part 1 of 6

ASSESSMENT REPORT, GEOLOGICAL EXPLORATION

THANKSGIVING PROPERTY

Revelstoke M.D., 92M/1 (E)

51° 14' N 118° 12' E

Owner: Andaurex Resources

Operator: Northair Mines Ltd.

Jan, 1982

R.Wares

GEOLOGICAL REPORT, THANKSGIVING PROPERTY

APPENDIX

LIST OF FIGURES

I GENERAL INFORMATION

1.1 Location, Access

The Thanksgiving Property is located 24 Kms north of Revelstoke, B.C. Access to the property is by Hwy 23, from Revelstoke to Mica Dam. Access to the property is relatively good, both utilizing logging roads and the old Mastodon mine road. (Fig. 1)

1.2 Topography

The Thanksgiving claim group flanks the Columbia River. On the west side of the Columbia, the claims cover part of the west bank to an elevation of 1500m. On the east side of the Columbia, the claims cover a moderate slope to an elevation of 1500m. The claims cover the La Forme Creek area; the north side La Forme Creek is relatively steep, with the claims rising to 1800m.

The claim group covers in past, the area cleared for the Revelstoke dam. The dam will flood the valley to the 575m level. Vegetation on the property comprises, on the lower slopes below 750m, second growth timber with some active logging underway on first growth timber in selected areas, south of La Forme Creek.

1.3 Claim Status

The group of claims in the Thanksgiving Property (Table 1) were staked at several periods from Dec 1980 to May 1981. (Fig.2)

1.4 History of the Property

Initial discovery of scheelite bearing float in the vicinity of Discovery Creek in October 1980, was followed by the discovery of Scheelite "in situ" shortly thereafter.

The claims were staked by 6 Revelstoke based prospectors, under the name of Cajac Exploration, who subsequently sold the property to Andaurex Resources. In May 1981, the property was optioned to Northair Mines, who, as the operating company, carried out the exploration programme in 1981.

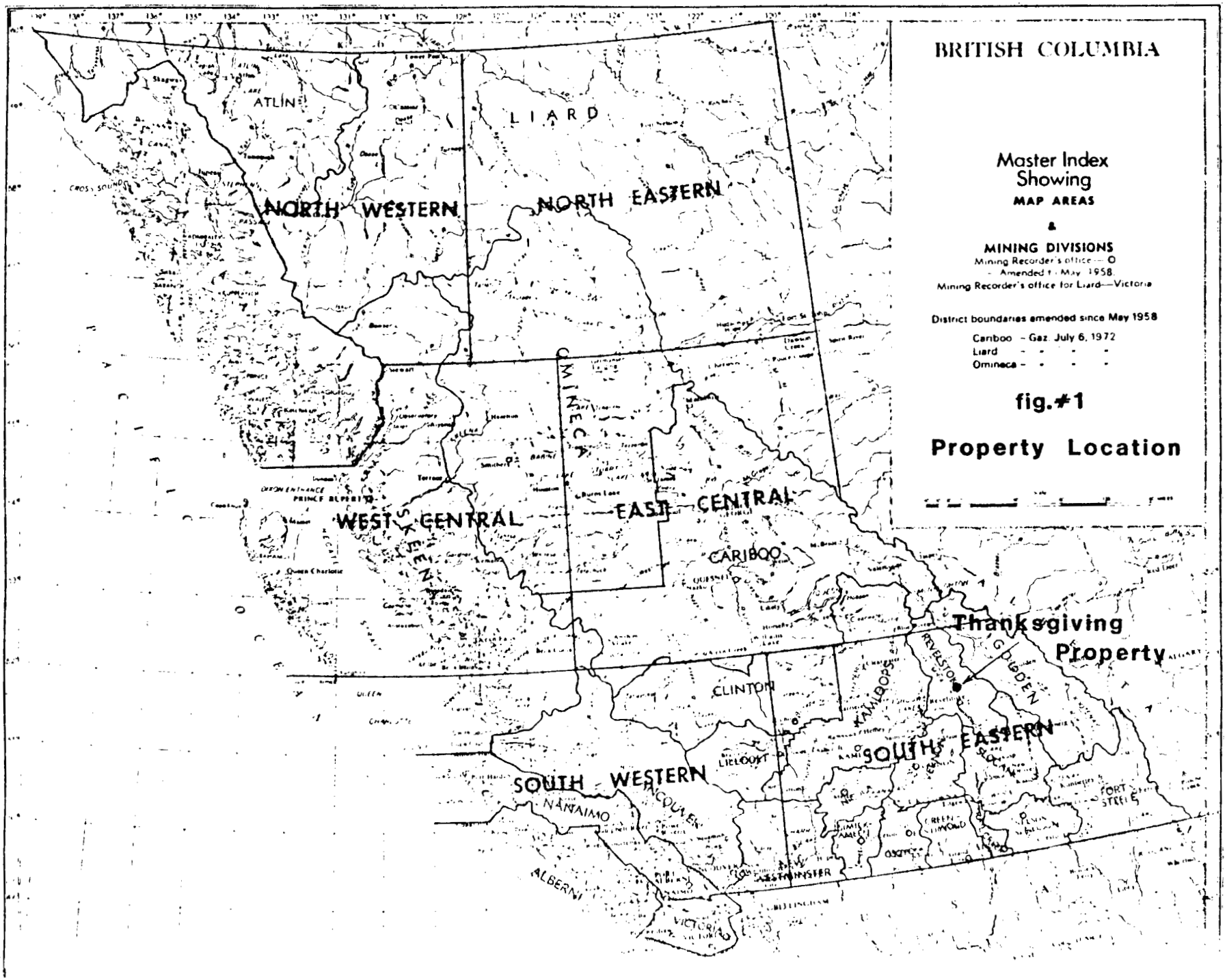
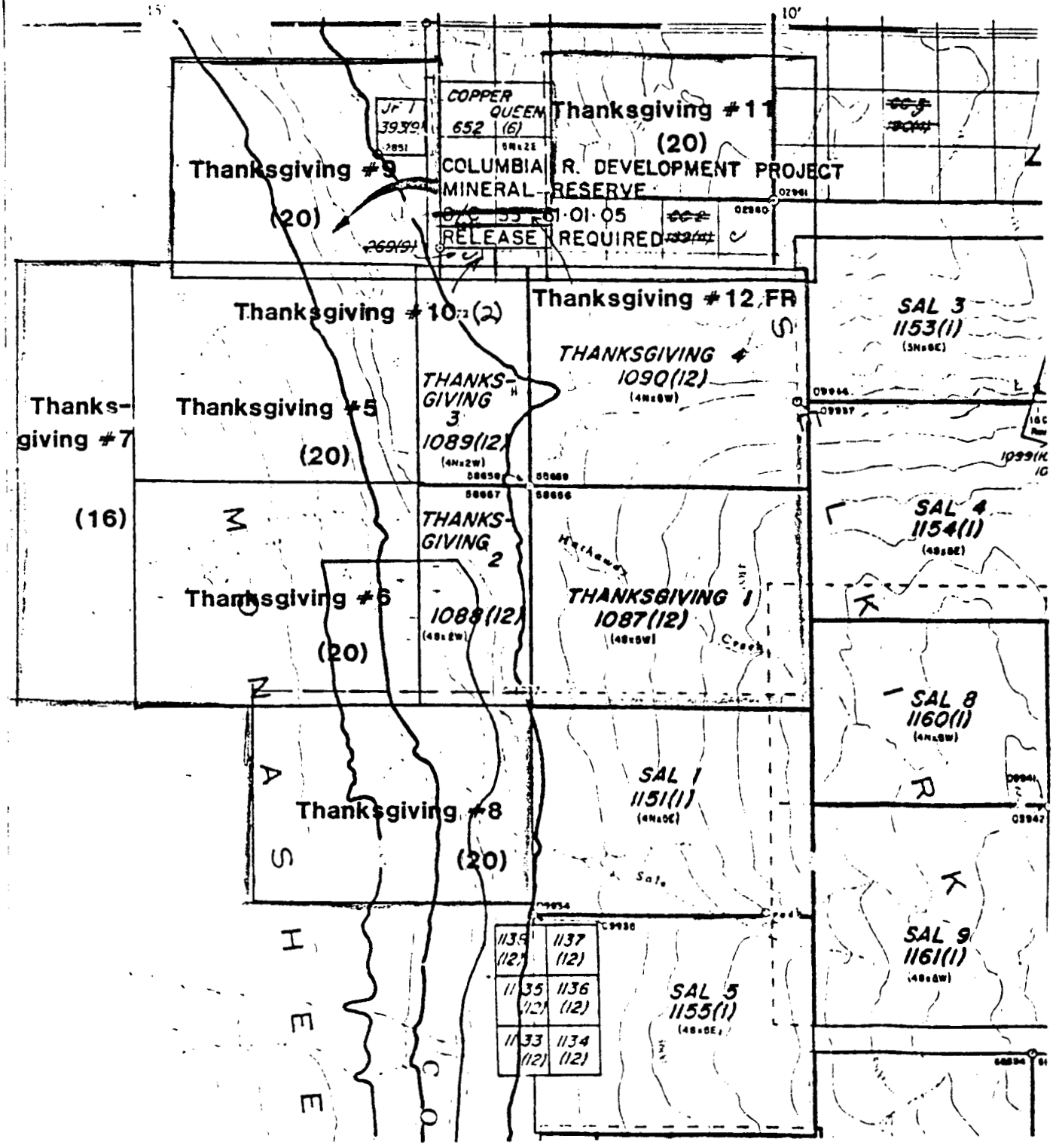

BRITISH COLUMBIA
Master Index
Showing
MAP AREAS
&
MINING DIVISIONS
Mining Recorder's office — O
Amended 1 May 1958
Mining Recorder's office for Liard—Victoria
District boundaries amended since May 1958
Cariboo - Gaz. July 6, 1972
Liard - - - -
Omineca - - - -
fig.#1
Property Location
ATLIN
LIARD
NORTH WESTERN
NORTH EASTERN
OMINECA
WEST CENTRAL
EAST CENTRAL
CARIBOO
Thanksgiving
Property
CLINTON
KAMLOOPS
REVELSTOKE
GOLDEN
SOUTH EASTERN
SOUTH WESTERN
NANAIMO
LILLOOET
FORT STEELE
VICTORIA

TABLE I

SCHEDULE OF CLAIMS

NAME	NO. OF UNITS	RECORD NO.	RECORD DATA
Thanksgiving #1	20	1087	2/12/80
#2	8	1088	2/12/80
#3	8	1089	2/12/80
#4	20	1090	2/12/80
#5	20	1201	29/04/81
#6	20	1202	29/04/81
#7	16	1203	29/04/81
#8	20	1263	8/06/81
#9	20	1264	8/06/81
#10	2	1265	8/06/81
#11	20	1266	8/06/81
#12 Fr	1	1267	8/06/81



NORTHAIR MINES LTD.	
CLAIM MAP	
Project: Thanksgiving	Drawn: R. Wares
Date: 3/12/81	Approved:
Scale: 1:50,000	Revised:
N.T.S. 82 M/1	Figure: #2

1.5 Work Done

The central portion of the property, was mapped at a scale of 1:5000 (1050 ha) with a core area. (120 ha) mapped at a scale of 1:2500, to facilitate detailed drilledcore correlation.

2. Regional Geology

The regional geology of the area north of Revelstoke is complex, not well understood and (occasionally) controversial.

The general geology has been described by Wheeler (1964)' and more recently, by Read and Brown (1981)'. The general geology as described by Wheeler, is essentially that of:

a) La Forme Creek being the locus of a break between, Shuswap terrain to the south and Lardeau Group rocks to the north of the Creek.

b) The Columbia River fault zone identified only as far south as the mouth of La Forme Creek. Its southern extension was not identified by Wheeler.

c) The terrain to the west of the Columbia River is identified as being of a different group, in the Shuswap complex.

The description by Read & Brown has expanded and, to some extent clarified the (admittedly) complex geology of the area. Their description and interpretation outlines the following with respect to the La Forme Creek area. (Fig.3)

a) The Columbia River fault zone has a history of protracted movements.

b) The La Forme Creek area is the locus of the northern limits of the Standfast Creek slide, a component of the Clachnacudainn salient.

c) Early deformation resulted in the formation of a prism of mylonites, which are themselves folded by later deformation.

d) Intrusives cut the mylonite zone.

e) Late displacement of the Columbia River fault zone caused intense deformation, manifested in fracturing, folding of the earlier mylonites and development of gouge zones.

f) The movement on the Columbia River zone (which dips at 30-35^{o} to the east) is normal dip slip.

g) The west side of the Columbia comprises mantling gneisses of the Monashee complex.

What the description at this scale establishes is the complex interplay of early and late stage deformation, and in particular, the importance of late brittle zones in, and associated with the Columbia River fault zone.

1. Wheeler, J.O. (1964): Big Bend Map Area, Geol Survey of Canada, Paper 64-32.

2. Read ,P.B. & Brown,R.H.(1981): Columbia River Fault zone: S.E. Margin of the Shuswap & Monasee complexes, SE :Can.J. Earth Sciences 18, p.1127

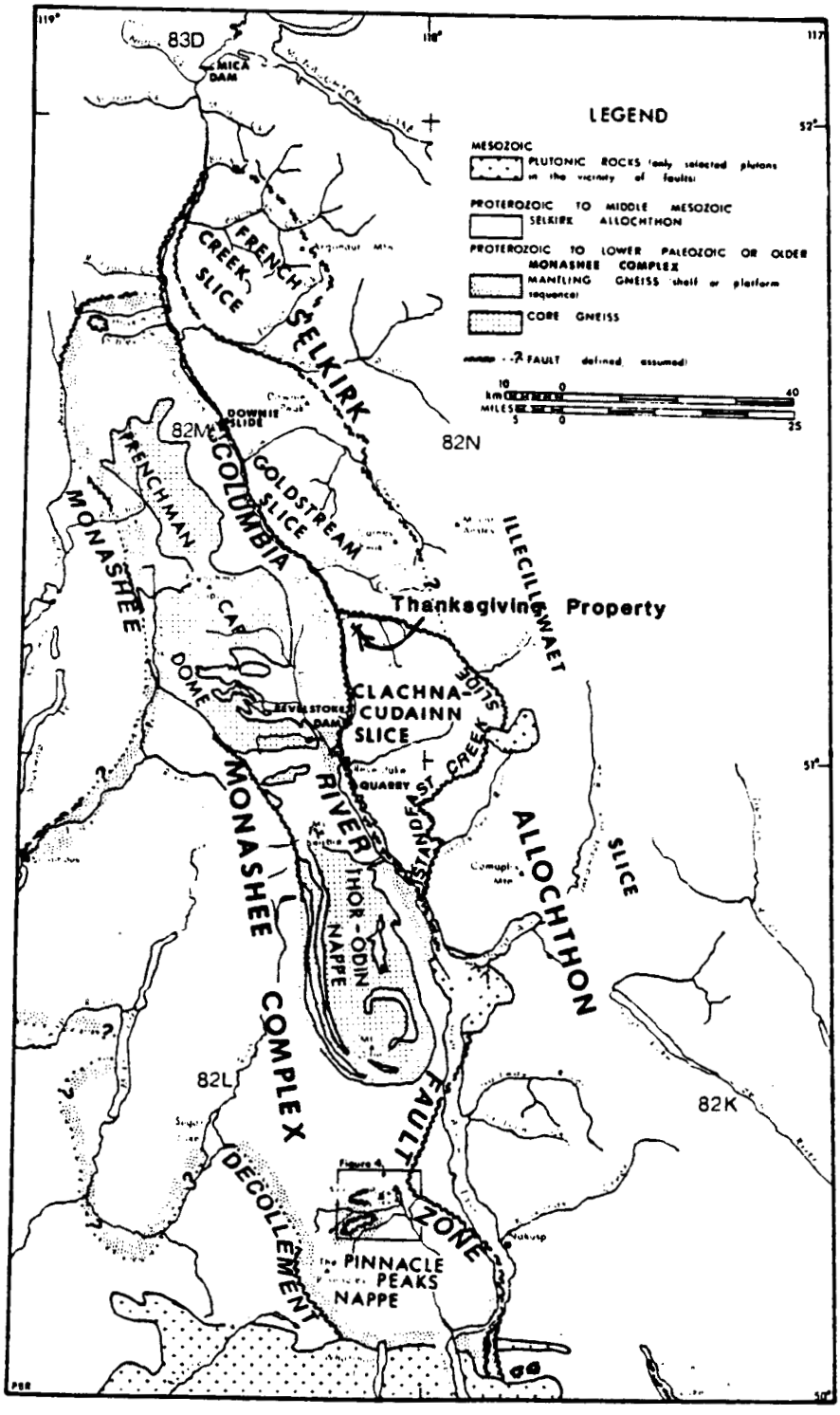


FIG. 2. Regional map showing the Columbia River fault zone and Monashee décollement, Monashee Complex, and Selkirk allochthon with its slices, and the location of Fig. 4.

NORTHAIR MINES LTD.	
Regional Geology	
Project: Thanksgiving	Drawn: R. Ware
Date:	Approved:
Scale:	Revised:
N.T.S. 82M/E	Figure: 3

3. General Geology

The geology of the Thanksgiving Property is essentially simple at a large scale, but on the basis of detailed drilling, complex at the small scale.

In essence, the geology of the main part of the property, (bounded by La Forme Creek and the Columbia River), comprises a threefold division of lithologies, in tectonic juxtaposition and cut by a late stacked sequence of thrust plates. The lower unit, comprises quartz and quartz biotite schists, without marked cataclastic textures, in tectonic contact with the intermediate unit. The intermediate unit exhibits a complex juxtaposition of lithologies. It is the unit of economic importance, hosting the skarn/scheelite zone. Lithologies comprise a variably skarnified carbonate horizon with associated calc silicate and associated silicified limestone, in contact with semipelitic & argillaceous sediments, with a substantial proportion of graphitic sediments.

The upper unit comprises quartz-augen gneisses with variable cataclastic textures, subordinate gneisses and quartz monzonite sills. Pelitic units are conspicuously absent.

A zoned diorite-quartz monzonite stock is present in the southern part of the property, below the major thrust zone.

The structure comprises, in broad outline an asymmetric antiformal structure, involving all three units, cut by a wide thrust plate, which defines and juxtaposes units of the intermediate assemblage. Some structural rotation and stacking appears to have occurred within this unit.

There are two interpretations possible. One is that the lower thrust plate is synchronous with the upper mylonites and is itself folded. The second interpretation is that the lower structures are later than the folding and is a late structure developed, with considerable brittle fracturing. Both fit the evidence at present.

To the west of the Columbia River, a gneiss-carbonate contact has been defined but dissimilar in structural style from the units east of the River. The units dip to the east at 40° .

To the north of La Forme Creek, reconnaissance has outlined sulphides hosted in carbonates. The geology is not well enough known to permit a reliable correlation with units to the south of La Forme Creek.

Alteration, pyritisation and injection of graphitic material appears to be associated with intermediate thrust plat. Silicification and late stage Kaolinisation is associated with movement on the thrust plates.

The level of exposure is variable. Outcrop is limited below the 600m level, where fluvoglacial sands and gravels mark the terrain. From 600 to 750m elevation, there is some late glacial ice flank deposits giving a bench terrain with limited outcrop. Stream and road cuts provide good exposure. The SE portion of the property has variable, occasionally, good outcrop patterns.

The property was mapped at a scale of 1.5000 with the area of primary economic importance being mapped at 1.2500, to permit correlation with diamond and percussion drill information. Trench blast areas were mapped at 1.250. (Fig. 4,5)

4. Lower Unit (Unit 1)

The lower unit, as defined in the mapping programme, comprises essentially quartz and quartz-biotite schists. The units are well exposed in road cuts on Hwy 23, to the south of the Mastodon Mine exit (49,500N, 49,950E). Schistosity is variable but persistent though the unit does not appear to have strong cataclastic textures. Some silicification and brittle faulting is evident immediately to the north of the Mastodon exit on Hwy. 23.

On Hwy. 23, at 49,300N, 49,950E, there is a transition from the quartz-biotite schist to a slightly more mafic unit. The transition zone is partly obscured by faulting and it is not clear whether it represents a lithological variant or a contact effect from the zoned intrusive complex to the SE. The latter appears probable. Structural complexity likewise obscures the relationship of this unit

to the intermediate assemblage. Tennous interpretation of drill core suggests the transition zone has been the locus of development of slip planes, now thrust plates. Calcareous quartz-biotite schists exposed at 50,250N, 49,850E, may possibly be part of the transitional assemblage.

In outcrop, occasional textures suggest the possibility of healed mylonites but this is not readily recognized without more detailed work.

The transition zone was apparently intersected in Hole #T-81-5, where a quartz-biotite schist, with frequent siliceous injection zones, was separated from a laminated quartzite or quartz schist at 66.14m, with a 3.5m zone at the transition being platy and of a mylonitic aspect.

One structural interpretation (to be described elsewhere) would relate the lower unit, as mapped,to the upper unit, either as a textural/compositional variant or as a unit further away from the cataclastic zone. This would require petrographic work outside the scope of this study. It should be noted that the macroscopic characteristics are of a lower level of deformation than units in the upper assemblage. A correlation would however rationalize some of the ambivalent field evidence.

5. Intermediate Assemblage (Unit 2)

The intermediate assemblage, as recognized in the field, is the unit of prime economic importance, hosting the skarn and scheelite assemblage. Lithologies are complicated by the alteration and juxtaposition associated with the thrust plates.

Lithologies ,within the unit ,comprise chlorite-quartz schists, quartz-biotite/ muscovite schists and a prism of calc silicate and skarn units. Graphitic units are strongly deformed. Drill core examination appears to suggest the presence of primary argillaceous sediments but also the presence of secondary graphite associated with late faulting and injected along cleavage/fracture planes.

5.1 Chlorite and Chlorite-graphite units:

These assemblages are recognized principally from drill core where they form units seemingly of variable thickness. The units appear to be predominantly dark, generally fine grained. Their variable nature suggest that they are probably retrograde alteration units.

5.2 Quartz-Muscovite/Biotite Schists.

The most frequent unit is a quartz-muscovite and quartz biotite schist, variably altered and deformed.

Minor amounts of graphite are present in the unit. The units appear to interfinger to some extent.

5.3 Skarn and Calcareous unit.

The unit of primary economic interest on the Thanksgiving Property is the one hosting the scheelite mineralization.

The skarn unit, from 3m to 10m in thickness is variable from a silicified limestone (unit 2d (1)) to calc-silicate unit (2d (2)) and a garnet-diopside skarn (2d (3)). The last unit is the one hosting the scheelite-pyrrhotite mineralization.

Unit 2d (3), the garnet-diopside skarn, is exposed on surface at the initial discovery site, at 50235N, 49950E and at 50015N, 49835E. The former site was opened up and sampled systematically. The garnet diopside skarn lies below, and in contact with the pyrrhotite-scheelite lens, of economic interest. At the latter locality, the skarn zone is occasionally vuggy in aspect. Some idocrase was identified in hand specimen, though no petrographic work has been carried out on the property.

Outcrops of the skarn unit are generally few. Correlation of the unit was effected by drill intersections. The garnet-diopside skarn unit is transitional to a diopside-bearing calc silicate unit, variably banded (2d (2)) and is itself transitional to a silicified limestone. Invariably, the garnet-diopside unit lies at the base of the skarn calc-silicate assemblage. Some repetition of the unit was noted in Hole T-81-14, where several skarn units

were apparently stacked by reverse faulting.

Elsewhere on the property, there are calcareous units, with no skarn aspect. The lack of surface information precluded lateral correlation with the skarn assemblage. They may be thin calcareous lenses within the quartz-biotite-muscovite schist assemblage.

One ambivalent unit is present at 48900N, 50900E. , where a steeply dipping lens of marble is present in an amphibolite schist sequence. Initial correlation suggested that it might be a lateral equivalent of the unit of economic interest, forming a wedge in the thrust plate. An alternate interpretation, not resolved with present information, is that it is a calc-silicate lens within unit 3, in the cataclasite sequence.

6. Upper Unit (Unit #3)

The upper unit is the most widespread unit on the Thanksgiving Property, in the geographic sense.

The assemblage comprises quartz-augen schists, quartz-biotite augen-schists, subordinate granite gneisses and less frequently, quartz-monzonite sills. Texturally, there is a range from psammatic units with a strong foliation /cleavage to flaser gneisses and cataclasites of mylonitic aspect. A good cross section of the units is present along the old Mastodon road.

The section from the edge of the property to 50,800N, 52,000E, exhibits a transition from flaggy psammites to flaser gneisses and mylonites. Noteable is a progressive development of secondary quartz-augen which become rotated and deformed. To the west of this incipient transition zone is a zone, possibly three to four hundred metres thick of cataclasites with a platy, mylonitic habit. Though there is no discrete structural break as such, the zone of probably the trace of the Standfast Creek slide, or a secondary structure of the slide.

To the west of the cataclastic zone, the units are quartz-augen gneisseswith a variable but strong fabric, though not cataclasites in general. A strong granodiorite gneiss lens is

exposed at several other locations in the northern and southern limbs of the antiformal axis.

The upper unit is in tectonic contact with the intermediate unit. The contact zone was intersected in several diamond drill holes, noteably T-81-14, T-81-16, T-81-19. Considerable core loss was encountered in the contact zone but the transition from augen gneisses to quartz-biotite schists or skarn units of the intermediate group was observed.

The trace of the mylonite zone, in a geometric construction would trace westwards on the southern limb of the antiform. Such a reconstruction would correlate the zone, mapped as the feldspathised zone on Hwy. 23, with the mylonitic envelope. Resolution of this is outside the scope of the present study.

7. Intrusives

There is present on the property a suite of intrusives and dyke rocks.

The largest unit is a zoned stock in the SW portion of the property. The intrusive is well exposed on the logging road at 48,400N, 50,750E and in outcrops to the west. The intrusive is zoned with a thin diorite envelope grading into a core area of porphyritic quartz-monzonite. Occasional lamination of phenocrysts is present. The eastern margin of the stock is apparently cut by an extension of the thrust plate that contains the unit of economic interest.

The western margin of the intrusive is manifested by the presence of a "screen" of variably feldspathised and migmatised psammitic units. The injection zone is observed in outcrops on Hwy. 23, from 48,800N, 50,000E and southwards to the edge of the property.

Sill like bodies of medium grained quartz-monzonite are observed at several localities both on surface and in drill core, restricted to the upper gneissic unit. The sill like bodies appear to be of restricted lateral extent. In the vicinity of the upper plate of the thrust zone, the medium grained quartz-monzonite is extensively sericitised, deformed, and carries minor pyrite. Two zones of quartz-monzonite, with

contact parallel to the foliation were observed in Hole #T-81-19. Sulphides were not observed at other localities in the intrusives.

Of particular interest are small sill like bodies, varying in width from 2m to 10m. One dyke was observed over a strike length of 250m from 49,900N, 49,950E to 49,900N, 49,700E.

Though contacts are parallel to foliation, the unit can occasionally be observed to transgress across the foliation over short distances. Other occurrences of the dyke were noted at 49,000N, 50,000E and at 48,550N, 49,800E. A good section of the dyke was encountered in Hole #T-81-25, where a drill width of 15m was intersected. This intersection had coarser phenocrysts in the centre of the unit. No sulphides were observed.

8. Structural Geology

The structural geology of the Thanksgiving Property is complex, in particular in and adjacent to the central wedge of thrust plates.

The geology map outlines (Fig.4,5) the presence of an asymmetric antiformal structure disrupted by the late thrust plates. The two dominant elements of the property are the antiformal structure, deforming the platy mylonitic fabric and, the thrust plates which transect the antiformal structure.

8.1 Major Structures

A zone of distinct cataclasis and mylonitisation cuts across the NE part of the property. It appears to be a broad zone rather than a distinct finite horizon. It appears to be part of the Standfast Creek slide zone. Mylonitic fabric is folded into an antiformal structure. The southern trace of the zone, based on geometric reconstruction trends eastwards from 48,500N, 50,000E. The definition and delineation of this structure would require more detailed petrographic studies.

The area of economic interest is defined by the surface trace of the intermediate unit, which, on the basis of minor structures, is essentially an open antiform with a shallow plunge to the SE (Fig. 5). The degree of structural complexity, indicated by drilling, does not permit unambiguous interpretation.

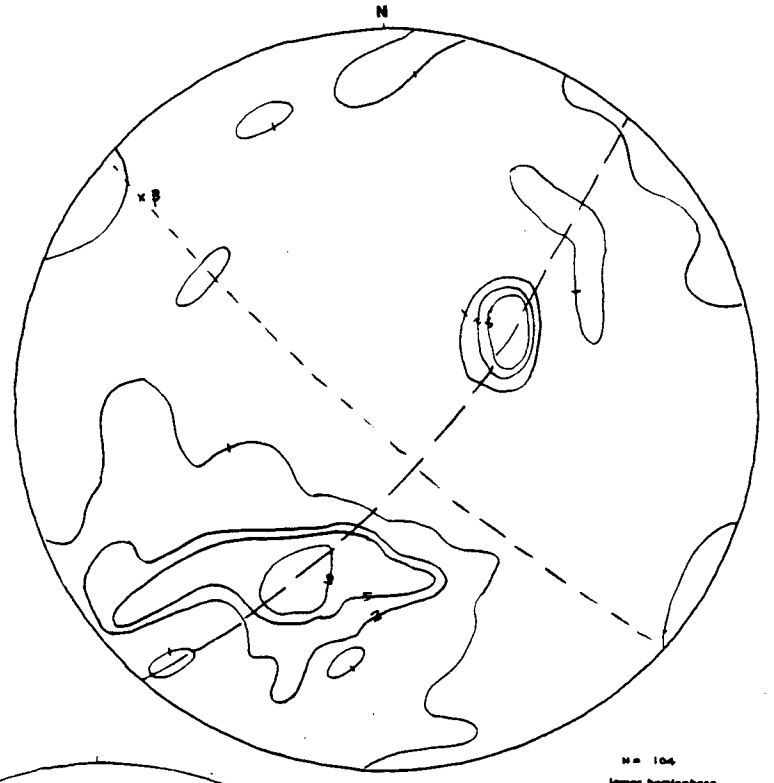
The information collected through the drill programme, defines, in considerable detail the tectonised contact between quartz-augen gneisses of the upper unit and the pelitic and calcareous units of the intermediate assemblage. This contact has a strike of 330° and dip of 30-35° to the NE. The lack of adequate surface outcrop and poor recovery in drill core did not permit the definition of the southern limits with complete confidence. Earlier interpretation had suggested the presence of a second, underlying thrust plate, with a comparable strike and dip. The information could also be interpreted as the southern limits being the folded thrust plate. Both interpretations are valid. Late brittle zones and post folding rotation is present.

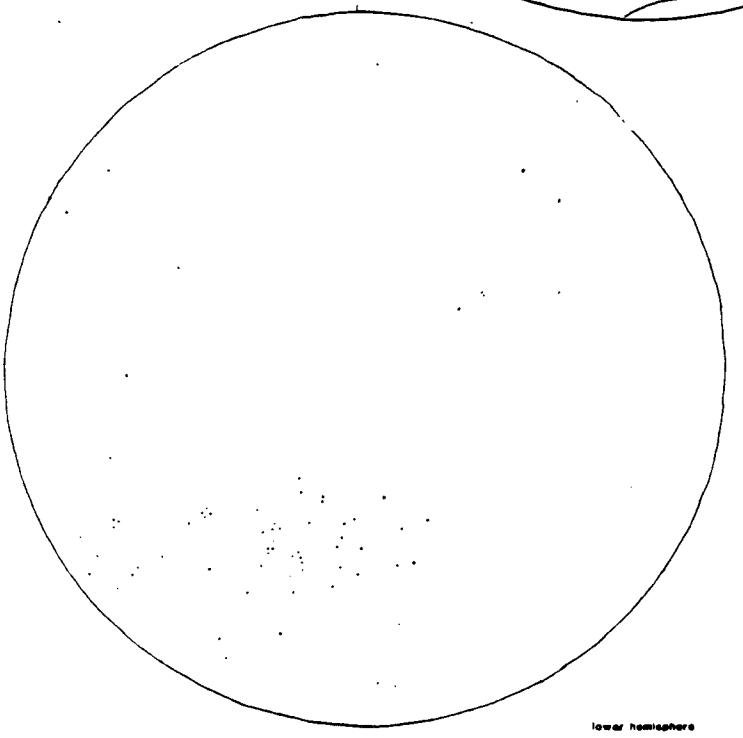
Outcrops on the north side of La Forme Creek may lie above the mylonite zone. At present, their structural position is not clear.

8.2 Structural Analysis

The synoptic stereonet for foliation/ schistosity, on the property (Fig. 6) does not define a systematic girdle of poles to attitude. The data reveals a broad spread. Attitudes of minor fold axes and linear structures /rodding, bond in structures, shows a concordance of plunge of fold axes and rodding structures but with a spread of attitudes to the NW and SE (Fig. 6).

The data was subdivided into structural domains, the data for the upper plate being analyzed separately. The data for the upper plate (Fig. 7)shows a reasonable girdle, systematic with a homogeneous, asymetric fold structure, plunging at 10-15° at 310°. The attitude of minor fold structures is in accord with this data.





NORTHAIR MINES LTD.	
Structure , Upper Plate	
Project: Thanksgiving	Drawn: R. Wanless
Date: Jan — 1982	Approved: RW
Scale:	Revised:
N.T.S.	Figure: 7

Analysis of the data from the lower and intermediate sections (Fig. 8) reveals a greater spread of attitudes but a reasonable girdle can be constructed, with a B axis plunging 15°, at 135°. The attitudes of the minor structures conform, in part, with this interpretation.

The conclusions that can be drawn from this preliminary analysis is that:

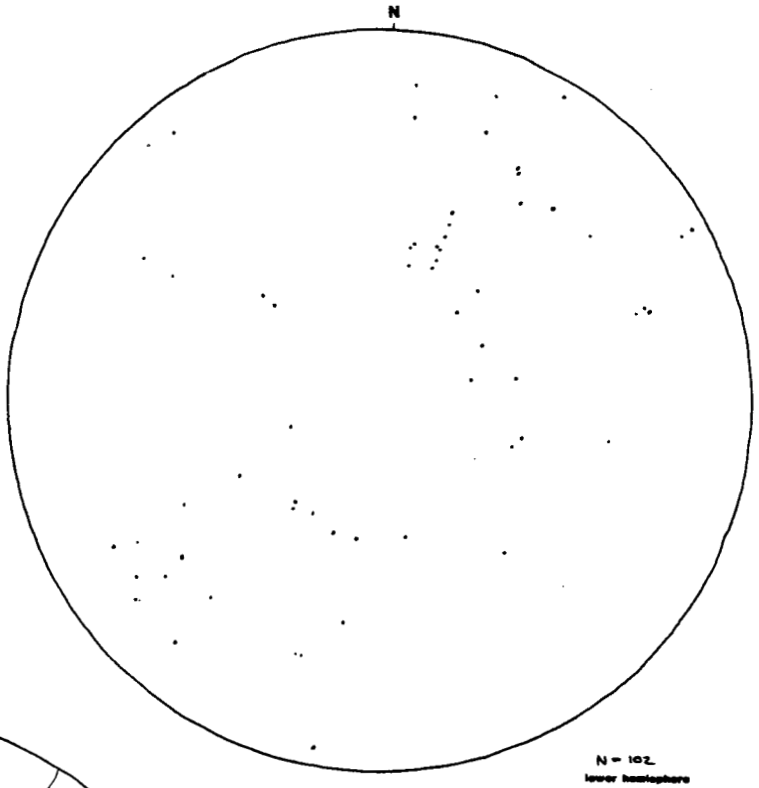
1) The structural disturbance in the lower zone involves some rotation of earlier structures.
2) The rotation may be related to a wedge between sub-parallel thrust plates or may be solely related to the late brittle zones.
3) The northern limb of the lower thrust plate is well established from drill information. The southern limb of the fold is likewise well established from surface information; the presence or absence of folding of the thrust plate is not entirely clear.

9. Mineralization

The initial discovery on the property was the "Creek Zone". (50,235N, 49,950E). Lenses of pyrrhotite and scheelite were observed in outcrop. Subsequent trenching and mapping clarified the nature of the mineralization.

The geology of the trench area (Fig. 9) is essentially that of a pyrrhotite-scheelite lens overlying a garnet-diopside skarn and overlain by a silicified limestone and quartz-biotite schist. The scheelite bearing lens traces across the face of the trench. At the NE portion of the trenching, strong folding of the calc-silicate is evident. The folds are asymmetric in section with a steep east limb. The synoptic stereonet for the trench area (Fig. 10) defines a crude girdle of poles to bedding / foliation, that corresponds reasonably closely to the plunge of minor folds in the trench area. The plunge of the B axis is 340°, at 15°.

The scheelite, with pyrrhotite occurs in several modes. One mode of occurrence is fine grained scheelite in irregular lenses and streaks of variable scheelite content. The other mode is as scattered coarse crystals. The fine and coarse modes



N = 102
lower hemisphere

Poles to schistosity

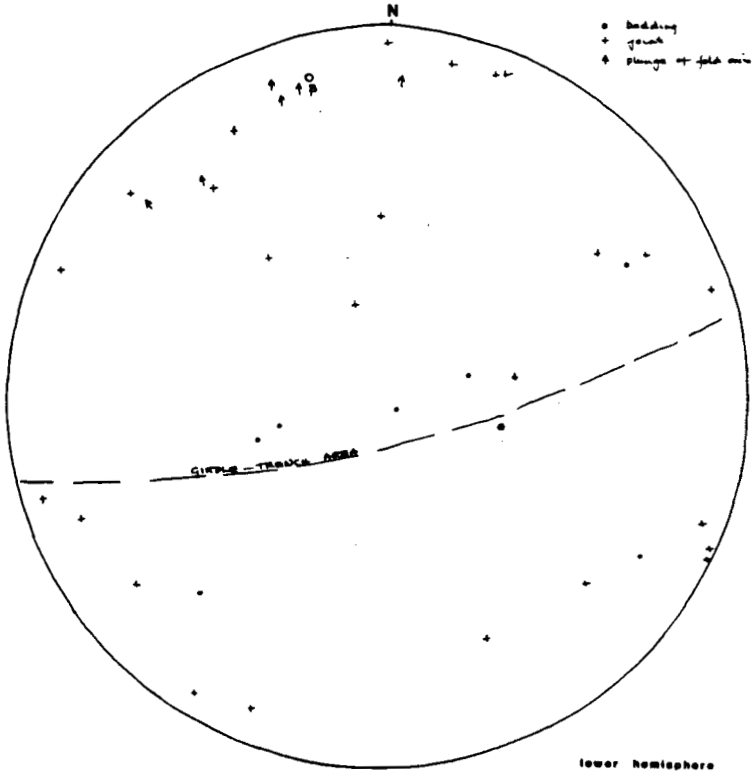
lower and Intermediate Plate

N = 102
lower hemisphere

lower and Intermediate Plate

1% per 1% area

NORTHAIR MINES LTD.	
Structure, Lower Plate	
Project: Thanksgiving	Drawn: R. Wanless
Date: Jan 1982	Approved: RW
Scale:	Revised:
N.T.S.	Figure: 8



NORTHAIR MINES LTD.	
Trench Area	
Project: Thanksgiving	Drawn: R. Woods
Date: Jan 1987	Approved: RW
Scale:	Revised:
N.T.S.	Figure: 10

of occurrence do not appear to form regular envelopes. The lensoidal scheelite occurrences are parallel to bedding with little or no indication of any vertical joint or fold control. The fold structures exposed in the trench appear to post date the mineralization with no evidence at this level of observation of concentration of sulphides in axial zones. The width of the scheelite bearing zone is up to 3m but is variable from 0.5m. Visual observation, confirmed by drill data showed that the scheelite bearing lens fingered out to the north and south of the showing. Drill data suggested a lensoidal occurrence with a plunge of 20° at 320°.

A second occurrence of scheelite a surface was noted at 50,025N, 49,875E. A steeply dipping skarn horizon, at least 3m thick, carried coarse scheelite and scattered fine streaks and disseminations. Minor fold and rodding structures plunged 30° at 110°. Though visually spectacular, the scheelite was irregular in its distribution.

A third surface or near surface occurrence of scheelite was located in trenching and drilling at 50,025N, 49,950E. The sulphide occurrence comprised pyrrhotite, in a lens from 3 to 5% po, with fine pin heads and streaks of scheelite. The po rich zone overlies a garnet-diopside skarn.

Drill intersections on the north limb of the antiform, outlined, gradations from weak to strong skarns. Heavy concentrations of po were largely absent. Though scheelite was not ubuiquitous and garnet skarn was not always accompanied by scheelite, the reverse is true.

The po lenses are not accompanied by significant amounts of galena, sphalerite, chalcopyrite or molybdenite.

Pyrrhotite is widespread, from trace to 1%, in, particularly the graphite schists and the chlorite graphite schists. They are not uniform in sulphide distribution. Pyrite and marcasite is variable but widespread in the muscovite schists and biotite schists of the intermediate group. The pyrite appears, on the basis of drill data to be related to the deformation/alteration episode. A correlation with, or development of a halo around the scheelite bearing zone

cannot be substantiated with the present data. Much of the pyrite appears to be related to alteration associated with the development of late brittle zones.

Sulphides are rare away from the lower thrust plate. Altered quartz-monzonite on or near the hangingwall of the lower thrust carries some pyrite. The cataclasites of the upper unit are not mineralized and no scheelite or pyrrhotite was recognized.

Reconnaissance north of La Forme Creek, in, apparently, a different tectonic environment, delineated scattered occurrences of po lenses in a carbonate host. The extent and significance is not known.

9.1 Genesis

An adequate study of the Thanksgiving W occurrences requires studies beyond the scope of this report.On the basis of field and drill information, the following summary can be presented.

a) The lack of close intrusives or dyke swarms, initially led to the concept of a primary sedimentary or stratabound control, modified by later deformation.

b) While the lack of intrusive is factual, the structural complexity may have resulted in the tectonic removal of a feeder stock.

c) The best available evidence suggests that the skarn/scheelite contact is a regional skarn, of unidentified parentage, but possibly related to incipient movement on a thrust plate. Subsequent overprinting may have ocurred with extensive pyritisation and graphitic injection in late brittle fault zones.

d) A syngenetic or modified syngenetic origin appears, on present evidence, unlikely.

10. Alteration

Alteration assemblages are most marked in the intermediate unit. Modifications in cataclastic zones in not clearly established.

Drill information clearly establishes the following information.

a) Pelitic units in the intermediate group have been modified by pervasive injection of graphitic or organic material. Gouge zones are characterised by a high concentration of graphite with an envelope of bleaching and sericitisation. These alteration zones may similarly have a pyritic envelope.

b) Scheelite or pyrrhotite scheelite lenses are an associate of garnet-diopside skarn assemblages. Lateral variations in the skarn may reflect a halo around a zone of mineralization, or lateral compositional variations influencing skarn development (or both).

c) A lower break, at the base of the intermediate unit is particularly marked by silicification, and sericitisation. This zone was intersected in Hole T-81-5.

d) There may be two overlapping alteration assemblages. One related to the development of scheelite and a later phase,related to development of brittle zones. Retrograde effects are associated with the latter.

11. SUMMARY AND CONCLUSIONS

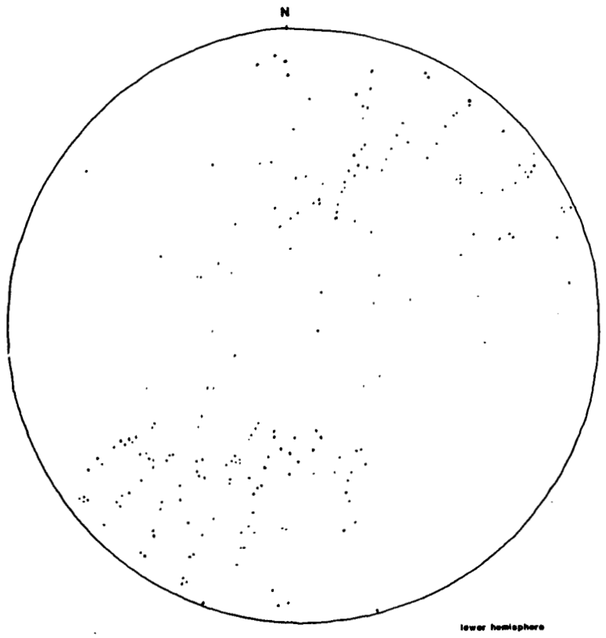
1. The programme of geological mapping has established the major structural pattern in the area. The delineation of the cataclasite zone is open to some question.

2. The lithological contrasts in the order of economic interest can be shown to be caused by a shallow thrust plate. The balance of the evidence suggests that the thrust plate (s) are folded. Poor drilling did not establish the orientation of the southern limb, (in the disturbed zone) with complete confidence.

3. Resolution of some of these questions would require studies beyond the scope of this report.

4. Geological studies could be usefully extended to the north of La Forme Creek where the geology is only partly explored.

part 1 of 6



lower hemisphere

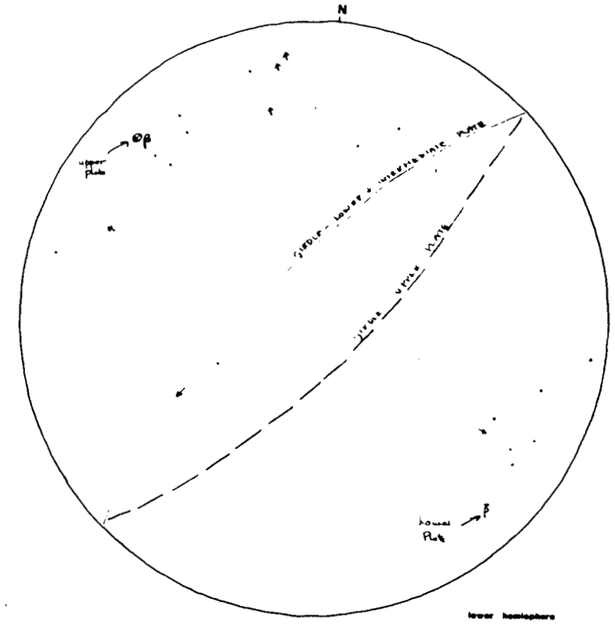
N= 209

Poles to foliation/cleavage

Thanksgiving Property

lower hemisphere

% per 1% area



lower hemisphere

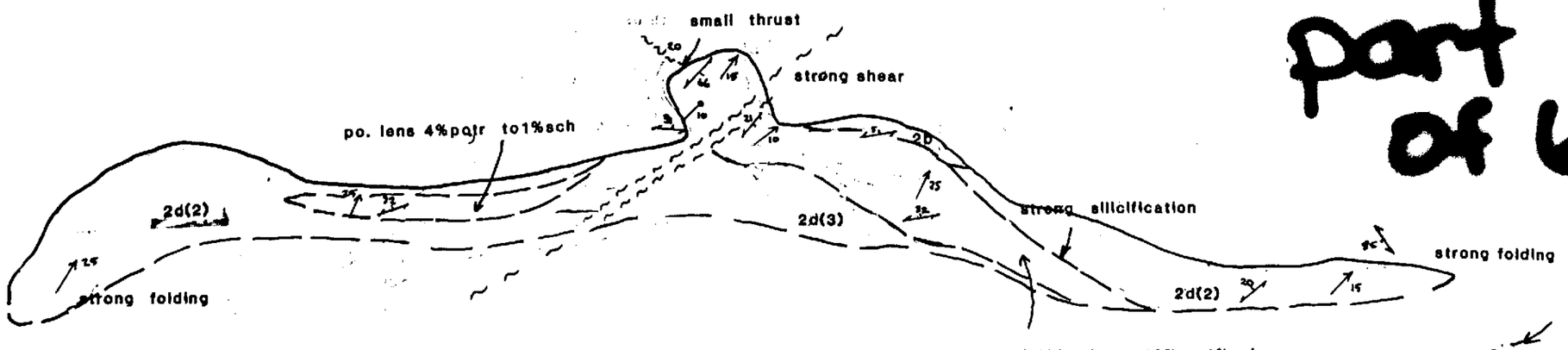
Minor Structures

- plunge of fold axis

↑ trending/bearing

NORTHAIR MINES LTD.	
SYNOPSIS, STRUCTURAL GEOLOGY	
Project.: Thanksgiving	Drawn: R. Wares
Date: Dec. 1991	Approved: RW
Scale:	Revised:
N.T.S.:	Figure: 6

part 1 of 6



plunge of fold axis
schistosity / foliation
2b qtz. - biotite / schist
2d(1) silicified limestone
2d(2) calc. silicate
2d(3) garnet diopside

0 1m 2.5m 5.0m

NORTHAIR MINES LTD.

PLAN GEOLOGY ,DISCOVERY TRENCH

Project.: Thanksgiving	Drawn: R.WARES
Date: Oct 1981	Approved: RW
Scale: 1:100	Revised:
N.T.S.:	Figure: 6

STATEMENT OF COSTS, GEOLOGICAL EXPLORATION

	NO. OF UNITS	UNIT COST	TOTAL
I. FIELD COSTS			
a) R. Wares	29	132.15	3,032.35
b) B. Lang	5	73.15	365.75
c) S. Fitzpatrick	13	80.46	1,045.98
d) R. Duncan	9	55.15	496.35
II. FIELD SUPPORT COSTS			
Room & Board	55	43.65	2,400.75
Trucks (prorated)			1,610.00
III. REPORT & MAP PREPARATION			
R. Wares, June 7,8,15 Aug, 24,25,26 Nov, 12,13,24,25	10	132.15	1,321.50
		TOTAL	$11,072.64

Time Distribution

R. Wares, June 1,2, (½),5,6,(½)
July 12,13,17
Aug 6,7,8,9,10,11,12,13,14,17,18 19,20,21,22,23,27,28,29
May 27,28,30,21

S. Fitzpatrick, Aug 6,8,10,11,12,13,14,15,17, 18,19,20,21

R. Duncan, July 12,13, Aug 6,10,11,12,13,17,18

STATEMENT OF QUALIFICATIONS

I, Roy Wares, with business address in the City of Vancouver, in the Province of B.C.
DO HEREBY CERTIFY THAT:

1. I am a graduate of the University of Aberdeen, with a B.Sc (Hons) degree in Geology and Queen's University, Kingston, Ontario, with a degree of M.Sc. in Geology.
2. At the time the work herein described, was performed, I was an Engineer-in-training with the Association of Professional Engineers of British Columbia.
3. I have practiced various levels in my profession in Canada for approximately eighteen years.
4. I am presently employed by Northair Mines and did personally conduct the programme described in this report.

R. Wares

Roy Wares

Dated at the City of Vancouver,
In the Province of British Columbia,
This 17th day of February 1982.

STATEMENT OF QUALIFICATIONS

I, Fred G. Hewett, with business address in the City of Vancouver, and residential address in the District of Coquitlam, in the Province of British Columbia,
DO HEREBY CERTIFY THAT:

1. I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.
2. I am a registered member of the Association of Professional Engineers of the Province of British Columbia.
3. I am a member of the Canadian Institute of Mining & Metallurgy, a fellow of the Geological Association of Canada, and member of the Society of Economic Geologist.
4. I have practiced various levels of my profession in Canada for approximately fifteen years.
5. I am presently employed by Northair Mines Ltd., and did personally supervise the work described in this report.

Fred G. Hewett, P. Eng.

Dated at the City of Vancouver,
In the Province of British Columbia,
This 17th day of February, 1982.


LEGEND
5a(p) pegmatite
5b kaolinitic gouge
5c sericite schist
4a diorite
4b quartz monzonite
4c porphyritic quartz monzonite
4d porphyritic quartz monzonite dyke
Upper Assemblage
3a quartz-augen gneiss/schist
3b biotite-quartz-gneiss
3c biotite-quartz-augen gneiss
3d cataclasite
Intermediate Assemblage
2a qtz.-chlorite schist
:(1):chlorite schist
2b qtz.-biotite/biotite schist
2c qtz.-muscovite/muscovite schist
2d calcareous unit
2d(1) silicified limestone
2d(2) calc silicate
2d(3) garnet-diopside skern
2e graphite schist:(g):gouge
Lower Assemblage
1a quartzite
1b quartz-biotite schist
trace of thrust plate
zone of intense cataclasis
fault zone (definite, inferred)
schistosity/foliation
contact (defined, assumed)
plunge of fold axis
rodding, boudin structure
trace of antiform, synform
diamond drill collar
percussion drill collar
road
outcrop,small outcrop
HWY 23
Upper Thrust
Middle Thrust ?
Upper Thrust ?
La Forme Creek
Thanksgiving Creek
50,500E
50,000E
49,500E
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NORTHAIR MINES LIMITED
SCALE 1:2500
APPROVED BY
GEOLOGY, LOWER AREA
THANKSGIVING PROPERTY
DRAWING NUMBER 5

NORTHAIR MINES LTD.

THANKSGIVING PROPERTY

GEOLOGY MAP

Part 1 of 6

LEGEND

- 5a silicified zone
- 5a(p) pegmatite
- 5b kaolinitic gouge
- 5c sericite schist
- 4a diorite
- 4b quartz monzonite
- 4c porphyritic quartz monzonite
- 4d porphyritic quartz monzonite dyke
- 4e migmatite zone

Upper Assemblage

- 3a quartz-augen gneiss/schist
- 3b biotite-quartz-gneiss
- 3c biotite-quart-augen- gneiss (granodiorite)
- 3d calcsilicate
- 3f marble

Intermediate Assemblage

- 2a qtz.-chlorite schist(1):chlorite schist
- 2b qtz.-biotite/biotite schist
- 2c qtz.-muscovite/muscovite schist
- 2d calcareous unit
- 2d(1) silicified limestone
- 2d(2) calc silicate
- 2d(3) garnet-diopside skarn
- 2e graphite schist:(g):gouge

Lower Assemblage

- 1a quartzite
- 1b quartz-biotite schist

KEY

- trace of thrust plate
- zone of intense cataclasis
- fault zone (definite, inferred)
- schistosity/foliation
- contact (defined, assumed)
- plunge of fold axis
- rodding, boudin structure
- trace of antiform, synform
- diamond drill collar
- percussion drill collar
- road

0 100m 250m 500m

Fig 4 R.Wares Nov. 1981