'84-1312-12847

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,847

PART 1 OF 2

12/85

REPORT OF WORK

GEOLOGICAL SURVEYS

ON THE NBR 3, NBR 5, NBR 6, NBR 7

MINERAL CLAIMS

and

NEX 1, NEX 2 TWO POST CLAIMS

N.T.S. 82M/5

KAMLOOPS MINING DIVISION

LAT. 51°17' LONG. 119°55'

Owner & Operator: Noranda Exploration Company, Limited
(No Personal Liability)

Submitted By : G. Shevchenko, Geologist
Vancouver, B.C.
February, 1985

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
GEOLOGICAL	

AUTHOR(S) G. Shevchenko SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED December 6, 1984 YEAR OF WORK 1984

PROPERTY NAME(S) Kiwi - Nex Claim Group

COMMODITIES PRESENT Zn, Pb, Ag

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Kamloops NTS 82M/5

LATITUDE 51°17'N LONGITUDE 119°55'W

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

NBR 3 (12 Units) NBR 5 (18 Units)

NBR 6 (20 Units) NBR 7 (20 Units)

NEX 1 (1 Unit) NEX 2 (1 Unit)

OWNER(S)

(1) Noranda Exploration Company, Limited (No Personal Liability) (2)

MAILING ADDRESS

P.O. Box 2380
Vancouver, B.C. V6B 3T5

OPERATOR(S) (that is, Company paying for the work)

(1) Noranda Exploration Company, Limited (No Personal Liability) (2) O'Brien Energy & Resources Ltd.

MAILING ADDRESS

P.O. Box 2380
Vancouver, B.C.
V6B 3T5

Suite 916, 111 Richmond St. West
Toronto, Ontario
M5H 2G4

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Northeast dipping andesites and sediments of the Eagle Bay Formation which is late Deveonian to Early Mississippian in age. Stratiform pyrite mineralization located at Andesite/Sediment contacts.

REFERENCES TO PREVIOUS WORK

(over)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground	1:10,000 (12 km^2)	NBR 3, NBR 5, NBR 6, NBR 7, NEX 1 & 2	$3,970.80
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ....)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)	13	NBR 3, NBR 5, NBR 6, NBR 7	$3,088.27
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			
		TOTAL COST	$7,059.07

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date	Rept. No.			Information Class

TABLE OF CONTENTS

LIST OF MAPS

1.0 INTRODUCTION

The NBR 3, NBR 5, NBR 6, NBR 7 mineral claims and the NEX 1 & 2 two post claims comprise the O'BRIEN-KIWI-NEX claim group which is owned and operated by Noranda Exploration Company, Limited (No Personal Liability).

During the 1984 field season reconnaissance (12 sq. km) and grid (2.5 sq. km) geological mapping was conducted at a scale of 1:10,000 and 1:5,000 respectively.

1.1 LOCATION AND ACCESS (MAP #1)

The property is located 22 km N.E. of Barriere, B.C. and is centered at 51°17'N latitude, 119°55'W longitude.

The claims are accessible by paved and good gravel roads from Barriere via East Barriere Lake Road followed by North Barriere Lake Road or Russell Creek Road.

1.2 TOPOGRAPHY AND PHYSIOGRAPHY

The claims are primarily situated on a steep westward facing slope with elevations ranging from 600 to 1,370 metres.

Vegetation ranges from dense alders to moderately timbered areas with minor undergrowth.

1.3 CLAIM STATUS

The claims are part of the O'BRIEN-KIWI-NEX claim group which is owned and operated by Noranda Exploration Company, Limited (No Personal Liability), 1050 Davie Street, Vancouver, B.C.

Claim Name	Record No.	Units	Expiry Date
NBR 3	005172	12	December 7, 1984
NBR 5	005174	18	December 7, 1984
NBR 6	005175	20	December 7, 1984
NBR 7	005176	20	December 7, 1984
NEX 1	005221	1	December 14,1984
NEX 2	005222	1	December 14,1984

N

LAT 51°17′

LONG 119°55′

NEX CLAIM GROUP

LAKE

EAST BARRIERE

East Barrière Lake

Barrière River

Barrière Creek

Bromley Creek

North Thompson River

Fraser River

Columbia River

Wells Gray Provincial Park

Bowron Lake Prov. Park

Mount Robson Prov. Park

Hamber Prov. Park

Mount Revelstoke Park

Glacier Park

Okanagan Lake

Shuswap Lake

Loon Lake

Logan Lake

Ashcroft

Likely

Hinton

Jasper

McBride

CLINTON

KAMLOOPS

Salmon Arm

VERNON

MERRITT

Kelowna

PRINCETON

PENTICTON

Hope

Keremeos

Oliver

Ymuch

Abbotsford

Morning Prov. Park

SCALE 1:3,168,000

N

REVISED	OBRIEN (J.V.)
	NBR KIWI NEX CLAIM GROUP
	LOCATION MAP
PROJ. No. 10	SURVEY BY:
N.T.S. 82M/7, 4	DRAWN BY: G.S.
DWG. No.	DATE:
	SCALE: 1:50,000
	NORANDA EXPLORATION
	OFFICE: VANCOUVER

VANCAL 11825

1.4 PREVIOUS WORK

Little work has been done on the claims themselves however, immediately to the north on the E.B.L. and REM claims, exploration has been conducted from 1969 to present. The companies that worked the area were K.E. Northcotte and Assoc., Westmin Resources, Craigmont Mines, Noranda Exploration, Rayrock Mines and Royal Canadian with surveys ranging from geological mapping, geochemistry, geophysics and trenching.

Two known Pb, Ag showings exist in the immediate vicinity of the claims; White Rock (Minfile #082M 066) and Silver Mineral (Silver Minnow) (Minfile #082M 069). These two properties have been worked sporadically since the early 1920's.

2.0 GEOLOGICAL SURVEY

The geological survey consists of two parts; a reconnaissance survey at a scale of 1:10,00 (Map 2) and a grid survey at a scale of 1:5,000 (Map 3). These maps are found in the pockets at the end of the report.

2.1 RECONNAISSANCE GEOLOGY (MAP #2)

The rock units found on the property belong to the Eagle Bay Formation which is Late Devonian to Early Mississippian in age. These units trend northwest/southeast and dip moderately to steeply to the northeast. The rocks have been subjected to low grade metamorphism. Although several phases of deformation have been reported in the area, only the F2 phase is evident. This is reflected by small scale tight folding of the S1 planes.

The area is primarily comprised of andesites, which occur as chlorite schists and greenstones, intercalated with minor amounts of carbonate, quartzite and argillite.

The stratigraphy of the area is yet to be confirmed, however it is believed that the sedimentary rocks are stratigraphically above the andesites.

2.1.1. Rock Descriptions

Unit 7 DOLOSTONE: Dark grey to light grey, banded to massive, fine to medium grained, may be silicified, minor limestone.

Unit 6 ANDESITE: 6a. Chlorite Schist-light to dark green, aphanitic to very fine grained, moderate to well developed schistosity, may contain magnetite and pyrite.

6b. Greenstone-light to medium green, aphanitic to fine grained, massive to moderately foliated, may be indistinctly inequigranular.

Unit 5 CONGLOMERATE: Mottled green, white, grey, tan and black, subrounded to rounded chert, limestone, argillite, dolostone and chlorite schist clasts (0.5 to 8 cm in diameter) set in a chloritic matrix of poor to well developed schistosity.

Unit 4 QUARTZITE: Greyish white to medium grey, massive to a moderately developed fracture cleavage, may contain minor siliceous argillite.

Unit 3 SILICEOUS ARGILLITE: Black to dark grey, very fine grained, massive to indistinctly schistose, minor quartzite.

Unit 2 GRITTY FELDSPATHIC PHYLLITE: Pale greenish grey to greyish white, slight inequigranular with a gritty appearance, fine grained quartz and siderite/ankerite set in an aphanitic phyllitic matrix.

Unit 1 DARK CLASTIC PHYLLITE: Dark grey to black, well developed phyllitic schistosity, aphanitic and soft.

2.1.2 Mineralization

Minor amounts of disseminated pyrite (1 to 5%) occurs sporadically within the andesites. However, in several cases the mineralization appears to be associated with the andesite/sediment and andesite/carbonate contact.

2.2 GROUND CONTROL

In order to gain control for detailed mapping a grid was established with a baseline parallel to the lithologic trend. The grid is comprised of 1.9 kilometers of cut baseline and 11.1 kilometers of flagged crosslines spaced 200 meters apart with stations every 25 meters.

2.3 GRID GEOLOGY (MAP #3)

The rock units trend northwest to northwest west with a vertical to

moderate northeast dip.

The grid is primarily comprised of andesites with a central core of sediments. The andesites occur as chlorite schists and greenstones, and the sedimentary rocks range from pelites and argillites to quartzites.

The sericite-quartz phyllite found within the graphitic argillite (Unit 2b) may represent an alteration zone.

Further mapping is required on Lines 122+00N to 116+50N in order to complete the geological picture.

2.3.1 Rock Descriptions

Unit 6 DOLOSTONE: Dark grey to light grey, massive fine to medium grained, may be silicified, minor limestone.

Unit 5 ANDESITE: 5a. Chlorite Schist - light to dark green, equigranular, aphanitic to very fine grained, moderate to well developed schistosity, up to 90% chlorite and 10% quartz, may contain up to 2% magnetite and 5% pyrite.

5b. Greenstone - light to medium green, equigranular to indistinctly inequigranular, massive to weakly foliated, aphanitic to fine grained, comprised predominantly of chlorite with lesser amounts of quartz, amphibole and epidote, may contain up to 5% pyrite. Gradational contacts.

Unit 4 CONGLOMERATE: Mottled green grey and white inequigranular, weakly to distinctly conglomeritic, subrounded to rounded clasts range from 0.5 mm to 10 mm in diameter and are comprised of carbonate and/or argillite, these are set in an aphanitic chlorite matrix of poor to well developed schistosity, matrix may be calcareous.

Unit 3 QUARTZITE: Greyish white to medium grey, massive to moderately developed fracture cleavage, aphanitic to fine grained, may contain minor siliceous argillite.

Unit 2 ARGILLACEOUS ROCKS: 2a. Siliceous argillite - black to dark grey, aphanitic to very fine grained, massive to weakly developed fracture cleavage, intercalated with quartzite.

2b. Graphitic argillite - similar to siliceous argillite but with up to 15% graphite occurring along the fracture cleavage planes.

2c. Pelite - dark grey equigranular, aphanitic, distinctly phyllitic.

Unit 1 SERICITE-QUARTZ-PHYLLITE: Beige, equigranular, very fine grained, distinct phyllitic schistosity.

2.3.2 Mineralization

Only minor amounts of pyrite mineralization were found near the andesite sediment contact on Line 126+00N. These are fine grained dissemination ranging up to 5%.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The property primarily consists of northeast dipping units of andesites and argillaceous sedimentary rocks which have been subjected to low grade metamorphism and polyphase deformation. The rocks belong to the Eagle Bay Formation which is Late Devonian to Early Mississippian in age.

Pyrite mineralization occurs sporadically within the andesites however the most favourable environment for stratiform sulphide mineralization appears to be the andesite/sediment and andesite/carbonate contact. Thus further exploration should be directed at such areas.

4.0 Bibliography

Preto, V.A. (1981): Barriere Lakes - Adams Plateau Area (82M/4, 5W; 92P/1E), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Field work, 1980, Paper 1981-1, pp. 15-23

APPENDIX I

ITEMIZED COST STATEMENT

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

DATE FEBRUARY 1985

PROJECT - O'BRIEN-KIWI-NEX GROUP
TYPE OF REPORT Geology $ Geochem

a) **Wages:**

No. of Days -	32 mandays	
Rate per Day -	$83.15	
Dates From -	April 1 - September 1984	
Total Wages	32 X $83.15	$2,660.68

b) **Food and Accommodation:**

No. of Days -	32	
Rate per Day -	$68.30	
Dates From -	april 1 -September 1984	
Total Cost -	32 X $68.30	$2,185.49

c) **Transportation:**

No. of Days -	32	
Rate per Day -	$45.76	
Dates From -	April 1 - September 1984	
Total cost	32 X $45.76	$1,464.20

d) Analysis

e) **Cost of Preparation of Report**

Author	**$ 249.45**
Drafting	**$ 249.45**
Typing	**$ 249.45**

f) **Other:**

Total Cost $7,059.07

UNIT COSTS

Unit Costs for Geology

No. of Days -	18	
No. of Units -	18 Days	
Unit Costs -	220.60 / Day	
Total cost	18 X 220.60	$3,970.80

Unit Costs for Linecutting

No. of Days -	14	
No. of Units -	13 L Km	
Unit Costs -	237.56 / LKm	
Total Cost -	13 X 237.56	$3,088.27

Total Cost	$7,059.07

APPENDIX II

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

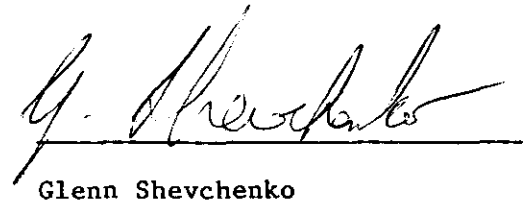
I, Glenn Shevchenko of the City of Vancouver, Province of British Columbia do hereby certify that:

I am a geologist residing at 9271 Arvida Drive, Richmond, B.C.

I graduated from Concordia University, Montreal, Quebec in 1982 with a Bachelor of Science Degree in Geology.

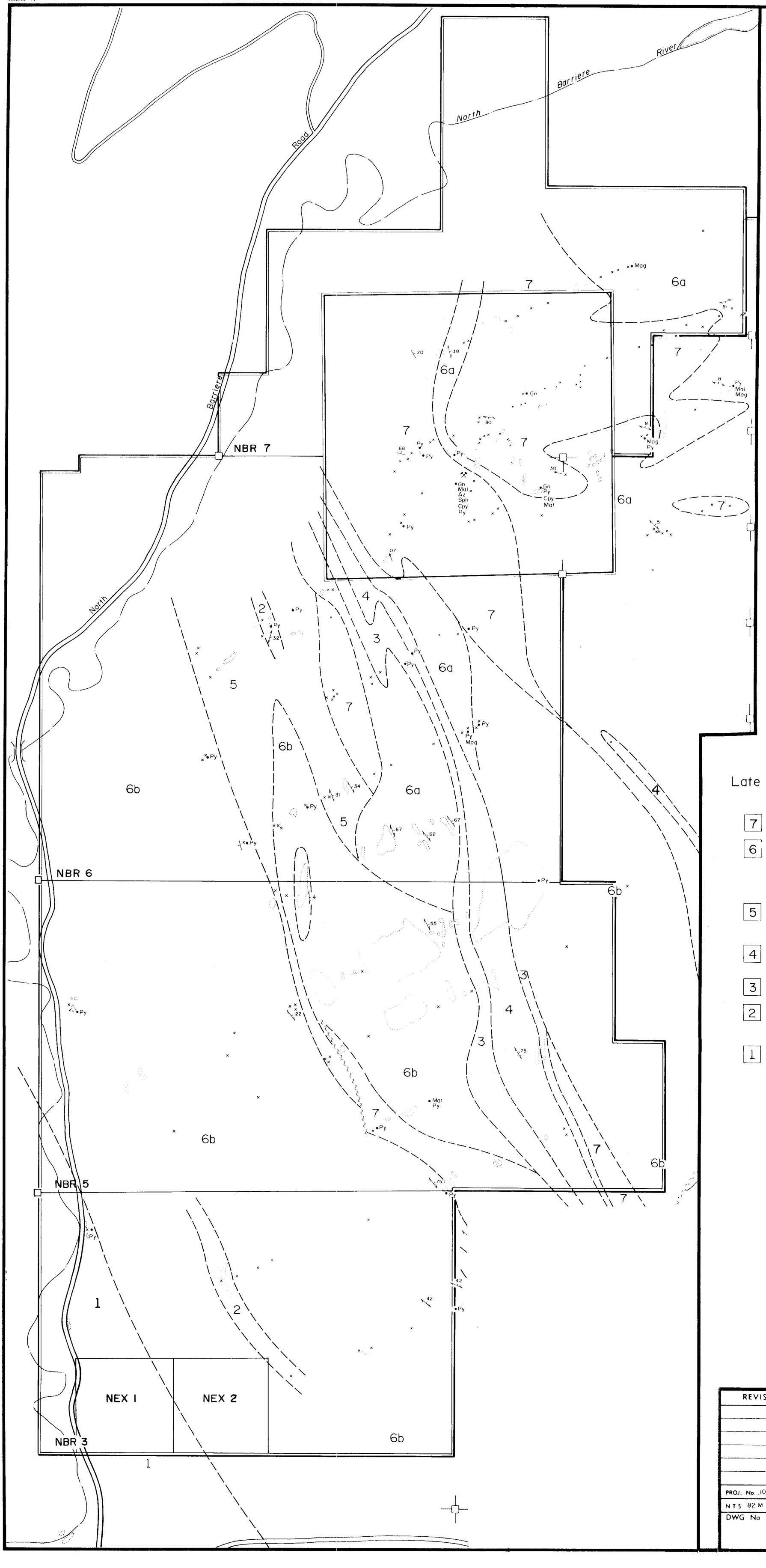
I have worked in mineral exploration since 1977 and have practised my profession since 1982.

I am presently employed with Noranda Exploration Company, Limited, and have been since May, 1984.



Glenn Shevchenko

VANCAL 11917



LEGEND

Late Devonian to Early Mississippian

EAGLE BAY FORMATION

- 7 DOLOSTONE: Dark grey to light grey, banded to massive, fine to medium grained, may be silicified, minor limestone.
- 6 ANDESITE: 6a Chlorite Schist - light to dark green, aphanitic to very fine grained, moderate to well developed schistosity, may contain magnetite and pyrite.
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- 1 DARK CLASTIC PHYLLITE: Dark grey to black, well developed phyllitic schistosity, aphanitic and soft.

SYMBOLS

GEOLOGICAL

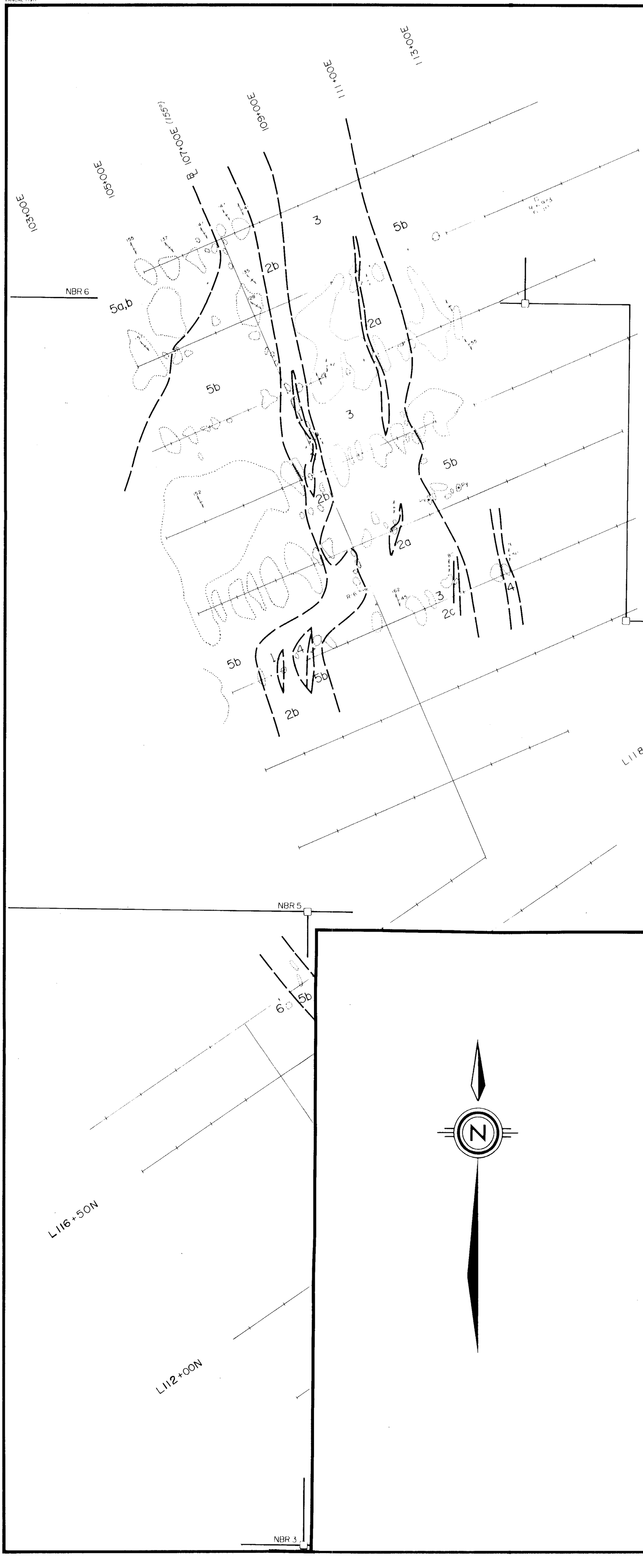
- Outcrop, spot outcrop
- Geological boundary (defined, assumed)
- Fault (assumed)
- Fold axis (assumed)
- Schistosity (inclined)
- Bedding (inclined)
- Axis of minor fold (inclined)
- Py Mineral occurence
- Mine workings

TOPOGRAPHICAL

- Road
- River, stream
- Claim boundary and post

REVISED	O'BRIEN J.V.
	NBR-KIWI-NEX CLAIM GROUP
	GEOLOGY
PROJ. No. 10	SURVEY BY G.S., I.M., G.C., J.R. DATE: 84-07
NTS 82 M 4,5	DRAWN BY SKS/LJT/LB SCALE: 1:10,000
DWG No 2	NORANDA EXPLORATION
	OFFICE Vancouver

VANCAL 11917



LEGEND

Late Devonian to Early Mississippian

EAGLE BAY FORMATION

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2c Pelite - Dark grey equigranular, aphanitic, distinctly phyllitic.

1 SERICITE - QUARTZ - PHYLLITE: Beige, equigranular, very fine grained, distinct phyllitic schistosity.

SYMBOLS

GEOLOGICAL

- Outcrop, spot outcrop
- R-61973 — Rock sample
- Geological boundary (defined, assumed)
- 20 — Foliation (vertical, inclined)
- Py — Mineral occurrence

TOPOGRAPHICAL

- Road
- Stream (direction of flow)
- Claim boundary and post (approx)

REVISED

O'BRIEN J.V.

NBR-KIWI-NEX CLAIM GROUP
GRID #1
GEOLOGY

PROJ. No. 110
N.T.S. 82 M 5
DWG. No. 3

SURVEY BY: G.S., G.G., I.M. DATE: Aug/1984
DRAWN BY: sks Lillie SCALE: 1:5000

NORANDA EXPLORATION

OFFICE: Vancouver