6187

ASSESSMENT REPORT

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEY

MARS 1 to 4
KEY 3, 4, 5, 9, 16, 17, 20 and 21
STANDARD 1, 2, 3 and 4
KELLY 1

MINERAL CLAIMS

Crown Grant Claims, Lot Numbers 6944-6954 and 7483-7490

51°26'N/118°18'W

REVELSTOKE MINING DIVISION

82M/8N

by

Gordon Gibson
Brian B. Hughes
Lyndon B. Bradish

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

August 4 - September 21, 1976

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INTRODUCTION

The mineral claims and crown granted mineral claims referred to in this report surround Keystone and Standard Peaks in southeastern British Columbia approximately 48km north of Revelstoke. During the period August 4 to September 21, 1976 an assessment program involving geological mapping, prospecting, line cutting, soil sampling and CEM surveying was completed on the claims.

Geological mapping and prospecting is, where physically possible, complete on claims of this report. The work was done by personell of Noranda Exploration Company, Limited. An appropriate part of the value of this work is now apportioned to each of several individual claims and previously filed claim groupings namely:

1) STANDARD BETA Standard 2
Iron Hill C.G.
Iron Chest C.G.
U.X.L. Fr. C.G.
Iron Hill Fr. C.G.

2) STANDARD DELTA Standard 4
Downie Fr. C.G.
Minto C.G.
Martha Jane C.G.
H.X.L. Fr. C.G.

3) KEY 3
4) KEY 16
5) KEY 17
6) KEY 20
7) KEY 21

A control grid, located entirely in the area of MARS 1, 2, 3 and 4, was developed by personell of AMEX Exploration Services, Limited (209-2985 Airport, Kamloops, B.C.) employed on a contract basis by Noranda Exploration Company, Limited. Soil samples were taken from the MARS grid by John Harrison (RR#1, Sechelt, B.C.), also employed on a contract basis by Noranda. CEM geophysical surveys were completed over part of the grid by Noranda personell.

A second control grid located in the area of KEY 1, 2 and 3 has been described in a previous assessment report on KEY 1 and 2. An appropriate proportion of the total line cutting, soil sampling and CEM surveying costs is herein applied for assessment on KEY 3.

A third control grid located in the area of the following claims:

STANDARD 1, 2, 3 and 4
CROWN GRANTS - LOT NUMBERS 6944 - 6954, 7483 - 7490
KEY 9

has been described in a previous assessment report. An appropriate proportion of the total line cutting, soil sampling and CEM surveying costs is herein applied for assessment on KEY 9.

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Geological and contract crews were under the general supervision of Gordon Gibson, geologist. Detailed geological mapping in the area of Standard 1 to 4 was undertaken by Brian B. Hughes, geologist. CEM field crews were supervised by J.T. Walker, geophysicist.

Previous reports outlining work done on these and adjoining claims include:

1)	Assessment report	Standard 1 - 4 Mineral Claims Crown Granted Mineral Claims - Lot Numbers 6944 - 6954 7483 0 7490	Filed Nov. 15, 1976
2)	Assessment Report	Key 1 - 2 Mineral Claims	Filed Nov. 12, 1976

LOCATION AND ACCESS

The various MARS, KEY, KELLY and STANDARD claims and the neighbouring STANDARD Crown Grants are located at co-ordinates 51°26'N/118°18'W in an area between and surrounding Keystone and Standard Peaks, British Columbia. The approximate center point of the claims lies 47km at 352° (true) from the town of Revelstoke. For claim locations see Figure 1.

Access is by helicopter from the paved Revelstoke - Mica Creek highway, however a network of logging roads starting from a point on the highway 50km north of Revelstoke comes to within 1.5km of the southwest corner of MARS 3.

TOPOGRAPHY, VEGETATION AND CLIMATE

The claims are located in the Selkirk mountain range and occupy a high dissected plateau drained by the headwaters of Keystone, Mars, Standard, Holdich and Kelly Creeks. Terrain varys from broad gently sloping sidehills to extremely steep cliffs and bluffs. Elevations range from 1100m to 2450m A.S.L.

Vegetation on the lower levels consists of mature stands of spruce, hemlock, balsam and cedar but sub-alpine and alpine conditions with scrub vegetation and open highland meadows prevail on the upper reaches.

Climate is that of the Interior Rain Belt with temperatures ranging between -15°C to +30°C. Annual precipitation averages 1.15m, more than half of which falls as up to 6m of snow. Most of the claims area typically remains snowbound until late in the summer.

CLAIMS AND OWNERSHIP

CLAIM NAME	OWNER	RECORD NUMBER	RECORD DATE
MARS 1	Noranda Exploration Company, Limited (No Personal Liability)	96	Feb. 11/76
MARS 2	"	97	" "
MARS 3	"	98	" "
MARS 4	"	99	" "
KEY 3	"	45	" "

.../3

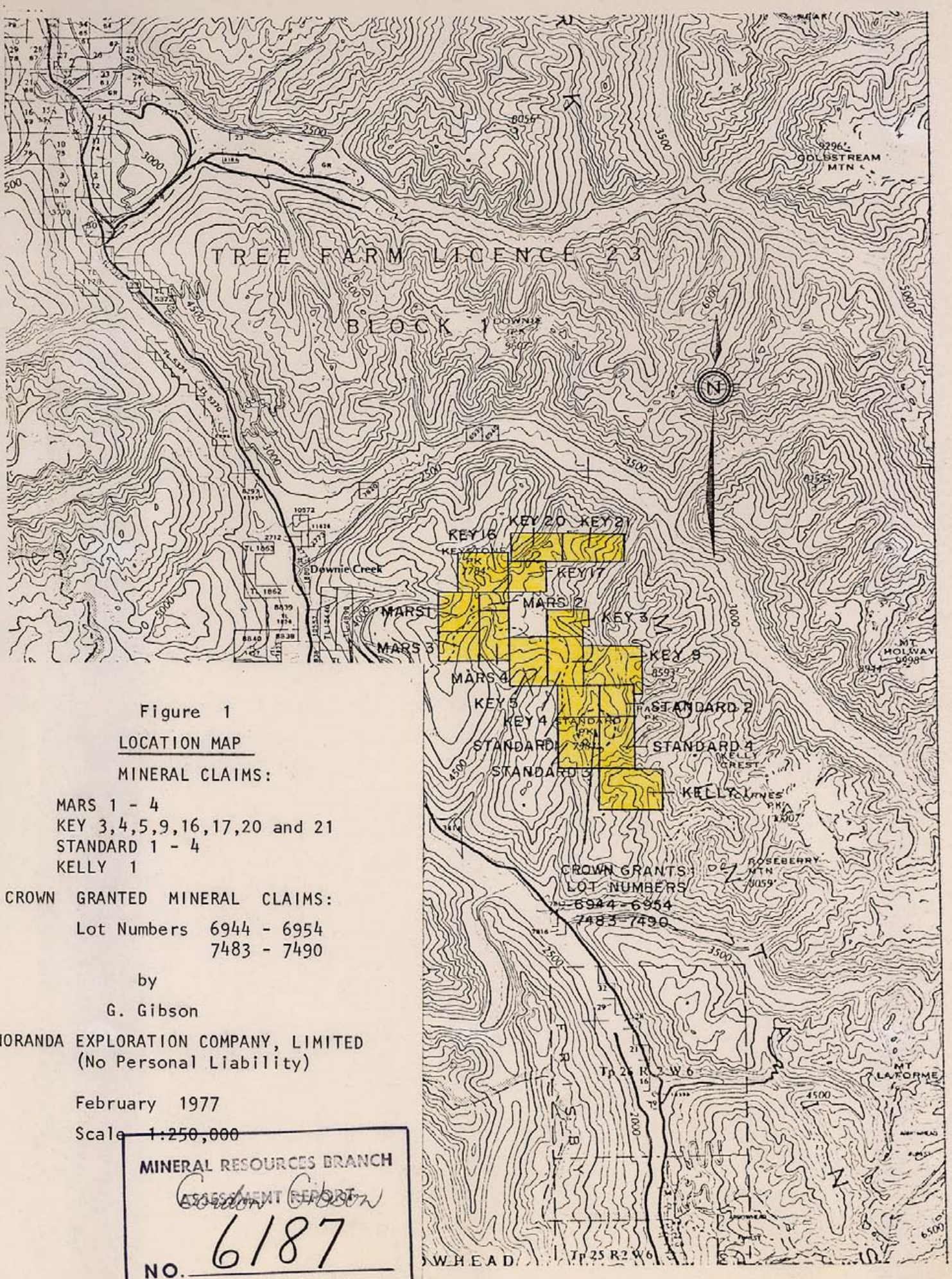

Figure 1

LOCATION MAP

MINERAL CLAIMS:

MARS 1 - 4
KEY 3,4,5,9,16,17,20 and 21
STANDARD 1 - 4
KELLY 1

CROWN GRANTED MINERAL CLAIMS:

Lot Numbers 6944 - 6954
7483 - 7490

by

G. Gibson

NORANDA EXPLORATION COMPANY, LIMITED
(No Personal Liability)

February 1977

Scale ~~1:250,000~~

CLAIM NAME	OWNER	RECORD NUMBER	RECORD DATE
KEY 4	Noranda Exploration Company,Limited (No Personal Liability)	46	Feb. 11/76
KEY 5	"	47	" "
KEY 9	"	51	" "
KEY 16	"	58	" "
KEY 17	"	59	" "
KEY 20	"	62	" "
KEY 21	"	63	" "
STANDARD 1	"	40	Nov. 14/75
STANDARD 2	"	41	Nov. 14/75
STANDARD 3	"	42	" "
STANDARD 4	"	43	" "
KELLY 1	"	86	Feb. 11/76

Noranda Exploration Company, Limited (N.P.L.) optioned the following 19 Crown Grant Claims on October 31, 1975

CROWN GRANTS	OWNER	LOT NUMBER
Standard	Gerald Rayner -626 Duchess St.	6944
Monitor	West Vancouver, B.C.	6945
Commander	(Nelson Land Registry Office)	6946
Winnibago	"	6947
Contractor	"	6948
Iron Hill	"	6949
Denver Fraction	"	6950
Butte Fraction	"	6951
Iron Chest	"	6952
Black Bear	"	6953
Criterion	"	6954
Iron Hill Fraction	"	7483
U.X.L. Fraction	"	7484
Downie Fraction	"	7485
Minto	"	7486
Martha Jane Fraction	"	7487
I.X.L. Fraction	"	7488
Frances	"	7489
H.X.L. Fraction	"	7490

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GEOLOGY

INTRODUCTION

Drawing 2 of this report is a geological plan map, showing the results of geological mapping and prospecting in the area of Keystone and Standard Peaks.

KEYSTONE AREA

Complexly deformed metasedimentary and metavolcanic lithologies of the Lower Cambrian and younger Lardeau (?) Group underlie the KEY and MARS claims. On a broad scale the strata strike north to north-east and dip very gradually to the east.

The most prominant recognized structural feature in the area is an eastwardly closing isoclinal synform with a very shallowly eastward dipping axial surface. The core zone of this major fold is well exposed in cliff faces northeast of Keystone Peak. East of Keystone Peak a northwardly striking high angle fault offsets the synform hinge zone about 400m vertically - east block up

Progressing away from the fold core into the lower and upper fold limbs the stratigraphic sucession involves schists, carbonates and greenstone. A preliminary incomplete Table of Formations showing diagramatically the sucession from structurally lowest at 1 (core zone) to structurally highest at 6 is outlined in Figure 2. Accurate thickness determinations on each unit have not been possible due to:

1. Tectonic thickening or attenuation of strata by folding.
2. Apparent lateral facies changes involving thickness variations.
3. Inherent thickness variations in volcanic strata (esp. chlorite schists) at time of deposition.

Observed sulfide mineralization in the area of the claims consists of galena-sphalerite - pyrite - chalcopyrite disseminations and pods within discordant quartz veins.

Gordon Gibson

Gordon Gibson
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

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Figure 2

TABLE OF FORMATIONS

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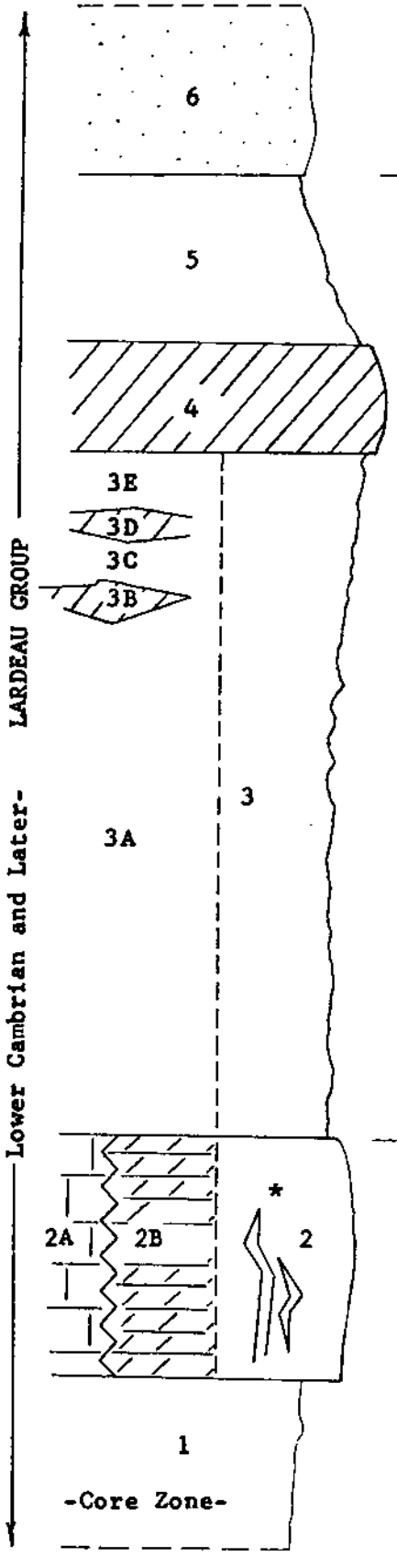

6. QUARTZ CHLORITE SCHIST
   - -Occasionally Calcareous

5. BANDED SCHIST
   - -Occasionally Graphitic
   - -Includes lesser QUARTZITE
   - -Locally Pyritiferous

4. GREENSTONE
   - -Chloritic
   - -Fine grained, Massive to schistose
   - -To 1% Pyrite

3. Undivided BANDED SCHIST

3E. GRAPHITIC BANDED SCHIST
   - -Locally Calcareous
   - -CHLORITE SCHIST interbeds

Concordant zone of Amphiboles, Serpentine and Talc at base

3D. CHLORITE SCHIST
   - -Lenticular
   - -Siliceous
   - -Foliated to massive

3C. GRAPHITIC BANDED SCHIST
   - -Locally Calcareous

3B. CHLORITE SCHIST
   - -Lenticular

3A. GRAPHITIC BANDED SCHIST
   - -Variably Calcareous/Siliceous

Concordant DOLOMITE levels with Mariposite

2. Undivided LIMESTONE DOLOMITE MARBLE

*Contains discordant veins of Quartz, Galena, Sphalerite, Pyrite, Chalcopyrite

2A. CALCITIC LIMESTONE
   - -Medium to coarse grained recrystallized
   - -Massive to banded, Competent
   - -Grey-buff weathering

2B. MARBLE, DOLOMITIC MARBLE
   - -Massive
   - -Brown weathering

1. CALCAREOUS GRAPHITE SCHIST
   - -Thinly foliated
   - -Includes lesser thin LIMESTONE, SHALE, QUARTZITE
   - -Locally contains up to 5% Pyrite
   - -Incompetent

STANDARD AREA

The Standard claims and Crown Grant claims are underlain by interlayered Lower Cambrian metapelitic and metavolcanic rocks. Later deformation has produced a north-south trending isoclinal antiform - synform pair plunging gently to the north.

Surface exposures show three mappable greenstone units adjacent to pelitic schists and marbles. These three greenstone units are the eroded expression of the antiform - synform deformation and are laterally equivalent. Schistosity within the pelitic schists and greenstones has a general north south strike and 25° to 45° dip to the east. Figure 3 is a preliminary Table of Formations for the Standard area.

The pelitic schist series (1 of Figure 3) consists of muscovite graphitic quartz schist to a muscovite chlorite quartz schist. Carbonate content increases in some areas and grades into a dirty limestone to a grey marble. Limy areas are commonly adjacent to greenstone contacts.

The greenstone can be broken into four distinguishable units on the two limbs of the antiform and to a lesser extent on the western limb of the synform. Outwards from the core of the antiform east and west similar unit relationships are noted. Sectional studies show the first unit to be a talc-chlorite carbonate gneiss. Thickness of this unit are irregular varying from less than a meter to 20 meters and traceable for the length of the property. Relict pillows in outcrop are questionable but suggest an ultrabasic volcanic origin. Unit 2 is a coarse grained hornblende plagioclase chlorite gneiss or Amphibolite. Surface exposures are up to several hundred meters wide and traceable through the property. Unit 3 is irregular in width and traceable length and shows extensive shearing. Sectional studies indicate this unit may be up to 90% or higher chlorite with lesser amounts of quartz and amphiboles. Commonly this unit contains 30% hornblende, minor quartz and carbonate and the rest chlorite. Copper mineralization is found within this unit disseminated along shears and in massive concentrations. Unit 4 is a finer grained Layered Amphibolite locally showing a relict trachytic texture. Mappable widths up to several hundred meters on both limbs of the antiform are common.

Pelitic schists (3 of Figure 3) are in contact with the outer edge of Unit 4 of the greenstone. Within the pelitic schists units, lenses of amphibolites are also observed associated with dirty limestone horizons. Sizes of these lenses vary in length from several hundred meters to longer (?) These amphibolites appear to grade or have a slight lithological change along strike and may be laterally represented by the muscovite chlorite schists.

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

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Figure 3

TABLE OF FORMATIONS - STANDARD AREA

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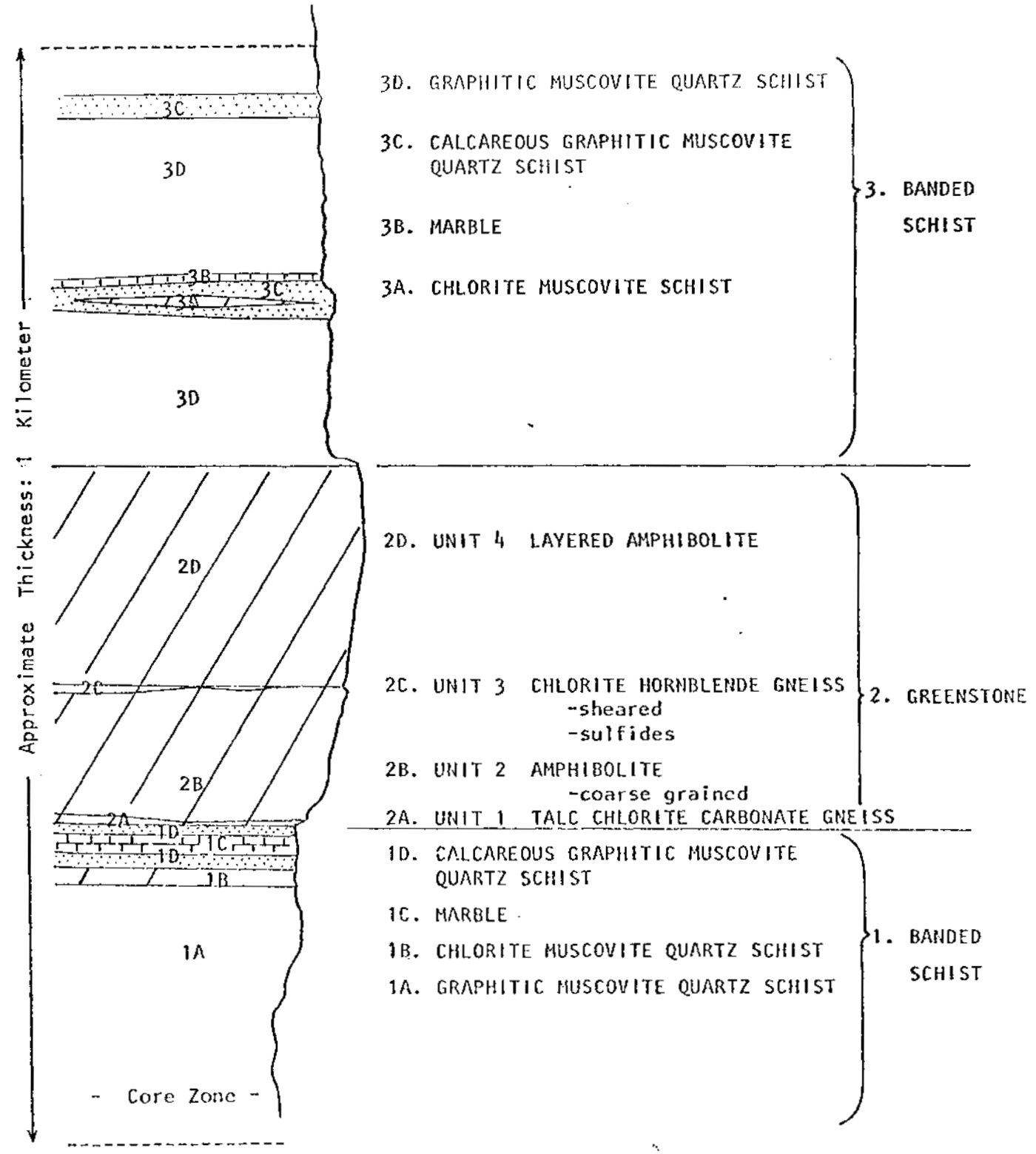

GRID PREPARATION

MARS 1, 2, 3 and 4

A control grid, located in the area of MARS 1, 2, 3 and 4 was developed by using chain and compass methods, stations flagged every 25m. A base line (94+00N), 3.0km in length was oriented 90° (astronomic) and sixteen perpendicular grid lines, spaced at 200m and numbered 60+00E, 62+00E....90+00E, were run from the base line. The total length of all grid lines is 42.50km.

GEOCHEMICAL SURVEY

INTRODUCTION

On the MARS grid a total of 420 samples were taken at 100m intervals along the grid lines.

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

SOIL SAMPLING METHODS

Soil samples were obtained by digging holes with a maddock to a depth of 15 - 30cm where the visible B horizon when ever possible was exposed. The samples were placed in "Hi Wet Strength Kraft 3½ x 6 · 1/8" Open End" envelopes and the grid station was marked on the envelopes with indelible felt pen.

LABORATORY ANALYTICAL METHODS

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 -90 mesh material is digested in 2ml. of HCl O4 and 0.5ml of HNO_3 for approximately four hours. Following digestion, each sample is diluted to 5ml. with demineralized H20. A Varian Techtron Model AA-5 Atomic Absorption Spectrophotometer was used to determine the parts per million 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.

PRESENTATION OF RESULTS

Results of the soil surveys are presented in Drawings 3 and 4 of this report. These are plan maps, scale 1:5,000 showing copper, molybdenum, lead and zinc values in parts per million. Anomalous values for each element are indicated in the legends.

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DISCUSSION OF RESULTS

Most copper, zinc, lead and molybdenum values in the soils fall within background levels. There is, however a broad zone located in the north and northwest part of the grid that contains a number of copper concentrations significantly higher than background. These are coincident with the projected occurence of massive chloritic greenstones mapped from surface exposures further to the north and northeast.

CONCLUSIONS

Soil values from the MARS grid tentatively indicate that massive greenstone units underlying part of the northeast quadrant of the grid may be favourable host rocks or copper mineralization. However, the southwest extremity of the grid on KEY 1 and 2 (see previous Assessment reports) which comes to within 0.50km of the northeast corner of the MARS grid is underlain by the same greenstone unit but does not support a stong continuation of high soil copper concentrations. Further detailed fill-in geochemical work should be undertaken in the immediate area of the MARS anomaly.

Gordon Gibson

Gordon Gibson
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

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GEOPHYSICAL SURVEY

INTRODUCTION

The C.E.M. survey was carried out by G. Fenton, A. Dickinson, W. Woolverton and D. Huston, under the supervision of J.T. Walker geophysicist, all employees of Noranda Exploration Company, Limited.

The C.E.M. equipment was manufactured by Crone Geophysics Ltd. of Mississauga, Ontario.

The Horizontal Shootback Method was employed at a frequency of 1830 Hz with a coil separation of 75 meters with Readings taken every 25 meters. Approximately 14.3 line kilometers were surveyed.

METHOD

The two operators, in turn, transmit and receive at each station (75m. separation every 25m). The transmitter is held in the horizontal plan while the receiver detects the dip angle null. The transmitter operator then receives, with the receiver operator transmitting. The two dip angles are then added together. The resultant dip angle is then plotted mid-way between the two operator locations on the survey line. Dip angle measurements (in degrees) are made at 25m intervals.

PRESENTATION OF RESULTS

The C.E.M. results are plotted on a grid plan map (drawing 5) at a scale of 1:5,000. The resultant dip angles are shown as continuous profiles with a vertical scale of 1cm = 20^{0}.

DISCUSSION OF RESULTS

Several anomalies are prominent on this claim group.

Line 60E/92N: A broad expression indicating a flat lying conductor.

Line 74E/97+50N: A very sharp response typically caused by a narrow, vertical conductor.

Line 86E/94+37.5N: The longest response, indicating a wide and very conductive body.

Many other marginaly anomalous responses are evident and are listed below.

NARROW RESPONSE

L70E/95+25N
L74E/94+25N
L90E/83+50N, 98N

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BROAD RESPONSE
L66E/85+50N
L70E/98N
L86E/86+50N
L70E/90N

Line to line correllation is not possible due to the wide surveyed line spacing.

L.C. Bradish
Geophysicist
Noranda Exploration Company, Limited
(No Personal Liability)

APPENDIX 1 - STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATION

I, Gordon Gibson of the City of Kamloops, Province of British Columbia do certify that:

1) I have been a temporary employee of Noranda Exploration Company, Limited during the period May 1973 to April 1976.

2) I have been a permanent employee of Noranda Exploration Company, Limited since May 1976.

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

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

5) I have held the position of Geologist for Noranda Exploration Company, Limited since May 1976.

Gordon Gibson

Gordon Gibson
Geologist
Noranda Exploration Company, Limited
(No Personal Liability)

STATEMENT OF QUALIFICATION

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).

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

STATEMENT OF QUALIFICATION

I, Lyndon C. Bradish of the City of Vancouver, Province of British Columbia, do certify that:

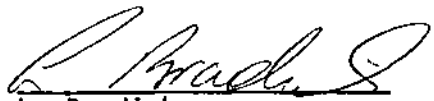
1) I have been an employee of Noranda Exploration Company, Limited since May 1973.

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

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

4) I am a member of the B.C. Geophysical Society.

5) I have held the position of Geophysicist for Noranda Exploration Company, Limited since May 1973.



L. Bradish
Geophysicist
Noranda Exploration Company, Limited
(No Personal Liability)

APPENDIX II - STATEMENT OF COST

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Mars

TYPE OF REPORT: Geophysics

(a) Employees: W. Woolverton, G.Fenton, A. Dickenson, G. Gibson
Number of days: 18
Dates worked: BetweenAug. 30 and Sept. 24, 1976

(b) Average cost per day $35.63
Total cost $35.63 X 18 $ 641.34

(c) Cost of food & accomodation $ 191.56

(d) Cost of transportation
i. During work period
type:
cost:

ii. To and from Claims from within B.C.
cost: 125.20 125.20

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter: 141.89 141.89

(f) Cost of instruments
i. Rental: CEM ONIT 30.00
ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation:
Drafting 1 day @ 112.25
(i) Other: Report Typing @ 195.00 307.25

TOTAL 1,437.24

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Mars

TYPE OF REPORT: Line Cutting

(a) Employees:

Number of days:

Dates worked: Between and

(b) Average cost per day $

Total cost $ X $

(c) Cost of food & accomodation $

(d) Cost of transportation

i. During work period

type:

cost:

ii. To and from Claims from within B.C.

cost:

(e) Cost of aircraft

i. Fixed wing:

ii. Helicopter:

(f) Cost of instruments

i. Rental:

ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation:

(i) Other:

Amex Exploration Service	5,764.50
Chopper Flight	89.54
Miscellaneous Field Supplies	42.38

TOTAL 5,896.42

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Mars

TYPE OF REPORT: Geochem

(a) Employees: R. Boesma, D. Huston, D. Johnston
Number of days: 7
Dates worked: Between Jul. 12 and July 25/76

(b) Average cost per day $ 29.09
Total cost $ 29.09 X 7 $ 203.63

(c) Cost of food & accomodation $ 99.33

(d) Cost of transportation
i. During work period
type:
cost:

ii. To and from Claims from within B.C.
cost:

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter: $1,242.06 1,242.06

(f) Cost of instruments
i. Rental:
ii. Supplies 36.68 36.68

(g) Cost of geochem analysis (details attached): 1,111.00

(h) Cost of report preparation: 314.60

(i) Other: J. Harrison Contractor 666.00

TOTAL 3,636.62

NORANDA EXPLORATION COMPANY, LIMITED

(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT:

ELEMENT	NO. OF DETERMINATIONS	COST PER DETERMINATION	TOTAL
Cu	440	1.00	440.00
Zn	440	.50	220.00
Pb	440	.50	220.00
Mo	20	1.00	20.00
Mo	420	.50	210.00
			1,111.00

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Keystone

TYPE OF REPORT: Geology

(a) Employees: D. Bathe, R. Boersma, G. Gibson, B. Hughes, D. Huston, R. Johnstone, B. McDougall, L. Reinertson, I. Saunders

Number of days: 100

Dates worked: Between Mar. 2 and Nov. 12, 1976

(b) Average cost per day $ 43.64

Total cost $ 43.64 X 100 — $ 4,364.00

(c) Cost of food & accomodation — $ 1,066.34

(d) Cost of transportation

i. During work period

type: Truck

cost: 1,628.45

ii. To and from Claims from within B.C.

cost: 280.31 — 1,908.76

(e) Cost of aircraft

i. Fixed wing:

ii. Helicopter: 4,464.20 — 4,464.20

(f) Cost of instruments

i. Rental:

ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation: — 1,021.13

(i) Other:

Field Supplies	78.48	
B.C. Tel	7.87	
Assay	41.00	127.36

TOTAL — $12,951.79

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Standard

TYPE OF REPORT: Geology

(a) Employees: D. Bathe, D. Boersma, G. Gibson, B. Hughes, D.Huston R. Johnston, B. McDougall, L. Reinertson, I. Saunders
Number of days: 78
Dates worked: Between Apr.23 and Nov. 15, 1976

(b) Average cost per day $ 49.62
Total cost $ 49.62 X 78 — $ 3,870.36

(c) Cost of food & accomodation — $ 1,116.76

(d) Cost of transportation

i. During work period

type: Truck

cost: 698.22

ii. To and from Claims from within B.C.

cost: 698.22

(e) Cost of aircraft

i. Fixed wing:

ii. Helicopter: 3,142.94 — 3,142.94

(f) Cost of instruments

i. Rental:

ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation: 1,076.31

(i) Other: Field Supplies 51.46
Assay costs 20.50 — 71.96

TOTAL $ 9,976.55

APPENDIX 111 - CONTRACT AGREEMENTS

MEMORANDUM OF AGREEMENT BETWEEN:

John Harrison - re:- Mars.

(Hereinafter referred to as the "contractor")

and

Noranda Exploration Company Limited (No Personal Liability)
Post Office Box 2380
Vancouver, B.C. V6B 3T5

(Hereinafter referred to as the "company")

1. The contractor agrees to establish a system of grid lines on the _____ mineral claim(s) in the _____ mining division of British Colmbia.

2. The contractor agrees to collect soil samples at perscribed intervals on the above mentioned grid system.

3. The contractor shall supply his own axes, compasses, marker pens, boots, clothing, sleeping bags and other personal effects.

4. The contractor shall supply his own food.

5. The company shall supply camping equipment for two men as well as shovels, mattocks, flagging tape, sample report forms.

6. The company shall provide transportation from Downie Creek. to the job site and return upon completion of the contract.

7. The company shall be responsible for workers compensation coverage.

8. The contractor shall be responsible for his own Medical Coverage and shall make his own Canada Pension, Unemployment Insurance and Income Tax payments and the costs of the same shall be borne by the contractor.

9. The company agrees to pay the contractor the sum of $ — for each kilometer of grid established.

10. The company agrees to pay the contractor the sum of $ 1.80. for each soil sample collected.

Signed this 17th day of September, 1976.

John Harrison

L. Reniertson

Noranda Exporation Company, Limited (No Personal Liability)

INTER-OFFICE CORRESPONDENCE

Snake River Contracting.

VANCOUVER, B. C.

OCT 4 1976

TO: L. Reinertson

FROM: J. Harrison

Sept. 22 1976.

SUBJECT:

Invoice for Soil Sampling on Mars Property (Project #51.)

420 samples @ $1.80 = $756.00

less camp costs.

Sept. 17 - 1 day @ $30.00 = 30.00

Sept. 18-21. 4 days @ $15.00 = 60.00

90.00 $666.00

Balance owing $666.00

please make cheque payable to John Harrison and mail to: Bank of Montreal
Sechelt, B.C.
account no. 3018-556.

L. Reinertson
#51 E1 -30

with thanks.
John Harrison.
rr. 1
Sechelt - 885-3866.

AMEX EXPLORATION SERVICES LTD.

A.A. (AB) ABLETT

Confidential Work

BUS. [illegible] 376-0433
RES. 376-7490

[illegible]

BOX 286
KAMLOOPS, B.C.

August 21, 1976

Noranda Exploration Company, Limited,
1050 Davies Street,
Vancouver, B.C.

Attention: Mr. Lawrie Reinertson

AUG 2 [illegible]

STATEMENT OF ACCOUNT

Grid preparation on your MARS GROUP mineral claims,
Revelstoke Mining Division

42.7 kilometers grid layout @ $135.00 per kilometer	=	$ 5764.50
Total requested	=	$ 5764.50

Respectfully submitted,

A.A. Ablett,
Amex Exploration Services Ltd.

L. Reinertson

#51-H-30

NORANDA EXPLORATION

CLAIM MAP

REVELSTOKE MINING DIVISION

SCALE 1:25,000

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6187
MAP NO. #1

Gordon Gibson

TO ACCOMPANY ASSESSMENT REPORT ON
MARS 1-4
KEY 3,4,5,9,16,17,20,21
STANDARD 1-4
KELLY 1
MINERAL CLAIMS
AND CROWN GRANT CLAIMS
LOT NUMBERS 6944-6954
7483-7490
BY GGIBSON, B.B.HUGHES, L.C.BRADISH

DRAWING 1

6187

GEOLOGICAL PLAN
1: 25,000

LEGEND

- AREAS OF ROCK EXPOSURE
- GEOLOGICAL BOUNDARY (DEFINED , ASSUMED)
- ANTIFORM (DEFINED , ASSUMED)
- SYNFORM (DEFINED , ASSUMED)
- FAULT (DEFINED , ASSUMED)

A. KEYSTONE AREA

- 6 — QUARTZ CHLORITE SCHIST
- 5 — BANDED SCHIST
- 4 — GREENSTONE
- 3 — UNDIVIDED BANDED SCHIST
  - 3E. GRAPHITIC BANDED SCHIST
  - 3D. CHLORITE SCHIST
  - 3C. GRAPHITIC BANDED SCHIST
  - 3B. CHLORITE SCHIST
  - 3A. GRAPHITIC BANDED SCHIST

  CONTAINS : DOLOMITE - MARIPOSITE HORIZONS.
- 2 — UNDIVIDED LIMESTONE DOLOMITE MARBLE
  - 2A CALCITIC LIMESTONE
  - 2B MARBLE, DOLOMITIC MARBLE

  CONTAINS: QUARTZ, GALENA SPHALERITE, PYRITE, CHALCOPYRITE VEINS.
- 1 — CALCAREOUS GRAPHITE SCHIST

B STANDARD AREA - DETAIL

- 3 — UNDIVIDED BANDED SCHIST
  - 3D GRAPHITIC MUSCOVITE QUARTZ SCHIST
  - 3C CALCAREOUS GRAPHITIC MUSCOVITE QUARTZ SCHIST
  - 3B MARBLE
  - 3A CHLORITE MUSCOVITE SCHIST
- 2 — GREENSTONE
  - 2A TALC CHLORITE CARBONATE GNEISS

  SULFIDE ASSOCIATION: PYRITE, PYRRHOTITE, CHALCOPYRITE, SPHALERITE
- 1 — UNDIVIDED BANDED SCHIST
  - 1D CALCAREOUS GRAPHITIC MUSCOVITE QUARTZ SCHIST
  - 1C MARBLE
  - 1B CHLORITE MUSCOVITE QUARTZ SCHIST
  - 1A GRAPHITIC MUSCOVITE QUARTZ SCHIST

- I — QUARTZ MONZONITE, GRANODIORITE
- GEOLOGY FROM WHEELER 1964 GSC PAPER 64-32
- INFERRED GEOLOGY

TO ACCOMPANY ASSESSMENT REPORT ON
MARS 1-4, KEY 3,4,5,9,16,17, 20, 21
STANDARD 1-4, KELLY 1
AND CROWN GRANT CLAIMS
LOT No's 6944 - 6954
7483 - 7490
BY G. GIBSON, B.B. HUGHES, L.C. BRADISH

FEB. 1977

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT Gordon Gibson
NO. 6187
MAP NO. #2

DWG. 2

6187

6187

60 E 62 E 64 E 66 E 68 E 70 E 72 E 74 E 76 E 78 E 80 E 82 E 84 E 86 E 88 E 90 E

108 N
106 N
104 N
102 N
100 N
98 N
96 N
94 N — BASE LINE
92 N
90 N
88 N
86 N
84 N
82 N
80 N

Mars 1
L.C.P.
Mars 3

MINISTRY OF ENERGY, MINES & PETROLEUM RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6187
MAP NO. #3

○ — ANOMALOUS VALUES
Cu > 100 ppm
Mo > 4 ppm.

Gordon Gibson

ONLY Mo WITH HIGHER READING THAN < 2 PLOTTED.

TO ACCOMPANY ASSESSMENT REPORT BY G. GIBSON B.B. HUGHES AND L.B. BRADISH ON THE MARS 1-4, KEY 3,4,5,9,16,17,20 AND 21, STANDARD 1-4 AND KELLY 1
MINERAL CLAIMS — CROWN GRANT CLAIMS
LOT NUMBERS 6944-6954 AND 7483-7490.

DATE 11/2/77

20 Cu
3 Mo

REVISED	MARS PROPERTY
	GEOCHEMICAL SURVEY
	Cu, Mo in P.P.M.
PROJ. No. 51	SURVEY BY: DATE: AUG., 1976.
N.T.S. 82 M/8 W	DRAWN BY: JAN VAN VOORST SCALE: 1:5000
DWG. No. 3	NORANDA EXPLORATION
	OFFICE: VANCOUVER

VANCAL

6187

60 E 62 E 64 E 66 E 68 E 70 E 72 E 74 E 76 E 78 E 80 E 82 E 84 E 86 E 88 E 90 E

108 N
106 N
104 N
102 N
100 N
98 N
96 N
94 N — BASE LINE
92 N
90 N
88 N
86 N
84 N
82 N
80 N

Mars 1
L.C.P.
Mars 3

Gordon Gibson

– ANOMALOUS VALUES
ZN > 200ppm
PB > 100 ppm

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6187
MAP NO. #4

TO ACCOMPANY ASSESSMENT REPORT BY G.GIBSON, B.B.HUGHES AND L.B.BRADISH ON THE MARS 1-4, KEY 3,4,5,9,16,17, 20 AND 21, STANDARD 1-4 AND KELLY 1 MINERAL CLAIMS – CROWN GRANT CLAIMS LOT NUMBERS 6944-6954 AND 7483-7490.

DATED 11/2/77

110 Zn
22 Pb

REVISED

MARS PROPERTY

GEOCHEMICAL SURVEY

Zn, Pb in P.P.M.

PROJ. No. 51
N.T.S. 82M/8W
DWG. No. 4

SURVEY BY: ..... DATE: AUG., 1976
DRAWN BY: JAN VAN VOORST SCALE: 1:5000

NORANDA EXPLORATION

OFFICE: VANCOUVER

VanCal

60 E
62 E
64 E
66 E
68 E
70 E
72 E
74 E
76 E
78 E
80 E
82 E
84 E
86 E
88 E
90 E

108 N
106 N
104 N
102 N
100 N
98 N
96 N
94 N — BASE LINE
92 N
90 N
88 N
86 N
84 N
82 N
80 N

Mars 1
L.C.P.
Mars 3

Mars 2
L.C.P.
Mars 4

CLAIM BOUNDARY

TO ACCOMPANY GEOPHYSICAL REPORT BY
L. BRADISH, GEOPHYSICIST ON THE
MARS 1,2,3 & 4 MINERAL CLAIMS.

L. Bradish DATED FEB 1977

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MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6187
MAP NO. #5

REVISED

MARS PROPERTY

CEM SURVEY
SHOOTBACK METHOD
PROFILES OF RESULTANT NULL ANGLE
VERT. SCALE 1 Cm = 20°
COIL SPACING 75 M FREQUENCY = 1830 Hz.

PROJ. No. 51
N.T.S. 82 M / 8 W
DWG. No. 5

G. FENTON, D. HUSTON
SURVEY BY: W. WOOLVERTON, A. DICKINSON DATE: AUG., 1976
DRAWN BY: JAN VAN VOORST SCALE: 1:5000

NORANDA EXPLORATION

OFFICE: VANCOUVER

VANCAL