1989 DIAMOND DRILLING REPORT

on the

Lara Group II

Solly, T.L., Jennie, Ugly, Wimp, Nero, Face and Plant Claims
COR 1-7 Fractional Claims

Victoria Mining Division

Latitude: 48° 54' N
Longitude: 123° 52' W

Owner

Laramide Resources Ltd.
675 W. Hastings St.
Vancouver, B.C. V6B 1N2

Operator

Minnova Inc.
3rd Floor - 311 Water St.
Vancouver, B.C. V6B 1B8

Minnova Inc.
Vancouver, B.C.

J. D. Kapusta
January 16, ~~1989~~ 1990

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1. Introduction

The Lara property is situated on southern Vancouver Island, British Columbia, in the Victoria Mining Division. The property is comprised of 14 claims (totalling 144 units), seven fractional claims and three Crown Grants, and measures about 11 kilometres east-west by three kilometres north-south. The property is primarily underlain by felsic to intermediate volcanic rocks of the Paleozoic Sicker Group (McLaughlin Ridge Formation).

This report describes the results of diamond drill holes 89-254 and 89-264 which tested geophysical anomalies on the Lara property. The holes totalling 497.40 m were drilled between May 27 and November 6, 1989.

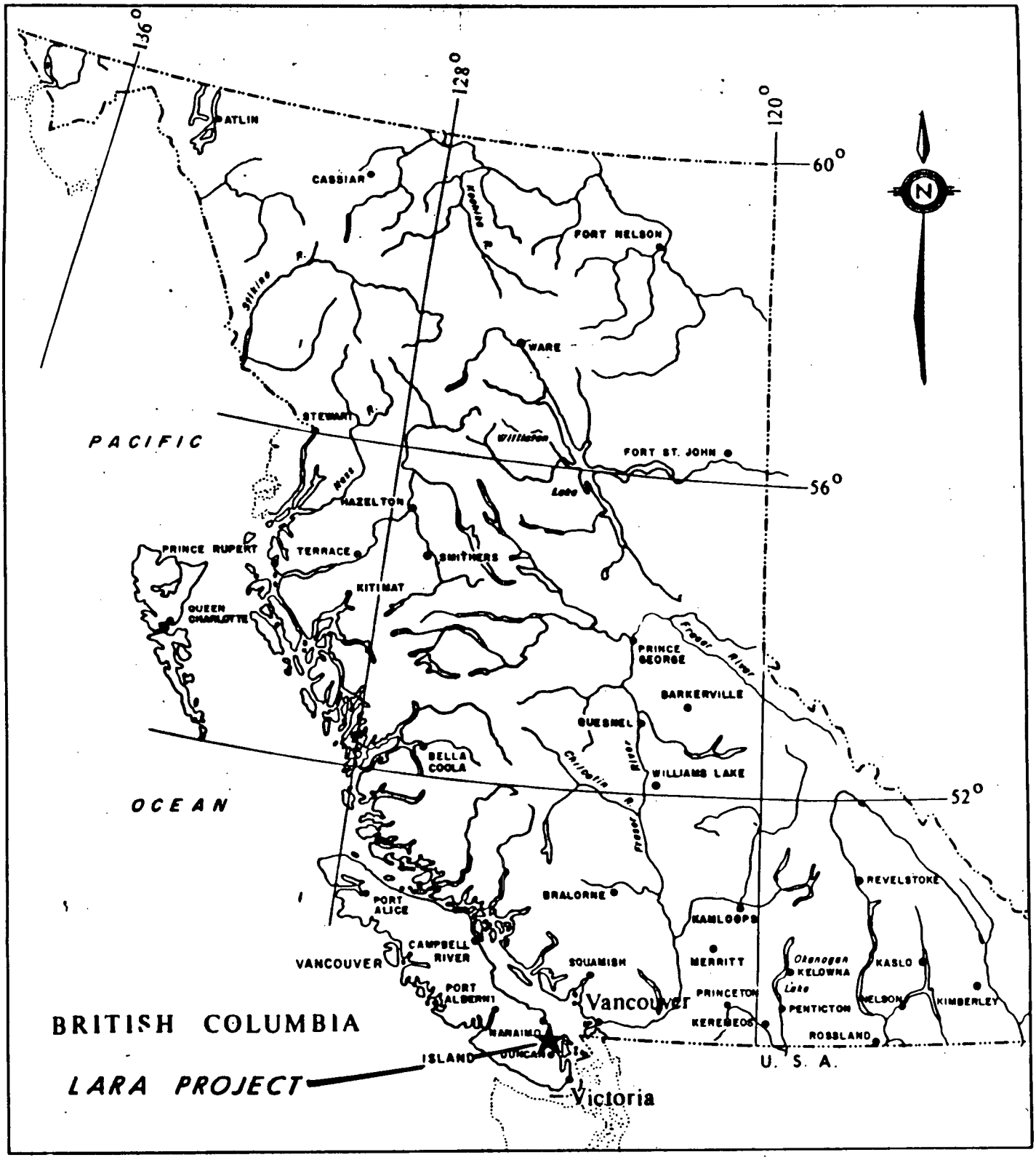
1.1 Location and Access

NTS:	92B/13W
Latitude:	48° 52' 30" N
Longitude:	123° 52' W

The Lara Property is located on southern Vancouver Island in the Victoria Mining Division (Figure 1). It lies about 75 kilometres north of Victoria and 15 kilometres northwest of Duncan. Access to the property is along the Chemainus River Logging Trunk Road (MacMillan Bloedel) for a distance of about 12 kilometres from Highway No. 1 at Chemainus. From the Chemainus River road, the property is accessed by a network of secondary logging and forestry roads. In addition, a major B.C. Hydro power Right of Way cuts across the west side of the property.

1.2 Property Status

The Lara Property is owned 100% by Laramide Resources Ltd. of 904 - 675 W. Hastings St., Vancouver, B.C. In addition Laramide has granted to Abermin Corporation of Vancouver, a convertible royalty equal to a 10% Net Profit Interest,



TO ACCOMPANY REPORT NO. _____ BY _____

MINNOVA Inc.

LARA PROJECT

GENERAL LOCATION MAP

FIGURE 1

DATE	SCALE	NTS	DRWG NO.
	1: 7 500 000		

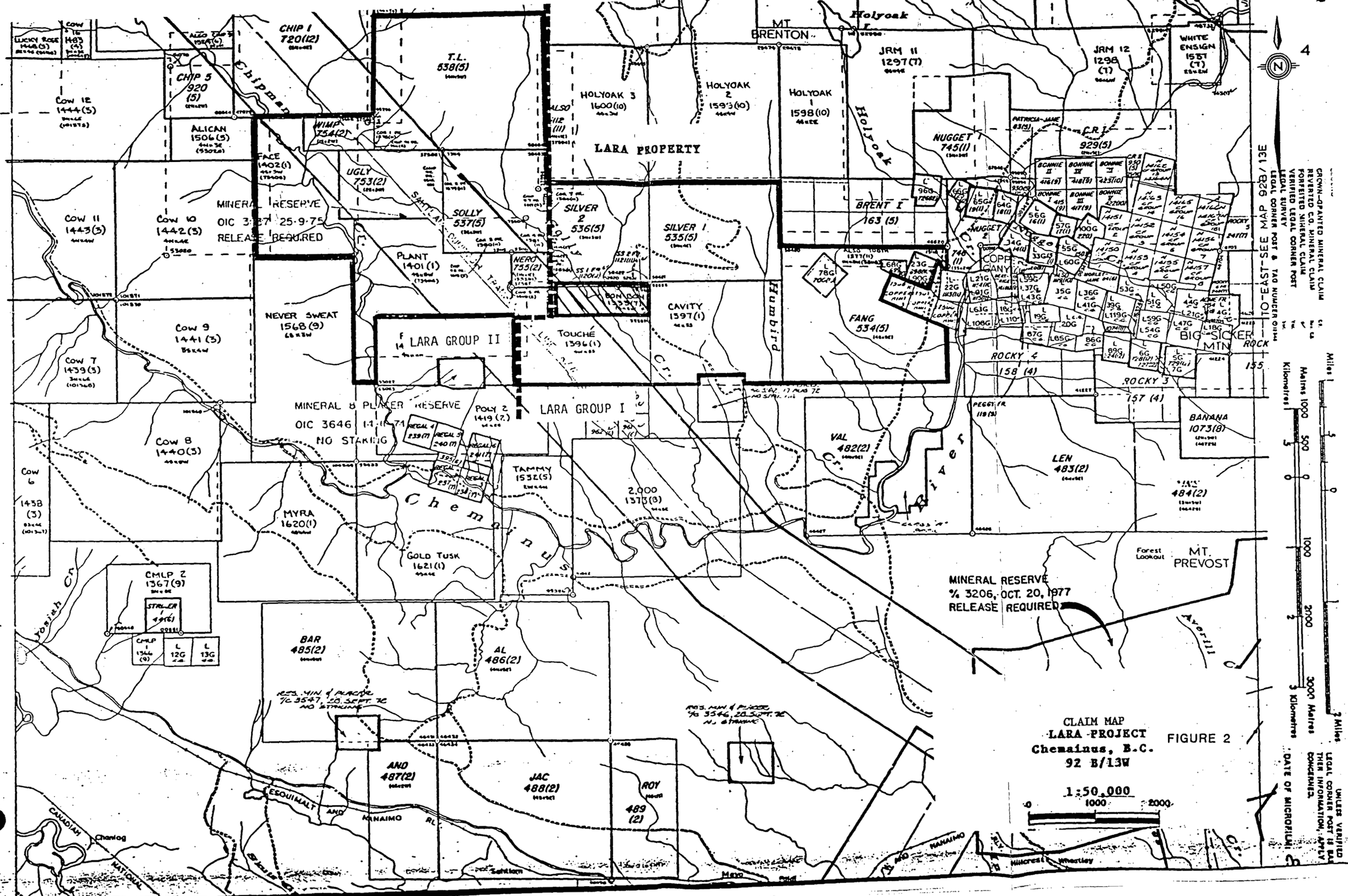
convertible, at the option of Abermin at any time prior to October 31, 1990 into 5% of the issued common shares of Laramide.

Minnova Inc. has entered into an agreement with Laramide by which it has obtained exclusive exploration rights to the Lara Property, on an expenditure basis, between November 1, 1988 and June 30, 1991.

1.3 Mineral Claims

The Lara Property consists of 14 claims, seven fractional claims and three reverted crown grants. For assessment purposes these have been divided into Lara Group I and Lara Group II (Figure 2) as follows:

Claim Name	Record No.	Units	Expiry Date
	Group I		
Silver I	535	12	May 8, 1996
Silver II	536	9	May 8, 1996
Fang	534	20	May 8, 1996
Tooth	1377	5	Nov 7, 1996
Touche	1396	12	Jan 21, 1997
Cavity	1397	12	Jan 21, 1997
Susan (Lot 23G)	698	1	Oct 26, 1996
Klondyke (Lot 68G)	699	1	Oct 26, 1996
Tinto View (Lot 78G)	700	1	Oct 26, 1996
	Group II		
Solly	537	9	May 8, 1998
T.L.	538	20	May 8, 1998
Jennie	1112	4	Nov 18, 1999
Ugly	753	6	Feb 8, 1998
Wimp	754	2	Feb 8, 1998
Nero	755	1	Feb 8, 1999
Face	1402	12	Jan 23, 1999
Plant	1401	20	Jan 23, 1998
COR 1-7 Fr.	1378-84	7	Nov 7, 1998


TO WEST SEE MAP 92C/16E
TO EAST-SEE MAP 92B/13E
CHIP 1 720(12)
CHIP 5 920 (5)
T.L. 538(5)
Chipman
Cow 12 1444(3)
ALICAN 1506(5)
WIMP 754(2)
FACE 1402(1)
UGLY 753(2)
SOLLY 537(5)
MINERAL RESERVE OIC 3187 25-9-75 RELEASE REQUIRED
Cow 11 1443(3)
Cow 10 1442(3)
PLANT 1401(1)
NERO 735(2)
SANTA ANA CREEK TRAIL
NEVER SWEAT 1568(9)
Cow 9 1441(3)
Cow 7 1439(3)
LARA GROUP II
TOUCHÉ 1396(1)
BON ICON 1397(1)
CAVITY 1397(1)
SILVER 2 536(5)
SILVER 1 535(5)
HOLYOAK 3 1600(10)
HOLYOAK 2 1593(10)
HOLYOAK 1598(10)
LARA PROPERTY
MT BRENTON
Holyoak
Humbird
JRM 11 1297(7)
JRM 12 1298 (7)
WHITE ENSIGN 1557 (7)
NUGGET 745(1)
BRENT 1 163 (5)
C.R. 929(5)
FANG 534(5)
COPPER CANYON
ROCKY 4 158 (4)
ROCKY 3 157 (4)
BIG SICKER MTN
155
BANANA 1073(8)
MINERAL & PLACER RESERVE OIC 3646 NO STAKING
POLY 2 1419 (?)
LARA GROUP I
Cow 8 1440(3)
Cow 6 1438 (3)
TAMMY 1532(5)
2,000 1375(8)
MYRA 1620(1)
GOLD TUSK 1621(1)
Chemainus
CMLP 2 1367(9)
STRIKER 1 496(6)
CMLP 1 1346 (9)
L 12G
L 13G
Yosiah Cr.
BAR 485(2)
AL 486(2)
RES. MIN. & PLACER 7C 3547, 20 SEPT. 76 NO STAKING
RES. MIN. & PLACER 7C 3546 20 SEPT. 76 NO STAKING
AND 487(2)
JAC 488(2)
ROY 489 (2)
ESQUIMALT AND NANAIMO RL
CANADIAN NATIONAL
Chemainus
Saltair
Maple
VAL 482(2)
LEN 483(2)
484(2)
Forest Lookout
MT. PREVOST
MINERAL RESERVE % 3206, OCT. 20, 1977 RELEASE REQUIRED
Averill Cr.
Hillcrest
Wheatley
CROWN-GRANTED MINERAL CLAIM
REVERTED CO. MINERAL CLAIM
FORFEITED MINERAL CLAIM
LEGAL SURVEY
LEGAL CORNER POST & TAG NUMBER
VERIFIED LEGAL CORNER POST
CLAIM MAP
LARA PROJECT
Chemainus, B.C.
92 B/13W
FIGURE 2
1:50,000
0 1000 2000
Miles 1
Metres 1000 0 500 1000 2000 3000
Kilometres 1 0 1 2 3
UNLESS VERIFIED LEGAL CORNER POST IS FOR FURTHER INFORMATION, APPLY CONCERNED.
DATE OF MICROFILM

1.4 History (to the end of 1988)

The Lara Property was staked by Laramide Resources in 1981 and optioned to Abermin Corporation in 1982. During 1981-83, exploration consisted of the establishment of a cut line grid, geological mapping, geophysical and soil geochemical surveys, and backhoe trenching to test anomalous areas. In 1984, 12 diamond drill holes totalling 1346 metres were drilled to test targets defined by the backhoe trenching, the last drill hole of this program, DDH 84-12, intersected economically significant mineralization beneath Trench 83-35. This intersection graded 0.68% Cu, 0.45% Pb, 3.01% Zn, 67.54 g/T Ag and 3.463 g/T Au, over a true thickness of 7.95 metres. This horizon was named the Coronation Zone, after its occurrence on the south slope of Coronation Mountain.

In 1985 the exploration program was designed to test the extent of mineralization intersected in drill hole 84-12; 61 diamond drill holes totalling 7437 metres were completed. The Coronation Zone was tested over a distance of 990 metres along strike and to 160 metres downdip.

The 1986 exploration program tested both the Coronation Zone and reconnaissance targets throughout the property, 75 diamond drill holes totalling 11,339 metres were completed. In addition to the diamond drilling, one backhoe trench (86-43) over the Coronation Zone was excavated. This trench exposed high grade massive sulphides grading 3.04% Cu, 43.01% Zn, 8.30% Pb, 513.60 g/T Ag and 24.58 g/T Au over a true thickness of 3.51 metres. The Coronation Zone was tested over a strike distance of 2100 metres.

The reconnaissance drilling tested geophysical, humus geochemical and geologic targets in the East, Far East, and North Grid areas. The most significant results from the Far East Grid drilling were from hole 86-110 that intersected up to 23% barite over 1.56 metres. In the North grid area a total of ten holes were drilled in an area referred to as the Randy Zone, that was discovered during surface mapping in 1986.

The 1987 exploration program tested the Coronation Zone, Randy Zone and reconnaissance targets throughout the property, 83 diamond drill holes totalling 15,038 metres were completed, one backhoe trench (87-44) over the Coronation Zone was also excavated.

In the Randy Zone 10 diamond drill holes were completed, this drilling has now traced the Randy Zone trend over a distance of 2000 metres and down-dip from surface to a depth of 180 metres.

The Reconnaissance drilling tested geophysical, humus geochemical and geologic targets on the West and North grid areas. The most significant results from the North Grid drilling were from drill holes 87-214 and 87-216. Drill hole 87-214 intersected a weak polymetallic zone between 20.25 m and 24.36 m, this interval graded 1.02% zinc. Drill hole 87-216 also intersected a weak polymetallic zone between 217.40 m and 220.16 m, this interval graded 0.67% Zn, 0.25% Pb, 0.13% Cu and minor Au and Ag.

In 1988 an underground exploration program was undertaken in the Coronation Zone. The goals of this program were: 1) to test the continuity of the Coronation Zone; 2) check rock conditions for mining cost estimate; and 3) take a bulk sample for metallurgical tests. To best accomplish these goals all work was conducted on the 600 bench level. The program consisted of 130.00 m of down ramping to the 600 metre level (at a -15% grade), and a 55.00 m crosscut to access the Coronation Zone. Once the zone was intersected 212 metres of drifting was carried out in a westerly direction, nine crosscuts through the zone totalling 79 m were driven from this drift. To the east of the access cross cut 91.00 metres of drifting was carried out in the footwall to the zone and from this drift three crosscuts totalling 38 metres were driven through the zone. In addition to the drifting and crosscutting in and through the Coronation Zone a total of five raises totalling 105 m were driven up into the zone, two from crosscuts on the east side and three from crosscuts on the west side. A limited amount of diamond drilling and jackleg driven test holes were also carried out.

2. Work Done

This report summarizes the results of two diamond drill holes (89-254 and 89-264) totalling 497.4 m, which were drilled on the Lara Group II, between May 27, 1989 and November 6, 1989 (Table 1). These holes were drilled to test an I.P. geophysical anomaly. The drilling contractor who carried out this work was Frontier Drilling Ltd. of Langley, B.C.

3. Geology

3.1 Regional Geology

The Lara Property is underlain primarily by the Paleozoic age Sicker Group which comprises well differentiated volcanic rocks with interbedded tuffaceous, carbonaceous and volcaniclastic sedimentary rocks. These rocks are strongly deformed (commonly schistose) and are regionally metamorphosed to lower to upper greenschist facies.

The Sicker Group is exposed in three major geanticlinal uplifts on Vancouver Island (Figure 3). The Lara property occurs toward the southwestern end (Figure 4) of the Horne Lake - Cowichan uplift which extends in an arc from Saltspring Island to Port Alberni, a distance of about 140 kilometres.

The stratigraphic divisions that are presently being used in the Horne Lake - Cowichan Uplift, and on the Lara property are those proposed by Nick Massey (Massey and Friday 1987, 1988) of the British Columbia Ministry of Energy, Mines and Petroleum Resources.

The Nitinat Formation, which is the lowermost unit in the Sicker Group, consists of mafic pyroclastics with subordinate volcanic flows (Brandon et al, 1986). The unit is commonly agglomeritic and is characterized by the presence of black augite phenocrysts which have been variably altered to uralite. These phenocrysts are up to 3 centimetres in diameter and comprise from

Table 1: Drilling Summary

Hole	Location Easting	Location Northing	Elev. (m)	Date Start	Date Finish	Total Depth (m)	Collar Azimuth	Collar Incl.	Tests Depth (m)	Tests Incl.	Tests Azimuth	Core Size	Target	Results
89-254	115+00W	104+64N	735	05/27/89	05/30/89	227.7	208	-49	38.7	-48		NQ	Test an IP and humus geochemical anomaly	62.50-87.40: andesite tuff with 2-3% py, 1% po, minor cp, would be the I.P. anomal 192.40-193.65: 815 ppm Zn, 18 ppm Pb, 6100 ppm Cu, 3.70 ppm Ag, 900 ppb Au
									160.00*	-44.5	213			
89-264	123+00W	104+78W	693.	11/02/89	11/06/89	269.7	208	-59	39.9	-55		NQ	Test an IP and humus geochemical anomaly	No significant results
									96.3	-52				
									134.1	-49				
									171.9	-49				
									260.3	-50				

* Sperry Sun Single Shot

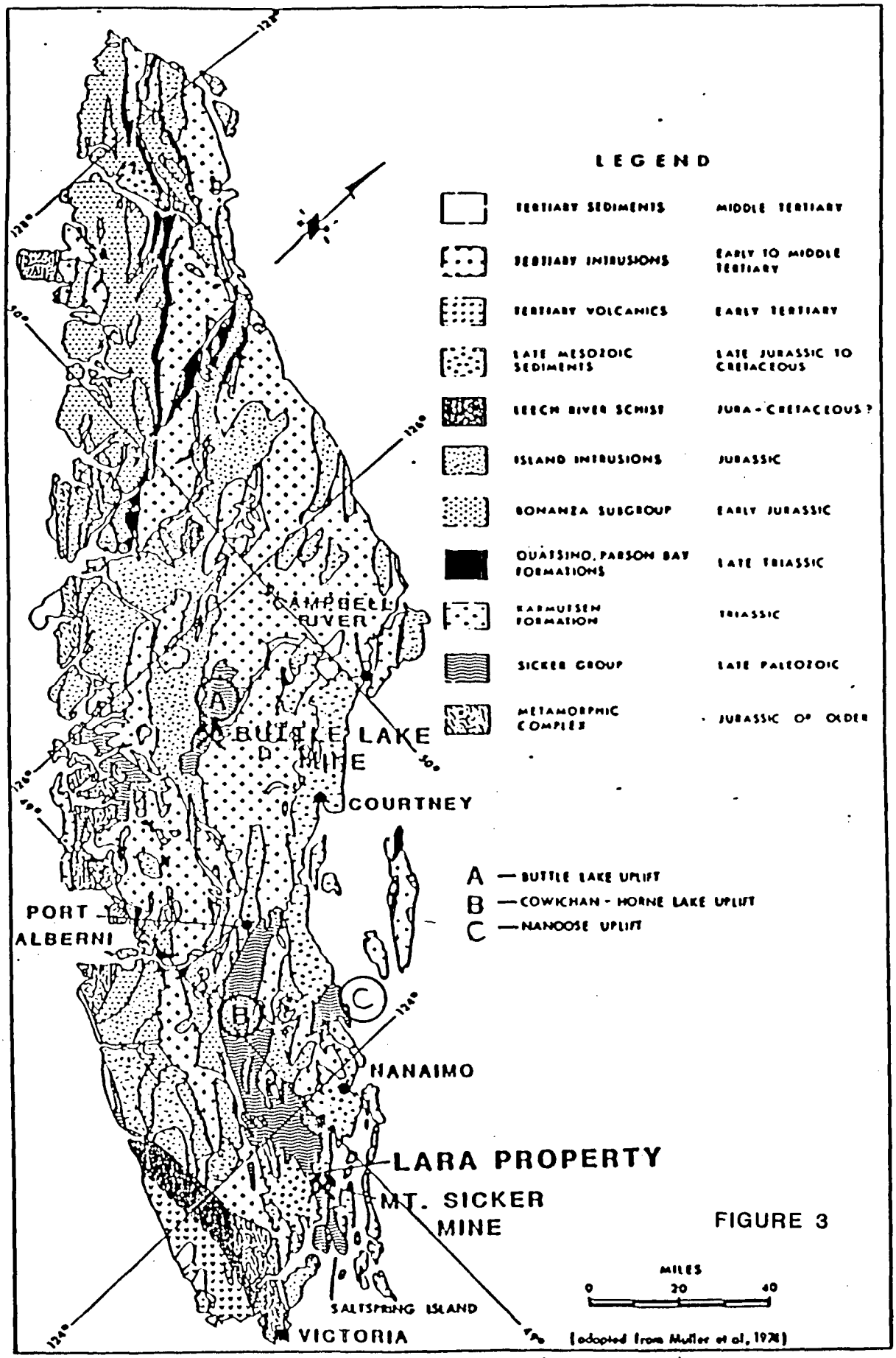


FIGURE 3

GEOLOGICAL SKETCH MAP OF
VANCOUVER ISLAND

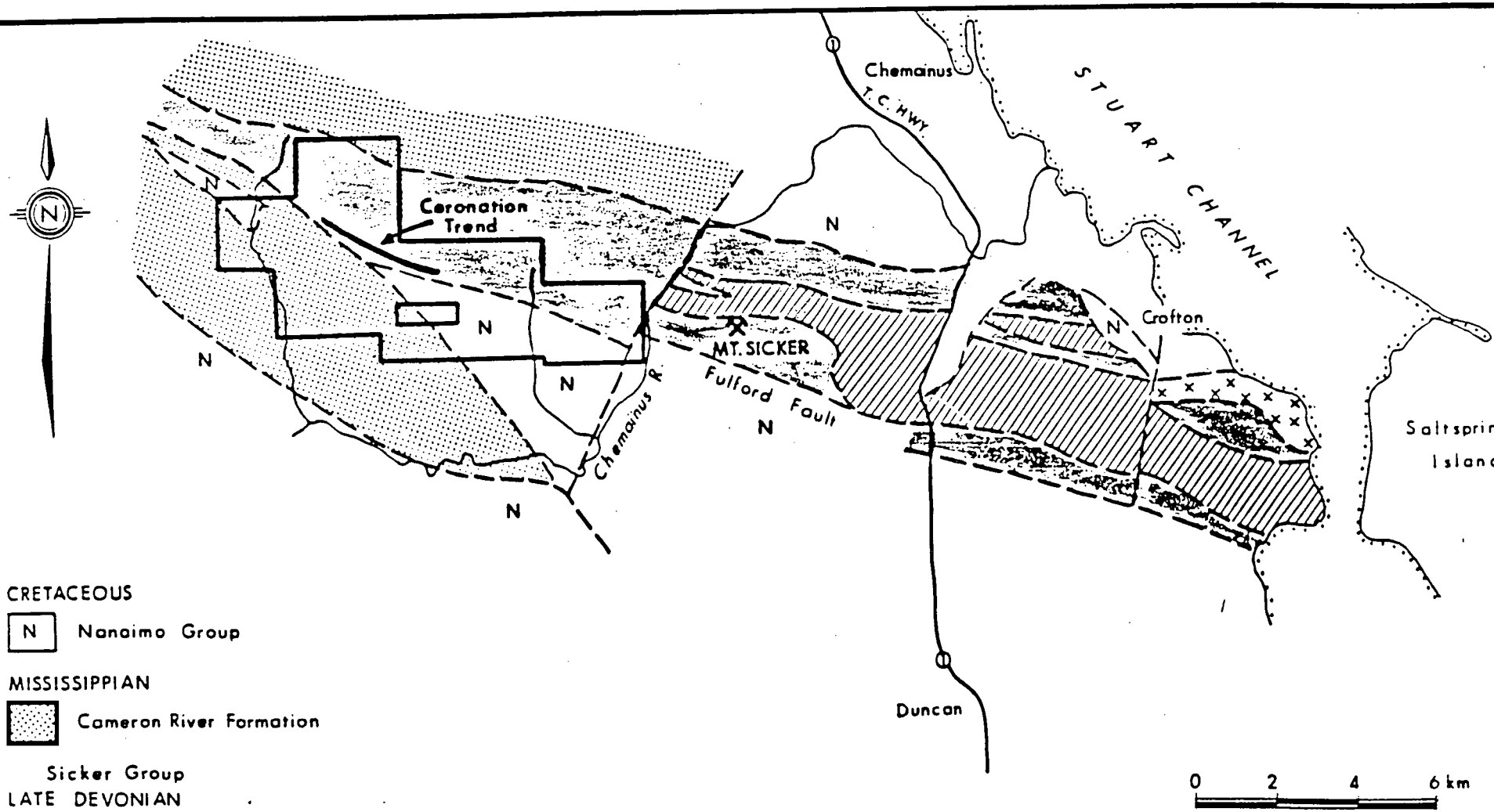
5 to 20% of the rock. Plagioclase phenocrysts are also abundant but are generally smaller. The Nitinat Formation contains a chlorite-epidote-actinolite-plagioclase metamorphic assemblage which is consistent with upper greenschist facies.

The McLaughlin Ridge Formation conformably overlies the Nitinat Formation. It consists of aphyric andesite pillow flows and breccias, rhyolite, volcanic sandstone, siltstone, argillite and chert. In the central part of the belt, the rocks are predominately volcaniclastic sediments with minor volcanic rocks. Felsic volcanic rocks are relatively uncommon, but are well developed at the southeastern end of the belt from just west of the Lara Property to Saltspring Island.

Sicker Group rocks are in fault contact or are unconformably overlain by the Cameron River Formation which consists of epiclastic sedimentary rocks including turbiditic sandstone, siltstone are argillite. The base of the unit is marked by a thick sequence of chert and cherty tuff.

The geology of the eastern portion of the Horne Lake-Cowichan uplift is shown in Figure 4. Sicker Group rocks outcrop in a folded, structurally complex west-northwest trending uplift which appears to plunge shallowly to the west. Progressively younger rocks are exposed from east to west along this trend. The belt is cut by several major cross faults along which differential uplift has taken place.

The Fulford Fault is a regionally extensive reverse fault which brings Mclaughlin ridge volcanics into contact with younger rocks of the Cameron River Formation and the Nanaimo Group. This faulting is associated with a Late Cretaceous to Early Tertiary deformational event.



CRETACEOUS

N Nanaimo Group

MISSISSIPPIAN

Cameron River Formation

Sicker Group

LATE DEVONIAN

McLaughlin Ridge Formation

Saltspring Intrusions

MID. DEVONIAN ?

Nitinat Formation

FIGURE 4

MINNOVA Inc.

LARA PROJECT

REGIONAL GEOLOGY- EASTERN PORTION OF THE HORNE LAKE- COWICHAN UPLIFT

DATE	SCALE	NTS	DRWG NO.
FEB 1988		92B /12W	

3.2 Geology of the Lara Property

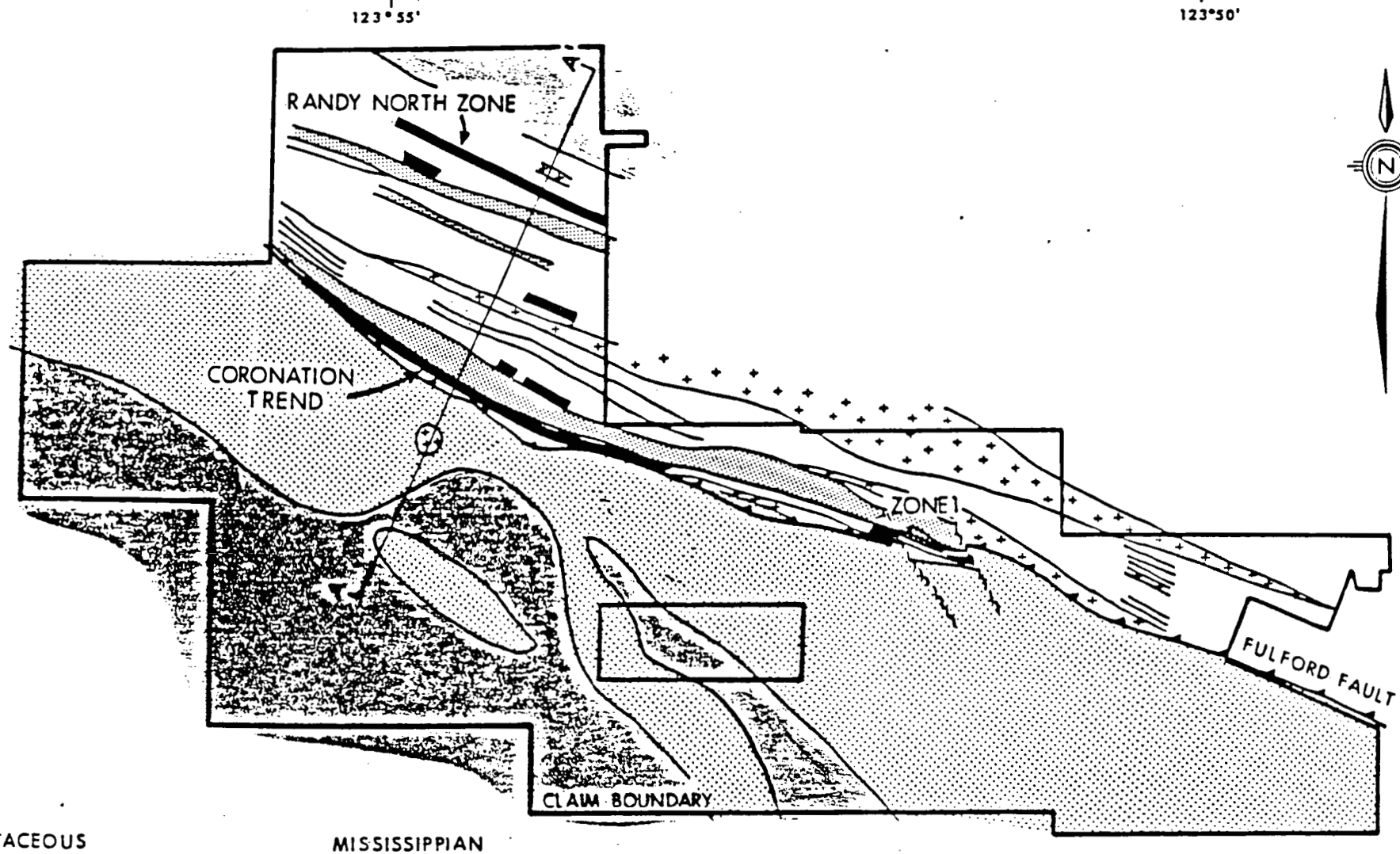
The property is underlain by the Mclaughlin Ridge Formation which has been thrust over younger rocks of the Cameron River Formation and the Nanaimo Group on the Fulford Fault (Figures 5 & 6). The Mclaughlin Ridge Formation consists of northerly dipping, west-northwest striking rhyolitic to andesitic rocks. Bedding in these rocks generally dips steeply at 60° to 75° N, although dips of 30° to 45° are common in the eastern half of the property between Humbird Creek and Silver Creek. The volcanics are dominated by felsic rocks; quartz phyric units are common particularly in the west half of the property. The most widespread lithologies are light green to white, feldspar and quartz feldspar crystal tuff. Lapilli tuffs occur locally.

Thick sequences of intermediate volcanic rocks occur at intervals in this felsic package. Intermediate rocks include fine grained andesite tuff and coarse grained lapilli tuff and breccia containing large epidotized fragments up to several centimetres in diameter.

Sedimentary rocks in the volcanic sequence include dark grey to black argillite, buff-coloured volcanic mudstone and tuffaceous quartz sandstones of both felsic and intermediate composition.

The Fulford Fault juxtaposes volcanic rocks of the Mclaughlin Ridge Formation and sedimentary rocks of the Cameron River Formation and the Nanaimo Group. The fault dips at about 47° in the west half of the property and cross-cuts bedding in the volcanic rocks at a shallow angle.

The Cameron River Formation south of the Fulford Fault consists of basal pebble conglomerate and volcaniclastic units grading upward into sandstone-argillite series and then to an upper argillite sequence with siltstone and chert interbeds. The Nanaimo



13

CRETACEOUS

Nanaimo Group, sandstone, siltstone, shale.

TRIASSIC

Karmutsen - Gabbro

MISSISSIPPIAN

Cameron River Formation

LATE DEVONIAN - SICKER GROUP

McLaughlin Ridge Formation

Felsic volcanics

Intermediate volcanics

Polymetallic horizon

0 1 2 km

FIGURE 5

MINNOVA Inc.

LARA PROJECT

SCHEMATIC GEOLOGICAL MAP

DATE	SCALE	NTS	DRWG. NO.
FEB. 1988.		92B /13W	

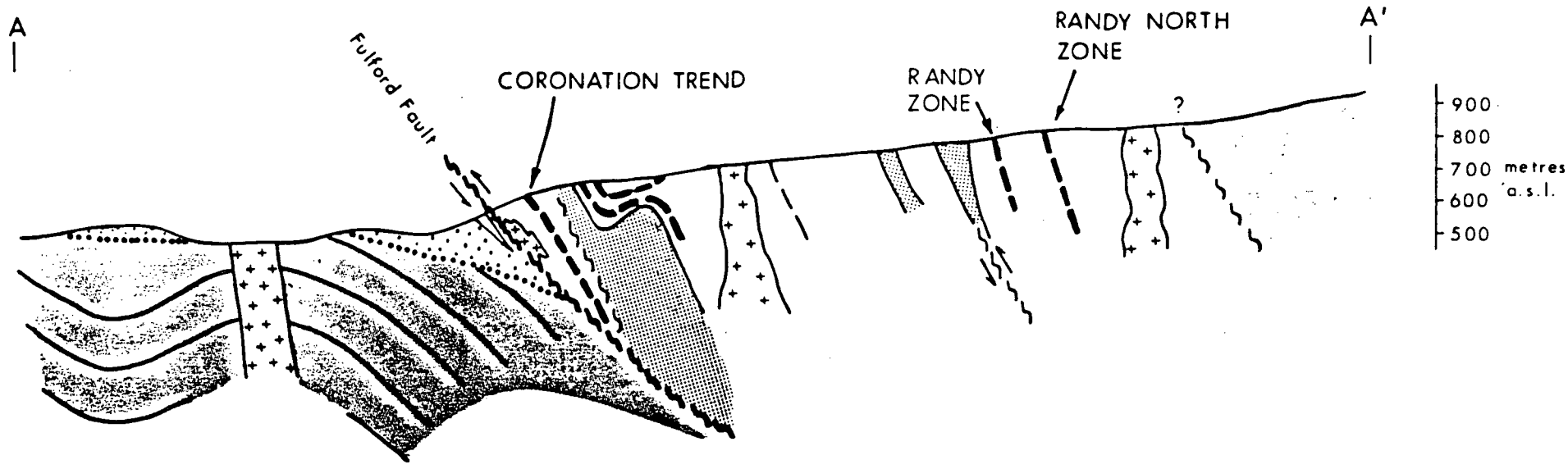
Group, which unconformably overlies the Cameron River Formation includes basal conglomerates, sandstone and fossil-bearing mudstone.

In the northwest part of the property, the volcanic rocks are again in contact with the Cameron River Formation which consists of greenish grey mudstone with argillite interbeds. A distinctive maroon schist package which is locally hematitic occurs immediately south of these sedimentary rocks and may represent the uppermost units in the McLaughlin Ridge Formation.

Intrusive Rocks

On the Lara Property the Sicker Group is cut by a number of mafic intrusions (Figure 5 and 6) which are probably feeders to the Triassic Karmutsen Formation. Compositionally the mafic intrusions are medium to coarse-grained diabase, gabbro and leucogabbro with minor diorite. They are commonly porphyritic with feldspar phenocrysts often being glomero-porphyritic clusters up to three centimetres in diameter, mafic phenocrysts are generally absent. Equigranular gabbros are also common. The intrusive bodies vary in size and form. Sill-like bodies are generally subconcordant with bedding, though they usually follow foliation where this is strongly developed. As a result of this they can show a variety of attitudes form shallow dipping to vertical. They may range in thickness from only few metres to 200 metres, discordant dykes are also common varying from 10 centimetres to 20 metres wide.

Also on the property are a number of quartz-feldspar porphyry dykes. These dykes are known as the Saltspring Intrusions and are coeval with the felsic volcanics in the McLaughlin Ridge Formation and were probably feeders for felsic crystal tuffs found within the formation (Massey and Friday, 1987). The porphyries are usually well foliated and difficult to distinguish from crystal tuffs when contact relationships with host volcanics are not clear.



CRETACEOUS

Nanaimo Group - sandstone, siltstone, shale.

TRIASSIC

Karmutsen - Gabbro

MISSISSIPPIAN

Cameron River Formation

LATE DEVONIAN - SICKER GROUP

McLaughlin Ridge Formation

Felsic volcanics

Intermediate volcanics

Polymetallic horizon

Fault

Unconformity

0 400 800 m

Figure 6

MINNOVA Inc.

LARA PROJECT
SCHEMATIC GEOLOGICAL
CROSS SECTION

DATE	SCALE	NTS	DRWG. NO.
FEB. 1988		92B/13W	

Quartz phenocrysts are up to 1 centimetre in diameter, round to oval in shape and may be stretched in the foliation. They comprise up to 20% of the rock. Plagioclase phenocrysts are smaller and vary in shape from euhedral laths to rounded and are sporadically altered to epidote.

It is believed there also exists a number of mafic intrusives, possibly dioritic in composition that are coeval with the andesite packages found in the McLaughlin Ridge Formation.

Elsewhere on the property it is believed that Tertiary age hornblende porphyry dykes occur. These late dykes are distinctly porphyritic with phenocrysts of dark green hornblende and feldspar up to several millimetres in size set in a fine grained, light green epidote-rich matrix. Border phases of these dykes may be brecciated and contain rounded fragments of dyke rock in a fine grained chloritic matrix. This brecciation may be the result of fluidization during emplacement of the dyke, suggesting a high volatile content. A petrographic sample from one of these dykes suggests that they are strongly altered mafic igneous rocks.

4.0 Diamond Drilling Results

Drill hole 89-254 was drilled to test an I.P. geophysical anomaly and a zinc high soil (humus) anomaly. The I.P. anomaly can best be explained by the sulphide content in the drill hole between 62.50 m and 87.40 m, where an andesite tuff containing 2-3% pyrite, 1% pyrrhotite and minor chalcopyrite was intersected. The hums geochemical anomaly can best be explained by the relatively high zinc content of both the felsic and andesitic rocks intersected in the hole, and possibly the section found between 192.40 m and 193.65 m which contains 6100 ppm Cu, 815 ppm Zn and 900 ppb Au.

Drill hole 89-264 was drilled to test an I.P. geophysical anomaly and a zinc high soil (humus) anomaly. The I.P. anomaly can best be explained by the sulphide content in the drill hole between 84.10 and 148.60 m; where predominantly andesite tuff (diorite

between 91.50 m and 122.70 m) containing up to 1% pyrite, minor pyrrhotite and chalcopyrite was intersected. The humus geochemical anomaly can best be explained by the relatively high zinc content in the same interval, samples contain up to 175 ppm Zn.

5. Conclusions

Although the mineralization intersected in holes 89-254 and 89-264 was not of an economic grade the area still warrants further work. Considering the metal enrichment (zinc) in both holes, the stratigraphic horizon should receive further work to help establish where the possible source area is.

6. Cost Statement

A.	Drill Costs	$25,249.39
B.	Personnel	3,300.00
C.	Analytical Costs	523.50
E.	Report Preparation	1226.50
	Total	$30,299.39

7. Core Storage

Drill cores are stored in a warehouse facility at 9398 Trans Canada Highway, Chemainus, B.C.

8. References

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Muller, J.E. (1980): The Paleozoic Sicker Group of Vancouver Island, British Columbia, Geological Survey of Canada Paper 79-30, 24 pages.

9. Statement of Qualifications

I, John D. Kapusta of Vancouver, British Columbia, do hereby certify that:

1. I am a geologist residing at 6170 Arlington Street, Vancouver, B.C. and currently employed by Minnova Inc. of 311 Water Street, Vancouver, B.C.

2. I graduated from the University of Manitoba in 1981 with a BSc. degree in Geology.

3. I have been employed on a full time basis in my profession since April 1981.

Date: March 9, 1990

Signature: John Kapusta

Appendix I

Drill Logs: 89-254, 89-264

HOLE NUMBER: 89-254

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: LARA PROJECT
PROJECT NUMBER: 242
CLAIM NUMBER: SOLLY
LOCATION: NTS 92 B/13

PLOTTING COORDS GRID: MINE
NORTH: 10464.50N
EAST: 11500.00W
ELEV: 735.00

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

COLLAR DIP: -49° 0' 0"
LENGTH OF THE HOLE: 227.70m
START DEPTH: 0.00m
FINAL DEPTH: 227.70m

COLLAR GRID AZIMUTH: 180° 0' 0" COLLAR ASTRONOMIC AZIMUTH: 208° 0' 0"

DATE STARTED: May 27, 1989
DATE COMPLETED: May 30, 1989
DATE LOGGED: 0, 0

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

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

CONTRACTOR: FRONTIER DRILLING
CASING: 6.7m
CORE STORAGE: CHEMAINUS

PURPOSE: To test an IP chargeability high associated with finely bedded pyrite, cherts, and strongly

DIRECTIONAL DATA: chloritic rocks.

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
38.70	-	-48° 0'	ACID	OK	
160.00	213° 0'	-44°30'	SING.SHOT	OK	

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.70	Overburden «OB»					
6.70 TO 23.80	Felsic Tuff; Lapilli Tuff? «F TUFF»	Colour: Light green grey Grain size: Fine grained Weak to moderately foliated; patchy indistinct fragmental appearance and occassional banded zones which may represent stretched lapilli. 11.0m 55 15.2m foliation 70 Occassional speckled zones with fine white specks = possible fsp. and occassional zones with <1-3% <0.5mm quartz eyes. 8.6m - 9.4m Coarse fragmental, up to 6cm fragments 13.3m - 13.65m Diorite. 22.0m 3cm fault gouge.		«W-M Ser»	«tr py» Trace disseminated pyrite.	
23.80 TO 24.90	Andesite Tuff «AND TUFF»	Colour: Dark green Grain size: Fine grained Weakly foliated; fine chloritic groundmass with 2-3% epidote grains and <1cm epidote calcite patches. 24.75m 5cm fault gouge.		«M Chl, W Ep» Moderately chloritic, patchy weak epidote.	Nil.	
24.90 TO 36.20	Felsic Lapilli Tuff, FP «F LAP TUFF»	0.5cm - 10cm siliceous light grey, weakly stretched fragments with 1-2% epidote grains = fsp., in a grey green foliated groundmass. Minor andesite component to groundmass becoming 100% andesite from 31.9m - 32.9m. Gradational arbitrary lower contact.		«W Ser» Weak sericite alteration of groundmass. Feldspars still quite fresh looking.		
36.20 TO 46.65	Feldspar Phyric Felsic Crystal Tuff,	Colour: Light green grey Grain size: Fine grained 7-10% and locally 15% 2-3mm white feldspar crystals, rare quartz eyes, 2-3% 2-4mm sericitic		«M Sil, Patchy Ser, Ep» Moderately siliceous, primary feature.	tr py	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	Lithic Tuff «F TUFF, FP»	felsic lithic grains. Siliceous appearance to core. Fine speckled appearance to core from fine disseminated iron carbonate. 39.7m Gougy slip plane. 53.0m - 46.65m Feldspar content dropping off to 1-2%. Weak fragmental appearance from 45.7m - 46.65m.		Patchy weak sericite as alteration of felsic lithic granules. Very patchy weak epidotization of feldspars near upper contacts.		
46.65 TO 52.50	Felsic Ash «F ASH»	Colour: Light grey, light brown Grain size: Fine grained Weakly foliated, generally aphyric with rare <0.5mm granules. Light grey colouration changing to light brown (surface oxidation) from 47.8m - 51.0m. 47.0m foliation Fault gouge at 48.7m. 51.4m foliation Faulted lower contact with 10cm fault gouge.	 45 55	«W Ser» Weakly sericitic.	«<1% py»	
52.50 TO 54.70	Felsic Tuff Lapilli Tuff «F LAP TUFF»	Colour: Grey green Stretched <1-2cm light grey siliceous felsic fragments in a green, fine grained groundmass. Stretched fragments imparts a banded appearance to unit. 53.2m foliation	 50	«W Ser»	«<1% py, tr cpy»	
54.70 TO 62.50	Diorite «DIOR»	Colour: Green Grain size: Fine grained Feldspar porphyritic leucoxene phyric, patchy finer grained phases. 62.5m contact	 55			
62.50 TO 87.40	Andesite Lithic Tuff, Sandstone «AND LITH	Colour: Medium grey green Grain size: Medium grained Pervasive granular appearance of 0.5mm - 2mm grains of epidote, andesite and possibly		«W Ep» Weak epidote as epidote grains,	{62.5m - 67.6m}«2-3% po, <1% py, tr cpy»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	TUFF, SS»	intermediate volcanics. Look like a reworked volcanic unit. 64.1m - 64.4m Chert: light creamy reddish brown. Cherts folded except at top and base of interval where bedding is at 50-60 degrees. 66.2m - 67.15m Fragmental appearance. Creamy green fragments. 67.15m - 67.6m Fine grained green andesite ash. ⌊67.6m - 71.1m⌋«FP Fel TUFF» Feldspar phyric felsic tuff: creamy grey, strongly bleached, 2-3% white feldspar crystals, patchy siliceous granules, rare quartz eyes, sharp lower contact. 71.1m - 71.7m Possible mafic «Diorite» dyke: green, fine grained. 71.7m - 87.4m Lithic tuff, crystal tuff: strong granular appearance with abundant biotite in groundmass to granules. Occassional creamy green mafic fragments up to 4cm and 1-2cm darker green fragments.	55	possibly not an alteration feature. ⌊67.6m - 71.1m «S bleached» Strongly bleached.	2-3% pyrrhotite, <1% pyrite and trace chalcopyrite all finely disseminated. ⌊67.6m - 71.1m «NIL» ⌊71.7m - 87.4m⌋«tr po, cpy» Trace disseminated pyrrhotite, chalcopyrite. 1-2cm pyrrhotite stringers from 81.1m - 81.3m.	
87.40 TO 105.00	Diorite «DIOR»	Colour: Green Grain size: Medium to coarse grained 20-50% feldspar porphyritic to weakly equigranular 5% fsp porphyritic lower chill margin. Sharp lower contact.	30	«W-M Qtz-chl-calc vns.» Weak to moderately abundant 1-15cm quartz-chlorite-calcite veining.	«<1% po, tr py, cpy» <1% pyrrhotite, trace pyrite and chalcopyrite mainly within quartz veins but also patchy disseminations.	
105.00 TO 150.20	Intermed. Tuff «I TUFF»	Colour: Medium grey green Grain size: Fine grained Weakly foliated, very fine granular appearance with patches of 5-7% mm translucent feldspars, <10cm gougy milled zones at 107.05m, 107.7m, 108.3m, 144.4m. 105.3m foliation 106.5m foliation 107.7m - 110.9m 5% 1-2mm epidotized fsp. (more	45 45	«M Chl, Patchy Qtz. vns.» Moderately chloritic. Occassional <1-3cm mineralized quartz veins/ stringers.	«2-3% py, tr cpy» 2-3% disseminated pyrite, trace pyrrhotite. Narrow quartz veins contain 5-10% brassy coarse pyrite and up to 1% chalcopyrite. Occassional <10cm zones with 5-7% coarse brassy py.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		andesitic composition). 112.7m - 117.0m Diorite. 119.1m foliation	60			
		124.9m Bedding defined by crystal rich and poor layers.	50			
		130.3m foliation	50		128.3m - 128.65m 7% py, <1% cpy stringery coarse mineralization.	
		131.7m - 139.7m «DIOR» Diorite: massive, feldspar porphyritic, sharp upper and lower contacts, minor gouge at upper contact. 131.7m contact 139.7m contact 141.3m foliation 145.5m foliation	30 70 60 60		145.8m - 146.2m 5-7% pyrite in minor qtz. vns. and disseminated near felsic contact.	
		146.2m - 150.2m Felsic tuff: light green, weak to moderately foliated, aphyric, rare <1cm calcite veins. 146.2m contact	55	146.2m - 150.2m Weakly sericitic, weakly silicified, increased silicification near lower contact.	146.2m - 150.2m Trace pyrite.	
150.20 TO 166.80	Diorite «DIOR»	Colour: Green Grain size: Medium grained Massive, feldspar porphyritic with up to 25% ragged white feldspars.		Rare <1-10cm quartz carbonate veins.	Trace pyrite, chalcopyrite, pyrrhotite.	
166.80 TO 175.80	Intermed. Tuff «I TUFF»	Colour: Medium grey green Grain size: Fine grained Weakly foliated, generally aphyric with minor patches with 1-2% <0.5mm translucent grains (fsp). 166.8m - 171.1m Felsic to intermediate tuff. Interval light grey, more felsic looking. 173.55m - 174.1m Indistinct 1cm grey felsic fragments. 2cm gougy core at lower contact.		«W Ser» Weakly sericitic. First 40cm moderate quartz veining.	«<1-1% py, tr po»	166.8m - 199.8m Rock appears to be indistinctly interbedded with gradational contacts and mixing/ reworking of units. Possible basin evironment with pulses of volcanic sedimentation.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
175.80 TO 184.30	Felsic Tuff «F TUFF»	Colour: Very light grey Grain size: Fine grained Weakly foliated, blitzed looking. Very fine granular quartz grains <0.25mm. Patchy 1-2% <1mm epidote grains. 181.4m - 184.3m Felsic to intermediate tuff: light green colour, aphyric. = gradational lower contact. 181.4m contact	 55	«M Ser» Moderately sericitic. Alteration much lower from 181m - 184.3m.	«3-4% py» 3-4% brassy pyrite as 0.5mm stringers and weak disseminations.	
184.30 TO 192.40	Andesite Tuff, Crystal Tuff «AND TUFF»	Colour: Dark green Grain size: Medium to coarse ash Up to 30% 1-1.5mm epidote grains (altered feldspars). Rare zones with 1-2% 0.5cm epidote fragments and andesite fragments up to 4cm. Minor biotite in groundmass at 187.8m. Indistinct bedded appearance to unit based on crystal content. Good bedding measurements as follows: 184.5m 187.2m 190.2m 190.4m 190.2m - 190.65m Finer ashier zone, indistinctly bedded.	 60 65 60 65 	«M Ep» Moderate epidote as epidotized feldspars. 190.2m - 190.65m Weakly chloritic.	«<1% py» 190.2m - 192.4m 1-2% disseminated pyrite.	
192.40 TO 199.80	Intermed. to Andesitic Tuff «I-AND TUFF »	Colour: Medium grey green Grain size: Fine to medium ash <1-3% and locally 5-7% weakly epidotized whitish green 1mm feldspars. Weak patchy indistinct bedding to unit. Stronger epidote alteration looks more andesitic. 193.7m bedding 198.6m - 199.8m Felsic tuff: light grey, <1-1% <1mm quartz grains and mm epidote grains. Gradational upper contact, minor mixing at lower contact.	 60 60	«W Chl, Ep» Weakly chloritic groundmass, weak epidote alteration of feldspars.	«3-4% py» 3-4% finely disseminated pyrite. 192.4m - 193.65m 3-4% pyrite and <1% chalcopyrite. Interval includes 2cm of semi-massive cpy.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
199.80 TO 227.70	Andesite Crystal Tuff, Lapilli Tuff «AND TUFF, LAP TUFF»	Colour: Dark green Grain size: Medium to coarse grained 199.8m - 212.3m Andesite crystal tuff composed of 10-20% 2-4 epidote grains =fsp. Indistinctly bedded with good bedding measurements from crystal rich/ash contacts. 201.7m 60 201.75m 55 210.5m 65 Patchy 1-2% translucent grey felsic? grains. 211.2m - 211.85m Grey felsic tuff 1% white feldspars. 212.1m - 212.3m Medium to dark grey, argillaceous, some fine light grey ash beds. Below 212.3m unit becomes fragmental with 10-15% 1-2cm epidotized fragments. 213.5m - 214.4m 2-3% 2-3mm uralite altered pyroxenes. Numerous siliceous grey felsic dykes with blue white quartz eyes, green epidote grains as follows: 212.8m - 213.0m 213.4m - 213.6m 215.2m - 215.6m 215.8m - 216.8m 218.4m - 223.1m 224.35m - 227.2m 214.5m - 215.0m Folded foliations.		W Chl, M Ep Weakly chloritic groundmass. Epidote as altered feldspars and fragments.	<1-1% disseminated pyrite. Ashier zones may contain 1-2% pyrite. 212.1m - 212.3m 3-4% very fine pyrite. *Interval contains 2mm of very fine syngenetic pyrite. 224.35m - 224.9m 2% pyrite.	212.1m - 212.3m Zone may also represent a shear zone within an argillite as seen in other holes.

John Kapusta

John Kapusta

March 9, 1990

Sample	From (m)	To (m)	Length (m)	ESTIMA Cu ppm	ASSAYS Pb ppm	Zn ppm	Ag ppm	Au ppb	Ba ppm	Cu %	Pb %	Zn %	Ag oz/t	Ag g/T	GEOCHEMICAL Au oz/t	Au g/T	Ba %	SG SG	NSR NSR	SUL %		COMMENTS –
13140	62.50	64.05	1.55	128	13	92	0.7	3											0.0			
13141	64.05	64.45	0.40	115	8	54	0.6	1	1700										0.0			
13142	64.45	65.80	1.35	171	12	97	0.8												0.0			
13143	65.80	67.15	1.35	202	13	108	1	2											0.0			
13144	67.15	67.60	0.45	223	16	98	1.2	2											0.0			
13145	192.40	193.65	1.25	6100	18	815	3.7	900											0.0			

Sample	From (m)	To (m)	Length (m)	Al2O3 %	Ba %	CaO %	Fe2O3 %	K2O %	MgO %	MnO2 %	Na2O %	P2O5 %	SiO2 %	Sr %	TiO2 %	Zr %	S %	Tot %	Ag ppm	As ppm	Ba-ppm ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm	Au ppb
17207	14.30	17.40	3.10	15.82	0.072	0.01	3.71	3	3.57	0.12	3.49	0.01	66.39		0.33		0.08	96.58	0.9	9	76	15	38	1	234	5
17208	40.80	43.80	3.00	15.99	0.082	2.28	3.1	2.8	1.08	0.07	5.49	0.01	64.46		0.28		0.06	95.69	0.6	1	92	9	20	1	30	5
13142	64.45	65.80	1.35	18.56	0.081	7.53	8.7	2.29	3.09	0.14	2.06	0.07	55.97		0.69				1.3	31	87	169	41	7	112	
17209	75.30	78.30	3.00	17.39	0.04	6.62	9.12	1.9	6.07	0.21	3.36	0.07	51.41		0.64		0.01	96.84	1.4	21	158	28	47	1	109	5
17210	119.00	122.00	3.00	17.14	0.1	1.56	10.1	1.75	6.47	0.3	2.7	0.06	52.82		0.62		1.7	95.33	1.2	20	78	188	58	2	129	5
17211	141.70	144.70	3.00	16.28	0.098	0.49	11.81	1.82	6.76	0.29	1.61	0.1	52.79		0.6		3.3	95.95	1.3	35	97	156	67	4	144	10
17212	175.90	178.90	3.00	15.05	0.162	1.85	5.44	4.25	1.6	0.06	1.27	0.01	65.02		0.28		3.4	98.37	0.5	25	135	10	22	1	30	30
17213	194.20	197.20	3.00	15.45	0.108	0.91	11.39	1.79	7.59	0.34	1.31	0.09	52.69		0.6		4.5	96.75	1.4	44	75	308	70	3	191	5

E NUMBER: 89-264

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: LARA PROJECT
OJECT NUMBER: 242
CLAIM NUMBER: UGLY
LOCATION: NTS 928/13

PLOTTING COORDS GRID: MINE
NORTH: 10478.00N
EAST: 12300.00W
ELEV: 693.50

ALTERNATE COORDS GRID: Mine
NORTH: 104+78N
EAST: 123+ 0W
ELEV: 693.50

COLLAR DIP: -59° 0' 0"
LENGTH OF THE HOLE: 269.70m
START DEPTH: 0.00m
FINAL DEPTH: 269.70m

COLLAR GRID AZIMUTH: 181° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 209° 0' 0"

DATE STARTED: November 2, 1989
TE COMPLETED: November 6, 1989
DATE LOGGED: 0, 0

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

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

CONTRACTOR: Frontier Drilling
CASING: 3.0
CORE STORAGE: Chemainus

POSE: To test IP and soil geochem anomalies. Step out 400m west of hole 255.

RECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
39.90	-	-55° 0'	ACID	OK	
96.30	-	-52° 0'	ACID	OK	
134.10	-	-49° 0'	ACID	OK	
171.90	-	-49° 0'	ACID	OK	
211.20	-	0° 0'	ACID		Water in tube, bad etch
260.30	-	-50° 0'	ACID	OK	

LE NUMBER: 89-264

DRILL HOLE RECORD

LOGGED BY: Paul Baxter

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.00	Overburden «OB»					
3.00 TO 8.20	Quartz Feldspar Porphyry Felsic Tuff «QFP TUFF»	Colour: Medium grey Grain Size: Medium grained Thick bedded, massive, weak to moderately foliated 5% quartz eyes, 1mm to 5mm 2-3% feldspar crystals, white, ghosty to weak epidote altered, also clay altered, <1mm 9.00 - 13.10m Local gouge		Locally bleached white, with minor sericite development	Trace disseminated pyrite 5.20 - 5.40m 1-2% pyrite, 0.5% chalcopyrite, trace sphalerite, 3-5% soft, dark grey black mineral	Moderately oxidized and weathered
8.20 TO 13.80	Quartz Porphyry Felsic Tuff «QP TUFF»	Colour: White to light grey Grain Size: Fine to medium grained Thick bedded, moderately foliated 2-3% quartz eyes to 1mm Groundmass fine grained		Minor sericite development of foliation surfaces	Trace disseminated pyrite	Strongly weathered and oxidized
13.80 TO 23.80	Felsic Tuff «F TUFF»	Colour: Medium to dark grey Grain Size: Fine grained Thick bedded, moderately foliated Weak granular texture, <1mm 15.17m CAF 23.00m CAF	 40 48	Weak sericite development on foliation surfaces Weakly siliceous Local weak biotite development	Trace disseminated pyrite, also in micro fractures Trace sphalerite, patches <1mm and in micro fractures	
23.80 TO 84.10	Feldspar Porphyry Lapilli Tuff «FP LAP TUFF»	Colour: Medium grey Grain Size: Medium to coarse grained Thick bedded, massive Weakly foliated 3-5% white to ghosty feldspar crystals to 3mm 3% bleached white, felsic fragments (QFP), flattened parallel to foliation, to 5cm 32.50m CAF	 55	Locally siliceous, minor biotite development Local weak epidote alteration Lapilli fragments bleached and silicified	Trace disseminated pyrite, also trace pyrrhotite and chalcopyrite	Flattened fragment

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		51.90 - 52.50m Quartz vein			Minor pyrrhotite and trace chalcopyrite	
		66.75m CAF	45			
		69.45 - 70.85m Felsic Tuff White, rare quartz eyes to 1mm Minor indistinct feldspars to 1mm Minor shearing on upper contact		Intensely bleached	3-5% patchy pyrite, possible trace chalcopyrite	Strongly oxidized, maybe a strongly altered version of the FP host
		71.30 - 72.10m FP Tuff, same as host		Intensely bleached, strongly oxidized on fracture surfaces	1% pyrite, patchy and in micro fractures	
		72.10 - 72.80m Core badly broken and strongly oxidized				
		74.80 - 75.40m FP Tuff, altered version of host		Intensely bleached	3% pyrite, patchy and in fractures	
		79.50 - 81.00m			<1% pyrite, trace chalcopyrite, possible trace sphalerite	
		81.20 - 83.45m Well developed lapilli interval 15-20% bleached white and siliceous				
		82.40m CAF	52			
		84.10m Very tight shear	71			
84.10 TO 91.50	Andesite Crystal Tuff «AND TUFF»	Colour: Light green Grain Size: Medium grained Thick Bedded, massive, weak to moderately foliated 5-7% white to ghosty, clay and epidote altered feldspar crystals to 1mm <1% green mafic crystals to 0.5mm (chlorite alt) All in a granular lithic matrix Minor quartz veins		Patchy to pervasive epidote alteration Local well developed chlorite on foliation planes	1% disseminated, patchy pyrite also in microfractures, minor to 0.5% locally pyrrhotite, trace chalcopyrite, trace sphalerite (best developed proximal to quartz veins)	Fracture surfaces strongly oxidized
		85.20 - 85.23m Gouge	80			
91.50 TO 122.70	«DIORITE»	Colour: Medium green Grain Size: Medium to coarse grained Thick, massive, weak foliated 10-15% felspars to 5m locally in clusters		Locally minor hematite		Fracture surfaces locally moderate to strongly oxidized This unit is unaltered with respect to rock interval up and down hole
		91.50 - 92.10m Well developed chill margin				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		91.50m Contact 93.45 - 94.20m Minor quartz veins 100.5 - 101.42m Fault 101.42 - 105.46m 3-5% quartz veins 122.50 - 122.70m Chill margin	50		Trace chalcopyrite and pyrrhotite Quartz veins contain minor chalcopyrite and pyrrhotite	Tri-coned through
122.70 TO 127.37	Andesite Crystal Tuff «AND TUFF»	Colour: Light to medium green Grain Size: Medium to coarse grained Thick bedded, massive, moderately foliated 5% white to ghosty to clay and epidote altered feldspar crystals to 1mm Possible 5% epidote altered lithic fragments to 3mm		Moderate to well developed chlorite on foliation surfaces Patchy to weakly pervasive epidote alteration Weak biotite alteration	<1% pyrite with minor pyrrhotite and chalcopyrite	Fracture surfaces locally weak to strongly oxidized
127.37 TO 132.47	Felsic Tuff «F TUFF»	Colour: Light to medium grey Grain Size: Fine to medium grained Moderately bedded, moderately foliated Interval has a weak granular appearance Rare quartz eyes to 1mm <1% white to ghosty to clay altered feldspar crystals to 0.5mm Interval contains minor interbeds of andesite crystal tuff 128.60 - 128.90m Andesite crystal tuff		Weak sericite development on foliation surfaces	0.5% pyrite with minor pyrrhotite and chalcopyrite, disseminated and along micro fractures	
132.47 TO 148.60	Andesite Ash to Crystal Tuff «AND ASH, TUFF»	Colour: Medium green Grain Size: Fine to medium grained Thick bedded, moderately foliated Fine granular appearance 5% ghosty to clay and epidote altered feldspar crystals to 0.5mm Minor felsic ash intervals 132.60 - 133.10m Very rubbly and strongly oxidized		Weakly developed chlorite on foliation surfaces Weak biotitic alteration A pervasive weak epidote alteration	0.5% pyrite with trace amounts of pyrrhotite and chalcopyrite Disseminated and along microfractures, also with quartz veins	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		139.60m CAF	50			
148.60 TO 152.42	«DIORITE»	Colour: Medium green Grain Size: Medium grained Massive, weakly foliated Minor quartz veins, locally contain trace chalcopyrite and pyrrhotite				
152.42 TO 155.81	Intermed. Ash Tuff «I ASH,TUFF »	Colour: Light green Grain Size: Fine to medium grained Thick bedded, weak to moderately foliated Granular in appearance 1-2% medium to dark green lithic fragments to 2mm of possible pumice fragments		Weakly developed sericite and minor chlorite on foliation surfaces Very weak pervasive epidote alteration	Trace disseminated pyrite	
155.81 TO 168.20	QFP Tuff to Lapilli Tuff «QFP TUFF, LAP TUFF»	Colour: Light to medium grey Grain Size: Medium to coarse grained Thick bedded, massive, weakly foliated 2-3% quartz eyes to 1mm <3% ghosty to clay to weakly epidote altered feldspar crystals to 0.5mm 3% medium to dark green Andesite crystal tuff fragments to 5cm, some may possibly be up to 14cm There may also be a small percentage of bleached white felsic fragments (very indistinct)			Trace disseminated pyrite	
168.20 TO 175.60	«QP TUFF»	Colour: Medium grey Grain Size: Medium grained Thick bedded, massive, weak to moderately foliated 3-5% quartz eyes from 1mm to 5mm Locally 1-2% feldspars to 0.5mm 169.00 - 169.40m Diorite		Weakly developed sericite on foliation surfaces Weak spotty epidote alteration	Trace disseminated pyrite	
175.60 TO 191.70	Felsic Lapilli Tuff «F LAP TUFF »	Colour: White to light grey Grain Size: Coarse grained Thick bedded, massive, weak to moderately foliated Groundmass is a fine grained felsic tuff with some		Felsic fragments are bleached and silicified Andesite fragments are weakly epidotized and locally strongly calcareous	Trace disseminated pyrite	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		rare quartz eyes <1mm and possibly 1-2% very indistinct feldspar crystals to 0.5mm Contains 5% Andesite crystal tuff fragments, to 5cm, possible to 12cm -the larger fragments may themselves be fragmental Possibly 5-10% felsic fragments, generally fine grained asn to FP to 5cm 176.10 CAF	36			
		180.70 - 186.50 «AND XT» Medium green Thick bedded, moderate to strongly foliated 10% white to ghostly to predominately clay altered feldspar crystals to 0.5mm 3-5% granular quartz		Weakly calcareous Weakly developed chlorite on foliation surfaces	Trace disseminated pyrite and chalcopyrite	Possible diorite
191.70 TO 205.60	Intermed. Ash to Crystal Tuff «I ASH,TUFF »	Colour: Medium green Grain Size: Medium grained Thick bedded, moderately foliated 5-7% ghosty to clay altered to weakly epidote altered feldspar crystals to 0.5mm 2-3% granular quartz The entire interval has a very granular appearance May contain indisinct felsic fragments to 3cm		Weak to locally strongly calcareous Weak biotite alteration to groundmass Weak pervasive epidote alteration Very weak chlorite Minor sericite development on foliation surfaces	Trace pyrite, local trace chalcopyrite and pyrrhotite	
207.60 TO 211.44	Felsic Lapilli Tuff «F LAP TUFF »	Colour: Light grey Grain Size: Medium to coarse grained Thick bedded, moderately foliated Groundmass is a fine grained felsic tuff, rare quartz eyes <1mm, <1% clay altered feldspars <1mm Contains 2-5% medium to dark green Andesite fragments from 2mm to 4cm, these appear to be an ash to crystal tuff 207.20m CAF	34	Weakly developed sericite on foliation surfaces Local carbonate patches	Trace disseminated pyrite	
211.44 TO 217.67	Felsic Ash «F ASH»	Colour: Light grey Grain Size: Fine to medium grained Thick bedded, moderately foliated Rare quartz eyes <1mm		Weakly developed sericite on foliation planes	Trace disseminated pyrite At 216.10m trace chalcopyrite in a thin quartz vein	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<1% clay altered feldspar crystals, <1mm <1% medium green wisps, fragments? 214.80 - 214.87m Fault, C-S fabric developed	60			
217.67 TO 230.70	Andesite Ash to Lithic Tuff «AND ASH, LITH TUFF»	Colour: Medium green Grain Size: Fine to medium grained Thick bedded, moderately foliated Generally a fine grained granular appearance Locally 3% ghosty to clay and epidote altered feldspar crystals <1mm Locally <2% light green epidote altered lithic fragments to 3mm 221.00m CAF 224.00 - 229.13m 229.13 - 230.70m Felsic ash, 1% clay altered feldspar crystals	25	Minor chlorite development on foliation surfaces Local patchy epidote alteration Weak to locally strongly calcareous Minor carbonate veining Pervasive weak epidote alteration	Trace disseminated pyrite 0.5% disseminated pyrite	Only 20cm of core recovered in this interval, missiatch
230.70 TO 232.12	«FAULT»	90% green gouge and intensely sheared rock 10% strongly sheared felsic looking material				
232.12 TO 233.72	«FAULT»	Intensely sheared felsic interval with abundant gouge seams 233.66 - 233.72m			Up to 1% disseminated pyrite in felsic fragments 2-3% pyrite, possible trace chalcopyrite	
233.72 TO 236.31	«DIORITE»	Colour: Medium to dark green Grain Size: Medium grained weakly foliated, locally strongly sheared				
236.31 TO 258.15	Andesite Ash to Lithic Tuff «AND ASH, TUFF»	Colour: Medium to dark green Grain Size: Fine grained Thick bedded, moderately foliated Very equigranular throughout		Locally weakly calcareous Weakly developed chlorite on foliation surfaces	Trace disseminated pyrite	Lower contact is not well defined

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Minor quartz carbonate veins 236.80 - 237.20m Intensely sheared 243.00 - 243.30m 250.00 - 250.20m Quartz carbonate vein 254.55 - 254.75m Quartz carbonate vein 254.75 - 258.15m 256.92 - 256.93m Fault gouge	70	Intense epidote alteration Moderate to strongly calcareous Abundant quartz carbonate microveins		
58.15 TO 60.00	«DIORITE»	Colour: Dark green to black Grain Size: Medium grained Thick, massive, weakly foliated Equigranular		Minor carbonate microveins		
60.00 TO 69.70	Felsic Ash «F ASH»	Colour: Light grey Grain Size: Fine grained Thick bedded? Massive, weakly foliated This interval may be thinly bedded Virtually an aphanitic texture 260.0 - 260.10m Fault, intensely sheared, abundant gouge	50	Intensely silicified	<1% fine grained disseminated pyrite	Entire interval is very broken and extremely rubbly Very poor recovery locally May have been a very thinly bedded ash
	«E.O.H.»					

John Kapusta

John Kapusta

March 9, 1990

Sample	From (m)	To (m)	Length (m)	ESTIMA GCu ppm	ASSAYS GPb ppm	GZn ppm	GAg ppm	GAu ppb	GBa ppm	Cu %	Pb %	Zn %	IAg oz/t	GEOCHEMICAL Ag g/t	IAu oz/t	Au g/t	SG SG	NSR NSR	SUL %	COMMENTS
3376	4.80	5.40	0.60	251	13	78	0.4	2												
3377	13.80	15.17	1.37	4	5	81	0.3	2												
3378	15.17	16.25	1.08	4	9	54	0.3	5												
3379	16.25	17.77	1.52	5	4	88	0.3	6												
3380	17.77	19.51	1.74	4	8	44	0.4	1												
3381	19.51	20.90	1.39	5	6	44	0.4	3												
3382	47.92	49.10	1.18	23	10	41	0.4	2												
3383	69.45	70.85	1.40	10	12	29	0.3	14												
3384	74.80	75.40	0.60	93	7	14	0.2	1												
3385	79.50	81.00	1.50	42	9	21	0.5	1												
3386	84.10	85.95	1.85	104	10	120	0.9	9												
3387	85.95	87.50	1.55	141	30	119	1.0	10												
3388	87.50	88.80	1.30	125	13	100	0.8	2												
3389	88.80	90.00	1.20	144	16	126	0.9	15												
3390	90.00	91.15	1.15	117	18	123	0.9	2												
3391	201.53	202.94	1.41	142	17	99	0.7	7												

Sample	From (m)	To (m)	Length (m)	Al2O3 %	Ba %	CaO %	Fe2O3 %	K2O %	MgO %	MnO2 %	Na2O %	P2O5 %	SiO2 %	Sr %	TiO2 %	Zr %	S %	Tot %	Ag ppm	As ppm	Ba-ppm ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm	Au ppb
13378	15.17	16.25	1.08	13.43	0.065	0.59	2.26	2.5	1.02	0.06	4.25	0.09	73.17		0.16		0.12	97.71	0.3	1	39	4	9	1	54	5
17323	27.10	30.10	3.00	15.7	0.08	1.27	3.51	1.99	1.43	0.08	4.83	0.11	67.88		0.33		0.41	97.6	0.5	1	121	23	8	1	37	5
17324	60.00	63.00	3.00	15.17	0.1	1.66	2.89	1.36	0.93	0.06	6.03	0.11	69.23		0.31		0.56	98.4	0.6	2	72	19	9	1	65	5
13387	85.95	87.50	1.55	18.46	0.065	6.72	8.41	1.39	3.44	0.23	2.15	0.29	52.88		0.67		1.25	95.94	1	1	72	141	30	1	119	10
17325	123.60	126.60	3.00	16.9	0.1	4.73	8.82	2.06	6.25	0.19	1.54	0.26	53.83		0.64		0.44	95.77	1.6	1	211	133	53	3	108	5
17351	128.90	132.47	3.57	15.48	0.15	1.16	4.16	4.28	1.82	0.07	0.56	0.09	67.87		0.4		1.45	97.5	0.7	1	169	56	10	1	34	5
17352	145.60	148.60	3.00	18.11	0.05	5.93	9.92	0.56	4.64	0.28	2.22	0.26	52.56		0.69		0.67	95.89	1.4	1	80	245	54	3	175	5
17353	175.60	178.60	3.00	15.54	0.115	2.17	3.21	2.24	1.65	0.06	2.71	0.12	68.94		0.32		0.02	97.1	0.5	1	118	2	16	1	35	5
17354	197.20	200.20	3.00	16.79	0.07	5.08	8.3	1.24	4.62	0.19	3.75	0.24	53.11		0.59		0.04	94.02	1.5	1	119	56	44	2	99	5
17355	221.60	224.60	3.00	17.55	0.07	7.45	8.69	1.67	3.63	0.27	1.84	0.3	52.41		0.61		0.03	94.5	1.5	1	95	49	44	1	144	5
17356	245.40	248.40	3.00	15.97	0.06	6.03	9.31	0.95	7.55	0.23	3.98	0.3	49.85		0.73		0.03	95	2	1	71	96	52	3	77	5
17357	264.30	269.70	5.40	7.61	0.61	1.58	3.82	0.82	0.99	0.05	2.01	0.11	79.15		0.21		1.15	98.12	0.2	22	304	52	13	1	34	10

Appendix II

Itemized Cost Statement

Itemized Cost Statement

A. Drill Costs

DDH 264, November 2-6, 1989

Drive Casing:	10', 10'÷3.28 = 3.05 m x $47.88/m	$ 146.03
Coring:	875', 875'÷3.28 = 266.77 m x $45.83/m	12226.07
Man Hours:	30 x $26.00/hour	780.00
Drill Hours:	5 x $38.00/hour	190.00
Tractor Hours:	8 x $60.00/hour	480.00
Casing left in hole:	1 NW 10' Casing @ $162.00 each	162.00
	1 NW Casing Shoe @ $126.00 each	126.00
Casing Cap;	1 NW Cap at $29.50 each	29.50
	subtotal	$14,139.60

DDH 254, May 27-30, 1989

Drive Casing:	20', 20'÷3.28 = 6.10 m x $47.88/m	$ 292.07
Coring:	727', 727'÷3.28 = 221.65 x $45.83/m	10,158.22
Tractor Hours:	3 x 60.00/hour	180.00
Casing left in hole:	2 NW 10' Casing @ $162.00 each	324.00
	1 NW Casing Sheet @ $126.00 each	126.00
Casing Cap:	1 NW Casing Cap @ $29.50 each	29.50
	subtotal	$11,109.79
	Total	$25,249.39

B. Personnel Costs

John Kapusta, Project Geologist (November 8-11)	4 days @ $325/day	$1300.00
Paul Baxter, Geologist (May 29-30, November 3, 4, 7)	5 days @ $300/day	1500.00
Roy Knight, Field Assistant (May 27, 30, November 8-10)	5 days @ $100/day	500.00
	Subtotal	$3300.00

C. Analytical Costs

November 16, 1989 Min-En Labs

10 Minnova Litho Packages @ $23.50 each	$235.00

November 17, 1989 Min-En Labs

2 Minnova Litho Packages @ $23.50 each	47.00
14 Rock Geochem @ $13.50 each (Cu, Pb, Zn, Ag, Au)	189.00
14 Sample Prep. @ 3.75 each	52.50
Subtotal	$523.50

D. Report Preparation

John Kapusta, 3 days (January 15-17) @ $325/day	$975.00
Typing, photocopying, drafting, computer time	251.50
Subtotal	$1226.50

TOTAL $30,299.39

Appendix III

Diamond Drilling Invoices

FRONTIER DRILLING LTD.
19644 33A AVENUE
LANGLEY, B.C. V3A 7X1
PHONE: 530-4100

INVOICE

INVOICE DATE: June 5, 1989 **PERIOD:** May 16 - June 2, 1989

INVOICE NUMBER: 8901-7 **JOB:** 8901 Minnova (38-3)

LOCATION: Chemainus, B.C.

IN ACCOUNT WITH: MINNOVA INC.
4th Floor, 311 Water Street
Vancouver, B.C.
V6B 1B8

PAGE ONE: DRILL FOOTAGE CHARGES	$55,961.54
PAGE TWO: FIELD COST CHARGES	$ 1,710.00
PAGE THREE: SUPPLIES AND SERVICES	$ 5,791.50
TOTAL INVOICE	$63,463.04 ✓

INVOICE #8901-7 PAYABLE BY JULY 7, 1989

DRILL FOOTAGE CHARGES

	CASING			CORING		
HOLE NUMBER	FROM	TO	TOTAL	FROM	TO	TOTAL
PL 248	-	-	-	307	922	615
PL 249	0	15	15	15	800	785
PL 251	0	114	114	114	557	443
PL 253	0	60	60	60	517	457
PL 254	0	20	20	20	747	727
PL 255	0	60	60	60	757	697
TOTAL			269'			3724'

CASING 269' ÷ 3.28 = 82. Meters @ $47.88 = $ 3,926.16 ✓

CORING 3724' ÷ 3.28 = 1135.4 Meters @ $45.83 = $52,035.38 ✓

TOTAL DRILL FOOTAGE CHARGES $55,961.54 ✓

PAGE TWO

FIELD COST CHARGES

DATE MAY	SHIFT	MAN HOURS RATE: 26.00	DRILL HOURS RATE: 38.00	DRILL HOURS NONOPERATING RATE: 28.00	TRACTOR HOURS RATE: 60.00	TRAVEL TIME RATE: -	MISC. -
16	D				5		
17	D	2	1				
18	D				1		
19	D	2	1				
21	D				4		
23	D	2	1		2		
25	D	2	1		2		
26	D				4		
30	D				3		
June 2	D	2	1				
TOTAL		10	5		21		

MAN HRS. 10 @ $26.00 = $260.00 TRACTOR HRS. 21 @ $60.00 = $1,260.00

DRILL HRS. 5 @ $38.00 = $190.00 DRILL HRS.N/O -

TRAVEL TIME - MISC. -

TOTAL $1,710.00

SUPPLIES AND SERVICES

[redacted] AND ADDITIVES:

TOTAL	Ø

DRILL BITS CHARGED:

TOTAL	Ø

OTHER DIAMOND PRODUCTS:

5 NW Casing Shoes @ $126.00	$ 630.00
[redacted] NW Caps @ $29.50	$ 147.50
TOTAL	$ ~~777.50~~ 777.50

DRILLING TOOLS LOST OR DAMAGED: (LEFT IN HOLES)

27 NW 10' Casing @ $162.00	$4,374.00
2 NW 5' Casing @ $96.00	$ 192.00
8 NW 2' Casing @ $56.00	$ 448.00
TOTAL	$5,014.00 ✓

MISC.:

COREBOXES:	
FUEL	
RENTALS	
HOLE TESTING	
MISC.	
TOTAL	Ø

TOTAL SUPPLIES AND SERVICES	$5,791.50 ✓

FRONTIER DRILLING LTD.
19644 33A AVENUE
LANGLEY, B.C. V3A 7X1
PHONE: 530-4100

INVOICE

INVOICE DATE: November 20, 1989 PERIOD: November 1 - 15/89

INVOICE NUMBER: 8911-3 JOB: Lara 8911

LOCATION: Chemainus, B.C.

IN ACCOUNT WITH: MINNOVA INC.
4TH FLOOR
311 WATER STREET
VANCOUVER, B.C. 681-3771

PAGE ONE:	DRILL FOOTAGE CHARGES	$51,437.62
PAGE TWO:	FIELD COST CHARGES	$ 4,222.00
PAGE THREE:	SUPPLIES AND SERVICES	$ 5,607.50
	TOTAL INVOICE	$61,267.12

DRILL FOOTAGE CHARGES

	CASING			CORING		
HOLE NUMBER	FROM	TO	TOTAL	FROM	TO	TOTAL
264	0	10	10	10	885	875
265	0	10	10	10	70	60
265 A	0	50	50	50	984	934
					1037	53*
266	0	70	70	70	742	672
267	0	30	30	30	817	787
268	0	90	90	90	107	17
			260'			3345'
						53'

CASING 260' ÷ 3.28 = 79.3 metres X $47.88 = $3,796.88

CORING 3345' ÷ 3.28 = 1019.8 metres X $45.83 = $46,737.43

53' ÷ 3.28 = 16.2 metres X $55.76 = $ 903.31

TOTAL DRILL FOOTAGE CHARGES $51,437.62

PAGE TWO

FIELD COST CHARGES

DATE NOV/89	SHIFT	MAN HOURS RATE: 26.00	DRILL HOURS RATE: 38.00	DRILL HOURS NONOPERATING RATE:28.00	TRACTOR HOURS RATE: 60.00	TRAVEL TIME RATE:	MISC.
1	D	16	3		6		
2	D	20					264
3	D	8	4				264
4	D	2	1				264
6	D	18			8		264
7	D	14			2		
9	D	2	1				
11	D	2	1		3		
13	D				3		
15	D	2	1		5		
		84	11		27		

MAN HRS. 84 hrs. X $26.00 = $2,184.00 TRACTOR HRS. 27 hrs. X $60.00 = $1,620.00

DRILL HRS. 11 hrs. X $38.00=$ 418.00 DRILL HRS.N/O Ø

TRAVEL TIME Ø MISC. Ø

TOTAL $4,220.00

SUPPLIES AND SERVICES

AND ADDITIVES:	
8 Pails Pac-Vis Polymer @ $96.00	$768.00
TOTAL	$768.00
DRILL BITS CHARGED:	
1 NQ core bit lost in fault ($548.00)	$548.00
TOTAL	$548.00
OTHER DIAMOND PRODUCTS:	
5 NW shoes left in holes ($126.00)	$630.00
TOTAL	$630.00
DRILLING TOOLS LOST OR DAMAGED:	
21 NW 10' casing @ $162.00	$3,402.00
2 NW 2' casing @ $ 56.00	112.00
5 NW casing caps @ $29.50	147.50
TOTAL	$3,661.50
MISC.:	
COREBOXES:	
FUEL	
RENTALS	
HOLE TESTING	
MISC.	
TOTAL	Ø
TOTAL SUPPLIES AND SERVICES	$5,607.50

Appendix IV

Analytical Results and Invoices

MIN
• EN
LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

INVOICE

TO : MINNOVA INC.
4TH FLOOR,
311 WATER STREET,
VANCOUVER, B.C.
V6B 1B8

RECEIVED
NOV 21 1989
Ans'd .....

INVOICE No 15577D
PAGE : 1 OF 1
DATE : Nov 16/89

ACCOUNT: 10162

ATTENTION: G.WELLS/J.KAPUSTA
PROJECT: LARA 242

FILE No: 9-1514

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
18	MINNOVA LITHO PACKAGE	23.50	423.00
	* TOTAL *		423.00

HESE ARE PROFESSIONAL SERVICES AND ARE PAYABLE WHEN RENDERED.
UTSTANDING BALANCES OVER 30 DAYS WILL BE CHARGED 2% INTEREST/MONTH.

COMP: MINNOVA INC.
PROJ: LARA 242
ATTN: G.WELLS/J.KAPUSTA

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 9V-1514-RJ1
DATE: NOV-16-89
• TYPE ROCK GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
17323	.5	1	121	23	8	1	37	5
17324	.6	2	72	19	9	1	65	5
17325	1.6	1	211	133	53	3	108	5
17351	.7	1	169	56	10	1	34	5
17352	1.4	1	80	245	54	3	175	5
17353	.5	1	118	2	16	1	35	5
17354	1.5	1	119	56	44	2	99	5
17355	1.5	1	95	49	44	1	144	5
17356	2.0	1	71	96	52	3	77	5
17357	.2	22	304	52	13	1	34	10
17358	[redacted]							
17359								
17360								
17361								
17362								
17363								
17364								
17365								

COMP: MINNOVA INC.
PROJ: LARA 242
ATTN: G.WELLS/J.KAPUSTA

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 9V-1514-RL1
DATE: NOV-16-89
• TYPE ROCK GEOCHEM • (ACT:FIRE)

SAMPLE NUMBER	AL2O3 %	BAT %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	TIO2 %	S %	TOT(%)
17323	15.70	.080	1.27	3.51	1.99	1.43	.08	4.83	.11	67.88	.33	.41	97.60
17324	15.17	.100	1.66	2.89	1.36	.93	.06	6.03	.11	69.23	.31	.56	98.40
17325	16.90	.100	4.73	8.82	2.06	6.25	.19	1.54	.26	53.83	.64	.44	95.77
17351	15.48	.150	1.16	4.16	4.28	1.82	.07	.56	.09	67.87	.40	1.45	97.50
17352	18.11	.050	5.93	9.92	.56	4.64	.28	2.22	.26	52.56	.69	.67	95.89
17353	15.54	.115	2.17	3.21	2.24	1.65	.06	2.71	.12	68.94	.32	.02	97.10
17354	16.79	.070	5.08	8.30	1.24	4.62	.19	3.75	.24	53.11	.59	.04	94.02
17355	17.55	.070	7.45	8.69	1.67	3.63	.27	1.84	.30	52.41	.61	.03	94.50
17356	15.97	.060	6.03	9.31	.95	7.55	.23	3.98	.30	49.85	.73	.03	95.00
17357	7.61	.610	1.58	3.82	.82	.99	.05	2.01	.11	79.15	.21	1.15	98 12
17358	[redacted]												
17359													
17360													
17361													
17362													
17363													
17364													
17365													

MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

NOV 23 1989

Ans'd .....

INVOICE

TO : MINNOVA INC.
4TH FLOOR,
311 WATER STREET,
VANCOUVER, B.C.
V6B 1B8

INVOICE No 15595D
PAGE : 1 OF 1
DATE :Nov 17/89

ACCOUNT: 10162

ATTENTION: G.WELLS/R.BAXTER FILE No: 9-1519
PROJECT: LARA 242

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
10	MINNOVA LITHO PACKAGE	23.50	235.00
15	ROCK GEOCHEM - CU PB ZN AG AU-FIRE	13.50	202.50
15	ASSAY CUT SAMPLE PREP	3.75	56.25
	GREYHOUND 01241	11.75	11.75
	GREYHOUND 01240	9.00	9.00
	GREYHOUND 01243	11.75	11.75
	GREYHOUND 01244	19.00	19.00
		* TOTAL *	545.25

THESE ARE PROFESSIONAL SERVICES AND ARE PAYABLE WHEN RENDERED.
OUTSTANDING BALANCES OVER 30 DAYS WILL BE CHARGED 2% INTEREST/MONTH.

COMP: MINNOVA INC.
PROJ: 242 LARA
ATTN: G.WELLS/J.KAPUSTA

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 9V-1519-RL
DATE: NOV-17-8
• TYPE ROCK GEOCHEM • (ACT:FIRE

SAMPLE NUMBER	DDH	AL2O3 %	BAT %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	TIO2 %	S %	TOT(%)
13378 ✓	264	13.43	.065	.59	2.26	2.50	1.02	.06	4.25	.09	73.17	.16	.12	97.71
13387 ✓	264	18.46	.065	6.72	8.41	1.39	3.44	.23	2.15	.29	52.88	.67	1.25	95.94
17349		[redacted]												
17350														
17366														
17367														
17368														
17369														
17376														
17377														

COMP: MINNOVA INC.
PROJ: 242 LARA
ATTN: G.WELLS/J.KAPUSTA

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 9V-1519-RJ
DATE: NOV-17-8
~~TYPE ROCK GEOCHEM~~ (ACT:F31

RECEIVED
NOV 23 1989
Ans'd .....

SAMPLE NUMBER	ODH	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
13378	264	.3	1	39	4	9	1	54	5
13387	264	1.0	1	72	141	30	1	119	10
17349		[redacted]							
17350									
17366									
17367		[redacted]							
17368									
17369									
-17376									
-17377									

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P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9998

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NOV 23 1989
Ans'd ..... Copy to MINNOVA INC., VANCOUVER, B.C.

Geochemical Analysis Certificate

9V-1519-RG1

Company: MINNOVA INC.
Project: 242 LARA
Attn: G.WELLS/J.KAPUSTA

Date: NOV-17-89

2. MINNOVA INC., CHEMAINUS, B.C.

He hereby certify the following Geochemical Analysis of 15 CORE samples submitted NOV-15-89 by J.KAPUSTA.

Sample Number	DDH	CU PPM	PB PPM	ZN PPM	AG PPM	AU-FIRE PPB
13376	264	251	13	78	0.4	2
13377	264	4	5	81	0.3	2
13379	264	5	4	88	0.3	6
13380	264	4	8	44	0.4	1
13381	264	5	6	44	0.4	3
13382	264	23	10	41	0.4	2
13383	264	10	12	29	0.3	14
13384	264	93	7	14	0.2	1
13385	264	42	9	21	0.5	1
13386	264	104	10	120	0.9	9
[illegible]	264	125	13	100	0.8	2
13389	264	144	16	126	0.9	15
13390	264	117	18	123	0.9	2
13391	264	142	17	99	0.7	7

Certified by _____

MIN-EN LABORATORIES

L76W 35N
L74W 35+75N
L72W 35N
L70W 35+60N
L70aW 35N
L68W 35+60N
L66W
L68+50W 35N
L69W 33N
L64W(OLD) 30N
L65W 40N
L64W 30N
L63+50W 35N
L62W 35N
L61+50W 35+75N
L60W 35N
L58W 35N
L56W 35N
L59W 28N
L57W 28N
L71W
L63W
L61W
L54W 25+00N
29N
21N
20N
20+75N
DDH 89-264
LCP WIMP
5 415 500 N
4432 000 E
5 417 000 N
5 417 800 N
Sally Creek
GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,807
SHEET D
MINNOVA Inc. FIG. 1
DIAMOND DRILL HOLE PLAN
NORTH GRID AREA
LARA PROJECT
DATE
SCALE 1 : 2 500
NTS 92 B / 13W
DRAWING NO. E-

5 415 500 N

435 500 E

20 N

19 N

L 65 W

19 N

19 N

DDH 89-254

LCP UGLY

L 55 W

16+75 N

LCP FL

LCP SOLLY

5 415 000 N

LCP JENNIE

10+00 N

10 N

9 N

8 N

L 70 W

L 68 W

L 65 W

L 63 W

L 61 W

L 66 W

L 59 W

LCP PLANT

L 57 W

7 N

L 64 W

5 N

L 62 W

5+50 N

L 55 W

5 414 500 N

5 414 000 N

Solly

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,807

TO ACCOMPANY REPORT NO. _____ BY _____

SHEET A

MINNOVA FIG. 1

DIAMOND DRILL HOLE PLAN

WEST GRID AREA
LARA PROJECT

DATE	SCALE	NTS	DRAWING NO.
	1 : 2 500	92 B / 13 W	E-