

# ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 89.02.26

ASSESSMENT REPORT 17389

MINING DIVISION: Cariboo

PROPERTY: Boo  
LOCATION: LAT 53 10 48 LONG 122 17 00  
UTM 10 5892316 547896  
NTS 093G01W

CLAIM(S): Boo 1  
OPERATOR(S): Duke Min.  
AUTHOR(S): Brett, D.W.  
REPORT YEAR: 1988, 11 Pages

## GEOLOGICAL

SUMMARY: The claim is underlain by Upper Triassic volcanic and sedimentary rocks of the Takla Group. Bedrock is generally obscured by glacial overburden but local outcrops consist of dark green to dark grey andesites and basalts. No mineralization is known to occur on the property. The electromagnetic anomaly in the southwest part of the Boo 1 claims should be further explored to the north of Ahbau Creek.

## WORK

DONE: Geophysical  
EMGR 6.6 km;VLF  
Map(s) - 2; Scale(s) - 1:2857

LOG NO. 0520	RD.
FILE NO.	

SUB-RECORDER  
RECEIVED  
MAY 09 1983  
M.R. # ..... \$ .....  
VANCOUVER, B.C.

A Report on A Geophysical  
Survey of the Boo #1 & 4 Claim  
Cariboo Mining Division, B.C.

N.T.S. Location Map 93G 1W

Geographical Co-ordinates:  
57 11' Latitude, 122 15' Longitude

SUB-RECORDER  
RECEIVED  
MAY 09 1983  
M.R. # ..... \$ .....  
VANCOUVER, B.C.

Owner and Operator:

Duke Minerals Ltd.

17389

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**17,389**

Author. D. Brett

## TABLE OF CONTENTS

	Page
1. Summary Introduction	
1.1 Terms of Reference	1
1.2 Property and Ownership	2
1.3 Location and Access	2
2. Regional Geology and Property Geology	2
3. Previous Work	3
VLF - EM Survey	3
4. Conclusions and Recommendations for Further Work	3
5. Cost Statement	4
Appendices:	
Appendix A - Author's Qualifications	
Appendix B - References	
Appendix C - Field Data	
Appendix D - Property Location Map	
Appendix E - Fig. 1 (in folder)	
Fig. 2 (in folder)	

## 1. SUMMARY INTRODUCTION

### 1.1 Terms of Reference

The Boo #1 and 4 mineral claims are comprise of 35 metric units, approximately 28 KM. N.E. of Quesnel B.C. The claims are owned by Duke Minerals Ltd, a public company that trades on the Vancouver Stock Exchange.

The property has been reported to be underlain by sedimentary and volcanic rocks of the Triassic to Jurrassic aged Takla Group which is locally known to host gold bearing massive sulphide as well as vein deposits.

An Airborne geophysical survey was conducted over the property during August, 1986. This survey outlined a northwesterly trending zone of increased surficial electromagnetic conductivity. A strong Magnetic high in the North West Quadrant of the Boo #1 claim has been interpeted as reflections of a dioritic phase of the Takla group. The Northeasterly trending magnetic low is interpreted as a fault response.

During the survey a malfunction was encountered on the digital tape drive system. No data was comprised on the Southern most portion of the claims.

In June of 1987 a geochemical, geophysical survey was conducted by Baratex Res. Corp. over the Boo #2 claim which is adjacent to the south of Boo #1. An interesting VLF conductor was encountered in the North West portion of the claim.

A two phase exploration programme was recommended by F. Holcapek, P.Eng. consisting of Reconnaissance geology, geological mapping, geochemical orientation survey and VLF survey using an established grid. In retrospect of the Report submitted on the Boo #2, it was apparent that VLF was the most effective tool in this environment.

It is Duke Minerals intent to carry out the completion of Phase I when more favourable economic situations arise.

If Phase I warrants further work, Phase II should be implemented, consisting of:

1. Detailed fill in geochemistry;
2. Detailed VLF EM survey over conductors;
3. Trenching with backhoe;

4. Geological mapping and sampling of trenches and areas of interest;
5. Diamond Drilling.

This Report is based on information gathered by Baseline Resources Ltd. on behalf of Duke Minerals Ltd.

Duke Minerals objectives were to further delineate a VLF conductor encountered by Baratex Resources Ltd. on their Boo #2 claim.

In the author's opinion it is essential to continue the control grid established in 1987 to further delineate this conductor on to the Boo #1, further more to fill in missing data from the airborne survey.

## 1.2 PROPERTY AND OWNERSHIP

The Boo #1 & 4 claims were recorded in the Cariboo Mining Division at Quesnel, B.C.

<u>Claim Name</u>	<u>#Units</u>	<u>Record Date</u>	<u>Record #</u>
Boo #1	20	Feb. 28, 1986	7370
Boo #4	15	Mar. 4, 1986	7375

The claims are owned by Duke Minerals Ltd. of Vancouver, B.C.

## 1.3 LOCATION AND ACCESS

The Boo #1 & 4 claims are situated approximately 28 km. northeast of Quesnel, British Columbia with the Ahbua Creek drainage system running Southwesterly through the claims. The centre co-ordinates of the Boo #1 & 4 claims are: 57 11' Lat. 122 15' Long.

Access to the property is by helicopter or snowmobile during winter. During the summer access can be gained by 4 x 4 and all terrain vehicle along a network of logging roads and spurs via highway 97. (See Appendix D)

## 2. GEOLOGICAL SETTING

The property is situated within the Quesnel Trough. A Northwesterly trending linear belt of early Mesozoic volcanics and sedimentary rock units. Believed to be in fault contact with the Mississippian Slide Mountain Group to the east and the Pennsylvanian Cache Creek Group to the west.

The rock units underlying the Quesnel Trough are considered to have been deposited within a volcanic arc setting localized along the margin of an easterly dipping subduction zone, active during late Triassic to early Jurassic time.

Block faulting is the main structural element within the Quesnel trough. Faulting is thought to have occurred during mid to late Mesozoic times when the Quesnel Trough rocks were accreted to the North American craton and again during late Tertiary to Pleistocene times when renewed uplift and faulting occurred.

Economic mineralization in the general area of the Boo 1 & 4 claims occurs as poly-metallic massive sulphide deposits, i.e. Gabriel Noranda property) as well as gold bearing quartz vein deposits (Hixon Gold property).

### 3. PREVIOUS WORK

An Airbourne VLF-Electromagnetic and Magnometer survey was conducted on the Boo #1 & 4 claims in August 1986 by Western Geophysical Aero Data Ltd.

A property visit in June of 1986 and an evaluation report in February of 1987 was carried out by F. Holcapek, P.Eng., Consulting Geologist.

#### 3.1 VLF - E.M. SURVEY

##### Survey Method

A VLF survey was conducted in conjunction with a 6.6 km. flagged chain and compass grid. Dip angle and field strength readings were taken at 20 mile intervals up to Line 3 + 00N although the grid was cut prior to the VLF survey. It was unfortunate that the early spring breakup of Ahbua Creek during the programme rendered it unsafe to cross. Seattle and Annapolis were the stations, using a Sabre model 27 VLF-EM receiver.

All data has been Fraser filtered.

### 4. CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER WORK

It seems quite evident that this survey did in fact pick up the continuation of the VLF conductor experienced by Baratex Resources i.e. Fig. 1 Line 1 + 00N St. 4 + 00W, Line 2 + 00N St. 4 + 20W, Line 3 + 00N St. 4 + 80W. It seems that Seattle was the more reliable station while Annapolis acted very erratically from line to line. The null was difficult to pinpoint causing the operator to make a judgment at each station. This survey was cut short by the break up of Ahbua Creek during the last stages of the programme. It is Duke's intention to carry out the rest of the work after spring thaw when the drainage has slowed to a passable level.

5. COST STATEMENT

Work was carried out February 22 to February 27

Geophysical Survey:

Labour & Fees - Dan Brett	\$1,200.00
- John Peters	1,200.00
Meals and Accommodation	444.68
Field Supplies and Maps	50.00
Instrument Rental	300.00
Snowmobile Rental	300.00
Transportation (Truck Rental, Gas)	<u>727.04</u>

Sub-Total 4,221.72

Administration:

Labour & Fees - Dan Brett	500.00
- John Peters	500.00
Drafting/Secretarial	<u>400.00</u>

Sub-Total 1,400.00

Total \$5,621.72

APPENDIX A

Dan Brett

AUTHOR'S QUALIFICATIONS

- Grade 12 graduate of Charles Tupper Secondary School (1982).
- Actively involved in "grassroots exploration" since the age of fifteen, working with various Vancouver companies for summer employment.
- Vice-President of Baseline Resources Ltd., a mining and exploration services company, since 1985.
- Organized and carried out five (5) grassroots projects, including diamond drilling in the Toodoggone and Cassiar areas of B.C.
- Run approximately 100 line km. of VLF personally and am, therefore, very familiar with the instrument used in this report.



## APPENDIX B

### REFERENCES

- Wood, D.H. Report on a Geophysical and Geochemical Survey of the Boo #2 Claim for Baratex Resources Corp., September 12, 1987.
- Pezzot, E.T. Airbourne VLF-Electromagnetometer and Magnetometer Survey Boo #1 & 4 Claims, Cariboo Mining District for Duke Minerals Ltd., September 18, 1986.
- Holcapek, F. Report on the Boo #1 & 4 claims, Cariboo Mining District for Duke Minerals Ltd., February 27, 1987.

75	-2		Seattle on 3:00		
50	0		Seattle Grain 445		
25	-2	Line 3000	D ES D ES	Annotations	
3+00	-2	0+00	0 60 -10	50	
75	-6	0+20	0 80 -10	50	
50	-2	0+40	0 75 -10	50	
25	0	0+60	0 55 -20	50	
2+00	-2	0+80	+2 60 -14	50	
75	-4	1+00	+10 60 -6	50	
50	-4	1+20	+4 60 -4	50	
25	0	1+40	+2 60 -2	50	
1+00	0	1+60	+2 60 -2	50	
75	0	1+80	-2 60 -6	50	
50	-4	2+00	-4 60 -4	50	
25	-6	2+20	-4 60 -20	50	
0+00	-6	2+40	-4 60 -25	50	
		2+60	+2 60 -18	50	
		2+80	+2 60 -20	50	
		3+00	+2 55 -22	50	
		3+20	0 55 -20	50	
		3+40	0 50 -20	50	
		3+60	-2 55 -20	50	
		3+80	-5 50 -20	50	
		4+00	-4 50 -14	50	

4+20	-2 50	-6	50		
4+40	-2 60	-6	50		
4+60	-2 60	-12	50		
4+80	-2 50	-20	50		
5+00	-2 55	-12	55		
5+20	-6 55	-12	50		
5+40	-6 55	-25	50	on top of	
5+60	-16 50	-24	50	← steep River	
5+80	-16 50	-20	50	Bank	
6+00	-14 50	-20	50		
L 2600 N					
6+00	-12 55	-14	50		
5+80	-16 55	-20	50		
5+60	-20 50	-24	50		
5+40	-18 50	-24	50		
5+20	-20 50	-18	50		
5+00	-24 55	-28	50		
4+80	-18 50	-28	50		
4+60	-18 55	-20	50		
4+40	-14 50	-14	50		
4+20	-10 50	-20	50		
4+00	-10 50	-16	50		
3+80	-14 50	-18	50		
3+60	-14 50	-10	50		

80	0	50	-10	50	
5+00	-12	50	-28	50	
20	-18	55	-2	45	
40	-20	50	-14	50	
60	-18	55	-20	50	
80					
6+00					
Line 1+00 N					
5+60	-16	50	-20	55	
40	-14	50	-20	50	
20	-12	50	-12	50	
5+00	-16	55	-30	50	
80	-16	50	-26	50	
60	-12	55	-30	50	
40	-12	55	-24	50	
20	-14	55	-30	50	
4+00	-4	55	-40	50	
80	+2	50	-32	50	
60	+6	50	-8	50	
40	+4	50	-18	50	
20	0	50	-30	50	
3+00	0	50	-48	50	
80	0	50	-30	50	
60	-4	55	-60	50	

40	-4	50	-40	60	
20	-4	50	-34	50	
2+00	-4	50	-40	50	
80	-2	50	-50	50	
60	-4	50	-50	50	
40	-2	50	-30	50	
20	-2	50	-50	50	
1+00	-2	50	-60	50	
80	-8	55	-50	50	
60	-8	50	-70	50	
40	-2	860	-30	50	
20	-2	55	-30	55	
0+00	-6	55	-30	50	

Line	CHICK N	F.S. Hic	D	F.S.	ANADAP.
0+00	0	55	-20	50	
0+20	0	60	-24	50	
0+40	0	55	-24	50	
0+60	0	55	-25	55	
1+00	0	60	-25	50	
1+20	-2	55	-25	55	
1+40	0	55	-25	50	
1+60	-2	60	-25	50	
2+00	-2	55	-25	50	
2+20	0	55	-25	50	
2+40	0	55	-25	50	
2+60	0	55	-25	50	
3+00	0	60	-26	50	
3+20	+2	55	-24	50	
3+40	+2	55	-36	50	
3+60	0	55	-30	50	
4+00	0	55	-30	50	
4+20	+2	55	-50	50	
4+40	+2	55	-50	50	
4+60	0	50	-?	50	
5+00	-6	50	-40	50	
5+20	-2	50	-24	50	

80	0	50	-10	50
5+00	-12	50	-28	50
20	-18	55	-2	45
40	-20	50	-14	50
60	-18	55	-20	50
80				
6+00				
Line 1+00 N				
5+60	-16	50	-20	55
40	-14	50	-20	50
20	-12	50	-12	50
5+00	-16	55	-30	50
80	-16	50	-36	50
60	-12	55	-30	50
40	-12	55	-24	50
20	-14	55	-30	50
4+00	-4	55	-40	50
80	+2	50	-32	50
60	+6	50	-8	50
40	+4	50	-8	50
20	0	50	-30	50
3+00	0	50	-48	50
80	0	50	-30	50
60	-4	55	-60	50

7+40	-6	50	-26	50
7+20	-6	50	-20	50
7+00	-8	50	-30	50
2+00	-8	50	-28	50
2+60	-2	40	-28	50
2+40	-6	40	-20	50
2+20	-10	45	-24	50
2+00	-4	45	-26	50
1+80	-2	45	-24	50
1+60	-2	45	-22	50
1+40	-4	45	-24	50
1+20	-2	50	-16	50
1+00	-8	50	-26	50
0+80	-20	50	-30	50
0+60	-8	50	-20	50
0+40	-6	50	-16	50
0+20	-2	50	-12	50

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NEVILLE GIBSONY INC  
WILMINGTON NC

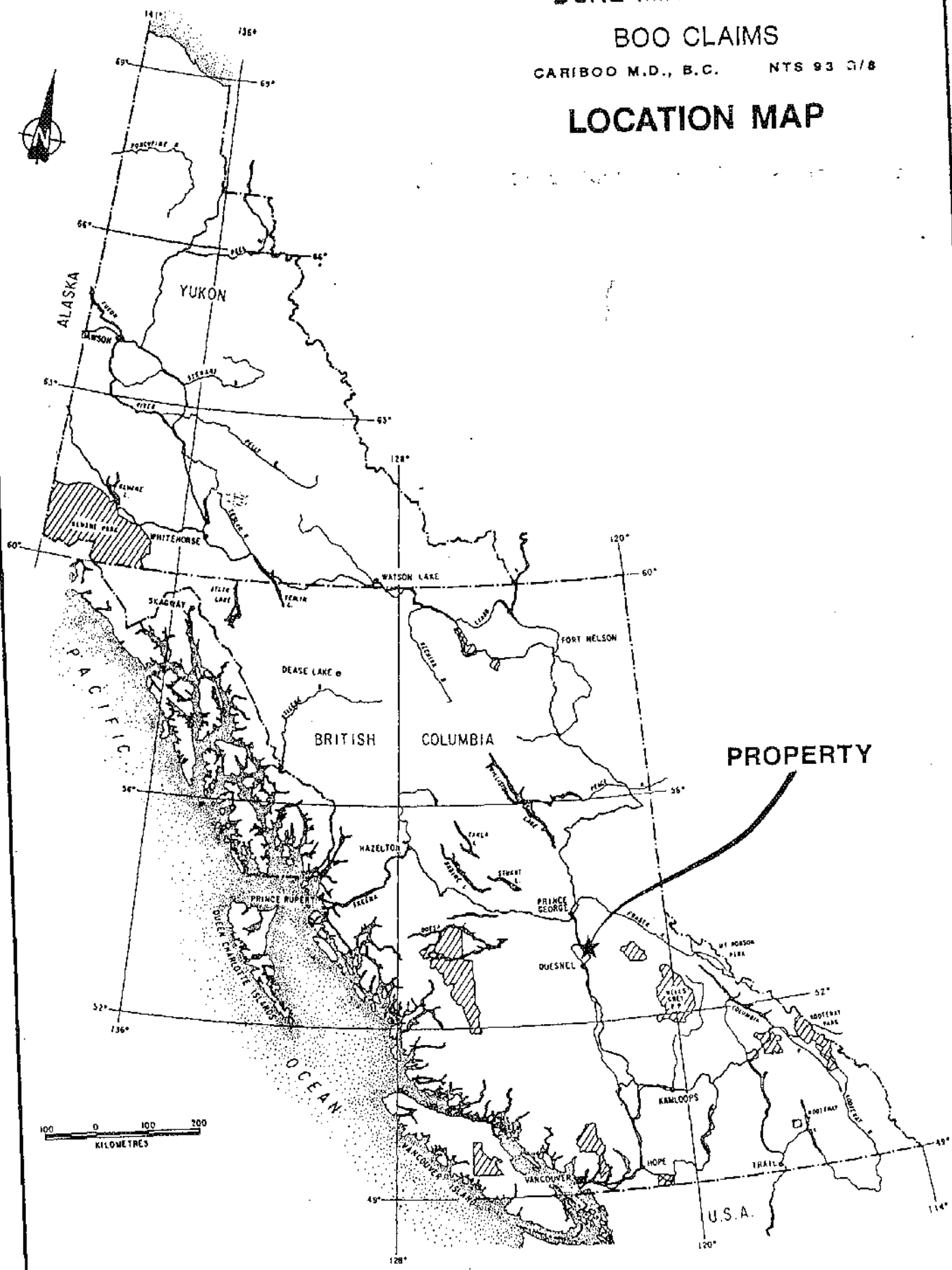
NEVILLE GIBSONY INC  
WILMINGTON NC

DUKE MINERALS LTD.

BOO CLAIMS

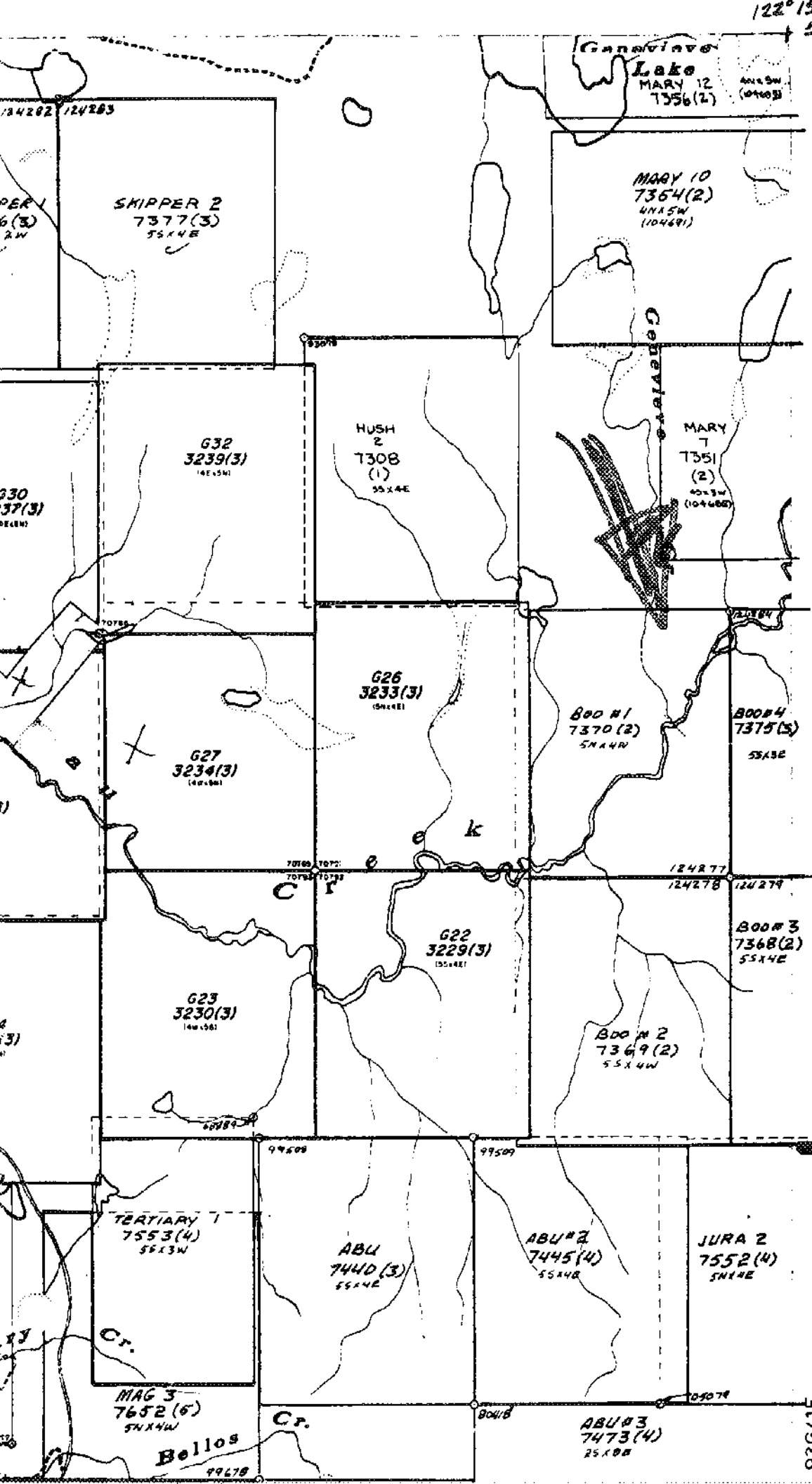
CARIBOO M.D., B.C. NTS 93 5/8

LOCATION MAP



PROPERTY

100 0 100 200  
KILOMETRES



N  
4

93G/1W

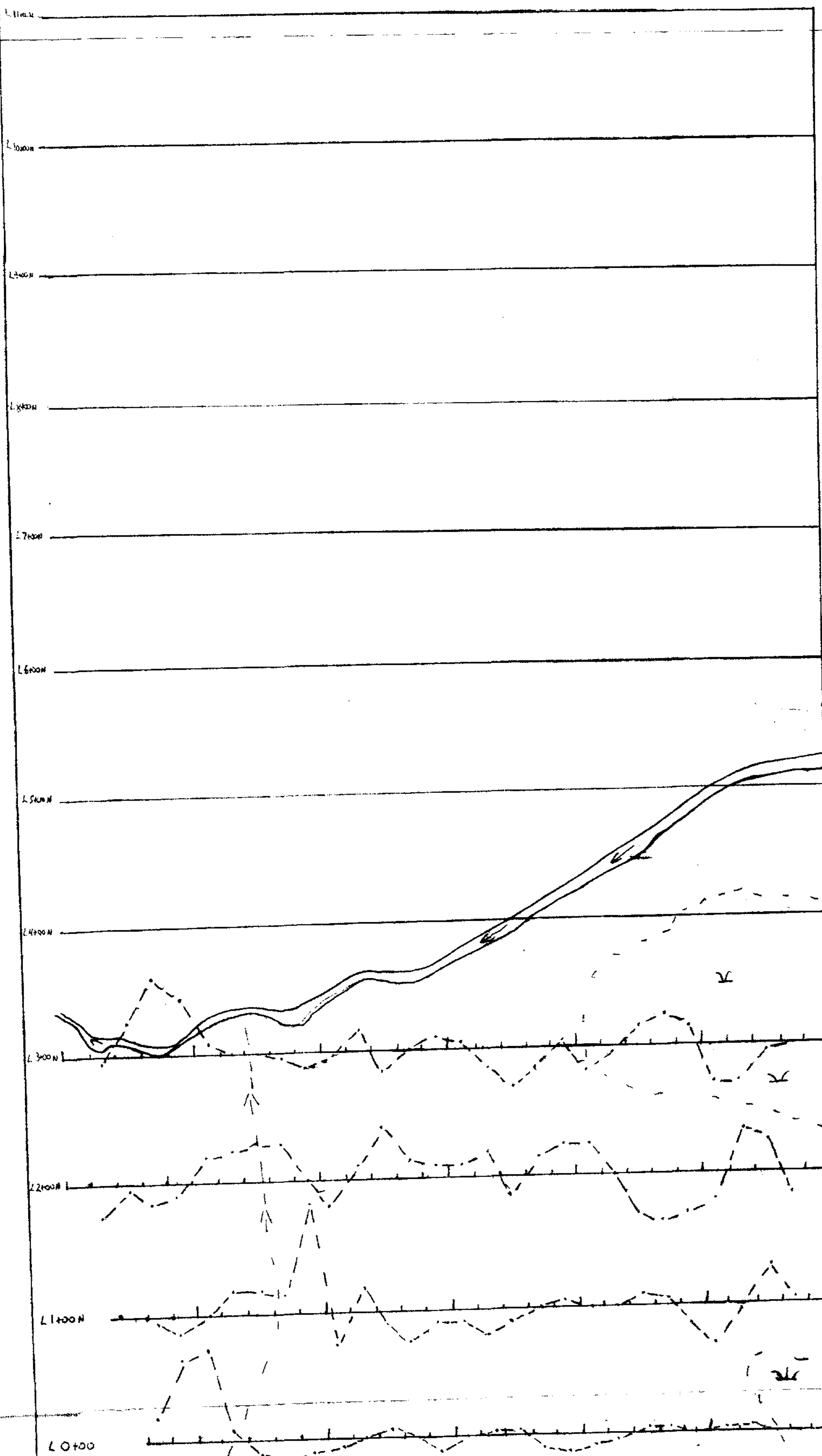
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5

4

LEGEND  
 COLOR-BLANK  
 REVERTED C.A.  
 REVERTED L.R.  
 VERIFIED LEGAL SURVEY  
 LEGAL CORNER

93G/1E



AHBUA CREEK

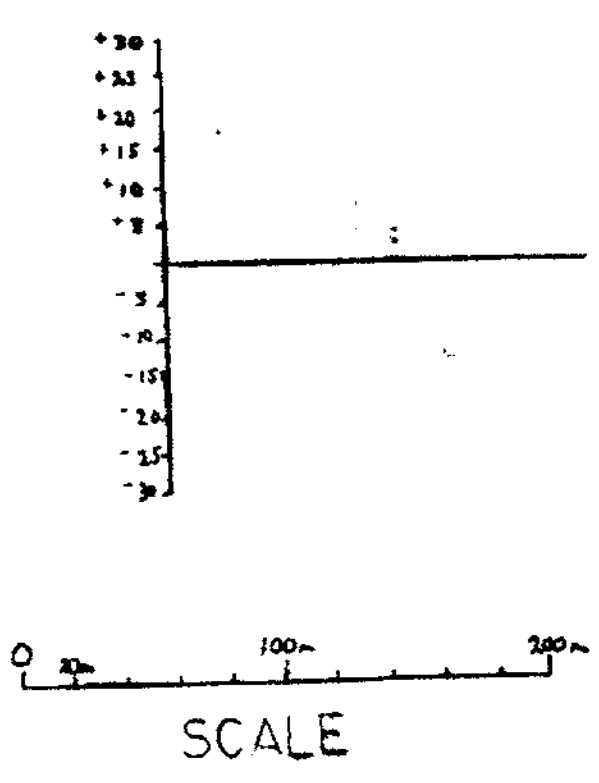


Fig 1	
DUKE MINERALS LTD	
B00*1-4 CLAIMS	
V.L.F.-EM DIP ANGLE	
PROFILES	
SEATTLE	
NTS 986-1W	CARL B00 M.D. 8.6.
G. CASBIGNER RESOURCES	
ASSESSMENT REPORT	

17,389

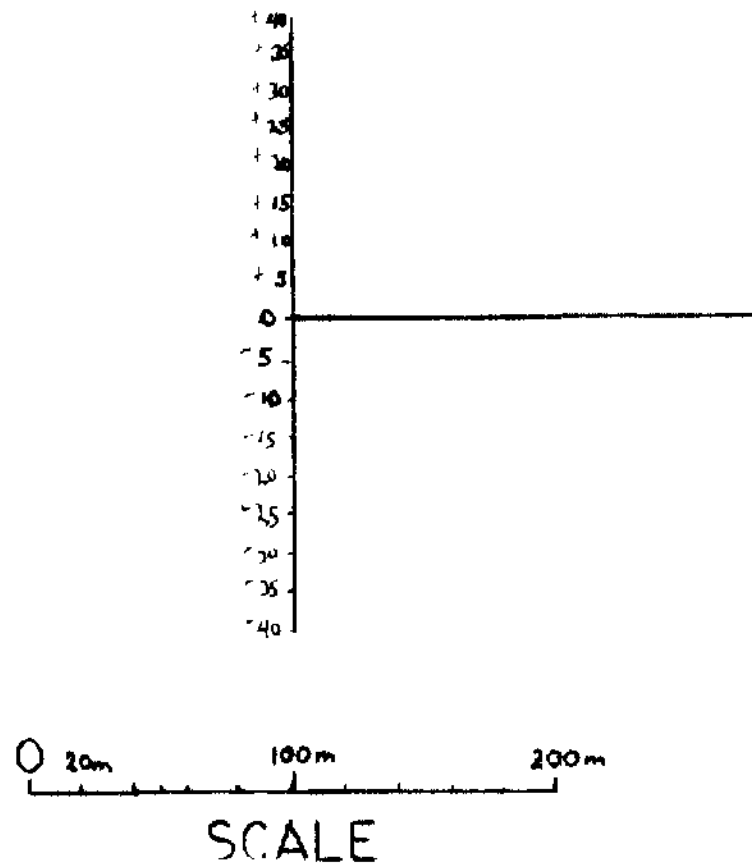
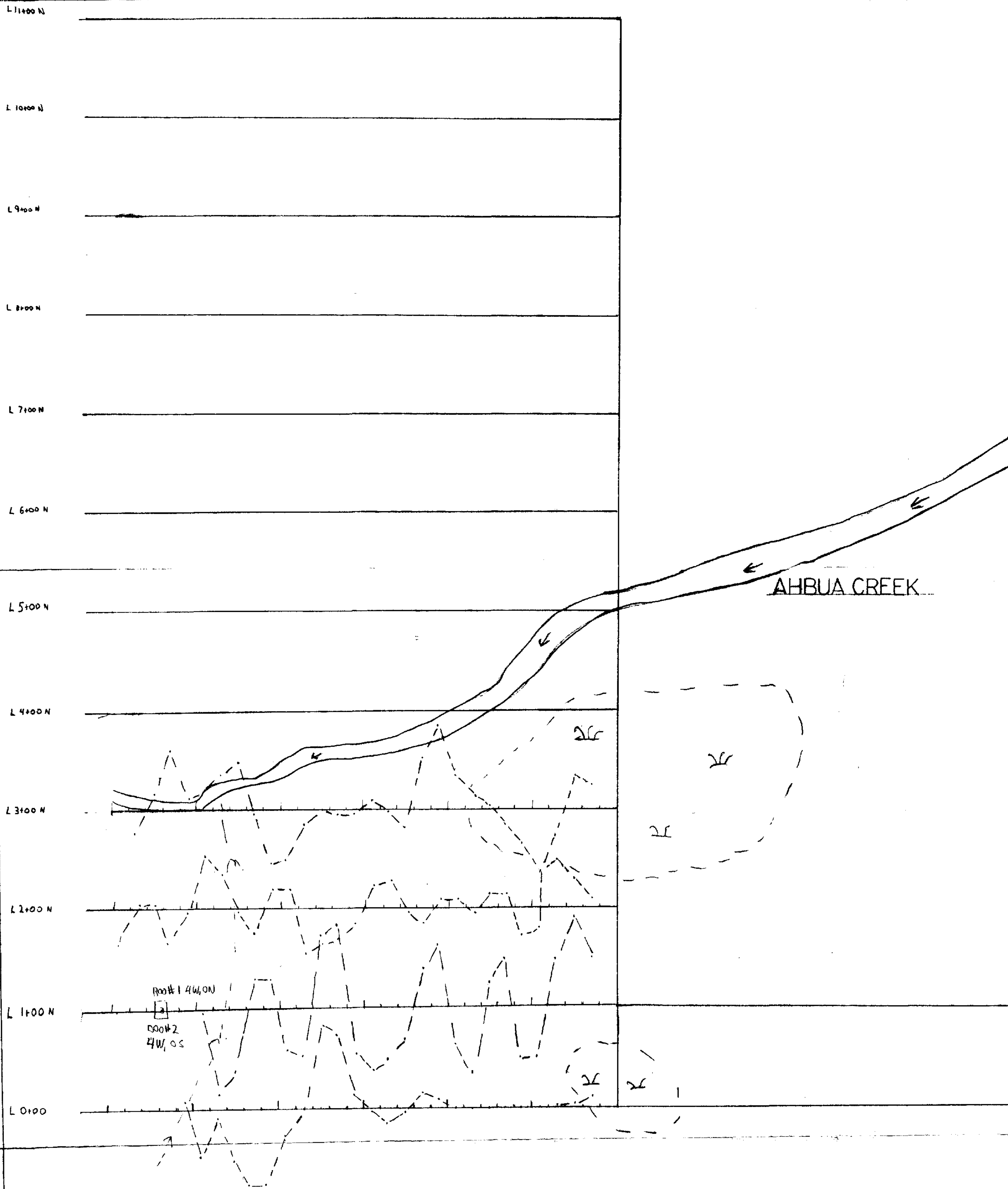


Fig 1

DUKE MINERALS LTD.  
 1300 \* 1+4 CLAIMS  
 VLF-EM DIP ANGLE  
 PROFILES  
 ANNAPOLIS  
 NTS 93G-1W CARLBOO MD. B.C.

BASELINE RESOURCES GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

17,389