

1983

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

SOIL GEOCHEMICAL SURVEY

PINE No. 3 GROUP

(Pine Mineral Claims 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr.)

Situated 13 miles northeast of Thutade Lake,
Omineca Mining Division,
British Columbia

57° 126° SW

By

R. W. Stevenson, P. Eng.

June 11 to 24, 1969

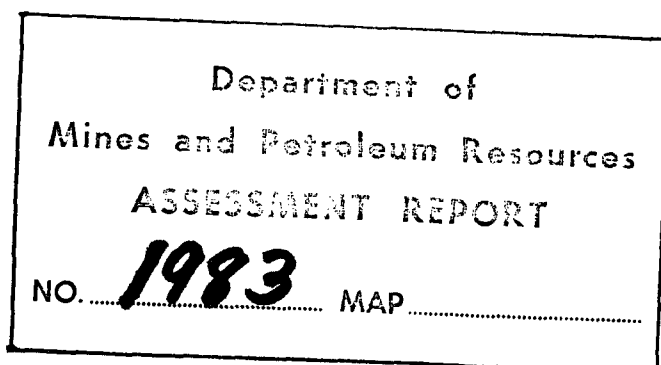
August 15, 1969

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LIST OF CLAIMS AND DISTRIBUTION OF WORK

PINE NO. 3 GROUP (40 claims)

<u>Claim No.</u>	<u>Record No.</u>	<u>Record Date</u>	<u>\$ Soil Geochem. Work Ea.Claim</u>	<u>Years Applied</u>
15	59499	June 10		
16	59500	"		
17	59501	"		
18	59502	"		
46	59882	June 19	304	
48	59884	"	272	
50	59886	"	156	
51	59887	"		
52	59888	"		
53	59889	"		
54	59890	"		
55	59991	"		
57	59993	"		
73	60887	July 16		1
74	60888	"		1
75	60889	"		1
76	60890	"		1
77	60891	"		1
78	60892	"		1
79	60893	"	194	1
80	60894	"		1
81	60895	"	132	1
82	60896	"		1
83	60897	"	242	1
84	60898	"		1
85	60899	"		1
86	60900	"		1
87	60901	"		
88	60902	"		
89	60903	"		
90	60904	"		
91	60905	"		
92	60906	"		
93	60907	"		
94	60908	"		
95	60909	"		
96	60909A	"		
97	60910	"		
98	60911	"		
144 Fr.		July 3	<u>109</u>	<u>14</u>
			\$1,409	

All the claims in this group were recorded before the start of the work; except for Pine No. 144 Fraction, which was staked on June 10 and recorded on July 3, 1969. The geo-chemical work was done between June 11 and June 24, 1969.

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 Pine No. 3 Group is as follows:

Chemical analysis of 178 samples - Cu, Mo, Zn, Pb		\$1,068.00
Wages and Board: linecutting and soil sampling:		
S.G. Gower - June 14,17,20,24	@ \$22.00 + \$4.50	106.00
M. Vreugde - June 11,17,20,24	@ \$19.50 + \$4.50	96.00
M. Morison - June 14,17	@ \$17.50 + \$4.50	44.00
D. Reid - June 11,17	@ \$16.50 + \$4.50	42.00
Helicopter set-out on property - 0:20 hrs @ \$160/hr		<u>53.00</u>
	Total ...	\$1,409.00

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

INTRODUCTION

The mineral property discussed in this report is about 13 miles northeast of Thutade Lake, British Columbia, on the southeast side of the Finlay River. The exploration work on these claims consisted of soil sampling. It was done during the period June 11 to 24, 1969.

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

LOCATION AND ACCESS

The property is situated at Latitude 57°13'N, Longitude 126°43'W, about 270 miles northwest of Prince George. This is about 13 miles northeast of Thutade Lake. It is on the south side of the Finlay River, in the Finlay Valley, an area of subdued topography which is characterized by erratic drainage caused by numerous eskers and both lateral and terminal moraines. The elevation there is from 3400' to 4500' above sea level; and vegetation varies from good stands of mature pine to semi-open swamp areas.

Access to the area is by fixed-wing aircraft from Smithers to Pine Lake, a distance of about 175 miles. This is a small lake, about 4000' long, which is situated 3 miles northeast of the Pine area. Local travel on the Pine property is fairly easy, except for the difference in elevation between the showing area and the river level. Small clearings in swamps and in burn areas provide good helicopter access to most parts of the property.

SOIL GEOCHEMICAL SURVEY

Soil Survey Field Work

Control Survey Lines

A control grid was established by chain and compass survey, using surveyor's flagging to mark the stations. This gave reasonably good control of the sample sites, with minimum expenditure. The survey area is in the valley of the Finlay River, and the topography is generally subdued. Over most of the area, the vegetation is mature Lodgepole Pine.

The baseline direction is N45°E. For purposes of marking the stations, this was termed Grid North. This direction was chosen so as to give the best coverage across the area of interest. Base camp was southwest of the grid area. On two of the lines farthest from camp, crews were set out by helicopter in nearby clearings so as to minimize unproductive walking time. Elevations range from 3800' to 4400' above sea level. A base map with scale 1" = 400' was compiled for use in plotting the sample results.

Soil Sample Collection

The samples were taken at 100-foot 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. Samples were not taken in swampy areas where only the "A" horizon was accessible.

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 mature forest) and the soil type.

Packaging

The samples were placed in 3" x 4½" 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 John Barakso, MSc.

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 ($HClO_4 \cdot H_2O$) 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, 15 ppm to 24 ppm for molybdenum, 300 ppm to 599 ppm for zinc, and 100 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.

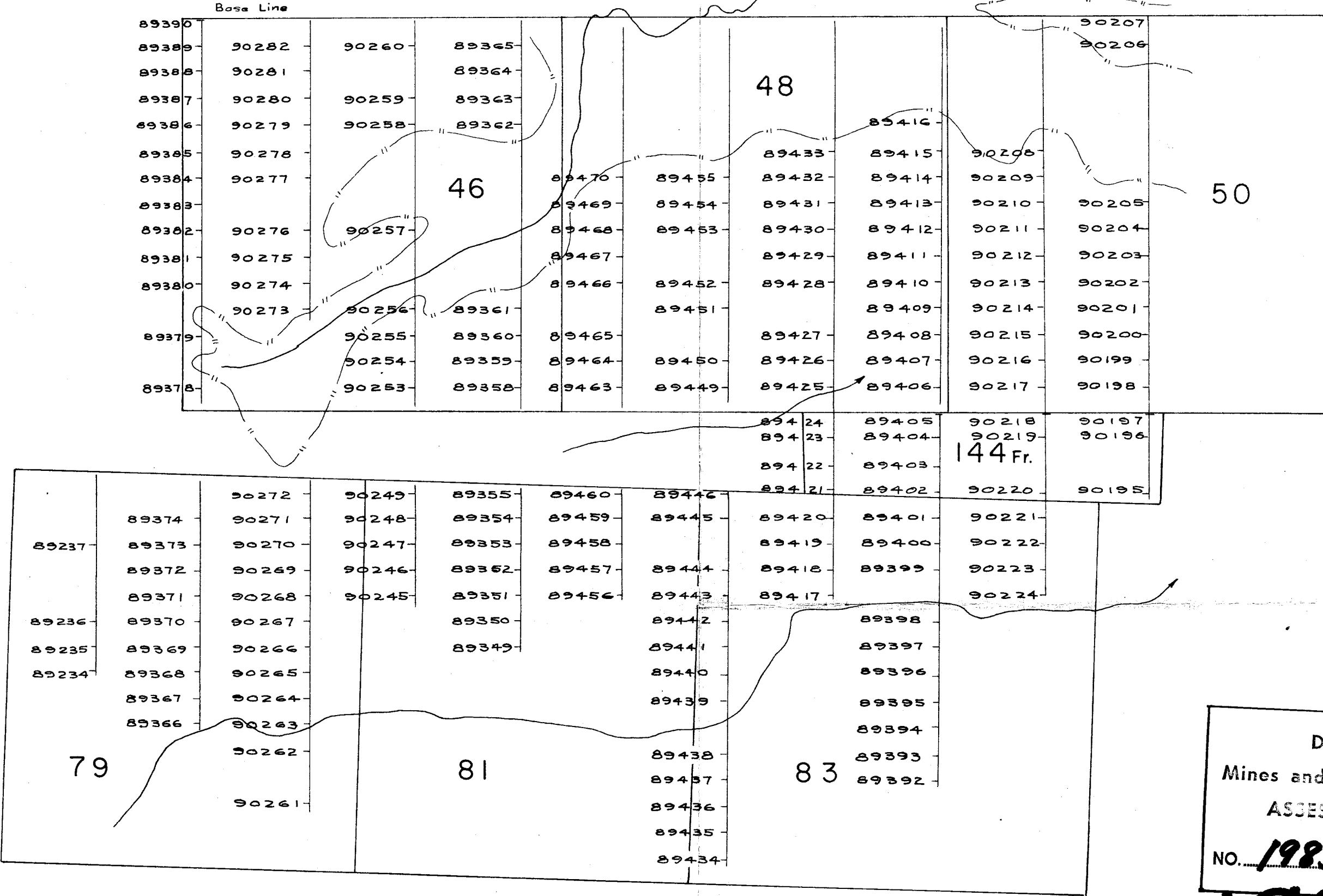
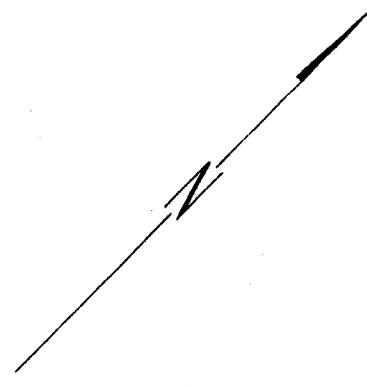
Zinc forms a somewhat sporadic anomalous zone across claims 50, 48, and 46, which may curve onto claim 79. Somewhat surprisingly, lead is not co-anomalous with zinc, except to a minor extent on claim 50. Copper and molybdenum are not strongly anomalous, but the anomalous sites form a pattern similar to that for zinc. The soil sampling indicates areas of erratic, low-grade mineralization.



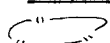
Vancouver, B. C.

August 15, 1969


R. W. Stevenson

Soil geochemical report for work recorded on
Pine No. 3 Group on July 10, 1969.



Legend
 Metal Values in P.P.M.
 Anomalous 
 Weakly Anomalous 
 Swamp 

To accompany Soil Geochemical Survey Report
 by R. W. Stevenson, P. Eng., on the Pine No. 3 Group
 thirteen miles northeast of Thutade Lake, Omineca
 Mining Division, dated August 15, 1969. *R. W. Stevenson*

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1983 MAP # 1

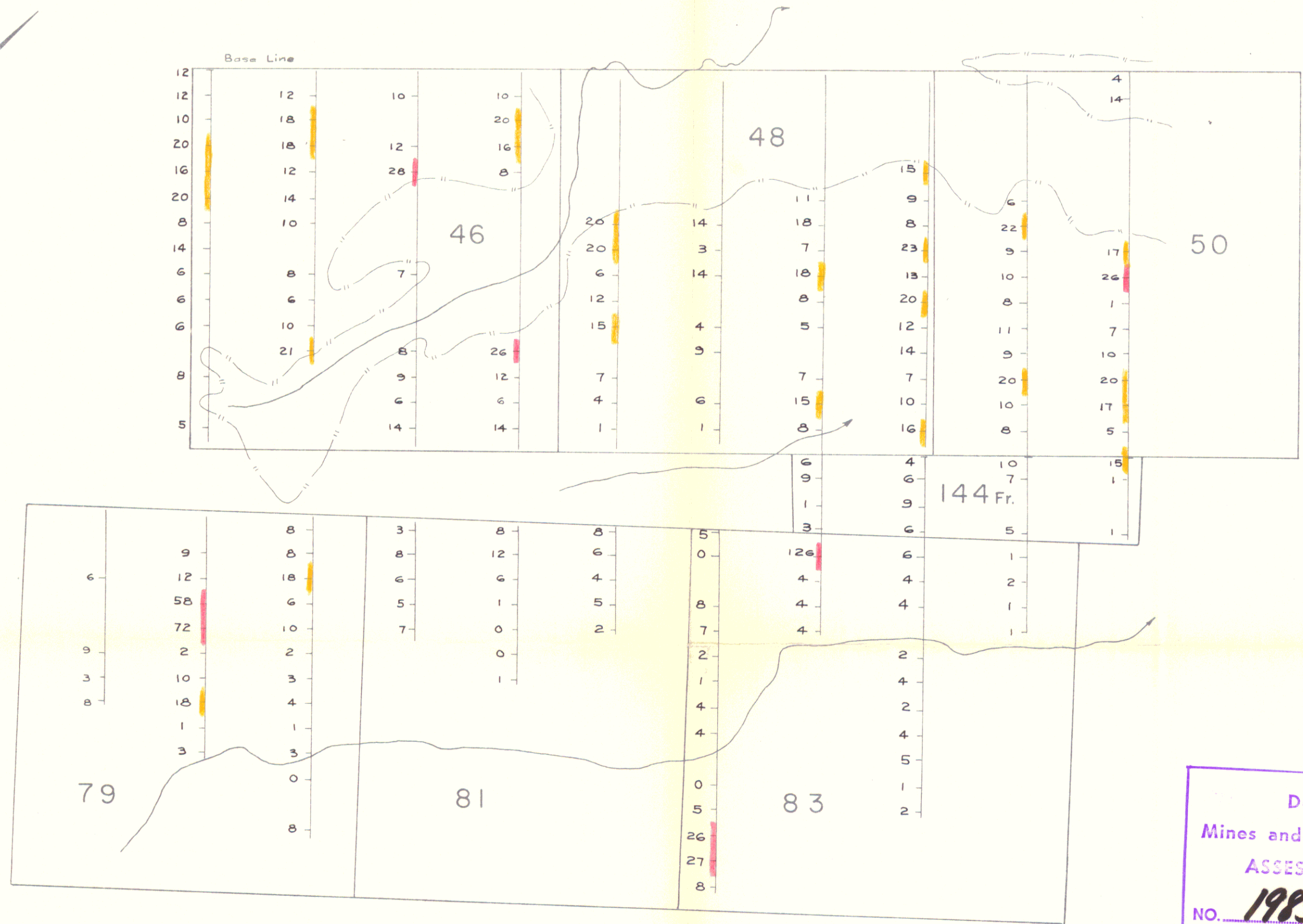
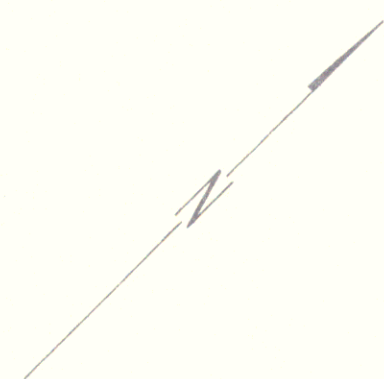
1983

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Pine No. 3 Group
 Pine Mineral Claims No. 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr.

Omineca M.D., B. C.
 Soil Geochemical Survey
Soil Sample Locations

DATA BY: R.W.S.	N.T.S. 94 - E	PL. NO.: 5
DRAWN BY:	DATE:	SCALE: 1" to 400'
TRACED BY: J.G.L.	DATE: 4/8/69	
REVISIONS:		



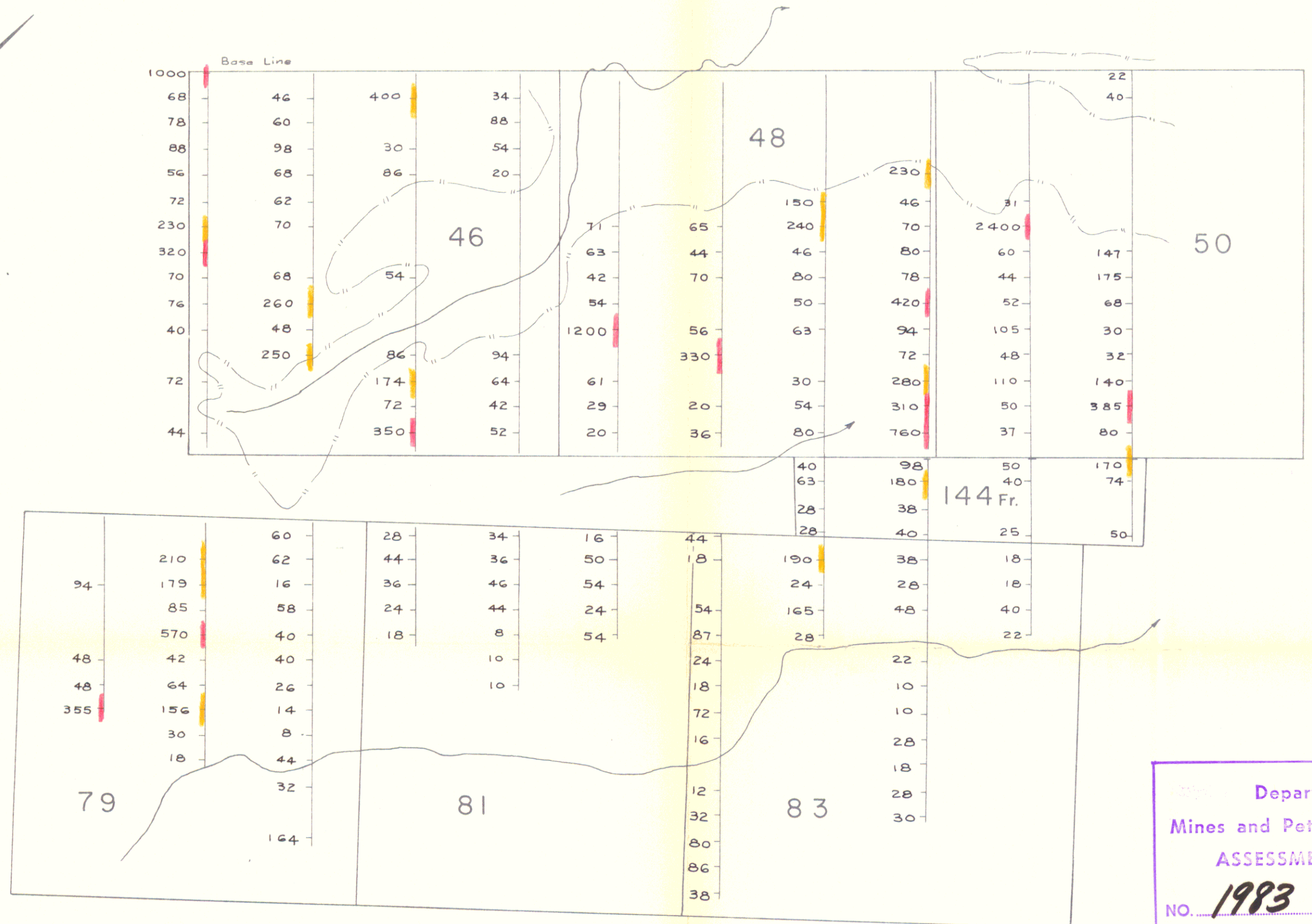
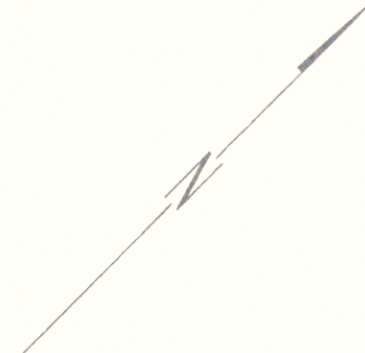
Legend

- Metal Values in P.P.M.
- Anomalous
 - Weakly Anomalous
 - Swamp

To accompany Soil Geochemical Survey Report
 by R. W. Stevenson, P. Eng., on the Pine No. 3 Group
 thirteen miles northeast of Thutade Lake, Omineca
 Mining Division, dated August 15, 1969. *R. W. Stevenson*

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1983 MAP # 2
1983

KENCO EXPLORATIONS (WESTERN) LIMITED		
Pine No. 3 Group Pine Mineral Claims No. 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr. 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" to 400'
TRACED BY: J. G. L.	DATE: 4/8/69	
REVISIONS:		



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ASSESSMENT REPORT
NO. **1983** MAP **#3**




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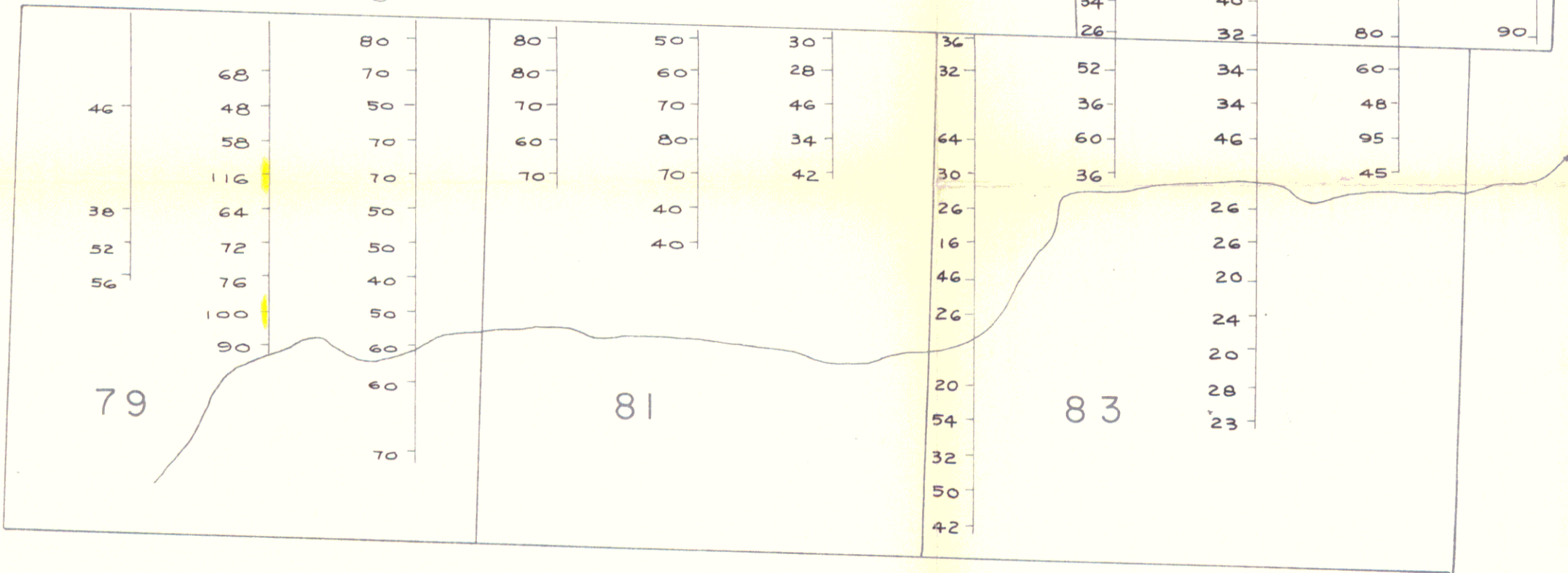
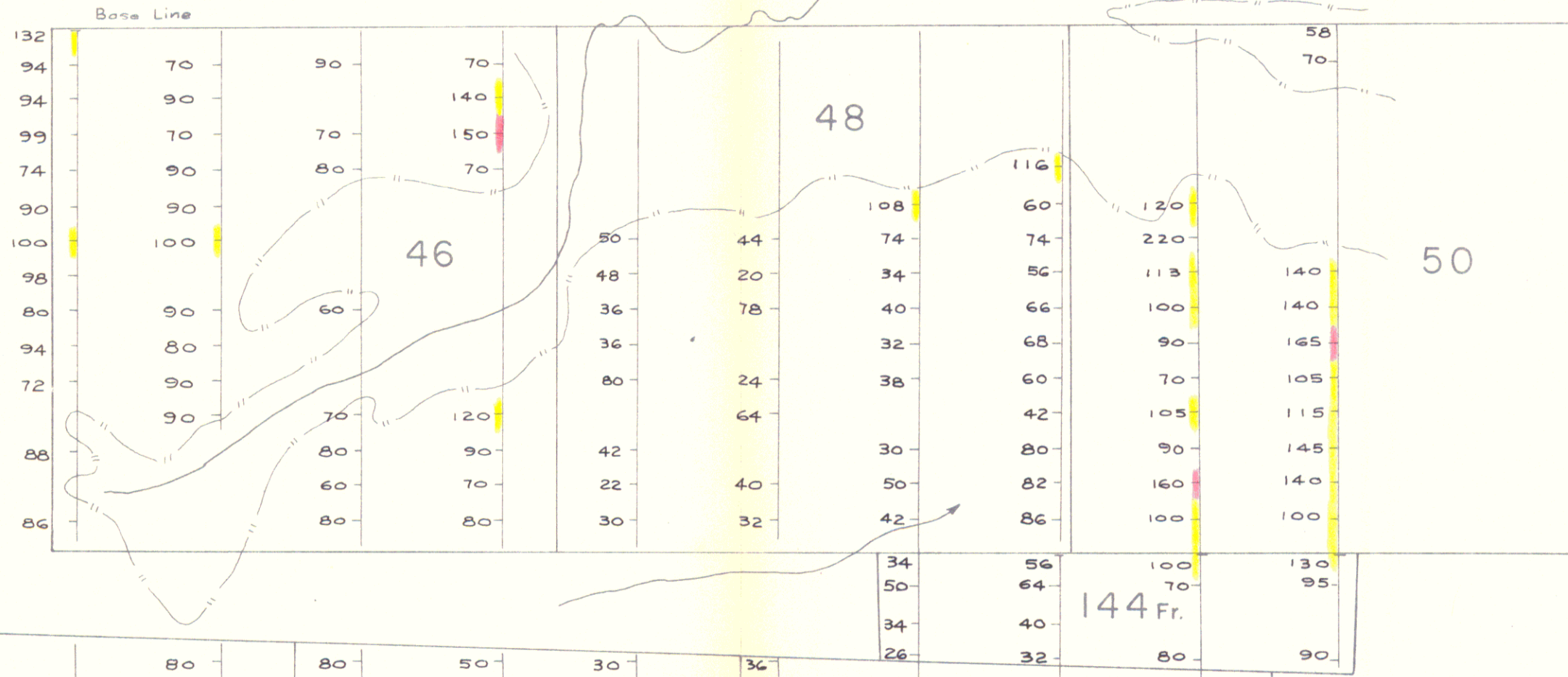
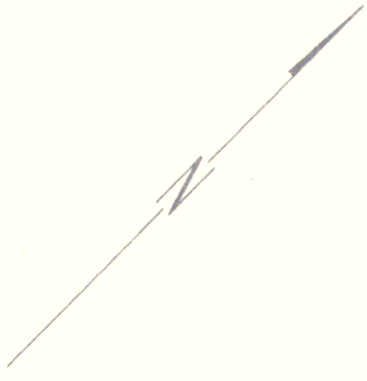
Pine No. 3 Group
Pine Mineral Claims No. 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr.
Omineca M.D., B.C.
Soil Geochemical Survey
Copper in Soil

DATA BY: R.W.S.	N.T.S. 94 - E	PL. NO.: 1
DRAWN BY:	DATE:	SCALE:
TRACED BY: J.G.L.	DATE: 4/8/69	1" to 400'
REVISIONS:		

Legend

Metal Values in P.P.M.
Anomalous 
Weakly Anomalous 
Swamp 




To accompany Soil Geochemical Survey Report
by R. W. Stevenson, P. Eng., on the Pine No. 3 Group
thirteen miles northeast of Thutade Lake, Omineca
Mining Division, dated August 15, 1969. *R.W. Stevenson*



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1983 MAP #4

1983

Legend

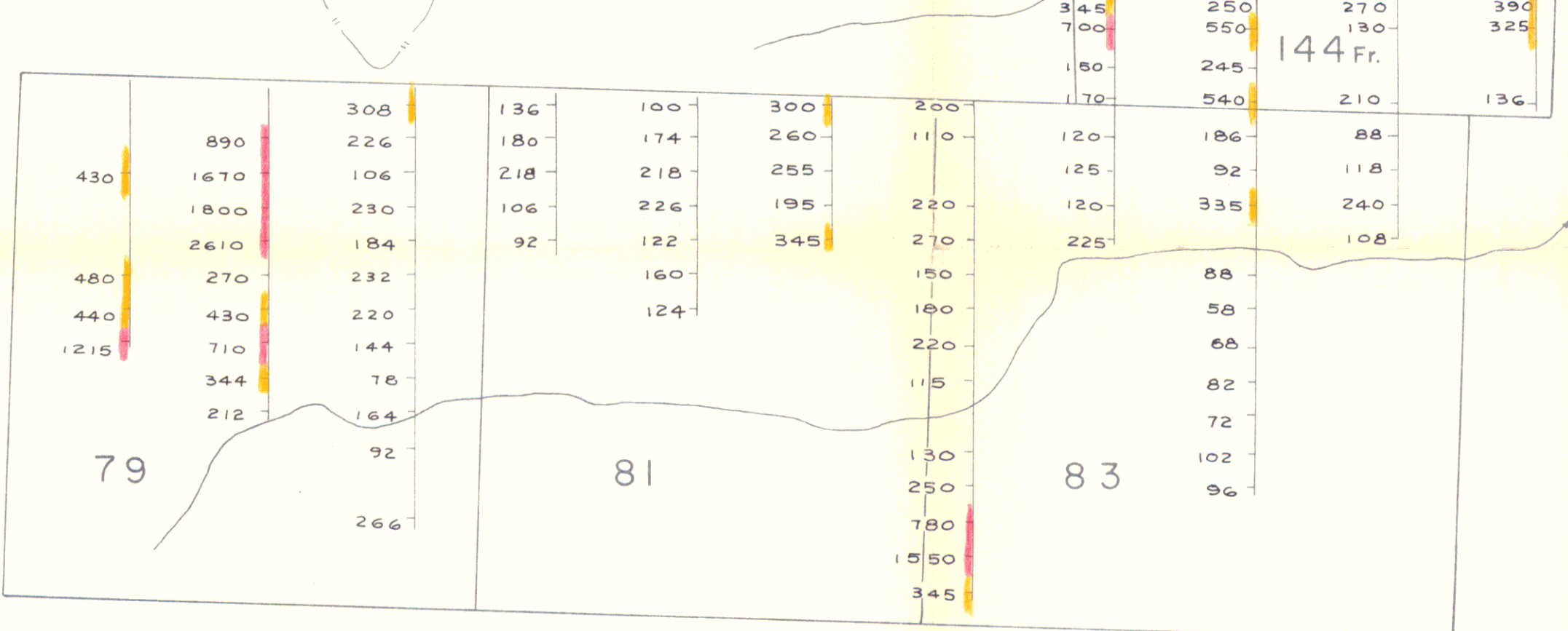
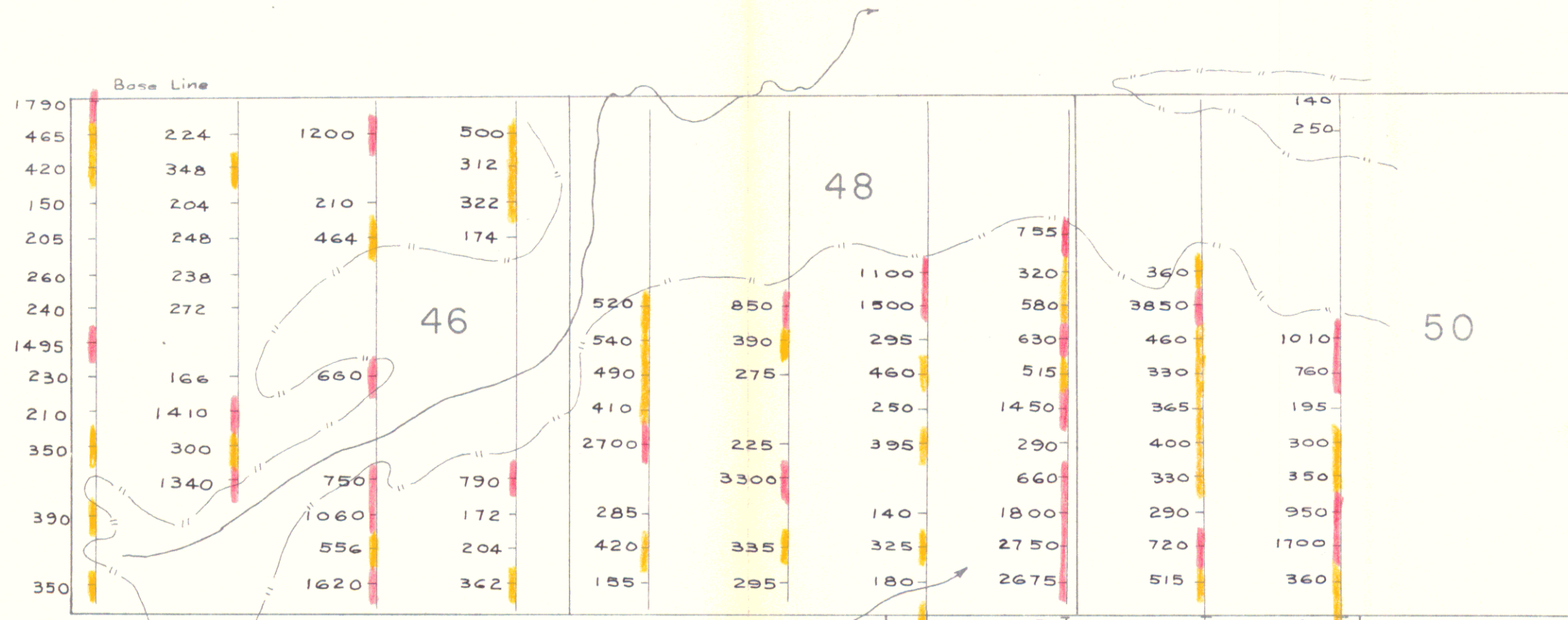
Metal Values in P.P.M.
Anomalous 
Weakly Anomalous 
Swamp 

To accompany Soil Geochemical Survey Report
by R. W. Stevenson, P. Eng., on the Pine No. 3 Group
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Mining Division, dated August 15, 1969. *R. A. Stevenson*

KENCO EXPLORATIONS (WESTERN) LIMITED

Pine No. 3 Group
Pine Mineral Claims No. 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr.
Omineca M. D., B. C.
Soil Geochemical Survey
Lead in Soil

DATA BY: R.W.S.	N.T.S. 94 - E	PL. NO.: 4
DRAWN BY:	DATE:	SCALE:
TRACED BY: J.Q.L.	DATE: 4/8/69	1" to 400'
REVISIONS:		



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1983

KENNCO EXPLORATIONS (WESTERN) LIMITED

Pine No. 3 Group
 Pine Mineral Claims No. 15-18, 46, 48, 50-55, 57, 73-98, 144 Fr.
 Omineca M. D., B. C.
 Soil Geochemical Survey
Zinc in Soil

DATA BY: R. W. S.	N.T.S. 94 - E	PL. NO.: 3
DRAWN BY:	DATE:	SCALE: 1" to 400'
TRACED BY: J. Q. L.	DATE: 4/8/69	
REVISIONS:		

Legend

Metal Values in P.P.M.

Anomalous
 Weakly Anomalous
 Swamp

To accompany Soil Geochemical Survey Report
 by R. W. Stevenson, P. Eng., on the Pine No. 3 Group
 thirteen miles northeast of Thutade Lake, Omineca
 Mining Division, dated August 15, 1969. *R. W. Stevenson*