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MINING RECORDERS OFFICE
WHITEHORSE, Y.T.

VANGORDA PROJECT

GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE

LINDA 1-48 AND JACKIE 1-8 CLAIM GROUP

Latitude 62°10'N Longitude 132°44'W

N.T.S. 105K-2

WHITEHORSE MINING DISTRICT
YUKON TERRITORY

During the Period Aug. 2 - Sept. 1, 1975

by

F. Foster
and
J.S. Brock

February 12, 1976

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Office of The ... Recorder
MAR 24 1976
...HITEHORSE
...ukon Territory

This report ... been examined by the Geological ... and is recommended to ... to be considered as ... amount of
$ 16,800

[signature]

...er

Considered ... claim work under Section ... Mining Act.

[signature]

B.R. BAXTER
Supervising Mining Recorder

for Com... Territory

16,800

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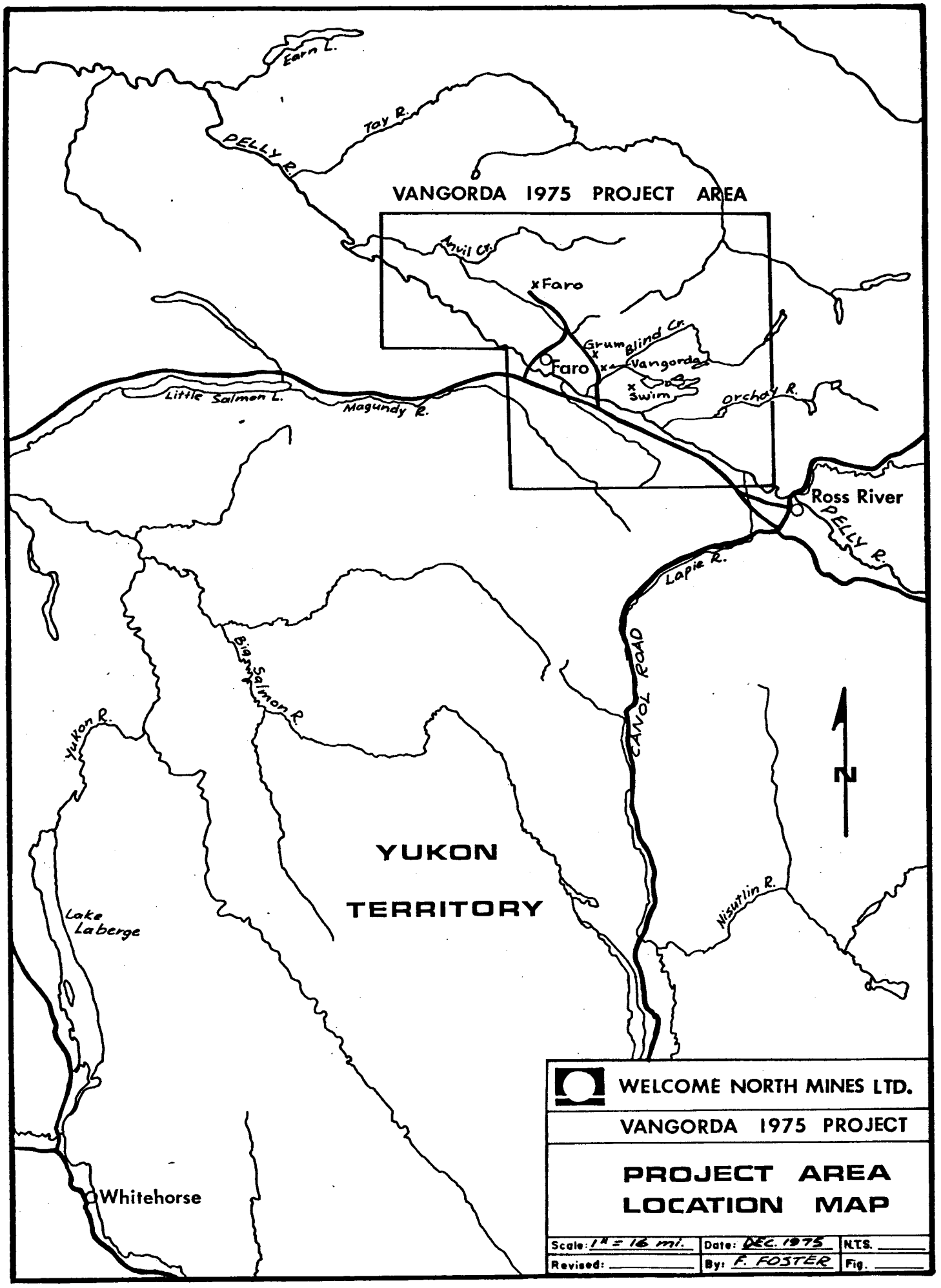

Earn L.
Tay R.
PELLY R.
VANGORDA 1975 PROJECT AREA
Anvil Cr.
Faro
Grum
Blind Cr.
Vangorda
Swim
Faro
Little Salmon L.
Magundy R.
Orchay R.
Ross River
PELLY R.
Lapie R.
CANOL ROAD
Big Salmon R.
Yukon R.
N
YUKON
TERRITORY
Lake Laberge
Nisutlin R.
Whitehorse
WELCOME NORTH MINES LTD.
VANGORDA 1975 PROJECT
PROJECT AREA
LOCATION MAP
Scale: 1" = 16 mi.
Date: DEC. 1975
N.T.S.
Revised:
By: F. FOSTER
Fig.

INTRODUCTION

The LINDA 1-44 and JACKIE 1-64 claims were staked by Welcome North Mines in February, 1975. The LINDA 45-48 claims were later tied on in December, 1975. The property was located over what was considered to be a favourable geologic environment for Anvil-Vangorda type massive sulphide deposits.

The LINDA 1-44 and JACKIE 1-64 claims were subsequently joint ventured to Getty Mining Pacific Ltd. in March, 1975 as part of the Vangorda 1975 Project. Under the joint venture agreement, Getty Mining Pacific currently holds a 60 percent working interest in the property, with Welcome North as partner with a 40 percent carried interest. The LINDA 45-48 claims were staked later in the year under this joint venture agreement.

Welcome North, as operator, during the period August 2, 1975 to September 1, 1975 carried out an exploration program consisting of electromagnetic and magnetic surveys.

MINERAL CLAIMS

The LINDA 1-48 and JACKIE 1-64 claim groups consist of the following 112 contiguous mineral claims located in the Whitehorse Mining District of the Yukon Territory (see Fig. 1a and 1b).

CLAIMS	GRANT NUMBERS	RECORDING DATE
LINDA 1-44	Y98528-Y98571	May 26, 1975
LINDA 45-48	YA4134-YA4137	Dec. 8, 1975
JACKIE 1-64	Y92599-Y92662	Feb.24, 1975

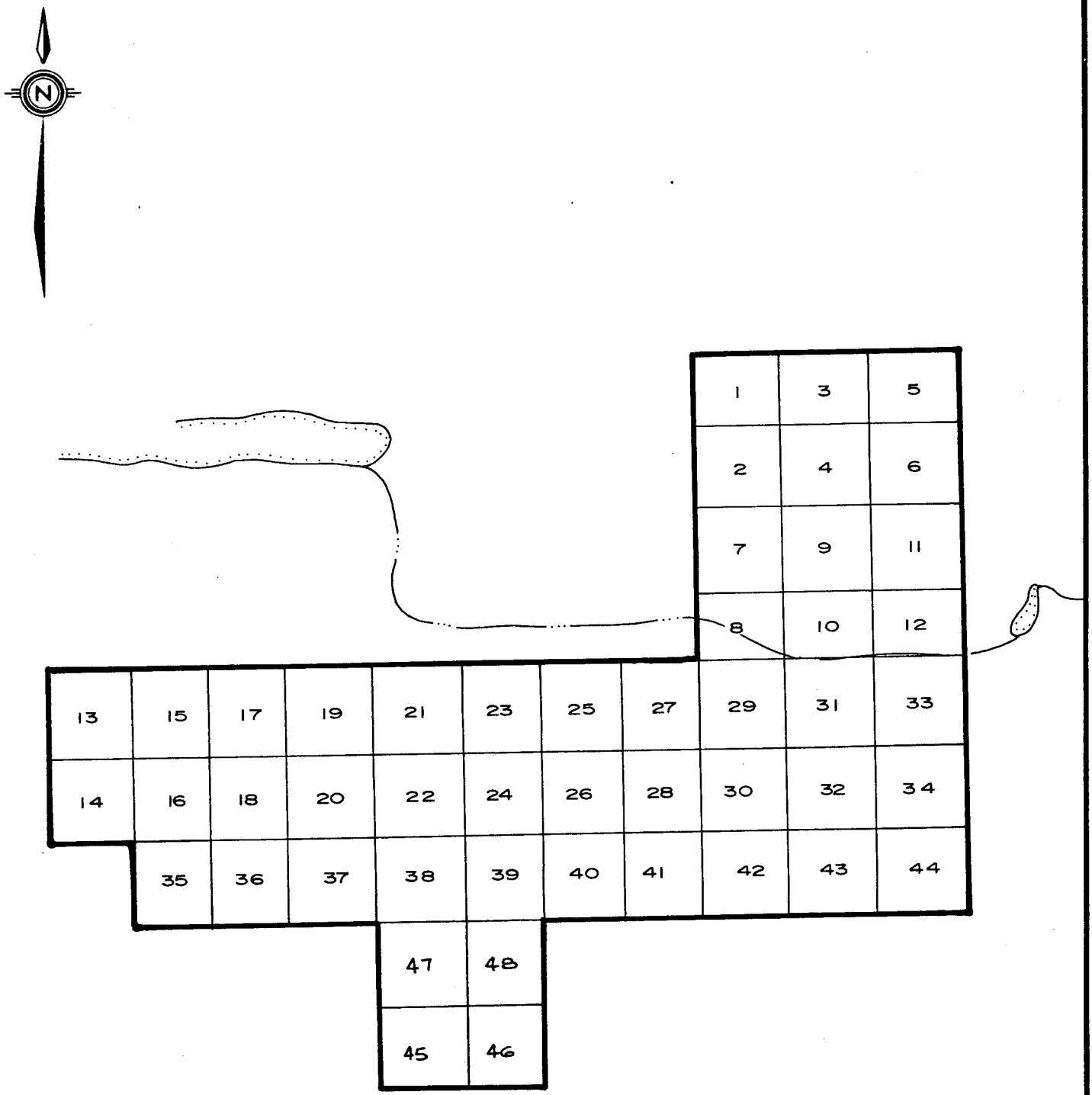


Fig. 1a

VANGORDA 75 PROJECT

WELCOME NORTH/ GETTY MINING PACIFIC

LINDA 1-48

105-K-2

SCALE IN MILES

1/2 1/4 0 1/2 1

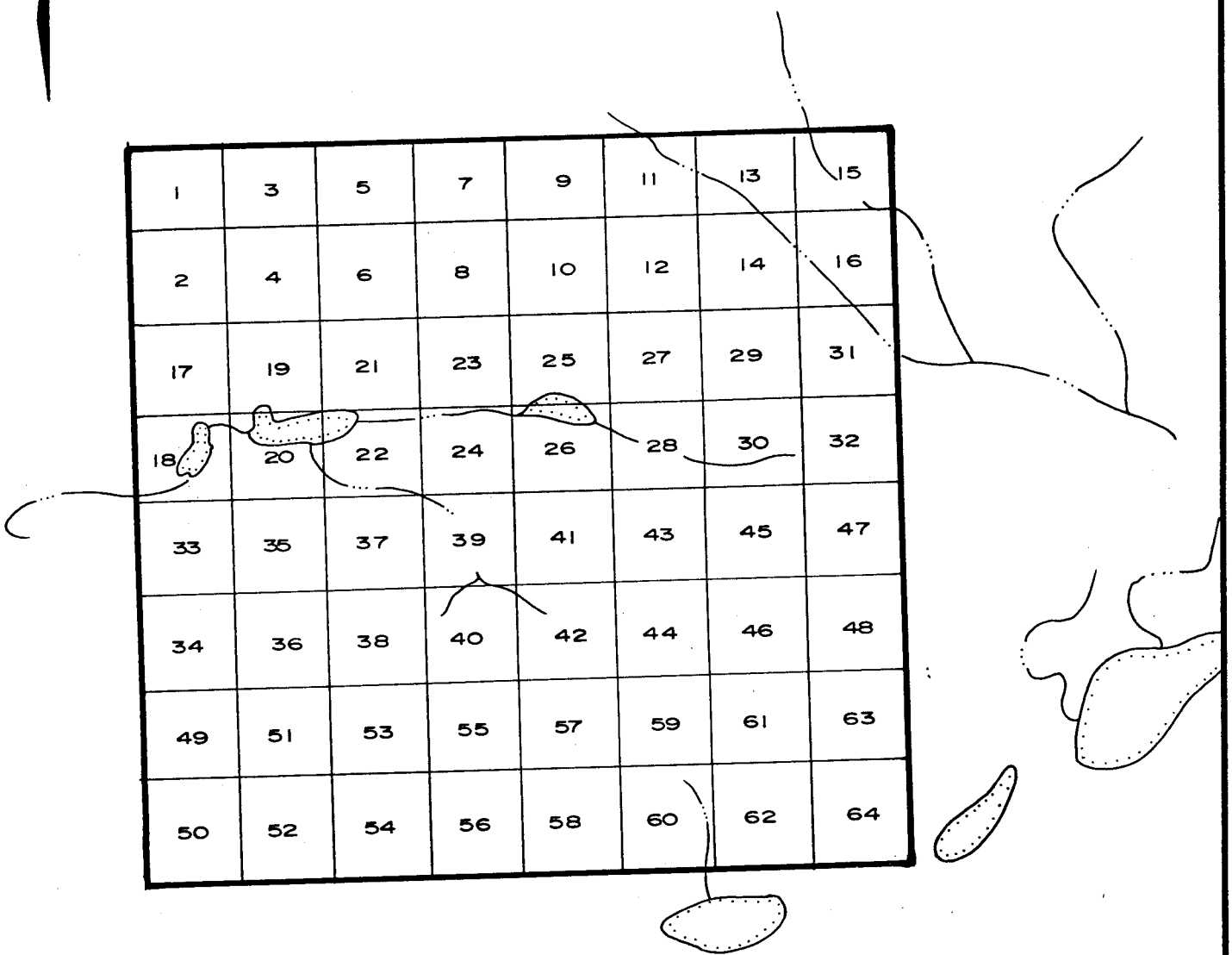


Fig. 1b

VANGORDA 75 PROJECT

WELCOME NORTH/
GETTY MINING PACIFIC

JACKIE 1-64
105-K-2

SCALE IN MILES

1/2 1/4 0 1/2 1

SUMMARY AND CONCLUSIONS

The LINDA 1-48 claims and JACKIE 1-8 claims are situated in an overburden covered area overlying phyllitic rocks of Unit (3a), the unit which contains the horizon that is host to the Vangorda and Grum type massive sulphide deposits.

Geophysical surveys carried out over the claim groups in 1975 indicated the presence of two conductors, of only moderate strength. One of these conductors is attributed to conductive overburden, however, the other conductor, located over Unit (3a), is of particular interest since it was previously delineated by a deeper penetrating Turam electromagnetic survey carried out by Anvil Explorations Ltd. in 1973. The LINDA 45-48 claims were tied on to the south of the LINDA 1-44 claims to cover the area in which an extension of this anomaly was delineated by previous electromagnetic surveys.

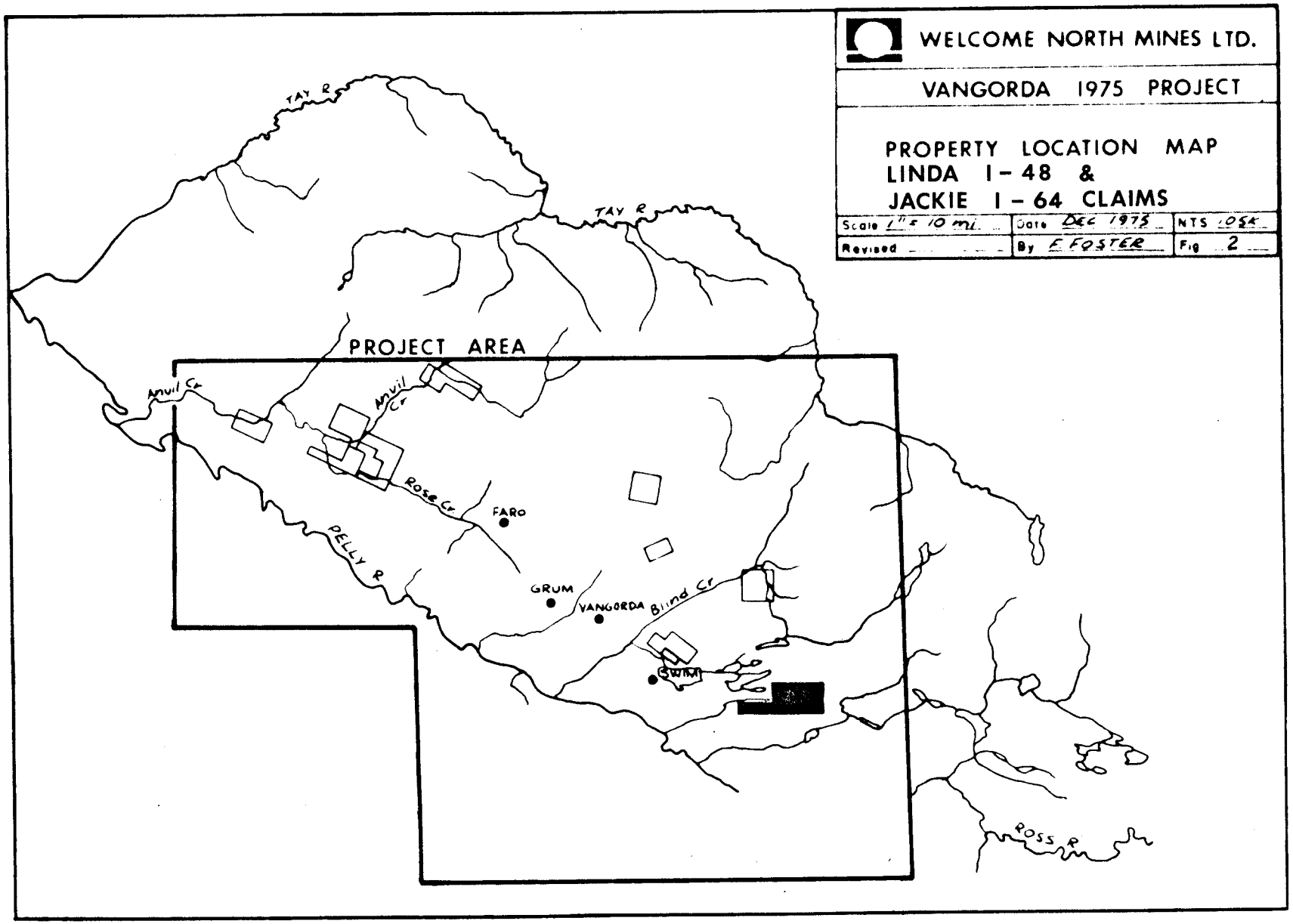
These conductors are to be further evaluated following more detailed geological (1" = 400 ft.) mapping and geochemical surveys on the property, which are proposed for the 1976 field season.

LOCATION AND ACCESS

The LINDA 1-48 and JACKIE 1-64 claims are located in the Whitehorse Mining District of the Yukon Territory (N.T.S. 105K-2) at latitude 62°10'N, and longitude 132°44'W, 125 miles northeast of Whitehorse, Yukon Territory and 21 miles east of the town of Faro, Yukon Territory (see Figure 2).

Access to the property can best be gained by helicopter from Faro or by cat trail from Kerr-Addison's Swim Lake camp situated 8 miles west of the property on Swim Lake which is accessible by road from Faro. The ground access route is serviceable by 4-wheel drive vehicle or trail bike during the dry season provided that washouts are repaired after each spring breakup.

The property is located below treeline at an elevation of 3000 feet in an area of gently rolling hills to the south and east of Moose Lake. Muskeg predominates in the valley floors whereas charred stands of timber, destroyed by fire in the late 1950's, and new growths of poplar and birch cover the hillsides. Outcrop is limited to hilltops and breaks in slope on the hillsides.


WELCOME NORTH MINES LTD.
VANGORDA 1975 PROJECT
PROPERTY LOCATION MAP
LINDA 1 - 48 &
JACKIE 1 - 64 CLAIMS
Scale 1" = 10 mi.
Date DEC 1975
NTS 105A
Revised
By E FOSTER
Fig 2
TAY R
TAY R
PROJECT AREA
Anvil Cr
Anvil Cr
Rose Cr
FARO
PELLY R
GRUM
VANGORDA
Blind Cr
SWIM
ROSS R

REGIONAL GEOLOGY

The Anvil District, as outlined in Fig. 3, lies immediately northeast of the Tintina Trench, the probable locus of a major zone of northwest-southeast transcurrent faulting.

The central part of the district is formed by the Anvil Range, the dominating structure being a doubly plunging arch-like feature around the Anvil batholith. The core of the Anvil Range is underlain by granitic rocks for which potassium-argon age determinations suggest an age of 80 - 90 million years. The Anvil Arch is flanked on the southwest and northeast by phyllites, calc-silicate gneisses and schistose rocks thought to be of Cambrian (?) to Ordovician age; these metasediments which have undergone at least three phases of deformation are host to the known massive sulphide deposits of Faro, Vangorda, Grum and Swim.

The schistose quartz rich host rocks of the Faro sulphide deposits are confined to the lower part of a unit of muscovite-biotite schist whose lower sections are sometimes graphitic. Small greenstone lenses are often found in the upper part of this sequence. This section constitutes the lower member of a 6,000 foot thick sequence of biotite-muscovite schist, calc-silicate gneiss and skarn, phyllite, chloritic greenstone bodies, and tuffaceous phyllite.

The phyllitic host rocks of the Grum, Vangorda and Swim sulphide deposits are confined to graphitic quartz-rich sections of phyllite situated close to relic volcanic complexes of greenstone, chloritic phyllite, limestone, and pyroxenite in the lower part of an estimated 3,000 foot thick unit of phyllite. The phyllite unit is separated from the lower schist unit in many areas by thick sections of calc-silicate gneiss.

The sulphide bodies of the Anvil district are tabular and lie in the plane of the crenulation foliation developed during the first phase of deformation. Their long axes coincide with the intersection of primary and secondary foliation. The sulphide deposits appear to have been only slightly affected by the regional metamorphism of phyllite host rocks.

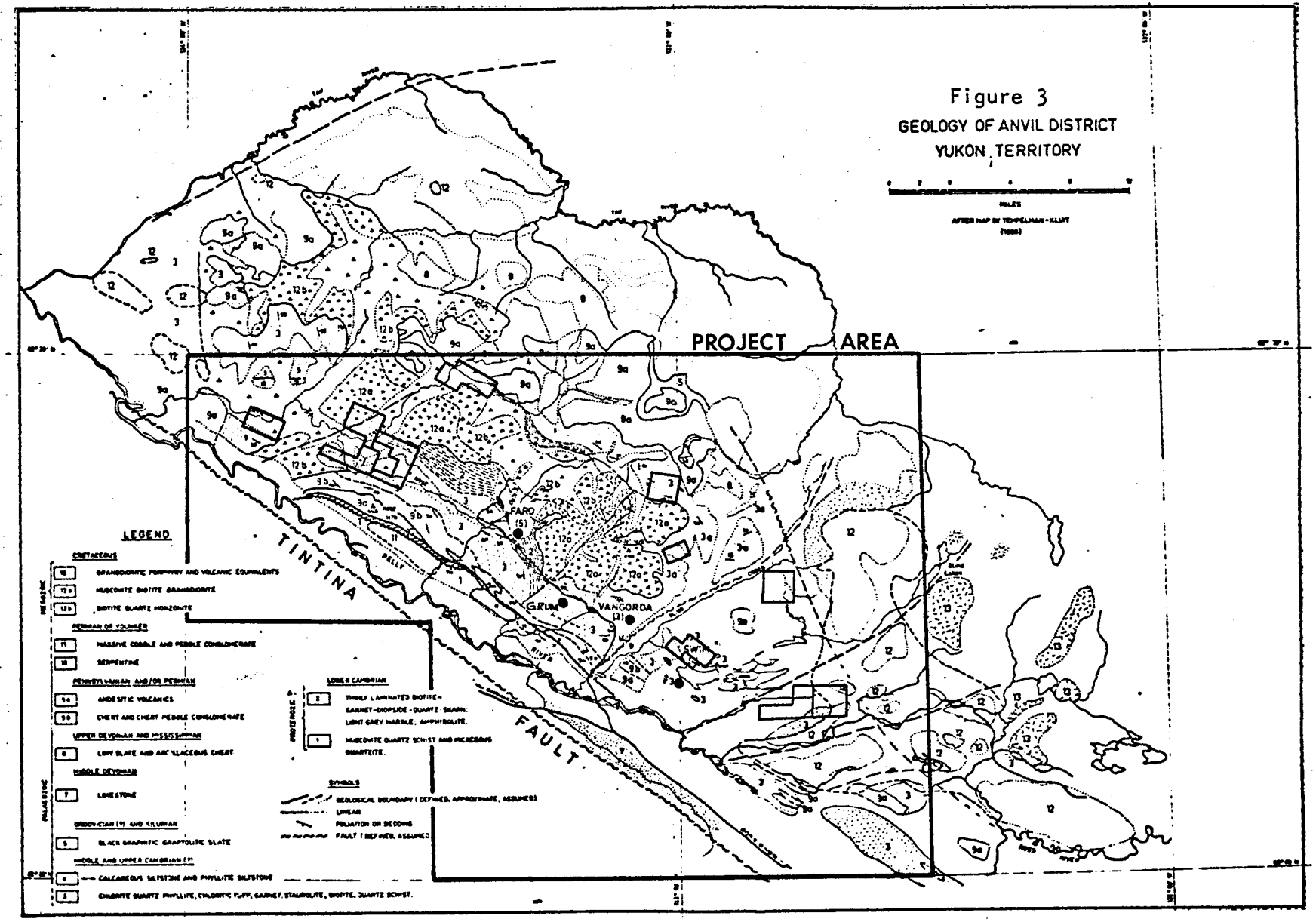


Figure 3
GEOLOGY OF ANVIL DISTRICT
YUKON TERRITORY

However, a district average grain size increase from the Swim northwest to the Faro deposits reflects a thermal metamorphic gradient caused by the intrusion of the Anvil Batholith. The base metals have been introduced into the phyllite prior to its metamorphism and deformation.

It appears that two units, the pelitic schists and phyllites, are host rocks for the four economically important sulphide masses and are also host to several smaller, presently non-economic deposits in the area.

Chloritic tuffaceous greenstone outcrops are close to all four deposits but are nowhere immediately against ore. Graphite is present in host rocks around all four deposits, but it is far more prevalent around the Swim body than near the Vangorda, Grum or Faro deposits.

A description of the rocks that make up the stratigraphic section of the Anvil Arch, and their tentative ages is listed on the following page. The description has been taken from Templemen-Kluit (1968) and modified by field observations and by information obtained from Cyprus-Anvil Mining Company.

ERA	PERIOD OR EPOCH	FORMATION	MAP UNIT	LITHOLOGY
Cenozoic	Tertiary		14b	Rhyolitic tuff
			14a	Quartz-feldspar porphyry
		RELATIONS NOT KNOWN		
Mesozoic	Cretaceous or Tertiary		13	Saussuritized porphyritic hornblende diorite
		INTRUSIVE INTO UNITS 2, 3, AND 11		
	Age unknown		12b	Hornblende diorite, gabbro
			12a	Pyroxenite, sometimes cataclastic and serpentinized
		INTRUSIVE INTO UNITS 2 AND 3		
	Cretaceous	Anvil Batholith	11	Porphyritic biotite-quartz monzonite and granodiorite; muscovite-biotite granodiorite; foliated equivalents
		INTRUSIVE INTO UNITS 2, 3, AND 8		
	Lower or Middle Triassic		10	Massive, well indurated cobble and pebble conglomerate with fragments of mica quartz schist (Unit 1), basalt (Unit 8), chert (Unit 8a), limestone (Unit 8c) and serpentinite (Unit 9); brown sandstone slate and argillaceous limestone
	Upper Permian or Lower Triassic		9	Serpentinite and serpentinized peridotite
		FAULT BOUNDED		
Paleozoic	Upper Permian	Anvil	8c	Light grey, massive resistant recrystallized limestone
	Lower Permian	Range	8b	Massive green basalt, commonly amygdaloidal, includes common pyroclastic and less common pillowed varieties, metamorphosed equivalents near granitic bodies
	Lower Permian and Upper Permian	Group	8a	Greenish grey, pale green and brick red argillaceous and tuffaceous chert
		UNCONFORMABLE ON UNITS 3, 4, 5, 6, 7		
	Upper Devonian		7	Grey slate, chert, greywacke, chert pebble pebble conglomerate and limestone
		UNCONFORMABLE ON UNITS 3 AND 4		
	Middle Devonian		6	Limestone and dolomite
	Silurian and Devonian		5	Light grey, medium bedded, medium-grained orthoquartzite
		CONFORMABLE		
	Middle Ordovician Lower Silurian		4	Dark grey and black graptolitic slate, minor thin-bedded black chert
		UNCONFORMABLE ?		
	Ordovician-Silurian		3d	Rhyolitic quartz-feldspar porphyry, sometimes pyritic
			3c	Medium green foliated actinolite schist, andesitic greenstone, foliated fine grained amphibolite, amygdaloidal chlorite phyllite
			3b	Sulphide horizon; muscovite phyllite and quartzite, siliceous graphitic phyllite, massive and banded pyrite and pyrrhotite
			3a	Dark grey biotite-chlorite schist and phyllite, medium greenish grey lustrous chlorite-muscovite-quartz phyllite, locally calcareous or graphitic
		GRADATIONAL CONTACT		
	Cambro-Ordovician		2b	Foliated amphibolite, pale green chloritic phyllite, greenstone, chlorite
			2a	Calc-silicate schist, phyllite, and gneiss with interbanded biotite and calc-silicate rich layers, can contain 2b
		GRADATIONAL CONTACT		
	Cambrian		1d	Chloritic schist and phyllite, and greenstone
			1c	Muscovite schist, muscovite-biotite schist, muscovite-andalusite schist ± graphite, biotite-andalusite-muscovite schist ± garnet and staurolite, graphitic schist
			1b	Faro sulphide horizon, muscovite quartzite ± sulphides, massive and banded pyrite and pyrrhotite
			1a	Quartzo-feldspathic biotite-muscovite schist and gneiss, in part bleached and hornfelsed

TABLE 1

PREVIOUS WORK

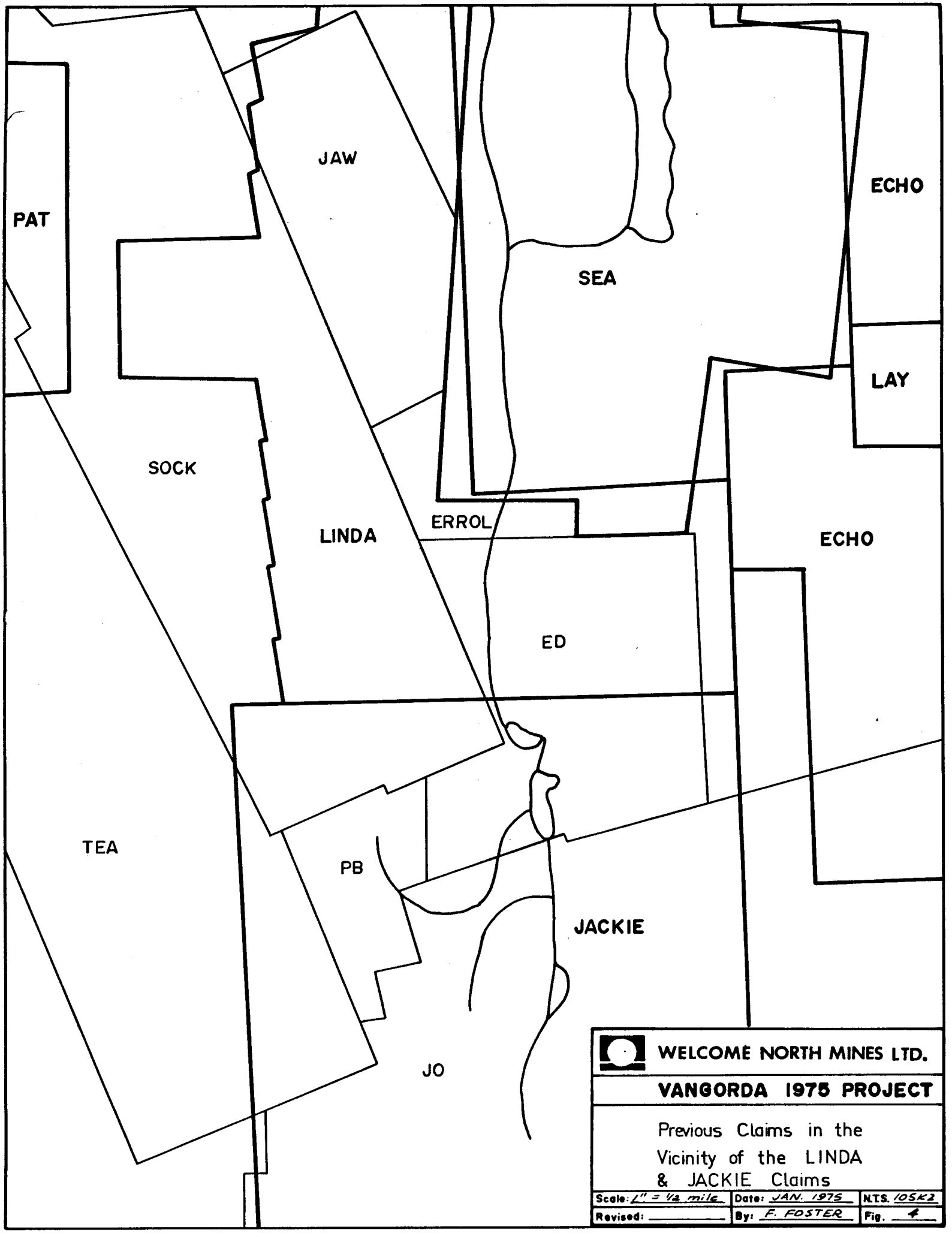
The CUB claims and the SEA claims (see RACHEL 1-43 claims, Previous Work) were staked to the north of the LINDA and JACKIE claims respectively by Dynasty Explorations Ltd. to cover airborne magnetometer anomalies. Dynasty entered a joint venture with Cyprus Explorations Ltd. in March, 1965 and following ground magnetometer and gravity surveys, drilled 5 rotary holes (about 3550 ft.) in April and May on the CUB group. The claims were later transferred to a new company, Anvil Mining Corp. Ltd., and when they lapsed the ground was restaked by Atlas Explorations Ltd. (20%) and Dynasty Explorations Ltd. (80%) as the CAPA and ECHO claims (see Fig. 4) in July, 1971. In 1972 the claims were explored through a joint venture with Midwest Oil Products Ltd., General Crude Oil Co., and Aquitaine Co. of Canada Ltd.

The SOCK claims were staked in November, 1965 and sold to Prosper Oils and Mines Ltd. and Kamloops Copper Consolidated Mining Ltd. early in 1966. The adjoining TEA claims to the southweast were staked in December, 1965 by Continental Consolidated Mining Ltd. Prosper and Kamloops Copper conducted ground magnetometer and electromagnetic surveys in 1966, and Kamloops Copper drilled a few holes late in the season.

Upon lapsing, the SOCK and TEA claims were restaked as the LUK claims in November, 1973 by the Anvil Range Syndicate (Teck Corp. and DuPont of Canada Exploration Ltd.) following an airborne magnetometer and EM survey. In 1974 the syndicate carried out reconnaissance IP surveys over the claims while Univex Mining Corp. Ltd. staked the PAT claims to the south in August.

Upon lapsing in 1975, the LUK claims were restaked as the LINDA claims in April by the Vangorda 1975 Project. Four more LINDA claims were added over the recently lapsed PAT claims in December, 1975.

The JO, ED, and PB claims were staked in December, 1965 in part by Silver Arrow Explorations Ltd. The rest of the claims to the east and south were purchased by Spur Petroleum Ltd. and Amalta Oil and Minerals Ltd.



WELCOME NORTH MINES LTD.

VANGORDA 1975 PROJECT

Previous Claims in the Vicinity of the LINDA & JACKIE Claims

Scale: 1" = ½ mile	Date: JAN. 1975	N.T.S. 105K2
Revised:	By: F. FOSTER	Fig. 4

and Jersey Consolidated Mining Ltd. Between December, 1966 and February, 1967, Silver Arrow conducted geological mapping, geochemical and EM surveys, and drilled 6 holes totalling 1424 feet. Airborne magnetic surveys were flown by Mineral Mountain and Jersey Consolidated and by Golden Gate Explorations Ltd. in 1966, after which no further work was done.

Upon lapsing the JO, ED, and PB claims were restaked as the JACKIE claims by Welcome North Mines Ltd. in February, 1975.

GEOLOGY

The LINDA 1-48 claims and the JACKIE 1-8 claims, covered by extensive overburden, are underlain by phyllites and calc-silicate rocks of units (3a) and (2a). The JACKIE 9-64 claims are underlain by granodiorites of the Anvil Batholith.

Examination of old diamond drill core on the JACKIE 1-8 claims indicated that the property is underlain by silvery grey phyllite of Unit (3a), calc-silicate gneiss and banded skarn of Unit (2a), and biotite-muscovite schist of Unit (1c), all overlying muscovite granodiorites of the Anvil Batholith. Relative thicknesses could not be ascertained because all the core was not present on the property, however core logs indicate a maximum depth of 300 feet to the intrusive rocks of the Anvil Batholith.

Rocks underlying the LINDA 1-48 claims have not yet been examined in detail. Reconnaissance mapping turned up a massive sulphide showing on the LINDA 46 claim which occurs at the contact between calc-silicate rocks of Unit (2a) on the south and phyllites of Unit (3a) which are believed to underlie the LINDA 1-44 claims on the north.

LINE CUTTING

Line cutting was carried out on the property by line cutters of Eastern Associates, hired on a contractual basis from Whitehorse. The grid system consists of two base lines trending at 90° which are connected by a perpendicular tie line. Perpendicular crosslines 3,000 feet long are spaced 800 feet apart along these base lines. Survey control was maintained by picket and chain methods with periodic line bearing checks by Sylva compass. Picket stations were established on the cross lines at 100-foot intervals.

A total of 18.31 miles of line were cut on the property (see Fig. 5a and 5b).

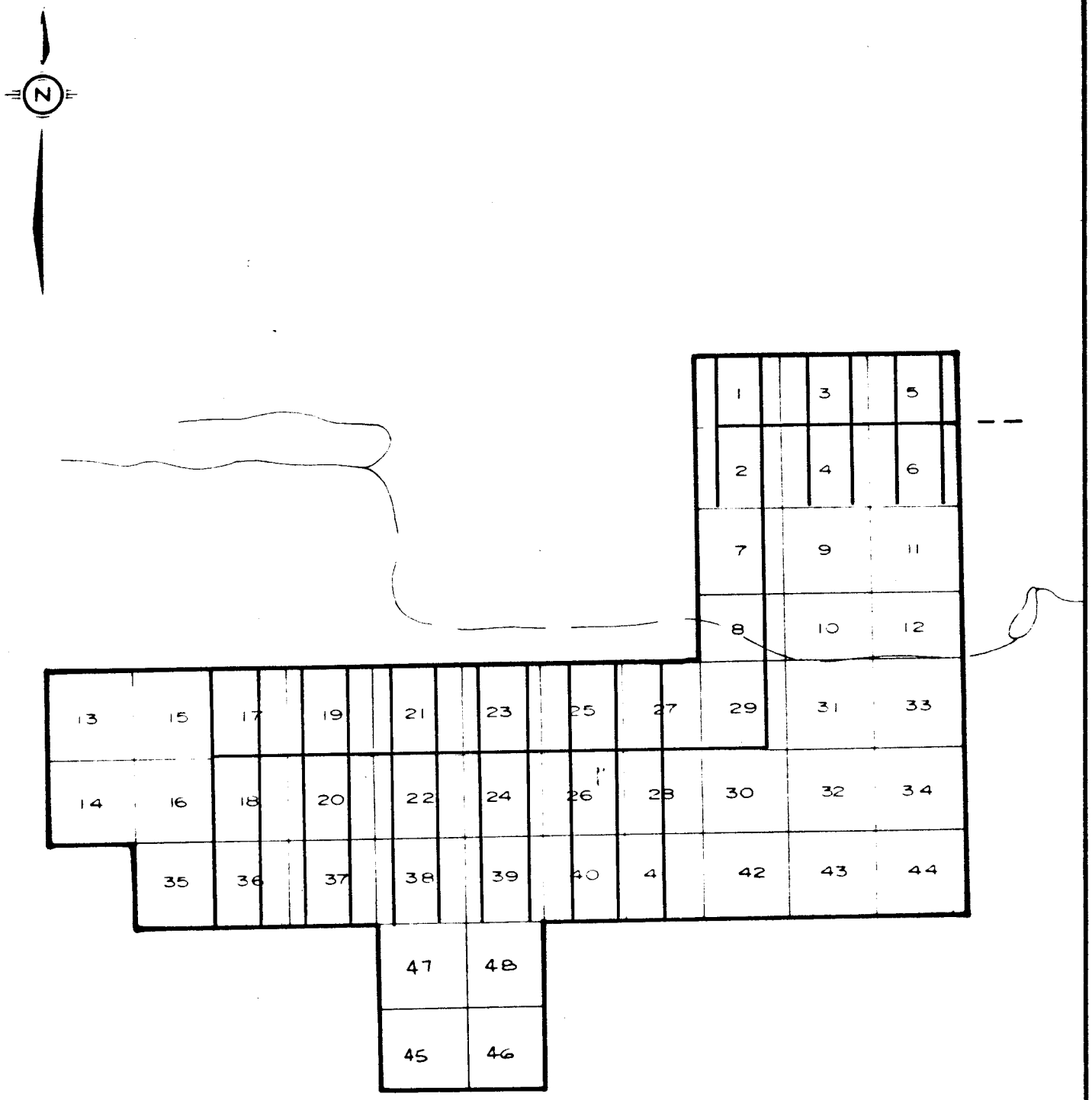


Fig. 5a

VANGORDA 75 PROJECT

WELCOME NORTH/ GETTY MINING PACIFIC

LINDA 1-48

105-K-2

SCALE IN MILES

1/2 1/4 0 1/2 1

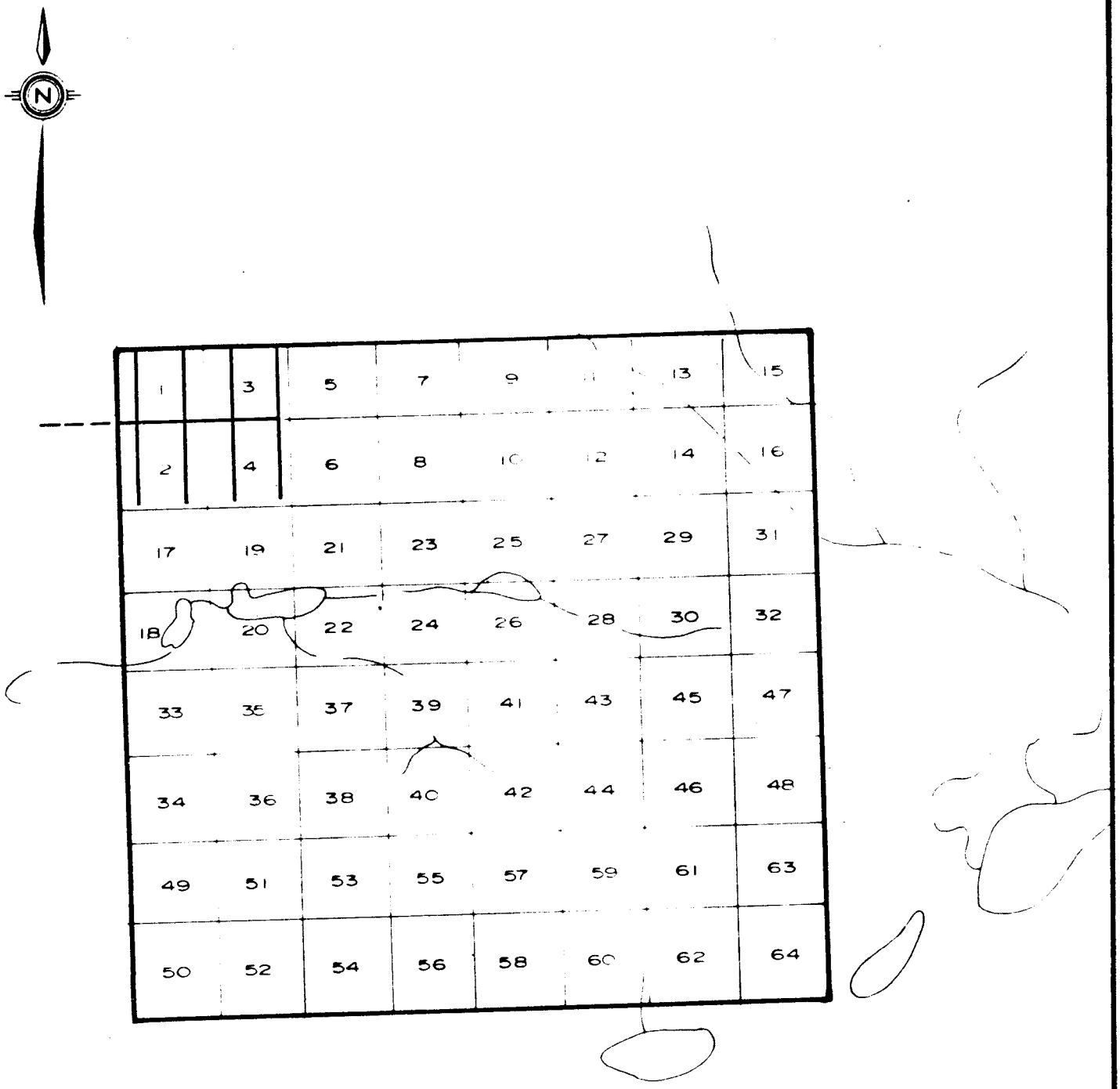


Fig. 5b

VANGORDA 75 PROJECT

WELCOME NORTH/ GETTY MINING PACIFIC

JACKIE 1-64

105-K-2

SCALE N MILES

2 4 0 2

GEOPHYSICAL SURVEYS

The geophysical surveys were carried out on a contract basis by geophysical crews of Peter E. Walcott and Associates Ltd. hired out of Vancouver, B.C.

1. Instruments Used

For the magnetometer survey, a McPhar M700 fluxgate magnetometer was used. The instrument is hand-held and measures the vertical magnetic component by use of an oil-dampened fluxgate which automatically levels itself in the direction of the vertical field. The magnetometer is of light weight and a direct read-out of gamma values can be obtained quickly.

The electromagnetic survey was carried out with a Crone CEM dual frequency unit. The Crone is of the inductive type and may be used either as a horizontal or vertical loop apparatus. Measurements are made of the resultant dip angle of the field and the width of null or out of phase component. It is designed to be operated with a maximum coil spread of 600 feet on frequencies of 390 and 1830 cycles per second with no interconnecting cables. The effective depth penetration is 300 feet for a horizontal conductor with maximum coil spread (no skin effect allowance) and 100 feet for a vertical conductor. The effective lateral coverage is a direct function of the spread under ideal conditions. The equipment was chosen in order to give reliable information on the attitude and configuration of a conductor, the physical properties of the host rock, dimensions of the conductor, and results free from error due to topographic relief.

2. Method of Survey

a) Magnetometer Survey

Prior to the actual magnetometer survey, readings were taken along the central base line at cross line intersection points. These stations were looped and re-read every hour as a means of controlling drift and diurnal variations. With base stations of an established value serving as a means of controlling drift and diural variations, a rapid and

precise check was kept on magnetic variations and the entire survey was thus kept on a relative basis during day to day operation. Each cross line was read with re-checks at the base station within every hour, this method provided an internal control for detecting diurnal and drift variations. The survey was done by one operator using the same instrument.

b) Electromagnetic Survey

All surveys were run with horizontal loop configuration and 300 foot coil spacing in order that highest response could be obtained from flat lying sulphide bodies. Readings at 1830 cps were taken at each station. The coil configuration was not adaptable to conditions of conductive overburden and maximum response from such was expected. All traverses were made by the "in line method" and done over the same grid as used for the magnetometer surveys. In some cases a lower frequency (390 cps) was adopted for better resolution of conductors, within areas of more specific interest. The two-man EM crew did all their ground work in coincidence with the magnetometer crew.

3. Treatment of Data

a) Magnetic Results

Magnetic results were corrected in the field for diurnal and drift variations by the field operator. The final gamma values were then plotted on a grid plan using scale of 400 feet to 1 inch. This data was presented to the party chief who profiled and contoured the data on overlay material in order that he could remain familiar with day to day results and progress of the survey, direct its course, and have results available for the project geologist when he carried out geochemical surveys and geological mapping on the property. Magnetic data is presented in this report on a map of 1" = 400' scale showing gamma values and contoured results (see Appendix). The map shows major drainage features and locations of mineral claim posts.

b) Electromagnetic Results

All results as derived in the field were plotted each night by the EM operators on a grid plan using a scale of 1" = 400'. Results were presented to the party chief for inspection, profiling and preliminary contouring in order that this data be compared with the magnetometer survey and the results be available to the project geologist when he carried out geochemical and geological surveys on the property. Final plotting was done on a map of 1" = 400' scale similar to that used for the magnetic map. Electromagnetic data is presented in this report showing values contoured.

4. Interpretation of Results

a) Magnetometer Survey

The magnetometer survey carried out over both the northern and southern grids on the LINDA and JACKIE claims showed the area covered by the claim group to exhibit fairly uniform magnetic susceptibility over which no major magnetic anomalies were discernible.

On the northern grid (Fig. 4 and Plate W-202-9) two very restricted high magnitude (max. 500 gammas) anomalies are situated in the vicinity of station 56E-12N in an overburden covered area believed to be underlain by granodiorite of Unit (11).

Another isolated and very restricted magnetic anomaly (300 gammas) occurs adjacent to a magnetic low in the vicinity of station 64E-24S on the southern grid (Fig. 4 and Plate W-202-7). This anomly may be indicative of a minor fault in the underlying phyllites of Unit (3a).

b) Electromagnetic Survey

Electromagnetic responses obtained over the grids covering the claim group are generally poor, with only weak conductors being delineated. All these conductors occur in areas of conductive overburden, however they are still of interest until further geological and geochemical

data can be obtained in the field since they are underlain by rocks of Unit (3a).

A weak electromagnetic conductor (-9° dip angle) was delineated by a high frequency response on the northern grid (Fig. 4 and Plate W-202-10) between lines 0E and 16E just north of the baseline. However a low frequency response over the same area suggested that the anomalous zone was due to conductive overburden. Several smaller weakly conductive zones on this same grid are also attributed to conductive overburden.

A fairly extensive, moderate strength (max. -23° dip angle) electromagnetic response, Conductor "A", previously outlined in 1973 by a Turam electromagnetic survey conducted by Anvil Explorations Ltd., was outlined by the high frequency survey on the southern grid (Fig. 4 and Plate W-202-8) in its southeast corner in an area of deep overburden cover. Low frequency responses obtained over this conductor indicate that a source of conductive overburden is a strong possibility.

RECOMMENDATIONS

Several airborne electromagnetic anomalies were confirmed by ground electromagnetic surveys which have been carried out to date in the vicinity of the claim group (see Plate 1).

Further exploratory work consisting of geological mapping and geochemical surveys outside the property is recommended to determine if further staking is warranted. Follow-up geochemistry and detailed geological mapping on a scale of 1 inch = 400 feet using cut line for control is recommended on the property in areas of interest indicated by electromagnetic and magnetic data from previous and present surveys.

The JACKIE 9-64 claims should be allowed to lapse since they overlie granodiorites of the Anvil batholith, which are of no interest as a host for massive sulphides.

BIBLIOGRAPHY

Archer, Cathro & Associates Ltd., Northern Cordillera Mineral Inventory: Yukon and Northwest Territories, 1975.

Dept. of Indian and Northern Affairs; Mineral Industry Reports, 1965 to 1973.

Sinclair, A.J., Selection of Threshold Values in Geochemical Data Using Probability Graphs: Journal of Geochemical Exploration, V. 3, p 129-149, 1974.

Templeman-Kluit, D.J.; Geology and Origin of The Faro, Vangorda and Swim Concordant Zinc-Lead Deposits, Central Yukon Territory: Geological Survey of Canada Bulletin 208, 1972.

Map: Dynasty Expl. Ltd., Anvil District, 105K, Airborne Magnetometer Survey, Scale 1" = 1 mile, Lockwood Survey Corp. 1965.

Golden Gate Explorations Ltd., Jo, Glynn, OP, Fannin Claims, 105K-2, Airborne Magnetic and Geological Survey, 3 maps, P.H. Sevensma, 1969

Mineral Mountain Mining Co. Ltd., Jo, Ed, Pb Claims, 105K-2, Airborne Electromagnetic, Geochemical, and Geological Survey, 5 maps, P.H. Sevensma, 1967.

Prosper Oils Ltd., Sock Claims, 105K-2, Electromagnetic and Magnetic Survey, 2 maps, W.P. McGill, 1966.

Silver Arrow Explorations Ltd., Jo, Ed, Pb Claims, 105K-2, Geophysical and Geological Report, Diamond Drilling, 5 maps, P.H. Sevensma, 1966.

Univex Mining Corp., Ron, Pat and Ross Claims, 105K-2, Geological Report, E.O. Chisholm, 1975.

Map: Dynasty Expl. Ltd., Anvil District, 105K, Airborne Electromagnetic Survey, scale 1" = 1 mile, Lockwood Survey Corp. 1965.

Mesozoic

Cretaceous

11 — Porphyritic biotite-quartz monzonite and granodiorite, muscovite-biotite granodiorite, foliated equivalents

Paleozoic

Ordovician and Silurian

3a — Dark grey biotite-chlorite schist and phyllite

Cambrian and Ordovician

2a — Calc-silicate schist, gneiss and phyllite, can contain 2b.

Geological boundary (defined approx., gradational, assumed)

Limit of outcrop, outcrop

Aeromagnetic Anomaly

Cat Trails

ORCHAY RIVER

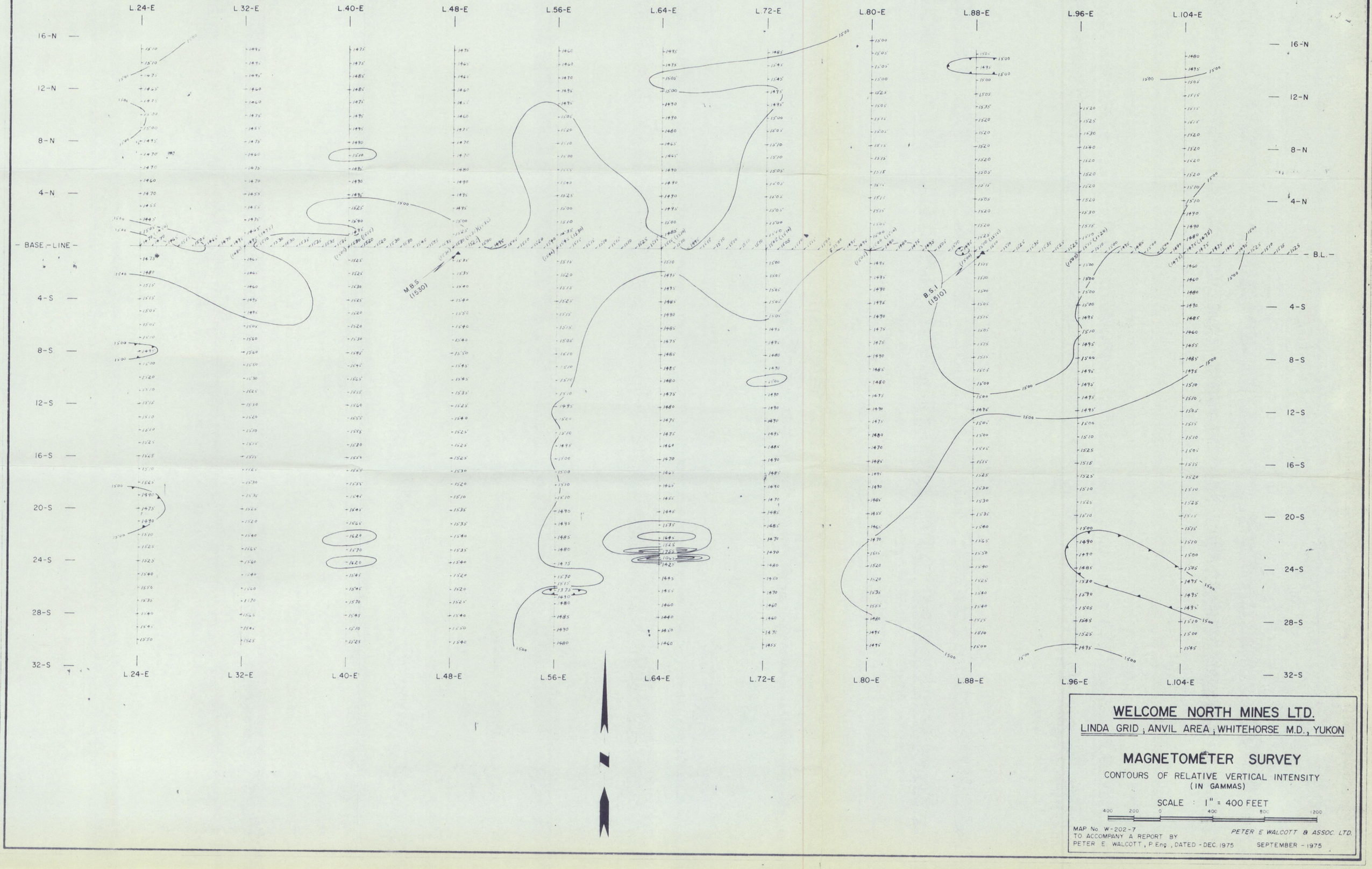
ORCHAY LAKES

ORCHAY RIVER

Base Line

Base Line

Base Line



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LINDA GRID ; ANVIL AREA ; WHITEHORSE M.D., YUKON

MAGNETOMETER SURVEY

CONTOURS OF RELATIVE VERTICAL INTENSITY
(IN GAMMAS)

SCALE : 1" = 400 FEET

400 200 0 400 800 1200

MAP No. W-202-7
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16-N — 12-N — 8-N — 4-N — BASE-LINE — 4-S — 8-S — 12-S — 16-S

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MAGNETOMETER SURVEY

CONTOURS OF RELATIVE VERTICAL INTENSITY
(IN GAMMAS)

SCALE 1" = 400 FEET

400 200 0 400 800 1200

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16-N
12-N
8-N
4-N
BASE LINE
4-S
8-S
12-S
16-S
20-S
24-S
28-S
32-S

B.L.

CONDUCTOR "A"

COIL SEPARATION - 300 FEET

FREQUENCY
390 Hz | 1830 Hz

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CRONE HORIZONTAL SHOOTBACK

ELECTROMAGNETIC SURVEY

CONTOURS OF DIP ANGLE

SCALE : 1" = 400 FEET

400 200 0 400 800 1200

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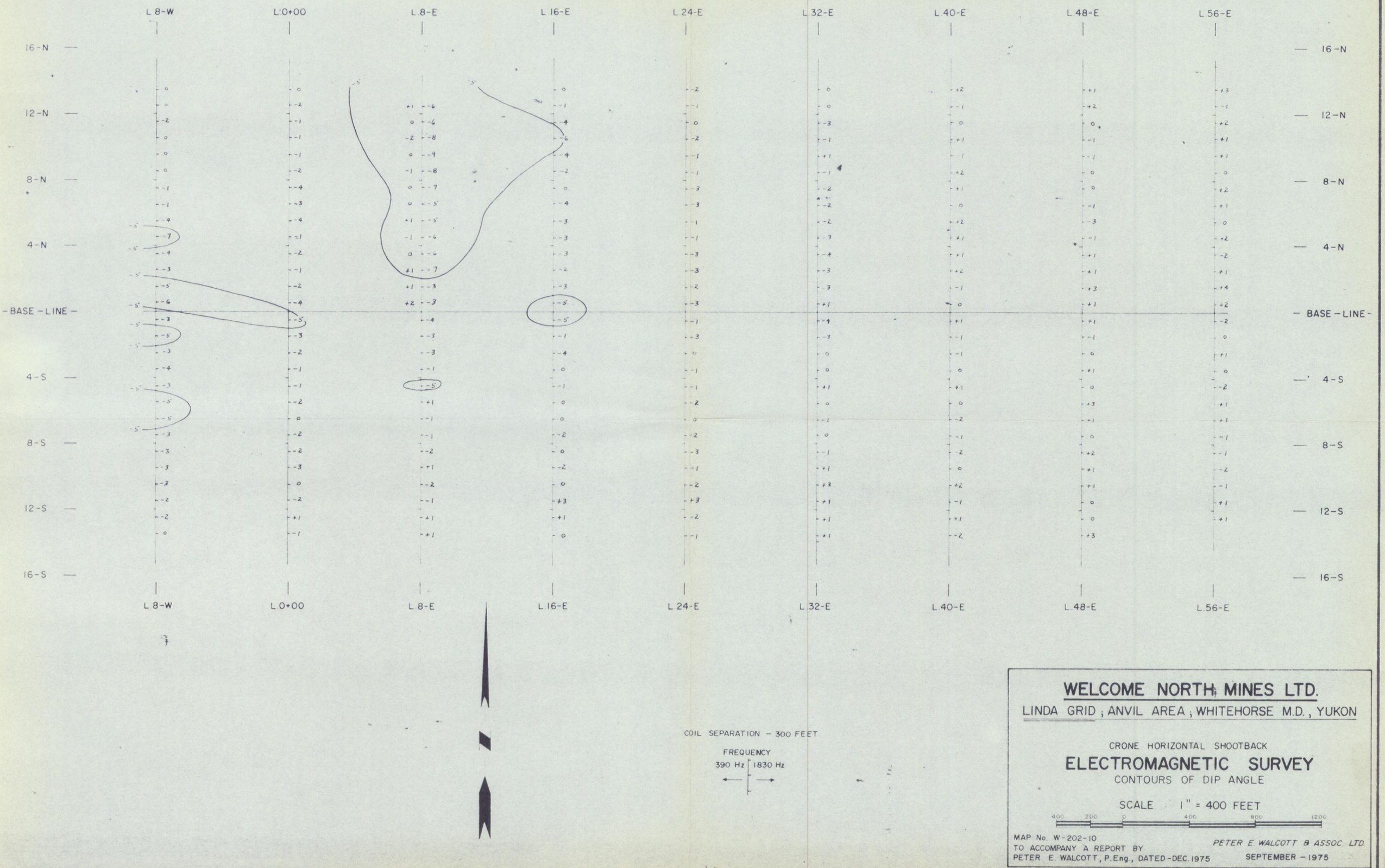

COIL SEPARATION – 300 FEET

FREQUENCY
390 Hz | 1830 Hz

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CRONE HORIZONTAL SHOOTBACK

ELECTROMAGNETIC SURVEY

CONTOURS OF DIP ANGLE

SCALE : 1" = 400 FEET

400 200 0 400 800 1200

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