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MAGNETIC SURVEY & GEOLOGY
ON THE
FRENCH PEAK SILVER PROPERTY
Silverado Group: Silverado, Eldorado, Mag Hi, Silver Iron
FP - 2, 3, 4,

Omineca Mining Division
93M/7W

55° 21' N 126° 48' W

FILMED

OWNER & OPERATOR: Silverado Mines Ltd.
AUTHOR: A.M. Homenuke, P. Eng. (Geol.)
SUBMITTED: October 2, 1989

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,142

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I. INTRODUCTORY NOTES

Location and Access

The claims are located southeast of French Peak, 10 km. west of the north end of the Babine Lake and 65 km northeast of Smithers, B.C., in the Omineca Mining Division (Fig. 1).

The property is reached by gravel roads from Smithers along the route to Smithers Landing, the Nilkitkwa Forest Access Road and a mine road constructed in 1976, a total distance of 120 km.

Physical Features

Elevation on the property ranges between 975 metres and 1,200 metres. On the north and south the terrain is mountainous with more moderate slopes towards Tsezakwa Creek which flows easterly across the central portion of the claim group.

Outcrop is generally scarce, with the major exposures being in creek banks and topographic highs. Further exposures have been provided by trenching.

Rainfall is relatively low, but snowfall exceeds 1.5 metres most years and lasts from late October until May.

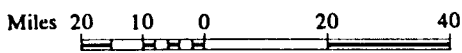
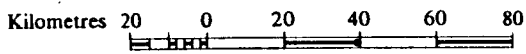
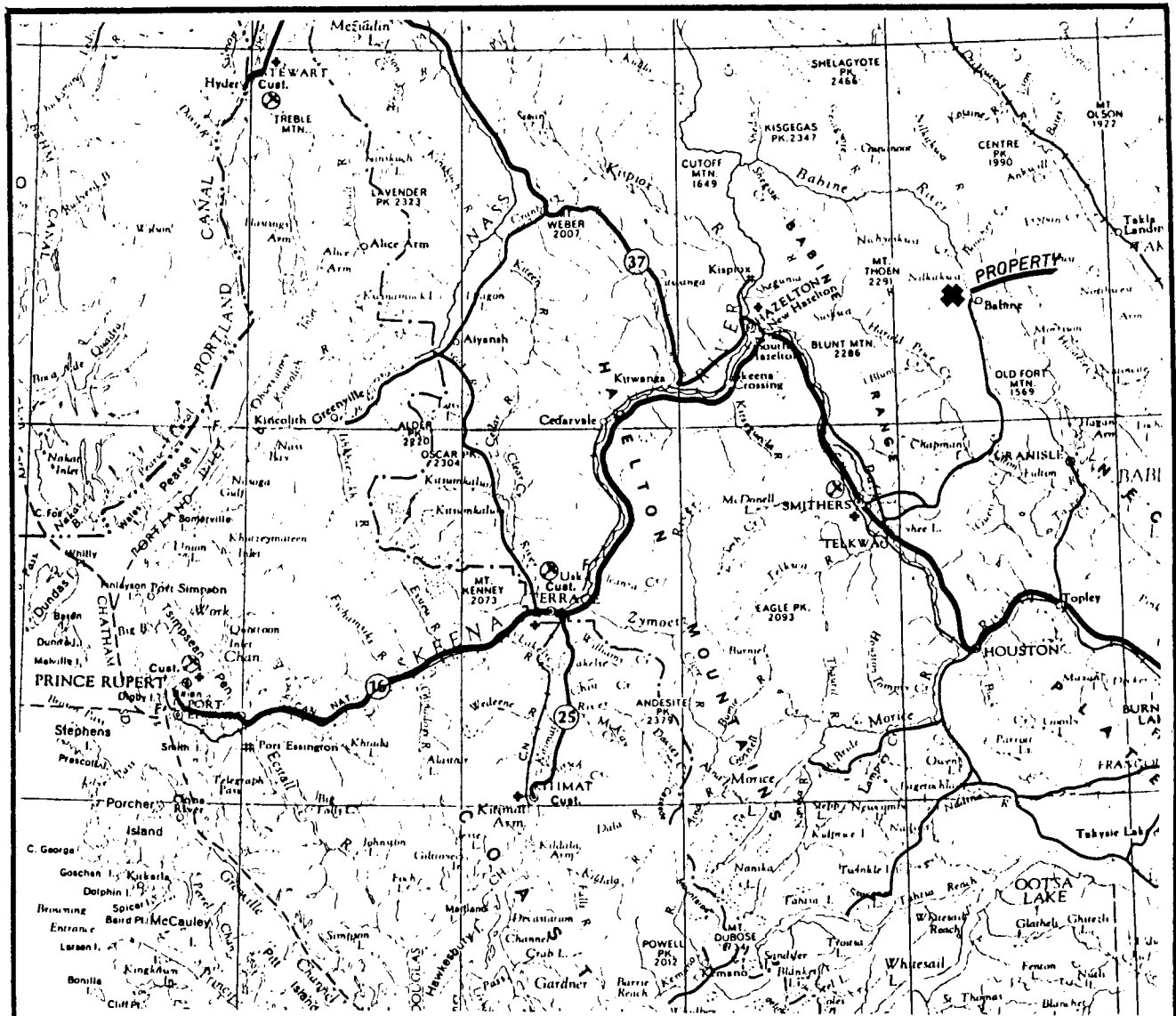
Vegetation consists mainly of subalpine fir, with spruce in flatter areas and poplar and alder near the main creeks. Old burnt areas are presently covered with a dense regrowth.

Claims and Ownership

The French Peak Silver Property has been reduced to one group, the Silverado Group, containing 7 claims totalling 64 units (Fig. 2). The following table lists the claim data:

<u>NAME</u>	<u>RECORD #</u>	<u>UNITS</u>	<u>RECORD DATE</u>	<u>YEAR OF LOCATION</u>
Silverado	298	9	May 26	1976
Eldorado	299	9	May 26	1976
Mag Hi	348	6	July 9	1976
Silver Iron	349	6	July 9	1976
FP - 2	5863	15(reduced)	Oct 6	1983
FP - 3	5864	9(reduced)	Oct 6	1983
FP - 4	5865	10	Oct 6	1983

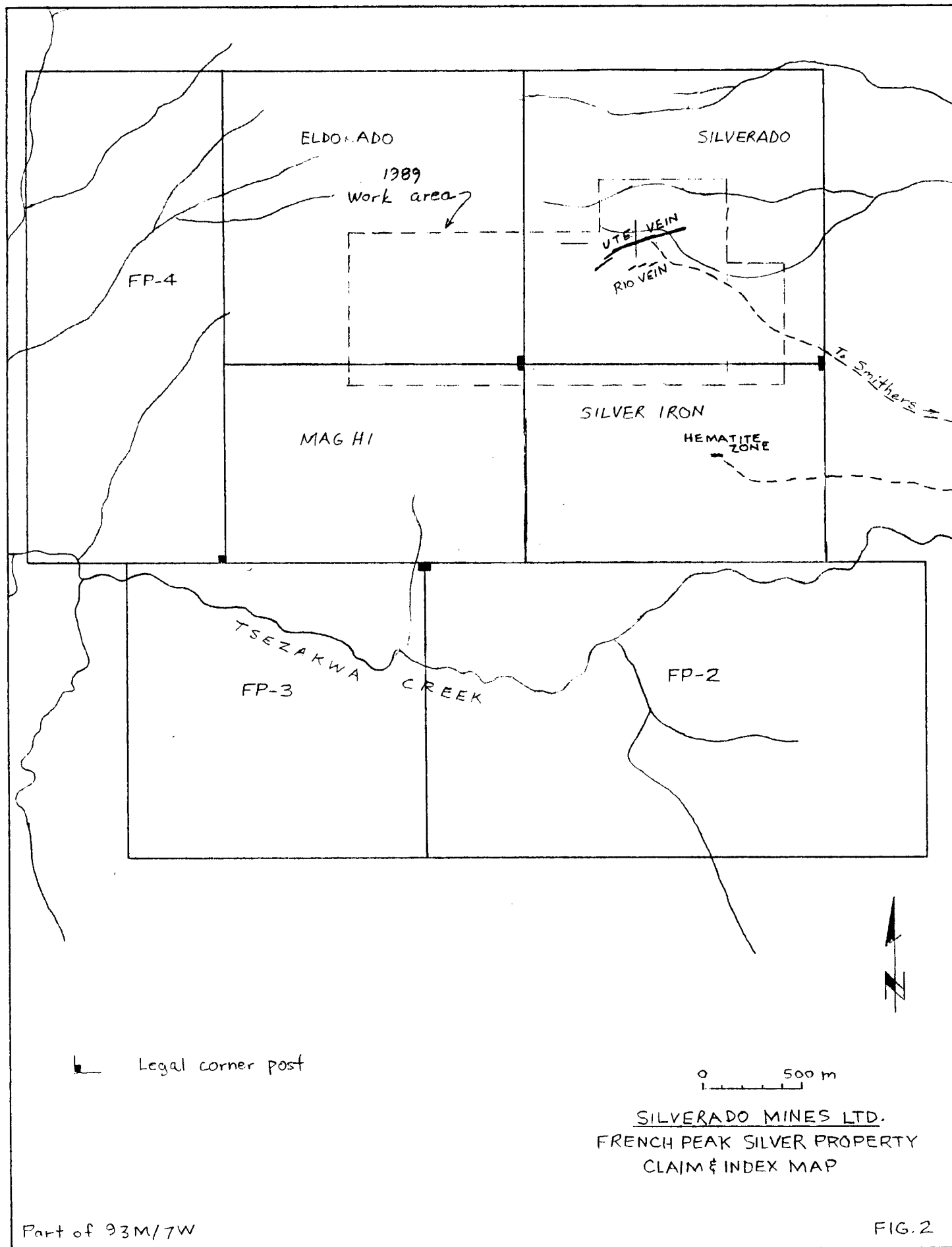
The Claims are owned by Silverado Mines Ltd.



SILVERADO MINES LTD.
 FRENCH PEAK SILVER PROPERTY
 OMECECA MINING DIVISION, B.C.

LOCATION MAP

FIGURE 1



Legal corner post

0 500 m

SILVERADO MINES LTD.
 FRENCH PEAK SILVER PROPERTY
 CLAIM & INDEX MAP

Part of 93M/7W

FIG. 2

HISTORY

The first mineralization was discovered by a Rio Tinto exploration party in 1955. In 1956 they explored the area of the Ute and Rio Vein Systems with trenching, 1722 feet of diamond drilling in 12 holes, mapping and surface sampling.

Sometime in the 1960's cat trenching to the south led to the discovery of the Hematite Zone.

In 1964, S. Homenuke and H. Gilleland leased the property and shipped a total of 24 tons of hand-sorted ore. In 1974, S. Homenuke and J. Sargent, having purchased the property, shipped a further 28.4 tons. The 52.4 total tons yielded over 10,500 ounces of silver, plus copper, lead, zinc and gold.

Renniks Resources Ltd. optioned the property in 1974 and carried out a program of mapping, sampling, trenching and electromagnetic surveying. Renniks allowed the option to lapse, due to commitments elsewhere.

In 1976, Silverado Mines Ltd. optioned the property and commenced a drilling program. Thirty holes were drilled, totalling 2,646 feet. Work also included construction of an access road, trenching, detailed mapping, magnetometer surveying and minor reconnaissance.

From 1977 to 1980, the property was optioned from Silverado to Mohawk Oil Co. Ltd. To cover assessment requirements, some linecutting and a petrographic study were done. In 1980, by agreement, Mohawk was required to have the property in production, at least on a limited basis. To this end, metallurgical testing, a preliminary environmental analysis, and a preliminary feasibility analysis were done. The project had reached the point of initial government permit applications when Mohawk, due to other commitments, returned the property to Silverado.

During the 1981 field season, Silverado, through Tri-Con Mining Ltd., and under the writer's direction, carried out an extensive program of geochemical sampling and geophysical surveying.

From 1983 to 1988, exploration included further drilling and trenching on the Ute Vein and Hematite Zone, further geochemical sampling, airphoto fracture analysis, geological mapping, a preliminary IP Survey and preparation of a new topographic base map. Several new veins related to the Ute System were discovered and several targets were enhanced for future exploration.

Economic Assessment

The production record and drilling results indicate that the French Peak Silver Property has potential as a high-grade silver-gold-base metal producer. Some of the drilling and mapping indicates possibilities for larger tonnage, lower grade mineralized zones.

Present work and Distribution

Fill-in geologic mapping and lithologic examinations were carried out during the course of a magnetic survey. Two areas, on the Mag Hi and Silverado claims, were studied in greater detail.

Magnetic surveying totalling 7.5 km was done on the Silverado, Eldorado, Mag Hi and Silver Iron claims.

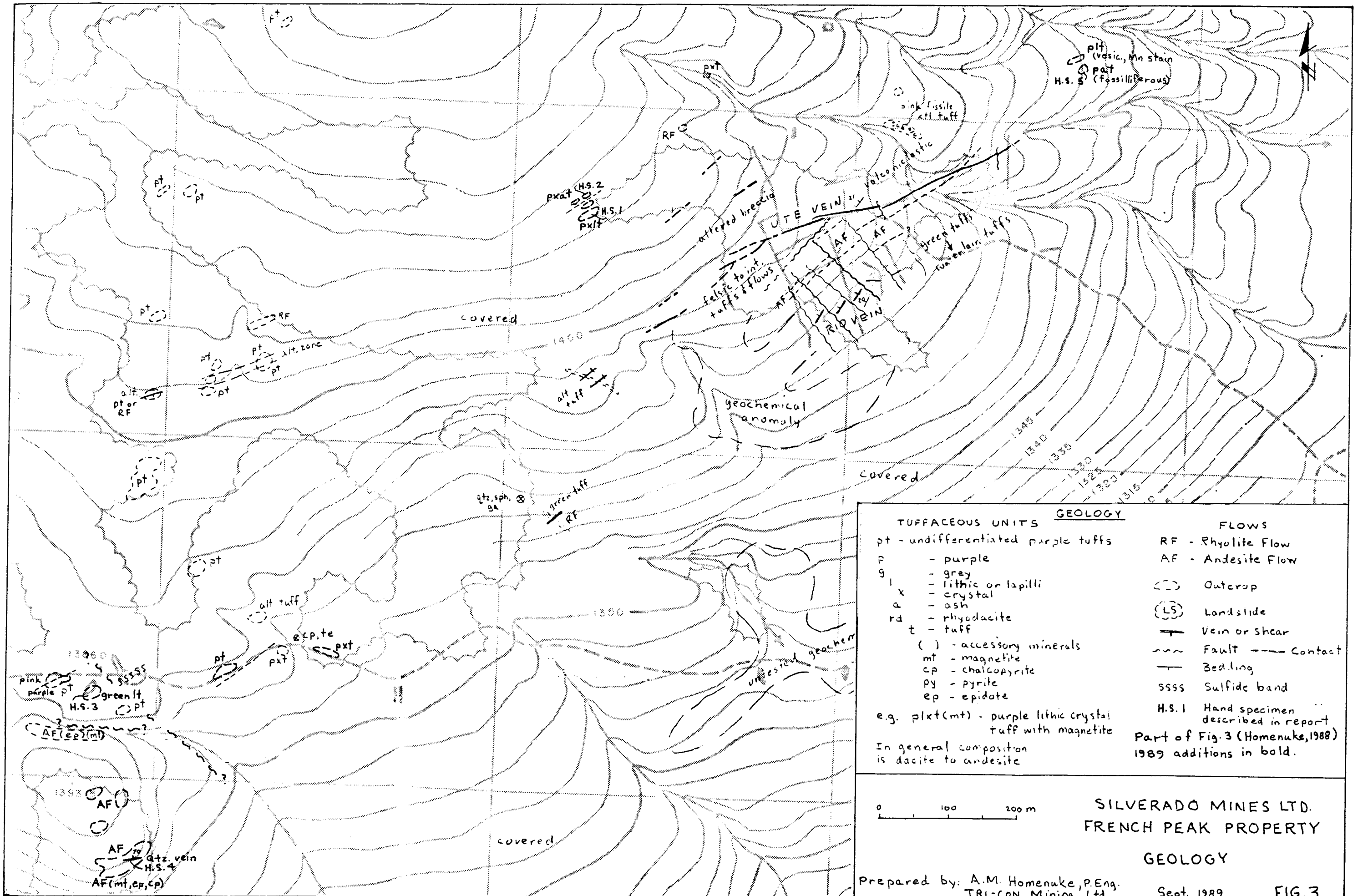
II. GEOLOGY

Areas of outcrop examined during this survey are shown on Fig. 3. Descriptions of hand specimens are included in Appendix I.

A prominent magnetic high from government airborne surveys is present over the southwest part of the map area. Examination of outcrops in this area confirmed the presence of dark green, probably andesitic, flows and tuffs. Magnetite is present in both, but is more abundant in the flows. The magnetic survey (Fig. 4) indicates that the airborne high is composed of northeast trending anomalies separated by lower values, probably indicative of an alternating flow and tuff sequence. The ground magnetic gradient suggests a northwest dip, which is the same as observed in bedded units elsewhere on the map area.

Epidote alteration is common in joints, along with occasional specks of chalcopyrite. A quartz-siderite vein containing a few percent magnetite and minor chalcopyrite is present on the south side of a small knob. The vein was observed intermittently along its east-west strike for about 30 metres. It ranges up to 20 cm. wide, dips steeply to the north and appears to occupy an extensional structure.

On the northeast part of the Fig. 3 map area, the rubble from a previously unmapped trench was observed to contain numerous fossils. The freshest specimens of the rocks in the area are purple lithic tuffs or volcanoclastics. The fossiliferous zone does not appear to be more than a few metres thick and contains some thin (1-2 cm) shaley horizons. The fossils, which are crowded in the rock, consist primarily of gastropods and pelecypods ranging from a few millimeters up to 10 cm in length. A shallow marine environment is indicated. Carbonates, other than in cross-cutting fractures, were not detected.



TUFFACEOUS UNITS		GEOLOGY	
pt	- undifferentiated purple tuffs	RF	- Rhyolite Flow
p	- purple	AF	- Andesite Flow
g	- grey	(O)	- Outcrop
l	- lithic or lapilli	(LS)	- Landslide
x	- crystal	—	- Vein or shear
a	- ash	---	- Fault
rd	- rhyodacite	---	- Contact
t	- tuff	—	- Bedding
()	- accessory minerals	ssss	- Sulfide band
mt	- magnetite	H.S. 1	- Hand specimen described in report
cp	- chalcopyrite		
py	- pyrite		
ep	- epidate		
e.g. plxt(mt) - purple lithic crystal tuff with magnetite		Part of Fig. 3 (Homenuke, 1988)	
In general composition is dacite to andesite		1989 additions in bold.	

0 100 200 m

SILVERADO MINES LTD.
FRENCH PEAK PROPERTY

GEOLOGY

Prepared by: A.M. Homenuke, P.Eng.
TRI-CON Mining Ltd. Sept. 1989

FIG. 3

By far the greatest volume of rock observed to date on the map area is a sequence of pink to purple, dacitic, crystal, lapilli and lithic subaerial tuffs.

However, the southeastern half of the map area is almost totally overburdened and the nature of the rocks is yet to be determined.

The known structures and results of previous geological mapping are included on Fig. 3.

III. MAGNETIC SURVEY

Procedure

In 1976, a detailed magnetic survey (unpublished; See Fig. 5) over a small area indicated that this type of survey would be useful for interpretation of lithology and structure.

A total of 7.5 km were surveyed with readings at 20 metre intervals. The lines were chosen to provide a broad coverage of the area of interest with sufficient detail for a preliminary interpretation.

The instrument used was a Scintrex MF-1 fluxgate magnetometer, which reads the relative intensity of the vertical magnetic field. All readings were taken facing north to avoid orientation variation. Diurnal variations were corrected by looping to previous stations, or checking at a base station. Scale sensitivity varied ± 100 gammas in the magnetic highs to ± 10 gammas in the magnetic low areas.

The corrected readings are plotted on Fig. 4 along with an interpretation of the data.

Discussion of Results

Relative intensity readings ranged from 350 gammas to 9300 gammas. In general, the highest and most varied magnetic responses occur from the central to the southwestern part of the map area. To the north and east the response is lower and flatter.

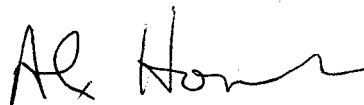
The higher readings are almost certainly all due to the presence of magnetite in andesitic flows and tuffs. The response along the south margin of the surveyed area indicates that more of these rocks can be expected under the overburden to the south.

The lowest readings, other than those from dipole effects appear to overlie volcanoclastic and sedimentary rocks. The more moderate readings likely represent the large volume of dacitic tuffs.

IV. CONCLUSIONS & RECOMMENDATIONS

1. Continued geologic mapping enhanced by magnetic surveying shows the map area to be underlain by subaerial andesitic to dacitic and minor felsic flows and tuffs interfingering and partially in growth-fault contact with subaqueous volcanoclastics to the northeast. Significantly, the known mineral deposits are along this extensional contact zone. Northwest trending block faults appear to affect only the rock units to the south of the Ute Vein. The rocks to the north may have been deposited after the period of major extension.
2. More detailed and extensive magnetic surveying will be beneficial to completing the geologic interpretation of the property.

Respectfully submitted,
TRI-CON MINING LTD.



A.M. Homenuke, P. Eng.
Senior Vice-President

COST STATEMENT

A. Homenuke, P. Eng. July 2 - 6, 1989

5 days field work and travel @ \$300/day	\$ 1,500.00
2 days report, maps interpretation @ \$400/day	800.00
Vehicle 5 days @ \$75/day	375.00
Room and board 5 days \$40/day	200.00
Instrument Rental 5 days @ \$20/day	100.00
Secretarial, miscellaneous, copying	<u>100.00</u>
Total	<u>\$ 3,075.00</u> =====

REFERENCES

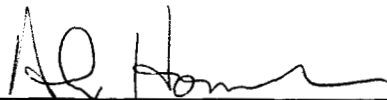
1976 - 1988, Homenuke, A.M., various assessment reports

CERTIFICATE OF QUALIFICATION

I, Alexander M. Homenuke, do hereby certify:

1. THAT I am a member in good standing of the Association of Professional Engineers of British Columbia.
2. THAT I received the Degree of Bachelor of Science in Geological Engineering from the Colorado School of Mines in 1974.
3. THAT I received a Diploma of Technology in Mining from the B.C. Institute of Technology in 1969.
4. THAT I have been employed in various aspects of mining exploration for 20 years and am presently employed by Tri-Con Mining Ltd., of Suite 2580, 1066 West Hastings Street, Vancouver, British Columbia.
5. THAT I presently reside at 29825 Harris Road, Mt. Lehman, British Columbia.
6. THAT this report is based on work supervised or conducted by myself.

DATED at Vancouver, British Columbia, this 2nd day of October, 1989.



A.M. Homenuke, P. Eng.
Geological Engineer.

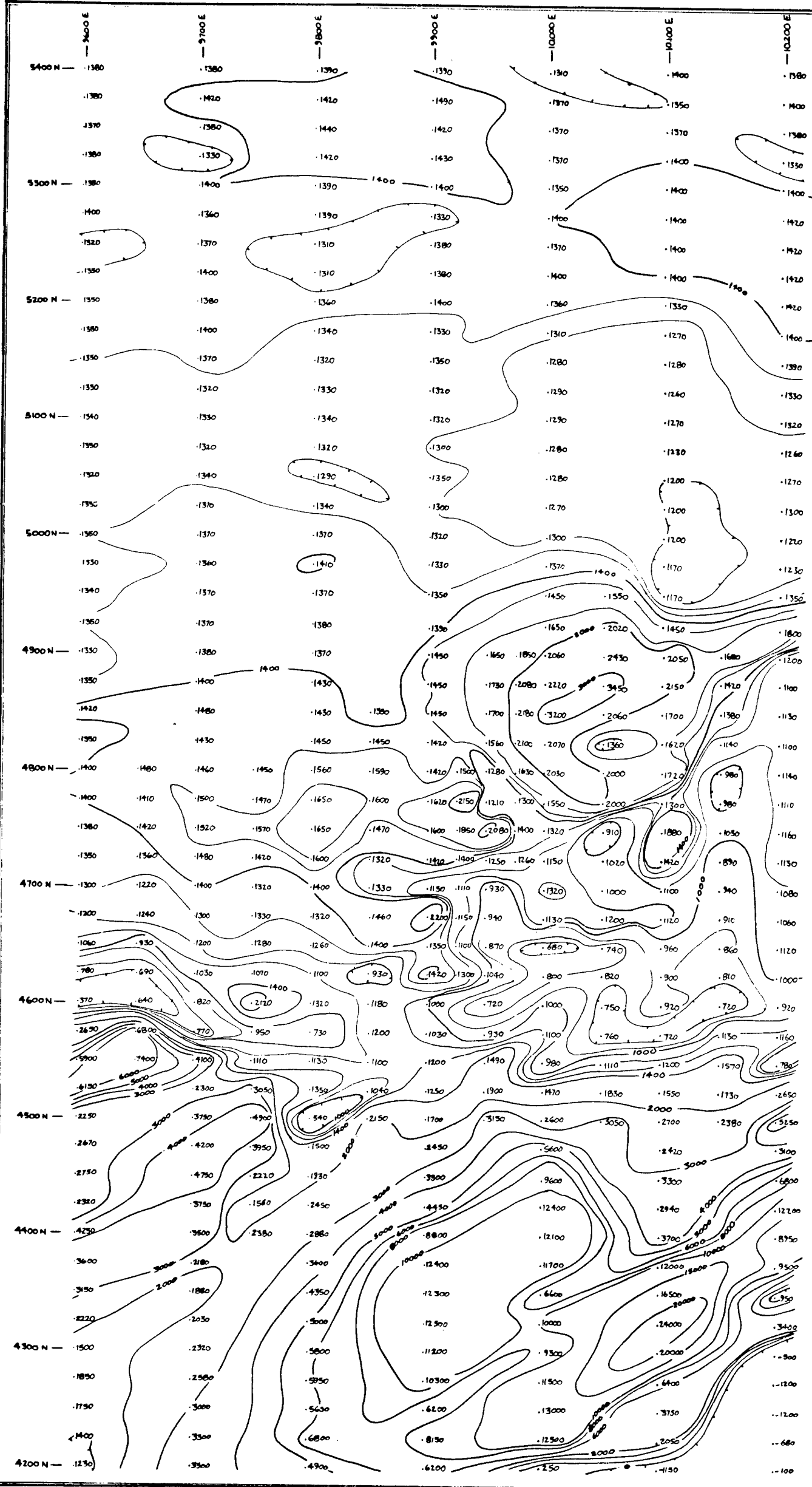
APPENDIX I
HAND SPECIMEN DESCRIPTIONS
(located on Fig. 3)

- H.S.1 Lapilli-crystal tuff - Pale mauve, fine grained, weakly kaolinized and silicified, 1% hematite/limonite clots 1 mm (after mafics?), limonite on fracture surface (after pyrite?)
- H.S.2 Crystal-ash tuff - Purple, fine grained, siliceous, 5% green chlorite clots, 1-2 mm (porphyroblasts?) relatively unaltered.
- H.S.3 Lithic-lapilli tuff - Dark green, fine grained, with purple pebbles, minor pyrite segregations, minor magnetic patches, weak argillic alternation.
- H.S.4 Quartz-siderite vein - 5% chlorite, 3% magnetite, minor chalcopyrite in

Andesite flow - dark green, moderately magnetic, darker chloritized mafics to 2 mm.
- H.S.5 Fossiliferous ash tuff (or hematitic mudstone), purple, fine grained, non-laminated (bioturbated?); cold dilute HCl test negative for carbonate except for few later fracture fillings to 0.5 mm; one 20 mm shaley layer observed. 20% fossils, including mostly pelecypods and gastropods 2-100 mm long. Replaced by siderite? Shallow marine environment indicated.

Appendix II

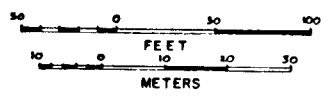
Detailed Magnetic Survey (from 1976)



LEGEND

- MAJOR CONTOURS
- INTERMEDIATE CONTOURS - as required by complexity of data
- - - MAGNETIC LOW
- 1100 INSTRUMENT STATION & READING

- > 6000 gammas
- 2000 - 6000 "
- 1400 - 2000 "
- 1000 - 1400 "
- < 1000 "



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FRENCH PEAK SILVER PROPERTY
MAGNETOMETER SURVEY
 IN THE AREA
 OF THE
 UTE & RIO VEIN SYSTEMS