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ASSESSMENT REPORT

GEOCHEMICAL SOIL SURVEY

ON THE

BAR 19 MINERAL CLAIM

N.T.S. 82G/5W 29.3' 56.5' Latitude 49**01992528** Longitude 115**0**

FORT STEELE MINING DIVISION

FILMED

GEOLOGICAL BRANCH ASSESSMENT REPORT

Owner-Operator: Noranda Exploration Company, Limited (no personal liability)

Author : James McDonald

Date : March 5, 1986

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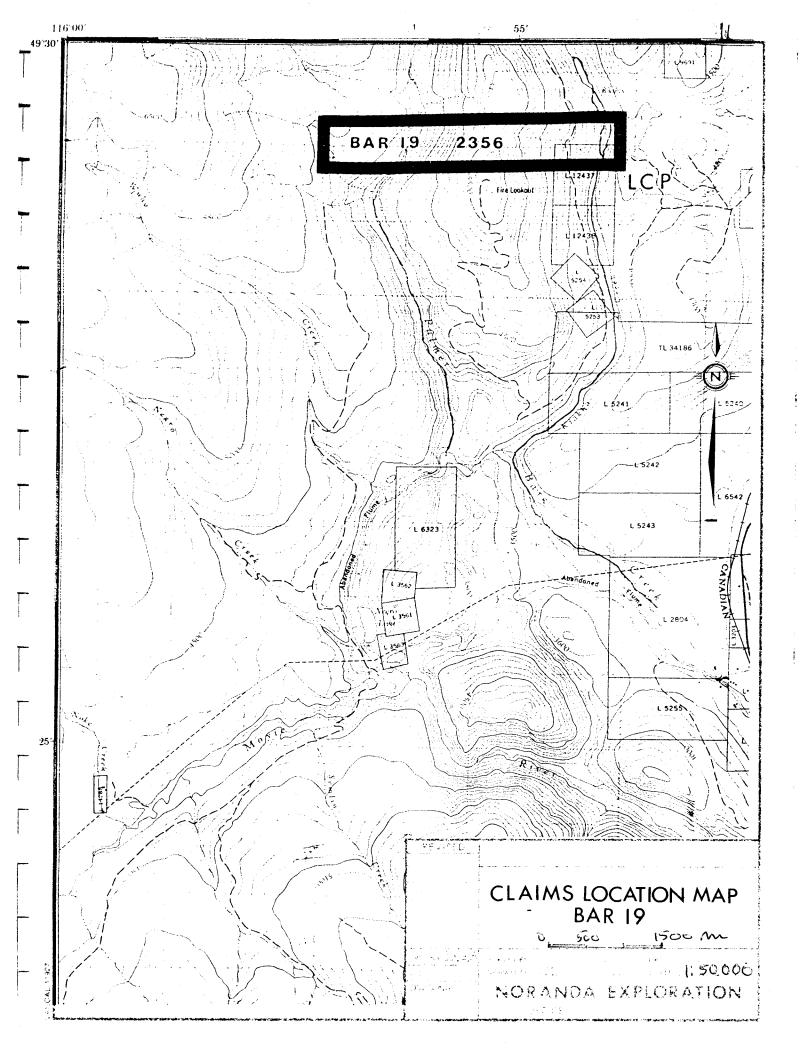
APPENDICES

- Appendix 1: Geochemical Soil Results (Cu, Pb, Zn, Ag, Mo)
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MAPS APPENDED

Map 1 : Geochemistry Bar 19 (Cu, Pb, Zn, Ag, Mo)

Scale 1:10,000



1.0 INTRODUCTION

During February, 1985 the Bar 19 (8 units) mineral claim was staked by Noranda Exploration Company, Limited (no personal liability), then during November of the same year reconnaissance soiling was conducted over the ground in an attempt to locate anomalous zones.

2.0 LOCATION AND ACCESS

The Bar 19 mineral claim is located approximately 1.1 km west-southwest of Cranbrook and is centered at about Longitude $115^{\circ}55'30"$ and Latitude $49^{\circ}29'25"$. Access is made via Highway 3 for approximately 10 km southward, then west along the Moyie River Road for 3 km before turning north along the fire lookout road for 6 km. Further access is made on the east side of the claim along old logging roads on the west side of Kiakho Creek, and on the west side of the claim along logging roads on the west side of Palmer Bar Creek.

3.0 TOPOGRAPHY AND VEGETATION

The topography is moderate to very steep with a maximum relief of approximately 488 m. Slopes are commonly 40° or more and a canyon runs through the western side of the claim. Most of the claim is covered by second growth pine and aspen, the western most portion of the claim is covered by a logging slash.

4.0 CLAIMS INFORMATION

The Bar 19 mineral claim is recorded by Noranda Exploration Company, Limited (no personal liability), P.O. Box 2380, Vancouver, B.C. V6B 3T5.

Claim Name	Record No.	Record Date
Bar 19	2356	February 20, 1985

5.0 GEOCHEMICAL SURVEY

During November, 1985 three lines for a reconnaissance soil survey were run in a N-S direction across the Bar 19 mineral claim. One line was located over the central portion of the claim and samples were taken at 50 m intervals over a 500 m distance. The remaining two lines were located on the western portion of the claim, and both were run with a 25 m sample interval. The locations and values for all of the samples along these lines are appended in map form.

5.1 Soil Geochemical Sampling

Forty nine samples, collected from the grids were analyzed for ppm copper, lead, zinc, silver and molybdenum in the Noranda Exploration Company, Limited laboratory located at 1050 Davie Street, Vancouver, B.C.

Soil samples, taken where possible, were obtained by digging holes with a maddock to depths between 10 and 30 cm where the visible B horizon, was exposed. The samples were placed in "Hi Wet Strength Kraft 3 1/2" x 6 1/8" Open End" envelopes and the grid co-ordinate was marked on the envelope with an indelible felt pen.

5.2 Laboratory Analytical Methods

Soil samples were placed in a drying cabinet for a period of 24 to 48 hours. The sample material is then screened and sifted to obtain a -80 mesh fraction.

The determination procedure for total copper, zinc, lead, silver and molybdenum is as follows:

0.200 grams of -80 mesh material is digested in 2 ml of $HC10_4$ and 0.5 ml of $HN0_3$ for approximately 5 hours. Following digestion, each sample is diluted to 5 ml with demineralized H_20 . Atomic Absorption Spectrophotometer was used to determine the parts per million, copper, lead, zinc, silver and molybdenum content in each sample.

The theory of Atomic Absorption Spectrophotometer is fully outlined in the literature and will not be described in this report.

5.3 Presentation of Results

The geochemical results for the Bar 19 mineral claim are found in Appendix 1. The location and values of these samples are appended in the back of this report in map form.

5.4 Discussion of Results

5.4.1 Molybdenum

All analysis returned a value of 1 ppm. No anomalous zones were defined.

5.4.2 Silver

The majority of samples returned values of 0.2 ppm with the marked exception of sample numbers 65711 and 65712 which returned respective values of 2.8 and 1.6 ppm.

5.4.3 Copper

All analysis returned variable values between 10 and 40 ppm. No anomalous trends were defined.

5.4.4 Lead

The majority of analysis returned values less than 40 ppm. Two samples did return anomalous values of 330 and 310 ppm, these were sample numbers 65711 and 65712 respectively.

5.4.5 Zinc

Analysis ranged in value from 36 to 420 ppm zinc but only one sample may be considered anomalous and that was sample number 65712 at 420 ppm.

6.0 CONCLUSIONS AND RECOMMENDATIONS

No anomalous values were returned from the soil survey with the exception of the most easterly line where samples 65711-12 returned elevated values in lead, zinc, and silver. It is therefore recommended that additional lines be established and sampled to the west and east of this most easterly one to see if any anomalous trends exist. Concordant with this survey prospecting should be conducted over this ground in an attempt to reveal the source of these elevated values.

The underlying rocks are of the Creston Aldridge Formation (Proterozoic). A gently north-plunging auticline crosses the claim, as well as a major montheasterly trending fault with normal movement. Beds dup gently to the montheast or northwest depending on the limb of the fold.

APPENDIX 1

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SOIL GEOCHEMICAL RESULTS

		NORANDA	VANCO	UVER LA	BORATOR	Y		-
		*****	*****	******	*****	****		
PROPERTY	/LOCATION	SENERAL				COD	E :8511-048	
12								-
Project	No.	:427		Sheet:	1 of 2	Da	te rec'd:NOV.19	
Material		:SILT/SO	IL	Geol.:	J. Mc	Da	te compl:DEC.20	
Remarks		:						
				Values	in PPM	, except	where noted.	-
========		********						
т.т.	SAMPLE							
No.	No.	Cu	Zri	РЬ	Ag	Mo	GCI	

77	65696	12	58	6	0.2	1
78	65702	14	110	10	0.2	1
79	65703	22	92	10	0.2	1
80	65704	18	110	8	0.2	1
81	65705	20	130	10	0.2	1
82	65706	20	98	8	0.2	1
83	65707	16	110	8	0.2	1
84	65708	14	200	6	0.2	1
85	65709	20	150	14	0.4	1
86	65710	14	140	14	0.2	1
87	65711	32	120	330	2.8	1
88	65712	28	420	310	1.6	1
89	65714	14	140	12	0.2	1
90	65715	12	110	6	0.2	1
91	65716	16	90	8	0.2	1
92	65717	20	66	8	0.2	1
93	65718	10	40	2	0.2	1
94	65719	16	38	4	0.2	1
95	65720	20	42	8	0.2	1
96	65721	16	36	8	0.2	1
97	65722	26	56	8	0.2	1
98	65723	14	56	10	0.2	1
99 .	65724	22	40	4	0.2	1
100 CHECK	NL-5	26	66	70	1.6	8
101	65725	14	66	12	0.2	1
102	65726	20	62	10	0.2	1
103	65727	34	88	14	0.2	1
104	65728	22	90	12	0.2	1

2359

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GCI Pg. 2 of 2359	Mo	Ag	РЪ	Zn	Cu		No.
2359						No.	
	1	0.2	в	60	16	65729	105
	1	0.2	6	52	14	65730	106
	1	0.2	0	48	16	65731	107
	1	0.2	6	40	14	65732	108
	1	0.2	8	54	14	65733	109
	1	0.2	10	66	14	65734	110
	1	0.2	8	50	18	65735	111
	1	0.2	8	50	24	65736	112
	1	0.2	8	56	20	65737	113
	1	0.2	10	74	10	65738	114
	1	0.2	10	52	22	65739	115
	1	0.2	10	80	26	65740	116
	1	0.2	12	48	36	65741	117
	1	0.2	10	60	30	65742	118
	1	0.2	8	54	24	65743	119
	1	0.2	10	60	85	65744	120
	1	0.2	2	52	26	65745	121
	1	0.2	2	48	20	65746	122
	1	0.2	5	48	18	65747	123
	1	0.2	6	78	14	65748	124
	1	0.2	8	58	18	65749	125
	1	0.2	4	52	20	65750	126

APPENDIX 2

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STATEMENT OF COSTS

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PRO	JECT: CRANBRO	оок				DATE	November	1985
TYP	E OF REPORT:	Soil Geoch	hem					
a)	Wages:							
	No. of Days	3						
	Rate per Day	\$ 100.00						
	Dates From:	November	198	85				
	Total Wages	3	x	\$	100.00		\$ 3	800.00
ь)	Food and Acco	modation:						
	No of days	3						
	Rate per day	\$ 50.00						
	Dates From:	November	198	85				
	Total Cost	3	×	\$	50.00		Ş 1	.50.00
c)	Transportatio	n:						
	No of days	3						
	Rate per day	\$ 10.97						
	Dates From:	November	198	85				
	Total Cost	3	X	\$	10.97		\$	32.92
d)	Instrument Re	ntal:				<i></i>		
	Type of Instr	ument						
	No of days							
	Rate per day	\$						
	Dates From:							
	Total Cost		x	\$				
	Type of Instr	ument						
	No of days							
	Rate per day	\$						
	Ger ave							
	Dates From:							

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¢) Analysis (See attached schedule)	\$ 196.00
9)	Cost of preparation of Report	
	Author	\$ 50.00
	Drafting	\$ 100.00
	Typing	\$ 50.00
h)	Other:	

Contractor Supervision - D. Cross - P. Eng.

Total Cost

\$ 878.92

\$ 878.92

e)	Unit costs for	Geochem
	No of days	3
	No of units	49
	Unit costs	17.94 / Sample
	Total Cost	49 × 17.94

NORANDA EXPLORATION COMPANY, LIMITED (WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: CRANBROOK

ELEMENT	NO. OF DETERMINATIONS	COST PER DETERMINATION	TOTAL
Cu	49	1.60	78.40
Pb	49	.60	29.40
Zn	49	.60	29.40
Мо	49	.60	29.40
Ag	49	.60	29.40
			

\$ 196.00



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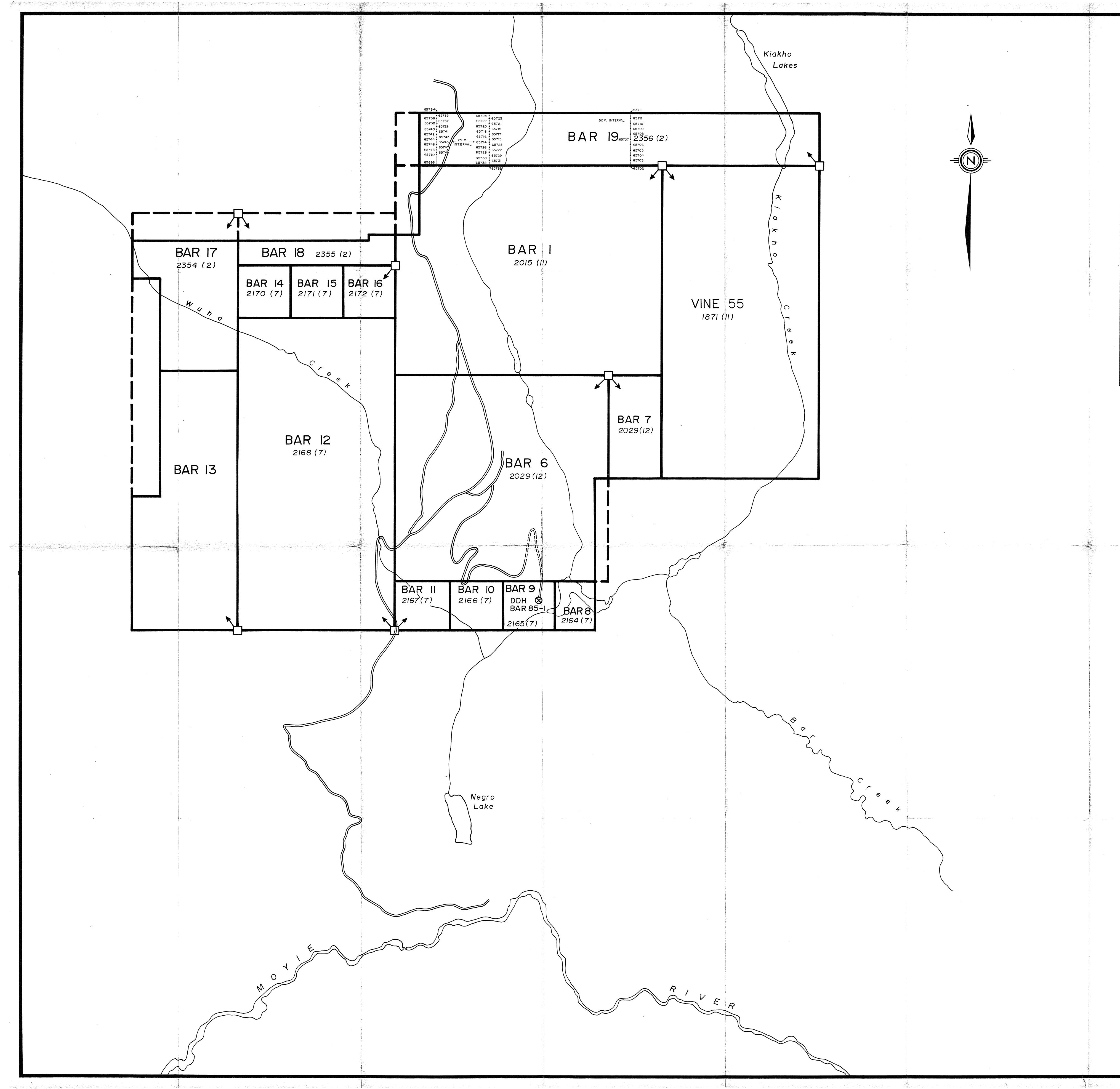
STATEMENT OF QUALIFICATIONS

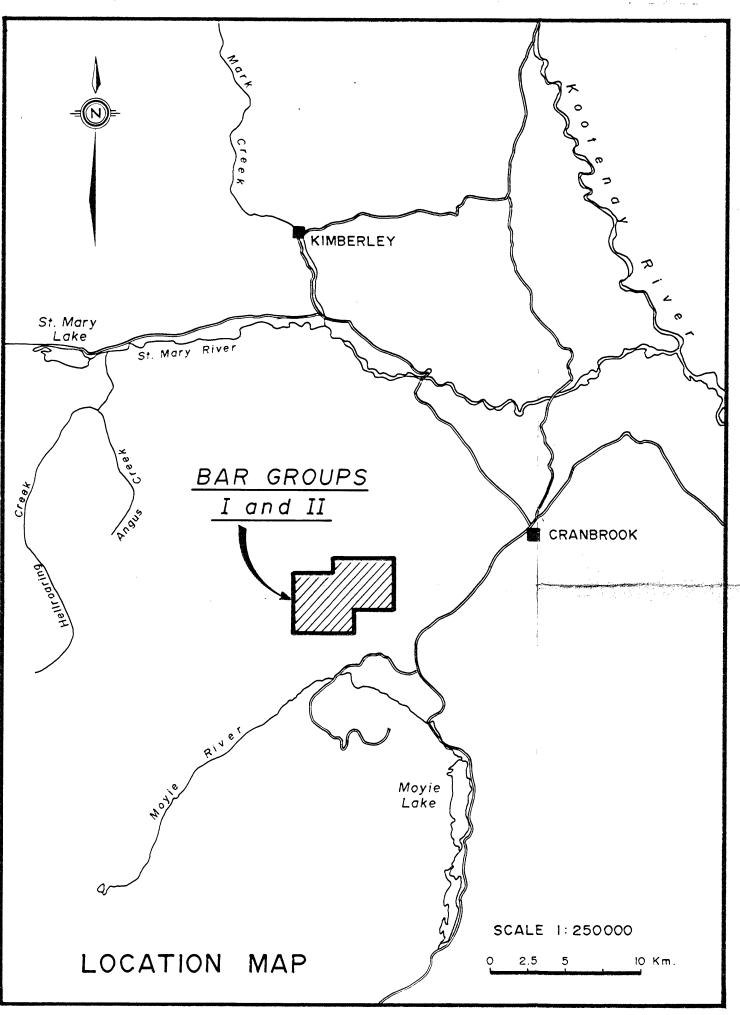
STATEMENT OF QUALIFICATIONS

I, James McDonald of the City of Vancouver, British Columbia, do certify that:

- I am a graduate of the University of Alberta with a Bachelor of Science in Geology.
- 2. I have been steadily employed by Noranda Exploration Company, Limited since May, 1983.

James McDonald Geologist Noranda Exploration Company, Limited (No Personal Liability)





SAMPLE	ELEMENTS					SAMPLE		EL	.EME	NTS	
SAM	Cu	Zn	Pb	Аġ	Mo	SAM	Cu	Zn	РЪ	Ag	Mc
65702	14	110	10	0.2	1	65728	22	90	12	0.2	1
65703	- 22	- 92		0.2	,	65729	1-6	-60-	- 8	0.2	5.1
65704	18	110	8	0.2	1	65730	14	52	6	0.2	1
65705	20	130	10	0.2	1	65731	16	48	0	0.2	1
65706	20	98	8	0.2	1	65732	14	40	6	0.2	1
65707	16	110	8	0.2	1	65733	14	54	8	0.2	1
65708	14	200	6	0.2	1	65734	14	66	10	0.2	1
65709	20	150	14	0.4	t	65735	18	50	8	0.2	1
65710	14	140	14	0.2	1	65736	24	50	8	0.2	1
65711	32	120	330	2.8	1	65737	20	56	8	0.2	1
65712	28	420	310	1.6	1	65738	10	74	10	0.2	1
65714	14	140	12	0.2	1	65739	22	52	10	0.2	1
65715	12	100	6	0.2	1	65740	26	80	10	0.2	1
65716	16	90	8	0.2	1	65741	36	48	12	0.2	1
65717	20	66	8	0.2	1	65742	30	60	10	0.2	1
65718	10	40	2	0.2	I	65743	24	54	8	0.2	1
65719	16	38	4	0.2	1	65744	28	60	10	0.2	1
65720	20	42	8	0.2	1	65745	26	52	2	0.2	1
65721	16	36	8	0.2	1	65746	20	48	2	0.2	1
65722	26	56	8	0.2	1	65747	18	48	2	0.2	1
65723	14	56	10	0.2	1	65748	14	78	6	0.2	1
65724	22	40	4	0.2	1	65749	18	58	8	0.2	1
65725	14	66	12	0.2	1	65750	20	52	4	0.2	1
65726	20	62	10	0.2	1	65696	12	58	6	0.2	1
65727	34	88	14	0.2	1						

GEOLOGICAL BRANCH ASSESSMENT REPORT

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SCALE 1:10 000

200 100 0 200 400 600 800 1000 Metres

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REVISED	BAR GROUP
	GEOCHEMISTRY BAR 19 Cu,Pb,Zn,Ag,Mo in ppm
PROJ. No440	SURVEY BY: J. McDonald DATE: April 1986 DRAWN BY: J. Serwin SCALE: 1:10000
DWGL No.	