

SUMMARY OF 1987 FIELD WORK

MT. SICKER PROPERTY

MNC LEASE AREA 827169

G.S. Wells
Minnova Inc.

March 10, 1988

SUMMARY OF 1987 FIELD WORK

MT. SICKER PROPERTY

MUNICIPALITY OF NORTH COWICHAN LEASE AREA

NTS 92 B/13 W

VICTORIA MINING DIVISION

G.S. Wells
Minnova Inc.
Vancouver, B.C.
March 10, 1988

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SUMMARY OF 1987 FIELD WORK

MUNICIPALITY OF NORTH COWICHAN LEASE AREA

1. INTRODUCTION

This report summarizes work done in 1987 by Minnova Inc. on the parts of our Mt. Sicker property covered by the Municipality of North Cowichan Lease Area.

a. Location and Access

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

b. Property Status

Minnova's Mt. Sicker property consists of 4 contiguous options (Postuk - Fulton, Peppia, Lieberman, Canamera) and Minnova claims for a total of 198 units. The Municipality of North Cowichan owns the base metal rights for certain claims in the eastern part of the property (Figure 2). By virtue of the Minnova - MNC lease agreement, Minnova Inc. has the right to obtain these base metal rights in exchange for cash payments and a retained royalty interest.

DAM

50°

128°

PACIFIC OCEAN

VANCOUVER

ISLAND

WESTMIN DEPOSITS

MOUNT SICKER

DEBBIE

THISTLE

HEATHER

LARA

Victoria

LEGEND

- 4 JURASSIC Intrusions
- 3 Nanaimo Sediments
- 2 KARMUTSEN & BONANZA Volcanics
- 1 Sicker Volcanics & Sediments

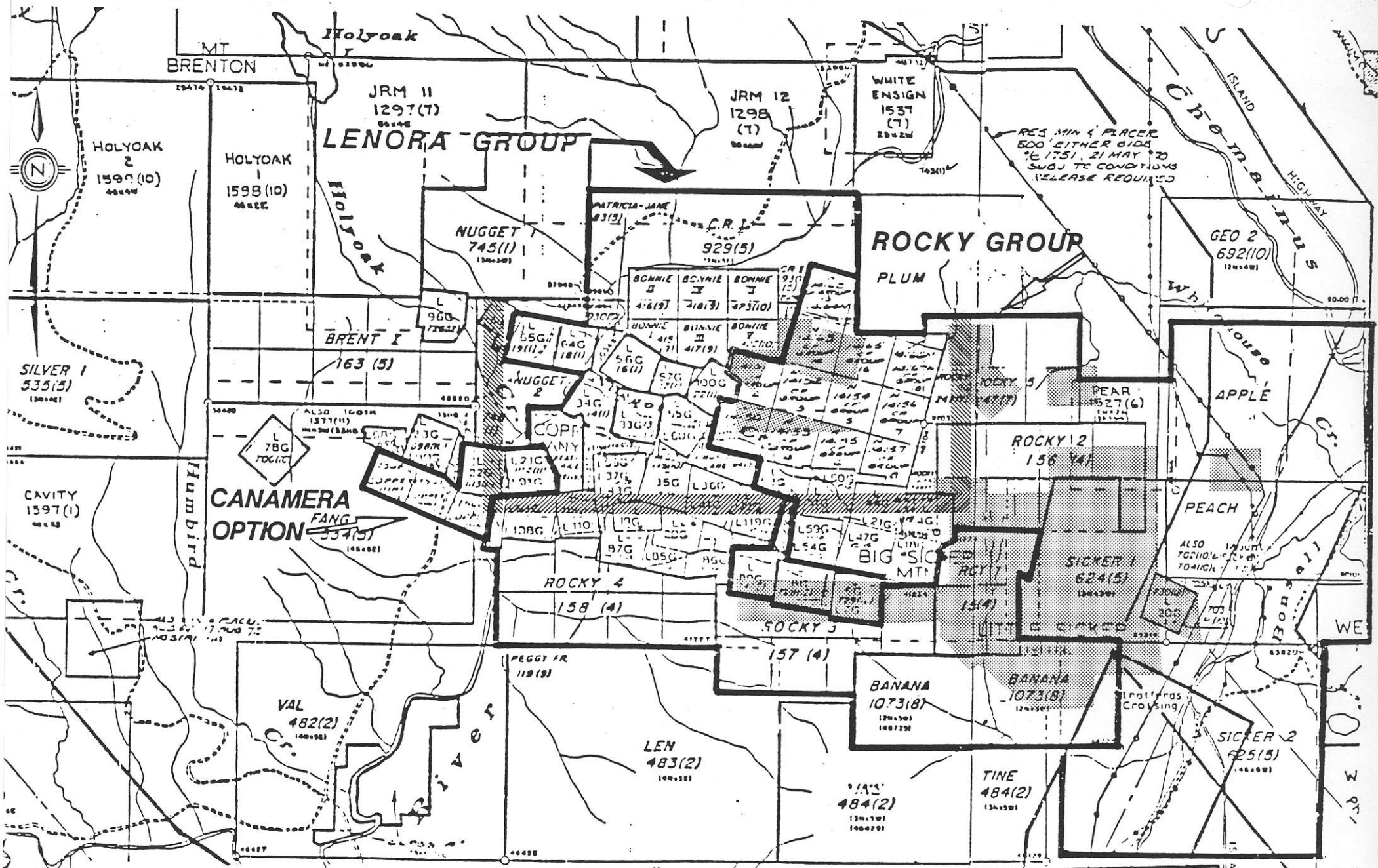
VANCOUVER ISLAND

GEOLOGY

SCALE: 1:2,000,000

MINNOVA

DM October 1987



MINNOVA

NTS 92B/13
0 1 2Km
1:50,000

**MT. SICKER PROPERTY
CLAIM MAP**

c. History

Two former producers (the Lenora and Tye mines) occur on the Mt. Sicker property. These deposits were discovered in 1898 and were largely mined out by 1909. Approximately 300,000 tons of ore grading 3.31% Cu, 7.5% Zn, 2.75 oz/T Ag and 0.13 oz/T 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. Minnova Inc. (formerly Corporation Falconbridge Copper) has been actively exploring the property since 1983 using a variety of geological, geochemical and geophysical techniques followed by diamond drilling in an attempt to discover a polymetallic massive sulphide deposit.

2. GEOLOGY

a. 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 siltstone 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 lava and agglomerates with minor massive to banded tuff layers.

Cretaceous sediments of the Nanaimo group unconformably overlie 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 into a series of fault blocks. Movements along these faults are interpreted to have been Tertiary in age. Metamorphic grade ranges from subgreenschist to greenschist.

b. 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. Only the Myra and Nitinat formations of the Sicker Group are exposed on the property. The Myra formation consists of thick units of felsic and mafic pyroclastic/flow rocks with minor ash, argillaceous sediment and chert. The Lenora - Tyee massive sulphide deposits occur within the Myra formation.

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

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 metres north of the Lenora - Tye deposits. The axial plane of the anticline is reflected by a pervasive moderately to intensely developed, vertically dipping foliation.

3. 1987 EXPLORATION PROGRAM - MNC LEASE AREA

In 1987, 3 diamond drill holes (1339 m) tested IP geophysical anomalies in the southeastern part of the lease area (Figure 3). Lithochemical samples were taken routinely throughout the holes and analysed for major and trace elements (SiO_2 , TiO_2 , Al_2O_3 , CaO , Na_2O , K_2O , MgO , MnO_2 , Fe_2O_3 , Pb , Ba , Cu , Zn) at Min-En Laboratories in Vancouver. Mineralized sections were analyzed for Cu , Zn , Ag and Au . A summary of each diamond drill hole is given below, whereas detailed descriptions are given in Appendix I.

MTS-33

Hole MTS-33 was drilled to evaluate shallow level IP and lithogeochemical anomalies and the Myra-Nitinat contact. The hole intersected andesitic crystal tuffs with variable amounts of epidote patches. Pyrite content in these units was sufficient to explain the IP chargeability anomalies. The Myra-Nitinat contact was not intersected suggesting that the hole was drilled on the north limb of the Mt. Sicker anticlinal structure.

Summary Log

0 - 6.1	-	Overburden
6.1 - 96.0	-	Andesite crystal tuff with 5-10% epidote patches
96.0 - 104.25	-	Felsic tuff - chloritic, 5% py
104.25 - 345.1	-	Diorite with mafic, carbonate-rich dykes
345.1 - 374.5	-	Andesite crystal tuff/ash - pervasive epidote, weak to moderate chlorite; 2-3% pyrite
374.5 - 381.5	-	Felsic to intermediate crystal tuff-pervasively chloritic; 5% py
381.5 - 382.7	-	Andesitic ash
382.7 - 390.75	-	Andesite crystal to lapilli tuff; moderate epidote, weak chlorite
390.75 - 427.4	-	Felsic to intermediate crystal tuff-moderate chlorite-epidote, 3-5% pyrite
427.4 - 565.6	-	Andesite ash/crystal tuff with mafic + QFP dykes
		428.5 - 437.0:10% dissem. pyrite
		437.0 - 449.6:3-5% pyrite

565.6 - 603.6 - Felsic ash/crystal tuff - moderate chlorite,
1-2% pyrite
603.6 - 625.1 - Andesite crystal tuff - weak patchy epidote
625.1 - EOH

MTS-34

Hole MTS-34 was drilled to evaluate a broad IP anomaly. Andesitic crystal tuffs which were intersected in the upper part of the hole, contain up to 5% disseminated pyrite. A silicified zone with 15% disseminated pyrite was intersected at a vertical depth of 100 metres. This zone is underlain by an intensely altered zone of chlorite and carbonate. The lower part of the hole encountered a relatively unaltered pyroxene-bearing flow breccia with QFP dykes. Although anomalous copper values (up to 700 ppm) are associated with the pyritic and altered zones, no economically significant zones were intersected.

Summary Log

0 - 7.0	Overburden
7.0 - 27.55	Andesite tuff/ash - weak pervasive chlorite-epidote with chlorite-sulphide (py) stringers; 2-3% pyrite
27.55 - 73.5	Felsic crystal/ash tuff - weak chlorite, sericite; weak to moderate epidote; 5% dissem. pyrite
73.5 - 107.8	Diorite with mafic dykes
107.8 - 108.9	Quartz - epidote vein
108.9 - 110.8	Silicified ash with minor cherty-looking patches; tr green micas, 15% dissem. pyrite

110.8 - 116.3	Altered flow breccia - fragments epidote-rich, matrix - intense chlorite with 2-3% carbonate veins; 2 - 3% pyrite
116.3 - 117.65	Silicified pyritic ash; pyrite in bands = beds?; 10-15% pyrite
117.65 - 255.2	Pyroxene-bearing flow with QFP dykes 117.65 - 124.4: intense chlorite; 1-2% pyrite 124.4 - 158.5: intense chlorite-carbonate 158.5 - 255.2: weak patchy epidote
255.2 - 264.0	Diorite

EOH

MTS-36

Hole MTS-36 tested an IP anomaly 565 metres north of MTS-34. The upper part of the hole consists of andesite crystal tuffs with patchy epidote alteration and thin zones with 3 to 5% pyrite. A 3.5 meter wide zone with 2-3% pyrite and 1-2% chalcopyrite occurs near the top of the Nitinat pyroxene-bearing breccia. The hole ended in a diorite dyke.

Summary Log

0 - 7.6	Overburden
7.6 - 175.25	Andesite crystal tuff/ash - weak chlorite-epidote 7.6 - 34.8: 1-2% py
175.25 - 214.0	Diorite
214.0 - 382.7	Andesite crystal tuff 265.75-268.1: intensely chloritic, 1-2% py 314.9-315.8: 10-15% pyroxene (?) crystals 317.4-324.0: moderate to intense epidote

324.0-382.7: 1-2% remnant pyroxene crystals
in feldspar phyric crystal tuff
378.9-382.7: 2-3% diss py, 1-2% cp; 0.4% Cu
over 2.1 m (378.9-381.0 m)
382.4-382.7: siliceous feldspar-phyric tuff,
20% py
382.7 - 408.9 Nitinat pyroxene-bearing flow (massive and
breccia) with QFP dykes. Weak to moderate
chlorite.
408.9 - 449.9 Diorite-feldspar-phyric
449.9 EOH

4. CONCLUSIONS

Three diamond drill holes (MTS 33, 34 and 36) tested IP anomalies in the south-eastern part of the MNC lease area. The amount of disseminated pyrite intersected in the holes was sufficient to explain the IP chargeability highs. Although no economically significant zones of metal enrichment are associated with these pyritic zones, anomalous copper values are present (eg. 0.4% Cu over 2.0 m - MTS 36). Further diamond drilling is required to fully evaluate the economic potential of the broad geophysical anomalies in this area.

Gary Wells

5. REFERENCES

Muller, J.E., 1980: The Paleozoic Sicker Group of Vancouver Island, B.C. GSC paper 79-30, 22p.

6. ITEMIZED COST STATEMENT
1987 Drilling - MNC Lease Area

Contractor: F. Boisvenu Drilling Ltd.

Contract Costs

1339 meters	\$78,585.72
Man and Cat hours	2,018.00
Materials	2,110.74

Salaries

G.S. Wells	25 days @ \$350/day	8,750.00
C. Higgins	8 days @ \$150/day	1,200.00

Field Expenses

Truck	25 days @ \$50/day	1,250.00
Food/Accomodation	33 man days @ \$40/day	1,320.00

Analyses

25 litho samples @ \$20/sample	500.00
40 assays @ \$12/sample	<u>480.00</u>

Subtotal	\$96,214.46
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Option Payment	<u>25,000.00</u>
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TOTAL SPENT ON MNC LEASE AREA:	\$121,214.46
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Appendix I,

Drill Logs

MIMMOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: HTS33

IMPERIAL UNITS: METRIC UNITS: I

PROJECT NAME: SIC
PROJECT NUMBER: 305
CLAIM NUMBER: SICKER I
LOCATION: NTS 92B/13

PLOTTING COORDS GRID: NTS
NORTH: 1533.005
EAST: 3650.00E
ELEV: 511.00

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

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 625.10m
START DEPTH: 0.00m
FINAL DEPTH: 625.10m

COLLAR GRID AZIMUTH: 45° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: June 10, 1987
DATE COMPLETED: June 20, 1987
DATE LOGGED: 0, 0

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

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

CONTRACTOR: F. BOISVENU DRILLING LTD
CASING: 6.1m
CORE STORAGE: 6722 LAKES RD, DUNCAN

PURPOSE: TEST CHLORITIC AND SERICITIC TUFFS, AND CHERT UNITS IN THE GAP AREA AND THE MYRA-NITINAT CONTACT

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-77° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
91.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
121.90	-	-75° 0'	ACID	OK		-	-	-	-	-	
152.40	-	-74° 0'	ACID	OK		-	-	-	-	-	
182.90	-	-75° 0'	ACID	OK		-	-	-	-	-	
213.40	-	-75° 0'	ACID	OK		-	-	-	-	-	
243.80	-	-74° 0'	ACID	OK		-	-	-	-	-	
274.30	-	-74° 0'	ACID	OK		-	-	-	-	-	
304.80	-	-74° 0'	ACID	OK		-	-	-	-	-	
381.00	-	-73° 0'	ACID	OK		-	-	-	-	-	
457.30	-	-72° 0'	ACID	OK		-	-	-	-	-	
533.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
609.60	-	-70° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 6.10	OVERBURDEN <OB>					
6.10 TO 96.00	ANDESITIC CRYSTAL TUFF with EPIDOTE CLASTS <AndT>	Colour - dark green matrix; light green clasts Grain size - fine-med Massive. - epidote clasts are subrounded - some may be remnant fragments. - generally 1-2cm in diameter - majority have ragged edges = alteration feature have 5-10% epidote patches and "clasts". 38.8-38.95: fgr. green, mafic dike 83.8-88.1 - magnetic, fgr., dark green mafic dike-hard to distinguish exact contacts.		- feldspar crystals and clasts are epidotized - also have epidote veinlets commonly bordering pyritic stringers. 28.4-30.0: zone looks silicified; lacks epidote "fragments". 37.6-38.4: chloritic stringer 46.5-47.8: chloritic stringer 49.0-49.1: carb-qtz-chl vein 53.4-53.7: 10% dark red hematite spots in siliceous zone; 2-3% carb veins. 83.8-88.1: tr-1% epidote veinlets in dike.	1-2% diss py throughout (locally enriched) some of epidote "clasts" have nucleated around pyrite "nodules" - pyrite occurs as disseminations, stringers +/- veinlets. 28.4-30.0: 5-7% py as disseminations + veinlets; tr cp. 34.1: 2cm wide py-cp stringer 37.6-38.4: 10% py, tr-1% cp in chloritic, blocky zone. 39.75-39.8: py-cp stringer 49.0-49.1: 5% py, 1% cp in vein 74.15: tr-1% cp in 2cm wide qtz-carb vein	37.6-38.4: blocky core blocky core at: 46.5-48.75 51.65-52.3 53.3-57.3 68.9-71.6: blocky core 90.2-102.4: blocky core
96.00 TO 104.25	CHLORITIC FELSIC TUFF? <FT>	Colour - greenish grey Grain size - fine Tr qtz "eyes" - textures obscured by fault gouge and blocky core fault gouge at: 97.0-97.3 103.35-104.25 96.0m 103.9-104.1: black argillite? + v.fgr pyrite in gouge zone. <ARG>	30	<Schl> pervasively chloritic; 1-2% carb veinlets. tr epidote patches	<5% diss py>	- alteration intense - uncertain whether this is an altered felsic tuff or altered mafic tuff? - lower contact = good fault gouge

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: MTS33

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
104.25 TO 163.50	DIORITE <DIOR>	Colour - greyish green Grain size - med. Massive. approx. 5% feldspar crystals - ragged outlines. locally % of feldspar crystals increases so that rock has typical dioritic/intergranular texture. fault gouge at: 147.55-147.65 - foliated 148.7-148.9	30	pervasively carbonate-rich approx. 5% carb + qtz veinlets - tr chloritic veins carbonate alteration not as pervasive in areas of intergranular texture. 149.5-151.5: fgr. chl-carb zone	none	
163.50 TO 174.20	MAFIC DIKE <Mdy>	Colour - grey Grain size - fine massive sharp contacts 163.75 - diorite inclusion near upper contact - 163.75- 164.0 1 % feldspar crystals 174.2	30 30 30	pervasively carbonate-rich 1-2% qtz veins. tr epidote veinlets - moderately to strongly magnetic	tr diss. py	possibly a lamprophyre dike - fgr., carb-rich
174.20 TO 345.10	DIORITE <DIOR>	Colour - dark green Grain size - medium feldspar-phyric 5-10% crystals - massive f.gr. mafic dikes at: 180.2-183.4 - perv. carb magnetic 191.8-191.9 192.4-192.6 204.4-205.0 - perv. carb., magnetic 206.1-206.45 - perv. carb., mag. 214.35-215.55 - perv. carb., mag 216.35-216.6- perv. carb., mag. fault gouge at: 217.4-217.5 f.gr., grey, mafic dikes at: 253.2-253.5 - carb rich 259.25-260.5 - carb rich fault gouge at: 261.3-261.7 262.0-262.1	60 20 45 40 30 50 20	relatively unaltered. tr-1% qtz-carb veins 178.85-180.2: 3-5% magnetite crystals chl-carb zones at: 195.3-196.0 198.4-199.7 201.3-202.8 203.6-204.4 209.4-210.3 253.5-254.0	none	blocky core at: 262.0-264.8 268.9-272.3

HOLE NUMBER: MTS33

DRILL HOLE RECORD

LOGGED BY: G. WELLS

PAGE: 3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		fgr., green chloritic mafic dike at: 282.45-282.75 good chilled contact	80	carb-chl vein at: 275.7-276.3 276.5-277.7 chl-carb zone at: 328.7-330.5 contacts sharp - possibly a mafic dike	speck of cp in carb vein at: 306.0	blocky core at: 273.8-275.0 276.5-279.0 316.3-319.5
345.10 TO 374.50	ANDESITIC CRYSTAL TUFF/ASH <And T>	Colour - dark green Grain size - fine interbedded ash and crystal-rich areas. 3-5% fsp crystals 5% epidote "clasts" = fragments? - diffuse boundaries - weakly foliated 373.9-374.5: fault gouge	60	<11 ep> fsp crystals + fragments? pervasively epidotized - matrix: weak to moderate chlorite	<2-3% py> 354.6-354.75: cgr. py in stringer with associated qtz-carb vein.	looks similar to unit at top of hole except that epidote clasts have more diffuse boundaries + look more like an alteration feature.
374.50 TO 381.50	FELSIC to INTERMED. CRYSTAL TUFF <And T>	Colour - greenish grey Grain size - fine-med. 5-10% qtz eyes; 5-10% epidotized feldspar crystals - weakly foliated	60	<S chl> pervasively chloritic	<5% py> 5% py as disseminations	alteration makes rock look intermediate in composition.
381.50 TO 382.70	ANDESITIC ASH TUFF <And A>	Colour - greyish green Grain size - fine well-foliated; contacts sharp 1-2% epidotized fragments with foliation/bedding wrapping around them. 382.0 foliation 382.7 contact	60 55	weak patchy epidote, moderately chloritic	<tr-1% py>	
382.70 TO 390.75	ANDESITE CRYSTAL to LAPILLI TUFF <And T, LT>	Colour - green Grain size - fine gr. matrix; med gr. crystals 20-30% epidotized feldspar crystals (2-3mm x 1-2mm) 5% epidote patches = possible fragments - subrounded - up to 1cm diameter 387.1-390.75: fgr. mafic dike, carb-rich	60	<11 ep, w chl> moderate epidote weakly chloritic	<tr-1% py>	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
390.75 TO 427.40	FELSIC to INTERMED. CRYSTAL TUFF <And T>	Colour - grey Grain size - fine to med. beds of qtz-phyric (10-15%) crystal tuff interlayered with feldspar-rich beds - bedding indistinct but well-foliated 393.15-393.85: fgr., grey mafic dike 398.5: foliation 411.0: foliation f.gr., grey mafic dikes - pervasively carbonate-rich at: 416.3-418.5 418.6-418.9 419.8: foliation 425.8-427.4: Andesitic ash with epidote veins + patches; cherty towards lower contact 427.4: contact	55 60 50	<Sep, chl> feldspar crystals pervasively epidotized. - moderately chloritic throughout with 1-2% intensely chloritic sulphide stringers. qtz-chl zone at: 423.0-423.7 intensely chloritic at: 423.7-424.85	<3-5% py> overall 3-5% py as disseminations parallel to foliation and as stringers - locally pyrite content enriched as noted below 418.9-423.0: 5-7% py	chemistry indicates that rocks are intermediate in composition
427.40 TO 565.60	ANDESITIC ASH/CRYSTAL TUFF with interlayered FELSIC CRYSTAL TUFFS <And A, T>	Colour - dark green Grain size - fine predominately ash with patches with 5-10% epidote "clasts" and 10% epidotized feldspar crystals - weakly foliated 434.4 436.9 443.5-445.3 - felsic crystal tuff- fgr., greenish-grey qtz-phyric 10-15% small q's. - contacts with andesitic tuff are indistinct. - moderately chloritic 445.6 451.95-565.5 tr, fgr. grey chert fragments in andesitic matrix. 452.9 462.3	50 40 55 60 55	<Wchl> pervasively mildly chloritic with the odd intensely chloritic stringer. feldspar crystals + "clasts" - pervasively epidotized.	4428.5-437.0 <10% py> 10% py as disseminations and veinlets. 4437.0-449.6 <3-5% py> 3-5% py, diss. + as stringers. 4449.6-464.0 <1-2% py> 1-2% py as diss + stringers	

HOLE NUMBER: MTS33

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		†464.1-465.9t <QFP> QFP dike - relatively sharp contacts. 5% Qtz "eyes"; 25-30% feldspar crystals - relatively unaltered.			464.0-475.9 - none	465.3-466.8: blocky core
		474.5-475.4 f.gr. grey, mafic dike, pervasively carbonate-rich lower contact chilled	30		465.9 †475.9 †465.9-565.6t <1% py> - 1% diss. py in andesitic crystal tuff - no sulphides in mafic dike	474.2-474.5: blocky core
		476.6-476.8 Cherty bed - relatively sharp contacts	55			
		f.gr. grey mafic dikes; carb-rich at: †481.35-484.6t <Mdy> †485.7-486.4t <Mdy>	20			
		491.8-493.5 felsic-looking tuff including cherty zone at 492.9-493.1			492.9-493.1	
		492.9	55		10% py as disseminations + stringers in chert	- uncertain as to whether this is a chert or Qtz vein.
		498.5	30			
		f.gr., grey, mafic dikes, carb-rich at: †500.00-503.25t <Mdy> weakly magnetic 504.8-505.45 507.2-508.4 †512.1-521.7t <Mdy> weakly magnetic	40 50 20			
		521.7-522.2 QFP + mafic dikes - looks like QFP fragments in mafic matrix.	20			
		522.2-523.9 felsic tuff with the odd chert fragment		522.2-523.9 weakly chloritic	†522.2-523.9t <5% py> 5% diss. py + in chloritic stringers	
		f.gr. green, mafic dikes at: 523.9-524.05 †524.4-525.2t <Mdy>				
		f.gr. grey, mafic dikes, carb-rich at: 539.85-547.2 - magnetic				
		†547.2-550.4t <QFPdy> QFP dike(?) or tuff(?) m.gr, grey		547.2-550.4 - relatively unaltered.	547.2-550.4 1-2% py as stringers.	
		f.gr. grey, mafic dikes, carb-rich at:		550.4-550.9: mt-Qtz-chl vein	550.7-550.9: 1-2% py in vein	

HOLE NUMBER: MTS33

DRILL HOLE RECORD

LOGGED BY: S. WELLS

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HOLE NUMBER: MTS33

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		552.5-555.7 f.gr. grey, cherty looking zones in andesitic crystal tuff at: +556.95-557.05 t <cht> +560.75-560.9 t <cht>				
565.60 TO 603.60	FELSIC ASH/ CRYSTAL TUFF <And T>	Colour - greenish grey Grain size - fine qtz-phyric, felsic tuff with gradational contacts approx. 10% qtz crystals 3-5% fsp crystals occur in patches. tr-1% v.f.gr greysigh brown chert fragments. 572.5-576.6 Andesitic crystal tuff 5% epidote patches. lower contact sharp f.gr., grey mafic dikes, carb-rich at: 579.4-585.6 586.75-587.3 fsp-phyric bed at approx. 591.2-592.0 -locally chert fragments aligned = bedding? 592.0 593.0 fsp-phyric beds at: 595.25-596.0 600.2-601.85 f.gr. grey mafic dike, carb-rich at: 597.3-600.2 cherty look to fgr. qtz-phyric tuff at: 602.1-602.3	40 50 55 30	+565.6-603.6 t <Mch> moderately chloritic with intensely sericitic zone at: 566.05-566.4 feldspar crystals epidotized. +601.85-603.6 t <3-5% py>	<1-2% py> 1-2% diss py - v.fgr.	chemistry indicates that unit is intermediate in composition.
603.60 TO 625.10	ANDESITIC CRYSTAL TUFF <And T>	Colour - greenish grey Grain size - med. to fine massive to weakly foliated. - local zones of epidotized fsp crystals + "clasts". - 2-3% chert fragments at: 603.6-604.9		weak to moderate, patchy epidote. - locally weak pervasive carbonate silicified cherty looking zones at: 605.2-605.35	1% diss py except where noted below. 605.2-605.35: 2-3% py	

HOLE NUMBER: MTS33

DRILL HOLE RECORD

LOGGED BY: G. WELLS

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HOLE NUMBER: MTS33

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		625.1 - E.O.H.		silicified cherty looking zones at: 620.35-621.5 622.45-622.85 624.4-624.55	615.4-615.6 - semi-massive pyrite stringer (chloritic matrix). 620.35-621.5 3-5% py> as disseminations + stringers 622.45-622.85 1-2% py> 624.4-624.55 1-2% py>	

HOLE NUMBER: MTS33

DRILL HOLE RECORD

LOGGED BY: G. WELLS

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HOLE NUMBER: MTS33

ASSAY SHEET

DATE: 21-December-1987

Sample	From (m)	To (m)	Length (m)	GEOCHEMICAL				COMMENTS
				Cu ppm	Zn ppm	Ag ppm	Au ppb	
1501	28.40	30.00	1.60	580	42	1.0	5	
6502	37.60	38.40	0.80	3500	76	1.5	5	
6503	96.00	97.50	1.50	88	64	0.9	5	
6504	97.50	99.00	1.50	83	41	0.9	5	
6505	99.00	101.50	2.50	49	38	0.9	5	
6506	101.50	103.35	1.85	88	36	0.8	10	
6507	418.90	420.50	1.60	12	31	0.9	5	
6508	420.50	422.00	1.50	20	26	1.0	5	
6509	422.00	423.00	1.00	10	47	1.0	5	
6510	428.50	430.00	1.50	32	43	1.0	5	
6511	430.00	431.50	1.50	13	38	0.9	5	
6512	431.50	433.00	1.50	8	27	0.7	5	
6513	433.00	434.50	1.50	9	44	0.8	5	
6514	434.50	436.00	1.50	15	56	1.0	5	
6515	436.00	437.00	1.00	85	55	1.2	5	
6516	491.80	493.50	1.70	19	36	0.7	10	
6517	601.85	603.60	1.75	11	30	0.6	5	
6518	615.40	615.60	0.20	105	25	1.2	5	
6519	620.35	621.50	1.15	36	22	0.9	5	
6520	622.45	622.85	0.40	22	23	0.8	10	

HOLE NUMBER: MTS33

ASSAY SHEET

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HOLE NUMBER: MTS33

GEOCHEM. SHEET

DATE: 31-December-1987

Sample	From (m)	To (m)	Length (m)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE0 %	MNO %	TI02 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %
6976	41.50	44.50	3.00	51.25	17.41	6.72	5.35	3.13	0.06	9.25	0.38	0.70	0.005	1054	46	60	0.5	5	16	3	.04	.005	94.29
6977	78.00	81.10	3.10	53.23	17.44	5.34	5.96	3.40	0.09	8.76	0.36	0.69	0.005	301	68	16	0.7	5	14	1	.03	.005	95.31
6978	348.70	351.70	3.00	55.33	17.30	5.29	4.81	3.66	0.32	8.15	0.23	0.67	0.014	100	28	12	0.6	15	13	1	.03	.005	95.82
6979	376.40	379.50	3.10	54.68	17.11	4.24	6.41	3.48	0.35	9.19	0.23	0.68	0.013	17	38	9	0.4	5	14	1	.02	.005	96.41
6980	401.10	404.20	3.10	55.59	16.63	3.09	5.98	4.26	0.49	9.66	0.19	0.65	0.015	14	33	14	0.5	5	14	2	.03	.005	96.59
6981	446.80	449.90	3.10	57.55	16.73	3.22	5.33	4.24	0.51	8.38	0.17	0.64	0.021	11	30	7	0.3	5	15	2	.03	.005	96.82
6982	477.30	480.40	3.10	51.59	18.06	4.32	5.20	4.38	0.45	11.26	0.27	0.77	0.022	34	48	18	0.7	5	17	3	.03	.005	96.27
6983	526.10	529.10	3.00	52.91	17.30	6.83	5.02	3.10	0.06	9.57	0.32	0.70	0.005	44	41	13	0.9	10	16	3	.04	.005	95.84
6984	568.10	571.20	3.10	54.12	18.28	4.56	4.25	5.10	0.56	8.29	0.22	0.72	0.064	41	60	6	0.6	5	16	2	.03	.005	96.20
6985	606.90	609.90	3.00	53.97	18.01	5.69	5.47	3.58	0.17	8.33	0.26	0.69	0.020	15	31	12	0.3	5	21	2	.03	.005	96.23

HINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: MTS34

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC PLOTTING COORDS GRID: MTS ALTERNATE COORDS GRID: COLLAR DIP: -75° 0' 0"
 PROJECT NUMBER: 305 NORTH: 1930.00S NORTH: 0+ 0 LENGTH OF THE HOLE: 264.00m
 CLAIM NUMBER: ROCKY I EAST: 2605.00E EAST: 0+ 0 START DEPTH: 0.00m
 LOCATION: NTS 92B/13 ELEV: 511.00 ELEV: 0.00 FINAL DEPTH: 264.00m

COLLAR GRID AZIMUTH: 45° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: June 21, 1987 COLLAR SURVEY: NO PULSE EM SURVEY: YES CONTRACTOR: F. BOISVENU DRILLING LTD
 DATE COMPLETED: June 25, 1987 MULTISHOT SURVEY: NO PLUGGED: NO CASING: 7.0M
 DATE LOGGED: 0, 0 RRD LOG: NO HOLE SIZE: NQ CORE STORAGE: 6722 LAKES RD. DUNCAN

PURPOSE: TEST 1) A STRONG IP ANOMALY ASSOC. WITH PY-CP STRINGER MINERAL. AND 2) THE NYRA-NITINAT CONTACT

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-74° 0'	ACID	OK		-	-	-	-	-	
91.40	-	-74° 0'	ACID	OK		-	-	-	-	-	
121.90	-	-74° 0'	ACID	OK		-	-	-	-	-	
152.40	-	-72° 0'	ACID	OK		-	-	-	-	-	
182.90	-	-73° 0'	ACID	OK		-	-	-	-	-	
213.40	-	-73° 0'	ACID	OK		-	-	-	-	-	
244.00	-	-71° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 7.00	OVERBURDEN					casing
7.00 TO 27.55	ANDESITIC to INTERMED. TUFF/ASH	Colour - greenish grey Grain size - fine weakly foliated to massive 1-2% epidote "clasts" occur locally. also have local beds of qtz-phyric material (10% q's) - contacts of these beds indistinct. 24.0m	50	weakly chloritic with more intense chloritic stringers - weak epidote alteration.	2-3% py throughout as disseminations, tr cp. Semi-massive py associated with chloritic stringers at: 10.1-10.2 10.8: 1cm 11.5-11.75 25.25-25.35: 30% py	blocky core: 14.4-21.4
27.55 TO 73.50	FELSIC CRYSTAL/ASH TUFF	Colour - grey Grain size - fine generally qtz-phyric with fsp-rich beds. - weakly foliated - bedding between qtz-phyric + fsp-rich beds is locally well-defined but generally very diffuse. 25-30% qtz eyes + 2-3% fsp crystals except in fsp phyric beds locally see the odd lapilli-sized fragment. 35.0m - bedding 53m - foliation 63.5m - foliation 70.7m - foliation	55 45 55 50	pervasive qtz-epidote vein stockwork at 27.55-29.05 32.0-32.4 2-3% epidote "clasts" = altered fragments? - diffuse to well-defined boundaries - unit weakly chloritic and sericitic and weakly to moderately epidotic. 64.2-73.5: moderate epidote-chlorite alteration - core dark green with light green ep. patches.	5% v.f.gr. pyrite disseminated throughout.	- amount of py in this unit is explanation for IP anomaly. epidote clasts probably an alteration feature but may have nucleated around an original fragment. chemistry indicates unit intermediate in composition blocky core + fault gouge: 70.7-73.5
73.50 TO 107.80	DIORITE/MAFIC DIKES	Colour - dark green Grain size - fine matrix; med-coarse fsp crystals generally massive diorite has 5-7% fsp crystals + is locally glomeroporphyritic 73.5m: contact mafic dikes, v.fgr., dark green at: 73.5-75.0 75.2-75.9 86.75-87.05 90.3-90.7 95.0-95.0 107.8m: contact	55 60	73.5-75.9: pervasive carbonate associated with mafic dikes. - generally unaltered 95.0-105.7: 3-5% carb. veins.	none 80.7: bleb of cp in qtz vein 90.3: bleb of cp in qtz vein	

HOLE NUMBER: MTS34

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
107.80 TO 108.90	QUARTZ-EPIDOTE VEIN	Colour - greenish white Grain size - very fine Massive			tr-1% py	
108.90 TO 110.80	SILICIFIED ASH/CHERT	Colour - grey Grain size - fine weakly bedded near upper contact; otherwise massive. - predominantly a felsic-looking ash - more silicified area look cherty. 109.1a	40	moderate to weakly chloritic - pervasively silicified. - tr. green mica flakes	15% py - primarily as disseminations - near upper contact has bedded appearance.	
110.80 TO 116.30	ALTERED NITINAT FLOW BRECCIA	Colour - greenish grey Grain size - fine approx. 10% epidotized fragments which contain remnant pyroxene crystals.		fragments pervasively epidotized; matrix pervasively chloritic with 2-3% carb veinlets.	2-3% diss. py	
116.30 TO 117.65	PYRITIC ASH with GREY CHERT	Colour - grey Grain size - fine pyritic beds interlayered with grey chert - most of unit looks like a silicified ash 116.4a: bedding 117.4	30 30	pervasively silicified tr-1% green mica flakes at 116.75-116.9: have light grey sericitic? patch	10-15% primarily as beds - have v.fgr. py + fgr. py- latter looks somewhat recrystallized.	
117.65 TO 255.20	NITINAT MAFIC FLOW with GFP DIKES	Colour - dark green Grain size - f.gr. with m-cgr. pyroxene phenocryst in altered zones stretched green crystals = pseudomorphs after pyroxene. approx. 2-3% crystals - weakly foliated 117.65-159.5 1-2% epidotized fragments with remnant pyroxene crystals.		117.65-124.4: intense chlorite alteration 124.4-159.5: intense chlorite-carbonate alteration.	117.65-124.4 1-2% diss py	

HOLE NUMBER: MTS34

DRILL HOLE RECORD

LOGGED BY: G. WELLS

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		126.0m	20	- end of intense alteration gradational		
		QFP dikes at: 133.8-136.3			124.4-225.6: tr diss. py	
		133.8m	30			
		137.0m	50			
		145.0m: foliation	40			
		158.5-255.2: massive flow; pyroxene phyrlic approx. 10% subrounded pyroxene crystals up to 1cm in diameter 1-2% brownish-green crystals = olivine?		158.5-224.0: - weak, patchy epidote alteration		
		f.gr., grey, QFP dike at: 163.9-165.4				
		f.gr., dark green mafic dike at: 181.1-181.7				
		181.1a: contact	40			
		185.4-188.1: 1-2% epidotized fragments in fgr. mafic matrix.				
		fgr., dark grey, mafic dikes - magnetic at: 204.2-206.0	30			
		206.2-206.75	40			
		fgr., grey QFP dikes at: 206.0-206.2				
		210.1-210.3: dikelets				
		211.3-223.8	30	211.3-223.8: 5% Qtz veins + veinlets	211.3-223.8: tr. cp in qv's in QFP	
		224.0-225.6	40			
		230.9-234.4	60	225.6-255.2: moderate chlorite-carb alteration % of pyroxene crystals variable but generally only 1-2% - occur in patches	225.6-255.2: 1% diss py in mafic sections.	
		235.45-235.8				
		235.85-236.35				
		246.55-247.0				
		blocky core and fault gouge at: 247.7-252.3				
		247.7a: foliation	40			
		QFP dikes at: 249.1-251.1				
		251.5-253.1				

HOLE NUMBER: MTS34

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
255.20 TO 264.00	DIORITE E.O.H.	Colour - green Grain size - fine fsp-phyric - 3-5% fsp crystals - massive		pervasively carbonate-rich	none	

HOLE NUMBER: MTS34

DRILL HOLE RECORD

LOGGED BY: G. WELLS

PAGE: 5

HOLE NUMBER: NTS34

ASSAY SHEET

DATE: 21-December-1987

Sample	From (m)	To (m)	Length (m)	GEOCHEMICAL				COMMENTS
				Cu ppm	Zn ppm	Ag ppm	Au ppb	
6521	11.50	11.75	0.25	420	98	1.8	25	
6522	107.80	108.90	1.10	68	34	0.6	5	
6523	108.90	109.90	1.00	233	29	1.0	5	
6524	109.90	110.80	0.90	75	40	1.1	5	
6525	110.80	112.30	1.50	24	57	0.9	5	
6526	114.80	116.30	1.50	27	60	1.2	10	
6527	116.30	117.65	1.35	24	22	0.9	5	

HOLE NUMBER: NTS34

GEOCHEM. SHEET

DATE: 31-December-1987

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	FeO %	MnO %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %
6986	34.70	37.80	3.10	54.28	16.51	5.35	5.76	1.85	1.37	9.08	0.25	0.71	0.114	206	47	4	0.8	5	19	3	.03	.005	95.31
6987	65.90	68.90	3.00	51.65	16.84	5.35	7.02	1.99	0.37	11.51	0.36	0.67	0.031	26	60	9	0.6	10	13	2	.03	.005	95.82
6988	119.50	122.50	3.00	49.64	16.42	1.73	9.91	0.82	1.07	12.83	0.47	0.73	0.146	17	81	17	0.1	10	19	3	.01	.005	93.78
6989	148.10	151.10	3.00	49.55	15.13	6.88	7.47	1.75	0.23	10.41	0.49	0.78	0.009	705	72	22	0.5	5	22	3	.03	.005	92.73
6990	178.70	181.70	3.00	49.09	16.40	8.54	7.52	3.44	0.21	9.39	0.39	0.73	0.021	68	43	4	0.8	5	16	3	.03	.005	95.76
6991	225.60	228.60	3.00	48.21	14.99	6.21	8.85	0.43	0.73	12.09	0.43	0.70	0.054	37	69	22	0.7	15	19	3	.02	.005	92.70

HOLE NUMBER: NTS34

GEOCHEM. SHEET

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HOLE NUMBER: MTS36

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: Y

PROJECT NAME: SIC PLOTTING COORDS GRID: MTS ALTERNATE COORDS GRID: COLLAR DIP: -70° 0' 0"

PROJECT NUMBER: 305 NORTH: 1365.00S NORTH: 0+ 0 LENGTH OF THE HOLE: 449.90m

CLAIM NUMBER: ROCKY I EAST: 2645.00E EAST: 0+ 0 START DEPTH: 0.00m

LOCATION: MTS 92B/13 ELEV: 590.00 ELEV: 0.00 FINAL DEPTH: 449.90m

COLLAR GRID AZIMUTH: 45° 0' 0" COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: June 25, 1987 COLLAR SURVEY: NO PULSE EM SURVEY: NO CONTRACTOR: F. BOISVENU DRILLING LTD

DATE COMPLETED: July 3, 1987 MULTISHOT SURVEY: NO PLUGGED: NO CASING: 7.6M

DATE LOGGED: 0, 0 RRD LOG: NO HOLE SIZE: NQ CORE STORAGE: 6722 LAKES RD, DUNCAN

PURPOSE: TO TEST 1) AN IP ANOMALY 2) CU-ZN LITHOGEOCHEM. ANOMALY AND 3) THE MYRA-NITINAT CONTACT

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-70° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-69° 0'	ACID	OK		-	-	-	-	-	
91.40	-	-68° 0'	ACID	OK		-	-	-	-	-	
121.90	-	-68° 0'	ACID	OK		-	-	-	-	-	
152.40	-	-67° 0'	ACID	OK		-	-	-	-	-	
182.90	-	-68° 0'	ACID	OK		-	-	-	-	-	
213.40	-	-66° 0'	ACID	OK		-	-	-	-	-	
243.80	-	-67° 0'	ACID	OK		-	-	-	-	-	
304.80	-	-66° 0'	ACID	OK		-	-	-	-	-	
371.90	-	-67° 0'	ACID	OK		-	-	-	-	-	
432.90	-	-65° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 7.60	OVERBURDEN					casing.
7.60 TO 175.25	ANDESITIC CRYSTAL TUFF/ASH	<p>Colour - greenish grey Grain size - fine-med. massive to weakly foliated. Indistinct bedding between fsp-rich layers + more ashy beds 110.m: foliation have 15% epidotized fsp crystals locally have 1-2% epidote "clasts" 18.0m: bedding 30.1m: bedding?</p> <p>34.8-35.8: f-mgr., grey, massive QFP dike. 34.8m: contact</p> <p>46.7m: foliation 66.0m: foliation</p> <p>90.5m</p> <p>92.7-101.6: 5% subrounded epidote "clasts" up to 10cm in diameter</p> <p>105.0m: foliation</p> <p>110.15m</p> <p>110.2-110.35: fgr., green, mafic dike</p> <p>116.2m</p> <p>142.2m: foliation</p> <p>154.0m</p>	<p>40</p> <p>35</p> <p>30</p> <p>50</p> <p>35</p> <p>45</p> <p>40</p> <p>30</p> <p>30</p> <p>45</p> <p>30</p> <p>30</p>	<p>weakly chloritic; with tr chlorite-sulphide stringers. weak epidote alteration - confined to fsp crystals + "clasts"</p> <p>46.7-48.8: intensely chloritic zone</p> <p>78.0-86.7: 1-4cm wide qtz-carb vein parallel to core axis.</p> <p>90.4-91.25: intensely chloritic zone</p> <p>104.5-104.6: chl-qtz zone</p> <p>110.0-110.15: qtz-chl vein</p> <p>112.5-117.3: pervasive intense chlorite with qtz-chl veins at: 113.6-113.7 115.85-116.0 116.7-117.2</p> <p>127.5-127.95: pervasive intense chlorite stringer</p> <p>147.3-148.9: moderate chlorite alteration</p>	<p>7.6-34.8: 1-2% diss. py; tr cp in stringers at: 17.4 18.4-18.7</p> <p>36.8: tr diss py except where noted below</p> <p>46.7-48.8: 3% diss. py specks of cp at: 56.3, 56.9</p> <p>90.4-91.25: 3-5% diss py</p> <p>104.5-105.6: 5% py, tr cp</p> <p>105.7: 2cm py-chl stringer</p> <p>110.0-110.15: 5-10% py</p> <p>112.5-117.3: 1-2% py with tr cp in qv's</p> <p>116.7-117.2: 5% py, tr cp</p> <p>127.5-127.95: 2-3% py, tr cp</p> <p>144.4-tr cp in qv (2cm)</p> <p>147.2-148.9: 3% diss. py</p> <p>155.45-155.5: semi-massive py, tr cp in chl-qtz stringer.</p>	

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MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-December-1987

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		166.7m: foliation	45		163.3-167.05: 2-3% diss py, tr cp - sulphides occur both as disseminations + stringers associated with qtz-carb-chl veins.	
175.25 TO 214.00	DIORITE	Colour - dark grey Grain size - fine matrix; med. fsp crystals massive - glomeroporphyritic; 5-10% feldspar crystals - upper contact sharp, chilled 185.1-187.15: fgr., dark green, mafic dike pervasively carb-rich with 10% carb veins lower contact sharp but obscured by blocky core.	60	relatively unaltered 183.65-183.75: qtz-carb-chl vein 209.5-210.15: qtz-carb-chl vein	none 183.65-183.75: tr-1% cp in vein.	194.0-201.5: blocky core with minor fault gouge 104.0-209.5: blocky core
214.00 TO 382.70	ANDESITIC CRYSTAL TUFF	Colour - grey-greenish grey Grain size - fine massive to weakly foliated - 1-2% epidote patches. locally have patches with 5% feldspar crystals. 227.0m FP dikes at: 234.35-234.4 240.2-244.8 251.1-255.1 268.1-282.2: crystal tuff more intermediate in composition - locally have indistinct beds with 10-15% qtz crystals fgr., greenish grey QFP dike with 15-20% feldspar crystals (1-2mm long) + 3-5% qtz eyes - generally subrounded (2-3mm diameter) - possibly are	45 30 20	generally unaltered; the odd chloritic stringer 255.1-265.75: moderately chloritic and epidote rich. 5% epidote patches + fsp crystals are epidotized. 265.75-268.1: intensely chloritic with 2-3% epidotized "frags". 268.1-282.2: weakly chloritic with 2-3% epidote "clasts" + patches - have the odd chlorite stringer.	1% diss. py, except where noted below. - the odd speck of cp. 232.5-232.65: 5% py associated with chl-carb stringer 265.75-268.1: 1-2% diss. py	

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		<p>vesicles. at: 282.2-293.05 - contacts sharp but obscured by blocky core.</p> <p>293.05: Andesitic crystal Tuff</p> <p>302.8-302.9: fault gouge 312.4m: foliation</p> <p>314.9-315.8: 10-15% dark green pyroxene crystals (2-3mm across) in feldspar-phyric crystal tuff contacts indistinct.</p> <p>325.0m: foliation</p> <p>324.0-382.7 1-2% remnant pyroxene(?) crystals occur in patches - square outline, brownish colour - found in crystal tuff + in epidote patches. - unit has 3-5% epidotized fsp crystals - occur in patches = beds; separated by more ashy layers - no distinctive bedding planes noted. 330.0m: foliation</p> <p>348.0m</p> <p>381.0m</p>	<p>15</p> <p>30</p> <p>20</p> <p>20</p> <p>30</p>	<p>293.05-317.4: weakly to moderately chloritic with 10-15% epidote patches - up to 10cm across.</p> <p>317.4-324.0: moderate to intense epidote alteration.</p> <p>324.0-382.7: moderately chloritic - weak epidote alteration associated with "clasts"</p> <p>- contact between intense epidote alteration and moderate chlorite alteration is gradational.</p> <p>382.4-382.7: siliceous epidotized fsp-phyric tuff.</p>	<p>375.9-378.9: 1-2% diss. py, tr cp</p> <p>378.9-382.4: 2-3% diss py, 1-2% diss cp</p> <p>382.4-382.7: 20% py</p>	
382.70 TO 408.90	NITINAT PYROXENE-BEARING MAFIC FLOW	<p>Colour - dark green Grain size - fine-med massive</p> <p>382.7-387.3: flow breccia - weakly epidotized fragments with good pyroxene phenocrysts (15-20%).</p> <p>387.3-401.5: massive-looking flow; patches with 2-3% pyroxene crystals.</p>		<p>weak to moderate chlorite 1-2% epidote veinlets.</p> <p>387.3-401.5: - pyroxene crystals altered a pale grey colour - locally alteration is zoned within individual crystals.</p>	1% diss py, tr cp	<p>Actual Nitinat contact may be around 324.0 but obscured by alteration. - no question about Nitinat pyroxene bearing rocks at 382.7 - also have sulphides associated with this area as was expected.</p>

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		401.5-408.3 - flow breccia; 1-2% weakly epidote-rich fragments with tr. pyroxene crystals. QFP; fgr., grey dikes at: 405.5-406.4 406.45-406.55 408.3-408.9 - dike contacts = blocky core but generally at steep angles.	60			QFP dikes noted in Nitinat in hole MTS-34
408.90 TO 449.90	DIORITE E.O.H.	Colour - greenish grey Grain size - fine feldspar phytic (10%) massive		1-2% carb veinlets - primarily near upper contact otherwise unaltered. 438.3-440.0: qtz-chl-carb zone.		

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DRILL HOLE RECORD

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ASSAY SHEET

DATE: 21-December-1987

Sample	From (m)	To (m)	Length (m)	GEOCHEMICAL				COMMENTS
				Cu ppm	Zn ppm	Ag ppm	Au ppb	
6528	90.40	91.25	0.85	41	98	1.2	5	
6529	147.30	148.90	1.60	85	57	1.0	5	
6530	163.30	164.55	1.25	525	56	1.0	5	
6531	164.55	165.80	1.25	3000	76	1.4	10	
6532	165.80	167.05	1.25	1610	58	1.2	5	
6533	265.75	267.00	1.25	162	120	1.2	5	
6534	267.00	268.10	1.10	48	87	1.0	10	
6536	375.90	377.40	1.50	200	113	1.2	5	
6537	377.40	378.90	1.50	965	105	1.2	5	
6538	378.90	380.00	1.10	3940	124	1.0	5	
6539	380.00	381.00	1.00	4100	130	1.2	5	
6540	381.00	382.40	1.40	240	125	0.6	5	
6541	382.40	382.70	0.30	570	80	1.0	5	

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ASSAY SHEET

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GEOCHEM. SHEET

DATE: 31-December-1987

Sample	From (m)	To (m)	Length (m)	SI02	AL2O3	CAO	MGO	NA2O	K2O	FEO	MNO	TIO2	BA	CU	ZN	PB	AG	AU	AS	SB	SR	ZR	TOTAL
				%	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPB	PPM	PPB	%	%
6992	41.50	44.60	3.10	53.37	17.74	6.15	5.46	2.77	0.49	8.66	0.30	0.79	0.017	47	44	12	0.8	5	18	4	.03	.005	95.79
6993	93.30	96.30	3.00	52.09	18.62	6.10	5.63	3.26	0.35	8.76	0.37	0.85	0.001	265	64	14	1.2	10	20	4	.03	.005	96.07
6994	135.90	138.70	2.80	53.09	18.34	5.46	6.32	3.12	0.37	8.85	0.42	0.83	0.025	352	72	7	1.0	5	19	4	.03	.005	96.84
6995	221.30	224.30	3.00	56.00	18.11	4.4	4.55	4.23	0.59	8.08	0.27	0.90	0.036	74	41	16	1.0	5	15	3	.03	.005	97.28
6996	261.20	264.30	3.10	50.91	16.67	6.59	8.67	0.84	0.05	11.60	0.55	0.70	0.005	321	92	8	1.1	5	27	5	.04	.005	96.61
6997	276.20	279.20	3.00	58.02	17.23	4.50	4.79	3.41	0.67	7.40	0.29	0.54	0.051	17	47	8	.07	5	19	3	.03	.005	96.64
6998	309.10	312.10	3.00	51.35	17.51	4.90	7.50	2.40	0.21	10.19	0.45	0.70	0.016	115	72	20	.05	50	6	1	.03	.005	95.25
6999	342.30	345.30	3.00	49.40	17.02	6.00	9.76	1.01	0.05	11.88	0.06	0.73	0.005	283	107	11	0.5	10	3	7	.03	.005	96.49
7000	390.10	393.00	2.90	50.69	18.66	5.13	7.29	2.95	0.40	11.08	0.39	0.81	0.085	78	110	5	0.6	5	9	2	.04	.005	97.54

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GEOCHEM. SHEET

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