Diamond Drilling Report

Mt. Sicker Property

Victoria Mining Division
NTS 92 B/13

48° ~~59~~ 51' N Latitude
123° ~~50~~ 46' W Longitude

Owner: Minnova Inc.

Operator: Minnova Inc.

by: P. Baxter
February, 1989

Claims

Rocky Group

Rocky 2	CF Group 3
Rocky 5	CF Group 4
Rocky 6 Fr.	CF Group 5
Acme Fr.	CF Group 6
Sicker 1	CF Group 7
Sicker 2	CF Group 8
Lawarance	CF Group 13
Pear	CF Group 14
Peach	CF Group 15
Apple	CF Group 16
CF Group 1	CF Group 17
CF Group 2	CF Group 18

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Diamond Drilling Report

Mt. Sicker Property

1. Introduction

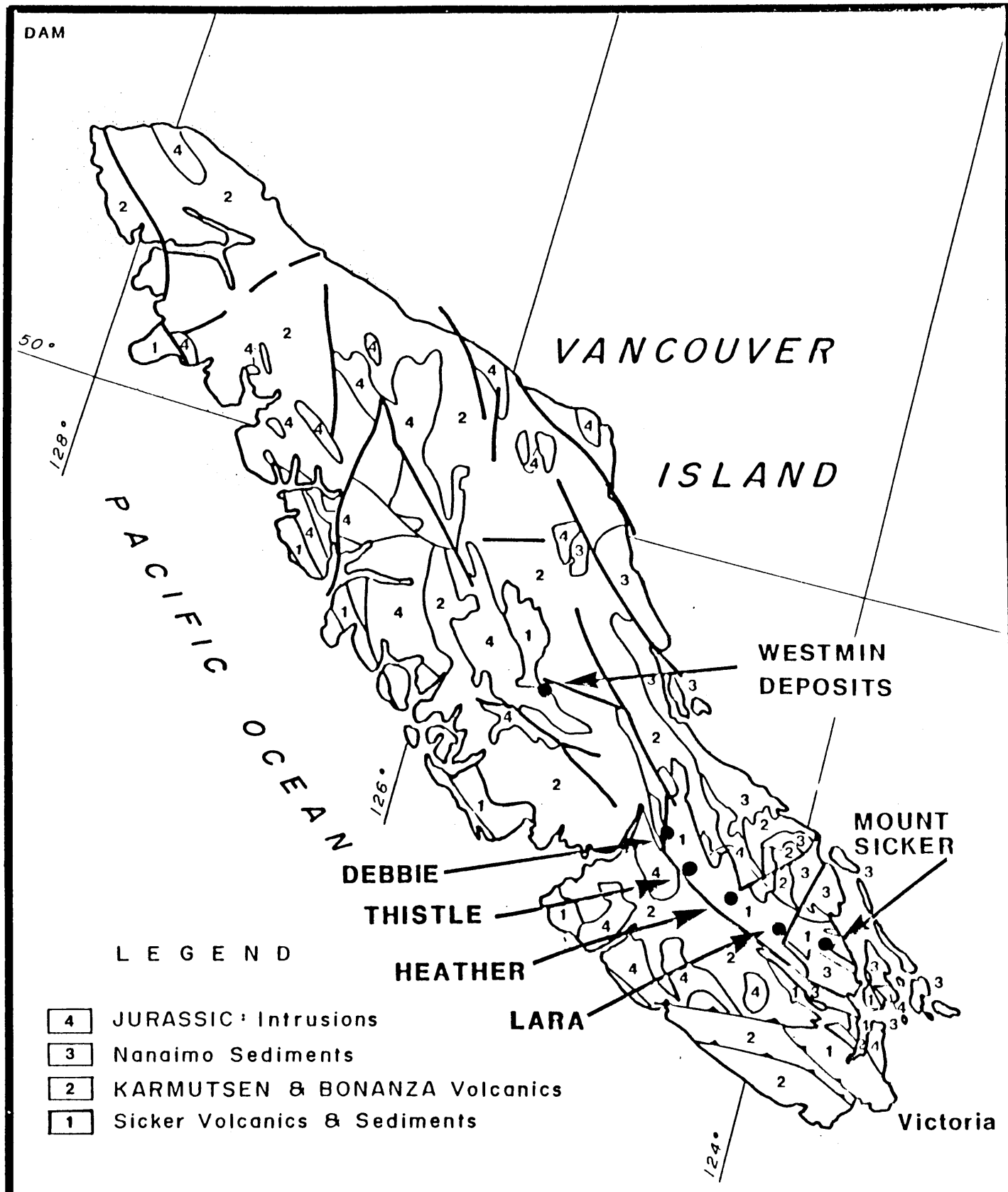
Minnova Inc. has acquired the mineral rights to claims which cover much of Mt. Sicker to evaluate the volcanogenic massive sulphide potential of the property. This report describes the results of diamond drill hole MTS-63 which tested the extent of pyrite - chalcopyrite stringer mineralization which is present in the Mona shaft area. The hole was drilled during the period of November 18 to November 26, 1988 by Burwash Contract Drilling.

1.1 Location and Access

The Mt. Sicker property is located 40 km and 10 km north of Victoria and Duncan respectively (Figure 1). An extensive system of logging roads from the Island Highway provides excellent access to the property. Topographic relief is moderate with elevations ranging from 150 to 700 meters above sea level. The property is covered by a mixed forest of Douglas fir, alder and cedar. Active logging is currently underway on several parts of the property.

1.2 Mineral Rights

Drill hole MTS-63 is located on the Westholme claim which is part of the Rocky group (Figure 2). The claim status of the Rocky Group is as follows:



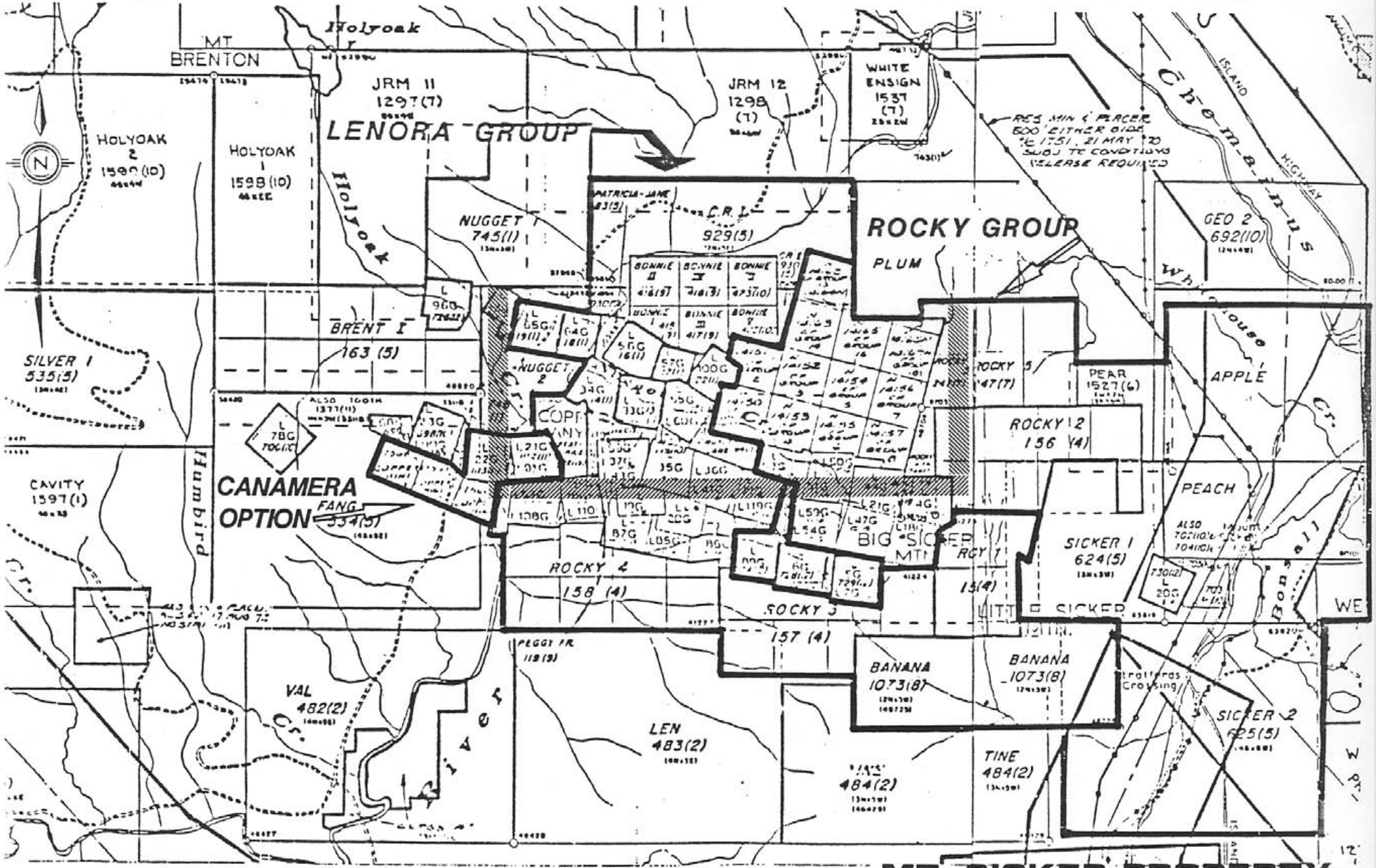
VANCOUVER ISLAND

GEOLOGY

SCALE : 1 : 2,000,000

MINNOVA

DM October 1987


MT BRENTON
Holyoak
JRM 11
1297(7)
JRM 12
1298
(7)
WHITE ENSIGN
1537
(7)
LENORA GROUP
ROCKY GROUP
PLUM
HOLYOAK
2
1590(10)
HOLYOAK
1
1598(10)
NUGGET
745(1)
929(5)
GEO 2
692(10)
BRENT 1
163 (5)
SILVER 1
535(5)
CANAMERA
OPTION
FANG
334(5)
ROCKY 5
147(7)
PEAR
1527(6)
APPLE
ROCKY 2
156 (4)
PEACH
CAVITY
1597(1)
Humbird
SICKER 1
624(5)
ROCKY 4
158 (4)
ROCKY 3
157 (4)
BIG SICKER MTN
BANANA
1073(8)
VAL
482(2)
LEN
483(2)
TINE
484(2)
SICKER 2
625(5)
Trafford Crossing
Chemainus
Island Highway
NTS 92B/13
0 1 2Km
1:50,000
FORDING COAL LEASE BOUNDARY
MINNOVA
MT. SICKER PROPERTY
CLAIM MAP
FIGURE 2

Lenora Group

Name	No. of Units	Record No.	Month of Record
Sicker 1	9	624	May
Rocky 2	8	156	April
Sicker 2	20	625	May
Rocky 5	6	247	July
Rocky 6 Fr.	1	248	July
Acme Fr.	1	254	August
CF Group 1	1	14150	October
" " 2	1	14151	" "
" " 3	1	14152	" "
" " 4	1	14153	" "
" " 5	1	14154	" "
" " 6	1	14155	" "
" " 7	1	14156	" "
" " 8	1	14157	" "
CF Group 13	1	14162	October
" " 14	1	14163	" "
" " 15	1	14164	" "
" " 16	1	14165	" "
" " 17	1	14166	" "
" " 18	1	14167	" "
Lawarance	1	730	December
Pear	4	1527	June
Peach	12	1623	January
Apple	12	1624	January
Acme MC	1	46	Crown Grant
Tony	1	18G	" "
Donagan MC	1	18G	" "
Dixie Fr. MC	1	21G	" "
Golden Rod MC	1	44G	" "
Nellena MC	1	47G	" "
Moline Fr. MC	1	50G	" "

Blue Bell MC	1	51G	"	"
Estelle MC	1	53G	"	"
Westholme MC	1	54G	"	"

3. History

Two former producers, the Lenora and Tyee mines occur on the Mt. Sicker property. These deposits were discovered in 1898 and were largely mined out by 1909 although they were worked periodically until 1947. A total of 300,000 tons grading 3.31% Cu, 7.51% Zn, 2.75 oz/ton Ag and 0.13 oz/ton Au were recovered from these 2 mines. Recent exploration on the property has been done by Duncanex, Mt. Sicker Mines and Serem in the vicinity of the former mines and the Postuk-Fulton and NE Copper showings. Minnova Inc. (formerly Corporation Falconbridge Copper) has been active on the property since 1983, carrying out an integrated exploration program consisting of geological, geochemical and geophysical surveys which has been followed up by diamond drilling. All aspects of this continuing program have been aimed at discovering a polymetallic volcanogenic massive sulphide deposit.

2. Work Done

This report summarizes the results of diamond drill hole MtS-63 (485.5 m) which tested the extent of pyrite - chalcopyrite stringer mineralization which is present in the Mona shaft area located approximately 1.5 km east of the old Lenora - Tyee orebodies. The hole which is located on the Westholme MC claim (Figure 3) was drilled by Burwash Contract Drilling.

Lithogeochemical samples were taken routinely throughout the hole, sent into Min-En Laboratories in Vancouver, and analyzed for major and trace elements (SiO_2, TiO_2, Al_2O_3, CaO, Na_2O, K_2O, MgO, Fe_2O_3, Pb, Ba, Cu, Zn, Au, Ag, Zr, Sr, As, Sb) using an ICP

technique. Mineralized sections were analyzed for Cu, Zn, Ag, Au and Ba using an atomic absorption method. The drill core is stored at 9398 Trans Canada Highway, Chemainus, B.C.

3. Geology

3.1 Regional Geology

The Mt. Sicker property is located in the Cowichan-Horne Lake uplift which is one of 3 fault-bounded areas that expose the Paleozoic Sicker Group on Vancouver Island (Figure 1). Muller (1980) subdivided the Sicker Group, as follows, in order of increasing age:

1) Buttle Lake Formation - consists of recrystallized crinoidal limestone interbedded with calcareous silt-stone and chert

2) Sediment - Sill Unit - thinly bedded to massive argillite, siltstone and chert interlayered with diabase sills

3) Myra Formation - basic to rhyodacitic banded tuff, breccia and lava with interbedded argillite, siltstone and chert

4) Nitinat Formation - basaltic lavas and agglomerates with minor massive to banded tuff layers

Cretaceous sediments of the Nanaimo Group unconformably overly the Sicker group; the contact is commonly marked by a basal conglomerate containing volcanic fragments derived from the Sicker Group.

The structure of the Sicker group is characterized by southwest verging, asymmetric and vertical, open and isoclinal folds (Muller, 1980). West-northwest and northeast trending faults dissect the Sicker group of the Cowichan-Horne Lake Uplift into numerous fault blocks. Movement along those faults is interpreted to have been mostly Tertiary in age (Muller, 1980). Metamorphic grade ranges from sub-greenschist to greenschist.

3.2 Geology of the Mt. Sicker Property

The Mt. Sicker property is underlain by Sicker group volcanic rocks, Nanaimo group sediments and dioritic intrusions of possible Triassic age (Figure 3). The Sicker Group can be subdivided into the Myra and Nitinat formations. The Myra formation consists of thick units of felsic and subordinate mafic pyroclastic/flow rocks with minor ash, argillaceous sediment and chert. The Lenora-Tyee massive sulphide deposits occur within the Mine package which is a distinct well-bedded, 70 meter thick succession of quartz +/- feldspar crystal tuffs, local felsic flows, fine felsic ash and minor chert and argillite. The Lenora-Tyee deposits are considered to be the stratigraphic equivalent of Westmin's Myra-Lynx deposits.

The Nitinat formation is restricted to the east end of the property and is well exposed along the Island Highway. The formation consists of epidotized pyroxene and/or plagioclase porphyritic andesitic-basaltic flows, flow breccias and debris flows.

Numerous mineralized occurrences are present on the Mt. Sicker property. Except for the former orebodies, most of the mineralization consists of disseminated and stringer sulphide zones which are thought to be an expression of a synvolcanic hydrothermal system. In the Mona shaft area, abundant pyrite - chalcopyrite stringer mineralization is present.

The structure of the Mt. Sicker property is dominated by a large asymmetric, west-northwesterly trending, shallow west-plunging anticline. The fold axis is interpreted to lie 300 m north of the Lenora-Tyee deposits. The axial plane of the anticline is reflected by a pervasive moderately to intensely developed, vertically dipping foliation. Small drag folds associated with the Mt. Sicker anticline occur at NE Copper and Lenora-Tyee.

4. Diamond Drilling Results

Hole MTS-63 tested the extent of stringer mineralization below the B.C. Tel diorite, a 230 m thick, flat-lying mafic intrusion. Felsic tuffs, ashes and flows and a thin zone of intermediate ash and chert occur beneath this diorite. Sulphide content in the volcanics is low except for an 11.05 meter wide quartz - pyrite stringer zone which contains 10-20% pyrite and is hosted in a massive, relatively unaltered felsic tuff or flow. No economic metal contents are associated with this zone. A detailed log for hole MTS-63 is included in Appendix I.

5. Conclusions

Hole MTS-63 confirmed that felsic volcanics underly the relatively thick (230 m+) B. C. Tel diorite. The stringer mineralization present on the surface is also present at depth but no economic metal contents are associated with the quartz - pyrite stringers intersected in MTS-63. The presence of a cherty unit and the stringers suggest that the environment is still favourable for hosting a volcanogenic massive sulphide deposit. The cherty layers indicate that there has been a pause in the volcanism to allow sediments and possibly massive sulphides to accumulate whereas the quartz - pyrite stringers indicate that a synvolcanic hydrothermal system did exist. Further testing of the felsic volcanic pile which exists beneath the B.C. Tel diorite is warranted to evaluate its potential for hosting a volcanogenic massive sulphide deposit.

6. Cost Statement

Westholme claim hole MTS-63	filed for	$34,356.02

MTS-63

Contractor Costs (see attached invoices)		31,306.02
P. Baxter:	6 days x $300/day	1800.00
G. Wells:	3 days x $350/day	1050.00
A. Brielsman:	2 days x $100/day	200.00
	Total	$34,356.02

7. References

Muller, J. E.

1980: The Paleozoic Sicker Group of Vancouver Island, B.C. GSC Paper 79-30.

Wells, G. S.

1987: Report on the 1987 Drill Program - Mt. Sicker Property FAME Report 10962-E65.

8. Statement of Qualifications

I, Paul Baxter certify that:

1. I hold a Honours Bachelor Science Degree in geology from the University of Alberta.

2. I am a member in training with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

3. I have worked as a geologist for 2 years full-time and 3 years part-time since 1985.

Paul Baxter

Date: February 28, 1989

Paul Baxter
Vancouver, B.C.

Statement of Qualifications

I, Gary S. Wells, hereby certify that:

1. I hold an Honours Bachelor of Science degree in combined geology and chemistry (1975) from Carleton University, Ottawa, Ontario and a Ph.D degree in geology (1980) from Queen's University, Kingston, Ontario.

2. I am an associate member of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.

3. I have practised my profession in exploration continuously since graduation in 1980.

Gary Wells

Date: February 28, 1989

Gary S. Wells
Vancouver, B.C.

Burwash Contract Drilling

1236 WILDER ROAD - R.R. 2 - COBBLE HILL, B.C. V0R 1L0 - VANCOUVER ISLAND - TEL. 743-3092

December 1, 1988

RECEIVED
DEC 6 198
Ans'd .....

Minnova Inc.
4th Floor, 311 Water Street
Vancouver, B.C. V6B 1B8

Dear Sirs:

Please find enclosed invoices for diamond drilling on your Mount Sicker property from November 16 - 30, 1988 for the following holes:

Hole MTS-88-41-D (to completion)	$ 5,649.00 ✓
Hole MTS 88-62 (to completion)	13,990.52 ✓
Hole MTS-88-63	31,306.02 ✓
Hole MTS-88-64	30,255.53 ✓
Hole MTS-88-65 (incomplete)	20,848.27 ✓
Hole MTS-88-66 (incomplete)	1,529.41 ✓
	$ 103,578.75

Yours truly,
BURWASH CONTRACT DRILLING
Per: A. Burwash

CORPORATION FALCONBRIDGE COPPER

VENDOR NAME	INVOICE NUMBER OR DATE	CURRENCY 1 - CDN 2 - US	F / L
BURWASH CONTRACT DRILLING	DEC 1/88	1	

ACCOUNT CODE			AMOUNT	CR
GENERAL LEDGER	DETAIL	EXPLORATION PROJECTS		X
710580	6010	3105	103578.75	

APPROVED	CODED	EXT. & ADDITION	A/PAY
			T88-032

#317

HOLE MTS-88-63

Moving		
4 tractor hours @ $60.00/hr.		$ 240.00
4 man hours tractor operating @ $24.00/hr.		96.00
6 man hours @ $24.00/hr.		144.00
Overburden		
10' @ $16.00/ft.		160.00
Core		
990' @ $16.00/ft.		15,840.00
593' @ $18.00/ft.		10,674.00
Consumables		
1 x 10' NW Casing @ $150.00		150.00
1 NW Casing shoe @ $152.00		152.00
1 NW Casing cap @ $40.00		40.00
15 bags Gel @ $10.00 ea.		150.00
15 pails Polymer mud @ $110.00 ea.		1,650.00
1 NQ Bit @ $575.00		575.00
	6% P.S.T.	163.02
	Cost + 10%	288.00
2 Acid Tests @ $50.00 ea.		100.00
Hole Stabilization		
26 man hours @ $24.00/hr.		624.00
13 drill hours @ $20.00/hr.		260.00
		$ 31,306.02

Appendix I

Drill Logs

MTS - 63

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER: 305
CLAIM NUMBER: WESTHOLME
LOCATION:

PLOTTING COORDS GRID: MTS
NORTH: 1150.00S
EAST: 1232.00E
ELEV: 646.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 485.50m
START DEPTH: 0.00m
FINAL DEPTH: 485.50m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: 40° 0' 0"

DATE STARTED: November 18, 1988
DATE COMPLETED: November 26, 1988
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: YES
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: Burwash Enterprises
CASING: 3.0 m
CORE STORAGE: Chemainus

PURPOSE: To test the extent of pyr-cp stringers in the Mona area

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
55.20	-	-75° 0'	ACID	OK		-	-	-	-	-	
200.30	-	-74° 0'	ACID	OK		-	-	-	-	-	
262.40	-	-76° 0'	ACID	OK		-	-	-	-	-	
316.10	-	-76° 0'	ACID	OK		-	-	-	-	-	
396.50	-	-77° 0'	ACID	OK		-	-	-	-	-	
449.40	-	-76° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.00	Overburden «OB»					
3.00 TO 229.00	Diorite «DIOR»	Colour: green Grain Size: fine to medium grained -massive -fsp porph with 3-7% ragged white fsp in a dark green mafic groundmass. patchy equigranular -occasional fine grained mafic dykes with calcite veining. -Diorite cut by fsp porph grey, massive felsic dykes at top of hole as follows: ⌈6.6-8.2⌋ «Fel Dyke» Felsic Dyke: 1-2% mm white anhedral feldspar contact ⌈20.7-41.5⌋ «Fel Dyke» Felsic Dyke: med grey, fine grained, 1-2% mm fsp. 30.5-34.3 weakly magnetic -60 m diorite becoming m. grained and more equi-granular. Occasional finer grained zones and coarser pegmatitic zones. Patches with 1% coarse metallic mineral = ilmenite? -Patchy strongly magnetic zones within pegmatitic zones below: 81.3-86.1; 90.5-91.0 122.5-140 -rubbly core abundant gougy fractures and thin gougy faults at < 20 deg to core axis 146.3-212.0 -Felsic dyking as follows:	35	⌈20.7-41.5⌋ «vw chl» very chloritic		20.7-41.5 -very rubbly core. Fairly broken and blocky to 77 m.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		⟨146.3-152.1⟩ «Fel Dyke» Felsic Dyke: med. grey f. g. massive, fsp porph 1-2% mm white fsp. Patchy mod magnetic	70			
		⟨152.6-153.1⟩ «Fel DYKE» Felsic Dyke 153.1	20			
		153.8-154.3⟩ «Fel DYKE» Felsic Dyke 153.8	30			
		⟨155.6-158.8⟩ «Fel DYKE» Felsic Dyke weakly magnetic				
		⟨160.9-165.0⟩ «Fel DYKE» Felsic Dyke as above, weakly magnetic. Irregular lower contact				
		⟨193.1-194.75⟩ «Fel DYKE» Felsic Dyke. As above 193.1 194.75	80 65			
		⟨205.1-206.0⟩ «Fel DYKE» 205.1	30			
		⟨206.5-206.9⟩ «Fel DYKE»				
		⟨209.4-211.8⟩ «Fel DYKE» 209.4	20			
		218.5 -diorite becoming fine grained, fsp phyric as lower contact is approached, 1-2% fsp				
		-Hematitic fracture coatings				
		227.0-229.0 -weak shearing along lower contact in last 20 cm				
		sharp lower contact	60			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
229.00 TO 235.60	Felsic Flow «FF»	Colour: light grey Grain Size: fine grained -massive, strong siliceous appearance, brecciated and/or fragmental -rubbly core, strong faulting below 233.5 m		«s. sil» -strong siliceous appearance = primary feature	«tr. py»	
		⟨235.3-235.6⟩ «Fault» Fault zone: gougy, milled		⟨235.15-235.3⟩ «Qtz Vn»	⟨235.15-235.3⟩ «1% py»	
235.60 TO 259.20	Felsic Tuff «FT»	Colour: light grey Grain Size: fine grained -weak to moderately foliated < 1-1% rounded mm quartz eyes. -top of unit -numerous medium green felsic Tuffs and Lithic Tuffs as follows:		«w. ser» -weak sericite alteration	«1 % py» -1% disseminated pyrite	
		⟨235.6-237.1⟩ «FT» Felsic Tuff -medium green, f.gr., fairly mass, possible fine felsic lithic frags.		⟨235.6-237.1⟩ «w. chl, w. calc» -weakly chloritic. Patchy discontinuous calcite veinlets	⟨235.6-237.1⟩ «tr. py»	
		⟨237.1-240.3⟩ «Fault» Fault zone: massive gougy milled zone with abundant granular host rock fragments.				
		⟨240.3-240.8⟩ »FLT» Felsic Lithic Tuff: med green, 1% < 0.5 cm felsic lithic fragments		⟨240.3-240.8⟩ «w. chl»	⟨240.3-240.8⟩ «tr. py»	
		⟨241.75-242.4⟩ «F(L)T» 241.75 242.4 contact	 25 30	⟨241.75-242.4⟩ «m. chl, w. calc» -moderately chloritic, weak calcite veining	⟨241.75-242.4⟩ «tr. py»	
		⟨243.2-244.6⟩ «FLT» Felsic Lithic Tuff: abundant grey felsic frags? in a green ground mass 244.6 contact 245.5 foliation 250.5 foliation	 35 25 25	⟨243.2-244.6⟩ «w.-m. chl» -weak to moderately chloritic	⟨243.2-244.6⟩ «tr. py»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		254.0-254.2 -weak fragmental appearance -lower contact in rubble foliation	10			
259.20 TO 281.50	Intermed. Tuff, Ash, Lithic Tuff Chert «IT, A,CHT»	Colour: grey green Grain Size: fine grained -weak to moderately foliated 259.2-263.5 -fine ash, finely bedded ash and cherts between 260.1 and 261.8 260.2 foliation 260.3 bedding 261.3 bedding 261.8 bedding -below 263.5 mixing of fine ashes and coarser tuff and lithic tuffs which sometimes contain rare 2-3 mm quartz grains and possible felsic frags. 266.1 -5 cm fault zone with 10% pyrite 269.6 foliation ┤271.0-274.5├ «FAULT» Fault zone: gougy and milled core ┤277.75-279.4├ «Fault, FT» -Felsic Tuff sliver with fault gouge and milled texture from 277.75-278.4 278.4 fault 279.4 contact 280.0 foliation	 0 60 65 55 25 30 25 5	«m. chl» -moderately chloritic throughout, slightly coarser tuff zones look less altered ┤269.3-281.5├ «w.-m. Calc» -weak to moderately developed thin calcite veining ┤277.5-277.75├ «Qtz Vn» ┤277.75-279.4├ «w.-m. Ser, w. Calc» -weak calcite veinlets	┤259.2-269.3├ «<1-1% py» <1%-1% pyrite. In zones of fine bedding pyrite very fine grained syn-genetic weakly bedded. -minor pyrite in thin clacite veining parallel to foliation ┤269.3-277.5├ «1% py» -1% pyrite within thin calcite veins ┤277.5-277.75├ «20% py, 2% cpy» ┤277.75-279.4├ «1-2% py» 1-2% py withinn calc veinlets ┤279.4-281.5├ «3% py, tr. cpy» -3% pyrite and trace chalcopyrite disseminated and within calcite veining approx. parallel to foliation	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
281.50 TO 302.10	Felsic Tuff «FT»	Colour: light grey Grain Size: fine grained -weakly foliated, rare rounded quartz eyes fragmental appearance or possible pseudo breccia below 296 m. 302.1 contact	 15	«w. Ser» -weakly sericitic -Areas of fragmentation or pseudo brecca weakly sericitic stockwork + groundmass	« <15 py» - <1% disseminated pyrite	
302.10 TO 322.50	Diorite	Colour: green Grain Size: fine grained -massive, fsp phyric with 1-3% white fsp in a f.gr green groundmass -minor hematitic fracture coatings 316.1-316.45 Fault Zone gougy milled 316.45 Fault 322.05 Contact	 20 50	«Qtz, Carb, Chl, Vns» -occasional Qtz carbonate chlorite veining up to 20 cm wide		
322.50 TO 398.00	Felsic Tuff Xtal Tuff «FT»	Colour: light grey Grain Size: fine grained -weakly foliated 322.05-336.5 -weakly siliceous brecciated (fragmental? or pseudobreccia?) appearance with a greenish sericitic stockwork, matrix. ┤322.85-323.0├ «Fault» Fault: numerous thin dark grey pyritic gougy bands 322.85 fault 327 foliation less than ┤332.3-333.35├ «M DYKE» -fairly massive 2-3% mm epidotized feldspars	 25 10 	«w. Ser, w. Calc, w. Ep» -weak sericite as ground mass altn. -weak epidote alteration of feldspar -weak minorcalcite veinlets ┤332.3-333.35├ «w. chl, w. ep m. calc» weakly chloritic, weak epidote altn.	« <1% py» -<1% disseminated pyrite and rare mm stringers	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
				of feldspars, moderate pervasive calcite.		
		333.35 contact	35			
		336.5-366.2 fsp phyric with 2-4% weakly epidotized 2-4 mm fsps. Patchy fsp phyric zones below 366.2				
		339.5 foliation less than	10			
		⟨344.8-345.0⟩ «Fault» Fault zone, gougy milled				
		345.0	25		⟨348.0-348.6⟩ « <1% py, sp» -<1% diss py. <1% sphalerite bright red disseminated often located near very thin calcite veinlets	
		360.6 foliation	0			
				⟨368.1-368.9⟩ «Qtz, Cal Vn» Qtz, Calcite veining	⟨368.1-368.9⟩ «10% py, tr cpy» -10% coarse brassy pyrite -trace chalcopyrite within pyrite	
		370.0 foliation	10		371.6 5 cm with 1% bright red sphalerite	
		377.2 foliation	55			
		380.2-380.6 -distorted foliations, minor grey clay gouge		⟨380.2-391.5⟩ «w. ser/chl» -weak sericite chlorite alteration -rock taking on a green color		
		⟨391.5-396.0⟩ «DIOR» -Diorite: f. gr. massive, fsp porphyritic. -Irregular lower contact, py along contact surface				
		391.5 contact	60			
398.00 TO 411.80	Diorite «DIOR»	Colour: green Grain Size: medium to fine grained -massive fsp porphyritic with fine grained zones with calcite veining=mafic dykes		398.0-411.8 -numerous calcite chlorite veins larger veins follow.		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
				┤402.15-403.4├ «Qtz, Calc, Chl Vns» -irregular quartz calcite chlorite veining		
		406.3 407.6 411.8 contact	25 25 90	┤406.3-407.6├ «Qtz, Calc, Chl Vn» -Quartz, calcite, chlorite veining -some parts of vein massive. -some veining parallel to core axis -<1% grey, metallic mineral?		
411.80 TO 485.50	Felsic Tuff Flow? «FT, FF»	Colour: light grey Grain Size: fine to medium grained -massive crystal tuff/flow -patches with 10-15% mm sized qtz crystals -no observed bedding between crystal-rich and more ashy areas		«w. Ser» -weak sericite alteration of fsp crystals -qtz veins - siliceous areas at:	«1% py» -1% py ocurs as f. gr. disseminations and stringers -more pyritic areas noted below:	
				┤420.1-420.3├ «QV»	┤420.1-420.3├ «10% py, tr. cp»	qtz-py-cp stringers between 420.1 and 431.15
		427.5 stringer	25	┤427.5-429.4├ «QV»	┤427.5-429.4├ «20% py, tr. cp»	
				┤430.3-431.15├ «QV»	┤430.3-431.15├ «20% py, tr. cp»	
				┤434.8-435.8├ «QV»	┤434.8-435.8├ «1-2% py»	
				┤435.8-485.5├ «w. chl» -core has a greenish grey colour due to weak pervasive chlorite alteration		
		454.0-455.4 -1-2% angular qtz crystals (2-3 mm across)				
		┤456.1-456.7├ «FAULT» -fault gouge				
				┤457.8-458.3├ «qtz-chl vein»	┤457.8-458.3├ «2-3% py»	
		471.0 foliation 485.0 foliation	35 35			
	E. O. H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG gm/T	AU gm/T	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	AG ppm	AU ppb	BA ppm	COMMENTS
BCD1156	277.40	277.90	0.50						4900	223	23	5.8	85	1220	
BCD1157	368.10	368.90	0.80						523	80	18	2.0	50		
BCD1158	406.30	407.60	1.30						30	30	12	1.2	15		
BCD1159	427.50	428.50	1.00						164	10	15	1.3	80		
BCD1160	428.50	429.40	0.90						31	12	8	0.9	10		
BCD1161	430.30	431.15	0.85						82	15	17	1.4	5		

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPM	SR %	ZR %	TOTAL %
BCD11360	31.40	34.40	3.00	50.35.	16.82	6.99	3.53	2.53	2.71	8.00	.14	.58	.068	27	64	16	0.8	10	1	1	.03	.002	92.21
BCD11361	231.60	234.60	3.00	62.95	15.00	3.41	2.82	5.17	1.02	3.00	.04	.32	.046	193	40	10	1.1	5	16	2	.02	.007	94.33
BCD11362	235.60	237.10	1.50	50.22	17.10	6.67	3.62	4.50	0.97	8.05	.14	.60	.037	135	53	19	0.4	5	25	2	.03	.002	92.23
BCD11363	260.10	261.30	1.20	54.39	15.96	0.96	5.53	2.13	1.70	8.53	.18	.52	.083	82	125	14	0.4	5	35	1	.01	.003	93.95
BCD11364	261.30	262.40	1.10	53.79	16.844	0.84	5.44	3.14	1.40	8.64	.18	.60	.070	208	117	14	0.4	10	30	1	.01	.002	94.16
BCD11365	262.40	263.50	1.10	50.13	18.76	1.68	6.34	4.25	1.11	8.42	.25	.56	.053	113	124	21	0.5	10	23	1	.02	.002	93.22
BCD11366	279.40	280.50	1.10	45.48	14.59	2.77	3.35	0.22	2.50	13.84	.13	.71	.109	2311	106	12	0.5	30	1	3	.01	0	94.03
BCD11367	280.50	281.50	1.00	50.89	16.72	1.77	3.69	0.16	2.92	11.48	.13	.75	.127	1596	94	7	1.9	20	1	3	.01	.001	94.41
BCD11368	295.00	298.00	3.00	68.15	13.95	1.91	2.82	0.82	2.33	4.40	.07	.34	.110	127	40	10	1.5	10	14	2	.01	.006	95.30
BCD11369	348.00	349.00	1.00	71.78	13.23	2.40	1.38	0.572.	53	3.40	.04	.30	.137	31	18	16	1.5	10	1	3	.01	.004	96.07
BCD11370	382.00	385.00	3.00	65.34	14.98	2.18	3.00	2.58	2.03	4.20	.05	.34	.129	90	26	9	1.4	5	1	2	.01	.003	95.01
BCD11371	419.30	420.30	1.00	66.98	13.77	2.10	1.39	0.39	3.16	5.28	.03	.38	.172	203	15	19	1.4	10	1	3	.01	.003	96.23
BCD11372	450.00	453.00	3.00	68.15	11.72	1.15	3.36	0.72	1.96	5.65	.11	.26	.060	10	43	15	0.9	5	4	2	.01	.003	95.07
BCD11373	480.70	483.70	3.00	67.52	14.32	0.81	3.34	2.47	1.88	4.28	.09	.31	.080	10	48	14	.8	5	10	1	.01	.004	95.39

LEGEND

CRETACEOUS

- 4 — Nanaimo Group Sediments
- 3 — Diorite Intrusions(age unknown)

PALEOZOIC
SICKER GROUP

- 2 — Rhyolitic-Dacitic Volcanics
- 1 — Andesitic Volcanics
- Mineralized chert, ash argillite (mine package)

SYMBOLS

- Shaft/old workings
- Bedding
- Anticline
- Syncline
- Fording Coal Lease Boundary
- ○MTS40 — 1987 Drill Hole Collar Location
- IP Chargeability Anomaly
- IP Survey December 1987
- 1988 Proposed drill hole location

N

RIVER

CHEMAINUS

POSTUK-FULTON PEPPA RESOURCES

QUEEN BEE

MTS-28 MTS-26 MTS-25

Postuk-Fulton

BELLE

NUGGET

CREEK FAULT

MTS44 MTS-29

MORLEY-JAYNE

MTS-58,59 KEY CITY MTS-60

MINE FAULT

MTS-23 KEY CITY MTS-19

CM-9 CM-8 CM-7 CM-10

MTS-22 TONY MTS-20 XL MTS-18 MTS-21

DONALD

MTS40

HERBERT

DOUBTFUL FR.

THELMA FR.

YANKEE FAULT

MTS-39 MTS-42

MTS-38 MTS-37 MTS-24

TYEE

Lenora-Tyee

LENORA TYEE

MTS-30 MTS-55,56 MTS-57 MTS-53 MTS-54 MTS-52

RICHARD III

MTS-50 ESTELLE P13

MONA MTS-43 MTS-41 MTS-27 MTS-38

WESTHOLME MTS-48 MTS-31 MTS-62 MTS-63

NORTHEAST COPPER FAULT

BLUEBELL MTS-65

FORTUNA FAULT

COPPER FAULT

FORDING COAL LEASE (South Boundary)

Gabriel

Northeast Copper

MTS-51 MTS-32

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,520

LOCATION MAP

VANCOUVER ISLAND — CHEMAINUS — DUNCAN — SALTSPRING ISLAND — COWICHAN LAKE

SCALE: 1:250,000

MINNOVA Inc.

MT. SICKER PROPERTY

GENERALIZED GEOLOGY + DRILL HOLE LOCATIONS

0 50 100 200 300 400 500 m

SCALE: 1:5000

Paul Bayle

November 1987		FIG. NO.:
DRAWN BY: H.G/GSW	REVISED JAN. 1989	3
DATE: DEC.1986	N.T.S. 92 B/13	