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GEOLOGICAL BRANCH ASSESSMENT REPORT THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and CEOPHYSICISTS OF ALDERTA
PERMAIT NUMBER
|P 1041
Robertson Research
| Canada Limited

12,356

GEOCHEMICAL RECONNAISSANCE REPORT
TOPAZ CLAIM

NELSON MINING DIVISION 82 F/2

Lat: 49°09'N Long: 116°46'W

OWNER: GREENWICH RESOURCES, INC.

OPERATOR: GREENWICH RESOURCES, INC.

CONSULTANT CONTRACTOR: ROBERTSON RESEARCH CANADA LIMITED

ΒY

G. W. SINDEN, CET
and
D. S. EVANS, Ph.D., P.Geol.
Consultant to
ROBERTSON RESEARCH CANADA LIMITED

FEBRUARY 1984



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Statement of Exploration Expenditures

Mineral Inventory Occurrence/Topaz Claim area

Analytical Information

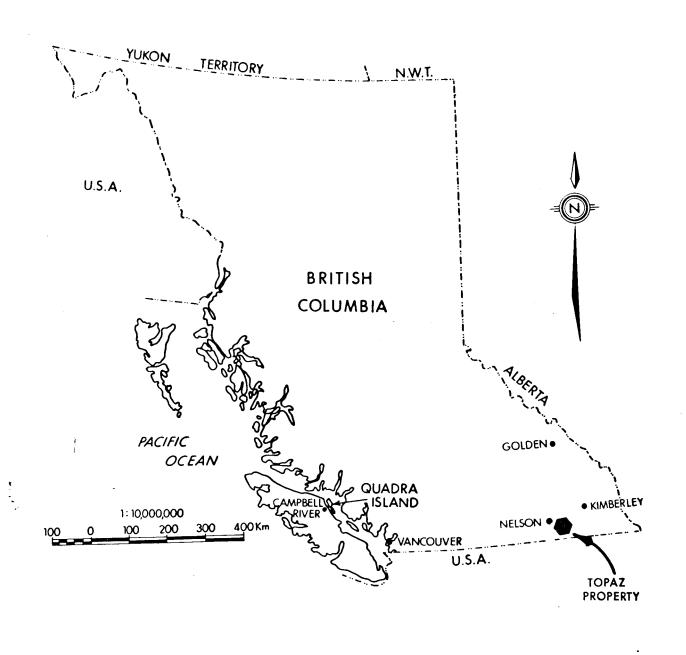
Geochemical Data

Appendix 1:

Appendix 2: Appendix 3:

Appendix 4:

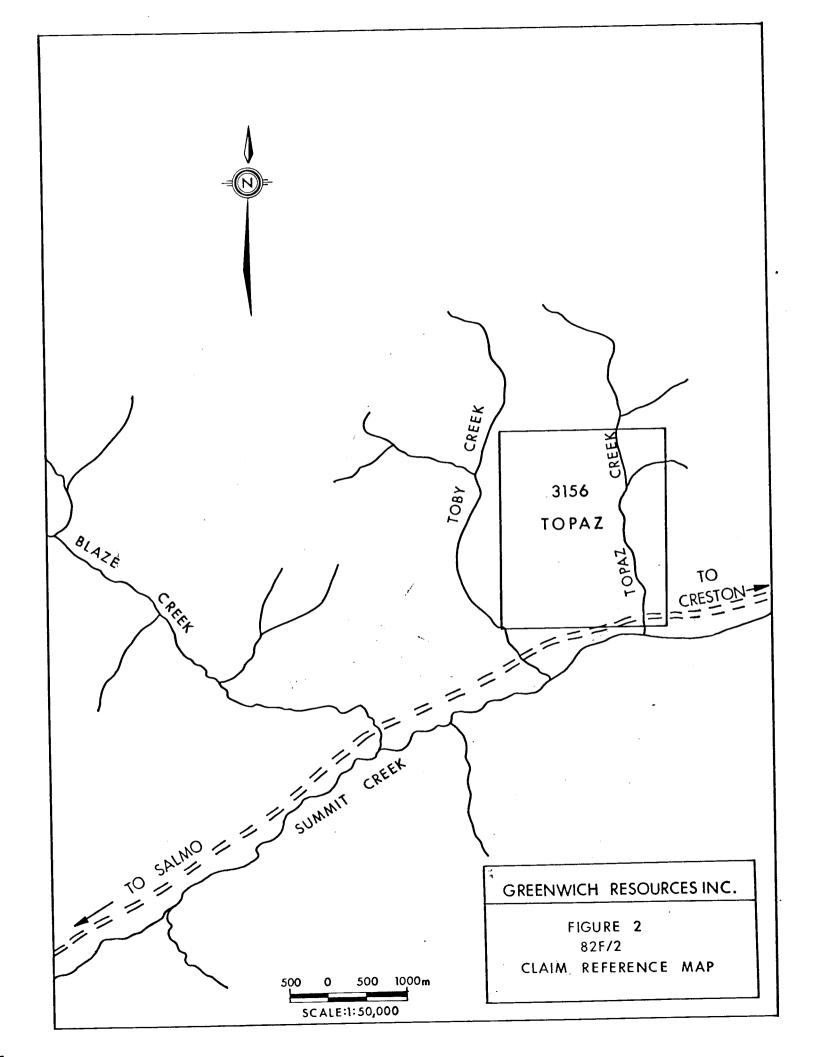




GREENWICH RESOURCES INC.

FIGURE 1

PROPERTY INDEX MAP



### 3.0 GEOLOGY

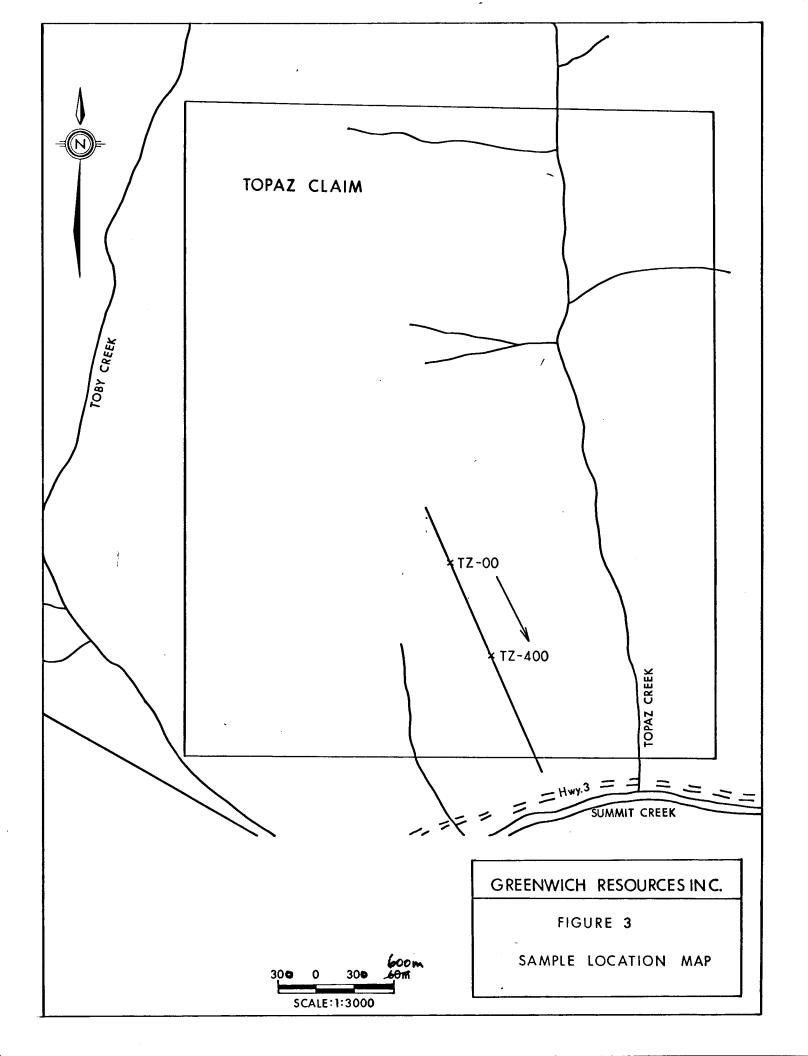
The Topaz Claim is underlain by rocks of the Aldridge Formation and Dutch Creek Formation both of Proterozoic age (Canada Department of Mines and Resources Map 603A, Rice, 1941). These formations are primarily of sedimentary origin and include argillites, limestones and quartzites.

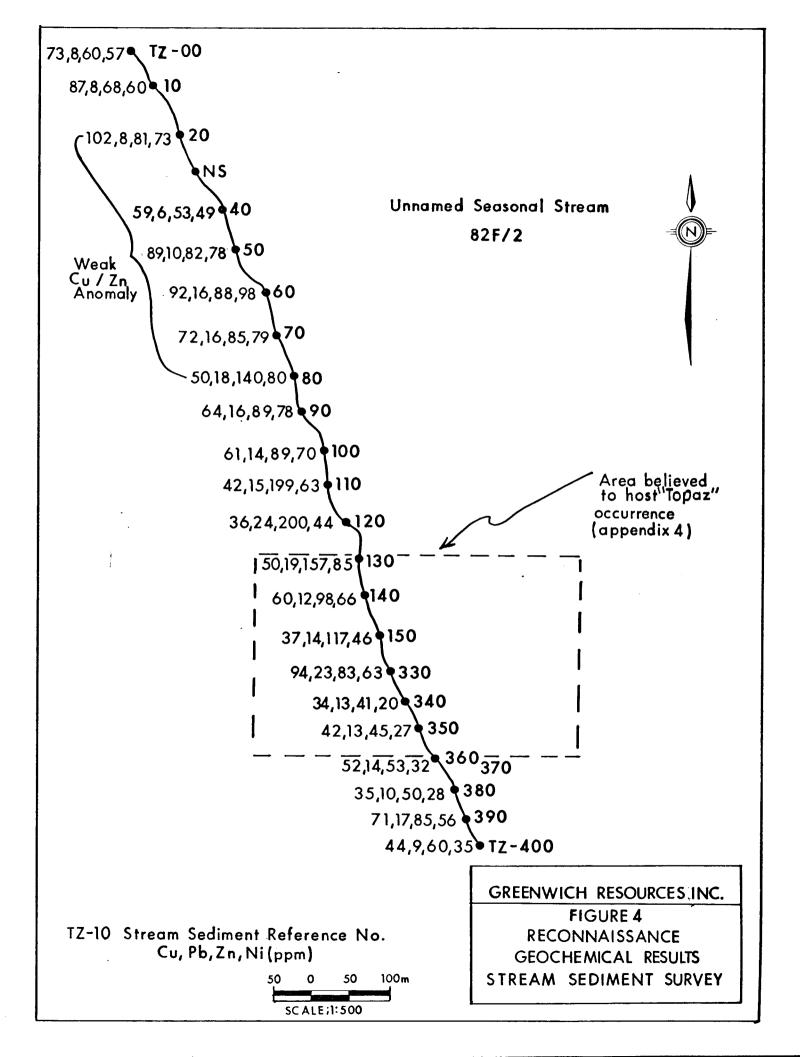
Mineral potential of the Topaz Claim is related to base and precious metal containing quartz veins hosted in folded and faulted members of the Aldridge and Dutch Creek Formations.

## 4.0 GEOCHEMISTRY

Twenty-three stream sediment samples were collected from the Topaz Claim and analysed for Cu, Pb, Zn, Ni, Co, Ag, Sn (Appendix 2). Stream sediment "fines" from the active channel was the preferred sampling media. Stations are plotted on Figure 3 and results plotted on Figure 4.

A Cu-Zn anomaly has been identified at stations TZ-20 to TZ-60; and, a zinc anomaly has been identified at stations TZ-80 to TZ-150 (see Appendix 2). Both anomalies are of weak to moderate magnitude.





## 5.0 CONCLUSIONS

Reconnaissance stream sediment sampling survey results from the Topaz claim have identified moderate copper and zinc anomalies. Followup stream and soil sampling is necessary to establish the source area(s) of these anomalies.

#### 6. RECOMMENDATIONS

More detailed and systematic soil, rock and stream surveys are recommended for the Topaz Claim. Prospecting and mapping are recommended in areas of outcrop. It is important that the Topaz Cu, Ni, Sn, Ag, Pb, Zn occurrence identified on the British Columbia Mineral Inventory data base (Appendix 4) be located.

## 7. SELECTED REFERENCES

Rice, H. M. A., 1941.

Nelson (East Half) Map Area, Canada Department of Mines and Resources Map 603A.

"Nelson Map-Area, East Half, British Columbia." Geol. Surv. Canada, Memori 228.

### CERTIFICATE

I, Gordon W. Sinden, currently residing at 2607, 123 - 10th Avenue S.W., CALGARY, Alberta, T2R 1K8, hereby certify that:

- 1. I am a geological technologist and have practised my profession since 1977.
- 2. I am a graduate of Northern Alberta Institute of Technology (1977) in Mineral Resources Technology.
- 3. I am a registered Engineering Technology (Resources Technology) with the Alberta Society of Engineering Technologists.
- 4. I visited the Topaz Claim on May 24, 1983 and carried out the work described in this report.

march 15/84

Date

Gordon W. Sinden, C.E.T.

### CERTIFICATE

- I, David S. Evans, currently residing at 5232 Viceroy Drive N.W., CALGARY, Alberta T3A OV7, hereby certify that:
- 1. I am a mining exploration geologist and have practised my pr fession since 1966.
- 2. I am a graduate of the University of British Columbia with a B.Sc. (1966) in Chemistry and Geology, and a graduate of the Royal School of Mines, University of London (U.K.) with a Ph.D. (1971) in Applied Geochemistry.
- 3. I am a registered Professional Geologist with the Associatio of Professional Engineers, Geologists and Geophysicists of Alberta, a member of the Society of Exploration Geochemists, and a fellow of the Geological Society of Canada.
- 4. The work in this report was carried out under my supervision

5. I visited the Topaz Property on May 24, 198

Date

David S.

ROBERTSON RESEARCH

### ANALYTICAL INFORMATION

Laboratory: TerraMin Research Labs Ltd.

Calgary, Alberta

Mesh Size: Stream sediments / -80 mesh

Extraction: For Pb/Zn Nitric-perchloric dissolution to

Ag/Cu/Co/Ni: dryness, taken up in dilute HCT

For Sn: Nitric-perchloric dissolution to

dryness, taken up in dilute HCI.

Stannine evolution.

Analysis: Atomic Absorption

GEOCHEMICAL DATA

# TERRAMIN RESEARCH LABS LTD.

## ANALYTICAL REPORT

Job # 8

83-123

Robertson Research

Date July 12, 1983

Client Project

TOPAZ

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Sample No.	Cu	Pb	Zn	Ni	Co	Ag	Sn	
Soil .	ppm	pp <b>m</b>	ppm	ppm	$\mathtt{pp} \mathbf{m}$	ppm	ppm	
TZ - 00	73	8	60	57	15	0.5	-1	
10	87	8	68	6 <b>0</b>	19	0.3	1	
20	102	8	81	73	19	0.3	1	
40	59	6	5 <b>3</b>	49	12	0.2	-1	
50	89	10	8 <b>2</b>	78	17	0.3	-1	
60	92	16	88	98	2 <b>2</b>	0.4	-1	
70	72	16	85	79	18	0.3	-1	
80	50	18	140	80	22	0.2	-1	
90	64	16	8 <b>9</b>	78	20	0.3	-1	
100	61	14	89	70	23	0.4	-1	
110	42	15	199	63	23	0.4	1	•
120	36	24	200	44	18	0.3	-1	
130	50	19	157	85	18	0.3	1	
. 140	60	12	98	6 <b>6</b>	19	0.2	-1	
150	37	14	117	46	17	0.2	-1	
330	94	23	83	63	23	0.3	-1	
340	34	13	41	20	16	0.2	-1	
350	42	13	45	27	12	0.2	-1	
36 <b>0</b>	52	14	53	32	13	0.1	-1	
370	28	7	46	22	7	0.1	-1	
380	35	10	50	28	13	0.1	-1	
390	71	17	8 <b>5</b>	56	18	0.3	-1	
400	44	. 9	60	35	15	0.1	-1	

## STATEMENT OF EXPLORATION EXPENDITURES

## STATEMENT OF 1983 EXPENDITURES TOPAZ CLAIMS

	DAYS		WAGES		SUBSISTENCE			
NAME/ADDRESS	DAYS WORKED	Days Worked	Daily Rate	Total Wages	Total Days	Rate Per Day	Amount	
Gordon W. Sinden Senior Technologist Robertson Research Canada Ltd. 300, 604 - 1st Street S.W. CALGARY, Alberta T2P 1M7	May 24,	1	\$155.00	\$155.00	1	\$25.00	\$25.00	
David S. Evans Exploration Manager/Geochemist Robertson Research Canada Ltd. 300, 604 - 1st Street S.W. CALGARY, Alberta T2P 1M7	May 24 <sub>,</sub>	1	\$360.00	\$360.00	1	\$25.00	\$25.00	
Tim Joveski Field Assistant R.R. #1 Nelson, B.C. V1L 5P4	May 24, June 10	2	\$110.00	\$220.00	2	\$25.00	\$50.00	
Ken Konkin Field Assistant Box 52 Nelson, B.C. V1L 5P7	May 24, June 10	2	\$110.00	\$220.00	2	\$25.00	\$50.00	
			TOTAL	\$ 955.00		TOTAL	\$ 150.00	

## STATEMENT OF 1983 EXPENDITURES TOPAZ CLAIM

## Other Expenditures

Field Office Rental		\$ 60.00
Supplies and Equipment	;	100.00
Truck Rental (incl. ga	as, oil, maintenance)	90.00
Mileage and Expenses		30.00
Freight		15.00
Communications - Telep	phone	10.00
Analyses		241.50
Drafting		100.00
Tota	al Other Expenditures	\$ 646.50
Summary		
Total Wages		\$ 955.00
Total Subsistence		150.00
Total Other Expenditur	es	646.50
Tota	al Project Costs	\$ 1751.50
Repo	ort Preparation	300.00
		 and the same of th

TOTAL 1983 EXPENDITURES \$ 2051.50



## MINERAL INVENTORY OCCURRENCE TOPAZ CLAIM AREA

Topaz 82F/2W

Lat: 4908.8 Long: 11645.8 Elev: 900m

Commodities present: Cu, Ni, Sn, Ag, Pb, Zn.

Minerals present: CLCP, GLEN, SPLR, PYTT, CSTR.

Galena, sphalerite and cassiterite occur in a quartz vein in metasedimentary

rocks.

Chalcopyrite and pyrrhotite are disseminated in a diorite sill.

Location comment: Common boundary of Topaz #1 - #3.

Bibliography:

- 1. BCDM GEM 1969 321
- 2. BCDM ACS. Report 2062

