KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT ON

SILT & SOIL GEOCHEMICAL SURVEYS

LINC NO. 1 GROUP

Linc 1-16 Mineral Claims

Situated 25 miles northwest of Germansen

Landing, Omineca Mining Division, B.C.

55°57'N; 125°17'W

Work done August 9-14, 1972

By; R.W. Stevenson December 5, 1972

## KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

SILT AND SOIL GEOCHEMICAL SURVEYS

LINC NO. 1 GROUP

(Linc No. 1 to 16 Mineral Claims)

Situated 4 miles west of the Omineca Road
12 miles north of Omineca River
25 miles northwest of Germansen Landing
Omineca Mining Division,
British Columbia

Department of

Miner and Retroleum Resources

ASSESSMENT REPORT

NO. 3 105 MAP

R.W. Stevenson, P. Eng.

Work done between August 9 and 14, 1972

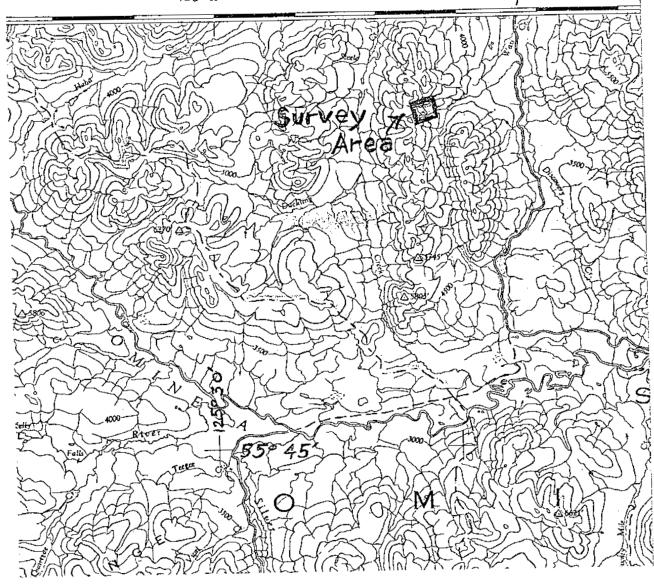
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Kennco Explorations, (Western) Limited

Linc No. 1 Group Linc No. 1 to 16 Mineral Claims

Department of 25 miles northwest of Germansen Landing, Mining Division. Mines and Petroleum Resourceseca Mining Division, British Columbia

ASSESSMENT REPORT

NO. 3996 MAP#1

LOCATION MAP

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#### INTRODUCTION

The mineral property discussed in this report is situated about 25 miles northwest of Germansen Landing, British Columbia. The exploration work done on this property consisted of a detailed silt geochemical survey, followed by a limited soil geochemical survey. The position of the survey area is shown on the Location Map. The claims were recorded on August 7, 1972, and the work was done from August 9 to 14, 1972.

The personnel employed are listed in the Statement of Costs Incurred. The work was done under the supervision of R.W. Stevenson, P. Eng.

## LOCATION AND ACCESS

The property is situated at Latitude 55°57'N, Longitude 125°17'W, about 25 miles northwest of Germansen Landing and 12 miles north of the Omineca River. This is about 110 miles north of Fort St. James. The survey area is at an elevation of about 4500' to 5500'. The east side of the property is in mature timber. This gradually changes to scrub alpine fir as treeline is reached near the north and west edges of the property.

Access to the property is by helicopter. The Department of Mines and Petroleum Resources Omineca Road passes 4 miles east of the property. Local travel within the survey area is fairly easy.

### SILT GEOCHEMICAL SURVEY

### Silt Survey Field Work

### Sample Site Control

Sample sites were plotted in the field, on a topographic map having a scale of 1" = 880'. This map was obtained by enlarging of the 1" = 2640' drainage map. Each sampling traverse was started from a point which could be identified easily on the topographic map. Sample site locations were plotted by pace and compass until another easily identifiable checkpoint was reached. The in points were further identified by reference to air photos.

### Silt Sample Collection

In general, the samples were taken at 300 to 400 foot intervals on the main streams, depending on where suitable silt could be found. More detail was added by sampling all the side streams and seepages.

Samples were taken from "active" material; that is under flowing water, either in streams or seepages. The samples were taken with a shovel. Fine-grained silt was selected. Care was taken to avoid high organic material, and well washed clay.

The sample site and number were then plotted on the field map. A note was made of the sample number; the width, depth, and speed of flow of the stream; the type of sediment sampled; and any peculiarities of nearby drainage, such as above or below a pond or swamp.

### Packaging

The samples were placed in  $3" \times 4 \cdot 1/2"$  brown paper envelopes on which the sample numbers had been marked. These were closed with a triangular triple fold. (The bags are not anomalous in trace metals).

### Sample Preparation

The samples were taken to base camp, and partly air-dried. The samples were then shipped to our laboratory in North Vancouver, where they were oven-dried at  $80^{\circ}\mathrm{C}$  and sieved through an 80-mesh size

stainless steel screen. (These sieves do not show noticeable wear even after several thousand samples have been sifted). The minus 80 mesh fraction was collected for all the analyses involved.

# Analysis

The samples were analysed in the North Vancouver laboratory of Kennco Explorations, (Western) Limited, under the supervision of H. Goddard, laboratory manager. Total extraction from a weighed sample is achieved by digestion with concentrated nitric acid and 70% perchloric acid. Determination of the Cu, Mo, Zn, Pb, Ag, Co, Ni content is made by aspiration in a Techtron AAS Atomic Absorption Spectrophotometer. To determine the gold content, a weighed sample is digested in aqua regia, filtered, and the gold removed by solvent-solvent extraction in an organic solvent, MIBK (methyl-isobutyl-keytone). This is aspirated in the Techtron AAS.

### Interpretation

The purpose of the silt survey was to explore the potential of the property as a guide to further exploration work. The configuration of streams made this a practicable goal. The results are plotted on Plates No. 1 to 9.

Sample stations that are considered to be background are uncoloured. Sample stations that are considered to be only weakly anomalous are coloured yellow; those that are anomalous are coloured red. The weakly anomalous levels vary somewhat with the size of the stream and the drainage area. For example, a value of 300 ppm Cu would be only weakly anomalous in a small seepage, but would be definitely anomalous in a large stream.

Numerous samples are anomalous for copper, but there are relatively few that are strongly anomalous except for a small area on the north branch of Rockpile Creek on Linc No. 14 mineral claim. Anomalous molybdenum has a pattern similar to copper, except that the strongest molybdenum anomalies are not coincident with the strongest copper anomalies. Silver and gold are only weakly anomalous in a few scattered samples. None of the halo metals are anomalous.

## SOIL GEOCHEMICAL SURVEY

## Soil Survey Field Work

## Control Survey Lines

A control grid was established by chain and compass survey. Stations were marked with surveyor's flagging. The grid was compiled on a map with scale 1" = 880'.

## Soil Sample Collection

The samples were taken at 100-foot intervals along the grid lines. They were taken from the top of the "B" (rusty) horizon.

The samples were collected by digging a small hole with a spade. By this means it was possible to examine the soil horizon development. A note was made of the grid line location, the sample number, the depth of sample, the horizon sampled, the direction of drainage, and the type of vegetation.

### Packaging

The samples were placed in 3"  $\times$  4 1/2" brown paper envelopes on which the sample numbers had been marked. These were closed with a triangular triple fold. (The bags are not anomalous in trace metals).

### Sample Preparation

The samples were taken to base camp, and partly air-dried. The samples were then shipped to our laboratory in North Vancouver where they were oven-dried at 80°C, and sieved through an 80-mesh size stainless steel screen. (These sieves do not show any noticeable wear even after several thousand samples have been sifted). The minus 80 mesh fraction was collected for all the analyses involved.

### Analysis

The samples were analysed in the North Vancouver laboratory of Kennco Explorations, (Western) Limited under the

supervision of H. Goddard, laboratory manager.

The analytical procedures used on the soil samples were the same as those used on the silt samples. These are described in the section entitled 'Silt Geochemical Survey'.

#### Interpretation

The property covers two valleys that have been subjected to alpine, as well as continental, glaciation. Consequently, the depth of overburden in the valley bottoms is unknown, even though bedrock is exposed along some of the ridges. The soil sample lines have been placed so that they are parallel to the valley direction, and are along the higher slopes. For this reason, it is estimated that the depth of overburden varies from a few feet to probably not more than 20' or 30' over most of the area sampled. Considering the type of soil it would seem likely that soil geochemistry is a reliable technique on these parts of the property. The samples were analysed for total metal content in copper, molybdenum, zinc, lead, silver, gold, cobalt, and nickel. The results are plotted on Plates No. 10 to 18.

Sample stations that are considered to be background are uncoloured. Sample stations that are considered to be only weakly anomalous are coloured yellow. The weakly anomalous levels are 150 ppm to 299 ppm for copper, 7 ppm to 19 ppm for molybdenum, 200 ppm to 499 ppm for zinc, 70 ppm to 149 ppm for lead, 2.0 ppm to 3.9 ppm for silver, 0.10 ppm to 0.29 ppm for gold, 50 ppm to 99 ppm for cobalt, and 200 ppm to 499 for nickel. Sample stations that are definitely anomalous are coloured red.

There are scattered weakly anomalous copper values over much of the property, but only on the west end of the most southerly line is there any indication of a well defined anomaly. Molybdenum shows only scattered weak anomalies, and is not co-anomalous with the best copper anomaly. A few samples are moderately anomalous in gold, but the values are widely scattered. Silver is not anomalous. Two adjacent samples are considered to be weakly anomalous in cobalt; surprisingly one is co-anomalous in gold but not in silver. The other metals are not anomalous.

Vancouver, B.C.

R.W. Stevenson, P. Eng.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA
То Wіт:
The same of the same of

In the Matter of assessment work on the Line No. 1 Sroup of mineral claims

1. R. W. Stevenson, for Kenner Exploration (Western) Limited

of Vancouver

in the Province of British Columbia, do solemnly declare that the cost of silt and soil gerclamical survey assessment work done on the Line No. 1 Broup of mineral claims in 1972 was as follows:

analysis of 252 silt and soil samples for Cu Mo Z., Pb Av Ag Co Ni

# 1386.00

Wages & Board

S. Earle August 9to 14 @ #19.00+\$15.00

204.00

J. Chiaffe August 9to 14 @ \$18.00+\$15.00

198.00

Surveyor's flagging Sample bags Drafting & typing

18.00

25.00

90.00

Total = # 1921.00

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."

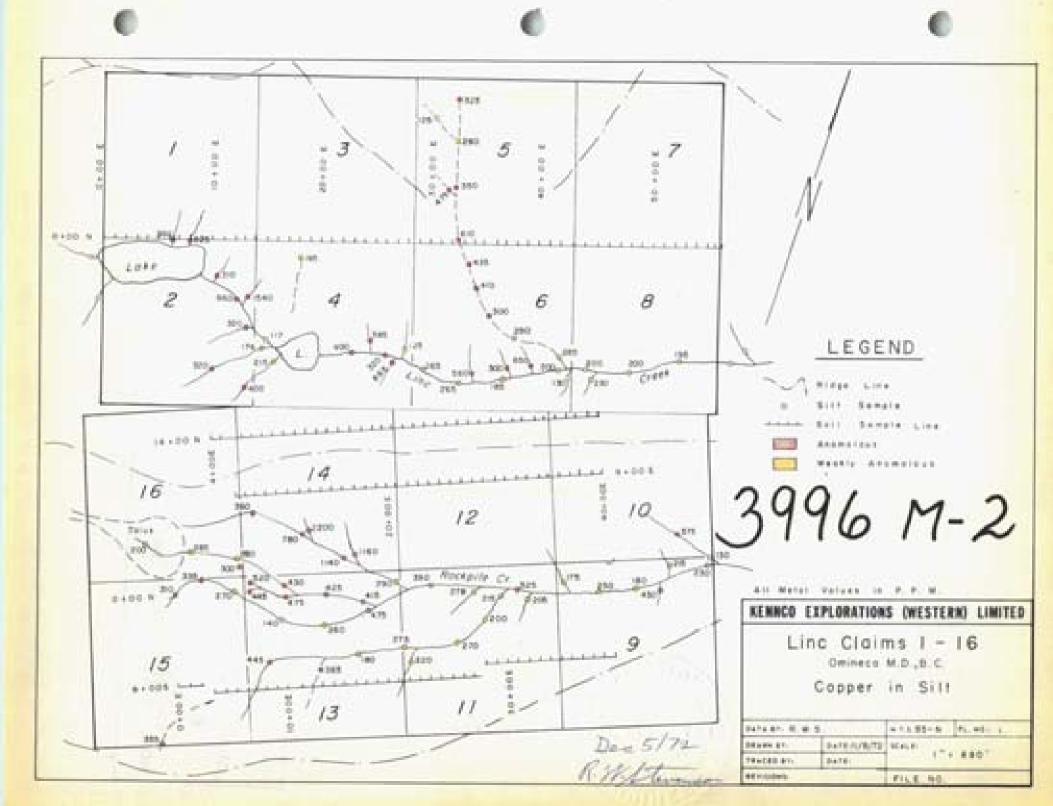
Declared before me at the left

of Manuacule, in the Province of British Columbia, this 1/th & R. M. Stevenson

**±** 0

day of Alcender 1972, A.D.

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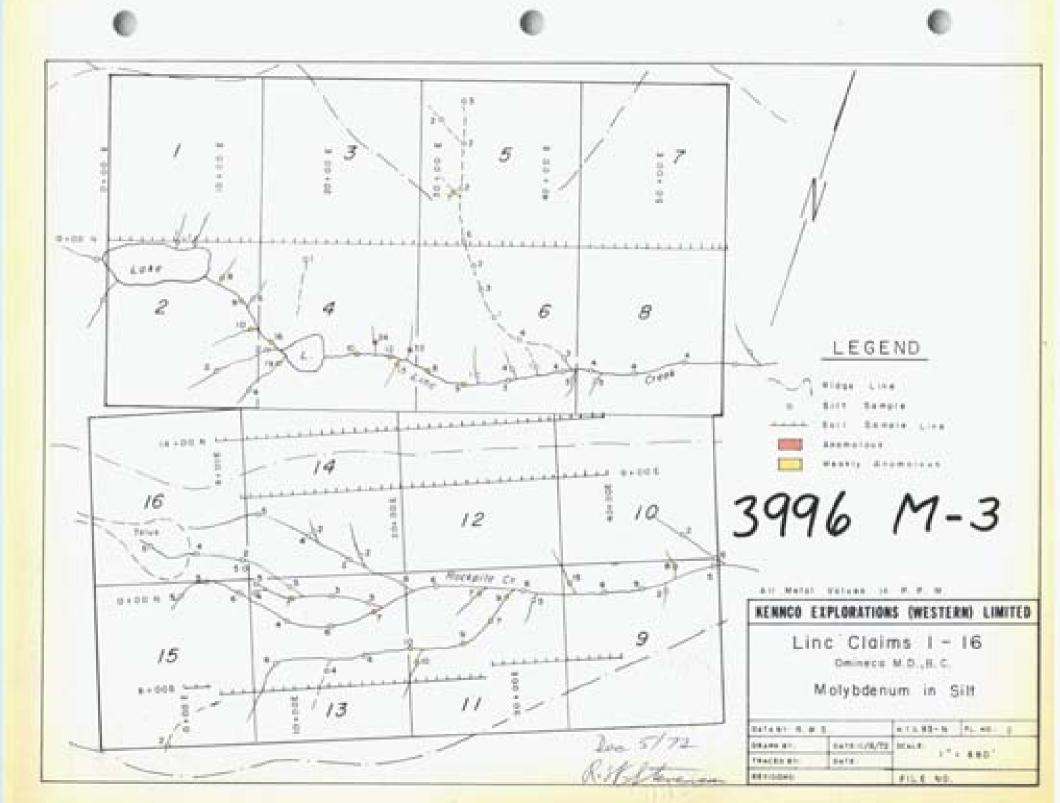


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MAP#J



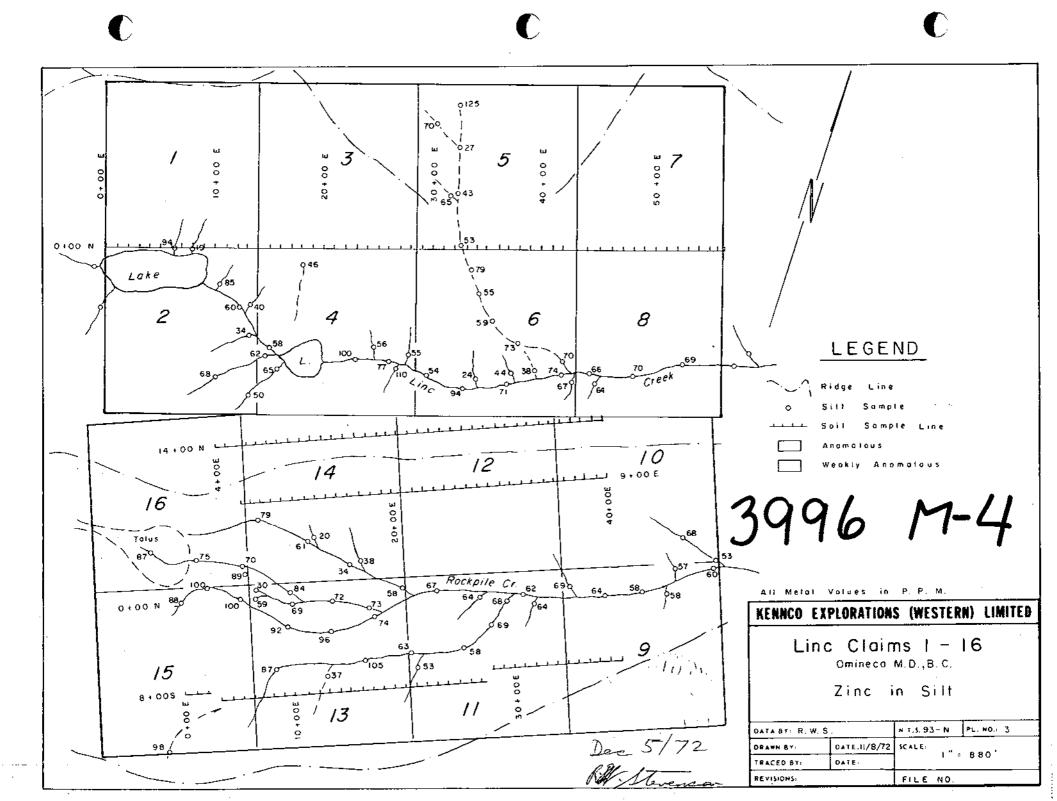
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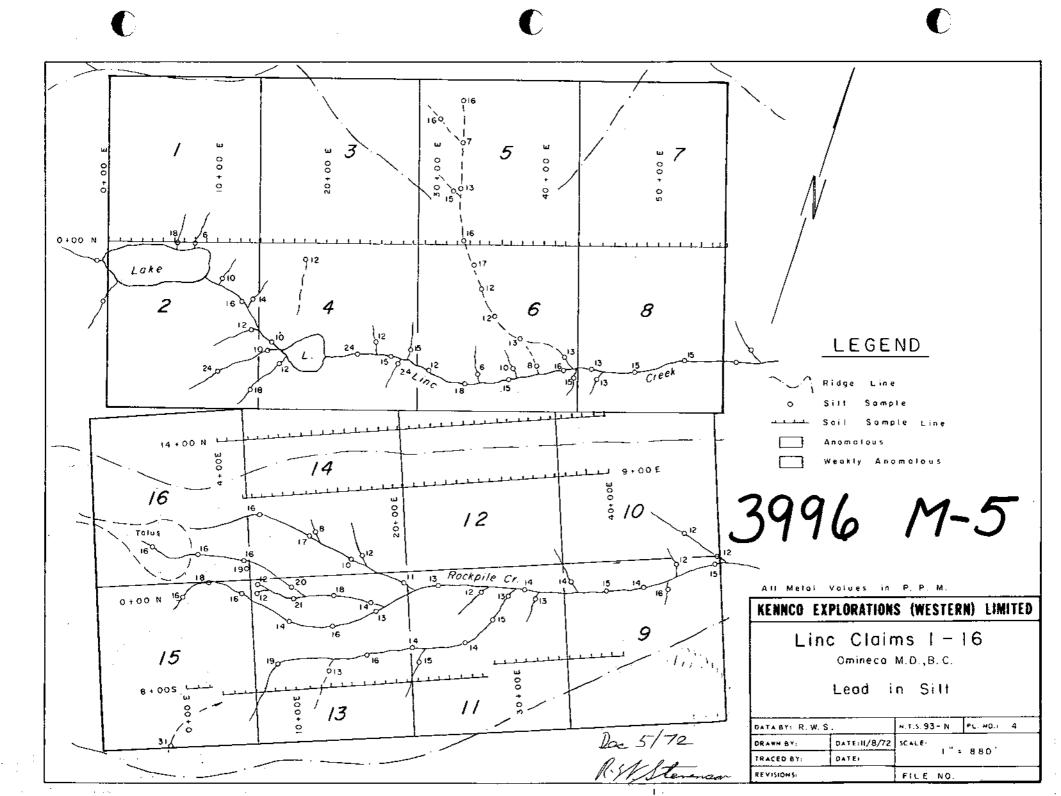
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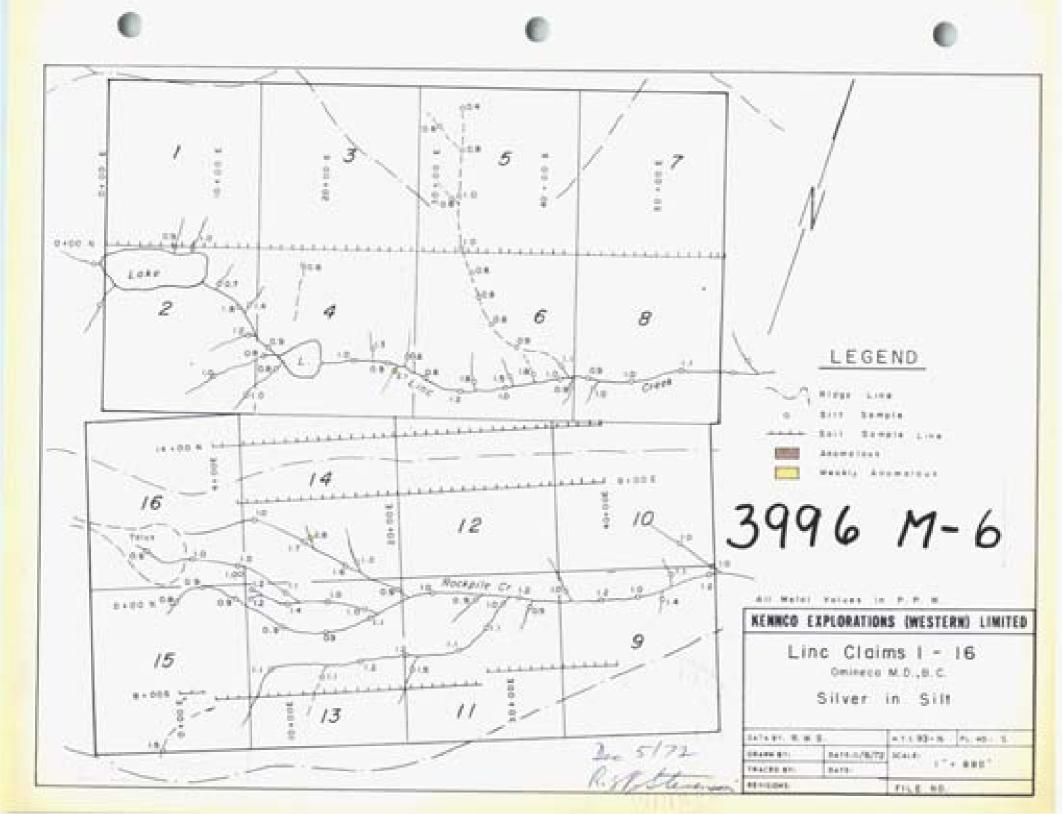


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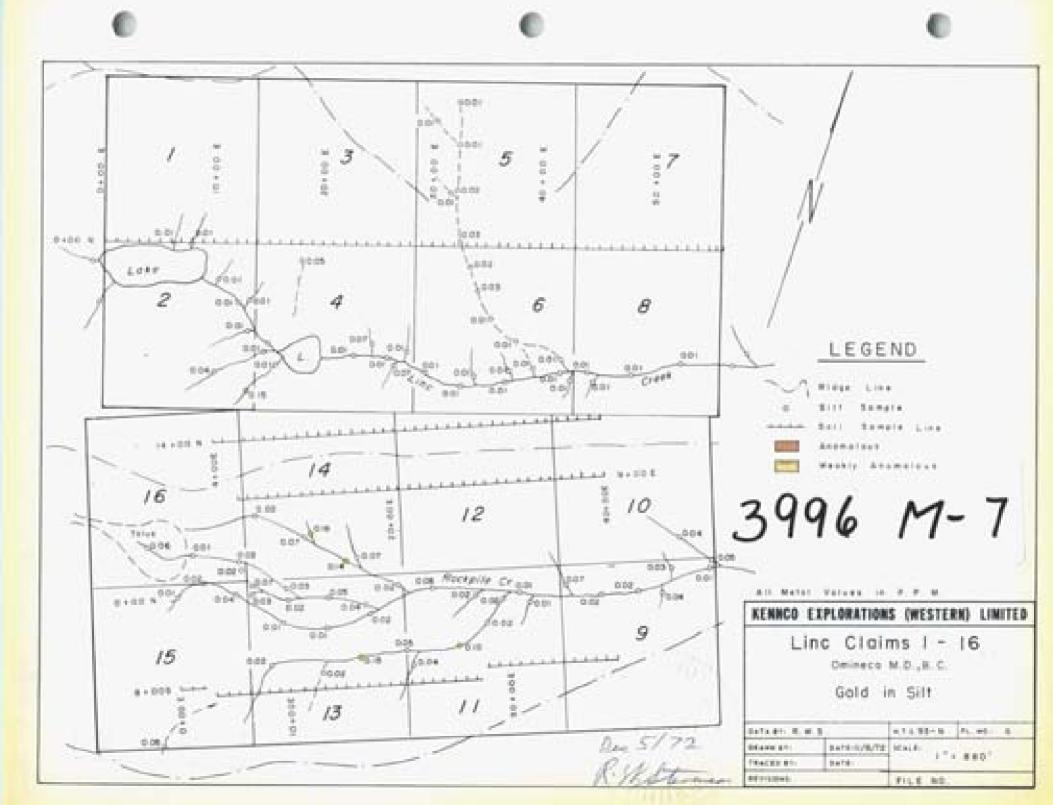
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<sub>MAP</sub> #6



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0+00 N Lake 2 8 LEGEND Weakly Anomalous 14 16 12 26 Rockpile Cr 26 All Metal Values in, P. P. M. KENNCO EXPLORATIONS (WESTERN) LIMITED Linc Claims 1 - 16 15 Omineca M.D., B.C. Cobalt in Silt DATA SYER. W. S. N. T.S. 93 - N PL: NO.: 7 Dac 5/72 DRAWN BY: DATE:11/8/72 SCALE 1": 880' TRACED BY DATE FILE NO.

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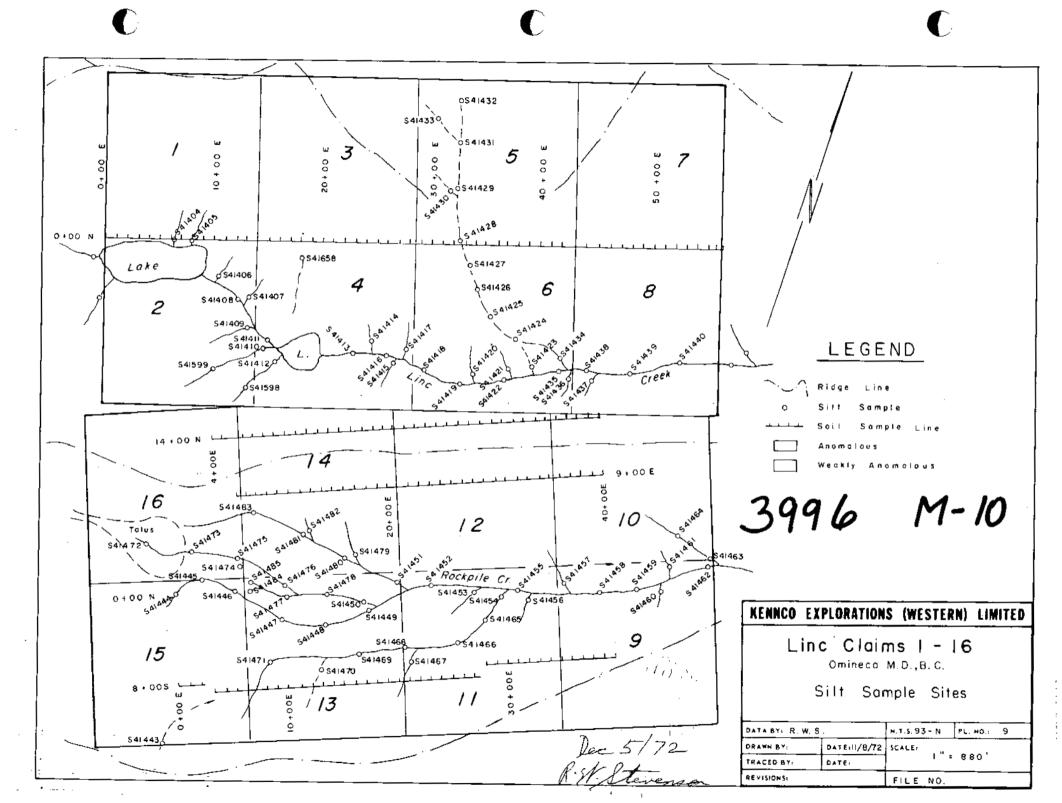
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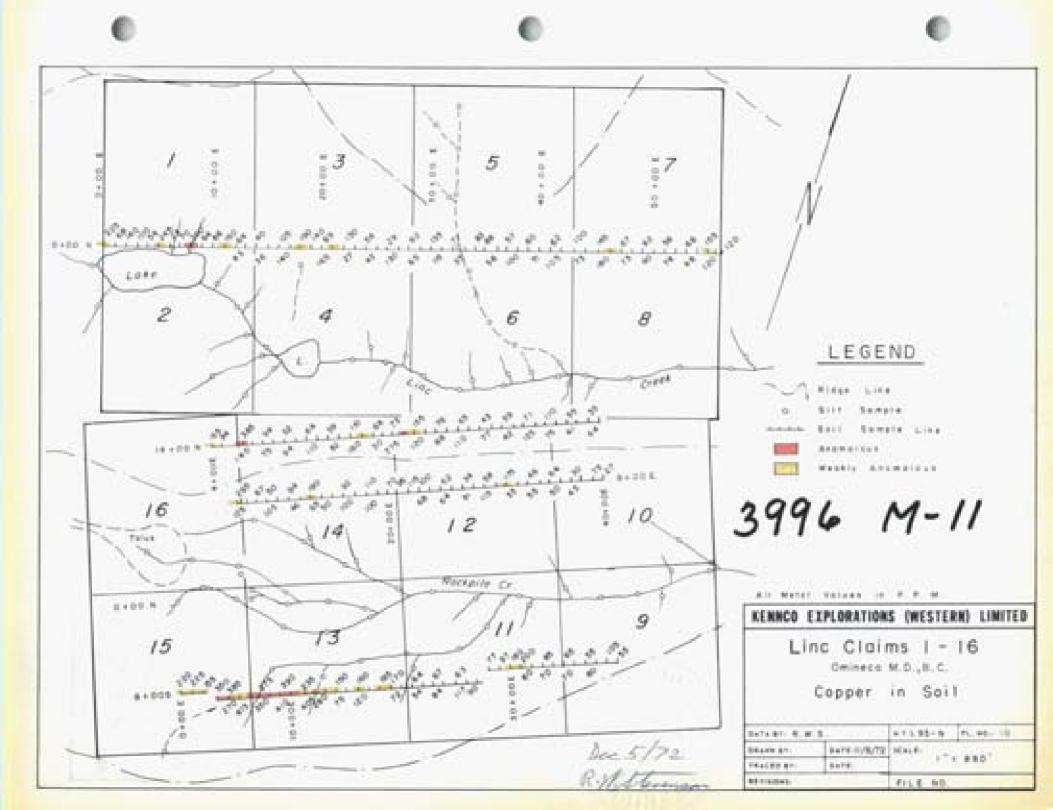


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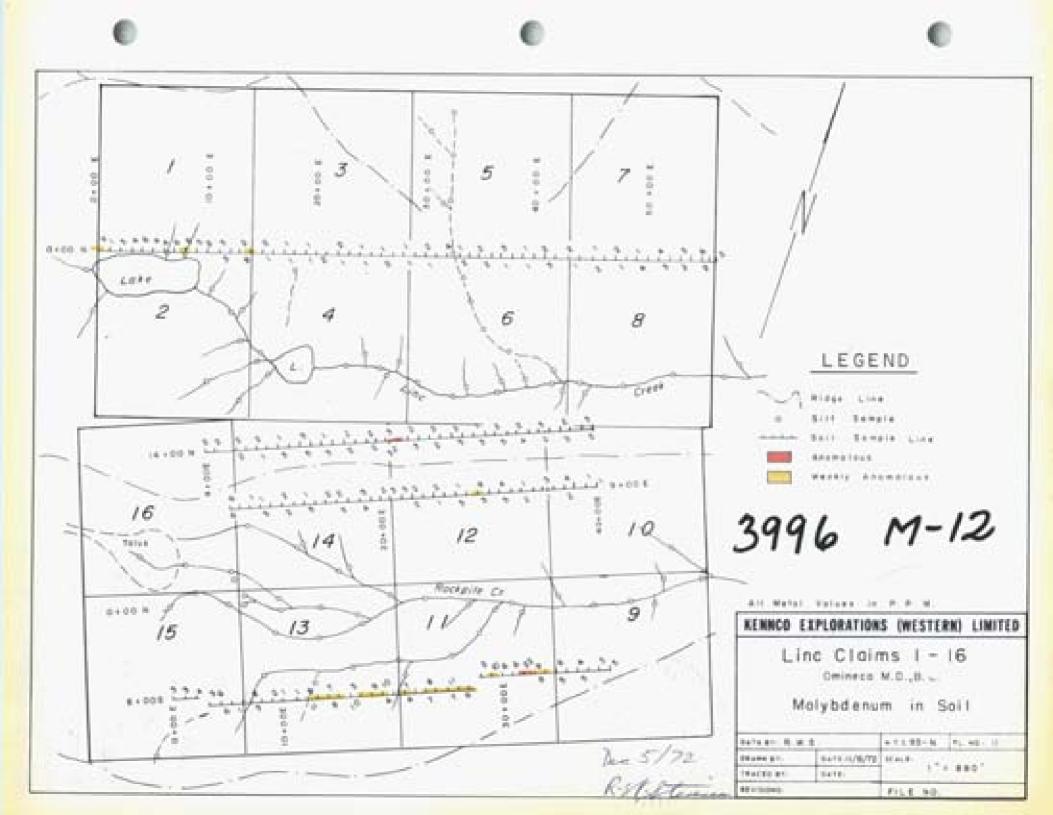
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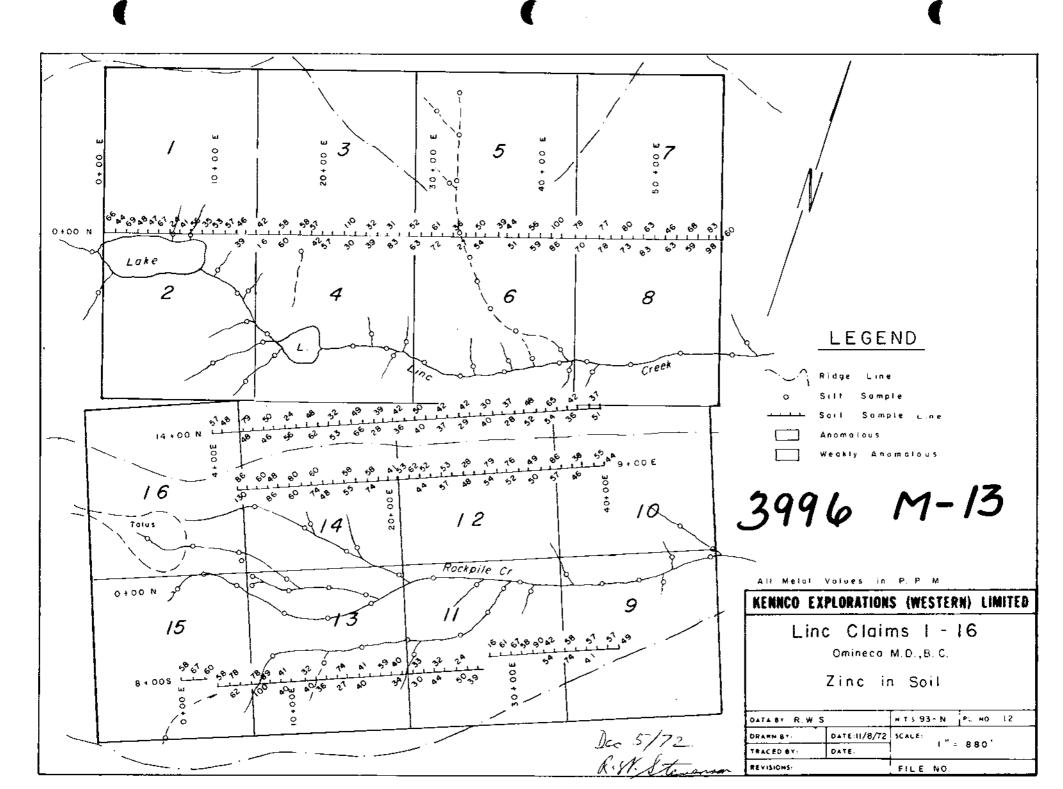


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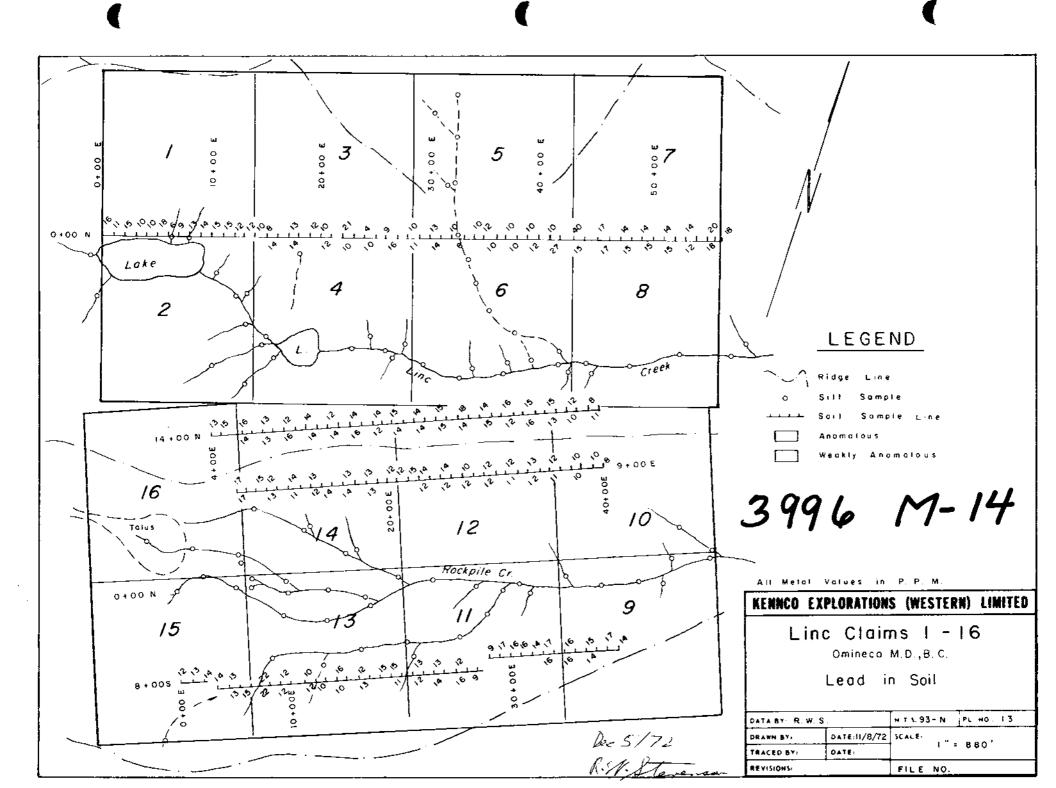


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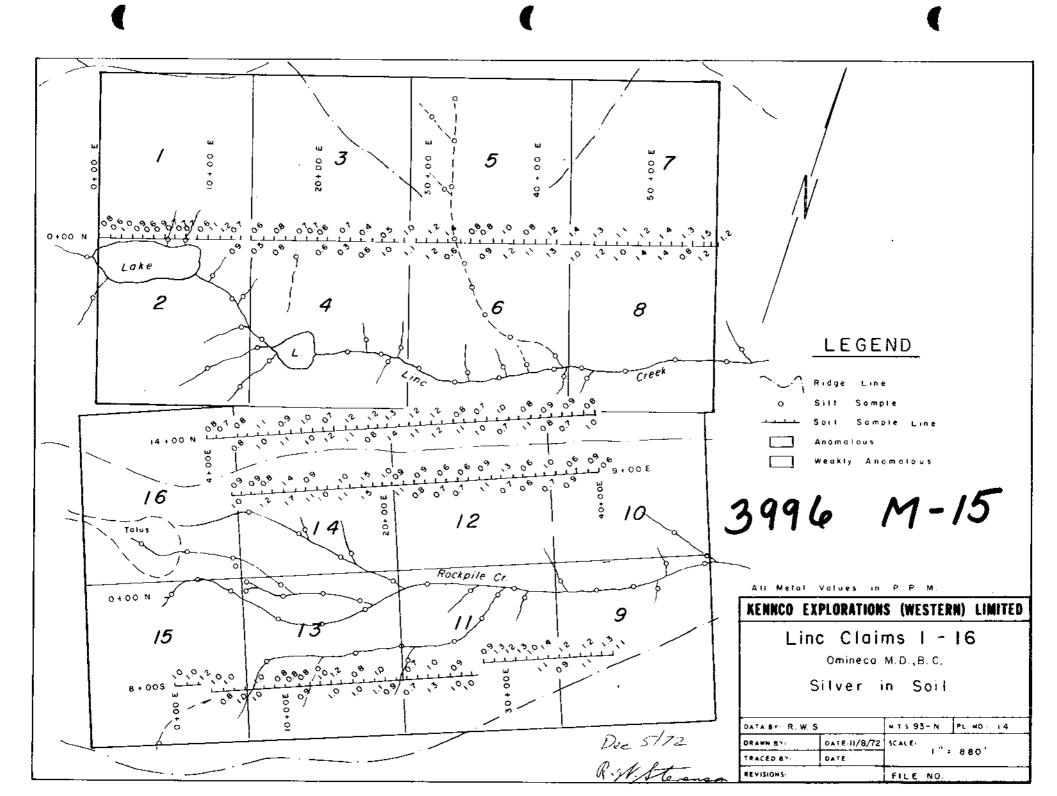
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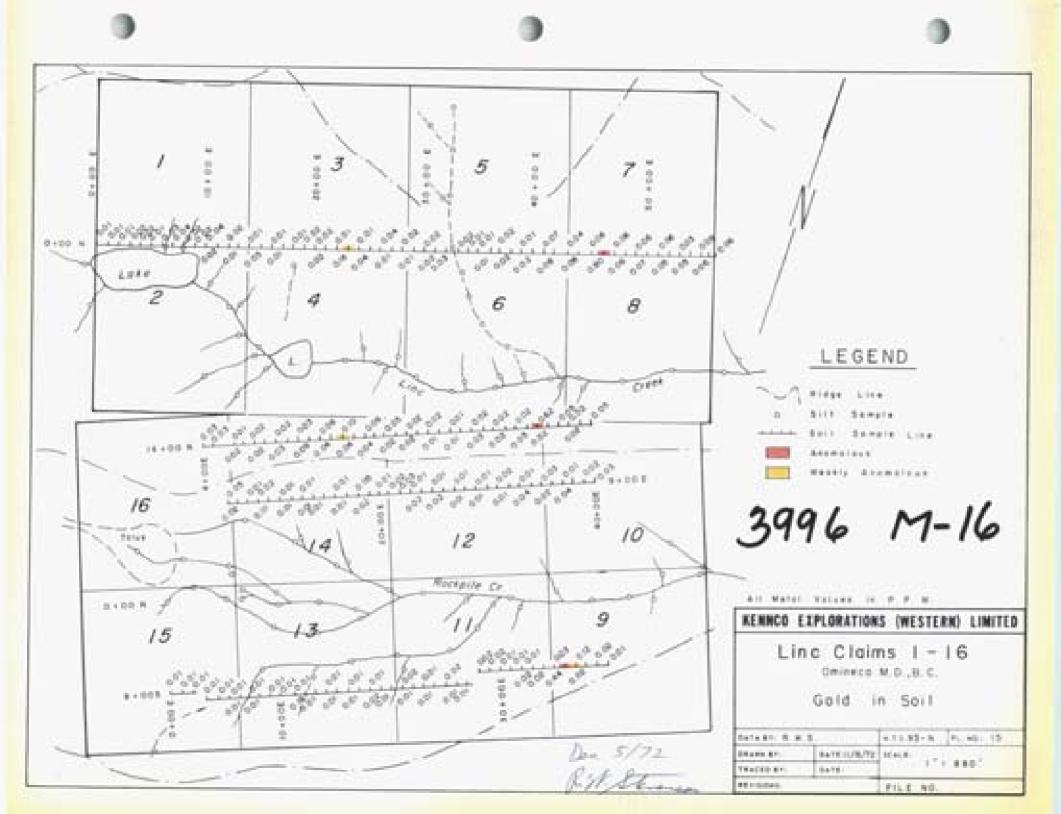
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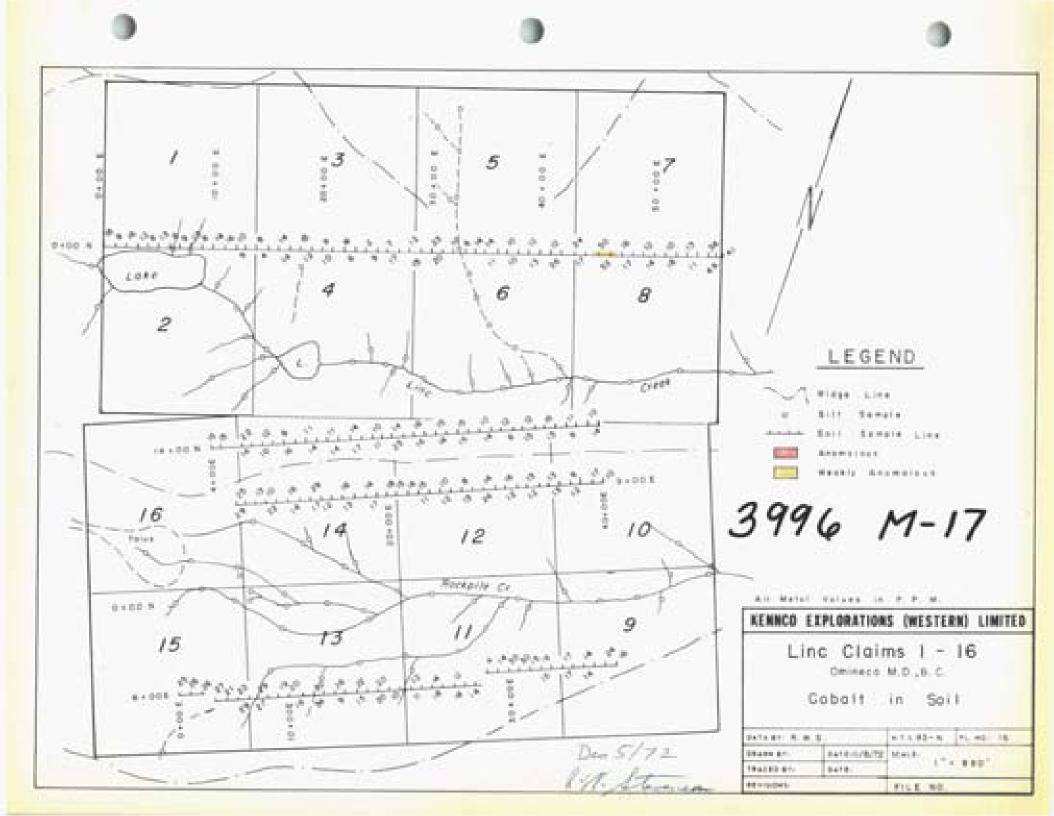
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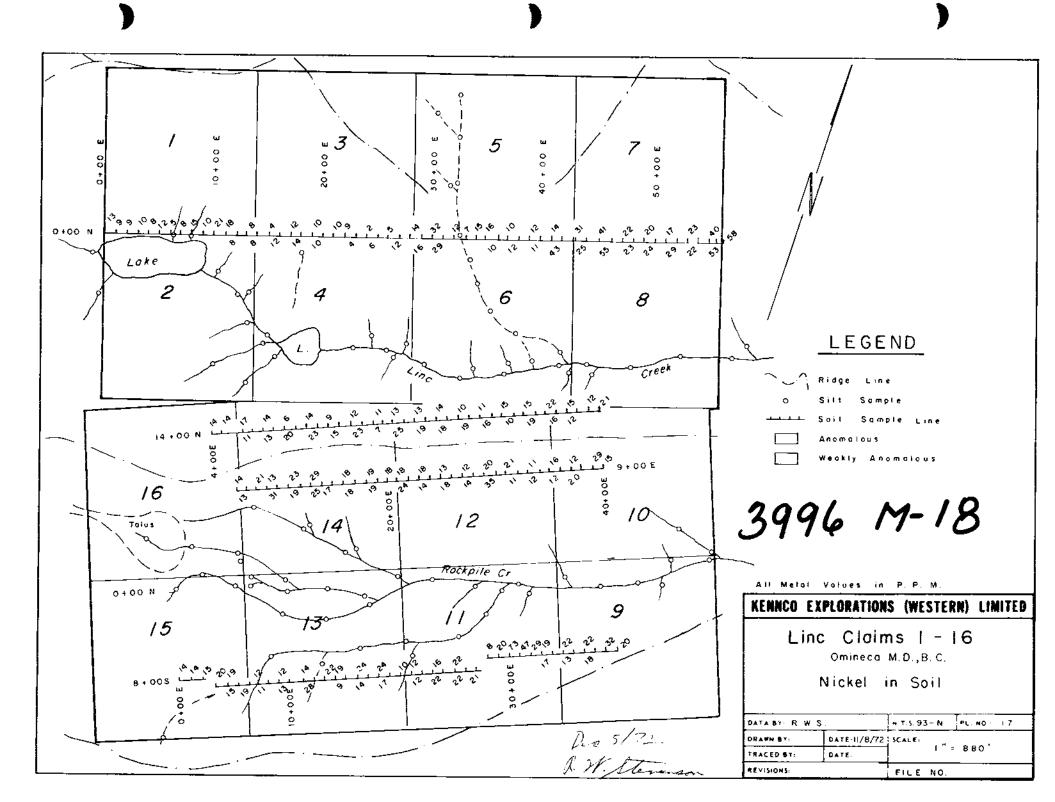
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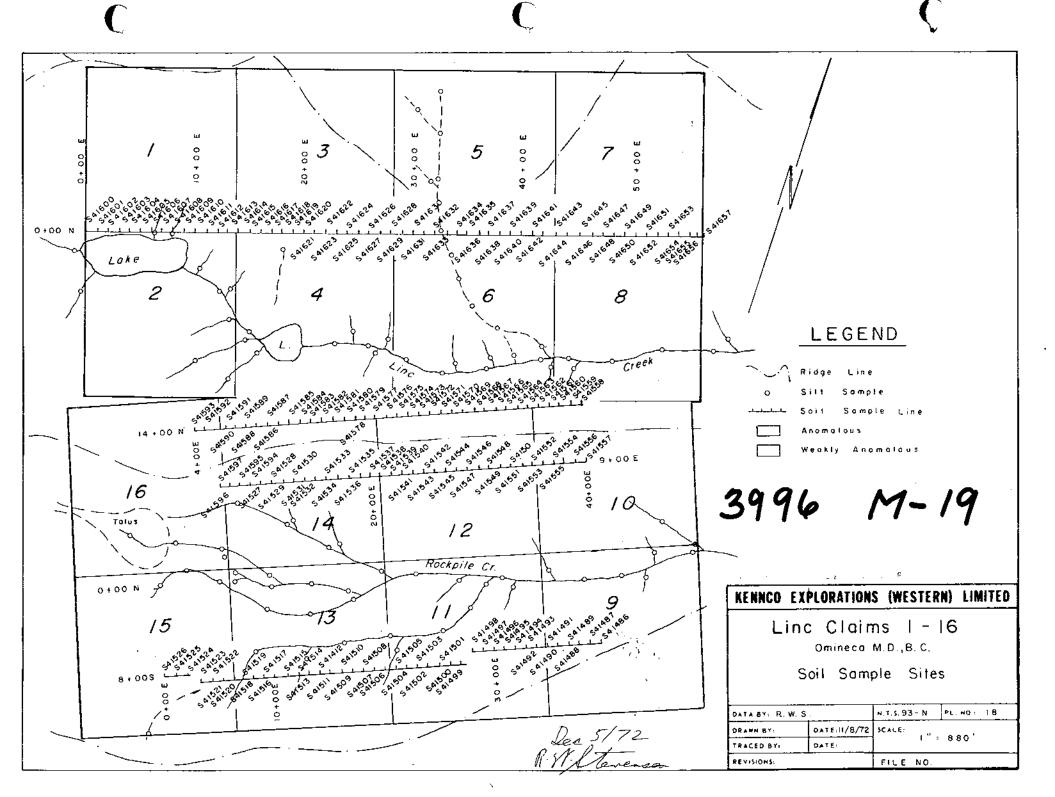


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