

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

DIAMOND DRILLING REPORT

VINE 39 CLAIM

Fort Steele Mining Division

Palmer Bar Creek Area

N.T.S. 82G/5W

Lat: 49° 27' 25"

Long: 115° 15' 30"

OWNER

Cominco Ltd.

Kootenay Exploration  
1051 Industrial Road No. 2  
Cranbrook, B.C.  
VIC 4K7

Work Performed During June 1983

Report By:

D.L. Pighin  
Geologist

Under the Supervision of:

D. Anderson  
Project Geologist

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,899**

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WESTERN DISTRICT

DIAMOND DRILLING REPORT

VINE 39 MINERAL CLAIM

Fort Steele Mining Division

1.00 GENERAL STATEMENT

This report outlines the results of a Diamond drill hole on the Vine 39 mineral claim.

Diamond drilling was done between June 17, 1983 and June 28, 1983.

Total expenditures related to the Diamond drilling program amounted to \$37,700.09.

2.00 INTRODUCTION

2.10 Status of Ownership

The Vine 39 claim is 100% Cominco owned.

2.20 Location and Access

The Vine 39 claim is located 6 kilometers SW of Cranbrook, B.C. Access to the drill site may be gained via Highway 3/95 and approximately 1 kilometer of rough bush road.

The collar of D.H. V-83-1 is located on Vine 39 Mineral Claim at Latitude 49° 27' 25" and Longitude 115° 15' 30".

2.30 General Character of the Area

The relief on the Vine 39 claim is flat to moderately rolling. Elevations range between 1000 m and 1140 meters. The area was logged prior to 1920. Natural regeneration has reforested the area to stands of Lodgepole Pine, Ponderosa Pine, Douglas Fir and Larch.

### 3.00 DIAMOND DRILLING

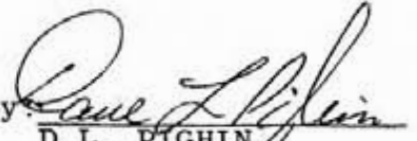
One hole D.D.H. V-83-1 was collared at a depth of 158.8 m on the bottom of an existing Percussion hole. D.D.H. V-83-1 drilled 207.0 m to a depth of 365.8 meters from surface. (Core size HQ). Sperry Sun Surveys were taken at 172.2 m, 220.0 m, 274.39 m and 365.8 m (see attached drill log for details).

The hole cored 207.0 meters of Middle Aldridge stratigraphy. Bedding to core axis ranges between 75° and 80°. No evidence of faulting or folding was found in the core. The sediments in the hole are generally thin to medium bedded, but some thick to very thick beds are present. Lithologically, these sediments are mainly quartzitic wacke, quartz wacke and wacke. The sediments, are generally weakly biotitic. Chlorite commonly occurs along fractures and as irregular patches within the sediments. Sericitic alteration is commonly found in quartz wacke beds. Weakly disseminated pyrrhotite and pyrite are found in the sediments through out the hole. Pyrrhotite in thin laminations is rare, but does occur in some wacke beds. Sphalerite and galena is generally associated with the quartz-chlorite filled fractures. Sphalerite is very rare in the sediments, and if it is found, it is usually associated with pyrrhotite.

### 4.00 CONCLUSIONS

The rocks which were cored by D.D.H. V-83-1 are lithologically typical of the Middle Aldridge formation. In the hole faulting and folding is not a problem. Sulphides in the core are typical of that which is normal for Middle Aldridge Formation.

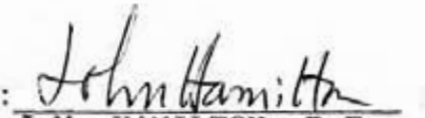
Report by:

  
D.L. PIGHIN  
Geologist

Endorsed by:

  
D. ANDERSON, P.Eng.

Approved by:

  
J.M. HAMILTON, P.Eng.  
Chief Geologist  
Kimberley

Approved for  
Release by:

  
G. HARDEN, Manager  
Exploration  
Western District  
Vancouver

xc: Mining Recorder (2 copies) ✓  
Western District, Exploration  
Kootenay Exploration

EXHIBIT "A"

STATEMENT OF EXPENDITURES

DIAMOND DRILLING - VINE 39 CLAIM (20 units)

FORT STEELE MINING DIVISION

Salaries

D.L. Pighin - Geologist, Field, planning & Supervision - 5 days @ \$190/day =	\$ 950.00
D.L. Pighin - Geologist, Report & Map Preparation - 3 days @ \$190/day =	570.00

Mob/Demob

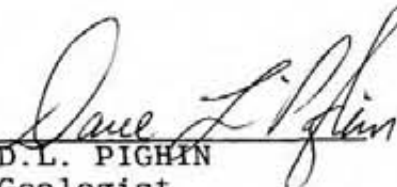
Henderson Heavy Hauling, Cranbrook	491.26
Fiorentino Bros, Cranbrook	238.00

Other

Supplies - Quick Gel	470.00
Transportation - 4x4 - 5 days @ \$40/day	200.00

Direct

Acadia Drilling Inc., 501 McBride St. W. Cranbrook, B.C. V1C 4H3	<u>34,780.83</u>
	\$37,700.09

  
D.L. PIGHIN  
Geologist

IN THE MATTER OF THE  
B.C. MINERAL ACT

AND

IN THE MATTER OF A DIAMOND DRILL PROGRAMME  
CARRIED OUT ON THE VINE 39 MINERAL CLAIM  
PALMER BAR CREEK AREA

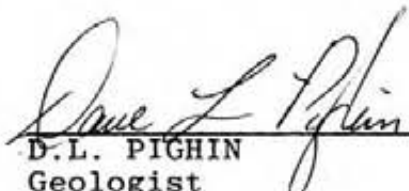
in the Fort Steele Mining Division of  
the Province of British Columbia

More Particularly N.T.S. 82G/5W

A F F I D A V I T

I, D.L. Pighin, of the City of Cranbrook, in the Province  
of British Columbia, make Oath and say:

1. That I am employed as a Geologist by Cominco Ltd.  
and as such, have a personal knowledge of the  
facts to which I hereinafter depose:
2. That annexed hereto and marked as Exhibit "A" to  
this my Affidavit is a true copy of expenditures  
incurred on a Diamond Drill programme, on the Vine  
39 Mineral Claim.
3. That the said expenditures were incurred between  
the 17th day of June, 1983 and the 28th day of June,  
1983 for the purpose of mineral exploration on the  
above noted claim.

  
D.L. PIGHIN  
Geologist

COMINCO LTD.


EXPLORATION

WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

D.L. PIGHIN has personally conducted many types of mineral exploration work for Cominco Ltd. over the last seventeen years.

I consider him well qualified to prepare this report.

  
\_\_\_\_\_  
D. ANDERSON, P.Eng.  
Project Geologist



# Drill Hole Record



Property VINE District Fort Steele Hole No. V-83-1  
 Commenced June 17, 1983 Location Vine 39 Claim Tests at 365.8, 274.39, 220 & Hor. Comp. 12.6 m  
 Completed June 27, 1983 Core Size HQ Corr. Dip 89.9 to 86.8° 172.2 Vert. Comp. 305.60 m  
 Co-ordinates Lat. 49° 27' 25" Long. 115° 15' 30" True Brg. S72°W Logged by D.L. Pighin  
 Objective To test Aldridge Sediments for Pb-Zn. % Recov. 95% Date July 1983

Claim  
T Brg.  
Collar Dip  
Elev.  
Length

Footage From To	Description	Sample No.	Length	Analysis
0 - 151.5	Percussion hole drilled in 1982, cased inside of well casing by 151.5 meters of HQ casing.			
151.5 - 155.2	Wacke; very thick bedded, thin to very thin parallel laminated, very fine grained, contacts sharp-flat. Bedding to core 77°.			
155.2 - 156.56	Quartz Wacke; very thick bedded, 2 cm parallel laminated wacke tops, medium grained, contacts undulating distinct.			
156.56 - 160.0	Quartzitic Wacke interbedded Wacke, thin bedded, non-laminated, fine grained, contacts undulating-distinct. @ 159.4 small irregular calcite vein contains pryorite chlorite and rare specks of sphalerite.			
160.0 - 161.1	Quartzitic Wacke; very thick bedded, thin non-laminated wacke top, medium grained, contacts undulating-distinct.			
161.1 - 162.2	Quartzitic Wacke, very thin bedded, 1 to 2 cm wavy laminated wacke tops, small scale cross-bedding at base of beds, medium to fine grained graded beds, contacts flat-sharp.			
162.2 - 166.8	Quartzitic Wacke; medium bedded, 2 to 5 cm wavy laminated wacke tops, fine grained, contacts distinct-undulating, load casted bases at 166.5, rare rip-up clast in section.			

# Drill Hole Record



Property VINE District Fort Steele Hole No. V-83-1  
 Commenced June 17, 1983 Location Vine 39 Claim Tests at 365.8, 274.39, 220 & Hor. Comp. 12.6 m  
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Claim  
T Brg.  
Collar Dip  
Elev.  
Length

Footage From To	Description	Sample No.	Length	Analysis
166.8 - 167.02	Wacke; medium bedded, thin to very thin parallel laminated, very fine grained, contacts sharp-flat.			
167.02 - 174.6	Quartz Wacke; medium bedded, 1 to 5 cm non-laminated wacke tops, generally medium grained, contacts distinct-undulating, some load casted bases, some beds distinctly graded fining upwards, beds generally sericitic. Sperry Sun Survey S74.5°W true, dip 88° @ 172.2 m.			
174.6 - 179.2	Quartz Wacke; very thick bedded, thin non laminated wacke tops rare, generally medium grain, some coarse grain sections, contacts indistinct-undulating, thin (3 cm) quartz, calcite, chlorite vein 20° to core, section weakly sericitic through-out.			
179.2 - 179.6	Quartzitic Wacke interbedded Wacke; thin bedded, medium to fine grained, contacts undulating-distinct, rare rip-up clasts.			
179.6 - 182.6	Quartzitic Wacke; medium bedded, 2 to 5 cm non laminated wacke tops, fine to medium grained, contacts flat-sharp to undulating-distinct.			
182.6 - 182.85	Wacke; medium bedded, thin to very thin parallel laminated, very fine grained, contacts flat-sharp. Bedding to core 82°.			
182.85 - 183.4	Wacke interbedded Quartzitic Wacke; thin bedded, some fine parallel lamination, contacts flat-sharp to undulating indistinct.			

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates	True Brg.	Logged by	
Objective	% Recov.	Date	

Footage From	To	Description	Sample No.	Length	Analysis
183.4	- 185.0	Quartzitic Wacke; medium bedded, 1 to 2 cm non laminated wacke tops, generally medium grained, contacts undulating-indistinct. Calcite after selenite xtls. at 183.6.			
185.0	- 188.0	Quartz Wacke; thick bedded, 5 cm non laminated wacke tops, medium grained fining upwards, contacts undulating-distinct, weakly sericitic through-out.			
188.0	- 190.0	Quartzitic Wacke; medium bedded, 1 to 2 cm non laminated wacke tops, fine grained, contacts undulating-distinct.			
190.0	- 199.1	Quartz Wacke, some interbedded Quartzitic Wacke; medium bedded, 1 to 8 cm non laminated wacke tops, generally fine grained, contacts undulating-distinct; calcite after selenite @ 192.6. Weak sericitization in some beds.			
199.1	- 199.7	Quartzitic Wacke; thin bedded, 1 to 3 cm non laminated wacke tops, generally fine grained, contacts undulating-distinct, abundant selenite? casts in bed tops.			
199.7	- 201.2	Quartz Wacke; very thick bedded, 1 cm thick non laminated wacke top, coarse grain base grading up to medium grain top, contacts no visible (broken core), sericitic.			
201.2	- 202.0	Quartzitic Wacke; medium bedded, no tops, fine grained, contacts hardly visible.			

811-4407

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates	True Brg.	Logged by	
Objective	% Recov.	Date	

Footage From	To	Description	Sample No.	Length	Analysis
202.0	- 202.78	Quartzitic Wacke, thin bedded, 1 to 2 cm non laminated wacke tops, fine grained, contacts undulating-distinct.			
202.78	- 208.2	Quartzitic Wacke; medium bedded, 2 to 5 cm non-laminated wacke tops, fine grained, contacts undulating distinct.			
208.2	- 208.9	Quartz Wacke; thick bedded, 4 cm thin non-laminated wacke top, coarse grained, contacts undulating-distinct, large chlorite-biotite concretion.			
208.9	- 211.8	Quartzitic Wacke; medium bedded, 2 to 5 cm non laminated wacke tops, contacts flat to undulation generally sharp, abundant calcite after selenite in bed tops. Bedding to core 78°.			
211.8	- 212.5	Quartz Wacke; very thick bedded, no tops, medium grained, contacts not visible (broken core).			
212.5	- 215.0	Quartzitic Wacke; medium bedded, 4 to 6 cm parallel and non laminated wacke tops, generally fine grained, contacts flat-sharp and undulating sharp.			
215.0	- 218.0	Quartz Wacke; thick bedded, 4 cm non laminated wacke top, medium grained, contact undulating-distinct, weakly sericitic.			
218.0	- 218.8	Quartzitic Wacke, interbedded Wacke; thin bedded, some small scale cross bedding in wacke beds, contacts undulating-distinct.			

811-4407

# Drill Hole Record



Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
218.6 - 219.7	Quartz Wacke; thick bedded, 3 cm thick non-laminated wacke tops, medium grained, contacts undulating-sharp, generally sericitic with patches of chlorite.									
219.7 - 222.4	Quartz Wacke; medium bedded, thin non laminated wacke tops, fine to medium grained, contacts hardly visible, patchy weak sericitization and chloritization. Sperry-Sun survey 987 <sup>A</sup> true, dip 87.5° @ 220.0 m.									
222.4 - 223.4	Wacke; thin bedded, some parallel lamination, but generally non-laminated, very fine grained, contact flat-sharp and undulating distinct.									
223.4 - 225.3	Quartz Wacke; medium bedded, 1 to 3 cm non laminated wacke tops, fine grained, contacts flat-distinct.									
225.3 - 226.3	Wacke; Interbedded Quartzitic Wacke; thin bedded, non laminated to wavy laminated, fine grained, contacts distinct-undulating, soft sedimentary slump structured, underlain by 5 cm thick fragmental unit, abundant selenite casts.									
226.3 - 229.5	Quartzitic Wacke; medium bedded, 2 to 3 cm non laminated wacke tops, fine grained, contacts hardly visible, some selenite casts in wacke tops.									
229.5 - 231.0	Quartz Wacke; thick bedded, 1 to 3 cm non laminated wacke tops, generally medium grained, contacts hardly visible, generally weakly sericitic.									

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# Drill Hole Record



Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
231.0 - 232.3	Wacke Interbedded Quartzitic Wacke; thin bedded, wavy laminated in part, very fine to fine grained, contacts undulating-distinct, thin soft sediment slump structured beds, with rare clast.									
232.3 - 235.9	Quartzitic Wacke; medium bedded, 2 to 5 cm non laminated and wavy laminated wacke tops, generally fine grained, contacts undulating-distinct, dewatering structures and soft sediment deformation near base of unit.									
235.9 - 236.9	Quartz Wacke; thick bedded, 3 to 5 cm non laminated wacke tops, medium grained, contacts undulating-sharp, good load casts developed on bed base, generally weakly sericitic.									
236.9 - 238.7	Quartz Wacke; medium bedded, wavy laminated wacke tops, medium grained, contacts undulating-distinct.									
238.7 - 240.8	Quartz Wacke; very thick bedded, no tops, medium grained, contacts not visible, weakly sericitic through-out.									
240.8 - 242.1	Quartz Wacke; thick bedded, thin wavy laminated tops, medium grained, contacts undulating distinct, generally sericitic.									
242.1 - 242.7	Quartzitic Wacke Interbedded Wacke; thin bedded, wavy laminated wacke, very fine and medium grained beds, contacts distinct-undulating, abundant selenite casts in wacke beds.									

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# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
242.7 - 244.0	Quartz Wacke; thick bedded, thin non laminated wacke tops, medium grained, contacts undulating-distinct, weakly sericitic.										
244.0 - 245.0	Quartzitic Wacke Containing Whispy Layers Of Wacke; thick bedded, generally slump structured, contacts not visible.										
245.0 - 247.0	Quartzitic Wacke; medium bedded, non laminated wacke tops, generally fine grained, contacts undulating-distinct.										
247.0 - 248.7	Quartzitic Wacke Interbedded Wacke; whispy slump structured wacke beds, fine grained with very fine grained wacke, contact sharp-undulating.										
248.7 - 252.4	Quartzitic Wacke; medium bedded, 3 to 5 cm wavy to non-laminated wacke tops, fine grained, contacts generally undulating-distinct, some flat-sharp, some rip-up clasts in section.										
252.4 - 253.83	Quartzitic Wacke Interbedded Wacke; thin bedded.										
253.83 - 256.2	Wacke; thin bedded, thin to very thin parallel lamination, generally very fine grained, contacts flat-sharp, some small scale cross-bedding, .5 cm bedded quartz pyrrhotite contain traces of sphalerite at 254.5 and 256.0.										

811407

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
256.2 - 265.7	Wacke Interbedded Quartzitic Wacke; thin bedded, generally fine parallel laminations, fine to very fine grain, contacts generally flat sharp. Bedding to core 83°, @ 246.8 2 cm heavy disseminated pyrrhotite contain tiny specks of sphalerite.										
265.7 - 267.0	Quartz Wacke; medium bedded, 4 to 5 cm wavy laminated wacke tops, generally fine grained, contacts sharp-undulating, weak sericitization and patchy chloritization.										
267.0 - 268.1	Quartzitic Wacke Interbedded Wacke; thin bedded, minor wavy lamination, contacts undulating-distinct, generally fine grained.										
268.1 - 270.1	Quartz Wacke; thick bedded, 3.5 cm non laminated wacke tops, generally fine grained, contacts gradational-indistinct, weakly sericitic.										
270.1 - 270.8	Quartzitic Wacke Interbedded Wacke; thin bedded, some parallel and wavy lamination, fine to very fine grained, contact flat-distinct.										
270.8 - 273.7	Quartzitic Wacke; medium bedded, 3 to 5 cm non laminated wacke tops, medium grained, contacts undulating-distinct.										

811407

Scale  
Colour Plot  
& Date

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
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Footage From To	Description	Sample No.	Length	Analysis
273.7 - 274.7	Wacke Interbedded Quartzitic Wacke; thin bedded, some thin parallel and wavy laminations, fine to very fine grained contacts, flat and undulating-distinct, some dewatering structures in wacke beds. @ 274.39 m Sperry Sun survey S72°W true S7° dip.			
274.7 - 283.6	Quartzitic Wacke; medium bedded, 2 to 4 cm wacke tops some wavy laminations, generally fine grained, contacts generally undulating-sharp, some good flame structured bases.			
283.6 - 287.4	Quartz Wacke; thick bedded, 2 to 5 cm wacke tops non-laminated, generally fine grained, conducts indistinct-gradational, beds generally weakly sericitic.			
287.4 - 290.1	Quartzitic Wacke; medium bedded, 2 to 5 cm wavy laminated wacke tops, generally fine grained, contacts sharp-undulating (good flame structured bases).			
290.1 - 291.85	Wacke Interbedded Quartzitic Wacke; thin bedded, some thin to very thin parallel laminations, some contacts sharp-flat, but generally indistinct and gradational.			
291.85 - 292.67	Wacke Interbedded Quartzitic Wacke; medium bedded, good thin parallel lamination in wacke beds, contacts flat-distinct.			
292.67 - 293.8	Wacke; thick bedded, very fine to fine parallel lamination very fine grained, contacts flat-sharp.			

Scale  
Colour Plot  
& Date

# Drill Hole Record

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Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
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Footage From To	Description	Sample No.	Length	Analysis
293.8 - 294.4	Quartz Wacke; thick bedded, 5 cm non-laminated wacke top, medium grained, contacts indistinct, quartz biotite filled fracture 10° to core.			
294.4 - 295.3	Quartzitic Wacke Interbedded Wacke; thin bedded, wacke beds are parallel laminated, generally fine to very fine grained, contacts sharp-undulating, some good flame structured bases.			
295.3 - 295.8	Quartz Wacke; thick bedded, no wacke top, medium grained, contacts indistinct, generally weakly sericitic.			
295.8 - 297.4	Quartzitic Wacke; medium bedded, 1 to 5 cm non laminated wacke tops, generally fine grained, contacts indistinct-gradational.			
297.4 - 300.0	Quartz Wacke; thick bedded, 1 to 5 cm non-laminated wacke tops, generally fine grained, contacts indistinct gradational in part, quartz biotite veins 10° to core.			
300.0 - 301.0	Wacke Interbedded Quartzitic Wacke; thin bedded, some wavy lamination in wacke beds, fine to very fine grained, contacts flat-distinct			
301.0 - 302.5	Quartzitic Wacke; medium bedded, 3 to 8 cm thick wavy laminated wacke tops, some small scale cross bedding in tops, fine grained, contacts flat-distinct. Very thin calcite filled tension cracks contain traces of sphalerite.			

81-447

81-447

Scale  
Colour Print  
& Date

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis
302.5 - 303.2	Quartz Wacke; thick bedded, 5 cm non-laminated wacke top, fine grained, contacts flat-distinct, weakly sericitic.			
303.2 - 307.9	Quartzitic Wacke; medium bedded, wavy to non-laminated wacke tops, generally fine grained, contacts undulating-distinct, some good flame structures. Bedding to core 82°			
307.9 - 311.4	Wacke Interbedded Quartzitic Wacke; wavy and parallel laminated, fine to very fine grained, contacts generally undulating-distinct, some flat sharp abundant small de-watering structures in bed tops.			
311.4 - 314.7	Quartz Wacke; thick bedded, 4 to 6 cm non laminated wacke tops, medium to fine grained, contacts indistinct gradational.			
314.7 - 317.2	Quartzitic Wacke; medium bedded, 2 to 4 cm wavy laminated tops, medium grained, contacts undulating distinct.			
317.2 - 318.4	Quartz Wacke; thick bedded, 3 to 4 cm non-laminated wacke tops, generally fine grained, contacts not visible (broken core), beds generally sericitic.			
018.4 - 335.4	Quartz Wacke; thick bedded, 2 to 4 cm non-laminated wacke tops, medium and fine grained beds, contacts undulating sharp to distinct, some flame structured bases. Generally sericitic with patchy chloritization.			

81-441

Scale  
Colour Print  
& Date

# Drill Hole Record

Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis
325.4 - 326.2	Wacke; thick bedded, non laminated, very fine grained, contacts flat-sharp.			
326.2 - 330.6	Quartzitic Wacke; medium bedded, 3 to 6 cm non laminated wacke tops, some parallel lamination in wacke interbeds, generally fine to very fine grained, contacts mainly flat-sharp. @ 327.4 thin chlorite pyrite band contain traces of sphalerite.			
330.6 - 331.9	Wacke Interbedded Quartzitic Wacke; thin bedded, good thin to very thin parallel lamination in wacke beds, generally very fine grained, contacts flat sharp. Bedding to core 82°			
331.9 - 332.3	Quartzitic Wacke; thick bedded, 3 to 5 cm non laminated wacke tops, fine grained, contacts indistinct gradational.			
332.3 - 336.4	Wacke Interbedded Quartzitic Wacke; thin bedded, good thin to very thin parallel bending in wacke beds, generally fine to very fine grained, contacts flat-sharp. From 335.8 to 336.4 limy sections up to 5 cm thick est. 20% CaO <sub>2</sub> .			
336.4 - 337.0	Quartzitic Wacke; medium bedded, fine grain, contacts flat distinct, limy section from 336.4 to 336.6 est. 20% CaO <sub>2</sub> .			

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## Drill Hole Record



Property		District	Hole No. V-83-1									
Commenced	Location	Tests at	Hor. Comp.									
Completed	Core Size	Corr. Dip	Vert. Comp.									
Co-ordinates		True Brg.	Logged by									
Objective		% Recov.	Date									
Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Ho'n No.	Sheet
337.0	- 339.0	Wacke Interbedded Quartzitic Wacke; thin bedded, some thin to moderately spaced parallel lamination, wavy lamination in some beds, fine to very fine grained, contacts flat-sharp to distinct undulating. Some thin disseminated pyrrhotite bands.										
339.0	- 339.8	Quartzitic Wacke; medium bedded, wavy laminated wacke tops, fine grained contacts indistinct (broken core).										
339.8	- 340.1	Wacke; thin bedded, thinly parallel laminated, very fine grained, contacts flat-sharp.										
340.1	- 342.7	Calcareous Wacke; thick bedded, very finely parallel laminated, very fine grained wacke with fine crystalline white CaO <sub>2</sub> , contacts are flat sharp. CaO <sub>2</sub> occurs as fine crystals oriented parallel to lamination. Pyrrhotite generally disseminated through-out, rare specks of sphalerite.										
342.7	- 344.7	Wacke Interbedded Quartzitic Wacke; medium bedded, fine parallel lamination in wacke beds, fine to very fine grained, contacts generally flat sharp, some small de-water structures in bed tops.										
344.7	- 345.7	Quartz Wacke; thick bedded, thin non-laminated wacke tops medium grained, contacts undulating-distinct, generally sericitic.										

21-407

## Drill Hole Record



Property		District	Hole No. V-83-1									
Commenced	Location	Tests at	Hor. Comp.									
Completed	Core Size	Corr. Dip	Vert. Comp.									
Co-ordinates		True Brg.	Logged by									
Objective		% Recov.	Date									
Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Ho'n No.	Sheet
345.7	- 347.7	Sub-Wacke Interbedded Wacke; thin bedded, thin parallel lamination, fine to very fine grained, contacts flat-sharp.										
347.7	- 348.7	Quartzitic Wacke; medium bedded, thin wavy laminated tops, generally fine grained, contacts undulating-distinct.										
348.7	- 350.2	Wacke Interbedded Quartzitic Wacke; thin bedded, wacke beds parallel laminated, some wavy lamination, fine to very fine grained, contacts flat-sharp some undulating.										
350.2	- 352.0	Wacke Interbedded Quartzitic; thin bedded, thin parallel lamination in wacke beds, fine to very fine grained, contacts flat-sharp. Bedding to core 85°.										
352.0	- 353.1	Quartzitic Wacke; medium bedded, thin non-laminated wacke tops, generally fine grained, contacts undulating-distinct.										
353.1	- 354.0	Quartz Wacke; thick bedded, very thin wacke tops, medium grained contacts indistinct (broken core), beds generally sericitic.										
354.0	- 354.6	Wacke; thin bedded, rare parallel lamina, fine to very fine grain, contacts flat sharp.										
354.6	- 356.3	Quartzitic Wacke; medium bedded, the parallel laminated wacke tops, generally fine grained, contact flat-distinct, some undulating.										

21-407

Scale  
Colour Plan  
& Date

# Drill Hole Record

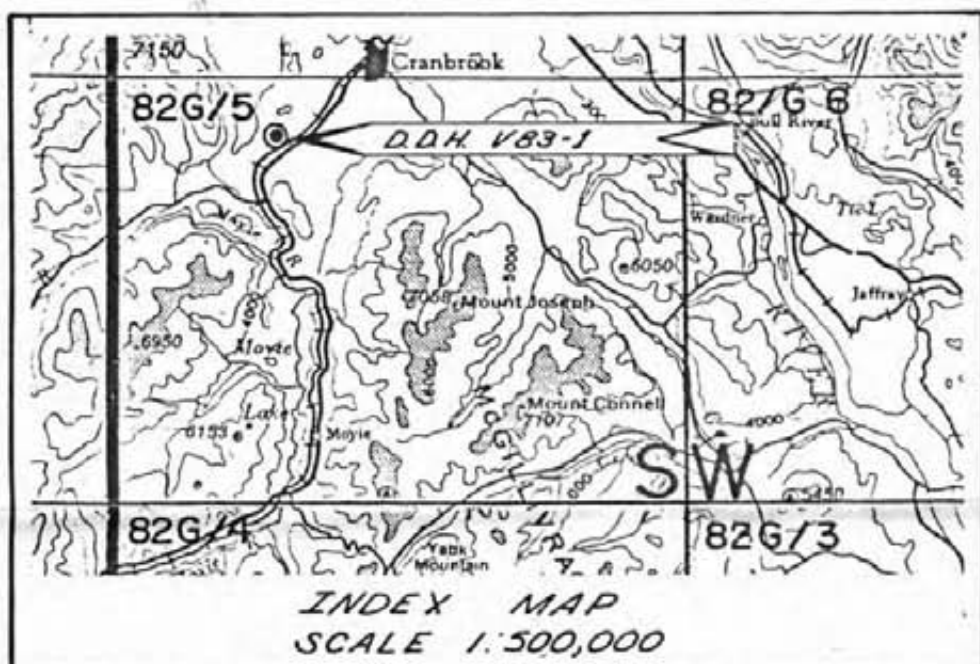
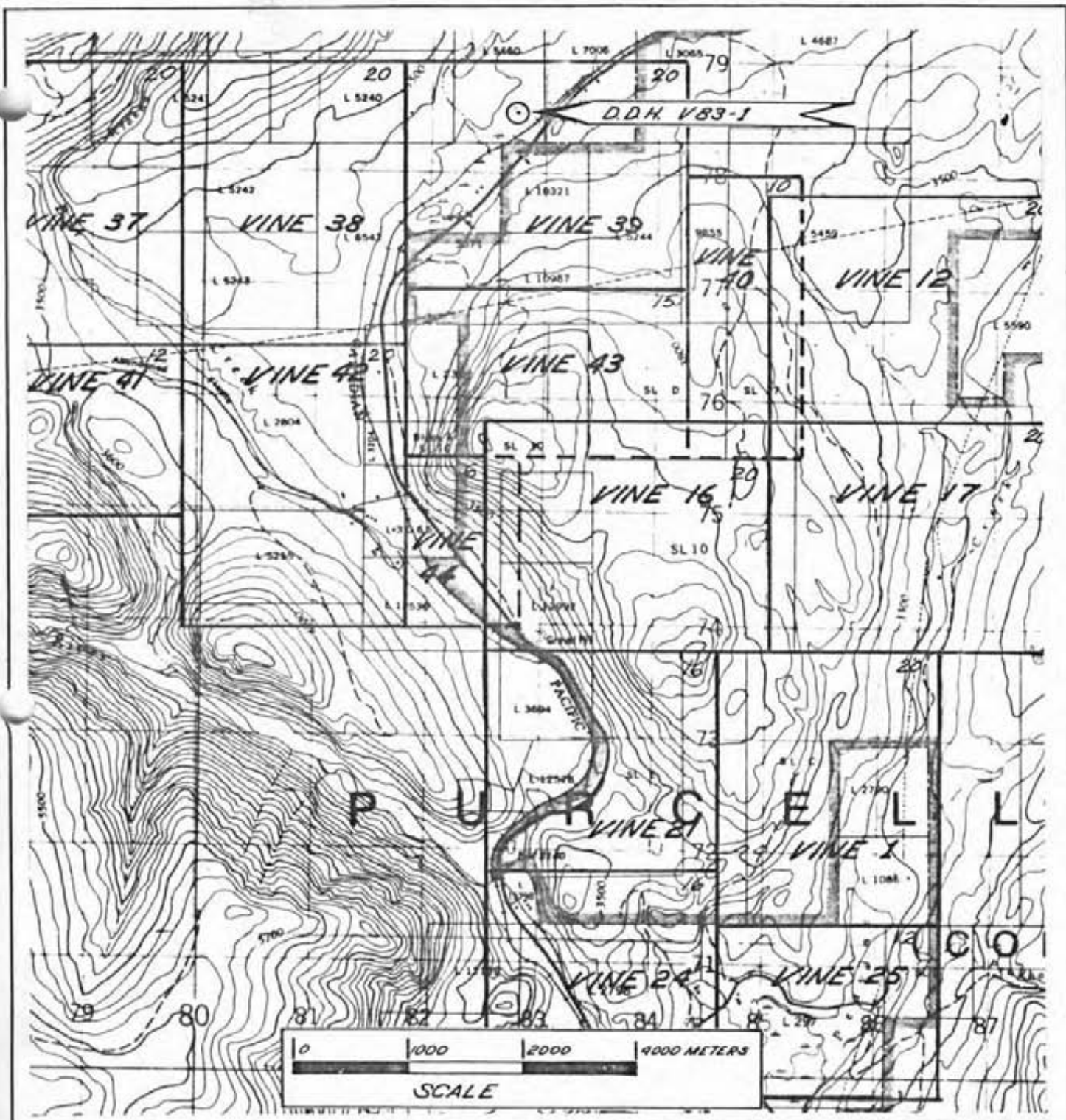


Property	District	Hole No. V-83-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim  
T Brg.  
Collar Dip  
Elev.  
Length  
Hole No. Sheet

Footage From To	Description	Sample No.	Length	Analysis
356.3 - 357.0	Wacke; thin bedded, generally parallel laminated, fine grained, contacts flat-sharp.			
357.9 - 359.0	Quartzitic Wacke; medium bedded, thin non-laminated tops, medium grained, contacts indistinct-gradational.			
359.0 - 359.4	Wacke; thin bedded, parallel laminated, contacts flat-sharp.			
359.4 - 363.5	Quartz Wacke; thick bedded, no wacke tops, medium grained, contacts indistinct, generally sericitic through-out. 361.9 - 362.6 quartz, chlorite vein @ 30° to core.			
363.5 - 364.4	Wacke; thin bedded, generally parallel laminated, fine grained, contacts flat-sharp, some undulating.			
364.4 - 365.0	Quartzitic Wacke; medium bedded, thin non-laminated wacke tops, fine grained, contacts distinct-undulating.			
365.0 - 365.8	Wacke; thin bedded, parallel laminated, fine grained contacts flat-sharp. Bedding to core 85°. Hole survey sperry-sun S89°W true -88.8°.			
	END CORE STORED AT SULLIVAN MINE, KIMBERLEY, B.C.			





Drawn by: D.L. Pighin		Traced by:	
Checked by:	Date:	Revised by:	Date:

VINE PROPERTY  
DIAMOND DRILLING 1983  
DDH V83-1

Scale: 05 Shown      Date: Nov. 1983      Plate: