2582

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

SOIL GEOCHEMICAL SURVEY

CHAPPELLE NO. 1 & 2 GROUPS
(Chappelle Mineral Claims 1-22, 25-30, 33-42)

Situated 17 miles northwest of Thutade Lake,
Omineca Mining Division,
British Columbia

57° 127° SE

By

R. W. Stevenson, P. Eng.

Work done on July 8, 1970

August 21, 1970

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS (Rear)

LIST OF CLAIMS AND DISTRIBUTION OF WORK

Chappelle No. 1 Group

Claim No.	Record No.	Record Date	$ Soil Geochem Work Ea. Claim	Years Applied
2	60862	July 16	194.00	-
4	60864	"	-	-
6	60866	"	222.00	-
7	84367	February 11	-	1
8	84368	"	-	1
9	84369	"	-	1
10	84370	"	-	1

Chappelle No. 2 Group

Claim No.	Record No.	Record Date	$ Soil Geochem Work Ea. Claim	Years Applied
1	60861	July 16	65.00	-
3	60863	"	-	-
5	60865	"	265.00	-
25	84385	February 11	-	1
28	84388	"	-	1
30	84390	"	-	1
			$746.00	7

STATEMENT OF COSTS INCURRED

Soil Geochemical Survey

A detailed explanation of how the soil geochemical survey expenditures were incurred is given under the section entitled 'Soil Survey Field Work'.

The total cost of the soil geochemical survey on Chappelle No. 1 and 2 groups is as follows:

Chemical analysis of 104 samples for Cu,Mo,Zn,Pb		$624.00
Wages & Board:		
S.C. Gower - July 8 @ $30.00 + $5.00		35.00
G. Davies - July 8 @ $35.00 + $5.00		40.00
D.R. Reid - July 8 @ $21.00 + $5.00		26.00
R.J. Beaty - July 8 @ $16.00 + $5.00		21.00
	Total	$746.00

The amount expended on each claim is shown on the list of claims.

Total on Group No. 1 = $416.00
Total on Group No. 2 = $330.00

INTRODUCTION

The mineral property discussed in this report is situated about 17 miles north of Thutade Lake, British Columbia. The exploration work on these claims consisted of a soil geochemical survey.

The work was done under the supervision of R. W. Stevenson, P.Eng.

LOCATION AND ACCESS

The property is situated at Latitude 57°17'N, Longitude 127°07'W, about 285 miles northwest of Prince George. This is about 17 miles northwest of Thutade Lake. The survey area is at an elevation of about 5500' above sea level. It is above tree-line.

Access to the property is by fixed-wing aircraft from Smithers to Thutade Lake, a distance of about 165 miles, and by helicopter from there.

SOIL GEOCHEMICAL SURVEY

Soil Survey Field Work

Control Survey Lines

A control grid was established by chain and compass survey. Laths were used to mark the stations because the survey area is above tree-line. This gave good control of samples sites, with minimum expenditure.

The base-line direction is north-south. This grid layout was chosen so as to give efficient coverage of the upland area that was to be sampled, as well as conforming to the claim boundaries. A base map with scale 1" = 400' was compiled for use in plotting the sample results.

Soil Sample Collection

The samples were taken at 100foot intervals along the grid lines. The location of the sample sites is shown on Plate No. 5. They were taken from the top of the "B" (rusty) horizon. Exceptions to this occurred in rocky places where sufficient soil could not be found to take a sample.

The samples were collected by digging a small hole with a trenching tool type of spade. By this means it was possible to see where the top of the "B" horizon was. The soil sample was then taken from the top of the "B" horizon, either with the tip of the spade, or with a small trowel.

A note was then made of the grid line location, the sample number, the depth to the top of the "B" horizon, the direction of drainage, the type of vegetation (i.e. - grass, or bare soil), and the soil type.

Packaging

The samples were placed in 3" x 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 the base camp, and were oven-dried at 80°C. They were then shipped to our laboratory in North Vancouver, where they were 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.

A one-gram sample is weighed to within $\pm$ 2 mgm. making a possible error of 2% at this stage. This is much more accurate than a volumetric scoop.

The sample is placed in a dry test tube, and 1 ml of reagent grade 70% nitric acid is added, or just enough to wet the sample. Four ml of reagent grade 70% perchloric acid ($H\ ClO_4.H_2O$) is added, and the sample is digested at 200°C on a hot plate for four hours. After cooling, the sample is diluted up to 50 ml with distilled water, agitated, and allowed to settle for two hours.

An aliquot of this solution is used for determination of copper, zinc, and lead by atomic absorption spectrophotometer.

An aliquot of this solution is also taken for determination of molybdenum. Ammonium thiocyanate, stannous chloride, and amyl acetate are added to the solution. Molybdenum forms a thiocyanate complex which is removed by solvent extraction in the amyl acetate. This is aspirated in the atomic absorption spectrophotometer to determine molybdenum.

Interpretation

Over most of the area, a good sample which was representative of the "B" horizon was obtained. The depth of overburden varies from a few inches to probably about 30' over most of the areas 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, and lead.

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, 14 ppm to 24 ppm for molybdenum, 300 to 599 ppm for zinc, and 80 ppm to 149 ppm for lead. Sample stations that are definitely anomalous are coloured red. The results are plotted on Plates No. 1 to 4.

Anomaly levels for all elements are relatively low. Copper and molybdenum form a poorly-definied, weak anomaly on the west half of Chappelle No. 1 claim. Zinc and lead are anomalous near the boundary between Chappelle No. 5 and 6.

Vancouver, B. C.

August 21, 1970

R. W. Stevenson

Kennco Explorations (Western) Limited

CHAPPELLE CLAIMS

Situated 17 miles northwest of Thutade Lake

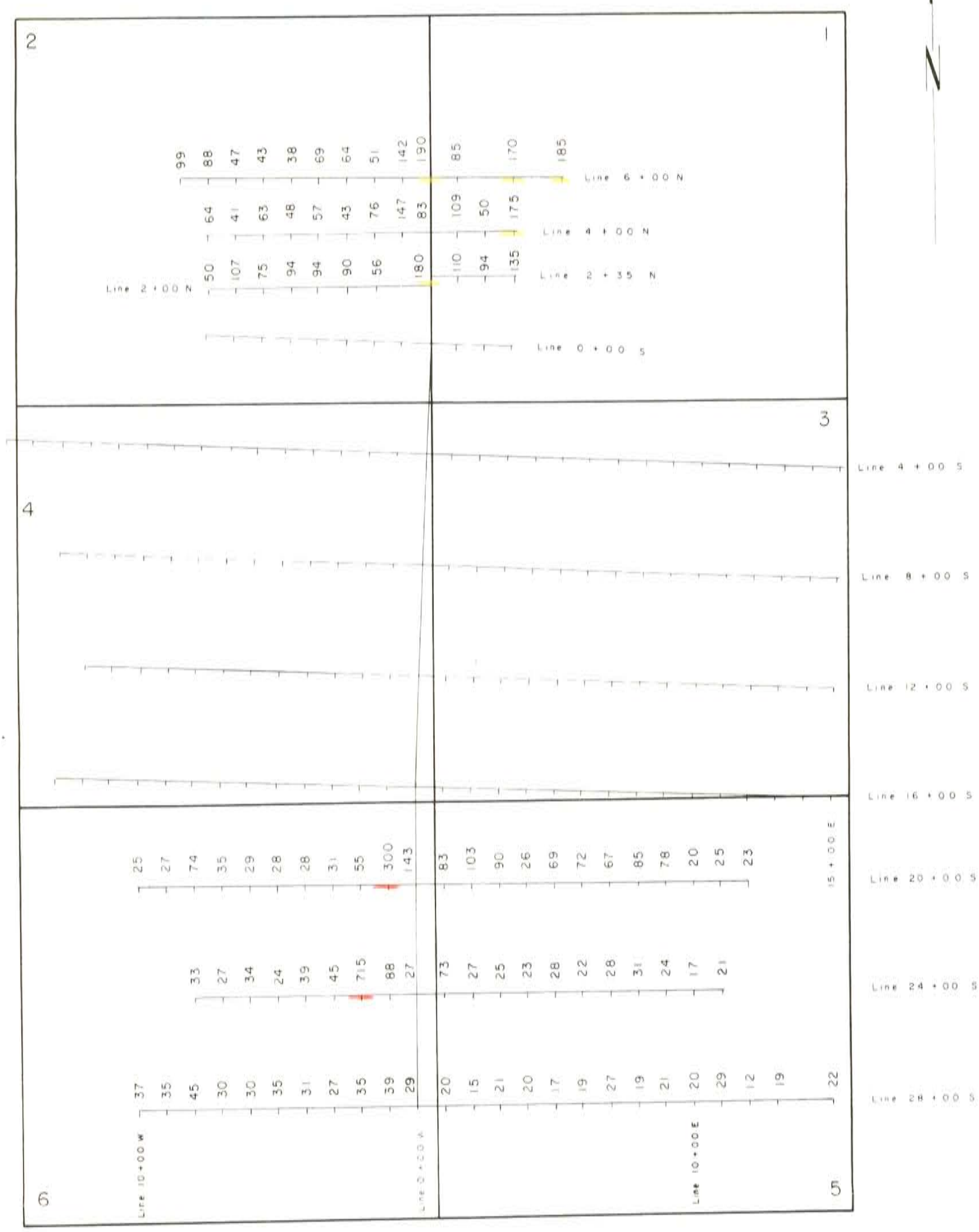
Omineca Mining Division

British Columbia

Scale :
1 : 250,000

57° 127° S. E.

LOCATION MAP



Anomalous

Weakly Anomalous

The Metal Values Are in P P M

KENNCO EXPLORATIONS (WESTERN) LIMITED

Chappelle Claims

Chappelle No. 1 and No. 2 Claim Groups

17 Miles NW of Thutade Lake, Omineca M.D., B.C.

Soil Geochemical Survey

Copper in Soil

DATA BY: R W S		N.T.S. 94 - E	PL. NO.: 1
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TRACED BY: J. Q L	DATE: 30/7/70		
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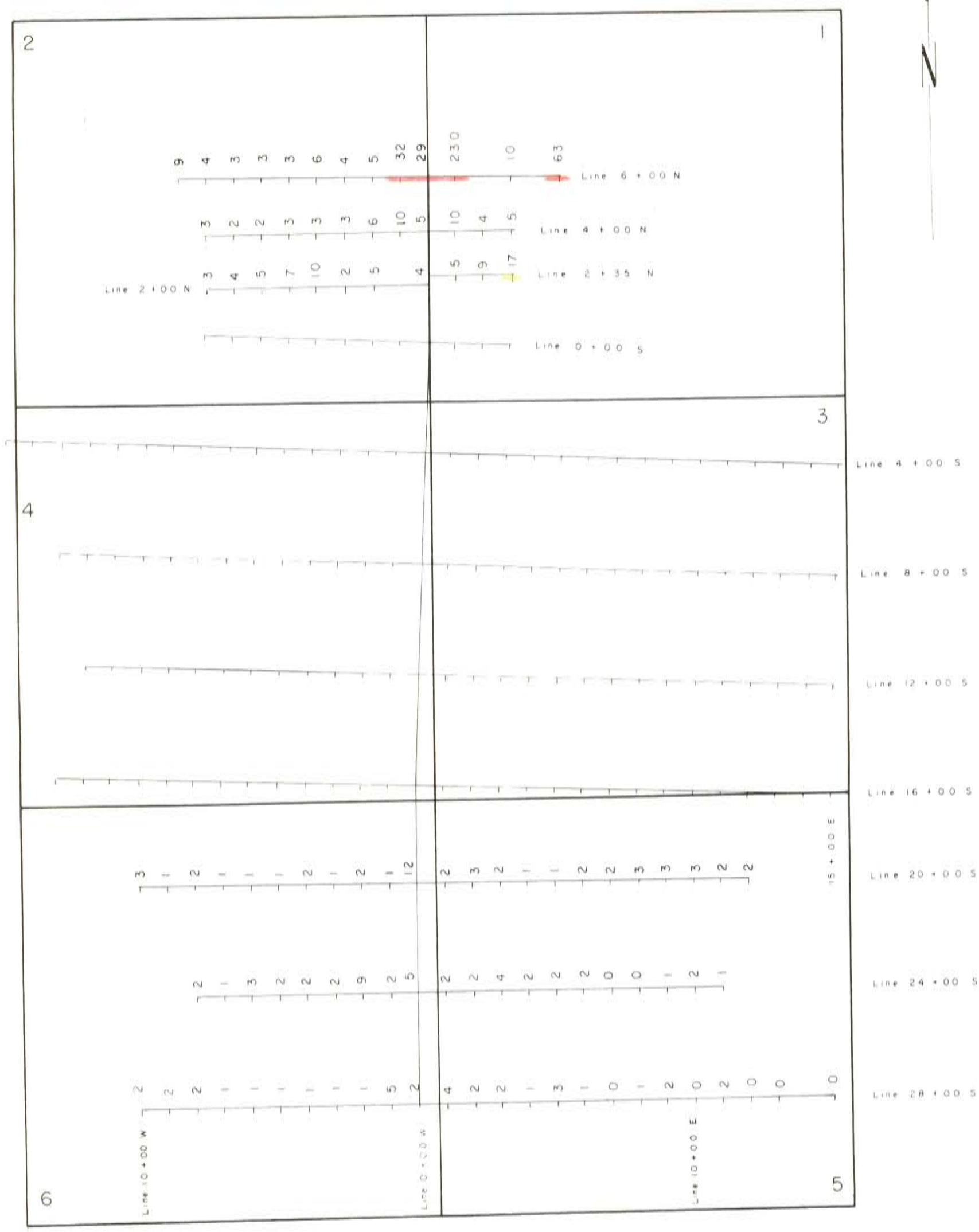


Anomalous

Weakly Anomalous

The Metal Values Are in P P M

KENNCO EXPLORATIONS (WESTERN) LIMITED

Chappelle Claims

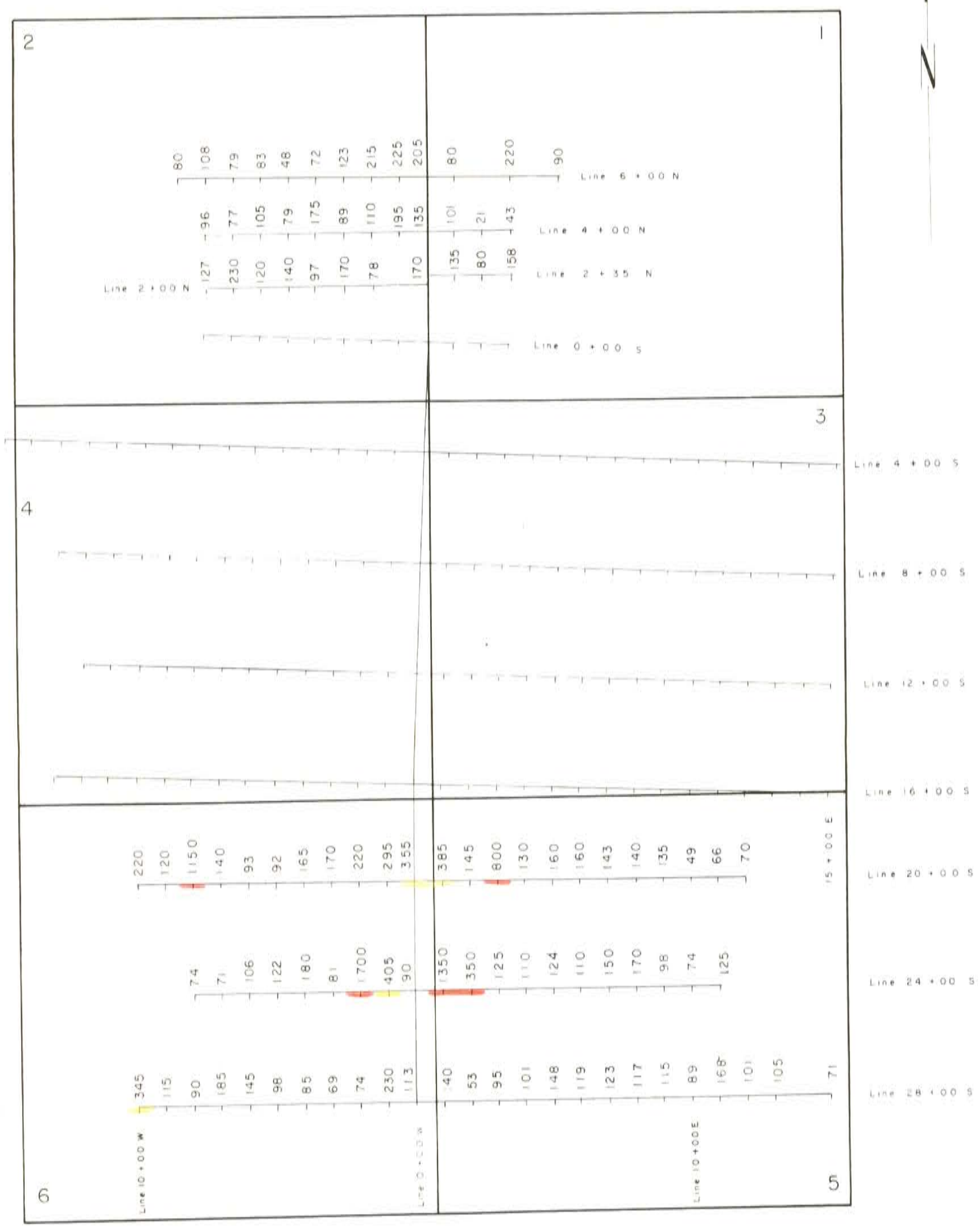
Chappelle No. 1 and No. 2 Claim Groups

17 Miles NW of Thutade Lake, Omineca M.D., B.C.

Soil Geochemical Survey

Molybdenum in Soil

DATA BY: R W S		N.T.S. 94 - E	PL. NO.: 2
DRAWN BY:	DATE:	SCALE: 1" = 400'	
TRACED BY: J Q L.	DATE: 30/7/70		
REVISIONS:		FILE NO.	



Anomalous

Weakly Anomalous

The Metal Values Are in P P M

KENNCO EXPLORATIONS (WESTERN) LIMITED

Chappelle Claims

Chappelle No. 1 and No. 2 Claim Groups

17 Miles NW of Thutade Lake, Omineca M.D., B.C.

Soil Geochemical Survey

Zinc in Soil

DATA BY: R. W. S		N.T.S. 94 - E	PL. NO.: 3
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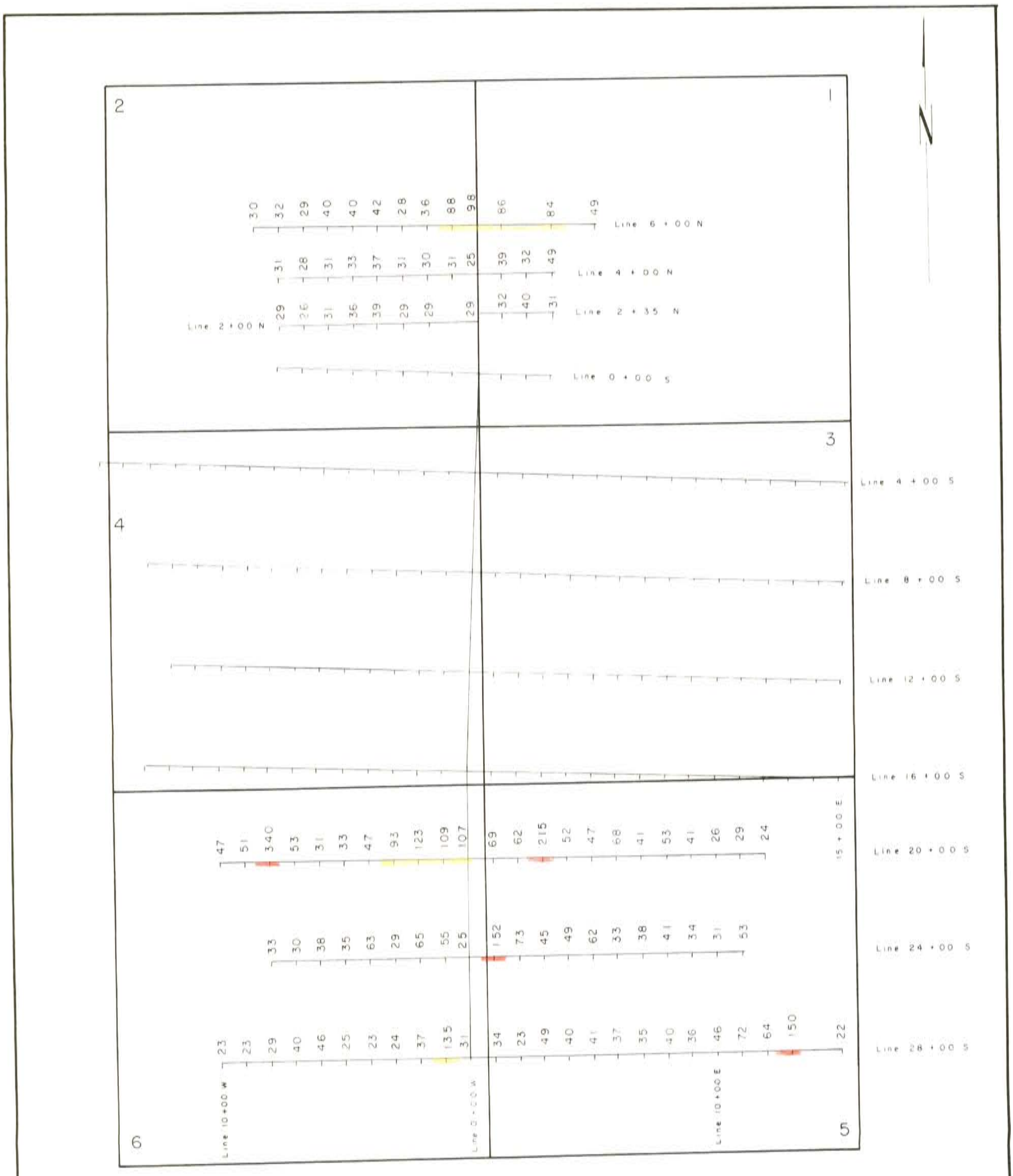
TRACED BY: J. Q. L.	DATE: 30/7/70		
REVISIONS:		FILE NO.	



Anomalous

Weakly Anomalous

The Metal Values Are in P P M

KENNCO EXPLORATIONS (WESTERN) LIMITED

Chappelle Claims

Chappelle No. 1 and No. 2 Claim Groups

17 Miles NW of Thutade Lake, Omineca M.D., B.C.

Soil Geochemical Survey

Lead in Soil

DATA BY: R. W. S.		N.T.S. 94 - E	PL. NO.: 4
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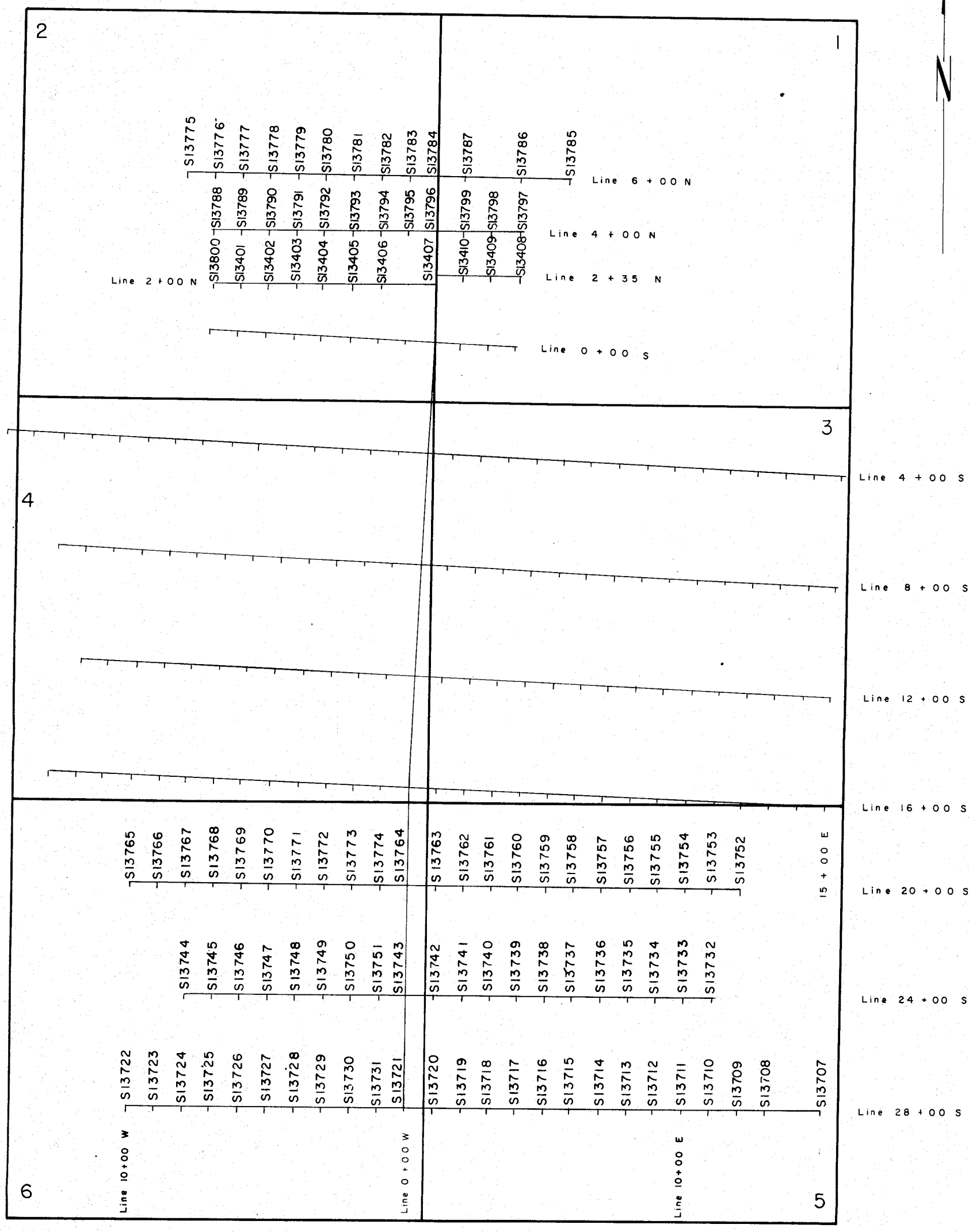

Anomalous

Weakly Anomalous

The Metal Values Are in P. P. M.

R. W. Stevenson

KENNCO EXPLORATIONS (WESTERN) LIMITED

Chappelle Claims

Chappelle No. 1 and No. 2 Claim Groups

17 Miles NW of Thutade Lake, Omineca M.D., B.C.

Soil Geochemical Survey

Soil Sample Sites

DATA BY: R. W. S.		N.T.S. 94 - E	PL. NO.: 5
DRAWN BY:	DATE:	SCALE: 1" = 400'	
TRACED BY:	DATE:		
REVISIONS:		FILE NO.	