

COMINCO LTD.

EXPLORATION

N.T.S. 92H/5

WESTERN DISTRICT

DIAMOND DRILLING REPORT

SENECA 1-74, AND 3-74 CLAIM GROUPS

CHEHALIS RIVER

NEW WESTMINSTER MINING DIVISION

Maps

1. Claim & DDH loc.
2. Prop. loc.

MAY 29, 1975

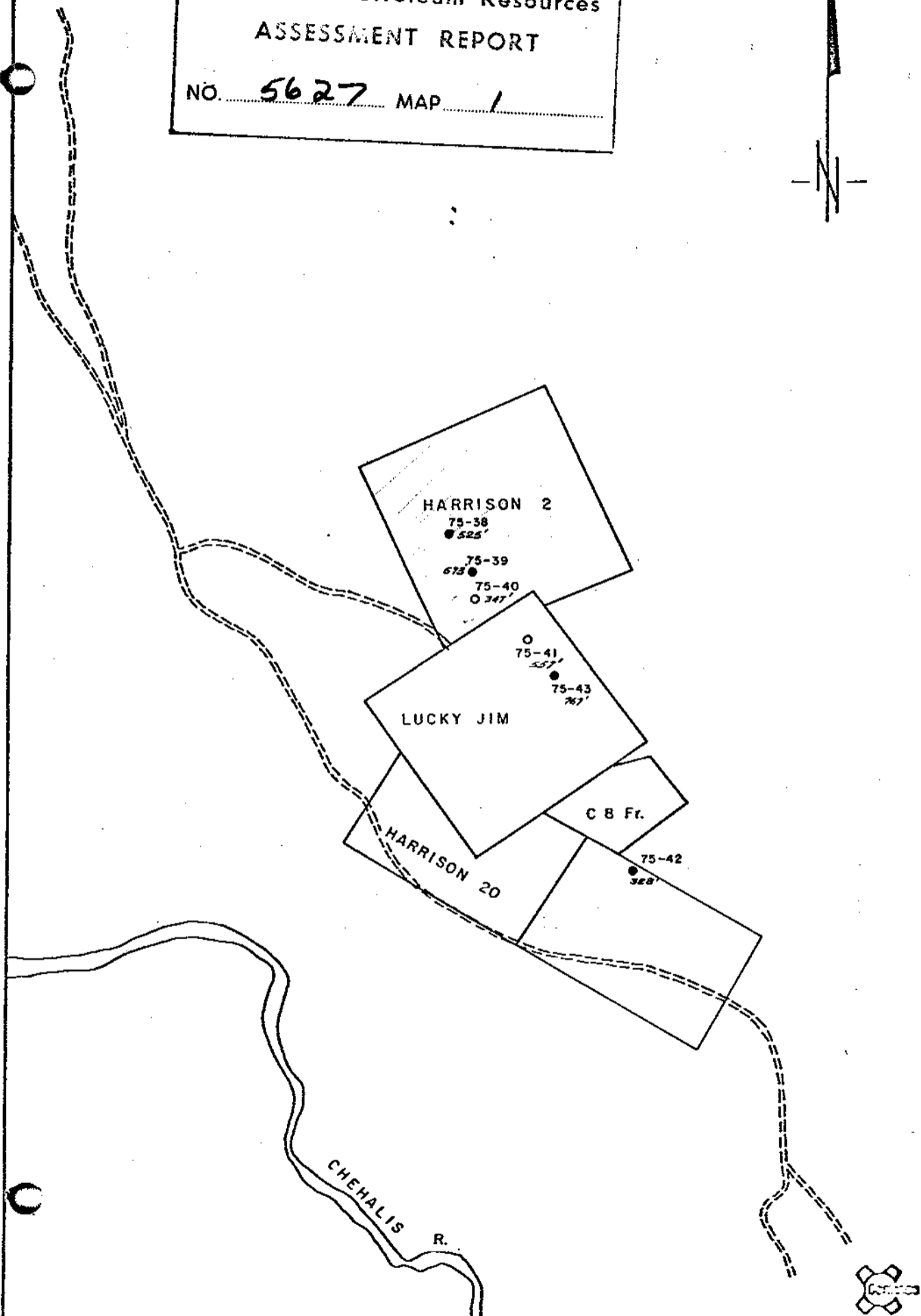
D. L. Cooke, Ph.D., P.Eng.

PERIOD OF WORK

MARCH 4, 1975 to May 29, 1975

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>5627</u> MAP
--

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5627 MAP 1



I. R. 5

Drawn by:		Traced by: <i>AM</i>	
Revised by	Date	Revised by	Date

SENECA OPTION  
DRILL HOLE LOCATIONS  
- 1975

Scale: 1" = 1000'      Date: SEPT. 1975      Plate:      N.T.S. 92 H/5

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A DIAMOND DRILL PROGRAMME CARRIED OUT ON THE MINERAL CLAIMS LUCKY JIM, AND HARRISON 2, OF THE SENECA CLAIM GROUPS 1-74, AND 3-74 RESPECTIVELY LOCATED ON THE CHEHALIS RIVER IN THE NEW WESTMINSTER MINING DIVISION OF THE PROVINCE OF BRITISH COLUMBIA

MORE PARTICULARLY N.T.S. 92H/5

A F F I D A V I T

I, DAVID L. COOKE OF THE CITY OF VANCOUVER IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:

1. THAT I AM EMPLOYED AS A SENIOR GEOLOGIST BY COMINCO LTD. AND, AS SUCH, HAVE A PERSONAL KNOWLEDGE OF THE FACTS TO WHICH I HEREAFTER DEPOSE:
2. THAT ANNEXED HERETO AND MARKED AS "EXHIBIT A" TO THIS MY AFFIDAVIT IS A TRUE COPY OF EXPENDITURES INCURRED ON DIAMOND DRILLING ON THE MINERAL CLAIMS LUCKY JIM, AND HARRISON 2.
3. THAT THE SAID EXPENDITURES WERE INCURRED BETWEEN THE 4th DAY OF MARCH 1975 AND THE 29th DAY OF MAY, 1975 FOR THE PURPOSE OF MINERAL EXPLORATION ON THE ABOVE NOTED CLAIMS.

SWORN BEFORE ME AT THE CITY )  
OF VANCOUVER IN THE PROVINCE )  
OF BRITISH COLUMBIA THIS )  
29<sup>th</sup> DAY )  
OF MAY 1975 )

[Signature] )  
A NOTARY PUBLIC IN AND FOR )  
THE PROVINCE OF BRITISH )  
COLUMBIA. )

[Signature]

DAVID L. COOKE

EXHIBIT "A"

DIAMOND DRILLING COSTS ON

THE

SENECA 1-74 AND 3-74 CLAIM GROUPS

SITUATE AT CHEHALIS RIVER

49° 22' North Latitude

122° 00' West Longitude

N.T.S. 92H/5

SALARIES

A.C. Freeze, Geologist (Mar. 4 to May 29, 1975)	74 days @ \$70.	\$ 5,180.00
R.A. Gannicott, Geologist (Apr. 21 to May 29, 1975)	34 days @ \$70.	\$ 2,380.00
J.A. Turner, Assistant (Mar. 19 to May 13, 1975)	54 days @ \$50.	\$ 2,700.00
D.L. Cooke, Sr. Geologist (Mar. 6 to May 29, 1975)	15 days @ \$110.	\$ 1,650.00

DOMICILE AND CAMP SERVICES

Hotel and Meals - 146 man days @ approx. \$22.26 \$ 3,250.00

TRANSPORTATION

Redhawk Rental - 3 months @ \$475 \$ 1,425.00  
Maintenance - Gasoline, repair, mileage charges \$ 1,005.00

DRILL SITE PREPARATION

Bulldozer costs: 111 hours @ \$28.00 \$ 3,110.00

DIAMOND DRILLING

Contract Charges/ Shepherd Enterprises Ltd. \$40,900.00

MISCELLANEOUS

Equipment, parts, etc. \$ 590.00

TOTAL COST OF DRILL PROGRAMME: \$62,190.00

TOTAL FOOTAGE DRILLED 3112 feet

COST PER FOOT DRILLED  $\frac{\$62,190}{3112} = \$19.98/\text{Ft.}$

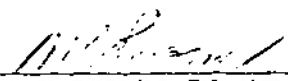
DRILLING COSTS APPLIED AS FOLLOWS

Drill Hole #75-40:	347 ft. <u>NO</u> @ \$19.98	\$ 6,933.06
Drill Hole #75-41	557 ft. <u>NO</u> @ \$19.98	\$11,128.86
	<del>BA AQ?</del>	\$18,061.92

Signed:

  
D. L. Cooke

THIS IS EXHIBIT "A" TO THE STATUTORY DECLARATION OF EXPENDITURES RELATING TO THE DIAMOND DRILL PROGRAMME DECLARED BEFORE ME ON THE 29<sup>th</sup> DAY OF MAY 1975, A.D.

  
A NOTARY PUBLIC IN AND FOR THE PROVINCE OF BRITISH COLUMBIA

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

MAY 29th, 1975

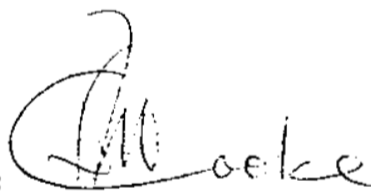
STATEMENT OF QUALIFICATIONS

I, DAVID L. COOKE, WITH BUSINESS ADDRESS AT 2200-200 GRANVILLE SQUARE, VANCOUVER 2, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT I HAVE SUPERVISED THE DIAMOND DRILLING PROGRAMME, AND THE LOGGING OF THE DRILL CORE BY A.C. FREEZE AND R.A. GANNICOTT, GEOLOGISTS, INTERPRETED THE DATA RESULTING FROM SAID PROGRAMME ON THE SENECA PROPERTY.

I ALSO CERTIFY THAT:

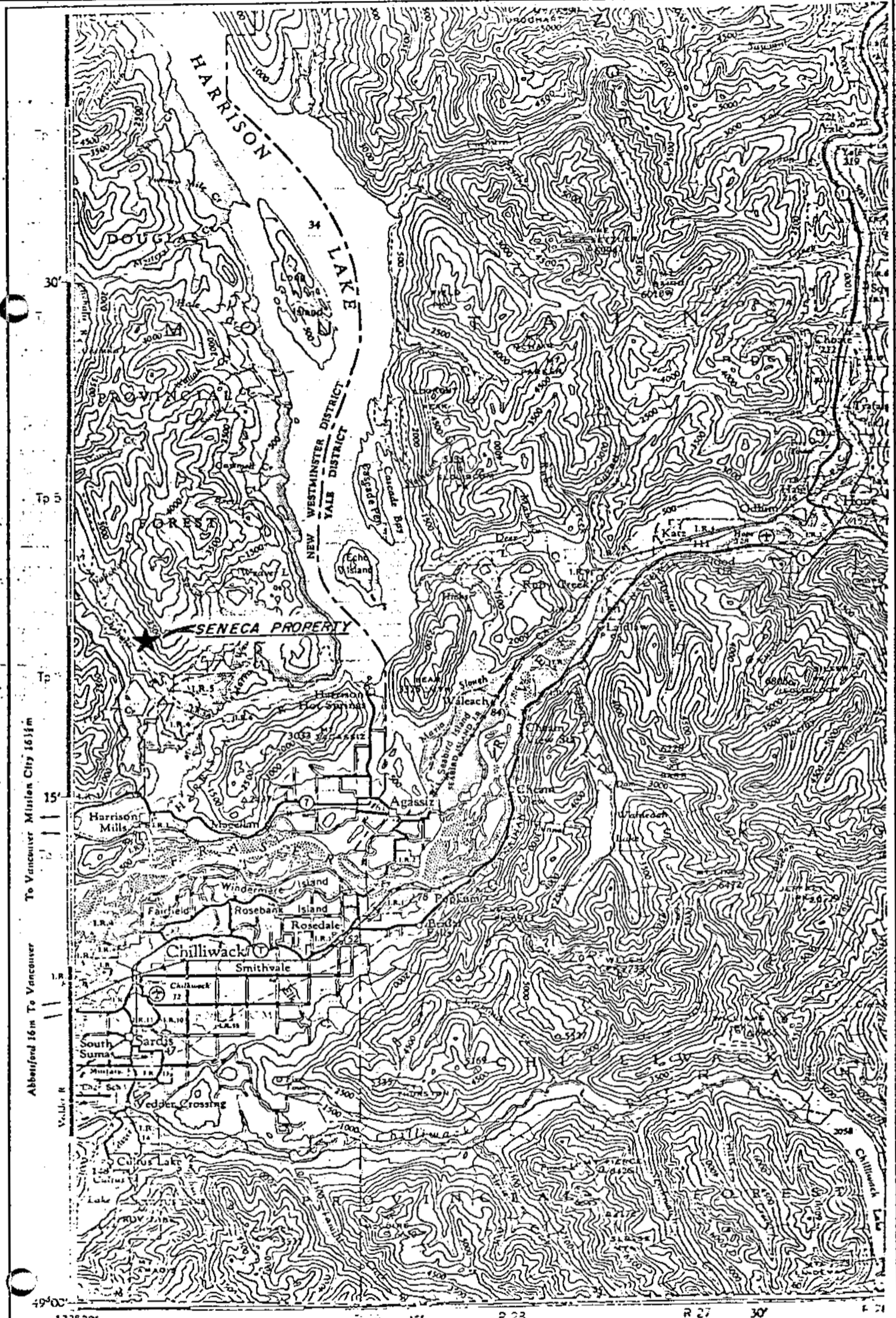
1. I AM A GRADUATE OF THE UNIVERSITY OF NEW BRUNSWICK WITH A B.Sc. DEGREE IN GEOLOGY (1959), AND OF THE UNIVERSITY OF TORONTO, WITH M.A. AND Ph.D. DEGREES IN GEOLOGY (1961 AND 1966 RESPECTIVELY).
2. I AM A MEMBER IN GOOD STANDING OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF BRITISH COLUMBIA.

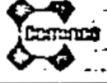
Respectfully submitted:



D. L. Cooke, Ph.D., P.Eng.

Vancouver, British Columbia



SENECA GROUP 

Drawn by:	Traced by:
Revised by   Date	Revised by   Date

LOCATION MAP **5627**  
**MAP 2**

Scale: 1" = 4 MILES      Date: FEBRUARY / 71.      Plate:

## Drill Hole Record



Property	Seneca	District	New Westminster	Hole No.	75-38
Commenced	April 7, 1975	Location	Line 13+50S 6+20E	Tests at	Nil
Completed	April 14, 1975	Core Size	BQ - AQ	Corr. Dip	-80°
Co-ordinates		True Brg.	216°	Logged by	A.C. Freeze
Objective		% Recov.	95%	Date	April 9, 1975

Claim

T Brg.

216°

Collar Dip

-80°

Elev.

1214.72'

Length

525'

Hole No.

75-38

Sheet

1

Footage From To	Description	Sample No.	Length	Analysis
0 - 12'.6" BQ	Overburden			
12'6"-18'10"	Rhyodacite Porphyry Dyke			
	- Zeolitized Feldspars, Trace Pyrite, Calcite-Chlorite Vesicle Filling			
18'10" - 19'	Ore Zone Fragmental			
	- Few Rhyolite Lapilli fragments, Pyrite on fractures			
19' - 21'4"	Ore Zone Fragments			
	- Andesite - Rhyolite Lapilli Tuff-occasional Breccia fragment			
	- ~5% Pyrite in matrix, few chalcopyrite fragments, Sphalerite in matrix			
21'4" - 110'	Footwall Rubbly Lapilli Tuff - Tuff Breccia			
	- Multi Lithic Andesite - Rhyolite fragmental			
	- At contact, Pyrite as discreet fragments and with depth is found as disseminations within Rhyolite fragments and within the matrix.			
	- Chalcopyrite (Trace) Pyrite (1 - 5%)			
	- Locally extensive Chlorite alteration (47' - 53') (Whisps)			
	- Some Calcite fracture filling			
110' - 115'	Andesite Dyke			
	- Calcite Vesicle Filling			
	- Occasional Rhyolite fragment			
	- Trace disseminations, and fracture contr. Pyrite.			



## Drill Hole Record

Property	District	Hole No.	75-38	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
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						
115' - 181'	Footwall Rubbly Lapilli Tuff - Tuff Breccia - Compositionally Andesite - Rhyolite with greater than 80% Dacite - Rhyolite fragments (Some Feruginous Chert Fragments) - Pyrite depletes from .5% - Trace at 137' - Locally extensive chloritization of matrix and fragments - Clots of wispy Chlorite diagnostic of footwall - Occasional Rhyolite fragment up to 8" diameter - 154' - 181' Chloritization depletes and silicification intensifies Acid fragments are highly corroded									
181' - 182'	Sheared Chloritic Contact									
182' - 277'	Dacite Andesite Porphyry Dyke - 2 - 10% Vesicles filled with Calcite, Chlorite, Zeolite - Feldspar partially zeolitized - Agglomeritic Andesite fragments at 202' - Trace Chalcopyrite at 202' Magnetite throughout									
277' - 360'	Rhyodacite Porphyry Dyke - Calcite Chlorite Hematite on fractures									
360' - 368'	Vesicular Andesite Dyke ? Flow? - Trace Pyrite, Calcite in vesicles - Matrix highly chloritized									
368' - 380'	Rubbly Dacite - Andesite Porphyry Shear Zone - Up to 0.5% Pyrite									





## Drill Hole Record



Property	Seneca	District	New Westminster	Hole No.	75-39
Commenced	April 14/75	Location	Line 17+00S 7+00E	Tests at	Nil
Completed	April 20/75	Core Size	BQ - AQ	Corr. Dip	-90°
Co-ordinates		True Brg.	-	Logged by	A.C. Freeze Jr.
Objective		% Recov.	95% to 522' 40% to 593'	Date	April 16/75

Claim

T Brg.

Collar Dip  
-90°

Elev. 1248.60'

Length 593'

Hole No. 75-39  
Sheet 1

Footage From	To	Description	Sample No.	Length	Analysis
0	- 121'	Rhyodacite Porphyry Dyke - Feldspar vary between fresh and highly zeolitized - Disseminated Magnetite throughout - Few vesicles mainly Chlorite filled - Hematite - Zeolite on fractures			
121'	- 125'6"	Rhyodacite Porphyry - Light green banded mixed with bedded Chert - Banding at 10° to normal of core axis - Feldspars and matrix extensively chloritized			
125'	- 126'6"	Andesitic Tuff - Some fragmentation with Pyrite associated as stringers and clots			
126'6"	- 127'3"	Argillaceous Tuffite - Trace chalcopyrite on fractures			
127'3"	- 127'10"	Mudstone - Hairline fractures - Bedding at 20° to normal of core axis - Fracture controlled Pyrite and Calcite in filling tensile fractures			
127'10"	- 134'6"	Argillaceous Tuffite - Mainly massive with some aspect of bedding - Micro fracturing throughout with associated Pyrite and trace Chalcopyrite			



# Drill Hole Record

Colour Plot & Dips

Property	District	Hole No.	75-39
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 2

Footage From To	Description	Sample No.	Length	Analysis
134'6" - 135'	Mudstone Breccia - Mixed fragments of Mudstone, Porphyry and Argillite			
135' - 150'	Mudstone - Argillaceous Tuffite - Fine laminations at 20° to normal of core axis - Calcite and Laumontite on fractures - 138.5 - 139' Somewhat sandier matrix - Transition to Argillite towards end of section - Trace Pyrite on fractures (143' - 150')			
150' - 154'6"	Bedded Argillite and Siltstone - Laminations at (0 - 10°) to normal of core axis - Random fracture controlled Pyrite			
154'6" - 155'	Rhyodacite Porphyry - Highly chloritized with <1% associated Pyrite			
155' - 156'6"	Siltstone - Green, bedded, convoluted bedding - Minor associated Pyrite, some brecciation			
156'6" - 177'	Rhyodacite Porphyry - 156' - 167' Highly stretched and chloritized (Rubbly) - 168' - 171' Fault			

*[Handwritten signature]*

Scale

Colour Plot  
& Dips

## Drill Hole Record



Property	District	Hole No.	75-39										
Commenced	Location	Tests at	Hor. Comp.										
Completed	Core Size	Corr. Dip	Vert. Comp.										
Co-ordinates	True Brg.		Logged by										
Objective	% Recov.		Date										
Footage		Description	Sample No.	Length	Analysis								
From	To												
177'	179'	Mixed Chert and Tuffaceous Andesite											
		- Some fragmentation No sulfides											
179'	192'	Andesite Lapilli Tuff											
		- Few Breccia sized fragments											
		- Spotted Chlorite - Zeolite clots similar to Hanging Wall Marker											
		- 190' - 192' Dominantly Tuffaceous matrix											
		- Chlorite - Zeolite clots, Argillaceous fragments											
192'	194'	Lower Hanging Wall Marker											
		- Rhyodacite Crystal Tuff mixed with Chert and Andesite - Dacite Tuff											
194'	194'6"	Argillaceous Tuffite											
		- included fragments of Rhyodacite Crystal Tuff											
194'6"	198'	Banded light green Chert											
		- Included Rhyodacite Crystal Tuff											
		- Hanging Wall Marker Chlorite clots											
		- Laumontite on fractures											
198'	204'	Ore Zone Fragmental											
		- Multi-Lithic Lapilli Tuff (Andesite-Rhyolite fragments in a siliceous matrix)											

Scale

## Drill Hole Record

Colour Plot  
& Dips

Property	District	Hole No.	75-39
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 4

Footage From To	Description	Sample No.	Length	Analysis
	- pyrite disseminated in Rhyolite fragments, and in matrix			
	- Trace fragmental Chalcopyrite			
204' - 211'	Rhyodacite Porphyry Dyke? Sill?			
	- Vesicular due to leached hornblende			
211' - 220'	Ore Zone Fragmental			
	- Multi Lithic Lapilli Tuff (Spotty Chloritic Andesite - Rhyolite)			
	- Visible fragments of Chalcopyrite and Sphalerite			
	- 1% Pyrite in matrix			
	- 1 - 1" fragment of Chalcopyrite and Sphalerite			
220' - 268'	Rhyodacite Porphyry			
	- Fresh Feldspar and Hornblende Blades			
	- Calcite Hematite on fractures			
	- Disseminated Magnetite throughout			
268' - 290'	Andesite - Rhyolite Lapilli Tuff (Footwall Marker or Footwall Breccia)			
	- Some Chert fragments			
	- Andesite fragments highly chloritized, silicified and corroded			
	- Locally hematized			
	- Trace Pyrite			

Scale

## Drill Hole Record

Colour Plot  
& Dips

Property		District	Hole No. 75-39								
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.
		265' - 270' Flow banded Rhyodacite Porphyry									
290'	- 292'	Rhyodacite Porphyry Dyke									
		- Fine grained border phase									
292'	- 381'	Rhyodacite Porphyry									
		- Relatively unaltered									
		- Some Calcite, Zeolite, Hematite on fractures (Magnetite)									
381'	- 400'	Rhyodacite Porphyry									
		- Feldspars moderately to intensely zeolitized (Magnetite)									
400'	- 522'	Rhyodacite Porphyry									
		- Intense zeolitization and epidotization									
		- Moderate chloritization									
		- Hematite, Calcite, Zeolite on fractures									
		- 515' - 522' Rhyodacite Porphyry is extremely sheared and solution weathered									
	522'	Fault - Reduce to AQ									
522'	- 524'	Andesite Tuff Porphyry									
		- Black chloritic spots similar to O.Z.F.									
		- Trace dissem. Chalcopyrite within matrix									
		- Only 4" recovered									
524'	- 534'	Siliceous Rhyolite Lapilli Tuff									
		- 1 foot recovered									
		- Trace Chalcopyrite and Pyrite in Rhyolite fragments									

# Drill Hole Record



Property	District	Hole No.	75-39
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim  
 True Brg.  
 Collar Dip  
 Elev.  
 Length  
 Hole No.  
 Sheet 6

Footage From To	Description	Sample No.	Length	Analysis
534' - 536'	Multi-Lithic Lapilli Tuff 4" Recovered - Andesite - Rhyolite fragments - Some friable Rhyolite Lapilli with Pyrite Mud Matrix - Gypsum or Barite in Matrix			
536' - 539'	Friable Rhyolite Lapilli Tuff - Fragmental Pyrite and trace Chalcopyrite in Pyrite Mud Matrix associated with Barite or Gypsum			
539' - 542'	Pebbles - Chert and Rhyolite			
542' - 545'	Rhyolite Lapilli Tuff - Chlorite plus Gypsum or Barite Matrix - Pyrite within some siliceous fragments			
545' - 550'	Pebbles 1 foot recovered - Mixed Andesitic - Rhyodacite Porphyry plus Chert Some Pyrite			
550' - 550'6"	Contact Acid Lapilli Tuff and Quartz Eye Rhyolite Sill			
550'6" - 581'	Quartz Eye Rhyolite 80% Core Recovery - Trace dissem. Pyrite towards end of section - 578' - 581' 2% disseminated Pyrite			
581' - 587'	Pebbles 2" Recovery - Mixed Rhyolite and Argillaceous Tuffite - Minor Pyrite with Argillite			

*[Handwritten signature]*





Scale

Colour Plot  
& Dips

## Drill Hole Record



Property	Seneca	District	New Westminster	Hole No.	75-42
Commenced	May 1/75	Location	Line 42S 3+50E	Tests at	Nil
Completed	May 4/75	Core Size	NQ	Corr. Dip	-90°
Co-ordinates		True Brg.	-	Logged by	A.C. Freeze Jr.
Objective		% Recov.	95+%	Date	May 1/75

Claim

T Brg.

Collar Dip -90°

Elev. 827.49'

Length 323'

Hole No. 75-42 Sheet 1

Footage From	To	Description	Sample No.	Length	Analysis
0	22'6"	Predominantly sandy rhyodacite - rhyolite tuff - lapilli tuff - .1 - .2% pyrite			
		- 18' - 22' Minor chlorite component 2 - 5% pyrite Intermittent black basaltic chloritic clots up to 1/2" diameter			
22'6"	24'	Bedded sandstone mixed with bedded andesitic tuff - Bedding convoluted 0 - 10" to normal of core axis			
24'	25'	Mudstone			
25'	31'	Mixed sediment-volcanic rock - Predominantly sandstone - Light green bands of andesitic material - Some chloritization			
31'	41'	Chloritic rhyolite crystal tuff - quartz feldspar crystal tuff - Crude foliation - 20% chloritic material evenly distributed throughout			
41'	53'	Rhyodacite Porphyry Broken ground 30% recovery - All feldspars chloritized - Amygdules filled with calcite			
53'	63'6"	Chloritized rhyolite crystal tuff - Appears texturally to be intrusive (Granitic) - 15% chlorite as clots and stretched wisps - 3 - 5% calcite in matrix			

## Drill Hole Record

Colour Plot  
& Dips

Property	District	Hole No. 75-42	
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 2

Footage From	To	Description	Sample No.	Length	Analysis
63'	- 70'	Mixed volcanic sedimentary sequence - Predominantly black cherty argillaceous tuffite mixed with thin layers of sandstone and andesitic material - Contorted and convoluted bedding with micro faulting - Some grey chert bands .1 - .5% pyrite - Bedding @ 5° to normal of core axis, (slump structures and loadcasts) - Trace chalcopyrite			
70'	- 77'	Altered rhyolite tuff - crystal tuff - few lapilli fragments - towards end, crudely bedded with alternating cherty and andesitic bands - fractured and chloritized - .2 - .5% pyrite			
77'	- 78'	Sandy andesitic to dacitic tuff - Chlorite with zeolite in clots			
78'	- 79'	Black crudely bedded sandy argillite - Some volcanic component			
79'	- 106'	Light grey siliceous tuffite - Specs of chlorite throughout - Predominantly sedimentary component and volcanic component - Trace - .1% pyrite - Bedding @ 0 - 5° to normal of core axis			



# Drill Hole Record

Property	District	Hole No. 75-42
Commenced	Location	Tests at
Completed	Core Size	Hor. Comp.
Co-ordinates		Vert. Comp.
Objective		Logged by
		Date

Claim  
T Brg.  
Collar Dip  
Elev.  
Length  
Hole No. 3  
Sheet

Footage From To	Description	Sample No.	Length	Analysis
106' - 118'	Mixed rock - Bedded black silty argillite, mudstone, chert, sandy andesitic tuff - Bedded pyrite 1 - 5% through section - Bedding 5 - 20° to normal of core axis - Truncated bedding, slump breccias, load casts			
118' - 127'	Mudstone - Fractured and healed with orange red zeolite (Laumontite)			
127' - 134'	Sandy andesitic tuff - crystal tuff - Large clots of basaltic chlorite (133' - 134')			
134' - 150'	Predominantly black bedded to massive argillaceous tuffite - Minor chert and mudstone - Bedding 0 - 10° to normal of core axis - 135'6", 144' and 148' occurrence of sedimentary equivalent of hanging wall marker - .1 - .5% pyrite through section			
150' - 153'	Mudstone breccia - Fragments of rhyolite and mudstone and argillite (Calcite matrix)			
153' - 163'	Mixed rock - sedimentary - andesitic component (20% andesitic) - Predominantly mudstone and argillite - convoluted bedding			

*[Handwritten signature]*

## Drill Hole Record



Property	District	Hole No.	75-42	
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.		Logged by	
Objective	% Recov.		Date	
Footage	Description	Sample No.	Length	Analysis
From To				
163' - 164'	Mudstone breccia - Pyrite in matrix			
164' - 165'	Massive pyrite bedded lenses ½" - 1" diameter - 0° to normal of core axis			
165' - 168'	Mixed bedded mudstone, argillite - .1 - .5% pyrite - Minor andesitic component			
168' - 171'	Mudstone breccia - In situ brecciation - carbonate and argillite matrix			
171' - 177'6"	Bedded mudstone, sandstone and argillaceous tuffite - @ 175' bedded massive pyrite lens			
177'6" - 179'	Vuggy chloritized rhyolite			
179' - 181'	Rubble -sandy argillaceous tuffite			
181' - 182'	Bedded chert, mudstone and argillaceous tuffite - 10% volcanic component			
182' - 195'	Hanging wall marker - Rhyolite crystal tuff matrix - Clots of basaltic chlorite and zeolite - Some chert breccia fragments - 183'- 186' Sandy dacite tuff - small hanging wall marker clots - 186' - 187' Silty argillaceous tuffite and mudstone - 187' - 195' Mixed sedimentary volcanic hanging wall marker equivalent Basaltic chlorite clots altered to talc			

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

Sheet 4

## Drill Hole Record



0

Property		District	Hole No. 75-42									
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates		True Brg.		Logged by								
Objective		% Recov.		Date								
Footage		Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To											
163'	- 164'	Mudstone breccia - Pyrite in matrix										
164'	- 165'	Massive pyrite bedded lenses ½" - 1" diameter - 0° to normal of core axis										
165'	- 168'	Mixed bedded mudstone, argillite - .1 - .5% pyrite - Minor andesitic component										
168'	- 171'	Mudstone breccia - In situ brecciation - carbonate and argillite matrix										
171'	- 177'6"	Bedded mudstone, sandstone and argillaceous tuffite - @ 175' bedded massive pyrite lens										
177'6"	- 179'	Vuggy chloritized rhyolite										
179'	- 181'	Rubble -sandy argillaceous tuffite										
181'	- 182'	Bedded chert, mudstone and argillaceous tuffite - 10% volcanic component										
182'	- 195'	Hanging wall marker - Rhyolite crystal tuff matrix - Clots of basaltic chlorite and zeolite - Some chert breccia fragments - 183'- 186' Sandy dacite tuif - small hanging wall marker clots - 186' - 187' Silty argillaceous tuffite and mudstone - 187' - 195' Mixed sedimentary volcanic hanging wall marker equivalent Basaltic chlorite clots altered to talc										

## Drill Hole Record



Property	District	Hole No.	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
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				
195' - 219'	Hanging wall marker Predominantly rhyolite - rhyodacite tuff - lapilli tuff - Basaltic chlorite clots altered to talc - .1 - .2% pyrite - trace chalcopyrite - 20% sedimentary component, -- chert, mudstone, argillite - 200' - 218' Some silicification. - Hanging wall marker clots highly deformed - Local clots of lower hanging wall marker dacite crystal tuff							
219' - 222'	Breccia - Mixed mudstone, chert, hanging wall marker.							
222' - 228'	Mixed contorted hanging wall marker with argillaceous tuffite - Lower hanging wall argillaceous tuffite - No sulfides							
228' - 230'	Hanging wall argillite marker. - Highly deformed - Pyrite lenses 1% - Bedding @ 0 - 5° to normal of core axis							
230' - 237'	Ore zone fragmental Rhyolite - andesite tuff breccia Fragments highly altered, corroded and stretched.							
237' - 254'	Predominantly fractured rhyodacite porphyry with argillaceous matrix - Pyrite 1 - 4% through section - Rhyolite highly chloritized, no fragmental sulfides.							

Scale  
Colour Plot  
& Dips

# Drill Hole Record



Property	Seneca	District	New Westminster	Hole No.	75-43
Commenced	May 5, 1975	Location	Line 27S 9+00E	Tests at	Nil
Completed	May 12, 1975	Core Size	NQ -468' BQ 276'	Corr. Dip	-90°
Co-ordinates		True Brg.		Logged by	A.C. Ereeze
Objective		% Recov.	95+%	Date	May 12, 1975

Claim  
T Brg.  
Collar Dip -90°  
Elev. 1283.55'  
Length 767'  
Hole No. 75-43  
Sheet 1

Footage From To	Description	Sample No.	Length	Analysis
0 - 10	Overburden			
10 - 80'	Rhyodacite porphyry			
	- moderately-intenseley zeolitized			
	- occasional epidote			
	- disseminated magnetite			
	- calcite hematite and zeolite on fractures			
80 - 112.6	Andesite-Dacite Flow			
	- grey brown hematized.			
	- stretched calcite filled amygdules			
	- calcite chlorite on fractures			
96 - 112'.6"				
	- occasional rounded lapilli sized fragments (flow bottom)			
	- trace cpy at 105'			
	- crude flow alignment 5-15° to normal of core axis			
	- some bedded sections intensely hematized			
112'6"-123'6"	Multilithic Andesite-Dacite Flow			
	- tuff sized fragments, chloritized			
	- 112'6" - 114'6" - intense hematization			
123'6" - 127'	Flow Bottom Breccia			
	- andesite - rhyolite fragments in calcite, chlorite, hematite and locally argillaceous matrix			
	- fragments intensely chloritized			

*Booke*

# Drill Hole Record



00

Property	District	Hole No.	75-43
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.  
75-43

Footage From To	Description	Sample No.	Length	Analysis
127 - 131	Rhyodacite Porphyry Dendritic fractures calcite, zeolite filled - few hematite stringers			
131 - 172	Multi Lithic Agglomerate Flow 131 - 164.6" - 3% epidote, no sulphides - 5-30% calcite amygdule filling, calcite in vesicles within fragments - intense hematization of fragments locally and matrix locally - fragment composition - andesite, dacite, chloritized rhyolite 163 - 164'6" - fragments highly corroded, chloritized at fringes, and hematized at center 164'6" - 172 - less intense hematization, greater chloritization			
172 - 188	Dacite Feldspar Porphyry Flow - locally agglomeritic - few coarse clots of black basaltic chlorite - included chert fragment 180 - 180'.6" - Sandy Tuffite 183 - 188 - zeolitized and epidotized			
188 - 199	Dacite Porphyry Agglomerate - sandy andesitic, -dacitic matrix - calcite in stretched amygdules - .1% py, tr cpy locally			
199 - 201	Sandy Dacite Tuff - .3% dissem. pyrite			

*[Handwritten signature]*





# Drill Hole Record



00

Colour Plot & Dips

Property	District	Hole No.	75-43
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. 75-43  
Sheet 3

Footage From To	Description	Sample No.	Length	Analysis
201 - 208	Dacite Feldspar Porphyry Flow - Zeolitized, hematized, chloritized - epidote - occasional clots of black basaltic chlorite with zeolite - calcite vesicle fillings (10%)			
208 - 223	Dacite Porphyry Agglomerate - coarse epidote in stringers and pods - calcite vesicle filling			
223 - 245'6"	Dacite Porphyry Flow - up to 25% calcite vesicle filling - chlorite reaction rims on calcite			
245'6" - 254	Andesite Tuff - Lapilli Tuff - trace dissem. pyrite 249 - 250 - chloritized and hematized rhyolite fragments			
254 - 260	Bedded sandy andesitic tuff - local bedded chert - bedding 0-8° to normal of core axis - tr pyrite			
260 - 282	Andesite - Dacite Porphyry Tuff Agglomerate - fragments up to 2" dia. - feldspar phenocrysts locally highly zeolitized - up to 5% calcite vesicle filling - up to 5% epidote			

Scale

Colour Plot  
& Dip

## Drill Hole Record



00

Property	District	Hole No.	75-43
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  
4

75-43

Footage From To	Description	Sample No.	Length	Analysis
282 - 383	Dacite-Andesite Porphyry Flow - amygdules up to 1" dia. filled with zeolite, quartz - matrix slightly hematized, chloritized - 5% epidote 312 - 318 Agglomerate blue chalcedonic quartz in vesicles 334 - 343 - Agglomerate			
383 - 384'6"	Rhyolite - quartz eyes - druzy quartz on fractures assoc. with hematite			
384'6" - 407	Dacite-Andesite Porphyry Flow - locally agglomeritic - stretched vesicles filled with zeolite, quartz, calcite - local autobrecciation - no sulfides - magnetite, epidote			
407 - 419	Bedded Andesite Tuff and Cherty Tuffite - predominately sandy andesitic tuff - bedding 0-10° to normal of core axis			
419 - 429'.6"	Andesite Dacite Tuff Porphyry - breccia sized argillite fragment at 422' - feldspars zeolitized - few argillaceous seams			

## Drill Hole Record



00

Property	District	Hole No. 75-43	
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.  
75-43  
Sheet  
5

Footage From To	Description	Sample No.	Length	Analysis
429'6" - 431"	Cherty Tuffite			
431 - 452	Andesite Dacite Porphyry Agglomerate Flow			
	- calcite filled vesicles in agglomeritic fragments			
	- minor chlorite and zeolite vesicle filling			
	- minor hematite from magnetite			
452 - 426'6"	Mixed Andesite Dacite Porphyry and Sandy Andesitic Tuff			
	- Feldspars zeolitized			
	- zeolite fracture filling			
	467 - 468 - Chert			
	START BQ CORE			
476'6" - 481'6"	Andesite Dacite Porphyry Flow			
	- few lapilli sized fragments			
	- feldspars zeolitized			
481'6"-490	Mixed Andesite Dacite Porphyry, Cherty Tuffite, Argillaceous Tuffite			
	- porphyry sections contain clots of black basaltic chlorite			
	- tuffite units are highly contorted			
490 - 502	Cherty-Argillaceous Tuffite			
	- predominately chert			
	- bedding contorted 30-40° to normal of core axis			
	495'6" - 498 - massive grey green fractured chert			
502 - 503	Andesite Lapilli Tuff in Argillaceous Matrix			
	- minor fracture controlled pyrite			

# Drill Hole Record



00

Property	District	Hole No.	75-43
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.

Footage From To	Description	Sample No.	Length	Analysis
503'6" - 507'	Mixed chert and sandy andesitic tuff			
507' - 511'	Andesite - rhyolite porphyry lapilli tuff			
	- Argillaceous matrix			
	- Andesitic fragments have black chloritic specs similar to ore zone fragmental			
	- Trace disseminated pyrite and chalcopryrite in fragments			
511' - 516'	Grey chert			
	- 512'6" - 513' Stretched light green dacite crystal tuff			
	- 513' - 514' Argillaceous tuffite			
516' - 519'	Andesite tuff - Lapilli tuff			
	- Argillite, sulfide matrix			
	- Black chloritic spots in andesite fragments			
	- 3% pyrite in matrix, trace chalcopryrite			
	- Minor calcite vesicle filling			
	- Few chloritized rhyolite fragments			
519' - 531'	Andesite lapilli tuff - tuff breccia			
	- Chloritic andesite and rhyolite fragments in predominantly siliceous and lesser argillaceous matrix			
	- Trace pyrite and chalcopryrite as tiny discreet fragments			
531' - 535'	Grey green chert			
	- 60% core recovery			

*Booke*

## Drill Hole Record



00

Property	District	Hole No.	75-43	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
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						
535' - 541'	Andesite - rhyolite lapilli tuff - 3 - 5% through section in matrix and on fractures up to 1/2" thick									
541' - 670'	Andesite dyke - Some vesicles calcite filling Local autobrecciation - 549'6" - 556'6" Andesite - rhyolite lapilli tuff									
670' - 681'	Hanging wall marker Multi Lithic lapilli tuff - tuff breccia - Clots of zeolitized black basaltic chlorite - Trace chalcopyrite and pyrite in fragments									
681' - 687'	Hematized tuff breccia - Massive feruginous chert 681' - 681'6" and 681'6" - 682' - Vuggy hanging wall marker and rhyolite section highly epidotized - Rhyolite porphyry fragments up to 4" diameter - Hanging wall marker clots up to 1" diameter - 686' - 687' Not hematized									
687' - 693'	Multi lithic lapilli tuff - tuff breccia - Predominantly andesitic matrix - Trace chalcopyrite and pyrite in fragments - Local dyke material - Few sporadic clots of hanging wall marker - Few jasper fragments									

