GEOCHEMICAL REPORT

ON THE

TEEPEE 1 AND 2 MINERAL CLAIMS

LOCATED IN THE

VERNON MINING DIVISION

AT CO-ORDINATES

49°55'05"N and 118°29'W

BY

B.B. HUGHES

NORANDA EXPLORATION COMPANY, LIMITED

(NO PERSONAL LIABILITY)

FEBRUARY 1980

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INTRODUCTION

The Teepee Creek Property is comprised of the Teepee 1 and 2 mineral claims. The property was staked in 1979 to cover an area of anomalous molybdenum in silts taken from Teepee Creek several years earlier.

The property is underlain by Cretaceous Nelson intrusion consisting of granite, porphyritic granite, quartz monzonite and to the east underlain by Permian Anarchist Group meta-sediments and metavolcanics.

In 1977 Exploram Minerals Ltd., (Mannix Construction) staked the area, conducted a wide spread I.P. survey and drilled several holes (3?). The core was not sampled and they allowed the claims to lapse.

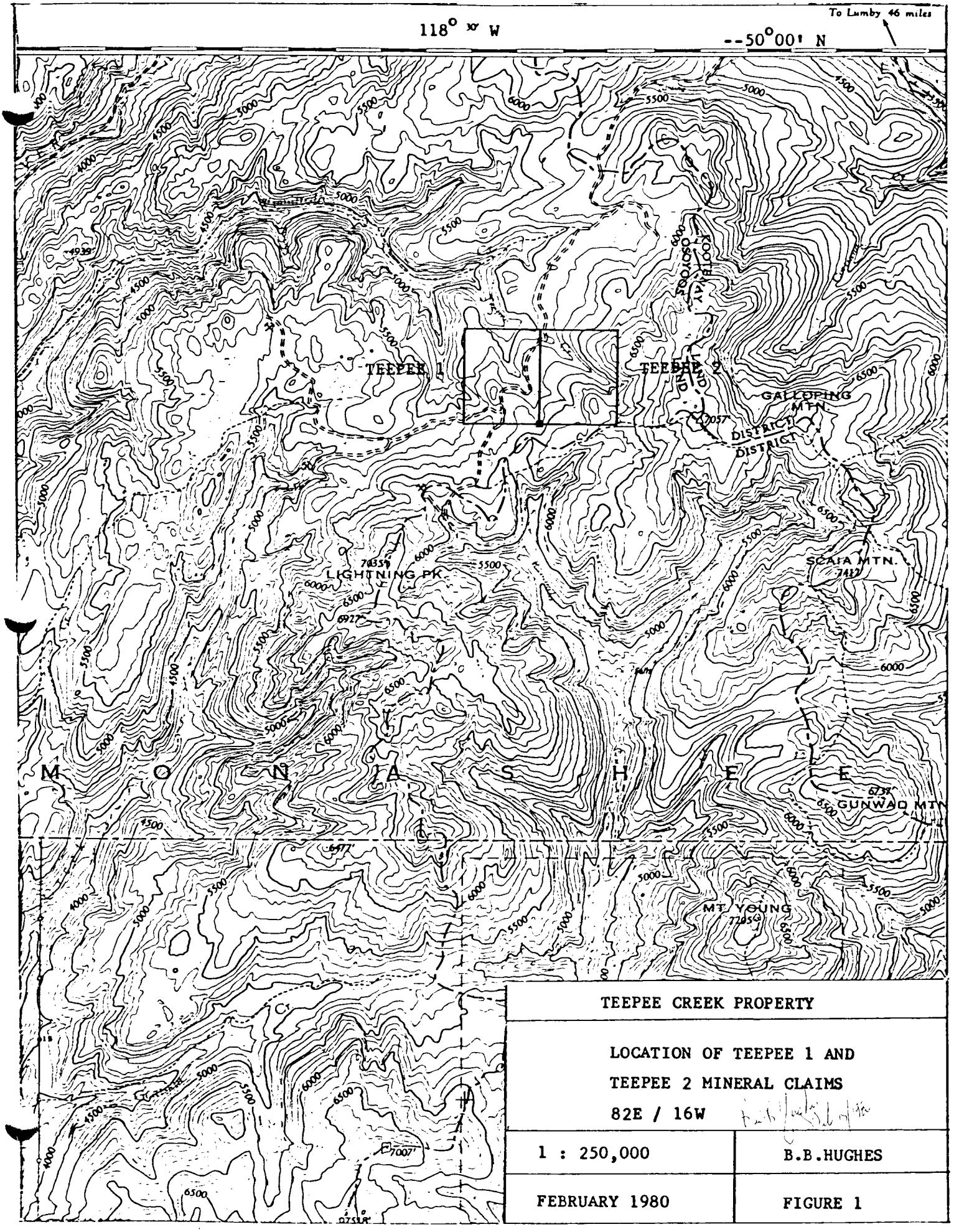
During July 1979 a control grid was established over part of the Teepee Creek Property and soil samples were collected and run for Mo, Cu, Zn and Pb in ppm.

LOCATION AND ACCESS

The Teepee Creek Property is centered on co-ordinates 49°55'05"N and 118°29'W on NTS map sheet 82E/16W. This point is 27.5 km at N78°W (true) from the village of Needles. The claims cover the area drained by the main south and east forks of Teepee Creek which in turn is a north flowing tributary of Winnifred Creek.

Elevations across the property varies from 1645 m in Teepee Creek to over 1950 m in the southeast part of the property. Vegetation is not thick on the property and becomes sub-alpine in the higher elevations to the southeast.

Access to the property is along an old mine road constructed to service operations in the Lightning Peak area. The old mine road leaves the Monashee



TEEPEE CREEK PROPERTY	
LOCATION OF TEEPEE 1 AND TEEPEE 2 MINERAL CLAIMS 82E / 16W	
1 : 250,000	B.B.HUGHES
FEBRUARY 1980	FIGURE 1

Highway approximately 28 km west of Needles and heads south through the headwaters of Winnifred Creek and across the center of the Teepee Creek Property.

New Logging roads coming up the Winnifred Creek Valley may also connect with the old mine road giving access to the property from the Kettle River Valley to the west.

CLAIM STATISTICS

All claims are in the Vernon Mining Division and are owned by Noranda Exploration Company Limited (N.P.L.)

Claim Name	Record Number	Units	Record Date
Teepee 1	601	20	March 22, 1979
Teepee 2	602	20	March 22, 1979

See Figure 1 and Drawing 1 for claim location.

CONTROL GRID

The Teepee Creek Property control grid was established during July 1979 using chains marked in feet and the Silva compass. The grid and soil sampling was done under contract by Amex Exploration Services Limited of Kamloops, B. C

Pre-existing east-west lines were re-established every 800 feet from 0+00N to 32+00N. These lines run from 24+00E to 80+00E with lines 16+00N and 32+00N being re-established out to 112+00E. East-west fill-in lines every 400 feet were established from 4+00N to 28+00N from 40+00E to 80+00E. All lines have been flagged and stations established every 200 feet with felt pen on teflon tags. Soil samples were collected every 200 feet along the grid lines wherever a good 'B' soil horizon could be found.

GEOCHEMICAL SURVEY

On the Teepee Creek Property a total of 217 soil samples were taken

All samples were analyzed for ppm copper, zinc, lead and molybdenum in the Noranda Exploration Company, Limited laboratory located at 1050 Davie Street, Vancouver 5, B. C. Analysts were R. Fenton and E. van Leeuwen.

Soil samples were obtained by digging holes with a maddock to a depth of 15 to 30cm where the visible B horizon, whenever possible, was exposed. Silt samples were taken from the active part of the streams where ever possible. The samples were placed in "Hi Wet Strength Kraft $3\frac{1}{2}$ x 6 1/8" Open End" envelopes and the grid station or sample number was marked on the envelope with indelible felt pen.

The samples are first 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 and molybdenum is as follows:

0.200 grams of the -80 mesh material is digested in 2ml. of HCl 04 and 0.5ml of HNO_3 for approximately four hours. Following digestion, each sample is diluted to 5ml. with demineralized H_2O. A Varian Techtron Model AA-5 Atomic Absorption Spectophotometer was used to determine the parts per million (ppm) copper, zinc, lead and molybdenum content in each sample.

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

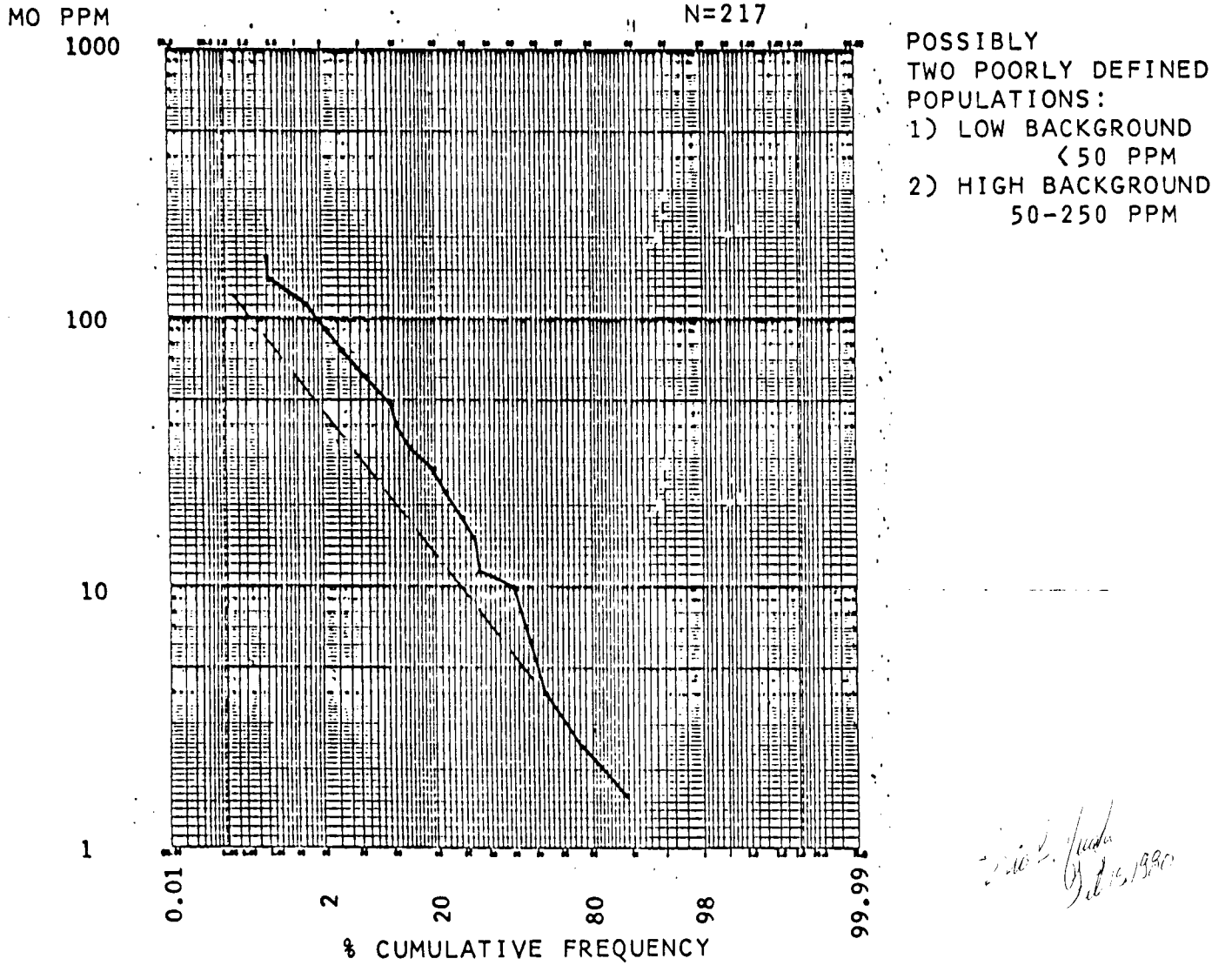
DISCUSSION OF RESULTS

Regional silting indicates anomalous molybdenum values in silts on the Teepee Creek Property.

Molybdenum

A plot of molybdenum in ppm versus % cumulative frequency shows possibly

FIGURE 2 MOLYBDENUM IN SOILS - CUMULATIVE FREQUENCY CURVE



two poorly defined populations: 1) a background population with values <110 ppm Mo in the area of the Teepee Creek Property and 2) possibly an anomalous or high background population >50 ppm Mo. Possibly anomalous values 50-110 ppm Mo and definitely anomalous >110 ppm Mo. Figure 2.

The plot for molybdenum is not easily broken into separate populations and therefore the chosen population thresholds are only at best approximations.

Copper

A plot of copper in ppm versus % cumulative frequency indicates the presence of two populations: 1) a background population <280 ppm Cu and 2) anomalous data >65 ppm Cu. This is broken down into possibly anomalous results 65-280 ppm Cu and definitely anomalous results >280 ppm Cu. Figure 3.

Zinc

A plot of zinc in ppm versus % cumulative frequency indicates the presence of three populations: 1) low background <42 ppm Zn. 2) middle background <30 ppm Zn and 3) anomalous or high background data >90 ppm Zn. The anomalous data is broken down into possibly anomalous 90-800 ppm Zn and definitely anomalous data >800 ppm Zn. Figure 4.

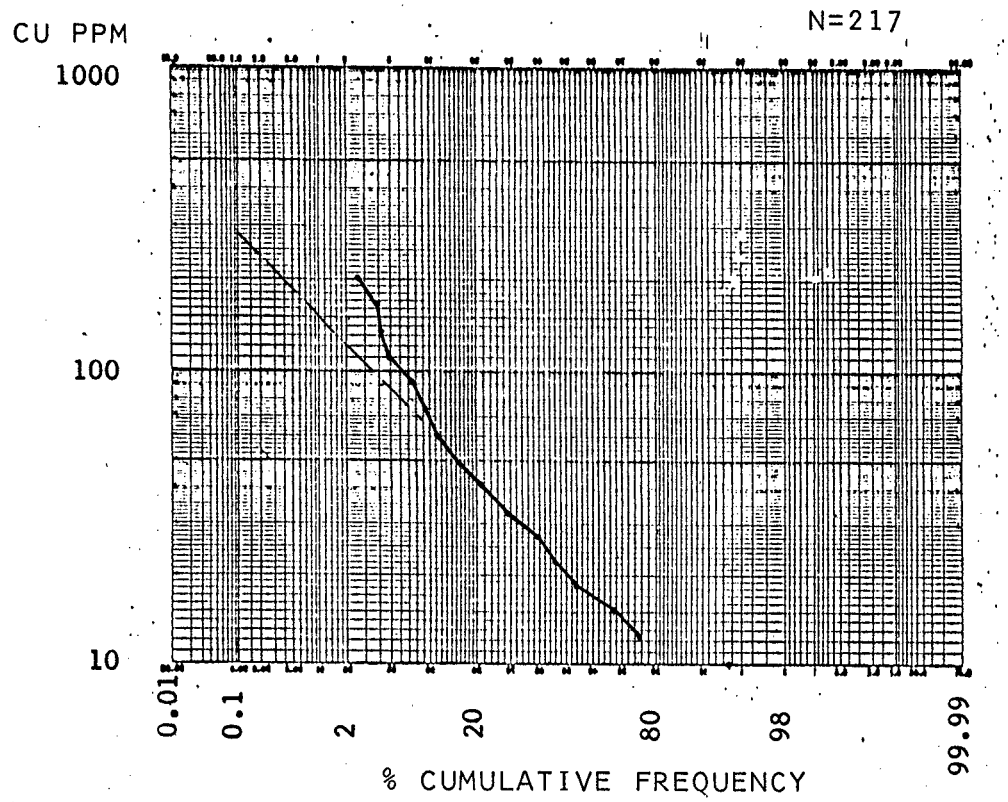
Lead

A plot of lead in ppm versus % cumulative frequency indicates the presence of two populations: 1) a background population <45 ppm Pb and 2) anomalous data >25 ppm Pb. The anomalous data is broken down into possibly anomalous 25-45 ppm Pb and definitly anomaleus >45 ppm Pb. Figure 5.

Anomaly 1

Anomalous data for Mo, Cu, Zn an Pb are found between stations 74+00E and 95+00E on line 32+00N. Line 28+00N has been established as far east as

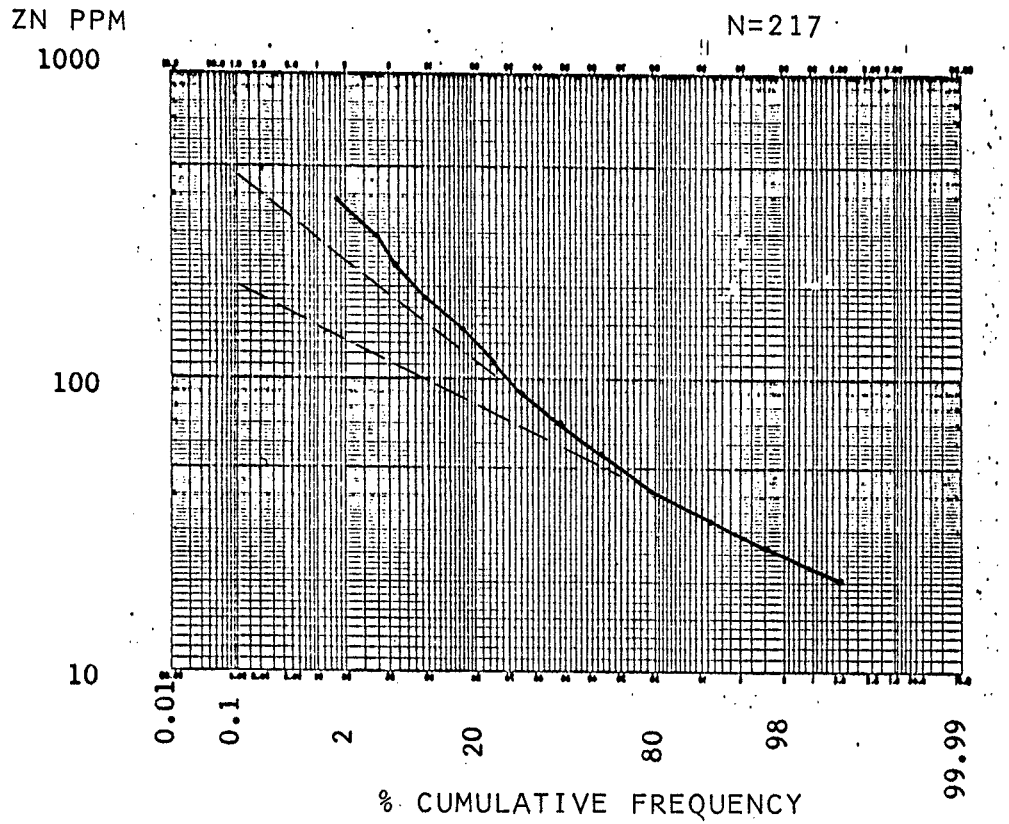
FIGURE 3 COPPER IN SOILS - CUMULATIVE FREQUENCY CURVE



TWO POPULATIONS
1) BACKGROUND:
< 280 PPM
2) ANOMALOUS DATA
> 65 PPM
THRESHOLD = 65 PPM
POSSIBLY ANOMALOUS
65-280 PPM
DEFINITELY ANOMALOUS
> 280 PPM

Brian Bl[illegible] Feb 15/1980

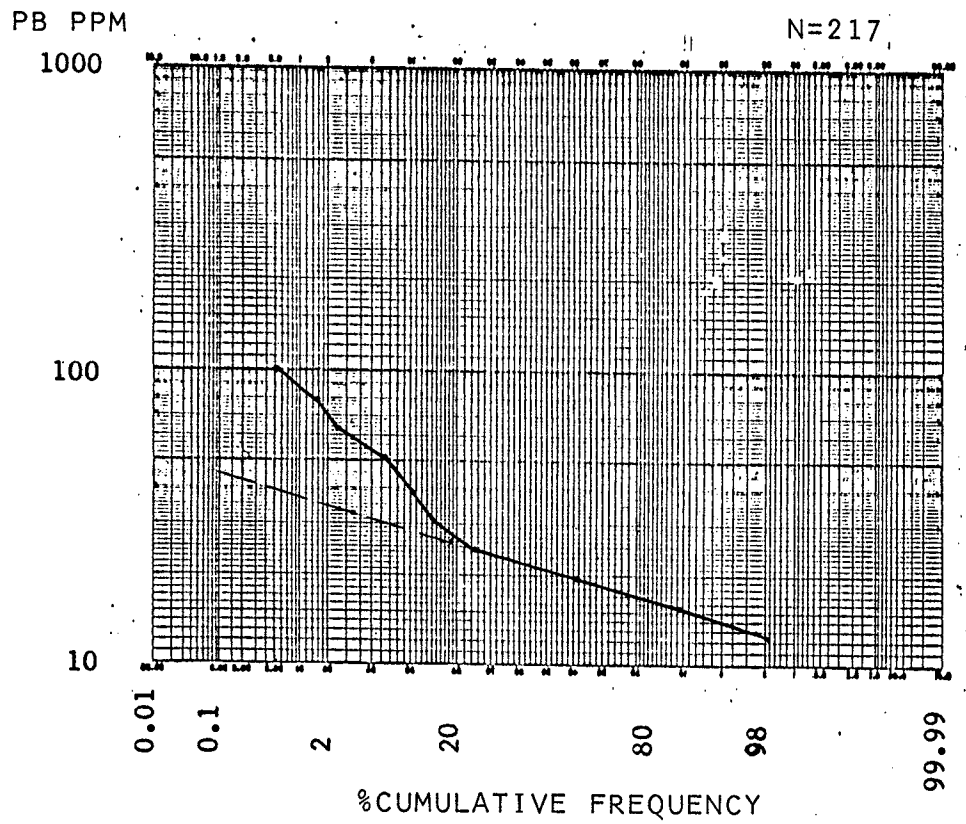
FIGURE 4 ZINC IN SOILS - CUMULATIVE FREQUENCY CURVE



THREE POPULATIONS:
1) LOW BACKGROUND
< 42 PPM
2) MIDDLE BACKGROUND
< 90 PPM
3) HIGH BACKGROUND
POSSIBLY ANOMALOUS
90-800 PPM
ANOMALOUS DATA
> 800 PPM

Brian Hughes Feb 15/1980

FIGURE 5 LEAD IN SOILS - CUMULATIVE FREQUENCY CURVE



TWO POPULATIONS:
1) LOW BACKGROUND
<45 PPM
2) ANOMALOUS DATA
>25PPM
THRESHOLD ◻ 5 PPM
POSSIBLY ANOMALOUS
25-45 PPM
DEFINITELY ANOMALOUS
>45 PPM

Brian Hughes Feb 15/1980

80+00E of which station 78+00E and 80+00E have anomalous values in soils of Mo and Cu. Further extensions of the existing grid lines and additional lines to the north of line 32+00N will be required to define this anomaly. See drawings 1 and 2.

Anomaly 2

Between stations 62+00E and 70+00E on line 16+00N are anomalous values in Cu, Zn and Pb. Results from samples on lines to the south do not show any extension to the soil anomaly. To the north only two samples on line 18+00N at stations 60+00E and 62+00E show anomalous values. Anomaly 2 does not appear to have any appreciable surface dimensions. See drawings 1 and 2.

Anomaly 3

A weak anomalous zone found on lines 0+00N through to 16+00N between stations 42+00E and 52+00E show erratic high values in Mo, Cu, Zn and Pb. Several more lines will be needed to the south of line 0+00N to better explain this area. See drawings 1 and 2.

Brian B. Hughes Feb 15/1980

Brian B. Hughes,
Geologist.

February 1980

APPENDIX I

STATEMENT

OF

QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Brian B. Hughes of the City of Vancouver, Province of British Columbia, do certify that:

1. I have been employed as a geologist by Noranda Exploration Company, Limited since April 1976.

2. I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology (1974).

3. I am a member of the Canadian Institute of Mining and Metallurgy.

Brian B. Hughes Feb 15/1980

Brian B. Hughes
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

APPENDIX II

STATEMENT

OF

COSTS

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT TEEPEE CREEK DATE MARCH 1980

TYPE OF REPORT

a) Wages:

No. of Days

Rate per Day $

Dates: from to

Total Wages x $ Nil

b) Food and Accomodation:

No of days

Rate per day $

Dates: from to

Total Cost x $ Nil

c) Transportation:

No of days

Rate per day $

Dates: from to

Total Cost X $ Nil

d) Instrument Rental:

Type of Instrument

No of days

Rate per day $

Dates: from to

Total Cost X $ Nil

Type of Instrument

No of days

Rate per day $

Dates: from to

Total Cost X $ Nil

f)	Analysis (See attached schedule)		602.00
g)	Cost of preparation of Report		
	Author	99.99	
	Drafting	78.00	
	Typing	68.00	245.99
h)	Other:		
	Amex Exploration Services		
	Geochem Contract	506.00	
	Line Cutting Contract	844.00	
	Supervision: G.E. Dirom P.Eng.	200.00	
			1,550.00
			2,397.99
Total Cost			2,397.99

e)	Unit costs for	Geochem	
	No of days		
	No of units	215 Samples	
	Unit costs	$11.15344 / Sam.	
	Total Cost	$11.15344 X 215	2,397.99

NORANDA EXPLORATION COMPANY, LIMITED

(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: TEEPEE CREEK March 1980

ELEMENT	NO. OF DETERMINATIONS	COST PER DETERMINATION	TOTAL
Cu	215	1.00	215.00
Mo	215	.60	129.00
Zn	215	.60	129.00
Pb	215	.60	129.00

602.00

TEEPEE CREEK

24 E 32 E 40 E 48 E 56 E 64 E 72 E 80 E 88 E 96 E 104 E 112 E

32 N

24 N

16 N

8 N

0 + 00

ROAD

TEEPEE 1

TEEPEE 2

LCP

Cu 34
Mo 12

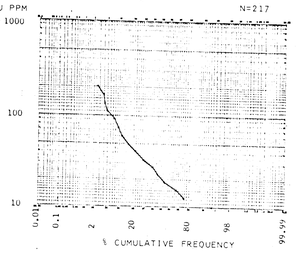
FEET 400 0 400 800 1200

MINISTRY OF ASSESSMENT REPORT NO. 7862

TO ACCOMPANY GEOCHEMISTRY ASSESSMENT REPORT ON
THE TEEPEE 1 & 2 MINERAL CLAIMS BY B.B.HUGHES
LOCATED IN THE VERNON MINING DIVISION

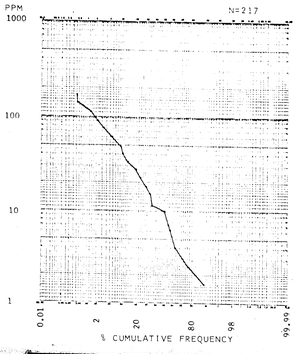
FEBRUARY 1980

CU PPM N=217



TWO POPULATIONS
1) BACKGROUND:
< 280 PPM
2) ANOMALOUS DATA
> 65 PPM
THRESHOLD = 65 PPM
POSSIBLY ANOMALOUS
65-280 PPM
DEFINITELY ANOMALOUS
> 280 PPM

MO PPM N=217



POSSIBLY
TWO POORLY DEFINED
POPULATIONS:
1) LOW BACKGROUND
< 50 PPM
2) HIGH BACKGROUND
50-250 PPM

Bruce Hughes Oct 15/1980

REVISED	TEEPEE CREEK PROJECT
	GEOCHEMICAL SOIL SURVEY Cu, Mo in P.P.M.
PROJ No. 45	SURVEY BY: IAS BBH — DATE: JULY 1979
N.T.S. 82E/16W	DRAWN BY: JAN VAN VOORST — SCALE: 1" = 400'
DWG No. 1	NORANDA EXPLORATION
	OFFICE VANCOUVER

TEEPEE CREEK

24 E | 32 E | 40 E | 48 E | 56 E | 64 E | 72 E | 80 E | 88 E | 96 E | 104 E | 112 E

32 N

24 N

16 N

8 N

0+00

ROAD

TEEPEE 1

TEEPEE 2

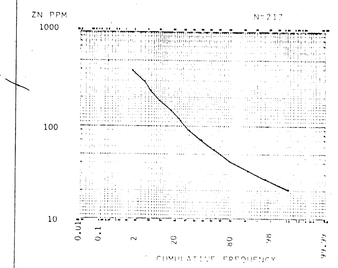
LCP

Zn 56
Pb 23

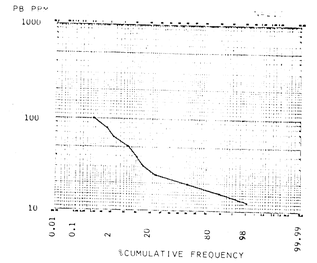
FEET 400 0 400 800 1200

TO ACCOMPANY GEOCHEMISTRY ASSESSMENT REPORT ON
THE TEEPEE 1 & 2 MINERAL CLAIMS BY S.B.H.-I.A.S-E.E.
LOCATED IN THE VERNON MINING DIVISION.

FEBRUARY 1980



THREE POPULATIONS:
1) LOW BACKGROUND
<42 PPM
2) MIDDLE BACKGROUND
<98 PPM
3) HIGH BACKGROUND-
POSSIBLY ANOMALOUS
98-800 PPM
ANOMALOUS DATA
>800 PPM



TWO POPULATIONS:
1) [illegible]
<25 PPM
2) ANOMALOUS DATA
>25PPM
THRESHOLD = 25 PPM
POSSIBLY ANOMALOUS
25-45 PPM
DEFINITELY ANOMALOUS
>45 PPM

REVISED	TEEPEE CREEK PROJECT
	GEOCHEMICAL SOIL SURVEY Zn, Pb in P.P.M.
FOR No. 45 MAP 82F.16W	SURVEY BY: I.A.S. B.B.H. DATE: JULY 1979 DRAWN BY: JAN VAN VOORST SCALE: 1" = 400'
DWG. No. 2	NORANDA EXPLORATION OFFICE VANCOUVER