42A01SE0073 63.5692 GRENFELL

TECHNICAL REPORTS AND SUMMARY

OF WORK CARRIED OUT UNDER OPAP GRANT OP90-066

AWARDED TO BLAINE VALLIER

1990

General Summary - The $10,000 OPAP grant awarded to Blaine Vallier for 1990 has enabled three prospectors from the Kirkland Lake area (B. Vallier, A. Carreau and L. Prevec) to carry out significant geological and geophysical explorations on five claims at two distinct locations in Grenfell Township.

Over three miles of magnetometer surveys, five miles of VLF-EM surveys and 567 feet of diamond drilling have defined two geophysical anomalies in NE Grenfell Twp, both excellent prospects for future exploration, and have defined and tested a VLF anomaly in SE Grenfell Twp. Over 90 man-days of work was done on these claims. All of the work; including line cutting, geophysical surveys, drilling, data analysis and report preparation, was carried out by the three named prospectors.

The two geographic locations in which exploration work was carried out are identified in Fig 1.

In NE Grenfell Twp, three claims, jointly owned by Vallier, Carreau and Prevec and collectively called the Kapakita Creek claims, were surveyed with magnetometer and VLF. The results of these surveys identified two major anomalies, each over one-half mile in length, with some significant potential for concentrations of copper, zinc and perhaps gold. One of these anomalies had been partly tested by three holes drilled by Minorex in prior exploration. Some anomalous zinc and copper values were reported. Both this and the southern anomaly which has not been drilled are considered excellent targets for more drilling and further exploration. A copy of the complete report of this work, accepted for assessment work credits on these claims, is appended.

In SE Grenfell Twp, work was concentrated in two claims of a contiguous block of eight claims held by Vallier Exploration. Work on these claims consisted of a VLF-EM survey followed by diamond drilling of 5 holes totalling 567 feet to define what was considered the most promising of four VLF anomalies that were mapped on the property. The most probable source of the VLF anomaly seemed to be a thin chloritic, serpentine-bearing zone associated with a hyaloclastite that probably marked an interflow zone in the sequence of volcanics. Minor gold anomalies were assayed in this type of material in one of the holes. A complete description of the VLF survey and of the core logs of the five drill holes as logged by Howard Lovell of the Ministry of Natural Resources, Kirkland Lake, are appended to this report. These were originally submitted as assessment work reports .

OP90-066

Work Done in Relation to Original Application:

The original OPAP grant submissions for work on these properties were submitted independently by Vallier, Carreau and Prevec. A total of $26,550 was requested to finance proposed exploration on the Kapakita Creek and Kenogami River Properties for 1990. Since only the one grant of $10,000 was awarded to Vallier it was necessary to select a subset of the planned work for completion with the available resouces. We therefore chose to first carry out geophysical surveys on our most promising claims, the three claims that make up the Kapakita Creek Property and two of the eight claims that make up the Kenogami River Property. The strong conductive zones discovered by us in the Kapakita Creek property are very definite drill targets that deserve thorough future exploration. Since the resources remaining to us, after completing our geophysical surveys, were insufficient to carry out the drilling that would be needed at Kapakita Creek, we concentrated in the last part of the year, on a thorough investigation of a VLF anomaly in the more readily accessible Kenogami River claims.

We hope that OPAP funding in the coming year may enable us to bring our explorations on the Kapakita Creek properties to a point where other mining or finacial interests will assist us in completing the studies on the property.

Discussion of Drill Holes and Possible Origin of VLF Anomaly

VLF anomaly B, defined by the VLF EM Survey carried out on the Kenogami River Claims, is a weak, but well defined, east-west striking structure probably identical to that described in this location by an airborne VLF survey carried out by R&H explorations in 1989 (Assessment Work Files for claim 982364). We entertained the possibility that this weak conductor might define a conductive interflow zone between successive volcanic flows that underlay, or are interbedded with, sequences of pillow volcanics exposed in the same region. The possibility that such an interflow zone may have served as a structurally suitable region for faulting and introduction of gold-bearing solutions during the epigenetic emplacement of gold in the east-west faults of the Temiskaming sediments made these zones sufficiently interest to warrant some more detailed investigation. Even in the absence of significant faulting it is possible that the interflow zones might contain anomalous concentrations of syngenetically derived gold, though economically viable deposits would be less readily found in this case.

As mapped by Grant in 1962 at other locations in SE Grenfell, the strike of the pillows in this region is approximately north-west, with tops to the north and dipping steeply in that direction. Well exposed pillows on survey line 2 in claim 983066 north-west of the drill site, show pillows striking north of west, with tops to the north and dipping approximately 70 degrees in that direction. From both surface geology and drill cores the pillow lavas in this location overlie more massive flows which are exposed to the south of this location.

Hole number 1 was drilled in a north-west direction (azimuth 315 degrees) at an angle of 45 degrees for 105 feet. This hole was designed to penetrate the VLF anomaly at about 50 feet in a direction that should minimize effects of geological formation (i.e. along strike) and should therefore maximize the possiblity of defining the source of the VLF anomaly. Interestingly, a hyaloclastite fracture zone with some chloritic mud was intersected at about 50 feet and chlorite filled fractures at 65 feet (or some 36 to 50 feet below the collar and the same distance NW of the collar). These chlorite containing structures could serve as the possible VLF conductor.

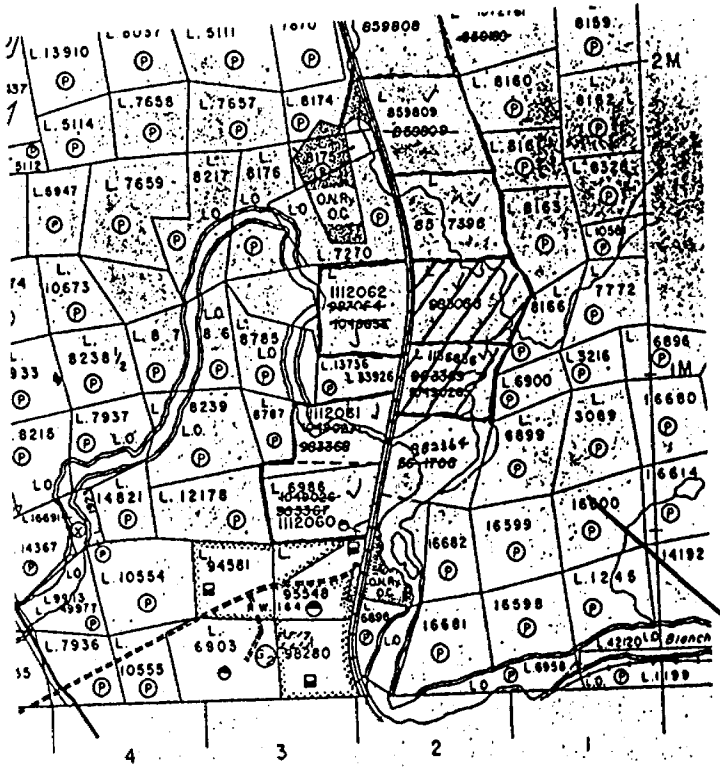
Hole number 2 was drilled vertically from the same position as hole 1. This was the first of two holes to determine the possible strike and dip of the chloritic and hyaloclastic formations. A chloritic tuff zone was intersected at 42 feet and and another in association with hyaloclastite at 62.5 feet. On the assumption that the chloritic zones intersected in this hole and hole 1 were the same formations this would suggest a northwesterly strike and as yet undetermined dip for this 'horizon'.

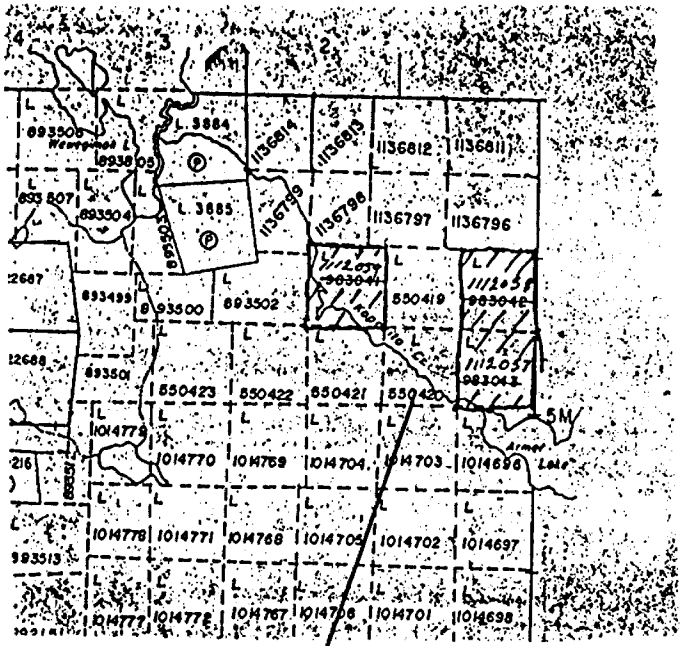
For hole number 3 the drill was moved some 30 feet SW of hole 1 and a hole drilled at azimuth 350 degrees at 45 degrees dip for 154 feet. This hole passed through massive basalt from fine to coarser amygdules consistent with passage toward the flow top. At about 100 feet a hyaloclastite with tuff and chloritic mud was encountered. If this hyaloclastite is consistent with that found in holes 1 and 2 it would suggest that the layer is dipping approximately 70 to 80 degrees to the north-east. The last 50 feet of hole suggested the presence of yet another flow zone overlying the uphole flow zone. The absence of obvious pillows at this point would suggest a more complex geology than might be predicted from the outcrops to the west.

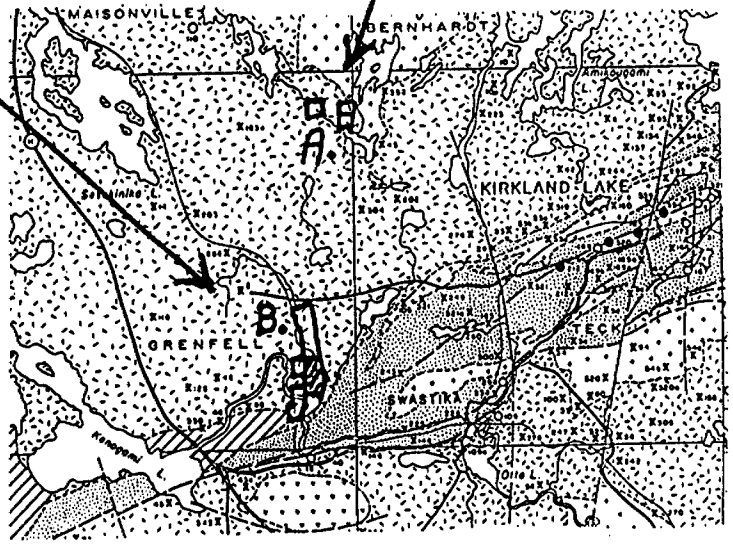
While the chloritic zones associated with hyaloclastite seemed to be the most likely explanation for the VLF signal which we had observed, if we assumed that the same chloritic zone was intersected in holes 1,2 and 3 then the strike of this formation was not consistent with the strike of our VLF anomaly. At this point two options were available to us. We could move the drills westerly along the VLF anomaly and drill through it at another location to determine if a correlation could be made with a possible conductor, or we could move move to the north of the VLF signal and drill back into the supposed dip of the geological strata to verify the conclusions arrived at in the first three holes. If there was a single major hyaloclastite layer we could expect to intersect it at predetermined spots by drilling back into it. We chose to take this second approach.

The drill was moved to a position about 40 feet north of hole number 1 and hole number 4 was drilled due south at 45 degree dip for 103 feet. Hole number 5 was drilled vertically for 101 feet from the same location. The fact that neither of these drill holes encountered the hyaloclastite or tuff layers suggests that our assumption, that this constitutes a single 'horizon' with north-west strike and dip of 70 degrees north, cannot be tenable. It cannot therefore be concluded that the hyaloclastite layer seen in holes 1,2 and 3 is in fact, one and the same formation, and this leaves open the possiblity that one or more of the chloritic zones intersected was the source of our VLF anomaly. Geological situations in which an E-W striking interflow zone dipping vertically or even to the south may be overlain by NW striking pillows dipping to the north can be constructed quite readily when it is recognized that the source of the lavas was from the north-east and the synclinal axis in that direction. The geological information obtained from these drill holes allows a number of possibilities which should be more readily confirmed or denied following a detailed surface geological survey of the outcrops in the vicinity of the drill holes and along the E-W strike of the VLF anomaly.

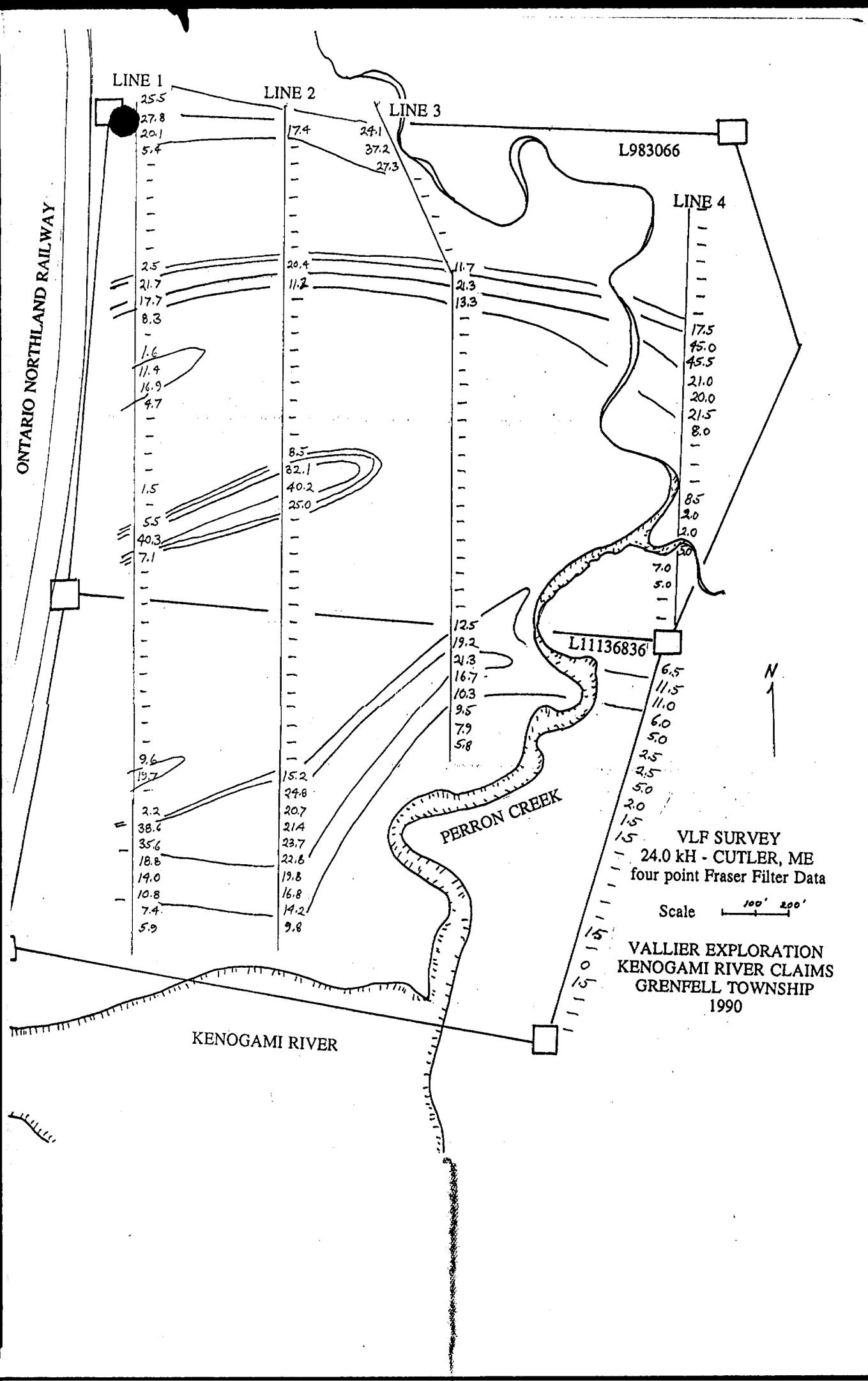
The fact that some anomalous, albeit low levels of gold, were associated with the sulphides in the chloritic zones, continues to make the detailed geological evaluation of these claims of some significance to future exploration in this region. Similar east-west trending hyaloclastic or brecciated zones with vertical or steep southerly slopes were associated with gold bearing solutions at the Mylake Mines claim site about one mile north-west of this site (see Grant, 1963).







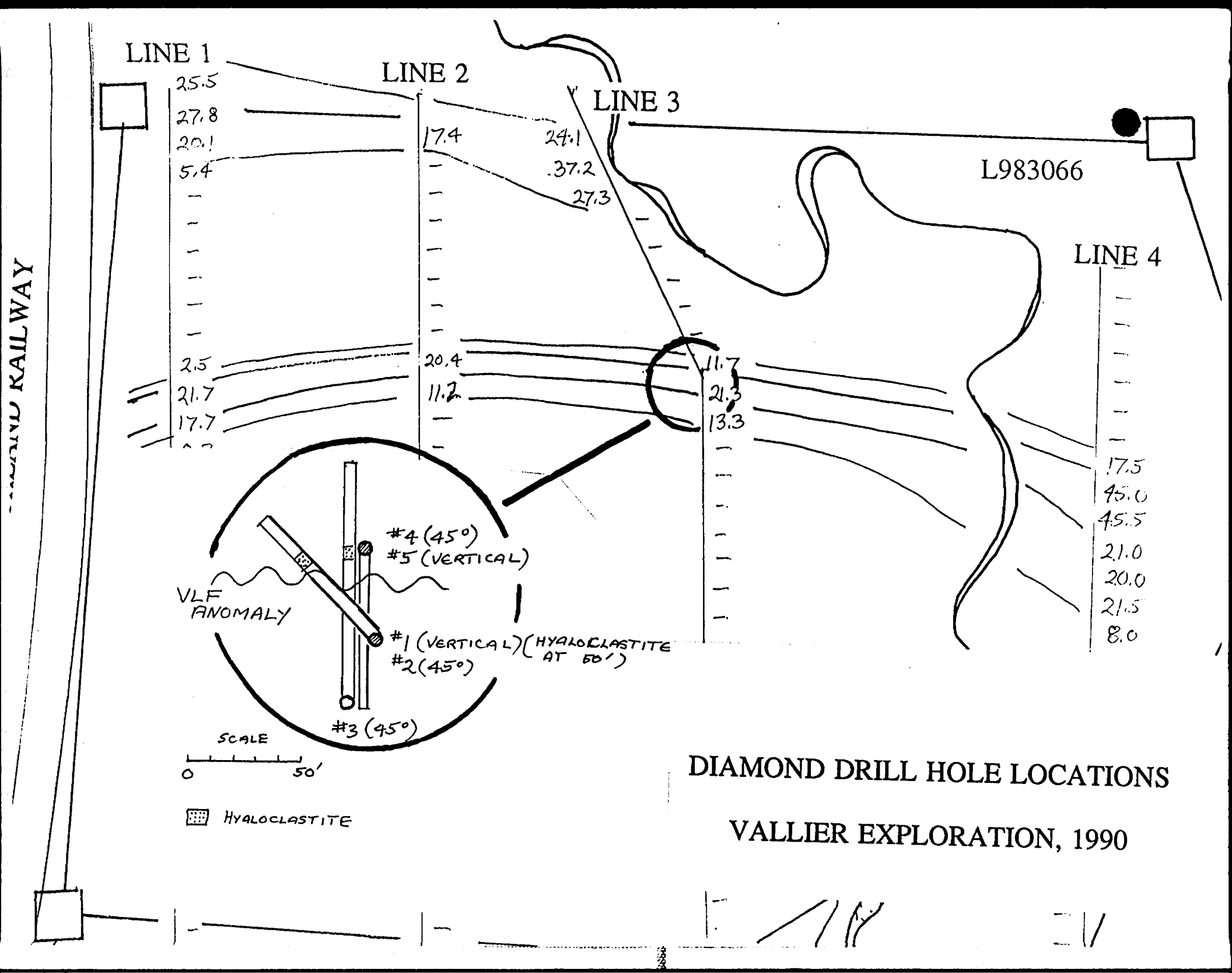
LOCATION OF KAPAKITA CREEK CLAIMS (A) AND KENOGAMI RIVER CLAIMS (B) IN GRENFELL TWP.



VLF SURVEY
24.0 kH - CUTLER, ME
four point Fraser Filter Data

Scale 100' 200'

VALLIER EXPLORATION
KENOGAMI RIVER CLAIMS
GRENFELL TOWNSHIP
1990



DIAMOND DRILL HOLE LOCATIONS

VALLIER EXPLORATION, 1990

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THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

1) VLF-EM + Magnetometer Survey, Kapakita Creek Property, Vallier Exploration, L. Prevec, Aug 90. → see file # 2.13467 Ref W W9008-243.

2) VLF Survey, Kenogami River Claims, Vallier Explorations, L. Prevac, Sept 190 → see file # 2.13610 Ref W W9008-314.

3) DDH #5, Vallier Explorations, Nov. 90 → see Grenfell Tp. DDR #36, Howard Lovell (logged). Ref W W9008-691.

4) DDH #4, Vallier Explorations, Oct/90 → see Grenfell Tp DDR #35, Howard Lovell (logged). Ref W W9008-614.

5) DDH #3, Vallier Explorations, Oct/90 → see Grenfell Tp. DDR #34, Howard Lovell (logged) Ref W W9008-332.

6) DDH #2, Vallier Explorations, Oct/90 → see Grenfell Tp. DDR #33, Howard Lovell (logged) Ref W W9008-325.

7) DDH #1, Vallier Explorations, Oct/90 → see file Grenfell Tp. DDR #32 Howard Lovell (logged) Ref W W9008-326.