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PROPERTY FILE  
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PHOENIX GEOPHYSICS LIMITED

REPORT ON THE  
GEOPHYSICAL AND GEOCHEMICAL SURVEYS

ON THE

A5-8; B2; B5-8; D10; D12; D14 CLAIMS

ALBERNI MINING DIVISION  
BRITISH COLUMBIA

FOR

COUS CREEK COPPER MINES LIMITED

LATITUDE:  $49^{\circ}13'$

LONGITUDE:  $124^{\circ}54.5'$   
N.T.S. 92F/2W

CLAIMS: A5-8; B2; B5-8; D10; D12; D14

OWNER/OPERATOR: COUS CREEK COPPER MINES LIMITED

BY

Paul A. Cartwright, B.Sc.  
Geophysicist

Philip G. Halliford, Ph.D., P.Eng.  
Geophysicist

Dated

July 7, 1983

## TABLE OF CONTENTS

	PAGE
<b>PART A REPORT</b>	
1. Introduction.....	1
2. Description of Claims.....	2
3. Presentation of Data.....	2
4. Discussion of Results.....	3
5. Summary & Recommendations .....	5
6. Assessment Details.....	6
7. Statement of Cost.....	8
8. Certificate - Paul A. Cartwright, B.Sc.....	9
9. Certificate - Philip G.Hallof, Ph.D.,P.Eng....	10
10. Certificate - John Marsh.....	11

## PART B ILLUSTRATIONS

Plan Maps (in pocket)	Dwg. I.P.P.-B-3028
	Dwg. I.P.P.-B-3028M
	Dwg. I.P.P.-B-3028Cu
	Dwg. I.P.P.-B-3028Ag
I.P. Data Plots	Dwgs. I.P.5831-1 to -5
Location Map	Figure 1
Claim Map	Figure 2

## 1. Introduction

A combined program of geophysical and geochemical surveying has been completed on the A 5-8; B2; B5-8; D10; D12; D14 Claims, Alberni Mining Division, British Columbia, on behalf of Cous Creek Copper Mines Ltd.

The property is located approximately 8 kilometers WSW of the City of Port Alberni, B.C. Access is logging roads from Highway 4 just west of Port Alberni.

The following geological description of the project area was taken from a report provided by the staff of Cous Creek Copper Mines Ltd. R.E. Anderson of Bethlehem Copper Corp. was the author of the report, which is dated August 31, 1977.

"The property is underlain by N-S striking bands of andesite, basalt, limestone, and tuff which have been intruded by diorite and quartz diorite. Skarn and massive sulphide mineralization occur sporadically throughout the central portion of the claim block. Blebs of massive pyrrhotite, pyrite, and minor chalcopyrite are generally found in the andesite in close proximity to the quartz diorite contact. Skarn mineralization is related to the limestone".

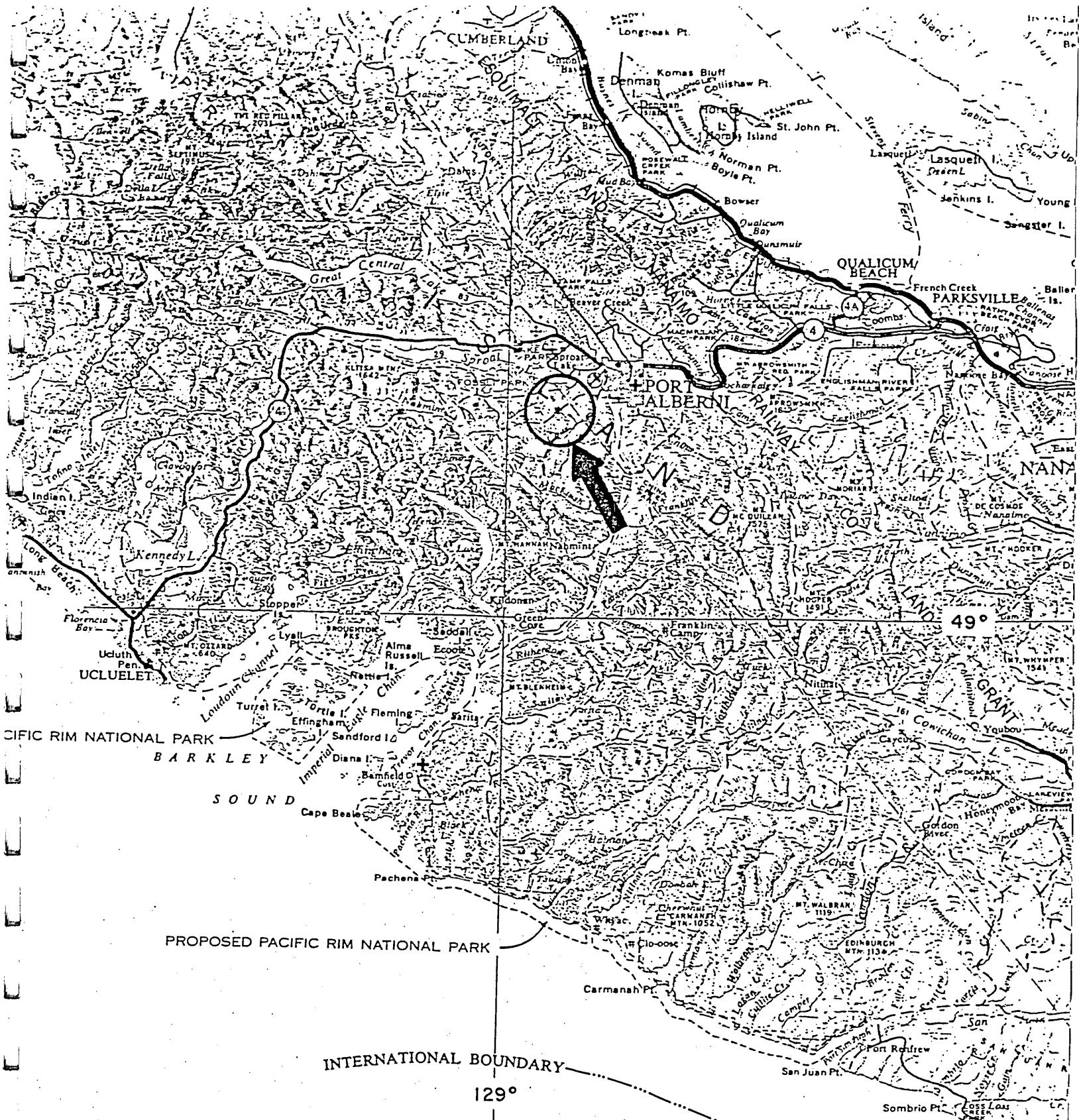
Prospecting by L. Vezina initially located a number of interesting copper showings, and the claims were staked in 1972. During 1976 and 1977, various programs of geological mapping, geochemical surveying, magnetic surveying and VLF electromagnetic surveying were carried out by Craigmont Mines Ltd. and by Bethlehem Copper Corp. The latter also commissioned a short pulse electromagnetic (PEM) survey, and drilled two percussion drill holes to test a resulting anomaly. No source to explain the PEM response is noted in the drill results.

Objective of the present surveys was to detect any conductive and/or magnetic mineralization in the area of the known showings via a more detailed and systematic program than those conducted previously, using VLF-EM and vertical field magnetics. Any significant VLF-EM anomalies were then further evaluated using the IP and Resistivity method in order to differentiate between those VLF responses caused by ionic conductors such as a swamps, and water filled fault zones and those zones caused by conductive metallic mineralization.

A soil geochemical survey was completed over the geophysical grid in order to provide more detailed geochemical data than was available from previous surveys. Bondar-Clegg and Co. Ltd. carried out the analyses. Each sample was sieved to -80 prior to a HNO<sub>3</sub>-HCL hot extraction. Copper and silver values were then determined using the atomic absorption method.

The magnetic survey utilized a McPhar Model M700 vertical field fluxgate magnetometer reading directly in gammas. Data was corrected for diurnal effects.

VLF-EM data was collected using a Phoenix Model VLF-2 receiver measuring the inclination in degrees from the horizontal of the VLF signals transmitted by facilities located near Seattle, Washington, and on the island of Hawaii.



## COUS CREEK COPPER MINES LTD.

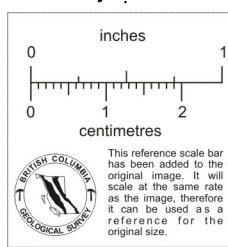
## LOCATION MAP

A5-8;B2;B5-8;D10;D12; D14 CLAIMS  
ALBERNI MINING DIVISION, B.C.

N.T.S. 92 F/2W

SCALE 1:600,000

**FIGURE 1**



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

IP and resistivity data were recorded using a Phoenix Model IPV-1 receiver, and a Phoenix Model IPT-1 transmitter and 2 kw motor-generator. IP effect is recorded directly as Per Cent Frequency Effect (P.F.E.) at operating frequencies of 4.0 Hertz and 0.25 Hertz.

Apparent resistivity values are normalized in units of ohm-meters, while Metal Factor values are calculated according to the formula: M.F. = (P.F.E. x 1000) : Apparent Resistivity.

Dipole-dipole array was used to make the IP measurements, with a basic inter-electrode distance of 25 meters. Five dipole separations were recorded in every case.

Field work was carried out during May and June 1983, under the supervision of John Marsh, geophysical crew leader. His certificate of qualification is included with this report. P. Cartwright was also on the site for 5 days during the course of the survey.

## 2. Description of Claims

The property consists of the claims as outlined below:

Claim Name	Record Number
A 5-8	19539/19542
B2	20683
B 5-8	20686/20689
D 10	20780
D 12	20782
D 14	20784

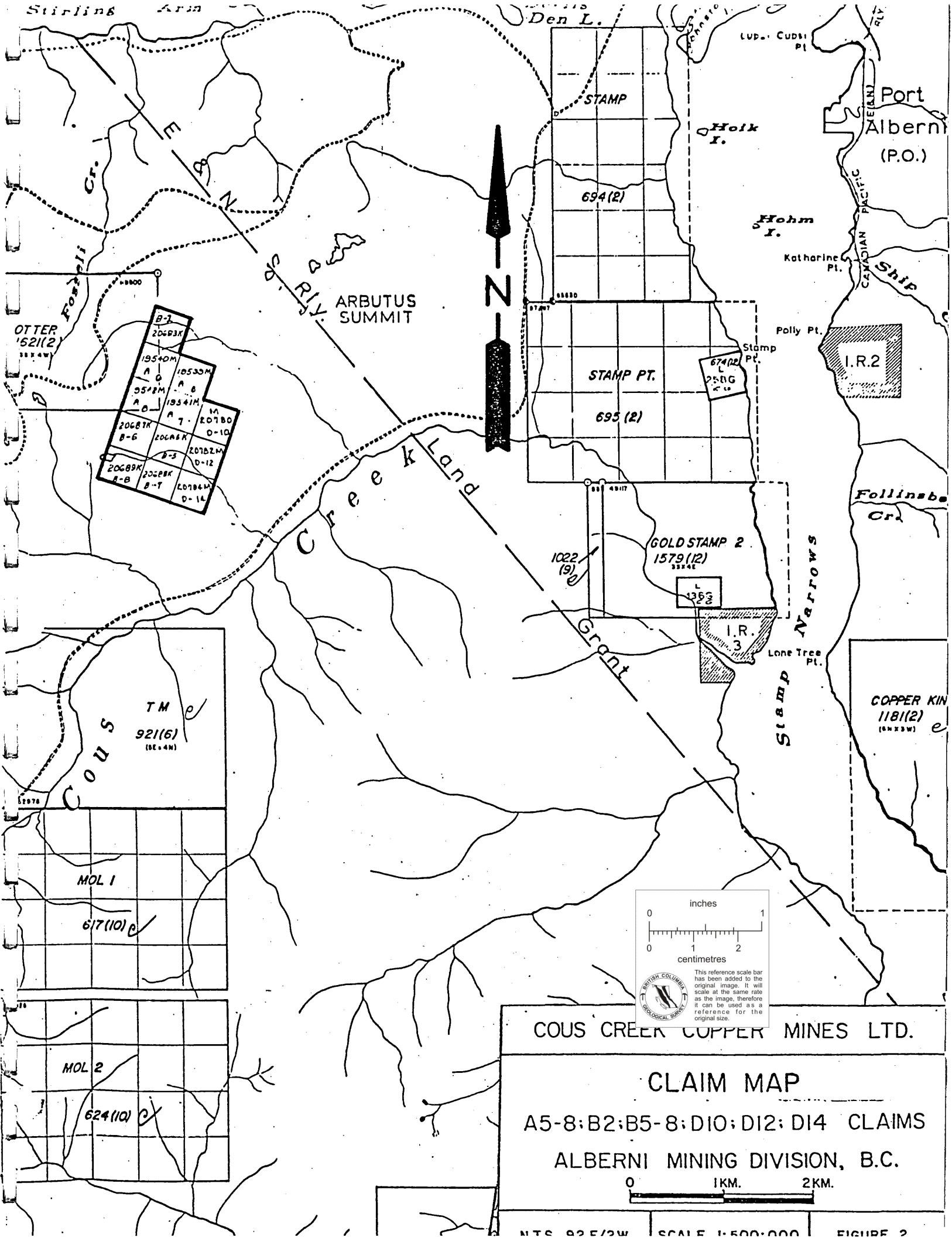
Owner and operator of the claims is Cous Creek Copper Mines Ltd.

## 3. Presentation of Data

The Induced Polarization and Resistivity results are shown on in the psuedo section format as follows:

Line	Electrode Interval	Dwg. No.
0	25 meters	5831-1
100S	25 meters	5831-2
250S	25 meters	5831-3
300S	25 meters	5831-4
350S	25 meters	5831-5

Also enclosed with this report are the following plan maps of the grid at a scale of 1:2,500:



Dwg. I.P.P. -B-3028	IP & VLF-EM Plan
Dwg. I.P.P. -B-3028M	Vertical Field Magnetics Plan
Dwg. I.P.P. -B-3028Cu	Geochemical Plan - Cu
Dwg. I.P.P. -B-3028Ag	Geochemical Plan - Ag

#### 4. Discussion of Results

Four separate anomalous zones are outlined by the VLF-EM results. These trends are shown on plan map DWG. I.P.P.-B-3028, along with the IP and Resistivity interpretation. Each zone is discussed separately below.

##### Zone A

This zone extends along the western edge of the grid, very close to the limestone - volcanic contact, from the vicinity of Line 2 + 00 N, Station 1 + 50 W to the area of Line 1 + 00S, Station 1 + 60N, at which point the source of the zone may veer towards the southwest. As the zone is generally coincident with an area of swampy ground, which could give rise to an unwanted VLF-EM response, the zone was further evaluated on Line 0 and Line 1 + 00S using the IP and Resistivity method. Anomalous polariability values are recorded over the VLF-Em zone on both lines. This indicates that metallic sulphides are present. Depth to the source in each instance is less than 25 meters subsurface.

Of further interest is the presence of a zone of anomalous silver geochemistry values, which correlates very well with VLF-EM Zone A.

##### Zone B

VLF-EM Zone B is interpreted to lie roughly 75 meters east of the baseline, between Line 0 and Line 3 + 50S. The trend passes very close to Pit 2-M and Pit 3-M, which expose mssive sulphide mineralization assaying approximately 0.3% copper, according to a July 22, 1977 Bethlehem Copper Corp. report prepared by C.M. Armstrong.

IP and Resistivity coverage is available over the zone on Line 0, Line 2 + 50S, and Line 3 + 50S. Results from Zone 0 suggest the source of the extreme nothern end of the VLF-EM conductor is a water-filled shear zone. However, the southern part of the VLF-EM zone definitely caused by a metallic source, with the most encouraging IP and Resistivity signature being recorded on Line 2 + 50S. Here, a conductive and polarizable source is detected at a depth of less than 25 meters subsurface.

Anomalous copper values are also recorded in the soils in the vicinity of Pit 2-M an Pit 3-M.

##### Zone C

This very short VLF-EM response is evident only in the data from Line 3 + 00S an Line 3 + 50S. The trend appears to strike from the vicinity of Pit 5-M, towards

the northwest. However, because this location is coincident with a area of swampy ground, the VLF-EM was further evaluated for the presence of metallic sulphides using the IP and Resistivity technique.

No IP anomaly is detected over the VLF-EM anomaly, but a very near surface, flat lying zone of lower resistivity values is evident. Therefore, it appears almost certain that the cause of the VLF-EM Zone C is a swamp.

#### Zone D

VLF-EM Zone D strikes to the southeast of Line 1 + 00S, Station 2 + 25E.

IP and Resistivity surveying was completed on Line 3 + 00S, in order to better define the nature of the source. No anomalous IP effects are recorded; however, an area of lower than background resistivity values is detected over the vicinity of the VLF conductor. This suggests that the source of VLF-EM Zone D is a water-filled fault zone.

Two very short (100 meters) lines were also surveyed using the VLF-EM method over two showings located roughly 900 meters south of Line 9 + 00S, Station 3 + 00E. Marginally anomalous responses are interpreted on both Line 11 + 85S and Line 12 + 50S, in the vicinity of the showings, when using the Seattle transmitter.

The most distinct feature evident in the vertical field magnetic data is a zone of higher than background values lying approximately 125 meters to 175 meters east of the baseline and extending northward from the vicinity of Line 1 + 00N to beyond Line 4 + 00N. Pit 8-M appears to be coincident with the zone. A report prepared by C.M. Armstrong, and dated July 22, 1977 for Bethlehem Copper Corp. states that massive magnetite was the only mineralization seen in Pit 8-M. It therefore appears that the source of the magnetic zone discussed above is primarily magnetite. The absence of anomalous soil geochemistry values in the area of the magnetic anomaly also supports this conclusion.

Pit 1-M is the only other showing that displays a magnetic correlation, with a very narrow, near-surface source being indicated, as the anomaly is essentially a single reading only. Weakly anomalous IP and Resistivity values and copper geochemistry values are also recorded over a very limited area centered on Pit 1-M. A similar single station magnetic high exists on Line 3 + 00N, Station 3 + 00E.

At least two other zones of higher magnetic values are seen striking north-south along the eastern margin of the grid. The most westerly zone appears to abruptly change direction towards the southeast, in the vicinity of Line 1 + 00E.

Anomalous copper soil geochemistry values do correlate with the zone of high magnetic relief. Unfortunately, the sources of the interesting magnetic and geochemistry values do not appear to be concentrated enough to be conductive, based on the VLF-EM results. IP and Resistivity coverage is not available over the more

anomalous parts of the zone.

The soil geochemistry survey also showed copper anomalies associated with the mineralization uncovered by Pit 1-A and Pit 2-A; however, the anomalies do not show strike lengths in excess of 100 meters.

Of greater interest is a silver geochemistry response detected on the western end of Line 4 + 00S. This zone is open towards the south and appears to lie very close to the limestone contact.

##### 5. Summary and Recommendations

The combined geophysical and geochemical program carried out on the A 5-8; B2; B 5-8; D 10; D 12; D 14 Claims for Cous Creek Copper Mines Limited has detected at least two zones which should receive high priority for additional work.

Anomalous IP effects and above background silver geochemical results correlate extremely well with the position of Zone A; a VLF-EM conductor. A diamond drill hole collared on Line 0, Station 1 + 60W, and drilling -45° to the east is definitely recommended to test the source of the response.

VLF-EM Zone B is also confirmed by anomalous IP effects, as well as by above background copper geochemical values. A diamond drill hole spotted on Line 2 + 50S, Station 0 + 65E, and drilling -45° to the east is recommended.

A series of anomalous copper geochemical zones coincident with higher than background magnetic values and striking north-south along the eastern side of the grid lines should also be investigated further. Additional work should first be in the form of IP and Resistivity surveying over the most anomalous portions of the geochemical zone; the eastern ends of Line 2 + 00N, Line 1 + 00N, Line 0 + 50N and Line 3 + 50S. Depending on results, drill targets could then be decided upon.

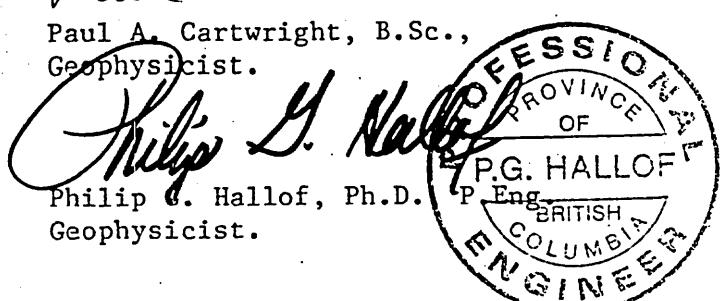
A silver geochemical anomaly outlined on the western end of the most southerly line surveyed should also be better defined by extending the existing geochemical sampling coverage to the south for several hundred meters.

Additional soil samples should also be collected towards the north in order to close off the single sample copper geochemical high outlined on Line 2 + 50N, Station 0 + 25W.

PHOENIX GEOPHYSICS LIMITED

*Paul A Cartwright*

Paul A. Cartwright, B.Sc.,  
Geophysicist.



Dated: 7 July 1983

Expiry Date: February 25, 1984

ASSESSMENT DETAILS

PROPERTY: A 5-8; B2; B 5-8; D 10;  
D 12; D 14 Claims      MINING DIVISION: Alberni

SPONSOR: Cous Creek Copper Mines      PROVINCE: British Columbia  
Ltd.

LOCATION: 8 kilometers WSW of Port  
Alberni, B.C.

TYPE OF SURVEY: Induced Polarization  
and Resistivity, Vertical Field Mag-  
netics, VLF Electro-magnetics, Soil  
Geochemistry (Cu & Ag), Line Cutting

OPERATING MAN DAYS: 31

DATE STARTED: 25 MAY 1983

EQUIVALENT 8 HR. MAN DAYS: 41.33

DATE FINISHED: 5 June 1983

CONSULTING MAN DAYS: 6

NUMBER OF STATIONS:

DRAFTING MAN DAYS: 8

IP & Res	93
Mag	435
VLF	463
Geochem	434

TOTAL MAN DAYS: 55.33

NUMBER OF READINGS:

IP & Res	810
Mag	435
VLF	926
Geochem	868

KILOMETERS OF LINE SURVEYED:

IP & Res	2.18 km
Mag	10.45 km
VLF	10.90 km
Geochem	10.45 km
Line Cutting	11.55 km

CONSULTANTS:

Paul A. Cartwright, 4238 W. 11th Avenue, Vancouver, B.C.  
Philip G. Hallof, Suite 3505, 2045 Lake Shore Blvd., West Toronto, Ontario.

FIELD TECHNICIANS:

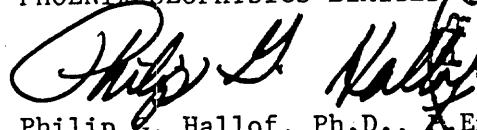
J. Marsh, 200 Yorkland Blvd., Willowdale, Ontario.

P. Gardner, 200 Yorkland Blvd., Willowdale, Ontario.  
K. Corman, 10891 Bromley Place, Richmond, B.C.

DRAUGHTSMEN:

R. Wakaluk, 7886 Vivian Drive, Vancouver, B.C.

PHOENIX GEOPHYSICS LIMITED

  
Philip G. Hallof, Ph.D.,  
Geophysicist.



DATED: 7 July 1983

Expiry Date: February 25, 1984

STATEMENT OF COST

COUS CREEK COPPER MINES LTD.  
Geophysical Surveys, Geochemical Survey, Line Cutting

Crew: J. Marsh, K. Corman, P. Cartwright

Period: May 25, 1983 to May 26, 1983.

Crew: J. Marsh, K. Corman

Period: May 27, 1983 to June 1, 1983

Crew: J. Marsh, K. Corman, P. Gardner

Period: June 2, 1983

Crew: J. Marsh, K. Corman, P. Gardner, P. Cartwright

Period: June 3, 1983 to June 5, 1983

Line cutting .....	11.55 km	)
Magnetics.....	10.45 km	)
VLF-EM.....	10.90 km	)
Geochemistry.....	434 samples	)
IP & Resistivity.....	2 days	)
Reporting on above results		)

IP & Resistivity - 1 extra day @ 850.00	850.00
---	--------

\$ 12,450.00

PHOENIX GEOPHYSICS LIMITED

Philip G. Hallof, Ph.D., P.Eng.(B.C.)  
Geophysicist.



Dated: 7 July 1983

Expiry Date: February 25, 1984

CERTIFICATE

I, Paul A. Cartwright, of the City of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a geophysicist residing at 4238 W. 11th Avenue, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia, B.C., with a B.Sc. Degree.
3. I am a member of the Society of Exploration Geophysicists and the European Association of Exploration Geologists.
4. I have been practising my profession for 13 years.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Cous Creek Copper Mines Ltd. or any affiliate.
6. The statements made in this report are based on a study of published geological literature and unpublished reports.
7. Permission is granted to use in whole or in part for assessment and qualifications requirement but not for advertising purposes.

DATED AT VANCOUVER, BRITISH COLUMBIA this 7th of July 1983

*Paul A. Cartwright*

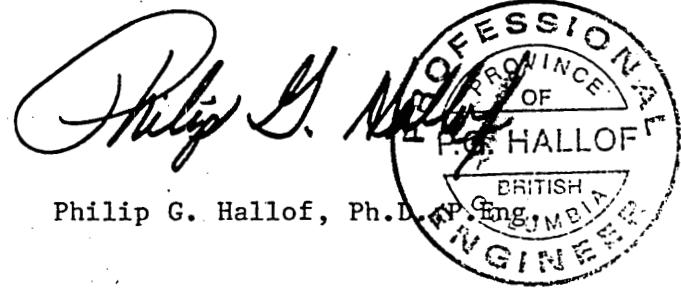
PAUL A. CARTWRIGHT, B.Sc.

CERTIFICATE

I, Philip George Hallof, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at Suite 3505, 2045 Lake Shore Blvd., West Toronto, Ontario.
2. I am a graduate of the Massachusetts Institute of Technology with a B.Sc. Degree (1952) in Geology and Geophysics, and a Ph.D. Degree (1957) in Geophysics.
3. I am a member of the Society of Exploration Geophysicists and the European Association of the Exploration Geophysicists.
4. I am a Professional Geophysicist, registered in the Province of Ontario, the Province of British Columbia and the State of Arizona.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Cous Creek Copper Mines Ltd. or any affiliate.
6. The statements made in this report are based on a study of published geological literature and unpublished private reports.
7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

DATED at Toronto, Ontario this 7th day of July 1983



Expiry Date: February 25, 1984

**CERTIFICATE**

I, John Marsh, of the Municipality of North York, Ontario, do hereby certify that:

1. I am a geophysical crew leader residing at 200 Yorkland Blvd., Willowdale, Ontario.
2. I am a graduate of the City of Norwich Technical College, U.K., ordinary National Certificate (Electrical Engineering).
3. I worked with McPhar Geophysics Company from 1968 to 1975 as a geophysical crew leader.
4. I am presently employed as a geophysical crew leader by Phoenix Geophysics Ltd. of Vancouver, B.C., 214 - 744 W. Hastings Street, Vancouver, B.C.

DATED at Vancouver, British Columbia, this 7th day of July 1983.

John Marsh.

COUS CK PT. ALBERNI LINE 0		X=25H RHO (OHM-M)																		
POLE NUMBER	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
COORDINATE	225H	175H	125H	75N	25H	25E	75E	125E	175E	225E										
INTERPRETATION																				
1	1219	1208	2199	443	299	1370	2470	3167	3800	3098	2153	2548	2676	1455	878	1900				H=1
2	1949	1597	420	666	1010	1449	2125	2508	3469	2955	3069	2066	1927	1451	1070	1210				H=2
3	2059	339	553	1875	1261	1134	1932	2138	3167	3433	2375	2290	1953	1878	1905	2394				H=3
4	591	538	1491	1859	923	922	1512	2019	3375	2835	2536	2112	2250	2905	1280	2069				H=4
5	631	1179	1493	1398	924	865	1721	2357	2250	2799	2520	2578	3667	1905	1650	3575				H=5
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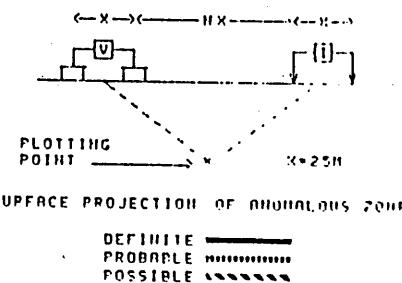
DHG NO - I P - 5411-

## COUS CK COPPER MINES LTD.

A5-B, B2, B3-B, D10, D12, D14 CLAIMS

ALBERNI MINING DIVISION/B C

LINE NO -0



COUS CK PT. ALBERNI LINE 0		X=25H PFE																		
POLE NUMBER	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
COORDINATE	225H	175H	125H	75H	25H	25E	75E	125E	175E	225E										
INTERPRETATION																				
1	2.1	1.9	2.6	8.5	8.4	8.2	7.5	6.5	6.5	3.4	3	3.4	3.2	2.4	1.9	2.1				H=1
2	2.1	4.2	7.9	7.2	6.3	10	6.5	5.4	5.4	3	3.1	2.6	2.4	2.6	2.5	2.9				H=2
3	4.1	9.2	6.6	5.2	9.8	8	5.1	3.7	3	2.3	2.7	2.3	2.8	3.1	3.1	3.1	2.2			H=3
4	9.3	6.5	4.1	8.6	7.3	6.9	3.4	3.4	5	1.9	2.9	2.6	2.9	3.4	2.3	2.1				H=4
5	6.3	5.5	7.1	6.3	6.6	4.7	3.3	3.2	4.5	2.4	3.5	2.9	3.2	2.6	2.5	3.4				H=5
6																				H=6

COUS CK PT. ALBERNI LINE 0		X=25H METAL FACTOR																		
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INTERPRETATION																				
1	1.7	1.6	1.2	19	23	6	3	2.1	1.7	1.1	2.3	1.3	1.2	1.6	2.2	1.1				H=1
2	1.1	2.6	19	11	6.2	7	3.1	2.2	1.6	1	1	1.3	1.2	1.8	2.3	.9				H=2
3	2	27	10	2.8	7.8	7.1	2.6	1.7	1.6	.7	1.1	1	1.4	1.7	1.6	.9				H=3
4	24	12	2.7	4.6	7.9	7.4	2.2	1.7	1.5	.9	1.1	1.2	1.3	1.2	1.0	.7				H=4
5	10	4.7	4.7	4.5	7.1	5.3	1.3	1.4	2	.9	1.1	1.1	.9	1.4	1.3	1.1				H=5
6																				H=6

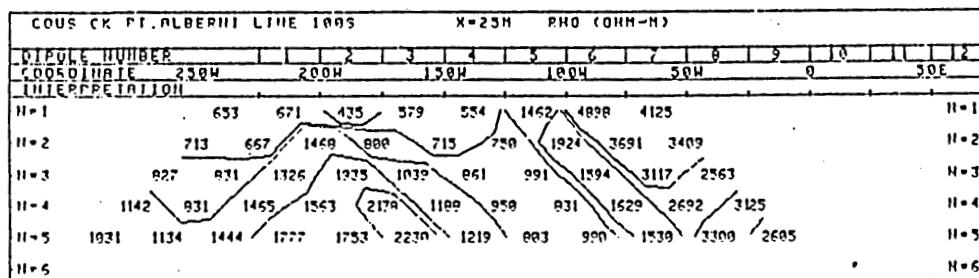
FREQUENCY (HERTZ) DATE SURVEYED MAY 1978 APPROVED

4 0.0 25  
NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5  
-2.-3.-5.-7 5.-10

DATE JUN 18

PHOENIX GEOPHYSICS LTD

INDUCED POLARIZATION  
AND RESISTIVITY SURVEY



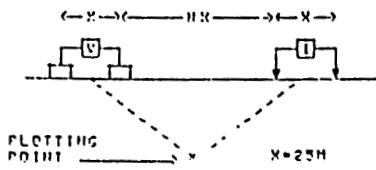
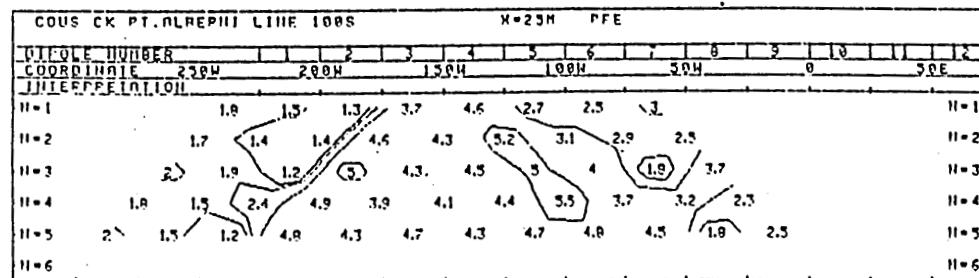
DHG. NO.-I.P.-3831-2

COUS CK COPPER MINES LTD.

A5-B1P2+B3-B1D1+D12+D14 CLAIMS

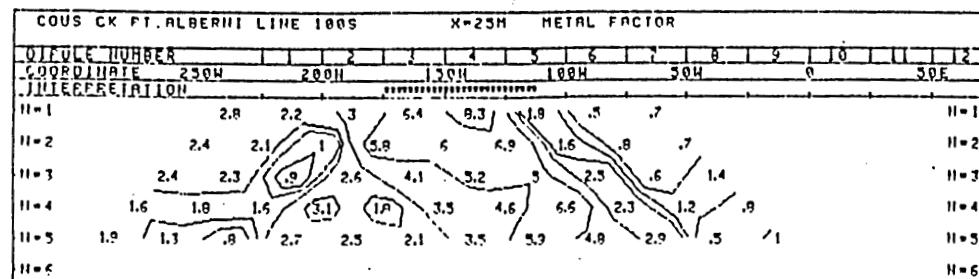
ALBERNI MINING DIVISION H.C.

LINE NO.-1005



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE —————  
PROBABLE ~~~~~~  
POSSIBLE ~~~~~~



FREQUENCY (HERTZ) DATE SURVEYED-JUN-JULY 1997  
4 0-0 25 APPROVED

NOTE- CONTOURS  
AT LOGARITHMIC  
INTERVALS 1,-1.5  
-2,-3,-4,-7 5,-10

DATE JULY 7/97

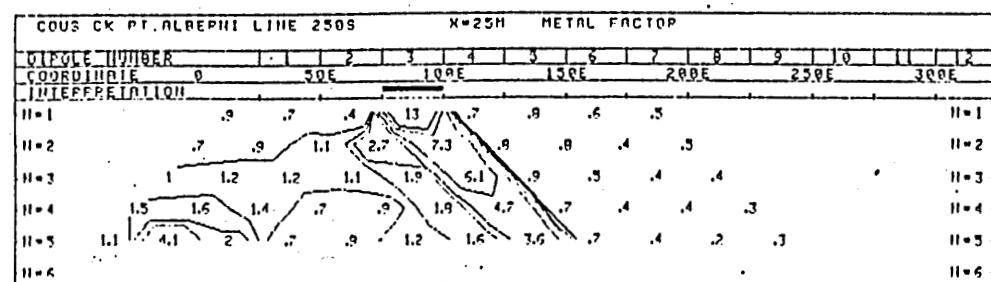
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION  
AND RESISTIVITY SURVEY

DWG. NO - I P - 5931-3

COUS CK PT. ALBREPHI LINE 250S X=25M RHO (OHMM-M)												
DIPOLE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
COORDINATE	0	50E	100E	150E	200E	250E	250E	300E				
INTERPRETATION												
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H=2		3534	2660	2294	1313	750	2522	3750	6250	6800		H=2
H=3		2503	2573	2417	1781	1762	916	3226	3463	6765	7241	H=3
H=4		1629	1583	2847	2293	2295	1970	1314	4259	5779	7199	H=4
H=5		2024	1020	1390	2077	2745	2530	2681	1736	4267	6115	H=5
H=6												H=6

COUS CK PT. ALBREPHI LINE 250S X=25M PFE												
DIPOLE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
COORDINATE	0	50E	100E	150E	200E	250E	250E	300E				
INTERPRETATION												
H=1		2.9	2	1.6	6.8	1.9	2.2	2.8	3.9			H=1
H=2		2.5	2.5	2.5	3.5	3.5	2.1	3.1	2.9	3.1		H=2
H=3		2.5	(3)	2.9	2	3.1	3.6	3	2.6	2.6	3.2	H=3
H=4		2.5	2.5	2.9	1.5	2.1	3.5	6.2	3	2.5	2.6	H=4
H=5		2.3	4.2	2.8	1.5	2.4	1	4.2	6.2	3	2.2	H=5
H=6												H=6

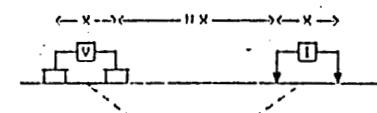


### COUS CK COPPER MINES LTD.

05-B1B2/B5-B1D10/D12/D14 CLAIMS

ALBREPHI MINING DIVISION/B.C.

LINE NO.-250S



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE —————  
PROBABLE -----  
POSSIBLE ~~~~~~

FREQUENCY (HERTZ)  
4 810 25

DATE SURVEYED: MAY-JUN 1981  
APPROVED

Pac

NOTE- CONTOURS  
AT LOGARITHMIC  
INTERVALS 1,-1.5  
-2,-3,-3.5,-7.5,-10

DATE JULY 7/83

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION  
AND RESISTIVITY SURVEY

COUS CK PT. ALBERNI LINE 300S								X=25M	RHO (OHMM-M)	
DIPOLE NUMBER	1	2	3	4	5	6	7	8		
COORDINATE	100E	350E	400E	450E						
<b>INTERPRETATION</b>										
H=1	16K	9716	3279	2177	3802	1025	1253	3131	H=1	
H=2	9092	3567	2248	2993	1396	1313	1510		H=2	
H=3	4671	2903	2915	2373	1794	1393			H=3	
H=4	3589	3625	2699	3191	2034				H=4	
H=5	4277	3556	3754	2915					H=5	
H=6									H=6	

DHG NO.-I.P-5831-4

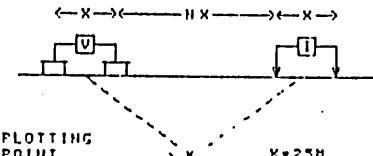
## COUS CK COPPER MINES LTD.

B5-B/B2/B5-B/D10-D12/D14 CLAIMS

ALBERNI MINING DIVISION B.C.

LINE NO.-300S

COUS CK PT. ALBERNI LINE 300S								X=25M	PFE	
DIPOLE NUMBER	1	2	3	4	5	6	7	8		
COORDINATE	100E	350E	400E	450E						
<b>INTERPRETATION</b>										
H=1	2.9	2.7	2.1	2.1	1.9	1.9	1.9	1.5	H=1	
H=2	2.7	2.4	2.6	2.3	1.4	1.8	2.9		H=2	
H=3	2.4	2.9	2.4	1.9	1.5	1.9			H=3	
H=4	2.8	2.6	1.9	1.9	2.2				H=4	
H=5	2.5	2.2	2.5	1.9					H=5	
H=6									H=6	



SURFACE PROJECTION OF RHOMBOIDAL ZONE

DEFINITE —————  
PROBABLE .....  
POSSIBLE ~~~~~~

COUS CK PT. ALBERNI LINE 300S								X=25M	METAL FACTOR	
DIPOLE NUMBER	1	2	3	4	5	6	7	8		
COORDINATE	100E	350E	400E	450E						
<b>INTERPRETATION</b>										
H=1	.2	.3	.6	1	.3	1.7	1.5	.3	H=1	
H=2	.3	.7	1.2	.9	1	1.4	1.9		H=2	
H=3	.5	1.1	.8	.8	.8	1.4			H=3	
H=4	.8	.7	.7	.6	1				H=4	
H=5		.6	.6	.7	.7				H=5	
H=6									H=6	

FREQUENCY (HERTZ) DATE SURVEYED-MAY-JUN 1983  
4 0/0 25 APPROVED

NOTE- CONTOURS  
AT LOGARITHMIC  
INTERVALS. 1,-1.5  
-2,-3,-5,-7.5,-10

DATE JULY 7/83

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION  
AND RESISTIVITY SURVEY

DUG NO - 1 F - 5011-5

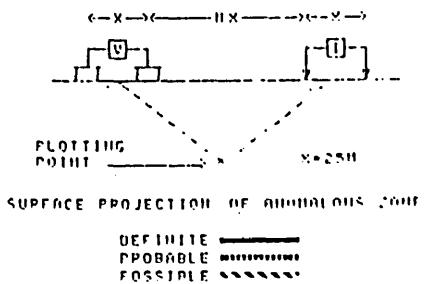
COUS CK PT. ALBERNI LINE 350S														X=25M	RHO (OHM-M)
DIPOLE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
COORDINATE	100H	50H	0	50E	100E	150E	200E	250E							
<u>INTERPRETATION</u>															
H=1	5200	2470	395	775	363	2274	831	6909	3711	4431					H=1
H=2	8635	1275	435	1815	1186	375	1543	1523	6307	4000	5398				H=2
H=3	4000	1995	210	2000	2515	1032	268	2373	2206	2741	4557	3918			H=3
H=4	4074	1108	532	2598	3404	2818	623	342	3305	27647	7447	4896	4154		H=4
H=5	3734	1042	360	4740	3075	3750	1997	925	512	3910	3300	7800	3935	6445	H=5
H=6															H=6

## COUS CK COPPER MINES LTD.

05-8182-83-8-010,012-014 CLOTHS  
ALBERNI MINING DIVISION-B.C

LINE NO - 350S

COUS CK PT. ALBERNI LINE 350S														X=25M	PFE
DIPOLE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
COORDINATE	100H	50H	0	50E	100E	150E	200E	250E							
<u>INTERPRETATION</u>															
H=1	4.6	3.6	1.5	.5	1.5	2.1	2.7	2	1.9	2.5					H=1
H=2	5.6	3.1	1.3	1.5	1.4	2.3	2.7	2.4	1.9	2.6	2				H=2
H=3	5.2	3.2	2.1	2.2	2.5	3.1	2.4	2.8	2.9	2.2	3.3				H=3
H=4	6.9	2.9	3	2.5	0	2.9	2.5	2.7	2.4	3.3	3.2	3.1	3.3		H=4
H=5	7.2	3.6	2.7	3.7	2.2	2.7	3.4	1.9	2.7	3.3	3.4	3.9	3.4	3.2	H=5
H=6															H=6



COUS CK PT. ALBERNI LINE 350S														X=25M	METAL FACTOR
DIPOLE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
COORDINATE	100H	50H	0	50E	100E	150E	200E	250E							
<u>INTERPRETATION</u>															
H=1	9	1.5	3.8	6	4.1	9	3.2	.3	.5	.6					H=1
H=2	.6	2.4	3.4	.8	1.2	6.1	1.6	1.6	.3	.7	.4				H=2
H=3	9	1.6	6.4	.7	1	1.6	12	1	1.2	.4	.5	.6			H=3
H=4	1.1	2.6	5.6	1	.4	1	4	7.3	.7	1.2	.4	.6	.8		H=4
H=5	1.9	3.4	7.1	.7	.9	.7	1.7	2.3	5.3	.8	1	.5	.9	.5	H=5
H=6															H=6

FREQUENCY (HERTZ) : 4 810 25  
DATE SURVEYED: MAY JUN 1971  
APPROVED: JAC

NOTE: CONTOURS AT LOGARITHMIC INTERVALS: 1, 1.5, 2, 3, 5, 10  
DATE: JULY 1971

PHOENIX GEOPHYSICS LTD

INDUCED POLARIZATION  
AND RESISTIVITY SURVEY



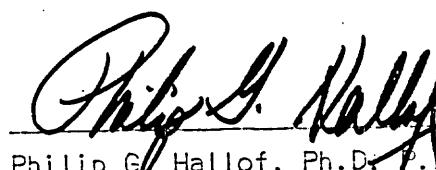
# PHOENIX Geophysics Limited

200 YORKLAND BLVD., WILLOWDALE, ONTARIO, CANADA M2J 1R5

TELEPHONE (416) 493-6350  
Telex: 06-986856  
Cable: PHEXCO TORONTO

I, Philip G. Hallof, Ph.D., P.Eng., hereby consent to the use of my report dated July 7, 1983 on the A5-8; B2; B5-8; D10; D12; D14 Claims, Alberni Mining Division, B.C. owned by Coos Creek Copper Mines Limited, in any filing statement, statement of material facts or prospectus to be used by Coos Creek Copper Mines Limited.

Dated at Toronto  
This 22nd day of July, 1983

  
Philip G. Hallof, Ph.D., P.Eng.   
P.G. HALLOF

Expiry Date: February 25, 1984



# PHOENIX Geophysics Limited

214 — 744 WEST HASTINGS STREET, VANCOUVER, B.C. V6C 1A6

TELEPHONE (604) 669-1070

I, Paul A. Cartwright, B.Sc., hereby consent to the use of my report dated July 7, 1983 on the A5-8; B2; B5-8; D10, D12, D14 Claims, Alberni Mining Division, British Columbia, owned by Cous Creek Copper Mines Limited, in any filing statement, Statement of Material Facts, or Prospectus to be used by Cous Creek Copper Mines Limited.

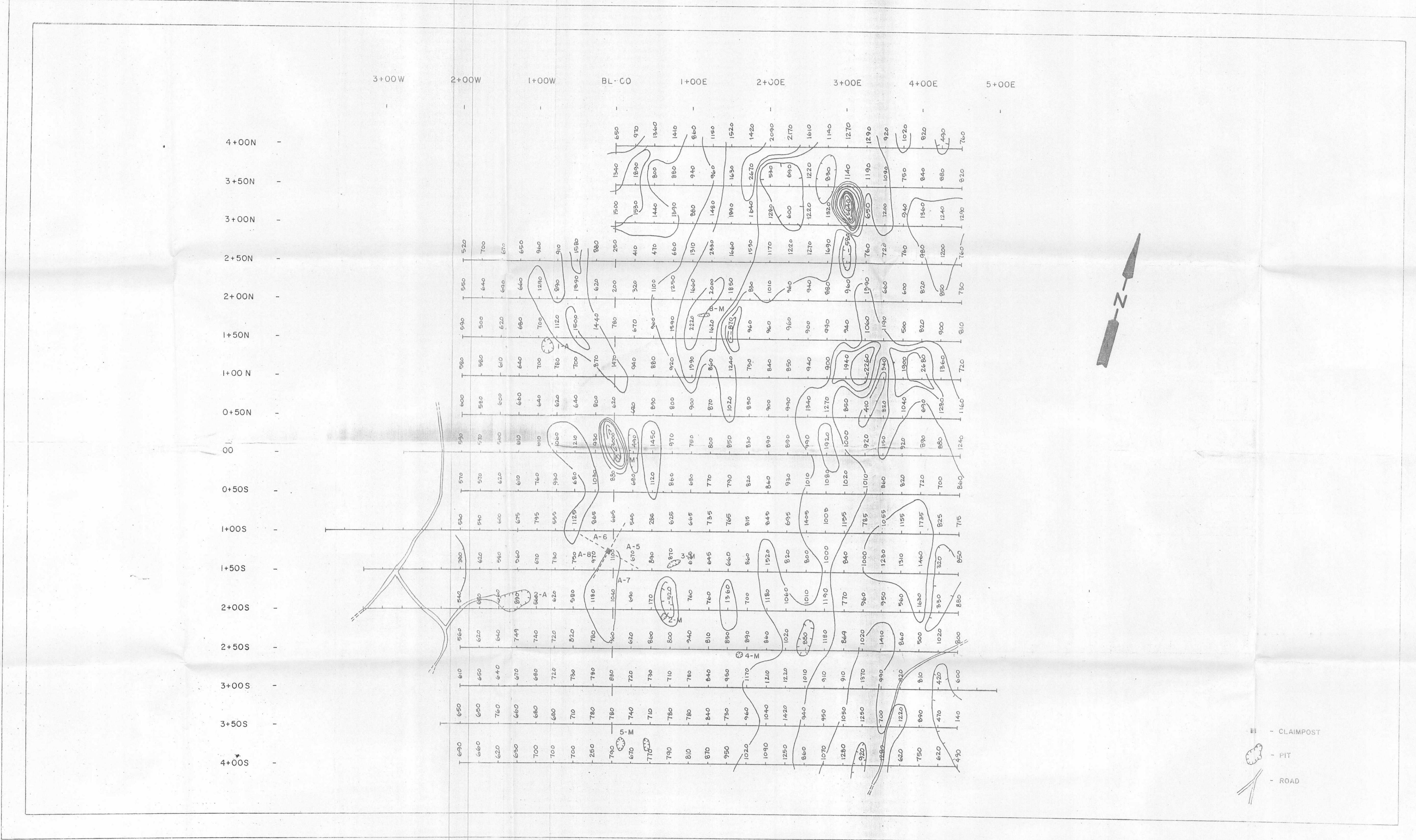
Dated at Vancouver, B.C.  
this 22nd day of July 1983.

Paul A. Cartwright, B.Sc.,  
Geophysicist.

PHOENIX GEOPHYSICS LIMITED

VERTICAL FIELD MAGNETIC PLAN

PLAN MAP

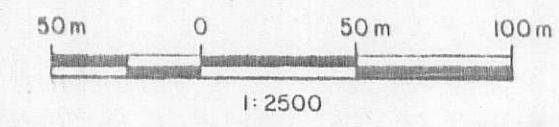


COUS CREEK COPPER MINES LTD.

A5-8:B2:B5-8:D10:D12:D14 CLAIMS

ALBERNI MINING DIVISION, B.C.

SCALE



CONTOUR INTERVAL - 500 GAMMAS

**NOTE**  
TO ACCOMPANY REPORT FOR  
COUS CREEK COPPER MINES LTD.  
ON THE A5-8:B2:B5-8:D10:D12:D14,  
CLAIMS, ALBERNI M.D., B.C. BY  
P.A. CARTWRIGHT B.Sc., GEOPHYSICIST  
AND DR. P.G. HALLOF Ph.D., P.Eng., GEOPHYSICIST.  
DATED July 7/83

DRAWN: R.G.W.  
DATE: JULY 1, 1983.  
APPROVED: PAC

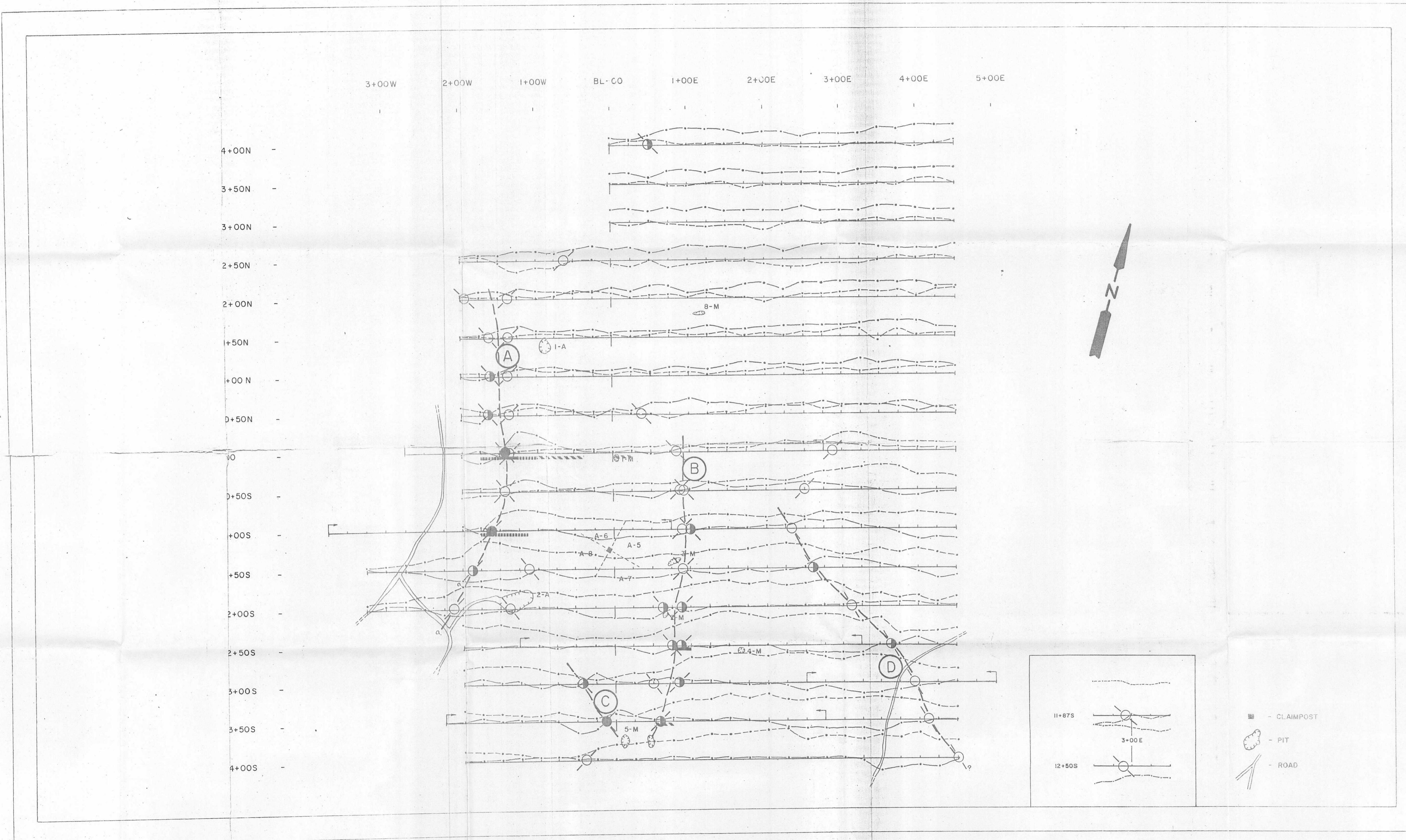
DATE: July 7/83

DWG NO.-LPP-B-3028M.

# PHOENIX GEOPHYSICS LIMITED

A row of 12 small, thin, curved metal needles or pins arranged horizontally. They are slightly tapered at the top and curve downwards towards the right. The needles are set against a plain white background.

PLAN MA



NOTE TO ACCOMPANY REPORT FOR  
COUS CREEK COPPER MINES LTD.  
ON THE A5-8;B2;B5-8;D10;D12;D14,  
CLAIMS, ALBERNI M.D., B.C. BY  
P.A. CARTWRIGHT B.Sc., GEOPHYSICIST  
AND DR. P.G. HALLOF Ph.D., P.Eng., GEOPHYSICIST.  
DATED: JULY 7/83

I.P. - SURFACE PROJECTION  
OF ANOMALOUS ZONE

DEFINITE [REDACTED]

PROBABLE [REDACTED]

POSSIBLE [REDACTED]

ARROWS SIGNIFY EXTEN-  
OF COVERAGE

# COUS CREEK COPPER MINES LTD.

A5-8;B2;B5-8;D10;D12;D14 CLAIMS

ALBERNI MINING DIVISION, B.C.

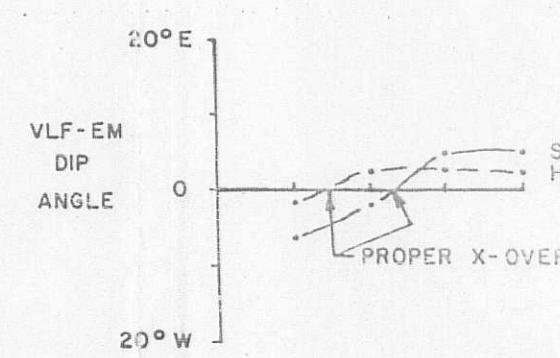
SCALE

50 m 0 50 m 100

1:2500

VLF EM. - ANOMALOUS CLASSIFI		
SEATTLE - Tx.		HAWAII
	DEFINITE	
	PROBABLE	
	POSSIBLE	

LOCATION OF CONDUCTOR  
AXIS



DRAWN: R.G.W.  
DATE: JULY 1, 1983.  
APPROVED: *Pac*

DATE: July 7/83

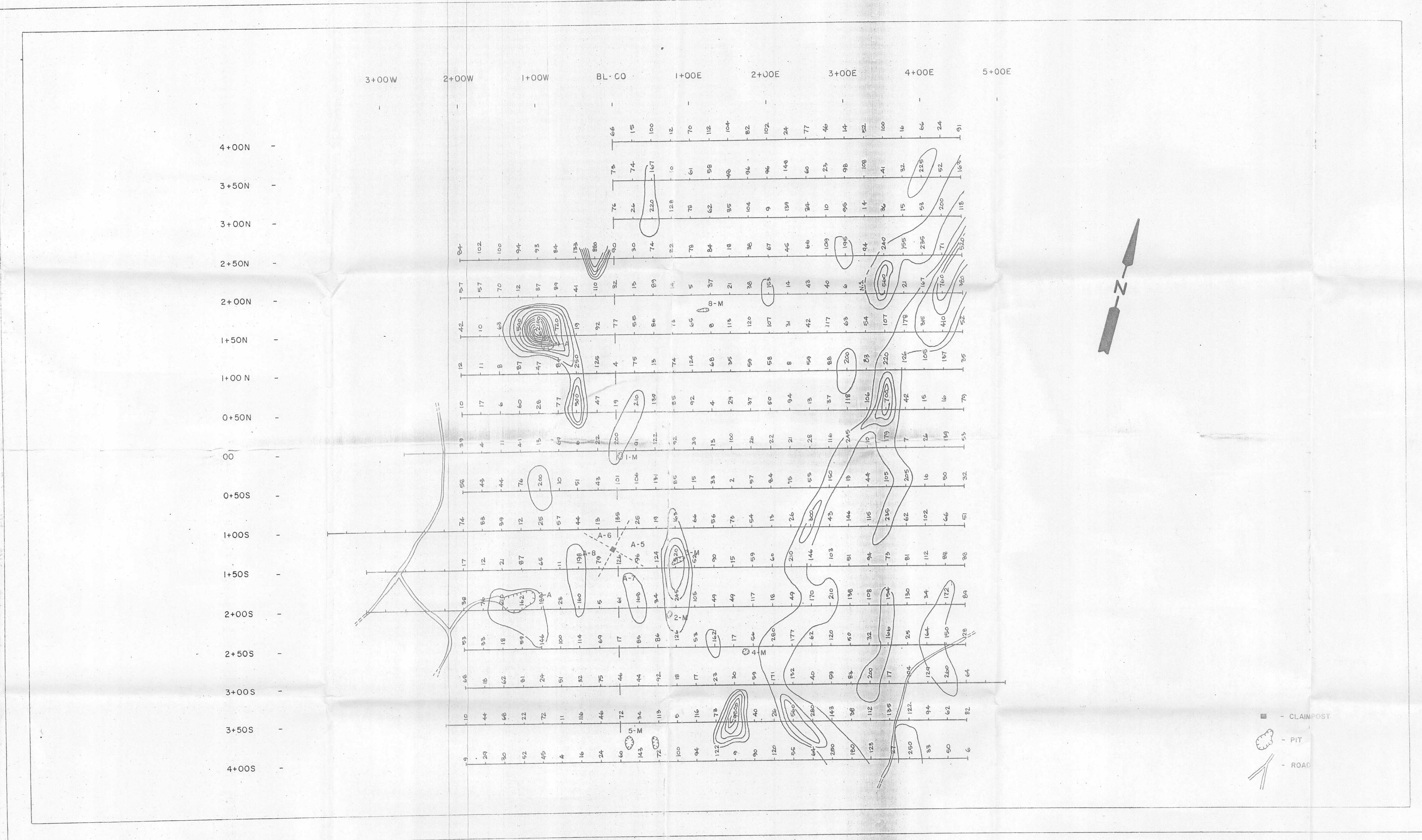
DATE: JULY 7/83

WG. NO.- I.P.P.-B-3028

PHOENIX GEOPHYSICS LIMITED

GEOCHEMICAL PLAN - Cu (PPM)

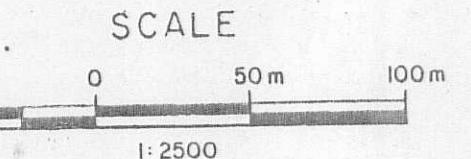
PLAN MAP



COUS CREEK COPPER MINES LTD.

A5-8:B2;B5-8:D10:D12:D14 CLAIMS

ALBERNI MINING DIVISION, B.C.



CONTOUR INTERVAL - 150 PPM

DRAWN: R.G.W.  
DATE: JULY 1, 1983.  
APPROVED: PAC

DATE: JULY 7/83

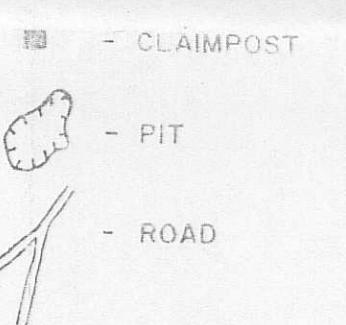
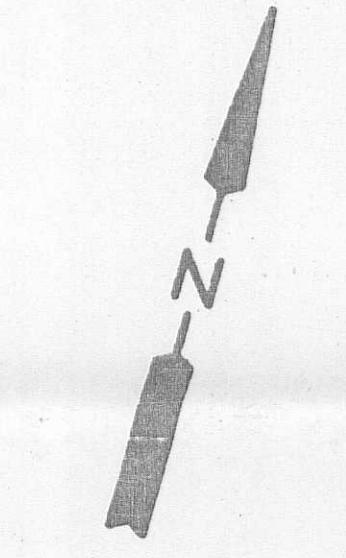
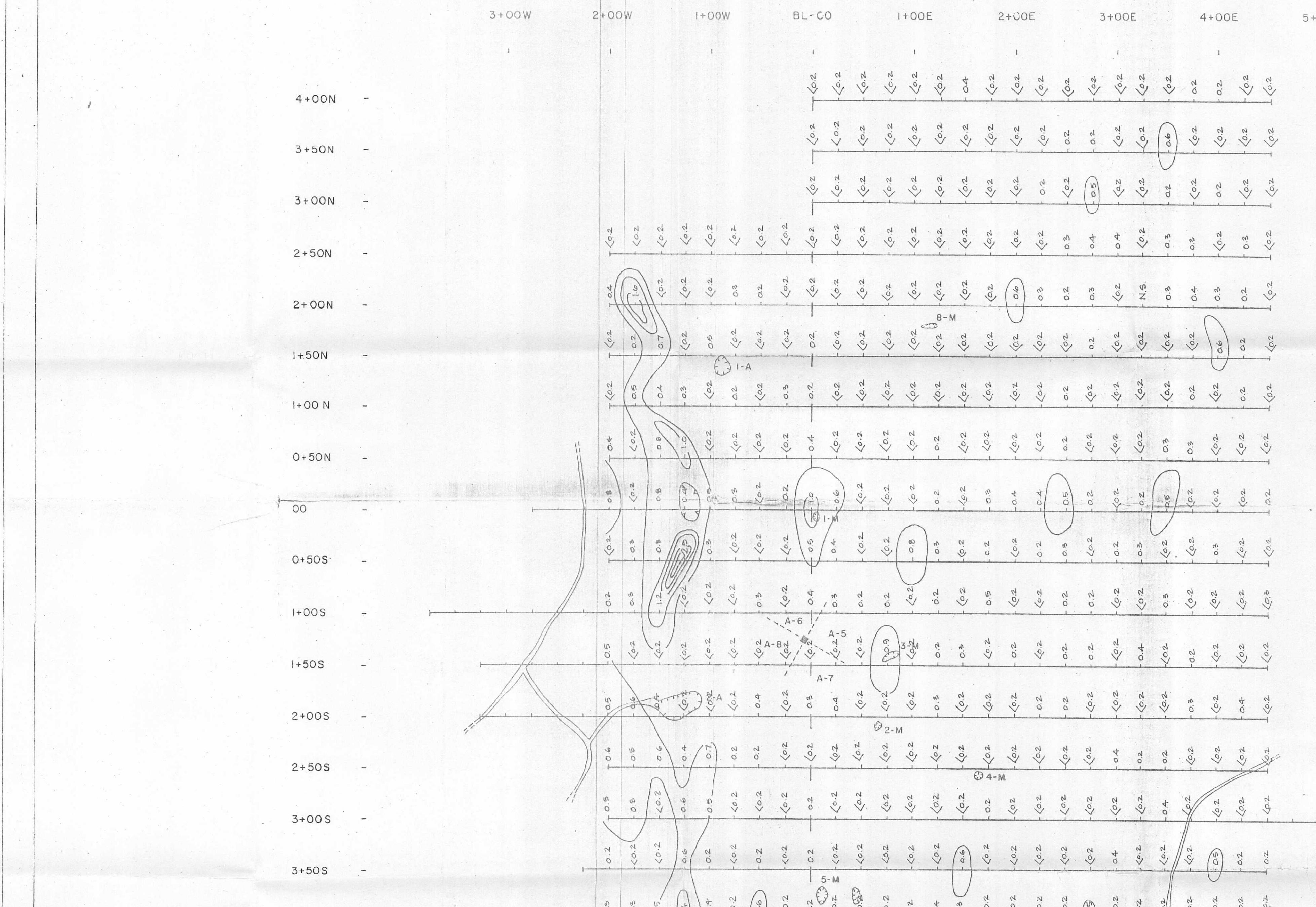
NOTE TO ACCOMPANY REPORT FOR  
COUS CREEK COPPER MINES LTD.  
ON THE A5-8:B2;B5-8:D10:D12:D14,  
CLAIMS, ALBERNI M.D., B.C. BY  
P.A. CARTWRIGHT B.Sc., GEOPHYSICIST  
AND DR. P.G. HALLOF Ph.D., P.Eng., GEOPHYSICIST.  
DATED July 7/83

DWG. NO.-I.PP-B-3028Cu

PHOENIX GEOPHYSICS LIMITED

GEOCHEMICAL PLAN - Ag (PPM)

PLAN MAP

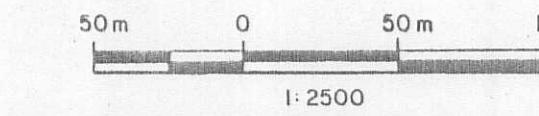


COUS CREEK COPPER MINES LTD.

A5-8:B2:B5-8:D10:D12:D14 CLAIMS

ALBERNI MINING DIVISION, B.C.

SCALE



CONTOUR INTERVAL - 0.5 PPM

DRAWN: R.G.W.

DATE: JULY 1, 1983.

APPROVED: PAC

DATE: July 7/83

**NOTE**  
TO ACCOMPANY REPORT FOR  
COUS CREEK COPPER MINES LTD.  
ON THE A5-8:B2:B5-8:D10:D12:D14,  
CLAIMS, ALBERNI M.D., B.C. BY  
P.A. CARTWRIGHT B.Sc., GEO PHYSICIST  
AND DR. R.G. HALLOF Ph.D., P.Eng., GEO PHYSICIST.  
DATED July 7/83

DWG. NO.-IPP-B-3028Ag