

005942

PRELIMINARY REPORT

PELLY CLAIMS

(FINLAYSON LAKE PROJECT)  
YUKON TERRITORY

Lat  $61^{\circ} 47'$  Long  $131^{\circ} 05'$   
NTS 105G - 14E

March 29 - April 3, 1978  
J.W. MURTON

PRELIMINARY REPORT

PELLEY CLAIMS

(FINLAYSON LAKE PROJECT)

Lat  $61^{\circ} 47'$  Long  $131^{\circ} 05'$

NTS 105G - 14E

March 29 - April 3, 1978

by J.W. MURTON

KERR ADDISON MINES LIMITED

SUITE 703 - 1112 WEST PENDER STREET  
VANCOUVER, B.C. V6E 2S1  
PHONE 682-7401

April 6, 1978

TO: W.M. Sirola  
FROM: J.W. Murton  
SUBJECT: Reconnaissance Examination of Area 60 Miles East of Ross River,  
on East Side of Pelly River

Rumours heard by Bill Sirola of a new discovery of Pb - Zn float near the Pelly River, east of Ross River, led to an investigation into claim ownership and geology of a 30 square mile area centered at Lat 61° 47' and Long 131° 05'.

Recent mapping by Tempelman-Kluit of the G.S.C. indicated a large area of pale green chlorite muscovite quartz phyllite of uncertain age which was terminated to the east by a thrust fault with carboniferous to Permian basalt and minor augite porphyry, which in turn was terminated further east by a possible right lateral fault with upper Devonian conglomerates and black slates occurring on the uplifted east side. Earlier work in 1966 by Kerr Addison in the general area had terminated within 1 mile to the west of the reported float, but had indicated several locations of anomalous magnetics and/or geochemistry which were investigated at that time.

The reported float location turned out to be well covered with claims as is shown on the enclosed maps. However, while the float "owners" had staked as far east as the above-mentioned thrust fault, an interpretation of government aeromagnetics by the writer indicated only sporadic occurrences of basalt, and no apparent thrust contact. Open ground on strike with the float "show" now became apparent, and ground reconnaissance of the area began forthwith.

Alexander Po (magnetometer) and Wayne Murton (EM-16) ran lines as shown on the enclosed plan maps and attached profiles during the period March 29 to April 3. All EM-16 readings were taken facing S 35° W, using the Seattle transmitter, while all magnetometer readings taken with a Geometrics G-816 were taken facing north.

Staking was initiated immediately when no indications of basaltic cover were found, and anomalous characteristics of the EM-16 profiles were noted in the area north of the highway.

Approximately 88 "PELLEY" claims have been laid out as shown, with staking still in progress on April 5.

On returning through Whitehorse, a long conversation with the claim (float) owners was held. They are:-

Al Carlos,  
13 Aspen Drive,  
WHITEHORSE.

&

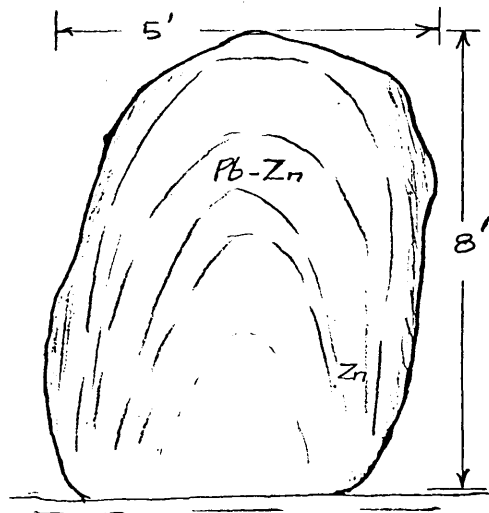
Glen Harris,  
707 Black Street,  
WHITEHORSE.

Tel: 633-2633

Tel: 667-7277

Both men responded very favourably to our overtures. A. Po was especially helpful to them in comparing their mineralization and rock with Grum, and we parted on very good terms. While they have previously optioned ground to the west of their showing to Dupont, they do not wish to deal with anyone at present on their main area of the float discovery. Kerr Addison will, however, be at the top of the list should further discussions be considered by the owners, which will become more probable as work progresses on their large block of ground.

The float showing was found on the south-west bank of a small creek west of the Pelly River, and other smaller float "more quartz and zinc" was found further south-west. Glaciation in the area is east → west, and bedrock (foliation?) in the area strikes east-west and dips shallowly north. The main float boulder is approximately 8' tall and 5' wide with a tight fold, indicated from pictures seen in Whitehorse thusly:



The limbs of the fold are more zinc rich while the nose or centre of the fold has more lead with the zinc, giving a massive sulphide appearance on a cut section. Very approximate composition of the "massive sulphide" sections would be

Quartz	10 - 20%
Pyrite	30 - 40%
Lead	10 - 20%
Zinc	10 - 30%

with the following assays shown to us.

Zinc rich "limb" area	-	Ag 0.5 oz/t	Pb 1.5%	Zn 20%
Pb - Zn "nose" area	-	Ag 3.5 oz/t	Pb 10.3%	Zn 21%

Specimens of the more quartz-zinc rich smaller float found south-west of the large boulder would assay (visually) no more than 2 - 3% Zn with little to no Pb and about 1% Py in a quartz rich gangue.

The host rock in the large boulder is a grey-green sericite-chlorite phyllite with many similarities to Grum's "bleached sericite phyllite" (A. Po). The prospectors report a heavy graphitic zone lying about a mile to the north of the float. No float has been found as yet in an up ice direction (to the east), but heavy secondary limonite has been reported east of the float, on the east bank of the Pelly River. Old Pelly River derived sand masks the general low area. Rock exposure is very sparse, making exploration and development of a valid stratigraphic section difficult. The prospectors have had some limited success with geochemistry and magnetics and are currently running gravity and pulse E.M.

It is recommended that Kerr Addison run geochemistry, E.M. and magnetic surveys over the Pelly claims as soon as conditions permit. If any further encouragement is encountered, basal till sampling and gravity should be considered when funds are available. In addition, if any other successes are reported in the area, an airborne E.M. and Mag. survey should be run over the favourable geological units lying to the south where unstaked ground occurs, with geological investigation carried out to the south-east of our claimed area. Possibly similar geological units may occur across the fault contact.

Approximately 50 line miles (80 line kilometers) would be required to cover all the claims with lines 500' (150 meters) apart.

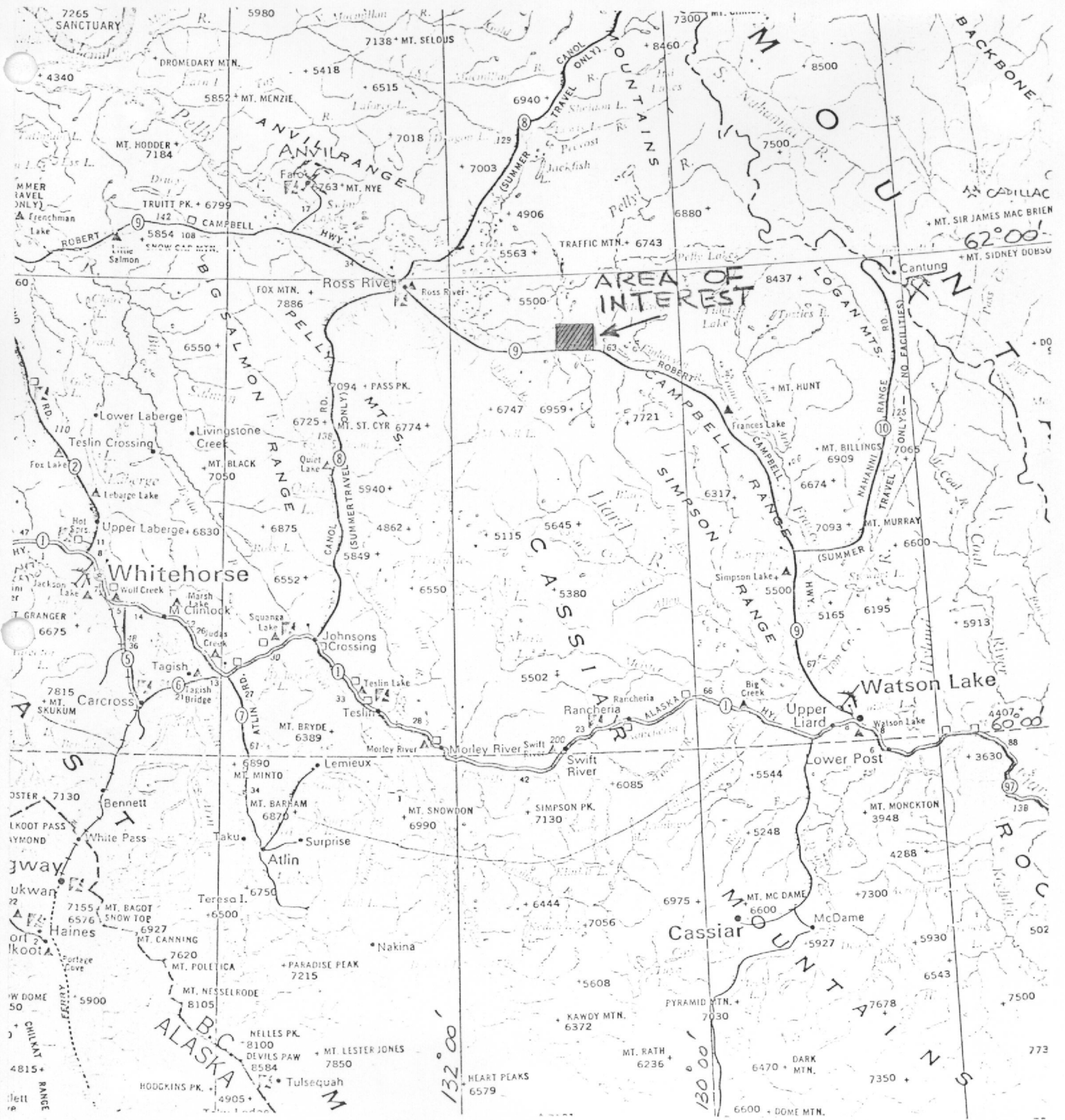


J.W. Murton

JWM:meb

LIST OF ILLUSTRATIONS

Fig (1) Location Map	1" = 40 miles
Fig (2) Geology Map	1 : 250,000
Fig (3) Claim Map	1" = ½ mile
Fig (4) Composite Plan	1 : 50,000
Fig 5 - 10 Line Profiles	1" = 500'
5) Day 1 - Line to North of Highway	
6) Day 2 - Loop line to South of Highway	
7) and tied to Day 1 line	
8)	
9) Line to South of Highway and crossing	
10) Major Fault	



LOCATION MAP  
SCALE 1" = 40 MILES

Fig. 1

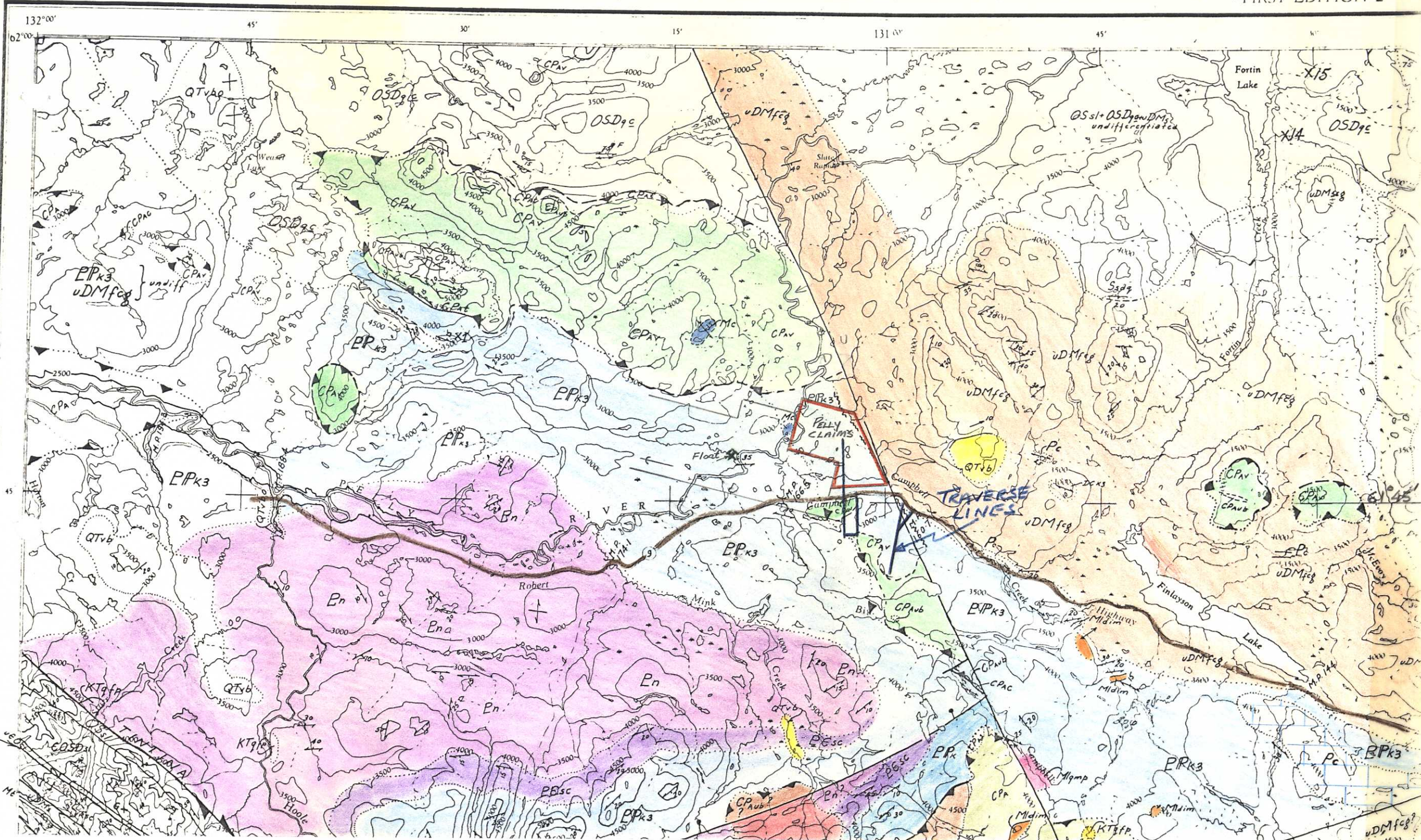
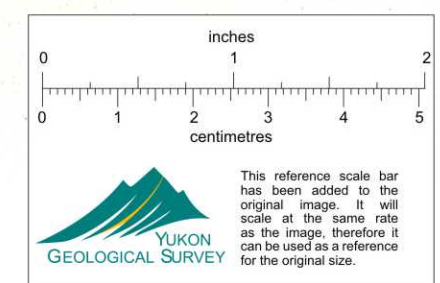


Fig 2  
1:250,000

- INTRUSIVE ROCKS**  
POST- (&SYN?) TECTONIC
- KTqD** CRETACEOUS  
Fresh, acid and intermediate, subvolcanic and volcanic rocks including two main types not differentiated, a dark weathering dacite with stubby hornblendes in a dark green aphanitic groundmass and rusty weathering rhyolite with clear quartz and white albite phenocrysts (locally pyritic)
  - Kmp** Blocky, resistant, medium grey weathering, fine-grained biotite quartz monzonite with smoky quartz and white albite euhedra in a quartzo-feldspathic groundmass; gradational with Kqm
  - Kqm** Resistant, blocky weathering, mainly equigranular medium-grained, but locally porphyritic (white K-feldspar), homogeneous grey biotite quartz monzonite and lesser granodiorite; contacts with En are arbitrary and based on the proportion of plutonic rock to the schist
  - Kqm+** Biotite quartz monzonite with numerous screens and pendants of schist and gneiss, mainly En; contacts with En are arbitrary
  - Msdm** MESOZOIC?  
Dark grey weathering equigranular medium-grained hornblende diorite; occurs as sills

**ALLOCHTHONOUS ROCKS**  
OMMECA CRYSTALLINE BELT

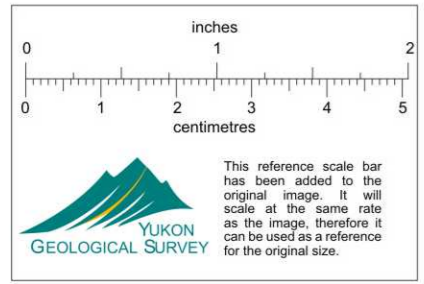
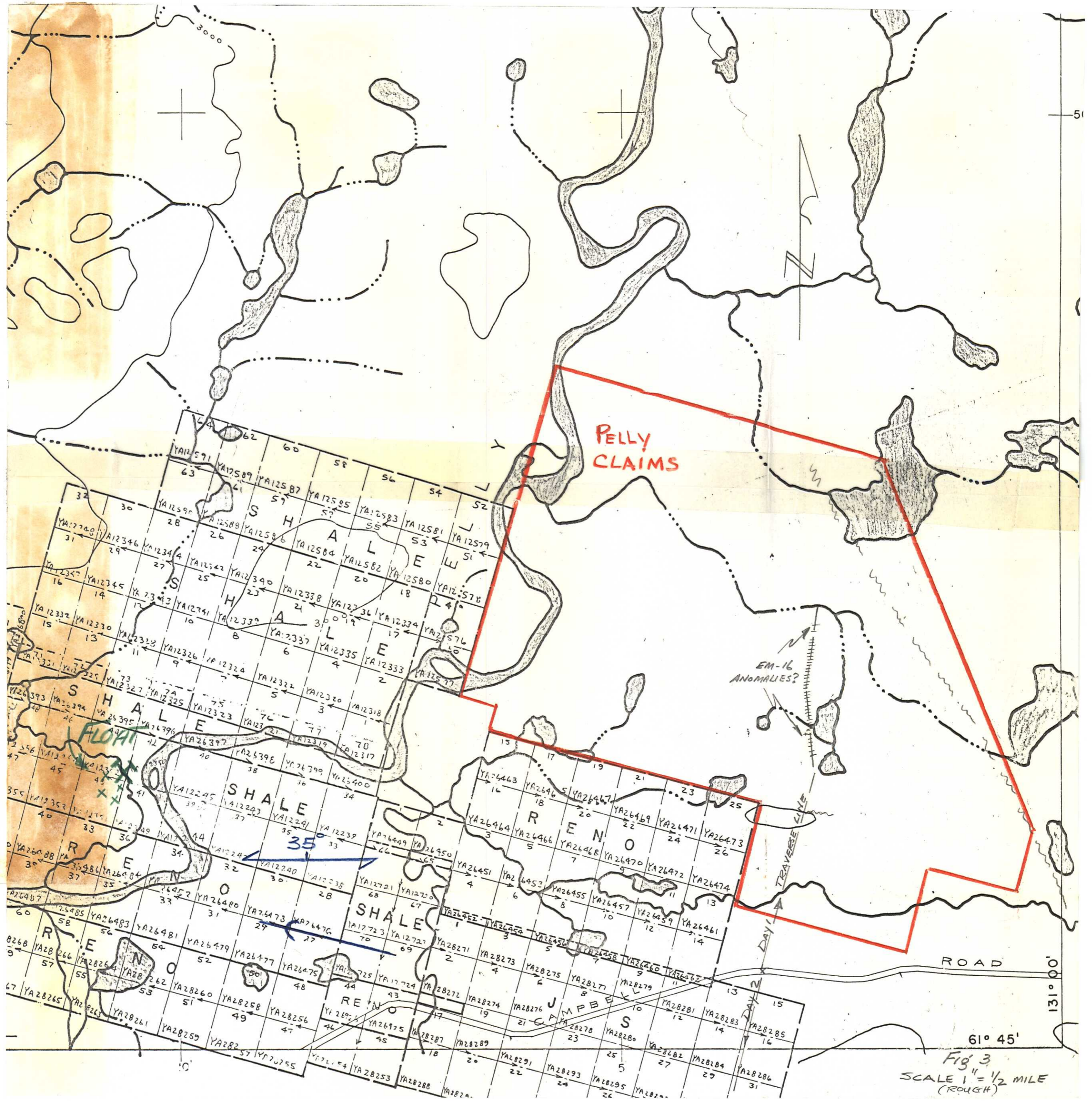
- SIMPSON RANGE ALLOCHTHONOUS ASSEMBLAGE**  
DEVONIAN TO TRIASSIC?
- Mmp** Resistant, medium grey weathering porphyritic (pink K-feldspar) biotite quartz monzonite; generally fresh to weakly saussuritized, locally shattered and recemented, but lacking the cataclastic texture of PMqdm; includes PM gdm undifferentiated
  - PMqdm** Massive, resistant, medium-grey weathering, blocky, dark green protomylonite and mylonite derived from hornblende granodiorite to quartz diorite. In places the original texture and minerals are fairly fresh and the rock is equigranular medium-grained with subhedral hornblende and blue quartz grains. For the most part the rocks are strongly saussuritized and now appear as quartz chlorite feldspar schist. Locally euhedral white K-feldspar crystals to 5 cm. across are grown across the cataclastic texture. May include Mmp undifferentiated.
  - PMqdm** Light rusty weathering, yellow greenish mylonite and ultramylonite derived from hornblende quartz diorite; boundaries with PMqdm are arbitrary.



- ANWIL-CAMPBELL ALLOCHTHONOUS ASSEMBLAGE**  
CARBONIFEROUS AND PERMIAN (POSSIBLY OLDER)
- CPAv** Resistant, dark grey weathering, massive, dark green aphanitic basalt and minor augite porphyry; includes CPAb and CPAs undifferentiated
  - CPAt** Recessive, Jasper-red and apple-green chert and cherty tuff; includes CPAv undifferentiated
  - CPAb** Dark grey weathering, resistant, massive medium-grained pyroxene gabbro; includes CPAs and CPAv undifferentiated
  - CPAub** Resistant dun brown weathering dunite, peridotite and pyroxenite and serpentinized equivalents; includes CPAs and CPAt undifferentiated
  - CPAs** Yellow green weathering serpentinized peridotite and pyroxenite; includes CPAt and CPAub undifferentiated
  - CPAc** Resistant, orange weathering quartz carbonate rock with minor green chromian muscovite; includes CPAs undifferentiated

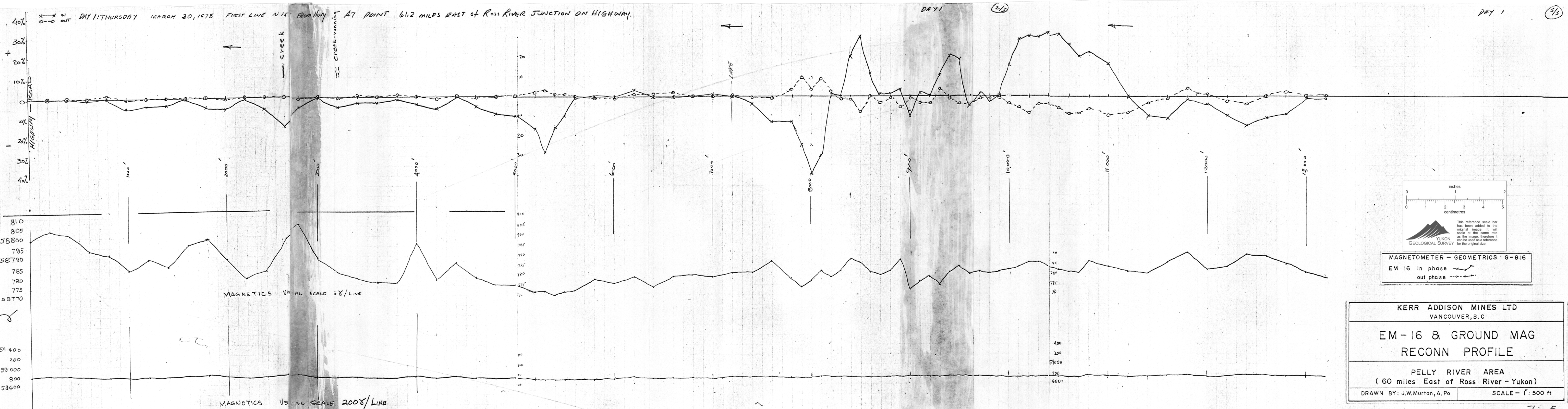
**AUTOCHTHONOUS AND PARAUTOCHTHONOUS ROCKS**  
PELTY-CASSIAR PLATFORM

- CARBONIFEROUS OR PERMIAN**
- PL** White weathering, resistant, massive light grey recrystallized crinoidal limestone; commonly has well developed flaser texture and grades into a marble blastomylonite; includes minor EPk undifferentiated
  - MT** Rusty orange weathering, pale green cherty textured volcanic rocks of intermediate composition with less greenish chert; minor black slate; massive medium green intermediate lapilli tuff
- UPPER DEVONIAN AND MISSISSIPPIAN**
- UDMfc** Resistant, medium grey, chert pebble conglomerate with minor interbedded black slate. For the most part the rocks have a well developed cataclastic texture so that they grade into graphitic siliceous phyllonite
  - UDMs** Black recessive weathering, with rusty streaks, thinbedded black siliceous slate with minor interbedded chert grain greywacke and chert granule grit
- SILURIAN AND LOWER DEVONIAN**  
NASINA FACIES
- SDQC** Recessive, dark grey to black weathering thinbedded and platy, calcareous and dolomitic graphitic siltstone with minor black graphitic slate; gradational with and contains lenses of SdQ and SdQ undifferentiated
- SANDPILE GROUP**
- SdQ** Interbedded, white weathering, resistant, medium bedded, light grey, algal laminate and sparry dolomite, orthoquartzite and sandy dolomite
  - SQ** Silvery white weathering, resistant, medium bedded, medium-grained nature orthoquartzite commonly with dolomitic cement; minor interbedded sandy dolomite
  - Sd** Resistant, light grey and white weathering, massive, medium grey, medium bedded, laminated to sucrose, dolomite; minor sandy dolomite
- SILURIAN**
- Ss** Tan weathering, thinbedded to platy, dolomitic siltstone and silty dolomite
  - Sshf** White weathering, thinly laminated white and green hornfels; probably the thermally metamorphosed equivalent of Ss; may include thermally metamorphosed equivalents of SdQ and SQ
- UPPER CAMBRIAN AND ORDOVICIAN**  
KECHIKA GROUP
- UCOs1** Orange brown weathering, recessive, medium grey slate and slate phyllite with lenses of pale green tuff; minor calcareous phyllite
- WINDERMERE AND LOWER CAMBRIAN**
- ELCSg** Dark grey weathering, medium green silty slate with some interbedded greywacke made up of white quartz grit in a greenish matrix
  - ELChf** Rusty weathering, green, white and purplish banded hornfels; thermally metamorphosed equivalents of the late Windermere green silty slate (ELCSg)
- ?ALLOCHTHONOUS?**
- AGE UNKNOWN**
- KLONDIKE SCHIST**
- EPk5** Resistant weathering metaquartzite with minor graphitic slate
  - EPk1** Slightly rusty weathering, white to pale green, muscovite quartz blastomylonite; includes minor fine-grained amphibole and chlorite quartz and biotite quartz blastomylonite
  - EPk3** Pale green muscovite chlorite quartz phyllite and medium green amphibole chlorite phyllite; includes minor black marble; generally strongly sheared with a well developed, slightly recrystallized, cataclastic texture
  - EPk2** Black siliceous phyllite and medium green amphibole chlorite phyllite; locally includes much interbedded gritty and pebbly greywacke containing clasts of blue quartz, white K-feldspar and slate chips; locally includes thin black marble lenses undifferentiated; for the most part the rocks are strongly sheared phyllonite
  - EPk4** Fairly resistant medium grey weathering, muscovite biotite quartzo-feldspathic gneiss with interfoliated chlorite biotite quartzite, quartz chlorite schist, amphibole chlorite schist and minor white marble; the more metamorphosed equivalent of EPk2 and EPk3; relationships between EPk2, EPk3 and EPk4 are gradational; in the southeast part of the area EPk4 and En are gradational with each other
- ?AUTOCHTHONOUS? ROCKS**  
OMMECA CRYSTALLINE BELT
- ?WINDERMERE AND CAMBRIAN?**
- BSsc** Buff weathering bioseite garnet muscovite schist with interfoliated lenses of coarsely crystalline, light grey marble; includes minor augen gneiss; structurally gradational with augen gneiss (En)
  - En** Blocky, medium grey weathering, biotite muscovite quartz feldspar augen gneiss of quartz monzonite composition with minor interfoliated biotite muscovite quartz schist; laterally gradational to En+; boundaries arbitrary
  - En+** Injection migmatite consisting of sills and dykes of fine grained biotite quartz monzonite, aplite and pegmatite, in biotite muscovite augen gneiss and schist; proportion of injected plutonic rocks to the host schist varies widely. Contacts with Kqm are arbitrary, based on the proportion of plutonic rock to schist.
  - En+Kqm** Augen gneiss En, injection migmatite En+ and biotite quartz monzonite Kqm, undifferentiated



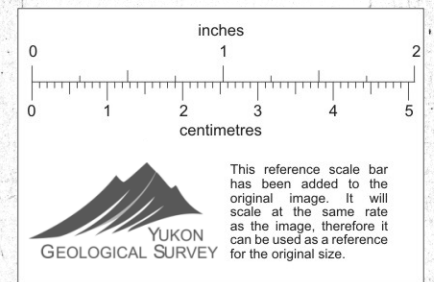
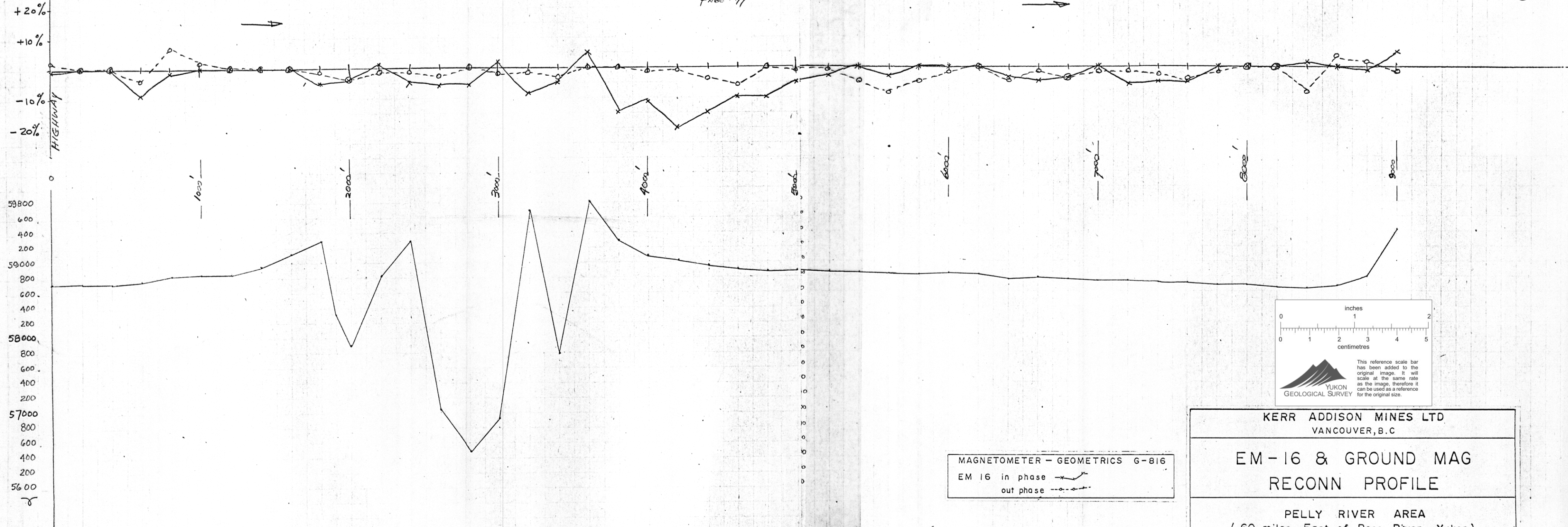
61° 45'  
Fig 3  
SCALE 1" = 1/2 MILE  
(ROUGH)





DAY 2 MARCH 31, 1978 ROSS RIVER Loop Line Origin from highway Line S15°W (South extension of Line DAY 1) 1/2 2/2 DAY 2 LINE S15°W

2/2



MAGNETOMETER - GEOMETRICS G-816  
 EM 16 in phase — x —  
 EM 16 out phase — o —

KERR ADDISON MINES LTD.  
 VANCOUVER, B.C.

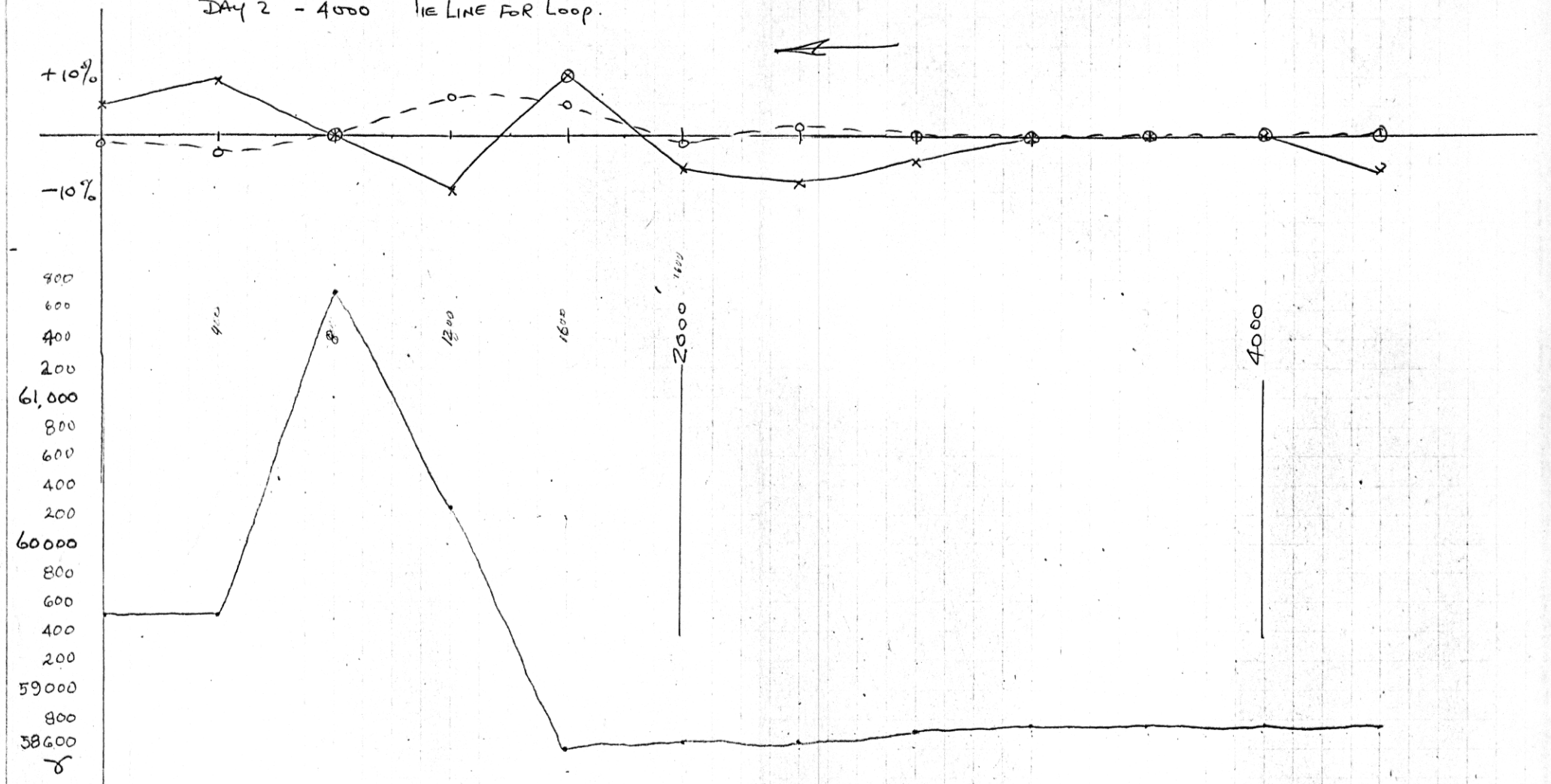
EM-16 & GROUND MAG  
 RECONN PROFILE

PELLY RIVER AREA  
 (60 miles East of Ross River - Yukon)

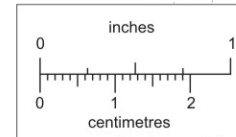
DRAWN BY: J.W. Murton, A. Po      SCALE - 1" : 500 ft

Fig. 6

DAY 2 - 4000' TIE LINE FOR LOOP.



900  
600  
400  
200  
61,000  
800  
600  
400  
200  
60000  
800  
600  
400  
200  
59000  
800  
38600  
8



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

MAGNETOMETER - GEOMETRICS G-816  
EM 16 in phase   
out phase

KERR ADDISON MINES LTD VANCOUVER, B.C.	
EM-16 & GROUND MAG RECONN PROFILE	
PELLY RIVER AREA (60 miles East of Ross River - Yukon)	
DRAWN BY: J.W. Murton, A. Po	SCALE - 1" : 500 ft

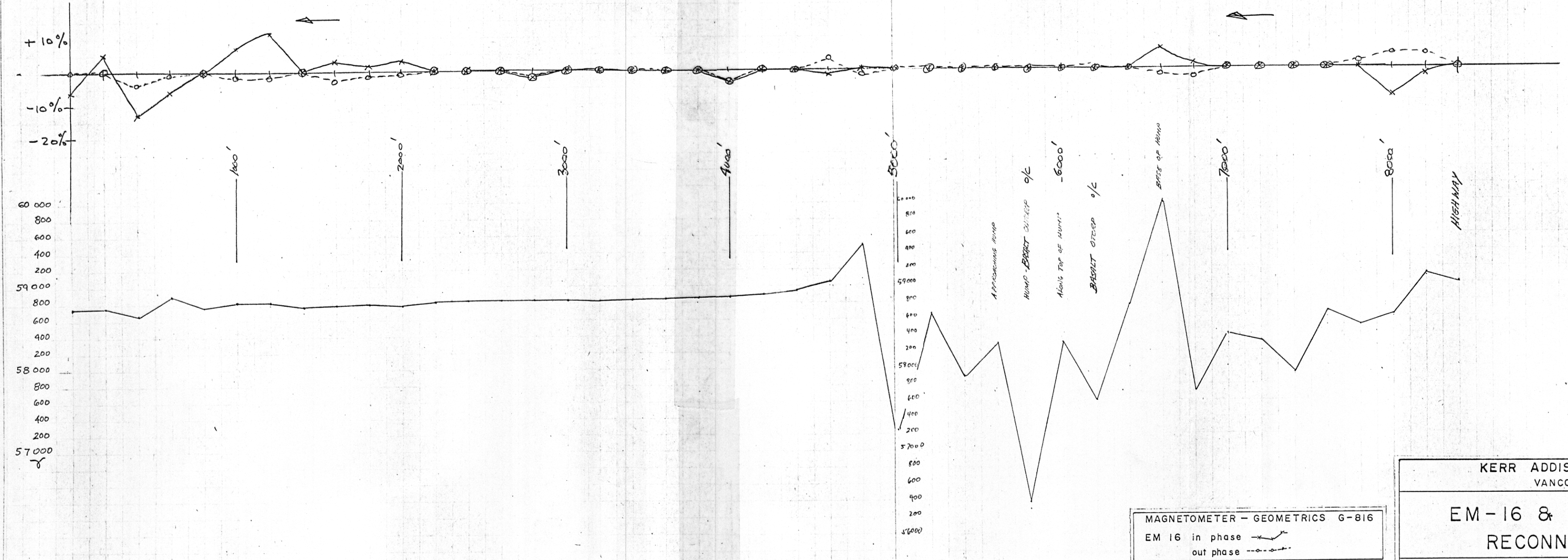
Fig 7

DAY 2 Loop Line towards Highway TREND N15°E MARCH 31, 1978

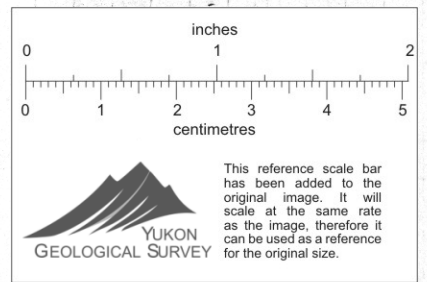
1/2

DAY 2 TREND N15°E (LOOP LINE TOWARDS HIGHWAY)

2/2

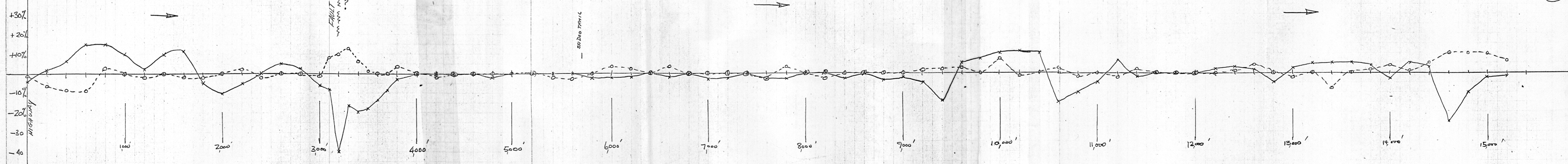


MAGNETOMETER - GEOMETRICS G-816  
 EM 16 in phase ———  
 out phase - - - - -



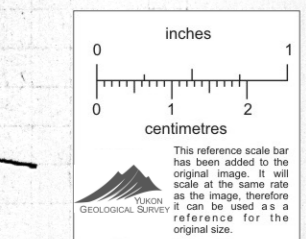
KERR ADDISON MINES LTD VANCOUVER, B.C.	
EM-16 & GROUND MAG RECONN PROFILE	
PELLY RIVER AREA (60 miles East of Ross River - Yukon)	
DRAWN BY: J.W. Murton, A. Po	SCALE - 1" : 500 ft

DAY 3 APRIL 1 TRAVERSE TO SOUTH OF ROAD ACROSS FAULT (1/3) DAY 3 (2/3) DAY 3 (3/3)



— 650  
 — 600  
 — 550  
 — 50,500  $\sigma$

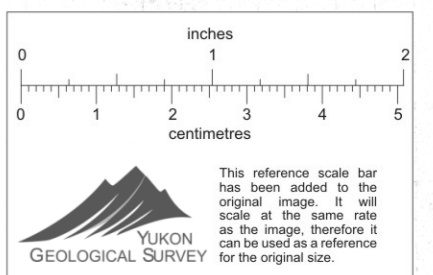
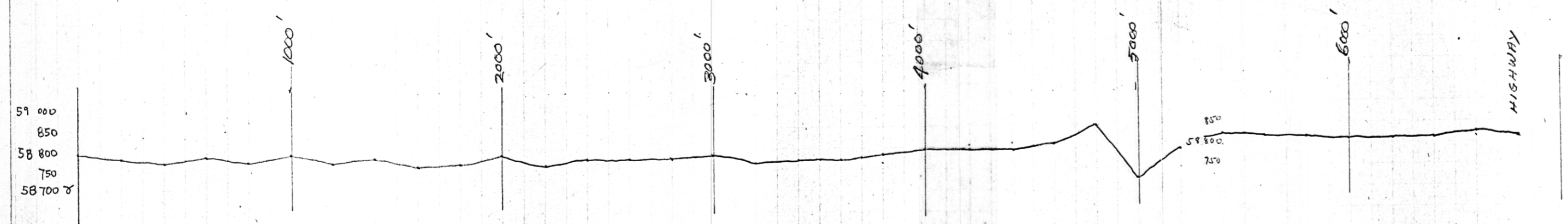
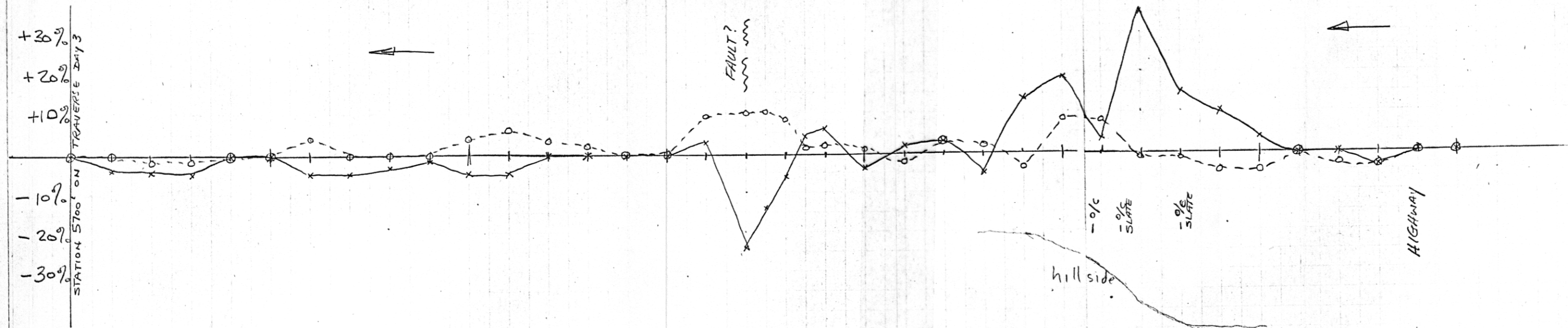
MAGNETOMETER - GEOMETRICS G-816  
 EM 16 in phase — x —  
 out phase - - - o - - -



KERR ADDISON MINES LTD  
 VANCOUVER, B.C.  
 EM-16 & GROUND MAG  
 RECONN PROFILE  
 PELLY RIVER AREA  
 (60 miles East of Ross River - Yukon)  
 DRAWN BY: J.W. Murton, A. Po SCALE - 1" = 500 ft

DAY 3 APRIL 1 - TRAVERSE ALONG SKIDOO TRAIL → TOWARDS HIGHWAY FROM 5700' Sta. of main traverse (1/2)

DAY 3 APRIL 1 - TRAVERSE ALONG SKIDOO TRAIL → TOWARDS HIGHWAY



MAGNETOMETER - GEOMETRICS G-816  
 EM 16 in phase — x —  
 out phase — o —

KERR ADDISON MINES LTD VANCOUVER, B.C.	
EM-16 & GROUND MAG RECONN PROFILE	
PELLY RIVER AREA (60 miles East of Ross River - Yukon)	
DRAWN BY: J.W. Murton, A. Po	SCALE - 1" : 500 ft

FIG 10