'80-#976-#8739

GEOCHEMICAL-GEOPHYSICAL REPORT

ON THE

CARLIN 2 CLAIM

[12 UNITS]

KAMLOOPS M.D.

Lat. 50°38'N Long. 120°07'W

92 I / 9 E

for

VANTEX RESOURCES INC.
Vancouver, B.C.

by

A.F. ROBERTS, P. ENG.

October 31, 1980

A. F. ROBERTS, P.ENG.
CONSULTING MINING ENGINEER

TABLE OF CONTENTS

MAPS

TABLE OF CONTENTS [Cont'd]

MAPS [Cont'd]

Page

APPENDICES

REFERENCES

1] Report on the Carlin 2 Claim, Kamloops M.D., for United Mineral Services Ltd.; J.B.P. Sawyer, P.Eng., March 12, 1976

2] Report on the Carlin 2 Claim, Kamloops M.D. for T. Alexander, J.B.P. Sawyer, P.Eng., May 11, 1979

3] Report on the Carlin 2 M.C., Kamloops M.D., held by R. Dickinson; Dickinson, McClaren, October 1975

4] Assessment Report No. 3616, December 7, 1971; D.E. Hopkins, B.A., M.A.

REFERENCES [Cont'd]

Ref. No.

5] Assessment Report No. 4315, May 26, 1973; C.P. Purdy, Jr., S.B., P.Eng.

also

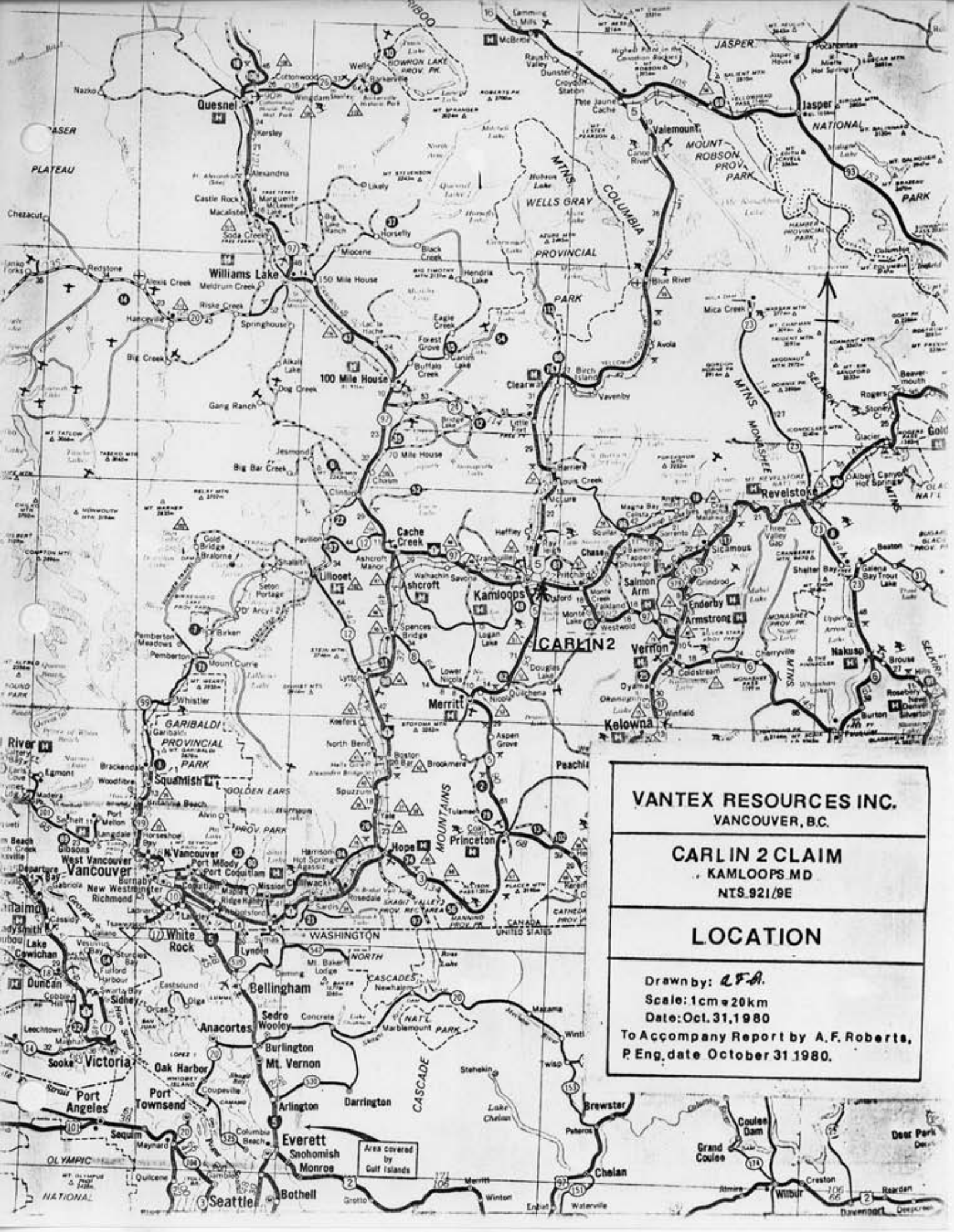
Contouring VLF-EM Data, D.C. Fraser, Geophysics, Vol. 34, No. 6, December 1969; p. 958-967

A Simplified Statistical Treatment of Geochemical Data by Graphical Representation, Claude LePeltier, Economic Geology, Vol. 64, pp. 538-550, 1969

GSC Bulletin 280, The Geochemistry of Gold and Its Deposits; R.W. Boyle, 1979

Practical Geochemistry for the Exploration Geologist, North West Mining Association; Working Papers

CIMM Geochemical Exploration, Special Volume 11, 1971



VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
KAMLOOPS MD
NTS 92I/9E

LOCATION

Drawn by: A.F.R.
Scale: 1cm = 20km
Date: Oct. 31, 1980
To Accompany Report by A. F. Roberts, P. Eng. date October 31 1980.

S U M M A R Y

The Carlin 2 mineral claim was covered by a combined geochemical-VLF-EM survey.

The geochemistry has indicated an anomalous area 1,000 metres by 150 metres, confirmed wholly or in part by coincident gold, silver, copper, arsenic values.

The VLF-EM survey confirms the geochemistry as interpreted from Fraser Filter calculations, and total field values, and suggests a greater length.

In addition, there are three smaller anomalies in the northwest corner of the property, partially coincident in geochemistry but offset from Fraser Filter, Total Field values. This may be due to slope of the terrain.

Six drill holes at -90°, 100 metres long, have been plotted to test these anomalies for a total length of 900 metres.

This Phase I program is estimated to cost $120,000.

With success in Phase I, more drilling will be required and will cost in excess of $250,000.

It should be noted that this property lies entirely in ranch land, and the permission of the land owners will be required to carry out the work.

The regulations of the Department of Mines & Petroleum Resources must be rigidly observed, and the necessary permits obtained well in advance of commencement of drilling.

Respectfully submitted,

A.F. Roberts, P. Eng.,
October 31, 1980

A. F. ROBERTS, P.ENG.
CONSULTING MINING ENGINEER

GEOCHEMICAL-GEOPHYSICAL REPORT
ON THE
CARLIN 2 CLAIM
[12 UNITS]
KAMLOOPS M.D.

Lat. 50°38'N Long. 120°07'W

for

VANTEX RESOURCES INC.
Vancouver, B.C.

by

A.F. ROBERTS, P. ENG.

OCTOBER 31, 1980

INTRODUCTION 1] 2] 3] 4] 5]

This report was authorized by the Directors of the Company.

Its purpose is to analyze the data from the program, and if worthy, recommend a further exploration program.

The writer visited the property on August 23, 1980, examined the outcrops, and noted a few of the claim posts.

The geophysical program was initiated on the advice of J.B. Paul Sawyer, P.Eng., in his two reports, and is a follow-up of the work done by Copper Range Exploration in 1971 and 1973, and further sampling by R.A. Dickinson and McClaren in 1975.

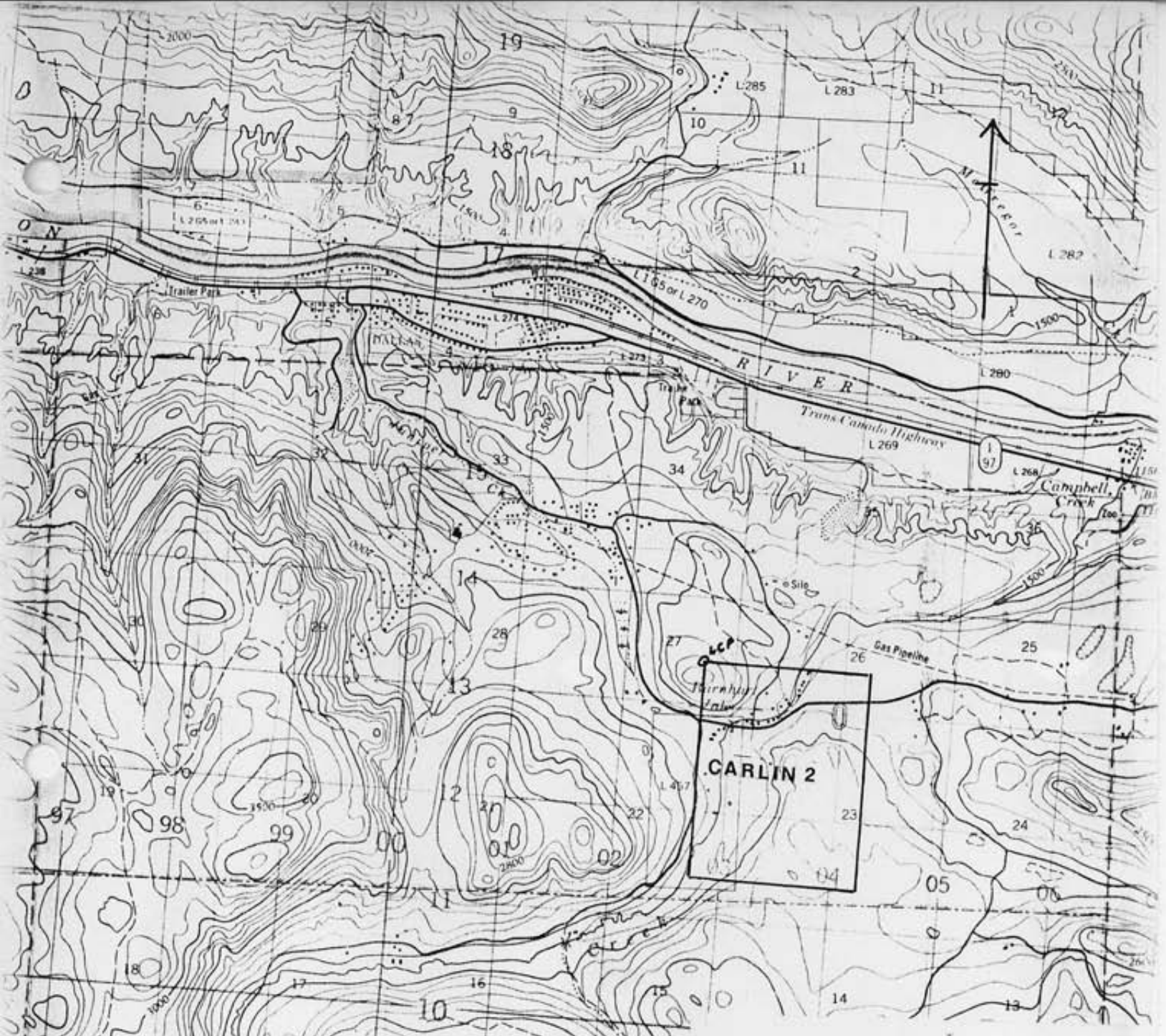
1] Report on the Carlin 2 Claim, Kamloops M.D. for United Mineral Services Ltd.; J.B.P. Sawyer, P.Eng., March 12, 1976

2] Report on the Carlin 2 Claim, Kamloops M.D. for T. Alexander, J.B.P. Sawyer, P.Eng., May 11, 1979

3] Report on the Carlin 2 M.C., Kamloops, M.D., held by R. Dickinson; Dickinson, McClaren, October 1975

4] Assessment Report No. 3616, December 7, 1971; D.E. Hopkins

5] Assessment Report No. 4315, May 26, 1973, C.P. Purdy, Jr.



VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
KAMLOOPS MD
NTS 92I/9E

TOPOGRAPHY

Drawn by: C.F.A.
Scale: 1:50,000
Date: Oct. 31, 1980
To Accompany Report by A.F. Roberts, P.Eng. date October 31 1980.

The geophysical-geochemical program was carried out by Strato Geological Inc. of Vancouver in the period October 3 - October 7, 1980, inclusive.

Maps were compiled by Strato, and interpreted by the writer.

LOCATION, ACCESS, TOPOGRAPHY 6] 7]

The property is located in Barnhart Vale, about eight miles southeasterly from the City of Kamloops.

A paved highway passes through the claim, and connects with the Trans-Canada Highway at both ends.

The interior of the claim has two dirt or gravel roads within it.

The country is generally ranch land, with few non-commercial trees. There is a little steep ground with a few rock exposures on the northwest corner, and a small exposure where previous work was done. Otherwise the country is flat to gentle, rolling, grass covered hills.

Campbell Creek flows northerly through the property, and then easterly through the village of Bernhart Vale.

6] Location Map, B.C. Road Map
1 cm = 20 km [Frontispiece]

7] Topographic Map NTS 92I/9W
1:50,000 [Follows page 2]

CLAIM [8]

Name	Units	Record No.	Expiry Date
Carlin 2	12	1793	April 4, 1981

"Survey Pending" is noted on the file card, with $400.00 excess in the assessment record.

Posts examined on the property complied with the Mining Act.

HISTORY

Some of the trenching on the property suggests that there was prospecting in the area, early in the century, although there is no record of it.

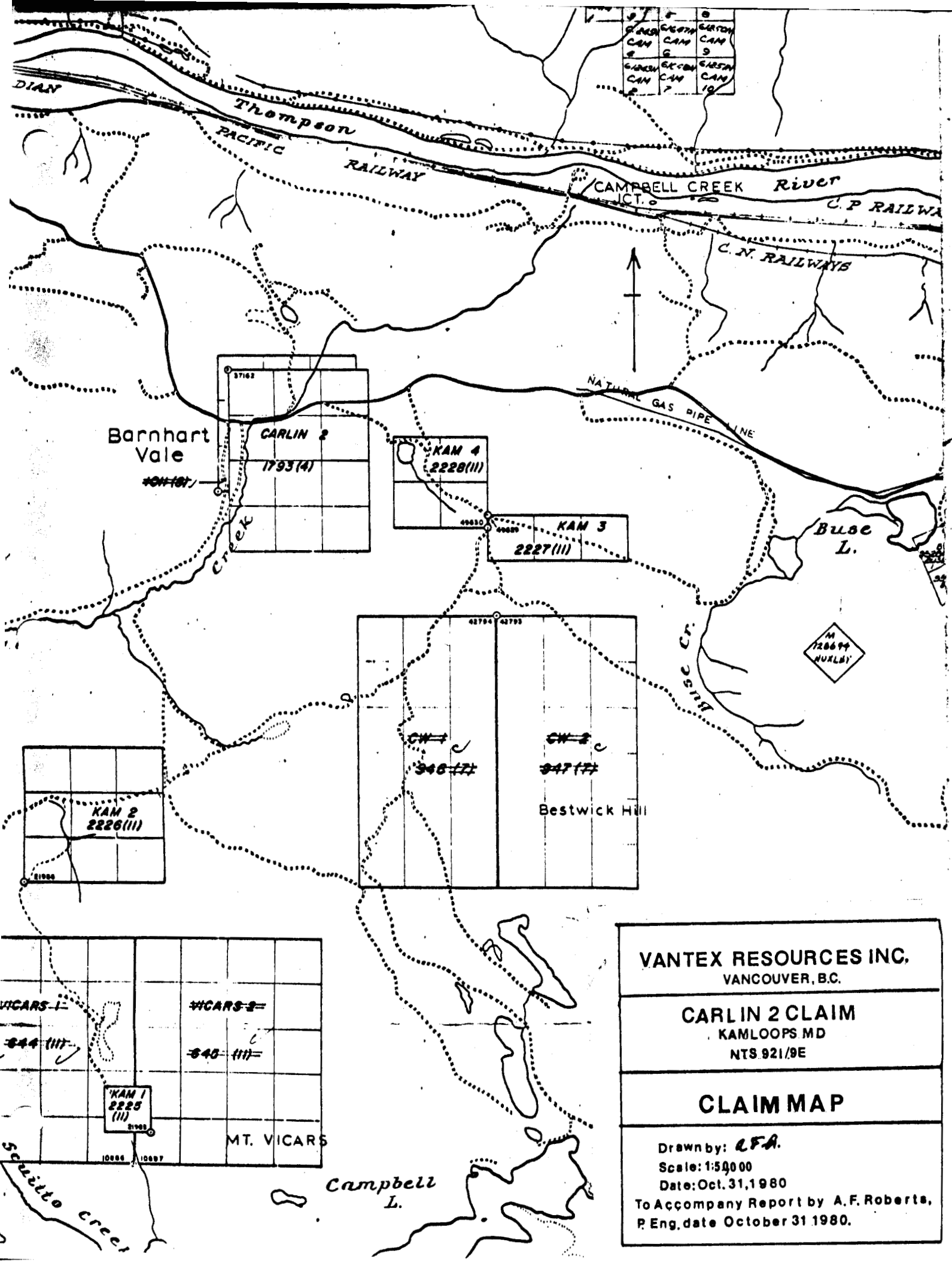
In 1971, Copper Range Exploration Company Inc., discovered anomalous copper-gold values on the property during a regional geochemistry program, and staked twenty-two claims, MOT 9-30 inclusive. Their follow-up work consisted of geological mapping, and geochemical soil and rock samples.

This work suggested an anomalous area about 300 feet wide, with a possible east-west strike, open at both ends.

In 1973, a more detailed program, indicated three anomalous zones:

8] Claim Map, B.C. Department of Mines and Petroleum Resources, 1:50,000 92I/9E

[Follows page 2]



VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
KAMLOOPS MD
NTS 92I/9E

CLAIM MAP

Drawn by: A.F.R.
Scale: 1:50000
Date: Oct. 31, 1980
To Accompany Report by A. F. Roberts, P. Eng. date October 31 1980.

1] Approximately 1,000 feet east of Barnhart Vale, 1000 feet by 2000 feet

2] 1,000 feet southeast of Barnhart Vale, 700 feet by 2,000 feet

3] Further south, 500 feet by 1,000 feet

Further work was recommended, but not carried out due to closure of the Vancouver office.

The property was re-staked by R.A. Dickinson in 1975, when the ground became open. The area of the Copper Range work was re-sampled and analyzed by a cyanide leach method, with three assays by normal fire assay.

Some anomalous values were found with the cyanide leach method. The fire assay method gave only low values in gold. No cross checking was done on the samples.

GEOLOGY [9] [10]

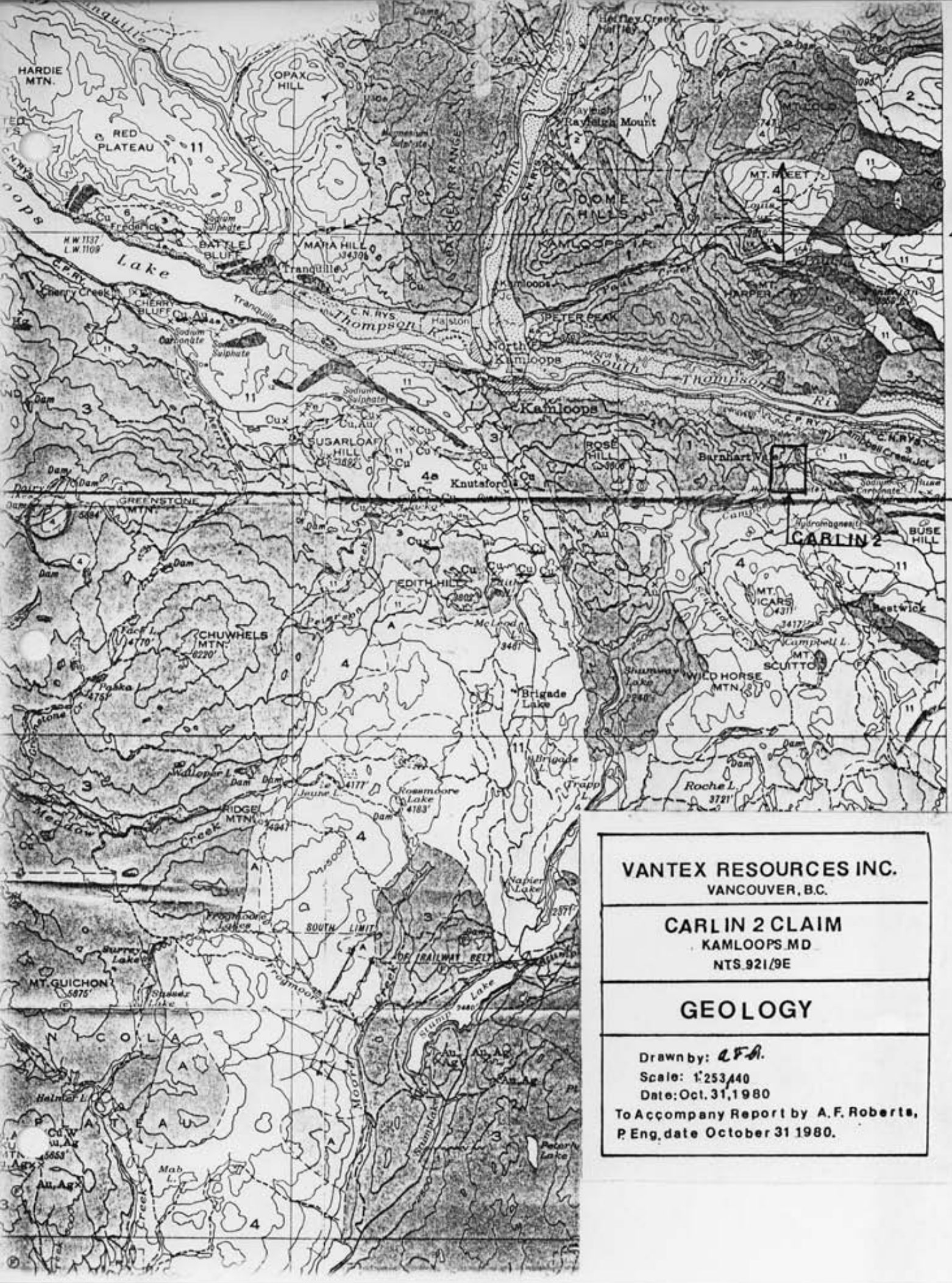
The general geology map indicates the property is underlain by Paleozoic sediments of the Cache Creek group, consisting of medium to dark, thin bedded argillite with irregular inclusions of chert, and some beds of greywacke, and minor limestone. All rocks are highly fractured and brecciated, in places veined with fine quartz stringers and segregations.

It is suggested that these altered phases carry the gold values.

A large granodiorite body lies immediately to the west, without any apparent effect on the property.

9] General Geology Map: Memoir 249, Geology of the Nicola Map Area, W.E. Cockfield, 1947 [Follows page 4]

10] Geology Map, Assessment Report No.4315, C. Phillips Purdy, Jr., P.Eng., 1"=1000' [Back Pocket]

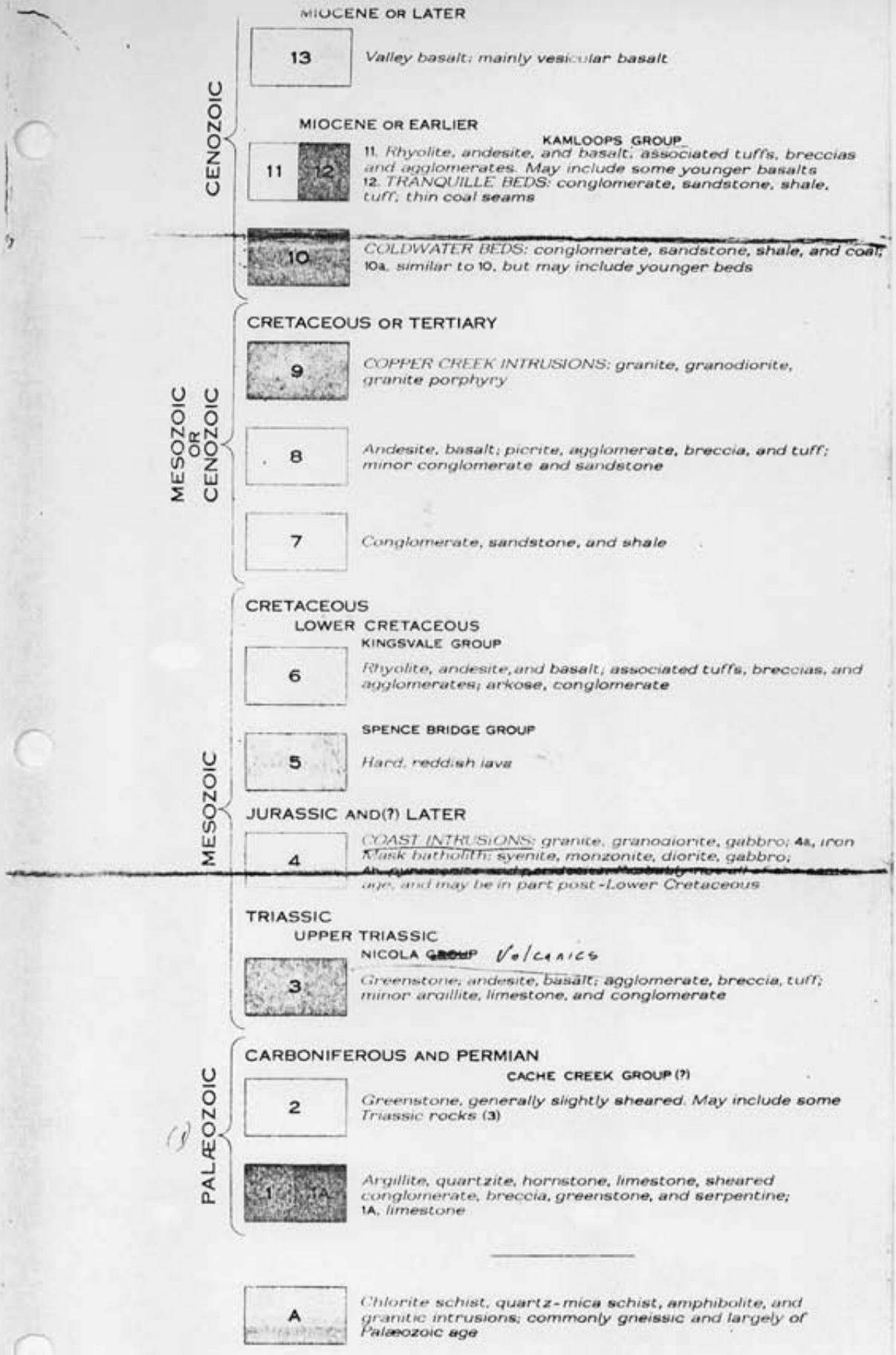


VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
KAMLOOPS M.D.
NTS 92I/9E

GEOLOGY

Drawn by: A.F.R.
Scale: 1:253,440
Date: Oct. 31, 1980
To Accompany Report by A. F. Roberts, P. Eng. date October 31 1980.


MIOCENE OR LATER
13
Valley basalt; mainly vesicular basalt
MIOCENE OR EARLIER
KAMLOOPS GROUP
11
12
11. Rhyolite, andesite, and basalt; associated tuffs, breccias and agglomerates. May include some younger basalts
12. TRANQUILLE BEDS: conglomerate, sandstone, shale, tuff; thin coal seams
CENOZOIC
10
COLDWATER BEDS: conglomerate, sandstone, shale, and coal;
10a, similar to 10, but may include younger beds
CRETACEOUS OR TERTIARY
9
COPPER CREEK INTRUSIONS: granite, granodiorite, granite porphyry
8
Andesite, basalt; picrite, agglomerate, breccia, and tuff; minor conglomerate and sandstone
7
Conglomerate, sandstone, and shale
MESOZOIC OR CENOZOIC
CRETACEOUS
LOWER CRETACEOUS
KINGSVALE GROUP
6
Rhyolite, andesite, and basalt; associated tuffs, breccias, and agglomerates; arkose, conglomerate
SPENCE BRIDGE GROUP
5
Hard, reddish lava
JURASSIC AND(?) LATER
4
COAST INTRUSIONS: granite, granodiorite, gabbro; 4a, iron Mask batholith: syenite, monzonite, diorite, gabbro;
age, and may be in part post-Lower Cretaceous
MESOZOIC
TRIASSIC
UPPER TRIASSIC
NICOLA GROUP Volcanics
3
Greenstone; andesite, basalt; agglomerate, breccia, tuff; minor argillite, limestone, and conglomerate
CARBONIFEROUS AND PERMIAN
CACHE CREEK GROUP (?)
2
Greenstone, generally slightly sheared. May include some Triassic rocks (3)
PALÆOZOIC
1
1A
Argillite, quartzite, hornstone, limestone, sheared conglomerate, breccia, greenstone, and serpentine;
1A, limestone
A
Chlorite schist, quartz-mica schist, amphibolite, and granitic intrusions; commonly gneissic and largely of Palæozoic age
Heavily drift-covered area
Fault
Synclinal axis
Fossil locality
Mineral occurrence
SYMBOLS FOR METALS

Dykes of feldspar porphyry, with fine pyrite and minor pyrrhotite are known in the area, cutting the Cache Creek sediments.

On the main hill area, a feldspar porphyry dyke cuts the Cache Creek sediments, and is cut by numerous quartz stringers and veinlets, and is associated with the anomalous gold values.

It is reported that $\frac{1}{4}$ mile to the north of the Campbell Creek road where it intersects the main road, there is an outcrop of biotite feldspar porphyry containing pyrite and specks of molybdenite without quartz.

At Barnhart Vale there is an outcrop of rock that may be a diorite. Alteration and oxidation do not permit proper identification.

Purdy reports beds of conglomerate 1,800 feet east of Barnhart Vale, on the down thrown side of a NE striking fault. These are oxidized, with a sandy matrix enclosing feldspar porphyry, argillite.

MINERALIZATION [11]

The writer did not take any samples for assay. Assay results are taken from the assessment reports, and enclosed in the Appendix.

They indicate that gold is present in the surface rocks in values that would make an open pit mine, if there is sufficient tonnage.

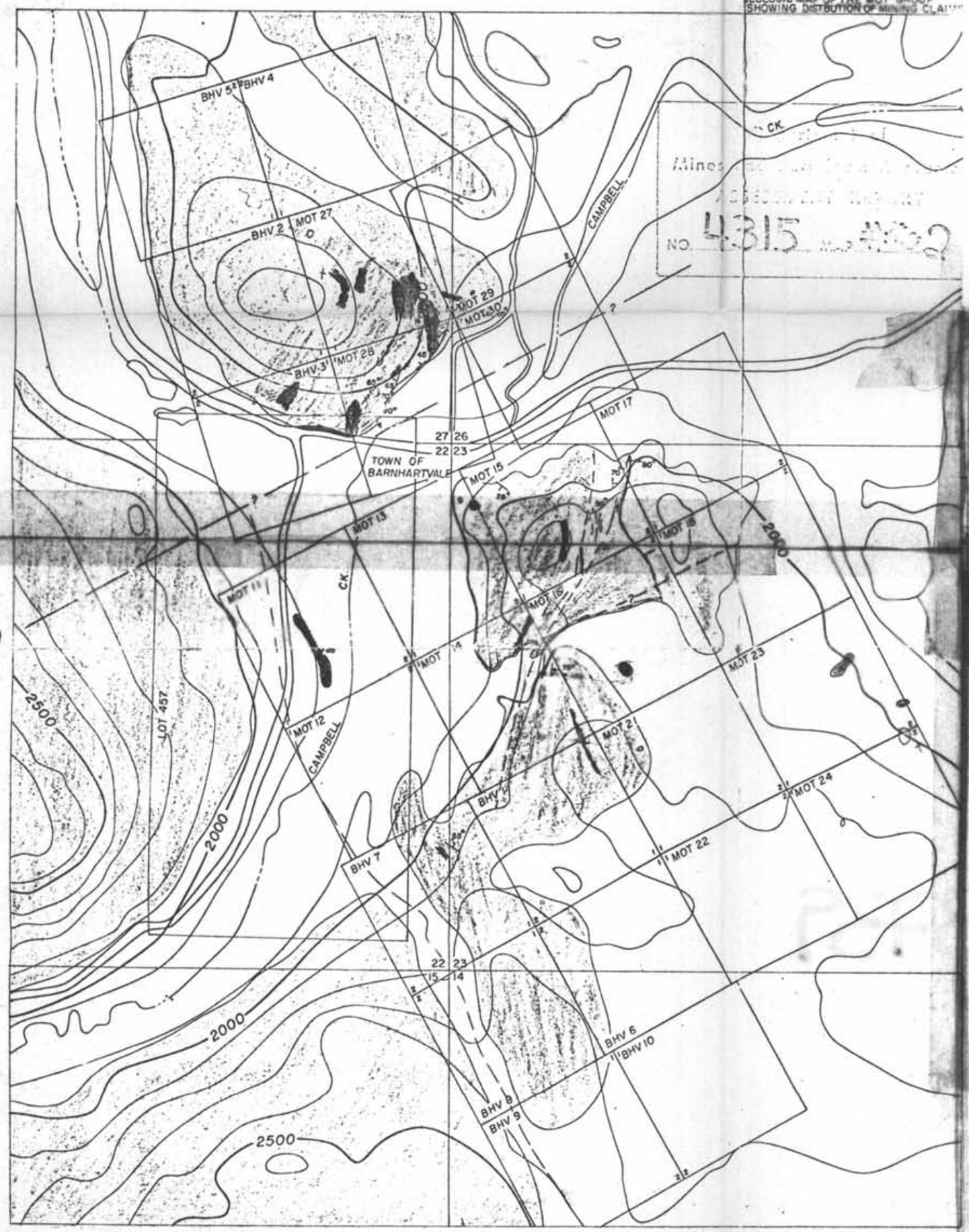
Being surface samples, it is possible that drilling would indicate higher values.

11] Appendix A - Assays and Maps MOT 5 claim area. Assessment Reports 3016, 4315, and Dickinson, McClaren, 1975, Rock Geochemistry Map

[End of Report]

PLATE I

GEOLOGIC MAP OF THE MOT GROUP
SHOWING DISTBUTION OF MINING CLAIMS



T
19

R 16 W

Scale: 1" = 1000' C.I. = 100'

0 500 1000

To accompany geological and geochemical report by C. Phillips Purdy Jr. P.Eng. on the MOT group, Barnhartvale, Kamloops Mining Division, dated May 26, 1973

VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
KAMLOOPS M.D.
NTS 92I/8E

LOCAL GEOLOGY

Drawn by: C.F.A.
Scale: 1"=1000'
Date: Oct. 31, 1980
To Accompany Report by A.F. Roberts, P.Eng. date October 31 1980.

COPPER RANGE EXPLORATION CO., INC

- Kamloops Group, Tranquille Beds — Early Tertiary
- Feldspar and quartz feldspar porphyry
- Biotite feldspar porphyry
- Diorite
- Granodiorite and aplite — Cretaceous
- Cache Creek Group (argillite, greywache, conglomerate, limestone and mafic volcanics) Intensity of shading shows degree of iron staining and bleaching of the Cache Creek Group — Permian

- 80° Fault, showing attitude, dashed where conjectured
- 70° Attitude of bedding
- 80° Attitude of joint
- Approximate contacts between rock types
- Area of outcrop or near outcrop identifiable by float fragments

GEOCHEMISTRY 1980 [12] [13] [14] [15] [16] [17]

The field work was done by Strato Geological of Vancouver, B.C., in the period October 3 - 7, 1980, and included the VLF-EM survey.

The property was laid out on a 125m x 50m grid with all samples taken from the "B" horizon, and placed in standard wet proof kraft paper bags.

Assaying was done by Acme Analytical Laboratories of Vancouver, B.C.

Maps were constructed at 1 cm = 25 cm, and values plotted for each metal, Gold, Silver, Arsenic, Copper.

A computer program by Positive Systems Limited, Burnaby, B.C., gave a mathematical analysis for frequency of values, percentage, and cumulative percentage. From this data, frequency and probability curves were constructed to give threshold and anomalous values for each metal. On the basis of this data, the maps were contoured.

---

[12] Plate A-1 - Geochemistry Map, Gold
1 cm = 25 m [Back Pocket]

[13] Plate A-2 - Geochemistry Map, Silver
1 cm = 25 m [Back Pocket]

[14] Plate A-3 - Geochemistry Map, Arsenic
1 cm = 25 m [Back Pocket]

[15] Plate A-4 - Geochemistry Map, Copper
1 cm = 25 m [Back Pocket]

[16] Appendix B - Assay Certificates with Assay Procedures [End of Report]

[17] Appendix C - Computer Analysis of Geochemical Assays, Frequency, Probability Curves, Au, Ag, Cu, As [End of Report]

Values used are as follows:

Gold: 5 ppb is the low limit of detection with the method used. 10 ppb is threshold, with 18% of samples above this level, and 10% above 15 ppb taken as truly anomalous.

Arsenic: The 20% above 13 ppm is probably threshold. The 13% level, 20 ppm was used as threshold, relying on experience elsewhere. 27 ppm is considered anomalous, with 10% of samples above this level.

Silver: The argillite areas usually have fairly high Silver values. With this consideration, threshold was taken at 0.5 ppm, 7% of values exceeding this point, and anomalous at 0.7 with 4-1/7% exceeding this value.

Copper: Overall copper assays are low, with only 4% exceeding 100 ppm.

Threshold: The curve "breaks" at about 65% and the threshold value was taken at 70 ppm [12%], and anomalous at about 75 ppm, with 10% of the assays.

This work indicates one strong anomaly that probably covers two of the Copper Range anomalies, and is centered on the old trenches.

The Anomaly extends from 5+00S to 15+00S and 5+50E to 10+00E, with a slight northeasterly trend.

The dimensions, then, are 1,000 x 150 m. [3,900 feet x 500 feet].

The second anomaly, north of the road, and in the northwest corner of the property has a strong north-easterly strike, with dimensions 625m x 25m, [2,000 feet x 600 feet], with two parallel anomalies each 225m x 62m [725 feet x 200 feet].

These anomalies are confirmed by all four metals, although not over their entire lengths, but closely enough to justify the above statements.

There are several small anomalies of gold, partially confirmed by the other metals to the south and east, and are probably related to the main anomaly. Other small gold anomalies lack confirmation.

GEOPHYSICS 18] 19] 20] 21] Seattle Transmitter

The survey was carried out on the same lines and stations as the geochemical survey and at the same time.

The instrument used was a Sabre Model 27, Serial No. 103, VLF-EM, made by Sabre Electronics Ltd., of Burnaby, B.C.

This instrument provides readings of the Dip Angle and a total field measurement as a percentage above a threshhold value of 50%, set at the same station every day.

18] Plate B - Plan Dip Angle

19] Plate C - Plan Fraser Filter, Diamond Drill hole locations

20] Plate D - Plan Total Field

21] Plate E - X-sections Dip Angle, Total Field, Fraser Filter

22] Appendix D - Operating Instructions, Sabre Model, Fraser Filter Calculations

The Fraser Filter transformation was calculated, and with the dip angle and total field readings were plotted on cross sections.

Dip angle, Fraser Filter, and Total Field were also plotted in plan and contoured.

High tension power lines on the north and west sides of the property caused a loss of some readings due to strong interference.

The Fraser Filter plan shows a conductive zone from 3+00S to 19+00S with an average width of 150 metres. This zone is roughly coincident with the main geochemical anomaly, but much longer, covering the geochemical anomaly at the south end of the property.

The general shape is also the same as the geochemical anomaly.

The anomalies in the northwest corner show the same type of shape and coverage, although shorter, and wider.

The total field plan indicates the stronger sections are covered by the Fraser Filter and geochemical anomalies, but show a decided east-west trend.

The Dip Angle-Fraser Filter axes are roughly coincident, though slightly offset, both with a northeasterly trend.

Without detailed geological mapping, and/or information from Diamond Drill holes, it is too uncertain

to interpret the negative areas and the contoured shapes. They could be due to folding of the rocks or to faulting, although it is thought that folding is the most plausible explanation.

The limited geological mapping shows the predominate dip to be easterly in the main zone, and a small fault in the northern section to dip easterly, and a similar one to the south to dip westerly.

The northwest anomalous area is shown with a westerly dip.

CONCLUSIONS

This property has been found to have a long, strong, geochemical-geophysical anomaly with approximate dimensions of 1,000 m by 150 m, in the central part of the property.

There are similar anomalies in the northwest section of the property, with dimensions of 625 m by 25 m, and two at 225 m by 62 m.

With indications such as these, the property certainly cannot be ignored.

RECOMMENDATIONS

A series of diamond drill holes are recommended to test the anomalies to a depth of 100 metres:

Main Anomaly:

DDH-1 Vertical 7+50E, 7+75S at the old trenching, -90°, 100 metres

DDH-2 8+25E, 7+75S, -90°, 100 metres

DDH-3 7+25E, 12+75S, -90°, 100 metres

DDH-4 7+50E, 17+75S, -90°, 100 metres

DDH-5 4+75E, 2+50S, -90°, 100 metres. Tests a geochemical anomaly in a negative Fraser Filter area.

DDH-6 3+50E, 0+00S, -90°, 100 metres
Tests a combined Fraser Filter area, combined with a strong Total Field anomaly, near but not confirmed by geochemistry.

All holes drilled with BQ size bits.

ESTIMATED COSTS

Phase I

Diamond drilling	$100.00/metre
Assaying	8.75
Core boxes, etc.	5.00
Camp, Supervision, labour, etc.	35.00
Total	$148.75/metre

Say - $150.00/metre

600 metres @ $150.00		$ 90,000.00
Reports, logging, etc.		7,500.00
Geological Mapping		5,000.00
Mobilization, demobilization		2,000.00
	Sub-total	$104,500.00
	15% Contingencies	15,675.00
	Total	$120,175.00

Say - $120,000.00

All holes subject to field supervision, as to exact location and depth. It may be necessary to run holes deeper if still in mineralization.

Note: As this property lies on ranch land, permission to work must be obtained from the owners of the surface rights before starting work.

All Department of Mines & Petroleum Resources regulations must be strictly observed. All permits to work on the property should be obtained several months in advance of the projected date to start working.

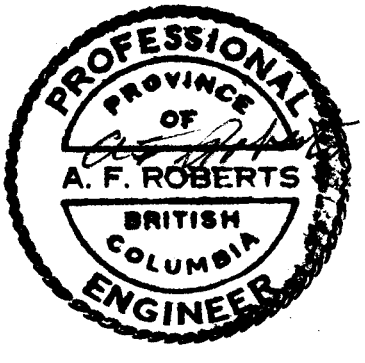
Phase II

With satisfactory results from Phase I, considably more drilling will be required to outline any ore bodies.

This work cannot be estimated without the results of Phase I, but can be expected to cost in excess of $250,000.

Respectfully submitted,

A.F. Roberts, P.Eng.
October 31, 1980



CERTIFICATE

I, A.F. Roberts, of 812 Fairbrook Crescent, Richmond, British Columbia, do hereby certify that:

1] I am a graduate of the University of British Columbia, B.Ap.Sc., in Mining Engineering, 1951.

2] I am a Registered Professional Engineer of the Province of British Columbia; and am a Member of the Canadian Institute of Mining and Metallurgy.

3] I have practiced my profession since 1951, with Quatsino Copper-Gold Mines Ltd., Giant Mascot Mines Ltd., Cochenour-Willans Gold Mines Ltd., Mogul Mines Ltd., Kerr-Addison Gold Mines Ltd., Atlantic Coast Copper Corporation Ltd., Wasamac Mines Ltd., Brenda Mines Ltd., and T.C. Explorations Ltd.

Since January 1970, I have been an independent Consulting Engineer.

Previous to, and during University, I worked underground as a miner, and on several exploration-development projects.

4] The accompanying report is based entirely on my personal examination of the area, August 24-27 and September 19-22, 1979, while engaged in the area.

5] I have no interest, direct or indirect, in the Carlin 2 Claim, nor have I any interest, direct or indirect, in Vantex Resources Inc., or in any companies with which it may be associated. I have not, nor do I expect to receive any interest in shares of any company, in its securities, or any company with which it may become associated.

6] I consent to the use of this report in, or in conjunction with a prospectus, or a statement of material facts, relating to the raising of funds for this project.

DATED at Vancouver, British Columbia, this thirty-first day o f October, 1980.

A.F. Roberts, P. Eng.
October 31, 1980

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

APPENDIX A

ASSAYS AND MAPS

MOT 5 CLAIM

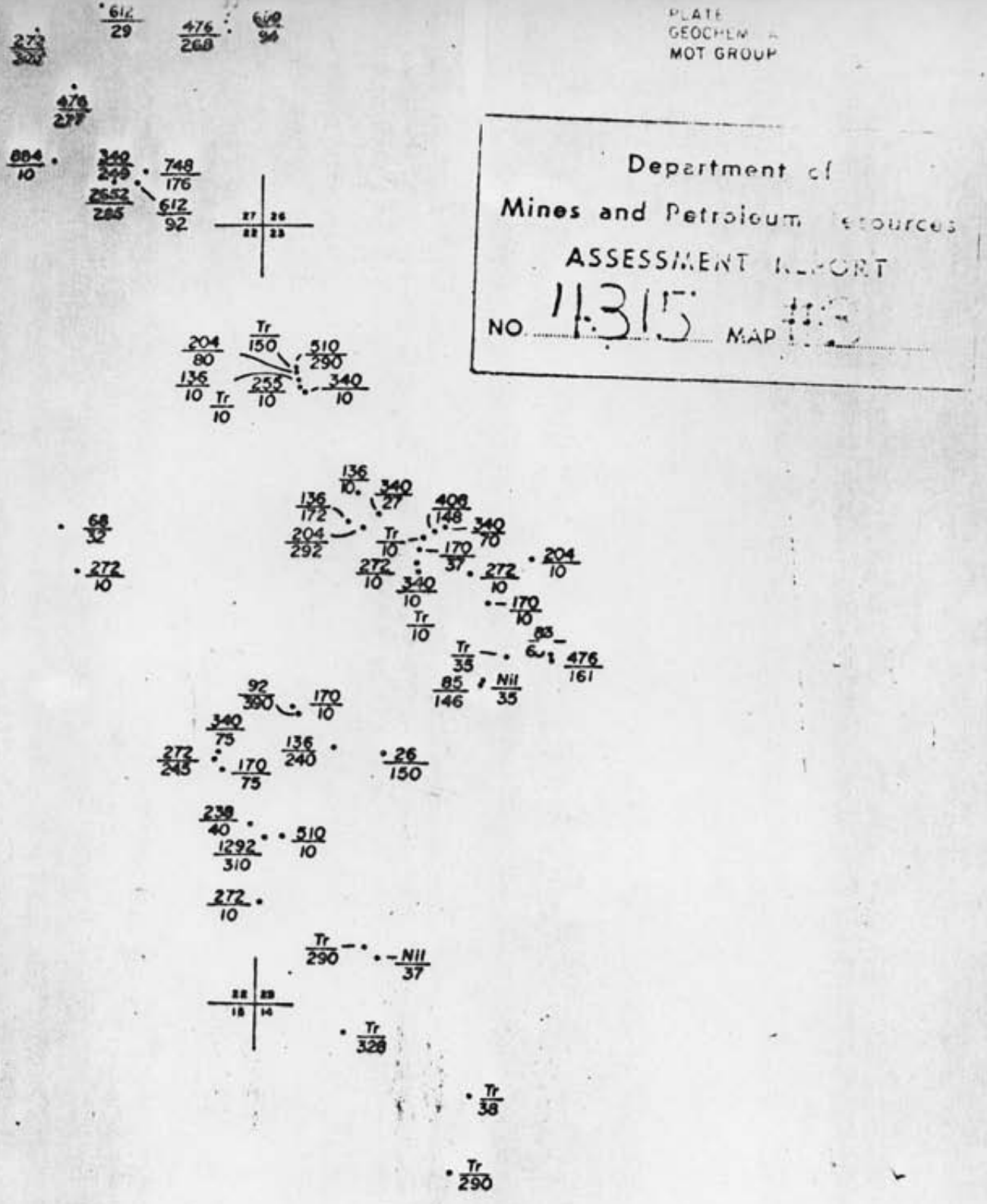
ROCK GEOCHEMISTRY MAP

ASSESSMENT REPORTS 3616, 4315

DICKINSON, McCLAREN, 1975

PLATE
GEOCHEM
MOT GROUP

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 11,315 MAP

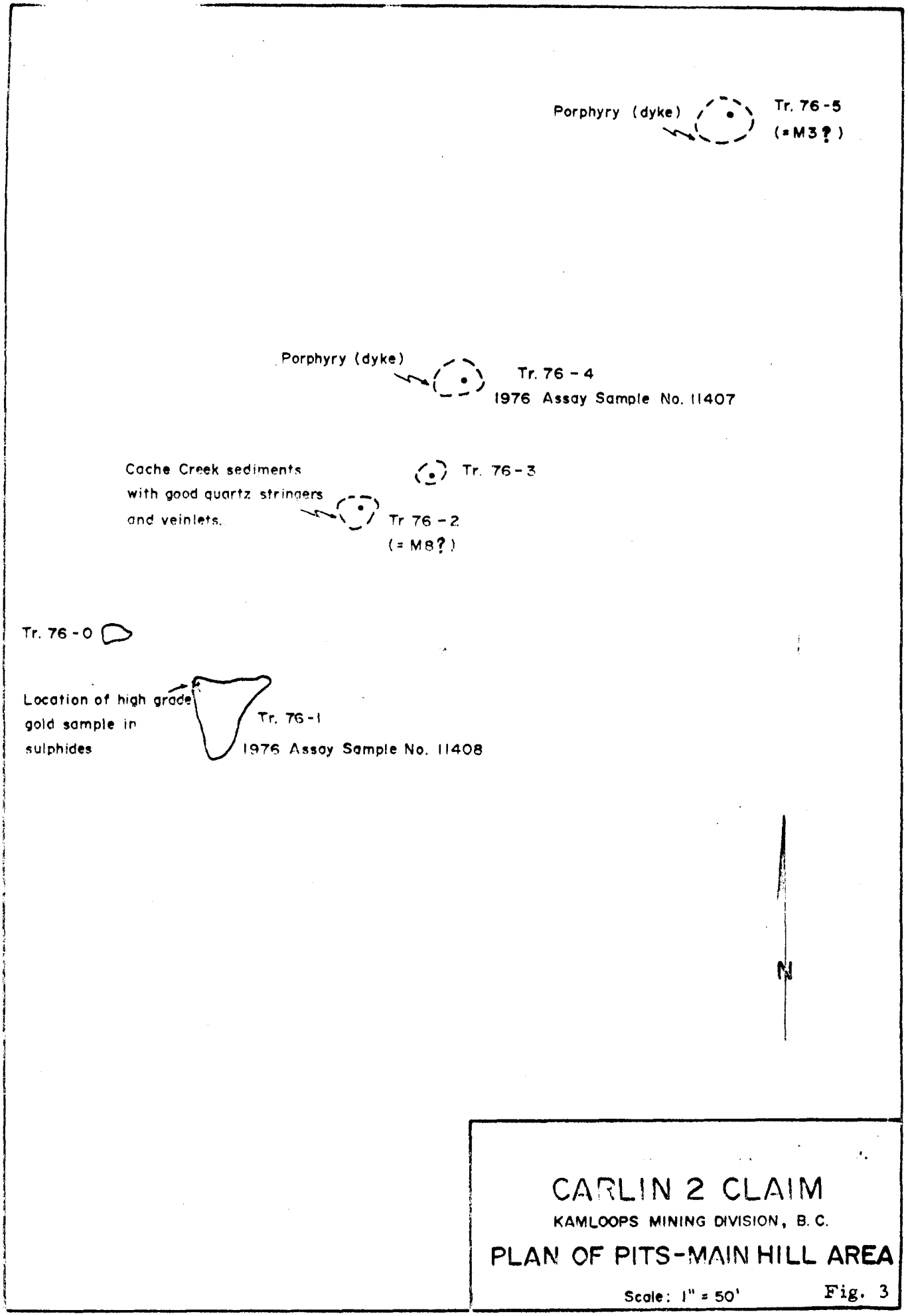


0 500 1000

340 Gold in p.p.b
249 Arsenic in p.p.m

Scale: 1"=1000'

To accompany geological and geochemical report by C.Phillips Purdy Jr P.Eng on the MOT group, Bonnhartvale, Kamloops Mining Division, dated May 29, 1973



CARLIN 2 CLAIM

KAMLOOPS MINING DIVISION, B. C.

PLAN OF PITS-MAIN HILL AREA

Scale: 1" = 50'

Fig. 3

APPENDIX B

ASSAY CERTIFICATES

ASSAY PROCEDURES

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex
800 - 543 Granville St.,
Vancouver, B.C.
V6C 1X8

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Ag	As	Au	
COS 0+ 0 E	39	.1	7	.005	1
0+50	27	.1	4	.005	2
1	22	.1	6	.005	3
1+50	25	.1	7	.005	4
2	35	.1	300	.005	5
2+50	41	.1	13	.005	6
3	29	.1	9	.005	7
3+50	29	.1	4	.005	8
4	29	.1	9	.005	9
4+50	49	.2	34	.010	10
5	43	.2	11	.005	11
5+50	43	.1	9	.005	12
6	31	.1	12	.005	13
6+50	50	.9	26	.005	14
7	63	.1	16	.010	15
8+50	46	.1	8	.005	16
9	44	.1	6	.005	17
10	34	.1	5	.005	18
10+50	80	.1	11	.005	19
11	63	.1	7	.005	20
11+50	65	.1	9	.005	21
12	62	.1	7	.005	22
12+50	59	.1	7	.005	23
13	62	.1	7	.005	24
13+50	55	.1	5	.005	25
14	61	.1	6	.005	26
14+50	58	.1	9	.005	27
COS 15 E	71	.1	7	.005	28
					29
C1.25S 0 E	68	.2	9	.010	X 30
0+50	60	.3	38	.025	Y 31
1	71	.9	26	.175	32
1+50	39	.1	14	.005	33
2	44	.3	42	.025	34
2+50	45	.1	10	.005	35
3	49	.2	9	.010	36
3+50	54	.1	5	.005	37
C1.25S 4 E	38	.1	12	.005	38
					39
					40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 20, 1980

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

2

SAMPLE No.	Cu	Ag	As	Au		
C1.25S 4+50 E	59	.2	27	.005		1
5	50	.5	43	.005		2
5+50	79	1.6	78	.025		3
6	71	.8	20	.005		4
6+50	41	.4	13	.005		5
7	46	.2	8	.005		6
7+50	40	.1	7	.005		7
10	81	.2	12	.005		8
10+50	56	.2	10	.005		9
11	51	.1	7	.005		10
11+50	59	.1	10	.005		11
12	67	.3	14	.005		12
12+50	65	.1	14	.005		13
13	62	.2	13	.005		14
C1.25S 13+50 E	57	.2	12	.005	X	15
						16
C2.50S 0 E	50	.4	24	.030		17
0+50	33	.1	9	.005		18
1	30	.1	8	.005		19
1+50	38	.3	12	.005		20
2	32	.2	16	.005		21
2+50	46	.3	16	.020		22
3	151	1.6	25	.025		23
3+50	60	.7	18	.005		24
4	90	1.7	63	.005		25
4+50	60	.9	89	.195		26
C2.50S 5 E	76	.7	159	.020		27
						28
C2.55S 5+50 E	36	.2	8	.005		29
6	59	.1	9	.005		30
6+50	54	.1	5	.005		31
7	48	.1	9	.005		32
C2.55S 7+50 E	55	.1	9	.005		33
						34
C3.0 S 10+50 E	55	.2	16	.005		35
11	54	.2	12	.005		36
11+50	63	.3	12	.005		37
12	52	.1	9	.005		38
C3.0 S 12+50 E	41	.1	5	.005		39
						40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

3

SAMPLE No.	Cu	Ag	As	Au		
C3.0S 13 E	47	.1	11	.010		1
13+50	64	.2	12	.020		2
14	53	.3	8	.005		3
14+50	45	.2	6	.005		4
C3.0S 15 E	42	.1	6	.005		5
						6
C3.75S 10 E	50	.1	7	.025		7
						8
C 40S 8 E	56	.1	6	.005		9
8+50	40	.1	4	.005		10
9	54	.2	9	.005		11
9+50	52	.2	8	.005		12
10	57	.1	8	.005		13
10+50	42	.1	6	.005		14
11	60	.2	8	.005		15
11+50	71	.1	4	.005		16
12	51	.2	5	.005		17
12+50	43	.1	4	.005		18
13	51	.1	7	.005		19
13+50	39	.1	4	.005		20
14	32	.1	3	.005		21
14+50	50	.2	9	.005		22
C 40S 15 E	43	.2	7	.005		23
						24
C400 0 E	32	.1	8	.005		25
0+50	49	.3	14	.005	X	26
1	52	.4	30	.015		27
1+50	47	.2	25	.005		28
2	77	.3	15	.005		29
2+50	48	.2	51	.035	X	30
C400 3 E	65	.3	37	.040		31
						32
C525 0 E	85	.5	22	.005		33
0+50	42	.3	8	.005		34
3	23	.1	5	.005		35
3+50	87	.3	9	.005		36
4	50	.2	5	.005		37
4+50	48	.2	8	.005		38
C525 5 E	59	.1	4	.005		39
						40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

4

SAMPLE No.	Cu	Ag	As	Au		
C525 5+50 E	36	.1	5	.005		1
6	40	.1	9	.005		2
6+50	39	.1	7	.005		3
7	60	.1	12	.005		4
7+50	56	.2	9	.005		5
8	50	.1	10	.015		6
8+50	33	.1	5	.005		7
9	74	.2	40	.010		8
9+50	75	.2	90	.005		9
10	75	.3	30	.005		10
10+50	37	.1	5	.005		11
11	85	.1	11	.005	X	12
11+50	48	.1	3	.005		13
12	32	.1	2	.005		14
12+50	44	.1	2	.005		15
13	45	.1	4	.005		16
13+50	58	.2	5	.005		17
14	38	.1	1	.005	X	18
14+50	39	.1	3	.005		19
C525 15 E	41	.1	5	.005		20
						21
C625 3+00 E	90	.2	5	.005		22
						23
C650 0 E	37	.1	3	.005		24
0+50	120	.5	15	.010		25
1	54	.2	8	.015		26
1+50	42	.1	6	.040		27
2+50	20	.1	4	.005		28
3+50	55	.2	10	.010		29
4	49	.2	7	.015		30
4+50	41	.1	6	.010		31
5	45	.2	8	.010		32
5+50	34	.1	6	.005		33
6	44	.1	11	.010		34
6+50	48	.4	44	.010		35
7	50	.1	36	.015		36
7+50	51	.1	23	.020		37
C650 8 E	28	.1	51	.010		38
						39
						40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex,

File No. 80-1263

Type of Samples Soil

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

5

SAMPLE No.	Cu	Ag	As	Au	
C650 8+50 E	47	.2	215	.020	1
9	80	.1	54	.010	2
9+50	91	.4	21	.010	3
10+50	39	.2	13	.005	4
11	32	.1	8	.005	5
11+50	36	.1	5	.010	6
12	40	.1	5	.005	7
12+50	30	.1	5	.005	8
13	36	.1	4	.005	9
13+50	54	.1	4	.005	10
14	61	.1	3	.005	11
14+50	33	.1	5	.005	12
C650 15 E	33	.1	4	.005	13
					14
C775 0+50 E	30	.1	6	.005	15
1	60	.1	9	.005	16
1+50	30	.2	7	.005	17
2	31	.1	4	.065	18
3	75	.2	8	.005	X 19
3+50	54	.2	7	.005	20
4	80	.3	10	.005	21
4+50	51	.2	5	.005	22
5	50	.2	10	.010	23
5+50	42	.2	10	.010	24
6	39	.3	34	.020	25
7	142	2.0	171	.320	X 26
7+50	168	3.8	123	1.700	27
8	145	2.9	43	1.160	28
8+50	76	.7	45	.090	29
9	42	.2	8	.015	30
9+50	140	.9	18	.005	31
10	35	.2	8	.005	32
10+50	42	.3	11	.010	33
11	27	.1	8	.015	34
11+50	44	.2	3	.005	35
12	30	.1	5	.015	36
12+50	42	.1	9	.005	37
C775 13 E	38	.1	5	.005	38
					39
					40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263

Type of Samples Soil

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

6

SAMPLE No.	Cu	Ag	As	Au	
C775 13+50 E	31	.1	5	.005	1
14	35	.1	10	.005	2
14+50	30	.1	5	.005	3
C775 15 E	36	.1	8	.005	4
					5
C900 0+50 E	27	.1	4	.005	6
1	74	.2	10	.005	7
1+50	35	.1	9	.325	8
3	66	.1	6	.010	9
3+50	53	.2	7	.010	10
4	58	.2	11	.005	11
4+50	47	.2	7	.005	12
5	83	.2	18	.010	13
5+50	46	.2	7	.005	14
6	37	.1	9	.005	15
6+50	61	.2	39	.005	16
7	133	1.5	70	.015	17
7+50	60	.3	9	.010	18
8	73	.7	39	.020	19
8+50	60	.2	13	.005	20
9	34	.1	9	.005	21
9+50	45	.2	10	.005	22
10	45	.2	10	.005	23
10+50	44	.2	13	.005	24
11	37	.2	7	.005	25
11+50	32	.1	5	.005	26
12	34	.1	5	.005	27
12+50	40	.1	7	.005	28
13	37	.2	7	.005	29
13+50	31	.1	6	.005	30
14	31	.1	8	.005	31
14+50	37	.1	6	.005	32
C900 15 E	33	.2	7	.005	33
					34
C1025 6 E	40	.2	7	.005	35
6+50	110	.8	69	.005	36
7	50	.3	47	.020	37
C1025 7+50 E	83	.2	25	.010	38
					39
					40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

7

SAMPLE No.	Cu	Ag	As	Au
C1025 8 E	31	.1	6	.005
8+50	36	.1	13	.010
9	45	.2	14	.005
9+50	37	.1	14	.005
10	32	.2	8	.005
10+50	38	.2	7	.005
11	32	.1	8	.005
11+50	32	.1	5	.005
12	40	.2	10	.005
12+50	33	.1	7	.005
13	33	.1	5	.005
13+50	38	.2	8	.005
14	33	.1	5	.005
14+50	30	.1	6	.005
C1025 15 E	35	.1	8	.005
C1150 0+50 E	70	.2	9	.005
1	41	.2	35	.015
1+50	21	.1	4	.005
2	64	.1	4	.005
2+50	62	.2	9	.005
3	52	.1	8	.155
4	56	.2	17	.005
4+50	45	.1	8	.005
5	44	.3	11	.005
5+50	43	.2	7	.005
6	44	.1	8	.005
6+50	64	.5	46	.005
7	176	.2	78	.005
7+50	116	.5	40	.005
8	91	.7	98	.040
8+50	60	.7	47	.010
9	39	.3	15	.005
9+50	37	.2	11	.005
10	31	.1	8	.005
10+50	36	.2	7	.005
11	32	.1	7	.005
C1150 11+50 E	30	.2	6	.005

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

8

SAMPLE No.		Cu	Ag	As	Au	
C1150	1200 E	34	.2	10	.005	1
	1250	32	.1	8	.005	2
	1300	39	.1	7	.005	3
	1350	35	.1	3	.005	4
	1400	27	.1	4	.005	5
	1450	24	.1	5	.005	6
C1150	1500 E	34	.1	6	.005	7
						8
C1275	0+50 E	66	.2	7	.005	9
	1+50	20	.1	2	.005	10
	2	44	.1	5	.025	11
	2+50	48	.1	5	.005	12
	3	40	.1	5	.005	13
	3+50	47	.1	9	.005	14
	4	42	.1	16	.005	15
	4+50	43	.1	13	.005	16
	5	41	.1	21	.005	17
	5+50	70	.2	32	.005	18
	6	53	.1	21	.005	19
	6+50	18	.1	7	.005	20
	7	183	.3	108	.115	21
	7+50	150	.6	40	.015	22
	8	44	.1	16	.005	23
	8+50	35	.1	7	.005	24
	9	38	.3	7	.005	25
	9+50	35	.2	8	.005	26
	10	30	.1	5	.005	27
	10+50	35	.1	8	.005	28
	11	34	.1	7	.005	29
	11+50	31	.2	6	.005	30
	12	33	.1	7	.005	31
	12+50	37	.2	9	.005	32
	13	31	.1	5	.005	33
	13+50	29	.1	5	.005	34
	14	35	.1	8	.005	35
	14+50	29	.1	6	.005	36
C1275	15 E	26	.1	3	.005	37
						38
						39
						40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

9

SAMPLE No.	Cu	Ag	As	Au
C1400 1+50 E	27	.1	3	.005
2	25	.1	6	.100
2+50	39	.2	6	.005
3	33	.1	5	.005
3+50	38	.1	5	.005
4	47	.1	8	.005
4+50	54	.1	8	.005
5	44	.2	5	.005
5+50	85	.3	7	.005
6	98	.2	46	.005
6+50	145	.1	62	.015
7	51	.3	23	.005
7+50	43	.1	12	.005
8	54	.3	12	.005
8+50	36	.1	9	.005
9	37	.2	8	.005
9+50	41	.3	11	.005
10	40	.2	11	.005
10+50	37	.2	10	.005
11	34	.1	7	.005
11+50	36	.1	7	.005
12	39	.2	11	.005
12+50	41	.2	10	.005
13	30	.1	7	.005
13+50	28	.2	7	.005
14	29	.2	6	.005
14+50	26	.1	6	.005
C1400 15 E	26	.1	6	.005
C1525 1 E	44	.2	7	.005
1+50	26	.2	6	.005
2	44	.2	9	.005
2+50	46	.2	6	.005
3	45	.2	9	.005
3+50	57	.1	9	.005
4	40	.2	7	.005
4+50	39	.1	6	.005
C1525 5 E	48	.1	6	.005

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

10	SAMPLE No.	Cu	Ag	As	Au	
	C1525 5+50 E	72	.2	7	.005	1
	6	25	.1	5	.005	2
	6+50	28	.1	8	.005	3
	7	43	.2	19	.005	4
	7+50	42	.1	8	.005	5
	8	42	.2	13	.005	6
	8+50	46	.2	12	.005	7
	9	38	.1	8	.005	8
	9+50	36	.2	9	.005	9
	10	38	.2	9	.005	10
	10+50	45	.3	12	.005	11
	11	33	.2	9	.005	12
	11+50	39	.2	9	.005	13
	12	38	.1	8	.005	14
	12+50	39	.2	10	.005	15
	13	36	.2	7	.005	16
	13+50	32	.1	7	.005	17
	14	31	.3	9	.005	18
	14+50	33	.1	7	.005	19
	C1525 15 E	30	.1	6	.005	20
						21
	C1650 1 E	47	.2	10	.005	22
	1+50	47	.2	9	.005	23
	2	37	.1	7	.005	24
	2+50	41	.1	6	.035	25
	3	41	.1	9	.005	26
	3+50	43	.1	11	.005	27
	4	89	.2	10	.010	28
	4+50	59	.1	7	.005	29
	5	38	.1	7	.005	30
	5+50	29	.1	7	.005	31
	6	32	.1	7	.005	32
	6+50	28	.1	7	.005	33
	7	25	.1	6	.005	34
	7+50	32	.1	9	.005	35
	8	30	.2	8	.005	36
	8+50	38	.2	9	.005	37
	C1650 9 E	31	.1	9	.005	38
						39
						40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

11

SAMPLE No.	Cu	Ag	As	Au	
C1650 9+50 E	30	.1	7	.005	1
10	39	.1	11	.005	2
10+50	33	.1	9	.005	3
11	48	.1	13	.005	4
11+50	39	.1	9	.005	5
12	38	.1	9	.005	6
12+50	36	.1	8	.005	7
13	38	.1	13	.005	8
13+50	37	.1	11	.005	9
14	32	.1	6	.005	10
14+50	31	.1	5	.005	11
C1650 15 E	30	.1	4	.005	12
					13
C1725 1 E	48	.1	9	.005	14
1+50	42	.1	7	.005	15
2	32	.1	7	.005	16
2+50	38	.1	9	.005	17
3	82	.1	11	.005	18
3+50	100	.8	18	.010	19
4	40	.1	9	.005	20
4+50	44	.1	10	.005	21
5	34	.1	11	.005	22
5+50	34	.1	8	.005	23
6	36	.1	4	.005	24
6+50	32	.1	8	.005	25
7	26	.1	6	.005	26
7+50	36	.1	13	.005	27
8	67	.2	68	.015	28
8+50	112	.9	22	.015	29
9	44	.1	8	.005	30
9+50	39	.1	7	.005	31
10	44	.1	12	.005	32
10+50	33	.1	7	.005	33
11	34	.1	7	.005	34
11+50	31	.1	10	.005	35
12	30	.1	5	.005	36
12+50	28	.1	6	.005	37
C1725 13 E	45	.1	11	.005	38
					39
					40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Vantex

File No. 80-1263
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

12

SAMPLE No.	Cu	Ag	As	Au	
C1725 13+50 E	27	.1	4	.005	1
14	33	.1	5	.005	2
C1725 14+50 E	32	.1	7	.110	3
					4
C1775 0 E	32	.1	4	.005	5
C1775 0+50 E	29	.1	3	.005	6
					7
C1900 0 E	30	.1	4	.005	8
0+50	44	.1	6	.010	9
1	61	.1	5	.005	10
1+50	40	.1	7	.005	11
2	50	.1	8	.005	12
2+50	33	.1	7	.005	13
3	43	.1	8	.005	14
3+50	43	.1	7	.005	15
4	45	.2	7	.005	16
4+50	52	.2	9	.010	17
5	34	.1	13	.005	18
5+50	78	.1	10	.005	19
6	41	.1	7	.005	20
6+50	39	.1	10	.005	21
7	34	.1	8	.005	22
7+50	30	.1	10	.005	23
8	21	.1	8	.005	24
8+50	29	.1	14	.005	25
9	36	.1	9	.005	26
9+50	31	.1	6	.005	27
10	38	.1	6	.005	28
10+50	24	.1	4	.005	29
11	29	.1	5	.005	30
11+50	27	.1	5	.005	31
12	50	.1	13	.005	32
12+50	30	.1	7	.005	33
13	36	.1	8	.005	34
13+50	36	.1	8	.005	35
14	32	.1	6	.005	36
14+50	29	.1	8	.005	37
C1900 15 E	28	.1	9	.005	38
rock only	79	.1	63	.005	39
					40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 16, 1980

DATE REPORTS MAILED Oct. 29, 1980

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone:253 - 3158

Cu

Geochemical Analysis of Ag, As, & Hg

Sample Preparation

Soil samples are dried at 75°C and sieved to -80 mesh.
Rock samples are ground to -100 mesh.

Digestion

A .50 gram sample is digested with dilute aqua regia in boiling water bath and diluted to 10 mls with demineralized water.

Determination

Ag is determined by Atomic Absorption from the solution, with background correction.
Cu & As is determined by ICP.
Hg is determinated by cold vapour AA using F & J scientific Hg assembly. An aliquot is add to stannous chloride-hydrochloric acid solution. The reduced Hg is carried by bubbing air through the solution and passed into the Hg cell determined by AA.

Geochemical Analysis of Au

Digestion and extraction

A 10 gram sample which has been ignited over night at 600°C is digested hot with dilute aqua regia, and the clear solution is extracted with Methyl Isobuthyl Ketone.

Determination

Au is determined by AA from the MIBK extractant with background correction.

APPENDIX C

COMPUTER ANALYSIS, GEOCHEMICAL ASSAYS

FREQUENCY, PROBABILITY CURVES

Au, Ag, As, Cu

Assay Statistical System by Positive Systems Ltd. Ph. 438-6452

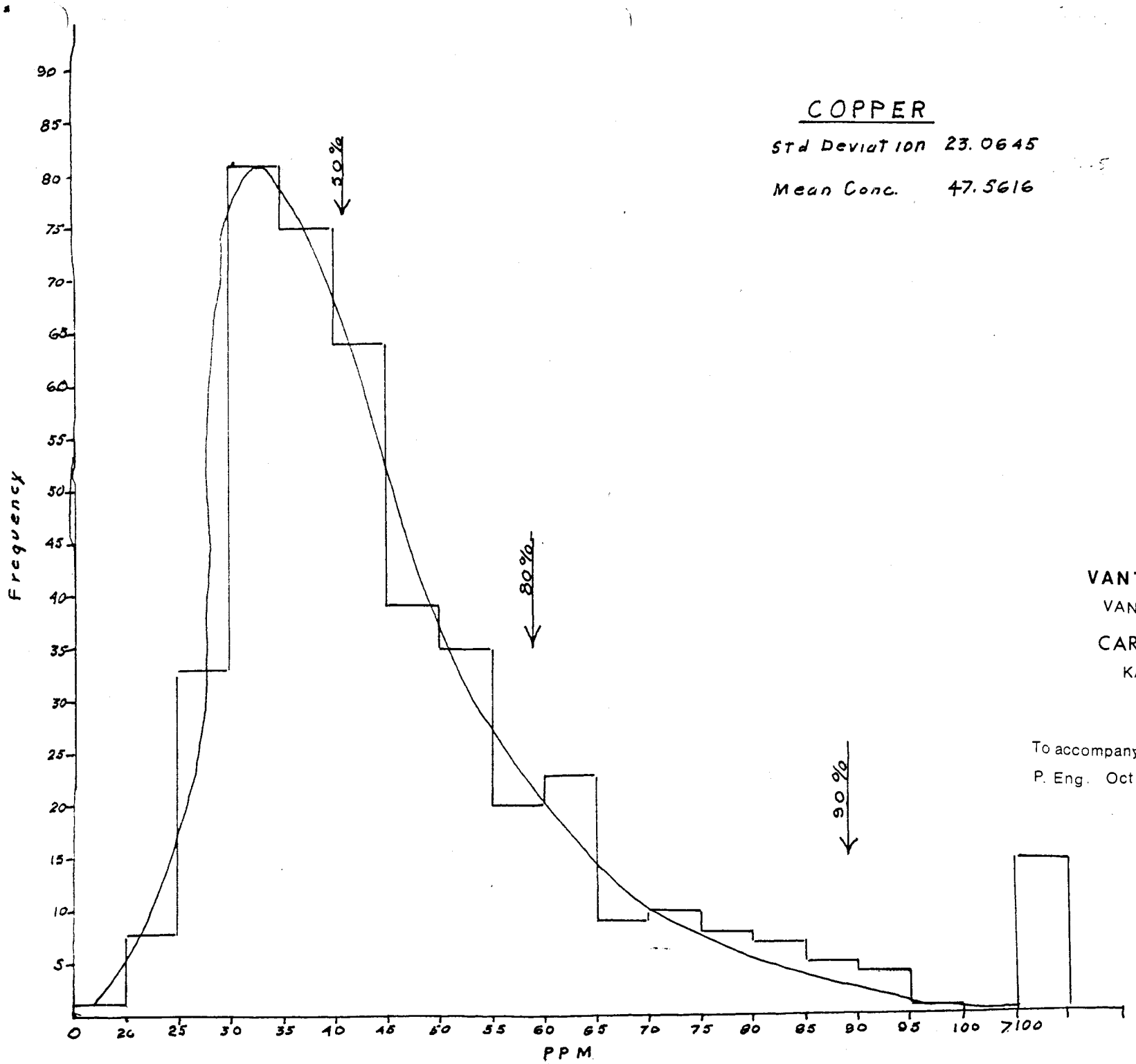
Run at: 80/11/06 for A.F. Roberts, P. Eng.

Mineral name: Cu

CONCEN. RANGE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
< 20	1	1	.228311	.228311
< 25	8	9	1.82648	2.05479
< 30	33	42	7.53425	9.58904
< 35	81	123	18.4932	28.0822
< 40	75	198	17.1233	45.2055 — 50%
< 45	64	262	14.6119	59.8174
< 50	39	301	8.90411	68.7215
< 55	35	336	7.99087	76.7123 80% Threshold
< 60	20	356	4.56621	81.2785
< 65	23	379	5.25114	86.5297
< 70	9	388	2.05479	88.5845 — 70% Anomalies
< 75	10	398	2.28311	90.8676
< 80	8	406	1.82648	92.6941
< 85	7	413	1.59817	94.2922 — 95%
< 90	5	418	1.14155	95.4338
< 95	4	422	.913242	96.347
< 100	1	423	.228311	96.5753
>= 100	15	438	3.42466	100

STANDARD DEVIATION: 23.0645

MEAN CONCENTRATION: 47.5616



VANTEX RESOURCES

VANCOUVER BC

CARLIN 2 CLAIM

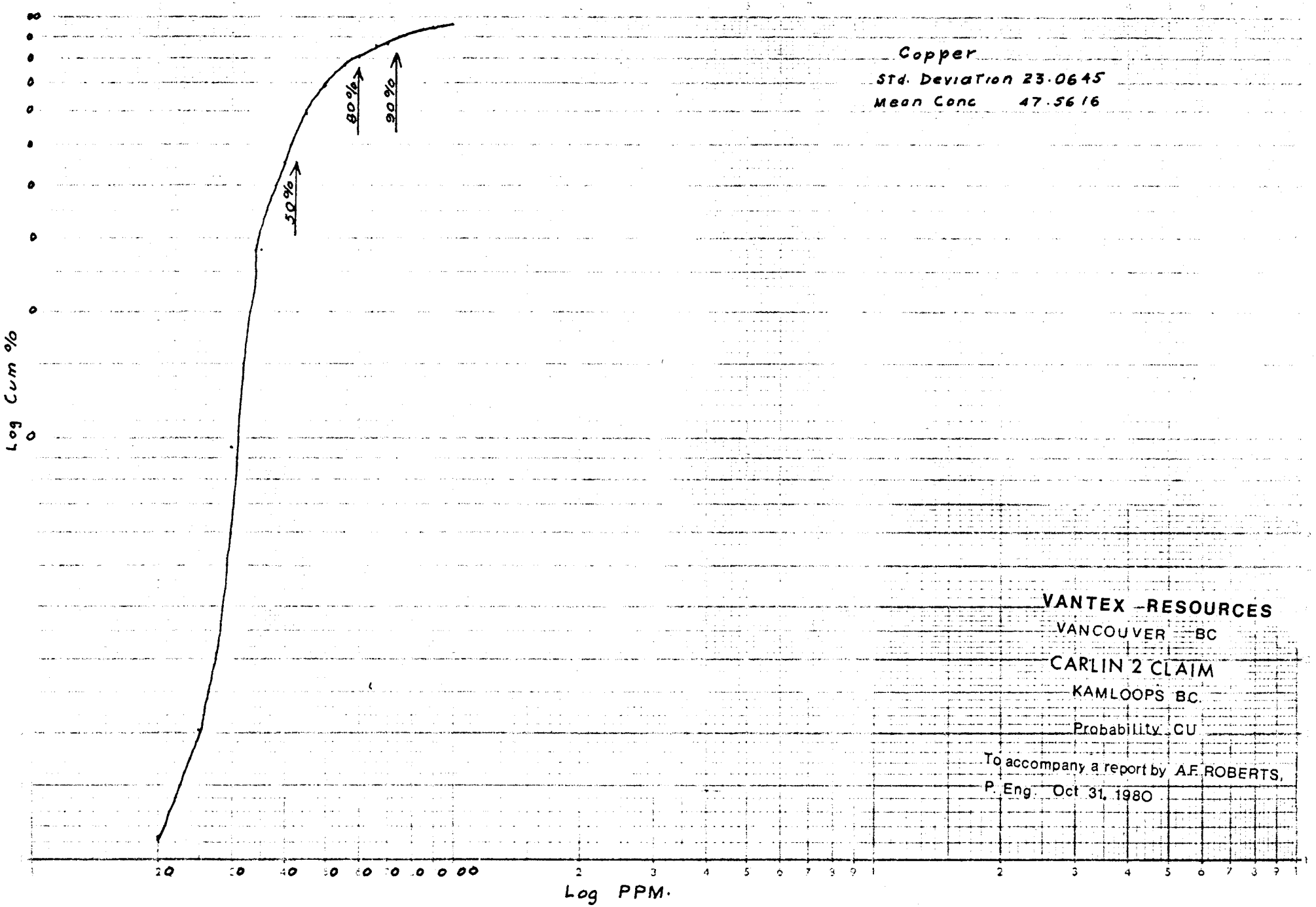
KAMLOOPS BC.

Frequency (%)

To accompany a report by A.F. ROBERTS P. Eng. Oct 31, 1980

G-112 LOGARITHMIC 3X2 CYCLES
SPECIFY TRACING OR DRAWING PAPER

GRAPHIC CONTROLS CANADA LTD.
MADE IN CANADA



Assay Statistical System by Positive Systems Ltd. Ph. 438-6452

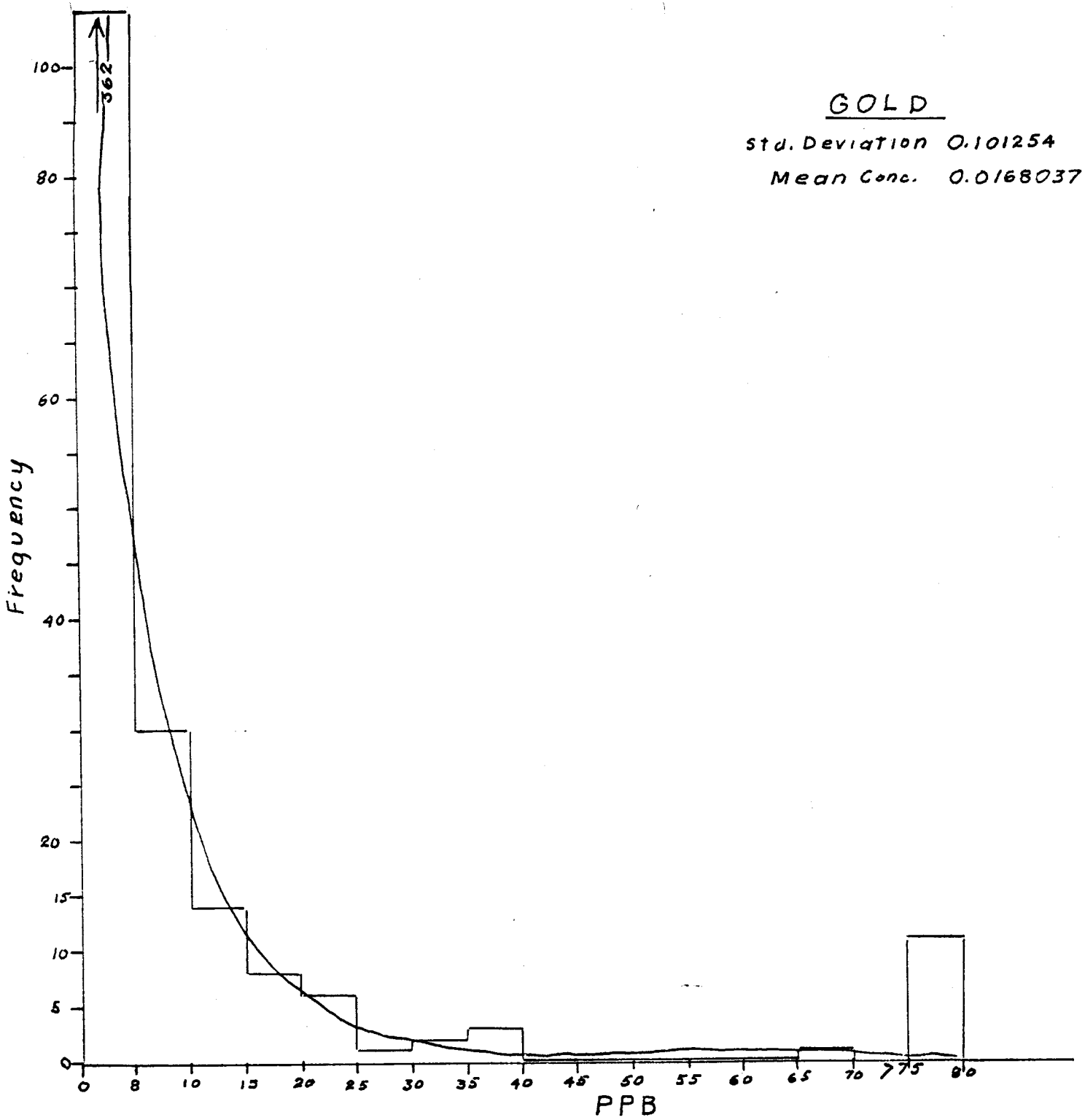
Run at: 80/11/06 for: A.F. Roberts, P. Eng.

Mineral name: Au

CONCEN. RANGE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
< 0	0	0	0	0
< 5E-03	0	0	0	0
< .01	362	362	82.6484	82.6484
< .015	30	392	6.84932	89.4977
< .02	14	406	3.19635	92.6941
< .025	8	414	1.82648	94.5206
< .03	6	420	1.36986	95.8904
< .035	1	421	.228311	96.1187
< .04	2	423	.456621	96.5753
< .045	3	426	.684932	97.2603
< .05	0	426	0	97.2603
< .055	0	426	0	97.2603
< .06	0	426	0	97.2603
< .065	0	426	0	97.2603
< .07	1	427	.228311	97.4886
< .075	0	427	0	97.4886
>= .075	11	438	2.51142	100

STANDARD DEVIATION: .101254

MEAN CONCENTRATION: .0168037



GOLD

Std. Deviation 0.101254

Mean Conc. 0.0168037

VANTEX RESOURCES

VANCOUVER BC

CARLIN 2 CLAIM

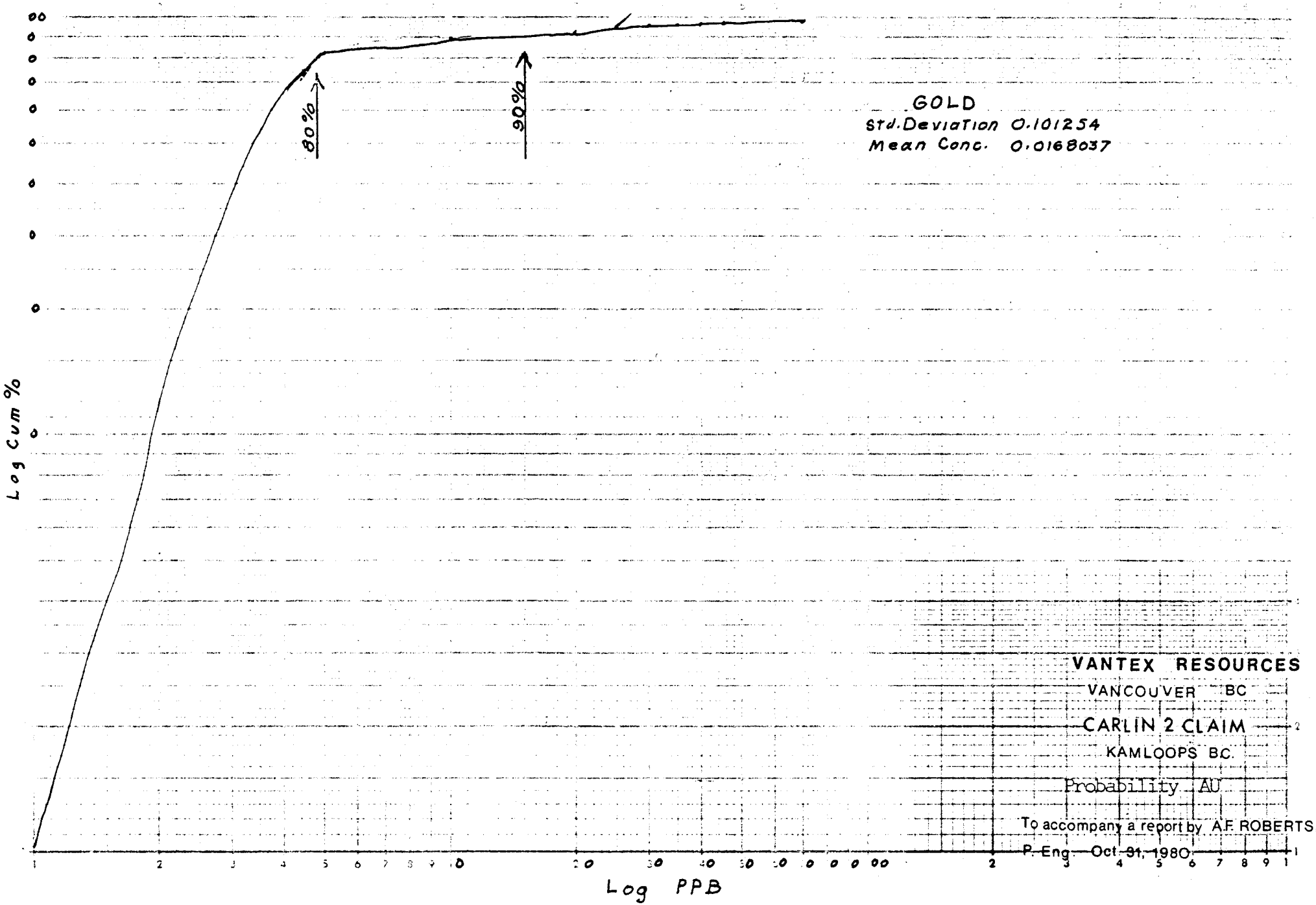
KAMLOOPS BC.

Frequency AU.

To accompany a report by A.F. ROBERT P. Eng. Oct 31, 1980

G-112 LOGARITHMIC 3X2 CYCLES
SPEC-FY TRACING OR DRAWING PAPER

GRAPHIC CONTROLS CANADA LTD.
MADE IN CANADA



Assay Statistical System by Positive Systems Ltd.

Run at: 80/11/06 for A. F. Roberts, P. Eng.

Mineral name: As

CONCEN. RANGE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
< 0	0	0	0	0
< 2	2	2	.456621	.456621
< 4	13	15	2.96804	3.42466
< 6	67	82	15.2968	18.7215
< 8	106	188	24.2009	42.9224
< 10	101	289	23.0594	65.9817
< 12	42	331	9.58904	75.5708
< 14	28	359	6.3927	81.9635
< 16	10	369	2.28311	84.2466
< 18	7	376	1.59817	85.8448
< 20	5	381	1.14155	86.9863
< 22	4	385	.913242	87.8995
< 24	4	389	.913242	88.8128
< 26	4	393	.913242	89.726
< 28	3	396	.684932	90.411
< 30	0	396	0	90.411
< 32	2	398	.456621	90.8676
< 34	1	399	.228311	91.0959
< 36	3	402	.684932	91.7808
< 38	2	404	.456621	92.2374

Assay Statistical System by Positive Systems Ltd.

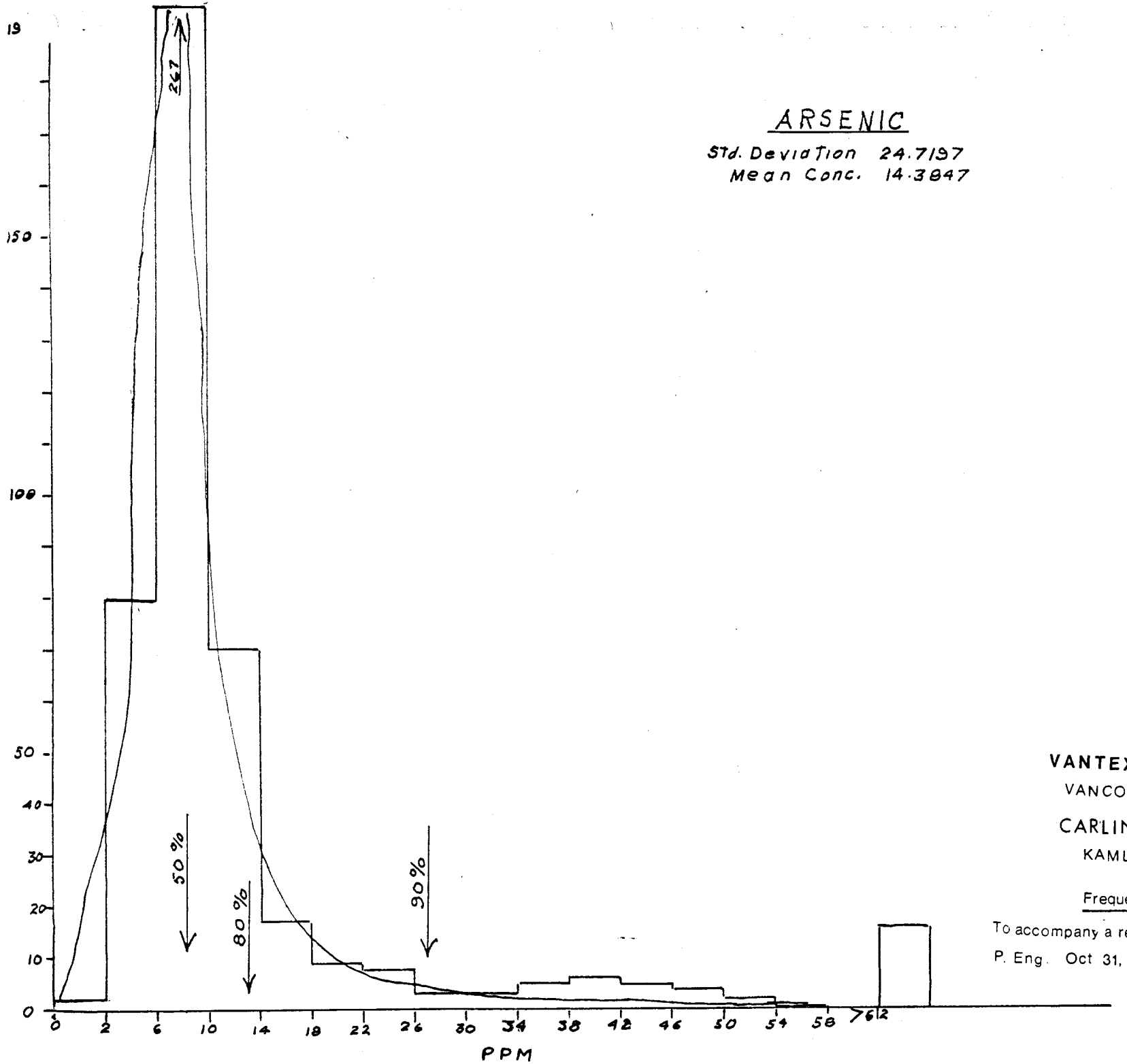
Run at: 80/11/06 for A. F. Roberts, P. Eng.

Mineral name: As

CONCEN. RANGE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
< 40	3	407	.684932	92.9224
< 42	3	410	.684932	93.6073
< 44	3	413	.684932	94.2922
< 46	2	415	.456621	94.7489
< 48	4	419	.913242	95.6621
< 50	0	419	0	95.6621
< 52	2	421	.456621	96.1187
< 54	0	421	0	96.1187
< 56	1	422	.228311	96.347
< 58	0	422	0	96.347
< 60	0	422	0	96.347
>= 60	16	438	3.65297	100

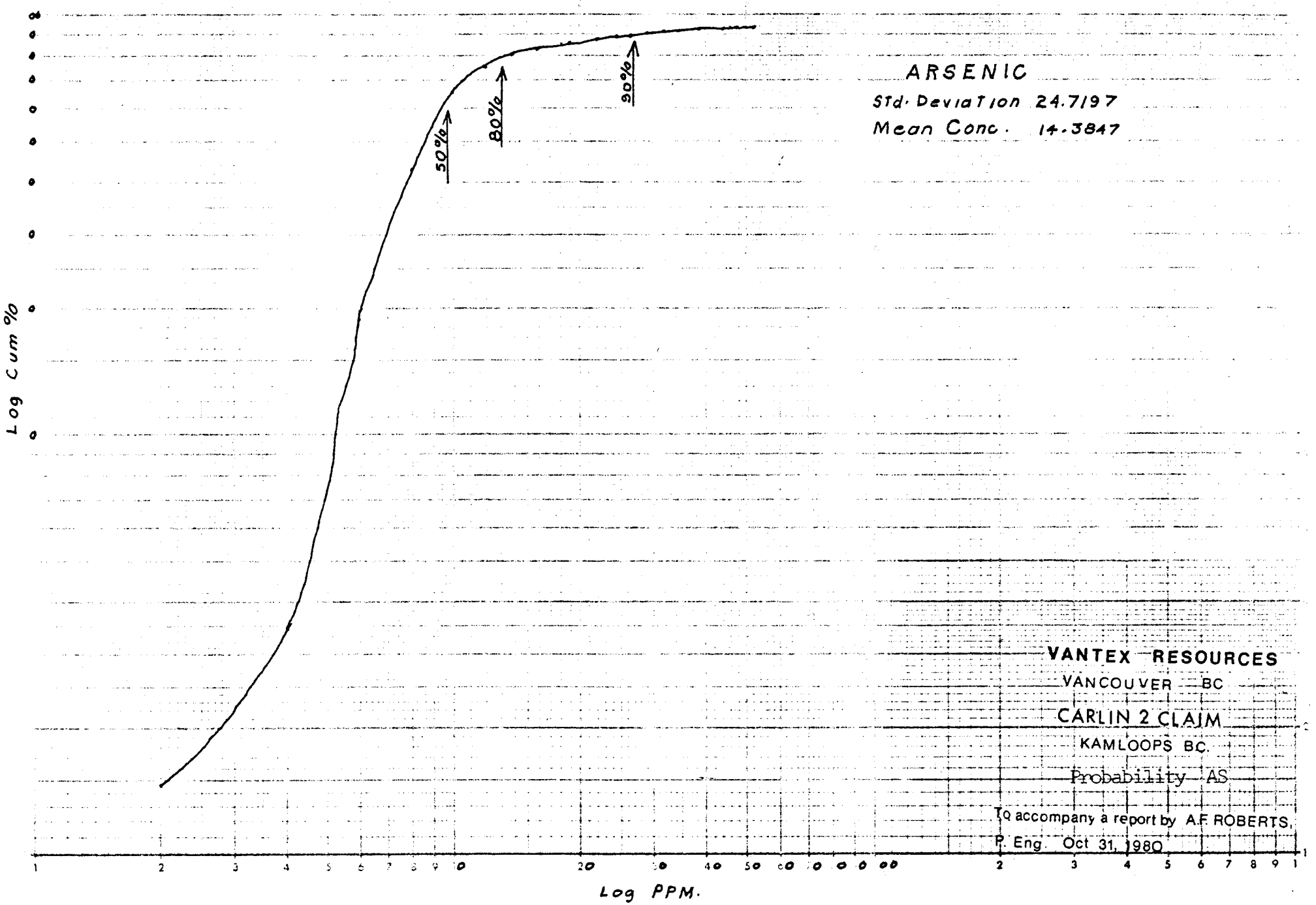
STANDARD DEVIATION: 24.7197

MEAN CONCENTRATION: 14.3847


ARSENIC
Std. Deviation 24.7197
Mean Conc. 14.3847
19
150
100
50
40
30
20
10
0
267
50 %
80 %
90 %
0
2
6
10
14
18
22
26
30
34
38
42
46
50
54
58
>62
PPM
VANTEX RESOURCES
VANCOUVER BC
CARLIN 2 CLAIM
KAMLOOPS BC.
Frequency AS.
To accompany a report by A.F. ROBERTS
P. Eng. Oct 31, 1980

G-112 LOGARITHMIC 3X2 CYCLES
SPECIALLY TREATED FOR DRAWING PAPER

GRAPHIC CONTROLS CANADA LTD.
MADE IN CANADA



Assay Statistical System by Positive Systems Ltd.

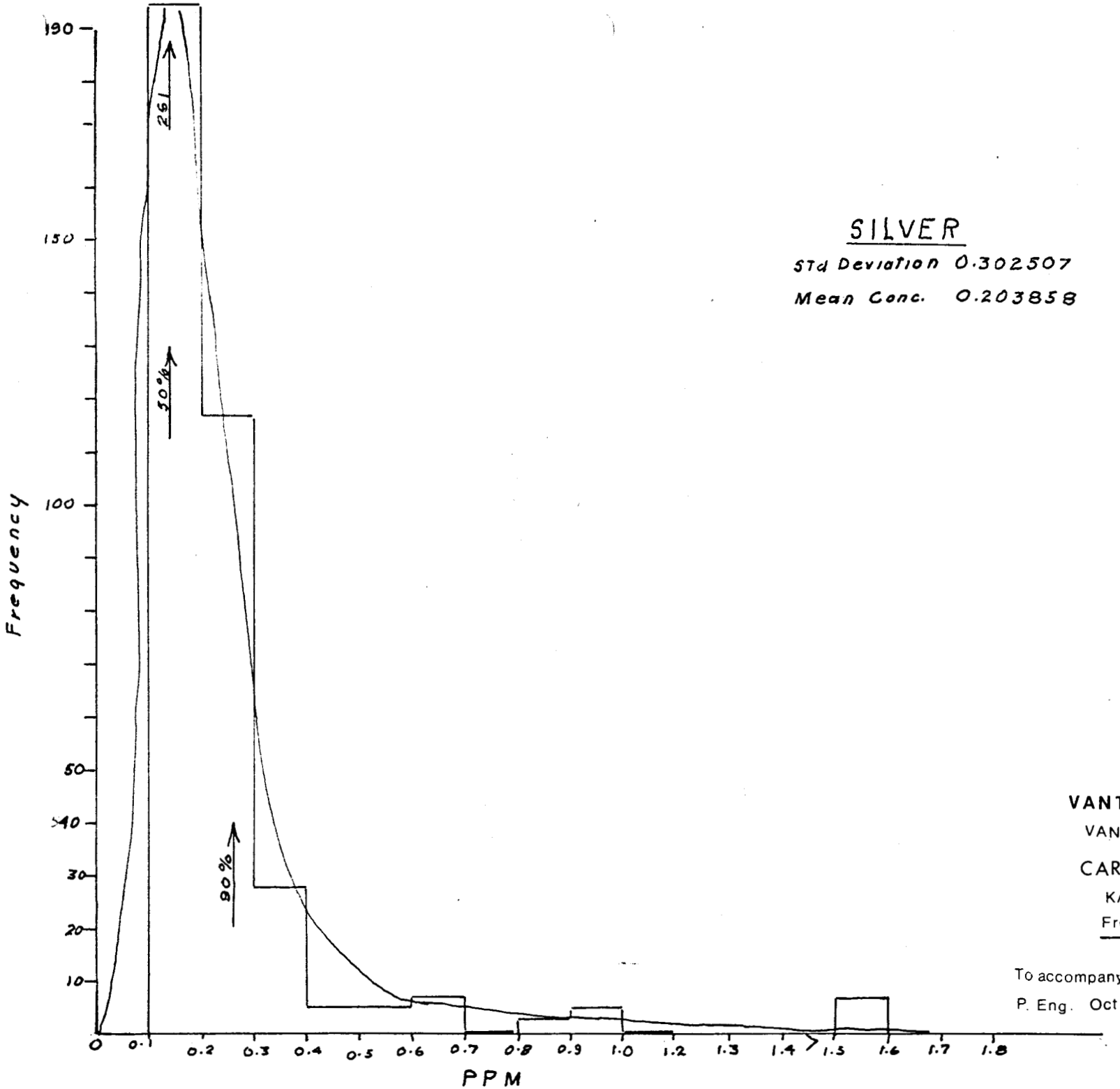
Run at: 80/11/06 for A.F. Roberts, P. Eng.

Mineral name: Ag

CONCEN. RANGE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
< .1	0	0	0	0
< .2	261	261	59.589	59.589
< .3	117	378	26.7123	86.3014
< .4	28	406	6.3927	92.6941
< .5	5	411	1.14155	93.8356
< .6	5	416	1.14155	94.9772
< .7	7	423	1.59817	96.5753
< .8	0	423	0	96.5753
< .9	3	426	.684932	97.2603
< 1	5	431	1.14155	98.4018
< 1.1	0	431	0	98.4018
< 1.2	0	431	0	98.4018
< 1.3	0	431	0	98.4018
< 1.4	0	431	0	98.4018
< 1.5	0	431	0	98.4018
>= 1.5	7	438	1.59817	100

STANDARD DEVIATION: .302507

MEAN CONCENTRATION: .203958



SILVER

Std Deviation 0.302507

Mean Conc. 0.203858

VANTEX RESOURCES

VANCOUVER BC

CARLIN 2 CLAIM

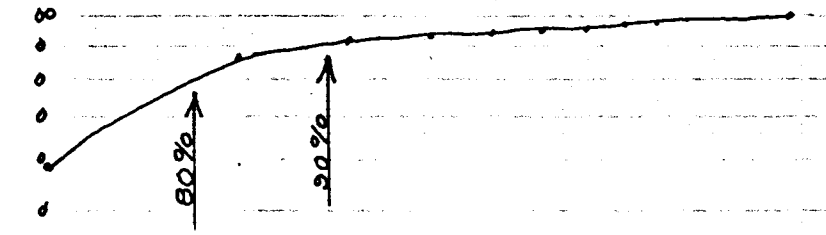
KAMLOOPS B.C.

Frequency AG.

To accompany a report by A.F. ROBERT P. Eng. Oct 31, 1980

G-112 LOGARITHMIC 3X2 CYCLES
SPECIFY TRACING OR DRAWING PAPER

GRAPHIC CONTROLS CANADA LTD.
MADE IN CANADA



SILVER
Std. Deviation 0.302507
Mean. Conc. 0.203858

Log. Cum %

Log PPM

VANTEX RESOURCES
VANCOUVER BC
CARLIN 2 CLAIM
KAMLOOPS BC.
Probability AG
To accompany a report by A.F. ROBERTS.
P. Eng. Oct 31, 1980

APPENDIX D

SABRE MODEL 27

OPERATING INSTRUCTIONS

FRASER FILTER CALCULATIONS

A. F. ROBERTS, P.ENG.
CONSULTING MINING ENGINEER

SABRE ELECTRONIC
INSTRUMENTS LTD.

4245 EAST HASTINGS STREET • BURNABY, B.C. V5C 2J5 • TELEPHONE: 291-1617

SABRE MODEL 27 VLF-EM RECEIVER

The model 27 EM unit was designed originally for a large Canadian mining company to overcome the deficiencies inherent in existing units.

The instrument is so stable and selective that completely reliable measurements can be made on distant stations without interference from nearby powerful transmitters. Stability and selectivity are especially important when making field-strength measurements, which are now being emphasized as a means of locating conductors.

This EM receiver is very compact, requires no earphones or loudspeakers and is housed in a heavy scotch saddle leather case. All of these features add up to make an ideal one-man EM unit of unexcelled electrical performance and mechanical ruggedness.

SPECIFICATIONS

Source of Primary Field - VLF radio stations (12 to 24 KHz.)

Number of Stations - 4, selected by switch; Cutler, Main on 17.8 KHz. and Seattle, Washington on 18.6 KBz. are standard, leaving 2 other stations that can be selected by the user.

Types of Measurement

1. Dip angle in degrees, read on a meter-type inclinometer with a range of $\pm 60^{0}$ and an accuracy of $\pm \frac{1}{2}^{0}$.
2. Field strength, read on a meter and a precision digital dial with an accuracy exceeding 1%.
3. Out of phase component, read on the field strength meter as a residual reading when measuring the dip angle.

SABRE MODEL 27 VLF-EM RECEIVER - (Continued)

Dimensions and Weight

Approx. 9½" x 2½" x 8½"; Weighs 5 lbs.

Batteries

8 alkaline penlite cells. The instrument will run continuously on 1 set of batteries for over 200 hours; So that in normal on-off use, the batteries will last all season. The battery condition under load is shown by pushing a button and reading voltage on the field strength meter.

VLF-EM OPERATING INSTRUCTIONS

The equipment is operated in the usual way as follows:

1. With the instrument held horizontal in front of you, turn around until a null appears on the field strength meter. You should now be facing the station.

2. With the receiver still facing the station, lift it to the vertical position and rotate it slightly in the vertical plane to your right or left until the best null appears on the field strength meter. Record the angle on the inclinometer at which the null appears. This is the DIP ANGLE (Positive or negative).

3. Return the instrument to the horizontal plane and turn around until the field strength meter is at its maximum reading. Set this maximum reading at 100 on the meter and record the reading on the gain control dial. This is the Field Strength Reading.

4. Repeat steps 1, 2 and 3 at each station.

5. To test the batteries turn the power switch on and push the test button. The field strength meter should read above the red mark. Battery life is approximately 200 hours and if the instrument is turned off between readings, the batteries should last for an entire season.

NOTE: An alternative way of measuring field strength is as follows:

PREFERRED METHOD >

Proceed as in step 3, setting the meter to 100. Now push the field strength button (marked FS) and the meter will read 50. (If it doesn't, adjust the gain control slightly). Leave the Gain Control setting where it is and take comparative Field Strength readings at each station by pressing the Field Strength button and recording the meter reading, which will vary from its Base Station Reading as you pass over conductive zones.

SELECTION OF STATIONS:

The stations are selected by the switch on the control panel, with the following abbreviations being used;

C = Cutler, Maine.	Frequency =	17.8 Khz.
S = Seattle, Wash.	Frequency =	18.6 Khz.
A = Annapolis, Md.	Frequency =	21.4 Khz.
H = Hawaii.	Frequency =	23.4 Khz.

The two most useful stations are Cutler and Seattle and these will be used almost exclusively. Note that Seattle is off the air for several hours on Thursdays for maintenance (between 10 A.M. and 2 P.M. usually). Cutler is off the air for the same length of time every Friday.

If Equipment fails to operate:

(a) Check that station is transmitting (see above). If one station appears to be dead, check another one to see if it is operating normally.

(b) Check batteries. If they read low or the reading begins to drop after the test button is held down for a few seconds, replace them. Note also that there are 8 batteries in the instrument and they cannot be individually checked by the test button. If the batteries have been in the unit for a long time it is possible that one is dead or very weak but that the total voltage indicated by the test button is near normal. It is cheap insurance to instal new batteries before starting a big survey.

(c) If unit still fails to operate check that battery connectors are tight, then check wiring of battery connectors for breaks or damage.

REVISED

OPERATING INSTRUCTIONS
SABRE VLF-EM RECEIVER

INTRODUCTION:

The VLF-EM method utilizes electromagnet field transmitted from radio stations in the 15-25 K Hz range. The signals are propagated with the magnetic component of the field being horizontal in undisturbed areas.

Conductivity contrasts in the earth create secondary fields, producing a vertical component and changes in the field strength or amplitude. These conductive areas may be located, and to a degree, evaluated by measuring the various parameters of this electromagnetic field.

The Sabre VLF-EM receiver is tuned to receive any 4 transmitter stations: usually C-Cutler Maine, S-Seattle, H-Hawaii and P-Panama.

The station used in the survey should be selected so that the direction of the signal is roughly perpendicular to the direction of the grid lines which, in turn, should be laid out perpendicular to the regional strike.

MEASUREMENTS:

The Sabre VLF-EM receiver can be used to measure the following characteristics of the VLF field.

(a) Tilt angle of resultant field;

(b) Field strength of (a) horizontal component of field
(b) vertical component of field

Field Procedure

The following procedure should be followed to measure the dip angle of null and the field strength of the horizontal component of the VLF field.

Initial Field Strength Adjustment

Adjust the gain control to provide a suitable relative field strength measurement, as follows:-

(a) hold receiver in horizontal position (meter faces horizontal) and rotate in a horizontal plane until a null is indicated on the F.S. meter; rotate 90° in this horizontal plane (F.S. meter reads maximum)

(b) adjust fain control so that the F.S. meter reads 100

(c) record gain control setting (000 to 999). Close guard over gain control and do not readjust unless a major field strength occurs.

The above procedure should be carried out at the beginning of each day's survey and checked during the day.

Dip Angle Measurement Procedure

1. Hold receiver in horizontal position and rotate in the horizontal plane until a null is observed. This aligns receiver in the field and the operator should be facing southerly or easterly depending on transmitter location.

2. Bring receiver up to the vertical position (meter faces vertical) and rotate the receiver in the vertical plane perpendicular to the transmitter direction until a null or minimum reading is observed on the field strength meter.

3. Hold the receiver in this field strength null position and read the inclinometer in degrees. Record this dip angle of null along with sign (+ or -).

Horizontal Field Strength Measurement Procedure

1. Return receiver to the horizontal position.
2. Reestablish null bearing in horizontal plane.
3. Rotate receiver 90° in the horizontal plane.
4. Depress damp push button switch and observe field strength meter reading for sufficient time to obtain an average F.S. meter reading. (depressed damp switch slows needle action and reduces meter reading by half. The reading will normally range around 50).
5. Record F.S. reading.

Filtering Techneque For VLF-EM Dip Angle Data

The standard profile method of presenting dip angle data may be difficult to interpret. A filtering technique, described by D.C. Fraser 1969 (Geophysics, V.34 No. 6,P. 958-967) enables the data to be presented on a plan map with conductive areas defined by contours.

The following explains the calculation:-

Line	Station	Null		Filter
8N	0 E	+ 3		
			+3+4= +7	
	1 E	+ 4		
			+4+4= +8	+7-(+10)= -3
	2 E	+ 4		
			+4+6= +10	+8-(+13)= -5
	3 E	+ 6		
			+13	+10-(+16)= -6
	4 E	+ 7	+16	-8
	5 E	+ 9	+21	-12
	6 E	+ 12	+28	+3
	7 E	+ 16	+18	+30
	8 E	+ 2	-2	+32
	9 E	- 4	-14	+14
	11 E	- 6	-16	-14-(-7)= -7
			-6-1= -7	
	12 E	- 1		

Fig. 1 is an example of a field sheet showing null angle reading, filtered reading and relative field strength. Fig. 2 shows the field sheet with filter card overlaid. The small window in the side of the card shows the four readings used to calculate the filtered reading, and an arrow showing that the filter reading is to be plotted between station 8E and 9E as indicated in fig. 1. The card is moved down the field sheet, one reading at a time as a guide while carrying out the filtering procedure. Throughout the survey care must be taken to ensure that the filtered data has the correct sign. The positive values only are plotted and contoured while for negative values, only the negative sign is plotted.

Crone suggests in instructions for the Radem VLF-EM, the use of N-S or E-W notation instead of (+ or -) signs, however for filtering a sign must be substituted.

The following convention may be used to ensure the correct sign of filtered data and provide a consistent crossover pattern when studying the profiled null angle data.

1. When taking a reading, always face southerly, on east-west lines, and always face easterly on north-south lines.

2. Record data on field sheets (top to bottom) as follows: on N-S lines record from south to north
: on E-W lines record from west to east

3. Plot and profile dip angle data on plan maps facing map north or map west.

The above convention will provide correct data regardless of the property location relative to the transmitter being used.

J.T. WALKER

MAY 17, 1974

Grid — 024 VLF-EM SURVEY

PROPERTY Glass TRANS Seattle PAGE 1
OPERATOR _____ INSTR. Sapre DATE Nov 11/74

Line	Stn.	Null	Filter	F. S.	
8N	0E	+3		50	
	1E	+4	-3	50	
	2E	+4	-5	52	
	3E	+6	-6	52	
	4E	+7	-8	57	
	5E	+9	-12	52	
	6E	+12	+3	58	
	7E	+16	+30	60	
	8E	+2	+32	65	X over
	9E	-4	+11	62	
	10E	-10	-7	50	
	11E	-6	-13	48	
	12E	-1	-14	48	
	13E	+2	-6	50	
	14E	+4	-1	52	
	15E	+11	+6	50	
	16E	-4	+13	55	X over
	17E	-2	+1	55	
	18E	0	-2	50	
	19E	+1			
	20E	-1			

Fig. 1 Example of Field Sheet

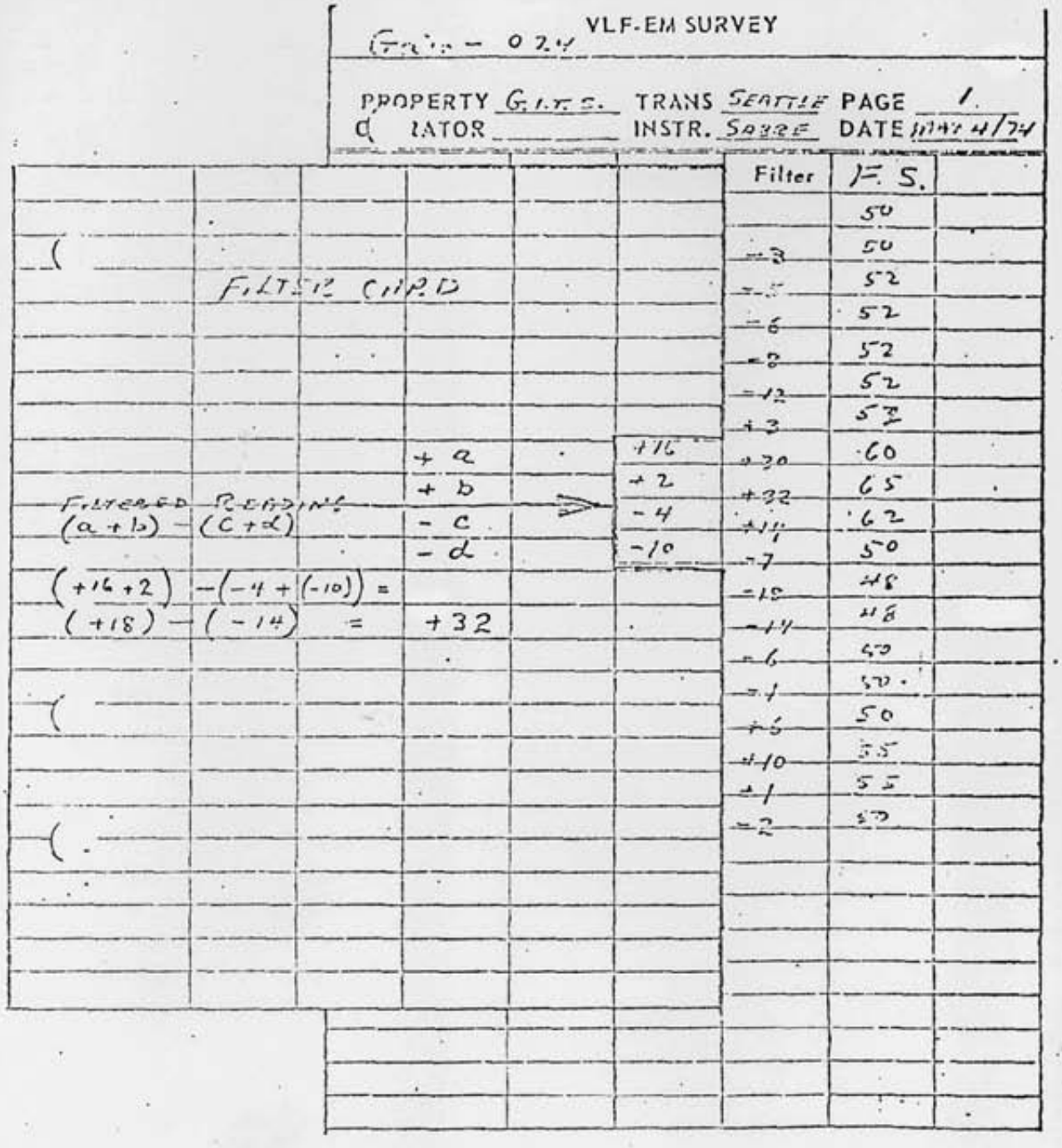


Fig. 2 Field Sheet with Filter Card Overlayed

STATEMENTS OF COSTS

CARLIN 2 CLAIM, KAMLOOPS M.D. 92H/9W

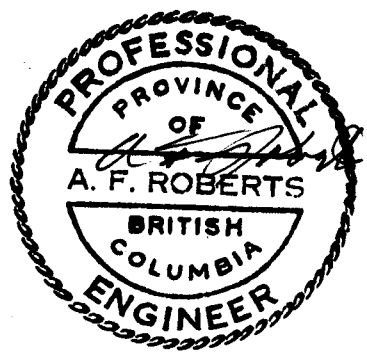
Line Cutting, VLF-EM, Soil Sampling 24 km/$150/km	$ 3,600.00
Sample bags	50.00
Flagging	32.00
E.M. Rental	50.00
Field Supplies	20.75
Drafting	145.85
Board	174.61
Transportation	342.60
Assaying	2,518.50
	$ 6,934.31

Employees [October 3-7 inclusive]
- H. Leis
- G. Smith
- Y. Nadeau
- M. Thompson

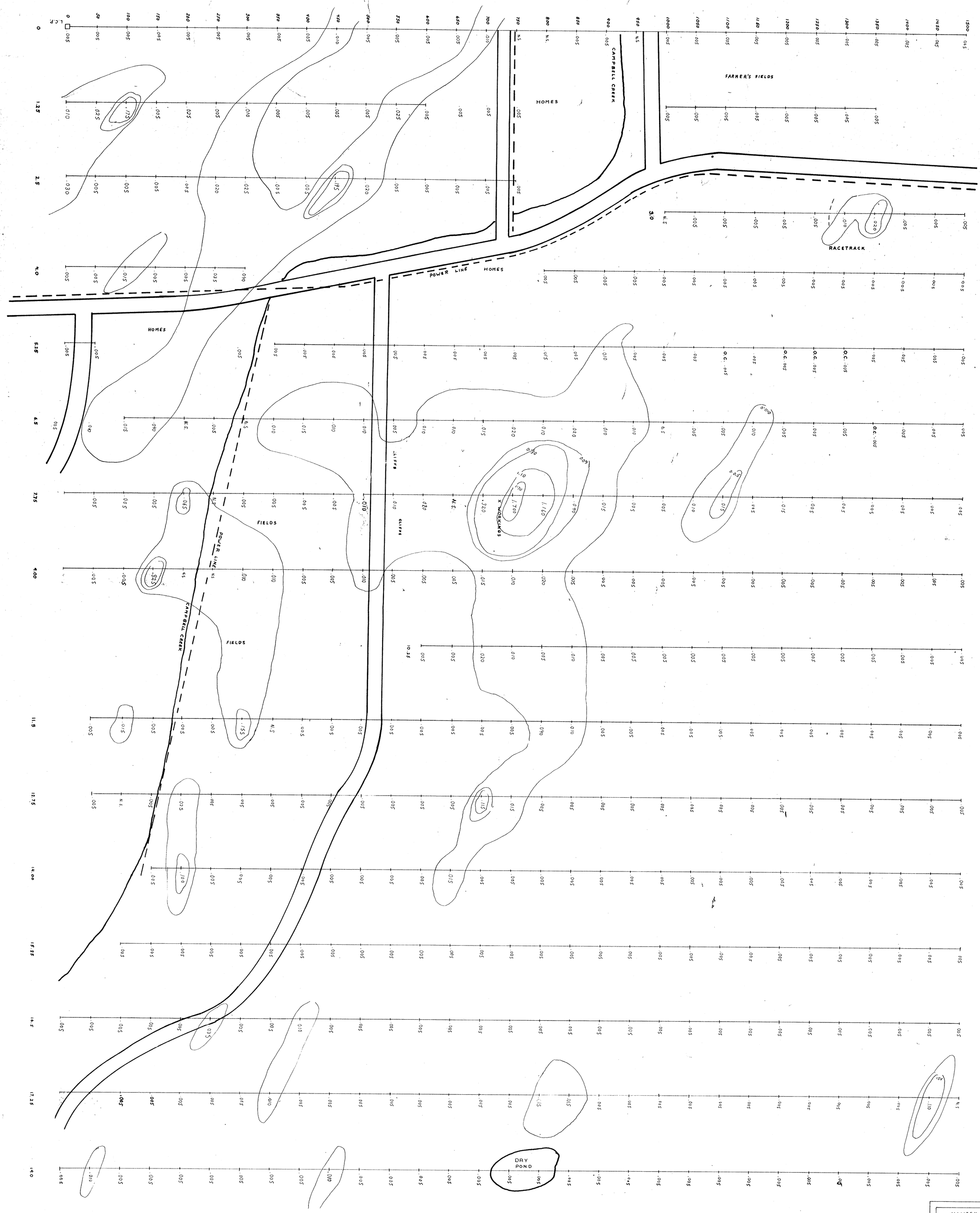
Engineer's Report	2,653.05
Total	$ 9,587.36

Field Costs supplied by Strato Geological.

The above is a full statement of the costs of this report for Vantex Resources Inc.



A. F. ROBERTS, P.ENG.
CONSULTING MINING ENGINEER



VANTEX RESOURCES INC
VANCOUVER B.C.

CARLIN 2 CLAIM
Kamloops M.D. B.C.

NTS 92I 9E

PLATE A-1

AU.

Scale 1cm 25m 0 25 50 100

Drawn by STRATO GEOLOGICAL

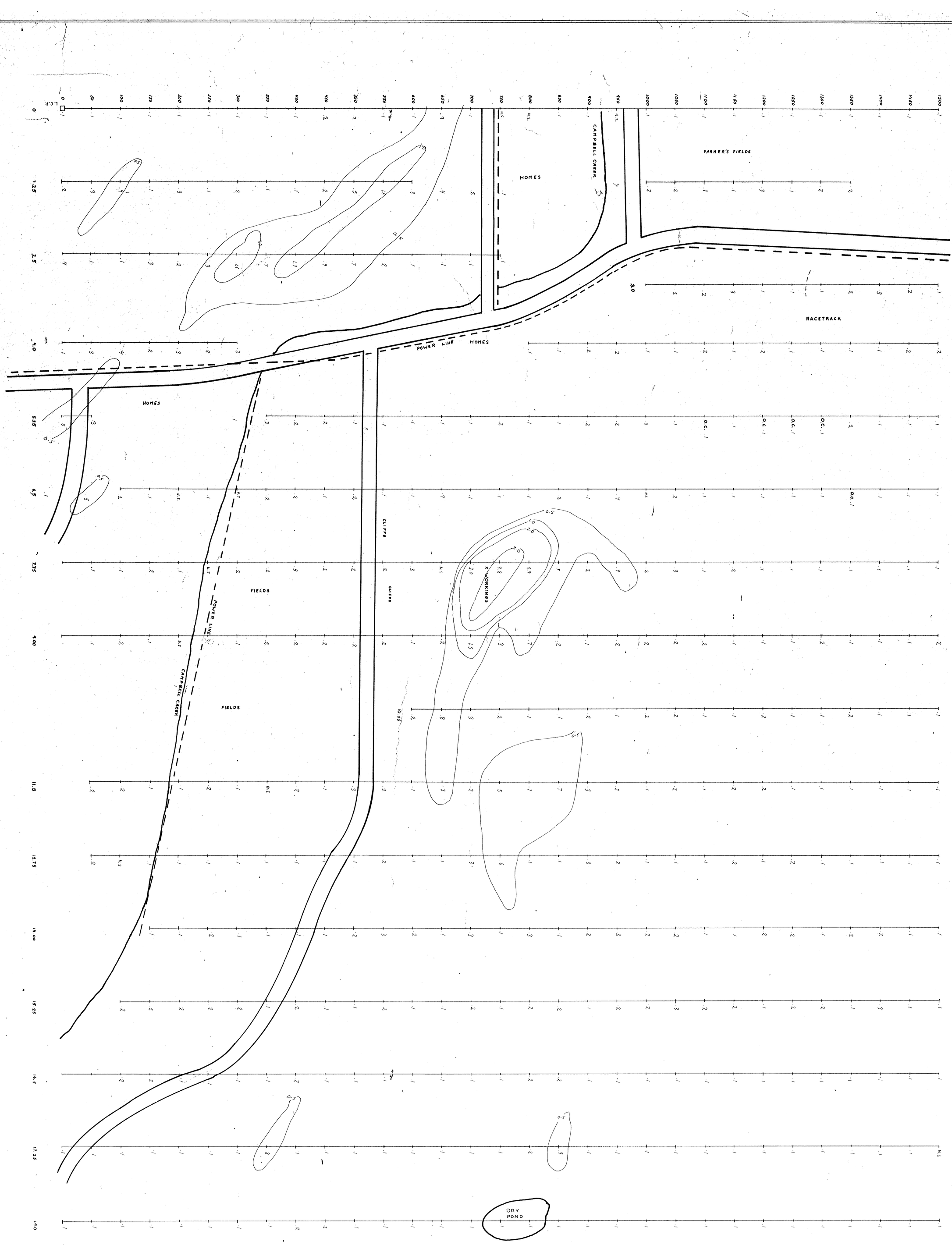
To accompany a report by A.F. ROBERTS P.Eng
Oct. 31, 1980

LEGEND

threshold 0.010
anomaly 0.015
contours as shown

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 8739

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8739
NO.

VANTEX RESOURCES INC
VANCOUVER, B.C.

CARLIN 2 CLAIM
Kamloops M.D. B.C.

NTS 92I 9E

PLATE A—2

AG.

Scale 1cm 25m 0 25 50 100

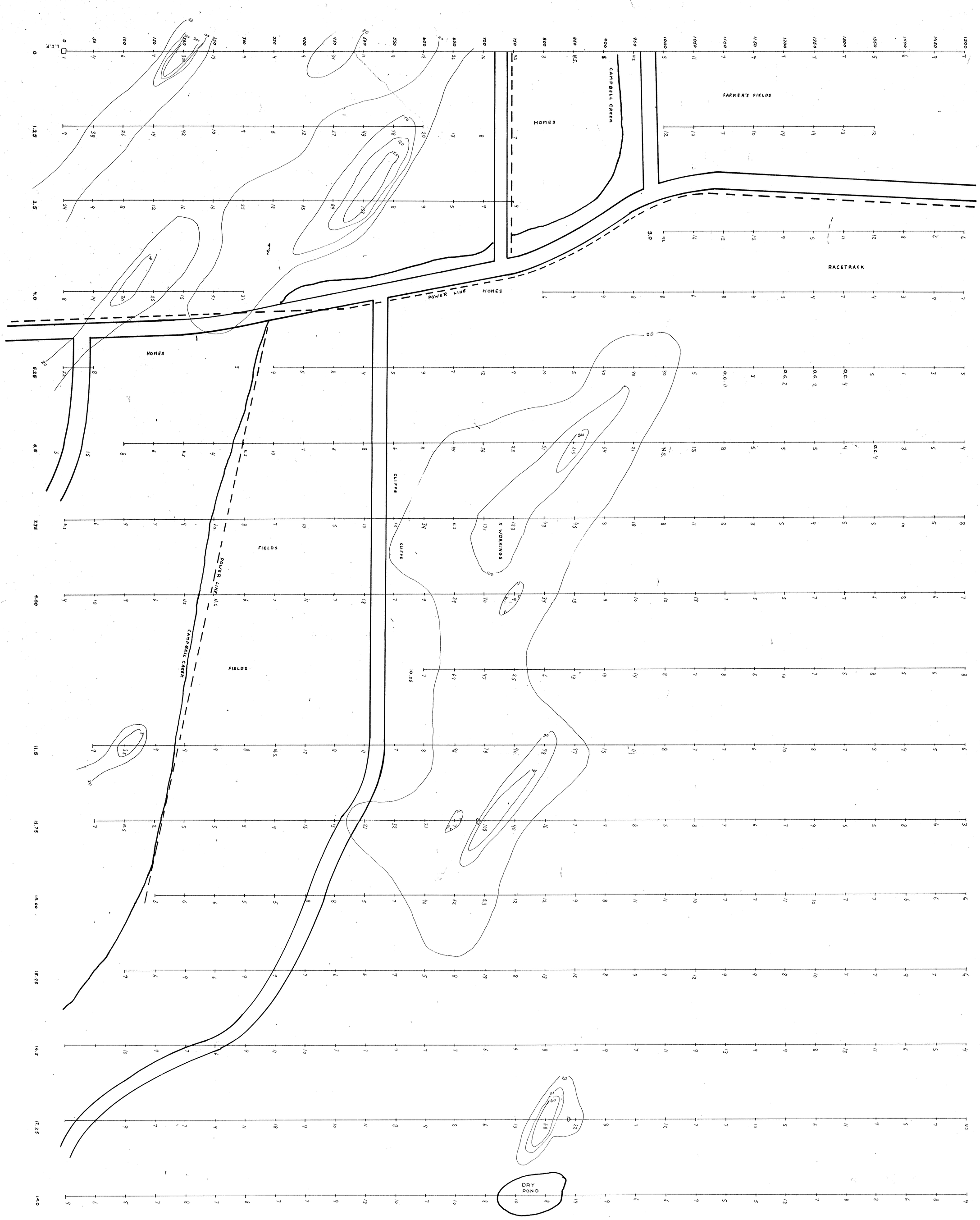
Drawn by STRATOGEOLOGICAL

to accompany a report by A.F. ROBERTS P. Eng
Oct 31, 1980

LEGEND

threshold 0.3
anomaly 0.5
contours as shown

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8739
NO.

VANTEX RESOURCES INC
VANCOUVER BC

CARLIN 2 CLAIM
Kamloops MD BC
NTS 92I 9E

PLATE A — 3
AS.

Scale 1cm 25m 0 25 50 100

Drawn by STRATO GEOLOGICAL

to accompany a report by A F ROBERTS P Eng
Oct 31 1980

LEGEND

threshold 19ppm
anomaly 26 ppm
contours as shown

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

HOMES

CAMPBELL CREEK

FARMER'S FIELDS

HOMES

POWER LINE

HOMES

RACETRACK

HOMES

POWER LINE

CAMPBELL CREEK

FIELDS

FIELDS

CLIFFS

CLIFFS

X WORKINGS

DRY POND

VANTEX RESOURCES INC
VANCOUVER BC

CARLIN 2 CLAIM
[illegible]

PLATE A—4

CU.

Scale 1:2500 0 25 50 100

STRATOGEOLOGICAL

[illegible]

LEGEND

threshold 60 ppm
anomaly 100 ppm
contours as shown

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8739
NO.

VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
Kamloops M.D., B.C.
NTS 92I/9E

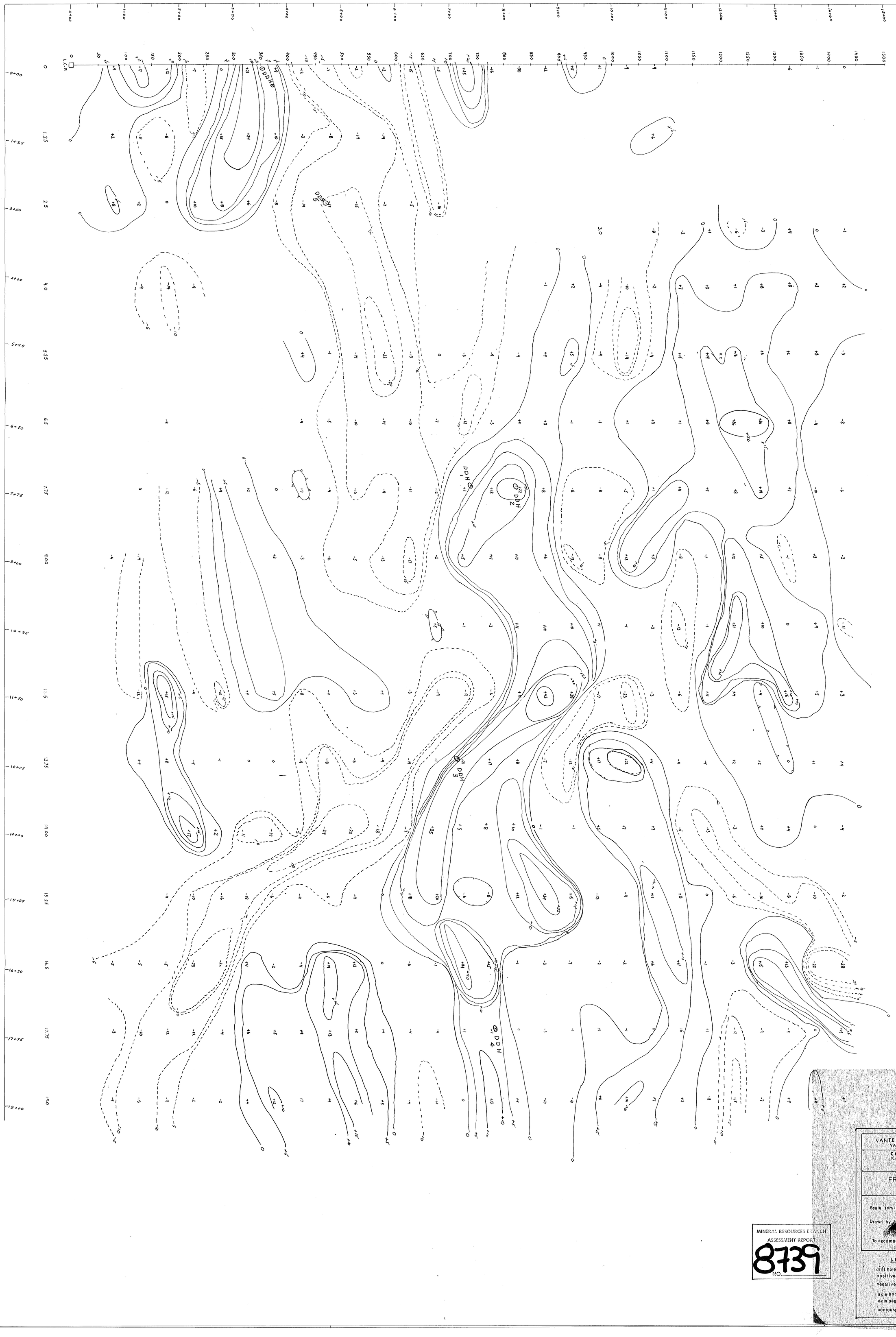
DIP ANGLE
PLATE B

Scale 1cm : 25 m 0 25 50 100

Drawn by STRATA GEOLOGICAL

To accompany a report by A.F. ROBERTS, P. Eng
Oct. 31, 1980

LEGEND
contoured interval 5
depression
rise
axis



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 8739

VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
Kamloops M.D., B.C.
NTS 92I/9E

FRASER FILTER
PLATE C

Scale 1cm: 25m
0 25 50 100
Drawn by [illegible] GEOLOGICAL

To accompany a report by A.F. ROBERTS P. Eng
Oct. 31, 1980

LEGEND
drill hole
positive areas
negative areas
axis positive
axis negative
contoured interval 5

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 3 CLAIM
Kamloops MD. BC.
NTS 92I/8E

TOTAL FIELD
PLATE D

Scale 1cm:25m

Drawn by

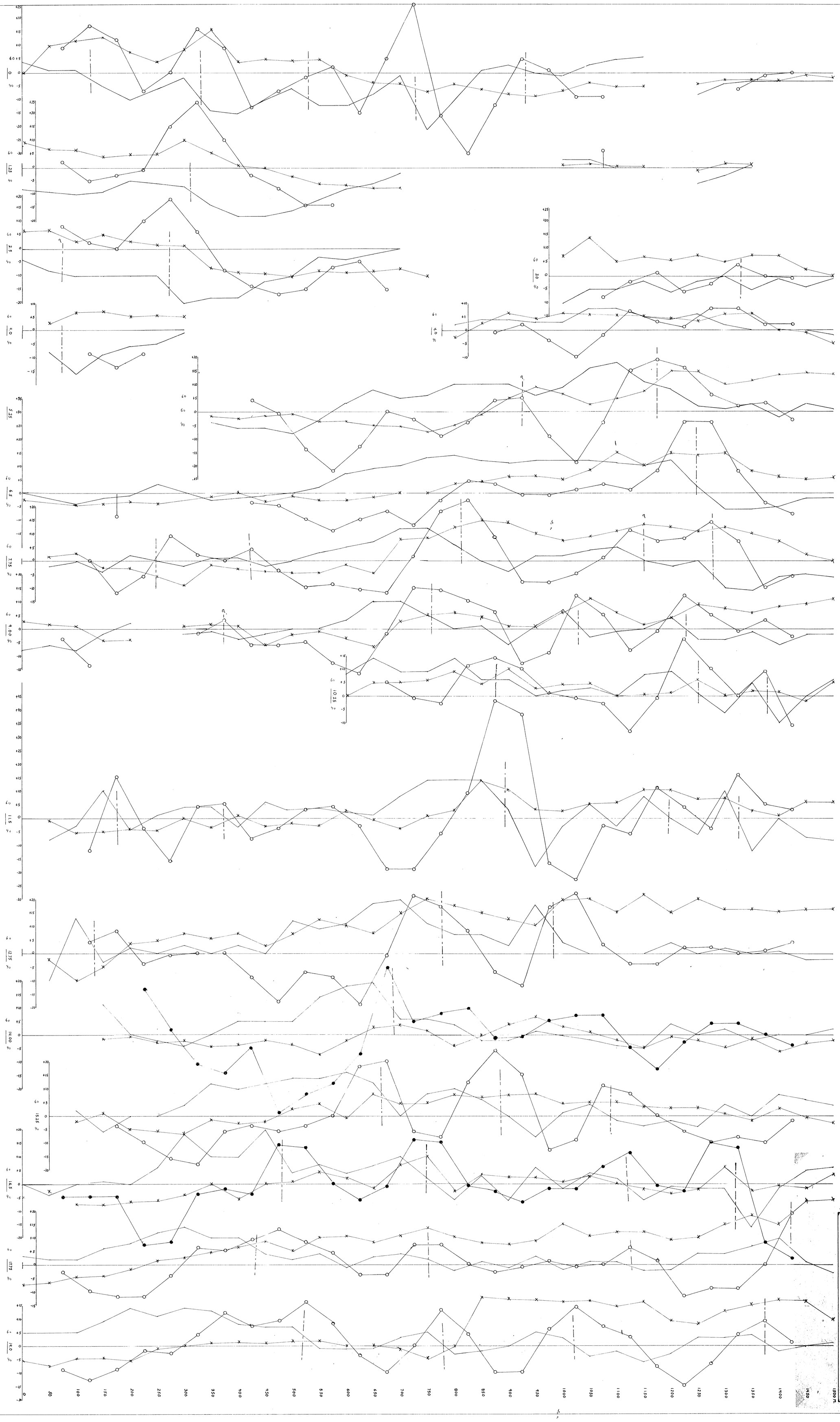
To accompany a report by A.F. ROBERTS P. Eng.
Sept. 21, 1980

LEGEND

conjugate interval 10

depression

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 8739

VANTEX RESOURCES INC.
VANCOUVER, B.C.

CARLIN 2 CLAIM
Kamloops M.D. B.C.

NTS 92I/9E

CROSS SECTIONS
PLATE E

Scale 1cm : 25m (0 25 50 100)

Drawn by STRATO GEOLOGICAL

To accompany a report by A.F. ROBERTS P. Eng
Oct. 31, 1980

LEGEND
AXIS
FIELD
DIP
FRASER

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS