

Survey Standards

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General Instructions for Surveys, e-Edition

Chapter D8 - MINERAL CLAIM SURVEYS IN THE NORTHWEST TERRITORIES

Effective Date:

This Chapter is effective July, 1981. The general instructions in this Chapter are under review. The general instructions in Part D of the Second Edition of the *Manual of Instructions for the Survey of Canada Lands* (published here and in Chapter D8 of the Third Edition of the *Manual of Instructions for the Survey of Canada Lands* for convenience) still apply in so far as they are consistent with new legislation, regulations or other policies. Please note chapter and section references are to the Second Edition of the *Manual of Instructions for the Survey of Canada Lands*.

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Chapter D1 **General Provisions**

1. The following instructions apply to the survey of all mineral claims staked under the authority of the Canada Mining Regulations dated November 3, 1977, as amended, the Yukon Quartz Mining Act or the now-revoked Northwest Territories Quartz Mining Regulations, and the Canada Mining Regulations of 1960 and 1961.
2. The General Instructions in Part B of this Manual will apply to mineral claims surveys insofar as they are not inconsistent with the provisions of this Part.
3. The position of the boundaries and the dimensions of a mineral claim are fixed by the regulations in force at the time of the location of the claim. The survey must comply in every particular with the provisions of the regulations.
4. Prior specific instructions for such surveys are not essential but may be issued on request. It is the surveyor's responsibility to ensure that he has all necessary information in regard to adjacent legal surveys or pertinent control.
5. Every surveyed claim or, in the case of a perimeter survey, a group of claims, is designated by a Quad lot number. Before commencing the survey, the numbers of the lot and Quad must be obtained from the Surveyor General. On making application for numbers the surveyor shall give the names, record numbers and if possible the staking sheet numbers of the claims and the best information in his possession as to the location of the claims to be surveyed so that the Surveyor General may determine the Quad to which they belong.

6. The survey must be made by the surveyor in person as called for by the affidavit of execution prescribed by the Canada Lands Surveys Act.

7. The survey made must, in every case, be an actual survey on the ground. If a previous survey forms a common boundary or boundaries with a claim being surveyed, such line or lines must be retraced, except in the case where the line has been run personally by the surveyor at some previous date, in which case the line need not be run again if a proper closure can be effected without so doing. In this case the information used from the previous survey must be incorporated in the field notes which are to be dated accordingly.

8. A mineral claim includes all water areas lying within its boundaries. Locate those portions of the banks of lakes, streams, or islands within 75 m of a surveyed boundary. Sketch on the plan additional water outlines in sufficient detail to help identify the geographical position of the claims.

9. In the event of the claim or group of claims to be surveyed being so staked that it encroaches upon one or more prior claims which have lapsed in the interval between the staking and the survey of the encroaching claim, the survey shall be made so as not to include any of the area of the lapsed claim or claims. When the prior claim has lapsed before the staking of the new claim which encroaches upon the area formerly occupied by the lapsed claim the survey of the new claim will be made without regard to the boundaries of the lapsed claim.

10. If the claim or group of claims to be surveyed is affected by a claim of prior location, but unsurveyed, the surveyor shall survey the latter to an extent sufficient to determine the boundaries common to both and incorporate this data in his field notes, together with a copy of the application for the prior location.

11. No mineral claim may consist of more than one parcel. Where a claim is divided by prior locations into two parcels the surveyor must determine which parcel shall constitute the claim.

12. When the evidence of any person on a matter relating to the mineral claim to be surveyed is taken by the surveyor he must, after reducing it to writing, read it over to the person who has given the evidence and take the affidavit of such person as to the truth of the statements contained therein. The evidence so attested shall be copied in the field notes, but it 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.

13. In surveying a claim which is in dispute with another claim the surveyor shall record all the intersections of the boundaries of the two claims. If the other claim is unsurveyed its boundaries shall be surveyed to an extent sufficient to determine the intersections and the full extent of the overlap.

14. In case of a dispute the surveyor has no authority to decide priority of rights; his duty is to note all adverse overlapping claims as he finds them and to show them in the field notes and on the plan of his survey.

Chapter D2

Surveys of Claims Staked under the Canada Mining Regulations

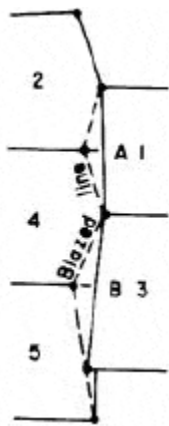
1. The following provisions apply to the survey of all mineral claims in the Northwest Territories including those staked under previous mining regulations.

2. The boundaries of a claim shall be surveyed as straight lines joining the location posts placed by the licensee instaking the claim, provided that

(a) the surveyor shall exclude from the claim any overlapping prior claim in good standing at the time of staking and

(b) the surveyor may survey the claim in such a way as to accommodate the licensee's intention to make his claim adjoin the boundary of a prior claim in good standing at the time of staking but this provision cannot operate to remove from the claim land that would otherwise be included.

The following example illustrates the application of this section:



The claims were staked as partly shown on this diagram in order of priority as shown by the numbers. Part of the westerly limits of Claim No. 1 and Claim No. 3 will form the easterly limit of Claim No. 4, and in the survey of No. 4, the surveyor will plant the corner post at points "A" and "B", but show in his field notes the position of the licensee's posts. In surveying Claim No. 5, join the No. 2 post with the south boundary of Claim No. 3 by a straight line between No. 1 post, as established by survey, and No. 2 post.

3. Where a licensee places a witness post on a boundary to mark an inaccessible corner, the boundary shall be the straight line joining the planted posts and its production to the witnessed corner.

4. Where an inaccessible corner of a claim is witnessed on both boundaries meeting at the witnessed corner, the corner shall lie at the intersection of the two boundaries.

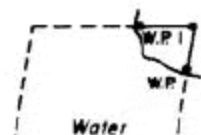
5. The following examples illustrate the methods to be adopted in surveying claims involving witnessed corners. The diagrams illustrate the positions of posts and the boundaries of the claims. The letters W. P. stand for the licensee's witness post and Wt. for additional witness monuments to be erected by the surveyor.



(a) Produce the line through the W. P. on the easterly limit to intersect the production of the line through the W. P. on the southerly limit. A similar method shall be adopted where any one of the four corners is similarly witnessed.



(b) Produce the line through the W. P. on the easterly limit the "call" distance to establish the northeasterly corner. Produce the line through the W. P. on the westerly limit the "call" distance to establish the northwesterly corner. Join the two corners so established with a straight line. A similar method shall be adopted when the wholly inaccessible boundary is the east, south, or west limit of the claim.

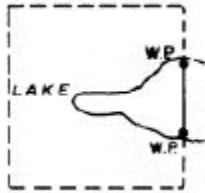


(c) Produce the line through the W. P. on the easterly limit the "call" distance to establish the southeasterly corner. Produce the line through the W. P. on the northerly limit the "call" distance to establish the

northwesterly corner. To establish the southwesterly corner draw a line parallel to the northerly limit through the south-easterly corner as established to intersect a line parallel to the easterly limit drawn through the northwesterly corner as established. A similar method shall be adopted where there is similar staking at any of the four corners of the claim.



(d) The licensee planted two (2) witness posts on the lines near No. 3 post and a witness post at "C" not on the lines of the claim. The claim shall be surveyed from the two witness posts near No. 3 post as in (c) above. The witness post at "C" shall be disregarded.



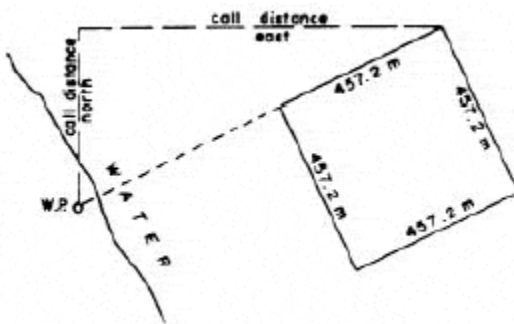
(e) Produce the line through the northerly W. P. the "call" distance to establish the northeasterly angle of the claim. Produce the line through the southerly W. P. the "call" distance to establish the southeasterly angle; thence westerly at right angles to the easterly limit the prescribed distance to establish the southwesterly angle. To establish the northwesterly angle draw a line parallel to the easterly limit through the southwesterly angle as established to intersect a line parallel to the southerly limit drawn through the northeasterly angle as established. A similar method shall be adopted when the only accessible boundary is the south, west, or north limit of the claim.



(f) Where all four sides of a claim fall in water, the witness location posts for the corners being within the boundaries of the claim the surveyor shall compute the positions of the corners of the claim from the record of the witness location posts. If any of the boundaries intersect an island or other land the usual corner or witness monuments shall be erected thereon. The plan shall show the computed dimensions of the boundaries of the claim.

6. A submerged claim staked according to the provisions of Sec. 18 of the Canada Mining Regulations (1961) shall:

- (a) be square with sides 457.2 metres long and
- (b) have its northeast corner at the "call" distances north or south and east or west from the single witness post (bearings being referred to the astronomic meridian through the witness post).



The following diagram illustrates how the position of a submerged claim is determined. The staker's sketch will indicate whether the line from the witness post to the northeast corner or the production of this line will coincide with the northerly or easterly boundary of the claim.

7. If any of the boundaries of a submerged claim intersects an island or other land, the surveyor shall plant the usual corner or witness monuments.

8. Any number of adjoining claims may be surveyed as one Quad lot provided that the aggregate area, as it appears in the applications to record, does not exceed 1045. 1 ha (2582.5 A.). In this case it will only be necessary to survey those claim boundaries which form part of the perimeter of the Quad lot, or which are necessary to determine the position of any claim corner on this perimeter.

9. All monuments marking corners and angles in the boundaries of a claim or group of claims shall be numbered consecutively clockwise beginning if possible, at the north-easterly corner.

Chapter D3
Surveys of Claims Staked under the Yukon Quartz Mining Act
(Two Post staking)

1. The surveyor shall begin by retracing the location line from post No. 1 to post No. 2 and measuring its length and bearing. The Act provides that the location line must be marked so that it can be distinctly seen; in a timbered locality by blazing trees and cutting underbrush, and in a locality where there is neither timber nor underbrush by legal posts or monuments of earth or rock.

The surveyor shall note the condition of the blazes or marks as well as the dimensions and character of the posts or monuments and enter this information in his field notes.

2. The inscriptions on location post No. 1 and location post No. 2 shall be copied and entered in the field notes.

3. Should location post No. 2 be more than 457.2 metres from location post No. 1, or more than 804.7 metres in the case of a location for iron or mica, the surveyor shall plant another post on the location line at a distance of 457.2 metres or 804.7 metres, as the case may be, from post No. 1, but he shall not disturb the original location post No. 2.

4. Should one or more of the location posts be obliterated or lost, the evidence used for restoring or re-establishing the said post or posts is to be given in the field notes.

5. The survey of the boundaries of the claim shall be made by laying out from the ends of the location line as established by the surveyor, and perpendicularly thereto to the right and left, the distances recorded by the locator. The extremities of the lines so laid out shall next be joined by straight lines.

6. A claim staked as a fractional claim may be surveyed to include as nearly as possible all the unoccupied ground lying between the previously located mineral claims described in the affidavit and sketch furnished by the locator when the claim was recorded, provided that the area of the claim as surveyed is less than 24.3 hectares (60 acres). Where the plan of survey reveals significant differences between the staker's apparent intention as reflected in the affidavit and sketch and the final surveyed fraction, the Surveyor General will seek the confirmation of the Mining Recorder that the fraction as surveyed complies with the Act, before approving the plan.

7. The corners or angles of the claim are to be numbered from three upwards consecutively around the claim, Numbers 1 and 2 being reserved for the location posts found or re-established.

8. Section 82 of the Act provides that where location post No. 1 or No. 2 of a mineral claim is on the boundary line of a previously located claim, which boundary line is not at right angles to the said location line, the fraction so created may be included in the claim being surveyed provided it is available and open to disposal and that the claim including the fraction will not exceed 24.3 hectares (60 acres).

The fraction is understood to be the gore of unoccupied land that would result if the two claims were surveyed strictly rectangular to the location lines. This gore would be defined by joining the respective corners of the two rectangles by a straight line and not in any case by producing the sides of the rectangles.

Where both claims affected are being surveyed and the fraction could be added to either claim without exceeding the limit of area, or it could be divided between them, the circumstances in each case will indicate to the surveyor how he should dispose of the fraction and the matter is left to his discretion.

9. Section 13(2) of the Act deals with claims which are contiguous and comprise a group recorded in the name of one person.

(a) It covers the case in which a prospector stakes what he believes to be a solid row of claims and, inadvertently, the location lines of the contiguous claims do not form one straight line or are not parallel. In this case the contiguity of the claims would not be destroyed, although fractions would be created. It is these fractions which are reserved to the recorded owner and which may be included in a mineral claim under section 82.

(b) Section 13(2) reserves to the owner of a group the vacant land within that group which has been created by reducing the length of the location line of a contiguous claim to 457.2 metres.

(c) If two or more rows of claims comprising a group recorded in the name of one person are located in such a manner that the location lines are parallel or are intended to be parallel, and it is the manifest intention of the locator of such group at the time of staking that the claims of the adjoining rows would adjoin each other, and it so happens that when these claims are surveyed they do not adjoin, then the vacant land so created between the two rows would be considered under section 13(2) to be reserved for the owner of the group.

(d) The types of vacant land mentioned above in items (b) and (c) may not be included in the claims being surveyed but must be staked by the recorded owner of the group as separate claims if he wishes to acquire mineral rights. The surveyor should provide his client with sufficient information regarding the size and location of this vacant land so that his client may stake one or more fractional claims in accordance with section 16 of the Act. (Note and adhere to section 6 above and section 83 of the Act when surveying a fractional claim.)

(e) The last part of section 13(2), which reads "any such lands may upon survey be included in one or more of such claims by a Canada Lands Surveyor pursuant to this Act," allows the surveyor to include that certain vacant land described above in item (a) in either one or the other or several adjoining claims provided that the area of any of the claims does not exceed 24.3 hectares (60 acres).

10. When it is found from the records of the Mining Recorder that adjoining claims not owned by the same party were located on the same day the surveyor should endeavour to ascertain from the owners, before going into the field, which claim was actually the prior location in order that he may know how to complete his survey in case the claims are found to overlap.

Chapter D4 Monumentation

1. A monument shall, if possible, be placed at each corner and at each angle of the boundaries being surveyed, including points at which legal posts have been placed pursuant to subsections 14 (2) and 14(3) of the Canada Mining Regulations, and at every intersection of these boundaries with the boundaries of overlapping prior or disputed claims.

2. The monument is to be placed at the true corner. In order to do so it may be necessary to remove the location post and mound. After removal the location post is to be erected again in the centre of the surveyor's stone or earth mound. In case separate location posts for two or more claims are found at the same point all the location posts are to be moved to the centre of the surveyor's mound, even though all the claims represented are not being surveyed. If no mound is built, replace the location post as close as possible to the corner.

3. A surveyor finding a location post in a mound erected by a surveyor in the survey of an adjoining claim shall place the corner of the claim being surveyed at the same point as the corner of the adjoining surveyed claim and add his inscription to the post already planted.

4. If a corner or angle of a mineral claim falls in water or in any other locality unfavourable to the erection of a monument, it shall be perpetuated by a witness monument. Where the witness monument replaces a witness location post it shall be placed at the same point as the witness location post or as near as possible thereto with due regard to the safety of the monument from destruction due to erosion or other natural causes.
5. Where, under paragraph 54(8)(b) of the Canada Mining Regulations, the surveyor is directed by the holder to reduce a claim, he shall establish a new corner location post, pursuant to Section 23, to mark the new corner of the claim and shall monument the cut-off line at intervals of approximately 450 metres.
6. The following posts may be used in monumenting the boundaries of a mineral claim:
 - (a) a C. L. S. pattern post as described in section B6: 22, or
 - (b) a mild steel bar not less than 1.5 cm square and 75 cm long driven into the ground so that no more than 15 cm protrudes above ground level; or the same type of bar not less than 23 cm long set in rock with not more than 15 cm protruding.
7. Pits and mounds or stone mounds in accordance with the specifications in Part B of this manual are to be made at all posts except that where any two posts marking a boundary line are less than 100 metres apart, they need be made at only one of these posts. Where pits and mound are not practical, three bearing trees or a marker post may be substituted for them.
8. The inscription on capped posts shall include the post and lot numbers placed in the segment of the cap facing the claim. On other posts these numbers are placed on the side of the post facing the claim. This inscription shall be in the form 3 L1642 where the 3 is the number of the post and 1642 is the number of the Quad lot.
9. Witness posts shall also be marked "WT" plus the distance and direction or the distance in each cardinal direction to the corner. When two witness posts are used to mark one corner of a claim and each is placed on one of the two boundaries meeting at the corner, witness distances will not be marked on the posts.

Chapter D5 Documentation

FIELD NOTES

1. Prepare field notes in one of the forms prescribed in Part B of this Manual.
2. In addition to the information prescribed in Part B the following are also to be added to the field notes of mineral claims:
 - (a) the name of the claim and the name of the person or persons for whom the survey was made are to be given in the title, and
 - (b) the certificate required by paragraph 55(1) (a) of the Canada Mining Regulations or by section 86 of the Yukon Quartz Mining Act.

3. The abbreviations L. P. for location post and W. P. for witness location post may be used without explanation.

PLAN OF SURVEY

4. Prepare a plan of survey in accordance with the specifications in Part B of this Manual but the scale shall be not less than 1: 5000 for fully surveyed claims containing less than 25 ha or 1: 10 000 for other mineral claim surveys.

5. In addition to the information prescribed in Part B the following are to be added to the plan of a mineral claim survey:

(a) the name of the claim and the name of the person or persons for whom the survey was made are to be given in the title,

(b) all location posts and location lines involved in the survey, with bearings and distances sufficient to correlate these to the boundaries surveyed, and any location posts that are now not on the boundary by virtue of the claim being reduced in area pursuant to section 54(8) (b), and

(c) the name of the claim inscribed in the claim together with the lot number.

6. In the case of a perimeter survey of a group of claims give

(a) in a separate table on the plan and not in the title, the name of each claim included in the group and its number in the Mining Recorder's Office, and

(b) the name of each claim adjoining the perimeter written in its appropriate position next to the boundary of the group.

7. The surveyor's affidavit must appear on the plan of a mineral claim. If the plan forms a separate document, add and execute the following affidavit on the plan:

"I of the of Canada Lands Surveyor, make oath and say that I have in my own proper person, according to law and the instructions of the Surveyor General of Canada Lands, faithfully and correctly executed the survey shown by this plan; and that the said plan is correct and true to the best of my knowledge and belief. SO HELP ME GOD."

.....

Sworn before me at
this..... day
of..... 19....
.....

A Justice of the Peace,
Notary Public,
Commissioner for Oaths, or
Canada Lands Surveyor.

NOTE: For format of corresponding solemn declaration see *Canada Evidence Act*, sec. 38

RETURNS OF SURVEY

8. The returns of survey shall consist of:

(a) the plan of survey,

(b) the field notes, in one of the prescribed forms,

(c) a copy of the application for the claim together with the sketch which accompanied it,

(d) all vertical air photographs used in plotting features shown on the plan, and

(e) any other items requested in specific instructions for the survey.

9. When submitting the returns of survey, retain the original plan and field notes and submit four paper prints of the plan and three paper prints of the field notes if they are plotted separately in plan form, or one copy if in book form. The original plan and field notes will be submitted as described in section B 12: 3.

10. The returns of survey must be submitted to the Surveyor General within six months of the completion of the field work.

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