



MEMORANDUM

TO:

MTL

FROM:

T. E. KALNINS

SUBJECT:

A.R. 82-431

DATE:

83.3.23

- | | | | | |
|--|---|---|---|---|
| <input checked="" type="checkbox"/> For Your Information | <input type="checkbox"/> Please O.K. and Return | <input type="checkbox"/> Please Discuss With Me | <input type="checkbox"/> Per Your Request | <input type="checkbox"/> For Your Signature |
| <input type="checkbox"/> Please Process | <input type="checkbox"/> Return With More Details | <input type="checkbox"/> Investigate and Report | <input type="checkbox"/> Please Answer | <input type="checkbox"/> For Your File |

Return for amendments:

Please review the Mineral Act Regulations and your report carefully. The location map lacks a north arrow. The map of vein systems ~~lacks~~ has an unnamed arrow, and the map is not clearly keyed to the property map. The reconnaissance geochem. map lacks a north arrow, a legend, and it is not keyed to the index map / claim posts / property boundaries or clearly identifiable geographic features. An estimated relationship is satisfactory. The description of the geochem. survey does not conform to sections C 7(4) (distance from road, contamination problems, sampling tools, depth, appearance of soil), and C 7(9) (the material analyzed and ~~brief~~ analytical procedure identified).

Takis

WRITE YOUR REPLY AND RETURN THIS SHEET

Fold Here for Window Envelope

Fold Here for Window Envelope

A GEOLOGICAL AND EXPLORATION REPORT

ON

THE COMPLETER PROPERTY
LOCATED AT FAUQUIER, B.C.
SLOCAN MINING DIVISION

82E/16E
49°50.5 - 118°04'

FOR

NORTHERN DEEP LEVEL MINES LTD.
VANCOUVER, B.C.

APRIL 1982

JAMES C. SNELL, P.ENG.
GEOLOGICAL ENGINEER

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,000

CONTENTS

	<u>Page Number</u>
1) Introduction	1
2) Location and Access	2
3) Property	3
4) Geography	4
5) History	5
6) Geology of the Completer Group	7
7) Petrology	8
8) Economic Geology	9 & 10
9) Geochemical Soil Survey	11
10) Conclusions	13 & 14
11) Recommendations	15
12) Cost Estimate - Soil Survey	16
13) Cost Estimate - Diamond Drilling	16
14) Cost Summary	16
15) Cost Detail - work completed to October 5, 1981	18
16) Certificate	19
17) Bibliography	20
Maps - Location Map	
Map of Vein Systems	
Recommendations	
Geochem Survey	
Geochemical	

INTRODUCTION

The writer has been requested by the Directors of Northern Deep Level Mines Ltd. to detail a geological report on the Completer Property located just to the south-east of Fauquier, B.C. The property consists of four located mineral claims and one crown granted mineral claim owned by Northern Deep Level Mines Ltd. of Vancouver, B.C. Several field trips have been made to the claims over the past year, the first trip being May 7, 1980 and the last trip May 25, 1981.

A preliminary work program was recommended for the claim group in a report by the writer dated May 1980. Some of this program has been completed. Air photo interpretation of the region has disclosed two nucleous areas or interesting fracture patterns worthy of detailed follow up investigations on the ground.

The results of the preliminary ground examination indicates an area of multiple intrusions, quartz veining, hydrothermal alteration and some sulphide mineralization. Information incorporated into this report was accumulated from personal examination of the property, from a report dated August 1965 by Allen P. Fawley for Pajo Mines Limited "The Arrow Lake Silver Property, Slocan Mining Division, British Columbia", from GSC Bulletin 161 Petrology and Structure of Nakusp Map-Area, British Columbia and from GSC Memoir 308, Nelson Map-Area West Half, British Columbia.

LOCATION AND ACCESS (49° 50' - 118° 04')

The Completer property is located in the Slocan Mining Division; 5Km south east of Fauquier, B.C. and 2Km due west of Lower Arrow lakes on the western edge of the Selkirk Range between elevations 2,500 and 3,500 feet.

The property can be reached from Vernon, B.C. via the Monashee Highway or from Revelstoke, B.C. via the Arrow Lake Highway. Access from Fauquier is by gravel road and forestry access road for a distance of 11Km.

PROPERTY

The property consists of four located mineral claims of 44 units total and one crown granted mineral claim. The property is situated just east of Lower Arrow Lake at Fauquier, B.C.

CLAIM GROUP	LOCATION DATE	METRIC UNITS	CLAIM NUMBER
1 -KOZ	May 9/81	12	2530
2 -DAV	May 9/81	16	2529
3 -BARN	May 14/81	8	2528
4 -BLUE	June 5/81	8	2559
(5) Completer CG			Lot 7309

GEOGRAPHY

The property is situated on the western margin of the Selkirk Mountains at an elevation of 3,500' just to the east of Lower Arrow Lake. The climate is moderate, temperatures range from 20° in January to 65° in July. The annual rainfall is about 25 inches with maximum precipitation in December of 4 inches.

The vegetation is interior rain forest type consisting of timbered lower slopes of Western Balsam, Hemlock, Pine, Douglas Fir, Engelmann Spruce and Western Red Cedar. The property has been logged.

HISTORY

B.C. Minister of Mines Report 1908 states that the Completer claim was crown granted in that year. In a private report by Mr. Shannon 1934 mention is made of a 440' adit and some surface stripping having been completed between 1907 - 1914 by the owners including J.N. McLeod. The workings have been verified and inspected by the writer. The 4'x6' adit is at an elevation of 3,100'.

NORTHERN DEEP LEVEL MINES LTD.

A considerable amount of work has been completed to date by Northern Deep Level Mines Ltd. This work includes access road construction and grading, surface stripping, which has exposed at least six substantial quartz veins; surveying and mapping of quartz vein systems; and a regional geochemical soil analysis reconnaissance program. An initial geochemical report was completed by the writer in May 1980 for the company.

GEOLOGY OF THE COMPLETER GROUP

The Completer Property overlies a multiple intrusive complex including an intrusive contact between the Cretaceous Nelson Batholith and the younger Tertiary intrusive of the Arrow Lake (Kuskanax) stock. Included within the Arrow Lake Stock is a partially digested pendant of the Nelson Batholith.

Three main intrusive rock types have been identified, these are syenite, monzonite and diorite. The main rock types have in turn been subdivided into 5 sub-units. Andesite also occurs on the property. Light orange brown felsite dykes occur within the intrusive host.

PETROLOGY

1) Quartz Syenite Prophyry

90% potassium feldspar with feldspar crystals up to one inch; less than 5% quartz, 5% biotite
This same rock type may show extreme hydrothermal alteration, and may have a fine or coarse grain matrix.

2) Biotite Quartz Syenite Prophyry

Same as above with up to 20% biotite in the groundmass.

3) Quartz Syenite

Fine grain - pink.

4) Quartz Monzonite

Light grey, coarse grain, 30%-50% quartz, 50%-70% feldspar, no mafics.

5) Biotite Quartz Monzonite

Light grey, up to 20% biotite, +30% quartz, balance white feldspar.

6) Monzonite

Grey, green, kaolinized feldspar less than 1% biotite.

7) Alaskite

Medium grey, light brown, 30% quartz 70% red potash feldspar.

8) Biotite, Hornblend, Quartz Diorite

Medium grain grey, 50% hornblend and biotite, 10% quartz balance green feldspar.

9) Andesite

Fine grain, green, may have rusty surface coating due to oxidation of iron.

10) Quartz Veins

With disseminated galena.

ECONOMIC GEOLOGY

Seven quartz-veins have been exposed on the property. Six of these veins occur just to the south west of the original exploration adit. The veins are massive bull quartz containing some disseminated galena and minor pyrite.

Vein 1 - At road junction width 5.5 meters
Exposed for 11 meters
Strike 165°

Vein 2 - Bull quartz, minor disseminated galena
Strike 30°
Dip - vertical
Width .6 meters

Vein 3 - Bull quartz, minor disseminated galena and pyrite,
Minor wall rock inclusions
Located at small shaft
Strike 25°
Dip - vertical
Width 1.5 meters

Vein 3A - Bull quartz
Strike 30°
Width 2 meters

Wall rocks between veins 3 and 3A are highly altered coarse grain biotite quartz monzonite, with limonite and siderite on fracture planes, grading to a fine grain highly siliceous rock adjoining the vein.

Vein 4 - White bull quartz, minor disseminated galena
some included wall rock
Wall rock highly altered, coarse grey green biotite
biotite-quartz monzonite, with interstitial limonite
and siderite
Strike 35°
Dip - 55° N.W.
Width 3 meters

Vein 5 - White bull quartz and siderite
Strike 25°
Dip - vertical
Width 1.6 meters

Vein 6 - White bull quartz with siderite and disseminated galena
Strike 25°
Dip - 85° W.
Width 2.6 meters

Veins 2-6 are located to the east of vein 1 all within a distance of 150 meters. Vein 7 is located 75 meters to the west of vein 1.

Vein 7 - White bull quartz vein on which a small shaft has been sunk.
The vein strikes at 350

A.P. Fawley, P. Eng. reports that vein mineralization consists of galena, sphalerite, pyrite and marcasite, the predominant economic mineral is silver and there are also values in gold, lead and zinc. The writer has not observed the sphalerite and has not personally taken samples of the vein matter due to the oxidation and the barren nature of the vein material at the surface.

Three samples were taken by A.P. Fawley, P. Eng. from the dumps at the shaft on the No. 2 Vein. These samples were as follows:

- No. 1 - 1/3 marcasite, 2/3 quartz
assay .02oz. Au. per ton
- No. 2 - Quartz with minor banded galena the specimen
is a better representation than average.
assay - Au - .09 oz/ton
Ag - 35.8 oz/ton
Pb - 3.4%
- No. 3 - An average sample of several specimens
partially oxidized mineralization
assay - Au - .06 oz/ton
Ag - 16.2 oz/ton
Pb - 1.3 %

GEOCHEMICAL SOIL SURVEY

A total of 315 soil samples were taken by hand in an immature B. soil horizon at the depths of 3" to 12" on the edge of roadcuts along the main access road and along the various logging roads giving access to the claim block. Samples were collected in standard kraft soil sample bags and after drying & seiving to (-) 80 mesh were analyzed for silver, lead, copper and arsenic by General Testing Laboratories using atomic absorption.

The purpose of the survey was to determine regionally the location of anomalous conditions in the soil within the area of geological interest.

SURVEY RESULTS

A significant anomalous area occurs between co-ordinates 500 + 00 N. and 500 + 00 S and between 500 + 00 E and 200 + 00 W. Additional anomalous conditions appear to trend southerly along BR3 and as well towards the north end of the Spur road.

The element lead, appears to record anomalous conditions in favour of the other elements analysed in the survey. Silver generally gave comparative low values to other silver rich areas such as the SloCan camp. Some high arsenic values can be noted on BR11 along with some high copper and lead. High arsenic readings were also recorded along the Dustin road on the extension of the vein system. Several high arsenic readings were also found along BR3 to the south of the vein exposure.

High copper concentrations do not appear to occur within this multiple intrusive environment which is somewhat of a surprise. Higher arsenic readings may indicate the occurrence of gold values within bedrock. Silver values in excess of 1.5 ppm are not common, indicating that in fact silver may not be of economic consequence or may be of low consequence on the property. Results from this initial survey indicate that the property should be explored for potential in gold and/or a combination of gold, silver and lead mineralization.

CONCLUSIONS

It would appear from the initial work completed on the Completer Property that a mineralized environment exists in an area of multiple intrusion and cross faulting essentially 1,000 meters by 700 meters (3280 ' x 2296'). Possibilities for mineralization also exists outside this area to the south east and as well to the north west. The potential for concentration of silver, lead and gold appears to exist on the property and further investigations are warranted and should be carried out toward determining the locations of this mineralization.

Surface stripping has revealed considerable quartz vein injection to the west of the old adit. This adit failed to reach its objective, being the downward extension of the quartz vein system. The veins are not well mineralized on surface exposure but do contain some galena and pyrite mineralization with low values in silver and gold. It has been reported that the silver-lead content in the veins increases with depth. These observations were reported from inspection made in the shaft on the number 3 vein. The extension of these vein systems has never been explored either to the north east, south west or to depth and it is quite possible that ore shoots occur within the veins both on strike and at depth.

Some potential also exists for an open pit type occurrence. The juncture of the main quartz vein system that may contain economic ore shoots would be a preferred target. Such an area may contain sufficient mineralized cross fracturing to be of interest both as to

magnitude and grade. If such an occurrence does exist it should be readily discovered and detailed during the course of future exploration on the property.

RECOMMENDATIONS

- 1) A detailed soil survey is recommended for the property. Soils should be analysed for lead and arsenic.

- 2) Diamond drilling should be completed as outlined on the enclosed map; to intersect and explore the exposed vein systems. This program requires 4 holes. Further drilling will be required to explore soil anomalies outlined during the geochemical program.

Survey and slash a working grid in a north-south direction between co-ordinates 200 + 00 W. and 400 + 00 E. Survey and slash a baseline east and west along 0 + 00. Extend the lines north to 600 + 00 and south to 700 + 00. The north south lines need not cross the main road. Samples should be taken at 30 meter intervals and the lines should be on a 50 meter spacing. 14 lines x 1300 meters per line = 18,200 meters of line. 18,200 meters of line at (30 meter intervals) = 600 samples. 18,200 meters = 59,711' = 11.3 line miles.

COST ESTIMATES - SOIL SURVEY

i)	Survey and slash lines 11.3 line miles at \$500.00 per mile	\$5,650.00
ii)	Soil sampling 600 samples x \$5.00	3,000.00
iii)	Analysis 600 samples X \$5.00	3,000.00
iv)	Room and board (camp)	2,500.00
v)	Transportation (fuel,vehicle)	<u>2,500.00</u>
	Sub total	16,650.00
	Contingencies - 10%	<u>1,665.00</u>
	Total	<u>\$18,315.00</u>

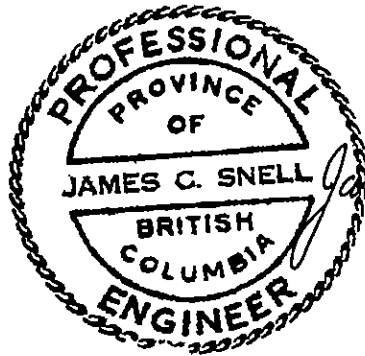
COST ESTIMATES - DIAMOND DRILLING

i)	Diamond Drill Hole No.1 - location 125 + 00 E - 50 + 00 N. at - 45° bearing 290° depth 75 meters cost estimate = 250 ' x \$30.00	\$7,500.00
ii)	Diamond Drill Hole No.2 - location 25 + 00 E - 25 + 00 N at 45° bearing 250° ,depth 75 meters cost estimate =	7,500.00
iii)	Diamond Drill Hole No.3 - location 75 + 00 N - 10 + 00 W. at -30° bearing 110° depth 150 meters cost estimate	15,000.00
iv)	Diamond Drill Hole No.4 - location 75 + 00 N - 10 + 00 W at -45° bearing 110° depth 200 meters cost estimate = 656' x \$30.00	20,000.00
v)	Drilling allowance for soil anomalies 200 meters(656 feet)	<u>20,000.00</u>
	Sub total	70,000.00
	supervision, contingencies, assays at 25% =	<u>17,500.00</u>
	Total	<u>\$87,500.00</u>

COST SUMMARY

(a)	Soil Survey	\$18,315.00
(b)	Diamond Drilling	<u>87,500.00</u>
	TOTAL	<u>\$105,815.00</u>

It is proposed that the soil survey be completed initially and that the diamond drill program follow. Should a good drill target be located during the course of the soil survey initial drilling may commence at that location.



Respectfully Submitted

James C. Snell, B. Sc., P. Eng.
Geological Engineer

NORTHERN DEEP LEVELS
COST FAUQUIER PROPERTY
TO OCTOBER 5, 1981

Assays :	Fire Au,Pb,Cu,Zn, - Pd.	34.25	
	Geochem Pd.	1,842.75	
	Geochem	396.75	
	Spectro	<u>31.50</u>	2,278.25
Roadwork:	Bulldozing Pd.	1,500.00	
		<u>3,662.50</u>	5,162.50
Geochem: Wages	A.Jewit,		
	J. Alderice		
	J. Guilbault		
	3 x 100.00 Pd.	300.00	300.00
Engineering - J. Snell		1,746.43	1,746.43
Breakdown of Geochem expenses			
Truck repairs		189.93	
Motels		129.06	
Groceries		193.09	
Meals		321.46	
Gas-Faquier		767.48	
Gas-Local		80.00	
Photocopying-Map		9.40	
Parking		<u>4.58</u>	<u>1,695.00</u>
Total			<u>11,182.18</u>

Paid total - 5,372.00
Unpaid total - 5,810.18

Soil analysis by General Testing Laboratories. July September 1981
analysis by Hot Acid extraction, Atomic Absorbtion methods.

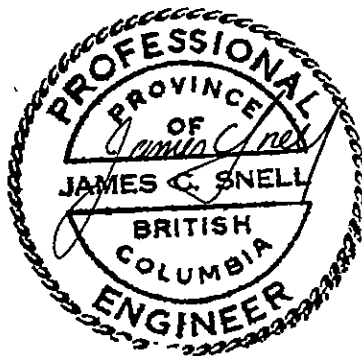
CERTIFICATE

I, JAMES C. SNELL, with business address in Vancouver, CANADA, do hereby certify that:

- (1) I am a consulting geological engineer.
- (2) I am a graduate of the University of Alaska, School of Mines, Fairbanks, Alaska, U.S.A.
- (3) I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario, CANADA.
- (4) I have received a Bachelor of Science degree in the Geological Sciences in 1964.
- (5) I am a registered Professional Engineer of the Province of British Columbia, CANADA.
- (6) I have examined the field geology of the Completer Claim Group and have supervised the work program undertaken to date.
- (7) I have arrived at the conclusions and have made the recommendations outlined in this report.
- (8) I Have a disclosed interest in Northern Deep Level Mines Ltd.

Dated at Vancouver, British Columbia, this 17th day of April 1982.

James C. Snell, P. Eng.
Geological Engineer.



BIBLIOGRPHY

FAWLEY, A.P.

The Arrow Lake Silver Property
Slocan Mining Division
British Columbia of Pajo Mines Limited
August 1965

HYNDMAN, D.W.

Bulletin 161 G.S.C.
Petrology and Structure of Nakusp
Map - Area, British Columbia

LITTLE, H.W.

Memoir 308 G.S.C.
Nelson Map - Area, West Half
British Columbia

SNELL, J.C.

Geological Report on the Completer Silver Prospect
Arrow Lake District,
Slocan Mining Division
for Northern Deep Level Mines Ltd.
May 1980



TO:
 NORTHERN DEEP LEVELS MINES LTD.
 1258 - 409 Granville Street
 Vancouver, B.C.

Gen I Testing Laboratories
 A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: soil samples

MARKED	XXXX	SILVER	Copper	Lead	Arsenic	XXX	XXX	XXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
J 1 - 0+50		0.8	17	26	5			
0+100		0.6	11	15	4			
0+20		0.2	5	17	7			
100+50		0.8	11	26	7			
200+50		0.6	7	23	4			
J 2 - 0+00		0.8	7	17	3			
0+50		0.6	4	9	2			
0+100		1.0	9	158	5			
0+200		0.8	6	12	1			
100+50		1.0	9	39	6			
200+40		0.6	5	9	2			
JIM - 0+00		1.5	8	40	18			
0+50		0.6	9	18	17			
0+100		0.8	4	20	12			
0+200		1.3	13	28	17			
0+300		0.8	6	40	8			
0+400		1.0	17	23	9			
100+50		0.4	37	20	13			
200+50		0.8	21	32	19			
300+50		1.0	35	31	202			
400+40		1.0	24	36	29			
SL10W - 0+50		1.3	11	22	12			
0+100		1.0	9	58	28			
100+50		1.5	11	17	6			
SP 1 - 0+00		1.0	19	15	12			
0+50		0.6	73	37	7			
0+100		0.6	12	22	5			
0+200		0.4	23	28	49			
0+300		0.4	6	18	6			
100+50		0.4	10	34	4			

COPY

/ Continued on page 2

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



Gené I Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.
 1258 - 409 Granville Street
 Vancouver, B.C.
 page 2

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: **Soil samples**

MARKED	xxxx	SILVER	Copper	Lead	Arsenic	xxx	xxx	xxx
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
SP1 200+50		0.2	8	28	5			
JESSY - 0+00		0.4	8	14	3			
0+50		0.2	9	9	6			
0+100		0.2	13	22	5			
100+50		0.8	8	14	3			
200+10		0.6	6	25	4			
JENNY - 0+00		0.2	3	40	11			
0+50		0.6	10	25	9			
0+100		0.6	8	28	4			
0+200		0.6	5	17	5			
0+300		0.6	8	46	80			
1+50		0.4	19	36	14			
200+40		0.6	8	66	14			
NICK - 0+50		0.4	7	31	8			
0+100		0.2	8	37	20			
0+200		0.6	7	18	2			
0+300		0.6	7	31	24			
100+50		0.4	4	17	9			
200+50		0.6	6	41	7			
300+17		0.8	19	55	22			
TOP - 0+00		0.6	5	26	4			
0+50		0.4	8	26	4			
0+100		0.2	4	58	6			
100+14		0.6	11	42	6			
BOO - 0+00		0.6	8	39	6			
0+50		0.4	8	37	8			
0+100		0.2	8	18	5			
SPOT - 0+00		0.4	6	20	12			
TROT NO. 1 - 0+20		0.4	7	31	20			
JOG - 0+21		0.6	11	46	37			

COPY

Continued on page 3

NOTE: REJECTS RETAINED ONE MONTH, PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.
 ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong
 PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.
 page 3

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: **soil samples**

MARKED	xxx GOLD	SILVER	Copper	Lead	Arsenic	xxx	xxx	x xx
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
KOA - 0+40		0.8	15	152	10			
0+100		0.4	8	36	7			
100+50		1.5	18	34	23			
SPUR - 0+00		0.6	12	42	7			
0+50		1.4	11	37	5			
0+100		0.4	10	31	6			
0+200		0.4	8	32	3			
0+300		0.4	11	49	7			
0+400		0.2	4	28	2			
0+500		0.2	14	29	6			
0+600		0.6	13	42	9			
0+700		0.6	13	59	10			
0+800		0.6	10	37	8			
0+900		0.6	10	18	7			
0+1000		0.6	16	26	7			
0+1100		0.6	9	36	9			
0+1200		0.6	17	65	8			
0+1300		0.4	23	71	4			
0+1400		0.2	6	26	8			
1+50		0.3	11	15	5			
200+50		0.2	4	14	5			
300+50		0.2	4	12	24			
400+50		0.2	12	28	9			
500+50		0.2	4	20	6			
600+50		0.2	19	40	17			
700+50		0.2	6	17	10			
800+50		0.2	5	23	14			
900+50		0.2	8	28	5			
1000+50		0.6	9	92	8			
1100+50		0.4	23	43	5			
1200+50		2.0	7	22	3			
1300+50		0.4	5	23	3			
1400+25		0.2	5	29	6			
BR 2 - 0+00		0.2	12	22	8			
0+50		0.2	6	10	3			
0+100		0.4	4	20	1			

COPY

Continued on page 4

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.
 ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

L. Wong
 PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER, American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND/OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.
 page 4

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1987

We hereby certify that the following are the results of assays on: soil samples

MARKED	SILVER Ag (ppm)	Copper	Lead	Arsenic	XXX	XXX	XXX
		Cu (ppm)	Pb (ppm)	As (ppm)			
BR 2 - 0+300	0.4	9	17	3			
0+400	0.4	9	15	4			
0+500	0.2	7	26	2			
0+600	0.6	6	29	4			
0+700	0.2	7	12	6			
0+800	0.2	6	9	5			
0+900	0.4	10	15	4			
0+100	0.2	6	22	5			
0+1100	0.2	8	59	7			
100+50	0.2	11	15	5			
100+50 A	0.2	9	29	2			
200+50	0.4	6	40	5			
300+50	0.2	7	10	4			
400+50	0.2	6	7	3			
500+50	0.2	9	29	4			
600+50	0.2	5	10	4			
700+50	0.2	13	12	3			
800+50	0.2	11	18	8			
900+50	0.2	9	18	2			
BR 3 - 0+00	0.4	7	20	8			
0+50	0.2	7	12	2			
0+100	0.6	12	29	6			
0+200	0.2	5	43	4			
0+200A	0.2	5	17	4			
0+300	1.0	8	72	3			
0+400	1.0	10	63	6			
0+500	0.8	11	47	8			
0+600	0.8	11	22	5			
0+700	0.8	13	25	1			
0+800	0.6	7	85	5			
0+900	1.0	24	75	9			
0+1000	1.0	11	59	3			
0+1100	1.0	11	20	9			
0+1200	1.0	9	28	19			
0+1300	1.0	12	34	29			
0+1400	0.6	5	25	11			

COPY

/Continued on page 5

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.
 page 5

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: June 16, 1981

We hereby certify that the following are the results of assays on: soil samples

MARKED	XXXXXX	SILVER	Copper	Lead	Arsenic	XXX	XXX	XXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
BR 3 - 0+1500		1.0	14	40	167			
0+1600		1.0	18	40	17			
0+1700		0.6	5	66	7			
1+50		0.8	6	80	6			
200+50		0.6	2	40	3			
300+50		2.1	9	204	4			
400+50		0.8	6	32	2			
500+50		0.8	8	28	5			
600+50		0.8	11	18	6			
700+50		0.6	6	17	3			
800+50		1.0	17	85	5			
900+50		1.0	6	26	1			
1000+50		1.0	6	36	10			
1100+50		0.8	4	20	61			
1200+50		0.8	9	36	20			
1300+50		1.0	9	50	10			
1400+50		0.8	5	50	11			
1500+50		0.6	8	15	13			
1600+50		0.8	36	43	14			
1700+50		0.6	7	28	10			
MR - 0+00		0.8	5	15	1			
0+50		0.6	4	15	2			
0+100		0.8	22	50	3			
0+200		1.3	11	9	1			
0+300		1.0	11	28	1			
0+400		1.2	9	23	4			
0+500		1.7	9	20	4			
0+600		0.8	7	15	5			
0+700		0.8	13	12	4			
0+800		0.8	5	4	3			
0+900		0.6	7	17	3			
0+1000		0.8	7	37	8			
0+1100		0.4	6	62	7			
0+1200		0.6	7	32	3			
0+1300		0.6	6	28	2			

COPY

Continued on page 6

REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR
 ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong
 PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.
 PAGE 6

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: **soil samples**

MARKED	SILVER Ag (ppm)	Copper	Lead	Arsenic	xxx	xxx	x xx
		Cu (ppm)	Pb (ppm)	As (ppm)			
MR - 0+1400	0.4	7	9	4			
0+1500	0.4	5	25	5			
0+1600	0.6	6	4	3			
0+1700	0.8	9	17	5			
0+1800	0.6	9	17	5			
0+1900	0.6	9	10	6			
0+2000	0.4	7	12	3			
0+2100	0.6	5	18	6			
0+2200	0.8	9	10	3			
0+2300	0.8	13	20	6			
0+2400	0.8	9	14	7			
0+2500	0.8	5	12	2			
0+2600	0.6	9	6	5			
0+2700	0.8	15	15	7			
0+2800	1.0	8	43	8			
0+2900	0.6	5	9	3			
0+3000	0.8	6	14	5			
0+3100	0.8	8	12	5			
0+3200	0.6	10	15	6			
0+3300	0.8	9	32	2			
0+3400	0.8	12	22	4			
0+3500	0.6	14	9	4			
0+3600	0.8	9	22	3			
0+3700	0.8	6	17	4			
0+3800	0.4	7	12	7			
0+3900	0.6	4	6	3			
0+4000	0.6	9	23	2			
0+4100	0.8	7	20	4			
0+4200	0.6	5	10	3			
0+4300	0.6	7	7	6			
0+4400	0.8	4	12	7			
0+4500	0.6	5	23	4			
0+4600	0.6	4	7	4			
0+4700	0.2	2	2	3			
0+4800	1.0	2	9	7			
0+4900	0.4	7	10	7			
0+5000	0.4	9	9	7			

COPY

/ Continued on page 7

NOTE: REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong
 PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1847 TELEX 04-507514 CABLE SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES LTD.

CERTIFICATE OF ASSAY

.... page 7

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: soil samples

MARKED	XXXX GOLD	SILVER	Copper	Lead	Arsenic	XXX	XXX	XXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
MR - 0+5100		0.2	4	6	6			
0+5200		0.2	7	9	14			
0+5300		0.2	5	40	61			
0+5400		0.4	7	20	7			
0+5500		0.2	7	9	6			
0+5600		0.2	17	25	10			
0+5700		0.2	16	12	7			
0+5800		0.4	7	6	11			
0+5900		0.2	8	4	10			
0+6000		0.2	6	7	5			
1+50		0.4	7	22	4			
2+50		0.4	9	14	3			
3+50		0.6	4	2	1			
4+50		0.4	4	7	1			
5+50		0.6	6	14	1			
6+50		0.2	6	17	4			
7+50		0.6	8	9	3			
8+50		0.4	7	31	5			
9+50		0.6	7	18	1			
10+50		0.6	6	10	1			
11+50		0.4	8	28	5			
12+50		0.4	5	26	3			
13+50		0.6	8	20	5			
14+50		0.4	4	23	4			
15+50		0.4	9	15	1			
16+50		0.6	6	14	1			
17+50		0.4	7	20	4			
18+50		0.4	7	18	6			
19+50		0.4	8	9	6			
20+50		0.4	9	7	4			
21+50		0.4	8	20	3			
22+50		0.4	7	28	4			
23+50		0.4	3	25	5			
24+50		0.2	4	7	5			
26+50		0.2	3	23	6			
27+50		0.4	4	7	4			

COPY

/ Continued on page 8

NOTE REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong
 L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER, American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE

TO:
 NORTHER DEEP LEVELS MINES LTD.
 PAGE 8

CERTIFICATE OF ASSAY

No.: 8106-2651 DATE: July 16, 1981

We hereby certify that the following are the results of assays on: **soil sample**

MARKED	GOLD	SILVER	Copper	Lead	Arsenic	XXX	XXX	XXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
MR - 28+50		0.6	10	23	4			
29+50		0.6	10	22	5			
41+50		0.6	5	34	4			
2510+40		0.4	10	12	6			
3000+50		0.4	6	9	4			
3100+50		0.6	10	12	9			
3200+50		0.6	5	40	6			
3300+50		0.4	7	22	2			
3400+50		0.6	10	18	4			
3500+50		0.5	14	23	6			
3600+50		0.8	9	32	4			
3700+50		0.6	8	18	4			
3800+50		0.7	24	9	5			
3900+50		0.8	6	17	5			
4000+50		0.8	8	17	3			
4200+50		0.6	9	25	4			
4300+50		0.8	10	20	7			
4400+50		0.4	10	15	4			
4500+50		0.6	6	17	2			
4600+50		0.4	5	18	2			
4700+50		1.0	10	14	10			
4800+50		1.7	8	12	8			
4900+50		0.6	10	15	10			
5000+50		1.0	6	46	7			
5100+50		0.8	19	22	19			
5200+50		0.8	9	17	42			
5300+50		0.6	14	10	11			
5400+50		0.8	8	25	8			
5500+50		0.8	10	45	19			
5600+50		0.6	14	9	10			
5700+50		0.5	25	12	11			
5800+50		0.6	6	22	5			
5900+50		0.8	12	18	8			

COPY

NOTE: REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND/OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



TO:
 NORTHERN DEEP LEVELS MINES
 1258 - 409 Granville Street
 Vancouver, B.C.

General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST. VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

CERTIFICATE OF ASSAY

No.: 8108-2754 DATE: Sept. 25/81

We hereby certify that the following are the results of assays on: soil

MARKED	XXXXXX	SILVER	Copper	Lead	Arsenic	XXX	X XX	XXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
D1 - 0+00		0.3	4	44	6			
0+50		0.1	7	36	23			
0+100		0.3	6	49	18			
0+200		0.3	5	12	9			
0+300		0.3	7	19	12			
100+50		0.1	5	54	9			
200+50		0.4	14	28	10			
300+50		0.4	6	17	12			
D2 - 0+50		0.1	9	42	11			
0+100		0.6	15	32	20			
Dustin - 0+00		0.7	10	40	30			
0+50		0.6	10	31	13			
0+100		0.9	10	87	92			
0+200		0.6	17	28	30			
0+300		0.9	12	25	8			
0+400		0.6	7	49	13			
100+50		0.4	6	45	10			
200+50		0.7	17	29	13			
300+50		0.4	29	23	19			
400+50		0.9	12	26	38			
500+57		1.0	15	40	16			
Ray - 0+50		0.9	14	49	5			
0+100		0.4	9	36	7			
0+200		0.7	26	38	6			
0+300		0.7	35	42	2			
0+400		1.0	12	28	14			
0+500		0.6	22	35	6			
0+600		0.4	10	39	6			
100+50		0.6	10	29	8			
200+50		0.4	15	21	2			
300+50		0.7	7	31	9			
400+50		0.4	10	25	8			
500+50		0.6	10	20	5			

COPY

Continued on page 2

REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

TO:
 NORTHERN DEEP LEVELS MINES
 ... page 2

CERTIFICATE OF ASSAY

No.: 8108-2754 DATE: Sept. 25/81

We hereby certify that the following are the results of assays on: soil

MARKED	XXXX	SILVER	Copper	Lead	Arsenic	XXXX	XXXX	XXXX
		Ag (ppm)	Cu (ppm)	Pb (ppm)	As (ppm)			
Dan - 0+00		0.4	9	48	17			
0+50		0.4	6	49	26			
0+100		0.6	9	35	19			
0+200		0.4	15	13	7			
100+50		0.7	11	44	15			
200+50		0.7	7	23	8			
Barn - 0+00		0.6	16	45	26			
Br 11 - 0+100		0.4	15	36	9			
0+200		0.9	7	21	10			
0+300		0.6	22	38	6			
0+400		0.7	72	74	74			
0+500		0.4	24	55	51			
0+600		1.4	27	32	6			
100+50		0.3	11	15	8			
200+50		0.6	22	33	15			
300+50		0.4	18	23	26			
400+50		0.4	22	50	14			

COPY

NOTE: REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

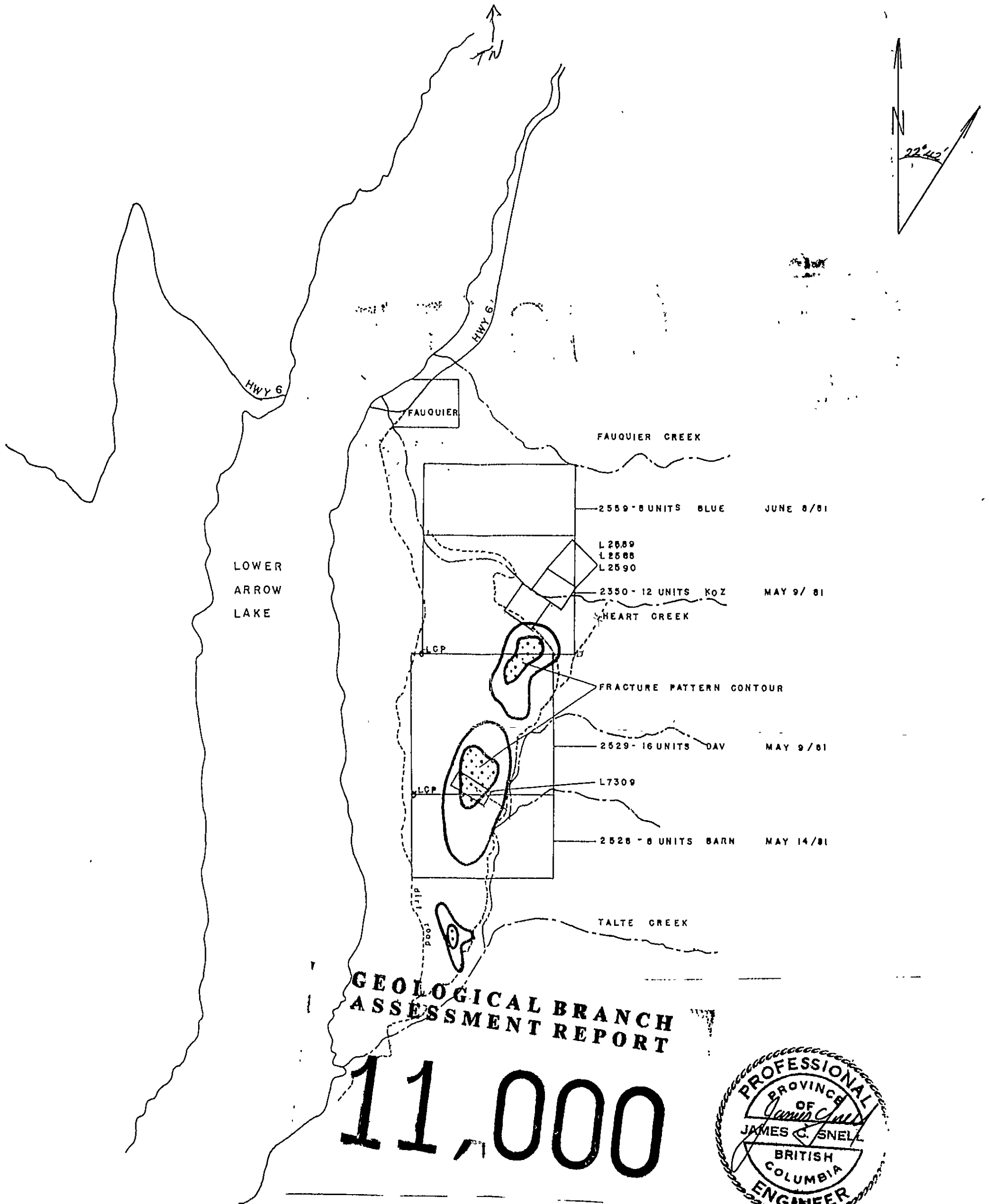
ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

L. Wong

PROVINCIAL ASSAYER

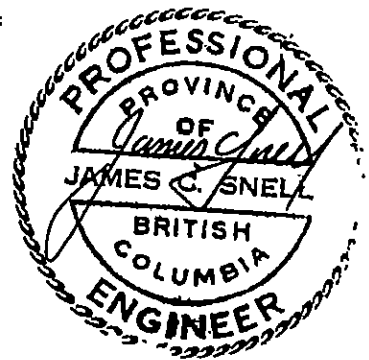
Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR National Institute of Oilseed Products • The American Oil Chemists Society
 OFFICIAL WEIGHMASTERS FOR Vancouver Board Of Trade

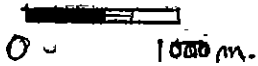


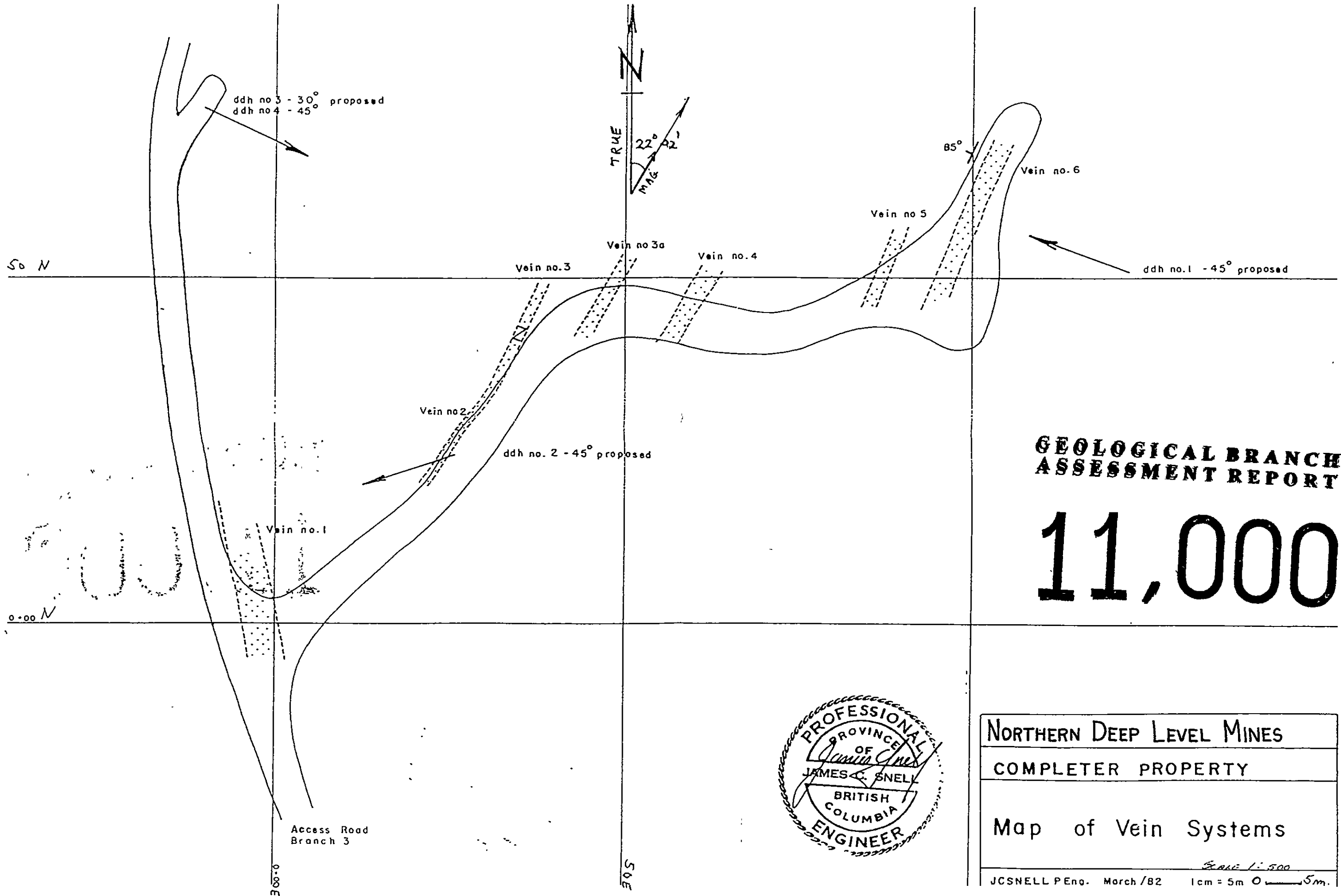
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,000



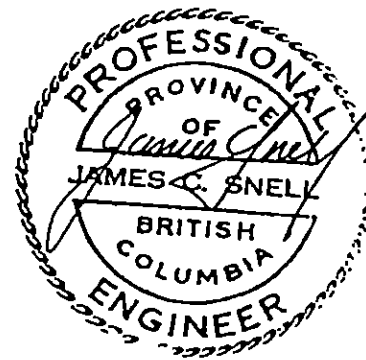
NORTHERN DEEP LEVEL MINES	
COMPLETER PROPERTY	
LOCATION MAP	
SCALE 1:5000	
J.C. SNELL P.ENG.	MARCH/82





**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,000



NORTHERN DEEP LEVEL MINES
COMPLETER PROPERTY
Map of Vein Systems
Scale 1:500
JCSNELL P. Eng. March /82 1cm = 5m 0 5m.

