

TRANGOR DIA NINES, Y.T.

DD. H. 15, 15A + 15B

015432

WELL NO: 15
 LAT 30.066.25
 LONG 30.293.65
 ELEV 160 400 G. 84

15A
 30.001.25
 30.301.65
 400 S. 84
 160

15B
 30.003.75
 30.301.65
 400 S. 84
 160

Well No	Lat	Long	15A Lat	15A Long	15B Lat	15B Long
1699	5.0	2.68 5.90	1633	3.3	1645	1.5 2.68 6.97
1710	5.0	1.1 2.0 2.0	1677	4.4	1696	4.5 2.70 3.63
1760	5.0	1.19 5.51	1715	3.6	1730	4.0 1.99 6.08
1790	3.0	3.61 7.68	1765	5.0	1780	5.0 3.50 7.38
1800	5.0	3.78 5.61	1815	5.0	1780	4.0 3.70 8.43
1870	3.0	4.15 6.84	1850	3.5	1820	3.0 3.44 7.76
1925	5.5	3.41 5.12	1900	5.0	1850	3.6 2.70 5.75
1980	5.5	1.17 1.08	1940	4.0	1886	5.4 2.14 1.82
2030	5.0	3.28 3.44	1990	5.0	1940	3.6 2.08 3.45
2080	5.0	5.67 9.15	2010	2.0	1970	4.4 1.58 5.27
2130	5.0	3.13 6.78	2060	5.0	2020	4.0 3.39 9.30
2170	4.0	1.92 6.88	2110	5.0	2060	6.3 3.90 7.21
2220	5.0	2.17 4.23	2160	5.0	2120	5.7 8.72 9.05
2270	5.0	3.44 3.61	2210	5.0	2180	3.0 3.52 10.20
2310	4.0	2.82 7.18	2260	6.0	2210	5.0 3.24 7.93
2360	5.0	1.75 5.71	2310	6.0	2260	5.0 1.33 6.97
2410	5.0	3.41 2.66	2360	6.0	2310	5.0 2.37 7.59
2460	5.0	2.88 1.18	2395	5.0	2360	5.0 4.00 4.80
			2435	4.3	2410	6.0 3.06 2.59
			2470	5.0	2470	
			2500			

1699-2460 = 3307h
 5.087h
 Combined: 81.108 38%

Combined: 80.5% 2.41 h
 Combined: 81.0% 5.80 h
 Combined: 81.0% 5.80 h

21.128: 3.24%
 14.20: 6.32%
 0.01%

THE DOWA MINING CO., LTD.

VANCOUVER OFFICE

SUITE 1102 - 1111 WEST HASTINGS ST. - VANCOUVER, B.C., CANADA V6E 2J3

Y. Vangorda
20

TELEX: 04-507886
DOWAMICO VCR

TELEPHONE: (604) 688-0220
CABLE: DOWAMICO-VANCOUVER

December 19, 1974.

Kerr Addison Mines Limited
405 Fidelity Life Building
1112 West Pender Street
Vancouver, B. C.

Attention: Mr. W.M. Sirola

Gentlemen:

Re: Vangorda/Swim Lake Property



In accordance with our telephone conversation concerning the captioned subject, recently, we would like to inform you that our drilling and work at your Vangorda/Swim Lake property, based on the mutual agreement with your Kerr Addison and our Dowa Mining, was completed on December 13th, 1974.

Our drilling was operated as per reported working plan and schedule. One drill hole in Swim Lake however, was not carried out because of weather conditions. We are enclosing the results of our drilling.

Core samples totaling about 1.2 tons has been shipped to Dowa's laboratory in Japan. We will inform you the results of the metallurgical test as soon as possible, when it is available.

We would like to say thank you for your help and it will be highly appreciated if you make cooperation in the future.

Yours truly,

THE DOWA MINING CO., LTD.

H. Nakazawa
General Manager
Vancouver Office

HN/sh
Enclosure

cc: Mr. Rowswell - Kerr Addison Mines
Mr. Asada - Mitsubishi Canada Trt.
Mr. Yanagawa - Mitsubishi Canada Vcr.

MAR - 9 1970

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

Vangorda

16.

J.H.S.	<input checked="" type="checkbox"/>
P.M.K.	<input checked="" type="checkbox"/>
G.R.H.	<input checked="" type="checkbox"/>
R.D.S.	<input checked="" type="checkbox"/>
H.C.B.	<input checked="" type="checkbox"/>
L.D.B.	<input checked="" type="checkbox"/>
J.B.T.	<input checked="" type="checkbox"/>
(E.C.J.)	

To..... P. M. Kavanagh..... From..... John C. Lund.....
 Subject..... Vangorda Property - Drilling..... Date..... March 6, 1970.....

Diamond drilling on Vangorda was completed March 4th.
 The following is a list of sections sampled in each drill hole:

	<u>Hole No.</u>	<u>Section Sampled</u>	<u>Length</u>	<u>Total Length Each Hole</u>	<u>Remarks</u>
<i>3 boxes</i>	DDH 1A	51.5 - 89.0	37.5'	51.5	No core to 51.5'
		134.0 - 148.0	<u>14.0</u>		
<i>3 boxes</i>	10A	184.0 - 203.0	19.0	116.1	
		235.0 - 255.0	20.0		
		259.4 - 278.0	18.6		
		281.5 - 340.0	<u>58.5</u>		
<i>6 boxes</i>	15E	107.0 - 112.0	5.0	116.0	
		125.0 - 129.0	4.0		
		134.0 - 241.0	<u>107.0</u>		
<i>5 boxes</i>	26A	107.0 - 127.0	20.0	87.5	
		182.4 - 188.5	6.5		
		216.0 - 257.5	41.5 (low		
		257.5 - 277.0	<u>19.5</u> (grade)		
<i>8 boxes</i>	47A	112.0 - 207.0	95.0	130.0	
		237.0 - 252.0	15.0		
		277.0 - 297.0	<u>20.0</u>		
		207.0 - 211.0	low grade sample to be used for grade control.		
<i>3 boxes</i>	52A	108.0 - 159.0	<u>51.0</u>	51.0	
<i>3 boxes</i>	50A	107.0 - 183.5	76.5	125.5	
		219.0 - 235.0	16.0		
		246.0 - 279.0	<u>33.0</u>		
<i>1 box</i>	75A	40.0 - 50.0	10.0	13.0	No core to 40 ft.
		65.0 - 68.0	<u>3.0</u>		
<i>3 boxes</i>	81A	38.0 - 72.0	34.0	64.0	
		95.0 - 125.0	<u>30.0</u>		
		Total length core sampled =		<u>754.6</u>	

35 boxes

+ the first shipment re. the "upper" sample
 & "lower" sample

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To.....From.....

Subject.....Date.....

- 2 -

Average core recovery over total footage drilled is about 87%.

Total core recovered is 656.5 *ft.*

The two samples marked "low grade" (DDH #26A 259.5' - 277' and combined sample DDH 47A 207 - 211; 271 - 277) are to be assayed separately and used in controlling grade if necessary. The samples are marked as such on the core box. Mr. Bennett should be so advised.

I told Bennett.
MLK

I would appreciate it if you could let us know when the core arrives at Noranda. The samples consisting of 35 core trays were shipped from Faro City on March 5th via Great Northern Airways.

John
John C. Lund.

JCL/lk

cc: R. J. CONEMAN
M. J. S. BENNETT

Vangorda/Swim Lake Drilling

	<u>Depth in Feet</u>	<u>Ore in Feet</u>	<u>Length of Ore</u>	<u>Depth of Initial Planned</u>	<u>Core Length</u>
<u>Vangorda</u>					
DO-1	76.6	53.0-76.6	23.6	100.0	74'
DO-2	312.6	141.0-312.6	171.6	300.0	132.0
		70.0-120.0	50.0		
DO-3	250.0	135.0-250.0	115.0	250.0	120.0
			165.0		
		102.0-132.0	30.0		
DO-4	201.0	135.0-201.0	66.0	200.0	170.0
			96.0		
DO-5	157.0	68.0-157.0	89.0	150	34
DO-6	151.0	55.0-140.0	85.0	150	30
		26.0-48.0	22.0		
DO-7	153.0	74.0-94.0	20.0	150	50
		148.0-153.0	5.0		
			47.0		
	1,301.20		677.2	1,300.0	610.0
<hr/>					
<u>Swim</u>					
DO-11	183.0	90.0-183.0	93.0	200	75
DO-12	252.0	90.0-252.0	162.0	250	78
DO-13	177.0	110.0-177.0	67.0	250	52
DO-14	354.0	150.0-354.0	204.0	350	84
DO-15	(give up)			250	76
	966.0		526.0	1,300	365
<hr/>					
Total	2,267.20		1,203.2	2,600	975'
					+228.2'

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

MAR - 2 1970

Vol. 16

J.H.S.
P.M.K.V.
G.M.H.
R.D.S.
R.C.B.
S.O.B.
✓ G.D.H.
D.H.T.
(E.C.J.)

To..... P. M. Kavanagh..... From..... Fred Chow.....
Subject..... Vangorda Metallurgical Test Material..... Date..... February 26, 1970.....
Shipment and Diamond Drilling Progress.

John Lund advised by 'phone today that the first batch of diamond drill core is being shipped out of Whitehorse by C.P. Air. It is consigned to Mr. Bennett, Noranda Mines Limited, Noranda, Quebec.

The shipment consists of the deep ore from D.D.H. #10A between footages 281.5 - 339.0 and the shallow ore from D.D.H. #50A between footages 107 - 183.5 feet. Identification is marked on the outside and inside of each core box. Footage blocks are placed inside for exact location of the ore sections.

To date, five diamond drill holes, No's 1A, 15E, 26A, 10A and 50A, are completed. John estimates that the remaining four holes will be completed in about 11 days.

Recovery of the ore sections is roughly 90% with the exception of the top of D.D.H. #1A (Nil).

John has elected to remain on the job till the completion of the drilling, though not later than Good Friday when his vacation commences.

I reported this by phone to Mike Bennett

Fred

Fred Chow.

FC/1k

He advised that the first shipment had arrived.

cc: R.J. COLEMAN

M.K.

Mar 2/70

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

Vangorda
16

✓	INS.
✓	RES.
✓	SMR.
✓	RDS.
✓	CCP.
✓	DE.
✓	CDL.
✓	CF.
	ECJ.

To..... W. M. Sirola From..... P. M. Kavanagh

Subject..... Vangorda Drilling for Metallurgical Samples Date..... February 4, 1970

This is further to my memorandum of January 26th on this subject, and is in confirmation of my telephone conversation with you yesterday.

Prompted by the information we have received that Anvil is not obtaining the favorable metallurgical results from their current upper open-pit ore that they obtained in the bulk sample taken from their early development adit, we have considered it prudent to metallurgically test separate samples of our shallow ore, and of our deep ore at Vangorda in addition to the overall large composite sample referred to in my January 26th memorandum. The procedure we have decided upon to obtain such samples is as follows, and represents a modification of the instructions outlined in my January 26th memorandum:

1. The section from approximate footage 107 to 183 in the hole to be drilled adjacent to former hole No. 50 is to be collected separately and clearly marked as Surface Sample. We estimate it will weigh approximately 200 lbs. The other two probable deeper ore sections in that hole should be collected together and form the originally-planned sample from that hole to be later a potential part of the overall large composite sample.
2. The deep section from approximate footage 270 to 338 in the hole to be drilled adjacent to former hole No. 10 is to be collected separately and clearly marked as Deep Sample. We estimate it will weigh approximately 200 lbs. The other four probable upper ore sections in that hole should be collected together and form the originally-planned sample from that hole to be later a potential part of the overall large composite sample.

In summary, there should now be 11 rather than 9 samples sent to Noranda.

PMK

Paul M. Kavanagh

PMK:lfr

cc: R. L. Coleman
M. J. S. Bennett

*P.S. I am enclosing a copy of this memo
for you to send to John Lund at the property
PMK.*

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

Vangorda

16

Rec'd Sept. 19/69

To..... P. M. Kavanagh..... From..... W. M. Sirola.....

Subject..... Vangorda Mines Limited,
Diamond Drill Core For Brunswick Mining..... Date..... Sept. 18/69
and Smelting, Metallurgical Testing.

One box of Winkie drill core from D.D.H. 15-D (157' to 250') on the Vangorda property was shipped yesterday to Brunswick Mining & Smelting Company, Bathurst, N.B., attention Mr. Neumann.

The weight of this core will be closer to 60 pounds rather than the 100 to 200 pounds requested by Brunswick M & S but that is all we can provide from the Vangorda property at the present time.

<input checked="" type="checkbox"/>	J.H.S.
<input checked="" type="checkbox"/>	P.M.K.
<input type="checkbox"/>	R.D.S.
<input type="checkbox"/>	B.C.B.
<input type="checkbox"/>	I.D.B.
<input type="checkbox"/>	G.M.H.
<input checked="" type="checkbox"/>	W.K.V.
<input type="checkbox"/>	(3)
<input type="checkbox"/>	
<input type="checkbox"/>	

W. M. Sirola.

WMS/lk

cc. L. Base, Noranda

KERR ALISON MINES LIMITED
(FOR INTER-OFFICE USE ONLY)

Vancouver SEP 16 1968

cc OR 4/5.13
Vancouver

To P. M. Kavanagh From W. M. Sirola
Subject Swim Lakes - Vangorda Metallurgical Sampling Date September 5, 1968

W.S.R.
H.G.G.
L.H.S.
E.F.
R.D.S.
C.C.U.
P.M.K. ✓
G.W.M.
R.O.M.
C.K.W.
J.B.S.
G.P.R.
K.F.L.
L.L.
D.I.

By this weekend we will have made the following distribution of core for metallurgical testing:

Recent assay of
a thin half of core:
1.62 Ag
3.96 Pb
4.60 Zn
0.21 Cu

Swim Lakes "A" Group - DDH #A-24, 151.7 - 200.5 = 48.8 feet averaging 3.7% Pb, 4.8% Zn and 1.8 oz. Ag to be shipped to Mr. Ogiri of Toyomenka in Vancouver who in turn will send it to Japan. I estimate that the core from this hole will weigh approximately 60 lbs.

63 lbs actual

From the Vangorda deposit we have core from drill holes 15-C and 15-D. I will send the upper section from 15-C (160 - 200 feet) which should weigh approximately 40 lbs to Galigher. The lower section from 15-C (201 - 250 feet) which should weigh approximately 50 lbs will go to Mr. Ogiri.

1.66 Ag
4.50 Pb
5.06 Zn
0.22 Cu

36 lbs actual

36 lbs actual

Each of these sections of core will be crushed to 1/4" and then sampled for lead, zinc, silver and copper prior to shipment.

We will have remaining for possible future use, all of the split core from DDH #A-12 at Swim Lakes. This is a section from 320.5 - 399.0 feet, or 78.5 feet averaging 3.8% Pb, 4% Zn, and 1.2 oz of Ag, plus all of DDH #15-D from Vangorda. This latter hole was drilled to a depth of 250 feet.

100 lbs

120 lbs

W. M. Sirola

W. M. Sirola.

WMS/lk

N.B. The assay results written by hand above are the assay results by Eldridge in Vancouver of the actual samples being sent out to Down & Galigher.

P.M.K.
Sept. 13/68.

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

VA. 16.

OB

cc. y/s
13

PMK

To..... P. M. Kavanagh..... From..... W. M. Sirola.....

Subject..... Swim Lakes Metallurgical Sampling..... Date..... July 31, 1968.

We have today telephoned to Ken Thompson the following instructions: When he next makes radio contact with Gagnon and his partner, he is to advise them to proceed to Swim Lakes by aircraft from Ross River (if Swim Lakes road is too difficult to negotiate by truck). At Swim Lakes, they are to remove the split core from the following drill holes and place the core in aluminum boxes for shipment to Vancouver:

*→ I should Thompson to ask him
tell Gagnon to use plywood box
the aluminum shafts for safe for
PMK
Aug. 13*

DDH A-12:

320.5 - 399.0 = 78.5 ft. averaging 3.8% Pb, 4.0% Zn and 1.2 oz. Ag.

DDH A-24:

151.7 - 200.5 = 48.8 ft. averaging 3.7% Pb, 4.8% Zn and 1.8 oz. Ag.

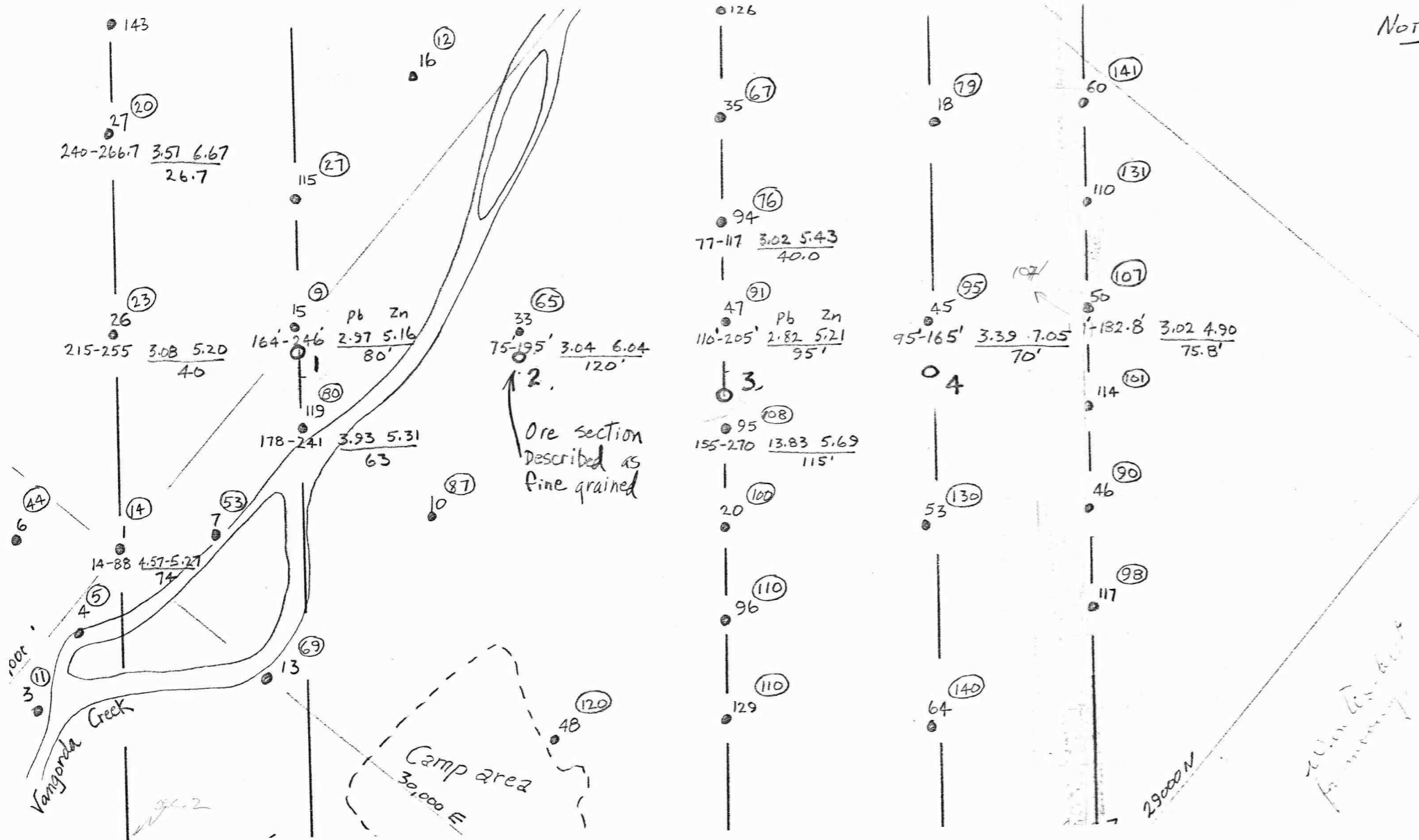
These holes were selected because of their ore grades, a somewhat higher percentage of Zinc than Lead and good recoveries. They are also complete sections which have not been previously tapped for metallurgical purposes.

The amount of split core involved should be very adequate for the Dow people and I understand from Mr. Ogiri that they do not care what size this material is crushed to in Vancouver. We will arrange to have the core crushed to 1/4" and a representative sample will be assayed by Coast Eldridge.

This sojourn to Swim Lakes is to take place after they have drilled a second hole at Vangorda.

The shipping instructions given to both Gagnon and Thompson are that the core is to be shipped to Kerr Addison Mines Limited, care of Crane Storage, 760 Beatty Street, Vancouver B.C., via Canadian Freightways from Whitehorse.

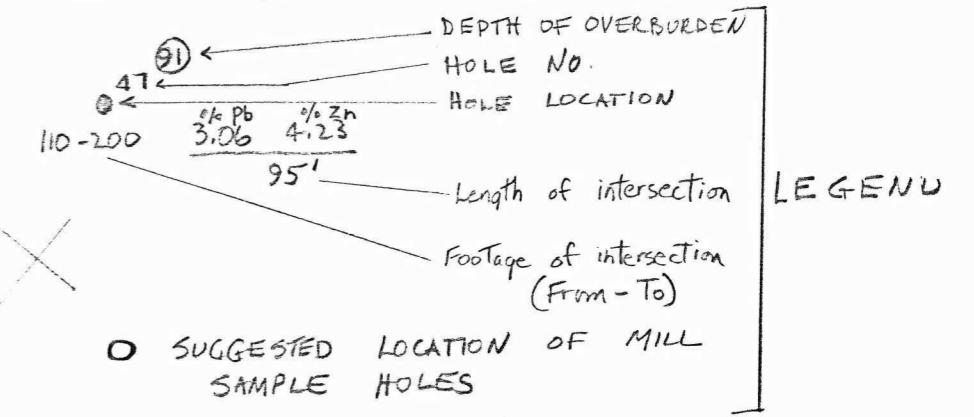
W.M. Sirola.



NOTES

ORE RESERVES 9,400,000 TONS { 3.16% Pb, 4.96% Zn,
0.27% Cu, 1.76 oz. Ag, 0.02 oz A

NX CORE DIAMETER 2 1/8"
ASSUMING 8.9 CU FT./TON AND 3.6 SPEC. GR.,
1 FT. OF CORE WEIGHS 5.56 lbs.



VANGORDA MINES LTD

D. D. HOLE PLAN

showing
SUGGESTED MILL SAMPLE HOLES
NUMBERED IN ORDER OF PREFERENCE

SCALE 1" = 100'

AUG. 4/64

AW

V order JUL 29 1968

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

(16)

W.S.R.
K.C.G.
J.H.S.
L.F.
R.D.S.
H.C.B.
P.M.C.
G.V.M.
R.O.M.
C.K.W.
J.H.S.
G.P.R.
K.I.L.
J.I.B.
E.C.I.

To..... P. M. Kavanagh..... From..... W. M. Sirola.....

Subject..... *Swim Lakes*
Swim Lakes - Vangorda Metallurgical Drilling..... Date..... July 22, 1968

The drillers reached Whitehorse on July 3rd instead of on July 2nd as scheduled. Constantini's luggage was left behind in Edmonton and did not reach Whitehorse until July 5th.

The bulldozer was not at the Pelly River ferry site on July 4th as scheduled but it did appear on July 5th but could not cross until July 6th because the blade and ripper had to be removed before making the ferry crossing. The cat and drillers arrived at Swim Lakes at approximately 10:30 P.M. on July 6th.

While waiting for the cat, Constantini's luggage and pipe fittings to arrive from Whitehorse, I took Gagnon to the site of Hole 15 on the Vangorda property.

On checking Hole #A-21 on the Swim Lakes "A" Group, we found it to be frozen solid. You may recall we had intended to use this as our water supply. Fortunately there was sufficient run-off water along the road to the drilling area to enable us to build a sump in which the water supply should last as long as it is required.

On July 8th the drill was set up two feet west of A-29 and commenced drilling on July 9th. I left Swim Lakes that day to make the Hart River examination and returned on July 11th to find that Gagnon had moved the drill to a location two feet east of A-29. He did this on the mistaken assumption that he could core better on this latter setup than he could in his former location where he had reached a depth of 69 feet before pulling out. He was then advised to not concern himself unduly with coring in the unmineralized rock above and between the zones and when I left the property on July 14th, he had reached a depth of 119 feet at 1:30 P.M. and was then beginning to core properly.

While it is always difficult to predict the outcome of any drill hole being drilled with limited equipment, it seems reasonable to assume that Gagnon should be able now to complete the holes without incident.

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To.....From.....

Subject.....Date.....

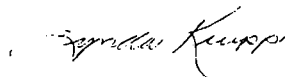
- 2 -

The road into the Swim Lakes group is rough in spots but the driller has been equipped with the necessary parts for repairing the truck which was damaged to some extent in the course of getting into the property. He has also been advised that gasoline for the drill and the truck will be made available to him on the Faro property through the courtesy of the Anvil people.

In case of difficulty, he has been advised to proceed either to Ross River or the Anvil property where he can contact either Ken Thompson, this office, or even his home base if necessary. He was advanced \$100.00 from this office on July 13th.

When the drilling is complete, he has been instructed to send the core via Canadian Freightways to Kerr Addison Mines, care of Crone Storage, Vancouver. Mr. Thompson has also been advised the disposition of the core.

When the core reaches Vancouver, we will have it crushed to 1/4" at Coast Eldridge. The appropriate sections will have to be assayed and the remainder distributed to Galigher and the Toyomenka people in Japan. We will get shipping instructions from Mr. Ogiri prior to shipment.



W. M. Sirola.

WMS/lk

Sirolo: May 17 1968

On the Vangorda property, drill hole No. 1 would be a good location except that core recovery was poor. The next choice would appear to be hole No. 15 where we drilled metallurgical holes in 1964. My only concern at this site is that the ore section is a little deep (164 to 246 feet) and I do not know if the Winkie drill could handle this. If it can, then this location is the obvious choice. Hole 33 is a good location but the Winkie drill would have to contend with 65 feet of overburden. I assume that this would be rather difficult for that machine.

Perhaps you would ask the driller whether or not he could drill to a depth of 246 feet in good ground conditions and if he can, then we should put the Winkie drill at Hole #15. The distance from Hole 15 to Vangorda Creek is less than 100 feet so there is no problem with water supply.

Shipment of the drill should be via railway express to Edmonton, then via Canadian Freightways to Whitehorse. The cost of 500 pounds and over is \$6.93/CWT from Edmonton to Whitehorse. You should allow seven days for shipment from Edmonton to Whitehorse.



W. M. Sirolo.

WMS/1h

Encl. Swim Lakes Diamond Drilling Plan, Scale 1" = 200 feet.
Vangorda Mines Diamond Drill Hole Plan, Scale 1" = 100 feet.

KAVANAGH - JUNE 10 1968

The Vangorda deposit also is higher in zinc than lead, having an average grade of 3.2% Zn and 5.0% Pb. Hole 15, at which we drilled the two big holes in 1964, fits the bill at 3.1% Zn and 5.0% Pb. In both of our big holes we assayed the 100-foot section. We should drill one hole there to 200 feet and obtain from it approximately 100 lbs. of sample. Based on the detailed assay results from our 115 hole 15-A, we could send the 100-foot section to collector and the 216 - 244 foot section to the laboratory. The former section assayed 3.1% Zn and 5.7% Pb, and the latter section assayed 3.0% Zn and 5.7% Pb. We could keep the remaining part of the total section for further possible use.


Paul H. Kavanagh

NORANDA MINES LIMITED
NORANDA, QUEBEC

Vangorda
22
SEP 3 1967
C.C. Vangorda
12
N.M.
Vangorda
16
September 6, 1967 ✓

Kerr Addison Mines Limited,
1600 Bank of Nova Scotia Bldg.,
44 King Street West,
Toronto 1, Ontario.

Vangorda Mines Ltd

Attention: Dr. P. Kavanagh - Chief Geologist

Dear Paul:

After talking to you about Vangorda samples, I rechecked our records and store room and found we had about 150 lbs. of the 1964 sample at about $\frac{1}{2}$ inch. A portion of this was riffled out and the +4 mesh material screened out. This has been sent to your attention.

Yours very truly,

Bill

WH:pd

W. Hrynewich,
General Mill Metallurgist.



file
Vangorda COPY
22

November 27th, 1964.

Mr. W. Hrynawich,
Gen Mill Metallurgist,
Noranda Mines Ltd.,
NORANDA, P. Quebec.

✓	W.S.R.
✓	K.C.G.
✓	E.F.
✓	R.D.S.
✓	B.C.B.
✓	P.M.K.
✓	G.W.M.
✓	H.A.P.
✓	C.K.W.
✓	J.B.S.
✓	G.P.N.
✓	K.F.L.
✓	J.P.
✓	(C.C.)

Dear Mr. Hrynawich,

Further to Mr. Ames' telephone conversation with you this morning concerning the Vangorda sample, I wish to advise you that from the assaying we have carried out on all the core represented in the sample, we have calculated the following grades for the whole sample: 2.968 per cent lead, 5.815 per cent zinc, making a combined lead - zinc grade of 8.783 per cent.

Yours sincerely,

Paul M. Kavanagh.
Chief Geologist, Exploration.

PMK:sw

cc: H. L. Ames
W. M. Sirola.

Nov. 27 / 64

Vanguardia Mines

<u>Hole No</u>	<u>Footage</u>	<u>Feet</u>	<u>Ag Pb</u>	<u>Ag Zn</u>	<u>Combined</u>
15 A	160-247	87.0	2.689	5.306	7.995
15 B	160-247	87.0	3.246	6.323	9.569
Average of 15 A & 15 B of Footage 160-247			2.968	5.815	8.783

NORCAN TOR

0

CP TEL TOR TK

NORCAN TOR

CPR RNK111 LON1030 X339 VIA COMMERCIAL

LONDON 19 NOV 13/64 453P COUNT PCTNS

NORCAN TOR

DEEKS ARSENIC CONTENT IN ORE 1.0 PERCENT MEXIMUM, IN METAL

0.05 PERCENT ACCEPTABLE ISF.

WAITE

1215PMEST/13TH

ORE 1.0 0.05 ISF.

Handwritten signatures and initials, including 'Voyage' and 'J.P.'.

W.S.R.	✓
D.C.	✓
L.F.	✓
R.D.S.	
B.C.O.	
P.M.A.	
G.W.M.	
H.A.P.	
C.K.W.	
J.G.S.	
G.P.R.	
K.F.L.	
J.I.R.	
K.G.J.	

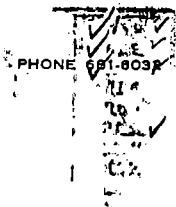
MR. W. S. ROW

ARSENIC ASSAYS ON CLEANED CONS FROM VANGORDA TESTS 70,71,72 AND TWO
CLEANER TAILINGS FROM TEST 72 WERE AS FOLLOWS - 0.0341 PERCENT
0.0341 PERCENT - 0.0336 PERCENT - 0.0334 PERCENT AND 0.0341 PERCENT.
COMPLETE ANALYSES BEING RUN ON SPECIFIED GRADE COMPOSITE SAMPLE OF CLEANER
CONCENTRATE PLUS THIRD AND FOURTH CLEANER TAILING.

AW...

H. L. AMES

Copy to H. L. Ames

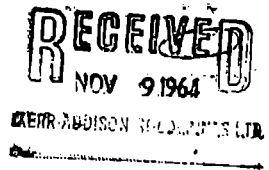


BRITTON RESEARCH LABORATORIES
755 BEATTY STREET
VANCOUVER 3, B.C.

JOHN W. BRITTON, B.Sc., P.Eng.

November 6, 1964

Mr W. Sirola,
Kerr-Addison Mines Ltd.,
1112 West Pender Street,
Vancouver 1, B.C.



Vancouver Mines Ltd

Dear Bill,

Re: Sampling of drill core

The following method was used for preparing the lead-zinc ore samples which were shipped to Mitsui Mining and Smelting Co., Japan and Noranda Mines, Quebec, on November 5 and 6:

The split core, from holes 15A, 160-247' and 15B, 160-247', was crushed in two stages to 3/8" (nominal), mixed and riffled. One half (336 pounds) was bagged for shipment to Noranda. (1st reject). The other half was riffled again and one half (168 pounds) was also bagged for shipment to Noranda (2nd reject). The other half was riffled to give the 50 kilogram sample for shipment to Mitsui and the remaining 58 pounds was bagged for shipment to Noranda (3rd reject). Each of the reject samples, totalling 562 pounds, should, of course, be representative of the whole sample.

Our invoice for the work is enclosed. Please do not hesitate to contact us if we can be of any further service to you.

With best regards,
Yours sincerely,

BRITTON RESEARCH LABORATORIES

John
John W. Britton, P.Eng.

cc Mr H.L.Ames, Noranda Mines

JWR/b

EN**Telecommunications**

check

full rate day letter

night letter

tolls

company or individual **KERR ADDISON MINES LIMITED**

VA 20

address and telephone **1600 - 44 King Street West, Toronto 1, Ontario** 362-7111time and date **November 3, 1964** 10:00 a.m. charge acct. no. **3-100-37860**

**WILLIAM SIROLA
402 FIDELITY LIFE BUILDING
1112 WEST PENDER STREET
VANCOUVER, B.C.**

**CONCUR WITH YOUR PROPOSAL STOP LYALL AMES FAVOURS COARSE CRUSH OF THREE EIGHTHS
OR ONE HALF INCH IF PRACTICAL STOP THEN SEND SAMPLES AS PER KAVANAGH LETTER
SEPTEMBER 29 STOP VERY SECURELY BAGGED STOP**

W. S. ROW.

send this message subject to the terms on back

6102

Telegram.

WILLIAM S. ROWLA

VANCOUVER

CONCUR WITH
YOUR PROPOSAL. LYALL
AMES ~~IS~~ FAVOURS COARSE
CRUSH OF THREE EIGHTHS
OR ONE HALF INCH IF
PRACTICAL. THEN SEND SAMPLES
AS PER KAYANAGH LETTER
SEPT 29 VERY SECURELY
BAGGED.

W. S. Row.

November 2, 1964.

TO: Mr. W. S. Row
FROM: C. K. Wilton
RE: Arsenic Content of the Vangorda Mineralization

- W.S.R.
- K.C.G.
- E.F.
- R.D.S.
- D.C.B.
- P.M.K.
- G.W.M.
- H.A.P.
- C.H.W.
- J.G.S.
- G.P.R.
- K.F.L.
- I.B.
- E.G.J.

Mines
A

Sirola's comment that "the arsenic content of the Vangorda mineralization necessitates a more involved assay procedure" may refer to the samples having been assayed by a polarograph, an instrument which was not in general use when this deposit was drilled off.

The Vangorda records have several references to the arsenical content of the ore. E.O. Chisholm's report of May 18th, 1956, on page 2 says that "sulphide content is variable but might average 60% overall" of which arsenopyrite would be 5%.

However the head sample chemical analysis of metallurgical test lots, give the arsenical content (in a report dated August 1956) as follows:

	<u>Sample 1</u>	<u>Sample 2</u>
As %	0.12	0.10

The report MD 3071 by the Dept. of Mines and Technical Surveys shows that metallurgical tests were run on 3 samples. Samples 1 and 2 were drill core rejects and sample No. 3 was a special sample consisting mostly of mineralized graphitic schist. Head sample analyses were in part as follows:

	<u>As %</u>
Sample No. 1	---
Sample No. 2	---
Sample No. 3	0.23

Arsenic or arsenopyrite are not mentioned in the section on microscopic examination of two polished sections from sample No. 1. There is no mention in the report of arsenic having a bad effect on the recovery in tests on sample No. 3.

A metallurgist friend of mine tells me that arsenic is objectionable in zinc concentrates. He also says that Normetal ores have some arsenic which they selectively suppress by high alkalinity. He says that the association of the arsenopyrite with the sphalerite and galena and the grain size of all three would have a bearing on whether the arsenic would cause trouble in the metallurgical processing of the ore.

CKW

C. K. Wilton
Senior Geologist - Exploration

November 2, 1964.

TO: Mr. W. S. Row

FROM: C. K. Wilton

RE: Arsenic Content of the Vangorda Mineralization

Sirola's comment that "the arsenic content of the Vangorda mineralization necessitates a more involved assay procedure" may refer to the samples having been assayed by a polarograph, an instrument which was not in general use when this deposit was drilled off.

The Vangorda records have several references to the arsenical content of the ore. E.O. Chisholm's report of May 18th, 1956, on page 2 says that "sulfide content is variable but might average 60% overall" of which arsenopyrite would be 5%.

However the head sample chemical analysis of metallurgical test lots, give the arsenical content (in a report dated August 1956) as follows:

	<u>Sample 1</u>	<u>Sample 2</u>
As %	0.12	0.10

The report MD 3071 by the Dept. of Mines and Technical Surveys shows that metallurgical tests were run on 3 samples. Samples 1 and 2 were drill core rejects and sample No. 3 was a special sample consisting mostly of mineralized graphitic schist. Head sample analyses were in part as follows:

	<u>As %</u>
Sample No. 1	
Sample No. 2	---
Sample No. 3	0.23

Arsenic or arsenopyrite are not mentioned in the section on microscopic examination of two polished sections from sample No. 1. There is no mention in the report of arsenic having a bad effect on the recovery in tests on sample No. 3.

A metallurgist friend of mine tells me that arsenic is objectionable in zinc concentrates. He also says that normal ores have some arsenic which they selectively suppress by high alkalinity. He says that the association of the arsenopyrite with the sphalerite and galena and the grain size of all three would have a bearing on whether the arsenic would cause trouble in the metallurgical processing of the ore.

Wilton

C. K. Wilton
Senior Geologist - Exploration

CKW:dh

No. 2 1964

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

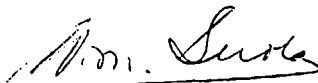
W.S.R.
K.C.G.
T.F.
R.D.S.
E.C.S.
P.M.R.
G.W.M.
H.A.P.
C.K.W.
H.S.
S.P.R.
H.P.L.
J.L.B.
E.C.J.

To W.S. ROW, From W.M. SIROLA,
Subject VANGORDA MINES DIAMOND DRILL HOLES 15 A and 15 B, Date October 30th, 1964.

Paul has just told me over the telephone that he will be away for a few days and he suggested that I send this material to you.

It would be my suggestion that we combine the core from 160 ft. - 247 ft. in holes 15 A and 15 B. This would give us the same core length in each hole. There is a 3.3 ft. section at the top of hole 15 A which is below the cut-off grade of 4%, but when this is combined with the section at the top of hole 15 B the grade would be slightly above the cut-off. This is equally true of the 3.2 ft. section between 243.8 ft. and 247 ft. in hole 15 A. There are no sections in either hole which I feel should be deleted, because any section below 4% combined, which occur in either hole, is too thin to exclude.

Will you please advise me if you concur with this proposal ?



William M. Sirola.

WMS/iv.

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To..... P.M. KAVANAGH. From..... W.M. SIROLA.

Subject..... VANGORDA MINES DIAMOND DRILL HOLES 15 A and 15 B. Date..... October 30th, 1964.

Enclosed are the geological logs, assays and a composite sheet for the above project.

The results of the drilling and sampling may be summarized as follows :

Diamond Drill Hole 15 A:

163.3 ft. - 243.8 ft. 80.5 ft. of 2.84% Pb, and 5.60% Zn.
Combined Pb and Zn 8.44%.

Diamond Drill Hole 15 B:

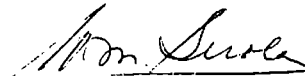
160.0 ft. - 247.0 ft. 87.0 ft. of 3.24% Pb, and 6.32% Zn.
Combined Pb and Zn 9.56%.

As per instructions, we have used one quarter of the total core for assay purposes, and will await word from you or Mr. Row regarding the manner in which holes 15 A and 15 B should be combined for metallurgical purposes.

It is rather interesting to observe that these two holes, which are only $2\frac{1}{2}$ ft. apart, have a difference in grade of more than 1% combined Pb and Zn.

3
The delay in providing this information results from the fact that the Coast Eldridge people are very busy, and, secondly, from the fact that the arsenic content of the Vangorda mineralization necessitates a more involved assay procedure.

As soon as we hear from you, we will arrange to have the core crushed to $\frac{1}{4}$ inch size and will then ship 50 kilograms of this sample to Mitsui and the balance to Noranda.



William M. Sirola.

WMS/iw.
Encls:

VA 22

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

W.S.R.
K.C.G.
E.F.
R.D.S.
B.C.B.
P.M.K. ✓
G.W.M.
H.A.P.
C.K.W.
J.B.S.
G.P.R.
K.F.L.
J.D.
E.C.J.

To W. M. Sirola From P. M. Kavanagh

Subject Arsenault Diamond Drilling Account Dated Oct. 14th, 1964. Date October 27/64

With reference to your memorandum of October 20th, I have okayed payment of the account as received.

Please remember to receive an accounting of the diamonds and bits credit from Arsenault. When the labour bill for the first week of October 7th is received we will not pay that bill until the diamonds and bits credit is resolved.

In some respects, Arsenault has been giving considerable evidence of the small size of his outfit, and at a cost to ourselves.

PMK:dh



Paul M. Kavanagh
Chief Geologist - Exploration

OCT-26 1964

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To P.M. KAVANAGH, From W.M. SIROLA,

Subject ARSENAULT DIAMOND DRILLING ACCOUNT DATED OCTOBER 14th Date October 20th, 1964.
1964.

I have approved this invoice with some reluctance because there were delays on the Vangorda job resulting from lack of bits. I have gone over this matter with Arsenault, and he takes the view that had we had better radio communication there would have been few delays. My own feeling is that the contractor should be adequately equipped for any job which he undertakes. But I find, on checking with the various contractors in Vancouver, that when a company contracts for cost plus work they take on both the assets and the liabilities of the crew assigned to the job.

W.S.R.
K.C.G.
S.C.
R.D.S.
R.C.R.
P.M.M. ✓
G.V.M.
H.A.P.
C.A.V.
R.B.S.
S.M.R.
K.F.E.
A.P.B.

In the case of the Swim Lakes effort, I do not feel that we had sufficient co-operation from Arsenault in this matter. But, again, he is unwilling to assume any of the liability or cost. The moral would appear to be that cost plus work should be avoided whenever it is at all possible, regardless of how small the job might be.

I am not sure, exactly, what the rebate will be on the diamonds and bits which will be returned for credit, but I think it is in the order of \$1,800. - \$2,000.

In fairness to Arsenault, it must be recognized that he does leave a drill at Swim Lakes very much at our disposal, without charging us a regular monthly rental, and without stipulating the amount of drilling he would expect in order to leave the drill over prolonged periods of time.

Please note that the labour for the Vangorda job has been shown to September 30th, whereas the job was actually terminated on October 7th. For some obscure reason this labour charge was not included in the account, despite the fact that the account includes invoices dated October 13th. If you wish, you could wait until these charges come in before paying the invoice, particularly since we do have a considerable rebate forthcoming on the bits.

William M. Sirola.

REFERENCE MEMORANDUM

DATE Sept 21 1964

THE ATTACHED PAPERS ARE REFERRED

TO

P.M.K

BY

WJR

PLEASE REPLY DIRECT

PLEASE HANDLE

PLEASE SEE ME RE THIS

YOUR COMMENTS

FOR YOUR INFORMATION

FOR APPROVAL

PLEASE RETAIN

PLEASE RETURN

Paul - Would it be feasible to take the one section of the core to Vancouver, have it assayed, crushed, riffle out 50 kg for Mitsui + send the rest east for test by Noranda?

WJR

SEP 21 1964

MITSUI AND COMPANY (CANADA) LIMITED

11 ADELAIDE ST. WEST
TORONTO 1, CANADA

TELEPHONE:
EMPIRE 6-0733
CABLE ADDRESS:
"MITSUICO" TORONTO

September 18, 1964.

Our Ref: M-9191

Vangorda Mines Ltd.,
Suite 1600,
44 King St. W.,
TORONTO 1, Ontario.

Attention: Mr. W.S. Row, President.

Gentlemen:

Re: Vangorda Mines - Fresh Samples.

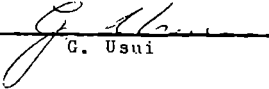
We would like to thank you for preparing a quantity of new fresh core samples for Mitsui Mining & Smelting Co., to represent Vangorda zinc-lead property which you expect to have around middle of October 1964.

We would like to ask you to send 50 kgs. of same (minimum 30 kgs. required) to the following address.-

Mr. S. Shimoda,
c/o Mitsui & Co. Ltd.,
United Kingdom Bldg.,
Room 1101,
409 Granville Street,
VANCOUVER 2, B.C.

Yours very truly,

MITSUI AND COMPANY (CANADA) LTD.


G. Usui

CU/moh

- for Nanyonda file "92"

Milieu want

50 Kg a minimum

30 Kg of new

sample - thru

Nanconver office

~

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

T.S.R.	✓
R.F.S.	✓
F.	
T.S.	
P.M.K.	✓
J.C.	
J.B.S.	
J.P.S.	
J.F.L.	
J.L.B.	
C.C.L.	

To W. M. Sirola From P. M. Kavanagh
Subject NX Drilling Vengorda Mines Property Date August 20/64

Attached is a sketch map concerning the planned NX drilling.

Our hope is that one vertical hole can be drilled at location #2 shown by the red #2 on the attached sketch. That vertical hole, as the sketch indicates, would be expected to encounter 65' of overburden and to intersect a mineralized section between 75' and 195'.

The second alternative is to drill 2 vertical holes at location #1 shown by the red #1 on the attached sketch. Those vertical holes would be expected to encounter 9' of overburden and to intersect a mineralized section between 164' and 246'.

Therefore in the first and preferable alternative there would be a 120' mineralized section, and in the second alternative there would be two 80' mineralized sections obtained.

We are interested in putting only the mineralized sections in lidded core boxes for transportation by truck express from Whitehorse to Edmonton and CNR rail express from Edmonton to our Toronto office. I am instructing Arsenault to have sufficient core trays and plywood lids delivered from Vancouver to Whitehorse. The unmineralized core from the top of the hole or holes can be discarded.

My instructions to Arsenault are that he should first attempt to drill the one hole at location #2 to the bottom of the mineralized section at approximately 200' of depth with the drill presently at the Swim Lakes property. If that proves to be impossible he should then drill the 2 holes at location #1 to the bottom of the mineralized section at approximately 246' of depth.

I have also instructed Arsenault that all of the drilling is to be at the NX size, and that he can't consider the possibility of drilling the bottom parts of the hole or holes at the AX size if the NX drilling proves difficult.

You or Dave should let me know if you have any difficulty - or think there will be any difficulty - in finding the drill locations on the ground from the sketch.

Three copies of this letter and sketch are included so that you can leave one or two with Dave.

Paul M. Kavanagh
Chief Geologist - Exploration

PMK:dh
Encl

MEMO TO: Mr. P. M. Kavanagh

August 13, 1964

FROM: W. S. Row

RE: Drilling at Vangorda for Lab Test Samples

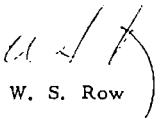
Lyll Ames advises that they would like 400 lbs. of split drill core to devise preliminary flow sheet adequate for capital and operating costs estimates. In addition to that, I want to have some core to make available to the Japanese or others so that they can corroborate our test results. Therefore, it would seem that we should have either of the following:

- (a) One drill hole to about 200' at Location No. 2, where the overburden depth is indicated to be about 65'.
- (b) Two holes to about 250' at Location No. 1 where overburden depth is indicated to be about 9'.

The locations are those suggested by Clarence Wilton.

I would like to get this drilling done as early as possible this year and the economics governing the choice of Location No. 1 or Location No. 2 will probably be controlled by transportation costs of drilling equipment, and whether or not the present drill now at Swim Lake can be used, or if another would have to be brought in.

WSR:JB
Encl.


W. S. Row

MEMO TO: Mr. P. M. Kavanagh August 13, 1964

FROM: W. S. Row

RE: Drilling at Vangorda for Lab Test Samples ✓ ✓

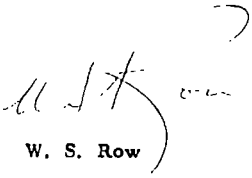
Lyall Ames advises that they would like 400 lbs. of split drill core to devise preliminary flow sheet adequate for capital and operating costs estimates. In addition to that, I want to have some core to make available to the Japanese or others so that they can corroborate our test results. Therefore, it would seem that we should have either of the following: ✓

- (a) One drill hole to about 200' at Location No. 2, where the overburden depth is indicated to be about 65'.
- (b) Two holes to about 250' at Location No. 1 where overburden depth is indicated to be about 9'.

The locations are those suggested by Clarence Wilton.

I would like to get this drilling done as early as possible this year and the economics governing the choice of Location No. 1 or Location No. 2 will probably be controlled by transportation costs of drilling equipment, and whether or not the present drill now at Swim Lake can be used, or if another would have to be brought in.

WSR:JB
Encl.


W. S. Row

GENERAL ENGINEERING COMPANY LIMITED
MEMORANDUM

Vangorda
16

To: E. Futterer
R. M. P. Hamilton

Date: June 18, 1964.

From: H. H. Merritt

Subject: VANGORDA MINES ORE SAMPLES - Determination of Specific Gravity

Two samples of diamond drill cores which appeared to be typical of this ore as described in the diamond drill logs were taken to the University of Toronto for determination of specific gravity.

The determinations were supervised by Dr. Pidgeon, and B. Vincienne, and carried out by Peter Strangway of the Department of Metallurgy.

Results were as follows:-

Specific Gravity Determination:

Sample #1

$\frac{1}{2}$ cylinder of drill core approximately
 $2\frac{1}{4}$ " diameter x $2\frac{1}{2}$ " long

Weight Dry	303.3 gm.
Weight in Water	<u>232.4 gm.</u>
Difference	70.9 gm.

Specific Gravity - $303.3/70.9 = 4.28$

Sample #2

$\frac{1}{2}$ cylinder of drill core approximately
 $1\frac{1}{2}$ " diameter x $1\frac{1}{4}$ " long

Weight Dry	64.30 gm.
Weight in Water	<u>49.76 gm.</u>
Difference	14.54 gm.

Specific Gravity - $64.30/14.54 = 4.42$

H. H. Merritt

HHM:lp

H. H. Merritt

September 24, 1963.

<input checked="" type="checkbox"/>	W.S.R.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	K.C.G.	
<input type="checkbox"/>	G.H.M.	
<input type="checkbox"/>	R.D.S.	
<input type="checkbox"/>	R.C.D.	
<input checked="" type="checkbox"/>	P.M.K.	<input checked="" type="checkbox"/>
<input type="checkbox"/>	C.V.P.	
<input type="checkbox"/>	E.O.C.	<input checked="" type="checkbox"/>
<input type="checkbox"/>	H.A.P.	
<input type="checkbox"/>	J.P.S.	
<input type="checkbox"/>	G.P.R.	
<input type="checkbox"/>	E.L.D.	
<input type="checkbox"/>	J.E.	
<input type="checkbox"/>	G.E.I.	
<input type="checkbox"/>	D.V.B.	

Mr. James Dodge,
1101 United Kingdom Building,
409 Granville Street,
Vancouver 2, British Columbia.

Dear Mr. Dodge:

As requested by Mr. Nishiwaki last week we are shipping express collect an additional 30 pounds of representative sample material from the same lot, (No.1), shipped to you on or about September 6th.

There is not sufficient sample left to make up a 50 pound sample as requested.

Yours very truly,

E. O. Chisholm
Chief Geologist.

EOC:dh

✓	W.S.R.	✓
✓	R.C.G.	✓
	G.H.M.	
	R.H.S.	
	H.C.R.	
✓	P.H.R.	✓
	C.H.R.	
	E.C.C.	✓
	H.A.P.	
	H.P.R.	
	G.P.R.	
	E.C.D.	
	L.D.	
	H.V.S.	

September 24, 1963.

Mr. W. Hryniewich,
Noranda Mines Limited,
Noranda, Quebec.

Dear Mr. Hryniewich:

Regarding the Vangorda Mines samples stored with you would you kindly ship half the remainder of No. 1 sample to: Mr. J. Dodge, Mitsui Mining & Smelting Company, 1101 U.K. Building, 409 Granville Street, Vancouver 2, British Columbia, express collect. We previously shipped them, on or about September 6th, approximately 50 pounds of the same sample.

If my records are correct this should leave about 28 pounds of this sample on hand for future tests. Please advise if this is correct.

Yours very truly,

E. O. Chisholm
Chief Geologist.

EOC:dh

CCT 5/63

FROM: C.C.S.

AUGUST 11

*HRYNIEWICH'S ABSENCE NORMAN
SHIPPING 25 LBS OF #1 TODAY
TO DODGE LEAVING 25 LBS ON
HAND FOR FUTURE TESTS*

EOC:CHISHOLM

MEMO TO: Mr. E. O. Chisholm

September 23, 1963

FROM: W. S. Row

RE: Vangorda

I had a visit last week with Mr. C. Nishiwaki of Mitsui Mining & Smelting along with a Mr. M. Morii. Mr. Nishiwaki asks that we send to Mr. Dodge another 50 pounds of the representative ore sample. Will you please arrange to have this done. He also has requested, and I have agreed, that either he or his representative may visit our offices to gain still further information regarding the Vangorda deposit.

In the meantime, they are going to do concentrating tests and subsequently some smelting tests by the Imperial Smelting process on the concentrate. As soon as Noranda labs can do it, I intend to have tests done towards the production of a single zinc-lead-copper concentrate, which is the type of concentrate which would be required for the Imperial Smelting process.



W. S. Row

WSR:JB

SEP 10 1963

22

1

INTER-OFFICE CORRESPONDENCE

<input checked="" type="checkbox"/>	W.S.R.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	K.C.G.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	G.H.M.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	R.D.S.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	B.C.R.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	C.M.K.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	T.O.C.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	H.A.P.	<input checked="" type="checkbox"/>
<input type="checkbox"/>	G.P.R.	<input type="checkbox"/>
<input type="checkbox"/>	E.L.D.	<input type="checkbox"/>
<input type="checkbox"/>	J.L.B.	<input type="checkbox"/>
<input type="checkbox"/>	E.C.J.	<input type="checkbox"/>
<input type="checkbox"/>	D.V.G.	<input type="checkbox"/>

FROM G Matheson
E.O. Ohisholm

DATE 9 Sept 1963
SUBJECT Vangorda Mines Ltd Samples
Bulk Samples no 1-5

MESSAGE

(TO BE COMPLETED IN TRIPPLICATE)

Dear Ted:

50 pounds of bulk sample no 1 were expressed on the 6 Sept 1963 from Noranda Qubec to Mitsubishi Mining Co Ltd in Vancouver as per the copy of attached letter to Dr Saigusa.

There is still on hand in storage in Noranda 114 pounds of sample no 1. It has been rebagged and freshly tagged. There was a small amount used of the original sample no 2, and none from samples 3,4, and 5.

These samples can be obtained or disposed of according to instructions by contacting W Hyrnewich of the Noranda Mines in Noranda,

G Matheson
G Matheson

E.O.C. All remaining samples should be held in storage as at present.
WSR

INSTRUCTIONS FOR USE OF THIS FORM

Form to be completed in triplicate by originator. Two copies - No. 1 and No. 2 - to be forwarded to addressee. Copy No. 3 to be retained in originator's file until reply received. Addressee to complete reply in duplicate on reverse side of sheets 1 and 2 and return No. 1 to originator. In following this procedure both parties have the complete message and reply on one sheet of paper.

INTER-OFFICE CORRESPONDENCE

FROM G. Matheson

DATE 9 Sept 1963

E.O. Ohlholm

SUBJECT Vangorda Mines Ltd Samples
bulk Samples no's 1-5

MESSAGE

(TO BE COMPLETED IN TRIPLICATE)

Dear Ted:

50 pounds of bulk sample no 1 were expressed on the 8 Sept 1963 from Noranda Quebec to Mitsubishi Mining Co Ltd in Vancouver as per the copy of attached letter to Dr Saigusa.

There is still on hand in storage in Noranda 114 pounds of sample no 1. It has been rebagged and freshly tagged. There was a small amount used of the original sample no 2, and none from samples 3, 4, and 5.

These samples can be obtained or disposed of according to instructions by contacting W Hyrnewich of the Noranda Mines in Noranda,



G Matheson

6 Sept 1963
Box 218
Bourlamaque
P.Q.

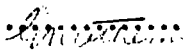
Dr Moritsuna Saigusa
Mitsubishi Metal Mining Co Ltd
Room 302
717 West Pender St
Vancouver B.C.

Dear Sir:

As requested by Mr E.O.Chisholm, Chief Geologist, Prospectors Airways Co Ltd of Suite 1600 , 44 King St West of Toronto Ont, we have forwarded by express collect one bag containing 50 pounds of bulk sample no 1 ,representative of all the core received,from the Vangorda Mines Ltd property in the Pelly River Area, Yukon.

Yours Sincerely

Prospectors Airways Co Ltd

Per...
G Matheson

Copy to

// E.O.Chisholm
P.A.C. LTD
Suite 1600
44 King St W
Toronto

PROSPECTORS AIRWAYS COMPANY, LIMITED
SUITE 1616, 44 KING STREET WEST
TORONTO 1, ONTARIO

Vancouver Good

COPY

VA
22

A	N
W.S.R.	<input checked="" type="checkbox"/>
G.A.C.	
G.H.M.	
E.O.C.	<input checked="" type="checkbox"/>
H.A.P.	
R.D.S.	
B.C.B.	
E.L.D.	
J.I.D.	
E.C.J.	

8 February 1960

Mr. F.H.W. Brooks, Manager
Bell-White Analytical Laboratories Ltd.
Haileybury, Ontario

Dear Sir:

Further to our correspondence with reference to the 49 boxes of crushed rejects submitted between June 1953 and February 1957, will you kindly arrange to send them to the address shown below for future storage.

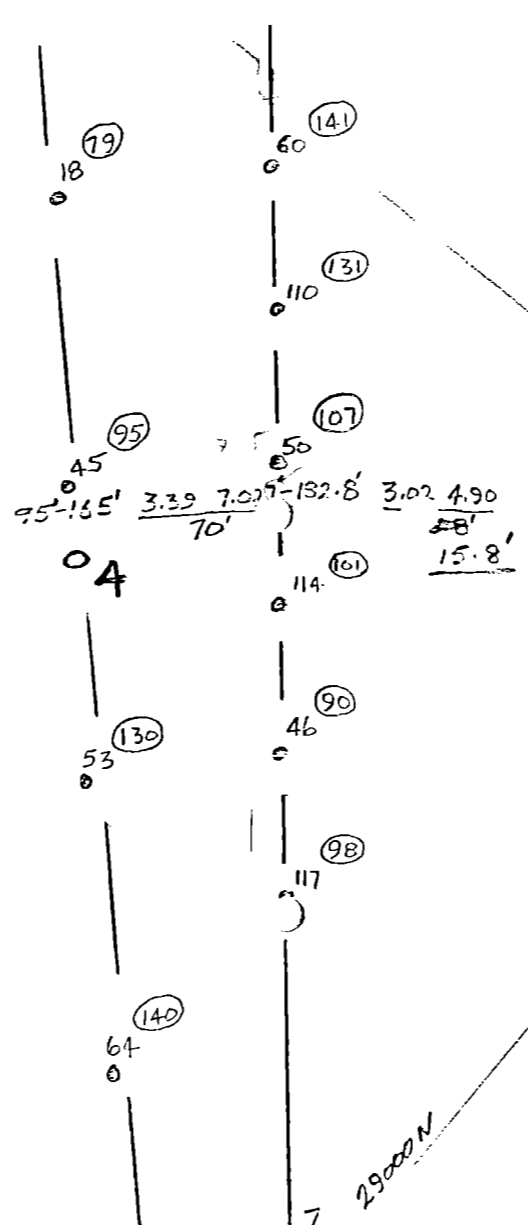
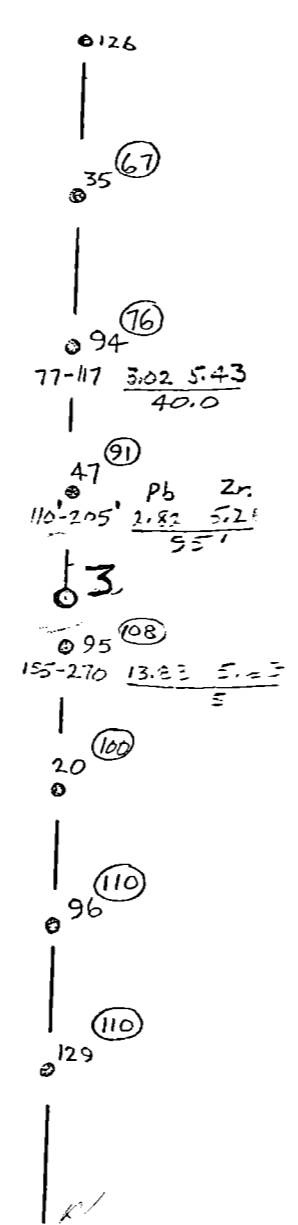
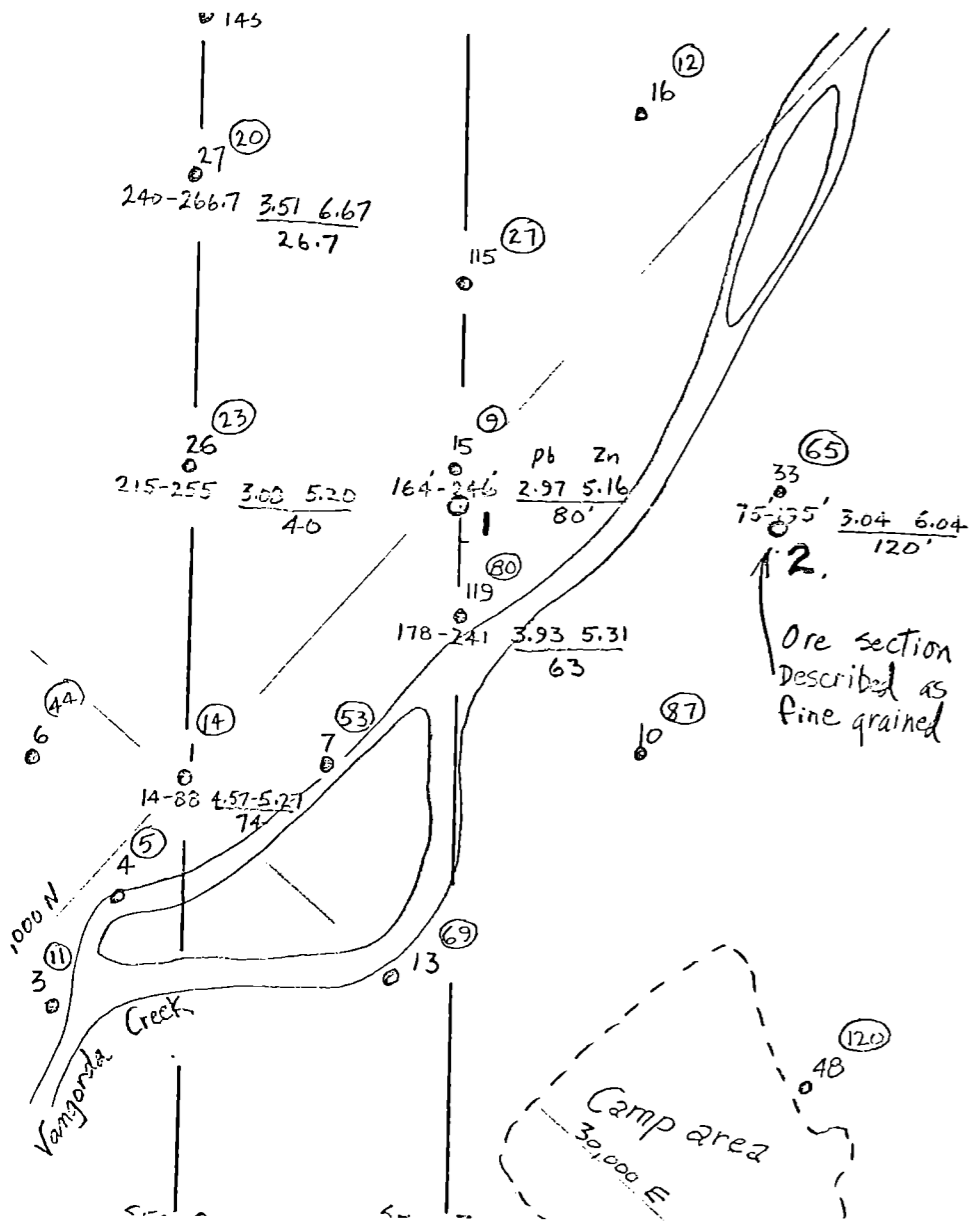
Noranda Mines Limited
Noranda, Quebec

Attention: Mr. H.L. Ames
Concentrator Super.

Yours very truly

EGJ-dp

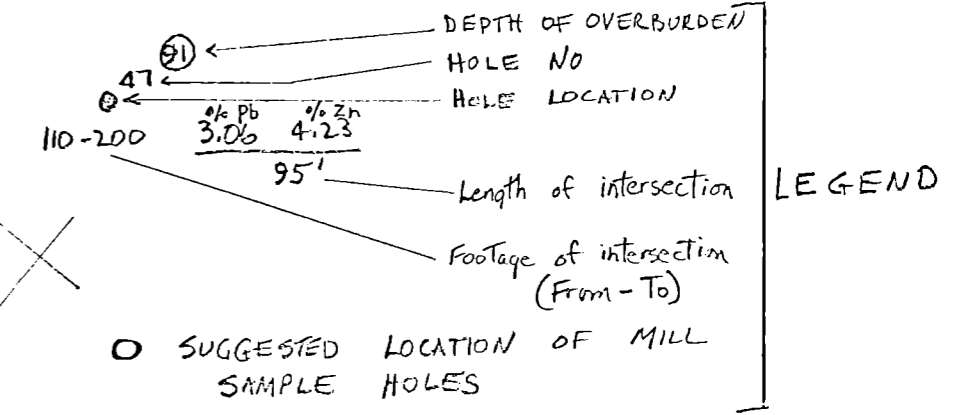
E.C. Jaoka



NOTES

ORE RESERVES 9,400,000 TONS { 3.16% Pb, 4.96% Zn, 0.27% Cu, 1.76 oz. Ag, 0.02 oz Au

NX CORE DIAMETER 2 1/8"
 ASSUMING 8.9 CU FT./TON AND 3.6 SPEC. GR,
 1 FT. OF CORE WEIGHS 5.56 lbs.



VANGORDA MINES LTD

DD HOLE PLAN

showing

SUGGESTED MILL SAMPLE HOLES

NUMBERED IN ORDER OF PREFERENCE

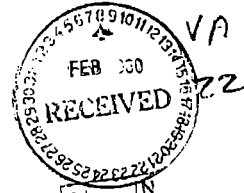
SCALE 1" = 100'

AUG. 4/64

CKW

NORANDA MINES, LIMITED
NORANDA, QUEBEC

February 5, 1960.



Mr. E. O. Chisholm
Prospector's Airways Co. Ltd.,
Suite 1614, 44 King Street, West,
TORONTO 1, Ontario.

Dear Sir:

We have arranged to store the Vangorda Mines' core
rejects which have been under discussion for some
time by you and Dr. Price.

Please send them to my attention Noranda Mines Ltd.,
Noranda, P. Q.

Yours very truly,

H. L. Ames,
Concentrator Superintendent.

HIA:sg

Dr. Peter Price.

INTER-OFFICE CORRESPONDENCE

~~303~~
VA
72

FROM: Mr. E.O. Chisholm

26 January 1960

Dr. S. Price

SUBJECT

MESSAGE

(TO BE COMPLETED IN TRIPLICATE)

The storage of the Vangorda rejects is still unresolved. Could you please forward this correspondence to the Noranda analytical branch and advise where we might keep these samples.

A	N
	W.S.R. ✓
	G.A.C.
	G.H.M.
	E.O.C.
	H.A.P.
	R.D.S.
	B.C.B.
	E.L.D.
	J.I.B.
	E.C.J.

EOC-dp
Encl.

E.O. Chisholm

PENDING

PROSPECTORS AIRWAYS COMPANY, LIMITED
SUITE 1616, 44 KING STREET WEST
TORONTO ONTARIO

2/5
VA
ZZ

A	N
	✓
	W.S.R.
	R.J.B.
✓	E.O.C.
	H.A.P.
	R.D.S.
	B.C.B.
	G.P.R.
	E.L.O.
	J.N.
	E.C.J.

7 May 1959

C
O
P
Y

Bell-White Analytical Laboratories Ltd.
Halleybury, Ontario

Attention: Mr. F.H.W. Brooks
Manager

Dear Sir:

Further to your letter of May 1st dealing with our sample rejects, will you kindly note that we are now making arrangements for these to be put into alternative storage.

As soon as possible we will inform you as and where to ship them direct from your laboratories.

This matter is now receiving our immediate attention.

Yours very truly

ECJ-da

E.C. Jacka

P. J. J.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

ASSAYERS AND ANALYTICAL CHEMISTS
MEMBER - ASSOCIATION OF CANADIAN TESTING LABORATORIES
HAILEYBURY, ONTARIO

~~23~~
VA
22

May 4, 1959.

RECEIVED
MAY 11 1959

Prospectors Airways Company Ltd.,
1616-44 King St. W.,
Toronto 1, Ont.

Attention; Mr. E. C. Jacka

Dear Sir,

Thank you for your letter of May 1st.

The information that you requested is listed below:

2 boxes	0.27 cu. ft.
16 "	0.60 "
13 "	0.78 "
10 "	1.25 "
6 "	1.96 "
2 "	3.96 "

The estimated weight is 3800 pounds.

Thank you for your co-operation.

Yours very truly,

BELL-WHITE ANALYTICAL LABORATORIES LTD.

F. H. W. Brooks

F. H. W. Brooks,
Manager.

FHWB/gg

A	N
W.S.R.	
G.A.C.	
E.O.C.	
H.A.P.	
R.D.S.	
B.C.B.	
G.P.R.	
E.L.D.	
J.I.B.	
E.C.J.	

PROSPECTORS AIRWAYS COMPANY, LIMITED
SUITE 1616, 44 KING STREET WEST
TORONTO 1, ONTARIO

Pending?

223
ed

VN
22

May 1st, 1959.

Bell-White Analytical Laboratories Ltd.,
Haileybury, Ontario.

Attention: Mr. F.H.W. Brooks, Manager.

Dear Sirs:

We are in receipt of your letter, together with the schedule of fees, and wish to thank you for same.

With reference to the forty-nine boxes of crushed sample rejects, if you will furnish us with the following we will give you further instructions with reference to the future disposition of same.

1. The size of the boxes.
2. The approximate total weight of the rejects

Upon receipt of your reply this matter will receive our immediate attention.

Yours very truly,

PROSPECTORS AIRWAYS COMPANY LIMITED

ECJ:sss

E.C. Jacka



C
O
P
Y

BELL-WHITE ANALYTICAL LABORATORIES LTD.

ASSAYERS AND ANALYTICAL CHEMISTS
MEMBER-ASSOCIATION OF CANADIAN TESTING LABORATORIES
HAILEYBURY, ONTARIO

April 30, 1959.

Prospectors' Airways Ltd.,
1616-44 King St. W.,
Toronto, Ont.

Attention: Chief Geologist

Dear Sir:

We are holding forty-nine (49) boxes of crushed rejects submitted between June, 1953 and February, 1957. If further work on these is not warranted, could they be disposed of.

We would like to take this opportunity to announce an added service, which we wish to extend to all our customers.

This laboratory can provide one day service for Gold, Silver and base metals, under normal conditions; and in addition we will be happy to forward canvass sample bags, duplicate tag sample books and shipping tags to your exploration supervisor.

We are enclosing our schedule of fees and will be glad to be of service to you as in the past.

Yours very truly,

BELL-WHITE ANALYTICAL LABORATORIES LTD.



F. H. W. Brooks,
Manager.

FHWR/gg
Encl.

A	N
	W.S.R.
	G.A.C.
	E.O.C.
	H.A.P.
	R.D.S.
	B.C.B.
	G.P.R.
	E.L.D.
	J.I.B.
	E.C.J.



DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

LATITUDE _____

BEARING OF HOLE _____

STARTED _____

DEPARTURE _____

DIP OF HOLE _____

COMPLETED _____

ELEVATION _____

DIP TESTS _____

DEPTH _____

D.D.H. No. _____ 10A PAGE _____

CLAIM No. _____

DIRECTION AND DISTANCE FROM _____

NE. CLAIM POST _____

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY						
FROM	TO			FROM	TO								
278.0	281.5	Sericite schist with quartz masses; occasional mass pyrrhotite, pyrite.											
281.5	293.0	MASSIVE SULPHIDES in quartzose rock. Pyrite predominates. Visible galena, sphalerite.		281.5	340.0	58.5							
293.0	301.0	AS ABOVE, increase quartz to about 40% galena, sphalerite. (Recovery 7.5%)											
301.0	312.6	SPONGY PYRITE as 302', 307.6'. Decrease quartz.											
312.6	327.0	AS ABOVE decrease sulphides, 15-20% combined galena, sphalerite.											
327.0	328.0	ROCK AS ABOVE increase quartz. (Good recovery)											
328.0	340.0	MASSIVE SULPHIDES											
340.0	349.0	DARK GREEN SERICITE SCHIST. Little mineralization.											
349.0	358.0	MIXED QUARTZ and sericite schist. Schistosity distorted.											

END OF HOLE

DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

LATITUDE _____

BEARING OF HOLE _____

STARTED _____

DEPARTURE _____

DIP OF HOLE _____

COMPLETED _____

ELEVATION _____

DIP TESTS _____

DEPTH _____

D.D.H. No. 26A

PAGE 7

CLAIM No. _____

DIRECTION AND DISTANCE FROM _____

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY		
FROM	TO			FROM	TO				
136.5	142.5	ROCK AS ABOVE. Increase graphitic, pyrrhotite. Scattered chalcopyrite, galena with a little sphalerite.							
142.5	162.5	QUARTZOSE GRAPHITIC SCHIST: (Quartz approx. 20 - 30%) Whips and thin bands of sphalerite and galena associated with quartz. Both brassy and white pyrite (Marcasite?)							
162.5	169.0	AS ABOVE. Increase sphalerite and galena. (10% combined)							
169.0	171.0	QUARTZOSE GRAPHITIC SCHIST: Schistosity shows "horsetail" structures. Sphalerite and galena approx. 10 - 12% combined.							
171.0	179.0	QUARTZOSE GRAPHITIC SCHIST: Decrease in sulphides.							
179.0	181.5	FOLDED QUARTZOSE GRAPHITIC SCHIST: Quartz 30 - 25% (recovery 1.6'). Approximately 7% amber sphalerite; 15 - 20% pyrite. Graphitic bands crenulated - fold with axis at 80° to core axis at 180.6'							
181.5	183.0	ROCK AS ABOVE to 182.6, then massive pyrite with sphalerite and galena. Contact with schist 60° ± to core axis. (recovery 1.5')			182.0	188.5	6.5		
183.0	188.5	MASSIVE PYRITE with galena and sphalerite; occasional chalcopyrite. Last 6" massive pyrrhotite. (Recovery 5.5')			182.4	188.5			

DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

 D.D.H. No. 76A PAGE 3

LATITUDE _____ BEARING OF HOLE _____ STARTED _____

DEPARTURE _____ DIP OF HOLE _____ COMPLETED _____

ELEVATION _____ DIP TESTS _____ DEPTH _____



CLAIM No. _____

DIRECTION AND DISTANCE FROM _____

NE. CLAIM POST _____

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY	
FROM	TO			FROM	TO			
188.5	201.5	Dark GRAPHITIC SCHIST; some interbanded quartz						
201.5	215.0	Dark green SERPENTINE SCHIST in part chloritic near 208'. Quartz 20 - 30% variable Scattered interbanded layers sulphides mainly pyrite. Quartz 212 - 212.8' Schist "gouge-like" at 212.8' - possible fault.						
215.0	216.0	QUARTZ: Contact with massive sulphides at 216' in about 40° to core axis.						
216.0	222.0	QUARTZOSE ROCK: with 60 sulphides: pyrite, pyrrhotite, galena, sphalerite.						
222.0	232.0	AS ABOVE. Increase quartz, carbonate. Scattered chalcopite		216.0	257.5	41.5		
232.0	238.0	Increase carbonate, decrease quartz.						
238.0	252.0	BANDED SULPHIDES. Scattered patches carbonate. Quartz 20 - 30%						
252.0	257.5	AS ABOVE: Pocket of galena at 256.8'						

DIAMOND DRILL RECORD

LOGGED BY John C. Lund

MAR 16 1970

PROPERTY Vanguard

D.D.H. No. 47A PAGE 1

LATITUDE 29.616N BEARING OF HOLE _____ STARTED Feb. 26/70

CLAIM No. _____

DEPARTURE 30.56E DIP OF HOLE -90° COMPLETED 2.6.23.70



DIRECTION AND DISTANCE FROM

ELEVATION 4,069.0 DIP TESTS _____ DEPTH 315'

NE. CLAIM POST

FODTAGE		DESCRIPTION	SAMPLE No.	FODTAGE		SAMPLE LENGTH	ASSAY	
FROM	TO			FROM	TO			
0	93.0	CASING: QVCARBURDEN						
93.0	112.0	Granulated GRAPHITIC SCHIST interbanded with quartz. Scattered sparse brown sphalerite. 2 - 5% pyrite partly oxidized.						
112.0	113.5	GRAPHITIC SCHIST: Slight increase in sphalerite (Recovery 1.5')		112.0	1207.0	95.0'		
113.5	115.5	GRAPHITIC SCHIST with quartz. Noticeable increase in sphalerite: visible galena. (Recovery 1.5')						
115.5	116.6	Broken GRAPHITIC SCHIST and quartz with sphalerite, galena, pyrite (Recov. 10")						
116.6	118.0	AS ABOVE. Recovery good.						
118.0	126.0	ROCK AS ABOVE. increase sphalerite, galena. less folding.						
126.0	127.0	AS ABOVE						
127.0	128.5	MASSIVE PYRITE. Scattered sparse sphalerite (Recovery 2')						

DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

D.D.H. No. _____

PAGE 2

LATITUDE _____

BEARING OF HOLE _____

STARTED _____

DEPARTURE _____

DIP OF HOLE _____

COMPLETED _____

ELEVATION _____

DIP TESTS _____

DEPTH _____



CLAIM No. _____

DIRECTION AND DISTANCE FROM

NE. CLAIM POST

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY	
FROM	TO			FROM	TO			
129.5	134.5	QUARTZ interbedded with sericite schist. gouge-like at 133' (possible fault). Sparse sulphides. (Recovery 2')						
134.5	135.0	3" MASSIVE PYRITIC in sericite schist.						
135.0	154.0	MASSIVE PYRITIC in quartzose rock banded with heavy sphalerite and galena mineralization. (Recovery 15.5') 6" crushed sericite at 139'.						
156.0	157.0	ROCK AS ABOVE increase sphalerite and galena (2.5' recovery)						
157.0	161.5	AS ABOVE (recovery 100%)						
163.5	172.0	INCREASE QUARTZ ROCK as above. (Recovery 8.5') Decrease sphalerite & galena.						
172.0	178.0	MASSIVE SULPHIDES as above heavily mineralized with galena & sphalerite. (Rec. 100%)						
178.0	181.0	QUARTZ-SERICITE SCHIST intricately folded and "mixed".						
181.0	188.5	MASSIVE BANNED SULPHIDES in quartzose rock. Galena & sphalerite in pyritic rock. 8" sericite and quartz 184.5' (Recovery 100%)						

DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

LATITUDE _____

BEARING OF HOLE _____

STARTED _____

DEPARTURE _____

DIP OF HOLE _____

COMPLETED _____

ELEVATION _____

DIP TESTS _____

DEPTH _____



D.D.H. No. 478 PAGE 4

CLAIM No. _____

DIRECTION AND DISTANCE FROM

NE. CLAIM POST

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY						
FROM	TO			FROM	TO								
246.0	256.0	MASSIVE PYRITE											
256.0	261.0	AS ABOVE, packets of galena and sphalerite.											
261.0	271.0	MASSIVE PYRITE in quartzose rock.											
271.0	280.5	INCREASE QUARTZ, considerable coarse sphalerite. (Recovery 9')			277.0	297.0	20.0						
280.5	290.5	Pyritic rock as above, increase sphalerite, visible galena, scattered chalcopyrite and pyrrhotite. These latter minerals tend to crosscut the pyrite, sphalerite and galena. Increase quartz and sericite schist remnants at 284'. Recovery 9.5'											
290.5	295.0	AS ABOVE, quartz variable											
295.0	298.0	AS ABOVE, fair amount of sphalerite.											
298.0	300.0	DECREASE SPHALERITE, galena, Rock Massive pyrite.											
300.0	315.0	SERICITE SCHIST. END OF HOLE.											

Recovery in ore sections = 84%

DIAMOND DRILL RECORD

LOGGED BY John C. Lund

MAK 16 1970

PROPERTY Vanorden

D.D.H. No. 52A PAGE 1

LATITUDE 29,07E.5W BEARING OF HOLE _____ STARTED Feb. 28/70

CLAIM No. _____

DEPARTURE 31,06E.5E DIP OF HOLE -90° COMPLETED March 1/70

DIRECTION AND DISTANCE FROM

ELEVATION 4,107.42 DIP TESTS _____ DEPTH 175 feet

NE. CLAIM POST



FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY		
FROM	TO			FROM	TO				
0	70.0	OVERBURDEN: Casing							
70.0	83.0	BLACK MINERALIZED SLUDGE: Narrow band sericite schist sludge between 80' - 83'. 6" mineralized rubble recovered between 80' and 85'.							
83.0	85.0	MINERALIZED RUBBLE: with some sericite schist.							
85.0	108.0	SERICITE SCHIST: Dark grey							
108.0	118.0	MASSIVE PYRITE in quartzose rock heavily mineralized with bands of reddish-brown sphalerite and galena. (Quartz approx. 40%) Recovery 108 - 111' = 3' 111 - 112.6 = 1.4' 112.6 - 115 = 2.5' Total Recovery 108 - 116 = 8.9' 115 - 118 = 2'		108.0	159.0	51.0			
118.0	121.0	QUARTZOSE ROCK as above with massive pyrite, galena and sphalerite to 120'. Last foot decrease quartz, very porous rock. (Recovery 2.5')							
121.0	125.5	A- above (Recovery 31)							
125.5	132.0	CRUMBLY POROUS PYRITE visible galena and sphalerite scattered yellowish-white Pb carbonate (?) (Recovery 2')							

DIAMOND DRILL RECORD

LOGGED BY John C. Lund

MAR 23 1970

D.D.H. No. 75A PAGE 1

PROPERTY Verigarde

LATITUDE 28.611.28 BEARING OF HOLE _____ STARTED March 2/70

DEPARTURE 31,458.96 DIP OF HOLE -90° COMPLETED March 3/70

ELEVATION 4,069.76 DIP TESTS _____ DEPTH 83'



CLAIM No. _____

DIRECTION AND DISTANCE FROM

NE. CLAIM POST

LHS
P.M.K.

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY	G.W.H.
FROM	TO			FROM	TO			
0	12.0	OVERBURDEN; CASING						K.C.S. K.C.B. L.D.B. K.D.R. K.H.I.
17.0	40.6	8" MIXED RUBBLE; some mineralization 38' - 39' Black mineralized sludge. Pyrite, galena.						(K.C.I.)
40.6	43.6	DARK POROUS MUCK, heavily mineralized with galena. 7" core						
43.6	48.0	ROCK AS ABOVE, increase pyrite, less 3", recovery 1-foot						
48.0	48.6	MINERALIZED RUBBLE AS ABOVE, decrease pyrite, recovery 6"						
48.6	49.0	MASSIVE SULPHIDES, high percentage galena, recovery 6"						
49.0	51.0	AS ABOVE, but more porous. Recovery 6"						
51.0	54.0	MASSIVE PYRITE; 1" of galena and sphalerite at 53', recovery 1-foot						
54.0	55.0	AS ABOVE. Scattered sparse galena, sphalerite. Recovery 1-foot.						

DIAMOND DRILL RECORD

LOGGED BY _____

PROPERTY _____

LATITUDE _____

BEARING OF HOLE _____

STARTED _____

DEPARTURE _____

DIP OF HOLE _____

COMPLETED _____

ELEVATION _____

DIP TESTS _____

DEPTH _____



D.D.H. No. 75a PAGE 2

CLAIM No. _____

DIRECTION AND DISTANCE FROM

NE. CLAIM POST

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY	
FROM	TO			FROM	TO			
55.0	56.6	AS ABOVE, increase galena, Recovery 10"						
56.6	57.6	BANDED QUARTZOSE ROCK. 40 - 60% pyrite, scattered galena, recovery 9"						
57.6	62.5	MASSIVE PYRITE IN QUARTZOSE ROCK with occasional patches galena & sphalerite. Recovery 2"						
62.5	63.5	AS ABOVE, recovery 6"						
63.5	65.0	1-foot MASSIVE PYRITE, no visible galena, sphalerite.						
65.0	68.0	QUARTZOSE ROCK with massive pyrite heavily mineralized with galena & sphalerite. Recovery 2"						
68.0	83.0	MASSIVE PYRITE. Little galena and sphalerite, recovery 10"						
		END OF HOLE						
		Stopped hole because of caving at 72'. Attempted to ream casing to 74' but casing wandered sharply and could not be corrected without cementing.						
		Recovery in ore zones = 46.6%						

DIAMOND DRILL RECORD

LOGGED BY John C. Lund

MAR 23 1970

PROPERTY Yanagorda

D.D.H. No. E1A PAGE 3

LATITUDE 28,303N BEARING OF HOLE _____ STARTED March 3/70

CLAIM No. _____

DEPARTURE 31,723.5E DIP OF HOLE -90° COMPLETED March 4/70



DIRECTION AND DISTANCE FROM

ELEVATION 4,085.10 DIP TESTS _____ DEPTH 33'

NE. CLAIM POST

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY			P.N. V. G.M.H.
FROM	TO			FROM	TO					
0	18.0	OVERBURDEN: CASING								805 2.8
18.0	24.0	QUARTZ SERICITE SCHIST with 30 - 50% pyrite. Rock is very rusted. Recovery 3 feet of broken core.								806 1.8
24.0	27.6	AS ABOVE. Scattered galena. Recovery 2.5'								807 2.2
27.6	33.0	AS ABOVE. Densest pyrite. Recovery 5'								808 1.5
33.0	35.0	SERICITE SCHIST. 6" core recovered.								
35.0	38.0	Lost core. 1 1/2" quartz recovered.								
38.0	38.5	SERICITE SCHIST, rusted, no sulphides, 4" core recovered.								
38.5	41.0	Mainly BARREN QUARTZ. Massive sulphides at 41'; fair amount of galena, Recovery 1.5'								
41.0	43.5	HEAVILY MINERALIZED BUBBLE. Recovery about 8"								

IMS
P.N. V.
G.M.H.
805
2.8
806
1.8
807
2.2
808
1.5
809
1.5



CV 2



FILE NO. A.3-R.1-64 14535

October 30, 1964

Ferr /ddison Mines Ltd.

402 - 1112 West Pender Street

Vancouver, B. C.

Copy: Toronto Office

Certificate of Assay COAST ELDRIDGE

ENGINEERS & CHEMISTS LTD.

125 EAST 4TH AVE. VANCOUVER 10, CANADA

Drill Core

We Herby Certify that the following are the results of assays made by us upon submitted _____ samples

	GOLD		SILVER		Lead (Pb)		Zinc (Zn)		
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT	PER CENT.	PER CENT.	PER CENT.	PER CENT.	
114 ED					0.54		1.20		
115					3.80		6.75		
116					1.07		2.87		
117					2.04		5.80		
118					6.12		7.11		
119					4.95		7.95		
120					2.24		6.99		
121					1.22		1.87		
122					2.45		3.88		
123					1.12		1.34		
124					2.37		7.66		
125					3.19		6.87		
126					2.09		4.50		
127					2.91		6.61		
128					2.30		6.99		

*Re. Vancouver Mines
Drill Core Samples*

✓
✓
G. K. S.
115
E.C.C.

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

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

H. Shays

Provincial Assayer



Kerr Addison Mines Ltd.

402 - 1112 West Pender Street

Vancouver, B. C.

Copy: Toronto Office

Certificate of Assay

COAST ELDRIDGE

ENGINEERS & CHEMISTS LTD.

125 EAST 4TH AVE. VANCOUVER 10, CANADA

A.3-R.1-64 14535

October 30, 1964

We Heresby Certify that the following are the results of assays made by us upon submitted Drill Core samples

	GOLD		SILVER	Lead (Pb)		Zinc (Zn)			
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.
129		\$			3.03		7.16		
130					3.37		7.38		
131					3.62		2.97		
132					2.55		3.21		
133					0.82		2.18		
134					0.46		2.49		
135					2.68		6.97		
136					2.70		3.83		
137					1.99		6.08		
38					3.54		7.38		
139					3.70		8.43		
140					3.44		7.76		
141					2.75		5.75		
142					2.14		1.82		
143					2.02		3.45		

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

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

H. Shayer Pro

To:

Kerr Addison Mines Ltd.

402 - 1112 West Pender Street

Vancouver, B. C.

Copy: Toronto Office



Certificate of Assay
COAST ELDRIDGE
 ENGINEERS & CHEMISTS LTD.
 125 EAST 4TH AVE. VANCOUVER 10, CANADA



FILE NO. A.3-K.1-64 14535

October 30, 1964

We Hereby Certify that the following are the results of assays made by us upon submitted **Drill Core** samples

	GOLD		SILVER	PER CENT.	Lead (Pb)	PER CENT.	Zinc (Zn)	PER CENT.	PER CENT.
	OUNCES PER TON	VALUE PER TON			OUNCES PER TON		PER CENT.		
144 DD		\$			1.58		5.27		
145					3.39		9.34		
146					3.95		7.21		
147					8.72		9.05		
148					3.52		10.20		
149					3.24		7.93		
150					1.33		6.97		
151					2.37		7.59		
152					4.00		4.84		
3					3.06		2.59		

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

Note. Rejects retained one week.
 Pulps retained one month.
 Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

H. CharlesProvin.

DIAMOND DRILL RECORD

LOGGED BY J. HYINE (0-160)
W.M. SIROLA (160-252)

PROPERTY VANGUARD MINES.

D.D.H. No. 35A PAGE 1

LATITUDE *30, 001. 25 BEARING OF HOLE _____ STARTED Sept, 25th, 1964.

CLAIM No. _____

DEPARTURE *30, 301. 65 DIP OF HOLE 90° COMPLETED Sept, 28th, 1964.

DIRECTION AND DISTANCE FROM

ELEVATION *4005.84 DIP TESTS _____ DEPTH 252 ft.

NE. CLAIM POST

* NOT SURVEYED.

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY		
FROM	TO			FROM	TO		RECOVERY.	Pb	Zn
0	17.0	OVERBURDEN. GLACIAL TILL WITH SMALL BOULDERS.	114	160.0	163.3	3.3	3.2	0.54	1.20
17.0	50.0	QUARTZ SERICITE SCHIST. 20% RECOVERY IN SECTION FROM 21 - 46.	115	163.3	167.7	4.4	4.0	2.80	6.75
50.0	120.0	GRAPHITIC SCHIST. BANDING AT 60°. MASSIVE PYRITE 105 - 106.	116	167.7	171.5	3.8	3.8	1.07	2.87
120.0	170.0	SERICITE SCHIST 70% REPLACED BY PYRITE. MINOR GALENA AND CHALCOPYRITE AT 122.0.	117	171.5	176.5	5.0	5.0	2.04	5.80
			118	176.5	181.5	5.0	5.0	6.12	7.11
130.0	132.0	SERICITE SCHIST, GRAPHITIC SCHIST AND SERPENTINE.	119	181.5	185.0	3.5	3.5	4.95	7.95
132.0	140.0	SERICITE SCHIST WITH FINE GRAINED DISSEMINATED PYRITE.	120	185.0	190.0	5.0	5.0	2.24	6.99
140.0	142.0	MASSIVE PYRITE WITH GALENA AND SPHALERITE.	121	190.0	194.0	4.0	4.0	1.22	1.87
142.0	160.0	SERICITE SCHIST WITH MINOR SULPHIDES.	122	194.0	199.0	5.0	4.7	2.45	3.88
160.0	163.3	SERICITE SCHIST WITH LOCAL PYRITE AND MINOR Pb and Zn.	123	199.0	201.0	2.0	1.7	1.12	1.34
163.3	167.7	HEAVILY PYRITIZED COMPACT ROCK WITH Pb and Zn REPLACEMENT.	124	201.0	206.0	5.0	5.0	2.37	7.66
167.7	171.5	PYRITIZED SERICITE SCHIST WITH Pb and Zn. REPLACEMENT. BANDING AT 60°.	125	206.0	211.0	5.0	5.0	3.19	6.87
171.5	185.0	MASSIVE PYRITE AND PYRRHOTITE. BANDS OF PbS and ZnS at 60°. MINOR CHALCOPYRITE.	126	211.0	216.0	5.0	5.0	2.09	4.50
			127	216.0	221.0	5.0	4.7	2.91	6.61
185.0	192.0	HARD, GREY, SILICEOUS MEMBER WITH 50% REPLACEMENT BY PYRITE AND PYRRHOTITE. 10% COMBINED Pb and Zn.	128	221.0	226.0	5.0	5.0	2.30	6.99
			129	226.0	232.0	6.0	1.3	3.05	7.16
192.0	201.0	MASSIVE PYRITE AND PYRRHOTITE. 8% COMBINED PbS and ZnS.	130	232.0	234.5	2.5	2.5	3.37	7.38

DIAMOND DRILL RECORD

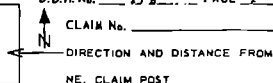
 LOGGED BY Y.M. JIROLA

 PROPERTY VANGUARD MINES

 D.D.H. No. 15 B PAGE 1

 LATITUDE *30, 00. 75 BEARING OF HOLE _____ STARTED Sept. 28th, 1964

 DEPARTURE *30, 301. 65 DIP OF HOLE 90° COMPLETED Oct. 4th, 1964

 ELEVATION *4005.84 DIP TESTS _____ DEPTH 247 ft.


* OF SURVEYED.

FOOTAGE		DESCRIPTION	SAMPLE No.	FOOTAGE		SAMPLE LENGTH	ASSAY		
FROM	TO			FROM	TO		RECOVERY.	Pb	Zn
0	15.0	CASING.	135	160.0	164.5	4.5	4.5	2.60	6.97
15.0	98.0	DRILLED WITH NX BULLDOZE BIT - NON-CORING.	136	164.5	169.0	4.5	4.5	2.70	7.83
98.0	160.0	AX CORE DISCARDED BECAUSE NOT ORE GRADE.	137	169.0	173.0	4.0	4.0	1.99	6.08
160.0	173.0	HARD, GREY, SILICEOUS ROCK WITH 50% REPLACEMENT BY PYRITE, 10% PbS and ZnS. BANDING AT 60°.	138	173.0	178.0	5.0	5.0	3.54	7.38
			139	178.0	182.0	4.0	4.0	3.70	8.43
173.0	185.0	MORE MASSIVE REPLACEMENT (Approximately 70%) - LOCAL CONFORMED BANDS BUT AVERAGE BANDING AT 70°. NUMEROUS QUARTZ "EYES" IN THIS SECTION. 1% COMBINED PbS and Zn.	140	182.0	185.0	3.0	2.3	3.44	7.76
			141	185.0	188.6	3.6	3.4	2.75	5.75
18	188.6	HARD, GREY, SILICEOUS MEMBER WITH 50% PYRITE, 1% COMBINED PbS and ZnS.	142	188.6	194.0	5.4	5.0	2.14	1.82
188.6	192.6	MORE MASSIVE SECTION. 7% PYRITE WITH FINELY DISSEMINATED PbS and ZnS, BANDING AT 70°.	143	194.0	197.6	3.6	3.6	2.02	3.45
			144	197.6	202.0	4.4	4.4	1.58	5.27
197.6	212.3	HARD, GREY, SILICEOUS ROCK WITH 50% PYRITE. 1% PbS and ZnS.	145	202.0	206.0	4.0	4.0	3.39	9.34
212.3	218.0	MASSIVE PYRITE. ROCK PARTLY POROUS FROM LEACHING. 15 - 20% PbS and ZnS.	146	206.0	212.3	6.3	6.3	3.95	7.21
		QUARTZ CHLORITE ROCK FROM 216.5 - 217.5.	147	212.3	218.0	5.7	4.0	8.72	9.05
218.0	247.0	HARD, GREY, SILICEOUS MEMBER WITH 7% PYRITE AND PYRRHOTITE AND 10% - 15% PbS and ZnS. BANDING AT 70°. MINOR CHALCOOPYRITE OCCURS AS BANDS, CLOTS AND DISSEMINATIONS.	148	218.0	221.0	3.0	2.5	3.52	10.20
			149	221.0	226.0	5.0	4.0	3.24	7.93
			150	226.0	231.0	5.0	4.8	1.33	6.97
			151	231.0	236.0	5.0	4.0	2.37	7.59

