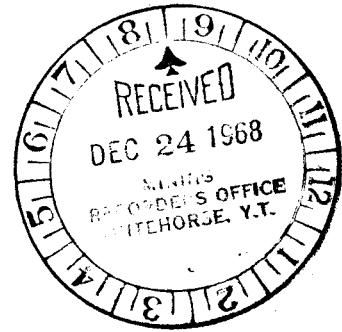


A REPORT  
ON  
A GROUND MAGNETIC  
AND  
INDUCED POLARIZATION SURVEY



FOR

GAYLORD MINES LIMITED  
NEW PRIVATEER MINE LIMITED  
QUATSINO COPPER-GOLD MINES LIMITED  
VANCOUVER, BRITISH COLUMBIA

BY

EAGLE GEOPHYSICS LIMITED  
VANCOUVER, BRITISH COLUMBIA

NOVEMBER 1968.

This report has been examined by  
the Geological Survey of Canada Unit.  
Approved for release by:  
*D. J. [unclear]*  
Approved for release by:  
of \$ 9613.91 amount  
*R. G. [unclear]*  
Approved for release by:  
under the [unclear] Quartz  
Mining [unclear]  
*[Signature]*  
COMMISSIONER



## INTRODUCTION

Between August 22nd and November 3rd, 1968, Eagle Geophysics Limited carried out a combined Linecutting, Ground Magnetic and Induced Polarization survey program on a property, located in the White River Area of the Yukon Territory, held by Gaylord Mines Limited, New Privateer Mine Limited and Quatsino Copper-Gold Mines Limited.

The survey was carried out over handcut lines which were turned off at right angles every 400 feet from a N 125°E baseline, and which were chained and picketed at 100 foot intervals.

Readings on the magnetic survey were taken every 100 feet along the picket lines using a Sharpe M.F.1 fluxgate magnetometer with additional readings at 50 foot intervals when deemed necessary. Magnetic measurements were also made on 'paced intermediate lines' in the region of magnetic features.

Measurements of apparent chargeability (the I.P. response parameter) were made over the entire line grid using the 'three electrode array' method with an electrode separation of 200 feet and a station interval of 200 feet. Simultaneous measurements of apparent resistivity were also made.

In addition, measurements of apparent chargeability and resistivity were made over interpreted anomalous areas using electrode separations of 100, 200 and 400 feet respectively and appropriate station intervals.

The data are presented on plan maps of the line grid, Maps E-129, 2 to 7 at a scale of 1 inch equals 200 feet. The reconnaissance chargeability and resistivity readings are presented in profile form on Map E-129-2 while the detail readings are in profile form on Map 129, 4 and 5. The '200 foot separation' detail chargeability and the reconnaissance and detail magnetic readings are shown in contoured form on Map E-129-6, 3 and 7 respectively.

PROPERTY AND LOCATION

The property consists of 48 contiguous, unpatented mining claims, registered in Whitehorse, Yukon Territory as follows:

<u>CLAIM NAME</u>	<u>GRANT NUMBER</u>	<u>EXPIRY DATE</u>
NACK 1-48	Y-21508-Y21555	December 13, 1968

Ownership in this group of claims is apportioned as follows:

Gaylord Mines Limited	$\frac{1}{2}$
New Privateer Mine Limited	$\frac{1}{4}$
Quatsino Copper-Gold Mines Limited	$\frac{1}{4}$

The claims are situated near the junction of the White and Generc Rivers at latitude  $61^{\circ} 45' N$  and longitude  $140^{\circ} 42' W$ . They lie 15 miles to the north of the ice field ranges of the St. Elias Mountains and 8 miles to the east of the Alaska-Yukon border.

Access to the property can be obtained by several alternate means. (1) Directly by helicopter, 220 miles from Whitehorse, or 15 miles from Mile 1168 on the Alaska Highway. (2) By fixed wing aircraft which can land on Rifle Lake, approximately two miles north of the property. (3) By an 18 mile winter tote road, impassable in summer, from the Alaska Highway to the United Pemtex Camp, and by a four mile trail from the latter to the property.

On this October survey, access was obtained by helicopter.

PURPOSE

The purpose of the survey was to assess the mineral potential of the most favourable portion of the claim group using magnetic and induced polarization techniques as recommended by B. Dudley Brett and Peter E. Walcott in their geological report dated July 1968.

## GEOLOGY

### GENERAL GEOLOGY OF THE AREA

Glacial drift, a recent layer of thick volcanic ash, and a vegetive cover effectively blankets most of the region with the exception of the edges of the higher hills and ridges.

Sporadic outcroppings of two rock units occur in the general vicinity of the NACK and surrounding claim groups. These are the Permian Cache Creek Group of altered andesite tuffs and breccias overlain in places by crinoidal limestone, and the Upper Triassic Mush Lake Group of porphyritic and amygdaloidal andesite.

Rock outcroppings occur on the periphery of Slaggard Ridge, which runs through the middle of the NACK Claim Group. Altered volcanics of the Cache Creek Group, mostly medium to fine grained, light grey to light green andesitic tuffs and amygdaloidal breccias, with some greenish fine grained amygdaloidal flows in places, occur on the top of the ridge, while volcanic andesitic rocks resembling the Mush Lake Group are found along the northeastern part of the ridge. The latter are commonly dark green in colour, and are fine to medium grained amygdaloidal andesites. Most of the volcanic rocks contain finely disseminated magnetite and pyrite.

Crinoidal limestone and altered equivalents of the Cache Creek Group are found on the cliff slopes flanking Rifle Lake, 6,000 feet to the north of the claims.

The presence of a northwest trending thrust fault at the eastern base of Slaggard Ridge is indicated by regional geological mapping (G.S.C. Map 1177A).

ECONOMIC GEOLOGY OF THE AREA

Native copper and chalcocite mineralization occur in a complex fracture zone in dark green flows of the Mush Lake Group at the United Pemetex property, approximately  $2\frac{1}{2}$  miles to the northwest of the SHARE claim group. This mineralization was tested by diamond drilling with inconclusive results with the result that magnetic and induced polarization surveys were undertaken this last summer to define the extent of possible mineralization, and a further drilling program based on these latter results, is now being initiated.

An occurrence of chalcopyrite mineralization has been located in the Cache Creek Group on the property of Canyon City Mines Limited, nine miles to the northwest.

## GEOLOGY OF THE PROPERTY

Glacial drift, volcanic ash and vegetation entirely cover the part of the property surveyed, while outcroppings of Cache Creek volcanics are reported to occur in the southeast portion. However, in the writer's opinion, the underlying rocks are expected to be the same as those outcropping on and around Slaggard Ridge, namely Cache Creek and Mush Lake volcanics with possibly some Cache Creek limestone.

An elongated draw runs northwest - southeast through that part of the property surveyed and continues onto the NACK claims. This draw approximately parallels the eastern flank of Slaggard Ridge and could possibly be indicative of a parallel thrust fault.

Glacial drift, volcanic ash and vegetation cover the greater part of the property, while outcroppings of the Cache Creek and Mush Lake Groups occur on the periphery of Slaggard Ridge.

Pronounced faulting is evident along the ridge flank in the inferred Mush Lake volcanics, and it is obvious that the rocks have undergone some alteration with the development of much chlorite, epidote and carbonate. The degree of alteration and the presence of minor faulting on the flank of the ridge are probably related to the major thrust at the base of Slaggard Ridge.

An elongated draw runs northwest - southeast through part of the property and continues onto the adjoining SHARE claims. This draw approximately parallels the eastern flank of Slaggard Ridge and could possibly be indicative of a parallel thrust.

No economic mineralization has been reported on the property.

## SURVEY SPECIFICATIONS

The Induced Polarization (I.P.) Survey was carried out using a pulse-type system manufactured by Hunttec Limited of Toronto, Ontario. Measurements with this system are made in the time domain.

The system consists basically of three units, a receiver, a transmitter and a motor-generator. The transmitter, which provides a maximum of 2.5 kw d.c. to the ground, obtains its power from the 2.5 kw 400 cycle, three phase generator driven by a gasoline engine. The cycling rate of the transmitter is 1.5 seconds 'current on' and 0.5 seconds 'current off' with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C<sub>1</sub> and C<sub>2</sub>, the primary voltage (V<sub>p</sub>) appearing between the potential electrodes, P<sub>1</sub> and P<sub>2</sub> during the 'current on' part of the cycle, and a secondary or overvoltage (V<sub>s</sub>) appearing between P<sub>1</sub> and P<sub>2</sub> during the 'current off' part of the cycle.

The apparent chargeability (M<sub>a</sub>) is calculated by dividing the secondary voltage by the primary voltage and multiplying by 400, which is the sampling time in milliseconds of the receiver unit. The apparent resistivity (P<sub>a</sub>) in ohm-meters is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity obtained are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and the resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the 'three electrode array' method of surveying. In this method the current electrode C<sub>1</sub> and the two potential electrodes P<sub>1</sub> and P<sub>2</sub> are moved in unison along the survey lines. The spacing between these three electrodes is kept constant for each traverse at a distance roughly equal to the depth to be explored by that traverse. The second current electrode C<sub>2</sub> is kept fixed at 'infinity'.

Thus, in a 'three electrode array' traverse with an electrode spacing of 200 feet, a body lying at a depth of 100 feet will produce a strong response, whereas the same body lying at a depth of 200 feet will only just be detected. By running subsequent traverses at different electrode spacings, more precise estimates can be made of depth, width, thickness and percentage of sulphides of causative bodies located by the I.P. method.

The magnetic survey was carried out using a Sharpe M.F.1 fluxgate magnetometer. This instrument measures variations in the vertical component of the earth's magnetic field to an accuracy of  $\pm 10$  gammas. Corrections for diurnal variations of the earth's field were made by tying-in to previously established base stations at intervals not exceeding two hours.

## INTERPRETATION PROCEDURES

### INDUCED POLARIZATION SURVEY

Induced Polarization interpretation procedures have been most completely developed in situations of mineralized horizontal layering where the electrode separations used are small compared with the lateral extent of the mineralized bodies. Geologically, the porphyry coppers of large lateral extent are practical examples where such interpretation procedures can be used to good advantage.

For more confined bodies, where the electrode separations used are often large compared with the lateral extent of the bodies themselves, the complex problem of resolving the combined effects of depth, width, dip and true chargeability of steeply dipping bodies together with the physical characteristics of overburden and country rocks has only recently been studied in detail. The result of this work is as yet unpublished. The interpreter must therefore use empirical solutions plus experience gained from surveys over known ore bodies in similar geological conditions to assist in his interpretation.

The interpretation submitted on the accompanying maps outlines certain possible zones which could be caused by magnetite and/or disseminated sulphide mineralization. However, as I.P. measurements are volume sampling measurements, the possible causative bodies are probably narrower and less well located than the zones outlined on the map.

### MAGNETIC SURVEY

The magnetic anomalies were subjected to analysis assuming infinite downward extent and using the symmetrical dyke and half-slope techniques. Estimates of depth of burial,  $h$ , half-width,  $m$ , and susceptibility contrast,  $k$ , were made and are shown on Map E-141-4. In addition, approximate estimates of percentage magnetite content were made by multiplying the susceptibility contrast,  $k$ , by 400.

## DISCUSSION OF RESULTS

The magnetic survey indicated the property to exhibit moderate magnetic relief with several prominent magnetic features. Slightly higher readings were generally obtained over the outcrop areas indicating shallow bedrock in the overburden covered areas.

Three high intensity magnetic lows are closely associated with an area of high chargeability (Map E-129-6 and 7). These magnetic lows are attributable to reverse polarization, i.e. the direction of the earth's magnetic field was reversed at the time of intrusion/extrusion of the molten mass and it acquired a high remanent magnetization as it cooled through its Curie temperature. This remanent magnetization is larger than the induced magnetization, hence the resultant is in an opposite direction to the current magnetization.

These magnetic reversals could be attributable to either of two causes. (1) They could be caused by high remanent magnetization in the underlying Cache Creek and/or Mush Lake volcanics and possible associated mineralization. (2) They could be caused by high remanent magnetization in an ultrabasic intrusive of the type associated with mineralization at the Canalask Nickel Mines White River property and the Hudson Bay Mining and Smelting Wellgreen property.

The first explanation appears more unlikely than the second as (a) no similar magnetic responses are obtained on adjoining properties over known Cache Creek and/or Mush Lake volcanics and associated sulphides, and (b) magnetic intensities of the high values obtained on the survey are not obtained from intermediate volcanics.

In the case of the latter it must be said that the relative values of the magnetic readings obtained on the survey can be observed over ultrabasic rocks, although the actual size of the body as outlined by the readings seems small for such an intrusive, and none have been reported in the immediate vicinity. However, (a) from regional geological mapping (G.S.C. Map 1177A), ultrabasics appear as two belts generally associated with parallel overthrusts 44 miles to the southeast with one belt continuing through the Canalask Nickel Mine 14 miles to the northeast and (b) the magnetic lows are open to the southeast so that an elongated intrusive

body could still occur.

It should be noted here that from the regional geology map and the government aeromagnetic maps (No's 4260G, 4273G and 4274G) it can be seen that the forementioned overthrusts are associated with magnetic lows thus adding weight to the postulation that the draw containing the anomalous area might be part of a parallel overthrust.

Two of the magnetic lows, Magnetic Anomalies No's 2 and 3 were subjected to detail study assuming infinite vertical bodies and using symmetrical dyke and half slope methods of analysis. In the case of Anomaly No. 2, they indicated an average depth of burial of approximately 35 feet and a susceptibility contrast of  $5.6 \times 10^{-2}$  c.g.s. units, corresponding to an apparent magnetite content of 22% by volume. In the case of Anomaly No. 3 they indicated an average depth of burial of approximately 20 feet and a susceptibility contrast of  $3.3 \times 10^{-2}$  c.g.s. units, corresponding to an apparent magnetite content of 13% by volume.

A confined moderate intensity magnetic high occurs in the middle of the property. It is not associated with any significant changes in chargeability or resistivity and is believed to be caused by a change in the magnetite content of the underlying rock.

The regional overthrust at the base of Slaggard Ridge is indicated by a series of elongated magnetic lows, offset by inferred faulting. This is in agreement with regional studies whereby overthrusts in the Klwane Lake Map Area (G.S.C. 1177A) are associated with series of magnetic lows (Government Aeromagnetic Maps 4260G, 4273G and 4274G).

Five northeast-southwest trending faults can be seen from the magnetics and are shown on Map E-129-3. Some of these can also be inferred from the contoured chargeability results. (Map E-129-6).

The reconnaissance resistivity survey (Map E-129-2) shows considerable variation in apparent resistivity throughout the survey area. This is indicative of thin overburden cover. A general resistivity low is associated with the thrust fault at the base of Slaggard Ridge.

The detail resistivity survey (Map E-129-5) shows general resistivity lows, i.e. conductivity highs, to be associated with the chargeability highs. However the chargeability highs most occur in a draw, and thus it is the writer's opinion that the resistivity measurements also relate to overburden thickness and to a possible fault zone (see geological section) as well as to conductivity directly associated with the chargeability highs.

The results of the Induced Polarization survey, as performed with a 200 foot electrode separation, show one large anomalous area and several other smaller individual anomalies (Map E-129-2).

The large anomalous area, as outlined by the 5.0 millisecond contour on Map E-129-6, is closely associated with a number of strong magnetic lows (Map E-129-7). It is roughly 1500 x 1500 feet and is open on the property's adjoining boundary with the SHARE claims. It can be subdivided into smaller and more definitive anomalies whose locations very closely correlate with those of the high intensity magnetic lows (Map E-129-4 and 7).

The other anomalies are much smaller in size and weaker in strength and in general do not show much correlation with the magnetics. These together with the large anomaly are best discussed by line as they occur.

LINE 60E Two small anomalies were obtained on this line near the baseline. One is located in the middle of a broad low intensity magnetic low, while the other is located in the vicinity of the inferred regional thrust.

LINE 52E The anomaly was obtained at the southern end of this line. It is open on its southern side and is closely associated with a high intensity magnetic low.

LINE 48E One anomaly was located at the southern end of this line. It is open on its southern side and is closely associated with a high intensity magnetic low.

Detail work done over this anomaly with the 100 and 400 foot spacings showed a similar response to the 200 foot spacing, indicating a shallow source, that could

possibly contain  $\frac{1}{2}$  to  $1\frac{1}{2}\%$  sulphides by volume (assuming sulphides to be the total cause of the I.P. effects).

LINE 44E One anomaly was observed on this line, and its location corresponds very well with that of a small high intensity magnetic low.

LINE 40E One broad anomaly was observed on this line and its mid point location corresponds very well with that of a high intensity magnetic low. No detail work was done on this line but the possibility exists that the 200 foot spacing could be double peaked thus indicating a narrower shallow body as calculations on the magnetic feature suggested a shallow causative source.

LINE 36E Two anomalies were located on this line closely associated with high intensity magnetic lows.

Detail work done over these anomalies showed roughly equal responses on the 100 and 200 foot spacings and slightly lower responses and apparent double peaks on the 400 foot spacing.

Both anomalies have indicated shallow causative sources. The southern one could conceivably be caused by 1 to 2% sulphide by volume, whereas the northern one could be attributable to  $\frac{1}{2}$  to  $1\frac{1}{2}\%$  sulphides.

LINE 32E One small anomaly was observed on this line with its location corresponding very well with that of a small isolated low intensity magnetic low.

LINE 16E Two broad low intensity anomalies were observed on this line with locations corresponding to those of small low intensity magnetic highs.

Detail work with 100 and 200 foot separations gave inconsistent high and low chargeability readings thereby suggesting minor sulphides could be the cause of the anomalies.

LINE 12E One low intensity anomaly was observed at the north end of this line in the region of the inferred regional thrust fault.

LINE 8E

One low intensity anomaly was observed at the northern end of this line in the region of the inferred regional thrust fault. This anomaly is undefined on its northern side.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Between August 22nd and November 3rd, 1968, Eagle Geophysics Limited carried out a combined linecutting, ground magnetic and induced polarization survey program over part of a property held by Gaylord Mines Limited, New Privateer Mine Limited, and Quatsino Copper-Gold Mines Limited.

The property, i.e. the NACK Claim Group, is located in the White River Area of the Yukon Territory, some 200 air miles northwest of Whitehorse.

The magnetic survey indicated the presence of several high intensity magnetic lows. These lows are indicative of high remanent magnetization and are believed by the writer to be caused by ultrabasic intrusives with associated magnetite and sulphides. They could however, possibly be caused by magnetite and associated sulphides in the underlying intermediate volcanics.

The induced polarization survey, as performed with 100, 200 and 400 foot electrode separations, indicated the presence of chargeability highs coincident with the above magnetic lows, and several other low intensity anomalies.

The resistivity survey showed great variation in resistivity to exist throughout the property. It indicated resistivity lows associated with both the regional thrust fault and the main chargeability highs. However, in the latter case the lows, i.e. conductivity highs, are also considered attributable to overburden thickness and a possible fault zone as well as to conductivity directly associated with the chargeability highs.

Although magnetite, a metallic conductor, could conceivably be totally responsible for the I.P. anomalies, the writer, on account of (a) known nickel and copper occurrences with ultrabasics in the Kluane Lake Map Area, and (b) reported economic sulphide mineralization in the immediate area, recommends that the combined magnetic and I.P. anomalies be tested by drilling.

Two diamond drill holes each of length 400 feet should be drilled accordingly:

HOLE #1

This 50° hole should be collared on Line 36E and drilled southwards on line so as to intersect 12 + 50S at 80 feet perpendicularly below the surface.

HOLE #2

This 50° hole should be collared on Line 40E and drilled southwards on line so as to intersect 9S at 50 feet perpendicularly below the surface.

Should economic mineralization be encountered associated with the magnetic lows, the remainder should be investigated by subsequent drilling. However, prior to this, detail magnetic measurements on 100 x 50 foot centres should be made over the anomalous area to more accurately outline drilling targets.

Prior to the above drilling and survey programs, arrangements should be made with the owners of the adjoining SHARE claims, No's 1-13, where similar magnetic and I.P. features exist, regarding a merger of interests or close co-operation in the follow-up program in order to reduce the cost of further exploration.

The cost of the forementioned program is estimated as follows:

Diamond drilling 800 feet at \$20.00 per foot	\$16,000.00
Linecutting and detail magnetometer surveying 8 miles at \$200.00 per line mile	\$ 1,600.00
Diamond drilling 2,000 feet at \$20.00 per foot (based on results of (a))	\$40,000.00
Engineering and supervision	\$ 5,000.00
	<hr/>
	\$62,600.00
Contingencies 10%	\$ 6,260.00
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	\$68,660.00
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Respectfully submitted,

EAGLE GEOPHYSICS LIMITED,



Peter E. Walcott, P.Eng.  
Geophysicist.

Vancouver, B.C.  
November 1968.

APPENDIX

(1)

COST OF SURVEYS

Eagle Geophysics Limited undertook the linecutting and the magnetometer surveys on a mileage basis, and provided a geophysicist, two operators, a 2.5 I.P. system and an extra receiver on a daily basis. Draughting and interpretation charges were extra so that the total cost of the services provided by Eagle Geophysics Limited was \$10,706.58.

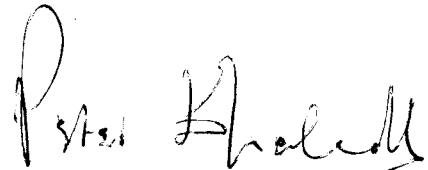
PERSONNEL EMPLOYED ON SURVEYS

<u>NAME</u>	<u>OCCUPATION</u>	<u>ADDRESS</u>	<u>DATE</u>
Peter E. Walcott	Geophysicist	Eagle Geophysics 815-736 Granville Vancouver 2, B.C.	October 16 - November 3, 1968 November 10 - 12, 25, 27, 28, 1968.
John Lloyd	"	"	September 23 - November 3, 1968
Gary M. MacMillan	Geophysical Operator	"	October 16 - November 3, 1968
V.R. Fallstrom	"	"	August 22 - September 6, 1968
Victor A. Pashniak	"	"	September 23 - November 3, 1968
S. Main	Typing	"	November 30, 1968
W. Wadman	Draughting	"	November 16 - November 22, 1968
E. Scurvie	Helper	General Delivery Whitehorse, Y.T.	August 22 - September 6 September 23 - November 3, 1968.
N. Maier	"	"	September 23 - October 16, 1968
S. Scurvie	"	"	August 22 - September 6, September 23 - November 3, 1968.
P. Charlie	"	"	"
J. Bill	"	"	September 23 - November 3, 1968.
R. Ward	"	"	August 22 - September 6, 1968
J. Ward	"	"	"
H. Roy	"	"	"
F. Colton	"	"	October 16 - October 24, 1968.
P. Nieman	Cook	"	September 23 - November 3, 1968.

CERTIFICATION

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practising my profession for the last six years.
3. I am a member of the Association of Professional Engineers of British Columbia, Ontario and the Yukon Territory.
4. I hold no interest, direct or indirect, in the securities or properties of Gaylord Mines Limited, New Privateer Mine Limited or Quatsino Copper-Gold Mines Limited, nor do I expect to receive any.



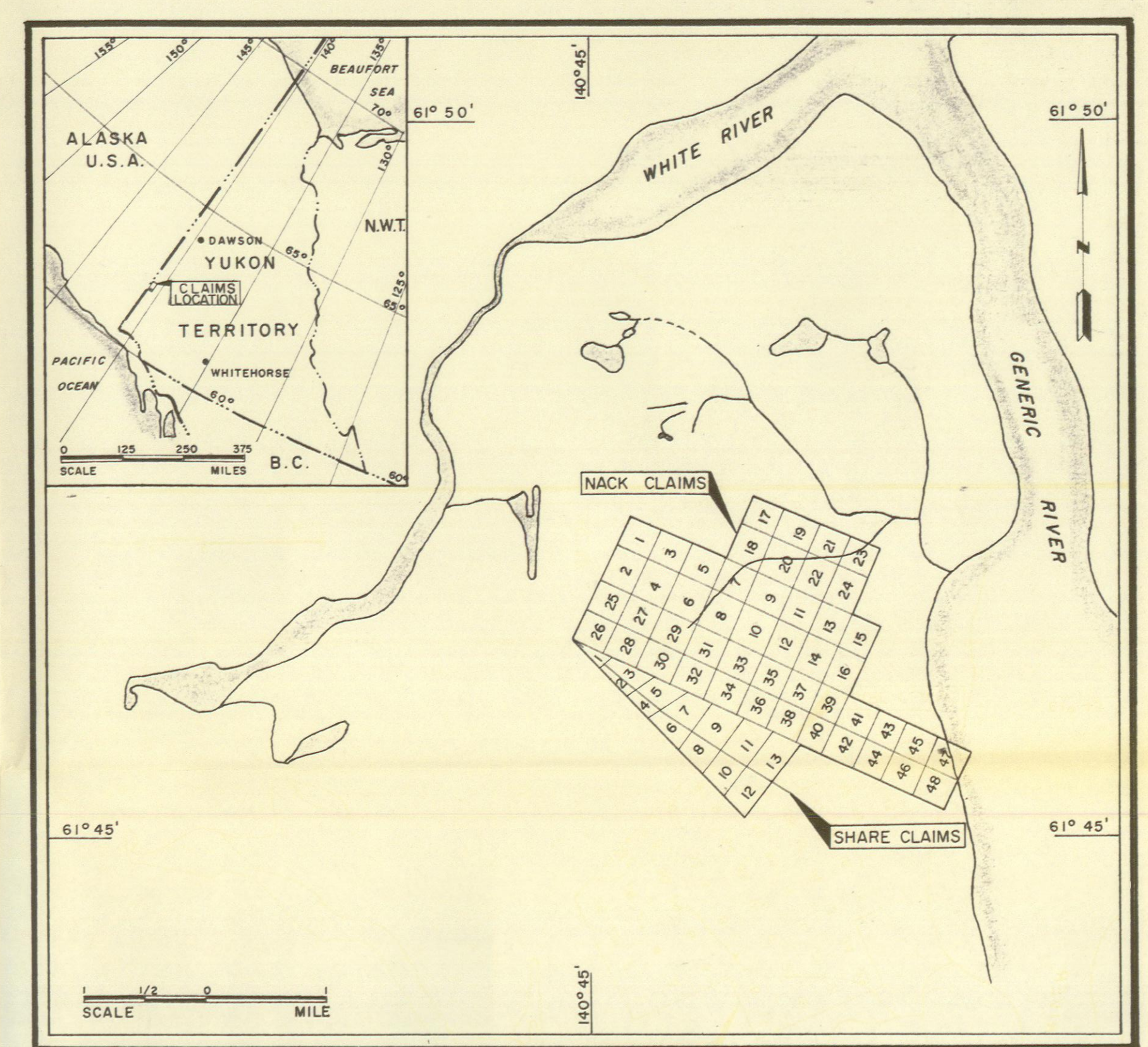
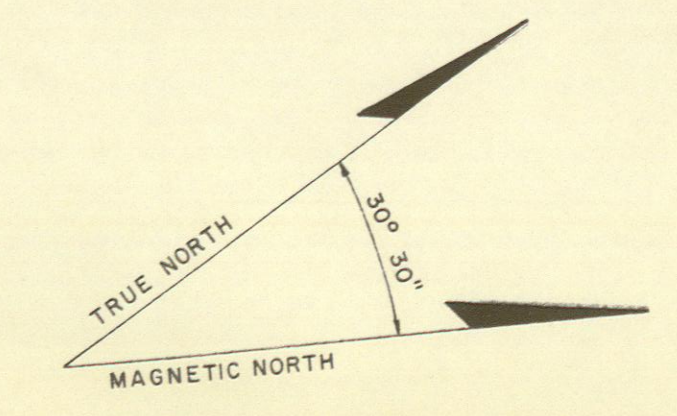
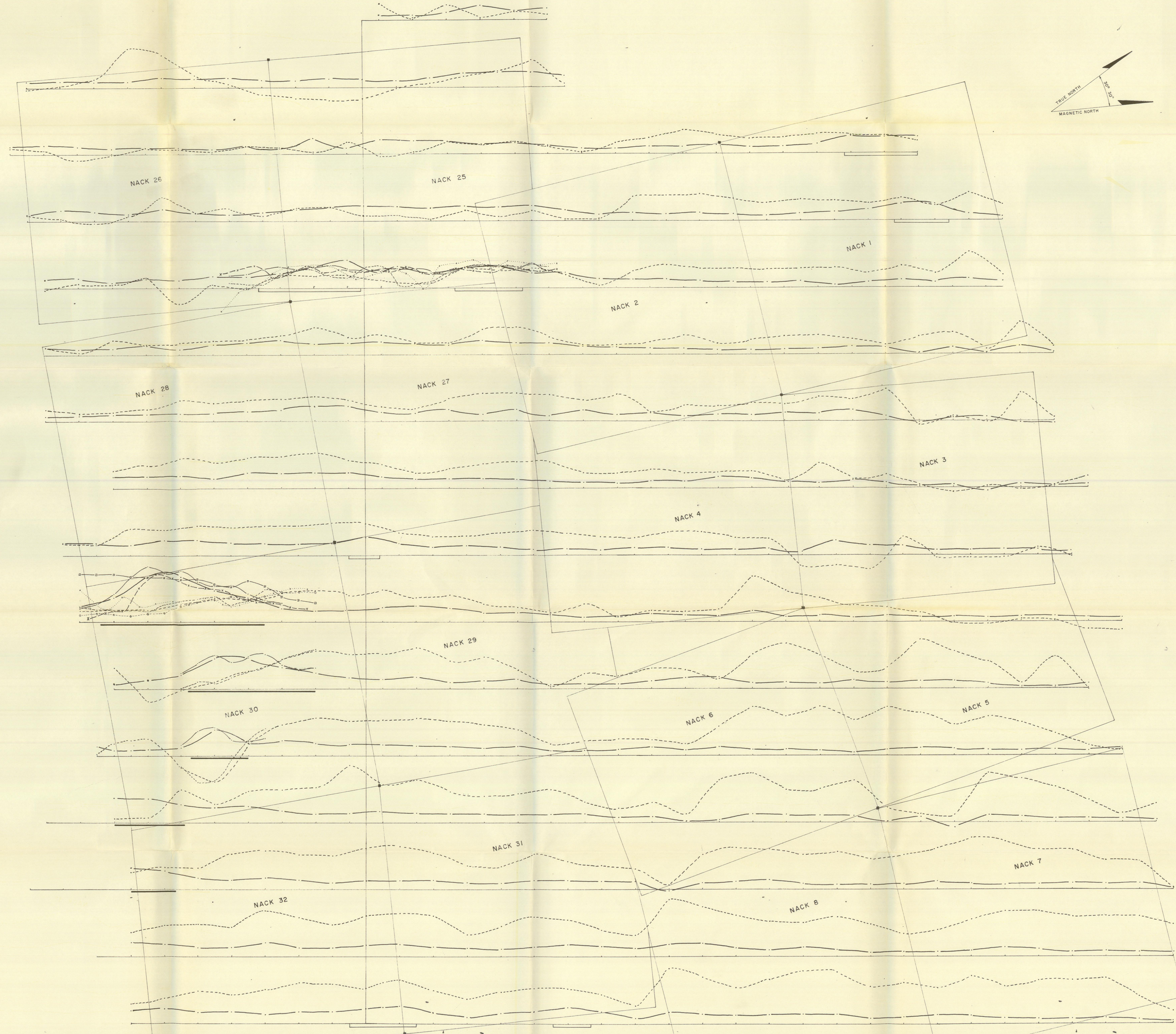
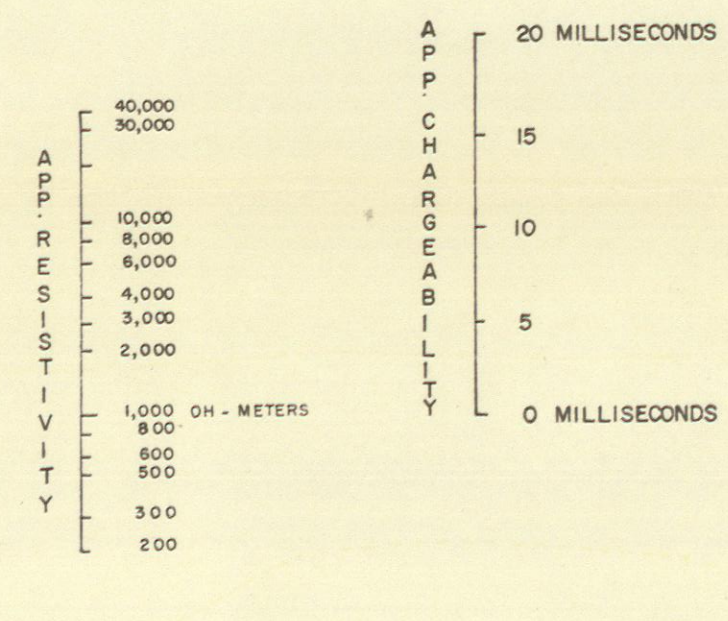
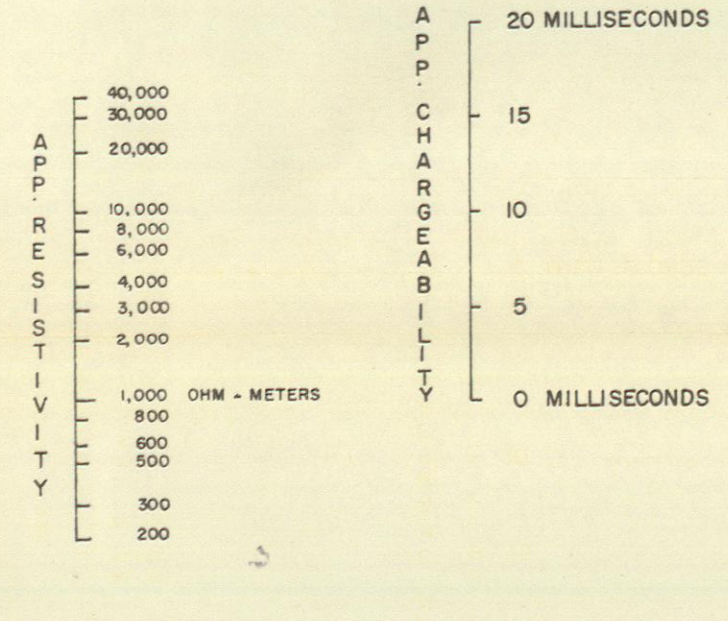
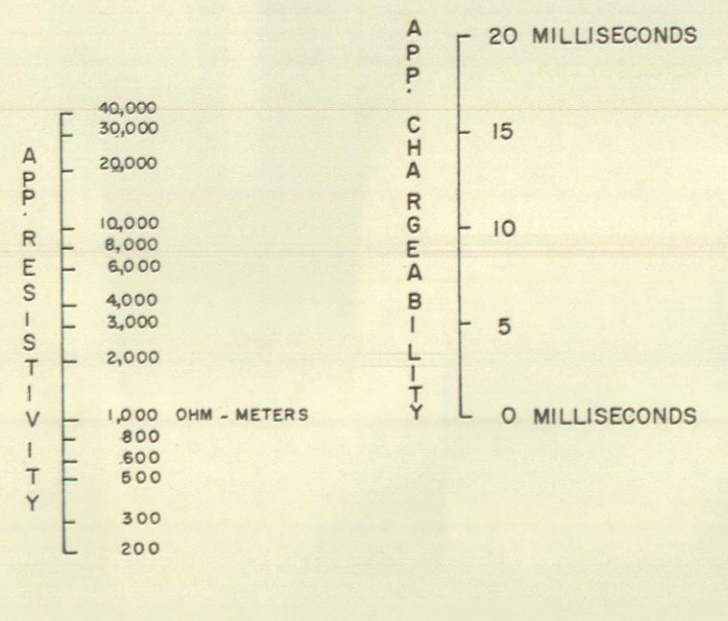
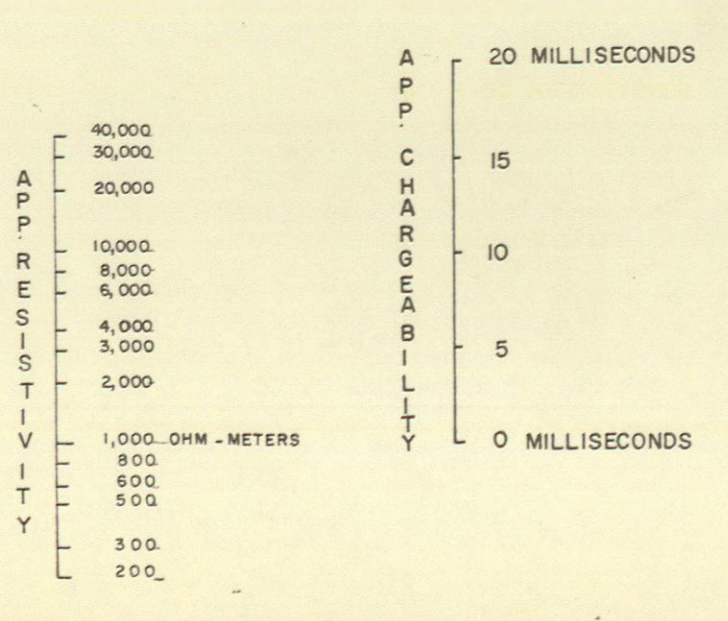
Peter E. Walcott, P.Eng.

Vancouver, B.C.  
November 1968

REFERENCES

- Bostock, H.S., 1952      Geology of Northwest Shakwak Valley,  
Yukon Territory, G.S.C. mem. 267.
- Brett, B.D. and      A Geological Report on the Nack  
Walcott, Peter E.      Claim Group  
July, 1968
- Cairnes, D.D., 1915      Upper White River District, Yukon  
G.S.C. mem. 50, pp. 133-141
- Cathro, R.J.      Preliminary Report on Nack 1-48  
March 15, 1968.      Claims
- Muller, J.E., 1967      Kluane Lake Map Area, Yukon  
Territory, G.S.C. mem. 340

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**LEGEND**

STATION LOCATIONS

**ELECTRODE SPACING**  
 o = 400'  
 x = 200'  
 • = 100'

**CHARGEABILITY**  
 □ = 100%  
 ○ = 50%  
 ◊ = 25%

**RESISTIVITY**  
 ○ = 100 Ω  
 ◊ = 50 Ω  
 □ = 25 Ω

——— AREA OF PRIMARY INTEREST  
 - - - - - AREA OF SECONDARY INTEREST

**MAP SYMBOLS**  
 ——— CLAIM POST AND BOUNDARY

**GAYLORD MINES LIMITED**  
**NEW PRIVATEER MINES LTD.**  
**QUATSINO COPPER-GOLD MINES LTD.**  
 NACK CLAIMS, WHITE RIVER AREA WHITEHORSE MINING DIVISION, YUKON TERRITORY

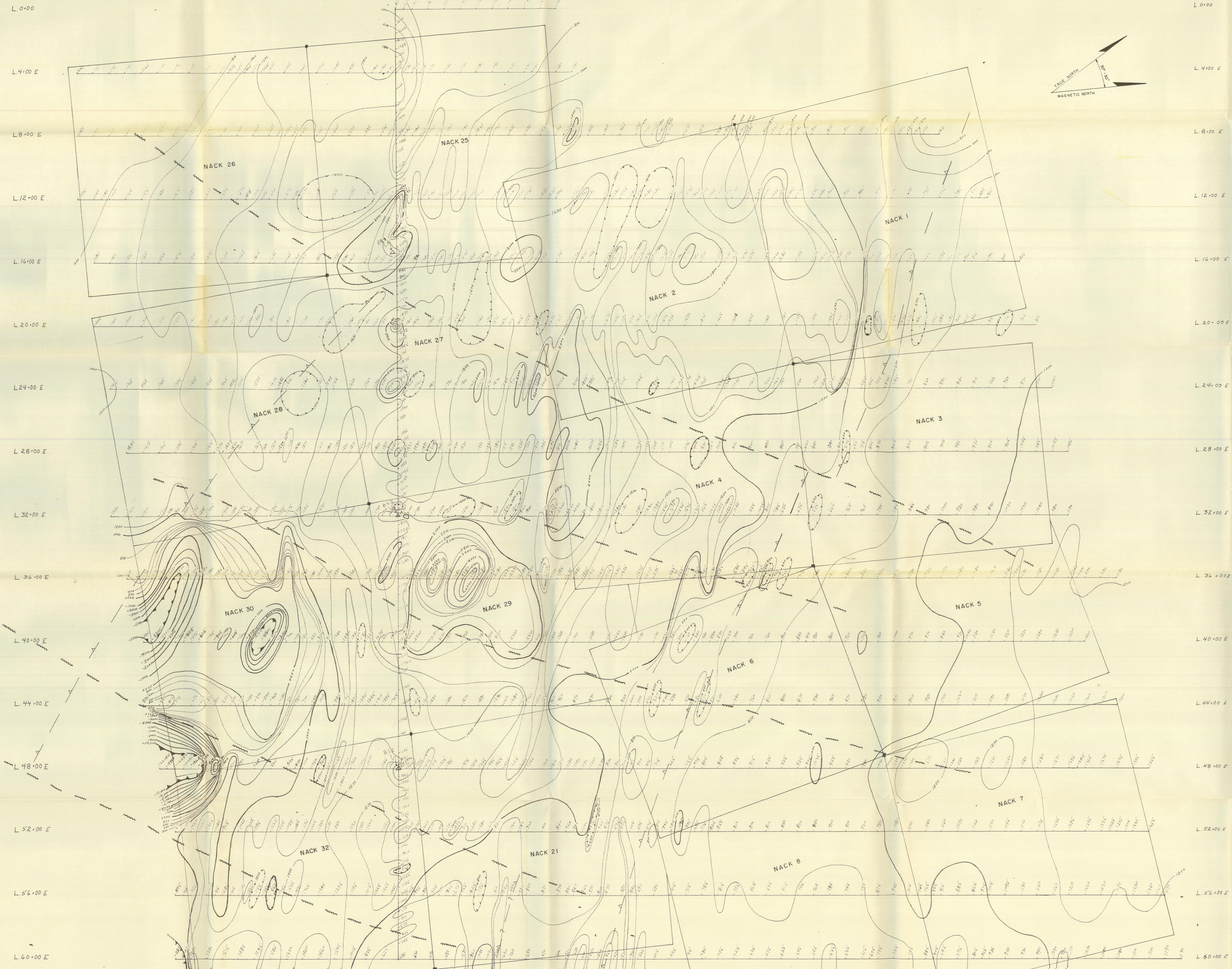
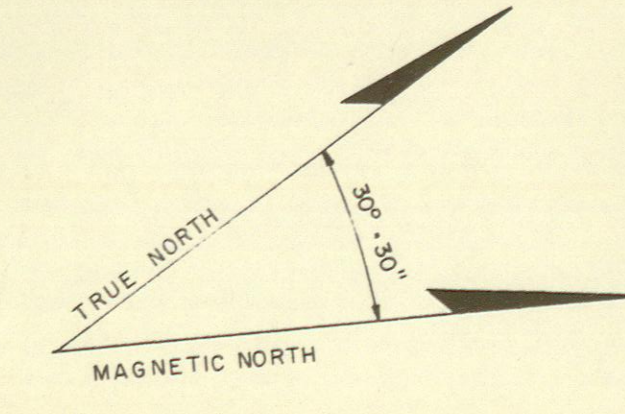
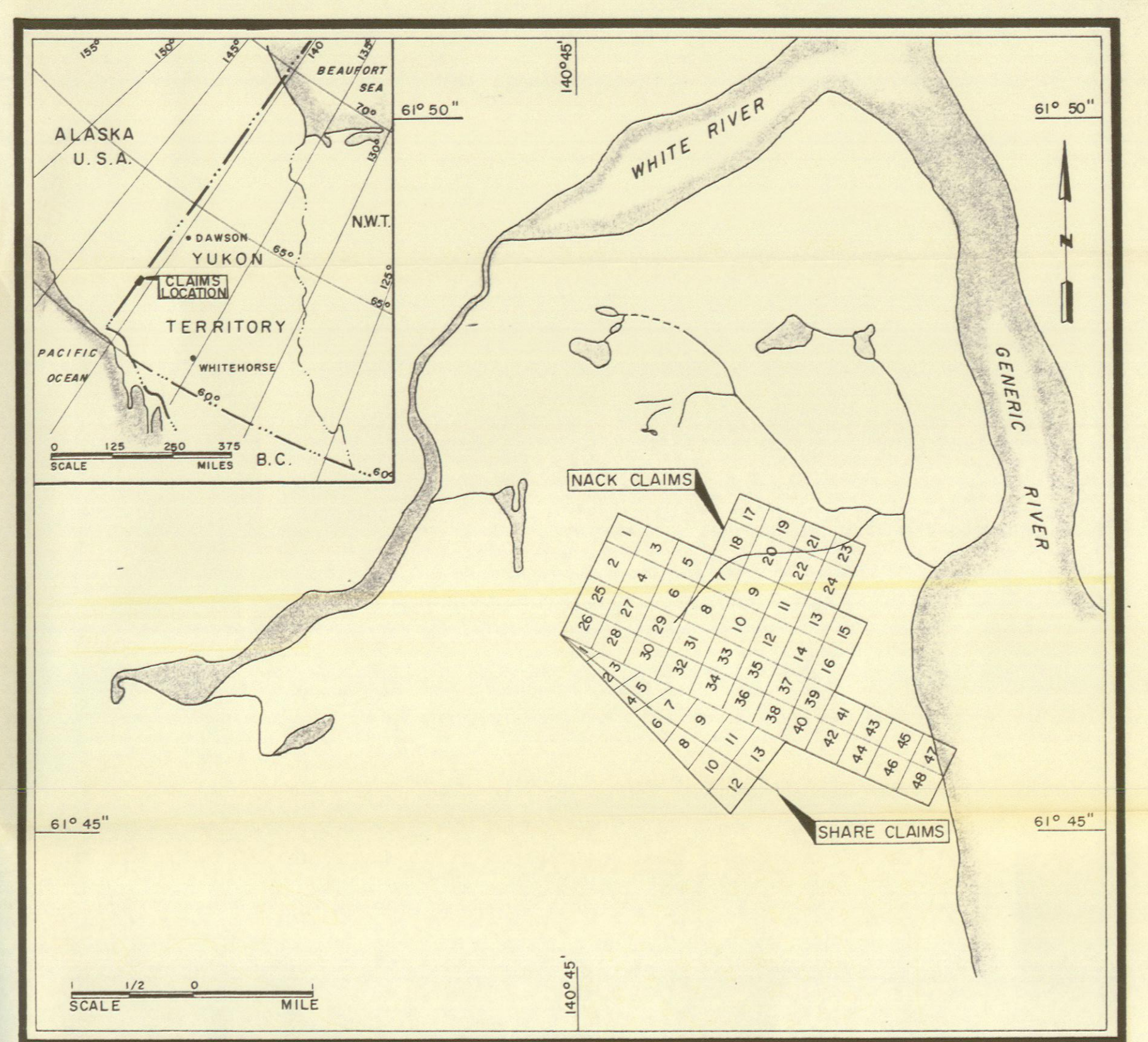
**INDUCED POLARIZATION SURVEY**  
**PROFILES OF APPARENT RESISTIVITY AND CHARGEABILITY**  
 SCALE 1 INCH = 200 FEET

200 100 0 100 200 300 400 500 600  
 FEET FEET

MAP No. E 129-2  
 TO ACCOMPANY A REPORT BY  
 PETER E. WALCOTT P.Eng.  
 DATED NOVEMBER, 1968.

EAGLE GEOPHYSICS LIMITED  
 SEPTEMBER - OCTOBER, 1968.

20-S 18-S 16-S 14-S 12-S 10-S 8-S 6-S 4-S 2-S 0 2-N 4-N 6-N 8-N 10-N 12-N 14-N 16-N 18-N 20-N 22-N 24-N 26-N 28-N 30-N 32-N 34-N 36-N 38-N 40-N 42-N 44-N 46-N 48-N 50-N



**LEGEND**

- 5000 GAMMA INTERVAL CONTOURS
- 1000 GAMMA INTERVAL CONTOURS
- 200 GAMMA INTERVAL CONTOURS
- MAGNETIC LOW
- △ MAGNETIC BASE STATION
- - - INTERPRETED FAULT
- - - INTERPRETED OVERTHRUST
- MAP SYMBOLS
- CLAIM POST AND BOUNDARY

**GAYLORD MINES LIMITED  
NEW PRIVATEER MINES LTD.  
QUATSINO COPPER-GOLD MINES LTD.**

NACK CLAIMS, WHITE RIVER AREA, WHITEHORSE MINING DIVISION, YUKON TERRITORY

**MAGNETOMETER SURVEY**  
CONTOURS OF RELATIVE VERTICAL MAGNETIC INTENSITY IN GAMMAS

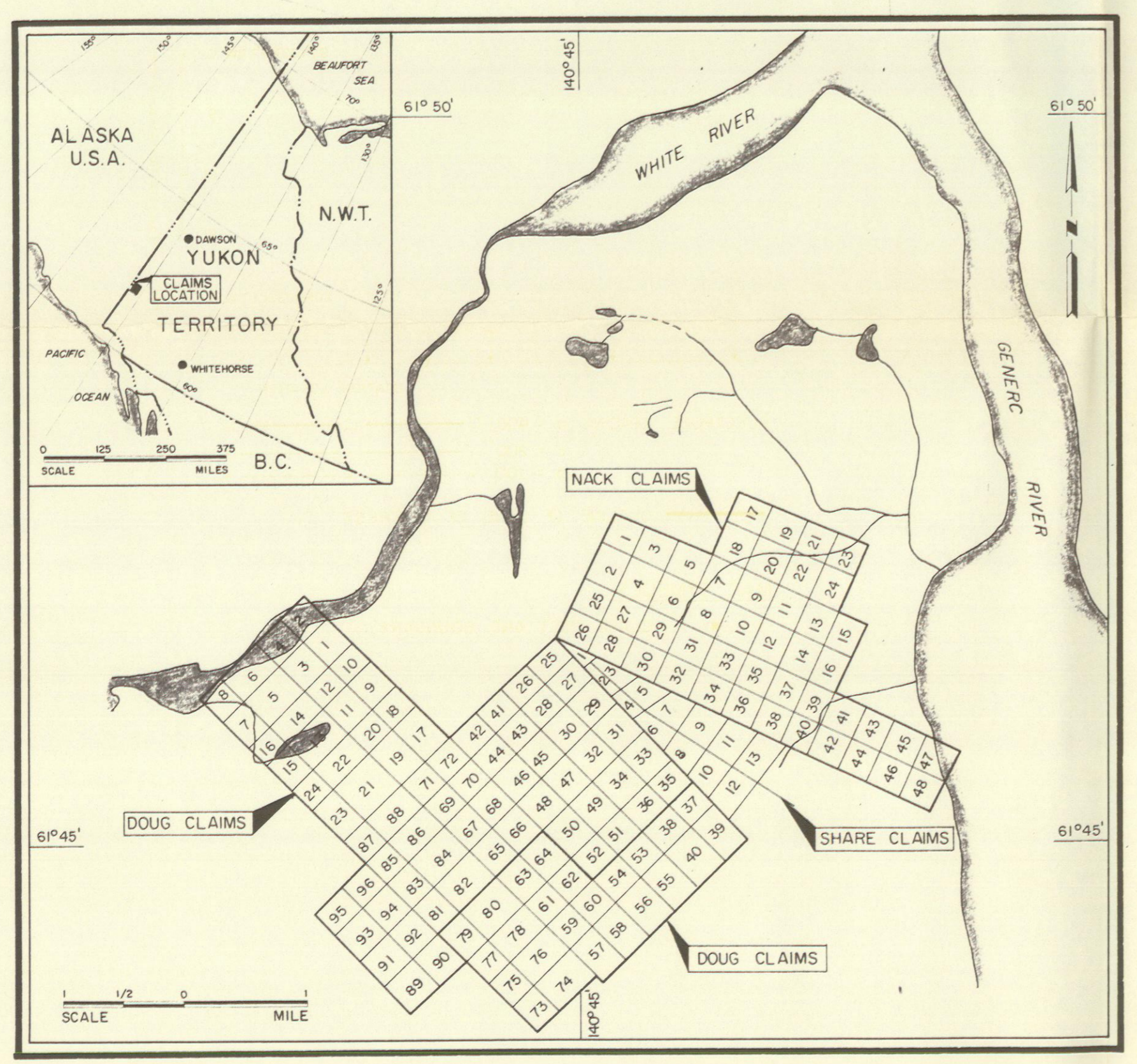
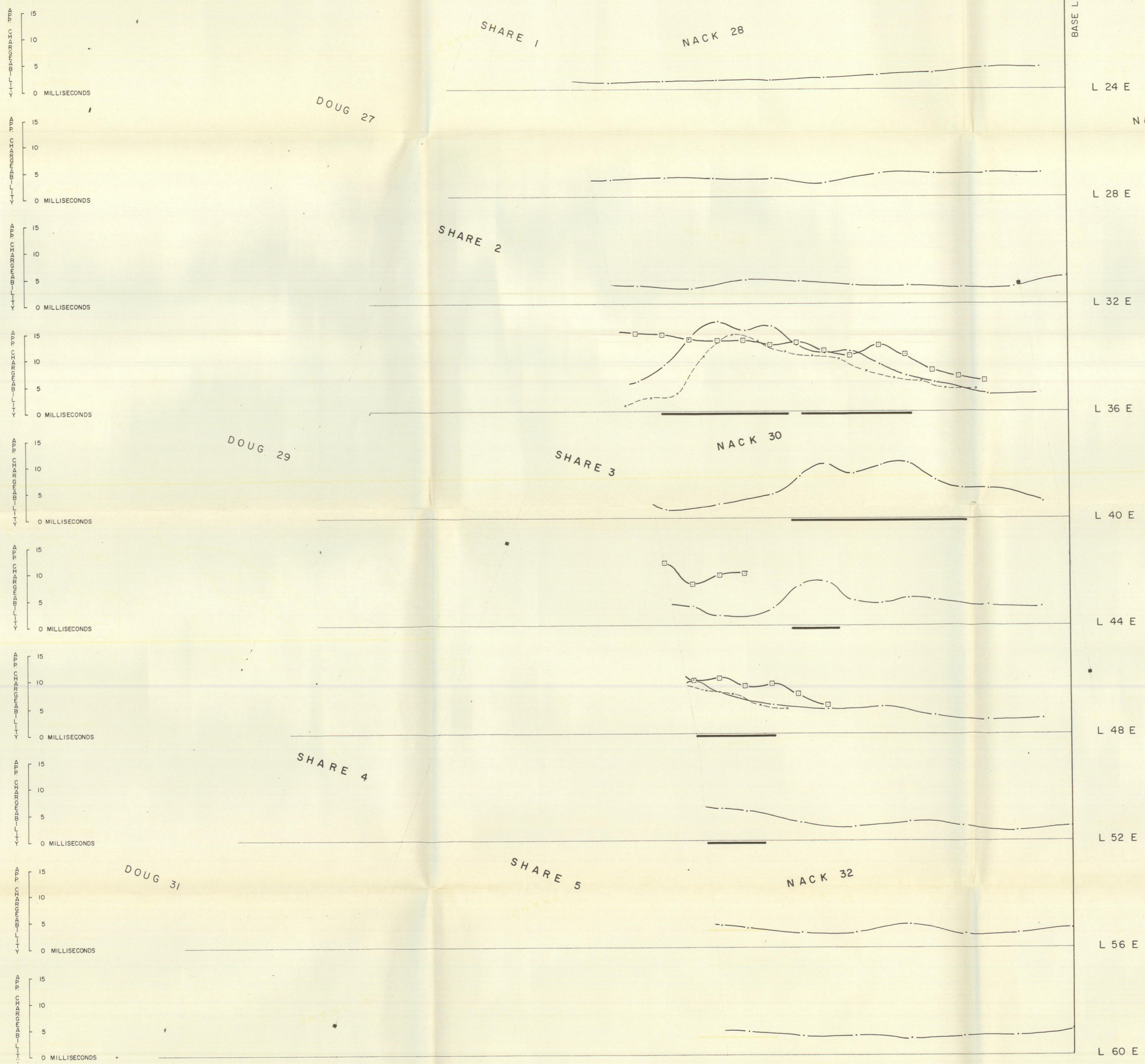
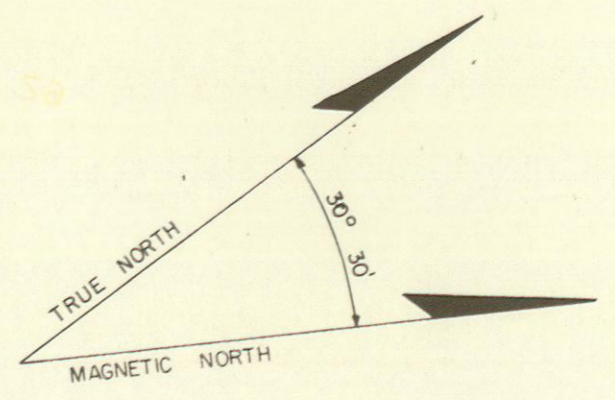
SCALE 1 INCH = 200 FEET

300 0 200 400 600  
FEET FEET

MAP No. E.129-3  
TO ACCOMPANY A REPORT BY  
PETER E. WALCOTT P.Eng.  
DATED DECEMBER, 1968.

EAGLE GEOPHYSICS LIMITED  
SEPTEMBER - OCTOBER 1968

34 S 32 S 30 S 28 S 26 S 24 S 22 S 20 S 18 S 16 S 14 S 12 S 10 S 8 S 6 S 4 S 2 S 0



**LEGEND**

$C_2 \quad \infty \quad P_2 \quad 0 \quad P_1 \quad 0/2 \quad 0/2 \quad C_1$   
 STATION LOCATION

ELECTRODE SPACING  
 $\square = 400'$   
 $\circ = 200'$   
 $\times = 100'$

——— OUTLINE OF ZONE OF INTEREST

**MAP SYMBOLS**

——— CLAIM POST AND BOUNDARY

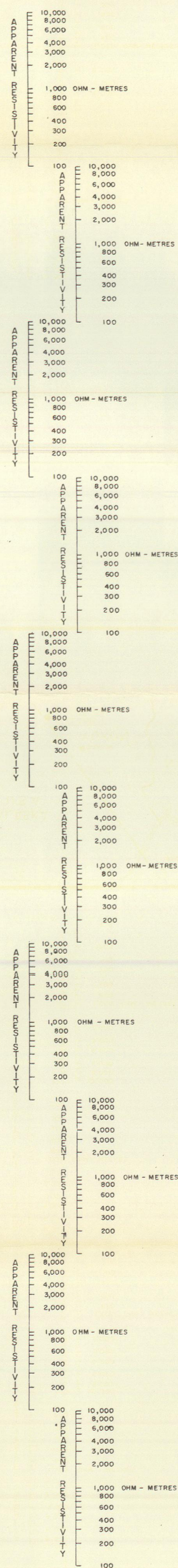
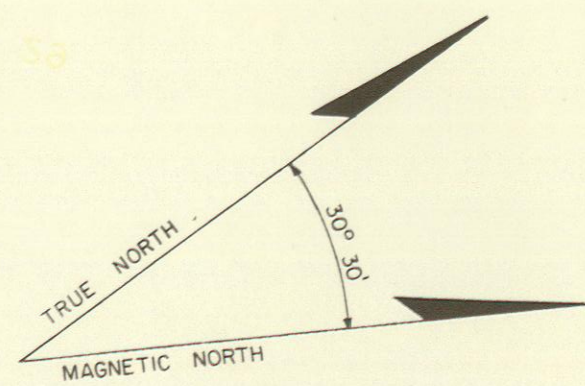
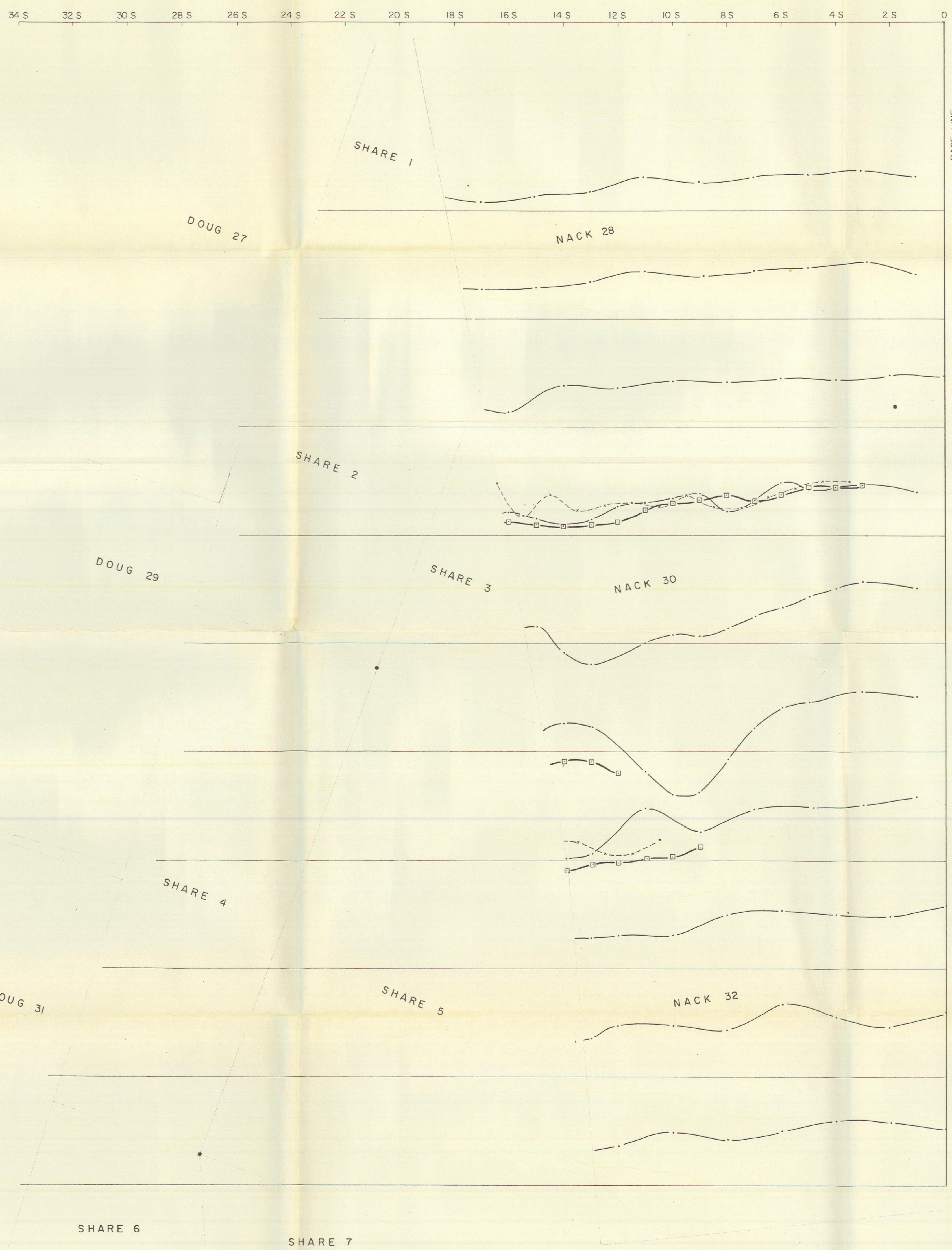
**GAYLORD MINES LIMITED**  
**NEW PRIVATEER MINES LTD.**  
**QUATSINO COPPER-GOLD MINES LTD.**  
 NACK CLAIMS, WHITE RIVER AREA, WHITEHORSE MINING DIVISION, YUKON TERRITORY

**INDUCED POLARIZATION SURVEY**  
**APPARENT CHARGEABILITY PROFILES**

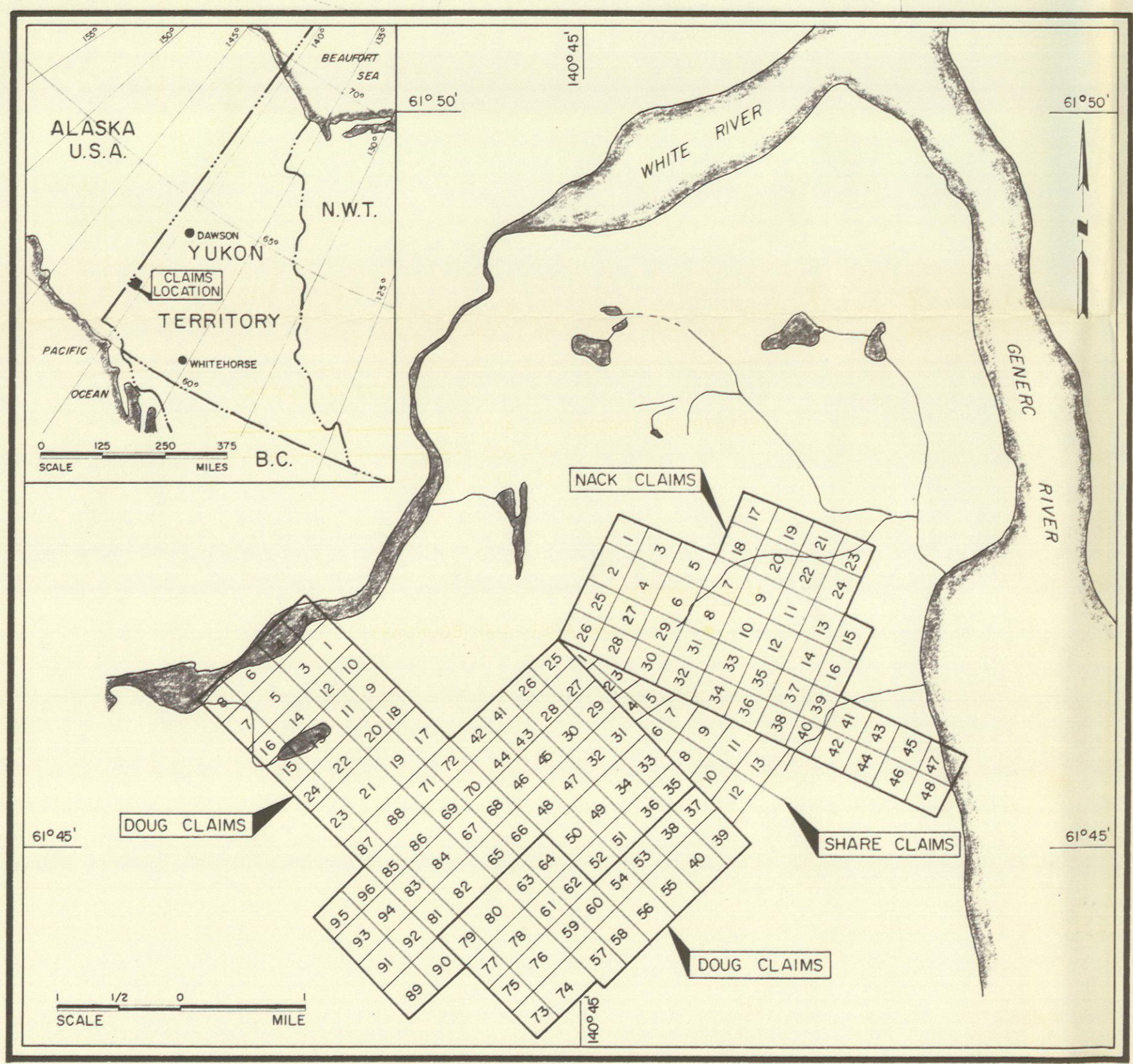
SCALE 1 INCH = 200 FEET

MAP No. E 129-4  
 TO ACCOMPANY A REPORT BY  
 PETER E. WALCOTT P.Eng. *Peter E. Walcott*  
 DATED NOVEMBER, 1968

EAGLE GEOPHYSICS LIMITED  
 SEPTEMBER - OCTOBER, 1968



BASE LINE  
L 24 E  
NACK 27  
L 28 E  
L 32 E  
NACK 29  
L 36 E  
L 40 E  
L 44 E  
L 48 E  
NACK 31  
L 52 E  
L 56 E  
L 60 E



**LEGEND**

$C_2$  —  $P_2$  —  $P_1$  —  $9/2$  —  $9/2$  —  $C_1$   
STATION LOCATION

ELECTRODE SPACING  
 o = 400' □  
 o = 200' □  
 o = 100' □

**MAP SYMBOLS**  
 — CLAIM POST AND BOUNDARY

**GAYLORD MINES LIMITED**  
**NEW PRIVATEER MINES LTD.**  
**QUATSINO COPPER-GOLD MINES LTD.**  
 NACK CLAIMS, WHITE RIVER AREA, WHITEHORSE MINING DIVISION, YUKON TERRITORY

**INDUCED POLARIZATION SURVEY**  
 APPARENT RESISTIVITY PROFILES

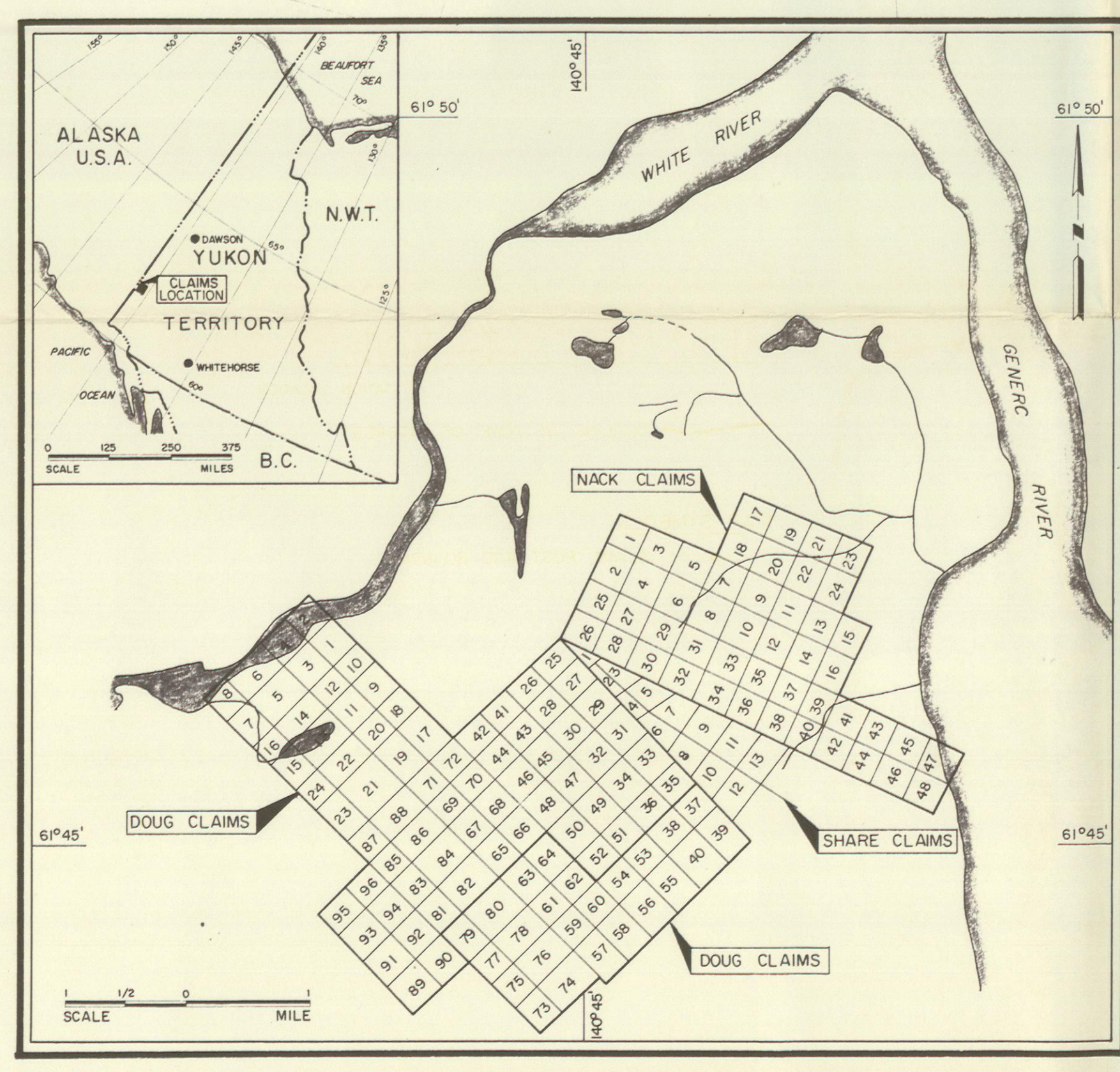
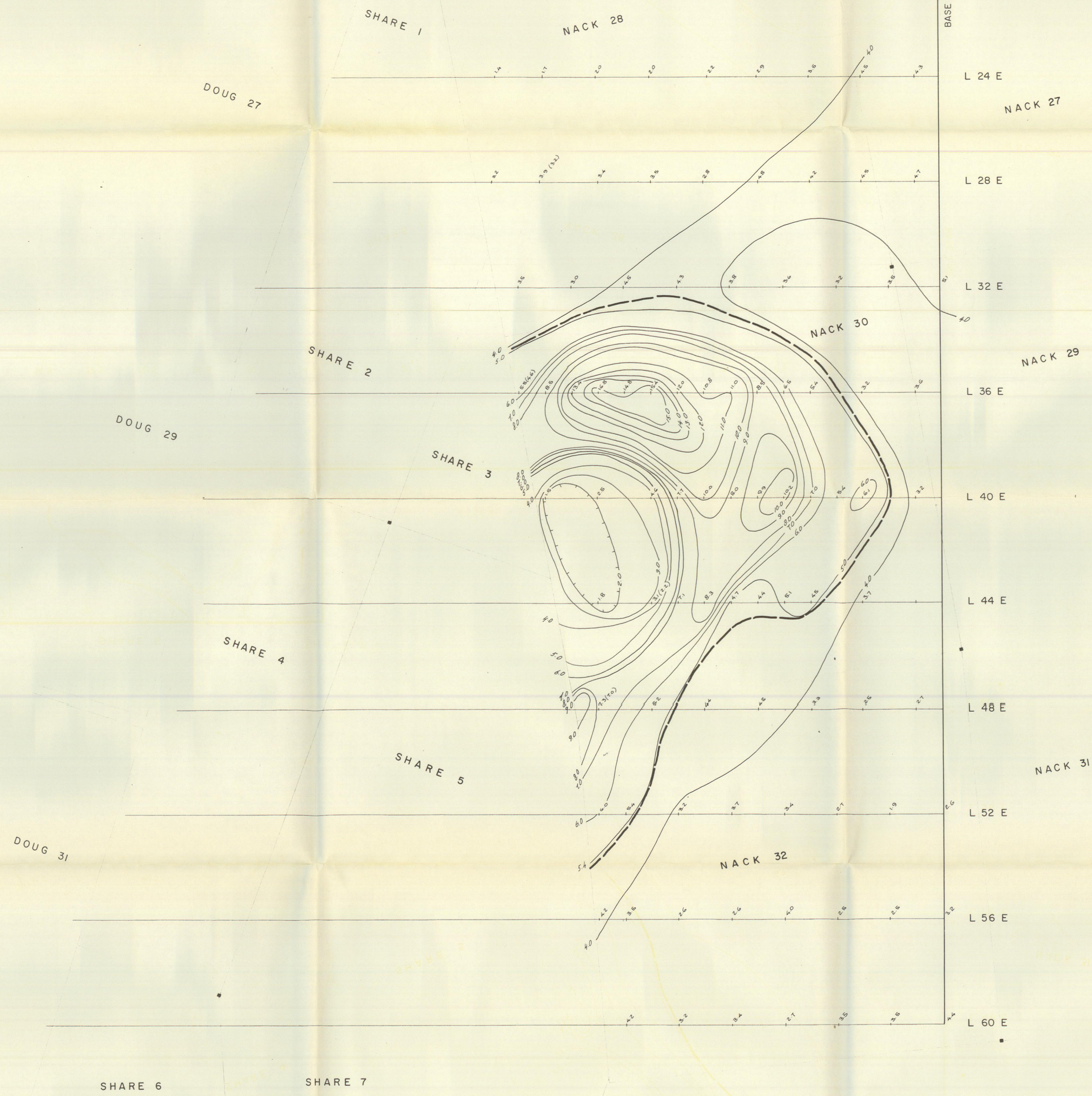
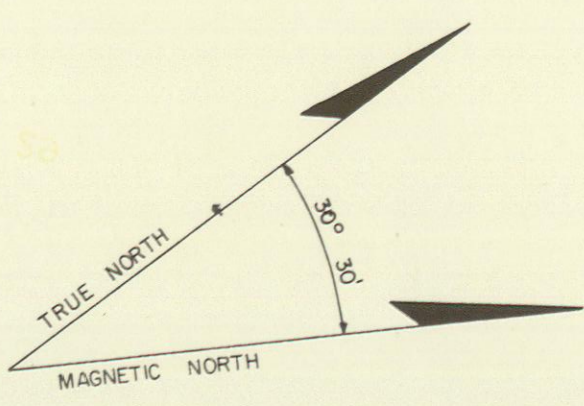
SCALE: 1 INCH = 200 FEET

200 100 0 200 400 600  
 FEET FEET

MAP No. E 129 - 5  
 TO ACCOMPANY A REPORT BY  
 PETER E. WALCOTT P. Eng.  
 DATED NOVEMBER, 1968

EAGLE GEOPHYSICS LIMITED  
 SEPTEMBER - OCTOBER, 1968

34 S 32 S 30 S 28 S 26 S 24 S 22 S 20 S 18 S 16 S 14 S 12 S 10 S 8 S 6 S 4 S 2 S 0



**LEGEND**

$C_2$  —  $P_2$  —  $a$  —  $P_1$  —  $1/2$  —  $1/2$  —  $C_1$   
 STATION LOCATION

- - - - -  
 OUTLINE OF ZONE OF INTEREST

**MAP SYMBOLS**

■ — CLAIM POST AND BOUNDARY

**GAYLORD MINES LIMITED**  
**NEW PRIVATEER MINES LTD.**  
**QUATSINO COPPER-GOLD MINES LTD.**  
 NACK CLAIMS, WHITE RIVER AREA, WHITEHORSE MINING DIVISION, YUKON TERRITORY

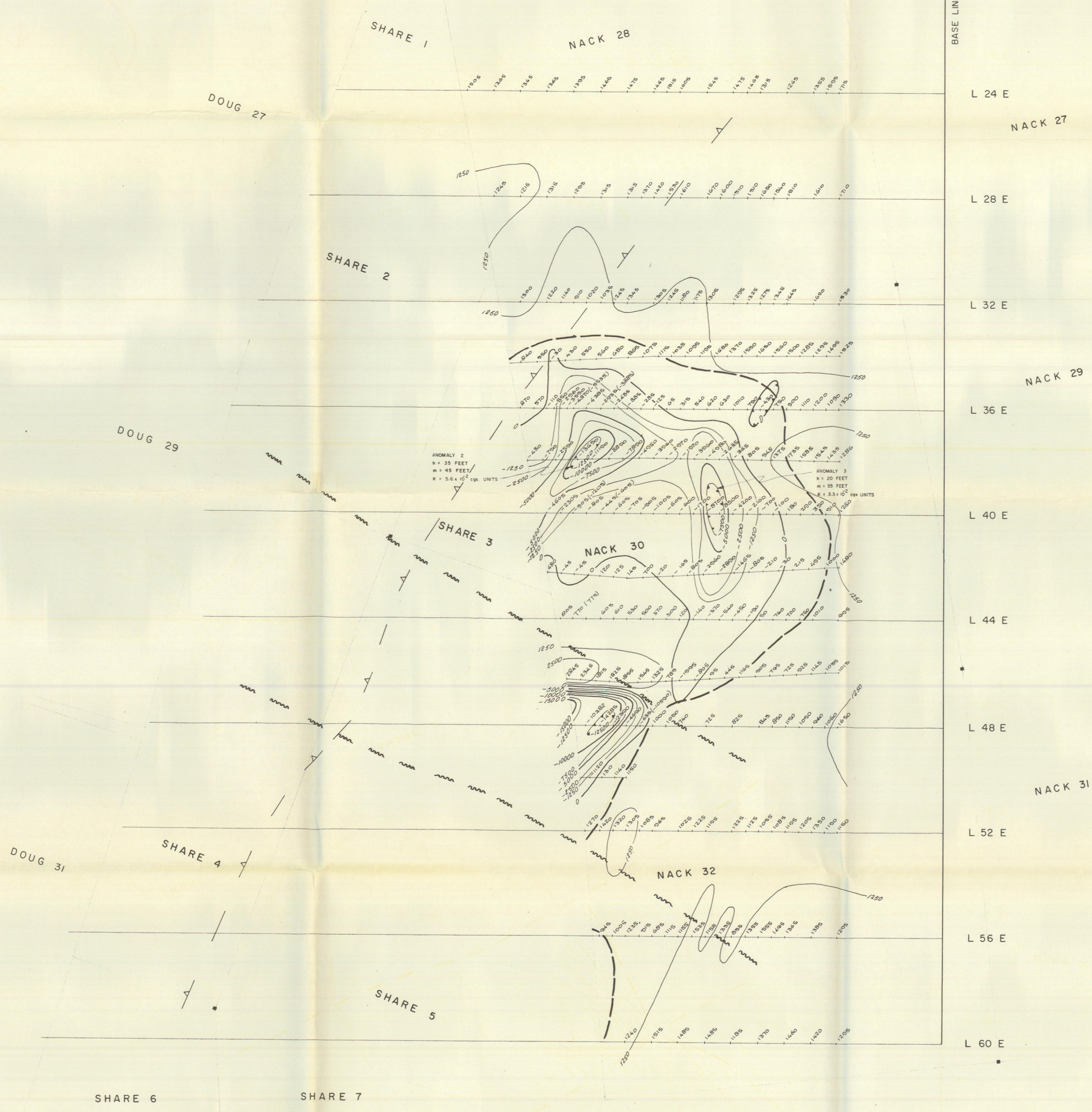
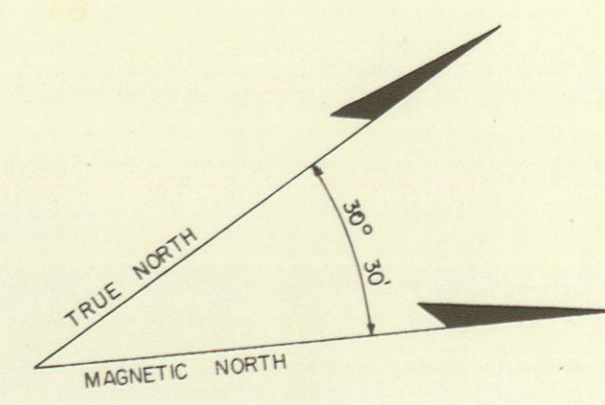
**INDUCED POLARIZATION SURVEY**  
 APPARENT CHARGEABILITY CONTOURS.  $a = 200$  FEET

SCALE 1 INCH = 200 FEET

MAP No. E 129-6  
 TO ACCOMPANY A REPORT BY  
 PETER E. WALCOTT P.Eng.  
 DATED NOVEMBER, 1968

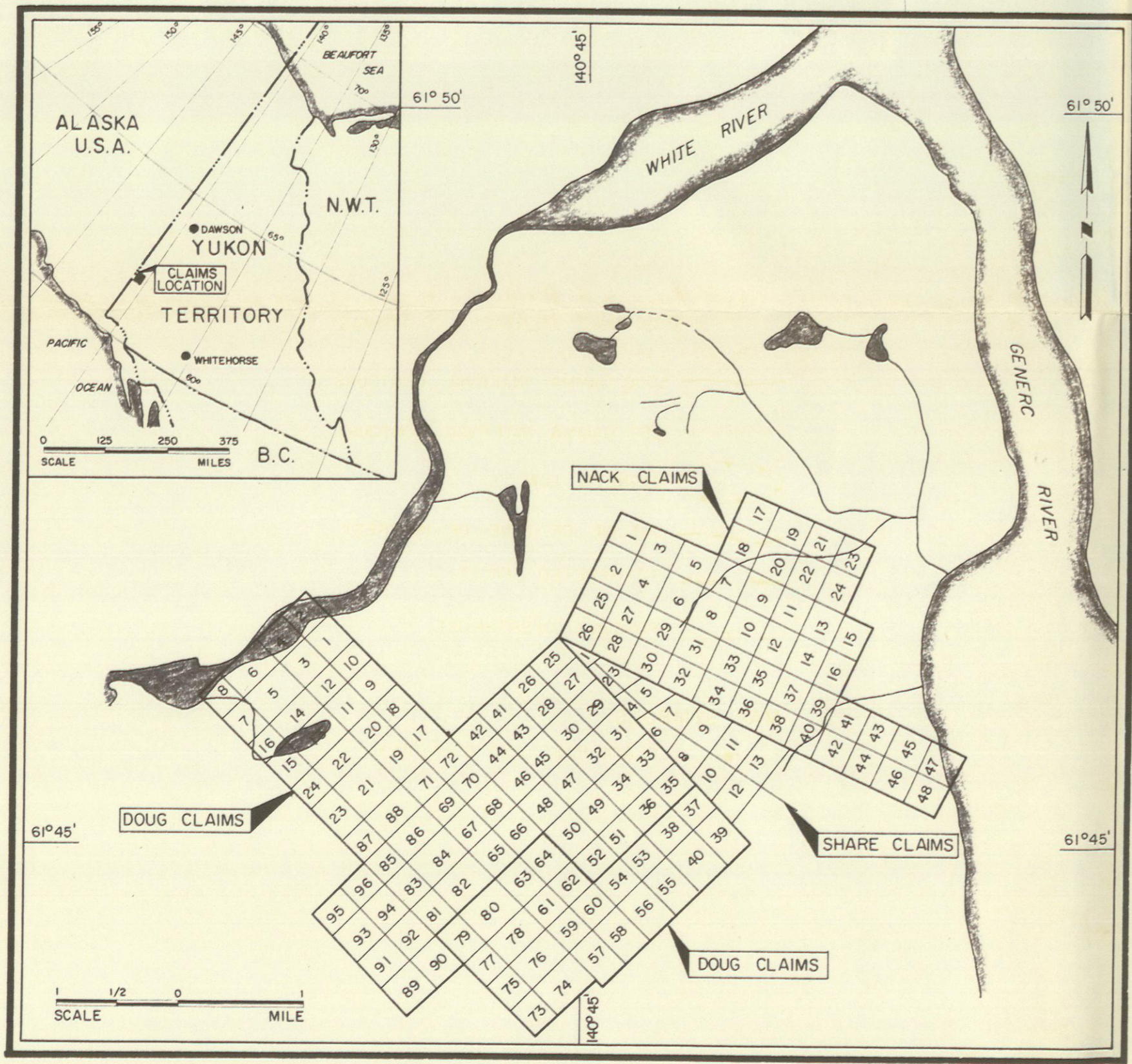
EAGLE GEOPHYSICS LIMITED  
 SEPTEMBER - OCTOBER, 1968

34 S 32 S 30 S 28 S 26 S 24 S 22 S 20 S 18 S 16 S 14 S 12 S 10 S 8 S 6 S 4 S 2 S 0



ANOMALY 2  
h = 35 FEET  
m = 45 FEET  
K = 5.6 x 10<sup>-2</sup> GPM UNITS

ANOMALY 3  
h = 30 FEET  
m = 35 FEET  
K = 3.3 x 10<sup>-2</sup> GPM UNITS



- LEGEND**
- CONTOUR INTERVAL GAMMAS
  - 5000 GAMMA INTERVAL CONTOURS
  - 1250 GAMMA INTERVAL CONTOURS
  - MAGNETIC LOW
  - OUTLINE OF ZONE OF INTEREST
  - INTERPRETED FAULT
  - POSSIBLE OVERTHRUST
  - MAP SYMBOLS
  - CLAIM POST AND BOUNDARY

**GAYLORD MINES LIMITED  
NEW PRIVATEER MINES LTD.  
QUATSINO COPPER-GOLD MINES LTD.**

NACK CLAIMS, WHITE RIVER AREA, WHITEHORSE MINING DIVISION, YUKON TERRITORY

**MAGNETOMETER SURVEY**  
CONTOURS OF RELATIVE VERTICAL MAGNETIC INTENSITY IN GAMMAS

SCALE 1 INCH = 200 FEET

200 100 0 200 400 600  
FEET FEET

MAP No. E 129-7  
TO ACCOMPANY A REPORT BY  
PETER E. WALCOTT P.Eng.  
DATED NOVEMBER, 1968

*Peter Walcott*

EAGLE GEOPHYSICS LIMITED  
SEPTEMBER - OCTOBER, 1968