

COMINCO LTD.

EXPLORATION

NTS 82 M/4

WESTERN DISTRICT

GEOCHEMICAL ASSESSMENT REPORT

on the

BAY MINERAL CLAIMS

Kamloops Mining Division

51°05'N 119°47'W

ADAMS LAKE AREA

WORK PERFORMED: JUNE 1-19, 1978

December 15, 1978

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 7123 NO. _____

P.J. Wojdak

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INTRODUCTION (Plate 1)

The Bay claims are located at Skwaam Bay on Adams Lake, 65 km northeast of Kamloops at 51°05'N, 119°47'W. The Bay property is situated on the steeper northern side of an asymmetrical U-shaped valley occupied by Sinmax Creek. Relief on the property is 1000 m and there is abundant outcrop on the steep upper slopes. Lower slopes are covered by talus, talus derived soil and vegetation. All-weather gravel roads along Sinmax Valley and the west side of Adams Lake provide good access. A dirt road to the plateau provides detailed access to the southeastern end of the claim block. In 1978 611 samples were collected during a geochemical soil survey covering part of Bay 1, 2 and 3 mineral claims. To provide control for the survey and other exploration a 2.4 km baseline and a 1:5,000 topographic map (12 sq. km covering all Bay claims) were prepared. The geochemical survey was carried out in the period June 1-19, 1978.

PROPERTY AND OWNERSHIP

The Bay property consists of 5 100% Cominco owned claims within the Kamloops Mining Division:

<u>Claim</u>	<u>Legal Corner Post</u>	<u>Units</u>	<u>Due Date</u>
Bay 1	42513	10	May 10, 1979
Bay 2	42514	10	May 10, 1979
Bay 3	42515	2	May 10, 1979
Bay 4	42516	6	May 10, 1979
Bay 5	43622	4	May 19, 1979
		<u>32</u>	

HISTORY

Previous exploration (by others) centered around lead-zinc and copper showings near Adams Lake in the southeastern part of the area now covered by the Bay claims. This included IP and magnetic surveys (Assessment Report 1114), an EM survey (Assessment Report 4134), a geochemical survey and geological mapping (Assessment Report 4135) and diamond drilling but did not locate economic mineralization. Mineralization in the area includes silver-zinc-lead-barite 3 km northwest of the property and lead-zinc-silver showings 10-20 km east on the Adams Plateau. Geological exploration mapping by Cominco (Assessment Report 6684) indicates the property is underlain by intercalated andesite, rhyolite and clastic sediments succeeded by mafic volcanic rocks. Rock strata strike northwest and dip moderately northeast.

SOIL GEOCHEMICAL SURVEY (Plate 2, 3, 4, 5)

Soil samples were collected on lines spaced 100 m apart along a 2.4 km baseline bearing 315°. Sample sites were at 40 m slope chained intervals along most lines, but lines 6W to 11W were at 30 m intervals. Talus-derived B-horizon soils were sampled at 10-30 cm depth but in some slide areas where soil horizons have not developed fine talus material was collected. The -80 mesh fraction of dried samples was analysed at Cominco's Exploration Research Laboratory in Vancouver. Cu, Pb and Zn determinations were by atomic absorption following digestion with hot nitric acid. Ba was determined by X-ray fluorescence.

Cumulative probability plots were made (see Appendix I) to aid in determining the anomalous populations at >90 ppm Cu, >400 ppm Zn and >0.35% Ba. No anomalous population can be selected from the Pb plot and the top 2½ percentile (> 200 ppm Pb) has arbitrarily been selected. Threshold values have also been contoured corresponding to the top 10% of Cu (>60 ppm) Pb (>90 ppm) and Ba (>0.2%) values, and top 15% of Zn (>200 ppm).

Pb, Ba and Cu show significant groupings of high values and high Zn values show the greatest tendency to be randomly distributed. The approximate centre of the three largest anomalies (in area and magnitude) for each element are listed below:

	1st anomaly	2nd anomaly	3rd anomaly
Cu	14W+350N	23W+50N	6W+260S
Pb	4W+250N	14W+400N	6W+250S
Zn	6W+260S	14W+350N	17W+130N
Ba	10W+250S	to 12W+150N 13W+150N	14W+450N

CONCLUSIONS

The 1978 soil survey on the Bay claims indicates three principal areas of interesting soil geochemistry:

- 1) an area centered at 14W+350N anomalous in Cu, Pb, Zn and Ba. Possibly related Zn and Ba highs extend downslope to the baseline and east to 12W.
- 2) a large area of high Pb extending from 1W+150N to 8W+150N. Cu, Zn and Ba do not correlate with this Pb anomaly.
- 3) an anomalous trend of vaguely coincident Cu, Pb and Zn centered at about 5W+200S. A prominent Ba anomaly on 10W may represent a continuation of this trend.

Correlation of these anomalies with geological and geophysical data may lead to diamond drill targets.

PJW/pc1

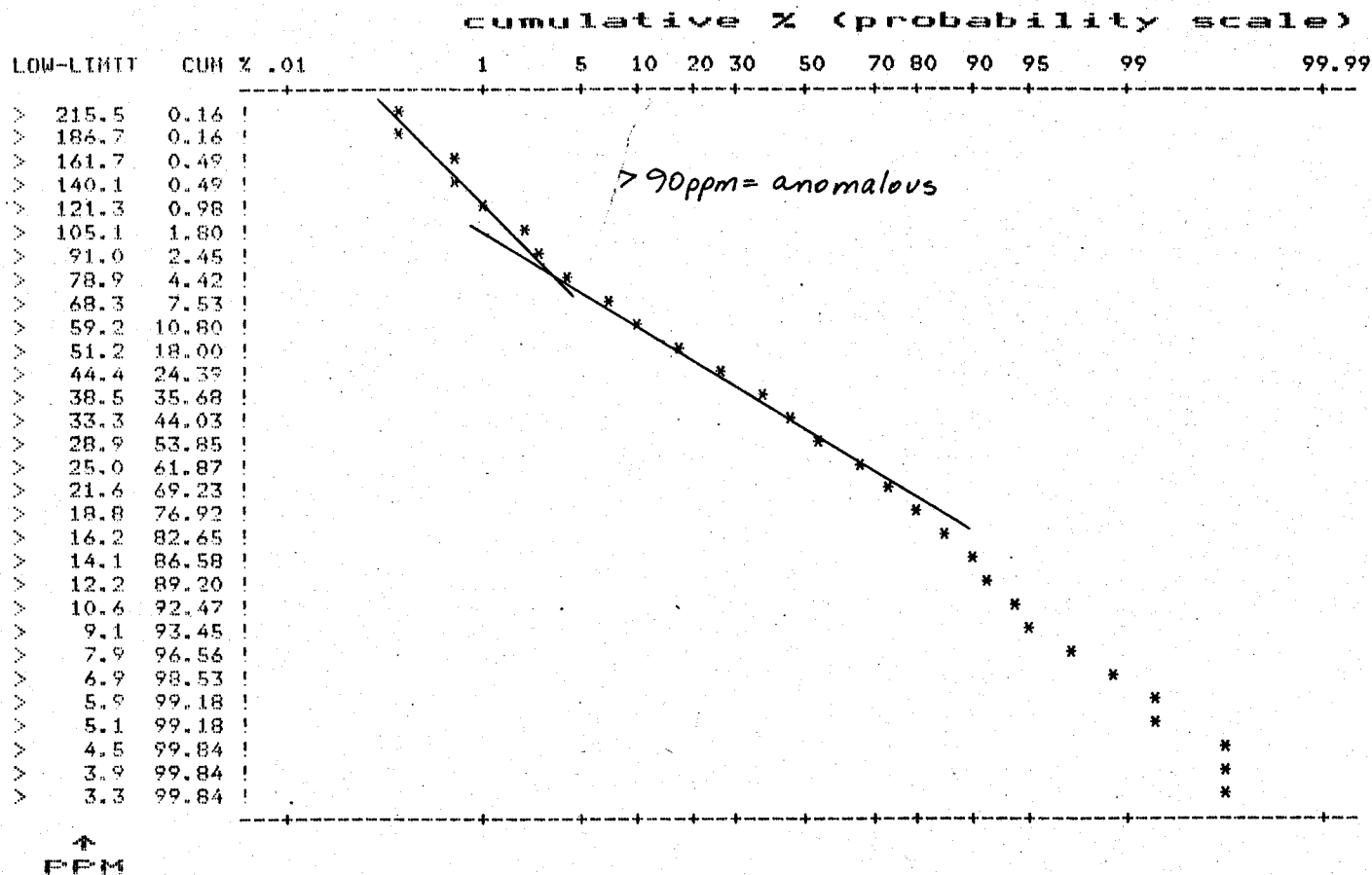
Report by: *P.J. Wojdak*
P.J. Wojdak

Endorsed by: *D.W. Heddle*
D.W. Heddle
Assistant Manager, Exploration

Approved for Release by: *G. Harden*
G. Harden, Manager, Exploration

RAY

CUMULATIVE PROBABILITY PLOT FOR COPPER



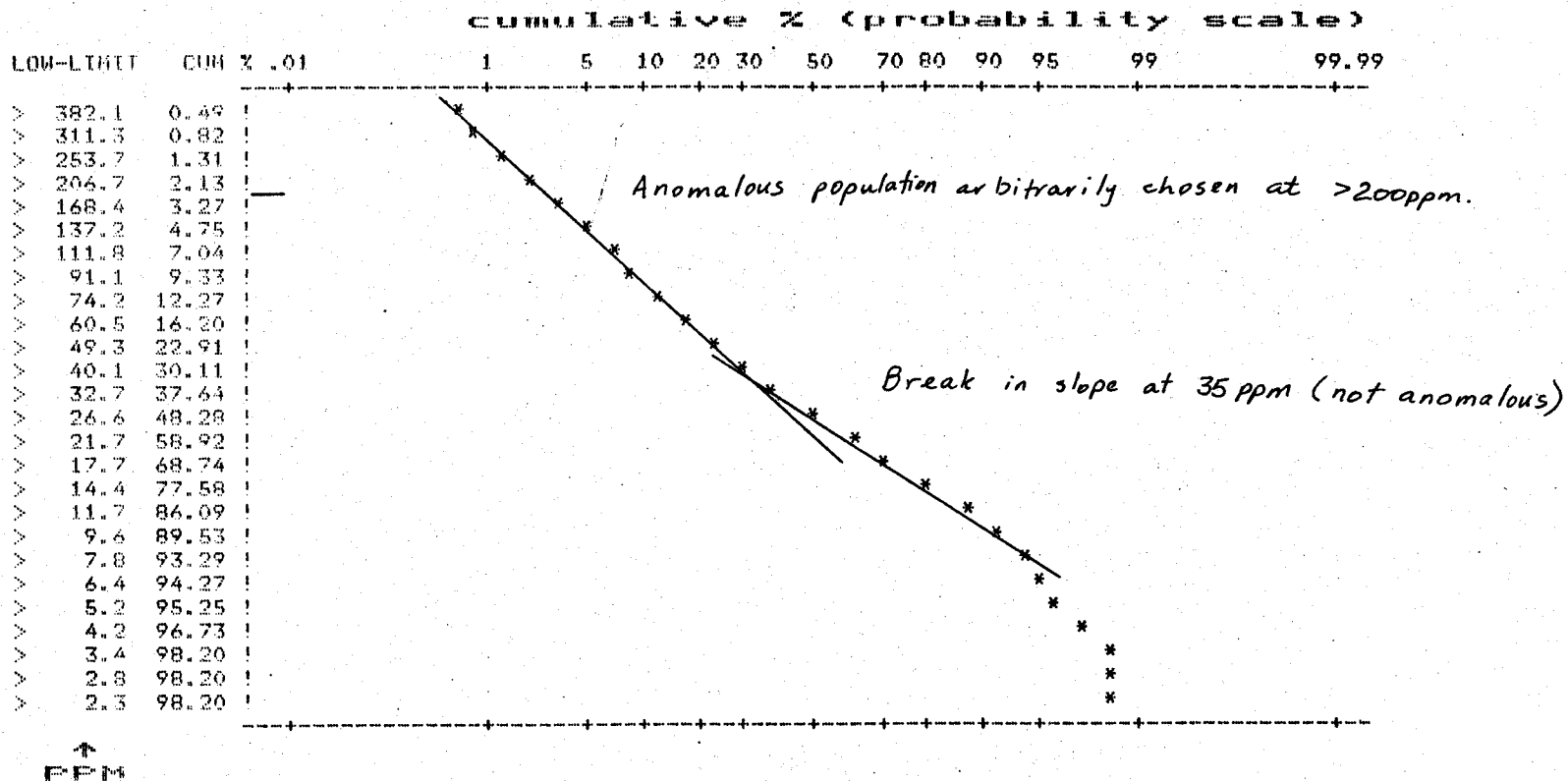
NOTE: PPM SCALE IS LOGARITHMIC (INTERVAL = .062), VALUES ARE CLASS LOWER LIMITS

SOILS

ELEMENT	NO OF ANALYSES	RANGE	ARTH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
COPPER	611	3 TO 237	35 (83)	28 (105)

BAY

CUMULATIVE PROBABILITY PLOT FOR LEAD



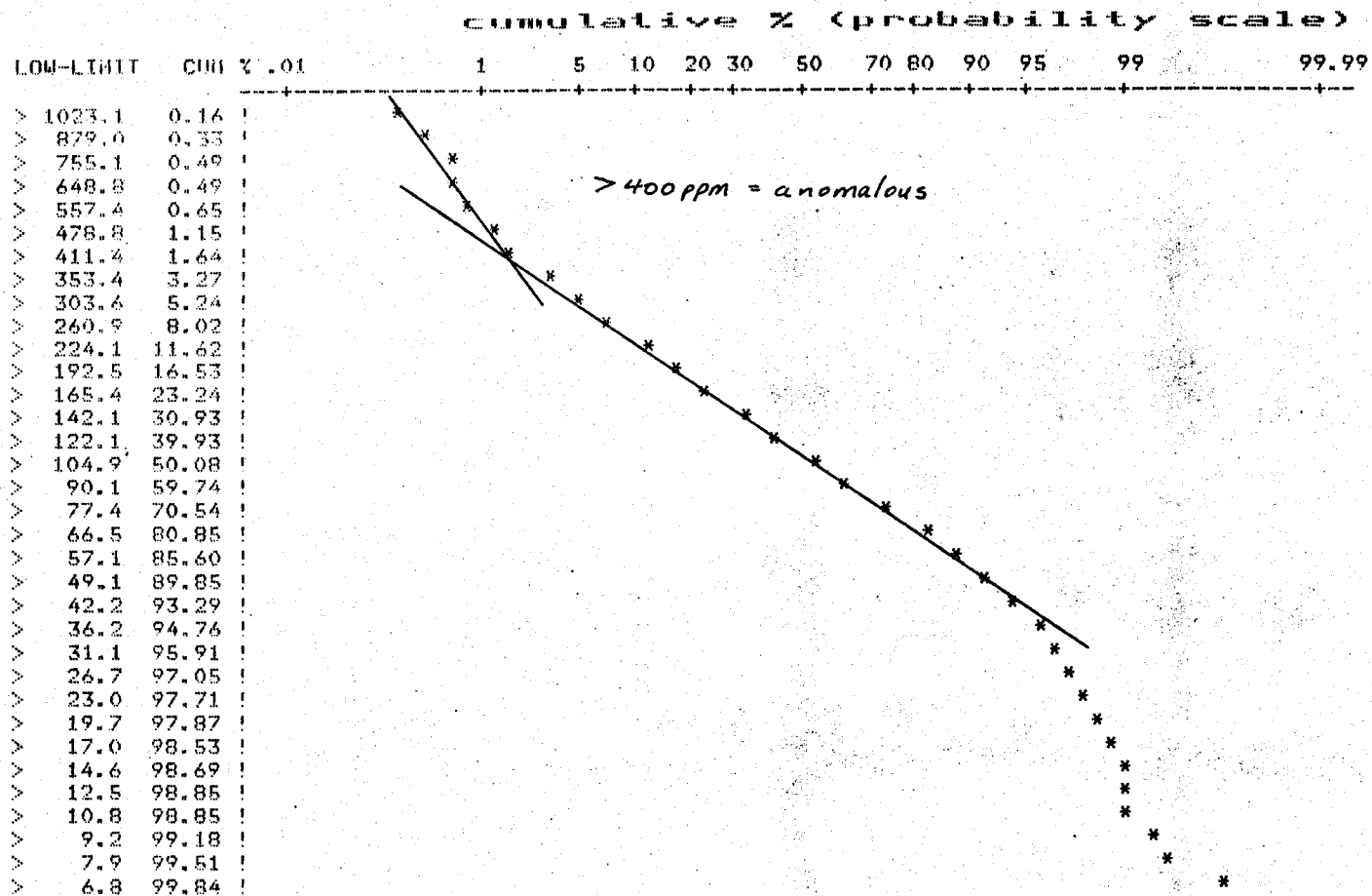
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SOILS

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
LEAD	611	2 TO 450	41 (146)	26 (168)

BOY

CUMULATIVE PROBABILITY PLOT FOR ZINC



NOTE: PPM SCALE IS LOGARITHMIC (INTERVAL=.065), VALUES ARE CLASS LOWER LIMITS

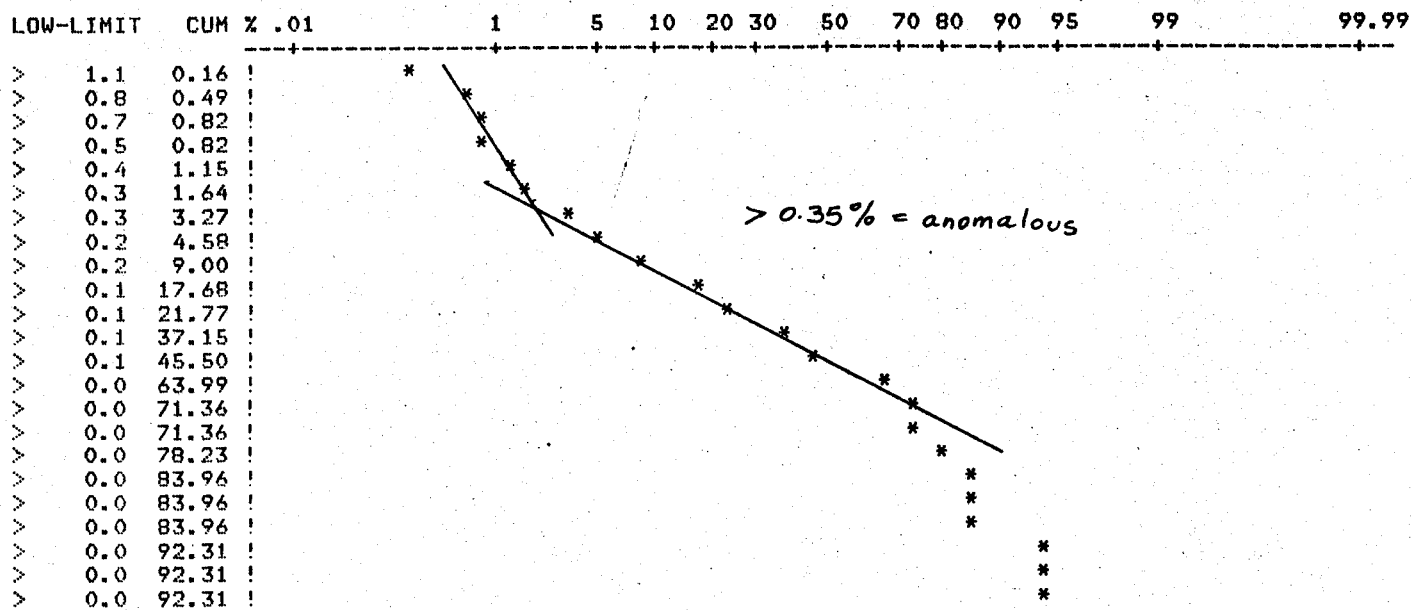
SOILS

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
ZINC	611	6 TO 1080	131 (335)	104 (411)

BAY PROPERTY

CUMULATIVE PROBABILITY PLOT FOR BARIUM

cumulative % (probability scale)



↑
PPM

NOTE: PPM SCALE IS LOGARITHMIC (INTERVAL=.103), VALUES ARE CLASS LOWER LIMITS

SOILS

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
BARIUM	611	0 TO 1	0 (0)	0 (0)

APPENDIX II

Statement of Expenditures on Bay Claims

Geochemical Program

Geochemical Survey

K. Simpson - June 1-6, 14-19; 12 days @ \$58/day	\$ 696.00
M. Graham - June 1-6, 14-19; 12 days @ \$52/day	624.00
P. Wojdak - June 1, 1 day @ \$124	124.00
Equipment and Supplies	150.00
Linecutting - 2.4 km baseline @ \$275/km	660.00
Analysis of soil samples - 611 samples for Cu, Pb, Zn, Ba @ \$4.80/sample	2,932.80
<u>Topographic Map</u> prepared by Pacific Survey Corporation	420.00

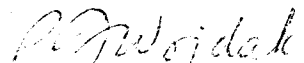
Project Support

Accommodation - 2 weeks cabin rent at Agate Bay Resort @ \$160/week	320.00
Groceries - 25 man days @ \$12.00	300.00
Truck rental	350.00

Report Preparation

F.J. Ferguson - drafting 1 day @ \$100	100.00
P.J. Wojdak - 2 days @ \$110	220.00
	<u>6,896.80</u>

Signed:



P.J. Wojdak
Geologist

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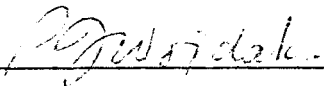
APPENDIX III

IN THE MATTER OF THE B.C. MINERAL ACT AND
IN THE MATTER OF A GEOCHEMICAL
PROGRAM CARRIED OUT ON THE
BAY 1, 2 and 3 MINERAL CLAIMS
LOCATED IN THE KAMLOOPS MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA
MORE PARTICULARLY N.T.S. 82 M/4

A F F I D A V I T

I, PAUL J. WOJDAK OF THE MUNICIPALITY OF DELTA IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:

1. That I am employed as a Geologist by Cominco Ltd., and as such have a personal knowledge of the facts to which I hereinafter depose:
2. That annexed hereto and marked as Appendix II to this my affidavit is a true copy of expenditures on a geochemical program carried out on the Bay Mineral Claims.
3. That the said expenditures were incurred between the first day of June and the nineteenth day of June, 1978 for the purpose of mineral exploration on the above noted claims.



P.J. Wojdak
Geologist

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WESTERN DISTRICT
15 DECEMBER 1978

APPENDIX IV

STATEMENT OF QUALIFICATIONS

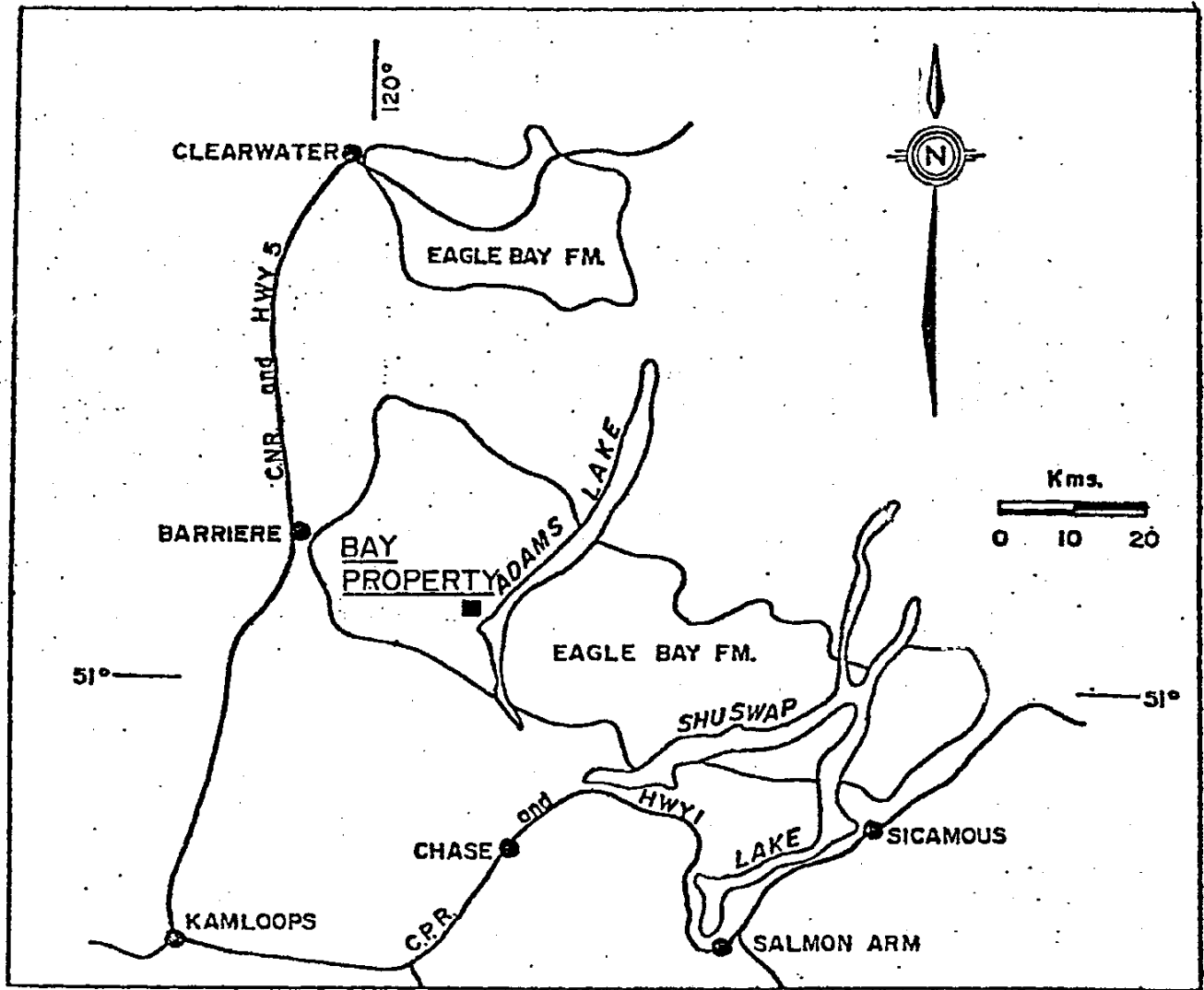
I, PAUL J. WOJDAK, OF THE MUNICIPALITY OF DELTA, PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:

1. THAT I am a Geologist residing at 11405-85th Avenue, Delta, British Columbia with a business address at 2200-200 Granville Street, Vancouver, British Columbia.
2. THAT I graduated with a B.Sc. in Geology and Chemistry from McMaster University, Hamilton, Ontario in 1971 with a M.Sc. in Geology from the University of British Columbia in 1974.
3. THAT I have practised Geology with Cominco Ltd. from 1974 to 1978.

DATED THIS 15 DAY OF DECEMBER 1978 AT VANCOUVER, BRITISH COLUMBIA.

Signed: _____

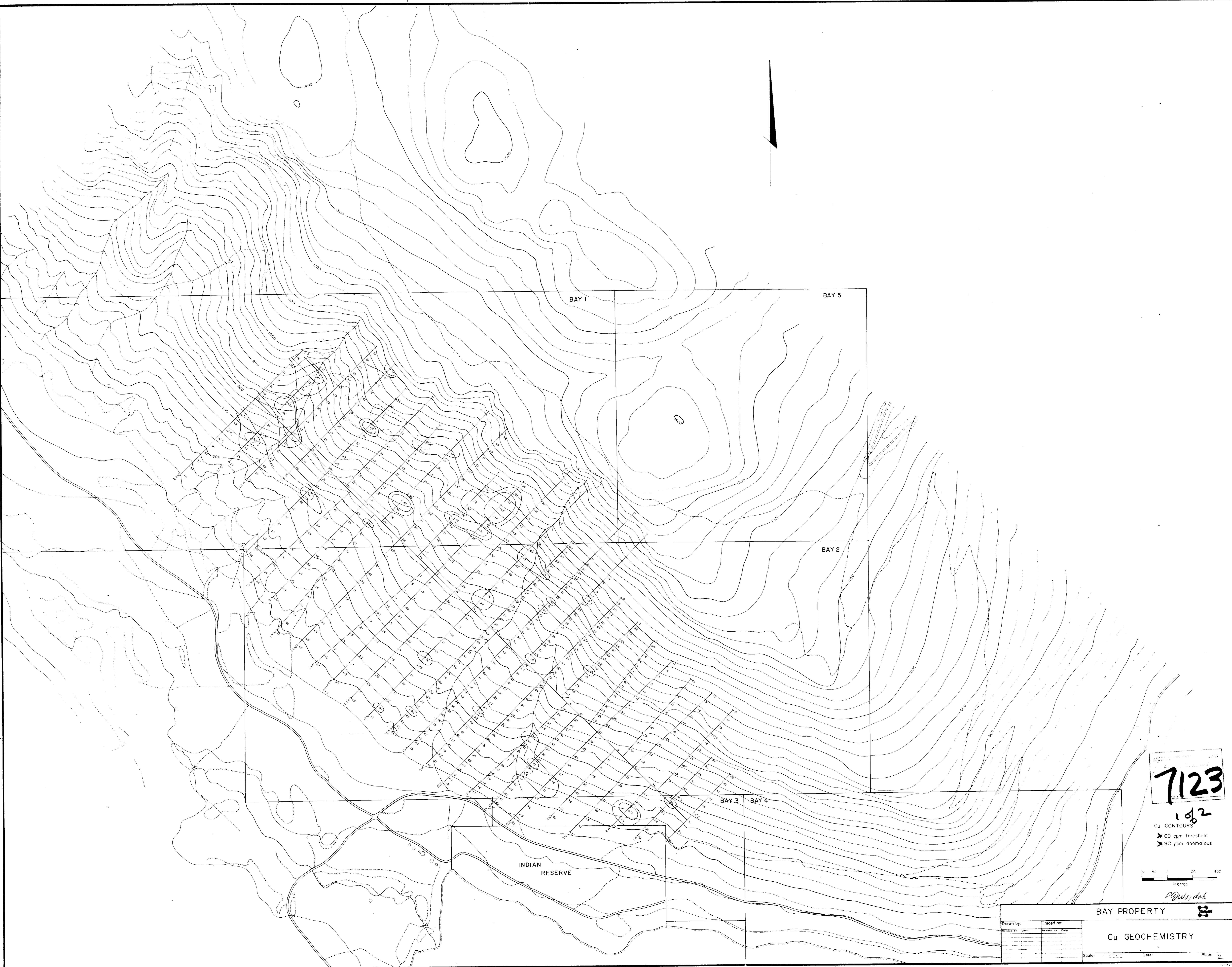
P. J. Wojdak
P.J. WOJDAK, M.Sc.



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Revised by	Date	Revised by	Date

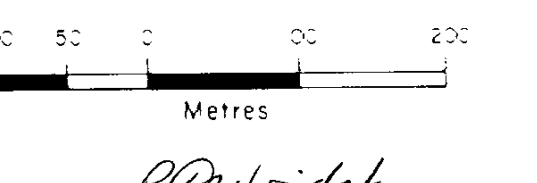
BAY LOCATION MAP

Scale: 1:1,000,000 Date: MARCH 1978 Plate: 1



7123
NO. 1062

Cu CONTOURS
 ▲ 60 ppm threshold
 ✕ 90 ppm anomalous



P. G. J. J. J.

BAY PROPERTY

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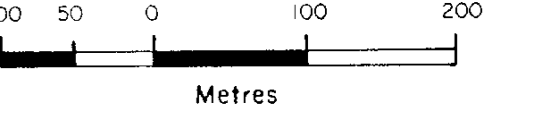
Cu GEOCHEMISTRY

Scale: 1:5000 Date: Plate: 2

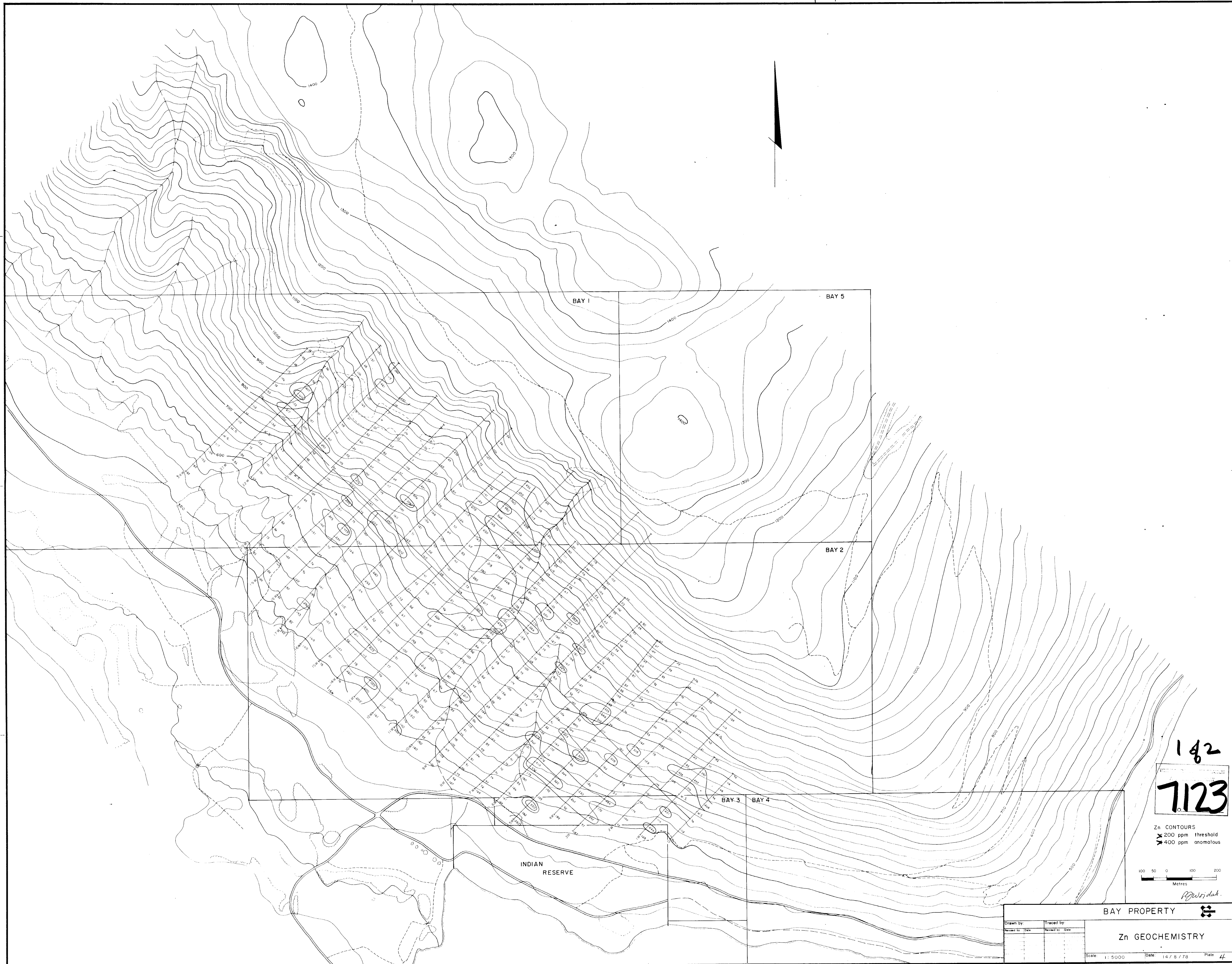


182
7123

Pb CONTOURS
 X 90 ppm threshold
 X 200 ppm anomalous (top 2 V2 percentile)



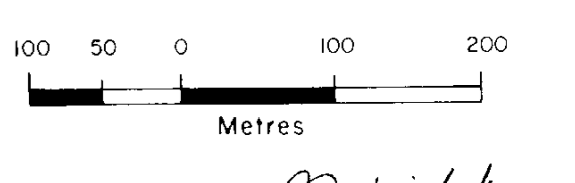
BAY PROPERTY		
Drawn by:	Traced by:	
Revised by:	Revised by:	Pb GEOCHEMISTRY
Scale: 1:5000	Date:	Page: 3



142

7123

Zn CONTOURS
 * 200 ppm threshold
 * 400 ppm anomalous



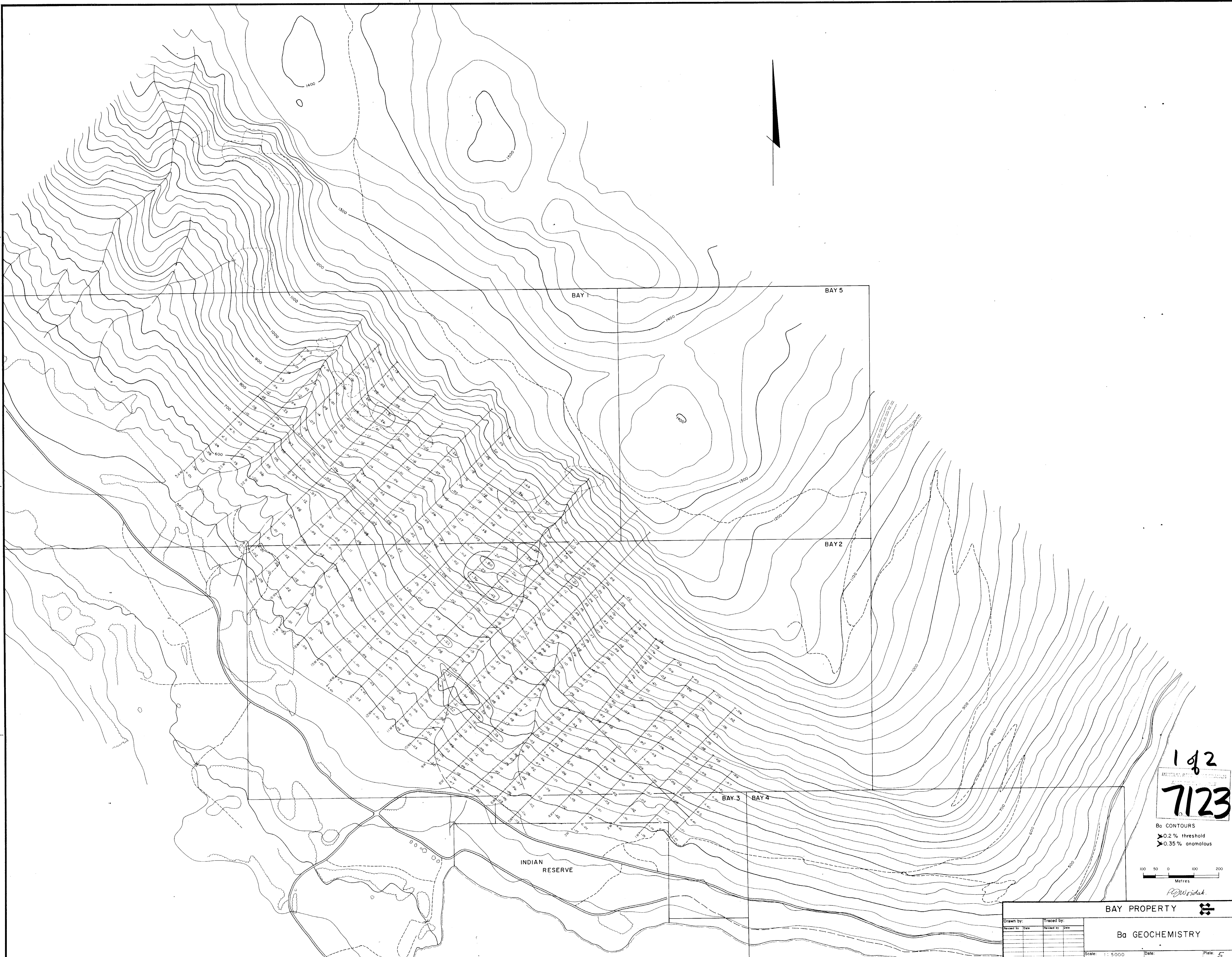
R. J. ...

BAY PROPERTY

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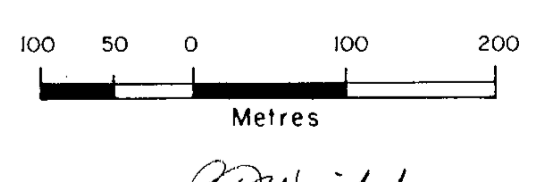
Zn GEOCHEMISTRY

Scale: 1: 5000 Date: 14 / 8 / 78 Plate: 4



1 of 2
7123

Ba CONTOURS
 x 0.2% threshold
 x 0.35% anomalous



R. J. W. S. D. A. K.

BAY PROPERTY

Drawn by:	Traced by:
Revised by:	Date:

Ba GEOCHEMISTRY

Scale: 1: 5000 Date: Plate: 5