2605

THE COLORADO CORPORATION

GRIZZLY GROUP

Sheslay River Area

Atlin M.D., B.C., 104-J-4

58°, 131° S.W.

July 24 - August 13, 1970

by

V. Cukor, P.Eng.

and

P.H. Sevensma, Ph.D., P.Eng.

PETER H. SEVENSMA CONSULTANTS LTD.

September 11, 1970.

TABLE OF CONTENTS

ILLUSTRATIONS (Rear)

THE COLORADO CORPORATION

GRIZZLY GROUP

Sheslay River Area

Atlin M.D., B.C., 104-J-4

58°, 131° S.W.

July 24 - August 13, 1970

1. INTRODUCTION

An initial exploration program has been conducted on the Grizzly group of claims during the summer of 1970, under an option of the property by Colorado Corporation. This program consisted of prospecting, line cutting, soil sampling, geological mapping, hand trenching and bulk sampling of mineral showings.

This report records and discusses the results of the geochemical program with short notes on the mapping and trenching results.

2. PROPERTY, LOCATION, ACCESS

The property consists of the following mineral claims:

Claim	Tag No.	Record No.	Date of Staking	Recording Date
Grizzly 1-20	70701-70720	13951-13970 N	Oct. 12/69	Oct. 20/69
Kid 1 = Grizzly 8	390771	4146 K		

The location of the property is about latitude 58° 14' N, and longitude 131° 53' W, and at elevations from 1,900' - 3,600', about 35 air miles NW of Telegraph Creek (see fig. 1).

The access is by helicopter from Telegraph Creek, or by float plane to Kennicott Lake and hence by helicopter to the property.

Timber and water are available on the property and are abundant in the Sheslay River valley along the Eastern edge of the property.

Road access could be provided easily from Telegraph Creek or along the Tahltan - Hackett and Sheslay Rivers starting from a point near where the present Dease Lake - Telegraph Creek road crosses the Tahltan River.

3. GEOLOGY

Geological mapping, on the scale 1" = 200' was done by W. Rehrig on behalf of Colorado Corporation. The results will be reported separately.

The 1" = 1,000' map, attached as figure 2, shows the general distribution of geological units and the approximate grid location. The area is underlain by Triassic volcanics, mainly massive, grey, fine grained andesite and porphyritic andesite, in places with very large plagioclase phenocrysts. This unit is intruded by a monzonite - syenite batholite-like intrusive body. Contacts are very irregular with a number of dykes (sometimes mineralized by chalcopyrite) crosscutting the volcanics.

The Grizzly group of claims covers this contact zone.

Both volcanics and intrusives are host rocks for significant copper mineralization.

The attached geological map, figure 7, embodies most of the mapping by W. Rehrig.

4. GEOCHEMICAL SOIL SURVEY

For the purposes of geological, geochemical and geophysical exploration, about 6.5 miles of grid lines have been cut and picketed, consisting of a baseline about 4,500' long and 10 crosslines of 3,000' each. The bearing of the baseline is about N 50° W, and spacing of the crosslines 400'. Soil samples were taken along crosslines every 100' where soil was available. The intention was to sample the "B" horizon, but locally, soil was very poorly developed and some coarser grained material and/or rock chips were taken in these locations.

All sampling was done by a stainless steel soil-samplers trowel and samples were packed in standard paper soil bags and partly dried up in the camp.

Assaying was done by Vancouver Geochemical Laboratories Ltd., using the following methods:

1. Assaying done on the -80 mesh fraction.
2. Weight of each sample, used 0.5 g.
3. Extraction by hot HNO_3 and $HClO_4$.
4. Method - Atomic absorption spectrophotometry.
5. Volume of dilution, used 10 ml.
6. Instrument - Techtron AA4 and AA5.

All samples were assayed for Cu, Pb, Zn and Mo and reported results are as follows:

No. of Samples	Sample No.		Assay Report No.	Date of Report
101	XL 20	100W - 1500W	70-82-019	Aug. 12, 1970
		500E - 1500E		
	XL 32	BL - 1400W		
		100E - 1500E		
	XL 36	BL - 1500W		
	XL 48	100W - 1500W		
		100E - 1500E		
120	XL 16	100W - 1500W	70-82-021	Aug. 19, 1970
		100E - 1500E		
	XL 24	100W - 1500W		
	XL 13	100E - 1500E		
	XL 44	100E - 1500E		
		100W - 1500W		
	XL 28	100E - 1500E		
		100W - 1500W		

221 samples

Assay results were plotted on 1" = 200' maps, each metal separately (see figures 3 - 6).

Cu values are generally high for the whole grid area. Based on the experience for the area, the Cu-background is considered to include all values up to 100 p.p.m. Cu. Threshold zone is 100 - 300 p.p.m. Cu, over 300 p.p.m. anomalous and over 600 p.p.m. significantly anomalous. Although information is missing along several lines, some very attractive Cu values were obtained with

42,500 p.p.m. of Cu as peak. Some of the anomalous values reflect areas where surface samples assayed about 0.2% Cu, but some even better results occur in areas covered by overburden.

The values for Pb and Mo are in the background range, excluding only 2 Mo readings of 10 and 23 p.p.m. As shown on figure 5, some of the Zn values are fairly high, but there does not seem to be any connection between high Cu and Zn results, which is entirely in line with results obtained in many other parts of the general area where soil-sampling programs have been conducted by the same crews during the 1970 field season.

An interpretation of the soil-sampling results can only be tentative. This particular grid is characterized by rapid variations in the copper-values, as well as by rapid variations in soil conditions between residual soil, some talus and remnants of glacial overburden. Vegetation also varies from very meagre patches in dry areas to patches with abundant thick vegetation and good subsurface water circulation.

With regards to copper-background, abundant sampling over large areas with strong fracturing and alteration suggests a background of up to 100 p.p.m. and a threshold zone of from 100 - 300 p.p.m. within the general district.

In the area under consideration however, the grid is somewhat too restricted to define a statistical background and based on general experience, the background outside the anomalous

area is probably up to around 50 p.p.m., with a threshold zone of from 50 - 100 p.p.m.

The rapid variations in soil profile further complicate the assessment.

Geologically, some strong fractures trending about E - W carry copper values over several feet up to several percent, and rather solid, slightly oxidized intrusive outcrops carry disseminated values in the 0.15% Cu - 0.25% range over areas of 100' - 200' wide.

Trenching results, when available, will hopefully give a somewhat better understanding of the distribution of the copper in place.

Comparing the data to the available geological information, the area West of the baseline, approximately from 1800N to 3800N, mostly covered by overburden, is considered a highly anomalous area by the writers.

This corresponds to the data available from some previous work done by Kennco in 1960, who also located a significant IP anomaly over a line run across this area.

5. TRENCHING

In the original showing area, 18 trenches have been blasted in rock. Dimensions of each of the individual trenches are about:

Width: 3 feet Length: 10 - 20 feet Depth: 2 - 4 feet

This gives an average trench-size of 3' x 15' x 3', or about 5 cubic yards per trench and 90 cubic yards of solid excavation

for 18 trenches.

Nine of these trenches are on claim Kid 1 and nine on claim Grizzly 7.

Two samples were prepared by coning and quartering from the blasted rock of each trench. At the time of writing, no assay results are yet available.

6. PREVIOUS HISTORY

The showing area was discovered in 1956 by F. Hasselberg and Ole Olson while prospecting for Newmont. In 1960, Kennco optioned the then existing Kid claims, covering the present Grizzly area. On May 9, 1961, Kennco filed as assessment report by D.A. Barr and E.A. Lawrence, describing their geochemical and geophysical work, run on 4 lines 1,000' apart and on one fifth intermediate line.

Where these lines are overlain by the new Grizzly grid, West of the Grizzly base line, the Kennco work identified the same area as an area of potential interest with coincident geochemical and geophysical (IP resistivity) anomalies.

In subsequent years, Kennco concentrated its efforts on Stikine Copper and dropped their option on the Grizzly area. The area was restaked once before the old Kid claims came open, and when finally all claims but one expired, the Grizzly Group was staked in October 1969.

The previous Kennco work definitely established the

area as one of possible economic interest and the present work has confirmed the presence of an environment favorable for economic concentrations of copper, i.e. copper-bearing syenite which is occasionally of the porphyry type, intruding Triassic volcanics, high copper-soil anomalies and significant amounts of copper in place.

7. SUMMARY

The Grizzly Group covers an area of syenitic to monzonitic intrusions in Triassic volcanics near the West edge of the major Kaketsa Intrusive. Significant amounts of chalcopyrite occur in disseminated from in quite fresh intrusive and in more or less East - West trending shears in the volcanics.

An overburden covered area some 2,000' long by 2,000' wide shows high copper values in soil. An old geophysical reconnaissance line run with IP in 1960 shows a significant low resistivity anomaly in this area.

Within the general framework of the Kaketsa Mountain area, the Grizzly Group, in the opinion of the writers, presents a target which warrants more detailed investigation by selective extensions and fill-ins of the soil survey and by an up-to-date IP survey covering the area of maximum interest at 400' line-spacing.

The results of a program of blasting and trenching conducted this summer are expected to help pin-point areas of

maximum interest and to provide more precise evaluation of the near-surface copper grade in outcrop areas.

The area will definitely warrant drilling, but until an IP survey is completed it is not possible to prepare a drill program.

Under the worst of conditions, it is estimated that a minimum of four 500' holes will be required, for a minimum drill program of 2,000'.

8. RECOMMENDATIONS

In view of the promising potential of the Grizzly Group, the following program is recommended:

(1) Extensions of cut grid into the surrounding low-copper areas: 10,000' of line.

(2) Additional soil-sampling for fill in and extensions: 300 samples.

(3) IP survey: 5 line-miles.

(4) Drilling: 2,000'.

No detailed cost-estimate is prepared at this time, as costs will be dependent upon other programs in the general area surrounding Kaketsa Mountain.

Respectfully submitted,

V. Cukor

V. Cukor, P.Eng.

P.H. Sevensma

P.H. Sevensma, Ph.D., P.Eng.
PETER H. SEVENSMA CONSULTANTS LTD.

September 11, 1970.

APPENDIX "A"

Geology of the Grizzly Prospect, Sheslay River Area, Atlin M.D., B.C.

by W. Rehrig, of Denver, Colorado, U.S.A.

GEOLOGY

Rocks in the claimed area consist of Triassic (?) andesite and andesite porphyry which are intruded by diorite to monzonite of the Kaketsa batholith. Associated with the intrusion of the batholith, extensive feldspar flooding and syenite are found cutting the intrusion and volcanic wallrocks.

The contact between the batholith and the volcanic rocks is highly irregular, and throughout the prospect area the roof of the intrusion is cut at a very low angle by the topography. As a result, there are several irregular areas or projections of andesite which extend into the diorite. These volcanic areas represent thin remnants of the roof above the batholith which have been nearly isolated by erosion. The volcanic rocks lying just above the relatively flat intrusive contact have been submitted to rather intense contact metamorphism and chemical exchange with the intrusion. As such, some of the copper mineralization of the prospect together with magnetite,epidote, carbonate and chlorite gangue mineralization occur in the areas of the volcanic roof rocks.

Structure is quite complex, notably in the contact portion of a major intrusion. Many faults of relatively small size and variable attitude have been mapped. These structures probably have effected minor displacements. Particularly common are structures of this kind which strike Northerly or North-Northwesterly.

Several major faults are suspected from indirect evidence. These faults strike NNW and North. Two of the NNW faults may have acted as primary structural control for a major part of the copper mineralization in the area.

Jointing is complex with multiple trends. Several distinct sets can be recognized. The strongest set is consistently filled with thin coatings of epidote, chlorite or K-spar and strikes from EW to N 60 W. Another joint set, which is especially prominent in the andesite, is also mineralized and strikes N 30 - 50 E. A third set strikes NS to N 30 E normal to the strongest jointing and is rarely mineralized.

Significant amounts of low-grade copper are present through the Grizzly Prospect. The copper which occurs as chalcopyrite is closely associated with epidote, chlorite, othoclase and pyrite mineralization. The absence of quartz in both intrusive and mineralizing phases is noteworthy.

The typical environment for chalcopyrite mineralization is in proximity to the batholith contact in areas of high orthoclase flooding. There are, however, such contact areas where copper is only rarely found.

The distribution of the best mineralized areas appears roughly coincident with one or two major NNW fault zones which constitute perhaps the fundamental control on mineralization. Because of this structural control, a linear zone of strong orthoclase replacement and intermittent low-grade copper is formed. The zone measures about 3500 ft. long and varies in width from 200 to 700 feet. It runs for nearly its entire length close to the intrusive-volcanic contact.

Respectfully submitted,

for W. Rehrig.

APPENDIX "B"

List of Personnel Employed and of Wages and Fees Paid on the Grizzly Group Project.

July 24 - September 15, 1970

1. Field Work

Name	Occupation	Period	No. Days	Rate	Total
Andy Giesbecht	Prospector	July 24 - Aug. 5/70	13	$50.00 per day	$650.00
Ronald Woods	Prospector's helper	July 24 - Aug. 5/70	13	$20.00 per day	$260.00
W. Rehrig	Geologist	July 24 - Aug. 10/70	18	$140.00 per day	$2,520.00
P.H. Sevensma	Geologist	July 25 & 29/70	2	$160.00 per day	$320.00
Andre Audet	Geologist's assistant	July 24 - Aug. 10/70	18	$725.00 per month	$420.48
Leonard Woods	Linecutter	July 24 - Aug. 9/70	17	$600.00 per month	$328.95
Joe Tomas	Linecutter	July 24 - Aug. 9/70	17	$500.00 per month	$275.21
Henry Vance	Soil sampler	July 24 - 31/70	8	$650.00 per month	$167.76
Patrick Carlick	Soil sampler	July 24 - 31/70	8	$600.00 per month	$154.80
Thomas Dennis	Cook	July 24 - Aug. 12/70	20	$550.00 per month	$354.80

Total direct labour cost, geological - geochemical program - $5,452.00

Supplied by Peter H. Sevensma Consultants Ltd.:

F. Bakonyi	Blasting & trenching	Aug. 6 - 17/70	12	$41.18 per day	$494.16

VANCOUVER, B.C.

SEP 18 1970

Sub-Mining Recorder

P. H. Sevensma

.....

Declared before me at the city
of Vancouver, in the
Province of British Columbia, this 18
day of September 1970, A.D.

D. M. Jenkins

Joan Turner
Sub-mining Recorder

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

2. Office Work - Peter H. Sevensma Consultants Ltd, fees

Name	Occupation	Period	No. Days	Rate	Total
P.H. Sevensma	Geologist	Aug. 15 - Sept. 15/70	4	$170.00 per day	$680.00
V. Cukor	Geologist	Aug. 15 - Sept. 15/70	7½	$120.00 per day	$900.00
H.S. Aikins	Technician	Aug. 15 - Sept. 15/70	1	$100.00 per day	$100.00
A. Oliveric	Draftswoman	Aug. 15 - Sept. 15/70	6¼	$55.00 per day	$371.25
J. Scobie	Stenographer	Aug. 15 - Sept. 15/70	1	$45.00 per day	$ 45.00
					$2,096.25

Distribution of Wages and Fees

1. Geological

P.H. Sevensma	$ 320.00
W. Rehrig, Andre Audet	2,940.48
Andy Giesbecht, Ronald Woods	910.00
Leonard Woods, Joe Tomas (50%)	302.08
Thomas Dennis, 50%	177.40
Peter H. Sevensma Consultants, 50%	1,048.13
	$5,698.09

2. Geochemical

Leonard Woods, Joe Tomas (50%)	$ 302.08
Henry Vance, Patrick Carlick	322.56
Thomas Dennis, 50%	177.40
Peter H. Sevensma Consultants, 50%	1,048.12
	$1,850.16

Total Geological & Geochemical $7,548.25

3. Trenching

F. Bakonyi $ 494.16

Total Wages and Fees $8,042.41

VANCOUVER, B.C.

SEP 18 1970

Sub-Mining Recorder

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 18
day of September 1970 A.D.

D. M. Gerlmer

Joan Turner

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

Sub-mining Recorder

Costs of Grizzly Project

July 24 - September 15, 1970

Item	Geological	Geochemical	Trenching
Wages and fees	$5,698.09	$1,850.16	$494.16
Camp operation:			
@ $10.00 per man day			
91 man days	910.00	--	--
27 man days	--	270.00	--
12 man days	--	--	120.00
Geochemical assays:			
221 samples @ $2.75	--	607.75	--
Transportation			
Pro Rata, estimated	1,000.00	400.00	100.00
Blasting supplies			
Pro Rata, estimated	--	--	200.00
TOTAL	$7,608.09	$3,127.91	$914.16

Summary:

1. Geological	$ 7,608.09
2. Geochemical	3,127.91
Sub-total	$10,736.00
3. Trenching	914.16
TOTAL	$11,650.16

Respectfully submitted,

P.H. Sevensma, Ph.D., P. Eng.

VANCOUVER, B.C.

SEP 18 1970

Sub-Mining Recorder

Declared before me at the City

of Vancouver, in the

Province of British Columbia, this 18

day of September 1970, A.D.

D. M. Sorensen

Joan Sumner

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

Sub-mining Recorder

AFFIDAVIT

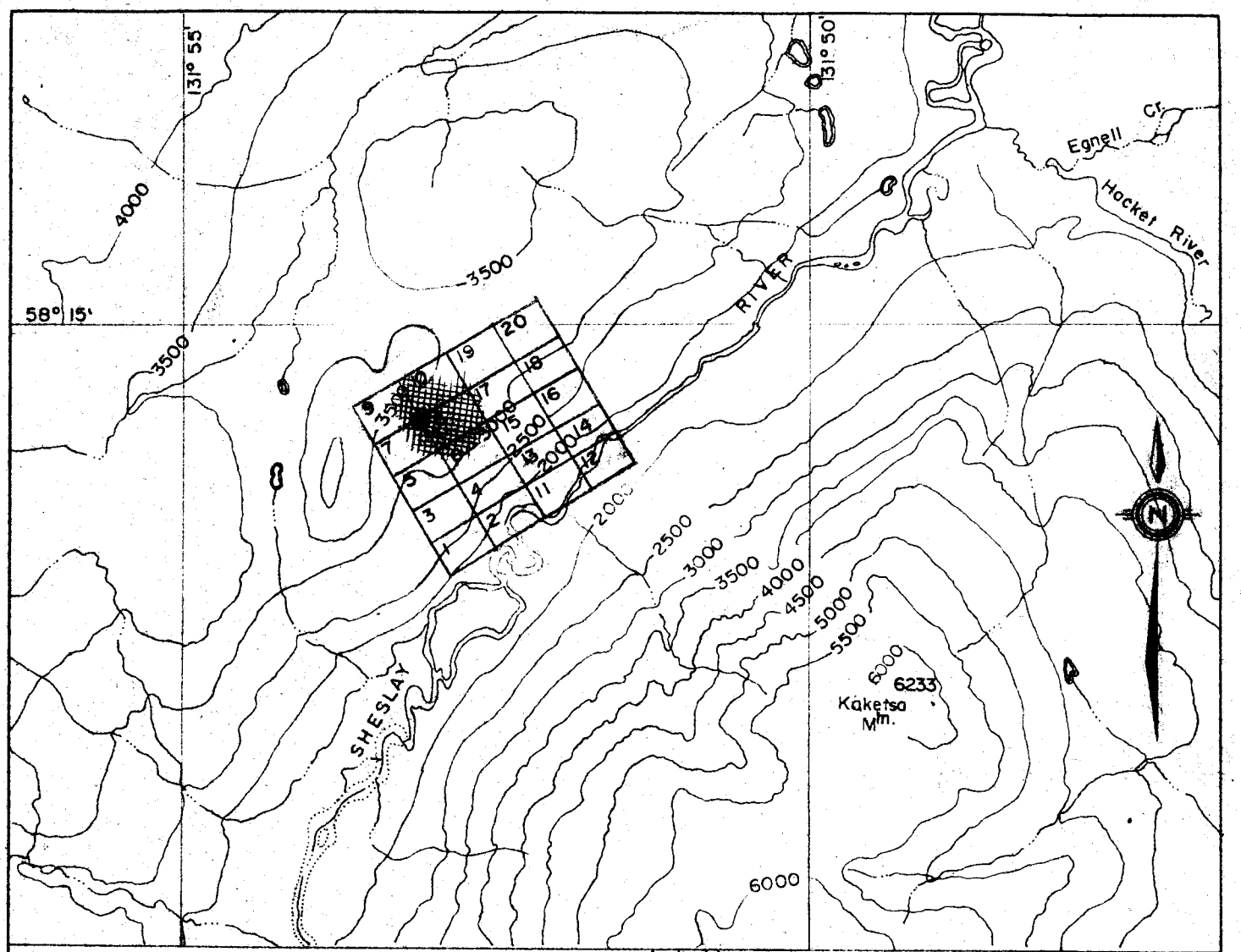
I, Pieter H. Sevenema, with business address 715 - 850 West Hastings Street, Vancouver, B.C., hereby declare as follows:

In the matter of the Grizzly Group report and the list of personnel employed and costs incurred as listed in Appendix "B" of the Geological - Geochemical Report on this property, I declare that I have inspected personally the work in progress, the last time on July 29, 1970, and that the information contained in Appendix "B" is true and accurate to the best of my knowledge and belief.

I also declare that in my opinion, Mr. W. Rehrig, Ph.D, Geologist of Denver, Colorado, who mapped the property, is fully qualified to assess a property of this type, as he is specialized in "porphyry-type" copper deposits.

Signed,

P.H. Sevenema, Ph.D., P.Eng.

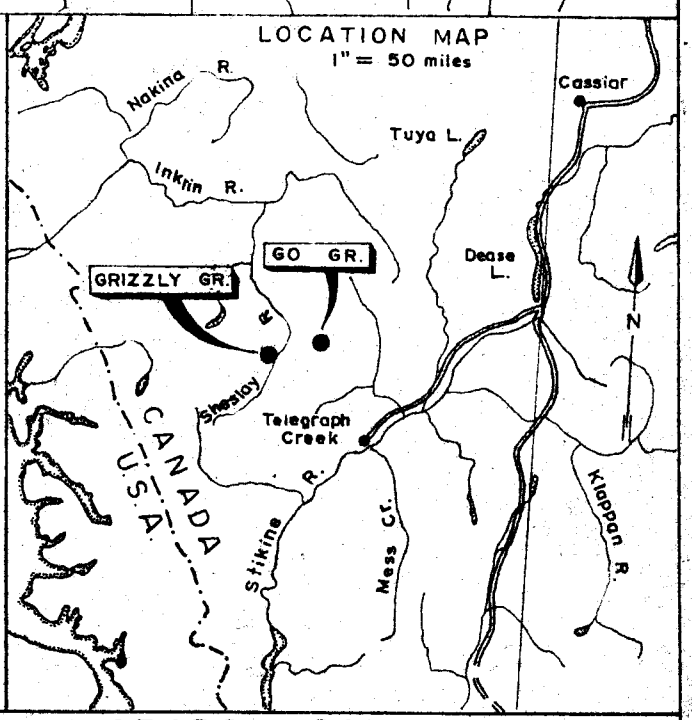


Surveyed area: reconnaissance soil-sampling and IP by Kennco in 1960

Intermittent high Cu., 1000 - 9175 p.p.m.

Several zones of IP anomalies.

Anomalous area open on all sides.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2605 MAP #1

P. H. Sevensma

THE COLORADO CORPORATION

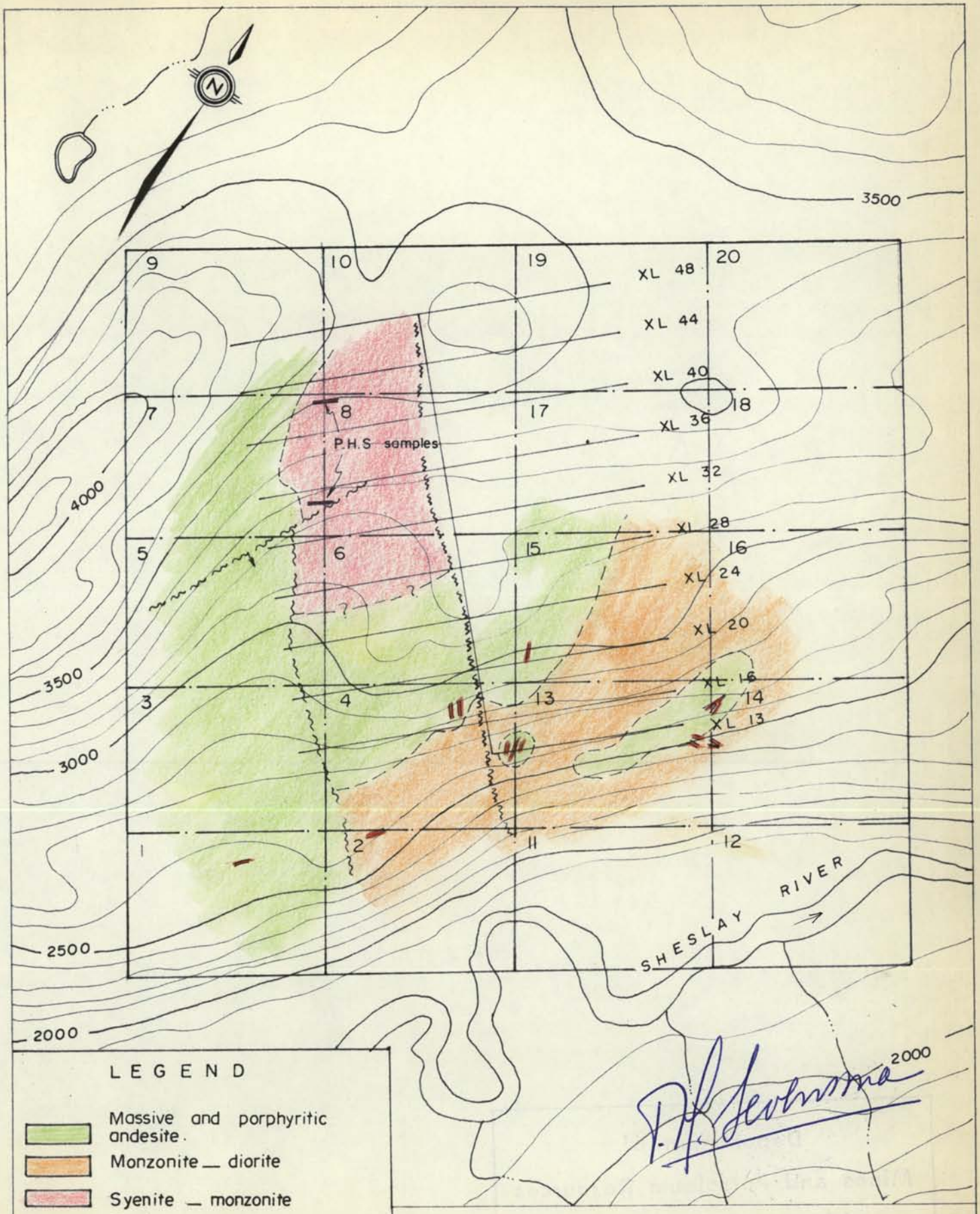
GRIZZLY GROUP—CLAIM MAP

Atlin M.D— B.C. 104 - J - 4 W

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No. Fig: 1 | Sept. 1970 | Scale: 1.25" to 1 mile approx

BCIL 2603 P.H.S.



LEGEND

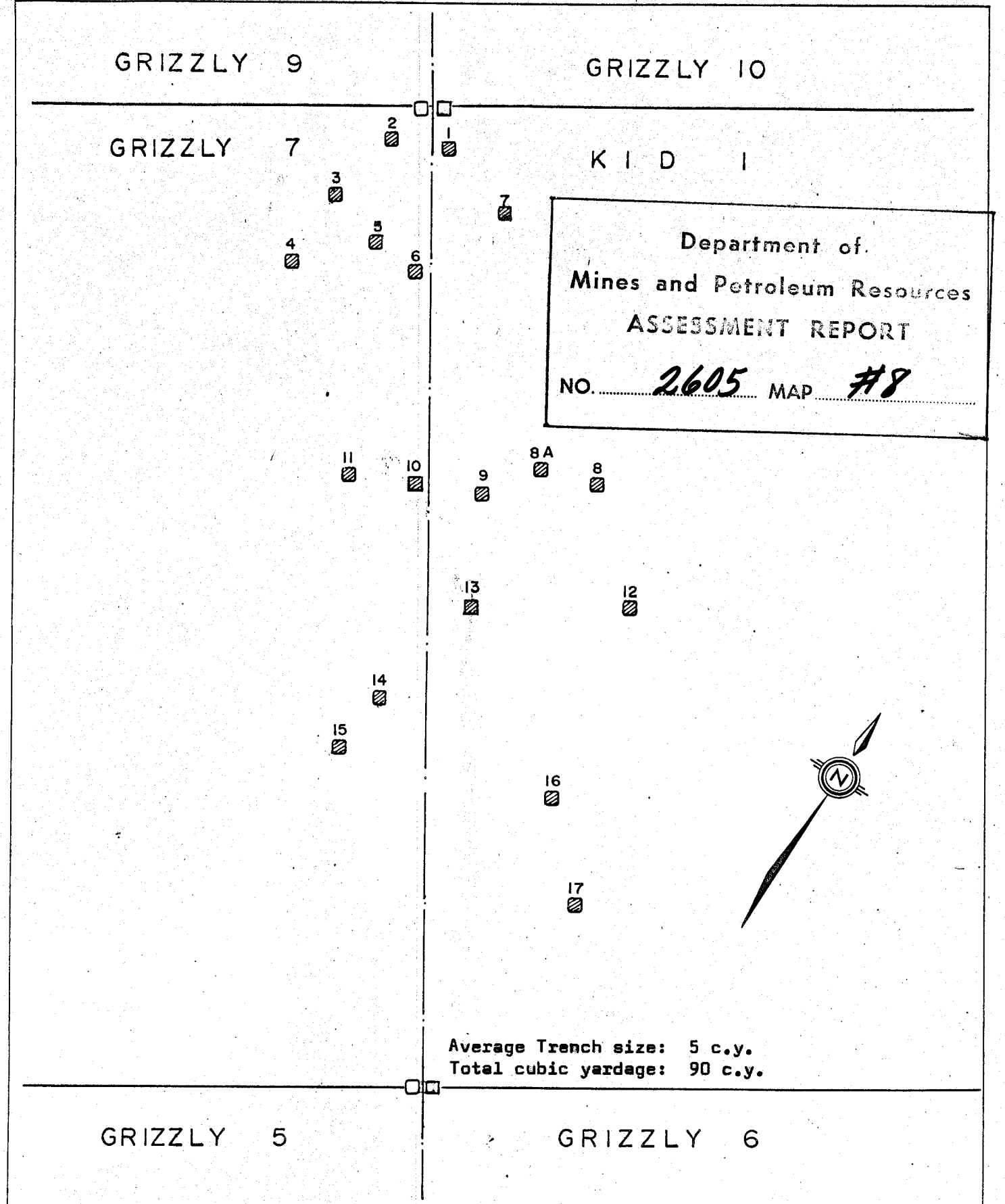
- Massive and porphyritic andesite.
- Monzonite — diorite
- Syenite — monzonite
- Fault
- Geological contact
- Cu. showings

GRIZZLY GROUP — General Geology & Grid Location

Atlin M.D. — B.C. 104 — J — 4 W

Peter H. Sevensma Consultants Ltd., Vancouver, B.C.

Sept. 1970 | Scale: 0 1000' | Fig: 2

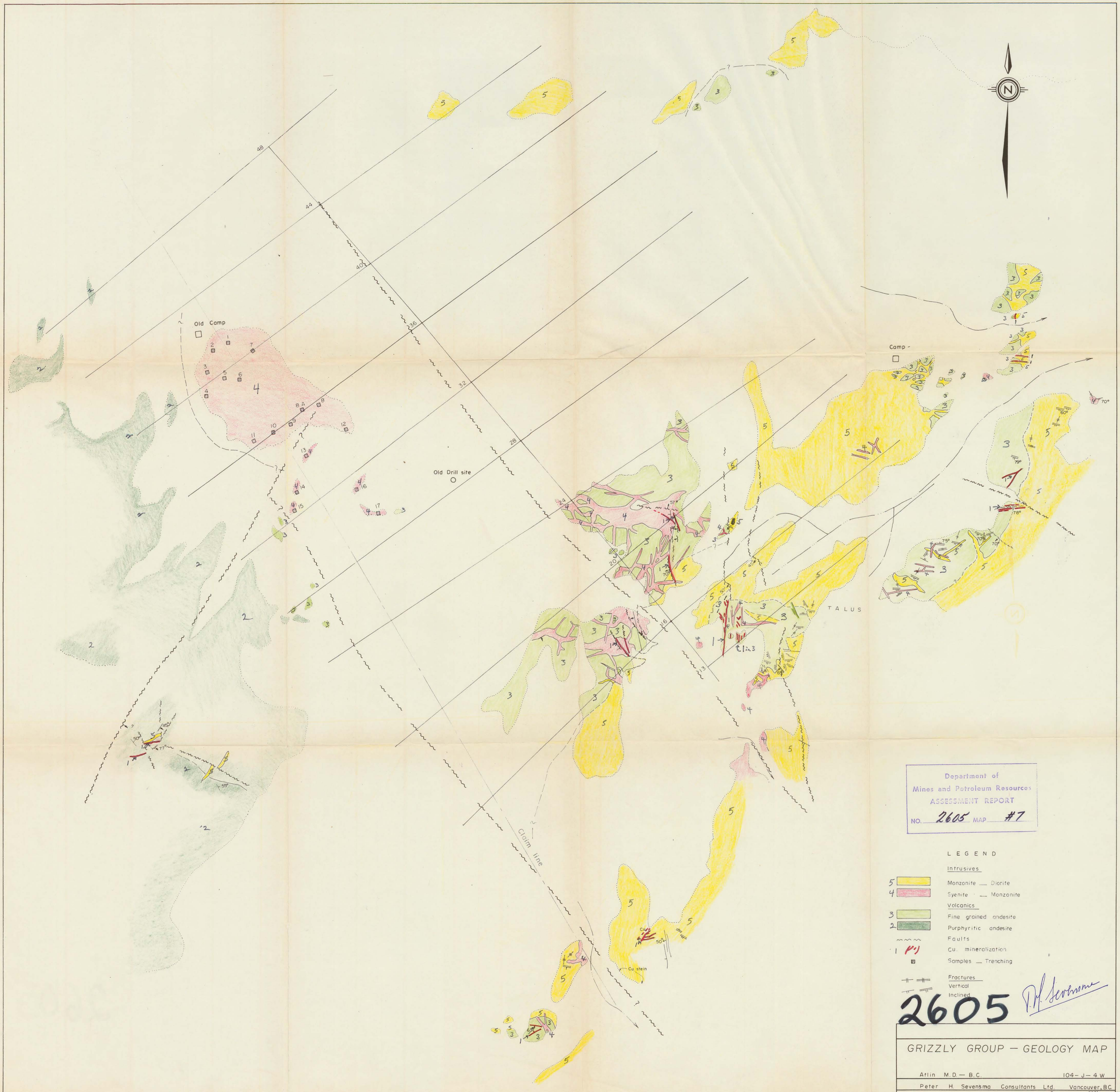


P. H. Sevensma

TRENCHING ON KID AND GRIZZLY CLAIMS
Atlin M.D.— B.C. 104-J-4/W

Peter H. Sevensma Consultants Ltd., Vancouver, B.C.

Sept. 1970 | Scale: 0 200' | Fig: 8



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2605 MAP #7

LEGEND

Intrusives

5 Monzonite — Diorite

4 Syenite — Monzonite

Volcanics

3 Fine grained andesite

2 Porphyritic andesite

Faults

1 Cu. mineralization

Samples — Trenching

Fractures
Vertical
Inclined

2605

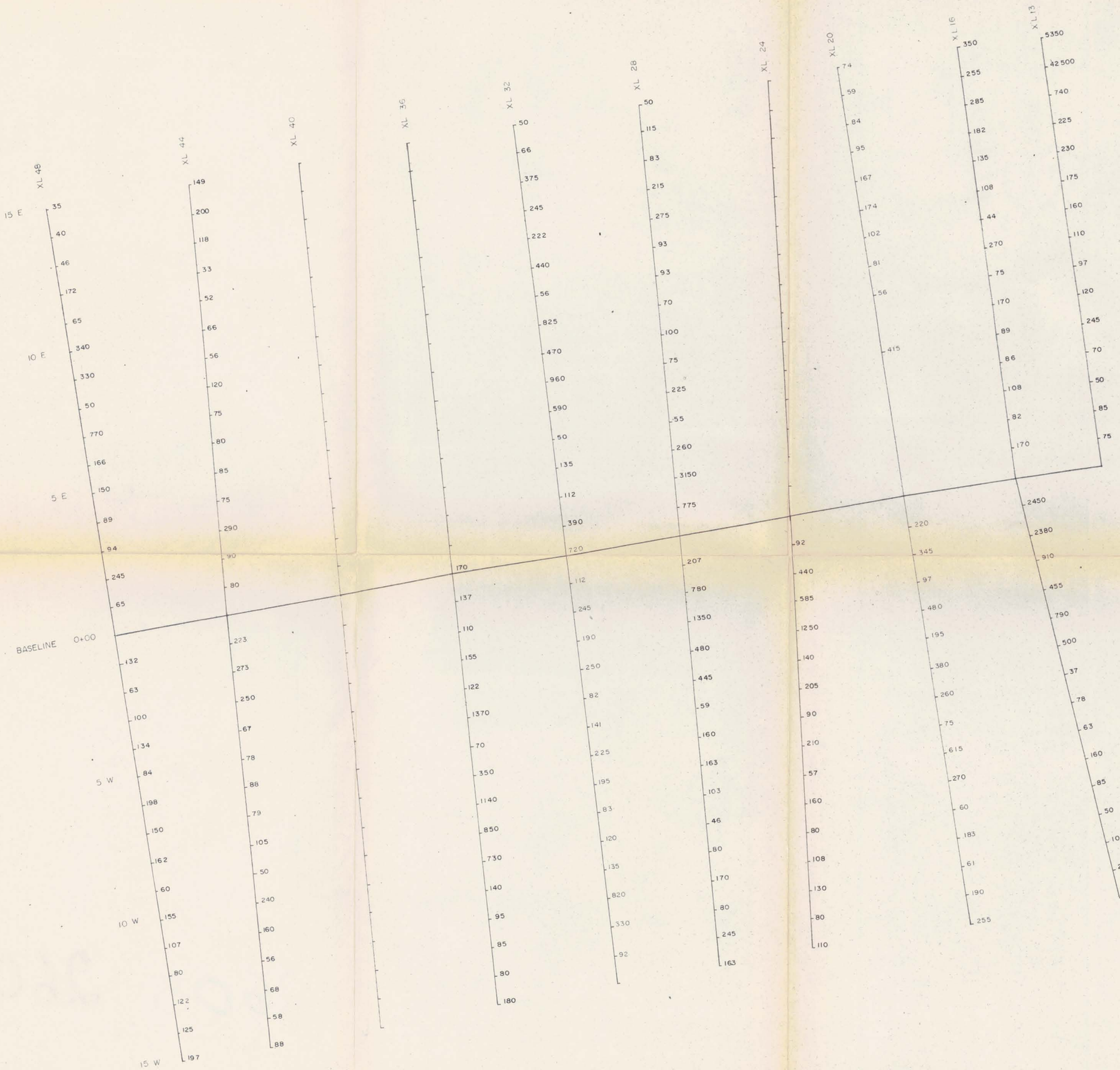
GRIZZLY GROUP — GEOLOGY MAP

Atlin M.D. — B.C. 104-J-4W

Peter H. Sevensma Consultants Ltd. Vancouver, B.C.

Sept. 1970, Scale: 0 200'

FIG. 7



Cu Plot

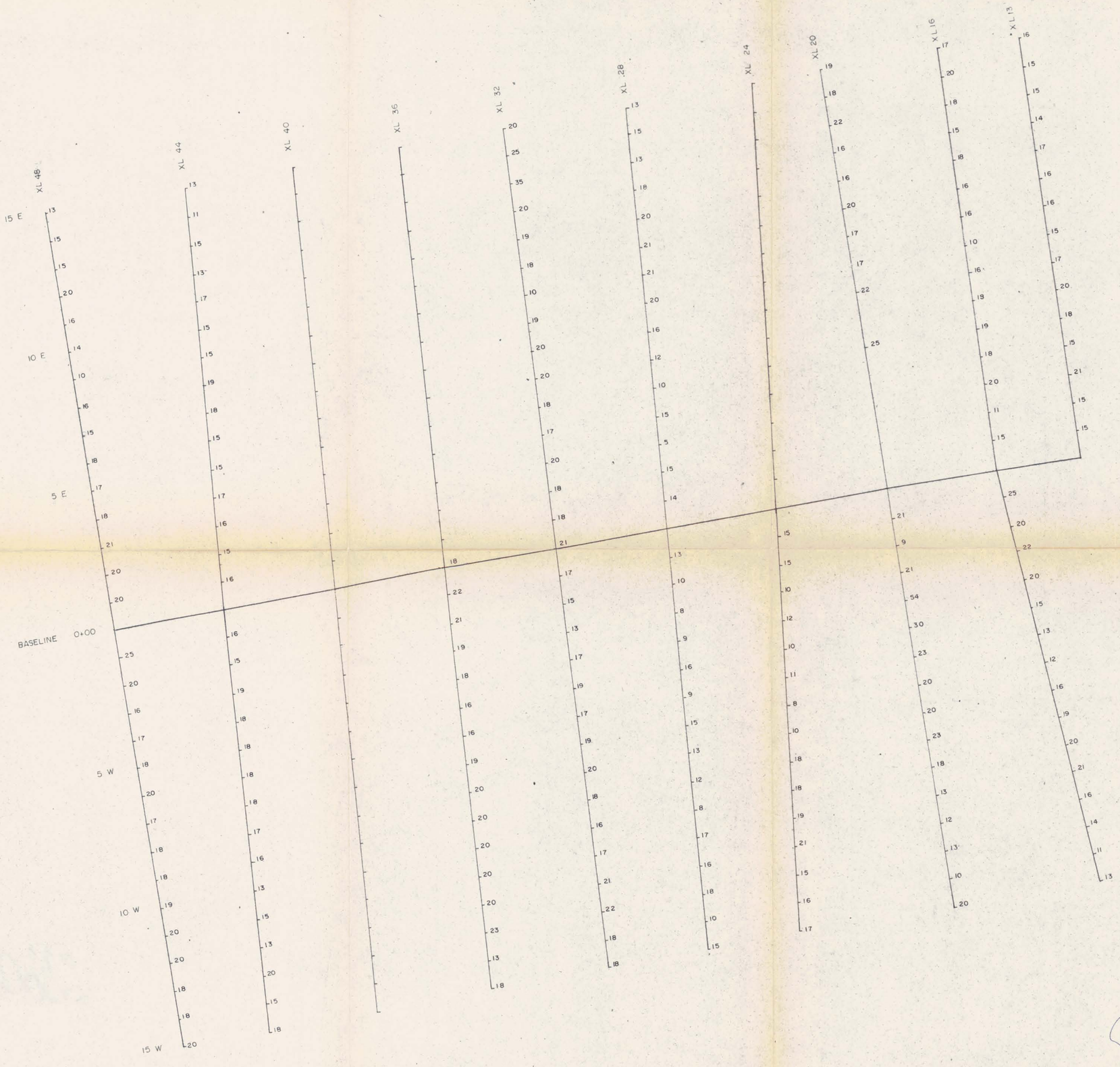
GRIZZLY GROUP
Geochemical Soil Survey

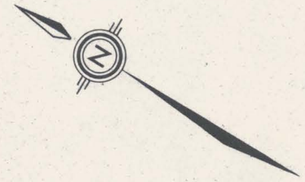
Atlin M.D.— Y.T. 104-J-4

Peter H. Sevensma Consultants Ltd. — Vanc. B.C.

Sept. 1970 Scale: 0 200'

FIG. 3





Pb. Plot 2605

GRIZZLY GROUP
Geochemical Soil Survey

Atlin M.D.—Y.T. 104-J-4

Peter H. Sevensma Consultants Ltd. — Vanc. B.C.

Sept. 1970 Scale: 0 200'

FIG. 4

XL 48 XL 44 XL 40 XL 36 XL 32 XL 28 XL 24 XL 20 XL 16 XL 13

15 E
10 E
5 E
BASELINE 0+00
5 W
10 W
15 W

XL 48: 210 370 280 255 141 42 32 212 230 170 150 400 298 155 225 322 305 117 105 183 250 278 210 290 255 325 840 295 320 182

XL 44: 150 95 214 210 305 210 168 250 330 255 298 365 275 130 470 560 250 218 585 195 300 210 218 345 91 165 143 830 330 390

XL 40:

XL 36:

XL 32: 84 109 196 153 155 74 38 68 99 99 98 70 110 82 175 123 129 156 100 133 202 145 128 88 340 215 300 270 200 1280 120 225

XL 28: 150 129 70 111 90 115 125 125 185 50 45 65 18 50 85 76 19 19 12 55 12 70 63 115 37 270 170 260 210 233

XL 24:

XL 20: 148 128 142 97 104 77 68 124 86 128 190 22 133 268 165 103 127 148 76 72 53 41 36 18 740 62 56 14 49 40 43 12 30 98 100 445 350 111 230 1470

XL 16: 90 112 102 95 88 84 162 34 132 91 159 105 165 100 155 93 108 141 116 140 125 55 45 75 122 210 102 82 35 12

XL 13: 60 68 118 58 84 195 137 120 68 120 135 68 140 32 60

Zn. Plot 2605

GRIZZLY GROUP
Geochemical Soil Survey
Atlin M.D.—Y.T. 104-J-4
Peter H. Sevensma Consultants Ltd. — Vanc. B.C.
Sept. 1970 Scale: 0 200'

FIG. 5

XL 48 XL 44 XL 40 XL 36 XL 32 XL 28 XL 24 XL 20 XL 16 XL 13

15 E
10 E
5 E
BASELINE 0+00
5 W
10 W
15 W

Mo. Plot

P. H. Sevensma

FIG. 6

GRIZZLY GROUP
Geochemical Soil Survey
Atlin M.D.—Y.T. 104-J-4
Peter H. Sevensma Consultants Ltd. — Vanc. B.C.
Sept. 1970 Scale: 0 200'