

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

GEOCHEMICAL SURVEY

YAHK GROUP

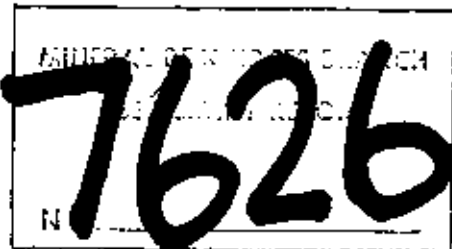
Yahk 1 Mineral Claim (20 units)
Yahk 2 Mineral Claim (5 units)
Yahk 3 Mineral Claim (4 units)

Situated 5 kilometers northeast of Yahk, B.C.
Fort Steele Mining Division,
British Columbia

Latitude: 49°07'N

Longitude 116°04'W

82F/1



by

R.W. Stevenson, P.Eng.
C.F. Staargaard, Geol.

PT. 182

Fieldwork done between June 11 & August 10, 1979

Vancouver, B.C.

September 19, 1979

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
Location and Access	1
Property Definition	1
Data Plotting Control	1
Geochemical Survey	2
Claims Worked.	2
GEOCHEMICAL SURVEYS - TECHNICAL DATA	2
A. Sample Site Control	2
Stream Sediment Survey	2
Soil Survey.	2
B. Sample Collection	3
Stream Sediment Survey	3
Soil Survey	3
Packaging	3
Analysis	3
Interpretation	3
Conclusions	4
ITEMIZED COST STATEMENT	5
AUTHORS' QUALIFICATIONS	7

ILLUSTRATIONS

	<u>Scale</u>	<u>Page</u>
Fig. 1 Location Map; Yahk 1,2,3	1:50,000	Foll.p.1
" 2 Soil Sample Location Plan	1: 5,000	Pocket
" 3 Lead, Zinc in Soil	"	"
" 4 Copper, Silver in Soil	"	"
" 5 Molybdenum, Manganese in Soil	"	"
" 6 Stream Sediment Location Plan	"	"
" 7 Lead, Zinc, Silver in Stream Sediments	"	"
" 8 Copper, Molybdenum, Manganese in Stream Sediments	"	"

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT ON GEOCHEMICAL SURVEY

YAHK GROUP

INTRODUCTION

Location and Access

The Yahk property is situated just west of Englishman Creek, approximately 5 km northeast of Yahk, B.C. at Latitude 49°07'N, Longitude 116°04'W. The terrain is moderately rugged with elevations ranging from 900 meters to 1500 meters above sea level. The applicable topographic map is Yahk; 1:50,000 scale, 82F/1.

Access to the property from Highway 3-95 is on foot for a distance of 400 meters. Access for heavy equipment has been by helicopter.

Property Definition

In the course of an exploration program for conformable Pb-Zn deposits in 1978, geochemically anomalous stream sediment samples were found in a stream and peripheral to a swamp on the present claim group. Evaluation of this anomaly led to claim staking and a more intensive geochemical sampling program, as well as an EM survey, with the intention of establishing diamond drilling targets.

The owner and operator of the property is Kennco Explorations, (Western) Limited, 730 - 505 Burrard Street, Vancouver, B.C. V7X 1M4.

Data Plotting Control

Approximately 15 km of linecutting, by flagging, and blazing and limbing trees, was performed in the process of establishing a sampling grid on the property.

KPM EXPLORATIONS (WESTERN) LIMITED

LOCATION MAP YAHK CLAIM GROUP



FORT STEELE M.D.

DATA BY: C.F.S.	N.T.S. 82F/1	PL. NO.:
DRAWN BY: C.F.S.	DATE: SEPT 77	SCALE:
TRACED BY:	DATE:	1:50,000
REVISIONS:	FILE NO.:	

R. St. Laurent
Sept 19/79

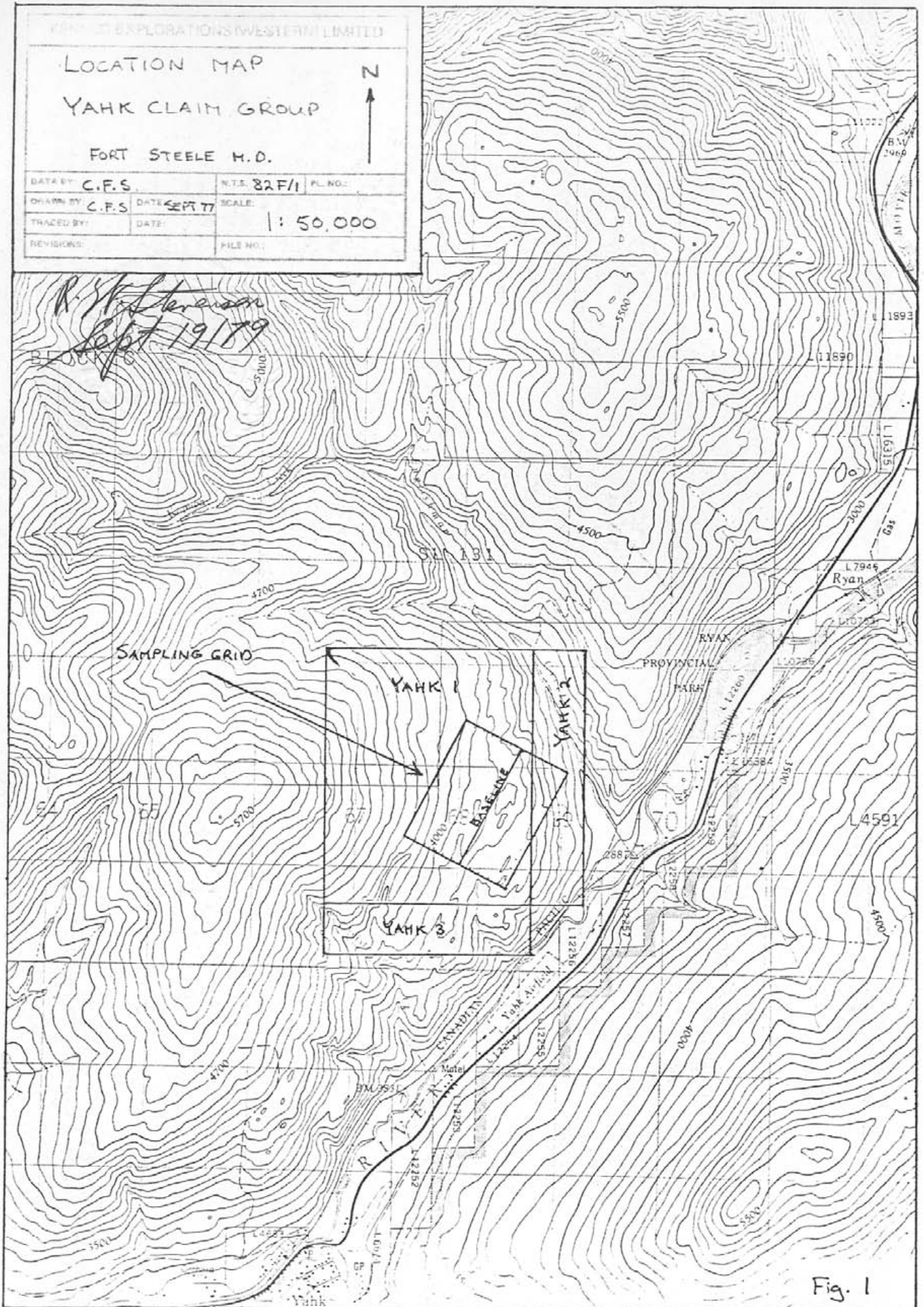


Fig. 1

A topographic map having a scale of 1:5000 had been prepared in early 1979 by Pacific Survey, Ltd. (Vancouver) and was used as a base map for data plotting.

Geochemical Survey

Geochemical work on the property progressed in two stages: (1) an initial soil sampling program centered on the aforementioned swamp, plus stream sediment sampling to search for additional anomalous areas, and (2) more detailed soil sampling. The second stage of soil sampling consisted of fill-in sampling in the most anomalous area outlined in the first soil survey with the objective of more clearly delineating the anomalous zone.

The total number of samples taken is as follows:

67 stream sediment samples
450 soil samples

Claims Worked

<u>Claim</u>	<u>Record No.</u>	<u>Staking Date(s)</u>	<u>Record Date</u>
Yahk #1	560	Oct. 6-9, 1978	Oct. 12, 1978
Yahk #2	657	May 31-June 4/79	June 17, 1979

GEOCHEMICAL SURVEYS - TECHNICAL DATA

A. Sample Site Control

Stream Sediment Survey: Samples were plotted in the field, on a topographic map having a scale of approximately 1:5000. The traverses were started from a point which could be identified on the topographic map, and individual sample stations were plotted by use of an altimeter in conjunction with the topographic map. Results were plotted on a base map having a scale of approximately 1:5000.

Soil Survey: A control grid was established by compass and chain survey. The baseline and crosslines were cut out, blazed and marked with surveyor's flagging. Stations were marked at 25-meter intervals. Results were plotted on a map having a scale of 1:5000.

B. Sample Collection

Stream Sediment Survey: Samples were generally taken at 25-meter intervals. If possible, samples were taken from active material, i.e. flowing water in stream or seepage. If no flowing water was observed, a dry gully sample was taken. Sampling material was taken from silt-size sediment.

The sample site and number were then plotted on the field map. The width, depth, flow speed, sediment type and any peculiarities of the drainage, such as bank material, dry gully, or seepage site were recorded.

Soil Survey: During the first stage of this survey, a sampling interval of 25 meters in the immediate vicinity of the swamp and an interval of 50 meters in outlying areas were used. During the second stage of the program, samples were taken at 12.5-meter intervals peripheral to the swamp, and at 25-meter intervals in the outlying areas.

At both times, samples were taken from the top of the "B" soil horizon, generally at a depth of 5-20 cm. A spade was used to take each sample. At each sample site, a note was made of the sample number, the depth, the sampled horizon and its degree of development, topography, vegetation and direction of drainage.

Packaging: The soil stream and sediment samples were placed in 3" x 4" brown paper sample bags on which the sample numbers had been marked. These were closed with a triangular triple fold.

Analysis: The samples were shipped to Min-En Laboratories Ltd (North Vancouver) for analysis. Both sample types were dried and sieved, the -80 mesh fraction being subsequently used in analysis.

One gram of sample was digested in a concentrated nitric-perchloric acid solution. Mo, Cu, Pb, Zn, Ag, and Mn contents were determined through atomic absorption spectrophotometry using a Perkin Elmer AA5 unit.

Interpretation

The purpose of the stream sediment survey was to outline additional anomalous drainage basins, if any existed, in the claim group. No additional anomalous areas were detected.

The soil survey was centered on the swamp area, which was found to be anomalous in Pb and Zn in early exploration efforts. Overburden depths range from less than a meter to a probable maximum of approximately 10 meters over the sampled area. Soil horizon development is generally fair to good. Some areas have fairly steep topography with the resulting possibility of lateral shifts of anomalous material, but this can be allowed for in interpretation. In general, soil sampling would seem to be an effective technique for outlining areas with further exploration potential.

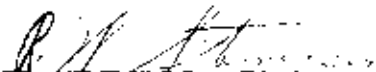
On the basis of soil geochemistry, a zone of relatively high Zn, approximately 800 meters in length and 100-200 meters in width, is centered on the swamp, overlying the contact between quartzites to the west and a diorite intrusive to the east. A smaller Pb anomaly is centered within the Zn anomaly. A narrow zone of elevated Cu values, approximately 800 meters in length, is located to the east of the zones of high Zn and Pb, overlying the intrusive body. Anomalous values for Ag, Mo, and Mn do not exhibit significant trends.

Conclusions

The distribution of anomalous Pb and Zn values with respect to the underlying quartzites and the position of several VPEM conductors suggests some potential for Pb-Zn mineralization at depth.

Vancouver, B.C.

September 19, 1979



R. W. Stevenson, P.Eng.



C. F. Staargaard, Geologist

ITEMIZED COST STATEMENT

Grid Establishment: (Amex Exploration Services Ltd.
June 11-June 24/79 Kamloops, B.C.)

Sr.Linecutter	14 days @ \$147.00/day	\$ 2,058.00
Jr.Linecutter	14 days @ \$ 98.00/day	1,372.00
Direct Costs (tags, flagging, equipt., etc.)		356.91
Vehicle	14 days @ \$ 25.00/day	350.00

Geophysical Survey: (G.White Geophysical Consulting
June 18-21/79 & Services Ltd., Richmond, B.C.)
June 24-July 1/79

Mobilization, Demobilization, Electrical Problems		
- 6 days @ \$345.00/day		1,725.00
VPEM Survey	6 days @ \$445.00/day	2,670.00
Miscellaneous (Reports, Computer Processing, etc.)		1,502.50

Geochemical Analysis: (Min-En Laboratories Ltd.
North Vancouver, B.C.)

67 stream sediment samples: Mo, Cu, Pb, Zn, Ag, Mn		
- @ \$5.25/unit		351.75
450 soil samples: Mo, Cu, Pb, Zn, Ag, Mn @ \$5.25/unit		2,362.50

Wages:

A. Strang: June 11-July 9, Aug. 3-10/79		
Geochemical-Geophysical Assistant		
37 days @ \$34.60/day		1,280.20
P. Mehling: June 11-July 9, Aug. 3-10/79		
Geochemical-Geophysical Assistant		
37 days @ \$34.60/day		1,280.20
C.F. Staargaard: Aug. 1-10, Aug. 28; Sept. 13, 14/79		
Project Manager		
13 days @ \$66.70/day		867.10
R.W. Stevenson: June 9, 12-14; July 1, 20; Sept. 14/79		
Supervisor		
8 days @ \$100.00/day		800.00

Board & Accommodation:

134 mandays on fieldwork dates shown above		
@ \$14.50/day		1,943.00
Rooms: June 11, 12, 17, 25, 27, 30 (1 room)		
July 1-7 (1 room)		
August 1, 2 (1 room)		
August 3-10 (2 rooms)		
Total room-days = 31 @ \$22.44/day (average)		699.05

SUB-TOTAL \$19,618.21

Itemized Cost Statement - cont'd

Brought Forward \$19,618.21

Transportation:

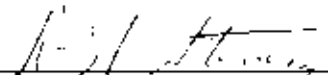
Kennco truck	37 days @ \$25.00/day	925.00
Rental truck	8 days @ \$25.00/day	200.00
Gasoline		264.00
Helicopter	- 4.8 hrs @ \$350.00/hr	1,680.00
	- fuel & oil	130.24
Plane fare (Return) for R.W. Stevenson		127.40

Miscellaneous:

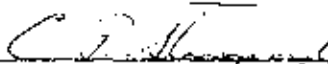
Supplies (hardware, flagging, etc.)	120.69
Airphoto enlargements	180.24
1:5000 pencil manuscript (claim area) topographic map	1,000.00
Copies of manuscript map	86.85
Typing, report production	120.00

TOTAL \$24,452.63

September 19, 1979



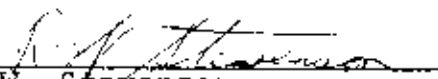
R. W. Stevenson, P. Eng.




C. F. Staargaard

AUTHORS' QUALIFICATIONS

I, Robert W. Stevenson of Vancouver, Province of British Columbia, do certify that I graduated in Mining Geology from the University of Toronto in 1952 with the Degree of Bachelor of Applied Science, and have practiced the profession of geology since that time. I have been registered as a Professional Engineer (Geological) in the Province of British Columbia since 1959. I have been a member of the Association of Exploration Geochemists since its inception in 1970.

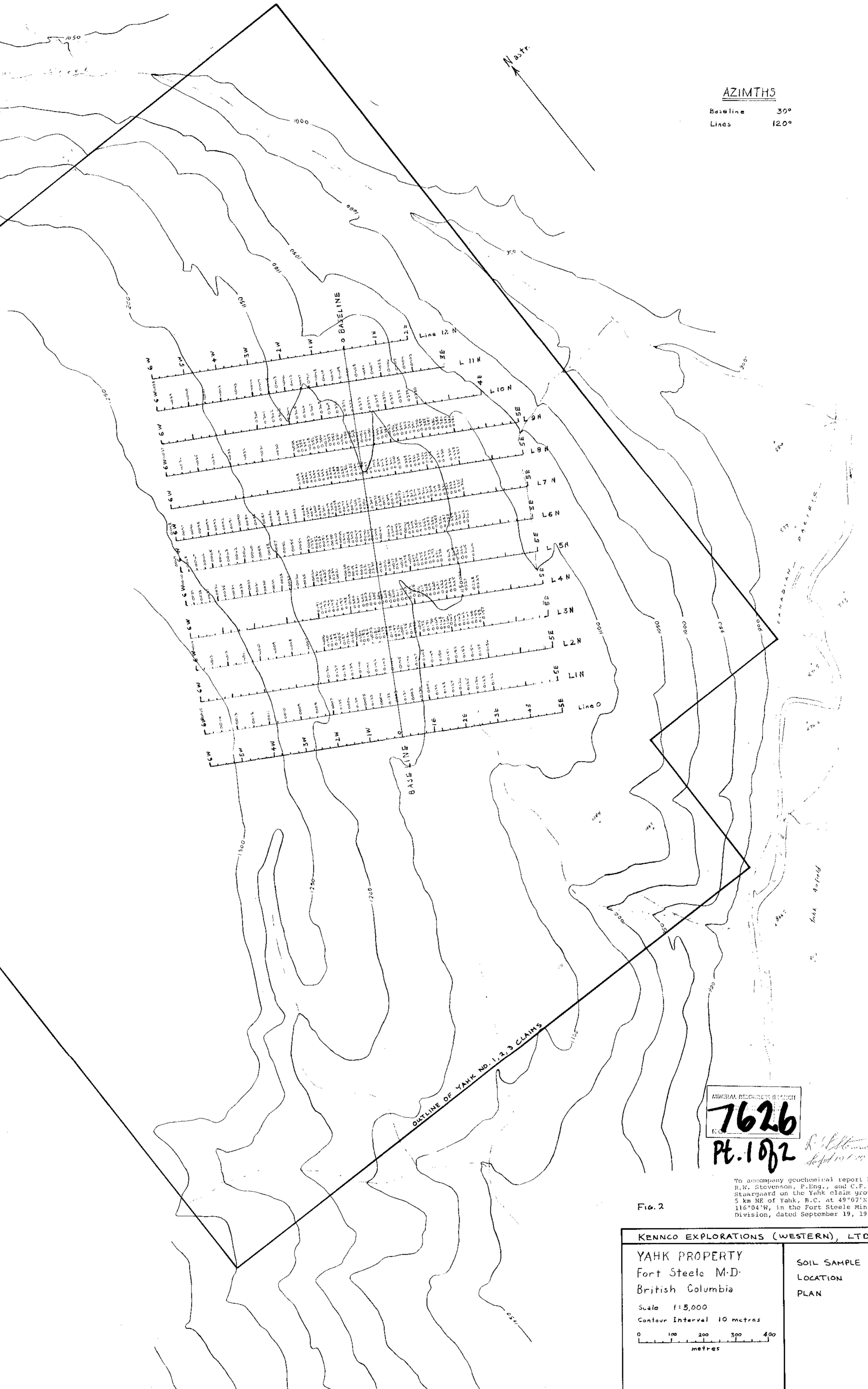

R. W. Stevenson

I, Christiaan F. Staargaard of Vancouver, Province of British Columbia, do certify that I graduated in the Geological Sciences from The Pennsylvania State University in 1977 with the Degree of Bachelor of Science and will graduate in Geochemistry from Queen's University with the Degree of Master of Science in 1980.


C. F. Staargaard

AZIMUTHS

Baseline 30°
Lines 120°



MINERAL REQUISITION SEARCH
7626
R.C.
PT. 1072

R. W. Stevenson
Sept 19/79

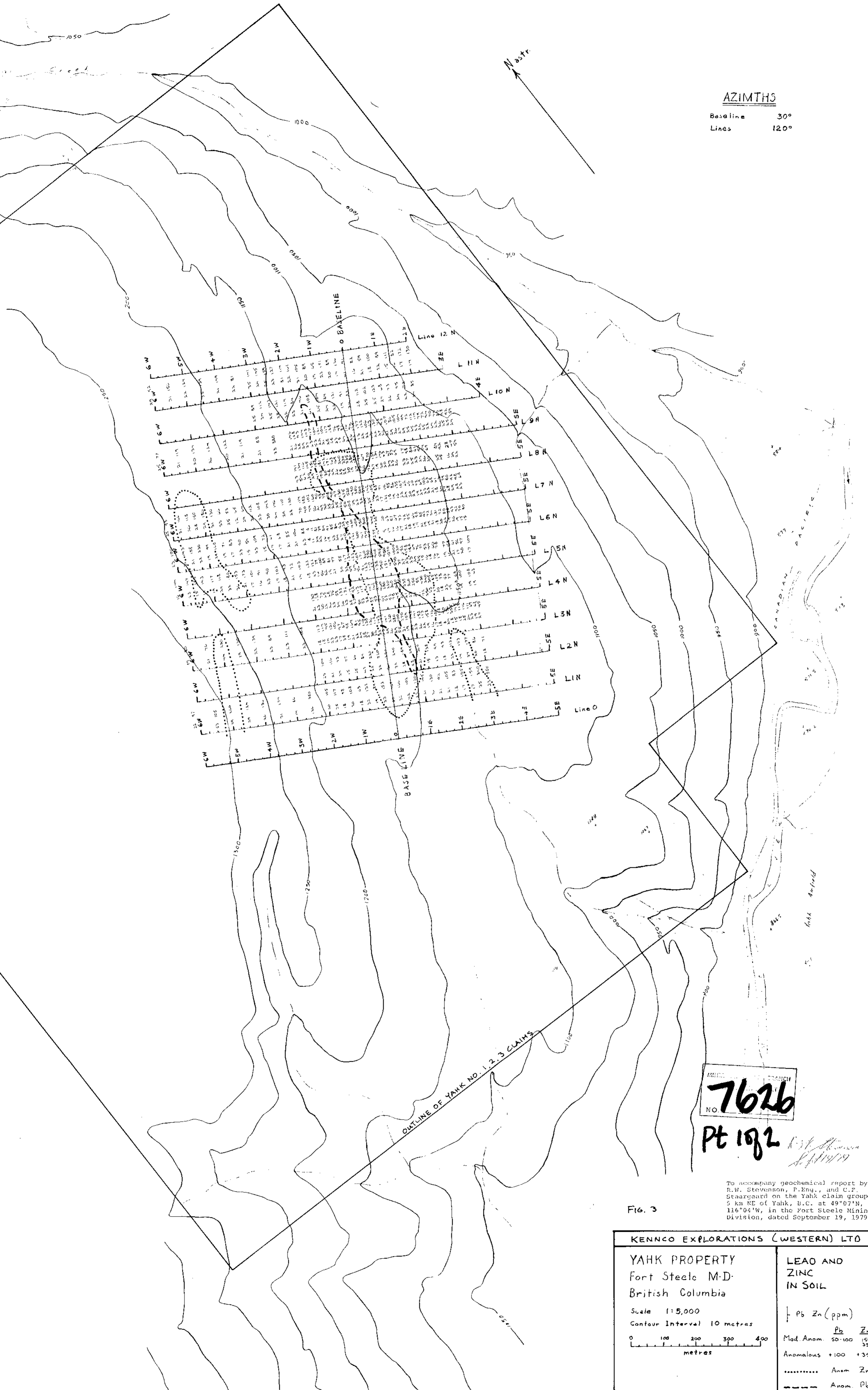
To accompany geochemical report by R.W. Stevenson, P.Eng., and C.F. Staargard on the Yahk claim group, 5 km NE of Yahk, B.C. at 49°07'N, 116°04'W, in the Fort Steele Mining Division, dated September 19, 1979.

Fig. 2

KENNCO EXPLORATIONS (WESTERN), LTD.	
YAHK PROPERTY Fort Steele M.D. British Columbia	SOIL SAMPLE LOCATION PLAN
Scale 1:5,000 Contour Interval 10 metres	

AZIMUTHS

Baseline 30°
Lines 120°



7626
NO. 7626
PT 1072

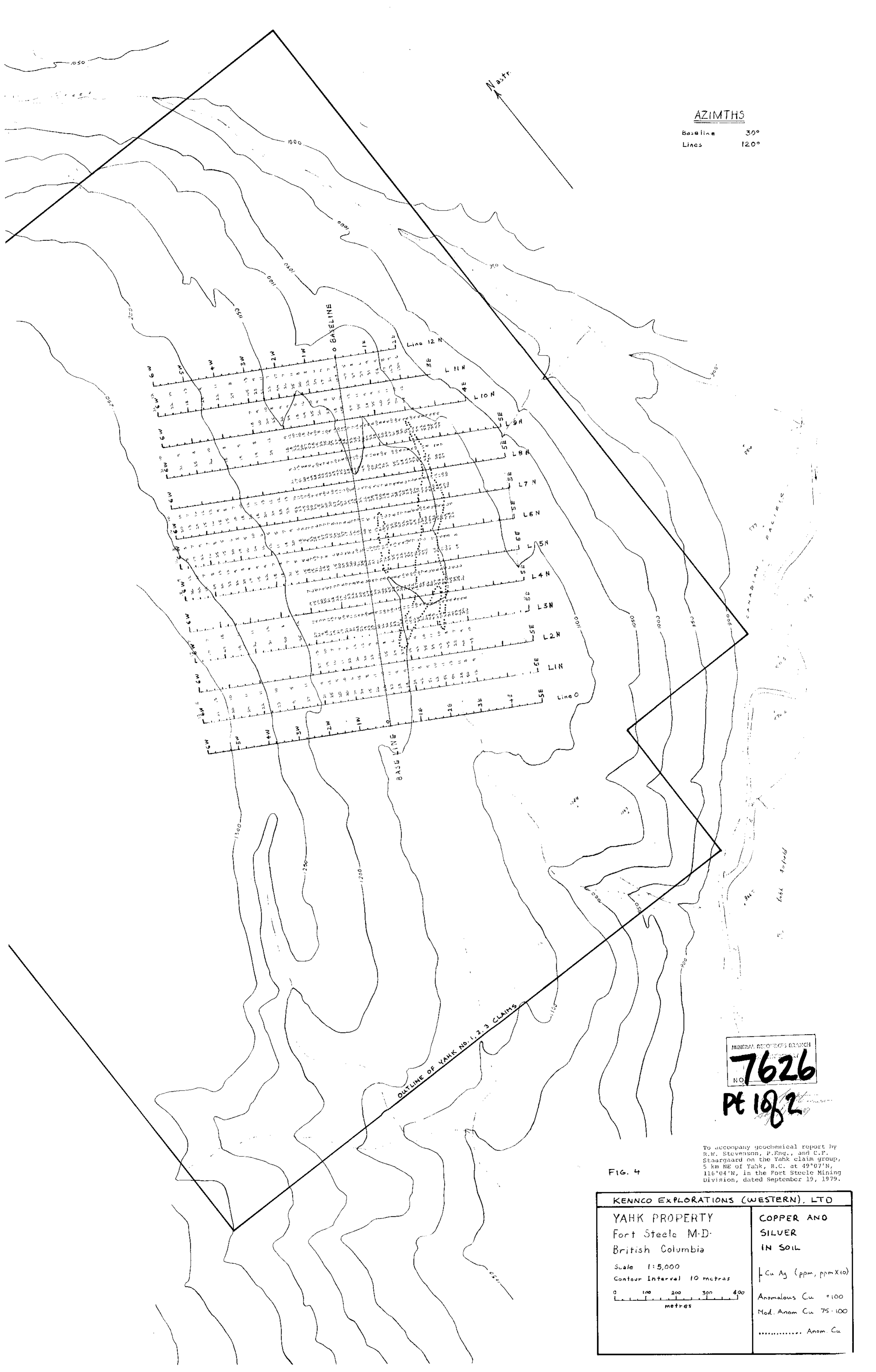
To accompany geochemical report by
R.W. Stevenson, P.Eng., and C.F.
Staargaard on the YAHK claim group,
5 km NE of YAHK, B.C. at 49°07'N,
116°04'W, in the Fort Steele Mining
Division, dated September 19, 1979.

FIG. 3

KENNCO EXPLORATIONS (WESTERN) LTD	
YAHK PROPERTY Fort Steele M.D. British Columbia	LEAD AND ZINC IN SOIL
Scale 1:5,000 Contour Interval 10 metres	Pb Zn (ppm)
0 100 200 300 400 metres	Mod Anom $\frac{Pb}{50-100}$ $\frac{Zn}{150-350}$
	Anomalous +100 +350
 Anom Zn
	----- Anom Pb

AZIMUTHS

Baseline 30°
Lines 120°



MINERAL RECORDS BRANCH
7626
NO.
PE 182

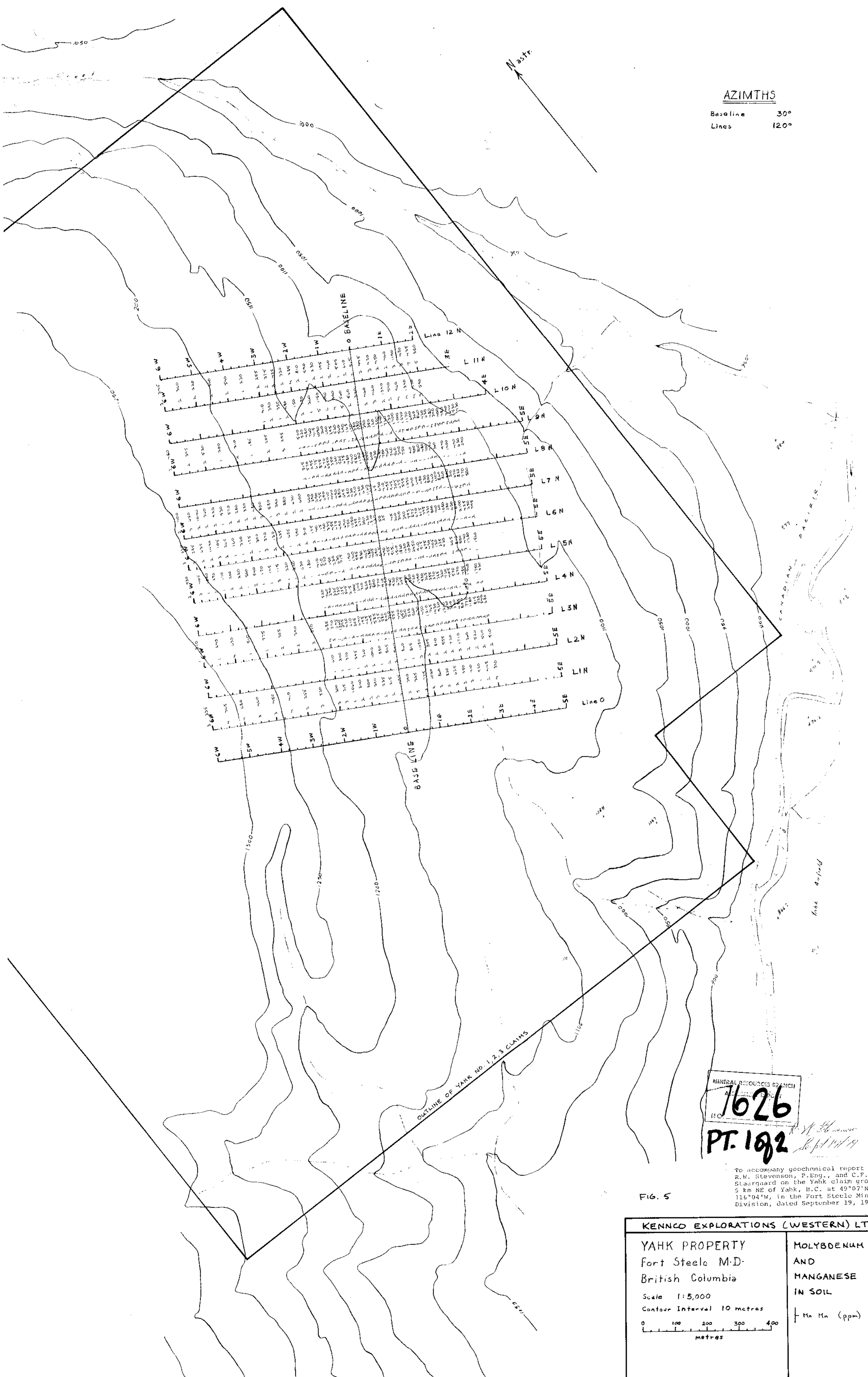
FIG. 4

To accompany geochemical report by
R.W. Stevenson, P.Eng., and C.F.
Staargaard on the Yahk claim group,
5 km NE of Yahk, B.C. at 49°07'N,
116°04'W, in the Fort Steele Mining
Division, dated September 19, 1979.

KENNCO EXPLORATIONS (WESTERN), LTD	
YAHK PROPERTY Fort Steele M.D. British Columbia	COPPER AND SILVER IN SOIL
Scale 1:5,000 Contour Interval 10 metres	— Cu Ag (ppm, ppm x10)
0 100 200 300 400 metres	Anomalous Cu +100 Mod. Anom Cu 75-100 Anom Cu

AZIMUTHS

Baseline 30°
Lines 120°



MINERAL RESOURCES BRANCH
1626
PT. 1092
R. W. Stevenson
Sept 19/79

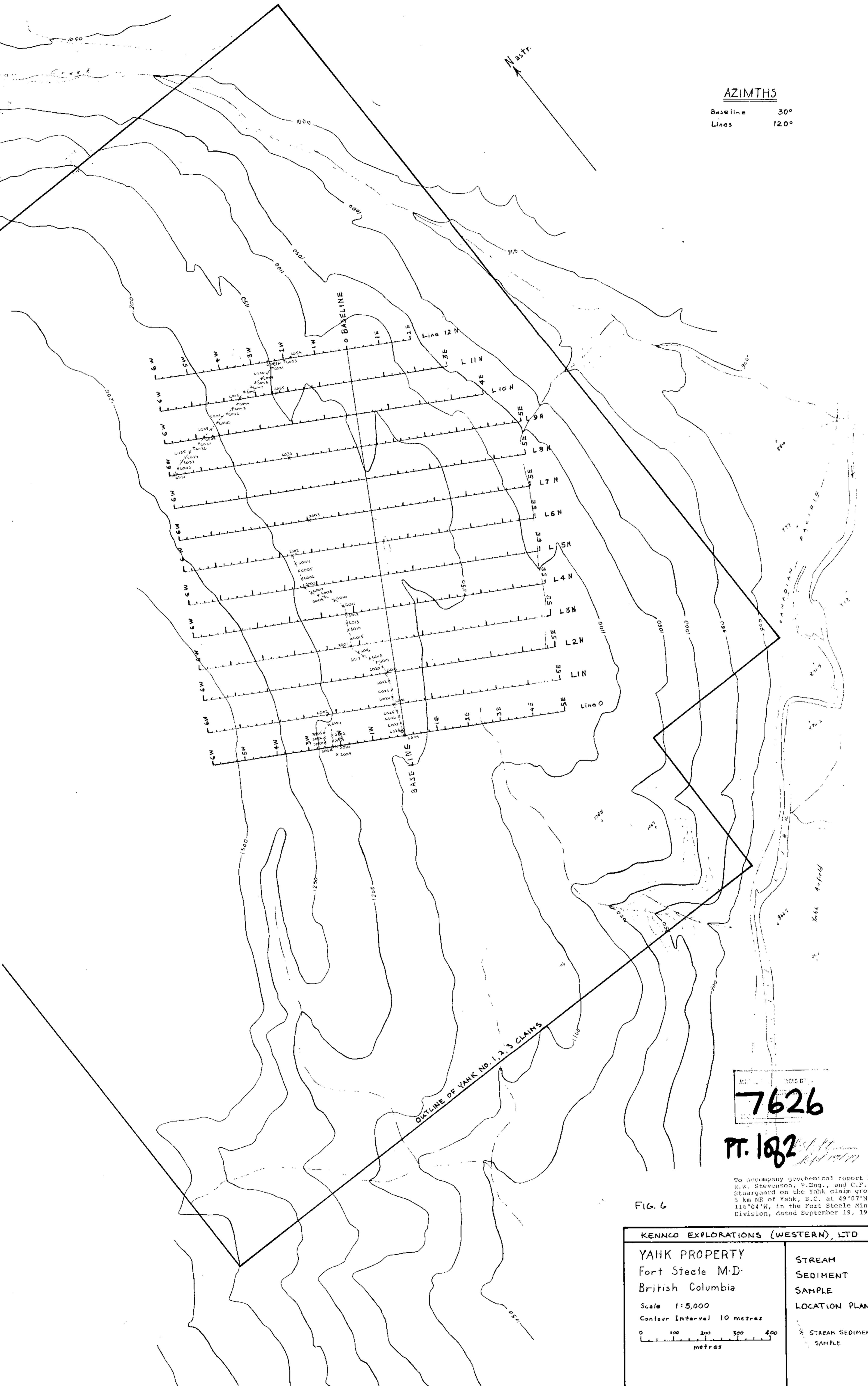
To accompany geochemical report by R.W. Stevenson, P.Eng., and C.F. Staergaard on the Yahk claim group, 5 km NE of Yahk, B.C. at 49°07'N, 116°04'W, in the Fort Steele Mining Division, dated September 19, 1979.

FIG. 5

KENNCO EXPLORATIONS (WESTERN) LTD	
YAHK PROPERTY Fort Steele M.D. British Columbia	MOLYBDENUM AND MANGANESE IN SOIL
Scale 1:5,000 Contour Interval 10 metres	Mo Mn (ppm)
0 100 200 300 400 metres	

AZIMUTHS

Baseline 30°
Lines 120°



7626

PT. 182

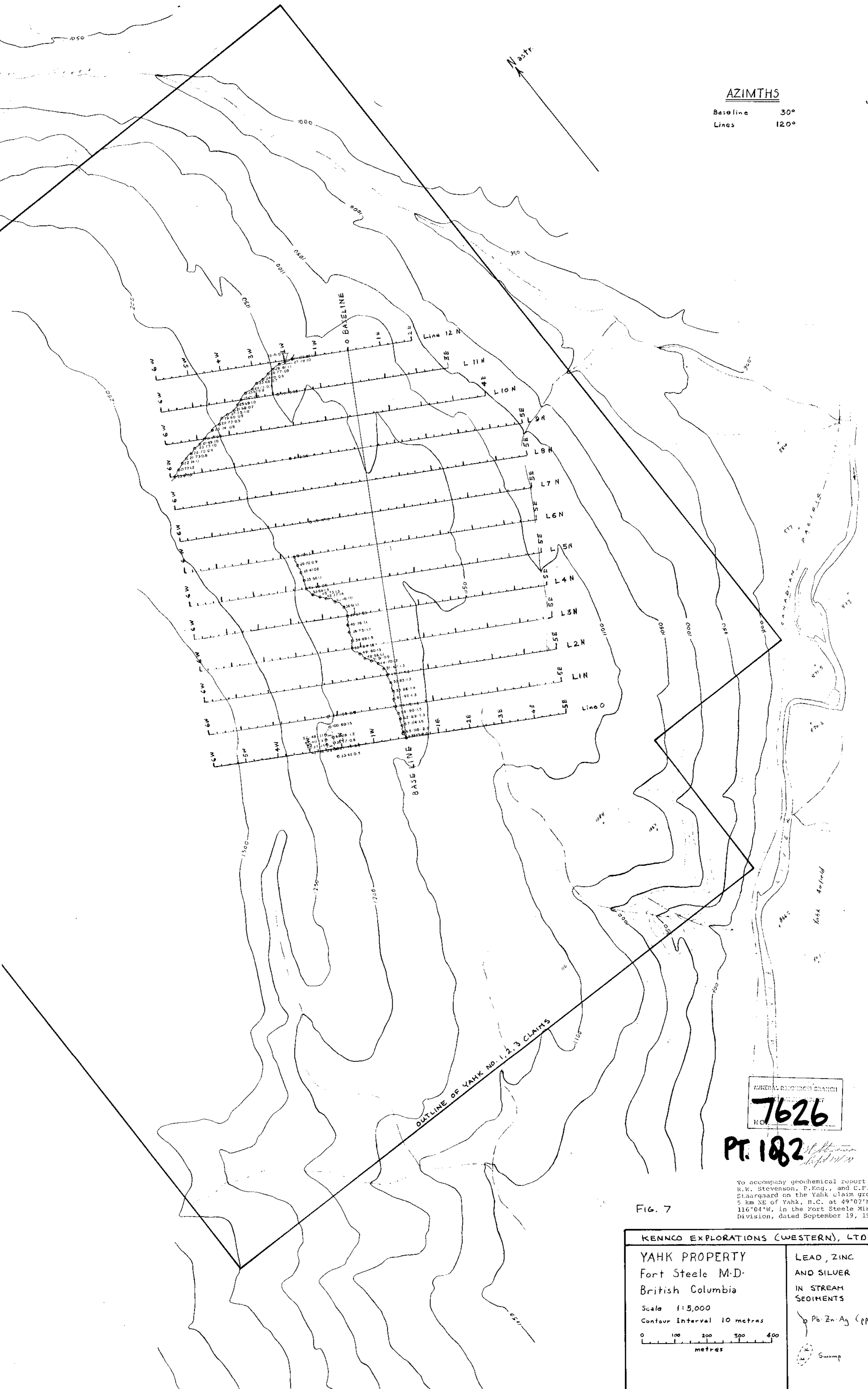
To accompany geochemical report by
H.W. Stevenson, P.Eng., and C.F.
Staasgaard on the Yahk claim group,
5 km NE of Yahk, B.C. at 49°07'N,
116°04'W, in the Fort Steele Mining
Division, dated September 19, 1979.

FIG. 6

KENNCO EXPLORATIONS (WESTERN), LTD	
YAHK PROPERTY Fort Steele M.D. British Columbia	STREAM SEDIMENT SAMPLE LOCATION PLAN
Scale 1:5,000 Contour Interval 10 metres	
0 100 200 300 400 metres	STREAM SEDIMENT SAMPLE

AZIMUTHS

Base line 30°
Lines 120°



MINERAL RESOURCES BRANCH
7626
NO.

PT. 182
St. Johnstone
Sept 1979

FIG. 7

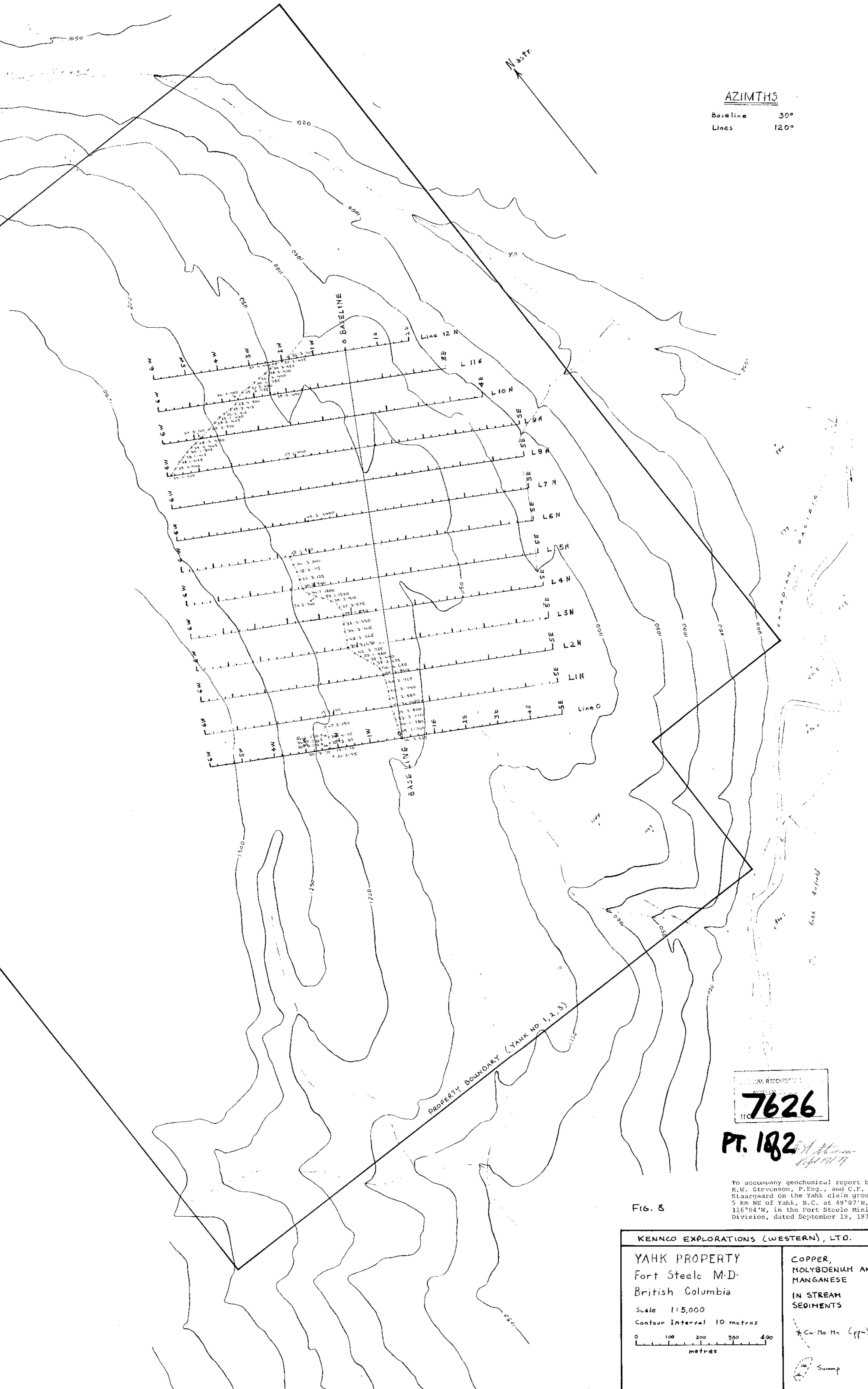
To accompany geochemical report by
R.W. Stevenson, P.Eng., and C.P.
Staargaard on the Yahk claim group,
5 km NE of Yahk, B.C. at 49°07'N,
116°04'W, in the Port Steele Mining
Division, dated September 19, 1979.

KENNCO EXPLORATIONS (WESTERN), LTD.	
YAHK PROPERTY Fort Steele M.D. British Columbia	LEAD, ZINC AND SILVER IN STREAM SEDIMENTS
Scale 1:5,000 Contour Interval 10 metres	Pb, Zn, Ag (ppm)
0 100 200 300 400 metres	Swamp

AZIMUTHS

Baseline 30°
Lines 120°

N astr.



LOCAL RESOURCES
ADDRESS
7626
H.C.

PT. 182
[Signature]
[Date]

To accompany geotechnical report by
R.W. STEVENSON, P. Eng., and C.F.
Staargaard on the Yahk claim group,
5 km NE of Yahk, B.C. at 49°07'N,
116°04'W, in the Fort Steele Mining
Division, dated September 19, 1979.

Fig. 3

KENNCO EXPLORATIONS (WESTERN), LTD.	
YAHK PROPERTY Fort Steele M.D. British Columbia	COPPER, MOLYBDENUM AND MANGANESE IN STREAM SEDIMENTS
Scale 1:5,000 Contour Interval 10 metres	* Cu, Pb, Mn (ppm)
0 100 200 300 400 metres	Swamp