ARIS SUMMARY SHEET

District Geologist, Kamloops Off Confidential: 90.02.24

ASSESSMENT REPORT 18730 MINING DIVISION: Kamloops

PROPERTY: Last Chance
LOCATION: LAT 50 56 00 LONG 120 54 00
UTM 10 5644292 647565
NTS 092I15W
CLAIM(S): LC 1-5
OPERATOR(S): Minnova
AUTHOR(S): Evans, G.W.
REPORT YEAR: 1988, 30 Pages
COMMODITIES
SEARCHED FOR: Copper,Silver,Mercury
KEYWORDS: Triassic,Nicola Group,Basalts,Lahars,Eocene,Kamloops Group
Chert pebble conglomerates,Alteration zones
WORK
DONE: Geological,Geochemical
GEOL 2275.0 ha
Map(s) - 4; Scale(s) - 1:5000
ROCK 95 sample(s) ;ME
RELATED
REPORTS: 17415
MINFILE: 092INE062

GEOLOGICAL AND

LITHOGEOCHEMICAL REPORT

LC PROJECT

LC GROUP AND
LC #5 CLAIMS

KAMLOOPS MINING DIVISION

LAT 50 54' LONG 120 57.0'

NTS 92I/15

Graeme Evans
Minnova Inc.
4th Floor,
311 Water Street
Vancouver,B.C

May 10, 1988

TABLE OF CONTENTS

LIST OF FIGURES

Page #

APPENDIX

Lithogeochemical Results

LIST OF MAPS (IN POCKET)

1	Geology and Rock Sample Locations	Sheet 1
1	Geology and Rock Sample Locations	Sheet 2
1	Geology and Rock Sample Locations	Sheet 3
1	Geology and Rock Sample Locations	Sheet 4

INTRODUCTION

GENERAL:

Minnova Inc. owns the LC claims which lie over the junction of the Deadman River and Criss Creek, in the Deadman Valley and to the East on the North side of Criss Creek. This report presents the results of the geological mapping and lithogeochemical sampling carried out in the fall of 1988.

LOCATION AND ACCESS: (Figure 1)

The LC-5 claims are located 15 km north of the junction of Highway 97 and the Deadman Valley road. Access on the West side of the claim group is via the Deadman Valley Road and the East via the Criss Creek logging road. The LC Group is located approximately 4 km to the Northeast on the Criss Creek logging road.

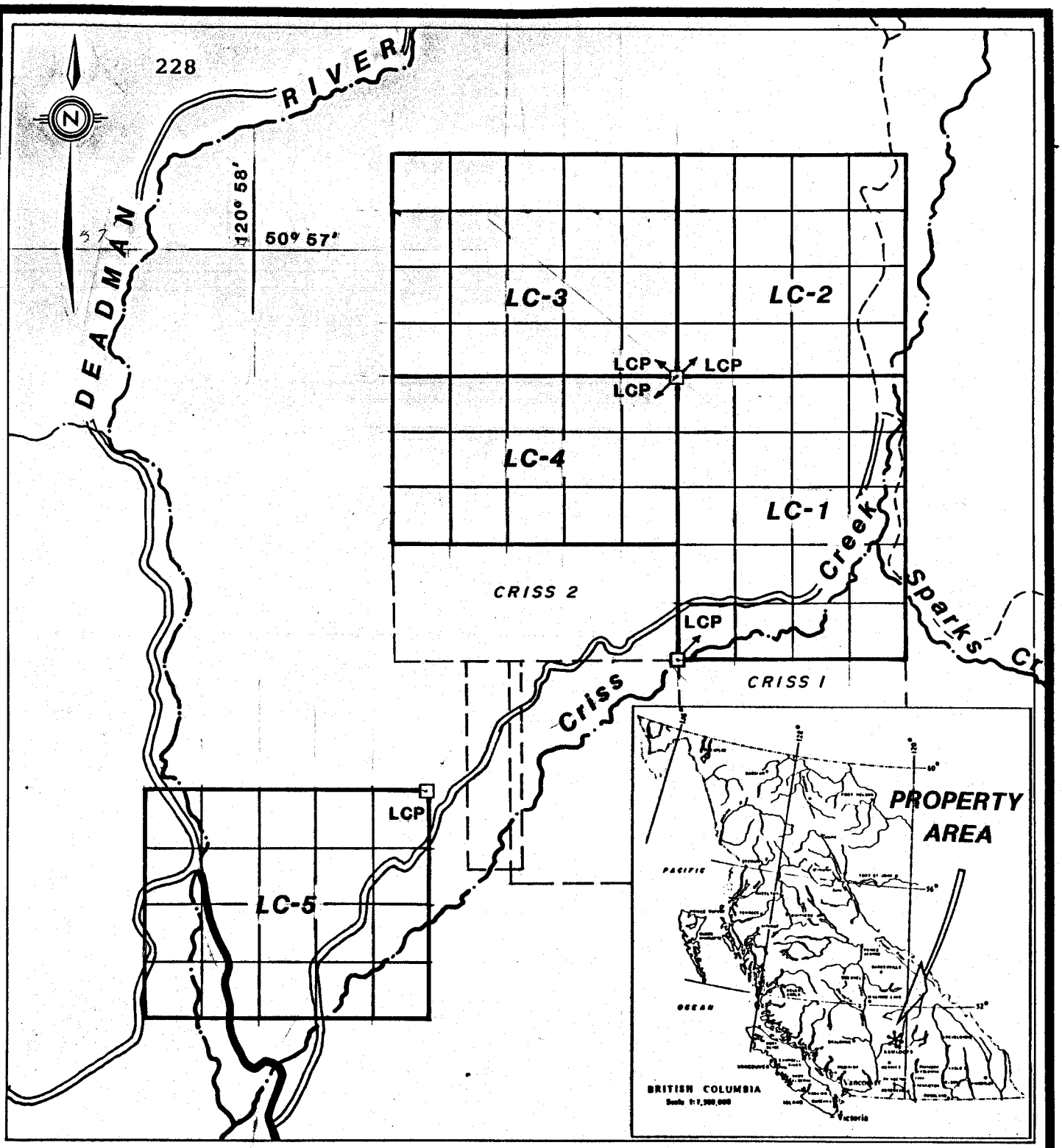
PHYSIOGRAPHY:

The LC claims lie just above the Deadman Valley at elevations of 700 - 900 meters on the East side of the valley. The area has very little precipitation and a large temperature range from -40 C to +40 C. The valley is used for hay cultivation and cattle ranching while the hills are extensively logged.

PROPERTY AND OWNERSHIP:

The LC claims are 100% owned and operated by Minnova Inc.

CLAIM NAME	RECORD NO.	NO. OF UNITS	EXPIRY DATE
LC - 1	6940	20	27/02/88
LC - 2	6941	16	27/02/88
LC - 3	6942	20	27/02/88
LC - 4	6943	15	27/02/88
LC - 5	6944	20	27/02/88



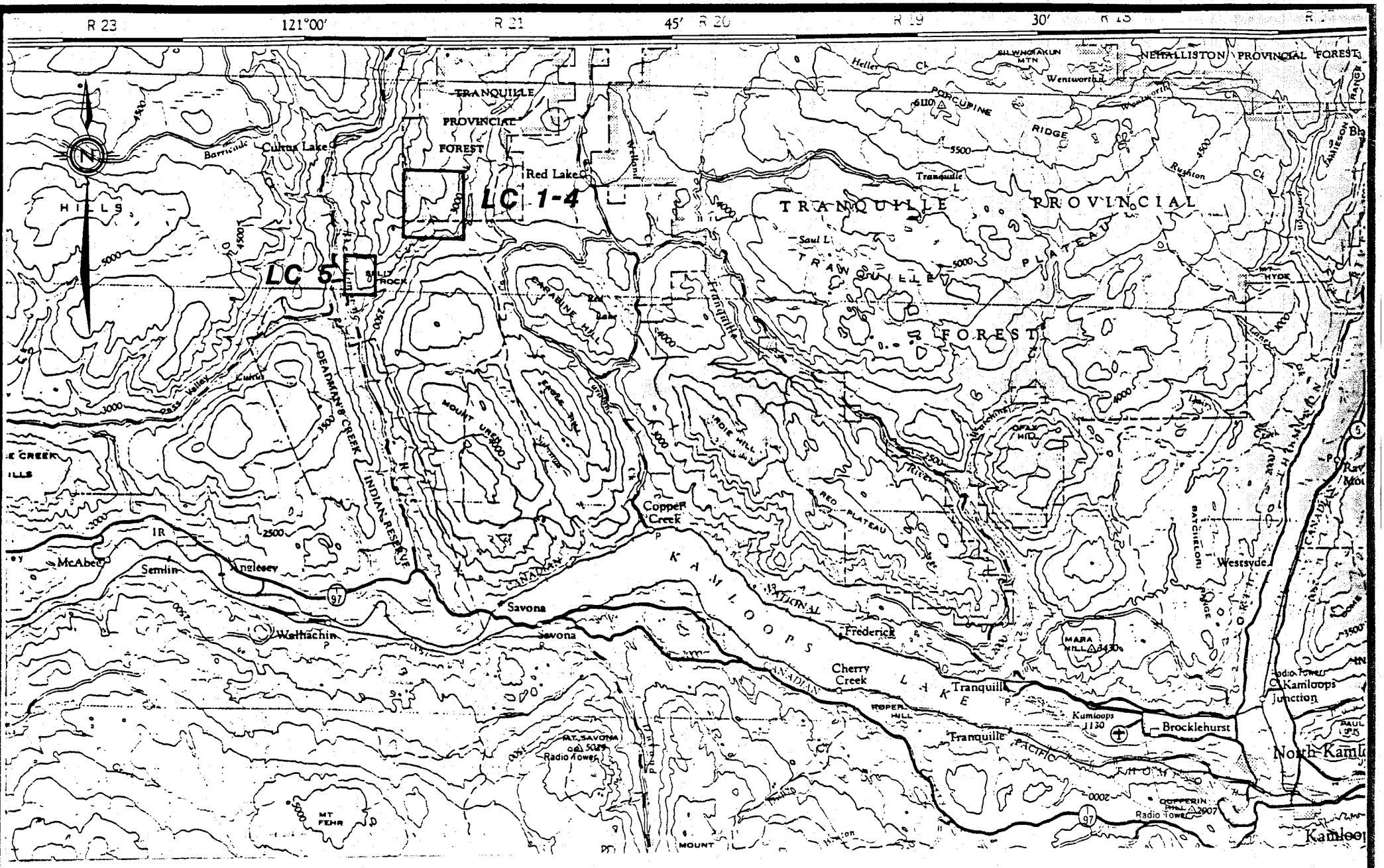
NTS 92I/15

LAST CHANCE PROPERTY

CLAIM CONFIGURATION

0 1 2Km

FIGURE 2



MINNOVA INC.

FIGURE 1
APRIL 1987

HISTORY:

The area has seen placer mining up Criss Creek in the early 1900's. Selco - B.P. held the ground in the Deadman Valley as the DM claims. D. Gamble wrote assessment report #9729 which covers the Geology and Geochemistry of the Hoodoo grid. This grid covered much of the LC #5 area and describes a complex tertiary history with sediments, rhyolites, basalts and a mafic breccia pipe known as "split rock". Assessment reports in the LC Group area include #9681 written for Placer Development with a grid established over the "Last Chance" showings and soils were taken along with a magnetometer survey.

SUMMARY OF WORK DONE:

From October 17, 1988 to November 2, 1988 the property was mapped Geologically on a 1:5000 scale. Lithogeochemical samples were taken of the different rock types and alteration and were analyzed for; Al2O3, Ba, CaO, Fe2O3, K2O, MgO, MnO2, Na2O,P2O5, Si)2, Sr, TiO2, Zr, S, Ag, As, Cu, Pb, Sb, Zn, Au and Hg. 95 samples were taken. 62 on the LC Group and the remaining 33 samples from LC - 5. The LC Group poses difficulty in geologic interpretation with less than 1% outcrop over much of the claim group.

REGIONAL GEOLOGY:

According to Monger (O.F. 980) the basement rocks around the property are Nicola volcanics and Paleozoic gneisses. Major faults such as the Deadman River fault with strike lengths 40+ miles have block faulted Eocene volcanic rocks into graben like structures. Monger feels the chert pebble conglomerates on the Eastern side of the L.C. property, belong to the Jurassic Ashcroft Formation. Near the faults small Triassic alkaline intrusives are shown to occur. Forming along topographic highs the Miocene basalts occur capping all other units. The main structures shown are NW trending Tertiary Faults which are found to be more numerous on a property scale.

DESCRIPTION OF ROCK UNITS

UNIT 1 - Triassic Nicola Rocks

Triassic Nicola Rocks are the oldest rocks present on the property and make up a majority of the basement rocks.

UNIT 1A

This unit comprises the alkaline mafic volcanics of the Nicola rocks. Generally this unit is strongly foliated with chlorite pervasively developed parallel to the foliation. Occasionally primary features can be seen and angular fragments are visible in flow breccias and fine grained plagioclase and pyroxene phyric tuffaceous units can be seen.

UNIT 1B - These rocks are various Nicola Sediments

These are mixed in with the volcanics and while occasional bedding is seen, no attempt was made to decipher the primary stratigraphy. Composition varies from mixed chlorite - graphitic tufaceous units to graphitic argillites and occasional massive limestone units. In the SW corner of LC #3 crinoid fossils were found in a limestone unit.

UNIT 2 - Mesozoic Diorite Dykes

Along the banks of Criss Creek in the southern portion of LC #1, medium grained diorite dykes were seen cross cutting Nicola volcanics. The matrix is pale grey moderately siliceous with 1mm plagioclase phenocrysts.

UNIT 3 - Eocene Kamloops Group Rocks - Concentrated on LC #5

UNIT 3A - Basalt Trachyte Lahars

These rocks form massive units with no visible bedding. The matrix consists of a fine sandstone-wacke with occasional exotic graphite fragment. The Lahars vary from pale green due to chlorite content to red with stronger hematite content. Various fragments range from sub - rounded to sub - angular and from 5mm to 50 cm in diameter. Most fragments consist of basalt trachytes with 3mm plagioclase laths in a fine grained matrix. Occasional Kamloops Groups rhyolite and siltstone fragments can be seen in the Lahars.

UNIT 3B - Basalt Trachyte Flows

These flows overlie the Lahars and are of the same composition as trachyte fragments below. Again the unit varies in colors from green to red depending on chlorite and hematite content. These flows have a fine grained mafic matrix with course 1 - 4 mm plagioclase laths making up 40 % of the volume. Bedding generally strikes 180 with moderate dips from 20 to 30 to the West. These flows are believed to have formed in a graben like structure along the Deadman Valley with dips into the present valley.

UNIT 3C - Siltstone

Small blocks of light creamy colored siltstone are wrapped around the breccia pipe in the middle of LC #5. These are similar to Eocene siltstones to the North along the Deadman River. Occasional graphitic plant fossil prints can be seen in these siltstones.

UNIT 4 - Miocene Rocks

UNIT 4A

A very distinctive unit in the middle of LC #5. A prominent local feature is known as "split rock" and this appears to be a breccia pipe which is a feeder for the nearby Miocene plateau basalts. Compositionally the rock is similar to the plateau basalts with a fine grained mafic matrix with coarse pyroxene and olivine crystals to 4mm in diameter. The rock consists of non matrix supported angular fragments varying in size from 1 cm to an impressive 5 m in diameter. The matrix is extremely vesicular with vesicles up to 30 cm in diameter. The vesicles are coated with a light green - yellow powder remnant of the gases.

UNIT 4B - The extrusive equivalent of unit 4A

These typical plateau basalts form flat lying ridges on the Southwest side of LC #4. These rocks are very mafic (only 45 % SiO2) and consist of massive fine grained vesicular flows. Minor 1 - 2 mm pyroxene and olivine crystals can be seen in certain portions of the flow.

UNIT 4C

This unit consists of chert pebble conglomerates previously called the Jurassic Ashcroft Formation by Monger (O.F. 980). The matrix is a fine grained siliceous matrix with occasional graphitic argillite beds. This unit and unit 4D cover large areas on the eastern side of LC #1 and 2. The units strike generally North and dip gently 5 - 30 to the East. They appear to have formed in a basin structurally controlled by the North trending fault along Criss Creek. Unit 4D is a siltstone with the same composition as the matrix of the chert pebble conglomerates. These siltstones occasionally have graphitic plant impressions and crossbedding. The age of units 4C and 4D are only loosely correlated with the Miocene but their fossil presence and similar elevations with the plateau basalts suggest this time correlation.

UNITS 5A & 5B

These are volcanic dykes located in fault structures. The age of these dykes can be confirmed since they have intruded the Miocene breccia pipe on "split rock". These dykes appear to be near vertical dykes forming within fault zones. Unit 5A has a fine grained light brown matrix with coarse 2 - 4 mm pyroxene crystals. Unit 5B is a lighter tan colour more felsic appearing dyke. These units are weakly to moderately magnetic and alteration occurs near these dykes and on their selvages.

FAULT AND SHEAR ZONES

Two major trends appear on the property. The dominant faults trend 300 - 360 and dip steeply to the East and West. Faults trending 040 - 050 crosscut the NW trending faults but do not appear to offset the fault zones. These faults are believed to have been active in the early Eocene forming graben like structures in both the Deadman River and along Criss Creek in which the Kamloops Group rocks were deposited. These faults appear to have been reactivated post Miocene and fault blocks have dropped blocks into the Deadman River and possibly Criss Creek. These faults are better termed shear zones as they commonly form strongly foliated zones up to 200 m wide.

LITHOGEOCHEMISTRY AND ALTERATION

Rock samples were collected in approximately 1.0 kg sizes and shipped to Min - En labs in Vancouver. Most elements were analyzed by ICP methods while Hg was analyzed by Atomic absorption and Au was analyzed by A.A. and fire assay. No statistical interpretation was made due to the widespread nature of the sampling.

In general strongly fractured areas in all rock types can have the pervasive alteration. Carbonate alteration in the most dominant with 15 - 60 % $CaCO_3$ and secondary hematite alteration forming prominent red bluffs. High level indicators are present with banded carbonate and chalcedony veins displaying open space cavities. These alteration zones occur near volcanic dykes of unit 5A and 5B and are probably related to the same system.

Trace element indicators are highlighted by widespread Hg anomalies over large portions of the property. Anomalies in Hg are as high as 21,375 ppb along with anomalous Ba values up to 4949 ppm Ba. Precious metal values are generally low with maximum values of 2.4 ppm Ag and 175 ppb Au. Base metal values are also generally low with only Cu showing any significant anomalies with maximum values up to 385 ppm Cu.

The alteration system can be identified as late or post Miocene in age and persists over large areas. Many aspects indicate this is a high level epithermal system. These include vein textures, low sulphides and anomalous Hg and Ba values.

SAMPLE DESCRIPTIONS

LC GROUP

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12501		4C	Mod Carbonate alteration trace pyrite
BCS 12502		4D	Weak Carbonate alteration
BCS 12503		4D	Moderate Carbonate alteration
BCS 12504		4C	Moderate Carbonate alteration
BCS 12505		4C	Strong Carbonate alteration
BCS 12506		4C	Moderate Carbonate alteration
BCS 12507		4C	Moderate Carbonate Alteration
BCS 12508		4C	Moderate Carbonate alteration
BCS 12509		1A	Chloritic
BCS 12510		1A	Chloritic
BCS 12511		5A	Mod Carbonate and Hematite alteration minor chalcedony
BCS 12512		5A	Strong hematite alteration, weak carbonate alteration
BCS 12513		5B	Minor carbonate alteration, minor quartz veinlets
BCS 12514		5C	Quartz - Carbonate vein trace Cinnabar

LC GROUP CONTINUED

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12515		5A	Mod Carbonate alteration
BCS 12516		5A	Strong Carbonate alteration, trace cinnabar minor chalcedony veinlets
BCS 12517		5A	Strong hematite and carbonate alteration with chalcedony and calcite veinlets
BCS 12518		5A	Strong hematite alteration with moderate chalcedony and calcite veinlets, trace cinnabar
BCS 12519		5A	Strong hematite alteration with moderate chalcedony and calcite veinlets, trace cinnabar
BCS 12520		4C	Moderate carbonate alteration
BCS 12521		4C	Moderate carbonate alteration
BCS 12522		1A	20% Calcite veinlets
BCS 12523		4C	No alteration
BCS 12524		1A	Weak Carbonate alteration
BCS 12525		1A	Weak Carbonate alteration
BCS 12526		5A	Weak Carbonate alteration
BCS 12527		1A	Weak Calcite veinlets
BCS 12528		1A	Strong carbonate alteration, limonitic up to 2cm calcite veins

LC GROUP CONTINUED

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12529		1A	Weak carbonate
BCS 12530		1A	No alteration
BCS 12531		5C	Laminated carbonate vein 15 cm
BCS 12532		1A	No alteration
BCS 12533		1B	Strong carbonate
BCS 12534		1B	Strong hematite alteration & silification
BCS 12535		1A	Moderate carbonate alteration with calcite veinlets
BCS 12536		4B	No alteration
BCS 12537		4B	No alteration
BCS 12538		5B	Strong silicification
BCS 12539		1A	Epidote veinlets and occasional carbonate veinlets
BCS 12540		1A	1 - 2 % disseminated pyrite
BCS 12541		2A	Weak carbonate alteration
BCS 12542		1A	Minor quartz and calcite veinlets, trace pyrite and cinnabar
BCS 12543		5A	No alteration
BCS 12544		4C	Moderate carbonate alteration
BCS 12545		4C	Weak carbonate alteration

LC GROUP CONTINUED

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12546		4D	No alteration
BCS 12547		5A	Strong hematite alteration with calcite veinlets
BCS 12548		5A	Strong hematite alteration with carbonate alteration on fractures
BCS 12549		5B	Carbonate stockwork with cinnabar
BCS 12550		5A	Moderate carbonate alteration with minor quartz veinlets and trace malachite
BCS 12551		5A	Minor calcite veinlets
BCS 12552		5B	Moderately silicified with quartz veinlets, trace pyrite
BCS 12553		1B	Moderate carbonate alteration
BCS 12554		1A	Moderate carbonate alteration
BCS 12555		1A	Moderate hematite alteration
BCS 12556		1B	Weakly silicified limestone
BCS 12557		4C	Weak carbonate alteration and silicification
BCS 12558		4C	Moderate carbonate alteration, weakly silicified

LC GROUP CONTINUED

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12559		4C	Weak Carbonate alteration
BCS 12560		4D	Unaltered
HS 386		4C	Unaltered

LC #5 CLAIMS

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12561		1A	Moderate carbonate alteration with quartz veinlets
BCS 12562		1A	Strong carbonate with 10% quartz veinlets
BCS 12563		3B	Moderate carbonate alteration with chalcedony veinlets
BCS 12564		1A	Strong carbonate and hematite alteration
BCS 12565		4A	Unaltered
BCS 12566		1A	No alteration
BCS 12567		1A	Weak hematite alteration
BCS 12568		3B	Strong hematite alteration with quartz veinlets
BCS 12569		3B	No alteration
BCS 12570		4A	No alteration
BCS 12571		3B	Moderate hematite alteration with calcite veinlets
BCS 12572		3B	Moderate carbonate alteration
BCS 12573		3B	Strong carbonate alteration
BCS 12574		3B	Quartz veinlets with weak silicification
BCS 12375		1A	No alteration
BCS 12376		1A	Weak carbonate alteration

LC #5 CLAIMS CONTINUED

SAMPLE NO	UNIT	ROCKTYPE	ALTERATION AND SULPHIDES
BCS 12377		3B	Strong carbonate alteration
BCS 12378		4A	No alteration
BCS 12379		1A	No alteration
BCS 12380		3A	Strong hematite alteration with minor silicification
BCS 12381		5C	Chalcedony veins
BCS 12382		5C	Quartz vein with trace pyrite
BCS 12383		3B	Minor chalcedony veinlets
BCS 12384		3B	Strong hematite alteration
BCS 12385		3B	Moderately silicified
BCS 12386		5C	Chalcedony vein breccia
BCS 12387		3C	Moderate carbonate alteration
BCS 12388		3B	Moderate hematite alteration
BCS 12389		3A	Moderate hematite alteration
BCS 12390		3B	Moderate hematite alteration with minor quartz veinlets
BCS 12391		3B	Moderate hematite alteration
BCS 12392		3B	Weak clay alteration
BCS 12393		1A	Strong carbonate alteration

CONCLUSIONS AND RECOMMENDATIONS

The Last Chance property has several wide alteration zones hosted in major fault zones. Alteration in quite recent, Late Miocene or Post Miocene in age and has many epithermal characteristics present.

Future work would be to establish grids over the main alteration zones and soil sample the areas as well as run magnetometer and VLF surveys. The promising targets should then be trenched with an excavator.

ITEMIZED COST STATEMENT

LC GROUP

Graeme Evans (Project Geologist) October 17 - October 28 1988 12 days @ $350/day	$ 4200.00
Wayne Hindley (Geological Assistant) October 17 - October 28, 1988 12 days @ $150/day	$ 1800.00
4 W.D. Truck Lease and Fuel 12 days @ $50/day	$ 600.00
Hotel and Meals in Kamloops 2 people @ $80/day	$ 960.00
Field Supplies (Flagging, Sample Bags, Hip Chains etc.)	$ 370.00
Lithogeochemical Analysis Minen Labs; 23 elements, ICP and Aqua Regia. 62 samples @$37/sample	$ 2294.00
Drafting of Maps 3 days @ $175/day	$ 525.00
Interpretation and Report Graeme Evans 3 days @ $350/day	$ 1150.00
Typing and Report Materials	$ 220.00
TOTAL	$ 12119.00

ITEMIZED COST STATEMENT

LC #5

Graeme Evans (Project Geologist) October 29 - November 2 1988 5 days @ $350/day	$	1750.00
Wayne Hindley (Geological Assistant) October 29 - November 2 1988 5 days @ $150/day	$	750.00
4 W.D. Truck Lease and Fuel 5 days @ $50/day	$	250.00
Hotel and Meals in Kamloops 5 days @ $80/day	$	400.00
Lithogeochemical Analysis Minen Labs; 23 elements, ICP and Aqua Regia. 33 samples @ $37/sample	$	1221.00
TOTAL	$	4371.00

STATEMENT OF QUALIFICATIONS

I, Graeme W. Evans certify that:

1. I am an Exploration Geologist residing at RR #5, Site 1, Comp 96 Kamloops, B.C.

2. I have a BSc. (Geol) from the University of British Columbia (1983).

3. I have practised my profession since 1983.

4. I personally carried out or supervised the work reported herein.

Graeme W. Evans

Date May 10, 1989

Graeme W. Evans

APPENDIX

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:F26) PAGE 1 OF 2

PROJECT NO: 328 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 8-2012/P1+2

ATTENTION: G.EVANS/I.PIRIE | (604)980-5814 OR (604)988-4524 # TYPE ROCK GEOCHEM # | DATE:NOVEMBER 16, 1988

(VALUES IN %)	AL2O3	BA	CAO	FE2O3	K2O	MGO	MNO2	NA2O	P2O5	SIO2	SR	TIO2
BCS12377	6.36	.009	11.27	3.50	.30	.32	.22	.09	.10	62.65	.01	.32
BCS12378	15.34	.123	4.80	5.88	2.19	3.41	.15	2.24	.30	56.00	.10	.87
BCS12379	15.23	.030	7.58	6.37	1.04	1.70	.25	3.22	.36	47.98	.04	.80
BCS12380	16.35	.161	6.03	6.90	2.29	2.23	.18	3.35	.40	46.50	.13	.99
BCS12381	3.66	.026	40.71	2.93	.58	4.73	1.34	.78	.11	16.85	.03	.22
BCS12382	1.10	.013	32.24	1.92	.10	17.21	.28	.18	.10	12.76	.01	.07
BCS12383	14.47	.108	4.83	5.70	1.74	2.14	.12	3.00	.32	48.04	.07	.90
BCS12384	14.89	.090	4.14	7.03	2.22	1.05	.04	3.20	.33	48.74	.07	1.08
BCS12385	10.65	.093	2.97	3.31	1.96	.90	.10	2.34	.27	73.41	.05	.53
BCS12386	7.95	.069	1.88	2.84	1.47	.55	.08	1.65	.18	79.34	.04	.40
BCS12387	13.95	.015	8.40	7.80	.54	3.23	.39	.25	.18	53.27	.02	.85
BCS12388	17.62	.253	6.31	8.95	2.57	3.69	.24	2.97	.52	48.99	.12	1.23
BCS12389	15.91	.150	7.56	7.87	2.20	3.72	.21	3.57	.57	51.75	.14	1.30
BCS12390	16.38	.187	7.31	8.90	2.33	3.96	.24	3.37	.55	50.03	.14	1.31
BCS12391	17.45	.256	5.84	8.83	2.70	4.04	.26	3.04	.48	50.40	.11	1.12
BCS12392	16.88	.332	5.34	7.43	6.90	3.92	.27	1.27	.64	48.16	.08	1.14
BCS12393	13.73	.068	10.01	6.91	1.97	.97	.29	.09	.17	55.08	.02	.83
BCS12501	10.44	.065	2.59	5.33	1.39	1.28	.16	1.39	.15	71.85	.02	.51
BCS12502	15.08	.042	4.24	4.60	1.12	1.53	.16	1.69	.18	64.23	.05	.64
BCS12503	12.08	.167	7.34	6.74	.69	4.00	.20	2.37	.16	56.33	.06	.51
BCS12504	12.13	.075	10.66	6.45	.94	4.78	.26	1.61	.18	50.51	.06	.52
BCS12505	1.19	.005	53.34	2.11	.15	1.14	.45	.12	.07	5.01	.25	.07
BCS12506	16.18	.058	3.04	8.31	1.16	2.56	.32	3.12	.18	58.81	.04	.89
BCS12507	16.84	.053	3.90	7.82	1.34	1.29	.18	2.74	.20	59.51	.04	.85
BCS12508	2.48	.017	28.37	7.90	.12	11.58	.32	.22	.09	14.74	.04	.10
BCS12509	18.78	.063	6.08	9.15	1.27	1.92	.22	3.08	.31	52.92	.06	.80
BCS12510	3.29	.643	45.40	1.65	.22	.75	2.40	.23	.06	14.55	.08	.16
BCS12511	12.72	.069	9.38	9.31	1.40	3.00	.55	.05	.23	47.79	.03	1.00
BCS12512	17.84	.030	3.95	11.99	.87	1.77	.36	.03	.28	55.93	.05	1.42
BCS12513	19.54	.027	2.30	3.00	1.05	.89	.08	2.78	.29	65.24	.09	.57
BCS12514	2.14	.186	30.33	9.56	.09	14.19	.90	.05	.12	10.25	.01	.11
BCS12515	17.76	.024	10.21	9.11	.55	3.41	.43	.02	.22	46.32	.02	.94
BCS12516	15.95	.012	6.26	7.54	.30	2.49	.32	.28	.24	57.54	.04	1.18
BCS12517	15.36	.016	3.14	6.99	.67	.78	.36	2.66	.30	63.82	.04	1.26
BCS12518	15.98	.099	9.21	7.76	1.08	3.97	.43	.77	.20	48.94	.06	.60
BCS12519	17.30	.045	2.36	9.40	.90	1.40	.42	.32	.39	61.08	.30	1.55
BCS12520	13.30	.099	2.58	3.32	.66	1.24	.17	.01	.22	72.91	.12	.84
BCS12521	9.54	.067	3.54	6.50	.28	1.42	.25	.01	.18	72.58	.03	.40
BCS12522	13.87	.044	5.90	9.54	.98	3.50	.33	3.25	.33	52.92	.05	1.55
BCS12523	14.83	.098	3.05	6.23	1.91	2.72	.19	3.12	.23	61.64	.05	.84
BCS12524	17.46	.057	8.72	8.75	1.34	3.42	.25	2.96	.22	47.40	.05	.83
BCS12525	17.93	.055	5.01	7.70	1.23	2.77	.22	3.65	.24	53.41	.07	.97
BCS12526	13.51	.071	3.43	2.96	1.46	.46	.14	3.83	.12	68.90	.02	.45
BCS12527	14.34	.039	20.21	7.75	.89	3.36	.32	2.00	.26	35.15	.04	.91
BCS12528	9.41	.005	27.88	4.55	.26	.58	.34	1.91	.26	36.77	.02	.61
BCS12529	16.83	.015	7.65	8.47	.43	3.19	.29	3.11	.25	50.69	.03	.93
BCS12530	17.88	.013	10.49	10.61	.27	3.95	.38	2.11	.19	44.31	.04	.94
BCS12531	1.55	.005	33.73	9.15	.01	6.74	.71	.04	.09	20.90	.01	.06
BCS12532	17.24	.012	11.97	9.25	.35	3.37	.36	2.12	.17	44.84	.03	.91
BCS12533	17.07	.006	3.61	8.43	.15	1.45	.18	.01	.28	62.56	.02	.91
BCS12534	5.58	.010	28.23	10.68	.16	8.63	.56	.02	.11	23.10	.01	.28
BCS12535	19.75	.089	6.69	11.73	2.08	3.03	.18	2.52	.34	47.34	.07	.97
BCS12536	14.41	.031	7.65	11.68	.99	7.50	.28	2.58	.33	45.73	.05	2.10
BCS12537	14.11	.028	7.69	11.63	.95	7.86	.27	2.44	.34	45.57	.06	2.13
BCS12538	13.92	.038	8.93	19.40	1.35	4.10	.57	1.28	.27	38.71	.02	.78
BCS12539	18.25	.146	3.27	5.48	3.07	1.71	.15	3.81	.23	59.13	.04	.69
BCS12540	15.33	.108	6.14	10.94	1.17	2.68	.25	1.30	.25	54.57	.04	1.20
BCS12541	17.18	.050	4.94	5.21	.57	2.03	.11	4.09	.17	60.39	.07	.53
BCS12542	6.79	.157	26.19	9.01	.17	9.74	.55	.50	.13	28.07	.07	.39
BCS12543	15.96	.121	7.02	8.32	.73	4.98	.24	2.89	.40	48.68	.03	1.17

(VALUES IN %)	ZR	S	TOT(%)
BCS12377	.005	.04	85.20
BCS12378	.005	.01	91.43
BCS12379	.005	.03	84.64
BCS12380	.005	.02	85.55
BCS12381	.005	.02	72.00
BCS12382	.005	.01	65.98
BCS12383	.008	.01	81.45
BCS12384	.009	.01	82.90
BCS12385	.005	.03	96.62
BCS12386	.005	.05	96.50
BCS12387	.005	.02	88.90
BCS12388	.005	.01	93.47
BCS12389	.008	.04	94.99
BCS12390	.005	.02	94.74
BCS12391	.005	.02	94.54
BCS12392	.005	.02	92.42
BCS12393	.005	.06	90.19
BCS12501	.005	.02	95.20
BCS12502	.005	.01	93.56
BCS12503	.005	.05	90.69
BCS12504	.005	.04	88.21
BCS12505	.005	.02	63.92
BCS12506	.005	.06	94.74
BCS12507	.005	.03	94.80
BCS12508	.005	.02	65.98
BCS12509	.005	.32	94.86
BCS12510	.005	.10	69.54
BCS12511	.005	.02	85.55
BCS12512	.005	.03	94.55
BCS12513	.005	.05	95.92
BCS12514	.005	.02	67.92
BCS12515	.005	.04	89.05
BCS12516	.006	.07	92.22
BCS12517	.005	.01	95.40
BCS12518	.005	.06	87.15
BCS12519	.008	.03	95.51
BCS12520	.005	.02	95.48
BCS12521	.005	.01	94.81
BCS12522	.006	.01	92.24
BCS12523	.005	.08	94.99
BCS12524	.005	.03	91.49
BCS12525	.005	.02	93.29
BCS12526	.020	.04	95.41
BCS12527	.005	.03	85.30
BCS12528	.005	.07	82.66
BCS12529	.005	.02	91.91
BCS12530	.005	.01	91.17
BCS12531	.005	.02	73.01
BCS12532	.005	.02	90.64
BCS12533	.005	.03	94.71
BCS12534	.005	.02	77.40
BCS12535	.005	.05	94.84
BCS12536	.005	.02	93.35
BCS12537	.005	.04	93.21
BCS12538	.005	.07	89.45
BCS12539	.005	.06	96.04
BCS12540	.005	1.04	95.03
BCS12541	.005	.01	95.35
BCS12542	.005	.09	81.86
BCS12543	.005	.08	90.65

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:F31) PAGE 1 OF 1

PROJECT NO: 328 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: B-2012R/P1+2

ATTENTION: G.EVANS/I.PIRIE | (604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM * | DATE:NOVEMBER 16, 1988

(VALUES IN PPM)	AG	AS	BA	CU	PB	SB	ZN	AU-PPB	HG-PPB
BCS12377	.7	17	37	18	16	4	38	15	650
BCS12378	2.2	8	118	60	21	1	26	5	70
BCS12379	.8	4	39	28	18	2	62	5	300
BCS12380	1.1	6	180	24	28	1	74	5	5
BCS12381	.9	8	27	210	18	1	25	10	10
BCS12382	.6	9	53	18	6	2	12	5	20
BCS12383	1.6	9	147	28	19	2	63	5	20
BCS12384	1.8	7	85	11	22	1	74	5	15
BCS12385	2.1	6	85	35	19	1	35	5	15
BCS12386	2.0	11	65	38	21	1	33	5	10
BCS12387	.7	11	11	27	15	1	84	5	65
BCS12388	1.5	3	227	20	22	1	74	10	10
BCS12389	2.2	7	71	40	25	1	93	5	5
BCS12390	1.3	8	170	23	21	1	85	5	10
BCS12391	1.1	5	281	14	24	6	77	5	15
BCS12392	1.6	1	108	385	122	5	289	5	10
BCS12393	.5	9	113	33	32	3	65	10	25
BCS12501	1.3	6	325	49	28	1	64	5	385
BCS12502	.6	1	250	18	20	1	68	5	140
BCS12503	.5	7	1306	9	15	2	61	5	390
BCS12504	.5	3	527	9	14	2	63	5	670
BCS12505	.3	6	14	11	20	1	21	5	105
BCS12506	.6	3	133	8	22	1	89	5	35
BCS12507	.7	9	275	9	19	2	90	5	170
BCS12508	.7	2	127	8	10	4	73	5	30
BCS12509	.8	19	203	8	23	1	28	5	120
BCS12510	.6	5	4949	18	41	1	12	5	55
BCS12511	.4	8	373	7	27	1	47	5	290
BCS12512	.5	15	126	8	28	1	69	5	335
BCS12513	1.7	6	125	18	14	3	20	5	530
BCS12514	.8	16	1268	50	7	2	48	5	21375
BCS12515	.4	12	53	8	17	1	98	5	895
BCS12516	.3	4	70	7	16	1	64	5	870
BCS12517	.6	8	66	39	23	3	86	5	430
BCS12518	.4	16	690	8	14	2	62	5	10000
BCS12519	.4	4	161	7	20	4	109	5	3000
BCS12520	1.1	9	661	50	16	12	48	15	2250
BCS12521	.6	5	475	20	18	15	65	5	1875
BCS12522	.5	3	41	43	19	6	78	5	410
BCS12523	1.1	11	142	35	18	1	60	5	355
BCS12524	.4	20	101	70	13	1	46	10	230
BCS12525	1.1	6	56	57	18	1	62	5	70
BCS12526	1.6	10	494	8	16	1	35	5	75
BCS12527	.9	4	80	45	10	1	43	5	115
BCS12528	.7	6	18	21	12	1	34	5	80
BCS12529	.8	5	23	59	15	1	56	5	45
BCS12530	.4	22	47	15	13	1	47	5	630
BCS12531	.5	12	1	7	14	1	41	5	330
BCS12532	.3	19	51	35	20	1	44	5	150
BCS12533	.4	12	33	19	23	6	85	5	1185
BCS12534	.6	62	63	8	16	1	24	10	5250
BCS12535	.5	4	174	13	14	2	22	5	115
BCS12536	1.4	5	78	8	8	1	66	5	55
BCS12537	1.2	6	53	9	12	1	71	5	25
BCS12538	.8	16	238	7	18	7	56	175	1195
BCS12539	2.3	14	53	17	15	2	28	5	90
BCS12540	1.2	13	310	20	18	3	17	10	875
BCS12541	1.8	12	51	8	14	1	21	5	155
BCS12542	.8	9	1011	68	10	1	61	15	390
BCS12543	.7	5	618	18	15	6	69	5	685

COMPANY: MINNOVA INC.
PROJECT NO: 328
ATTENTION: G.EVANS/I.FIRIE

MIN-EN LABS ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM *

FILE NO: 8-2012L/P3+4
DATE:NOVEMBER 16, 1988

(VALUES IN %)	AL2O3	BA	CAO	FE2O3	K2O	MGO	MNO2	NA2O	P2O5	SIO2	SR	TIO2
BCS12544	14.37	.060	2.05	7.37	1.29	1.38	.17	3.28	.19	65.51	.03	.53
BCS12545	14.62	.065	7.49	8.99	1.46	3.52	.28	2.76	.24	51.50	.03	.80
BCS12546	17.03	.059	2.36	6.83	1.38	2.54	.17	3.72	.15	60.40	.04	.73
BCS12547	16.06	.021	1.74	12.28	.22	2.28	.33	4.89	.27	55.77	.03	1.44
BCS12548	15.37	.038	3.04	11.85	.76	2.16	.45	3.87	.26	55.87	.04	1.39
BCS12549	16.90	.080	5.16	5.38	2.01	2.18	.28	2.49	.21	58.60	.03	.64
BCS12550	17.57	.027	8.72	8.62	.85	3.21	.19	2.24	.23	52.98	.05	.97
BCS12551	16.57	.045	5.28	6.71	.69	1.33	.15	3.98	.26	59.23	.04	1.01
BCS12552	16.70	.035	2.18	1.64	.85	.22	.04	5.33	.12	69.27	.03	.22
BCS12553	16.77	.007	1.17	10.42	.16	.79	.07	6.79	.30	58.82	.02	1.44
BCS12554	18.30	.021	7.36	11.71	1.21	4.52	.21	3.13	.25	46.75	.05	1.42
BCS12555	17.42	.038	3.88	6.27	.56	1.66	.11	4.65	.24	60.15	.07	.83
BCS12556	2.29	.005	54.75	1.12	.30	.77	.16	.07	.32	6.22	.01	.15
BCS12557	10.38	.094	.35	10.98	.98	.37	.51	.03	.14	73.05	.06	.40
BCS12558	13.72	.043	.26	7.83	.54	.30	.35	.01	.16	73.68	.03	.44
BCS12559	13.88	.080	.58	4.32	.71	.35	.31	.01	.18	76.30	.02	.53
BCS12560	15.96	.152	5.71	7.32	2.14	3.02	.19	3.34	.39	54.17	.06	1.09
BCS12561	17.26	.039	9.17	10.58	.73	4.86	.41	.82	.13	45.43	.02	.77
BCS12562	15.58	.029	8.16	6.44	.64	3.08	.29	.02	.22	56.36	.06	.87
BCS12563	10.44	.012	14.44	7.04	.20	5.54	.41	.02	.12	49.64	.03	.44
BCS12564	16.27	.076	4.22	8.73	2.26	2.41	.23	4.05	.34	54.42	.05	1.19
BCS12565	16.42	.150	5.40	6.26	2.72	3.66	.19	2.58	.32	58.17	.11	.84
BCS12566	18.95	.048	6.31	8.55	1.92	4.23	.25	3.56	.40	46.81	.03	1.36
BCS12567	18.56	.047	7.90	8.10	2.57	3.24	.23	3.74	.46	45.87	.05	1.40
BCS12568	16.50	.153	6.37	8.02	2.40	4.02	.19	3.65	.48	51.78	.11	1.14
BCS12569	16.70	.151	6.34	7.43	2.48	3.85	.14	3.91	.46	52.56	.11	1.14
BCS12570	18.56	.171	7.78	7.88	1.47	2.30	.19	3.41	.43	51.98	.11	1.26
BCS12571	14.78	.041	19.07	7.90	1.31	2.43	.46	2.86	.29	36.20	.04	1.05
BCS12572	17.71	.085	1.22	5.11	4.03	.90	.18	5.53	.21	60.71	.02	.94
BCS12573	17.20	.057	2.92	4.05	2.82	.61	.13	4.90	.24	61.53	.04	.91
BCS12574	16.62	.075	2.56	3.61	3.27	.53	.11	4.14	.25	64.17	.03	.73
BCS12575	14.98	.035	14.94	7.10	1.69	4.54	.32	2.61	.24	42.63	.04	1.11
HANDSAMPLE386	17.89	.060	4.00	8.29	2.94	4.42	.29	5.33	.45	47.53	.02	1.31
H.S.33+34LC	8.40	.076	1.94	3.20	1.57	.50	.14	1.86	.18	78.73	.04	.42
12526	17.88	.110	4.14	8.51	2.86	4.30	.30	5.13	.43	47.66	.02	1.32

COMPANY: MINNOVA INC.
PROJECT NO: 328
ATTENTION: G.EVANS/I.PIRIE

MIN-EN LABS ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM *

FILE NO: 8-2012R/P3+4
DATE:NOVEMBER 16, 1988

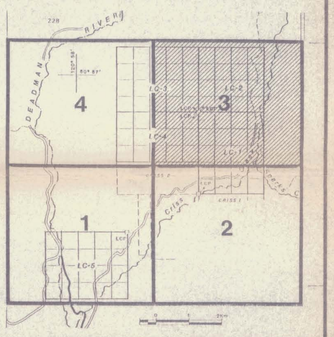
(VALUES IN PPM)	AG	AS	BA	CU	PB	SB	ZN	AU-PPB	HG-PPB
BCS12544	.2	12	93	13	15	2	49	5	190
BCS12545	.4	7	269	27	19	5	59	15	1975
BCS12546	.5	6	117	10	13	2	81	5	40
BCS12547	.4	3	83	11	25	6	70	5	50
BCS12548	.4	15	205	11	25	1	70	5	100
BCS12549	.4	6	241	30	16	1	45	10	1375
BCS12550	2.4	11	63	30	17	5	11	5	150
BCS12551	.8	12	275	7	15	1	18	5	130
BCS12552	1.7	10	242	12	19	3	11	5	320
BCS12553	.5	9	45	7	16	3	31	5	405
BCS12554	.6	5	82	8	15	2	19	5	45
BCS12555	1.2	14	212	22	21	3	22	10	1345
BCS12556	.6	10	1	18	7	1	21	5	1040
BCS12557	.5	52	614	8	21	2	44	5	2125
BCS12558	.2	10	209	10	20	1	49	15	425
BCS12559	.5	15	497	25	17	1	57	5	385
BCS12560	.7	3	940	25	20	1	81	5	1835
BCS12561	.6	14	50	56	13	1	54	10	375
BCS12562	.5	6	196	8	17	2	55	5	85
BCS12563	.5	10	72	7	7	2	69	5	2000
BCS12564	.4	11	88	7	23	2	54	5	140
BCS12565	1.9	10	109	53	15	2	16	5	35
BCS12566	.9	4	36	115	8	6	54	10	25
BCS12567	.9	6	20	128	14	1	58	15	75
BCS12568	1.4	4	144	14	16	1	64	5	25
BCS12569	.8	10	62	28	14	1	65	5	5
BCS12570	1.1	14	183	14	17	1	67	5	5
BCS12571	.8	6	47	8	20	1	26	5	25
BCS12572	1.0	11	49	9	20	1	73	5	55
BCS12573	1.3	8	71	13	20	1	37	10	200
BCS12574	1.5	7	90	13	18	2	19	5	120
BCS12575	1.1	3	21	96	16	3	31	5	95
HAND SAMPLE386	.7	20	239	104	14	6	57	5	50
H.S.33+34LC	1.6	8	86	29	18	1	30	10	40
12526	.4	21	230	100	22	5	59	20	55

(VALUES IN %)	ZR	S	TOT(%)
BCS12544	.005	.03	96.25
BCS12545	.005	.04	91.79
BCS12546	.005	.01	95.44
BCS12547	.005	.02	95.40
BCS12548	.005	.02	95.15
BCS12549	.005	.05	93.92
BCS12550	.005	.01	95.59
BCS12551	.006	.01	95.33
BCS12552	.005	.06	96.71
BCS12553	.005	.02	96.78
BCS12554	.005	.04	94.96
BCS12555	.005	.01	95.88
BCS12556	.005	.07	66.23
BCS12557	.005	.05	97.40
BCS12558	.005	.02	97.10
BCS12559	.005	.02	97.30
BCS12560	.006	.09	93.64
BCS12561	.005	.03	90.25
BCS12562	.025	.02	91.75
BCS12563	.010	.01	87.36
BCS12564	.011	.05	94.30
BCS12565	.005	.06	96.99
BCS12566	.007	.04	92.48
BCS12567	.007	.04	72.22
BCS12568	.005	.02	94.84
BCS12569	.005	.03	95.20
BCS12570	.005	.01	95.57
BCS12571	.005	.02	86.44
BCS12572	.024	.01	96.69
BCS12573	.023	.01	95.45
BCS12574	.016	.01	96.12
BCS12575	.005	.02	90.24
HANDSAMPLE386	.008	.04	92.57
H.S.33+34LC	.005	.03	97.09
12526	.007	.02	92.70

LAST CHANCE GEOLOGICAL LEGEND

5C	Miocene or Younger	Alteration (Carbonate +/-Hematite +/- Silicification
5B		Alkaline Felsic Dykes
5A		Pyroxene Basalt Dykes
4D	Miocene	Sandstone with Basalt Flows
4C		Chert Pebble Conglomerate
4B		Plateau Basalt Flows
4A		Olivine Basalt Breccia Pipe
3C	Eocene Kamloops Group	Sediments (Siltstone, Argillite)
3B		Basalt Trachyte Flows
3A		Basalt Trachytic Lahars
2	Mesozoic(?)	Intrusive Dykes
1B	Triassic Nicola	Sediments (Tuff, Argillite, Limestone)
1A		Volcanics (Pyroxene Rich Flows and Flow Breccias)

- Major Faults
- Bedding
- Vein Attitude
- Foliation
- Fracture
- Road



MINNOVA Inc.

LAST CHANCE PROPERTY

GEOLOGY

ROCK SAMPLE LOCATIONS

0 100 200 300 400 500m

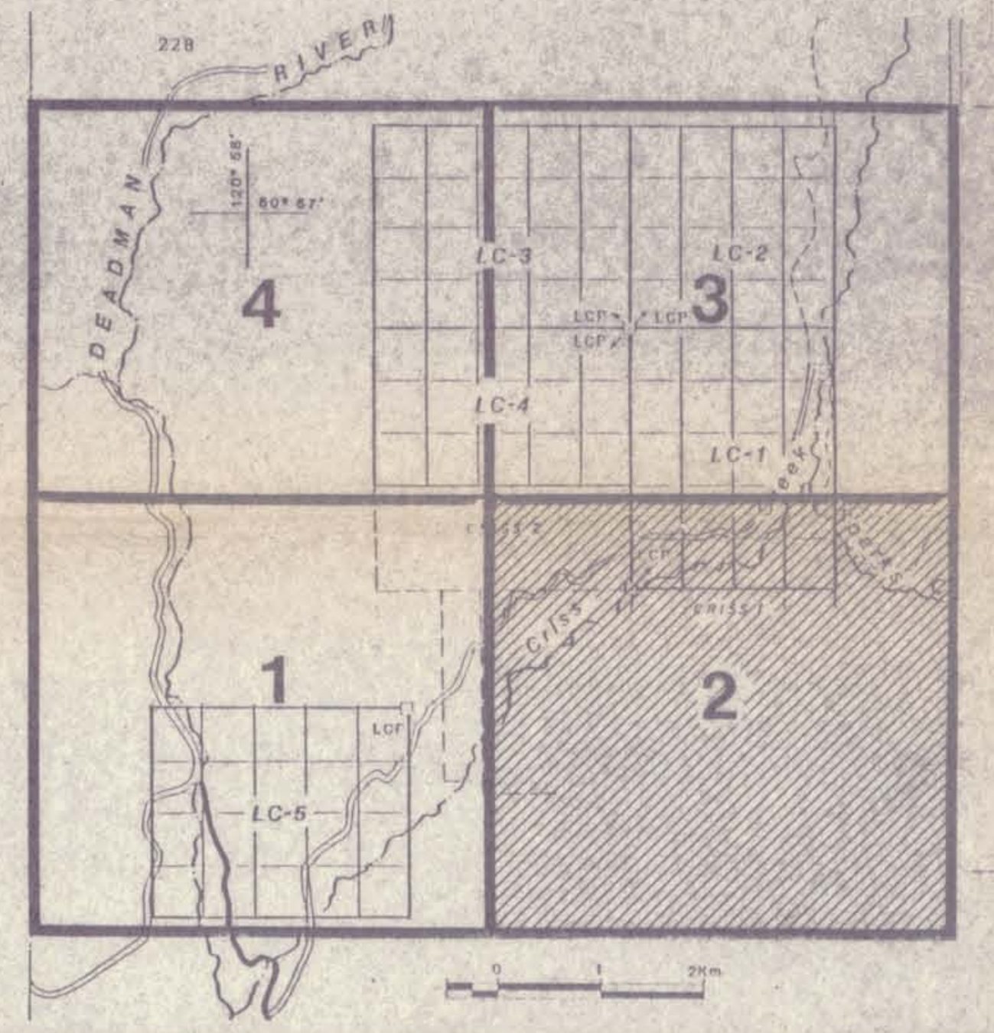
SCALE: 1:5000

	REVISED: FEBR., 1989	FIG. NO.:
DRAWN BY: CB/dm		
DATE: MAY 1987	N.T.S. 92I/15	

LAST CHANCE GEOLOGICAL LEGEND

5C	Miocene or Younger	Alteration (Carbonate +/-Hematite +/- Silicification
5B		Alkaline Felsic Dykes
5A		Pyroxene Basalt Dykes
4D	Miocene	Sandstone with Basalt Flows
4C		Chert Pebble Conglomerate
4B		Plateau Basalt Flows
4A		Olivine Basalt Breccia Pipe
3C	Eocene Kamloops Group	Sediments (Siltstone, Argillite)
3B		Basalt Trachyte Flows
3A		Basalt Trachytic Lahars
2	Mesozoic(?)	Intrusive Dykes
1B	Triassic Nicola	Sediments (Tuff, Argillite, Limestone)
1A		Volcanics (Pyroxene Rich Flows and Flow Breccias)

Major Faults
Bedding
Vein Attitude
Foliation
Fracture
Road



MINNOVA Inc.

LAST CHANCE PROPERTY

GEOLOGY

ROCK SAMPLE LOCATIONS

0 100 200 300 400 500m

SCALE: 1:5000

	REVISED:FEBR. ,1989	FIG. NO.:
DRAWN BY: CB/dm		
DATE: MAY 1987	N.T.S. 92I/15	

DEADMAN RIVER

Barricade Creek

Silverspring Creek

5C

Heavy carb. alt.

12 529

12 525

BCS 12 522
carb. alt., 20% calcite veinlets.

1A

12 527
flow Bx. & Lmst.

POND

12 530

12 531, carb. + chalc. vein

5C

12 532, flow Bx. & Lmst.

12556, & Lmst., wk. silic. (fossils)

1A

5C

BCS 12533/34, carb. alt. + silic., very strong.

1B

BCS 12535, carb. alt.

4B

Basalt float

Basalt float

12 536

12 537

4B

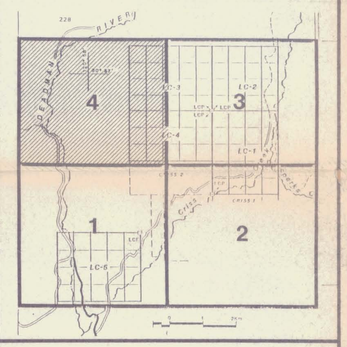
12 554

12 553

LAST CHANCE GEOLOGICAL LEGEND

5C	Miocene or Younger	Alteration (Carbonate +/-Hematite +/- Silicification
5B		Alkaline Felsic Dykes
5A		Pyroxene Basalt Dykes
4D	Miocene	Sandstone with Basalt Flows
4C		Chert Pebble Conglomerate
4B		Plateau Basalt Flows
4A		Olivine Basalt Breccia Pipe
3C	Eocene Kamloops Group	Sediments (Siltstone, Argillite)
3B		Basalt Trachyte Flows
3A		Basalt Trachytic Lahars
2	Mesozoic(?)	Intrusive Dykes
1B	Triassic Nicola	Sediments (Tuff, Argillite, Limestone)
1A		Volcanics (Pyroxene Rich Flows and Flow Breccias)

Major Faults
Bedding
Vein Attitude
Foliation
Fracture
Road



MINNOVA Inc.

LAST CHANCE PROPERTY

GEOLOGY

ROCK SAMPLE LOCATIONS

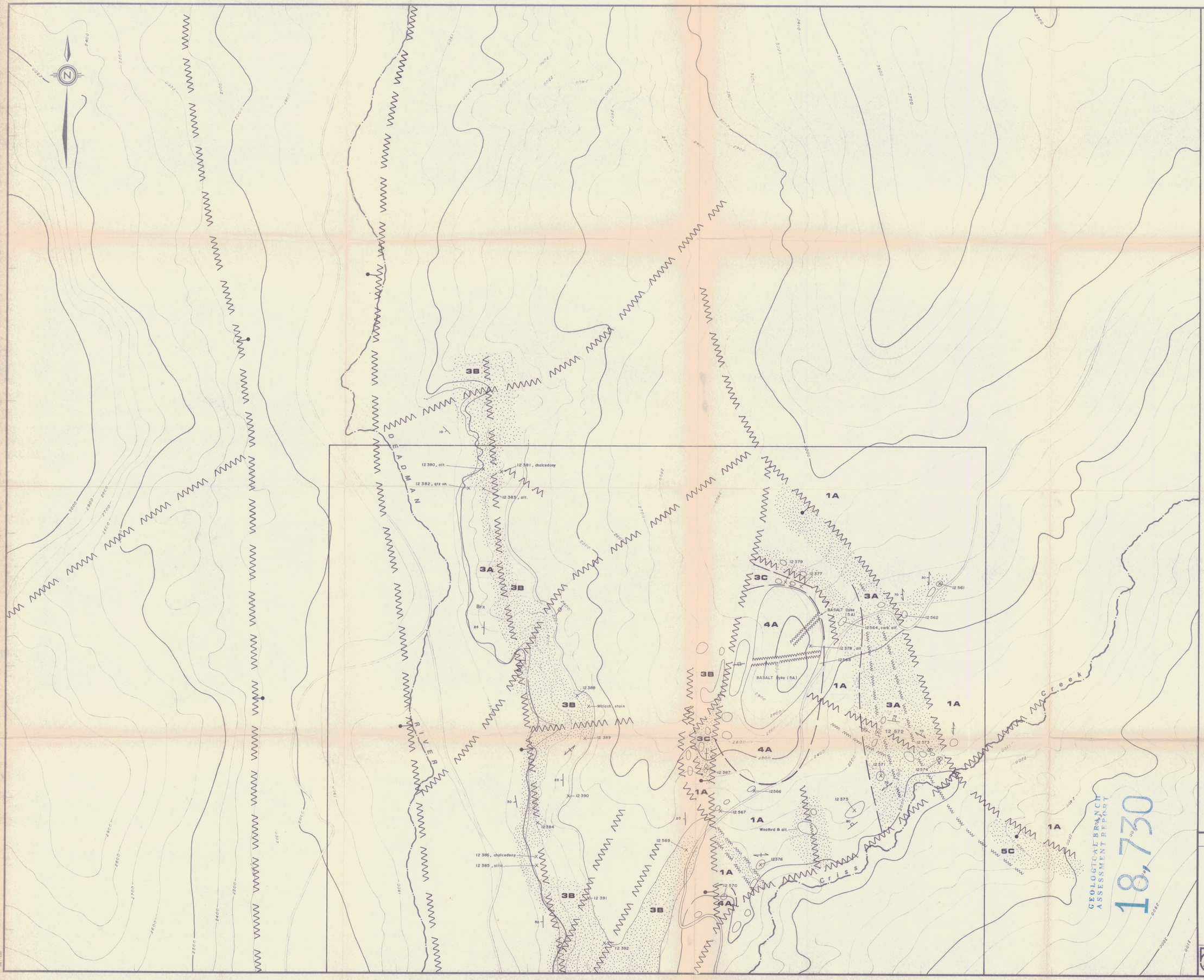
0 100 200 300 400 500m

SCALE: 1:5000

		REVISED: FEBR., 1989	FIG. NO.:
DRAWN BY: CB/dm			
DATE: MAY 1987	N.T.S.	92I/15	

GEOLOGICAL BRANCH ASSESSMENT REPORT

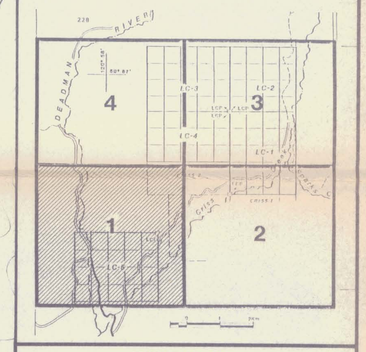
18,730



LAST CHANCE GEOLOGICAL LEGEND

5C	Miocene or Younger	Alteration (Carbonate +/-Hematite +/- Silicification
5B		Alkaline Felsic Dykes
5A		Pyroxene Basalt Dykes
4D		Sandstone with Basalt Flows
4C	Miocene	Chert Pebble Conglomerate
4B		Plateau Basalt Flows
4A		Olivine Basalt Breccia Pipe
3C		Sediments (Siltstone, Argillite)
3B	Eocene Kamloops Group	Basalt Trachyte Flows
3A		Basalt Trachytic Lahars
2	Mesozoic(?)	Intrusive Dykes
1B	Triassic Nicola	Sediments (Tuff, Argillite, Limestone)
1A		Volcanics (Pyroxene Rich Flows and Flow Breccias)

- Major Faults
- Bedding
- Vein Attitude
- Foliation
- Fracture
- Road



MINNOVA Inc.

LAST CHANCE PROPERTY

GEOLOGY

ROCK SAMPLE LOCATIONS

0 100 200 300 400 500m

SCALE: 1:5000

		REVISED: FEB., 1989	FIG. NO.:
	DRAWN BY: CB/dm		
	DATE: MAY 1987	N.T.S. 92I/15	