

3362

KENCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

SILT AND SOIL GEOCHEMICAL SURVEYS

SAUNDERS NO. 2 GROUP

(Saunders Mineral Claims 57-61, 82-95,
206-209, 134-137, 254,255)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3362-MAP

Situated 7 miles southwest of Toadogone Lake,
Omineca Mining Division,
British Columbia

57°20'N; 127°04'W

Mining Recorder's Office
RECORDED
NOV 19 1971
AT _____
SMITHERS, B.C.

by

R. W. Stevenson, P. Eng.

Work done from July 13 to August 6, 1971

October 20, 1971

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Kennco Explorations, (Western) Limited

SAUNDERS CLAIMS

Situated 7 miles southwest of Toodoggone Lake

Omineca Mining Division,
British Columbia

57° 127° SE

R. H. Stevenson

LOCATION MAP

Scale:

1 : 250,000

INTRODUCTION

The mineral property discussed in this report is situated about 7 miles southwest of Toodoggone Lake, British Columbia. The exploration work done on this part of the property consisted of a silt geochemical survey, followed by a soil geochemical survey. The relative positions of these surveys are shown on the Location Map. They are both on Saunders No. 2 Group of mineral claims.

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 57°20'N; Longitude 127°04'W, about 7 miles southwest of Toodoggone Lake, and 285 miles northwest of Prince George. The survey area is at an elevation of about 5500', and is above tree line.

Access to the property is by fixed wing aircraft from Smithers to Black Lake, a distance of about 180 miles, and by helicopter from there. Local travel in the survey areas is relatively 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" = 2640'. These maps were obtained by enlarging portions of the 1:250,000 topographic 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. Crews were set out by helicopter so as to utilize as much as possible of the working day in sample collection. A drainage base map with a scale of 1" = 1320' was compiled for use in plotting the sample results for office interpretation.

Silt Sample Collection

In general, the samples were taken at 400 to 800 foot intervals on the main streams, depending on where suitable silt could be found.

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" 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 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 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 AA5 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 AA5.

Interpretation

The purpose of the silt survey was to explore the potential of this part of the property prior to doing the soil surveys. The configuration of streams made this a practicable goal. The results are plotted on Plates A-1 to A-9.

None of the samples are anomalous in any of the elements analysed. This is particularly surprising in the case of the small stream flowing across Saunders No. 61 mineral claim, because several elements were later found to be anomalous in soil in that area. No reason has been ascertained for the lack of silt anomalies there.

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 on laths. The grid area extended slightly beyond a small gossan zone. The grid was compiled on a map with scale 1" = 400'.

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 where possible.

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, the type of vegetation, 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 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.

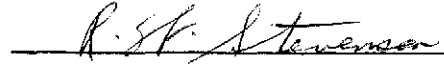
The analytical procedures used on the soil samples were the same as those used on the silt samples. These are described in the section entitled 'Silt Geochemical Survey'.

Interpretation

The depth of overburden varies from a few feet to probably about 10' 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.

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, 10 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.

Molybdenum forms a moderately strong, well defined anomaly that is roughly coincident with the weak gossan. Lead and gold form weak anomalies that are similarly coincident. Copper and zinc are anomalous at scattered sites in the north half of the weak gossan. Only a few samples are anomalous in either silver or cobalt. The low nickel values reflect the absence of basic rocks.


R. W. Stevenson, P. Eng.

Vancouver, B.C.

October 20, 1971

STATEMENT OF COSTS

The costs incurred on assessment work on the Saunders No. 2 Group of mineral claims were as follows:

Silt Survey

Analysis of 19 silt samples for Cu, Mo, Zn,Pb,Ag,Au,Co,Ni	\$104.50
Wages & Board: R.S. Lopaschuk July 13 @ \$17.00 + \$10.00	27.00
G. Allen July 13 @ \$16.00 + \$10.00	26.00
Helicopter setout on the property 0:30 hrs. @ \$175/hour	87.50
Drafting	20.00

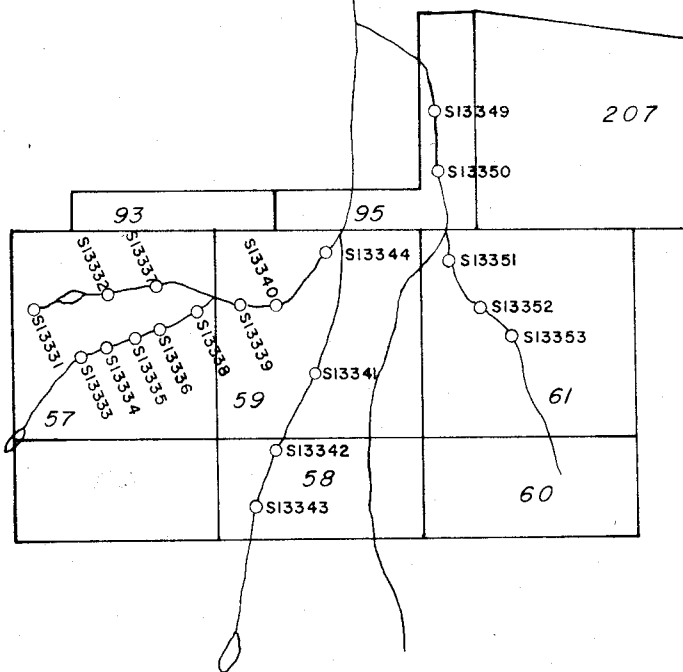
Soil Survey Area No. 4

Analysis of 304 soil samples for Cu, Mo,Zn,Pb,Ag,Au,Co,Ni	\$1,672.00
Wages & Board: S.C. Gower August 5,6 @ \$35.00 + \$10.00	90.00
S. Earle August 4-6 @ \$17.00 + \$10.00	81.00
G. Allen August 4-6 @ \$16.00 + \$10.00	78.00
Helicopter setout on the property 2:10 hours @ \$175.00	379.00
Station markers, 200 laths @ 9¢/each	18.00
Drafting & Typing	<u>90.00</u>
Total	\$2,673.00

R. W. Stevenson
R. W. Stevenson, P. Eng.

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NO. 3362 MAP. #2



LEGEND

○ Silt Sample

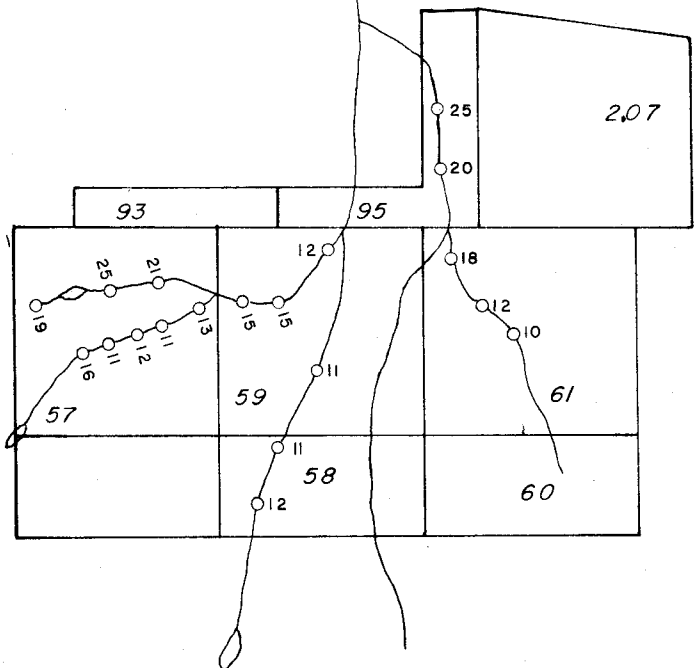
R. H. Stevenson

KENCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group
Omineca M. D., B. C.
Silt Geochemical Survey
Silt Sample Sites

DATA BY: S. C. G.		N.T.S. 94-E	PL NO. A-1
DRAWN BY:	DATE:	SCALE: 1" = 1320'	
TRACED BY: P. Y.	DATE: 20/10/71		
REVISIONS:		FILE NO.	

Department of
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ASSESSMENT REPORT
 NO. 3362 MAP #3



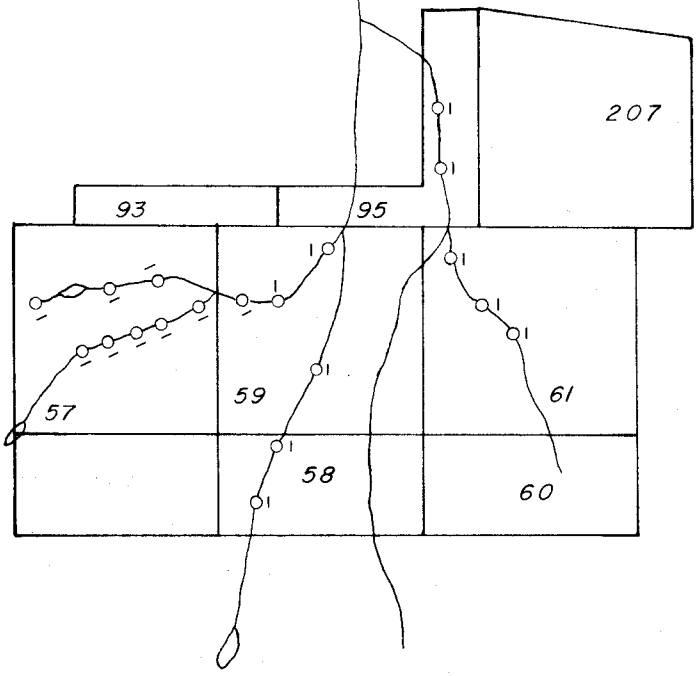
LEGEND

- Silt Sample
- Anomalous *R. N. Stevens*
- Weak Anomalous

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M.D., B.C. Silt Geochemical Survey Copper In Silt		
DATA BY: S. C. G.	N.T.S. 94-E	PL. NO: A-2
DRAWN BY:	DATE:	SCALE: 1" = 1320'
TRACED BY: P. Y.	DATE: 20/10/71	
REVISIONS:	FILE NO.	

**Department of
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ASSESSMENT REPORT
 NO. 3362 MAP #4



LEGEND

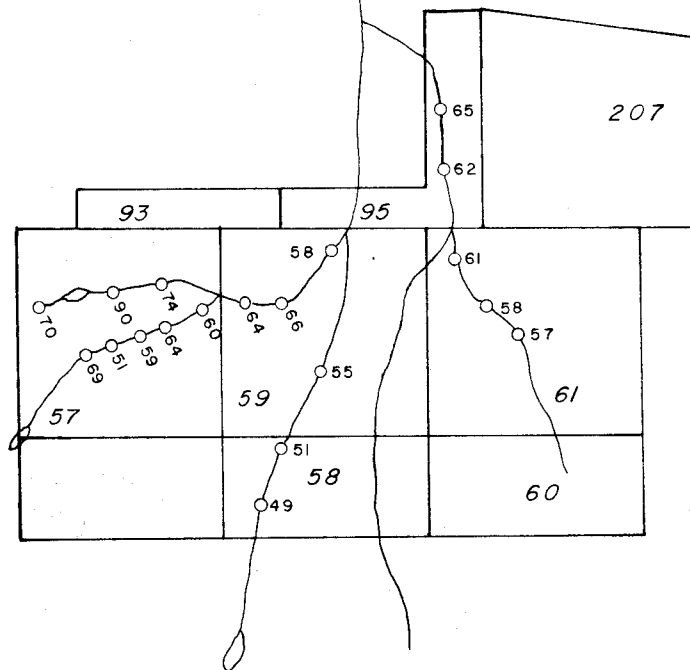
- Silt Sample
- Anomalous *R. S. Stevenson*
- Weak Anomalous

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M.D., B.C. Silt Geochemical Survey Molybdenum In Silt		
DATA BY: S. C. G.	N.T.S. 94-E	PL. NO.: A-3
DRAWN BY:	DATE:	SCALE: 1" = 1320'
TRACED BY: P. Y.	DATE: 20/10/71	
REVISIONS:	FILE NO.	

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ASSESSMENT REPORT

NO. 3362 MAP #5



LEGEND

- Silt Sample
- Anomalous *R. A. Stevens*
- Weak Anomalous

All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group

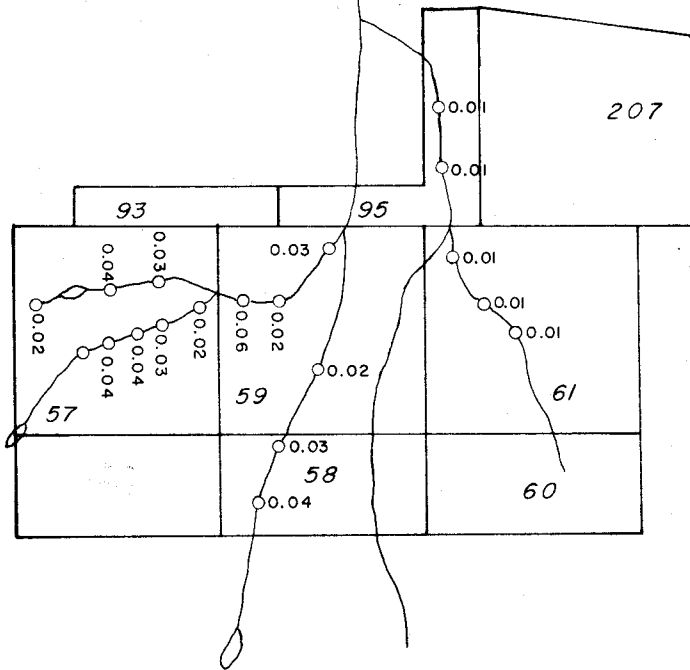
Omineca M.D., B.C.

Silt Geochemical Survey

Zinc In Silt

DATA BY: S. C. G.		N.T.S. 94-E	PL. NO.: A-4
DRAWN BY:	DATE:	SCALE: 1" = 1320'	
TRACED BY: P. Y.	DATE: 20/10/71		
REVISIONS:		FILE NO	

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 No. 3362 MAP #8



LEGEND

- Silt Sample
- Anomalous *R.S. Stevens*
- Weak Anomalous

All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group

Omineca M.D., B.C.

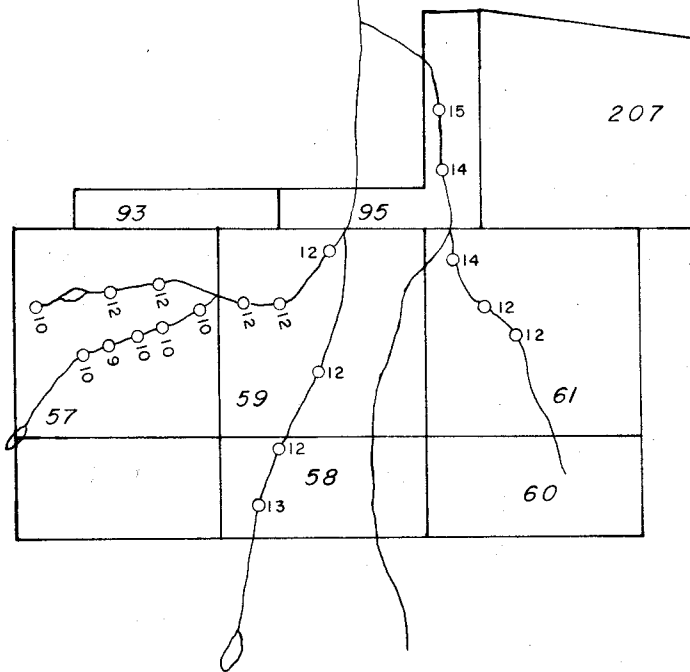
Silt Geochemical Survey

Gold In Silt

DATA BY: S. C. G.		N.T.S. 94-E	PL. NO. A-7
DRAWN BY:	DATE:	SCALE: 1" = 1320'	
TRACED BY: P. Y.	DATE: 20/10/71		
REVISIONS:	FILE NO.		

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NO. 3362 MAP #9



LEGEND

- Silt Sample
- Anomalous *R. S. Stevens*
- Weak Anomalous

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group

Omineca M.D., B.C.

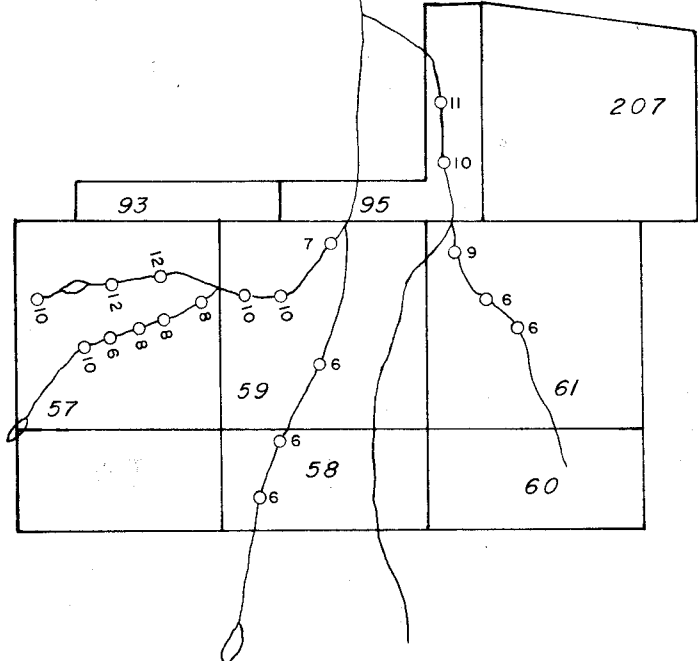
Silt Geochemical Survey

Cobalt In Silt

DATA BY: S. C. G.		N.T.S. 94-E	PL. NO. A-8
DRAWN BY:	DATE:	SCALE: 1" = 1320'	
TRACED BY: P. Y.	DATE: 20/10/71		
REVISIONS:	FILE NO.		

**Department of
Mines and Petroleum Resources
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NO. 3362 MAP #10



LEGEND

- Silt Sample
- Anomalous *P. S. Stevens*
- Weak Anomalous

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group		
Omineca M.D., B.C.		
Silt Geochemical Survey		
Nickel In Silt		
DATA BY: S. C. G.	N T.S. 94-E	PL. NO: A-9
DRAWN BY:	DATE:	SCALE:
TRACED BY: P. Y.	DATE: 20/10/71	1" = 1320'
REVISIONS:	FILE NO.	

Mineral Occurrence Indicated? No New Card Started? _____ Map No. _____

Property Name: 7 mi. S.W. of Toadoggone Lake Property No. _____
Omineca

Location: ← N.T.S.: 92E/6E M.D.: _____

Metals: _____ Ref.: 2083, 3198?, near 3314

Claims reported on: SAUNDERS (SAUNDERS NO. 2 GROUP), CHAPPELLE

Owner: Kennco Explorations (Western) Limited

Address: 730-505 Burrard St., Vancouver 1, B. C.

Principal: Same

Address: _____

Authors: R.W. Stevenson, P. Eng. Co-signer: _____

Geol.: _____ Geophys.: _____ Geochem.: X L.C.: _____ Topo.: _____ (Other) _____

Dates work done: July 13-Aug. 6/71

Affidavit submitted: Nov. 8/71 To C.M.B.: Nov. 23/71

Attention: _____

Total amount of work:	\$ 2600
Certificates of work claimed:	\$ 2600

Comment: Acceptable for \$ 2,500.

J. S. H. Eastwood - Nov. 26 '71

accepted

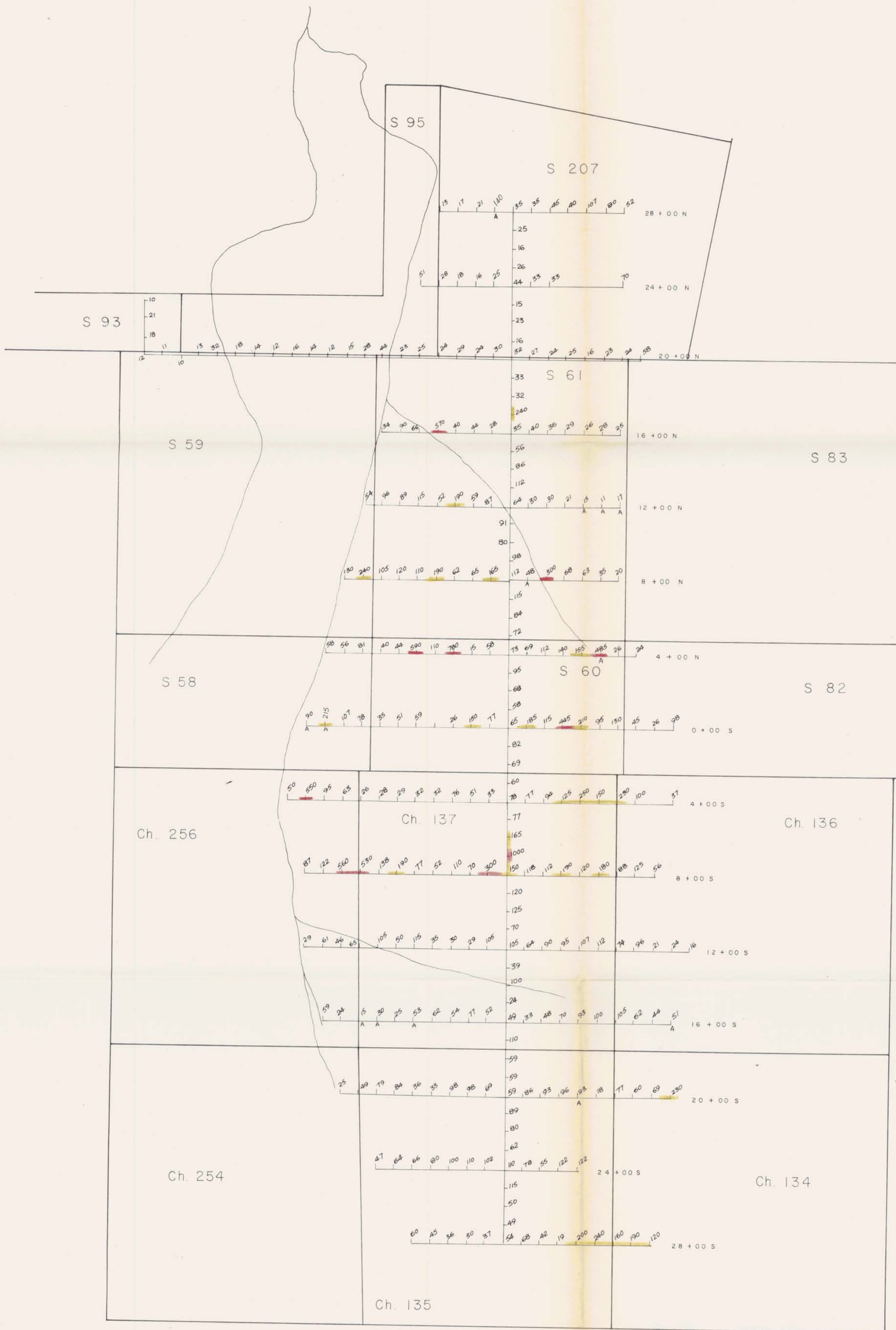
Sharon Holland

Chief, Mineralogical Branch

Acceptance Date: 29/11/71

FINAL AMOUNT OF WORK APPROVED: \$ 2600.00

Assessment Report No. 3362



LEGEND

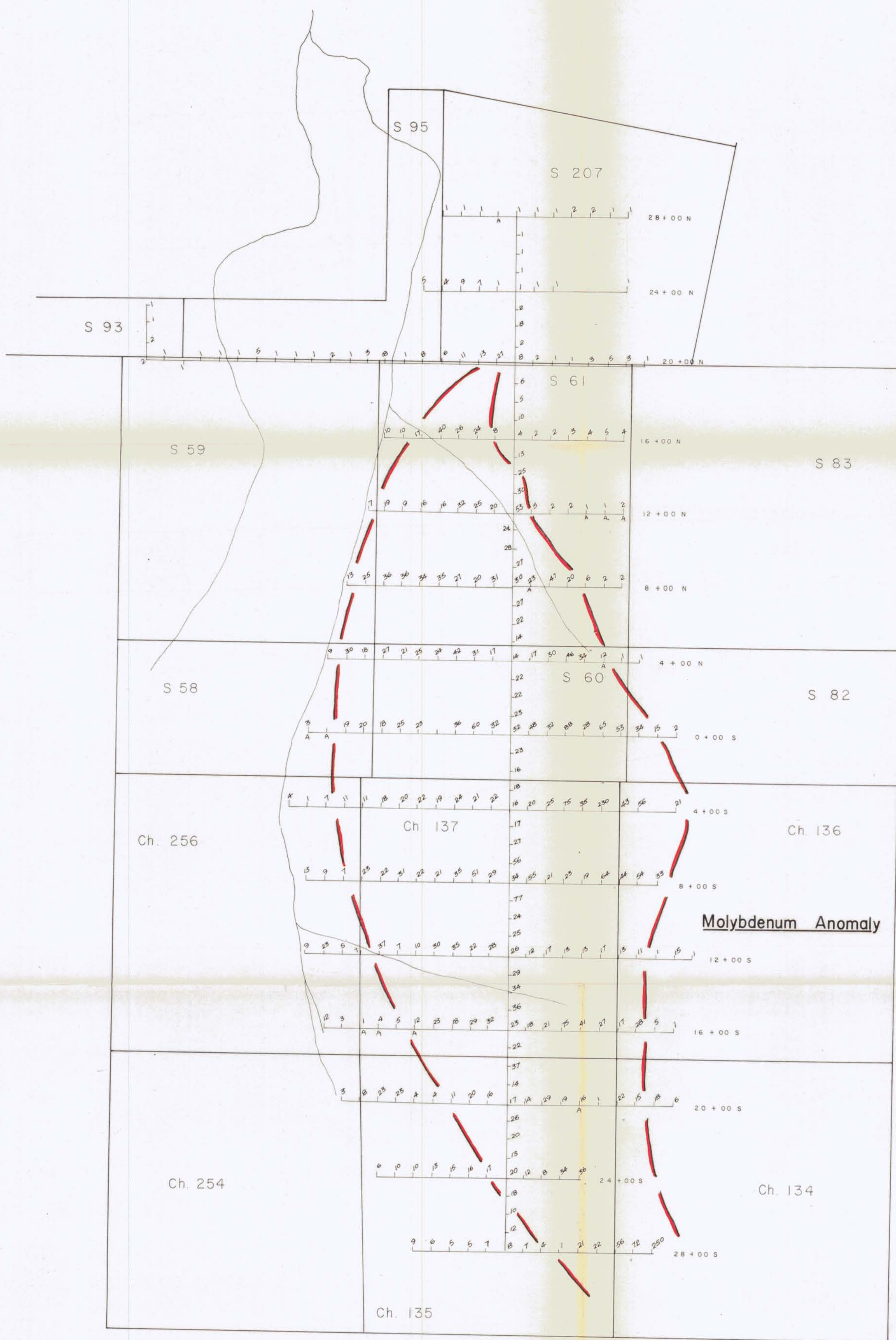
- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

Department of
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ASSESSMENT REPORT
 NO. 3362 MAP #12

All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M. D., B. C.		
Soil Geochemical Survey Soil Survey Area No. 4 Copper in Soil		
DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-2
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.Q.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggon Lake, Omineca Mining Division, Dated Oct. 20, 1971.



LEGEND

- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

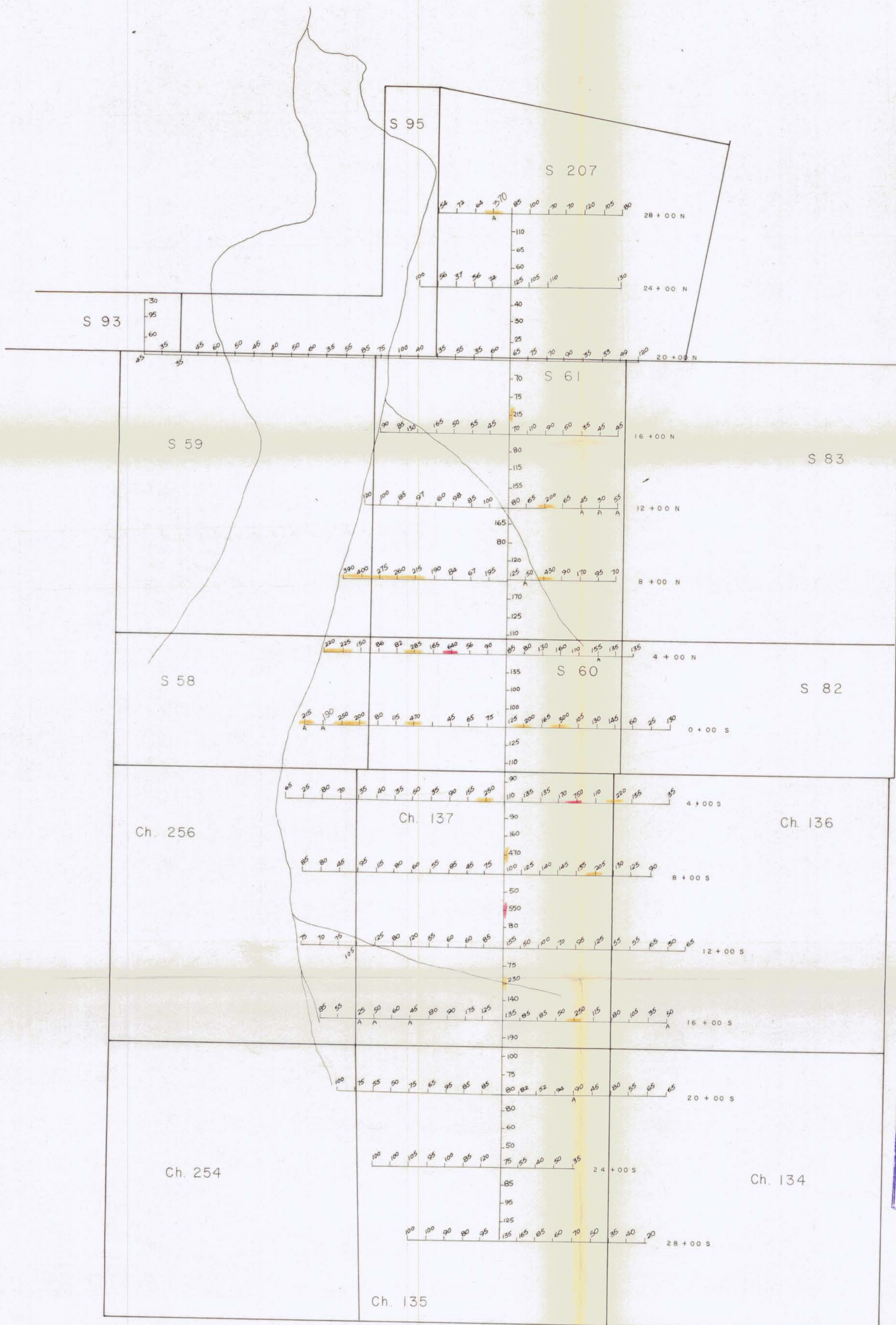
**Department of
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ASSESSMENT REPORT**

NO. 3362 MAP #13

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M. D., B. C. Soil Geochemical Survey Soil Survey Area No. 4 Molybdenum in Soil		
DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-3
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.O.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
Saunders No. 2 Group, 7 Miles Southwest of Toadoggone Lake, Omineca Mining Division, Dated Oct. 20, 1971.



LEGEND

- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch. 137 Chappelle Claim and Number

Department of
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ASSESSMENT REPORT
 NO. 3362 MAP #14

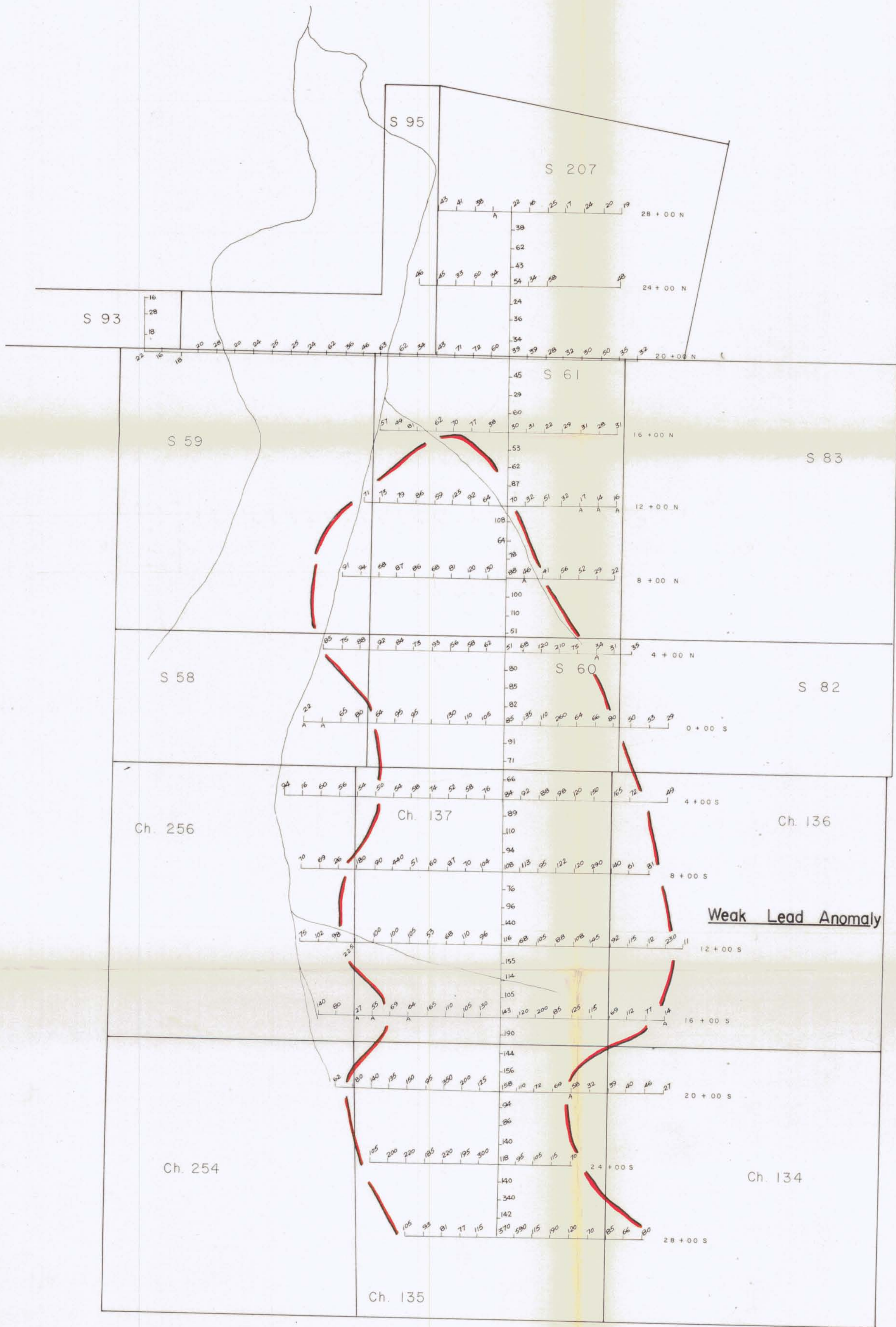
All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group
 Omineca M. D., B. C.
 Soil Geochemical Survey
 Soil Survey Area No. 4
Zinc in Soil

DATA BY: S.C.G.		N.T.S. 94 - E	PL. NO.: B-4
DRAWN BY:	DATE:	SCALE: 1" = 400'	
TRACED BY: J.Q.L.	DATE: 29/9/71		
REVISIONS: P.N.S.Y.	FILE NO.		

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadogone Lake, Omineca. *R.W. Stevenson*
 Mining Division, Dated Oct. 20, 1971.



LEGEND

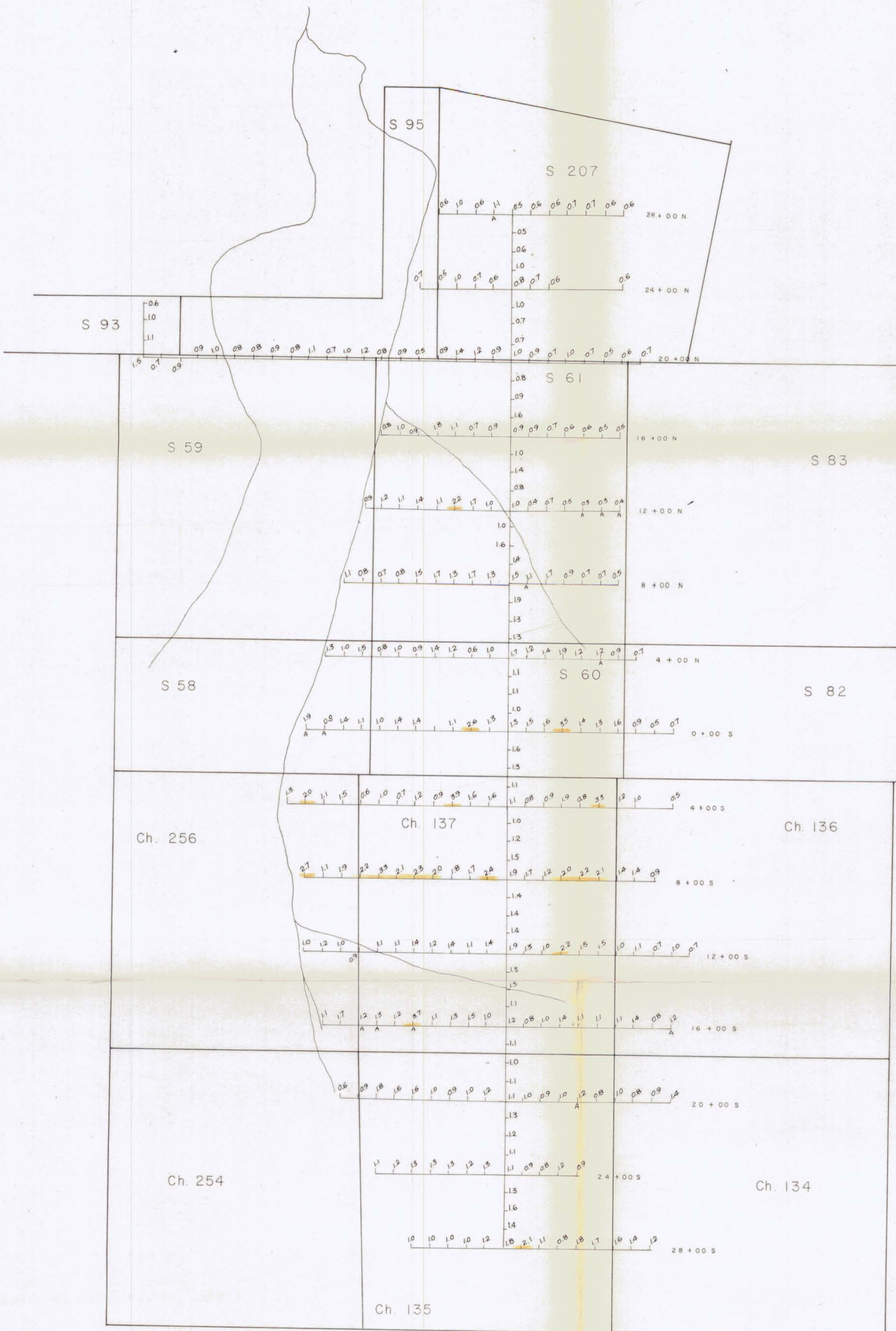
- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

Weak Lead Anomaly

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KENNCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M. D., B. C.		
Soil Geochemical Survey Soil Survey Area No. 4 Lead in Soil		
DATA BY S.C.G.	N.T.S. 94 - E	PL. NO.: B-5
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.Q.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggon Lake, Omineca Mining Division, Dated Oct. 20, 1971.



LEGEND

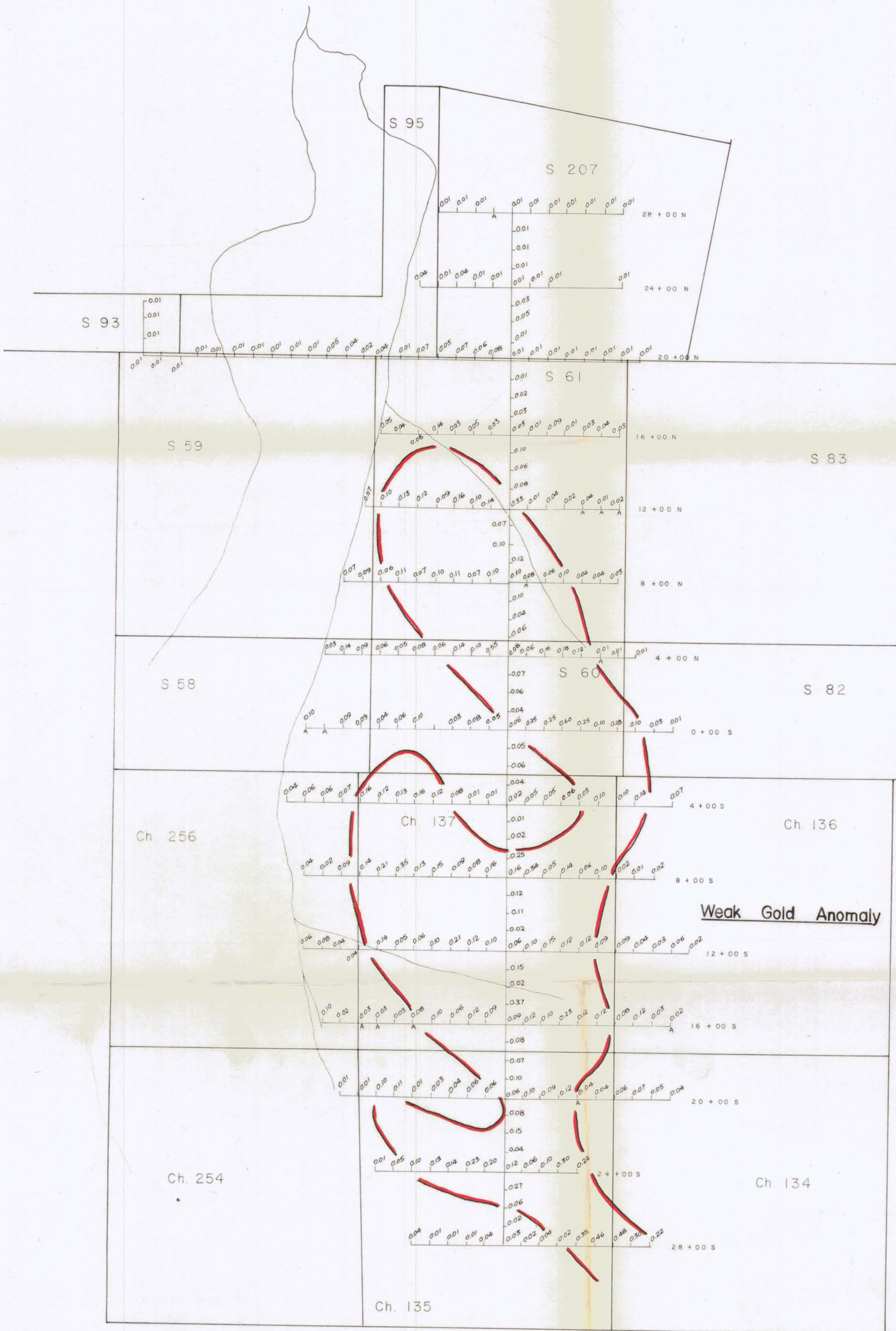
- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- CH 137 Chappelle Claim and Number

**Department of
 Mines and Petroleum Resources**
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All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M. D., B. C.		
Soil Geochemical Survey Soil Survey Area No. 4 Silver in Soil		
DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-6
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.Q.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggonne Lake, Omineca *R.W. Stevenson*
 Mining Division, Dated Oct. 20, 1971.



LEGEND

- Soil Sample Line
- Anomalous
- Weekly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

Department of
 Mines and Petroleum Resources
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 NO. 3362 MAP #17

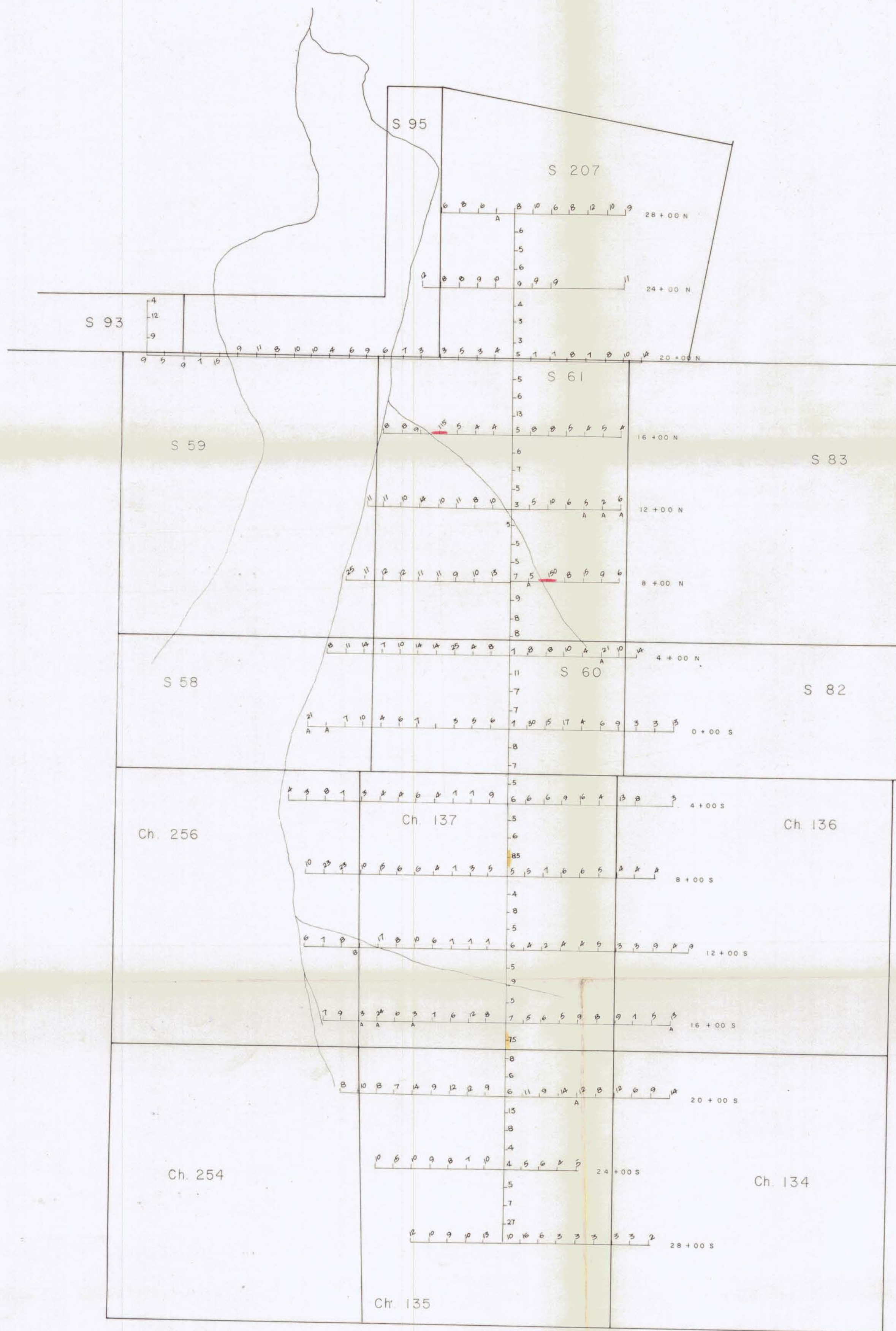
All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED




Saunders No. 2 Group
 Omineca M. D., B. C.
 Soil Geochemical Survey
 Soil Survey Area No. 4
 Gold in Soil

DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-7
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.Q.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggone Lake, Omineca
 Mining Division, Dated Oct. 20, 1971.



LEGEND

-  Soil Sample Line
-  Anomalous
-  Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

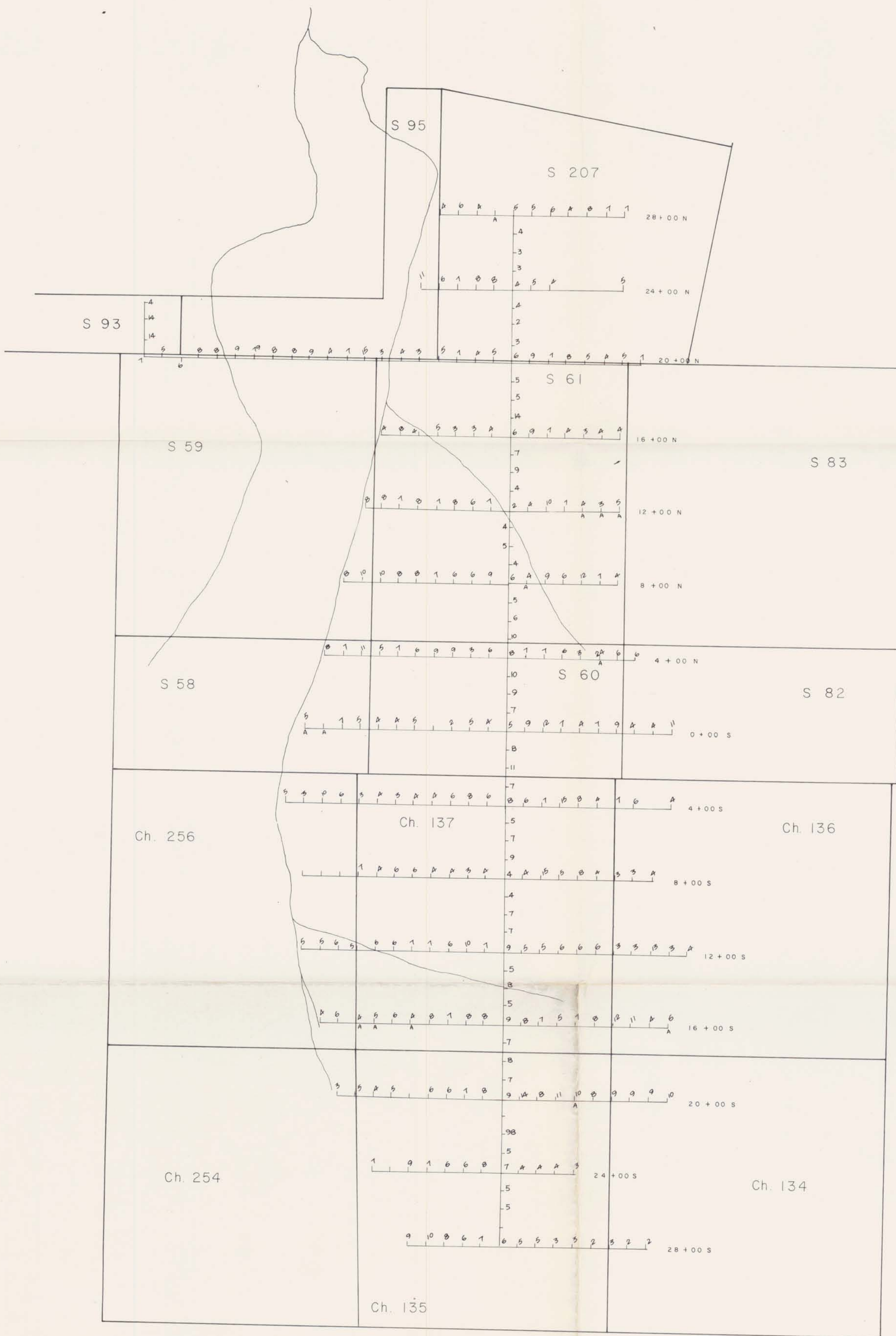
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. 3362 MAP #18

All Metal Values in P. P. M.

KENCO EXPLORATIONS (WESTERN) LIMITED		
Saunders No. 2 Group Omineca M. D., B. C.		
Soil Geochemical Survey Soil Survey Area No. 4 Cobalt in Soil		
DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-8
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.O.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggone Lake, Omineca
 Mining Division, Dated Oct. 20, 1971.





LEGEND

- Soil Sample Line
- Anomalous
- Weakly Anomalous
- S 207 Saunders Claim and Number
- Ch 137 Chappelle Claim and Number

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3362 MAP #19

All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED

Saunders No. 2 Group
 Omineca M. D., B. C.
 Soil Geochemical Survey
 Soil Survey Area No. 4
Nickel in Soil

DATA BY: S.C.G.	N.T.S. 94 - E	PL. NO.: B-9
DRAWN BY:	DATE:	SCALE: 1" = 400'
TRACED BY: J.Q.L.	DATE: 29/9/71	
REVISIONS: P.N.S.Y.	FILE NO.	

To Accompany Geochemical Survey Report by R.W. Stevenson P. Eng. on
 Saunders No. 2 Group, 7 Miles Southwest of Toadoggone Lake, Omineca
 Mining Division, Dated Oct. 20, 1971.