

MAP NO.: ASSESSMENT REPORT X  
106 D 16 PROSPECTUS  
CONFIDENTIAL X  
OPEN FILE

DOCUMENT NO: 092668  
MINING DISTRICT: Mayo  
TYPE OF WORK: Geology

REPORT FILED UNDER: 697895 Ontario Ltd

DATE PERFORMED: September 20-29, 1988

DATE FILED: December 23, 1988

LOCATION: LAT.: 64° 54' N

AREA: Bear River

LONG.: 134° 17' W

VALUE \$: 24 000.00

CLAIM NAME & NO.: LEX 1-8 YB 02035-YB 02042  
WITZ 1-6 YA 83795-YA 83800  
WITZ 7-40 YB 02001-YB 02034

WORK DONE BY: D. Kretschmar

WORK DONE FOR: 697895 Ontario Ltd

DATE TO GOOD STANDING: REMARKS: #64 FACE #59 ARCTOS



TRANSMITTAL FORM

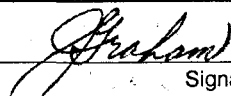


M.R. file no.
R.M.M.R. file no.
Date forwarded <i>28 Dec. 1988</i>

From ► Mining Recorder at: *M240*

To ► Regional Manager, Mineral Rights at Whitehorse, Y.T.

For action are:

<input type="checkbox"/> NEW APPLICATION FOR PLACER LEASE TO PROSPECT	Name	
<input type="checkbox"/> RENEWAL APPLICATION PLACER LEASE TO PROSPECT	Name	Lease no.
<input type="checkbox"/> AFFIDAVIT OF EXPENDITURE ON PLACER LEASE	Name	Lease no.
<input type="checkbox"/> SECURITY DEPOSIT		
<input type="checkbox"/> FINANCIAL ABILITY		
<input type="checkbox"/> ASSIGNMENT OF PLACER LEASE NO.	From	To
<input type="checkbox"/> GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT.	Owner	
<input type="checkbox"/> DIAMOND DRILL LOGS	Claims	Claim sheet no.
<input checked="" type="checkbox"/> QUARTZ ASSESSMENT REPORT	Claims <i>Lex 1-8 Witz 1-40</i>	Claim sheet no. <i>106-D-16</i>
	Type of report <i>Geological Report</i>	Submitted by <i>197895 Ontario Ltd</i>
	Cls. work performed on <i>Lex 1-8 Witz 1-40</i>	\$ req. for ren. application <i>24,000.00</i>
 Signature		

REPLY ACTION

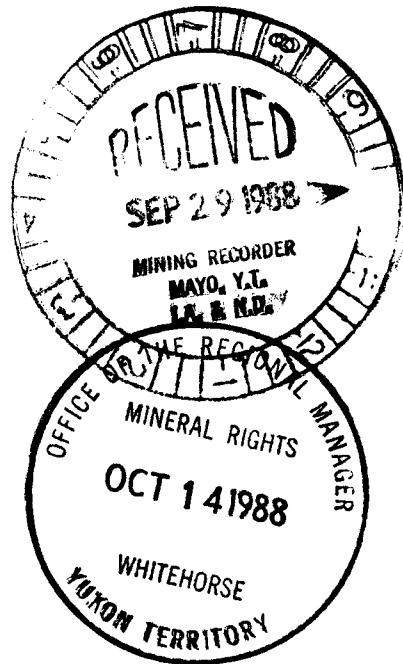
Date returned  
**092668**

*5 Jan 89*

*Enclosed is the second copy of the above Report.*

*Gerrald*

Signature



GEOLOGICAL REPORT

ON THE

LEX 1-8 AND WITZ 1-40 CLAIMS

LATITUDE <sup>64</sup>45°54' TO <sup>64</sup>45°57'

LONGITUDE 134°17' TO 134°23'

CLAIM SHEET 106-D-16

FOR

697895 ONTARIO LTD

112 ADELAIDE STREET EAST

TORONTO M5C 1K9

ONTARIO CANADA

BY

DIANE KRETSCHMAR

GEOLOGIST

DECEMBER 1987

092668

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 24,000.00.

*U. LeBouge*

*U.* Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

TABLE OF CONTENTS

	PAGE NO.
LIST OF CLAIMS	1
INTRODUCTION	2
LOCATION - ACCESS	2
PREVIOUS WORK	2
GEOLOGY AND CURRENT EXPLORATION	4
CONCLUSIONS	6
RECOMMENDATIONS	6
REFERENCES	7

FIGURE 1 - LOCATION MAP

MAP SHOWING THE POSITION OF THE LEX  
AND WITZ CLAIMS

LIST OF CLAIMS

LEX GROUP

NUMBERS	1	YB02035	5	YB02039
	2	YB02036	6	YB02040
	3	YB02037	7	YB02041
	4	YB02038	8	YB02042

WITZ GROUP

NUMBERS	1	YA83795	21	YB02015
	2	YA83796	22	YB02016
	3	YA83797	23	YB02017
	4	YA83798	24	YB02018
	5	YA83799	25	YB02019
	6	YA83800	26	YB02020
	7	YB02001	27	YB02021
	8	YB02002	28	YB02022
	9	YB02003	29	YB02023
	10	YB02004	30	YB02024
	11	YB02005	31	YB02025
	12	YB02006	32	YB02026
	13	YB02007	33	YB02027
	14	YB02008	34	YB02028
	15	YB02009	35	YB02029
	16	YB02010	36	YB02030
	17	YB02011	37	YB02031
	18	YB02012	38	YB02032
	19	YB02013	39	YB02033
	20	YB02014	40	YB02034

## INTRODUCTION

In June 1987 Dr John Ferguson and Dr David Tucker of 697895 Ontario Ltd, Toronto, carried out a regional reconnaissance program for Noble Metals in Canada following the Coronation Hill model. Significant assays for gold resulted from sampling in the Wernecke Mountains, Yukon Territory, specifically in the Bear River and Kiwi Lake areas. Three target areas were earmarked for follow-up reconnaissance mapping and sampling, prospecting and contingent staking.

The Bear River Area (106D16-U12UIV) was selected after a composite sample of rock specimens on the table at the old camp assayed 33 g/tonne gold.

Follow-up work was carried out by Diane Kretschmar, geologist, and Lex Salie, prospector, during the period September 20 to 29, 1987. This report presents a brief summary of their results.

## LOCATION AND ACCESS

The area of interest is situated in the Wernecke Mountains about 175 kilometres northeast of Mayo (Fig. 1). Access is provided by helicopter from Mayo or by fixed-wing aircraft to the Bear River airstrip or Gillespie Lake or Quartet Lakes and then by helicopter. A winter cat road extends from Elsa to the Bear River Valley.

## PREVIOUS WORK

The region has seen considerable exploration activity in the past. The Bear River Valley was explored for specularite in the 1960's. Breccia-hosted uranium-copper-cobalt occurrences were first noticed in the Wernecke's in 1974. Intensive prospecting and exploration activity for uranium followed in the period 1976-1980.

A regional exploration program for gold in the Wernecke breccias was initiated by Texaco Canada in 1980. At about the same time, Archer-Cathro re-analysed all their numerous geochemical and rock samples from the area for gold and platinum group elements. As a result, several breccia bodies containing anomalous gold values were delineated.

The WITZ group covers two previously-staked properties, ARCTOS and PITCH, which were originally acquired in the fall of 1976. Work on the ARCTOS claims continued through the 1980 field season and consisted of geological mapping, trenching and stream water and rock chip geochemical sampling.

Mineralisation consists of several vein and pod type occurrences of brannerite, chalcopyrite, bornite, cobaltite, barite in the breccias and argillites. Samples from trenches gave up to 0.09%  $U_3O_8$  and 0.41% Cu across 0.6 metres and up to 0.78 g/tonne gold. Work on the PITCH claims consisted of an airborne scintillometer and follow-up ground scintillometer survey. Minor amounts of chalcopyrite and erythrite are associated with the breccia and its contact with the dolomite.

The LEX group covers the old FACE property which was originally staked in 1976 to cover an occurrence of uranium float. Work on the FACE claims continued through the 1981 field season and consisted of prospecting, airborne and ground radiometric surveys, soil sampling, geological mapping and hand trenching. The property was acquired during the current program because of the reported occurrence of float mineralised with pitchblende and chalcopyrite and assaying 2.15%  $U_3O_8$ , 0.4% Cu and 6.4 g/tonne Au (Eaton, 1982).

GEOLOGY AND CURRENT EXPLORATION

On a regional scale, significant breccia-hosted uranium-iron ± copper ± cobalt ± barite ± gold mineralisation occurs in the lowermost succession of Proterozoic rocks exposed in the Wernecke and Ogilvie Mountains. More than eighty large breccia bodies commonly in the order of 1 kilometre across but up to several kilometres across have been mapped.

According to Bell (1983) most uranium occurrences in the eastern part of the Wernecke Mountains are associated with the most intensely altered rocks (bleached, chloritized, K and Na metasomatized, hematized, silicified and carbonatized). All uranium occurrences are within 20 m of breccias. As well, most of the known uranium occurrences appear to be within about 300 m of the pre-Phanerozoic unconformity and consequently some may be partly supergene. Bell (1983) reports that two styles of uranium occurrence contain gold values:

1. Brannerite ± chalcopyrite ± native gold in the matrix of homolithic (siliceous, feldspathic and hematitic) breccia.
2. Brannerite and monazite in the matrix and in veins in carbonatized, feldspathized and chloritized homolithic breccias that in places resemble syenite accompanied by anomalous rare earth elements ± gold ± thorium.

Brief field examinations in the Bear River area of several mineralised breccias reported to contain gold values revealed a distinctive suite of lithologies consisting of breccia, dolomite and mafic rocks. Heterolithic breccia bodies containing clasts of chert, dark volcanics, argillite, jasper and carbonate in a carbonate and hematite-rich matrix have been described in the literature as intrusive pipes or pods.

However, the breccia units appear to be fault bounded and may represent graben filling detritus. Along one margin of the breccia bodies there is a pale grey to cream siliceous dolomite unit which weathers to an orange colour. The third lithologic unit in the distinctive suite is a mafic rock usually mapped as diorite which may be brecciated in part or may occur along the margins of the breccia unit.

Subsequent to compilation of information on previous work in the area and field reconnaissance traverses, 48 mineral claims in two groups - WITZ 1240 and LEX 128 were staked for 697895 Ontario Limited by Gordon Clark and Associates Ltd, Whitehorse and recorded on September 16, 1987.

On the WITZ property, according to Yeager and Ikona (1980), thin bedded black slates and argillites with occasional quartzite beds are overlain by thickly bedded, orange-weathering dolomite. A major unconformity of Lower Hadrynian age forms the upper contact of the dolomite unit. Several irregularly shaped breccia bodies occur throughout these Proterozoic metasediments. The breccia zones vary from tens of feet to several thousand feet in size and appear to be cross-cutting pipe-like features. A map unit called chloritic metasiltstone by Yeager and Ikona was only seen in one outcrop which was diorite.

Six rock geochemical and one talus fine sample collected during the current reconnaissance survey did not contain appreciable gold.

The LEX property is underlain by dark grey argillites or slates and light grey mature quartzites of Helikian age. A heterolithic breccia unit consisting of a variety of altered fragments in a carbonate and hematite matrix trends north-south up the centre of the property. On the southern and western sides the breccia is in contact with orange-weathering dolomite which may represent an alteration zone related to the breccia.

Mineralisation consists of brannerite along fractures within a siliceous border phase of the breccia and pitchblende chalcopyrite float. Five rock geochemical samples obtained during the current reconnaissance survey did not contain significant gold.

#### CONCLUSIONS

The work carried out in the Bear River area of the Wernecke Mountains has confirmed the potential for polymetallic deposits of uranium and iron oxide with or without associated copper-cobalt-barite and noble metals in hematitic breccias. These deposits occur in the lowermost succession of Proterozoic sediments, mostly within about 300 m of the pre-Phanerozoic unconformity. The two claim groups which were staked represent a very preliminary assessment of the best possibilities in the area.

#### RECOMMENDATIONS

A thorough compilation of existing geological and property assessment data is recommended. In particular for the two properties the following work should be carried out:

##### WITZ Claims

1. Establish a grid of lines.
2. Geological mapping.
3. Soil sampling.
4. Hand sampling of creeks for heavy mineral gold analysis.

##### LEX Claims

1. Compile existing data including any unpublished information in Archer-Cathro files.
2. Drill the soil anomalies.

REFERENCES

Bell, R.T. (1983): Comments on the Geology and Uraniferous Mineral Occurrences of the Wernecke Mountains, Yukon and District of Mackenzie, GSC Paper 82-18.

Eaton, D. (1982): Wernecke Joint Venture Hand Trenching Report, FACE 1-8 Claims, Yukon Mining Recorder's File 090968 MTS106D16.

Yeager, D. and Ikona, C.K. (1980): Assessment Report on the ARCTOS 1-16 Mineral Claims, Mountaineer Mines Limited - Panocean Oil Limited Joint Venture, Yukon Mining Recorder's File 090587 MTS106D16.

STATEMENT OF QUALIFICATIONS

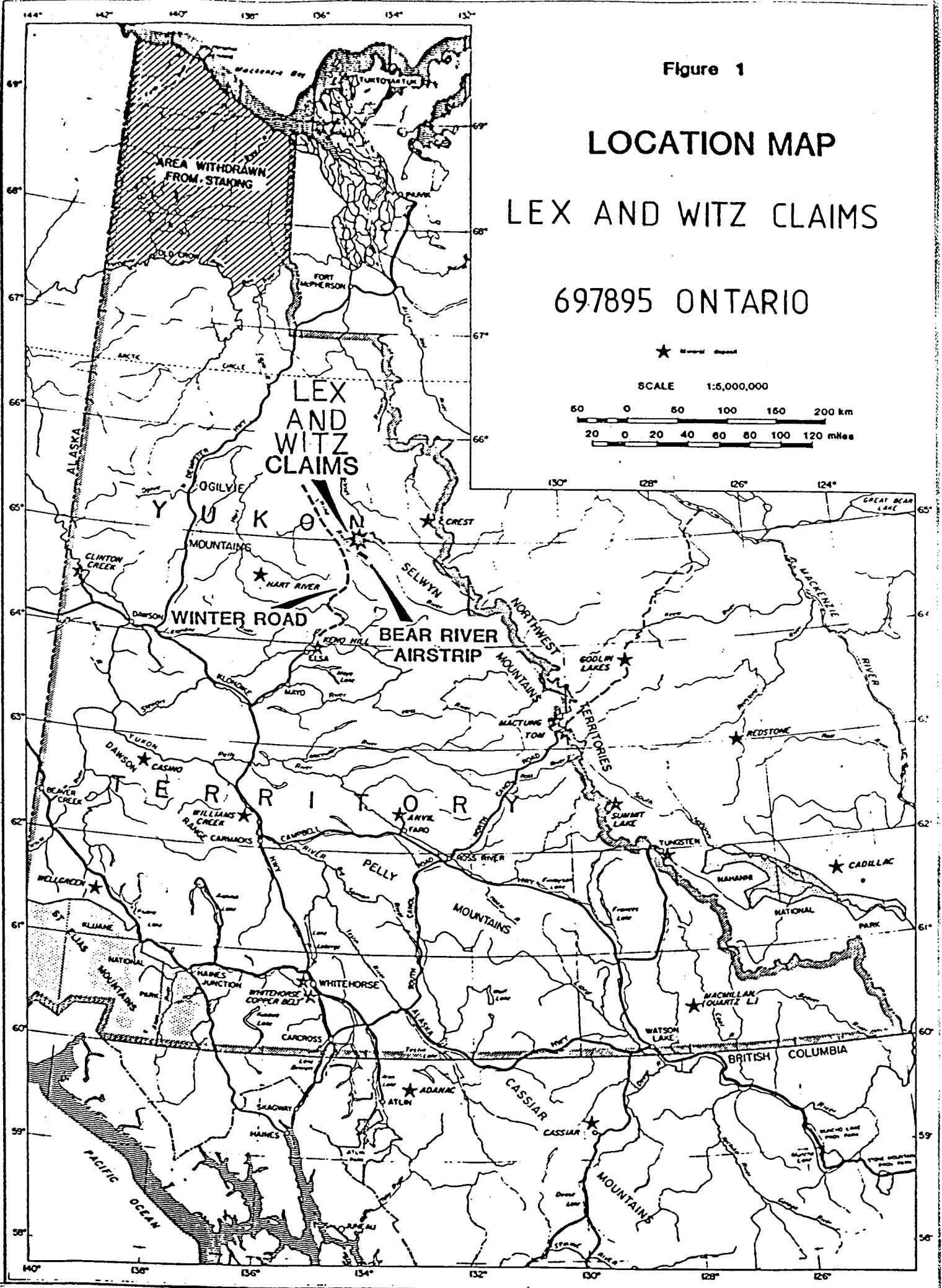
I, Dianne Kretschmar, of R.R. #1, Severn Bridge, Ontario POE 1N0, certify that:

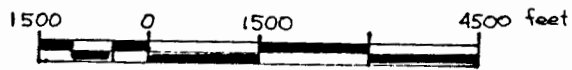
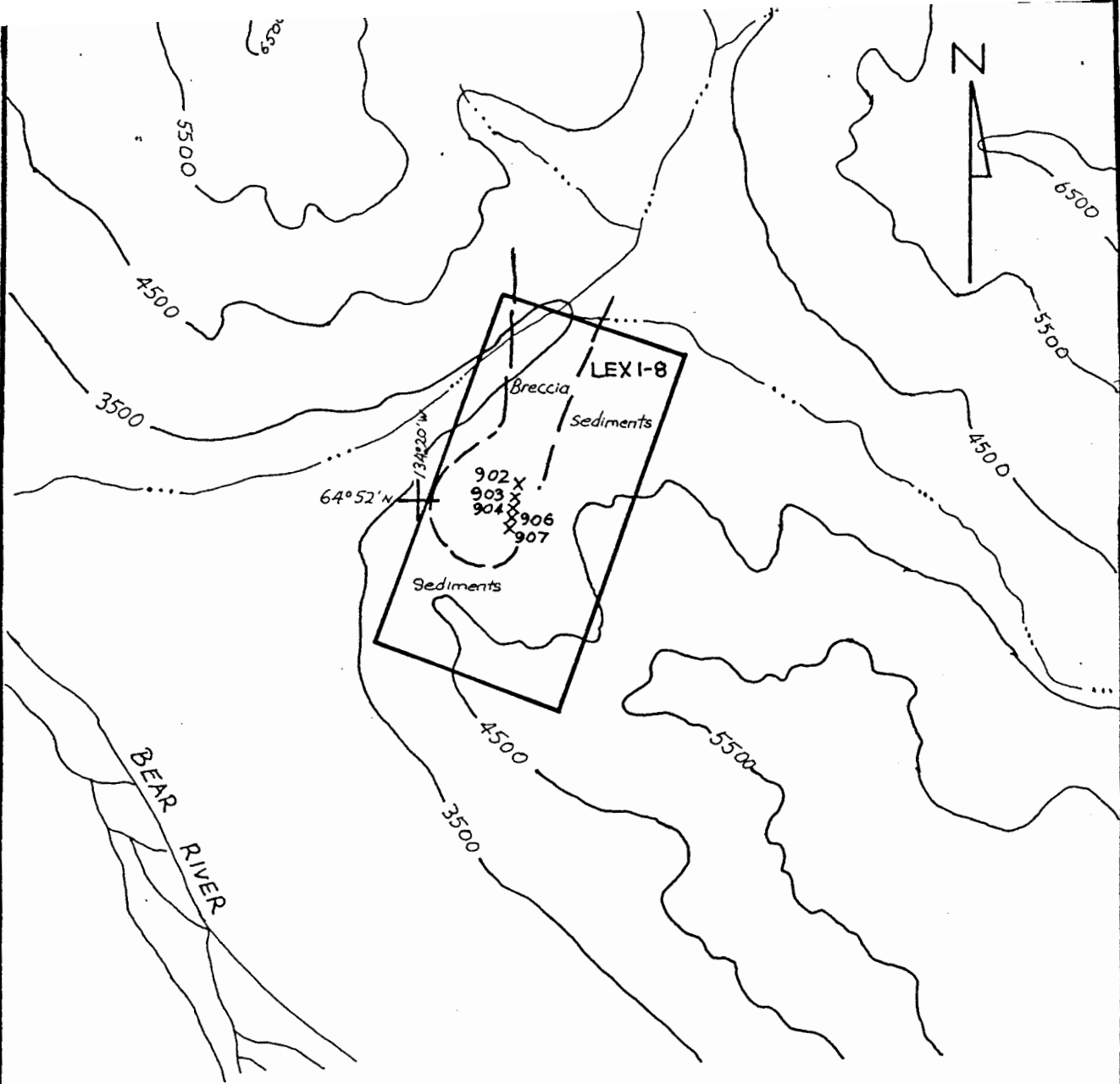
1. I am a mining exploration geologist with over 20 years of experience in the field.
2. I am a graduate of McMaster University, receiving a B.Sc. (Hon.) in geology and chemistry in 1967.
3. I worked on the Witz and Lex properties, Mayo District, Yukon during September, 1987.

*Dianne Kretschmar*

Figure 1

# LOCATION MAP LEX AND WITZ CLAIMS 697895 ONTARIO

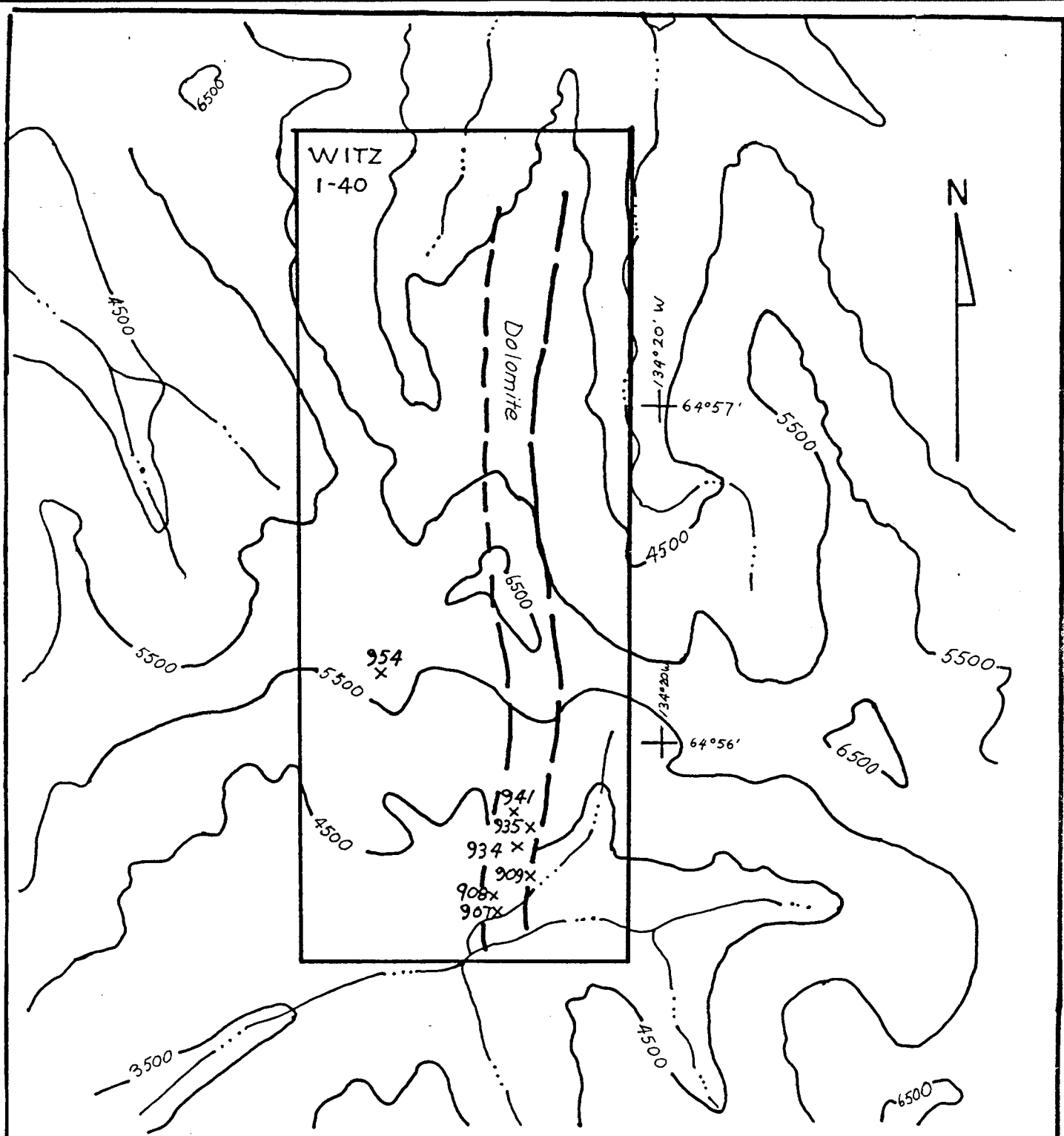




- X 906 Sample location and number
- ~ Contour, interval 1000 feet
- - - - - Creek
- - - - - Geological boundary
- ┌ Claim boundary

697895 ONTARIO LTD  
 Geological sketch map and  
 sample locations  
 LEX CLAIMS  
 NTS 106-D-16 YUKON  
**092668**

Figure 3



- (4500) Contour, interval 1000feet
- 907 X Sample location and number
- ┌ Claim boundary
- Geological boundary
- ~ Creek

697895 ONTARIO LTD  
 Geological sketch map and  
 sample locations  
 WITZ CLAIMS


NTS 106-D-16 YUKON

Figure 2

EXPENDITURE STATEMENT

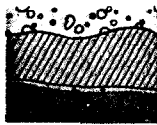
For the period 16 September 1987  
to 15 September 1988

	\$
Consulting Dianne Krestchmar including travel, accommodation, geologist's and assistant's salaries, report writing	14,000
Consulting Others	1,966
Helicopter hire	15,131
Motor vehicle hire	72
Assays	1,070
Administration (15%)	4,836
TOTAL	<hr/> \$37,075 <hr/>

  
Witnessed at Sydney 9<sup>th</sup> December  
1988

  
P.J. MCLACHLAN

Company Ltd.  
 Ave.  
 Vancouver, B.C.  
 7P 2R5  
 (604) 985-0681  
 04-352667



# BONDAR-CLEGG

**Geochemical  
 Lab Report**

REPORT: 127-6745 ( COMPLETE )

REFERENCE INFO:

CLIENT: GREATER PACIFIC INVESTMENTS LTD.  
 PROJECT: NONE GIVEN

SUBMITTED BY: DIANNE DRETSCHMAR  
 DATE PRINTED: 29-SEP-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	14	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
2	Ag Silver	15	0.1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
3.	Co Cobalt	15	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
4	Mo Molybdenum	15	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
5	Ufl Uranium, fluorometric	15	0.2 PPM	HN03	Fluorometric
6	Au Gold - Fire Assay	15	5 PPB	FIRE-ASSAY	Fire Assay AA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	15	2 -150	15	ASSAY PREP	1
				CRUSH, PULVERIZE -150	14

REPORT COPIES TO: DR. JOHN FERGUSON  
 DIANNE KRETSCHMAR

INVOICE TO: DR. JOHN FERGUSON

Company Ltd.

1 Ave.  
Vancouver, B.C.  
V7P 2R5  
(604) 985-0681  
04-352667



# BONDAR-CLEGG

Geochemical  
Lab Report

WITZ CLAIMS

REPORT: 127-6745

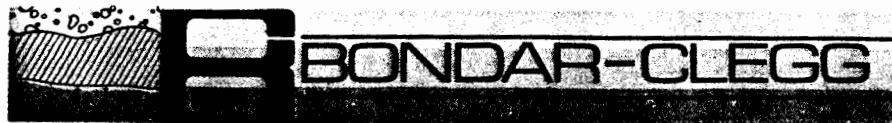
PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Co PPM	Mo PPM	Uf1 PPM	Au PPB
---------------	---------------	--------	--------	--------	--------	---------	--------

R2 907		505	0.6	645	3	0.6	<5
R2 908		88	0.8	8	4	2.0	<5
R2 909		75	0.8	126	16	1.0	15

Jar-Clegg & Company Ltd.  
30 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R5  
Phone: (604) 985-0681  
Telex: 04-352667



**Geochemical  
Lab Report**

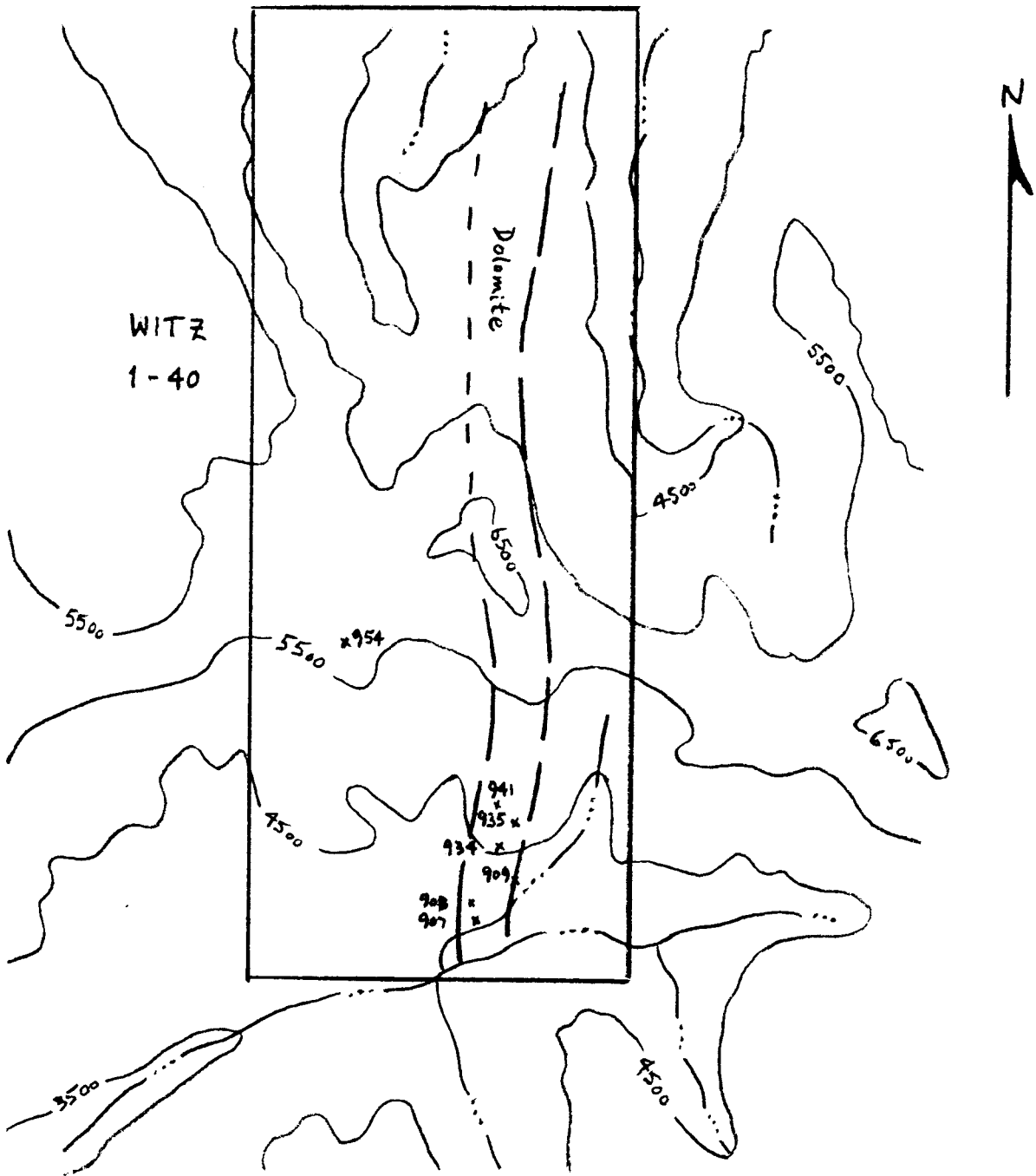
REPORT: 127-7312

PROJECT: NONE GIVEN

PAGE 1

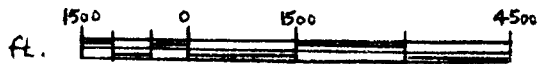
SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	Ag PPM	Co PPM	Uf1 PPM	Au PPB
S1 941		110	3	0.5	18	0.2	<5
R2 934		104	4	0.8	15	0.6	5
R2 935		156	6	1.3	3	<0.2	<5

R2 954		600	3	5.3	39	1.0	<5
--------	--	-----	---	-----	----	-----	----



WITZ  
1-40

Dolomite



SCALE: 1" = 1/2 mi.

GREATER PACIFIC INVESTMENTS

Sample Locations

WITZ CLAMS

NTS 106-D-16

YUKON TERR.

Company Ltd.  
1 Ave.  
JUVET, B.C.  
7P 2R5  
(604) 985-0681  
04-352667



Geochemical  
Lab Report

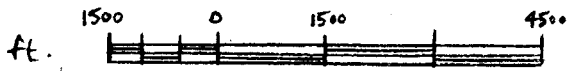
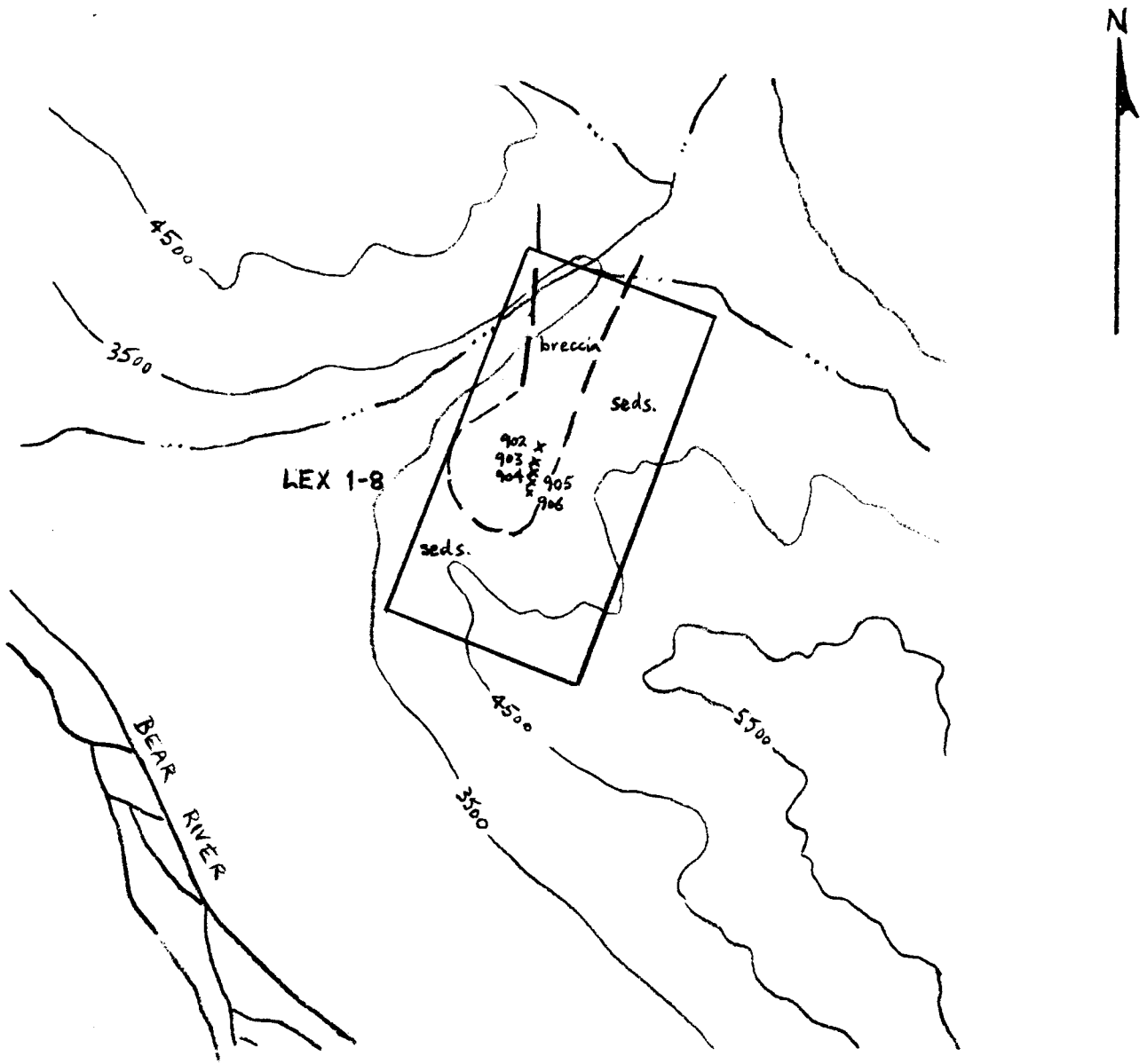
LEX CLAIMS

REPORT: 127-6745

PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Ag PPM	Co PPM	Mo PPM	Uf1 PPM	Au PPB
R2 902		35	5.1	9	7	0.2	<5
R2 903		137	1.4	28	4	2.0	<5
R2 904		415	0.7	8	5	5.0	<5
R2 905		3	1.3	2	1	2.0	<5
R2 906		10	0.6	4	2	4.0	<5



SCALE : 1" = 1/2 mi.

GREATER PACIFIC INVESTMENTS

Sample Locations

LEX CLAIMS

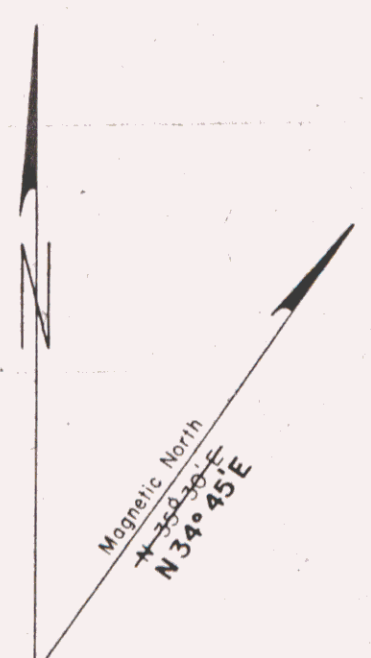
NTS 106-D-16

YUKON

# SHEET 106-D-16

LATITUDE 64° 45' To 65° 00'  
LONGITUDE 134° 00' To 134° 30' 092668

CANADA  
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES  
NORTHERN ADMINISTRATION BRANCH  
RESOURCES DIVISION  
SCALE: 1/2 MILE TO 1 INCH  
ISSUED UNDER THE AUTHORITY OF THE MINISTER  
NORTHERN AFFAIRS AND NATIONAL RESOURCES



106-E-2	106-E-1	106-F-4
106-D-15	106-D-16	106-C-13
106-D-0	106-D-9	106-C-12

## NOTICE

THIS MAP IS ISSUED AS A PRELIMINARY GUIDE FOR WHICH THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT WILL ACCEPT NO RESPONSIBILITY FOR ANY ERRORS, INACCURACIES OR OMISSIONS WHATSOEVER.

31 OCT 77  
4 OCT 76  
87 SEPT 76  
7 SEPT 76  
24 AUG 76  
22 JULY 76  
18 JULY 76  
14 MAY 73

15 JULY 81  
17 JULY 81  
18 JULY 81  
19 JULY 81  
20 JULY 81  
21 JULY 81  
22 JULY 81  
23 JULY 81  
24 JULY 81  
25 JULY 81  
26 JULY 81  
27 JULY 81  
28 JULY 81  
29 JULY 81  
30 JULY 81

15 JULY 81  
17 JULY 81  
18 JULY 81  
19 JULY 81  
20 JULY 81  
21 JULY 81  
22 JULY 81  
23 JULY 81  
24 JULY 81  
25 JULY 81  
26 JULY 81  
27 JULY 81  
28 JULY 81  
29 JULY 81  
30 JULY 81

MAP SHOWING THE POSITION OF LEX AND WITZ CLAIMS  
697995 ONTARIO LTD

