

010205

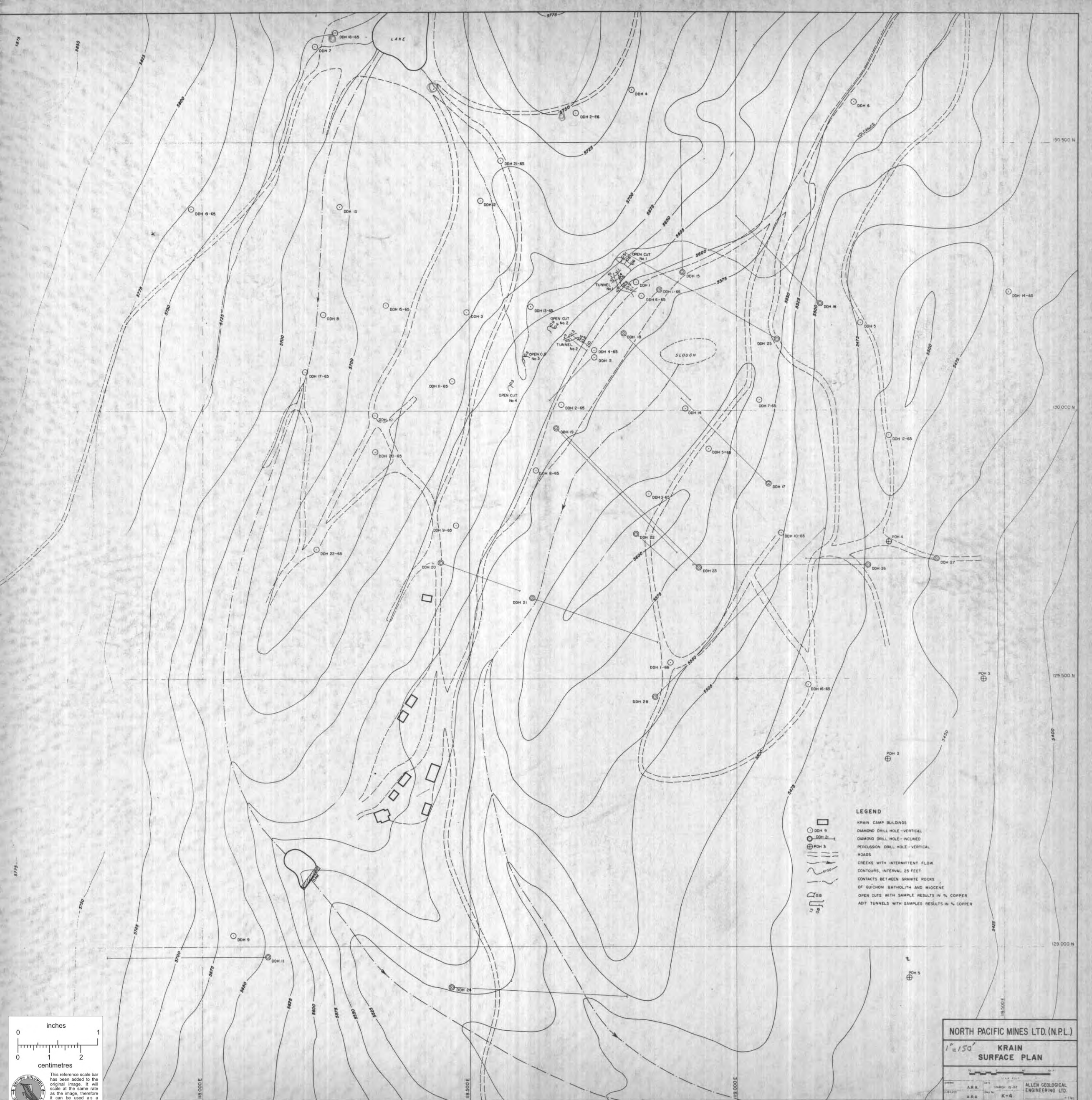
NORTH PACIFIC MINES LTD. N.P.L.  
728 WEST HASTINGS STREET  
VANCOUVER, BRITISH COLUMBIA

MAPS AND SECTIONS

TO ACCOMPANY  
REPORT  
ON HOLDINGS  
IN  
BRITISH COLUMBIA  
AND  
NOVA SCOTIA

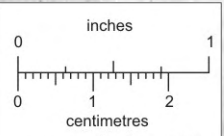
ALLEN GEOLOGICAL ENGINEERING LTD.  
UNITED KINGDOM BUILDING  
VANCOUVER B.C.  
MARCH 1967





**LEGEND**

- KRAIN CAMP BUILDINGS
- DIAMOND DRILL HOLE - VERTICAL
- DIAMOND DRILL HOLE - INCLINED
- PERCUSSION DRILL HOLE - VERTICAL
- ROADS
- CREEKS WITH INTERMITTENT FLOW
- CONTOURS, INTERVAL 25 FEET
- CONTACTS BETWEEN GRANITE ROCKS OF QUICHON BATHOLITH AND MIOCENE
- OPEN CUTS WITH SAMPLE RESULTS IN % COPPER
- ADIT TUNNELS WITH SAMPLE RESULTS IN % COPPER



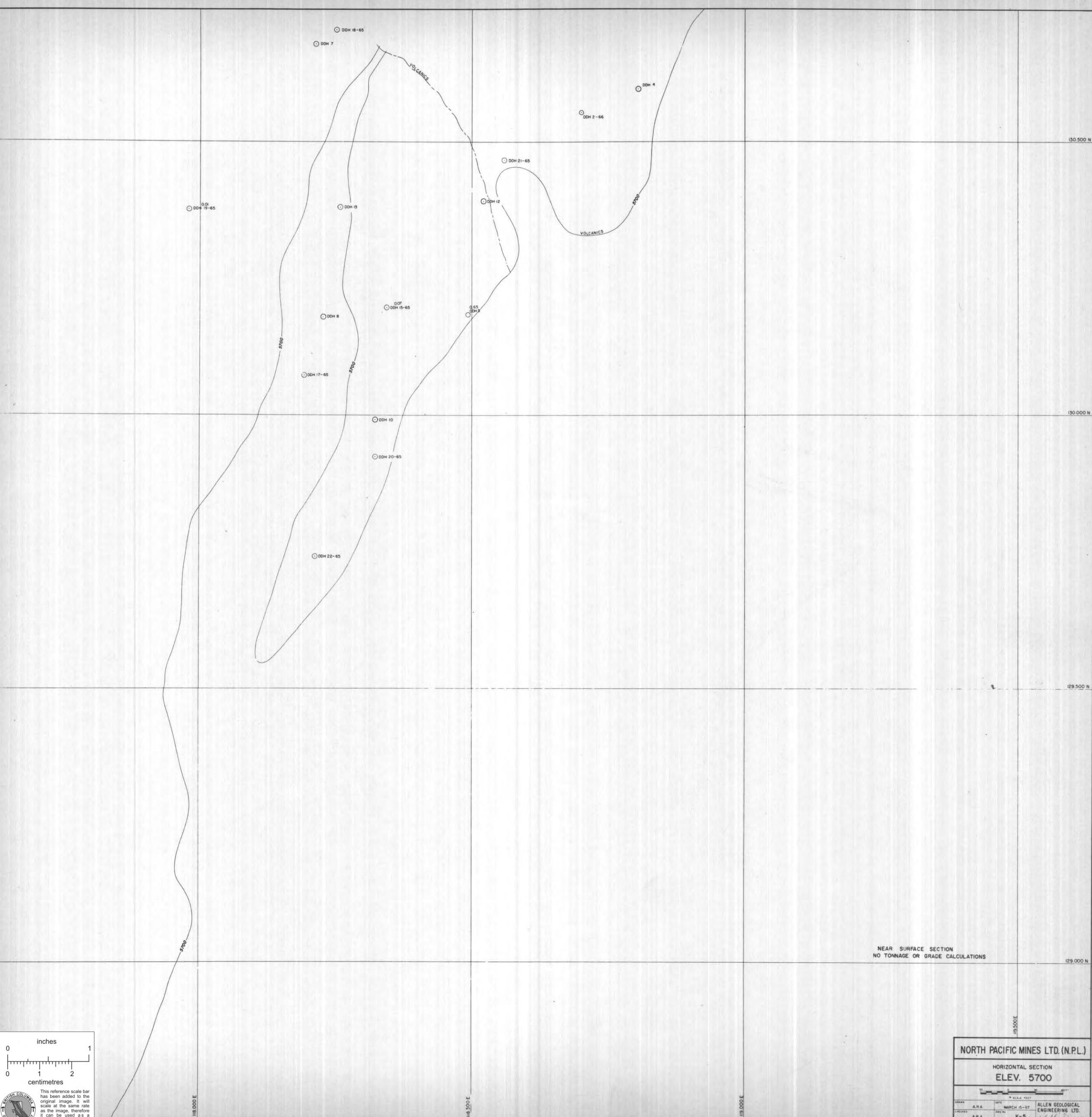
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

**NORTH PACIFIC MINES LTD. (N.P.L.)**  
 1" = 150'  
**KRAIN SURFACE PLAN**

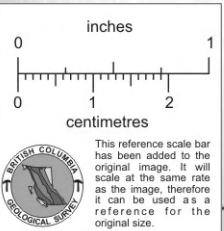
DATE	1957	SCALE	1" = 150'
DRAWN	A.R.A.	CHECKED	11-57
PROJECT	A.R.A.	NO.	K-4

ALLEN GEOLOGICAL ENGINEERING LTD.



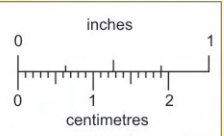


NEAR SURFACE SECTION  
NO TONNAGE OR GRADE CALCULATIONS

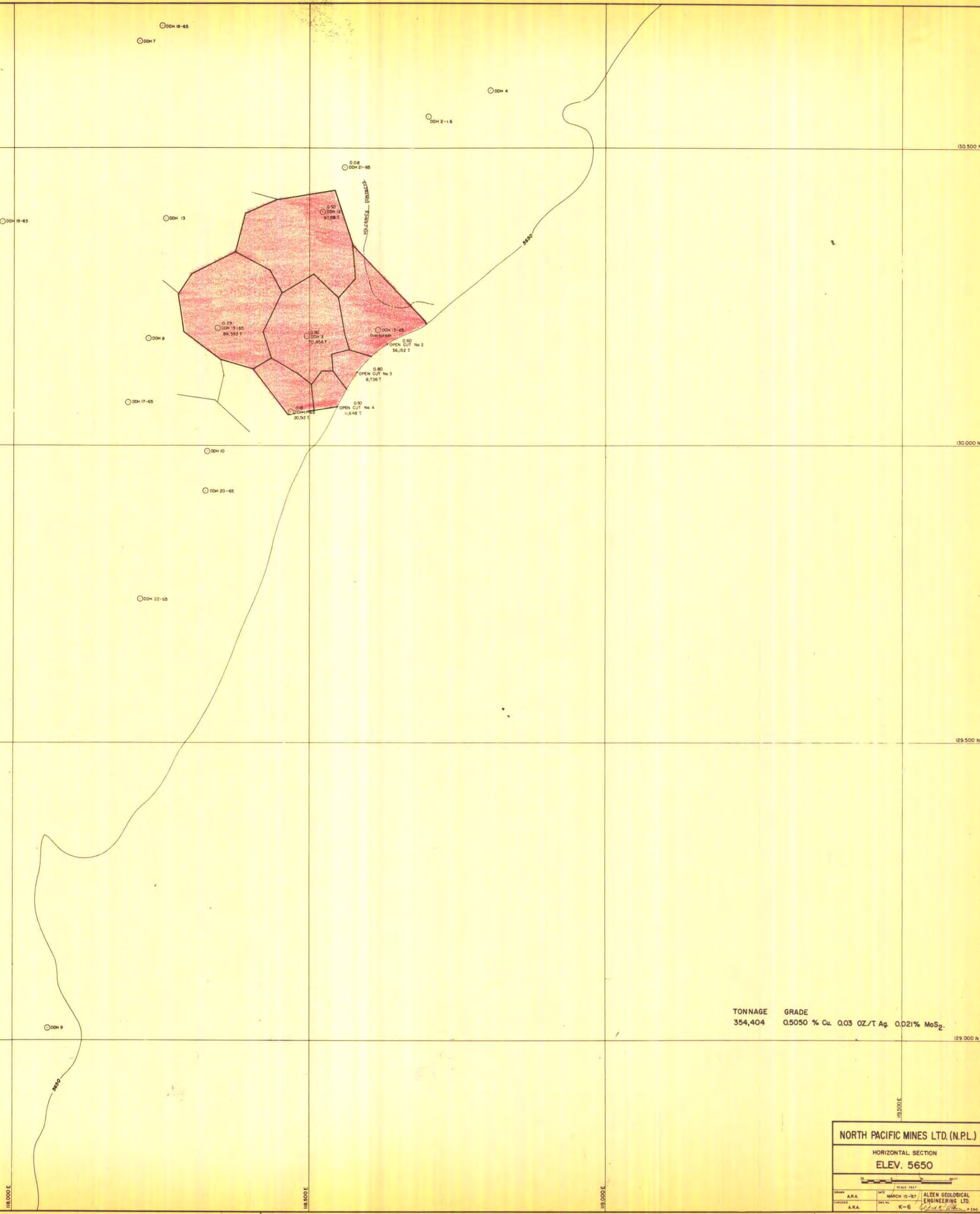


NORTH PACIFIC MINES LTD. (N.P.L.)			
HORIZONTAL SECTION			
ELEV. 5700			
DATE	DATE	DATE	DATE
AREA	AREA	AREA	AREA
MARCH 15-67		ALLEN GEOLOGICAL ENGINEERING LTD.	
K-5			





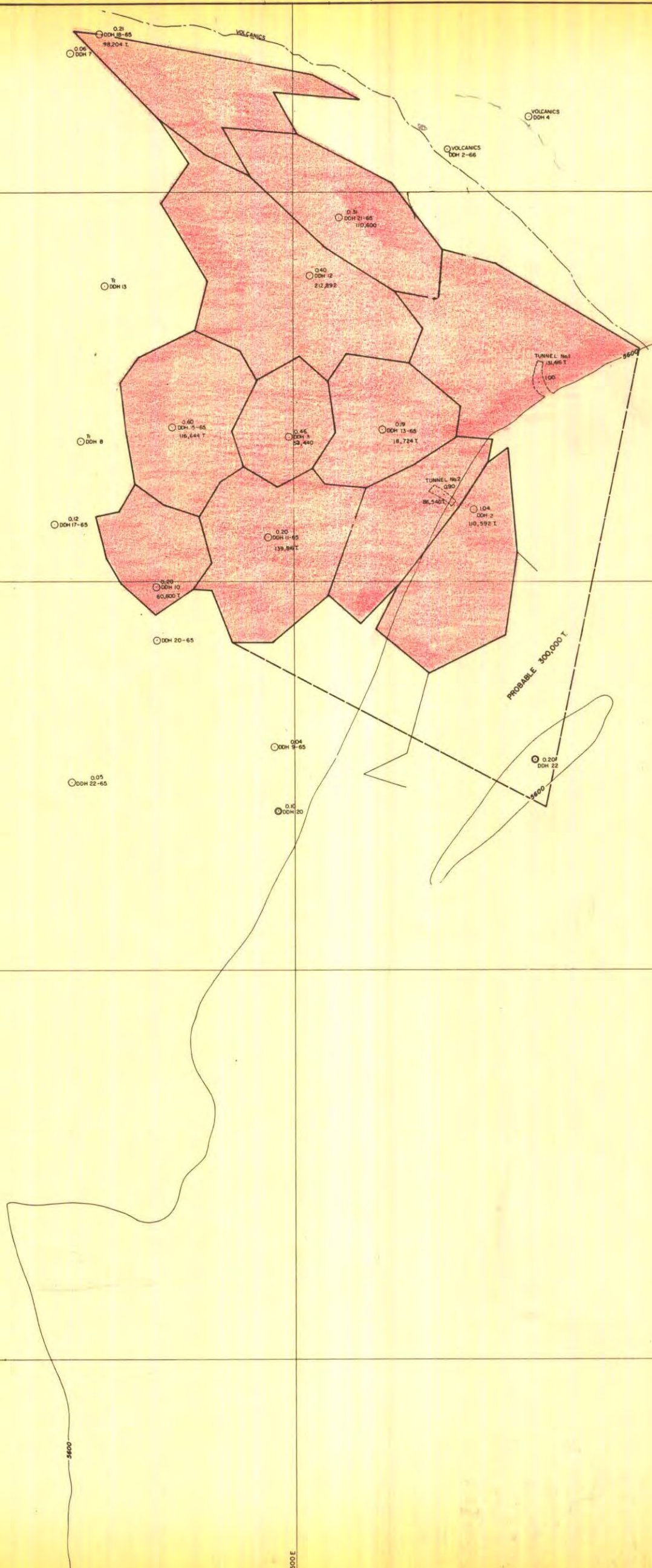
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



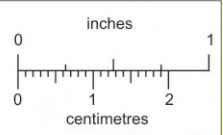
TONNAGE GRADE  
354,404 0.5050 % Cu. 0.03 OZ./T Ag. 0.021% MoS<sub>2</sub>.

NORTH PACIFIC MINES LTD. (N.P.L.)			
HORIZONTAL SECTION			
ELEV. 5650			
DATE	SCALE	TEST	
MARCH 15-87			
DRAWN	DATE	CHECKED	DATE
A.R.A.		A.R.A.	
K-6		ALEEN GEOLOGICAL ENGINEERING LTD.	





TONNAGE GRADE  
 1,266,896 0.5226 % Cu. 0.14 OZ./T Ag 0.008 % MoS<sub>2</sub>



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.

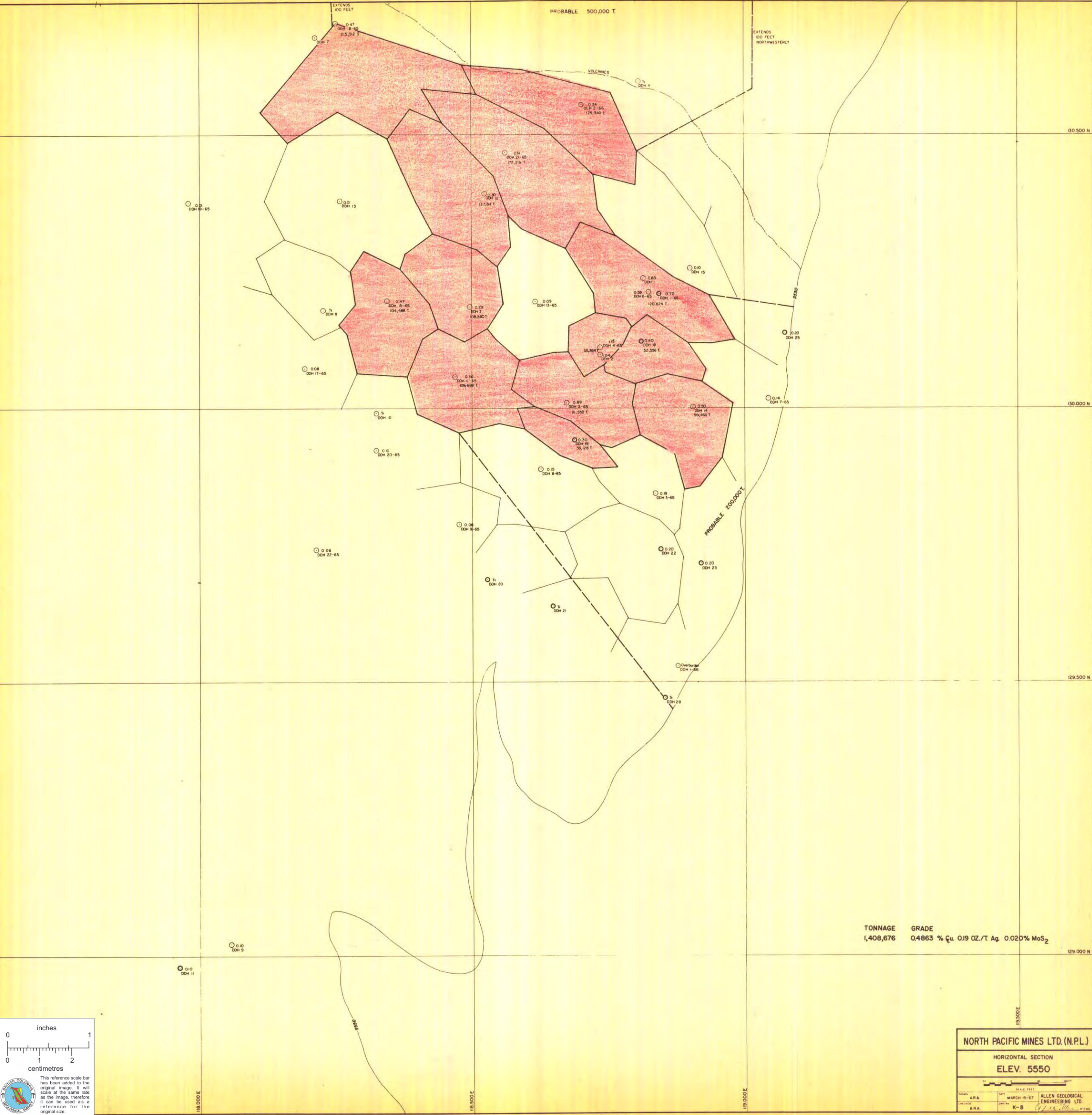
**NORTH PACIFIC MINES LTD. (N.P.L.)**  
 HORIZONTAL SECTION  
 ELEV. 5600

DATE: MARCH 15-57  
 DRAWN BY: A.R.A.  
 CHECKED BY: A.R.A.

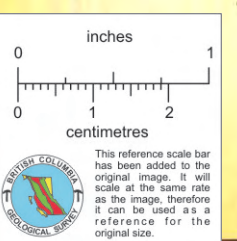
SCALE 1:50,000  
 K-7

ALLEN GEOLOGICAL ENGINEERING LTD.  
 VANCOUVER, B.C.





TONNAGE GRADE  
 1,408,676 0.4863 % Cu 0.19 OZ./T Ag 0.020% MoS<sub>2</sub>



**NORTH PACIFIC MINES LTD. (N.P.L.)**  
 HORIZONTAL SECTION  
 ELEV. 5550

DATE: MARCH 15-57  
 DRAWN BY: A.R.A.  
 CHECKED BY: K-B

ALLEN GEOLOGICAL ENGINEERING LTD.  
 VANCOUVER, B.C.



PROBABLE 1,000,000 T.

0.18  
DDH 7

0.30  
DDH 4  
12,304 T

DDH 6

130,500 N

0.05  
DDH 19-65

0.18  
DDH 13

0.47  
DDH 21-65  
100,378 T

0.30  
DDH 12  
129,520 T

DDH 2-66

0.36  
DDH 8

0.36  
DDH 15-65  
9,620 T

0.33  
DDH 3  
82,560 T

0.09  
DDH 5-65

0.30  
DDH 1  
19,161 T

0.10  
DDH 5

0.20  
DDH 25

0.08  
DDH 17-65

0.45  
DDH 11-65  
154,528 T

0.40  
DDH 4-65  
39,872 T

0.27  
DDH 2

0.50  
DDH 1-65  
48,952 T

0.20  
DDH 7-65

0.18  
DDH 10

0.08  
DDH 2-65  
87,571 T

0.20  
DDH 14  
82,320 T

0.08  
DDH 20-65

0.00  
DDH 18  
70,034 T

0.10  
DDH 5-65

DDH 17  
Overburden

0.18  
DDH 9-65

0.11  
DDH 3-65

0.27  
DDH 10-65

0.22  
DDH 23

130,000 N

129,500 N

0.18  
DDH 9

PROBABLE  
1,000,000 T.

0.04  
DDH 16

129,000 N

TONNAGE 1,353,043 GRADE 0.4914 % Cu. 0.19 OZ./T Ag. 0.020% MoS<sub>2</sub>

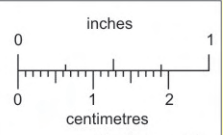
0.18  
DDH 11

Overburden  
DDH 24

118,500 E

118,500 E

118,000 E



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.

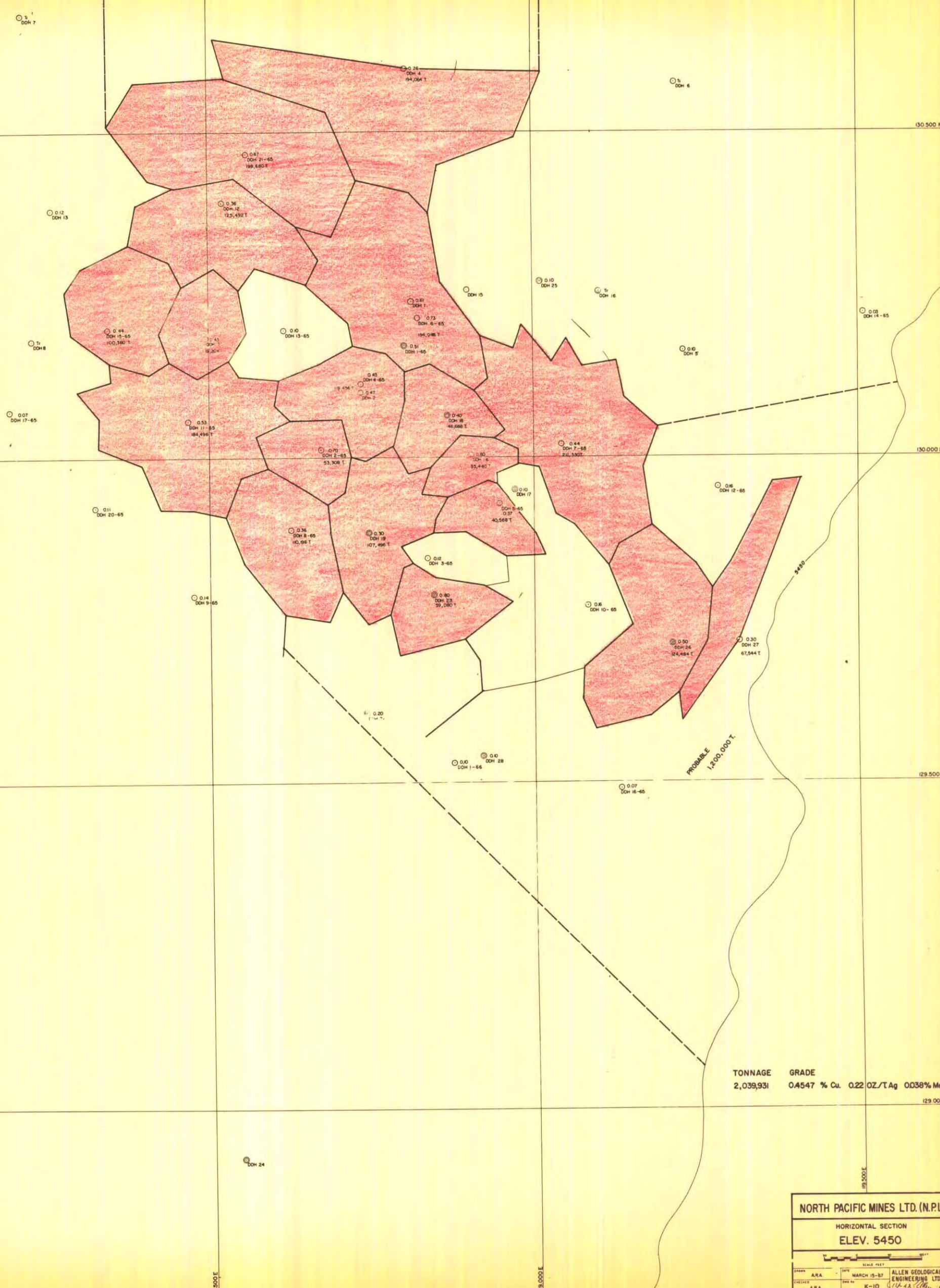
**NORTH PACIFIC MINES LTD. (N.P.L.)**  
**HORIZONTAL SECTION**  
**ELEV. 5500**

SCALE FEET  
 0 10 20 30 40 50

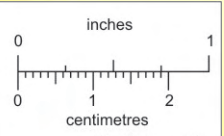
DATE: MARCH 15-67  
 DRAWN BY: A.R.A.  
 CHECKED BY: A.R.A.  
 DESIGNED BY: K-9  
 ALLEN GEOLOGICAL ENGINEERING LTD.  
 P. ENG.



PROBABLE 1,000,000 T



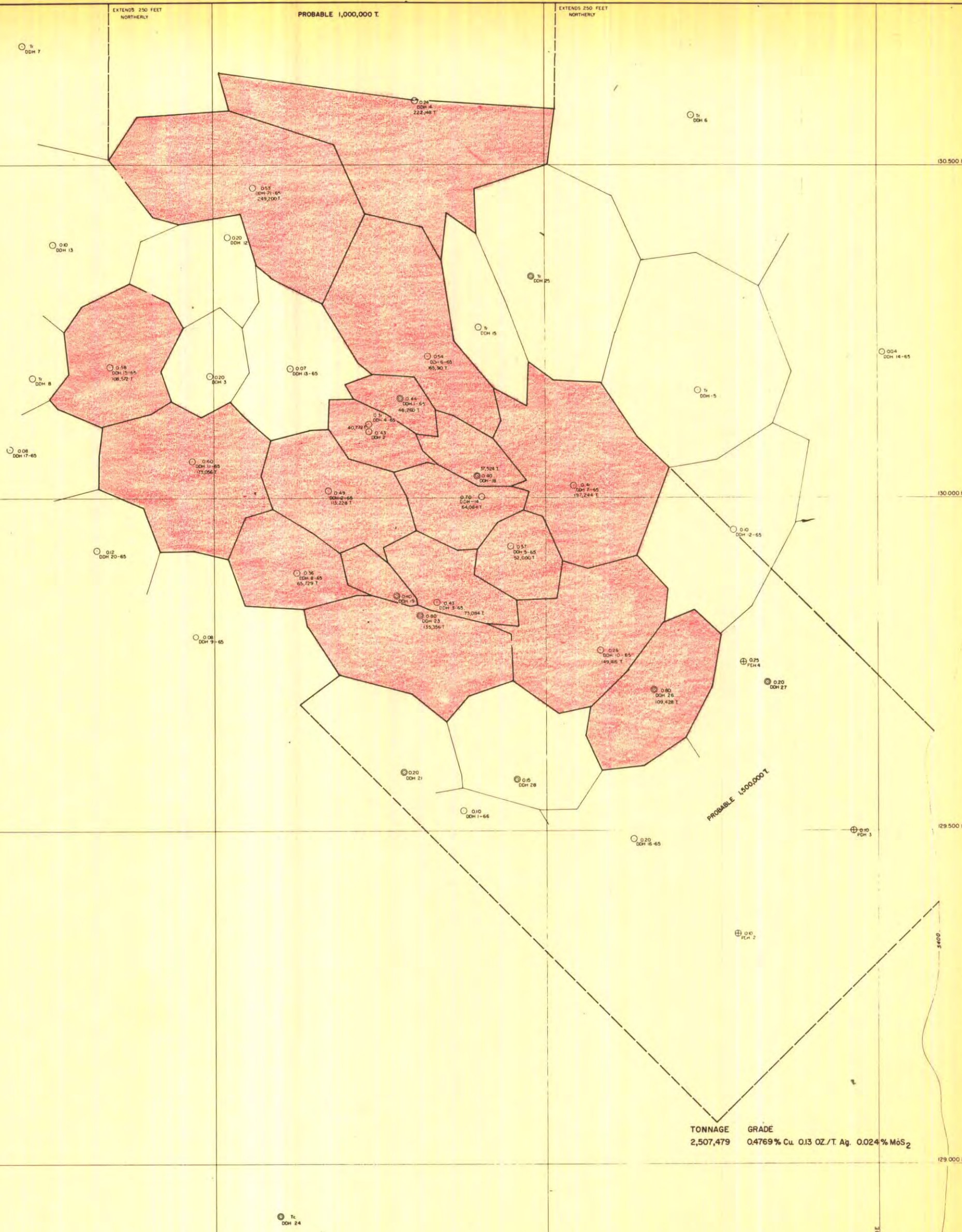
TONNAGE GRADE  
 2,039,931 0.4547 % Cu. 0.22 OZ./T Ag 0.038% MoS<sub>2</sub>



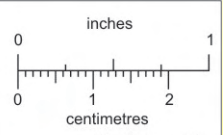
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

NORTH PACIFIC MINES LTD. (N.P.L.)	
HORIZONTAL SECTION	
ELEV. 5450	
DATE	SCALE
MARCH 15-87	1" = 100'
AREA	ENGINEER
K-10	Allen Geological Engineering Ltd.





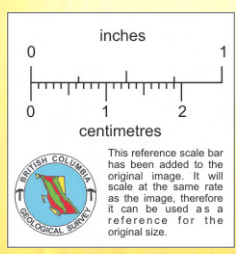
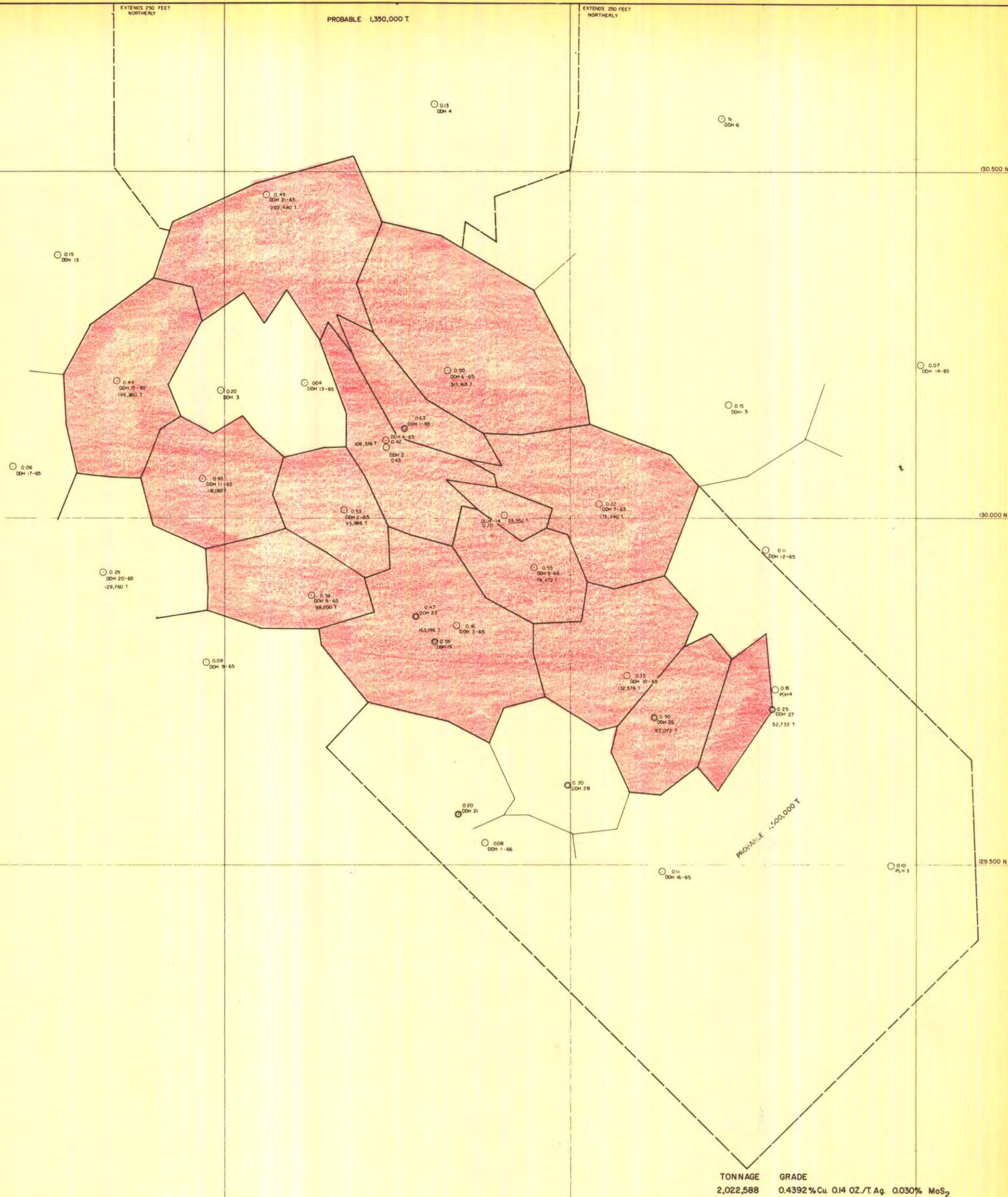
TONNAGE GRADE  
 2,507,479 0.4769% Cu 0.13 OZ./T. Ag. 0.024% MoS<sub>2</sub>



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.

NORTH PACIFIC MINES LTD. (N.P.L.)	
HORIZONTAL SECTION	
ELEV. 5400	
DATE	MARCH 5-57
SCALE	1" = 200'
PROJECT	ARA
NO.	K-11
ALLEN GEOLOGICAL ENGINEERING LTD.	





NORTH PACIFIC MINES LTD. (N.P.L.)

HORIZONTAL SECTION

ELEV. 5350

SCALE FEET

SCALE METRES

DATE MARCH 15-57

PROJECT ARA

ALLEN GEOLOGICAL ENGINEERING LTD.

ENGINEER K-12



EXTENDS 250 FEET  
NORTHERLY

PROBABLE 1,600,000 T.

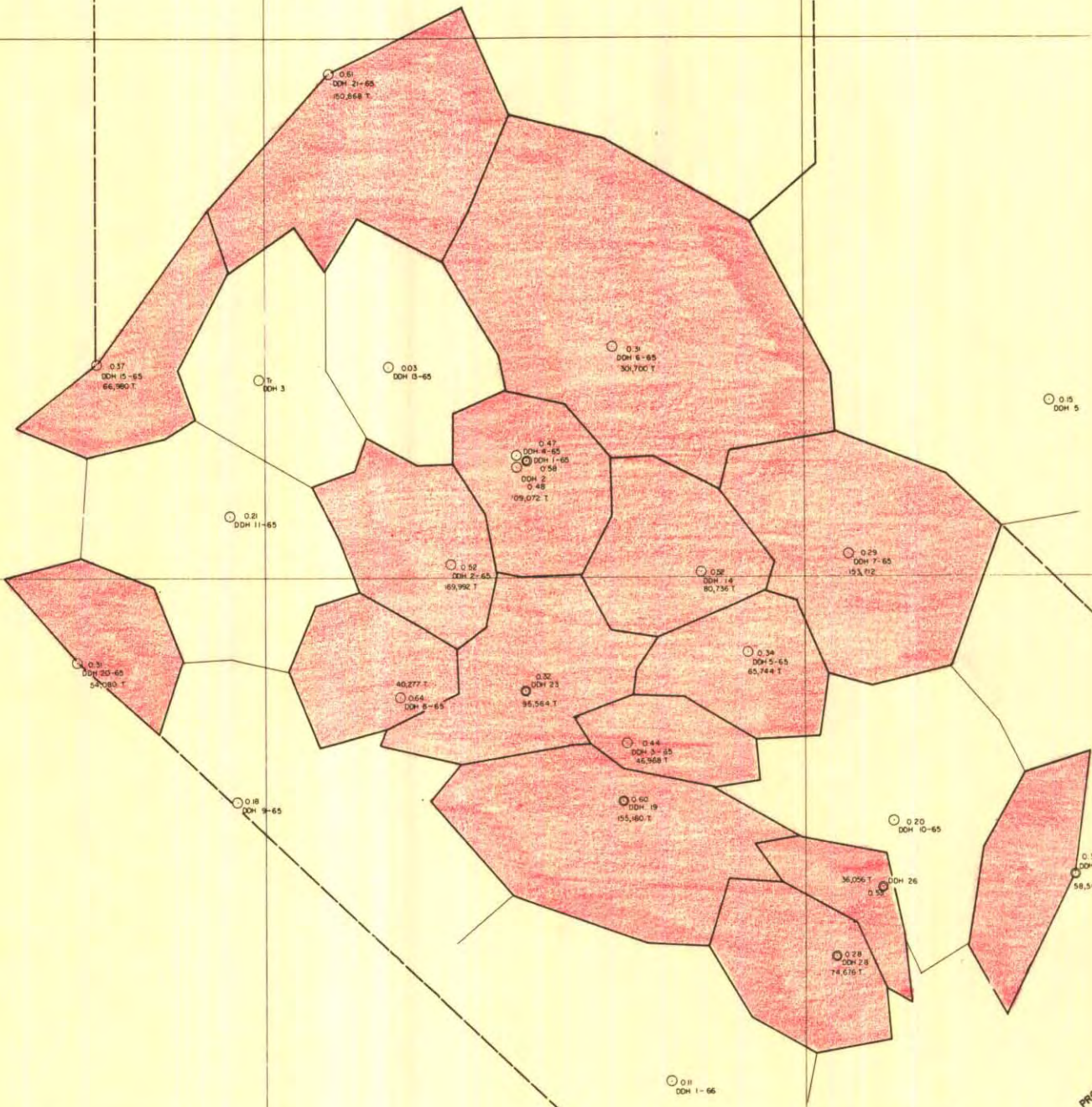
EXTENDS 250 FEET  
NORTHERLY

130,500 N

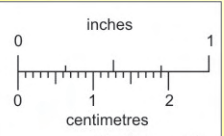
130,000 N

129,500 N

129,000 N



TONNAGE GRADE  
1,659,945 0.4284% Cu. 0.21 OZ./T. Ag. 0.025% MoS<sub>2</sub>



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.

NORTH PACIFIC MINES LTD. (N.P.L.)

HORIZONTAL SECTION  
ELEV. 5300

DATE	MARCH 15-57	SCALE	AS SHOWN
AREA	K-13	DRAWN BY	ALLEN GEOLOGICAL ENGINEERING LTD.
CHIEF		CHECKED	

118,000 E

118,500 E

119,000 E



EXTEND 250 FEET  
NORTHERLY

PROBABLE 1,750,000 T

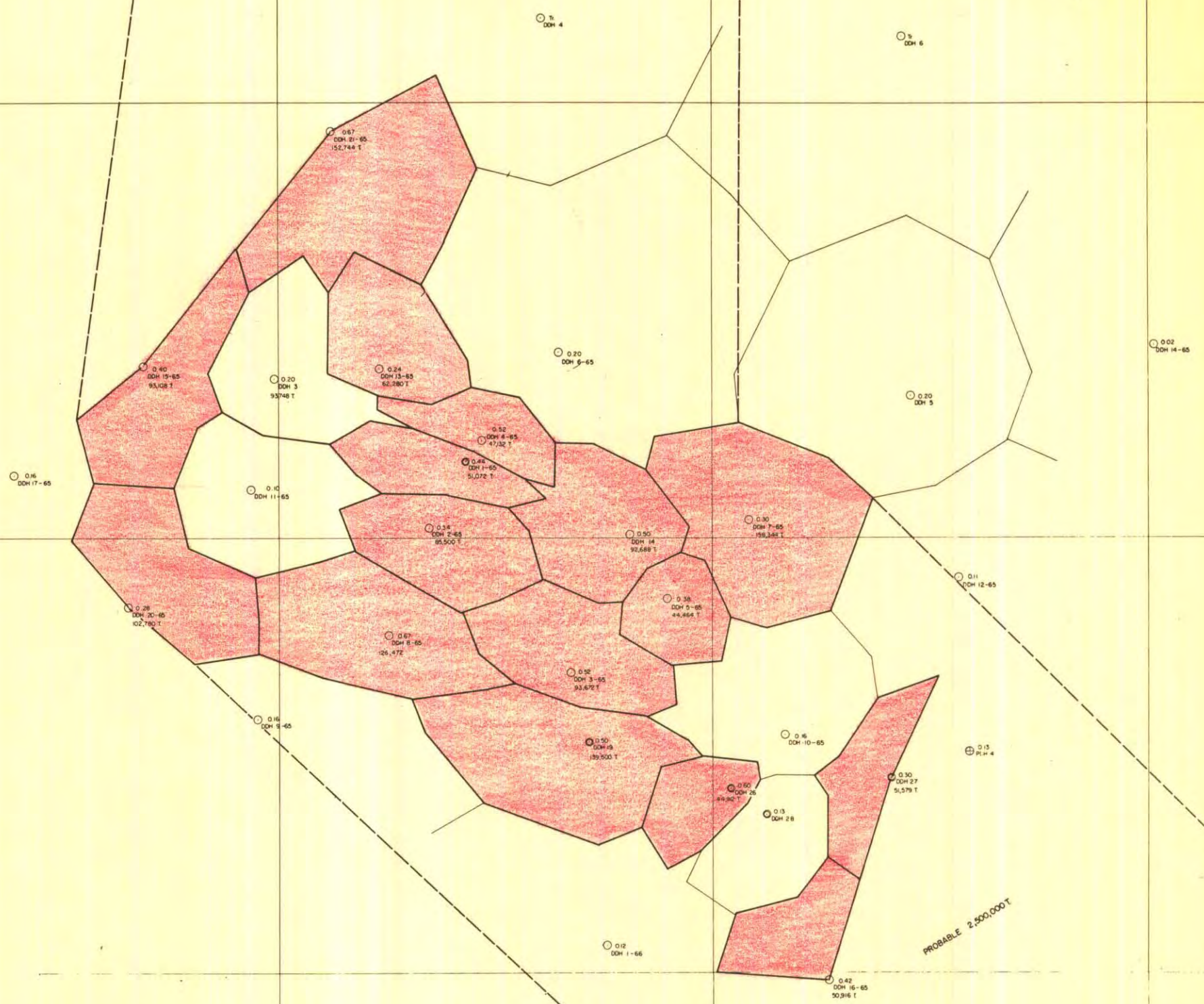
EXTEND 250 FEET  
NORTHERLY

130,500 N

130,000 N

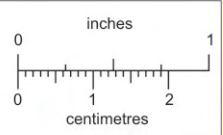
129,500 N

129,000 N



PROBABLE 2,500,000 T

TONNAGE 1,490,911 GRADE 0.4399% Cu. 0.16 OZ./T Ag. 0.019% MoS<sub>2</sub>



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.

**NORTH PACIFIC MINES LTD. (N.P.L.)**  
 HORIZONTAL SECTION  
 ELEV. 5250

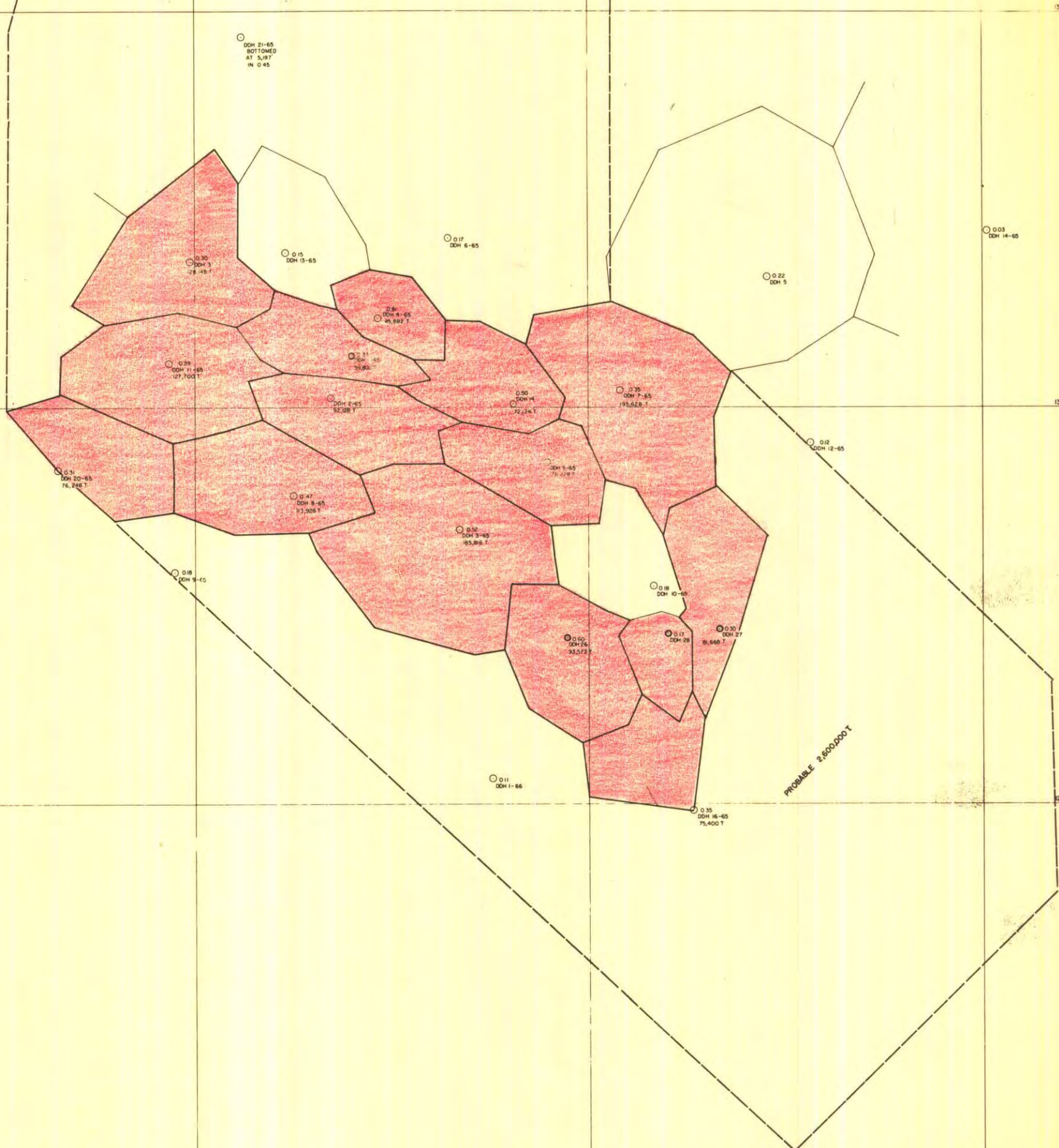
DATE: MARCH 15-67  
 DRAWN BY: K-14  
 CHECKED BY: ALLEN GEOLOGICAL ENGINEERING LTD.



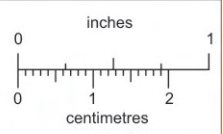
EXTENDS 250 FEET  
NORTHERLY

PROBABLE 1,900,000 T

EXTENDS 250 FEET  
NORTHERLY



TONNAGE GRADE  
 1,424,275 0.4173% Cu. 0.14 OZ./T Ag. 0.026% MoS<sub>2</sub>



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.

**NORTH PACIFIC MINES LTD. (N.P.L.)**  
 HORIZONTAL SECTION  
 ELEV. 5200

SCALE: 1" = 100'

DATE: MARCH 10-57  
 DRAWN BY: ARA  
 CHECKED BY: K-15  
 ALLEN GEOLOGICAL ENGINEERING LTD.



EXTENDS 250 FEET  
NORTHERLY

PROBABLE 2,000,000 T.

EXTENDS 200 FEET  
NORTHERLY

130,500 N

130,000 N

129,500 N

129,000 N

0.33  
DCH 7-65  
154,000 T.

0.21  
DCH 1-65  
34,004 T.

0.28  
DCH 2-65  
117,952 T.

0.14  
DCH 8-65  
122,040 T.

0.20  
DCH 6-65

0.49  
DCH 4-65  
109,372 T.

0.41  
DCH 7-65  
174,928 T.

0.40  
DCH 3-65  
104,596 T.

0.39  
DCH 5-65  
207,004 T.

0.18  
DCH 9-65

0.15  
DCH 10-65

0.15  
DCH 28

0.08  
DCH 6

0.08  
DCH 5

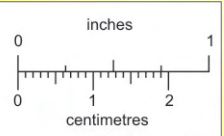
0.08  
DCH 14-65

0.12  
DCH 12-65

0.08  
DCH 1-66

PROBABLE 2,750,000 T.

TONNAGE GRADE  
1,011,976 0.4266% Cu, 0.11 OZ./T. Ag, 0.037% MoS<sub>2</sub>



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.



NORTH PACIFIC MINES LTD. (N.P.L.)

HORIZONTAL SECTION  
ELEV. 5150

DATE: MARCH 6-57  
DRAWN BY: K-16  
CHECKED BY: [Signature]  
ENGINEER: ALLEN GEOLOGICAL ENGINEERING LTD.



PROBABLE 2,250,000 T

EXTENDS 250 FEET  
NORTHERLY

EXTENDS 250 FEET  
NORTHERLY

130 500 N

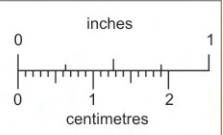
130 000 N

129 500 N

129 000 N

PROBABLE 3,000,000 T

TONNAGE GRADE  
925,531 0.4276% Cu. 0.11 OZ./T. Ag. 0.082% MoS<sub>2</sub>

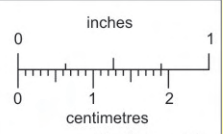
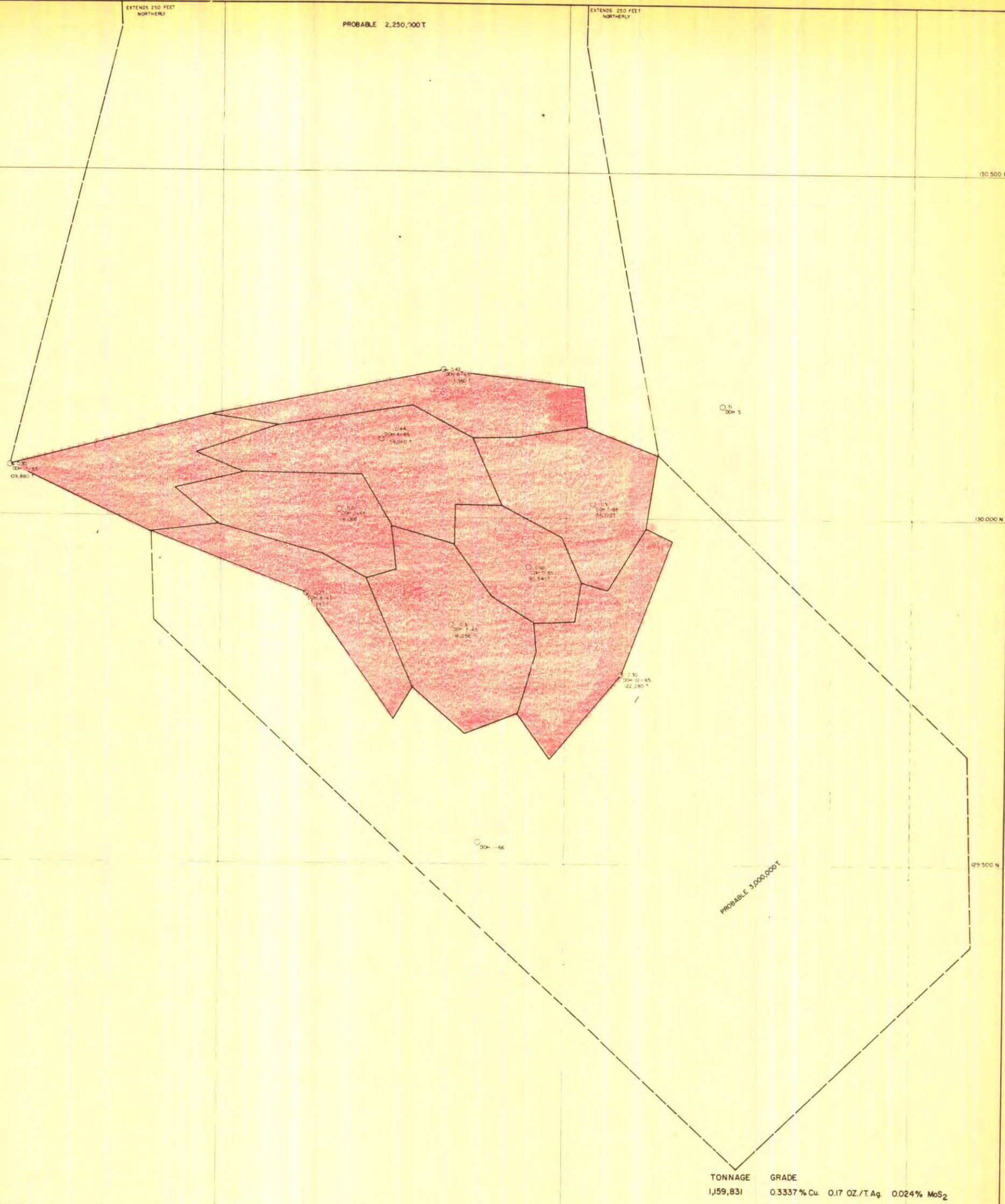


This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

**NORTH PACIFIC MINES LTD. (N.P.L.)**  
HORIZONTAL SECTION  
ELEV. 5100

DATE: MARCH 15-67  
DRAWN BY: ARA  
CHECKED BY: ARA  
PROJECT: K-17  
ENGINEER: ALLEN GEOLOGICAL ENGINEERING LTD.





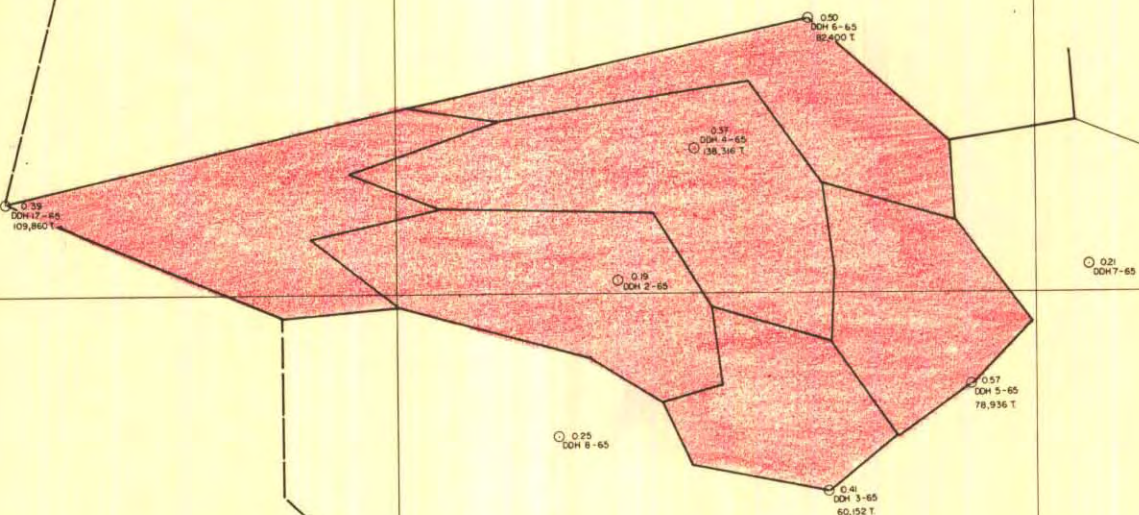
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

NORTH PACIFIC MINES LTD. (N.P.L.)	
HORIZONTAL SECTION	
ELEV. 5050	
DATE	MARCH 15-57
BY	K-IB
ALLEN GEOLICAL ENGINEERING LTD.	



PROBABLE 2,800,000 T

130,500 N



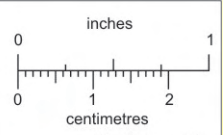
130,000 N

129,500 N

PROBABLE 2,700,000 T

TONNAGE GRADE  
 469,664 0.4379% Cu. 0.28 OZ./T Ag. 0.020% MoS<sub>2</sub>

129,000 N



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.

NORTH PACIFIC MINES LTD. (N.P.L.)	
HORIZONTAL SECTION	
ELEV. 5000	
DATE	MARCH 15-'67
SCALE FEET	1" = 100'
ENGINEER	ALLEN GEOLOGICAL ENGINEERING LTD.
DRAWN BY	K-19



PROBABLE 3,000,000 T

130 500 N

130 000 N

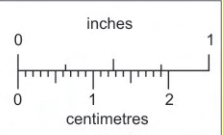
129 500 N

129 000 N



PROBABLE 2,500,000 T

TONNAGE 213,420 GRADE 0.5673% Cu 0.25 OZ./T. Ag 0.016% MoS<sub>2</sub>



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.

NORTH PACIFIC MINES LTD. (N.P.L.)

HORIZONTAL SECTION  
ELEV. 4950

DATE	DATE	SCALE	SCALE
ARR	MARCH 10 67	1" = 100'	1" = 100'
ARR	K-20	ARR	ARR



PROBABLE 3,000,000 T.

EXTENDS 250 FEET  
NORTHERLY

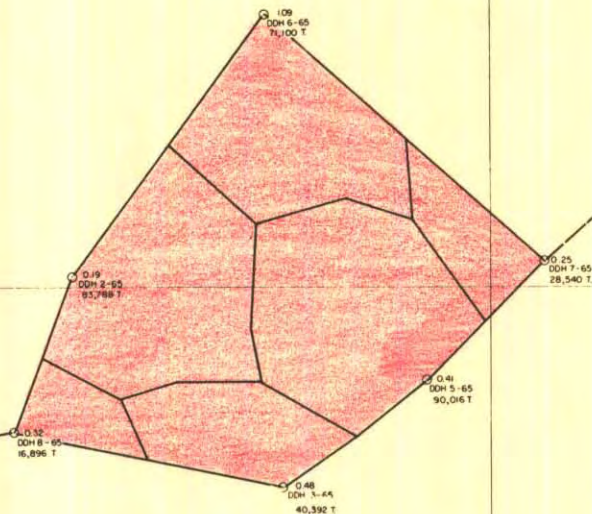
EXTENDS 250 FEET  
NORTHERLY

130 500 N

130 000 N

129 500 N

129 000 N



PROBABLE 2,500,000 T.

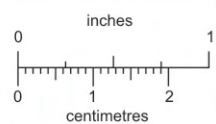
TONNAGE GRADE  
333,072 0.5316 % Cu 0.37 OZ./T Ag 0.032 % MoS<sub>2</sub>

118 500 E

118 500 E

118 000 E

118 000 E



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.

NORTH PACIFIC MINES LTD. (N.P.L.)			
HORIZONTAL SECTION			
ELEV. 4900			
DATE	SCALE	BY	NO.
APR 15-57	AS SHOWN	ALLEN	10-11
CHECKED	DATE	APPROVED	DATE
ARA	MARCH 15-57	ALLEN	MARCH 15-57
APR	K-21	ALLEN GEOLOGICAL ENGINEERING LTD.	



PROBABLE 3,000,000 T

EXTENDS 250 FEET  
NORTHERLY

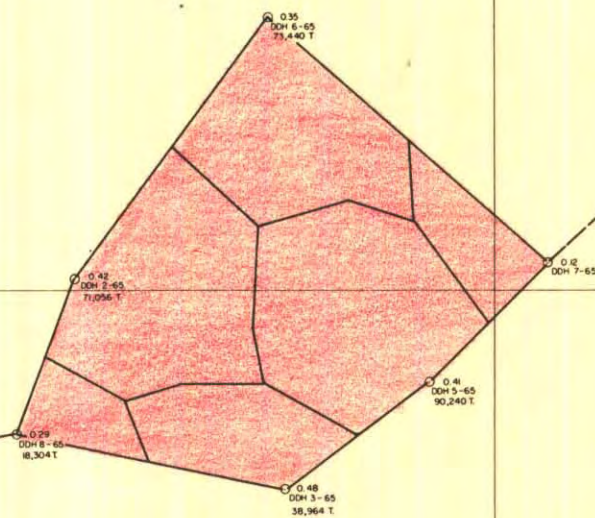
EXTENDS 250 FEET  
NORTHERLY

130,500 N

130,000 N

129,500 N

129,000 N



INDICATED 3,000,000 T

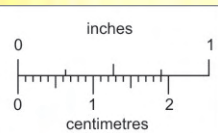
TONNAGE 292,000 GRADE 0.3991% Cu 0.35 OZ./T Ag 0.022% MoS<sub>2</sub>

118,500 E

118,000 E

118,500 E

118,000 E



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.

NORTH PACIFIC MINES LTD. (N.P.L.)

HORIZONTAL SECTION  
ELEV. 4850

DATE	SCALE FEET
1967	1:1000

DATE	SCALE FEET
MARCH 15-67	1:1000

DATE	SCALE FEET
K-22	1:1000

ALLEN GEOLOGICAL  
ENGINEERING LTD.



130,500 N

130,000 N

129,500 N

129,000 N

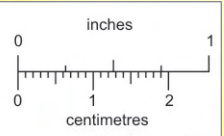


THIS IS THE PLAN OF  
 THE LOWEST LEVEL  
 CONSIDERED IN TONNAGE  
 AND GRADE CALCULATIONS

118,500 E

118,500 E

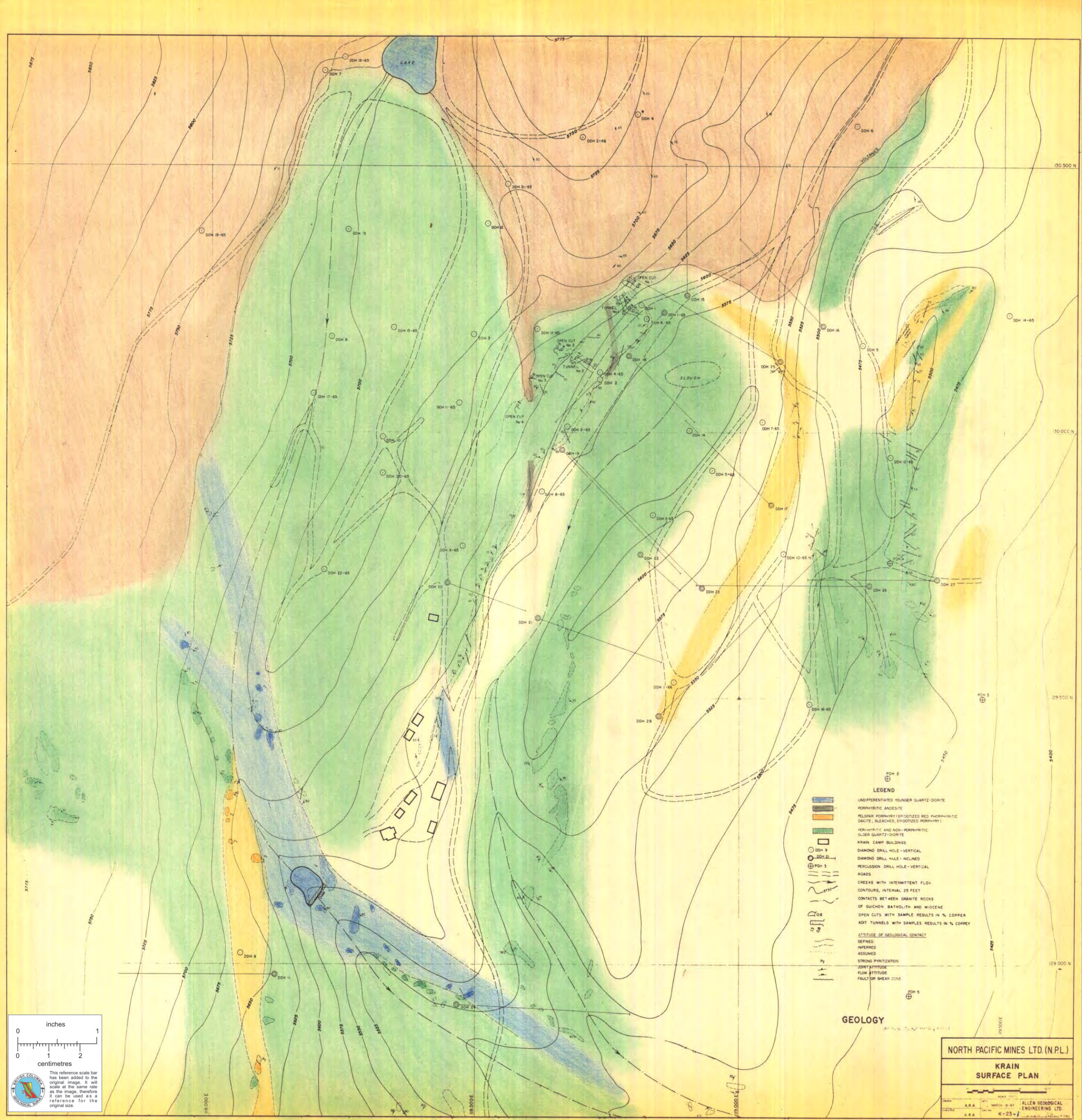
118,500 E



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.

NORTH PACIFIC MINES LTD. (N.P.L.)			
HORIZONTAL SECTION			
ELEV. 4800			
SCALE FEET			
DATE	MARCH 15-1917	ALLEN GEOLOGICAL ENGINEERING LTD.	
CHECKED	ARR	NO. 11	K-23
DATE			

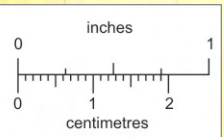




- LEGEND**
- UNDIFFERENTIATED YOUNGER QUARTZ-DIORITE
  - PORPHYRYIC ANDESITE
  - FELSIPAR PORPHYRY (EPIDOTIZED RED PORPHYRYIC DACITE, BLEACHED, EPIDOTIZED PORPHYRY)
  - PORPHYRYIC AND NON-PORPHYRYIC OLDER QUARTZ-DIORITE
  - KRAIN CAMP BUILDINGS
  - DIAMOND DRILL HOLE - VERTICAL
  - DIAMOND DRILL HOLE - INCLINED
  - PERCUSSION DRILL HOLE - VERTICAL
  - ROADS
  - CREEKS WITH INTERMITTENT FLOW
  - CONTACTS BETWEEN GRANITE ROCKS OF GUICHON BATHOLITH AND MIOCENE
  - OPEN CUTS WITH SAMPLE RESULTS IN % COPPER
  - ADIT TUNNELS WITH SAMPLES RESULTS IN % COPPER
- ATTITUDE OF GEOLOGICAL CONTACT**
- DEFINED
  - INFERRED
  - ASSUMED
  - STRONG PYRITIZATION
  - JOINT ATTITUDE
  - FLOW ATTITUDE
  - FAULT OR SHEAR ZONE

**GEOLOGY**

NORTH PACIFIC MINES LTD. (N.P.L.)  
**KRAIN SURFACE PLAN**



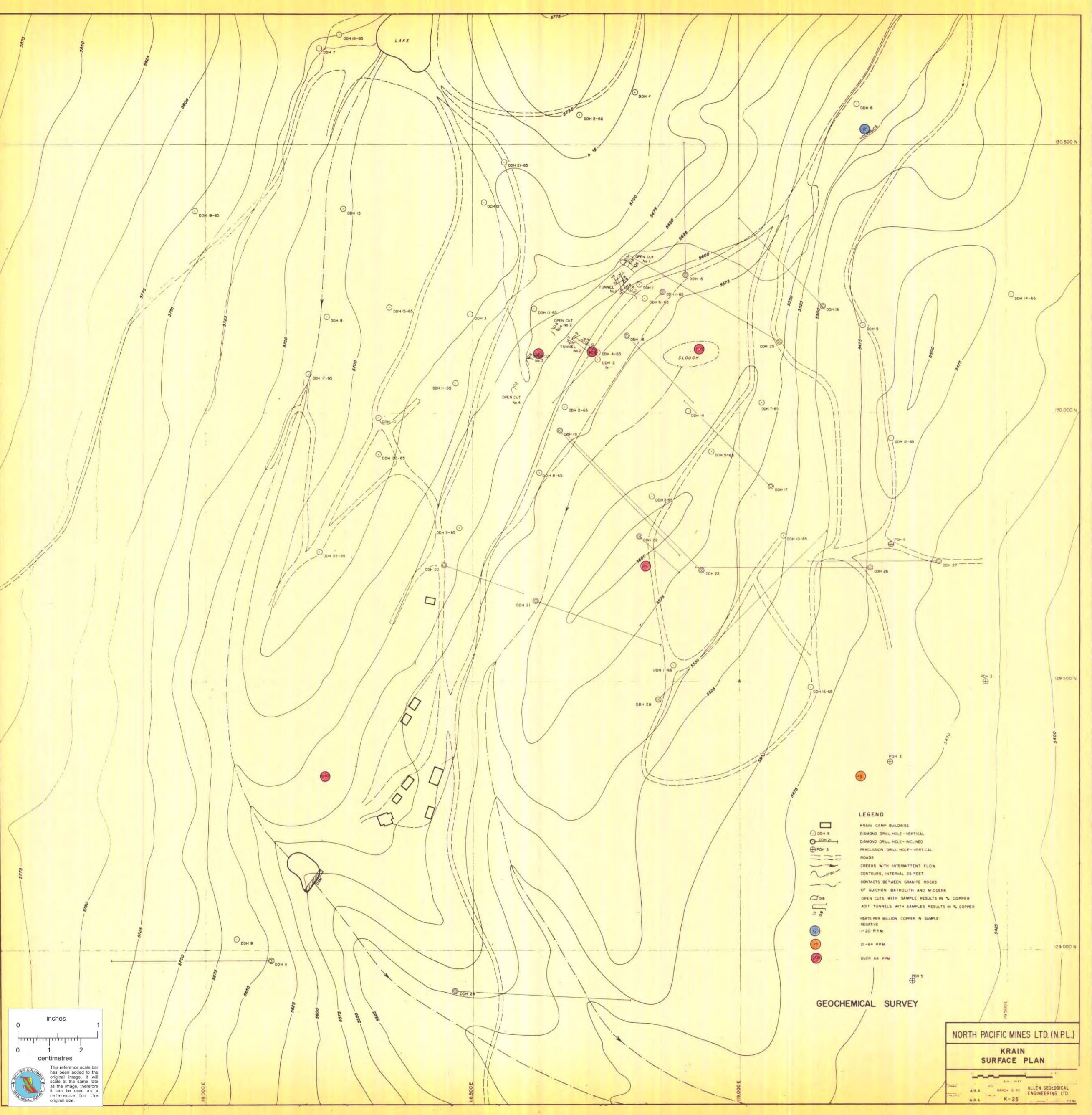
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ALLEN GEOLOGICAL ENGINEERING LTD.  
 K-23



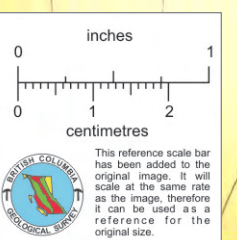






118500E  
118600E  
118700E  
118800E  
118900E  
119000E  
119100E  
119200E  
119300E  
119400E  
119500E

130500 N  
130000 N  
129500 N  
129000 N



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.

- LEGEND**
- KRAIN CAMP BUILDINGS
  - DIAMOND DRILL HOLE - VERTICAL
  - DIAMOND DRILL HOLE - INCLINED
  - PERCUSSION DRILL HOLE - VERTICAL
  - ROADS
  - CREEKS WITH INTERMITTENT FLOW
  - CONTOURS, INTERVAL 25 FEET
  - CONTACTS BETWEEN GRANITE ROCKS OF QUICHON BATHOLITH AND MIOCENE
  - OPEN CUTS WITH SAMPLE RESULTS IN % COPPER
  - ADIT TUNNELS WITH SAMPLES RESULTS IN % COPPER
  - PARTS PER MILLION COPPER IN SAMPLE
  - NEGATIVE
  - 1-20 PPM
  - 21-64 PPM
  - OVER 64 PPM

**GEOCHEMICAL SURVEY**

**NORTH PACIFIC MINES LTD. (N.P.L.)**

**KRAIN SURFACE PLAN**

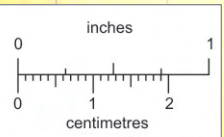
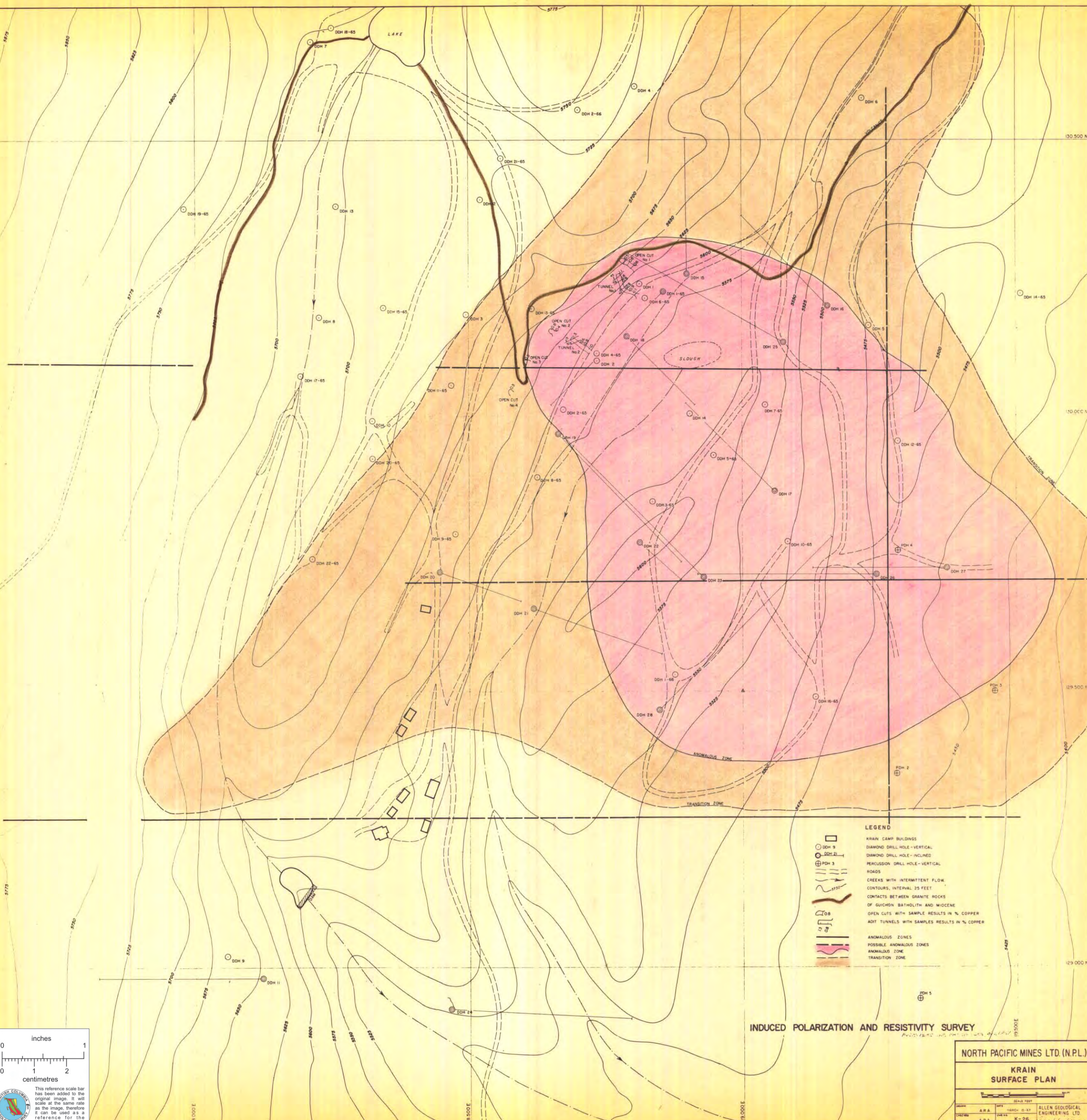
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ALLEN GEOLOGICAL ENGINEERING LTD.

MARCH 1967

K-25





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- LEGEND**
- KRAIN CAMP BUILDINGS
  - DIAMOND DRILL HOLE - VERTICAL
  - DIAMOND DRILL HOLE - INCLINED
  - PERCUSSION DRILL HOLE - VERTICAL
  - ROADS
  - CREEKS WITH INTERMITTENT FLOW
  - CONTOURS, INTERVAL 25 FEET
  - CONTACTS BETWEEN GRANITE ROCKS OF GUICHON BATHOLITH AND MIOCENE
  - OPEN CUTS WITH SAMPLE RESULTS IN % COPPER
  - ADIT TUNNELS WITH SAMPLE RESULTS IN % COPPER
  - ANOMALOUS ZONES
  - POSSIBLE ANOMALOUS ZONES
  - ANOMALOUS ZONE
  - TRANSITION ZONE

**INDUCED POLARIZATION AND RESISTIVITY SURVEY**

**NORTH PACIFIC MINES LTD. (N.P.L.)**

**KRAIN SURFACE PLAN**

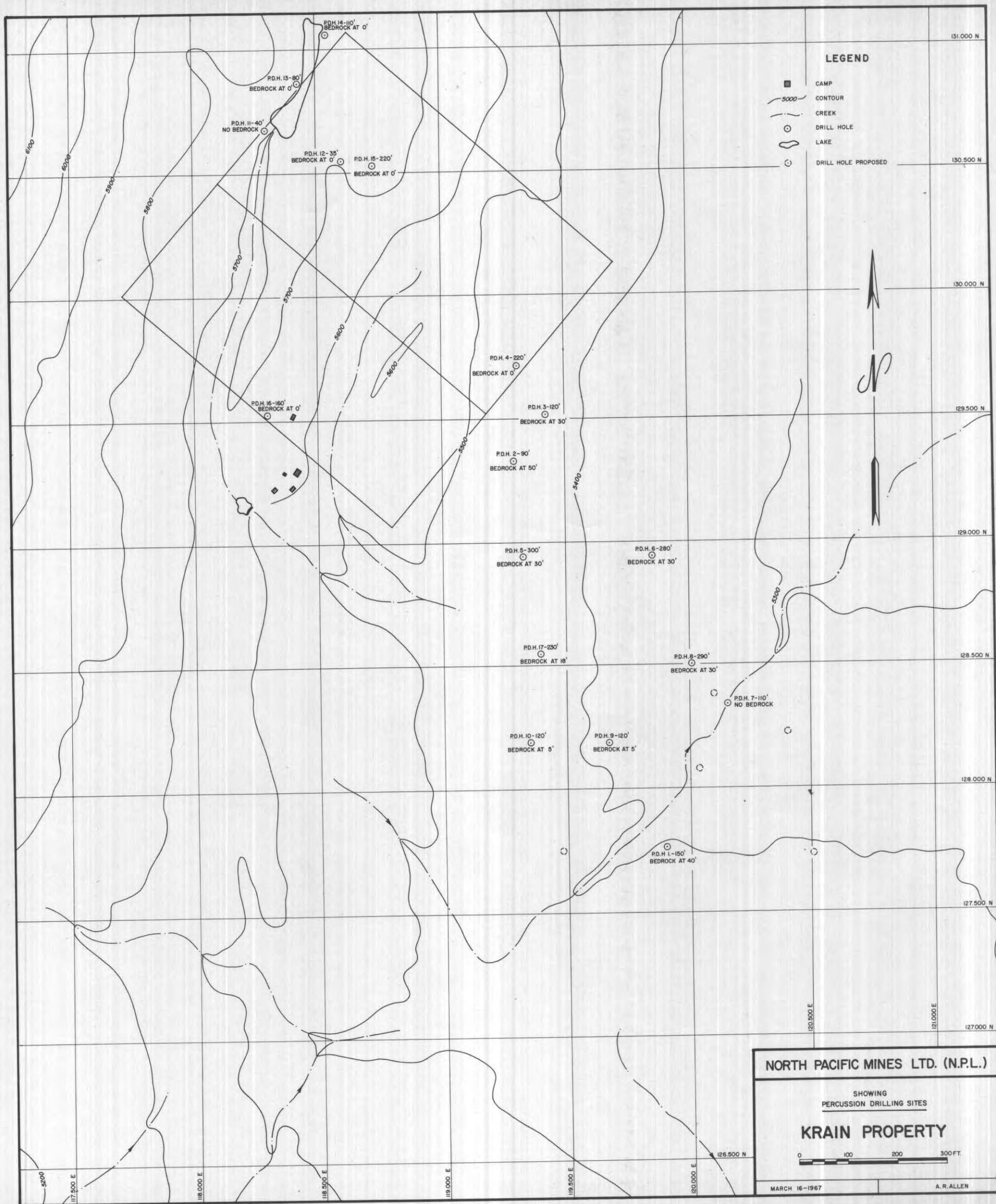
SCALE: 1" = 100'

DATE: MARCH 1967

PROJECT: K-26

ALLEN GEOLOGICAL ENGINEERING LTD.





**LEGEND**

- CAMP
- 5000— CONTOUR
- CREEK
- DRILL HOLE
- DRILL HOLE PROPOSED
- LAKE

**NORTH PACIFIC MINES LTD. (N.P.L.)**

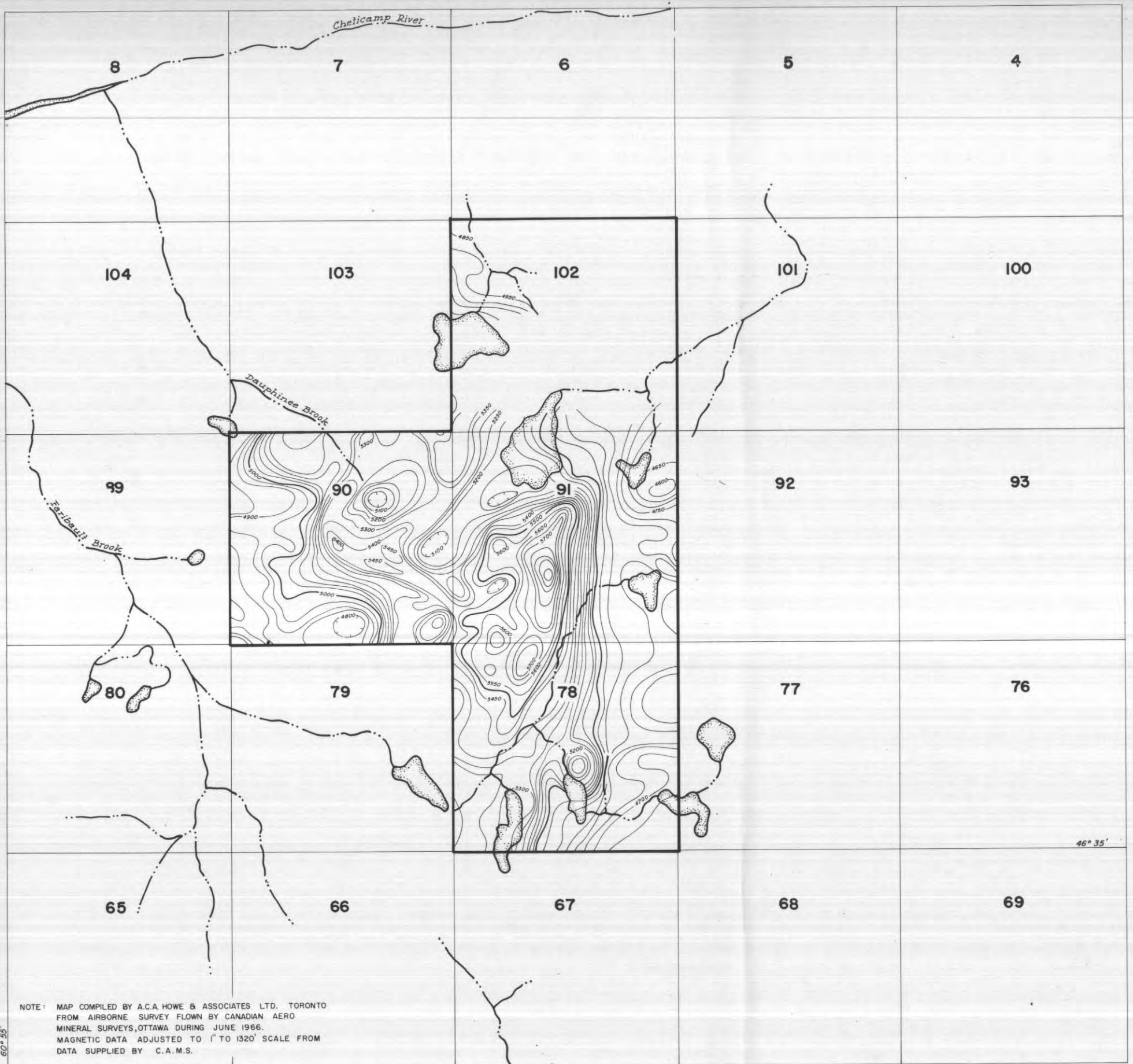
SHOWING  
PERCUSSION DRILLING SITES

**KRAIN PROPERTY**

0 100 200 300 FT.

MARCH 16-1967 A.R. ALLEN



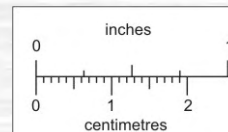


KEY MAP



LEGEND

- BOUNDARY OF PROPERTY
- MAGNETIC CONTOURS - CONTOUR INTERVAL 50 GAMMAS
- MAGNETIC DEPRESSION
- TRACT BOUNDARIES WITH TRACT NUMBER

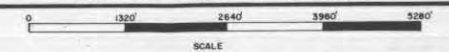


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NORTH PACIFIC MINES LTD. (N.P.L.)

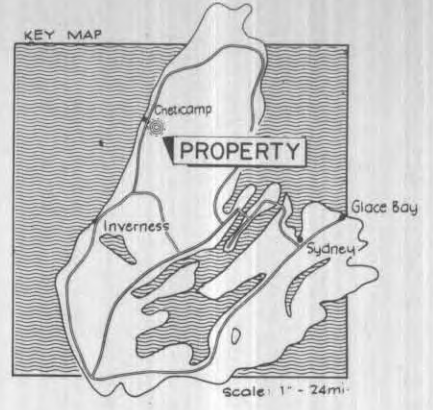
AEROMAGNETIC SURVEY

CHETICAMP AREA - NOVA SCOTIA

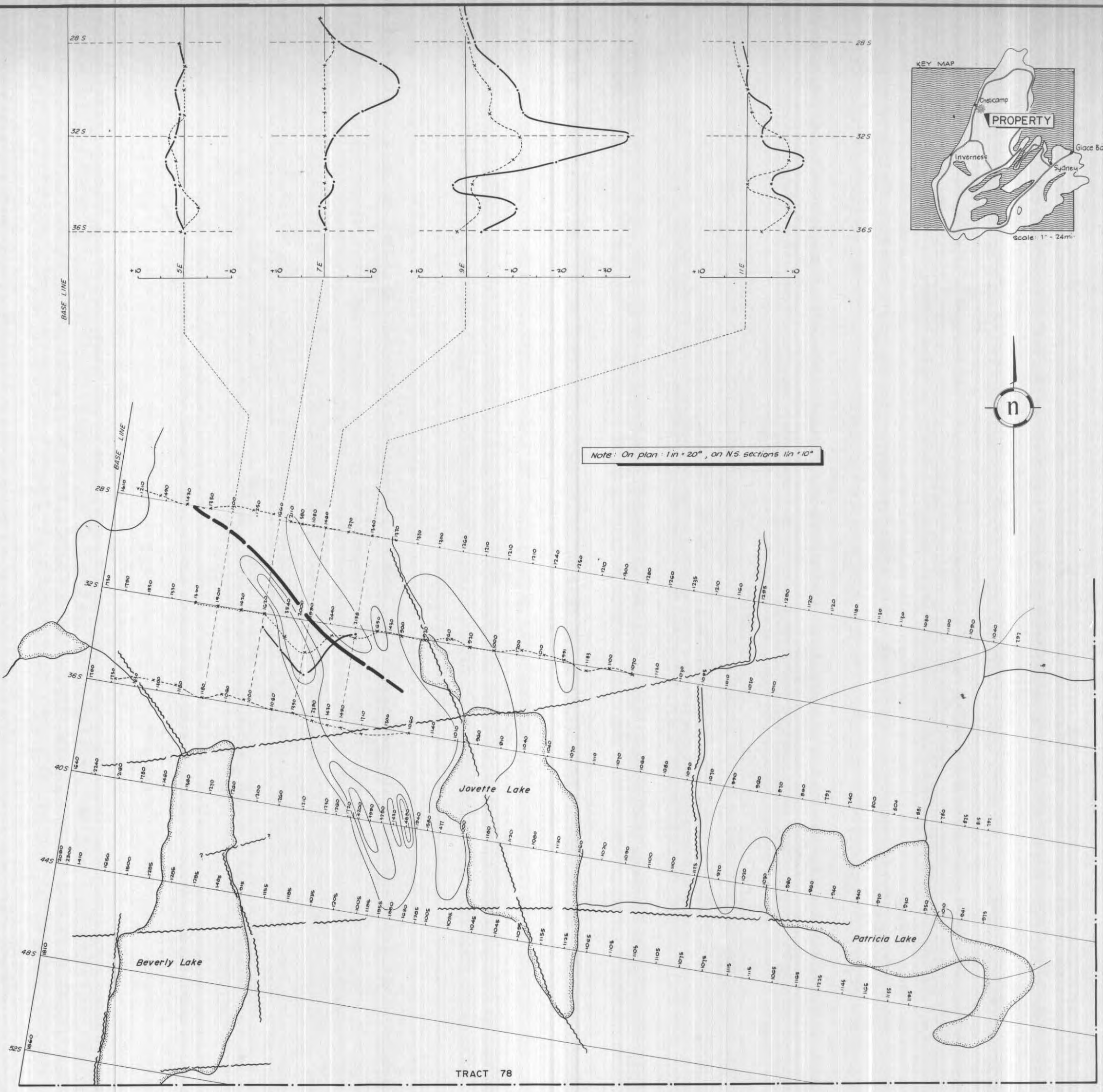


DRAWN: C.D.	DATE: FEBRUARY, 1967	ALLEN GEOLOGICAL ENGINEERING LTD. <i>Allen</i> P. ENG.
CHECKED: ARA	DWG No. C-36	





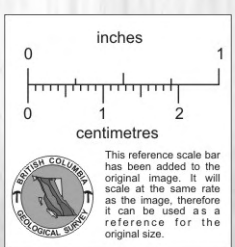
Note: On plan: 1 in = 20", on NS sections 1 in = 10"



**LEGEND**

- RELATIVE VALUE OF MAGNETIC FIELD IN GAMMAS
- MAGNETIC CONTOURS - INTERVAL 1000 GAMMAS
- E.M. PROFILES - HIGH FREQUENCY
- LOW
- E.M. CONDUCTOR

NOTE: INSTRUMENT: CRONE J.E.M. 'SHOOTBACK' METHOD,  
COIL SPACING 200'  
SHARPES FLUXGATE MAGNETOMETER

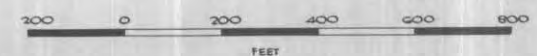


**NORTH PACIFIC MINES LIMITED**  
CHETICAMP AREA, CAPE BRETON ISLAND, N.S.

S.E. PORTION OF TRACT 78  
showing

**MAGNETIC & E.M. ANOMALIES**

by  
**A.C.A. HOWE & ASSOCIATES LTD.**



REF. MAP N.K. 10-B