A GEOLOGICAL REPORT

ON

THE LEN #1-32 CLAIMS OF TALLY RESOURCES, INC.,

MAYO MINING DISTRICT, YUKON TERRITORY.

November 7, 1980

AGILIS EXPLORATION SERVICES LTD.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$ 20,600.02

R. Debicki A. Reg Geol

Resident Geologist or
Resident Mining Engineer June 1/81

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

INDIAN and NORTHERN AFFAIRS

TRANSMITTAL FORM

M.R. File No. _____

S.M.R. File No. _____

Date Fwd. 8/4/81

FROM: Mining Recorder at ..... Mayo .....

TO Supervising Mining Recorder at Whitehorse, Y.T.

Office Of The Supervising Mining Recorder
APR 15 1981
WHITEHORSE
Yukon Territory

FOR ACTION ARE:

☐ NEW APPL'N for PLACER LEASE to PROSPECT: Name:

☐ RENEWAL APPL'N PLACER LEASE to PROSPECT: Name: Lease No. .....

☐ AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name. Lease No. .....

☐ ASSIGNMENT of PLACER LEASE No. .....
From: To:

☐ GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner

☐ DIAMOND DRILL LOGS
Claims: Claim sheet no.

☑ QUARTZ ASSESSMENT REPORT
Claims: "LEN" 1-32 Claim sheet no. 106-D-4

Type of report: GEO.

Submitted by: TALLY RESOURCES INC

Cls. work performed on:

$ Req. for ren. application
$ 20,600.12/02

Signature

REPLY ACTION

Date Ret.

Signature

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A GEOLOGICAL REPORT

ON

THE LEN #1-32 CLAIMS OF TALLY RESOURCES, INC.,

MAYO MINING DISTRICT, YUKON TERRITORY.

INTRODUCTION:

During the period of May 26 to June 16, 1980, a stream sediment survey, geochemical soil survey, and geologic mapping was carried out on the Len 1-32 mineral claims. The purpose of this work was two-fold: to complete the required assessment work and to evaluate the mineral potential of the eastern part of the Len claims.

HISTORY OF THE PROPERTY:

The property was originally located by Keno Hill Mines Ltd. to investigate geochemical stream sediment highs along the creeks. After a galena-siderite vein structure was found by prospecting, several trenches were excavated but the claims were allowed to lapse.

In March, 1968 the Jay 1-16 claims were staked and acquired by Altair Mining Corporation Ltd. (NPL). The following summer a geochemical soil survey was carried out by McDonald Consultants Ltd. for Altair. This survey outlined a well defined Pb, Zn, Ag soil anomaly which ran in an east-west direction, as well as several weaker anomalous areas.

In September 1973 geological mapping and the sampling of trenches was done by Agilis Engineering for Belmoral Mines Ltd. In 1974 Agilis investigated the geochemical anomalies by trenching and putting in prospect pits. A total of 71 metres of EXT diamond drilling was also carried out in six holes. Recovery in the diamond drill holes was very poor (30%) due to the small core size and the schistosity of the rocks cored.

The Jay claims were allowed to lapse after 1974, and the Len claims were

staked to cover the former Jay claims and adjoining ground to the east.

PROPERTY, TITLE:

The property consists of the Len 1-32 mineral claims. The (Figure 1.) claims are owned by Gordon Dickson of Whitehorse, Y.T. and are currently under option to Tally Resources Inc. of Vancouver, B.C.

FIELD PROGRAM - 1980:

The 1980 field program consisted of geological mapping, geochemical soil sampling, and stream sediment sampling. Field work was carried out from May 26 to June 16.

The geology of the property was mapped at a scale of 1 inch = 1000 ft (1:12,000). A flagged grid put in with hip chain and compass served as ground control. Traverses made along creeks, grid lines, and across country were used as a base for the geological mapping.

The stream sediment survey consisted of the collection of 245 silt samples over the entire property, which includes six tributaries of Skate Creek and one tributary of Lynx Creek. Samples were collected every 60 metres and notes were taken with regard to sediment type, slope, local vegetation, and rock types near sampling sites.

Soil samples for geochemical analysis were collected over the entire claim group using the flagged grid for ground control. Lines were generally spaced 100 metres apart, with soil sample stations every 50 metres along the lines. In all 42.9 km of grid lines were run and 797 soil samples were obtained for analysis. For the geochemical soil survey, detailed notes were taken with regard to soil type, depth, and colour, local vegetation, and rock types nearby.

GEOGRAPHY:

The Len property is located 47 km NNE of Mayo in the central part of Yukon Territory, with the centre of the claim group located at 64° 01'N. latitude and 135° 37'W. longitude (Figure 2). The property is situated in the Stewart River drainage system and lies immediately southeast of the confluence of Skate and Lynx Creeks, the latter of which flows in a southwesterly direction to the South McQuesten River, a major tributary of the Stewart River.

The physiography of the property consists of north-facing gentle slopes that are drained by Skate Creek. Relief in the area is 340 metres, and the average elevation is approximately 1100 metres above sea level.

The vegetation consists of stunted stands of spruce and fir, with low stands of willow and buckbrush especially common along waterways. Along north-facing slopes thick moss covers permafrost, which makes soil sampling difficult during all months of the summer.

The property is accessible by helicopter from Mayo, Y.T.

GEOLOGY:

The area occupied by the Len claim group appears to have been little affected by glacial activity (Vernon and Hughes, 1966). Granitic glacial erratics were found in the eastern part of the Len property; these were probably carried by lateral and sub-lateral meltwater channels.

The gradual north-facing slopes of Skate Creek, and especially the wide slope in the eastern part of the claim group, show evidence of the slow downslope movement of colluvial materials.

REGIONAL GEOLOGY:

The area has been mapped at a scale of 1:250,000 by the Geological Survey Of Canada and the results appear on the Nash Creek map sheet and in GSC Memoir 364 (Green, 1972). Earlier geological investigations were conducted by Bostock (1974) in the Mayo area, and Boyle (1965) in the Keno Hill-Galena Hill area. The most detailed geological mapping in the area is that of Green (1971), who mapped the Mayo Lake, Scougale Creek, and McQuesten Lake map areas, which lie immediately east and southeast of the Len property.

In general, rocks of the Len claim group include quartzites, quartz-mica schists, and limestone. These rocks are included in Green's (1972) unit 3 and are presumed to be of Precambrian and/or Cambrian age. To the north and immediately east of the Len property these rocks are apparently thrust over the Keno Hill Quartzite of Cretaceous age (Green, 1972).

The structural configuration of rocks of unit 3 is complex, with several stages of folding indicated. Large open folding is apparent on a regional basis, but on a smaller scale, folding appears to be tight and highly complex. The obliteration of bedding by metamorphism makes interpretation especially difficult.

Granitic intrusions of Cretaceous age form small stocks that intrude rocks of unit 3. These granitic rocks occur in the west-central and southeastern parts of the Len property, and also outcrop to the northeast, north, and northwest of the claim group.

Lead-zinc-silver deposits in the general area include the Stand-to-Hill and Rambler Hill showings in the Davidson Range to the east, the McQuesten Pass, and McKay and Horseshoe Hill showings to the north, and the United-Keno Hill Mines deposits 22 km southeast of the Len property.

LOCAL GEOLOGY:

The results of the 1980 geological mapping are presented as Figure 3. The rocks have been divided into four main units, designated as units A,B,C, and D.

Rocks assigned to unit A consist of fine-grained, thin and medium bedded to massive, grey, banded quartzites. The beds are typically platy and contain 2-3 cm interbeds of graphitic shale-slate that are usually contorted. These contorted interbeds more often than not contain lenses, stringers, pods, and eyes of quartz. These rocks outcrop well and form cliffs up to 30 metres high along Skate Creek.

Rocks designated as unit B consist of fine to medium grained, medium to thick bedded, massive, platy or blocky, dark green sheared quartzites. Thin quartz pods, stringers, and eyes between bedding planes are sometimes present, but are not the general rule. These rocks, which weather a medium to dark greenish grey, outcrop well and form cliffs along Skate Creek and its tributaries. Some of the rocks of unit B have a "bleached" white to light grey sandy texture and are probably associated with more intense shearing.

Rocks assigned to unit C are similar to those of unit A, but are finer grained and have a sugary texture. They are typically very fine-grained, sugary, thin to medium bedded, dense, slabby, banded, mottled white-buff-grey quartzites. Near the granodiorite (unit D) stocks in the west and southeast parts of the map-area, the unit C rocks are more schistose, with wavy bedding, thin grey slaty contorted partings, and stretched quartz augens, stringers, and pods.

At the unit C/granodiorite contact, the quartzites are recrystallized, and have a medium to coarse grained, glassy texture.

Rocks assigned to unit D consist of granodiorite. According to Green (1972), these rocks are of Cretaceous age and are strung out along the northeast side of Tintina Trench for many hundred kilometres. The Cantung tin and tungsten showings at Dublin Gulch, 11 kilometres northwest of the Len property, are associated with

granodiorite like that of unit D.

It is the writer's opinion that the rocks of units A,B, and C have a common premetamorphic origin, and represent different degrees of structural deformation.

Folding on the Len property is fairly tight, and is quite complex. Faulting is probably more common than illustrated on the geologic map presented here.

ECONOMIC GEOLOGY:

Detailed mapping of the trenches in 1973 exposed a sideritic vein on what is now Len claim 30. This vein which strikes N 60° W, has a strike length of 61 metres, an apparent width of 10.7 metres, a true width of 2.7 metres, and dips 20° to the northeast. The vein material is coarsly crystalline, strongly oxidized siderite with narrow stringers and veinlets of galena concentrated along the hanging wall and footwalls.

Assay samples collected every 1.5 metres across the vein averaged as follows: Ag 11.55 oz/ton, Pb 4.98%, Zn 5.05%, Au o.o14 oz/ton (Holcapek, 1973).

The geologic mapping completed in 1980 failed to turn up any new showings. Table 1 lists Pb, Zn, and Ag assay values for selected rocks from all of the rock units. The granodiorite stock centered at lines 200 N, 400 W has not previously been mapped and holds potential for future prospecting. The 1980 Pb - Zn soil geochemistry results (detailed in a separate report) show interesting anomalies in the vicinity of this granodiorite stock.

RECOMMENDATIONS:

Further prospecting in the vicinity of the newly mapped granodiorite stock is warranted. Ultra-violet light prospecting is a useful tool and should be considered. If the results of the tin and tungsten soil analyses in the vicinity of the granodiorite stock are positive, a more detailed (25 x 50 metre) geochemical soil survey should be initiated in this area.

REFERENCE:

1. Bostock, H.S. 1974. Mayo, Yukon Territory. Geological Survey Of Canada Map 890 A.

2. Boyle, R.W. 1965. Geology geochemistry, and origin of the lead-zinc-silver deposits of the Keno Hill - Galena Hill area, Yukon Territory. Geological Survey Of Canada Bulletin III.

3. Green, L.H. 1971. Geology of the Mayo Lake, Scougale Creek and McQuesten Lake Map - areas, Yukon Territory. Geological Survey Of Canada Memoir 357.

4. Green, L.H. 1972. Geology of Nash Creek, Larsen Creek, and Dawson Map - areas, Yukon Territory. Geological Survey Of Canada Memoir 364.

5. Holcapek, F. 1973. Geological Report on the Jay Mineral Claims, Belmoral Mines Ltd. (NPL). October 25, 1973.

6. Vernon, P. and Hughes, O.L. 1966. Surficial Geology, Dawson, Larsen Creek, and Nash Creek Map - areas, Yukon Territory. Geological Survey Of Canada Bulletin 136.

By C. L. McAtee - Geologist

Endorsed By

R.H.D. Philp, P. Eng.

GEOCHEMICAL SURVEY RESULTS ON

THE LEN GROUP, MAYO M.D., Y.T.

WORK COMPLETED:

Both silt sampling of the major creeks and soil sampling of the entire gridded area was conducted over the Len Group in conjunction with the geological survey during 1980.

A total of 245 silt samples were taken at approximately 60 meter intervals along the creeks with all samples tested for silver, lead and zinc.

Soil samples were collected at 50 meter intervals along north-south lines spaced 100 meters apart. A total of 797 soil samples were collected along a total of 42.9 km of grid lines. These samples were also analyzed for silver, lead and zinc, with 127 in the vicinity of intrusives analyzed for tin and tungsten as well.

RESULTS:

Small silver-lead-zinc highs correspond to the previously explored mineralization near 1000 - 1100 W, 50 N. Weak highs to the immediate northwest probably represent a further outcropping or an extension of the zone in this direction. However, the highs appear on only one line.

Although a strong high is found at 1600 W, 250 S, only two samples along one line are anomalous.

The most significant silver anomaly extends from 200 E, 200 N, westerly to 200 W, 100 N with a weaker east-west trending anomaly to the immediate south. This corresponds very well with a lead anomaly. The anomaly crosses the drainage in an area of quartzites near the edge of, and partially within, a granodiorite intrusive body. This could represent an extention of the previously exposed mineralized zone to the west. Weakly anomalous silver-lead-zinc values also occur in silt samples from 3 creeks in this area.

No anomalous areas were outlined in the eastern portion of the property mapped as being underlain by sheared dark green quartzite.

Continued...

Tin values generally lie between 1 and 3 ppm with a few higher values to a maximum of 12 ppm. Tungsten values are mainly 1 ppm with a few higher values up to 9 ppm. No significant anomalous areas were outlined.

CONCLUSIONS:

The anomaly at 200 W to 200 E extends over approximately 500 meters and warrants further investigation. From its location it appears to represent an extention of the mineralized zone exposed further west. Detailed mapping and trenching should be carried out to determine the source of the anomalous values.

March 25, 1981.

R.H.D. Philp, P. Eng.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of the geological and geochemical surveys on the Len Claims, Mayo M.D.

I, Ronald Philp

of 1458 - 409 Granville Street, Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that the following personnel were employed and costs incurred in conducting the surveys.

PERSONNEL

R. Philp	- geologist, supervisior - 3 days @ $200.00/day =	$ 600.00
C. McAtee	- geologist - 28¼ days @ $137.50/day =	3,884.37
C. McAtee	- geologist - 4½ days @ $170.46/day =	767.07
N. Armstrong	- party chief - 26 days @ $119.31/day =	3,102.06
J. Gillanders	- sampler - 30 days @ $81.81/day =	2,454.30
D. Conway	- sampler - 29 days @ $81.81/day =	2,372.49
		$13,180.29

DISBURSEMENTS

Meals, accomodation, travel	$ 641.09	
Maps, prints	102.11	
Aircraft	842.44	
Freight	102.15	
Fuel, supplies, equipment	889.35	
Truck rental	493.00	
Assays	3,381.80	
		$ 6,451.94
Plus 15% service charge on disbursements		967.79
TOTAL		$20,600.12

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the

of , in the

Province of British Columbia, this

day of , A.D.

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

3

CERTIFICATE

I, RONALD H.D. PHILP, of 1458 - 409 Granville Street., Vancouver, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia (B.A. Sc. 1961)
2. Since graduation I have been engaged in mining exploration in North America, Central America, Australia and Fiji.
3. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
4. I supervised the work carried out during the period July 17 - August 8, 1980, as descrided in the Geological Report on the Bud, Dago, and Scotty Claims of Pan Acheron Resources Ltd, Kathleen Lakes Area, Yukon Territory dated November 4, 1980.

Ronald H.D. Philp
P. Eng

Vancouver, B.C.
April 25, 1981

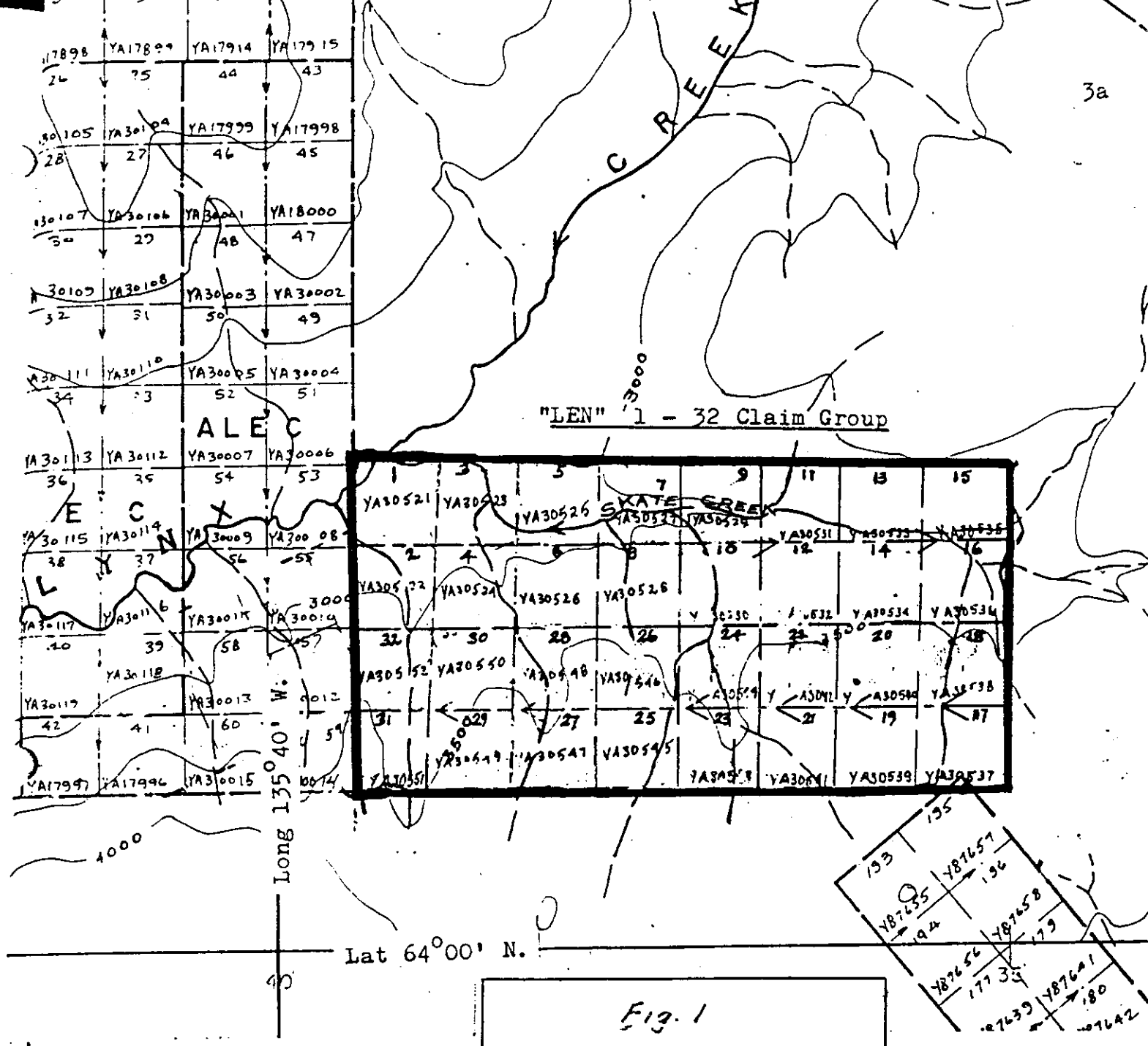


Fig. 1

TALLY RESOURCES INC

CLAIM MAP

Scale: 1:31,680

Source:
Affairs Map 106-D-4, revised to 1 Feb 1979

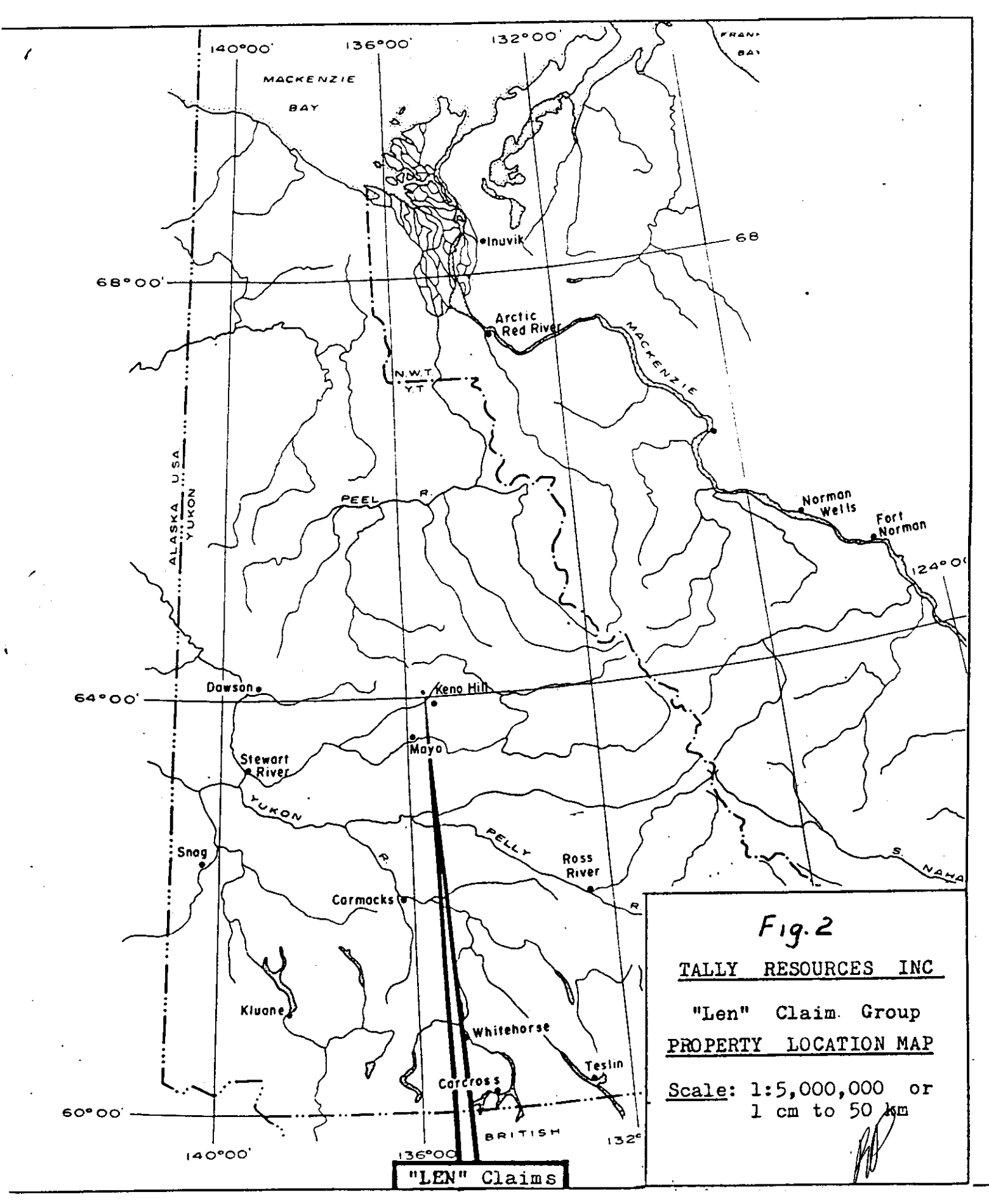


Fig. 2

TALLY RESOURCES INC

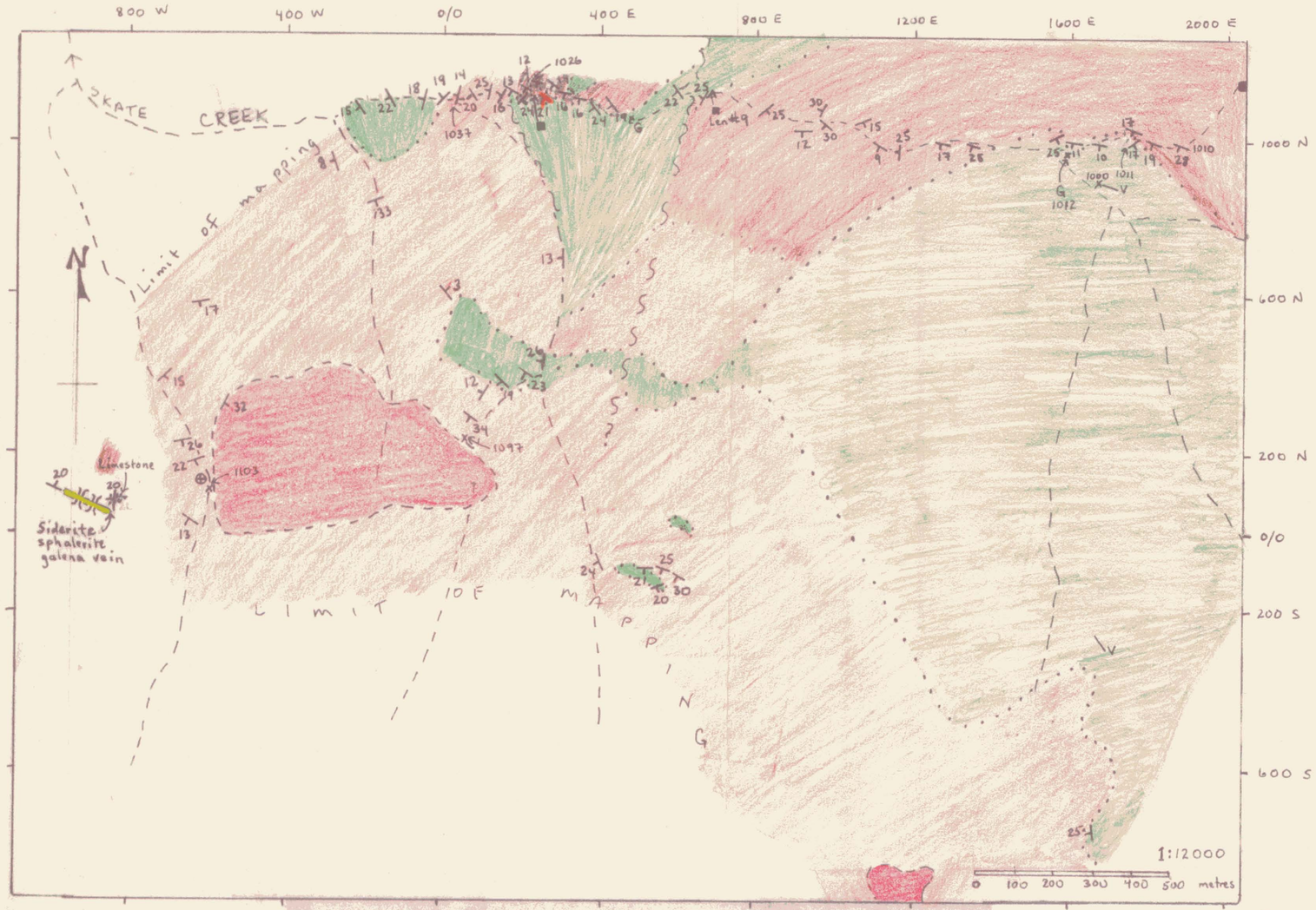
"Len" Claim Group

PROPERTY LOCATION MAP

Scale: 1:5,000,000 or 1 cm to 50 km

LEGEND

UNIT A		Fine - grained, grey banded quartzite
UNIT B		Sheared dark green quartzite
UNIT C		Very fine - grained, sugary, white-buff-grey quartzite.
UNIT D		Granodiorite
		Mineralization - siderite, galena sphalerite.
		Limestone, thin-bedded, foliated
	V	Quartz vein
	xG	Gossan
	26	Strike/dip
	1103	Outcrop numbers (assay samples)
		Geologic contact (approximate, assumed)
		Trench
		Creek
		Fault
		Claim post



McAtee, 1980

TALLY RESOURCES INC.

FIG. 3 - GEOLOGICAL MAP OF EASTERN PORTION OF LEN - # 1 - 32 CLAIMS

YUKON TERRITORY

December, 1980 Agilis Exploration Services

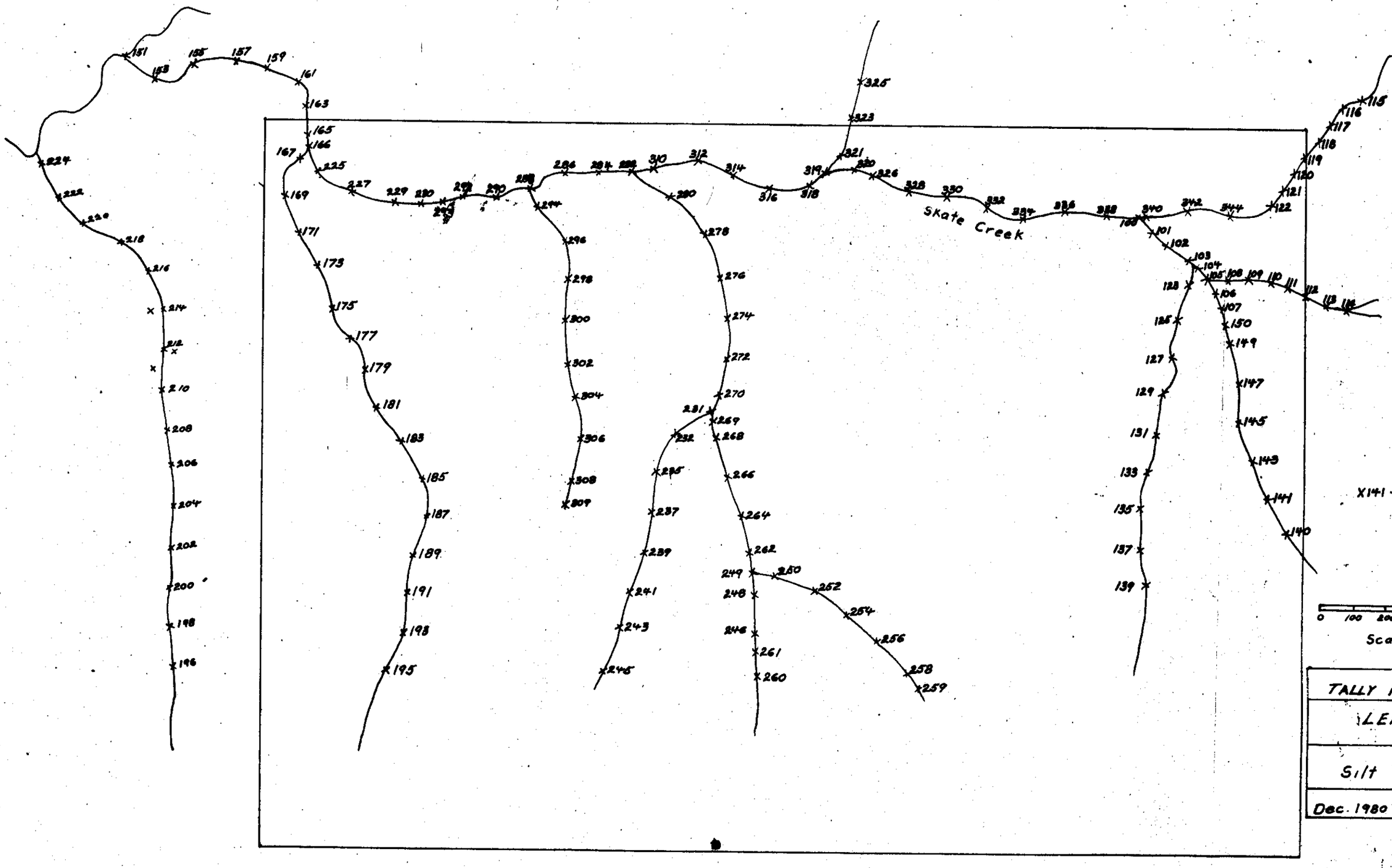

Skate Creek
N
X141 - - - - Sample number
0 100 200 300 400 500 metres
Scale 1:12,000
TALLY RESOURCES INC.
LEN CLAIMS
Silt Sampling
Dec. 1980

Figure 4.

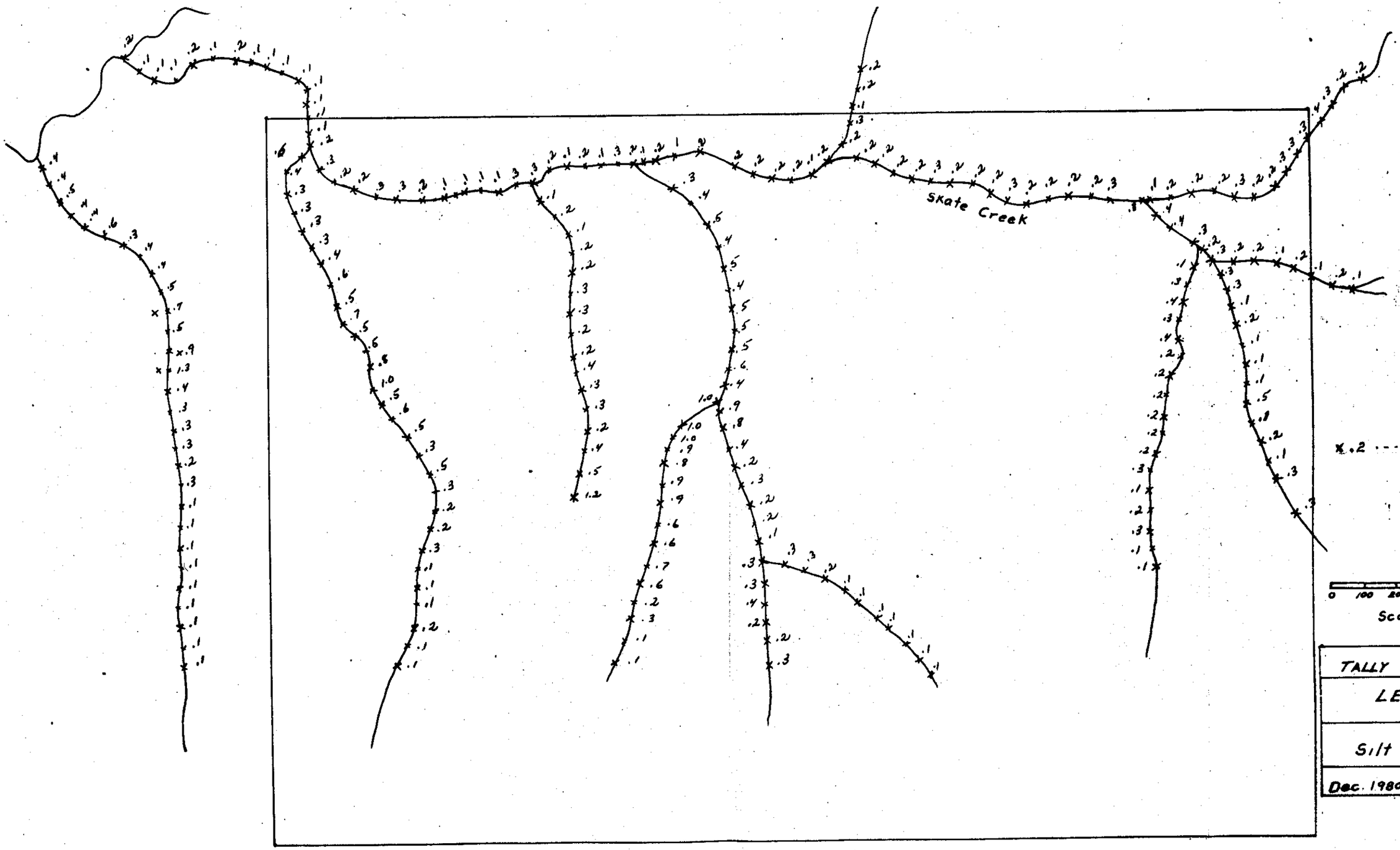


Figure 4.

x .2 - - - - Silver (ppm)

0 100 200 300 400 500 metres

Scale 1:12,000

TALLY RESOURCES INC.
LEN CLAIMS
Silt Sampling
Dec. 1980

Skate Creek

N

Figure 4.

× 41 - - - - Lead (ppm)

0 100 200 300 400 500 metres

Scale 1:12,000

TALLY RESOURCES INC.
LEN CLAIMS
Silt Sampling
Dec. 1980

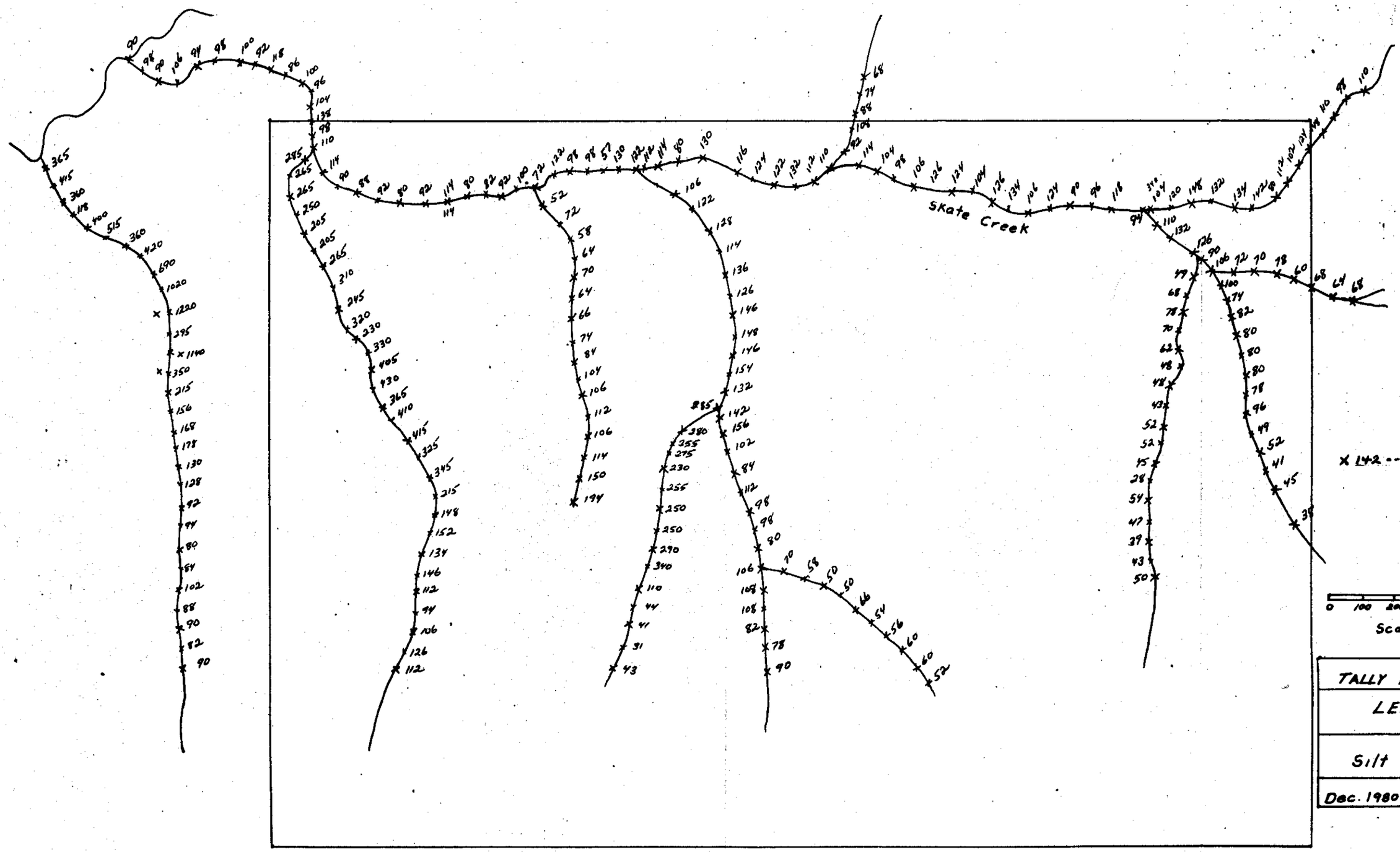

Skate Creek
N
× 142 --- Zinc (ppm)
0 100 200 300 400 500 metres
Scale 1:12,000
TALLY RESOURCES INC.
LEN CLAIMS
Silt Sampling
Dec. 1980

Figure 4.

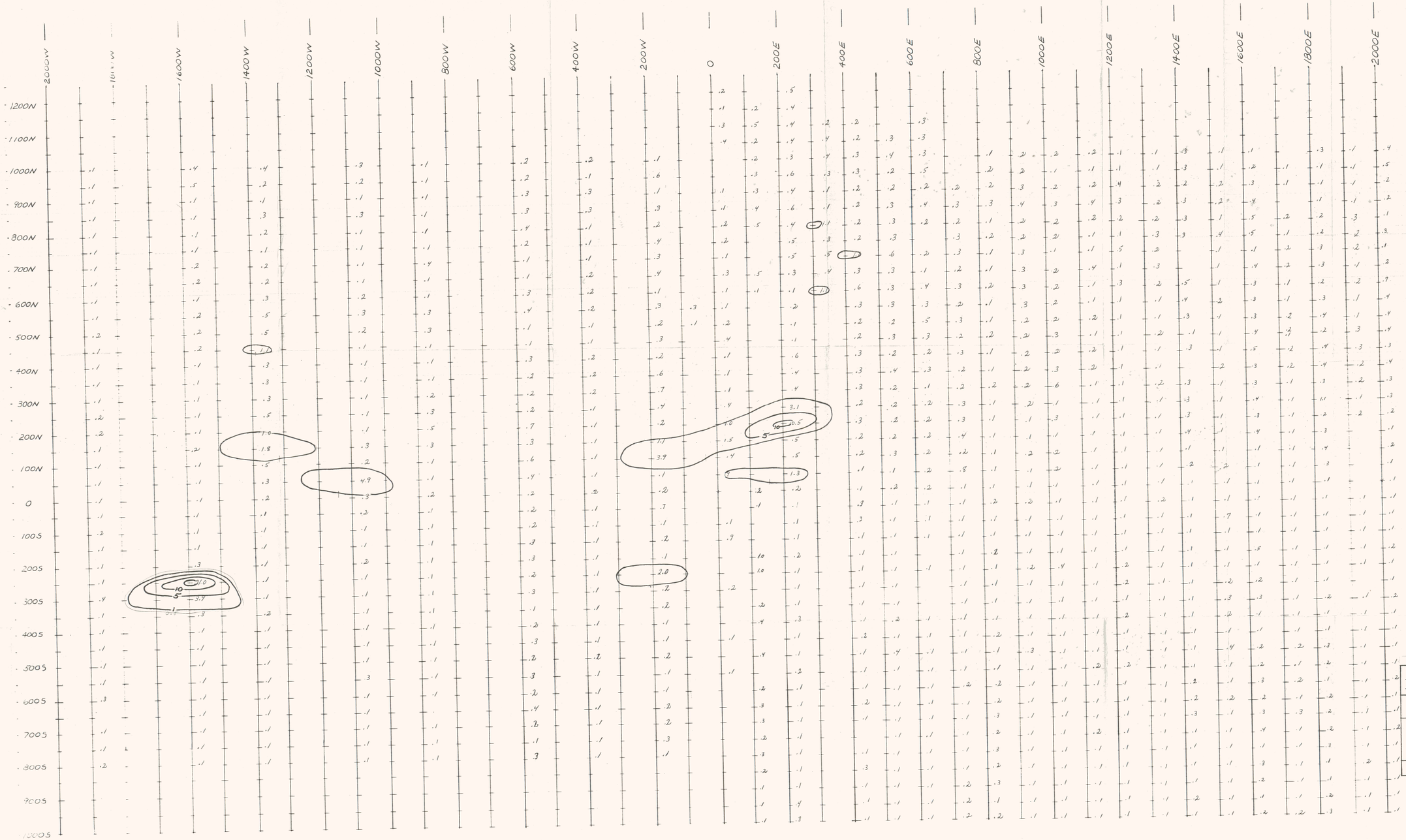
TALLY RESOURCES INC

LEN GROUP

GEOCHEMICAL SURVEY

LEAD (PPM)

Scale: 1:500 Oct., 1980



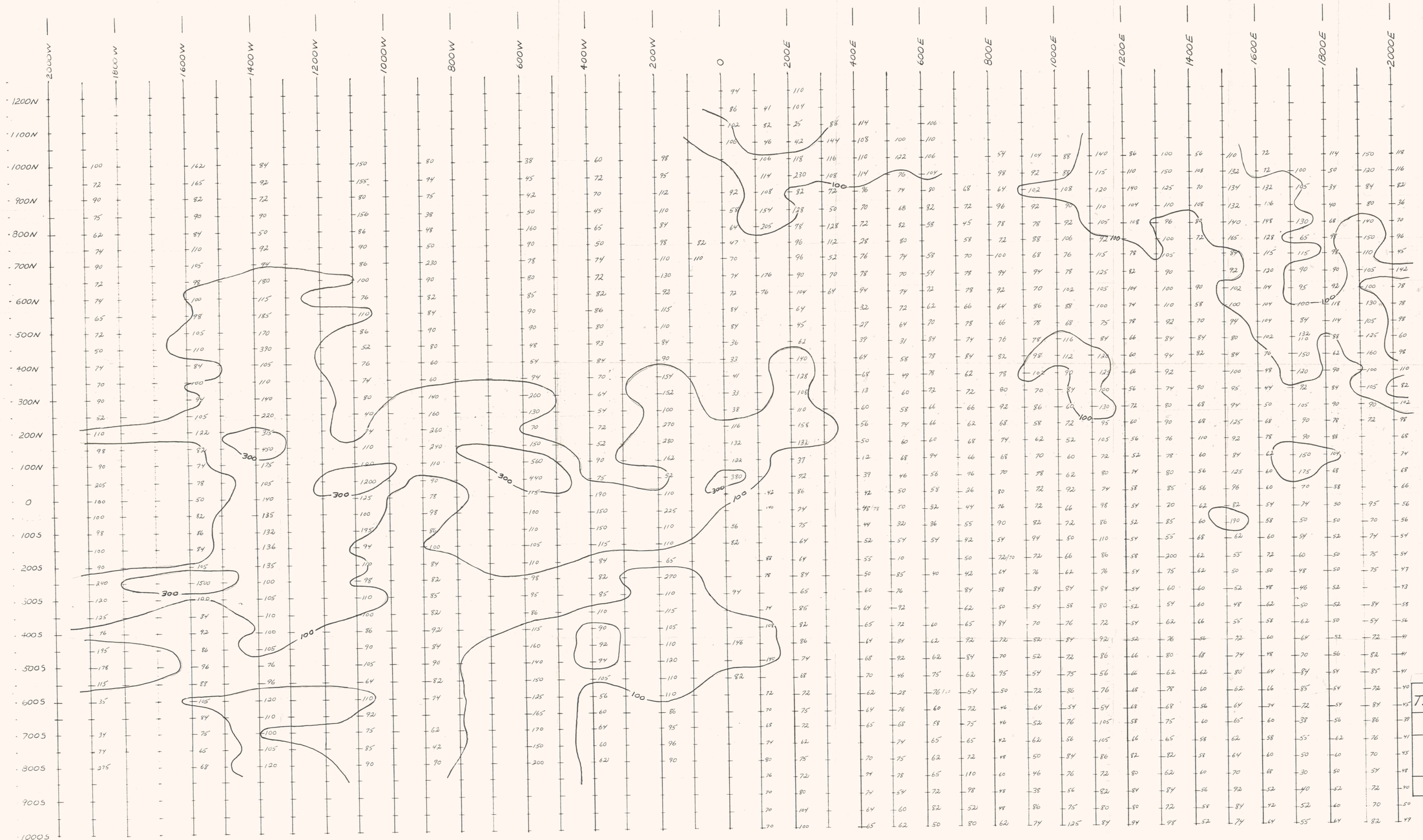
TALLY RESOURCES INC

LEN GROUP

GEOCHEMICAL SURVEY

Silver (PPM)

Scale: 1:500 Oct., 1980



TALLY RESOURCES INC

LEN GROUP

GEOCHEMICAL SURVEY

Zinc (PPM)

Scale: 1:500 Oct., 1980