

925/3E

011702

CALLAGHAN PROJECT

92J/3E

Donald Gee

September 7, 1973

CALLAGHAN PROJECTStaking

On August 26, 1973, six claims (WEND 1-6) were staked by D.Gee with D. Schneider. The claims are located approximately 2.5 miles south-east of Callaghan Lake and 9.2 miles north of Brandywine Falls. The claims were staked following a reconnaissance of the area of interest. The surrounding claims were located and their true locations were re-plotted on the accompanying map.

<u>Claim name</u>	<u>Tag Number</u>
WEND 1	381051 M
WEND 2	381052 M
WEND 3	381053 M
WEND 4	381054 M
WEND 5	381055 M
WEND 6	381056 M

The area was defined by reconnaissance silt anomalies obtained by Noranda in August, 1970.

The T group claims were staked on August 16, 1972 but the freshness of the blazing and litter around the posts indicates a much later date i.e. 1973. As these claims were not on the latest claim map, the above assumption may be correct. However, this has no bearing on the WEND group since the T group overlaps the Fass and IT groups.

Geology (See accompanying map)

Much of the property is on a steep cliff face thereby making accessibility virtually impossible. This rock face covers the western and central part of the property. The stream and swamp valleys are very steep and narrow. Timber covers all the area except where rock or swamps prevail. Access to the property is by helicopter only although a good logging road exists on Callaghan Creek about 2 miles to the southwest.

The property is underlain chiefly by coarse to fine grained diorite. Minor granodiorite and granite are believed to be phases of the main dioritic mass. Also minor quartz monzonite, feldspar porphyry and diabase dykes intrude these diorites. Irregular quartz veins (average width 1 inch), and stringers are found in the above rocks but contain no sulfide mineralization.

Saussuritization is the predominant alteration, ranging from moderate to intense degrees. Textures of the diorite vary from gneissic to typically coarse granitic.

A rock which can best be described as a metavolcanic occurs in the vicinity of the second claimpost north. It is green, fine grained and locally contains up to 90% chlorite. Originally the rock may have been an andesite/basalt. Contacts with the diorite are inferred rather than visible. It appears to be a lobe-like feature and is assumed to be older than the diorites.

Pyrite occurs sporadically in the diorite. Clusters of fine disseminations are common. Very minute fracture fillings were observed but are rare. Pyrite is also disseminated in the metavolcanics but, as in the diorite, the modal content is always less than one percent.

Chalcopyrite was found in only one locale (see geology map). It occurs as very fine disseminations and one fracture filling (2.5 x 0.2 centimeters). The copper is in saussuritized diorite.

A single outcrop of quartzite was noted on a small creek on the southern edge of WEND 2.

Assays taken indicate no economic potential. The P.F.U. silts do indicate a zinc anomaly in WEND 4. (See accompanying G.C.I. and sample report).

There is no indication of the cause of the 1970 copper anomaly. The stream drains the main diorite mass, and, as previously mentioned, the diorite does not contain significant copper or zinc mineralization.

#### Recommendations

It is recommended that only a brief examination of no more than one day's duration be undertaken in the area of the zinc anomaly. The remainder of the property does not merit further work.

D. Gee.

Atts.

NOKANDA EXPLORATION CO. LTD.

LOCATION CALLAGHAN  
92 5/8E SBC

PROJECT 40 "8-43" SHEET 1

MATERIAL Silt (PFU)

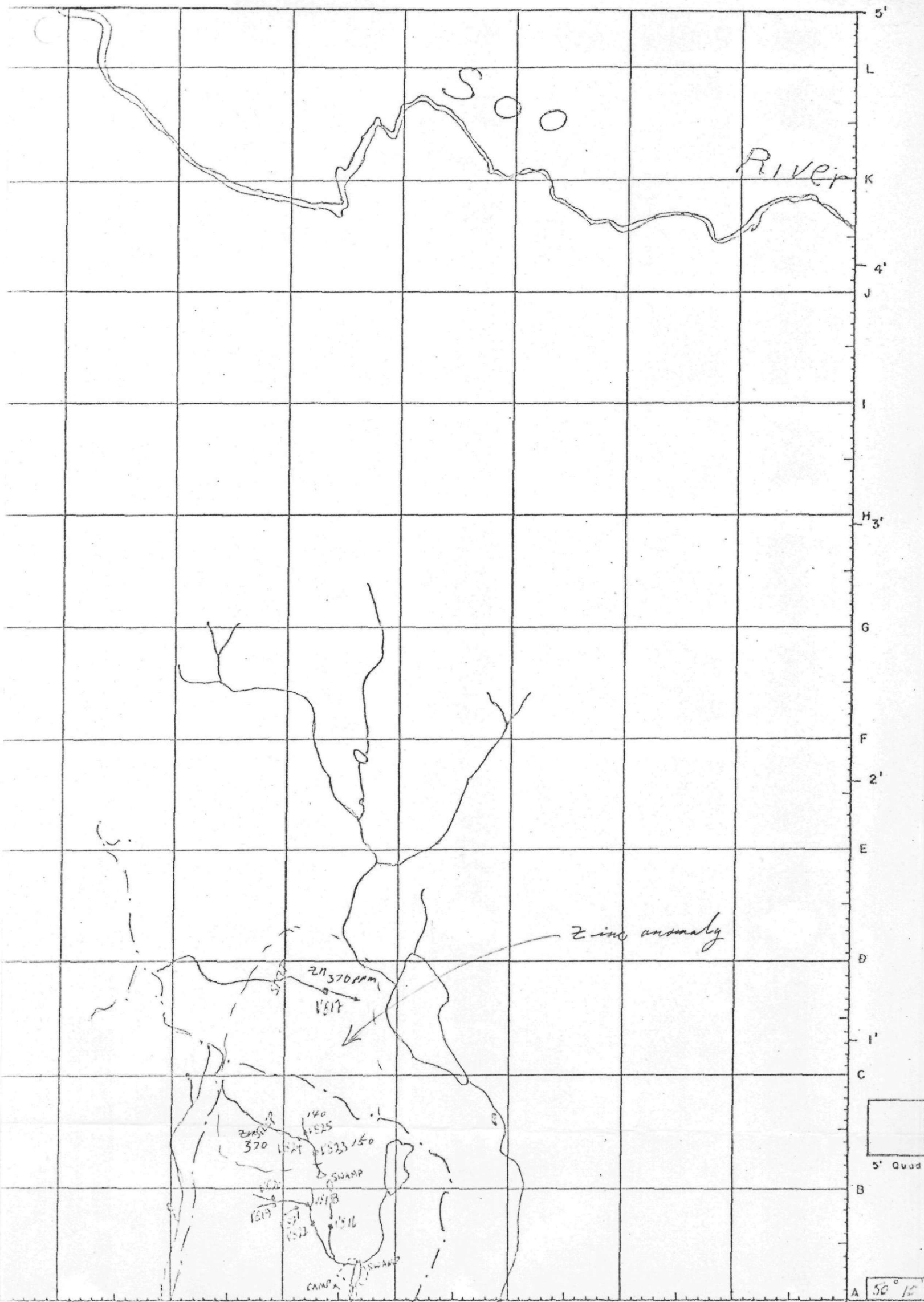
SAMPLE NOS. \_\_\_\_\_  
 COLLECTOR D. S. DATE 1/1

REMARKS Sol Cu Zn Pb  
Tot Cu Ag Mo

ANALYST R. DATE Aug 131/23

T.T. No.	SAMPLE No.	1	2 Sol Cu	3 Tot Cu	4	5 Sol Zn	6 Sol Pb	7 Tot Ag	8 Tot Mo	G.C.I. NUMBER
1	CHECK "CD		54	72		36	10	1.2	6	753
2	V 816		30	36		130	16	1.2	6	
3	7		34	34		370	10	1.6	14	
4	8		44	48		80	12	1.2	4	
5	9		84	110		140	2.2	1.8	4	
6	V 820		24	30		72	12	1.2	2	
7	1		38	46		150	8	1.4	2	
8	2		86	110		86	15	1.6	4	
9	3		20	26		150	4	1.0	2	
10	4		62	70		370	12	1.4	4	
11	V 825		24	28		140	16	1.2	2	
12	CHECK "CD		54	72		36	10	1.2	6	
-	-		-	-		-	-	-	-	-





NO. OF SAMPLES \_\_\_\_\_ SAMPLE NOS. 1416 - 1425

PROJECT 1490 DATES SAMPLED 8/18/13 to 11/5/13 COLLECTORS D. SCHNEIDER

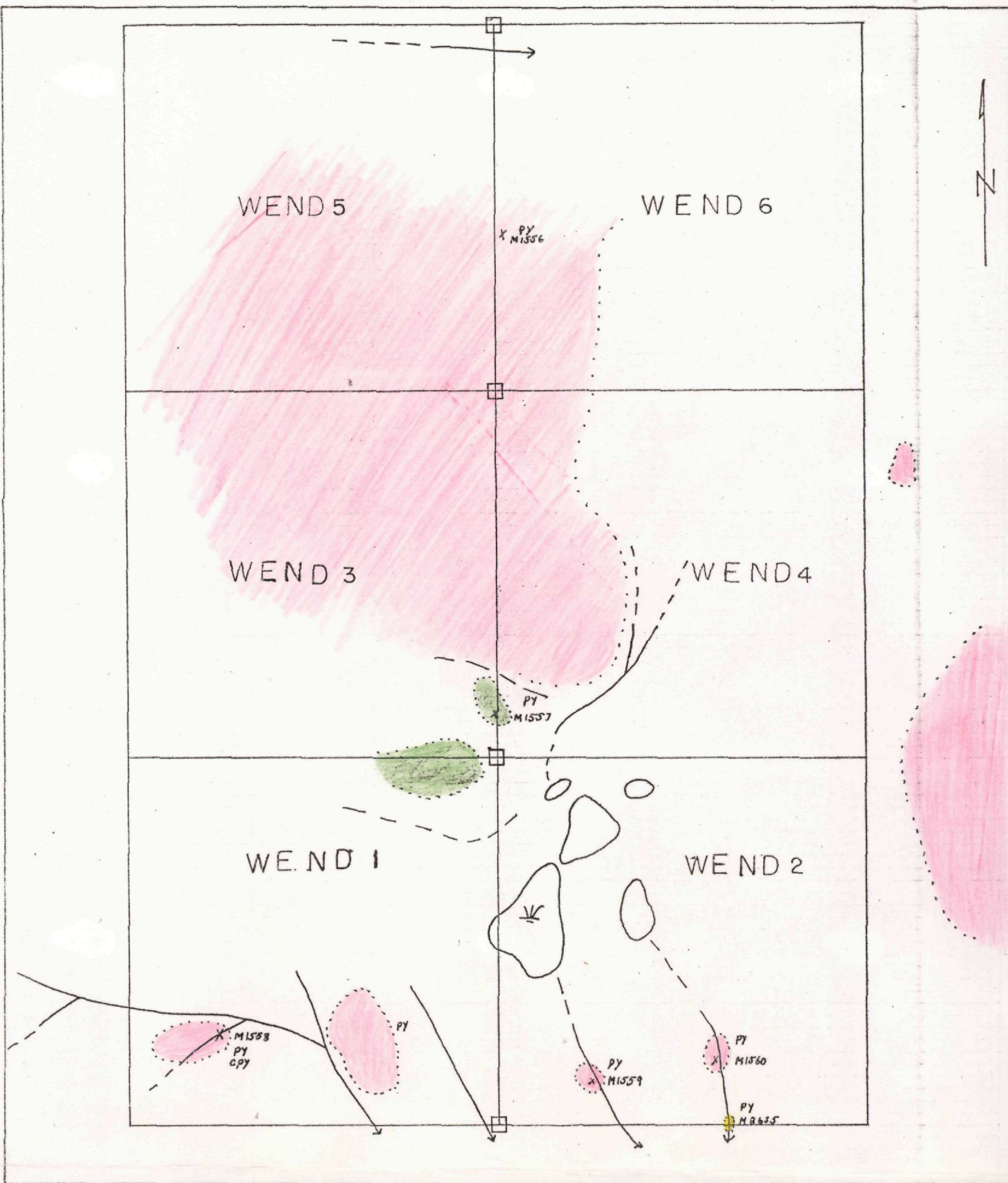
REMARKS \_\_\_\_\_

SCALE 1" = 1/2 MILE N.T.S. NO. 92.1/30

G.C.I. NO 753

50° 15' Lat

5' Quad

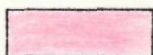




LEGEND



QUARTZITE (Q)



DIORITE, GRANODIORITE, GNEISSIC DIORITE - SAUSSURITIZED



METAVOLCANIC (METAMORPHOSED ANDESITE / BASALT)



OUTCROP



JOINT STRIKE AND DIP



ASSAY LOCATION



PYRITE



CHALCOPYRITE



INFERRED CONTACT

SCALE

1" = 500'

D. GEE

AUGUST 1973



# CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET  
VANCOUVER 3, B.C.  
PHONE 688-8586

## CERTIFICATE OF ASSAY

TO Noranda Exploration Company Limited  
1050 Davie Street  
Vancouver, B.C.

September 4, 1973

Lab 5141

**I hereby certify** THAT THE FOLLOWING ARE THE RESULTS OF ASSAYS MADE BY US UPON THE HEREIN DESCRIBED SAMPLES.

MARKED	GOLD		SILVER	COPPER	LEAD	ZINC	MOLYBDENUM				
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
M 1556	trace		trace	0.01	----	0.01	----				
M 1557	trace		----	0.01	0.01	0.01	----				
M 1558	trace		----	0.01	----	0.02	trace				
M 1559	trace		----	0.08	----	0.02	trace				
M 1560	0.01		0.1	trace	----	0.02	trace				

**NOTE:**

Rejects Retained One Month  
Pulps Retained Three Months  
Un. Otherwise Arranged.

Gold calculated at \$ ..... per ounce

  
Registered Assayer; Province of British Columbia



# CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET  
VANCOUVER 3, B.C.  
PHONE 688-8586

Don Gee

## CERTIFICATE OF ASSAY

TO Noranda Exploration Company Limited  
1050 Davie Street  
Vancouver, B.C.

September 7, 1973  
Lab 5161

**I hereby certify** THAT THE FOLLOWING ARE THE RESULTS OF ASSAYS MADE BY US UPON THE HEREIN DESCRIBED SAMPLES.

MARKED	GOLD		SILVER	MOLYBDENUM		Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent							
M 8635	trace			trace								

**NOTE:**

Rejects Retained One Month  
Pulps Retained Three Months  
Unless otherwise Arranged.

Gold calculated at \$ ..... per ounce

*R.A. Williams*

Registered Assayer; Province of British Columbia

THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIAOFFICE OF THE RESIDENT MINING ENGINEER  
704 STOCK EXCHANGE BUILDING  
475 HOWE STREET  
VANCOUVER

92J/3E

November 5th, 1936.

Dr. John F. Walker,  
Provincial Mineralogist,  
Victoria, B. C.

Dear Dr. Walker:

I just received my assay results on the Astra and Cambria property in the Brandywine river-Callahan creek area west of McGuire, P. G. E. Railway section. I took 32 samples most of which were channels. The mineralization is very low grade but extensive prospecting done indicates an exceptionally large area of such mineralization. The only underground work done consists of a crosscut adit 62 feet long which has proved continuity of the nearest surface showing to a depth of 37 feet below the outcrop. Mr. Frank Price, the owner, had one man working there during part of the summer. I have not yet written up my notes on this property for the Annual Report but have gone over the assays with the corresponding notes and have come to the conclusion that this exceptional prospect merits serious attention.

The most intensively prospected area is about 300 feet wide and 500 feet long. In numerous cuts in this area low-grade silver-lead-zinc mineralization, with occasional gold and copper values, is exposed where the capping has been penetrated or partially penetrated.

PROPERTY FILE

92JW001



Oxidation is generally light or very shallow. Manganese dioxide is present at numerous points. There is a slight suggestion that gold values improve with the presence of appreciable percentages of copper and in this connection chalcopyrite is comparatively abundant at some points. Better gold values might be encountered with development.

Outside of the zone specified there are widely separated showings of similar mineralization. As every cut made in the large area shows either mineralization or capping it seems reasonable to assume that similar mineralization is very extensively distributed under the covered ground between. For general conditions (subject to drastic revision) I would refer you to the 1934 Annual Report. I was not able to duplicate the gold assay of 0.4 oz. per ton across 15 feet specified in this report but did get interesting gold values in selected material from other cuts such as 0.12, 0.11, and 0.08 oz. per ton. The best gold assays in the channel samples were 0.07 and 0.08 oz. per ton.

It will be noted that all the samples show some zinc, up to 9 per cent., in channel samples, while there is generally a low percentage of lead up to 9 per cent., (but on the average the lead content is apparently lower than the zinc.)

It is not a poor man's proposition but it should appeal to a company with the necessary funds.

This deposit seems to be one about which much valuable information could be obtained by diamond drilling as the mineralization, particularly in the large zone first specified, appears to be of a comparatively uniform character though low grade. The work done is quite superficial and the main host rock, composed of more or less silicified greenstone, has hardly been penetrated in many places. It is capped by a rock, possibly a different phase of the greenstone, which does not appear to be favourable for mineralization. This capping is quite shallow in most places. It seems reasonable to suppose that concentrations of better material would be discovered in this very extensive area of mineralization.

I am sending separately dyke and mineralization specimens from the Brandywine river-Callahan creek district and would be glad to have determinations, microscopic or megascopic, as seen fit, of the dyke specimens which are important geological features in this area. The widely separated apparent "boundaries" of the mineralized area, which is composed of more or less silicified greenstone and chloritic schist, consist

- 4 -

of argillites to the south; a very wide feldspar-porphry dyke to the west; tuffs and included wide feldspar-porphry dyke to the east. There are also dioritic stocks in the vicinity.

Yours very truly,

A handwritten signature in cursive script, appearing to read "B. J. Knady".

Resident Mining Engineer.

92J/  
3E

92JW001

W-1

CALLAGHAN M.C.

Property Report  
BARKLEY VALLEY MINES LTD. (N.P.L.)  
by  
A.R. Bullis, P. Eng.  
1 June, 1970

92JW001

PROPERTY FILE

PROPERTY FILE

Property Report

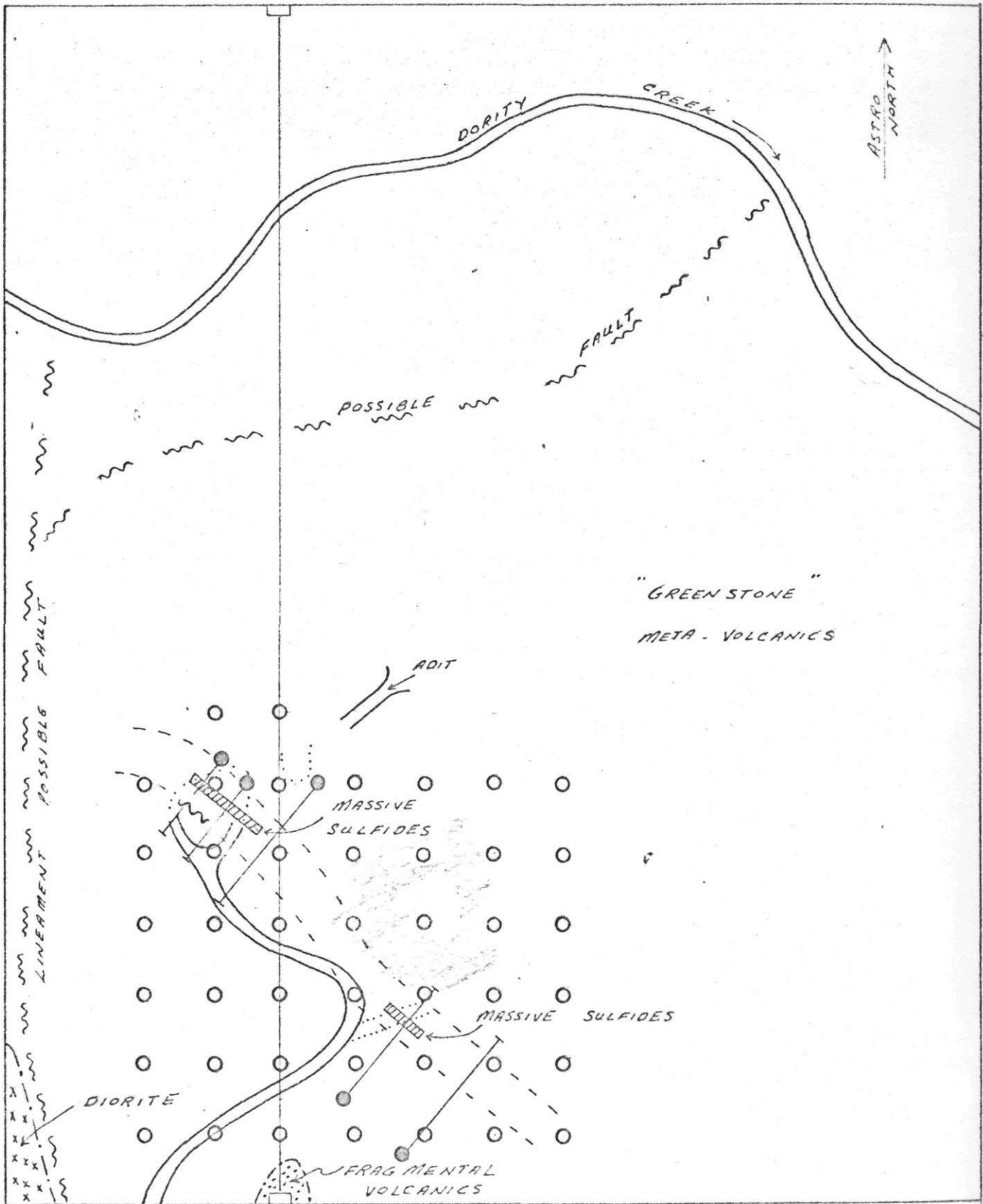
BARKLEY VALLEY MINES LTD. (N.P.L.)

by

A.R. Bullis, P. Eng.

BULLIS ENGINEERING LTD.

1 June, 1970



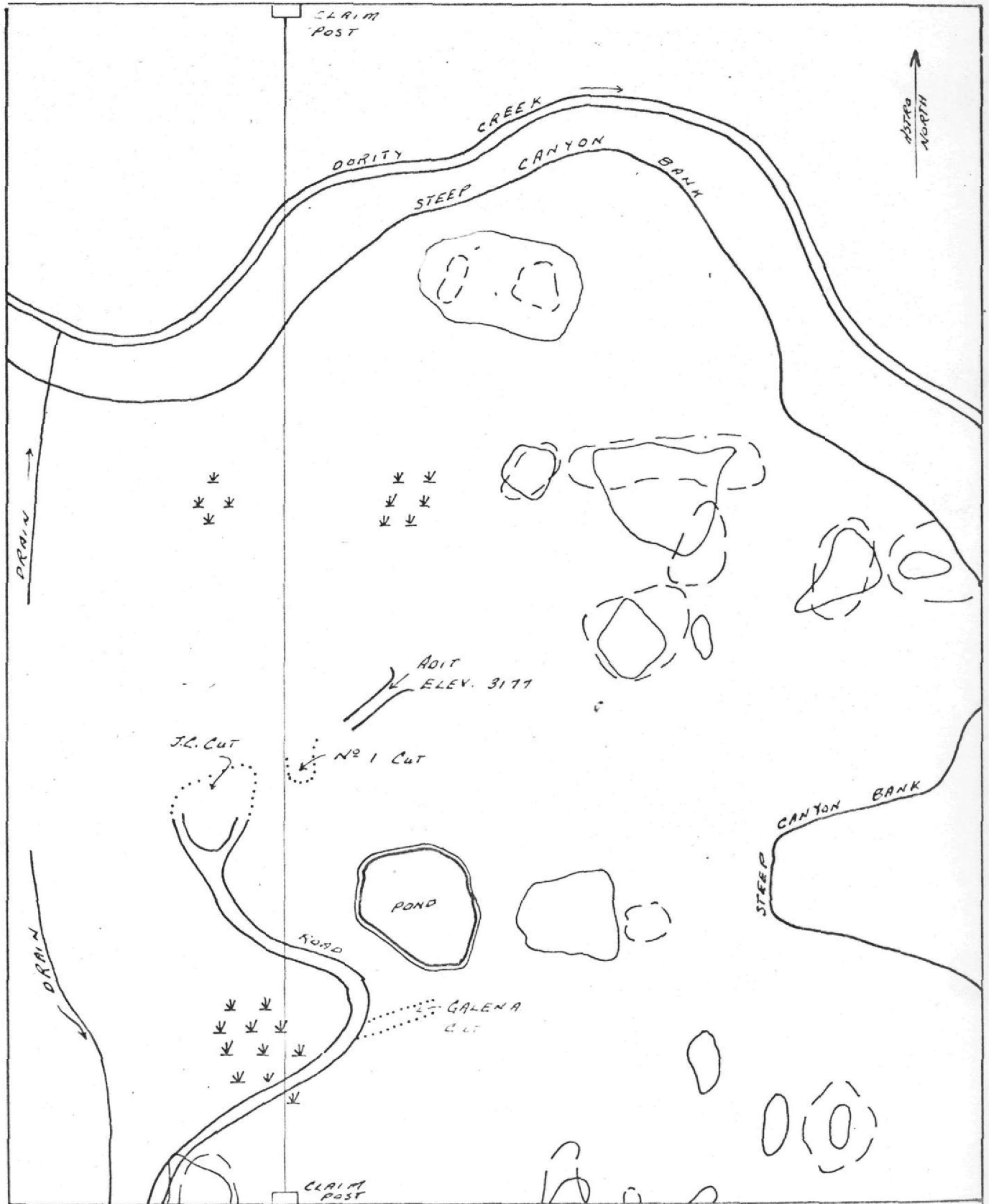
BARKLEY VALLEY MINES  
CALLAGHAN M. C.

SHOWING GEOLOGY

SCALE 1" = 200'

DATE APRIL 15/70

BULLIS ENGINEERING LTD.



LEGEND

- High Frequency 1800 C.P.S.  
(Contour Line)
- - - Low Frequency 180 C.P.S.  
(Contour Line)

BARKLEY VALLEY MINES  
E.M. CONTOUR MAP  
CALLAGHAN M.C.

Scale : 1" = 200'  
Date : April 15 / 70  
Bellis Engineering Ltd.

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BARKLEY VALLEY MINES LTD. (N.P.L.)

by A.R. Bullis, P. Eng.  
June 1, 1970

INTRODUCTION

The following report is a summary of the past exploration on the Callaghan Mineral Claim by Barkely Valley Mines Ltd. and an outline of certain recommendations made by the author in earlier reports.

LOCATION & ACCESS

The property is located north and west of Mile 70 on the P.G.E. Railway. The Tarn Group is situated between Callaghan Creek and Brandywine Creek, about one mile west of Callaghan Creek; the approximate co-ordinates of the centre of the claim group are: 50° 05' North Latitude, 123° 08' West Longitude.

The Callaghan Claim is located on a tributary of Callaghan Creek approximately two mile south of the Tarn Group.

The B.C. Provincial Highway #99, which parallels the P.G.E. Railway from the village of Squamish, connects with a logging road near McQuire that follows the Callaghan Creek valley for 4.5 miles. The Tarn Group is less than two miles from the logging

road and can be reached by trail. The Callaghan Claim which is approximately four thousand feet from the same logging road is accessible from the road via a steep bulldozed road that is presently unsuited to wheeled vehicles. A pack trail to the showings is more easily negotiated on foot.

Additional trails, or roads, will have to be constructed to serve the Tarn Group.

PROPERTY

Barkley Valley Mines Ltd. hold twenty-four mineral claims in the Callaghan Creek-Brandywine Creek Area.

A list of the claims follow:

<u>Name of Mineral Claim</u>	<u>Record No.</u>
Tarn No. 1	14357
<u>to</u>	<u>to</u>
Tarn No. 11	14367
Callaghan	7950
Al No. 1	15574
<u>to</u>	<u>to</u>
Al No. 4	15577
Al No. 7	15580
Al No. 8 Fraction	15581
Al No. 9 and No. 10	15582 and 15583

In addition, Barkley Valley Mines holds four other claims in the vicinity of the Al Group that are referred to as the Railway Group.

#### GEOLOGY

The Callaghan Claim is underlain in part by a "roof pendant", or "septa", of Triassic (?) rocks. O'Grady states that the stratified rocks of the area are comprised of argillites, bands of limestone, conglomerate and tuffs, interbedded with greenstone and chloritic to talcose schist. Scott states that the small remnant of older rocks on the Callaghan Claim is chlorite and sericite schist with small remnants of altered limestone. Scott further states that the alteration in the area has produced "skarn", or contact metasomatic alteration within the sedimentary remnants.

The "roof-pendant" is surrounded by diorite related to the Coast Range batholith of Jurassic or Cretaceous age. The diorite is green to nearly black and represents a basic phase of the intrusives that form the large Coast Range batholith.

#### SHOWINGS

Sporadic exploration and development has been done on the Callaghan Claim since its discovery in

PROPERTY FILE

1925. The development consists of one adit, sixty feet long, which is now caved and inaccessible and a number of pits and trenches; most have been excavated by hand but some have been extended by bulldozer. Exploration of the mineralized zones has been done by diamond drilling, and more recently, by geophysical methods.

Scott has noted that the principal shearing direction in the vicinity of the showings on the Callaghan Claim is in a North 15 to 20 degrees West direction. According to O'Grady, the bed-rock in the vicinity of the showings is greenstone that contains sparse disseminated sulfide mineralization of zinc, lead, copper and iron.

The "Galena" Cut is a trench about forty feet long, in which a small massive lead-zinc-copper sulfide lense, 1 to 2 feet wide, and thirty feet long is exposed. The wall rock is sparsely mineralized, according to Scott.

The "J.C." Cut, located 300 feet north-west from the "Galena" Cut, exposes a zone of sparse mineralization in two bands, each five feet wide, that are separated by twenty feet of chlorite schist. Scott reports that a "narrow stringer of high-grade appears in each zone".

The No. 1 Cut, located 200 feet north-east of the J.C. Cut exposes a mineralized skarn area that is "spottily" mineralized but which does not show a definite zone.

The Astra Cut, located about five hundred feet south-west of the "J.C." Cut, exposes silicified dolomitized limestone that contains irregular streaks of lead, zinc, and copper sulfides near a fracture in the limestone.

There are no trenches, or cuts on the Tarn Group that have been described in previous reports.

#### DEVELOPMENT AND EXPLORATION

With the exception of the magnetometer survey on the Tarn Group, all previous work has been done on the Callaghan Claim.

The adit, which is reported to be sixty feet in length, is now inaccessible. O'Grady reports four samples from the adit, only two of which are representative; these assayed 0.35% Lead and 3.00% Zinc. The other two samples were specimens, or grab samples, which averaged 7% Pb, 17% Zinc and 3.7 ozs. silver per ton. Scott reports fair grade lead-zinc material on the Adit dump.

Rock trenching and test pitting have revealed several mineralized zones which are described under the heading "Showings". Some zones were stripped with a bulldozer but as no follow-up-pick-and-shovel work was done, very little new information was obtained from this work.

The diamond-drilling done by New Jersey Zinc located two narrow zones of 5 to 7% combined lead zinc under the J.C. Cut. Scott sampled the core from these holes by selecting representative pieces of core at regular intervals from across 300 feet of country rock. The assays indicate the entire country rock is sparsely mineralized by lead and zinc sulfides, but it is very much below ore grade.

During 1967, the property was surveyed by T. Rolston Electronic Services with a Fluxgate Magnetometer and a Crone JEM Electromagnetic instrument. As a result of the geophysical work on the Callaghan Claim, three short holes were drilled on anomalies near the "J.C." Cut and one hole was drilled near the J.C. Cut. Thirty-five feet of core was sampled from the longest hole under the J.C. Cut which assayed 1.60 ozs. Silver per ton, 0.70% copper, 4.05% lead and 4.00% zinc.

Some preliminary prospecting has been done on the Tarn Group and it was surveyed with the magnetometer, but no E.M. work has been done on the Group.

#### "J.C." AND "GALENA" CUTS

Both zones have been described in a general way, in all previous reports submitted to Barkley Valley Mines Ltd.

There is no clear evidence that the "J.C." and "Galena" zones are the same although they do appear to be on strike. Nor is there sufficient evidence

to suggest that the sulfide mineralization in the zones is confined to a fissure "vein" type of deposit, the sulfides may be localized along folds in a wider shear zone.

The "J.C." zone consists of a sixteen-foot wide section of sulfide mineralization, containing pyrite, sphalerite, galena and chalcopyrite. The mineralization is quite massive over the sixteen-foot width and appears to be confined to a steeply dipping shear zone. The walls of the shear zone contain disseminated sulfides, mainly pyrite, and the host rock is drag-folded along an axial-plane parallel to the shear. The plunge of the fold axis has not been determined and, if the mineralization is controlled by the folding, it is most important to learn the altitude of the fold axis. This information can be obtained by mining a bulk sample from the "J.C." Cut to determine plunge and rake of the zone.

The samples that have been taken are listed on the following page. They were taken by a number of people and the author cannot vouch for the reliability of all, or any, of the results. However, they all fall within a range of values that would be "ore" if sufficient tonnage is available.



TABULATION OF SAMPLES

<u>Where</u>	<u>When</u>	<u>By Whom</u>	<u>Type</u>	<u>Width</u>	<u>Au</u>	<u>Ag</u>	<u>Cu%</u>	<u>Zn%</u>	<u>Pb%</u>
Galena Cut	1967	J.S. Scott	Channel	75 Ft.	0.04	2.9	2.2	6.0	11.0
J.C. Cut	1967	J.S. Scott	Channel .	5 ft.	0.02	0.3	0.81	1.92	0.81
J.C. Cut	1969	Brameda Res.	Grab		0.30	6.1	4.2	9.6	6.2
J.C. Cut	1969	Brameda Res.	Grab		0.05	4.0	1.2	5.2	6.7
J.C. Cut	1969	Barkley Valley	Grab	16 ft.	0.03	7.9	2.6	18.9	38.5



COMMENTS ON THE GEOPHYSICAL SURVEYS BY ROLSTON

The magnetometer survey shows a marked gradient from south to north and probably indicates a major fold or fault separating the two areas. The fault, postulated in the north section of the property, extends north-east and south-west.

The electromagnetic survey has revealed at least six anomalies where the ratio of the low frequency to the high frequency readings approaches unity, i.e., the ratios range from 0.7 to 0.8; this is interpreted to mean that some of the anomalies could be caused by disseminated - to - massive sulfides. The dips of the conductors are variable but most are steep.

The anomalies that have ratios of 0.7 to 0.8 are shown on the accompanying maps.

A programme of drilling of some anomalies is warranted, as most appear to be shallow.

WORK COMPLETED TO OCTOBER, 1969

The programme of development and exploration on the Callaghan Claim can be separated into three categories:

- (1) Building and maintenance of the access road to the claim.
- (2) Drilling of 46 holes by means of a large-diameter

percussion drill to test the nature and grade of mineralization over a wide area of the Callaghan Claim.

- (3) Continued stripping and exposure of the mineralized shear zone at the J.C. Cut.

#### RESULT OF 1969 PROGRAMME

Early in 1969, the Pacific Logging Company Ltd. began logging in the area between Brandywine and Callaghan Creeks. An agreement was reached between Pacific Logging and Barkley Valley Mines whereby Pacific Logging would use a portion of the road to the Callaghan Claim. For this privilege, Pacific Logging agreed to improve and maintain the road and further agreed to relocate that portion of the access road in the canyon of Brandywine Creek. Barkley Valley Mines agreed to assist this programme by supplying rock-drills, compressors and a truck whenever necessary. The road will be available to both companies at all times.

The upper portion of the road to the Callaghan Claim, roughly one mile in extent, not presently being used or maintained by Pacific Logging, has been improved by Barkley Valley and is now quite suitable for four-wheel drive vehicles or heavy trucks. Additional work will be necessary to bring this portion of the road up to good hauling standards.

The author in a report dated October 24th, 1968, recommended that the large area of disseminated mineralization surrounding the Galena and J.C. Cuts be tested by a number of short vertical drill holes. The programme of drilling was initiated in July using a large-diameter percussion drill. The holes were laid out on one-hundred foot centres which roughly coincided with the geophysical grid lines cut by T. Rolston Electronic Services. Forty-six holes were drilled approximately one hundred feet deep. The holes were drilled dry and the cuttings from the holes were collected from every five feet of hole. The samples were numbered and submitted to Crest Laboratories Ltd., Vancouver, who used a hot-acid extraction method (geochemical) to determine the copper, zinc and lead content of the cuttings. The samples from eight holes only have been analysed to date, leaving thirty-eight holes to be assayed. The assay returns for the eight holes were disappointingly low; the best section was in Hole L453, from five to thirty feet which assayed 0.22% combined copper-lead-zinc.

The balance of the holes should be assayed in a way that will yield the desired information at a minimal cost. A good method would be to combine a portion of all the cuttings from each hole into a representative composite sample and analyze for zinc, lead, and copper. The holes that

PROPERTY FILE

show interesting values can be investigated, sample by sample, to locate the position of the values in the individual hole.

The stripping on the J.C. Cut was extended during the past few months to a width of about one hundred feet and a depth of fifteen feet on the fact of the bluff where the vein is exposed. The work has revealed a shear zone, at least forty feet wide, in which there is a sixteen foot section of massive-to-disseminated lead, zinc and copper sulfides. The mineralized section has not been traced along the strike between the Galena and J.C. Cuts because the depression that lies between the cuts is filled with water.

#### FUTURE PROGRAMME

The author has recommended that the "ore" lenses that have been uncovered at the J.C. and Galena zones be mined in open trenches. The purpose of this work will be twofold; one, it will provide a large bulk sample of the material which can be tested at the Anaconda plant at Britannia Beach and, two, mapping of the excavation will provide knowledge of the geological structure of the "ore" lenses.

The cost of this programme is estimated to be \$92,119.18; about \$15,000.00 will be used for the

purchase of equipment.

The balance of the recommended programme consists of additional diamond drilling to test certain of the E.M. anomalies and to check the possible extension of the "ore" lenses to be mined at the "J.C." and "Galena" zones. The proposed drill holes are shown on the accompanying plan of the Callaghan Claim.

The author has recommended that some funds be provided for road improvements and to complete the Percussion Drill Programme, i.e., complete the assaying of the key holes to determine whether or not there are zones of mineable grade near the surface.

In addition to the work planned for the Callaghan Claim, Barkley Valley Mines are committed to do some exploration work on the groups of claims that have been staked. Assessment work on the Tarn, Al and Railway groups will have to be done this coming field season. An estimate has been incorporated in the costs for the assessment work.

PROPERTY FILE

COST ESTIMATE

Mining

1. Equipment	
Air Trac and Compressor	\$10,000.00
Drill Rods, Couplings, Bits, Shanks etc.	1,236.60
Bit Grinder	3,115.00
2. Tent Camp and Cookhouse	1,000.00
3. Provincial Sales tax on Above	767.58
4. Cook-house Loss	
6 men @ \$5.00/day for 150 days	4,500.00
5. Hauling	
5000tons @ \$5.25/ton	26,250.00
6. Mining	
5000tons @ \$5.50/ton	27,500.00
7. Milling	
5000tons @ \$2.75/ton	13,750.00
8. Concentrate Handling	
1000tons @ \$4.00/ton	4,000.00
Sub Total:	<u>\$92,119.18</u>

Exploration and Assessment

1. Complete Percussion Drill Program Study	\$ 6,000.00
2. Tarn Group:	
Access Road and Assessment on 11 Claims	4,000.00
3. A1 Group	1,600.00
4. Railway Group:	
Access Road and Assessment	2,000.00
5. Contingency for Diamond Drilling (if necessary) 2000 ft. @ \$10.00	20,000.00
	<hr/>
Sub Total:	<u>\$33,600.00</u>
	<hr/>

*less - smelter returns on 5000 tons ore*

Grand Total

Mining and Exploration	\$125,719.18
	<i>200,000</i>
Plus Contingency for Head Office overhead, Audit, Legal Fees, Engineering etc.	15,000.00
	<hr/>
<u>Total:</u>	<u>\$140,719.18</u>
	<hr/>

*indicates profit*  
Respectfully Submitted,

*A.R. Bullis*

A.R. Bullis, P. Eng.

BULLIS ENGINEERING LTD.

June 1, 1970  
Delta, B.C.



CERTIFICATE OF QUALIFICATIONS

I, Albert Ralph Bullis, do hereby certify that:

1. I am a practising geological engineer with residence at 1318-56th. Street, Delta, B.C.
2. I am a graduate of the University of British Columbia and have been granted the degree of Bachelor of Applied Science.
3. I have been practising my profession as a geological engineer for eighteen years.
4. I am a member of the Association of Professional Engineers of British Columbia and a member of the Association of Professional Engineers of Ontario.
5. I have based my report on numerous personal examinations of the Callaghan Claim. The drill programmes described in the report were planned and supervised by the author.
6. I have no interest, directly or indirectly, in the property or securities of Barkley Valley Mines Ltd. (N.P.L.), nor do I expect to receive any.

*AR Bullis*

A.R. Bullis, P. Eng.

June 1, 1970  
Delta, B.C.



PHONE: 685-5821  
File #321102/106

CERTIFICATE OF ASSAY

J. R. WILLIAMS & SON LTD.

PROVINCIAL ASSAYERS AND CHEMISTS

Office and Laboratory:

580 Nelson Street, Vancouver 2, B. C.

I **Hereby Certify** that the following are the results of assays made by me upon samples of ORE  
herein described and received from Messrs. Barkley Valley Mines March 17th 19 70

MARKED	GOLD		SILVER		Copper		Lead		Zinc	
	Ounces Per Ton	Value Per Ton	Ounces Per Ton	Value Per Ton	Per Cent.	Value Per Ton	Per Cent.	Value Per Ton	Per Cent.	
		\$		\$		\$		\$		
T/4 - 1					4.35	49.155	41.70	137.61	13.60	43.52
T/4 - 2					4.90	55.37	21.60	7128	32.40	<del>27.52</del> 103.68
T/4 - 3					2.70	30.51	5.90	19.47	36.20	115.84
T/4 - 4					3.25	36.725	3.80	12.54	7.70	24.64
T/4 - 5					0.32	3.616	0.95	3.135	0.90	2.88

Gold calculated at \$.....per ounce.

Silver calculated at.....cents per ounce.

NOTE—Pulps of Samples retained 2 months from date of Receipt.  
Rejects 1 week unless otherwise instructed.

Calculated at.....cents per lb.

Calculated at.....cents per lb.

Calculated at.....cents per lb.

 Provincial Assayer.

PHONE: 685-5821

File #321181/185

### CERTIFICATE OF ASSAY

# J. R. WILLIAMS & SON LTD.

PROVINCIAL ASSAYERS AND CHEMISTS

Office and Laboratory:

580 Nelson Street, Vancouver 2, B. C.

**I Hereby Certify** that the following are the results of assays made by me upon samples of ORE herein described and received from Messrs. Barkley Valley Mines April 6th 19 20

MARKED	GOLD		SILVER		Copper		Lead		Zinc	
	Ounces Per Ton	Value Per Ton	Ounces Per Ton	Value Per Ton	Per Cent.	Value Per Ton	Per Cent.	Value Per Ton	Per Cent.	
		\$		\$		\$		\$		
T/5 Cl Zn Tails					4.50	50.85	12.20	39.66	2.80	8.96
T/5 Cl Pb Tails					5.85	66.105	25.80	85.14	15.75	50.40
T/5 Final Tails					0.12	1.356	2.90	9.57	0.10	.32
T/5 Cl Zn Conc.					3.80	42.94	9.10	30.03	34.40	110.08
T/5 Cl Pb Conc					4.65	52.545	37.40	123.42	19.90	63.68
						43 <sup>00</sup>		75 <sup>00</sup>		80 <sup>00</sup>

Gold calculated at \$ \_\_\_\_\_ per ounce.

Silver calculated at \_\_\_\_\_ cents per ounce.

Calculated at \_\_\_\_\_ cents per lb.

Calculated at \_\_\_\_\_ cents per lb.

Calculated at \_\_\_\_\_ cents per lb.

NOTE—Pulps of Samples retained 2 months from date of Receipt.  
Rejects 1 week unless otherwise instructed.

J. Williams Provincial Assayer.

0925W 001

October 1, 1974

Noranda Exploration Company Limited  
P.O. Box 2380  
Vancouver, B.C.  
V6B 3W7

Dear Sirs:

Re: Box, SP, Pest, Sno, BF, Dem, WI, BU,  
SJ, BZ, Wend, Gail, Godat, STL, Kip,  
Pik, Loon, Fu-Hu, STP forfeited  
mineral claims.

Thank you for your letter dated September 26, 1974,  
and the information submitted pursuant to Section 52 of the  
Mineral Act with respect to the above noted mineral claims.

Yours very truly,

R. Rutherford  
Deputy Chief Gold Commissioner

bmh

September 26, 1974

The Honourable Leo T. Nimsick  
 Minister of Mines and Petroleum Resources  
 Parliament Buildings  
 Victoria, B.C.

Re: Box, SP, Pest, Sno, BF, Dem, WT, BU,  
 SJ, BE, Wend, Gail, Godat, STL, Kip,  
 Pik, Loon, Fu-Hu, STP, forfeited Mineral claims.

Dear Sir

Pursuant to Section 52 subsection 2 (b) of the Mineral Act, enclosed please find reports on the above listed forfeited Mineral Claims.

Yours truly

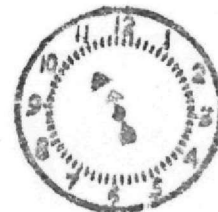
W.W. Young  
 Coordinator

REFERRED TO	D.	INITIAL
D.M.		
ADM (M)		
ADM (P)		
C.C.O.		
C.P.R.		
DCSO	✓ 1/10	K
ACPR		
G.C.		
ACCTS.		
GEOL.		
INSP.		
M. REV.		
EC. & P.		
FILE NO.		
FILING CLERK		

Encl:  
 WWY/db

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DEPT. OF MINES  
 AND PETROLEUM RESOURCES

REPORT TO MINISTER OF MINES AND PETROLEUM RESOURCES

PURSUANT TO SECTION 52 SUBSECTION 2 (b)

Claim Names: WEND 1 - 6

Record Numbers: 23007 - 23012

Mining Division: Vancouver

Date of Forfeiture: August 29, 1974

EXPLORATION AND DEVELOPMENT DONE:

	<u>YES</u>	<u>NO</u>	<u>REPORT ATTACHED</u>	<u>MAP ATTACHED</u>	<u>ASSESSMENT REPORT FILED</u>	<u>COST</u>
PROSPECTING						
GEOLOGICAL	X		X	X		
GEOPHYSICAL						
GEOCHEMICAL						
SURFACE						
AIRBORNE						
LINE PREPARATION						
DIAMOND DRILLING						
ROAD WORK						
RECLAMATION						

Project part of general reconnaissance programme, no separate accounts kept.

TOTAL