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Report on

BULLDOZER TRENCHING

on the

ITN PROPERTY

(ITN 1-48 and 60-63 Claims)

for

SILVERQUEST RESOURCES LTD.

NTS 115J/9 and 115I/12

Latitude 62°33'N; Longitude 138°00'W

OCTOBER, 1986

by

R.C. Carne, M.Sc.

Work done between June 1 and June 12, 1986

BOX 4127, 3125 THIRD AVENUE, WHITEHORSE, Y.T. Y1A 3S9
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CONCLUSIONS AND RECOMMENDATIONS

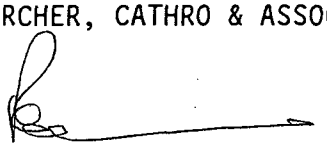
In June 1986, Silverquest Resources Ltd. explored the 52 claim ITN property under option from Chevron Canada Resources Ltd., by bulldozer trenching to test its bulk tonnage gold potential.

Results of the program are disappointing. Only a small portion of the three anomalous zones on the property was successfully tested by the trenching which was constrained by heavier than expected permafrost. The five trenches that were cut to bedrock exposed a number of zones of fault gouge and/or intense clay alteration within the Cretaceous Coffee Creek Granite country rock. One of these zones contains a 4 m wide heavily oxidized quartz vein. Unfortunately, only sub-economic values of gold and silver were returned from channel and chip samples of bedrock, the best result being one of 3.11 oz/ton silver and 0.016 oz/ton gold over a 15 m sample length.

The three anomalies, however, have yet to be completely tested by trenching. This work should be deferred until the Casino access road is completed and the cost of exploration in the area is reduced. The work should be carried out in early fall to take advantage of the greatest annual permafrost retreat.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



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R.C. Carne, M.Sc.

INTRODUCTION

The ITN property (ITN 1-48 and 60-63 claims) was staked in 1985 by Freegold Venture (Chevron Canada Resources Limited) to cover a gold-silver-lead-arsenic geochemical anomaly outlined in 1981 by Nat JV (Chevron Canada Limited and Armco Mineral Exploration Ltd).

Follow-up prospecting, geological mapping and grid soil geochemical sampling in 1985 by Freegold Venture outlined three areas of moderate to strong gold, silver, lead, arsenic and zinc response.

Silverquest Resources Ltd. explored the ITN property for bulk tonnage gold potential in 1986 under an option agreement from Chevron Canada Resources Limited.

The 1986 program took place between June 1 and June 12 and consisted of bulldozer trenching, trench sampling and hand pitting. Personnel consisted of crew chief B. Wengzynowski and assistant T. Knight. The program was supervised by geologists W.D. Eaton and R.C. Carne. The bulldozer was contracted from owner-operator W. Arnholtz of Whitehorse.

The trenching program was terminated prematurely when heavier than expected permafrost was encountered. Vegetation was stripped from proposed trenches which will induce a permanent permafrost retreat to facilitate future trenching programs. A total of eleven trenches was attempted with a total volume excavated of 8360 cubic metres (Table 1).

Forty-six rock chip samples and three soil samples were collected from the trenches. All samples were pulverized to -140 mesh, after which a one assay ton split (29.167 grams) was analyzed by Fire Assay with gravimetric finish for gold and silver.

TABLE I
1986 BULLDOZER TRENCH SUMMARY

Trench	Length (m)	Width (m)	Avg. Depth (m)	Volume (m3)	Claims
A	300	4	1	1200	ITN 9, 21
B	250	4	1	1000	ITN 21
C	420	4	1	1680	ITN 7, 9, 23
F	80	4	1	320	ITN 7
TK-1	250	4	1	1000	ITN 11
BW-1	220	4	1	880	ITN 11
BW-2	130	4	1	520	ITN 11
BW-3	100	4	1	400	ITN 7
BW-4	100	4	1	400	ITN 7
BW-5	180	4	1	720	ITN 7
BW-6	60	4	1	240	ITN 7,8
				8360m3	

PROPERTY, LOCATION AND ACCESS

The ITN property consists of 52 full size mineral claims. These are registered in the name of Archer, Cathro & Associates (1981) Limited on behalf of Freegold Venture with the Whitehorse Mining Recorder as listed below:

Claim Name	Grant Number	Expiry Date*
ITN 1-37	YA91875-YA91911	March 19, 1993
ITN 38-48	YA92627-YA92637	March 19, 1993
ITN 60-63	YA92649-YA92652	March 19, 1993

The claims are located 103 km northwest of Carmacks at latitude 62°33'N and longitude 138°00'W on NTS map sheets 115J/9 and 115I/12. The nearest road access is the Freegold Road which terminates 41 km to the southeast. The route for the proposed Casino road passes through the property. Access to the claim block in 1986 was by a Bell 206B helicopter operating from a base in Carmacks.

*Expiry dates listed assume acceptance of assessment credits resulting from the 1986 work program.

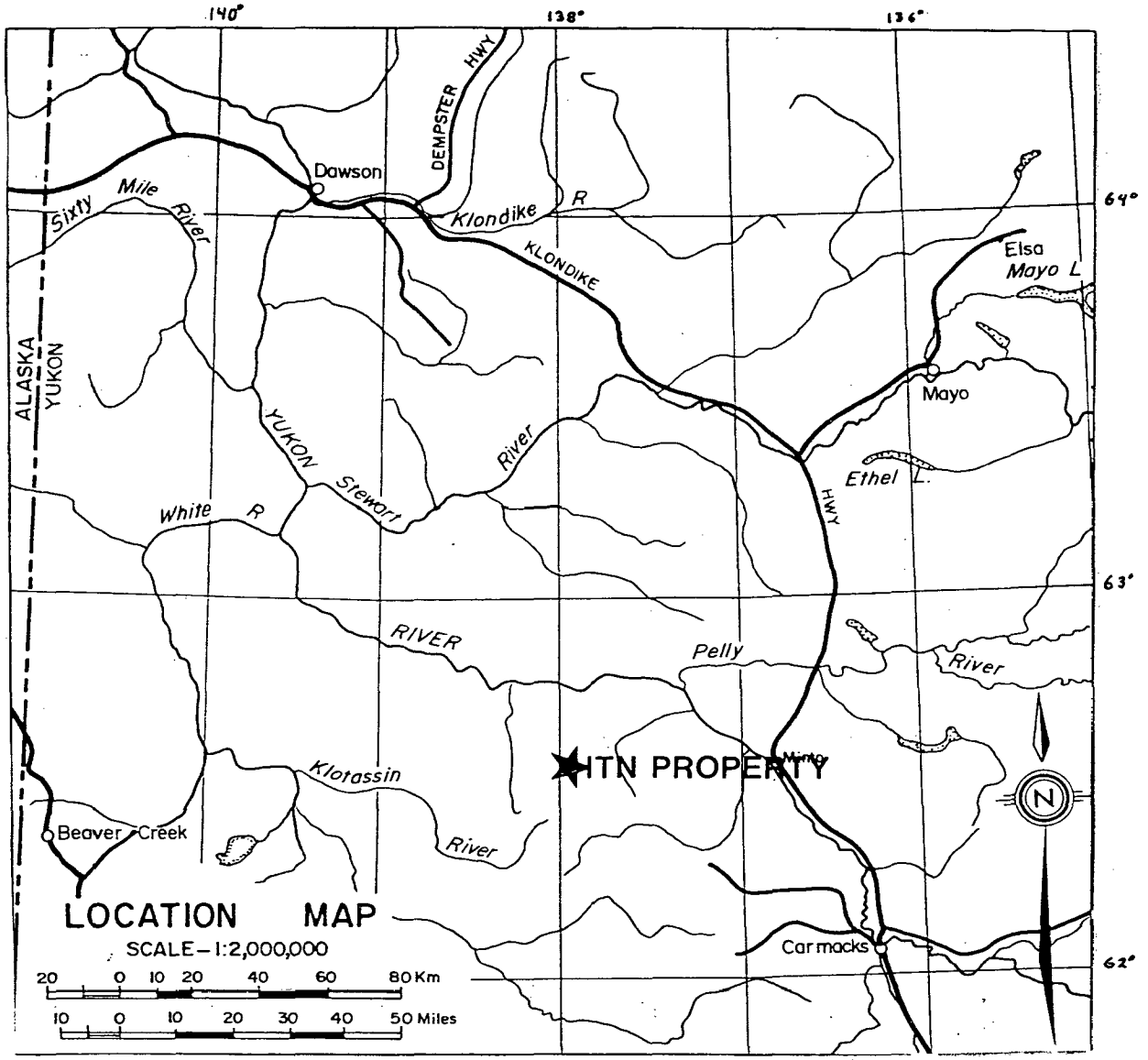


Figure 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

ITN PROPERTY

SILVERQUEST RESOURCES LTD.

PHYSIOGRAPHY AND GEOMORPHOLOGY

The ITN claims are situated in central Dawson Range near the headwaters of Hayes Creek. The property lies west of the creek and is drained by two northeast-flowing tributaries. Like most of the Dawson Range, this area escaped Pleistocene glaciation. Typical terrain consists of rounded ridge crests flanked by gentle north-facing and steep south-facing slopes. Local elevations range from 870 m in Hayes Creek Valley to 1285 m on ridge tops.

Soil development is generally poor and recent volcanic ash in organic soil often lies directly on broken bedrock. North-facing slopes and valley bottoms are underlain by permafrost and are vegetated with thick moss and black spruce. South-facing slopes are drier and support grasses with stands of poplar trees.

RESULTS

Geology of the ITN claims is detailed in a report submitted for assessment credit in 1985. Descriptions of the major lithologies are given below.

PALEOZOIC OR EARLIER

Pelly Gneiss (Psn) occurs in the southwestern part of the map area and consists of dirty quartzite, sericite-muscovite schist, amphibolite, chlorite schist and assorted gneisses. The chlorite schists often exhibit potassium feldspar and quartz veinlets that are conformable to foliation. Extensive hornfelsing is present adjacent to a granodiorite stock to the west.

CRETACEOUS

Coffee Creek Granite (Kg) underlies much of the property. It is normally a coarse-grained, equigranular, biotite-bearing leucogranite but grades locally to alaskite or quartz monzonite. All three phases are supergene clay altered, recessive weathering and form rusty subcrops.

Quartz-Feldspar Porphyry (Kmnr) consists of 2 to 5 mm quartz and feldspar phenocrysts in fine-grained to aphanitic felsic matrix. The unit is recessive and bright orange weathering. It forms a 200 m wide dyke in the southwest part of the claims truncating against a large, east-northeast trending fault, a 1000 m in diameter plug-like body located at the centre of the ITN claim block, and several small dykes scattered across the property.

Andesite (Kmn) occurs in dark, resistant weathering dykes and plugs cutting granite near the centre of the ITN claims. It consists of dark green porphyritic andesite with 2 to 3 mm plagioclase phenocrysts.

Detailed grid soil sampling on the property by Freegold Venture in 1985 outlined three areas of multi-element geochemical anomalies. These are termed A, B and C (Figure 2) and are summarized on Table II below:

TABLE II
SOIL GEOCHEMICAL ANOMALIES

Anomaly	Size of Gold Anomaly (m)	Maximum Values				
		Au(ppb)	Ag(ppm)	Pb(ppm)	Zn(ppm)	As(ppm)
A	300 x 200	1020	14.0	414	550	590
B	900 x 400	850	5.2	464	570	970
C	500 x 200	193	54.0	1550	420	880

Anomaly A was not tested by bulldozer trenching in 1986. A hand pit was excavated to about 0.5 m depth before heavy frost was encountered. This work was done to investigate a spot high value of 1020 ppb gold from a 1985 soil sample taken within Anomaly A. Three soil samples were taken at 10 cm intervals from the bottom of the pit. One composite sample of rock chips taken randomly from the pit was also analyzed. These results are shown below.

TABLE III
RESULTS OF HAND PIT - ANOMALY A

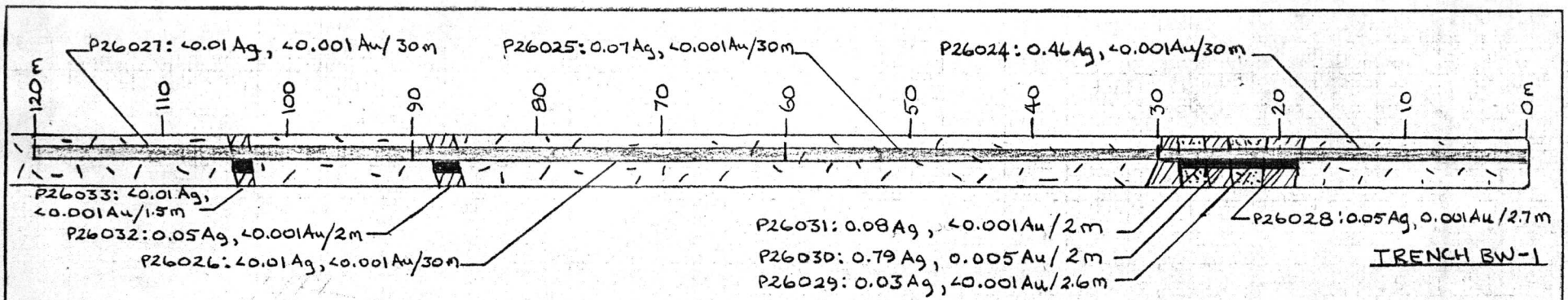
Sample Description	Sample No.	Ag (ppm)	Au(ppb)
1985 soil sample at 10 cm depth	P4780	N/A	1020
1986 soil sample at 30 cm depth	P26042	13.0	308
1986 soil sample at 40 cm depth	P26043	5.5	274
1986 soil sample at 50 cm depth	P26044	4.5	206
1986 random rock sample 10-50 cm depth	P26045	3.4	69

Decreasing values of silver and gold in soils with increasing depth suggests that the source of mineralization in Anomaly A lies upslope from the 1986 hand pit.

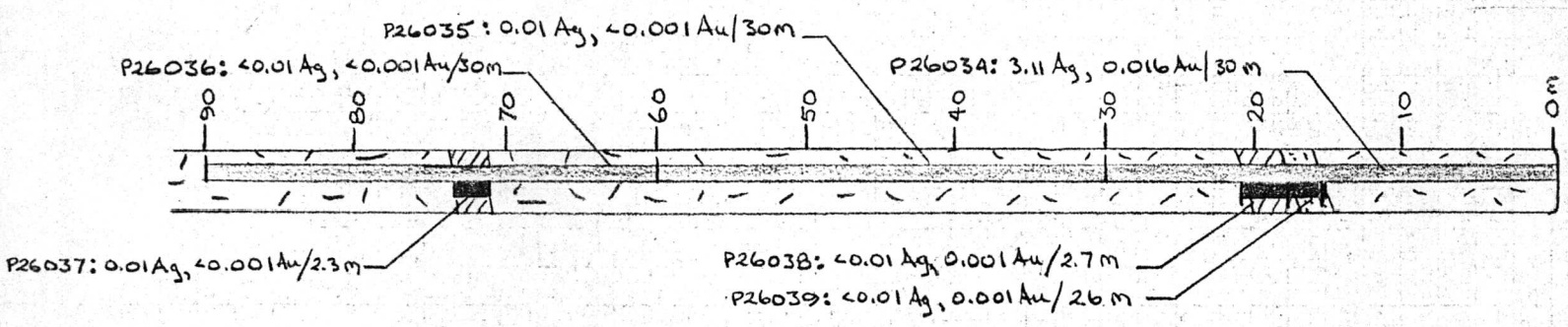
Trenches C,F, BW-3, BW-4, BW-5 and BW-6 were cut to explore the southeast, uphill edge of Anomaly B. Only trenches F and BW-4 penetrated the frozen overburden cover to bedrock. Trench F intersected a 14 m wide structure with a 2.4 m wide, heavily oxidized quartz vein on the hanging wall and an 11.5 m wide fault gouge/clay alteration zone along the footwall (Figure 3). The vein strikes 062°, dipping 70° to the northwest. A channel sample across the quartz vein assayed 0.15 oz/ton silver and 0.036 oz/ton gold over 2.4 m. The wallrocks are only weakly mineralized. The same structure was cut 25 m along strike to the northeast in Trench BW-4 (Figure 3). Here the quartz vein is located along the centre of a 15 m wide fault gouge/alteration zone. The quartz vein portion of the structure assayed 0.15 oz/ton silver and 0.005 oz/ton gold over 4.2 m. The hanging wall gouge/alteration zone assayed 1.9 oz/ton silver and 0.013 oz/ton gold over 4.2 m while the footwall section

assayed 0.18 oz/ton silver and 0.04 oz/ton gold over 6.7 m. Wallrocks on either side of the structure carry only trace values of gold and silver.

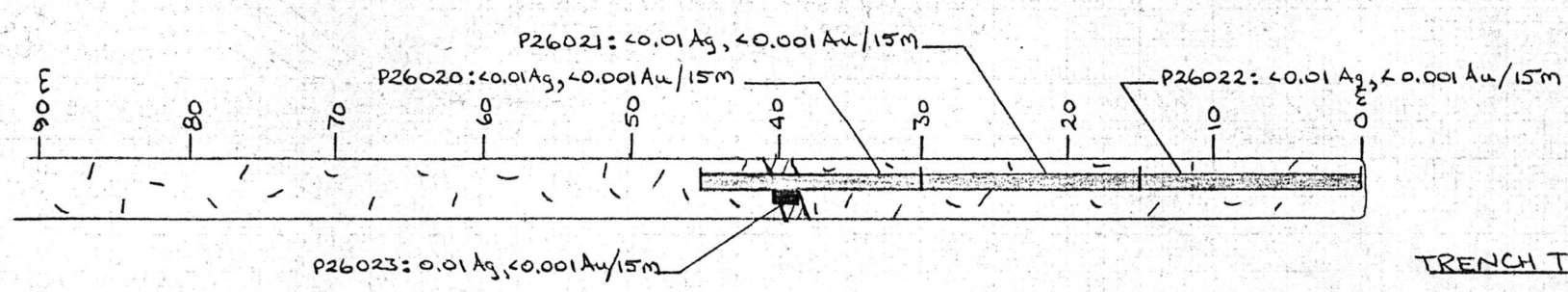
Trenches A, B, BW-1, BW-2 and TK-1 were excavated to explore Anomaly B. Only trenches BW-1, BW-2 and TK-1 penetrated the frozen overburden cover to bedrock along the lower intensity, southern half of the anomaly. A number of narrow fault gouge/alteration zones were intersected in the trenches. Channel samples of this material assayed only low values of silver (less than 1 oz/ton) and gold (less than 0.02 oz/ton). One 15 m long chip sample of weakly altered Cretaceous granite country rock taken from the east end of Trench BW-2 assayed 3.11 oz/ton silver and 0.016 oz/ton gold. This interval included a 5.3 m wide gouge/alteration zone which, sampled separately, assayed <0.01 oz/ton silver and 0.001 oz/ton Au.



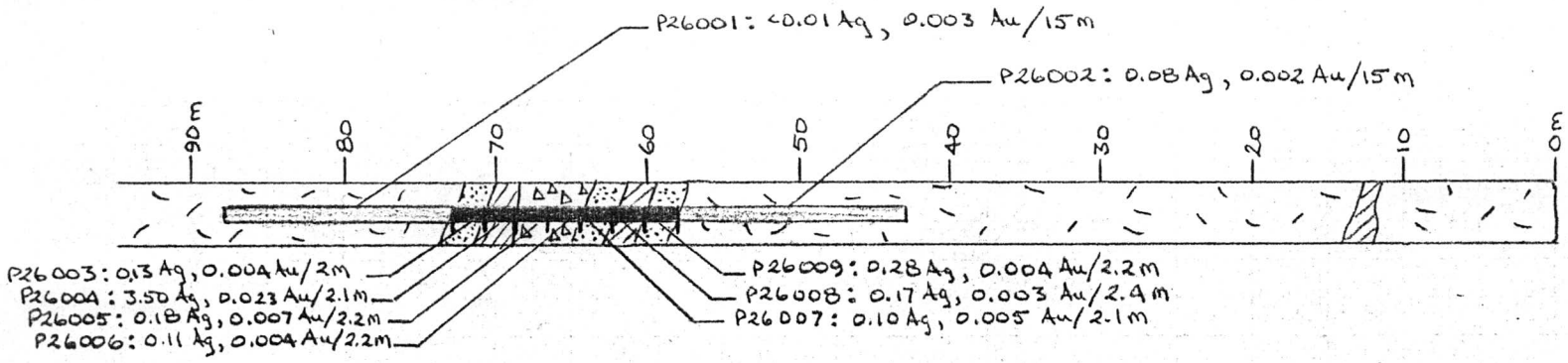
TRENCH BW-1



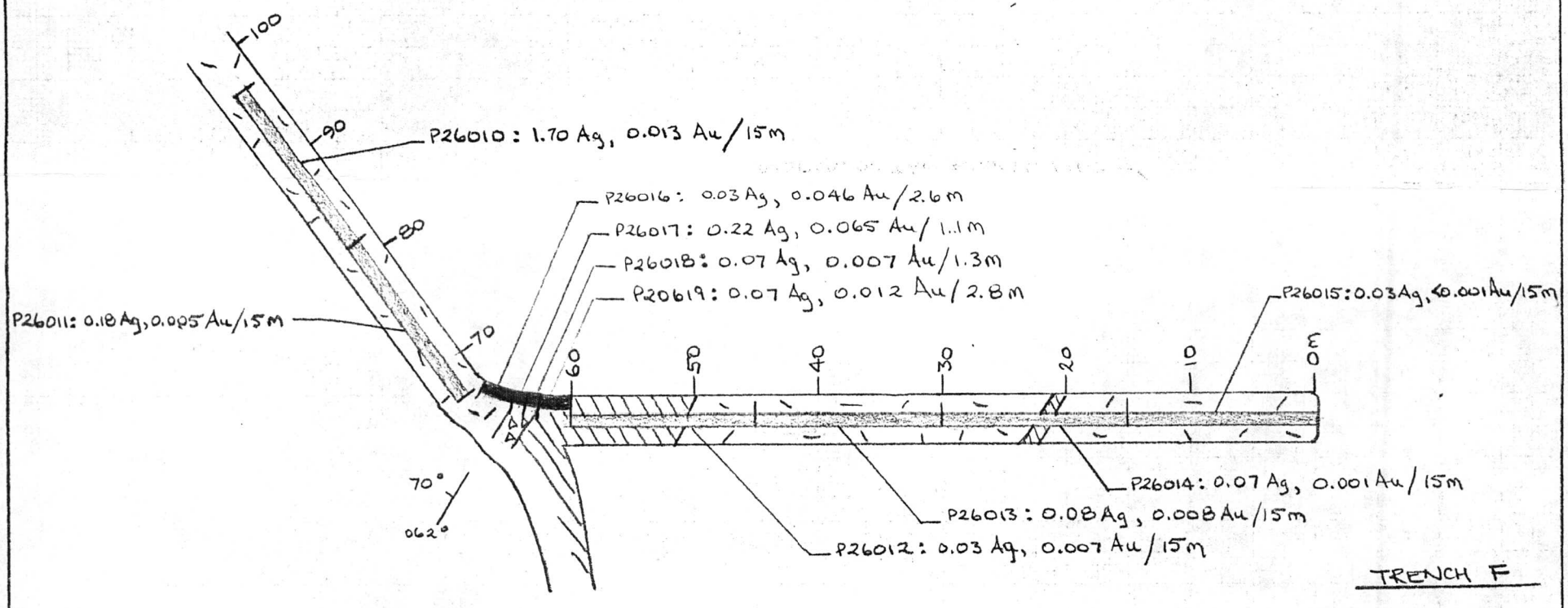
TRENCH BW-2



TRENCH TK-1



TRENCH BW-4



TRENCH F

SEE FIGURE 2 FOR TRENCH LOCATIONS

0 10 20 30 m

SCALE 1:500

- Cretaceous granite (Kg)
- argillic altered Kg
- fault gouge
- quartz vein

All assay values in oz/ton

- channel sample
- chip sample

FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

ITN CLAIMS

TRENCH DETAIL

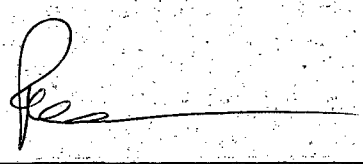
SILVERQUEST RESOURCES LTD

To Accompany Report Oct./86

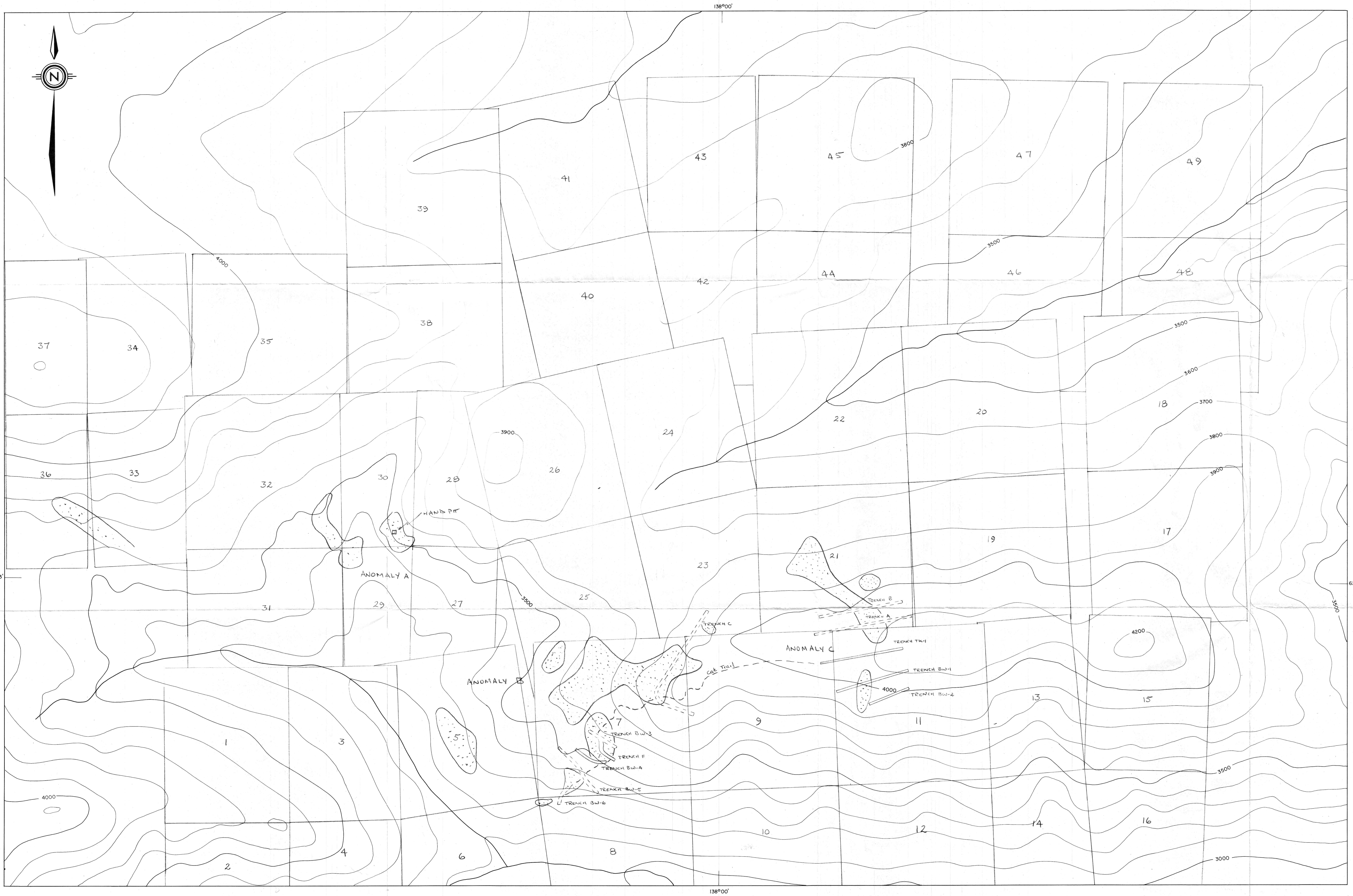
STATEMENT OF QUALIFICATIONS

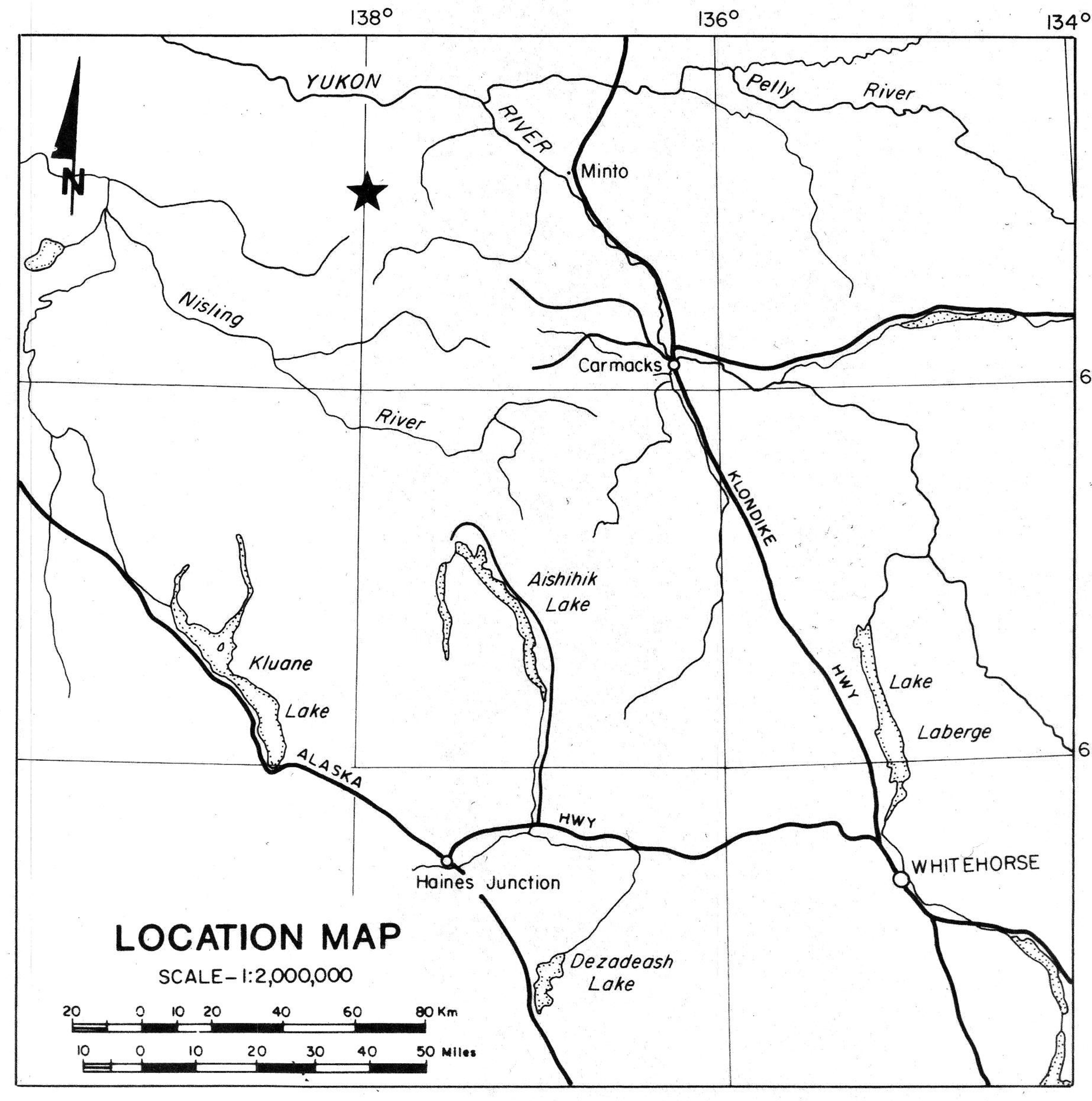
I, Robert C. Carne, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Burnaby, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1974 with a B.Sc. and in 1979 with an M.Sc. majoring in Geological Sciences.
2. I am a member of the Geological Association of Canada.
3. From 1974 to the present, I have been actively engaged as a geologist in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981 became a partner of Archer, Cathro & Associates (1981) Limited.
4. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



Robert C. Carne, B.Sc., M.Sc.





LEGEND

TRENCH TO BEDROCK

TRENCH NOT TO BEDROCK

GOLD >50ppb IN SOIL

3 ITN CLAIM NUMBER

Figure 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SUMMARY MAP

ITN CLAIMS

SILVERQUEST RESOURCES LTD.

0124-09560
TN27.48
C4
F79
C. 1

SCALE – 1:5,000

100 50 0 50 100 200 300 400 Metres

100 50 0 50 100 200 300 400 Yards

To accompany report dated October, 1986