

LOG NO: 1006	RD.
ACTION:	
FILE NO:	

1989 ASSESSMENT REPORT

- on a -

DIAMOND DRILLING PROGRAM

- on the -

DES CLAIM GROUP

KAMLOOPS & NICOLA MINING DIVISION

NTS 92 I/7E

Latitude: 50⁰ 25' N
Longitude: 12⁰ 39' W

FILMED

Owned and Operated by:

CHARLES BOITARD

H. Kim, P.Geol., F.GAC
Consulting Geologist

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

SEPTEMBER 12, 1989
VANCOUVER, B.C.

19,140

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1989 ASSESSMENT REPORT
ON A
DIAMOND DRILLING PROGRAM
ON THE
DES CLAIM GROUP

INTRODUCTION:

A diamond drilling program consisting of seven holes totalling 2046.60 m. was completed on the Des Claim Group during the period from January to May 1989.

The purpose of drilling was to drill the I.P. Anomaly to locate sulphides which could be associated with sulphides of economic value.

Information for this report was obtained from pertinent publications as cited under bibliography and from the writer's actual core logging on site. The lithologic nomenclature on core logging was based on the writer's macroscopical and megascopical examination of the cores with reference to the petrographical analysis of the six core samples by Jeff Harris, Ph.D.

Appendix 1 for this report represents only summary of drill logs for holes of Des 89-1 through 89-7, derived from the initial detail core logs

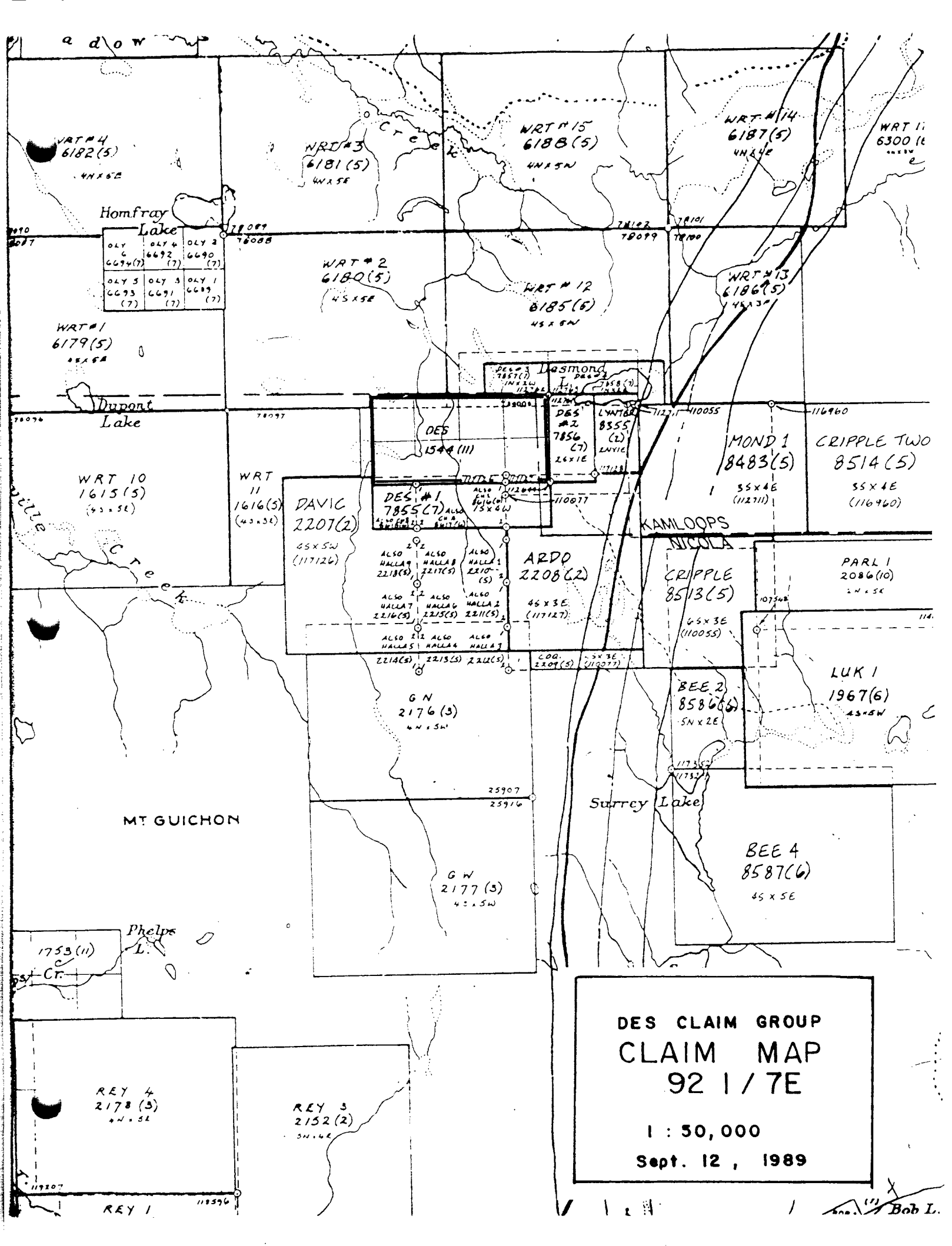
PROPERTY:

The Des property consists of 18 units staked under the modified grid system (Figure 2). The claim particulars are as follows:

NAME	RECORD NO.	UNITS	EXPIRY DATE
DES	1544	8	1991
DES #1	7855	4	1993
DES #2	7856	2	1993
DES #3	7857	2	1993
DES #4	7858	2	1993

Assessment work will also be applied to the following claims contiguous with the DES Claims, and owned by Victor Doucet of Kamloops, British Columbia:

DAVIC	2207	20	1990
ARDO	2208	12	1990
LYNTER	8355	2	1990



Homfray Lake

OLY 6 6694(7)	OLY 4 6692 (7)	OLY 2 6690 (7)
OLY 3 6693 (7)	OLY 5 6691 (7)	OLY 1 6689 (7)

DES #1 7855(7) ALSO 75X6W

ALSO HALLA 9 2218(S) ALSO HALLA 7 2216(S) ALSO HALLA 5 2214(S)

ALSO HALLA 8 2217(S) ALSO HALLA 6 2215(S) ALSO HALLA 4 2213(S)

ALSO HALLA 1 2210(S) ALSO HALLA 2 2211(S) ALSO HALLA 3 2212(S)

ALSO HALLA 10 2219(S) ALSO HALLA 11 2218(S) ALSO HALLA 12 2217(S)

ALSO HALLA 13 2216(S) ALSO HALLA 14 2215(S) ALSO HALLA 15 2214(S)

ALSO HALLA 16 2213(S) ALSO HALLA 17 2212(S) ALSO HALLA 18 2211(S)

ALSO HALLA 19 2210(S) ALSO HALLA 20 2209(S)

**DES CLAIM GROUP
CLAIM MAP
92 1 / 7E**

1 : 50,000
Sept. 12 , 1989

Bob L.

LOCATION & ACCESS:

The Des property is located 40 km southwest of Kamloops, B.C. Access to the property is conveniently provided by Coquihalla Highway, Lac La Jeuna Road, 14 kilometers east of Logan Lake and by many secondary roads leading to Surrey Lake.

The Highland Valley orebodies are located approximately 28 kilometers to the west - northwest.

PHYSIOGRAPHY:

The property is situated in rolling wooded terrain at an elevation of approximately 1,350 metres in the Highland valley area of Thompson Plateau.

The surface area of the property for the most part is covered by overburden, till materials and vegetation. Due to lack of surface exposure, it is difficult to decipher the subjacent geology.

The vegetation is characterized by pockets of fir in mature stands of lodgepole pine. Ground cover is generally light with numerous areas of very heavy deadfall. The area is drained by several small northerly flowing creeks which should provide sufficient water for exploration work. The climate is semi-arid with an average rainfall of 25 cm. annually.

HISTORY OF PREVIOUS WORK:

The exploration history of the Des claims is chronologically summarized in the following:

- 1972: Geochemical reconnaissance, Des 1 - 98;
By C.A.R. Lammle (Assessment Report)
- 1976: Geological reconnaissance, Desmond Lake property;
By L. Sookochoff, P.Eng.
- 1977: I.P. and resistivity survey on two lines at the
southeastern sector of the Des claim by Glen White.
- 1980: A combined magnetic and VLF-EM survey was carried out by
David Mark on the Des Claim. Northerly and northwesterly
trend of VLF-EM anomalies were indicated, compounded by
correlative magnetic highs.
- 1981: A total of 2.8 linear kilometres of I.P. survey was
completed by D.R. MacQuarrie, on a portion of the western



Scale 1:125,000 or 1 Inch to 2 Miles approximately



Scale of Kilometres



Magnetic Declination approximately 23°00' East at centre of sheet, 1972
Decreasing approximately 2' 48" annually.

Mr. Charles Boitard - DES CLAIM

NTS 92I/7E

LOCATION MAP

FIG. 1

September 12, 1989

sector of the Des claims. A northerly to northwesterly striking I.P. anomaly was indicated.

1984: A total of 1.4 linear km of I.P. survey by D.R. MacQuarrie. The 1981 I.P. anomalous zone has been extended an additional 200 m to the north.

1987: A total of 3 linear km of I.P. survey by J.P. La Rue.

This survey indicated additional 200 meters north-northwest trending I.P. anomaly extended northerly from the previously defined limits of the 1981 and 1984 surveys.

GEOLOGY:

The regional geology is described by L. Sookchoff, P.Eng. (1976). The Geology is stated as follows:

"The property is located within a north-south trending zone of the Nicola Group of Upper Triassic sediments and volcanics, forming an arcuate band up to 25 miles wide and stretching from Princeton in the south, through Merritt and beyond Kamloops Lake. Peripheral rocks are predominantly intrusives along with Cretaceous and younger sediments and volcanics. Stocks and plugs of intrusives are occasionally evident throughout the Nicola rocks."

FIGURE 3 is the writer's interpretive bedrock geology of the claims based on core logging of the seven holes drilled spacing 100 - 200 meters apart. The geological contact between the basalt and andesite and fault zone are ill-defined.

The cored rock types for the most part are variants of a basaltic lithotype dominated by fresh augite phenocrysts. Chloritization and hemato-ankeritization are common on the groundmass and phenocrysts throughout the region. The second common rock type is trachyandesitic rock confined to the northeastern sector of Figure 3. The third would be serpentized basalt to trachybasalt and serpentinite.

Bleaching including kaolinization and argillization commonly occurs in andesitic rock types.

Serpentinization occurs commonly in the basaltic rock at depth, about 200 metres below the surface.

MINERALIZATION:

The presence of a native copper bearing basalt (reportedly up to 2%) was confirmed in the field by the writer at Holes Des 89-2, 89-6 and 89-7.

In January 1989, a massive sulphide showing was exposed during the course of building drill access roads 50 meters southeast of Hole Des 89-1. The showing consisted mainly of chalcopyrite and bornite in the gangue of quartz carbonate materials.

1989 DIAMOND DRILL PROGRAM:

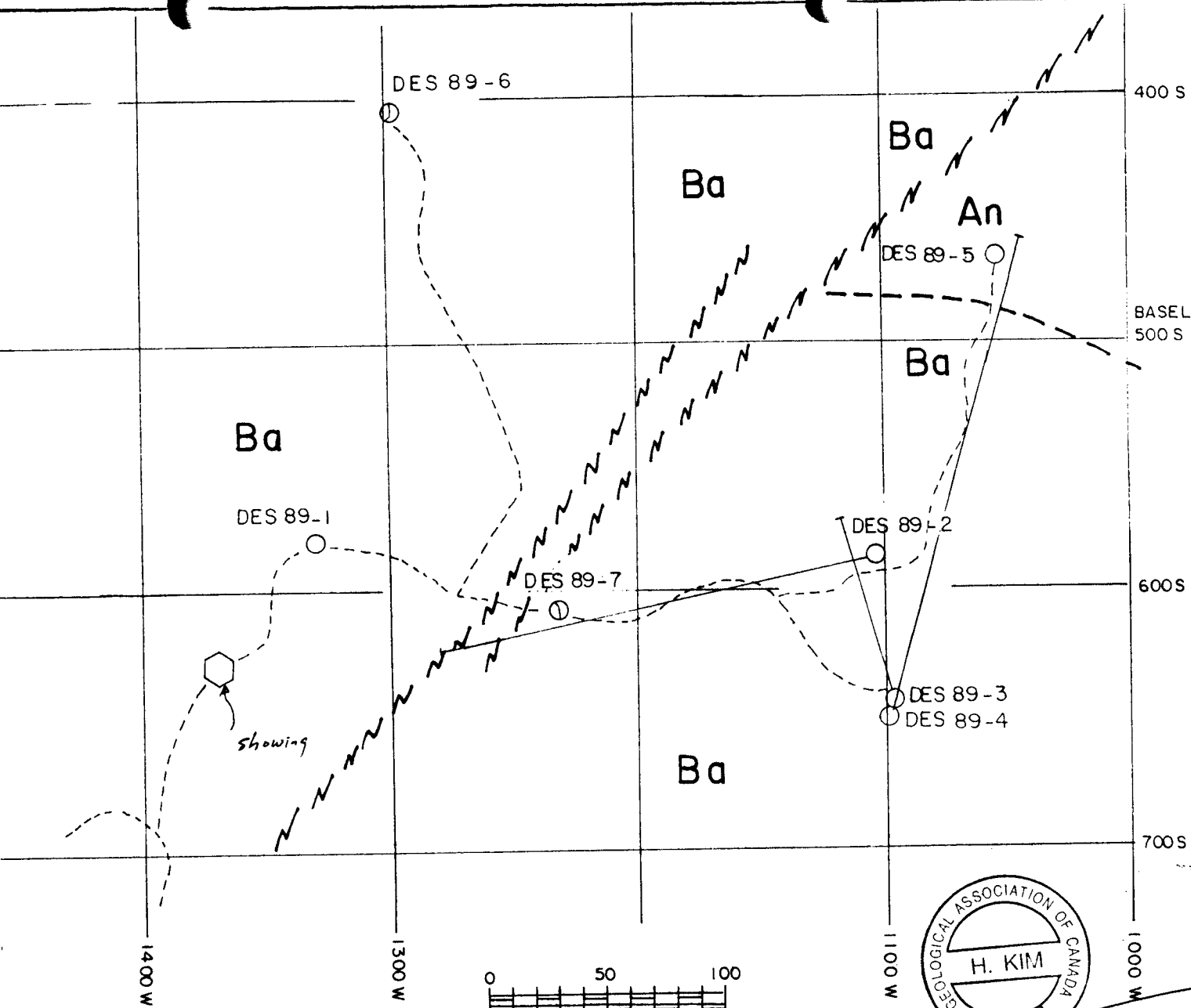
The 1989 diamond drill program on the Des property consisted of seven holes in NQ, BQ and/or AQ drill size diameter. The total footage was 2046.60 meters. Summarized drill logs are shown in Appendix I.

The drill particulars are as follows:

HOLE NO.	AZIMUTH	DIP	DRILL LENGTH (Meters)
DES 89-1		-90 ⁰	182.92
DES 89-2	260 ⁰	-60 ⁰	363.71
DES 89-3	345 ⁰	-45 ⁰	108.53
DES 89-4	15 ⁰	-45 ⁰	289.93
DES 89-5		-90 ⁰	279.08
DES 89-6		-90 ⁰	230.18
DES 89-7		-90 ⁰	297.25
TOTAL			2046.60

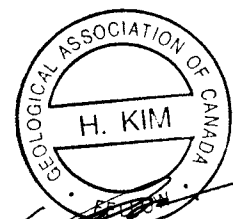
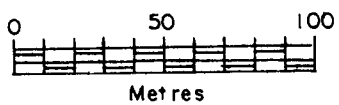
CONCLUSIONS & RECOMMENDATIONS:

Based on the macroscopical, megascopical and microscopical examinations of the drill cores for Holes Des 89-1 through Des 8-7, the drill tested area is mainly underlain by variants of basaltic lithotype. A portion of the northeastern sector of the drill tested area (Fig. 3) appears to be underlain by andesite to trachyandesite. As common with regional metamorphic effects in the Nicola volcanics, chloritization, epidotization and hematankeritization are evident in the area of question. Scapolitization occurs commonly in the basaltic rock at depth, about 150 meters below the surface. Bleaching, kaolinization and argillization plus mylonitized shear zones in places present moderate sulphide mineralization, but its auriferous content would not be significant to date. However, a native copper bearing basalt near the surface remains to be investigated for its economic viability. An ill-defined northeasterly structure in Figure 3 should be tested by short northwestward diamond holes.



LEGEND

- Ba BASALT TO TRACHYBASALT
- An ANDESITE TO TRACHYANDESITE
- FAULT-SHEAR ZONE
- DES 89-2 DRILL HOLE
- GEOLOGICAL CONTACT
- DRILL ACCESS ROAD



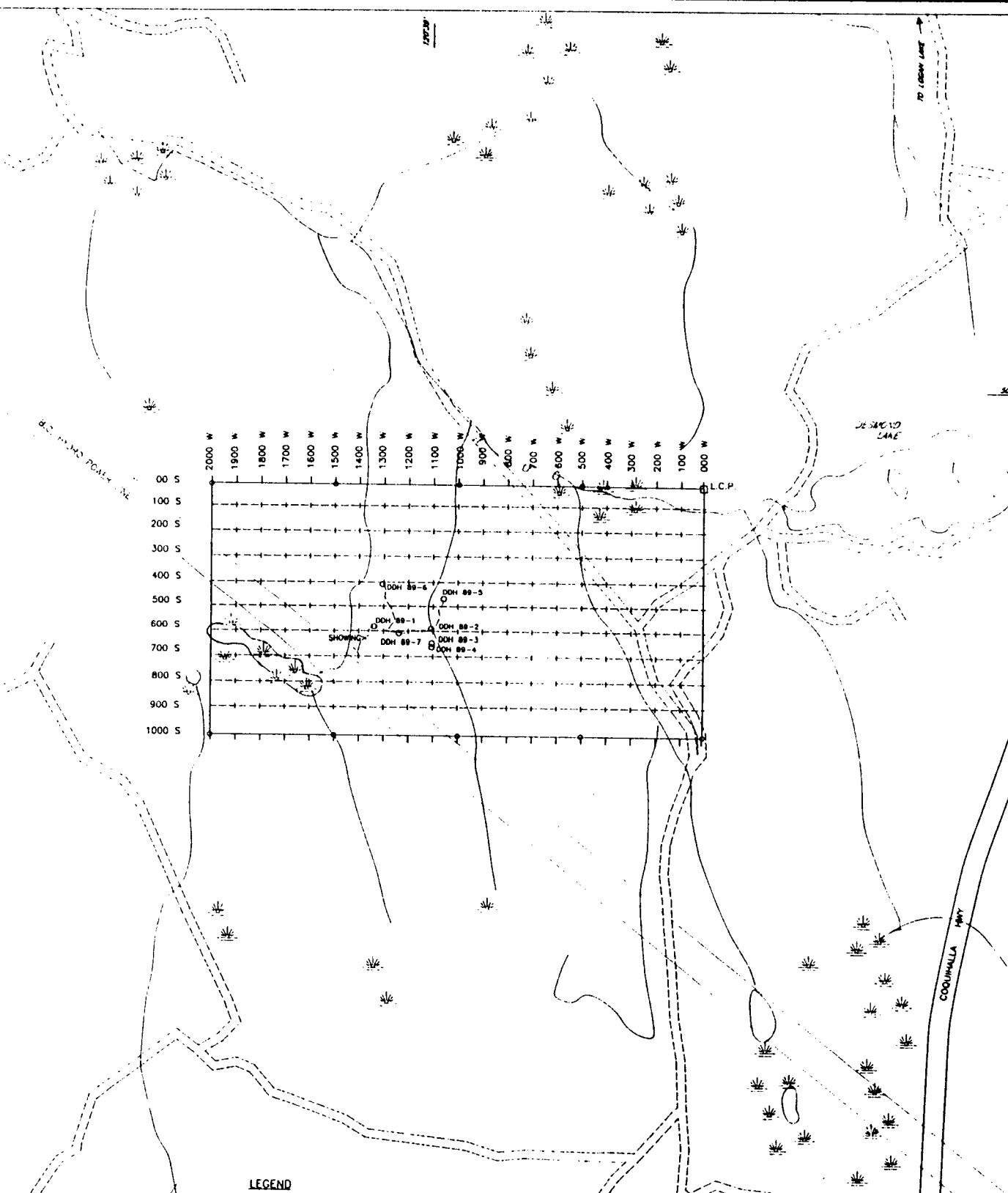
DES CLAIM GROUP
Nicola & Kamloops M. D.
BEDROCK GEOLOGY &
DRILL LOCATION PLAN

To accompany an assessment report
 by H. Kim, P. Geol., P.E., F.G.A.C.






September 12, 1989

Fig. 3

Drawn by H.K



LEGEND

-  SWAMP
-  ROAD
-  DRILL ACCES ROAD
-  CREEK
-  DRILL HOLE

DES PROPERTY
KAMLOOPS M.D.

SURVEY LOCATION

SCALE	DATE	M.T.S.	DRAWN BY:
AS SHOWN	FEB 80	ML/7K	GEO-COMP
			FIGURE 4

The former surveys on the eastern portion of the property should be utilized to full advantage in further exploration. This should be done to correlate future data with former results in order to establish area of correlative significance.

STATEMENT OF COSTS:

The costs incurred on the 1989 Diamond Drill program on Des Claim Group in Nicola and Kamloops Mining Division are as follows:

Diamond drilling, 2046.60 meters (NQ, BQ, and AQ)	\$ 127,286.65
Consulting geologist	3,000.00
Drafting	50.00
Wordprocessing	549.50
Report	<u>300.00</u>
TOTAL	\$ 130,986.15

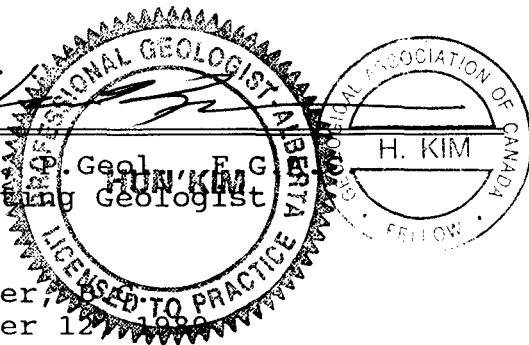
CERTIFICATE

I, Hun Kim, with a business address in the city of Vancouver, B.C., do hereby certify that:

1. I am a consulting geologist and registered in the Geological Association of Canada (Registration # F1309).
2. I am a registered, licensed member, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists in the Province of Alberta (Registration # 5848).
3. I am a graduate of Seoul University (1958) holding a B.Sc. degree in Geology and completed one year of post graduate studies for a Master of Science degree (1960).
4. I have practiced my profession for 16 years in Canada, and for 7 years in foreign countries per U.S. Agency of International Development overseas project for the U.N. and assessed about 200 different metallic and non-metallic mines and properties including 104 precious metal deposits.
5. This report is based on the writer's actual core logging on site on the Des property, May, 1989, plus available maps and reports from government and private sources on the region.

H. Kim, P. Geol. E. G.
Consulting Geologist

Vancouver, B.C.
September 12, 1989



BIBLIOGRAPHY

- Lammle, C.A.R. (1972) Geochemcial Report on Des 1-98 Mineral Claims. B.C. Dept. Mines Assessment Report
- Sookochoff, L (1976) Geological Report on the Desmond Lake Property. Oct. 12, 1976. Private Report
- White, G. (1977) I.P. and Resistivity Test Profiles Plates 1 to 4. Private Report 5/6/77
- Mark, D.G. (1980) Geophysical Report on VLF-EM and MAG. Surveys, Des Claim. April 29, 1980
- MacQuarrie, D.R. (1981) I.P. and Resistivity Survey Report, Des Claim. December 15, 1981
- MacQuarrie, D.R. (1984) Geophysical Report on I.P. Survey, Des Claim. October 15, 1984
- La Rue, John P.(1987) Assessment Report on Geophysical Survey

APPENDIX 1

DRILL CORE LOGS, DES 89-1 through 89-7

All drill cores are placed in wooden boxes and stored in core racks, nearby the respective drill hole collars.

H. Kim, P. Geol.
 DRILL LOG

Hole No. DES 89-1
 Page 1 of 1

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola & Kamloops Mining Division

DATE LOGGED
 May 27, 1989

AZIMUTH _____ DIP ^{90°} _____ ELEVATION _____ TOTAL DEPTH 182.92 meters

COORDINATES OF HOLE COLLAR;
 OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
 NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	2.13	Casing			
2.13	182.92	BASALT Porphyritic; pinkish grey to grey coloured; aphanitic to fined grained rock with crowd- ed yellow and pale green flakes of sesame size, which are phenocrystic augite and altered olivine. The groundmass is meg- ascopically and petrographically very fine-grained plagioclase, as an ill- defined aggregate of microlites. Strong intact core; hardness of the rock would be 3 ⁰ . No conspicuous sulphides seen except quartz carbonates with epidote patches at 52.13 m. End of hole			

H. Kim, P. Geol.
DRILL LOG

Hole NODES 89-2

Page 1 of 2

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola and Kamloops Mining Division

DATE LOGGED
May 26, 1989

AZIMUTH 260° DIP -60° ELEVATION _____ TOTAL DEPTH 363.71 meters

COORDINATES OF HOLE COLLAR;
OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	10.97	CASING			
10.97	189.93	BASALT TO TRACHYBASALT Light grey, grey, pinkish grey and greenish coloured; aphanitic; crowded yellow olive and augite phenocrysts make up 50% to 70% of the rock. The overall section is moderately hematized. Also, serpentized with quartz-carbonate veining throughout the section.	56676 56677	(11.28 (13.50 (16.61 (20.27 (21.34 (23.26 (24.84	11.37 13.81 16.76 20.42 21.95 23.32 25.00
		*Native copper flakes occur conspicuously at 47.86 - 47.47 m.	56678	(47.56 (49.08	47.86 49.39
189.93	200	ANDESITE Aphanitic; light green; scattered elongated phenocrysts feldspars and chlorites, up to 2mm makeup about 20% of the rock. Locally serpentized.	56703	193.90	196.03
200	220.12	BASALT TO BASALT PORPHYRY Schistose and serpentized at 213.71-219.20 m.	56704 56705	208.23 215.24	209.75 216.76
220.12	220.73	ANDESITE Similar to previous section			
220.73	226.06	QUARTZ VEIN			
226.06	239.32	SERPENTINITE Weakly schistose 50° to core axis.			
239.32	242.37	ANDESITE As previously			
242.37	270.42	TRACHYBASALT Phenocrystic dark green pyroxene and pseudo hematite 1-2mm and scattered bright green rounder specks 2mm in a light green aphanitic groundmass; 'salt and pepper' texture.			

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-2

Page 2 of 2

Company MENIKA MINING LTD. (N.P.L.)

Property DES, Nicola and Kamloops Mining Division

From	To	DESCRIPTION	Sample No.	From	To
270.42	345.12	SERPENTINITE As previously			
345.12	350.76	TRACHYBASALT As previously			
350.76	353.81	BASALT PORPHYRY Similar to previous section			
353.81	358.07	SERPENTINITE	56706	357.01	357.62
358.07	363.71	BASALT Amygdaloidal; porphyritic			
		End of hole			

H. Kim, P. Geol.
 DRILL LOG

Hole No. DES 89-3
 Page 1 of 1

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola and Kamloops Nining Division

DATE LOGGED

May 28, 1989

AZIMUTH 345° DIP -45° ELEVATION _____ TOTAL DEPTH 108.53 meters

COORDINATES OF HOLE COLLAR;
 OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
 NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	7.92	CASING			
7.92	108.53	BASALT Aphanitic to fine-grained, pinkish grey and brown coloured; porphyritic; locally saprolitized and hematized. End of hole.			

H. Kim, P. Geol.
 DRILL LOG

Hole No. DES 89-4
 Page 1 of 1

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola and Kamloops Mining Division

DATE LOGGED
 May 28, 1989

AZIMUTH 15° DIP -45° ELEVATION _____ TOTAL DEPTH 289.93 meters

COORDINATES OF HOLE COLLAR;
 OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
 NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	4.27	CASING			
4.27	124.39	BASALT Porphyritic; aphanitic to fine-grained, pinkish grey and brown coloured; locally hemato-ankeritized and serpentized.			
124.39	145.73	ANDESITE TO TRACHYANDESITE Aphanitic; light green coloured Flow layers and upper contact with basalt are well defined to be 40° to core axis. *Faults at 137.80m and 143.59m. The lower contact is sharp 18° to core axis.			
145.73	153.66	GREEN SCHIST Light green; porphyritic; banded epidote quartz carbonate 40° to core axis.			
153.66	159.45	BLEACHED ZONE			
159.45	161.28	ANDESITE TO TRACHYANDESITE			
161.28	166.31	BLEACHED ZONE			
166.31	186.59	ANDESITE TO TRACHYANDESITE			
186.59	200.30	BLEACHED ZONE			
200.30	289.93	TRACHYANDESITE Mixed fresh and altered rocks, epidotized, chloritized, serpentized and argillized. End of hole.			

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-7

Page 2 of 4

Company MENIKA MINING LTD. (N.P.L.)

Property DES, Nicola and Kamloops Mining Division

From	To	DESCRIPTION	Sample No.	From	To
100.91	103.65	MUDSTONE Light green, volcanic			
103.65	115.54	LITHIC SANDSTONE As previously			
115.54	126.52	PORPHYRITIC BASALT Crowded white, fresh euhedral phenocrystic feldspar 1-3mm in an aphanitic pinkish grey groundmass not hematized.			
126.52	126.82	MUDSTONE Light green			
126.82	128.81	BASALT Aphanitic, pinkish brown			
128.81	129.57	QUARTZ-CARBONATE BRECCIA 1. Angular quartz-carbonate, fragments up to 3cm. in a pinkish fine arenite matrix. 2. Pink mudstone and arenite fragments in a quartz-carbonate			
129.57	130.48	BASALT Aphanitic to fine grained, pinkish brown			
130.48	134.14	QUARTZ CARBONATE BRECCIA Hosted by pinkish, green brown volcanic mudstone. Highly saprolitized.			
134.14	135.51	PORPHYRITIC BASALT As previously			
135.51	136.43	LITHIC SANDSTONE	56658	135.51	136.43
136.43	138.26	QUARTZ CARBONATE BRECCIA, ZONE WITH SULPHIDES Quartz-Carb. breccia hosted by green pink, bleached or fresh aphanitic rock or cherty rock. Moderately to heavily disseminated mainly by pyrite.	56659 56660 56661	136.43 136.73 136.98	136.73 136.98 137.65
138.26	174.17	MIXED BASALT, PORPHYRITIC BASALT AND TRACHYBASALT Similar to previous sections, weak to strong hematization in places. Moderately magnetic. Epidote patches and streaks throughout.	56663	138.26	139.48

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-5
Page 1 of 1

MENIKA MINING LTD. (N.P.L.)

COMPANY

PROPERTY DES, Nicola and Kamloops, Mining Divisions

DATE LOGGED
May 29, 1989

AZIMUTH _____ DIP -90° ELEVATION _____ TOTAL DEPTH 574.08 meters

COORDINATES OF HOLE COLLAR:
OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
NOS.

Meters

Meters

From	To	DESCRIPTION	Sample No.	From	To
0	3.66	CASING			
3.66	68.60	ANDESITE TO TRACHYANDESITE Light green, aphanitic; sparsely scattered euhedral feldspar and chlorite specks, micro-crystallites less than 1mm in a light green aphanitic groundmass; moderately epidotized throughout the section; locally disseminated by pyrite and pyrrhotite. Fault at 39.32m and 50.60m.			
68.60	128.35	BLEACHED - EPIDOTIZED ZONE	56710 56711	114.32 115.85	115.85 117.37
128.35	200	ANDESITE TO TRACHYANDESITE As previously			
200	210.06	BLEACHED - ARGILLIZED ZONE			
210.06	299.70	ANDESITE TO TRACHYANDESITE			
299.70	308.84	CHLORITE SCHIST Thinly foliated with chlorite layers; schistosity 40° to core axis			
308.84	321.64	ANDESITE			
321.64	327.74	CHLORITE SCHIST			
327.74	349.39	ANDESITE			
349.39	350.15	QUARTZ VEIN			
350.15	574.08	ANDESITE TO TRACHYANDESITE Fairly similar to previous section, locally bleached, koalinized and argillized. Also, moderately epidotized and chloritized in places. Quartz carbonates with pyrite dissemination at 371.34 - 563.41 m.	56712 56713	371.79 464.93	372.10 467.37
		End of hole			

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-6
Page 1 of 1

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola and Kamloops, Mining Divisions

DATE LOGGED

May 29, 1989

AZIMUTH _____ DIP -90° ELEVATION _____ TOTAL DEPTH 230.18

COORDINATES OF HOLE COLLAR:
OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	3.36	CASING			
3.36	47.26	BASALT Grey to pinkish brown coloured aphanitic to fine grained; euhedral/equant pyroxene phenos, pseudo yellow olive green augite and chlorite 1-2mm plus opaque felted minerals *Native copper disseminated throughout the section.			
47.26	78.96	LITHIC SANDSTONE Bedded; fine-grained; pinkish brown; lithic clusts, subrounded 0.1-0.5mm and micro mafic crystals present parallel laminar structures; petrographically it is classified as "a well sorted, volcanic arenite of basalt composition".			
78.96	85.37	BASALT Similar to previous section * Also native copper occurs throughout the section.			
85.37	88.41	BASALT PORPHYRY Crowded euhedral fresh feldspar phenos up to 3mm pseudo chlorite, anhedral and rounded quartz eyes 3mm in grey aphanitic groundmass. *Native copper flakes occurs in quartz eyes.			
88.41	98.78	BASALT Similar to above			
98.78	101.83	TRACHYANDESITE			
101.83	121.65	BASALT			
121.65	123.78	QUARTZ-CARBONATED			
123.78	230.18	MIXED BASALT AND BASALT PORPHYRY Locally hemato-ankeritized, no conspicuous sulphides noted. End of hole.			

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-7
Page 1 of 4

COMPANY MENIKA MINING LTD. (N.P.L.)

PROPERTY DES, Nicola nad Kamloops Mining Divisions

DATE LOGGED
May 24, 1989

AZIMUTH _____ DIP -90° ELEVATION _____ TOTAL DEPTH 297.25 meters

COORDINATES OF HOLE COLLAR;
OR SURVEYED LOCATION

DRILLER P. McDonald

SAMPLE
NOS.

Meters		DESCRIPTION	Sample No.	Meters	
From	To			From	To
0	0.91	CASING			
0.91	75.15	BASALT TO TRACHYBASALT Pinkish grey to brown, light green to greenish grey. Aphanitic, moderately strong intact core. Megascopically porphyritic. About 50% of euheral to subhedral phenocrystic augite, chlorite and olivine, secondary amphibole and serpentine in a pinkish brown aphanitic groundmass. About 10% of phenocrysts are psuedo morphed by hematite or serpentine. 36.58 - 39.17m, Highly chloritized/serpentinized, magnetic. 69.51 0 75.15m, Disseminated by dusty pyrite.	56651 56652 56654	21.64 (63.41 (64.63	22.56 63.71 64.93 73.17
75.15	94.96	LITHIC SANDSTONE Fine grained, pinkish brown, bedded magascopically and mascroscopically it looks "pinkish volcanic mudstone" or "siltstone". But it is microscopically defined as bedded tuff or <u>volcanic sandstone</u> . Lithic clusts subangular to subrounded 0.1-0.5mm and micro size mafic crystals show parallel, laminar structure. Petrographically the rock is classified as "a well sorted fine grained volcanic arenite" of basaltic or trachybasaltic composition. Numerous calcite veinlets in general 30° to core axis at 78.96-95.12m. Mud seam along fault 0° to core axis.			
94.96	99.23	BLEACHED-CARBONATED ZONE Pinkish red. Brecciated carbonates or quartz carbonates a soft soupy, pinkish grey aphanitic matrix.			
99.23	100.91	LITHIC SANDSTONE As previously			

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-7

Page 2 of 4

Company MENIKA MINING LTD. (N.P.L.)
Property DES, Nicola and Kamloops Mining Division

From	To	DESCRIPTION	Sample No.	From	To
100.91	103.65	MUDSTONE Light green, volcanic			
103.65	115.54	LITHIC SANDSTONE As previously			
115.54	126.52	PORPHYRITIC BASALT Crowded white, fresh euhedral phenocrystic feldspar 1-3mm in an aphanitic pinkish grey groundmass not hematized.			
126.52	126.82	MUDSTONE Light green			
126.82	128.81	BASALT Aphanitic, pinkish brown			
128.81	129.57	QUARTZ-CARBONATE BRECCIA 1. Angular quartz-carbonate, fragments up to 3cm. in a pinkish fine arenite matrix. 2. Pink mudstone and arenite fragments in a quartz-carbonate			
129.57	130.48	BASALT Aphanitic to fine grained, pinkish brown			
130.48	134.14	QUARTZ CARBONATE BRECCIA Hosted by pinkish, green brown volcanic mudstone. Highly saprolitized.			
134.14	135.51	PORPHYRITIC BASALT As previously			
135.51	136.43	LITHIC SANDSTONE	56658	135.51	136.43
136.43	138.26	QUARTZ CARBONATE BRECCIA, ZONE WITH SULPHIDES Quartz-Carb. breccia hosted by green pink, bleached or fresh aphanitic rock or cherty rock. Moderately to heavily disseminated mainly by pyrite.	56659 56660 56661	136.43 136.73 136.98	136.73 136.98 137.65
138.26	174.17	MIXED BASALT, PORPHYRITIC BASALT AND TRACHYBASALT Similar to previous sections, weak to strong hematization in places. Moderately magnetic. Epidote patches and streaks throughout.	56663	138.26	139.48

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-7

Page 3 of 4

MENIKA MINING LTD. (N.P.L.)

Company

Property

DES, Nicola and Kamloops Mining Division

From	To	DESCRIPTION	Sample No.	From	To
174.17	180.30	APHANITIC CHERTY ROCK Homogeneously light grey, silicified matrix of quartz latite or dacite composition. No mafics nor feldspar are noted, pink hematized streaks and stains occur throughout.			
180.30	197.40	TRACHYBASALT AND PORPHYRITIC BASALT Identical to previous section			
197.40	213.40	SERPENTINITE 197.40 - 203.96m Serpentinized trachybasalt 203.96 - 209.45m Talcoese soapstone 209.45 - 213.10m Serpentinized trachybasalt	56680 56681	203.65 206.40	206.40 209.45
213.10	216.46	QUARTZ CARBONATE BRECCIA Hosted by trachybasalt			
216.46	259.75	AMPHIBOLIZED-SERPENTINIZED Macroscopically it looks dark green, hard serpentine, but megascopically and petrographically it is classified as porphyritic trachybasalt consisting of augite (40-50%), secondary amphibole (1-0%), serpentine. Sphere and rutile (4-10%). The graphite streaks are pronounced throughout the section.	56682 56683 56684 56666 56685 56686 56687 56688 26689	233.23 234.75 236.28 239.63 249.39 251.52 253.04 254.57 257.62	234.75 236.28 237.80 240.54 251.52 253.04 254.57 256.70 259.75
259.75	260.67	QUARTZ CARBONATE BRECCIA AND VEINLETS Hosted by trachybasalt. Fractures are coated by graphite and disseminated by pyrite.			
260.67	283.53	TRACHYBASALT Identical to previous section	56700 56690	272.86 282.77	274.39 283.53
283.53	285.45	PORPHYRITIC ANDESITE It is texturally and mineralogically distinct from the basaltic rocks. Fine grained, greenish volcanic, consisting mainly of euhedral feldspar phenos 1-2mm and sparse chlorite specks in a light green aphanitic groundmass. Very weakly serpentinized	56691	283.53	285.45

H. Kim, P. Geol.
DRILL LOG

Hole No. DES 89-7

Page 4 of 4

Company MENIKA MINING LTD. (N.P.L.)
Property DES, Nicola and Kamloops Mining Divisions

From	To	DESCRIPTION	Sample No.	From	To
285.45	297.25	SERPENTINITE 285.45 - 286.58m Serpentinized trachy-basalt limontized fractures subparallel to core axis. 286.58 - 288.10m Mixed steatite and ser-pentinized trachybasalt, graphitic quartz carbonate, veinlets 50° to core axis.	56693	286.58	288.10
		288.10 - 292.68m Serpentinized trachy-basalt, rounded and subrounded, dark green, yellowish green and yellowish brown phenos up to 3mm, crowded in a light grey talcose sugary textured groundmass.	56694 56695 56696	288.10 289.63 291.15	289.63 291.15 292.68
		292.68 - 293.90m Steatite, light grey, talcose weakly bleached, heavily graphitized on fractures.	56697	292.68	293.90
		292.90 - 297.25m Serpentinized trachy-basalt, heavily graphitized on fractures	56698 56699	293.90 295.73	295.73 297.25
		End of hole.			

APPENDIX II

DRILL CORE ASSAYS, DES 89-1 through 89-7

PROJECT NO: DES

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9-397R/P1+2

ATTENTION: C. BOITARD

(604)980-5814 OR (604)988-4524

TYPE ROCK GEOCHEM

DATE: 06-02-1989

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
56651	.4	14220	8	2	13	1.2	4	35350	.2	32	15	46840
56652	.1	13640	3	2	13	1.1	4	13580	.2	37	75	55740
56654	.1	19110	6	1	225	1.0	4	25190	.2	20	51	32380
56658	.6	13750	1	1	39	1.6	5	119430	.2	49	26	47530
56659	.1	19280	1	6	30	1.2	4	51740	.2	37	19	42810
56660	.2	18370	5	1	30	1.2	4	51120	.2	36	12	50500
56661	.8	15240	10	1	54	1.2	4	56980	.2	36	44	44470
56663	.1	7690	5	4	241	1.1	3	61440	.2	30	87	48470
56664	.5	25840	5	1	15	1.6	5	66070	.2	55	94	54360
56666	1.1	29390	13	4	12	1.5	8	33300	.2	41	27	53840
56676	.5	15770	10	4	20	1.2	6	21710	.2	41	68	49110
56677	.5	18120	22	5	38	1.5	7	29840	.2	47	42	57910
56678	.6	18650	30	4	18	1.6	6	36450	.2	44	503	52280
56679	1.0	16540	23	5	50	1.4	6	72340	.2	38	90	46640
56680	.8	22720	1	10	1465	1.8	7	49560	.2	55	72	48010
56681	.6	19770	1	9	557	1.6	6	54460	.2	48	59	43610
56682	1.0	29030	16	6	43	1.2	7	38550	.2	36	24	48160
56683	1.1	29830	22	5	26	1.5	7	35320	.2	38	25	52160
56684	1.4	29130	16	4	15	1.4	8	26050	.2	43	26	56980
56685	1.2	30080	26	5	11	1.6	7	40150	.2	41	32	56670
56686	1.2	29450	30	5	30	1.6	7	68030	.2	41	43	57870
56687	1.6	31680	35	4	12	1.6	8	59910	.2	44	56	60810
56688	1.3	35790	14	4	8	1.6	8	48890	.2	48	38	68330
56689	.7	32120	17	2	12	1.4	5	64370	.2	43	706	64210
56690	1.8	33300	27	3	351	1.6	9	72690	.2	46	89	60890
56691	.1	23680	13	3	94	1.1	3	49710	.2	26	66	43720
56692	.8	29980	23	2	39	1.5	6	55550	.2	38	85	63300
56693	.3	36990	18	1	30	1.5	4	70370	.2	38	142	63640
56694	1.1	33700	16	2	149	1.6	7	61390	.2	45	101	65650
56695	.9	30860	12	1	36	1.5	7	63650	.2	43	69	63280
56696	1.1	28890	17	1	18	1.6	5	56730	.2	40	85	59160
56697	.7	30540	15	1	8	1.4	3	66460	.2	36	200	52780
56698	.4	26240	21	1	8	1.2	4	76150	.2	35	81	55710
56699	.4	25970	22	1	10	1.4	3	66610	.2	34	120	53130
56700	1.4	24670	12	1	49	1.3	6	26000	.2	34	30	46100

COMPANY: MENIHA MINING

MIN-EN LABS ICP REPORT

(ACT:F31) PAGE 1 OF 3

PROJECT NO: 225

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/9/0426/R/J/001

ATTENTION: C. BOITARD

(604)980-5814 DR (604)968-4524

* TYPE ROCK GEOCHEM * DATE: 06-09-1989

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CO	CU	FE	
56701	.4	39970	10	1	6	1.5	6	36080	.2	43	67	58840
56703	.8	33260	7	1	1088	1.5	7	37810	.2	29	47	42730
56704	.8	25990	16	1	252	1.9	8	79160	.2	39	61	48360
56705	1.0	22660	2	7	17	1.9	11	60820	.2	50	48	46790
56706	.9	34890	21	1	20	1.9	8	63880	.2	48	965	73300
56707	.7	14860	35	1	12	1.3	4	66720	.2	40	137	56160
56708	.5	32560	14	1	11	1.6	5	44860	.2	38	60	61690
56709	.7	27150	16	1	7	1.3	3	59790	.2	36	44	59330
56710	.7	8050	17	1	11	1.1	5	78990	.2	35	14	50300
56711	.8	8120	25	1	15	1.2	5	87250	.2	33	34	51960
56712	1.5	19670	26	1	21	1.4	8	110130	.2	32	18	44550
56713	.7	38700	25	1	6	1.5	6	65800	.2	39	78	59740
56714	.4	43860	3	1	25	1.8	8	42510	.2	42	29	63300
56716	.6	42330	16	1	9	1.4	8	50490	.2	42	60	63430
56717	.6	29160	14	1	11	1.6	6	65790	.2	38	12	59420
56718	.6	39870	25	1	5	1.6	6	35160	.2	44	88	67520

APPENDIX III

The following assay sheets show results of core sample assays taken during the drilling.

COMPANY: MENIKA MINING

MIN-EN LABS ICP REPORT

(ACT:F31) PAGE 1 OF 1

PROJECT NO: DES 89-1

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/V/0090/R/J/001

ATTENTION: C. BOITARD

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: 02-10-1989

(PPM)	308' F	350' F	448' F	600' F
	1.4	1.2	.8	1.2
	22639	23581	32654	16665
AS	33	34	1	23
B	10	19	10	7
BA	18	15	11	12
BE	.9	1.1	1.2	.8
BI	6	5	9	6
CA	18336	38289	17113	48820
CD	.1	1.5	1.2	.3
CO	35	34	31	30
CU	42	26	30	22
FE	46927	46347	44739	43929
K	2558	892	1072	1433
LI	14	12	13	17
MG	30577	28150	24235	28621
MN	737	865	779	1121
MO	2	3	2	2
NA	6133	1494	15967	1338
NI	90	91	40	36
P	1415	1518	1384	1063
PB	373	125	28	19
SB	2	1	1	2
SR	36	24	31	119
TH	1	1	1	2
U	1	2	1	1
..	145.8	172.3	155.9	156.7
	29	24	20	26
GA	2	2	1	1
SN	1	2	2	1
W	1	2	1	1
CR	196	229	112	122



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CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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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

Certificate of ASSAY

Company: MENIKA MINING
Project: DES 89-2
Attention: C. BOITARD

File: 9-123/P1
Date: FEB 20/89
Type: METALLIC COPPER

We hereby certify the following results for samples submitted.

Sample Number	TOTAL WEIGHT GM	+120 MESH WT GM	-120 CU %	+120 CU %	NET CU %
860 F	291.33	4.03	0.109	0.095	0.109

Certified by *[Signature]*
MIN-EN LABORATORIES LTD.

(PPM) B50F-120

MESH

AS	1.5
	22921
B	10
BA	16
	11
BE	1.5
BI	1
CA	34462
CD	6.2
CO	35
CU	1066
FE	41560
K	913
LI	11
MG	23965
MN	682
MO	3
NA	905
NI	54
P	1037
PB	13
SE	2
SR	29
TH	1
U	1
V	212.5
	37
	2
SN	2
W	3
CR	166

MIN-EN Laboratories Ltd.

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705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: 04-352828

CERTIFICATE OF ASSAY

COMPANY: MENIKA MINING
PROJECT: DES 98-2
ATTENTION: C. BOITARD

FILE: 9-123
DATE: FEB 20/89
TYPE: METALLIC GOLD ASSAY

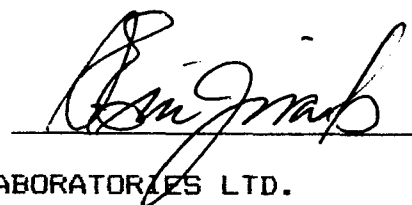
We hereby certify that the following are assay results for samples submitted.

```

*****
SAMPLE   * TOTAL +120 M * ASSAY VAL ASSAY VAL * +120 M  -120 M * METALLIC GOLD * NET GOLD
NAME     * WT (G) WT (G) * NET AU G/T-120AU6/T * AU (MG) AU (MG) * (OZ/T) (GM/T) * (OZ/T) (GM/T)
*****
B60F    * 291.33  4.03 *      0.09   0.03 *    0.000  0.009 *    0.000  0.00 *    0.001  0.03

```

Certified by



MIN-EN LABORATORIES LTD.

PROJECT NO: DES B9-2

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/V/0123/M/J/002

ATTENTION: C. BOITARD

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: 02-21-1989

(PPM)	136 F	191 F	806F F	860 F
AG	5.8	3.4	.4	1.8
AS	16058	11367	23697	34469
B	14	16	1	42
BA	10	7	14	22
BE	18	18	26	13
BE	1.2	1.3	1.4	1.9
BI	53	31	2	11
CA	15630	21396	62725	28939
CD	10.7	8.9	9.4	8.7
CO	41	35	42	50
CU	19042	13154	149	5736
FE	42164	41823	54573	68641
K	493	424	2571	1278
LI	21	15	32	16
MG	38206	30032	45873	37057
MN	685	573	979	676
MO	2	3	3	1
NA	1218	1168	650	1373
NI	99	81	115	63
P	1962	1859	911	1051
PB	24	23	13	10
SB	2	1	2	2
SR	46	54	47	56
TH	2	1	1	1
U	1	1	1	1
V	150.1	162.4	162.9	276.2
ZN	38	36	35	62
HA	1	1	2	4
SN	3	1	1	4
W	3	3	2	1
CR	333	343	313	195

Certificate of ASSAY

Company: MENIKA MINING
 Project: DES B9-2
 Attention: C. BOITARD

File: 9-123/P2
 Date: FEB 21/89
 Type: METALLIC COPPER

We hereby certify the following results for samples submitted.

Sample Number	SAMPLE WT. GM.	+120 WT. GM.	+120 CU%	-120 CU%	NET CU%
136 F.	107.81	2.81	43.819	1.815	2.910
191 F.	174.74	3.74	43.889	1.235	2.148
B06F	348.30	24.30	.016	.012	.016
B60 F.	154.06	15.06	.578	.605	.581

Certified by _____



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 705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

(604)980-5814 OR (604)988-4524

TELEX: 04-352828


CERTIFICATE OF ASSAY

COMPANY: MENIKA MINING
 PROJECT: DES 89-2
 ATTENTION: C. BOITARD

FILE: 9-123
 DATE: FEB 21/89
 TYPE: METALLIC GOLD ASSAY

We hereby certify that the following are assay results for samples submitted.

SAMPLE NAME	TOTAL WT (G)	+120 M WT (G)	ASSAY VAL MET	ASSAY VAL AU 6/T-120AU6/T	+120 M AU (MG)	-120 M AU (MG)	METALLIC GOLD (OZ/T)	GOLD (GM/T)	NET GOLD (OZ/T)	GOLD (GM/T)
136 F.	107.81	2.81	0.09	0.02	0.000	0.002	0.000	0.00	0.001	0.02
191 F.	174.74	3.74	0.13	0.06	0.000	0.010	0.000	0.00	0.002	0.06
806F.	348.30	24.30	0.42	0.07	0.010	0.023	0.001	0.03	0.003	0.09
860 F.	154.06	15.06	0.13	0.02	0.002	0.003	0.000	0.01	0.001	0.03

Certified by 
 MIN-EN LABORATORIES LTD.

PROJECT NO: BES-89 - 4-5.2 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/V/0205/R/J/001

ATTENTION: C. BOITARD

(604)980-5514 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: 03-31-1989

(PPM)	607#4	1145#5	1173#2	1187#5	1210#5	1222#5	1227#5
AG	2.1	2.7	2.8	1.6	1.8	1.9	1.5
AL	8714	9750	30726	32025	15050	5463	25808
AS	497	94	13	28	32	1	17
B	8	3	16	29	8	3	11
BA	17	8	16	7	15	6	8
BE	5	4	1.0	1.7	1.7	1.7	.8
BI	4	3	67	23	6	3	19
CA	31535	59101	30343	47640	21682	111525	65980
CD	4.2	0.8	3.9	3.2	3.3	3.7	3.8
CO	45	35	36	51	39	28	39
CU	14	3	23987	58	147	10	10
FE	63638	39433	66128	46533	41430	42951	37866
K	4212	2850	1794	484	3966	2211	734
LI	9	12	20	20	11	9	17
MG	13201	9180	33536	27945	13375	30750	29268
MN	1718	1195	600	651	358	1547	907
MO	4	5	5	5	5	5	6
NA	648	304	1168	460	772	510	276
NI	85	79	105	107	117	52	78
P	508	575	1454	767	530	530	611
PB	33	29	42	26	24	17	21
SB	128	2	22	12	4	1	10
SR	48	26	148	38	32	31	20
TH	1	1	1	1	2	1	1
U	2	1	1	1	1	1	1
V	52.3	35.0	202.0	155.1	76.0	86.5	150.9
ZN	16	15	45	41	31	27	39
BA	1	1	1	1	2	1	1
SH	1	1	1	2	1	1	1
W	1	1	2	3	1	1	2
CR	75	89	251	221	105	63	177
AU-FFB	73	302	29	3	300	63	43

PROJECT NO:

708 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/V/0185/M/J/001

ATTENTION: C. BOITARD

(604)980-5814 OR (604)989-4524

* TYPE ROCK GEOCHEM * DATE: 03-05-1989

(PPM) DES89-4- DES89-4- DES89-4- DES89-4-

	477 F	493 F	516 F	520 F
AL	1.0	.7	2.9	54.0
AS	21130	5071	5865	9440
B	9	1	34	13
BA	11	4	1	4
BE	7	5	7	23
BI	1.6	1.1	.7	1.6
CA	1	2	1	4
CD	74244	74521	46552	129038
CE	7.6	9.5	6.2	426.1
CO	32	27	23	30
CU	68	48	46	1006
FE	49257	42138	26717	54876
K	1016	1356	1764	1268
LI	23	7	7	7
MG	24536	29147	10963	31130
MN	1119	1191	733	1835
MO	8	2	4	1
NA	346	421	387	305
NI	48	42	23	39
P	602	381	290	562
PB	26	16	40	2731
SB	1	1	2	285
SR	15	6	23	4
TH	1	2	1	1
U	1	1	1	1
ZN	111.3	49.9	47.0	84.8
GA	44	34	15	3060
GR	1	1	1	1
SN	2	1	2	1
W	1	1	2	1
CR	97	68	84	102



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SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 887
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 284-9996

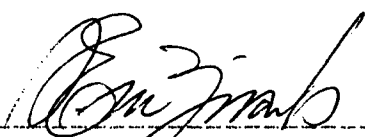
Certificate of Assay

Company: MENIKA MINING
Project:
Attention: C. BOITARD

File: 9-165/P1
Date: MARCH 5/89
Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
DES 89-4-477 F	.05	0.001
DES 89-4-493 F	.02	0.001
DES 89-4-516 F	.21	0.006
DES 89-4-520 F	1.41	0.041

Certified by 

MIN-EN LABORATORIES LTD.

COMPANY: MENIKA MINING

MIN-EN LABS ICP REPORT

(ACT:F31) PAGE 1 OF 1

PROJECT NO:

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9/V/0182/R/J/001

ATTENTION:

(604)980-5814 OR (604)988-4524

* TYPE ROCK GEOCHEM * DATE: 03-16-1989

(PPM) DES89.5(

415) F.

AL	.6
AS	6847
B	18
BA	3
BE	23
BI	.8
CA	4
CD	51742
CO	1.8
CU	16
FE	15
K	43950
LI	1791
MG	5
MN	17109
MO	1110
NA	2
NI	597
P	4
PB	1153
SB	18
SR	3
TH	20
"	1
	1
	80.3
ZN	25
GA	1
SN	1
W	1
CR	42

Certificate of GEOCHEM

Company: MENIKA MINING
Project: DES 89-5
Attention: C. BOITARD

File: 9-224/P1
Date: APR. 7/89
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB
89-5-1841 <i>R</i>	174

Certified by _____

C. Boitard

MIN-EN LABORATORIES LTD.

PROJECT NO: DES 89-5

785 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 9-224/P1

ATTENTION: C. BOITARD

(604) 980-5814 OR (604) 988-4324

* TYPE ROCK GEOCHEM * DATE: 04-11-1989

(PPM) 89-5-1841 F.

AG	18
AL	11206
AS	15
B	2
BA	21
BE	22
BI	2
CA	33090
CD	2.5
CO	87
CU	12
FE	97272
K	1962
LI	15
MG	8942
MN	482
MO	16
NA	254
NI	34
P	236
PB	19
SE	2
SR	17
TH	1
V	57.7
ZN	21
BA	2
SK	2
W	2
OR	227

COMPANY: MENIKA MINING
PROJECT NO: DES
ATTENTION: C. BOITARD
(PPM) 1739-89. # 5

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

(ACT:F31) PAGE 1 OF 1
FILE NO: 9/V/0223/R/J/001
* TYPE ROCK GEOCHEM * DATE: 04-06-1989

	5
AG	1.8
AL	19171
AS	7
B	10
BA	69
BE	.7
BI	12
CA	26718
CD	2.1
CO	105
CU	694
FE	38985
K	934
LI	16
MG	23670
MN	507
MO	7
NA	935
NI	55
P	604
PB	27
SB	3
SR	51
TH	1
U	2
V	162.7
ZN	44
GA	1
SN	2
W	2
CR	155

Certificate of GEOCHEM


Company: MENIKA MINING
Project: DES
Attention: C. BOITARD

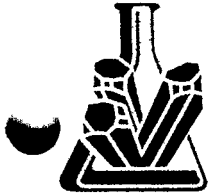
File: 9-223/P1
Date: APR. 5/89
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB
1739-89.5	190

Certified by _____


MIN-EN LABORATORIES LTD.



**MINERAL
• ENVIRONMENTS
LABORATORIES**

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR 31 ELEMENT TRACE ICP:

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb,
Sr, Th, U, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories., at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

1.0 gram of the sample is digested for 4 hours with an aqua regia HClO₄ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.

LOG NO:	0228	RD. 1
ACTION:		
FILE NO:	#19140	