently held by surveyors for intended use on claim surveys should be returned to Legal Surveys.

I would draw your attention to Sec. 5.02, which gives direction to the surveyor when a difference is found between information on the tags and that given in the record of the claim.

Note that Sec. 7.08(f) requires the perimeter boundaries of the area dealt with to be shown as a solid thick black line, replacing the requirement of red outlining. When parts of such boundary are not run, the letter (C) bracketed shall follow the dimensions as per Sec. 7.08(e) to signify they are calculated.

The specimen plans contained in these regulations have necessarily been reduced, and clarity has suffered. Full scale prints, if required, are available upon request.

Surveyors engaged in mineral claim work are advised to obtain a copy of the Mineral Act Regulations, which include the staking requirements. These are issued under B.C. Reg. 587/77 and are obtainable from the Ministry of Mines and Petroleum Resources, Parliament Buildings, Victoria.

Yours truly,

R. W. Thorpe,  
Acting Surveyor General

RWT:mw  
Encl.

## MINERAL ACT

### GENERAL INSTRUCTIONS RESPECTING THE SURVEY OF MINERAL CLAIMS AND 2-POST CLAIMS AUTHORIZED UNDER SECTION 38 OF THE MINERAL ACT AS AMENDED, 1977

#### *Foreword*

The object of these instructions is to place before British Columbia land surveyors, in convenient form for reference, the rules that now guide the Surveyor-General in performing his duties under the *Mineral Act* and in accordance with the regulations governing the locating of mineral claims and 2-post claims under the *Mineral Act* (B.C. Reg. 587/77).

It is believed that these instructions conform with decisions of the Courts where decisions have been given, with the best legal opinion in other cases, and with the practice of experienced surveyors. Adherence to these instructions will enable a more prompt approval of the survey returns, whereas departure may delay approval.

Victoria, B.C.

*Surveyor-General*

#### *Division (1)—Interpretation*

1.01 These regulations may be cited as the "Mineral Act Survey Instructions."

1.02 In these regulations the word "Ministry" refers to the Ministry of the Environment.

1.03 In these regulations the word "records" under the *Mineral Act* shall include the record of the mineral claim or 2-post claim and the affidavit and sketch plan of the locator in the prescribed forms.

*Division (2)—General*

2.01 A survey under these instructions consists of the delineation on the ground of the area to which the holder of a mineral-claim or 2-post claim record is entitled under the provisions of the *Mineral Act*.

2.02 The instructions herein contained apply more particularly to mineral claims located on or after May 15, 1893. If called upon to survey claims located prior to that period, the surveyor shall acquaint himself with the provisions of the statutes in force at the time of location.

2.03 On application to the Surveyor-General, any available information regarding existing surveys will be furnished.

2.04 The survey shall be made under the personal supervision, on the ground, of the surveyor signing the plan. If a previous survey, made by another surveyor, forms a common boundary with the claim being surveyed, such boundary shall be defined by traverse and all details of the traverse shall be shown on the plan.

2.05 All surveys shall be referred to the astronomic meridian, which shall be determined by astronomic (preferably stellar) observation, from the Provincial Triangulation System or by gyroscopic meridian indicator, except that in cases of surveys of small extent the meridian of an adjacent survey may be adopted. When atmospheric conditions prohibit an observation, the meridian as determined by magnetic compass may be accepted, in which case the magnetic declination used shall be recorded.

2.06 The conventional method of survey requires that angles shall be read with a transit, and distances shall be measured with a steel tape or with electronic measuring equipment. Tapes shall be compared from time to time with the standard of length adopted by Canada. Electronic equipment shall be calibrated periodically, and when necessary the measured distance compared to a known distance. If other than conventional methods of survey are to be employed, prior approval is required from the Surveyor-General.

2.07 All linear measurements shall be in metres and decimals thereof.

2.08 All surveys shall be closed. The allowable linear error of closure shall be 1:2 500. If, due to unavoidable circumstances, the error of closure exceeds the allowable limit, the letter accompanying the survey returns shall contain an explanation for the error.

2.09 All surveys shall be connected to existing surveys, provided such surveys are situated within the following distances:

(a) 1.5 km, if in heavily wooded or precipitous country:

(b) 3 km, if in open or partly open country:

(c) 4.5 km, if along a trail, wagon-road, on ice, or along open foreshore.

If no previous survey is within these distances, an acceptable tie shall be made to Provincial triangulation, some prominent nearby topographical feature shown on a Ministry map, identifiable on an air photograph, or to improvements of a permanent nature made upon the claim, and the covering letter with the survey returns shall contain such details of the claim as will facilitate its identification and location at a future date.

2.10 Where necessary, the surveyor shall include in his survey returns a suitable air-photo identification.



### *Division (3)—Types of Survey*

#### *Separate Claims*

3.01 The boundary-lines of all claims shall be run, or traversed where it is not practicable to run them, and all surveys shall be closed. Monuments shall be placed at all corners and angles of the unit or claim and at points of intersection of the boundaries of the claim being surveyed with the boundaries of other claims, district lots, sections, etc.

3.02 Each separate claim survey shall be given a number consisting of the co-ordinates of the southwest corner of the claim together with the addition of the claim name and record number. The co-ordinates shall be the U.T.M. rectangular co-ordinates rounded to the nearest 100 metres. They shall serve as a reference to the general location of the claim but shall not be used for the purpose of establishing exact position. When the U.T.M. rectangular co-ordinates of the southwest corner of the claim cannot be easily established by a tie to survey control they may be scaled from the best map available or obtained by photogrammetric methods.

#### *Multi Unit Claims*

3.03 This type applies to all surveys of claims of more than one unit (*see Mineral Act Regulations, B.C. Reg. 587/77*).

3.04 It is permissible to create an "inner perimeter" within the claim being surveyed in order to exclude a claim or claims held under different ownership. All such "inner perimeters" shall be fully monumented except for intersections made by unit boundaries.

3.05 All boundary-lines on the perimeter of the claim being surveyed shall be run, or traversed where it is not practicable to run them. Monuments shall be placed on the perimeter at all unit corners and angles and at points of intersection with other claims, district lots, sections, etc.

3.06 The true bearing and length of all boundary-lines shall be determined by traverse. The remaining boundaries of each unit within the perimeter shall then be determined by calculation.

3.07 Each multi unit claim survey shall be given a number consisting of the co-ordinates of the southwest corner of the claim together with the addition of the claim name and record number. The co-ordinates shall be the U.T.M. rectangular co-ordinates rounded to the nearest 100 metres. They shall serve as a reference to the general location of the claim but shall not be used for the purpose of establishing exact position. When the U.T.M. rectangular co-ordinates of the southwest corner of the claim cannot be easily established by a tie to survey control they may be scaled from the best map available or obtained by photogrammetric methods.

3.08 If, subsequent to the acceptance by the Ministry of a multi unit survey, the claim holder wishes to amend the perimeter boundaries as per section 34 of the *Mineral Act* by deleting one or more units his surveyor shall request special instructions from the Surveyor-General.

#### *Control Surveys for Surface Mining Operations*

3.09 This type of survey is intended for use where surface stripping would cross claim boundaries and destroy monuments which normally would be set in the survey of 2-post claims or mineral claims.



3.10 Monuments shall be placed so that a density of at least one monument per 500 metres is obtained outside the proposed area of the surface mining operation. These monuments, set in the most suitable places with a view to permanence, shall be integrated and given co-ordinates based on the same origin as that of the group of claims being surveyed in order to assist in the future establishment of individual claims on the ground if required.

3.11 (a) The true bearings and lengths of all location-lines and mineral claim boundaries shall be run, or traversed when not practicable to run them, and all remaining claim boundaries determined by calculation. Co-ordinates for all corners and intersections shall be computed and based on a common origin, the meridian of which shall be established by stellar observation or gyroscopic meridian indicator. Wherever possible the origin of co-ordinates should be a Provincial or geodetic survey control monument.

(b) In addition to the monumentation required in section 3.10, the surveyor shall monument internal legal posts in a manner similar to that described in section 3.16 if, in his opinion, the monuments are not likely to be disturbed by mining operations.

3.12 For this type of survey the surveyor engaged should request special instructions from the Surveyor-General and submit a statement of intention by the mining company to carry out surface mining operations.

#### *Perimeter Survey*

3.13 This type of survey is authorized by section 29 (2) of the *Mineral Act*. All claims within the perimeter must be under one common ownership and there must be no "open ground" between the claims.

3.14 It is permissible to create an "inner perimeter" within the group of claims being surveyed in order to exclude a claim or claims held under different ownership. All such "inner perimeters" shall be fully monumented.

3.15 All boundary-lines on the perimeter of the group being surveyed shall be run, or traversed where it is not practicable to run them. Monuments shall be placed on the perimeter at all corners and angles and at points of intersection with other claims, district lots, sections, etc., and shall be stamped as detailed in section 4.11 (c).

3.16 The true bearing and length of all location-lines shall be determined by traverse, and legal posts shall be replaced or witnessed by a monument, the reference post to which shall be marked in accordance with section 4.14 (a) (ii). The remaining boundaries of each claim within the perimeter shall then be determined by calculation.

3.17 If, subsequent to the acceptance by the Ministry of a perimeter survey, the leaseholder wishes to amend the perimeter boundaries by deleting one or more claims as per section 34 of the *Mineral Act*, the surveyor shall request special instructions from the Surveyor-General.

3.18 Each perimeter survey shall be given a number consisting of the co-ordinates of the southwest corner thereof. The co-ordinates shall be the U.T.M. rectangular co-ordinates rounded to the nearest 100 metres. They shall serve as a reference to the general location but shall not be used for the purpose of establishing exact position. When the U.T.M. rectangular co-ordinates of the southwest corner

cannot be easily established by a tie to survey control they may be scaled from the best map available or obtained by photogrammetric methods.

*Division (4)—Monumentation*

4.01 A survey monument shall consist of a standard post and one or more of the reference marks described in the Instructions Regarding Permanent Survey Monuments.

4.02 Posts shall be of the following types:

Type 1: Standard Concrete Post.

Type 2: Standard Rock Post.

Type 4: Standard Capped Post.

Type 5: Standard Post.

4.03 The Type 2 post shall be used to mark every corner which falls on bed-rock, an immovable boulder, or a permanent stone or concrete structure.

4.04 The Type 1 or Type 2 post shall be used for control surveys for surface mining operations as outlined in section 3.10 and shall be placed with a density of one in three, with the intervening posts being Type 4. Intervisibility is desirable, but every control monument must "see" at least one other control monument.

4.05 The Type 4 post shall be used for separate claim, single unit, multi unit, fractional claims, and for control surveys as described in section 4.04.

4.06 The Type 5 post may be used for the following purposes only:

- (a) Marking legal posts of claims in a perimeter survey as outlined in section 3.16 except where the legal post falls on the perimeter itself, in which case a Type 4 post shall be used.
- (b) Marking legal or legal corner posts of claims in control surveys, as permitted in subsection (b) of section 3.11.
- (c) Marking legal posts of claims in separate claim surveys where the legal posts do not fall on the corner of a claim.
- (d) Marking the accepted location of a group of posts tied under section 5.04.
- (e) Marking the intersection of surveyed right-of-way boundaries with the boundaries of claims being surveyed under sections 3.01, 3.05, and 3.15. These intersections shall be posted in the same manner (i.e., one boundary or both boundaries) as the right-of-way is posted.

4.07 Where no tie to a cadastral survey or trig. point is possible within the limits required by section 2.09, a monument of Type 1, 2, or 4, stamped as a reference to the claim being surveyed must be set and referenced with bearing-trees, or other tie (e.g., to the footings of a bridge) at a prominent topographical feature which is identifiable on existing maps or photos. A traverse is required from the reference monument to the survey.

4.08 The required type of post shall be set as specified by these regulations. Any existing lot-corner tied to in the course of the survey, at which no post of Type 1, 2, 4, or 5 is found, shall be reposted with a post of Type 5 or better.

4.09 A corner which falls in an inaccessible position in a locality unfavourable to the planting of a post, or where a post is likely to be disturbed or destroyed,



shall be witnessed by posts of Type 1, 2, or 4, planted at the nearest accessible points to the corner on the two boundary-lines which intersect at the corner, or on a boundary produced.

4.10 Each standard post shall be set with the crown on the cap toward the north and with the corner point, as nearly as possible, at the centre of the cap. After setting the post, the true point shall be marked by a small hole punched or drilled in the cap.

4.11 (a) When used for separate claim surveys, the space provided on the cap shall be used to indicate diagrammatically the direction of the boundary-lines, and the designation of any adjoining surveys. The cap shall also indicate the year in which the post was set, the surveyor's commission number, the letters "MC", and the record number when space permits. In the case of a witness-post, it shall also be marked with the letters "WT" followed by the distance and general direction to the corner witnessed. This post marking is best done with steel dies of the letters and numbers required.

(b) When used for multi unit claims, the post cap shall show, in addition to the items detailed in paragraph (a) above, the unit number and a number, of a consecutive series starting from 1, which will serve to identify the corner on the survey plan.

(c) When used for perimeter surveys, the post cap shall show in addition to the items detailed in paragraph (a) above, a number, of a consecutive series starting from 1, which will serve to identify the corner on the survey plan.

(d) When used for control surveys, the cap shall be marked with the letters "MC", the year in which the post was set, the surveyor's commission number, and a number, of a consecutive series starting from 1, which will serve to identify the monument on the survey plan.

(e) An existing monument which is used in connection with an adjoining current survey shall be stamped as per paragraph (a), (b), or (c) above.

4.12 The position of every post shall be referenced by at least three bearing-trees, wherever trees are available. The distance to each bearing-tree shall be measured in metres and tenths from a point 1 metre vertically above the top of the post to the face of the blaze. The bearing-tree shall be carved with the letters "BT" and the measured distance. The magnetic bearing from the post to the tree shall be recorded, together with the diameter and species of each tree.

4.13 Cairns shall be built, if possible, to reference the position of all posts set. At a true corner post, the cairn shall be in the shape of a pyramid 1.5 metres square at the base and 1 metre high; its centre shall lie due south of the post, with one corner adjoining the post. At a witness-post, the cairn shall be conical, 1.5 metres in diameter at the base and 1 metre high. It shall stand on the opposite side of the post from the corner witnessed, with its centre 1 metre from the post. Should it be impractical to build a cairn to the size and location as specified, all details of any variations shall be recorded.

4.14 Every post of Types 1, 2, 4, and 5 shall be accompanied by a reference post of one of the following types:

(a) A wooden post of triangular cross-section, not less than 8 cm wide on any face.



- (i) When referencing a post of Type 1, 2, or 4, the wooden post shall stand approximately 1 metre high and be marked "Mon" on the side facing the standard post. The top of a hewn post shall be pointed to shed water, or, if milled, the top should be chamfered.
- (ii) When accompanying a post of Type 5, the wooden reference post shall be painted white, if possible, shall stand approximately 30 cm high, and shall be marked "IP" or "AP" on the side facing the Type 5 post. A wooden post accompanying a Type 5 post set under section 4.06 shall also bear the letters "MC" and the record number, either carved or painted thereon. When accompanying a Type 5 post set under subsection (e) of section 4.06, the wooden post shall show the letters "MC", record number and R/W in addition to "IP". These may be either carved or painted thereon.
- (b) A metal reference post, which shall consist of an aluminum plate of approximately 22-gauge thickness, approximately 10 by 20 cm in size, bolted to a galvanized angle-iron post. The plate shall be marked "B.C.L.S. Survey Post 20 cm from this Ref. Post."  
When used to accompany a post of Type 1, 2, or 4, the metal post shall stand approximately 1 metre high, or if used to accompany a post of Type 5, approximately 30 cm high.

#### *Division (5)—Determination of Boundaries*

5.01 In determining the boundaries of a mineral claim, including a fractional claim, the surveyor shall be guided by the *Mineral Act*, the Mineral Act Regulations (B.C. Reg. 587/77) and by the instructions herein contained. Copies of the records of the claim, including any mining inspector's reports verifying the positions of legal corner posts shall be obtained from the Gold Commissioner of the mining division in which the claim is situate.

5.02 If the surveyor finds the data on the legal post or legal corner post differs from that shown on the record of the claim, and it is concluded that, as per section 49 of the *Mineral Act*, the error was not intentional or calculated to mislead others, the surveyor may proceed on the assumption that the data on the post will normally be deemed to govern over that given in the record. In such instances, the surveyor shall inform the Gold Commissioner of the differences found.

The acceptance of a survey by the Ministry under these conditions is not a final determination of title to the claim which may be subject to adverse action under section 51 (see *Manley vs. Collom* 32 S.G. 371; 8 B.C. 153 or *Martins Mining Cases Vol. 1*, p. 487). It may be advisable to consider abandonment and restaking under these conditions.

5.03 Prior 2-post claims shall be surveyed as rectangles. The straight line between the No. 1 and No. 2 posts shall govern the direction of the side lines. The end lines shall be established by running lines at right angles to the location-line—one from No. 1 post and the other from No. 2 post, or the position of No. 2 post as corrected in accordance with section 40 (1) of the *Mineral Act*. In connection with section 40 (1), it should be noted that even though the position of the No. 2 post shall be brought back if necessary to 457.20 metres (1,500 feet) from the No. 1 post, the original No. 2 post itself must be left in place as found. It is not

necessary to run the true location-line, the surveyor may determine the true bearing and length by running a traverse or trial line between the No. 1 and No. 2 posts.

5.04 When, because of the impossibility of setting a group of legal or legal corner posts over the same point, two or more such posts are found to have been set as close together as the topography allowed, and are interpreted by the surveyor as marking the same point, the monument marking said point shall be placed at the site of the post having the earliest location date.

5.05 When a monument is required to be placed at the "legal corner post" or "legal post" of a claim, said post shall be replaced by the monument (and reference post), and the post shall be left in the cairn adjacent to the monument. If the post is in the form of a tree stump, the stump shall be left *in situ* and the monument set as a witness-post on a true line.

5.06 Should one or more of the "legal posts" or a "legal corner post" be obliterated or lost, the surveyor in relocating their original positions shall use the best evidence available which would include any existing mineral inspection report, use of the existing nearby identification posts or a statutory declaration by the locator of the claim or by some other person present at the time of location or who had definite knowledge of the location. This shall not relieve the surveyor from the obligation of procuring any further evidence, corroborative or otherwise, as can be obtained, and of reaching a conclusion from all the evidence available. A covering letter to accompany the survey returns must explain the evidence used and the reason for not producing an affidavit, if one was not obtained.

5.07 Due regard shall be given to prior locations in the survey of subsequent and fractional locations and to section 17 of the *Mineral Act*, and when survey data is obtained on the ground for the purpose of excluding a prior claim from the claim being surveyed, this data shall be incorporated in the survey returns, together with a true copy of the records of the prior locations.

5.08 When two or more adjoining claims in good standing are in the same ownership at time of surveying and have the same location date, the surveyor may indicate priorities and carry out his survey accordingly, regardless of any numbers in the legal names of the claims.

5.09 No 2-post claim may consist of more than one parcel. Where a claim is divided by prior locations into two or more parcels, the parcel nearest the No. 1 post shall constitute the claim. (*Dart v. St. Keverne Mining Co. Ltd.*, 7 B.C. 56 or *Martins Mining Cases Vol. 1*, p. 331.)

5.10 The "fraction created," referred to in section 40 (2) of the *Mineral Act*, shall be formed by producing a side line of the claim being surveyed to meet that boundary of the previously located claim which is touched or crossed by the location-line of the new claim.

5.11 Should the production of the side line not effect this intersection, then the point of intersection of this side line with the line drawn at right angles to the location-line from the No. 1 or No. 2 post (adjusted if necessary to place it at the allowable maximum distance from No. 1) shall be joined to the nearest extremity of the aforesaid boundary of the prior claim (see explanatory diagrams Nos. 1 to 9 accompanying the instructions).



5.12 A "fraction created" may be included at either or both ends of the location-line, provided that this location-line touches or crosses the boundaries of previously located mineral claims and 2-post claims. If one "fraction created" is so great in area that it would cause the maximum area of the claim to be exceeded, it cannot be reduced in area, but must be eliminated entirely. If the fractions combined, but neither singly, would cause the maximum area to be exceeded, the fraction nearest the No. 1 post shall be included in the survey.

5.13 The surveyor shall include in a 2-post claim survey any "fraction created," provided that the limiting area is not thereby exceeded.

5.14 The surveyor shall exclude from a Unit System survey any "fraction created."

5.15 In laying out a claim located and recorded as a fractional mineral claim, it is important that the surveyor shall obtain a copy of the locator's sketch-map on the back of the prescribed form and to include on survey, as nearly as possible, the ground called for by the record and the sketch. Claims located on or before February 28, 1975, in no case to exceed 20.90 ha (51.65 acres) and claims located after February 28, 1975, in no case to exceed 25 ha (61.78 acres).

5.16 No. 1 and No. 2 posts of a fractional mineral claim located on or before February 28, 1975, and the legal corner post for a fractional claim located after February 28, 1975, while possibly not essential to the determination of the boundaries of the claim, shall in all cases be properly tied to the survey.

5.17 If a fractional mineral claim is described on the record of said claim as being surrounded on all sides by previously located claims, which are also unsurveyed, the surveyor shall submit with his survey returns of the fractional claim copies of the records of all the surrounding claims concerned.

5.18 In the event of a claim to be surveyed being so staked that it overlaps a Crown-granted mineral claim which has reverted to the Crown but of which the survey had not been cancelled at the time when the new claim was staked, the new claim shall be surveyed so as not to include any of the area covered by the reverted claim. The boundaries of the reverted claim shall be treated in the same way as regards the inclusion of the "fraction created," etc., as though the reverted claim were in good standing. Should, however, the survey of the reverted claim have been cancelled prior to the date of staking of the claim to be surveyed, the area occupied by the cancelled claim shall be treated as vacant Crown land, in so far as the cancelled claim is concerned.

5.19 The boundary of a previously surveyed claim shall not be used to close the survey of the claim to be surveyed without having been retraced by the surveyor.

5.20 When surveying mineral claims along the International Boundary, either along the 49th parallel of latitude or the Canada-Alaska boundary, the reserve of 18.29 metres (60 feet) width adjacent to these boundaries shall be respected and eliminated from the survey of any claims affected.

5.21 Boundaries of mineral claims shall include all water areas covered by the record and not reserved.

5.22 As water areas will be excluded from the area of a mineral claim when dealing with the disposition of surface rights over Crown land, a survey of the natural boundary of the water area is required of sufficient accuracy only to deter-



mine the area and shape. Compass and chain, stadia, or a photogrammetric method may be used. In the latter case, at least two photo points must be surveyed in to control the scale and azimuth. The photo points are to be identified on the photo in the course of the ground survey. Alternatively, where a map prepared from photos exists, and providing two common points on the map and survey can be identified, the detail of the natural boundary may be obtained from the map by an accurate enlargement process.

5.23 Small watercourses or ponds of a temporary or seasonal nature with poorly definable boundaries are not to be considered as having a natural boundary. Such watercourses shall not be shown within or crossing the boundaries of a claim; however, as their existence on the ground has a topographic value, they shall be shown if possible according to section 7.08 (j) on the side of the boundary opposite the area being surveyed.

5.24 Disposition of surface rights of mineral claims by the Crown may except the type of road as follows:

- (a) Public roads, by virtue of section 6 or 8 of the *Highway Act*;
- (b) Forest access roads which are unsurveyed;
- (c) Petroleum development roads which are unsurveyed;
- (d) Existing roads which are not "public" under the *Highway Act* but which are travelled by the public;
- (e) Surveyed roads for which a plan is on deposit (where the road has been gazetted at a greater width than surveyed, the gazette boundary is to apply);
- (f) Road allowances parallel to and within the boundaries of sections or district lots.

5.25 Roads in categories (a) to (d) will be traversed on centreline, using either transit and chain, compass and chain, or transit and stadia, commencing and terminating at intersection points on the road centre line and with the boundaries. The traverse is for plotting purposes only and precision to the standard of the claim boundaries being surveyed is not required. Alternatively, where a map prepared from photos exists and providing two common points on the map and survey can be identified, the detail of the road alignment may be obtained from the map by an accurate enlargement process.

5.26 Roads in category (e), when contained within a claim, need not be retraced to recover or reset all the road boundary posts. Each boundary intersection of the claim being surveyed with the road survey or gazette-width boundary must be posted as a result of tying into two posts of the road survey.

5.27 The boundary-lines through timber shall be marked by blazing trees on each side of the line. No tree so blazed shall be more than 2 metres from the line. Two blazes shall be made quartering toward the line and must be readily distinguishable. Line trees shall be blazed with three notches on each side in the direction of the line. The size, type, and distance from the last post to the centre of the tree shall be recorded.

5.28 (a) When a 2-post claim is being surveyed, the surveyor shall be guided by the records of the claim, the sketch-plan on the back of the declaration made by the owner when the claim was recorded, posts Nos. 1 and 2, and the notice on the initial post, and any regulation made by the Surveyor-General.

(b) Subject to section 29 (2) of the *Mineral Act*, where the survey of adjoining mineral claims and 2-post claims recorded in the name of one owner, discloses that at the time of acceptance of the survey by the Surveyor-General there is no ground held by any other owner or the Crown, then the Surveyor-General, subject to regulations which he may issue, may accept a perimeter survey of such 2-post claims, units, or a combination of such 2-post claims and units not exceeding 40 in number, as sufficient survey for a lease.

(c) No mineral claim located after February 28, 1975, shall be divided for the purposes of subsection (b), except as provided for by section 7 of the *Mineral Act Regulations*, B.C. Reg. 587/77.

(d) For purposes of subsections (3) and (4) of section 22 and subsections (1) and (2) of section 34 of the *Mineral Act*, a lease issued on the basis of a perimeter survey may be amended by a further survey, in accordance with instructions issued by the Surveyor-General, to establish a new boundary.

(e) When a mineral claim located after February 28, 1975, is being surveyed, the surveyor shall be guided by the records of the claim, the sketch-plan submitted by the owner at the time he records the claim, the legal corner post, the notice on the legal corner post, and any regulation made by the Surveyor-General.

#### *Division (6)—Disputed Claims*

6.01 When surveying a claim which overlaps or is in dispute with a previously surveyed claim, the surveyor shall note the intersection of lines and determine the courses and distances from the corners situate within the boundaries of his survey, together with ties to all posts involved, so that the overlap may be clearly shown on the plan.

#### *Division (7)—Survey Returns*

7.01 In order to comply with sections 22, 38, and 45 of the *Mineral Act*, and to guard against obvious possible abuse, survey returns of claims shall be filed with the Surveyor-General as soon as practicable, and in all cases within six months of the date of completion of the field work, and, if sent back to the surveyor for amendments, shall be returned within one month. If survey returns are not filed within the above time limit, the Surveyor-General, before dealing with them, may call upon the surveyor for an affidavit to the effect that he has again visited the ground and has checked and found the survey monuments in good order and in their true position.

7.02 Survey returns required to be filed with the Ministry, shall consist of the following:

- (a) A survey plan.
- (b) Machine-made copies of the records of all claims being surveyed.
- (c) Machine-made copies of the records of all claims which affect the determination of the boundaries of the claims being surveyed.
- (d) Printed forms, stocked by the Ministry, on which the surveyor shall record the serial number of the identification tags as found by him, as well as the information found written on the tags and on the legal corner post of fractional claims.
- (e) Where necessary, copies of air photographs showing information required in sections 2.09, 2.10, and 5.22.



7.03 The survey returns shall be forwarded direct to the Ministry by the surveyor and not through the surveyor's agent or client. A covering letter shall be sent in the same mail, and should include the statutory fee specified by section 38 (3) (c) of the *Mineral Act* and an explanation of any deviation from the regulations or instructions.

*Survey Plan*

7.04 A survey plan shall bear a title similar to "Survey Plan of Mineral Claim(s)" (giving the name of the claim(s)), followed by the U.T.M. co-ordinates referred to in section 3.02, 3.07, or 3.18 consisting of Zone, Eastings and Northings, in that order with no trailing zeroes omitted.

7.05 The plan shall be prepared on tracing-linen or film with a matte finish to a scale of 1:1, 1:1.25, 1:2, 1:2.5, or 1:5, or multiples of same by integral powers of 10. These scales shall be used for all survey plans and for inserted enlargements unless due to the circumstances a "not to scale" inset is necessary. The smallest scale shall be chosen so that all the required detail may be shown clearly and without congestion. In cases where the foregoing would necessitate an unduly large plan to permit the showing of a few details, the main body of the plan shall be drawn to an authorized reasonable scale and the details shown on inserted enlargements.

7.06 All information on the plan shall be printed, and only the signatures shall be written.

7.07 Standard sheet sizes authorized for the preparation of survey plans are as follows:

- A size—216 mm by 279 mm (8½ by 11 inches).
- B size—279 mm by 432 mm (11 by 17 inches).
- C size—432 mm by 559 mm (17 by 22 inches).
- D size—559 mm by 864 mm (22 by 34 inches).
- E size—864 mm by 1 118 mm (34 by 44 inches).

7.08 The plan shall be draughted in black ink only and shall show all details, as follows:

- (a) Boundary-lines run, as solid lines.
- (b) Boundary-lines not run, as broken lines, except where such boundaries are subject to subsection (f).
- (c) Bearings on the full-circle system.
- (d) Dimensions shall be in metres and decimals thereof.
- (e) The designation (C), denoting calculated, shall follow the bearing and dimension of a boundary-line not run and which forms part of the area dealt with by the plan.
- (f) The perimeter boundary-lines of the area dealt with by the plan shall be solid lines having a width of 1.0 to 1.5 mm.
- (g) Bearings and dimensions of traverse-lines and triangulation rays. These lines and rays shall be in fine broken lines. If more convenient, the bearings and dimensions may be shown in tabular form elsewhere on the plan.
- (h) A table showing co-ordinates prepared in compliance with section 3.10.



- (i) The boundaries of surveyed rights-of-way crossing the claim(s) shall be shown as fine broken lines. Boundary intersection dimensions and posting details, as required by section 4.06 (e), shall be shown.
- (j) Such topographical features, types of timber, and improvements as can be shown without detriment to the clarity of the plan. Where line trees are shown, the distance along the line to the centre of the tree must be given. Improvements shall include buildings, fences, gas and oil wells, unsurveyed utility lines, cultivation, mine workings, etc.
- (k) The designation of land on both sides of the line, i.e., any lot numbers, claim names or "unsurveyed Crown land." In no case shall abbreviations or initials of official claim names be used.
- (l) The name, date of location, and record number of the claim surveyed, and of adjoining claims.
- (m) The correct designation of any surveyed sections or lots which may overlap the claim surveyed.
- (n) The area in hectares of each claim being surveyed. In perimeter surveys, the total area within the perimeter shall also be shown. A claim, 500 by 500 metres closed in accordance with section 2.08, is accepted as containing 25 hectares.  
A claim, 457.20 by 457.20 metres (1,500 by 1,500 feet), closed in accordance with section 2.08 is accepted as containing 20.90 hectares (51.65 acres). Areas are to be shown to four significant digits.
- (o) Monuments found and set, together with details of their markings and references. Monument markings shall, where applicable, be shown in the form of a sketch of the post cap. Where a previously established corner is entirely obliterated, the method employed to re-establish the corner shall be clearly shown.
- (p) The plan shall contain a legend giving details of the various monuments shown on the plan, using the standard symbols given in the Instructions Regarding Permanent Survey Monuments as far as they apply.
- (q) The direction of flow of creeks and rivers crossed, their width and average depth, together with the distance along the boundary to the centre of the watercourse.
- (r) The directions, whence and whither of roads and trails crossed.
- (s) Offset distances from boundary or traverse-lines to improvements and topographical features. The distance along the boundary or traverse-line to the point of offset must be shown.
- (t) A connection to nearby surveys, or, if no connection was made, the position of the parcel in relation to some prominent topographic feature. Should the scale of the plan be too large to show this information, it shall be shown as an inset at a suitable smaller scale.
- (u) The centrelines of roads in categories (a) to (d) of section 5.24 should be shown in a broken black line, with the type of road indicated alongside.

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- (u) The centrelines of roads in categories (a) to (d) of section 5.24 should be shown in a broken black line, with the type of road indicated alongside.

7.03 The survey returns shall be forwarded direct to the Ministry by the surveyor and not through the surveyor's agent or client. A covering letter shall be sent in the same mail, and should include the statutory fee specified by section 38 (3) (c) of the *Mineral Act* and an explanation of any deviation from the regulations or instructions.

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- (d) Dimensions shall be in metres and decimals thereof.
- (e) The designation (C), denoting calculated, shall follow the bearing and dimension of a boundary-line not run and which forms part of the area dealt with by the plan.
- (f) The perimeter boundary-lines of the area dealt with by the plan shall be solid lines having a width of 1.0 to 1.5 mm.
- (g) Bearings and dimensions of traverse-lines and triangulation rays. These lines and rays shall be in fine broken lines. If more convenient, the bearings and dimensions may be shown in tabular form elsewhere on the plan.
- (h) A table showing co-ordinates prepared in compliance with section 3.10.



- (v) The boundary courses of a road in category (e) of section 5.24 between intersected courses shall be dimensioned by copying from the registered plan, providing no gross error is apparent.
- (w) Traverses or photogrammetric methods used to define natural boundaries, which are within the area being surveyed, need not be shown.
- (x) The plan shall show Mining Division, the scale, a north point, a note regarding the derivation of bearings, and shall be dated and signed by the surveyor.
- (y) The survey plan shall bear the surveyor's declaration in the form prescribed under the *Land Registry Act*.

7.09 Annexed are specimen survey plans for the guidance of surveyors in the preparations of survey returns. For the sake of uniformity, surveyors shall, so far as possible, adopt the style and method exemplified by the specimen. Approved symbols and abbreviations can be found on the specimen plan and in the General Instructions Regarding Permanent Survey Monuments.

7.10 In cases where a mineral claim involves Indian reserve lands, the surveyor should ensure that the necessary approval by the appropriate Gold Commissioner has been given before including such lands within his survey (see section 2, *Indian Reserve Mineral Resources Act*, R.S.B.C. 1960, chapter 187).

*Division (8)—Cancellation*

8.01 The following regulations issued by the Surveyor-General are hereby cancelled: B.C. Regs. 778/75 and 783/75.

# SPECIMEN-SEPARATE CLAIM SURVEY

B.C. Reg. 49/78

## SURVEY PLAN OF MINERAL CLAIMS

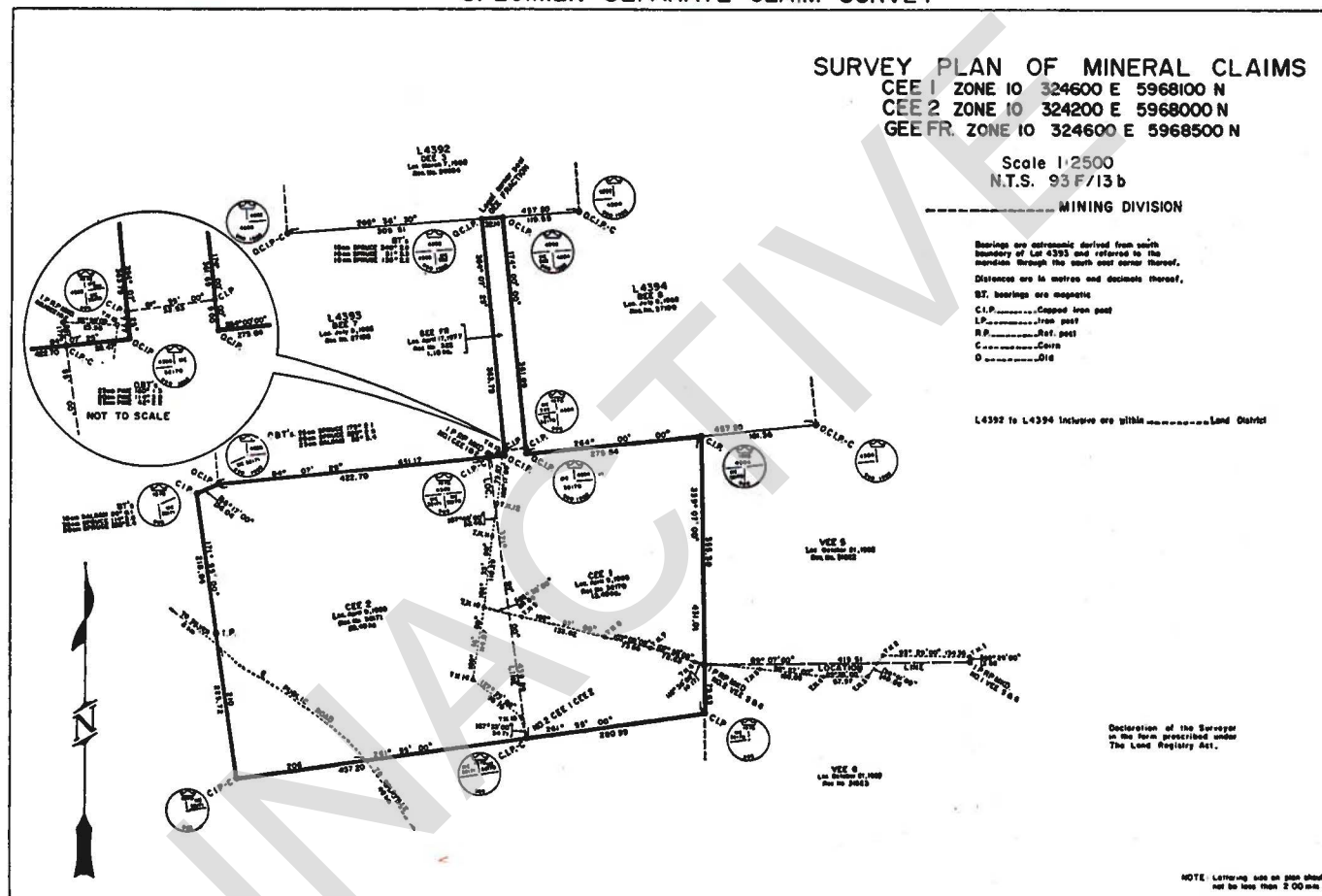
CEE 1 ZONE 10 324600 E 5968100 N  
CEE 2 ZONE 10 324200 E 5968000 N  
GEE FR. ZONE 10 324600 E 5968500 N

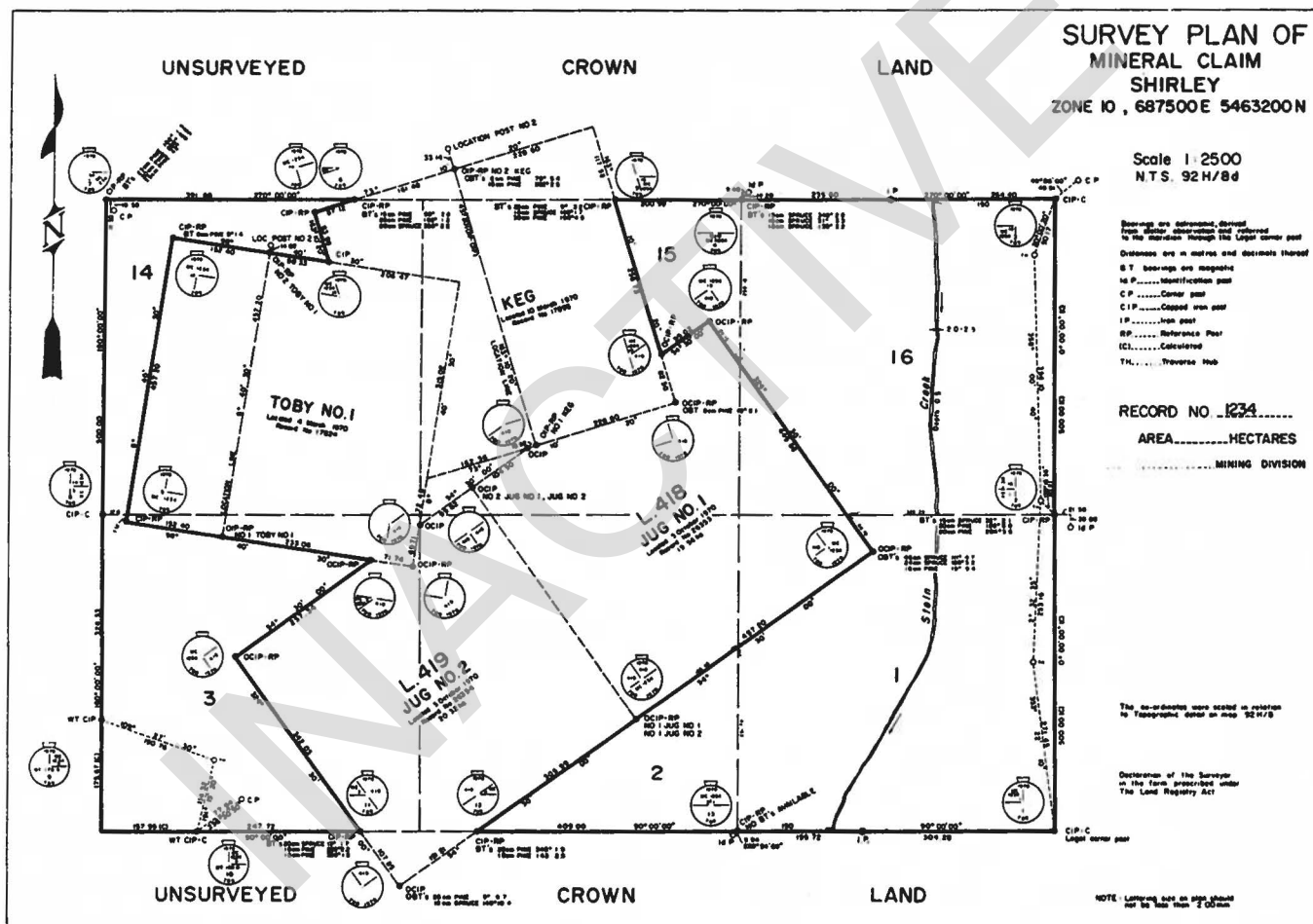
Scale 1:2500  
N.T.S. 93 F/13 b

MINING DIVISION

Bearings are astronomic derived from south boundary of Lot 4393 and referred to the meridian through the south east corner thereof.  
Distances are in metres and decimals thereof.  
ST. bearings are magnetic  
C.I.P. ----- Clipped iron post  
I.P. ----- Iron post  
R.P. ----- Ref. post  
C. ----- Corner  
O ----- Old

L4392 to L4394 inclusive are within ----- Land District

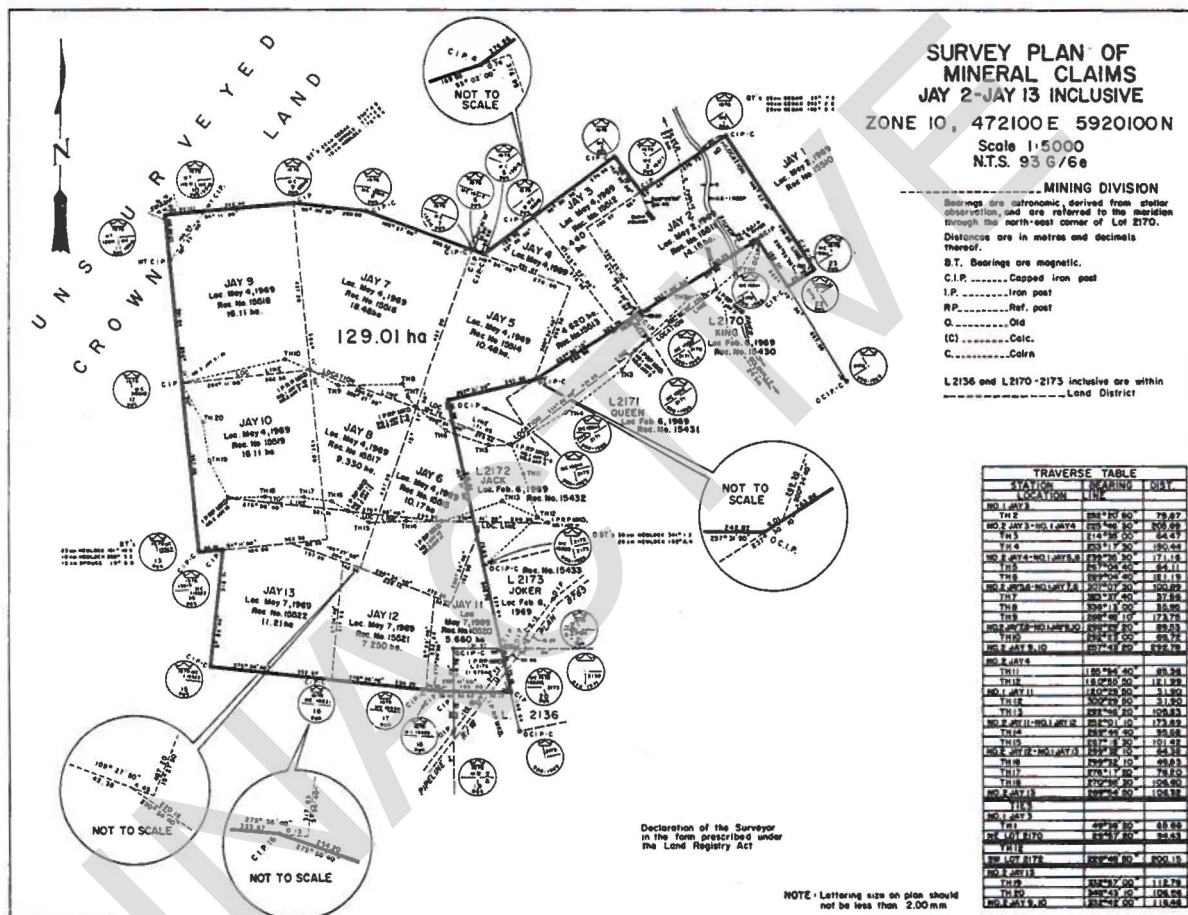




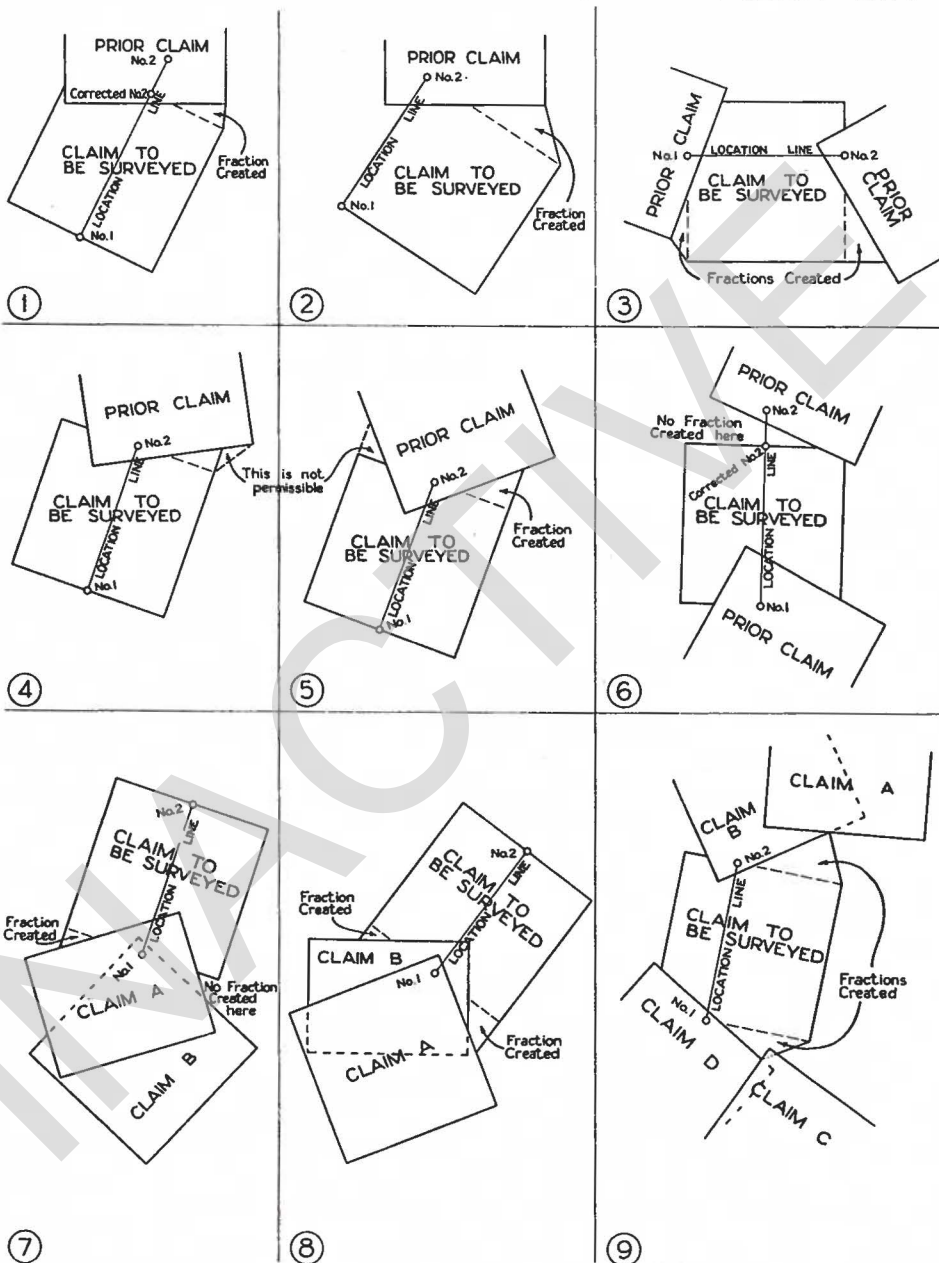


# SPECIMEN-PERIMETER SURVEY

B.C. Reg. 49/78



# EXPLANATORY DIAGRAMS - SEE DIVISION 5.11



The Courts have declared the right of a claim to ground within a previously located claim to be "void ab initio". The production of the north-east boundary of Claim B (Fig. 7) and the south boundary of Claim B (Fig. 9), into Claim A may bound a void if that be possible, but it is not the boundary of a mineral claim.