

83-#789-11786

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 104K/12E

ASSESSMENT REPORT

GEOCHEMICAL, GEOPHYSICAL & GEOLOGICAL REPORT
FOR GOAT I CLAIM
ATLIN MINING DIVISION
TAKU RIVER AREA, B.C.

Latitude: 58°40'N Longitude: 133°30'W

Work Performed

August 20, 1983 - September 3, 1983

Owner and Operator: Cominco Ltd.

8 December 1983

J. Paul Sorbara

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,786

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FOR GOAT I CLAIM

ATLIN MINING DIVISION

TAKU RIVER AREA, B.C.

INTRODUCTION

The Goat I mineral claim is located on the north side of the Taku River Valley, east of the peak of Mt. Manville, and is centered at 58°40'N and 133°30'W. Access to the property is by helicopter, usually from Atlin, B.C. The property was staked in July 1982 and is 100% owned by Cominco Ltd.

During the period of August 20 to September 3, 1983 a program of geology, geophysics, soil geochemistry and line cutting was conducted on the Goat claim. This program was supervised by the author who also performed the geological mapping. The linecutting was contracted to McCrory Holdings (Yukon) Ltd. and the geophysical work was done by Ingo Jackisch, assisted by Ted Wong (both Cominco geophysicists). The soil sampling was done by Chris Parisien, a local resident, under the supervision of the author.

GEOPHYSICAL SURVEY

Geophysical work conducted on the Goat claim in 1983 consisted of 2.8 km of Max.-Min. II (HLEM) with a 50 m coil separation and total field MAG done over the entire grid (2.8 km). The HLEM survey defined 4 conductive zones trending parallel to the stratigraphy (Plate 3). The three easterly conductors are underlain by graphitic argillite and, hence, are not of interest. The westernmost conductor is mostly underlain by andesitic tuff and breccias, but the northern tip of this conductor is underlain by minor amounts of rhyolitic tuff (no obvious geological explanation).

The MAG survey defined three small areas of increased magnetic field strengths (Plate 4). One of these 3 zones (the southernmost one) is partly coincident with one of the EM conductors, and the other 2 MAG highs are not coincident with conductors. Regardless of their positions, the MAG highs are not extreme and are not believed to be significant.

GEOLOGY

The Goat property is underlain by interbedded rhyolitic tuffs, tuffs and breccias of andesitic composition and graphitic argillite, with minor volcanic sandstone and sub-volcanic intrusive andesite. These units strike roughly 230° with vertical-to-steep dips (Plate 2). Minor amounts of disseminated chalcopryrite and sphalerite were found in rhyolitic rocks along the western edge of the survey area. Rhyolitic rocks also contained some sericite and carbonate and were in places slightly schistose. Andesitic rocks to the east are calcareous and in places contain coral fragments. The argillaceous rocks contain graphitic material and minor pyrite.

SOIL GEOCHEMISTRY

The soil sampling was done on the grid at 25 metre intervals with 120 samples collected, of which 55 were analyzed. These were analyzed for Cu, Pb and Zn in the Cominco Exploration laboratory in Vancouver. The analytical process involved sieving to -80 mesh followed by decomposition by 20% HNO₃ and atomic absorption spectrophotometry.

The highest values of Cu, Pb and Zn (81, 83 and 329 ppm respectively) were located at the northwest corner of the grid (see Plate 5). These results are restricted to a very small area and appear to result from minor disseminated sphalerite and chalcopryrite in rhyolitic tuffs. No other anomalous values were found within the grid area.

INTERPRETATION

The Goat property is underlain by a northwest striking, steeply dipping sequence of interbedded rhyolitic to andesitic tuff, graphitic argillite and minor volcanic sandstone. The EM conductors found on the property are underlain by graphitic argillite or andesitic tuff and hence, are of little apparent value. Minor mineralization in the form of disseminated chalcopryrite and sphalerite was found in an area of the property. The grade and size of this mineralization, however, makes it of little economic significance.

Report By: J. Paul Sorbara
J.P. Sorbara
Geologist

Endorsed By: F.D. Gill
F.D. Gill
Assistant Manager
Exploration, Western District

Approved for Release By: G. Harden
G. Harden
Manager
Exploration, Western District

Distribution: Mining Recorder (2)
W.D. Files (1)

APPENDIX I

STATEMENT OF EXPENDITURES

SALARIES

J. Paul Sorbara	15 days @ 155.76/day	\$ 2,336.40
Chris Parisien	12 days @ 130.41/day	\$ 1,565.00
Linecutting		\$ 5,442.00
Geophysics		\$ 7,821.00
Geochemistry	55 samples @ \$3.95	\$ 217.25
Mobilization & Demobilization		\$ 8,632.00
Food & Lodging		\$ 4,023.00
		<hr/>
	TOTAL EXPENDITURES	<u>\$30,036.65</u>

Signed: J. Paul Sorbara
J.P. Sorbara

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, J. PAUL SORBARA, OF THE CITY OF NORTH VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:-

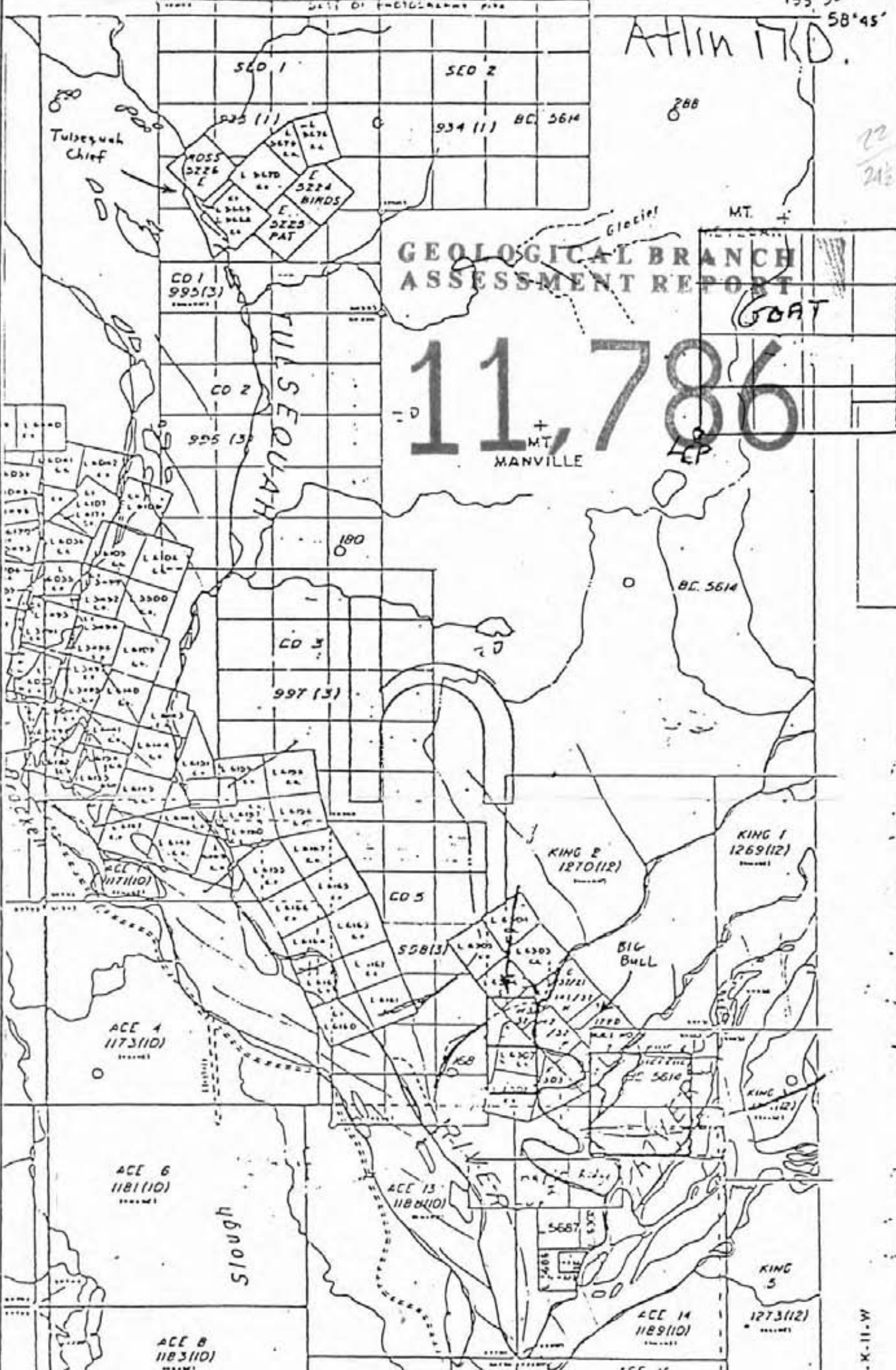
1. THAT I am a geologist residing at 1209 - 2012 Fullerton Avenue, North Vancouver, British Columbia, with a business address at 409 Granville Street, Vancouver, British Columbia;
2. THAT I graduated with a B.Sc. in geology from the University of Toronto, Toronto, Ontario in 1976, and with a M.Sc. in geology from the University of Toronto in 1979.
3. THAT I have practised geology with Cominco Ltd. from 1979 to 1983.

Signed: J. Paul Sorbara
J. Paul Sorbara, M.Sc.
Geologist, Cominco Ltd.

8 December 1983

133°30' 58'45"

Atlin Tkd.



GEOLOGICAL BRANCH ASSESSMENT REPORT

GOAT

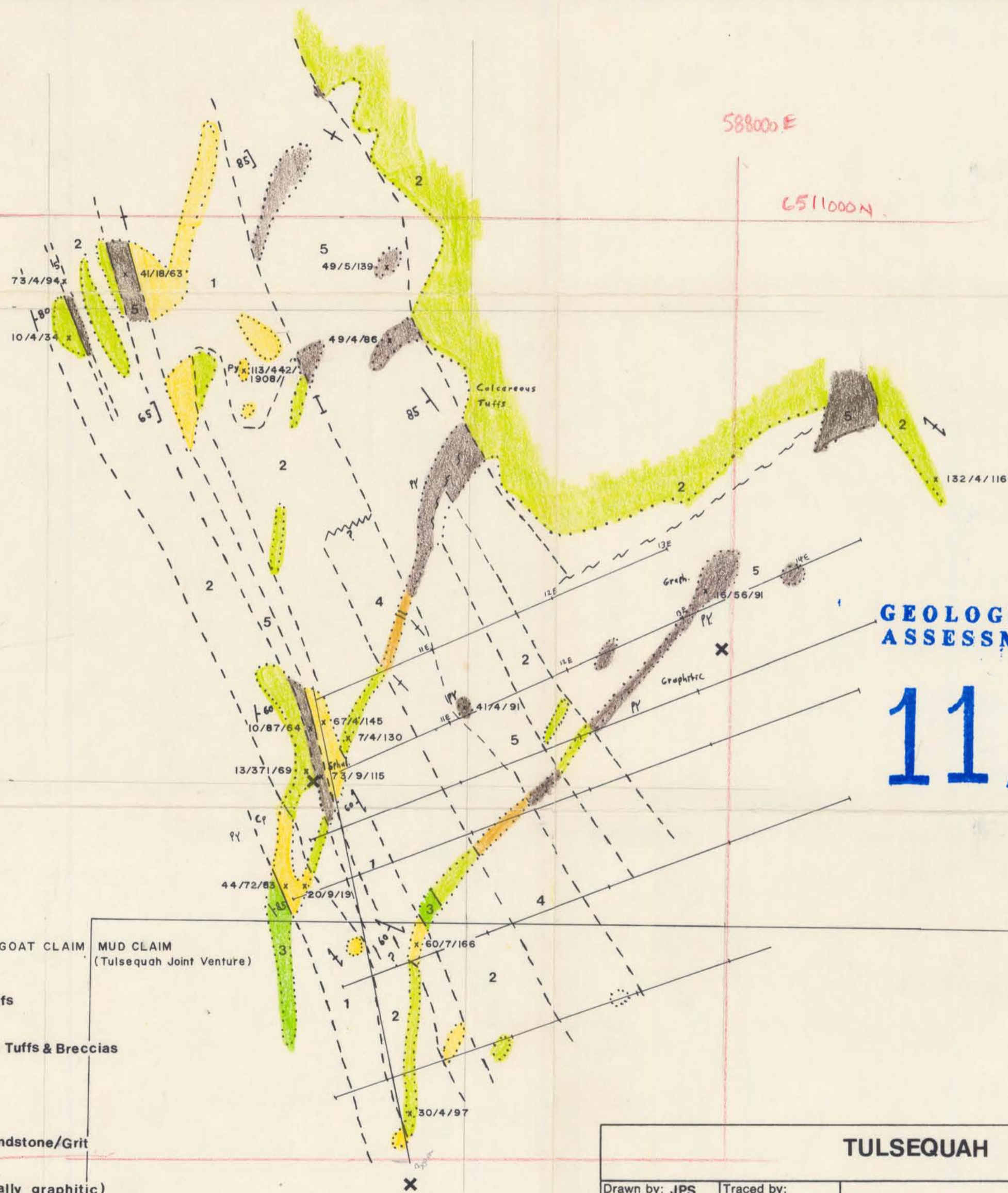
11,786

MT. MANVILLE

Drawn by:		Traced by:	
Revised by	Date	Revised by	Date






Goat Claim
 Index and Claim Location
 (From Minerals Titles Reference Map 104K/12E)

Scale: 1:50,000 Date: Plate 1



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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-  1 Rhyolitic Tuffs
-  2 Intermediate Tuffs & Breccias
-  3 Andesite
-  4 Volcanic Sandstone/Grit
-  5 Argillite (locally graphitic)

x Cu/Pb/Zn (ppm in rock)
X Airborne EM Conductor

GOAT CLAIM MUD CLAIM
(Tulsequah Joint Venture)

TULSEQUAH



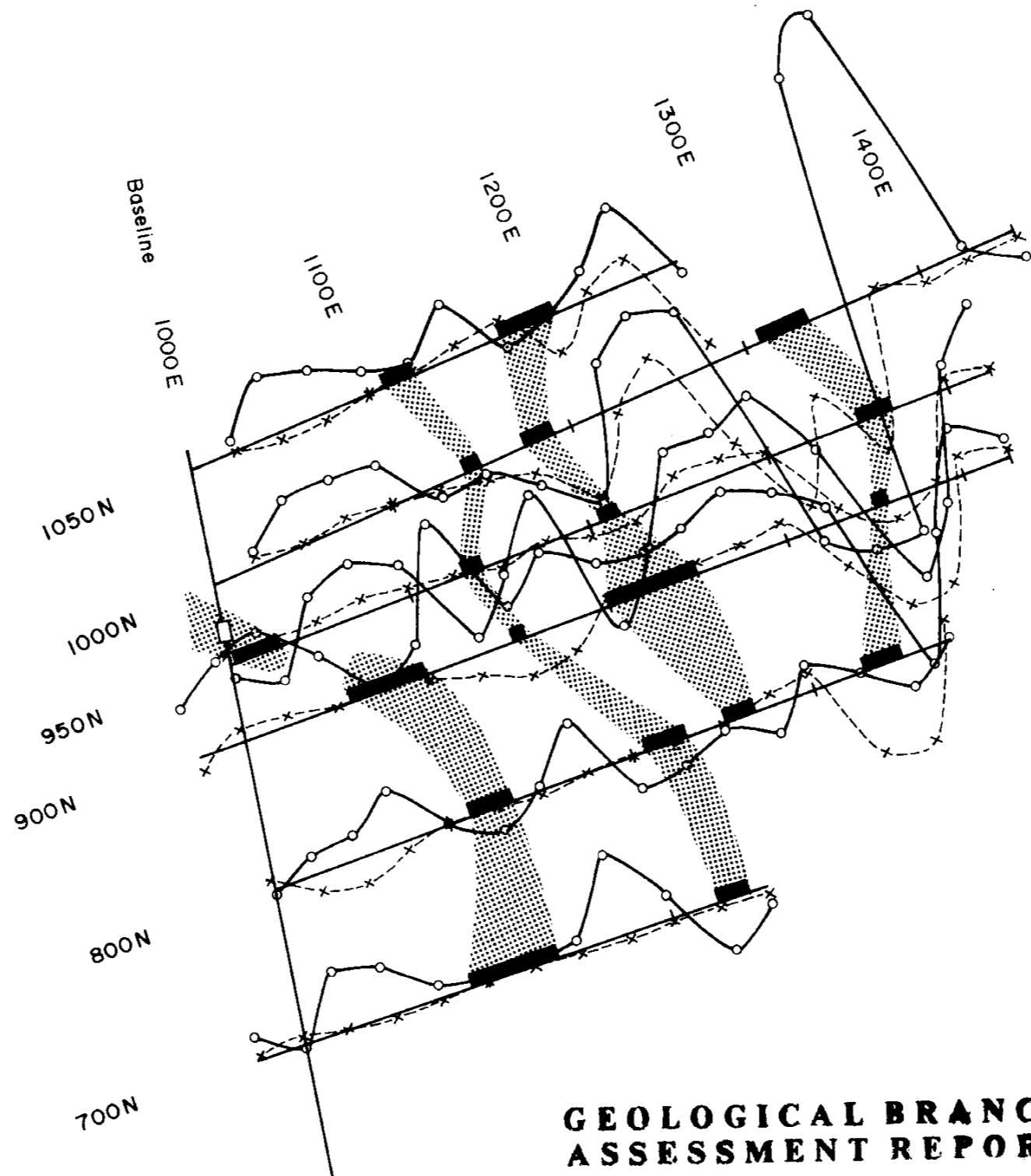
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Revised by	Date	Revised by	Date

**Goat Claim
Geology**

Scale: 1:4210 approx

Date: SEPT, 83

Plate: 2

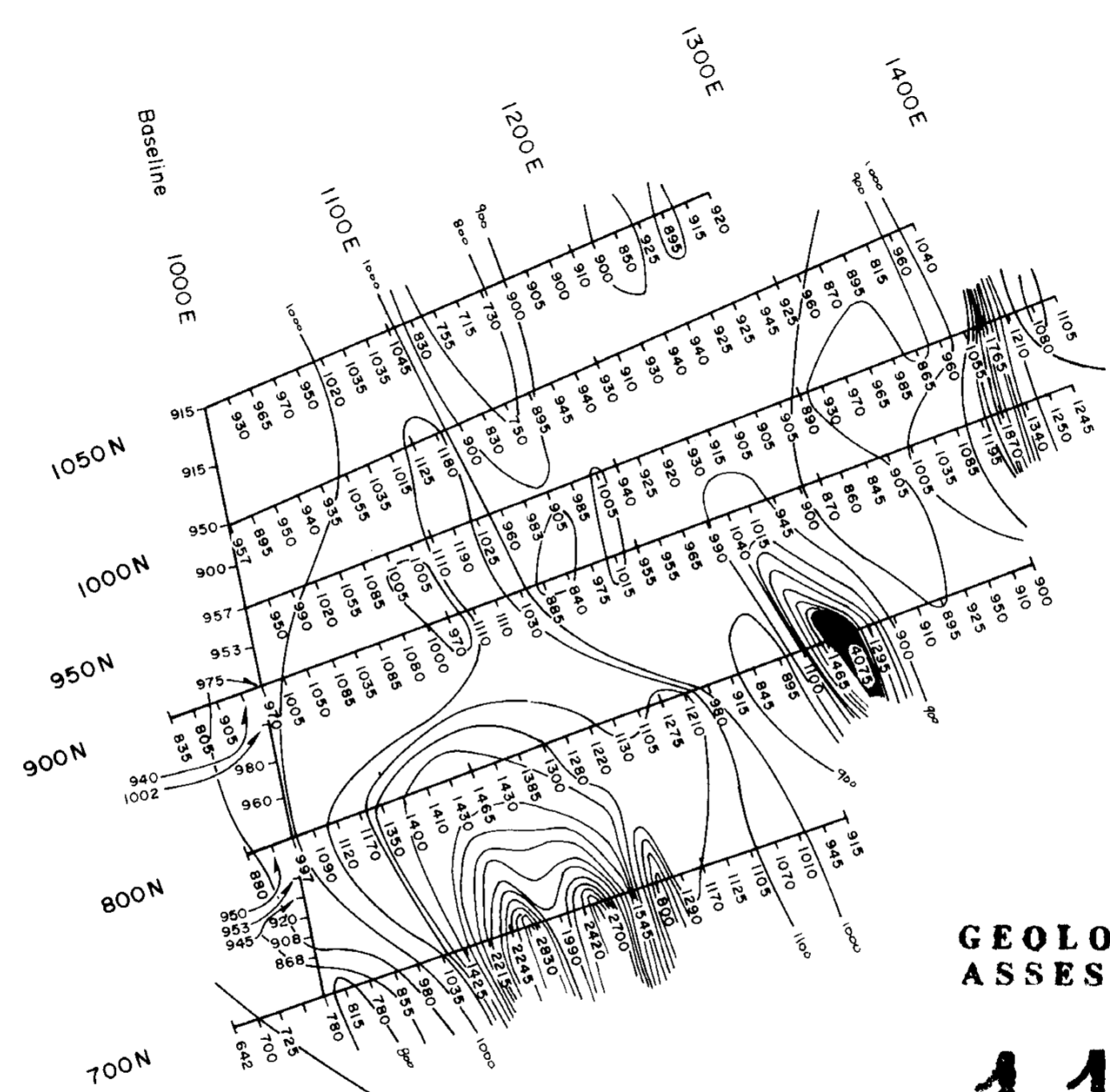


**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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TULSEQUAH PROPERTY (Goat Claim)					
Drawn by:		Traced by:		HLEM MAX-MIN 1777 Hz COIL SEPARATION = 50 metres ATLIN M.D., B.C.	
Revised by	Date	Revised by	Date		
Scale: 1: 4210 Approx.		Date: JANUARY 1984		Plate: 250-83-3	



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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BASE LEVEL : 57,000 Gammas
CONTOUR INTERVAL : 100 Gammas



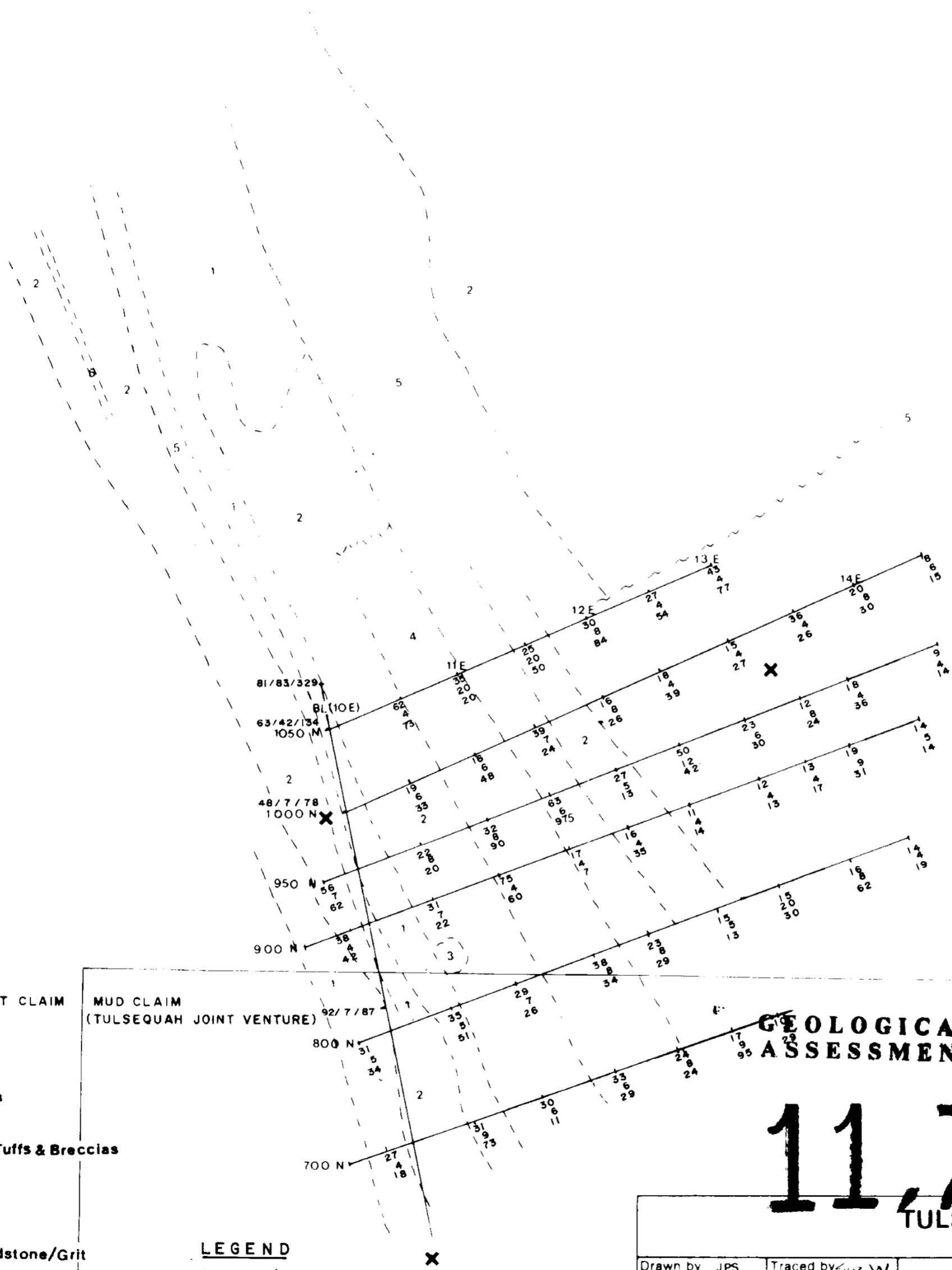
TULSEQUAH PROPERTY (Goat Claim)



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

MAGNETICS

ATLIN M.D., B.C.



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**



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TULSEQUAH

- Rhyolitic Tuffs
- Intermediate Tuffs & Breccias
- Andesite
- Volcanic Sandstone/Grit
- Argillite (locally graphitic)
- Airborne EM Conductor

LEGEND

Cu	55 ppm
Pb	55 ppm
Zn	55 ppm

Drawn by	JPS	Traced by	Suz W
Revised by	Date	Revised by	Date

**Goat Claim
Soil Geochemistry**