DIAMOND DRILLING REPORT

ON

LEN GROUP

KAMLOOPS MINING DIVISION
NTS 82M/12E
Latitude 51°32'N by Longitude 119°45'W

by

C. C. EVERETT

NOVEMBER 1, 1983

for

ESSO RESOURCES CANADA LIMITED
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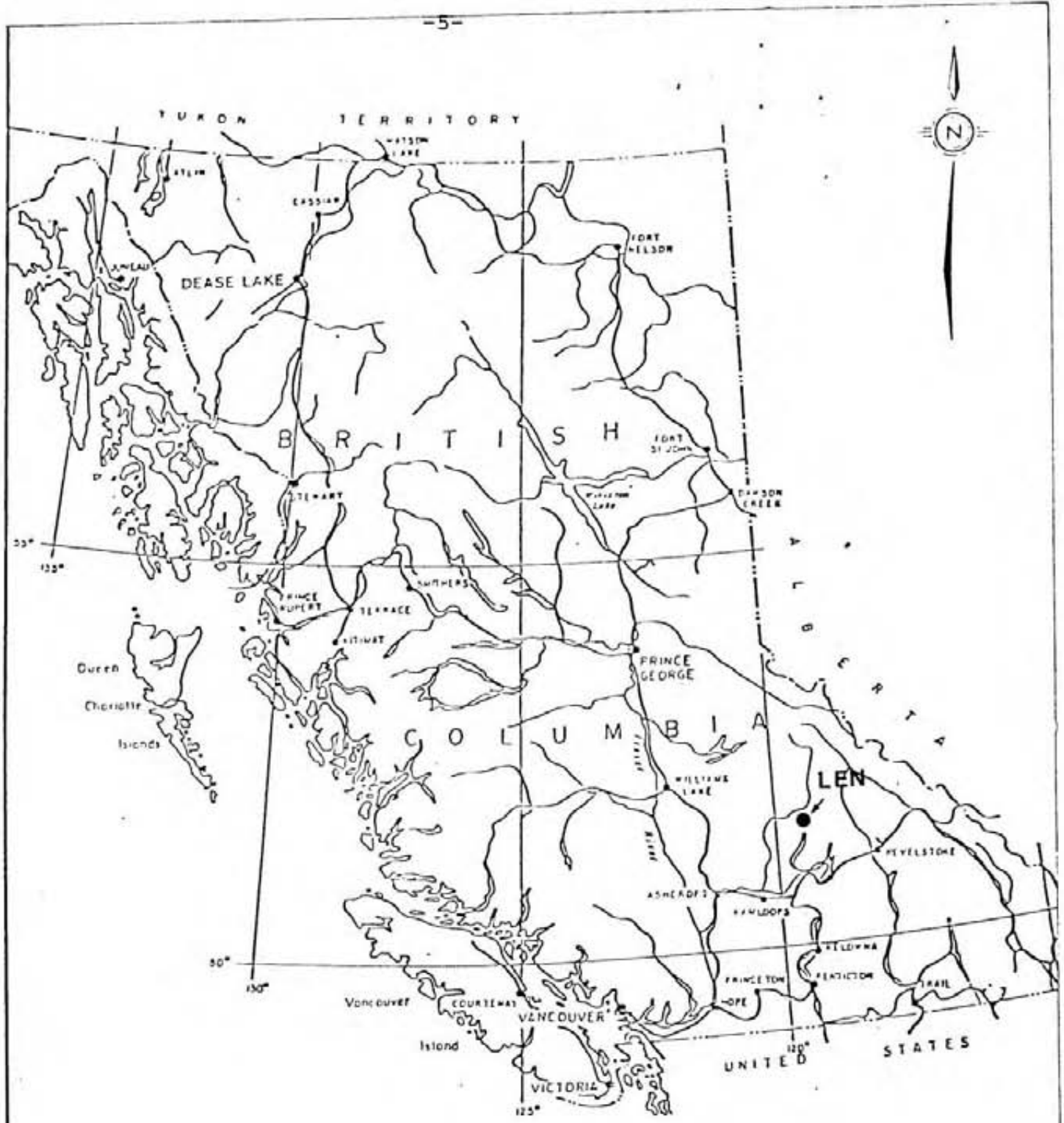
Summary

The "Len" claims lie at an elevation of ~1370 metres, on a west facing slope above Jones Creek, south of the North Thompson River.

In 1977, highly anomalous stream silt values (to 11,300 ppm zinc), were discovered in two minor tributaries of Jones Creek. Follow-up sampling showed a progressive increase in silt values towards the heads of both streams, with an apparent source of the anomaly at the base of the Eagle Bay Formation Tshinakin limestone bluff. Subsequent soil sampling revealed moderate values along the limestone/argillite fault contact and a more conspicuous anomaly along the trace of the 2 creeks. The soil anomaly appeared to be a drainage phenomenon.

Extensive overburden, in excess of 5-10 metres, blankets most of the property. Outcrop is limited to the limestone bluffs and scattered angular argillite and basic tuff float occur in the creek beds. Geological mapping failed to reveal the source of the geochemical anomaly.

This report documents a one-hole diamond drill test of the property. LBC 83-1 is collared within the Tshinakin limestone, upslope of the stream zinc anomaly.



ESSO MINERALS CANADA

LEN

PROPERTY LOCATION MAP

0 100 200 MILES

0 100 200 400 KILOMETRES

FIGURE I

1.0 Introduction

1.1 Location and Access

The "Len" claims are located in south central British Columbia about 100 km NNE of the city of Kamloops and 5 km south of the village of Vavenby, figure #1. Approximate geographic centre of the property is at 51°32' north latitude and 119°45' west longitude.

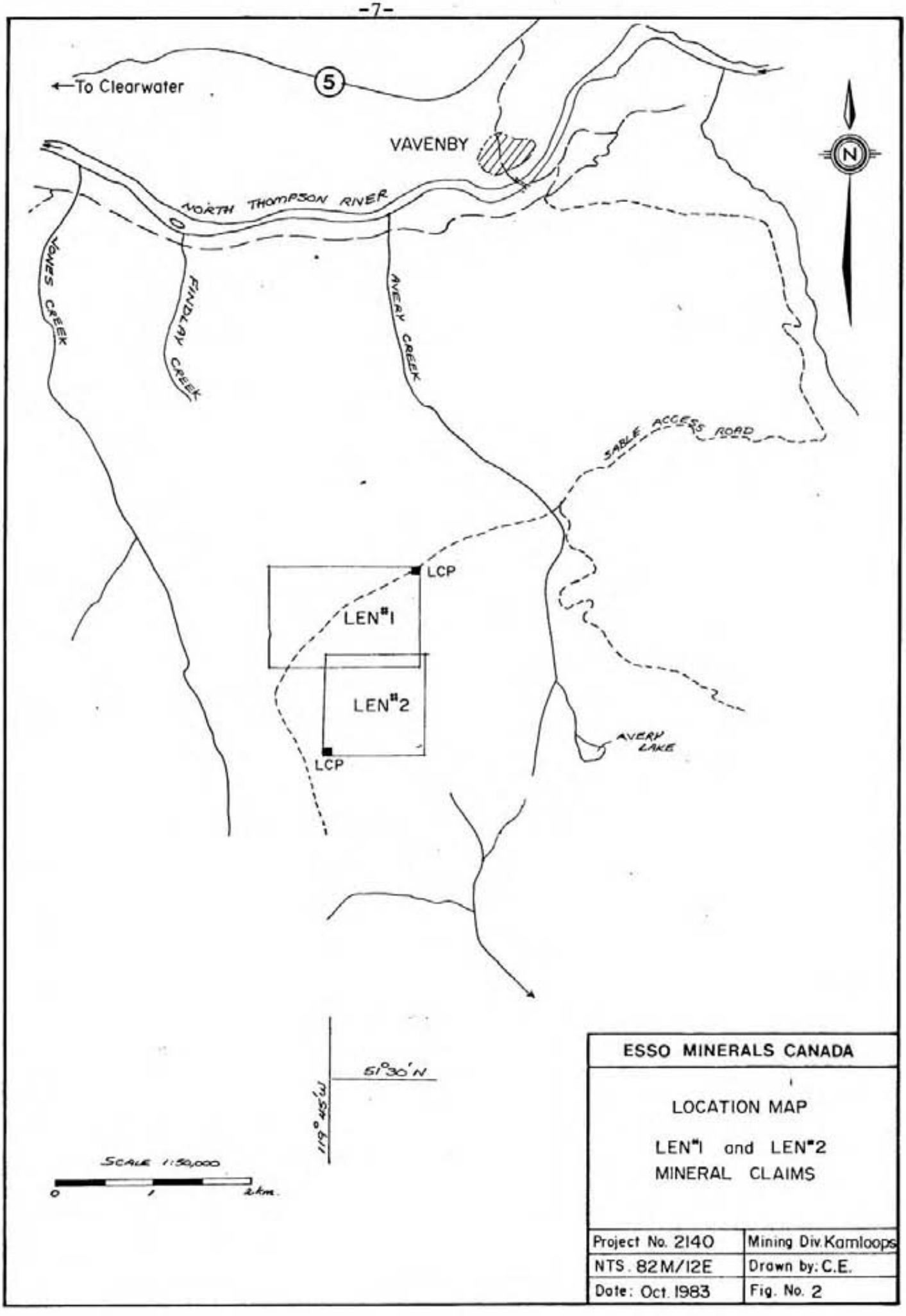
Access to the property is gained by driving 12 km south and southwest from Vavenby along the Sable logging road. The claims cover a gentle to moderately sloping ridge between Jones Creek and Avery Lake, figure #2.

1.2 Property

The Len group consists of 2 mineral claims aggregating 10 contiguous units. Claim names, units, month of record, record numbers and expiry dates are listed below in Table #1.

(Table #1)

		Land Record		
Claim	Units	Month of Record	Record #	Anniv. Date
Len 1	6	10	1028	1989/10/06
Len 2	4	10	1052	1989/10/19



ESSO MINERALS CANADA	
LOCATION MAP LEN #1 and LEN #2 MINERAL CLAIMS	
Project No. 2140	Mining Div. Kamloops
NTS. 82M/12E	Drawn by: C.E.
Date: Oct. 1983	Fig. No. 2

1.3 History of Property

Anomalous silt values (Cu, Pb, Zn, Ag) were discovered in 2 minor tributaries of Jones Creek by an Esso Resources prospector in September 1977. Follow-up sampling showed a progressive increase in silt values at the heads of both streams. Soil sample results outlined a linear anomaly parallel to the streams. This coincidence and its orientation at $\sim 60^{o}$ to the regional trend suggested that the anomaly was a drainage phenomenon.

The 1978 exploration program comprised regional and property geological mapping, horizontal loop E.M. surveying and trenching. Results failed to define the source of the anomalous stream geochemistry.

The objective of the 1983 drill program was to test the Tshinakin limestone, particularly at its basal fault contact with Eagle Bay Formation argillites and basic tuffs, figure #3.

1.4 Regional Geology

Figure #3 is a 1:10,000 scale regional geological summary of the Len claims illustrating the Jones Creek anomalous tributaries and the LBC 83-1 drill hole location. The suggested geological sequence correlates with the upper Eagle Bay Formation north of the Baldy Batholith, making the Len limestone, equivalent to the Tshinakin limestone.

Point A on figure #3 (south central in the Len #1 claim) is the area at the base of the limestone bluff, where the anomalous streams are sourced. The Tshinakin limestone appears to be in thrust fault contact with gentle north dipping sericite schists, chlorite schists and black carbonaceous argillites of the Eagle Bay Formation. An ankeritic-limestone breccia appears to mark the fault contact.

1.5 Details of 1983 Drill Program

LBC 83-1 was collared on September 26th and completed on September 28th, 1983. All work was completed by Ultramobile Diamond Drilling Ltd. of Surrey, B.C. A summary of drill associated costs follows section 2.0. The hole was drilled to a depth of 84.12 metres. Figure #4 is the LBC 83-1 cross section. A detailed drill log is located in Appendix A.

LEN 2140 - PROPERTY GEOLOGY - DRILL HOLE LOCATION MAP

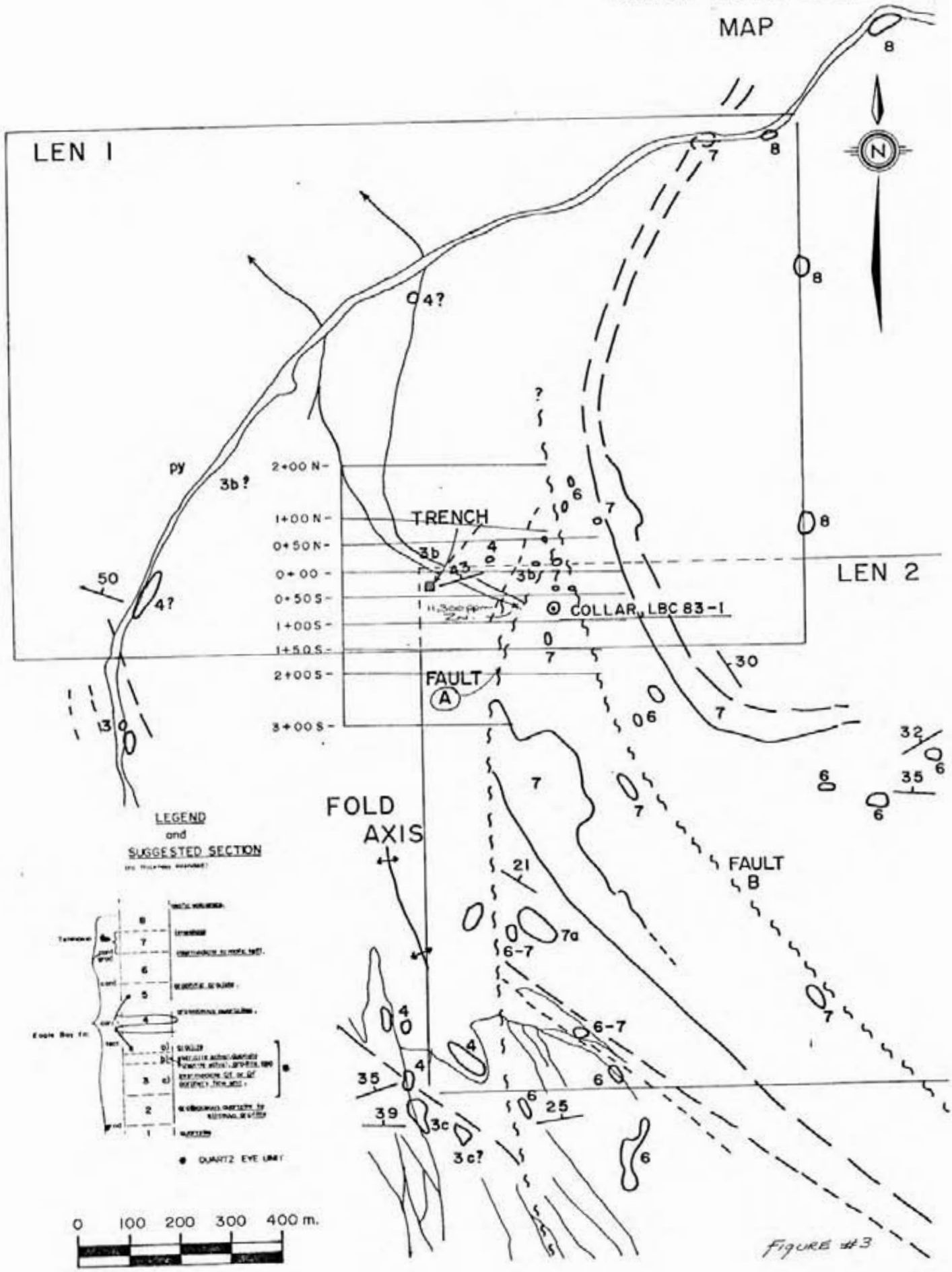


FIGURE #3

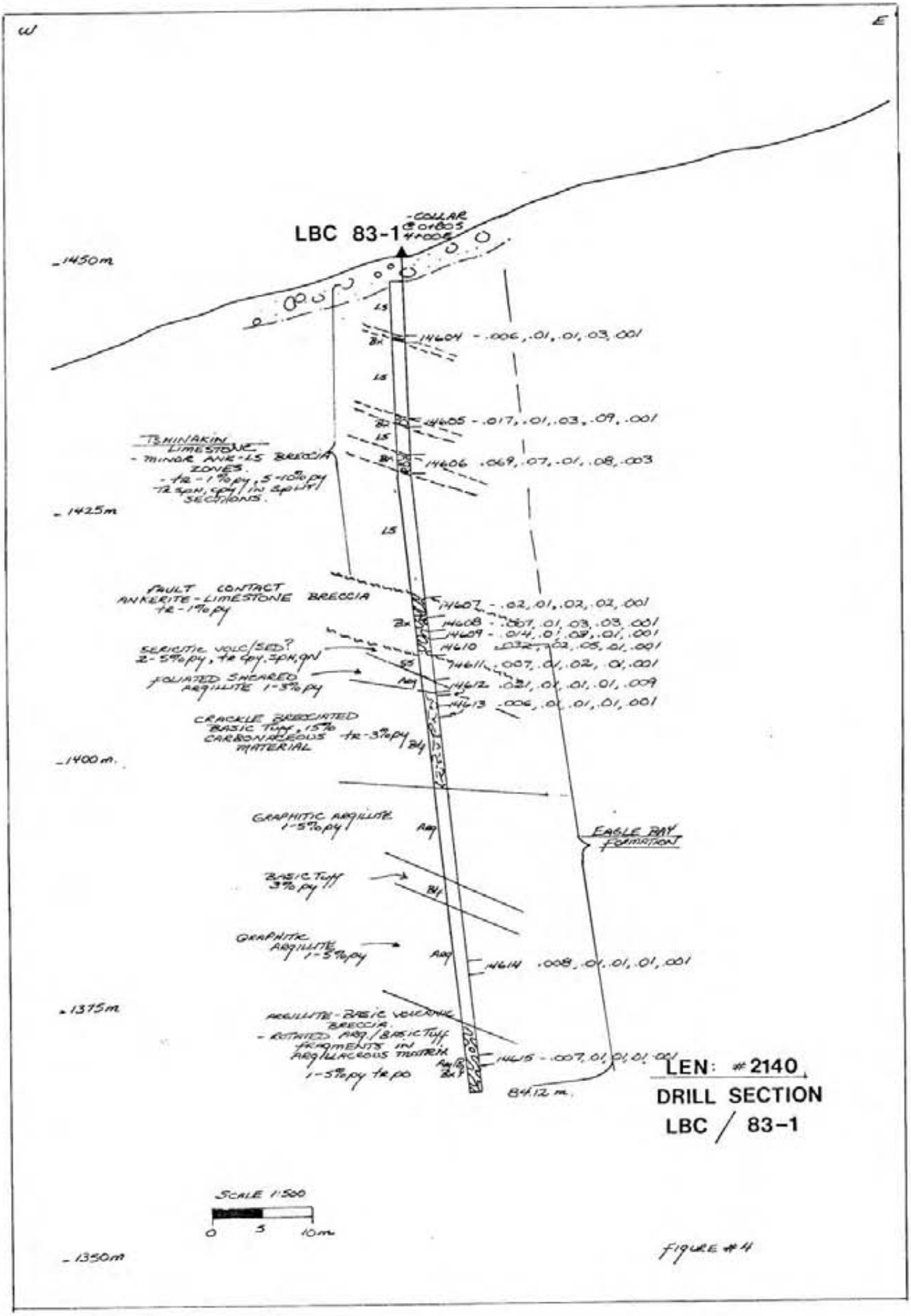
2.0 Diamond Drilling: LBC 83-1

2.1 Geology

White to grey white weakly crystalline limestone was intersected from the drill collar to a depth of 39.9 metres. The unit is cut by narrow 0.1-0.2 metre, probably tectonic, ankeritic breccias to 34.3 metres. A pronounced 5.6 metre ankeritic fault breccia marks the limestone basal contact with the Eagle Bay Formation graphitic argillites. Approximately 40% of this section was lost as ground core. Attitudes of brecciation @ 70^{o} CA suggests the fault to be gently dipping to the east. This would roughly parallel regional geological trends; figure #3.

A narrow 2.4 metre yellow-green foliated sericite schist occurs at the top of the predominantly argillaceous section. Trace amounts of carbonaceous material occur parallel to foliation. This unit is assumed to be an altered sediment. The alteration would be attributive to a low intensity hydrothermal event associated with faulting.

From 42.3 to 84.12 metres the Eagle Bay rocks are primarily gentle northeast dipping black graphitic argillites. Narrow basic tuffs and argillaceous tuff breccias occur from 43.55-53.2, 63.2-65.6 and 77.63-81.36 metres. These sections are generally crackled to sub-brecciated, with black carbonaceous material acting as a matrix to the basic volcanic



LEN: #2140

DRILL SECTION

LBC / 83-1

FIGURE #4

fragments. The attitude of brecciation is generally 50-70° to the core axis. These units are probably products of tight folding within the Eagle Bay Formation. Minor amounts of strike slip movement, brecciation and fracture filling are expected as less competent argillaceous horizons are folded with more brittle volcanic rocks.

2.2 Mineralization

Assay results for LBC 83-1 are shown on figure #4 and in Appendix A. Geochemical analytical techniques are described in Appendix B. All samples were analyzed by Min-En Laboratories in North Vancouver, B.C.

Finely disseminated pyrite and chalcopyrite, in trace amounts only, are common throughout the Tshinakin limestone. Pyrite content increases to approximately 5-10% within the ankeritic breccias. Assay results from these zones indicate minor amounts of copper; .006-.069% Cu. Lead, zinc silver and gold results are low.

Coarse galena and chalcopyrite blebs occur in quartz stringers within the narrow sericite schist horizon. Assays from this zone are extremely low and are not representative of the minor amounts of base metal mineralization noted in drill core.

The lower argillites and basic tuffs commonly contain Tr-5% disseminated pyrite. Test samples within these zones were not anomalous.

Assay results from LBC 83-1 do not indicate the presence of base metals along the fault contact. The 1977 stream silt anomaly generated from this zone is not explained.

C. Ewert

STATEMENT OF QUALIFICATION

I am a Bachelor of Science graduate from the University of New Brunswick (May 1977) and have been employed as an exploration geologist within the mining industry for six years; the last 3 years with Esso Resources Canada Limited.

C. Everett

CAL C. EVERETT

SUMMARY OF COSTS
COST ESTIMATE - LEN GROUP

Geologist 5 man days @ $157.00 per day		$ 785.00
Geological Assistant 5 man days @ $96.00 per day		$ 480.00
Report Preparation 2 man days @ $157.00 per day		$ 314.00
Drill Site Preparation: Sept. 19-20th		
4 man days @ $160.00 per man/per day		$640.00
Room and Board 10 man days @ 35.00 per man/per day		$ 350.00
Diamond Drilling LBC 83-1		
6 ft. @ $15.00 foot (casing BW)	$ 90.00	
270 ft. @ $22.00 foot (drilling BQ)	$ 5,940.00	
Mob-Demobilization Fee	$ 600.00	
Assays 10 @ $12.00	$ 120.00	
Labour 98 hrs @ 26.00 hour	$ 2,548.00	
Machine Hours	--	
Fuel	--	
Addivtives	--	
Acid Tests 1 @ $35.00	$ 35.00	
Equipment Costs (casing, casing shoe)	$ 382.00	
	$ 9,715.00	$ 9,715.00
TOTAL		$ 12,284.00

C. Evans

COST DISTRIBUTION LEN GROUP

Geological	1,265.00
Report Preparation	314.00
Analysis	120.00
Room and Accommodation	350.00
Diamond Drilling	10,235.00
TOTAL	12,284.00
TOTAL APPLIED	$ 12,000.00

LIST OF PERSONNEL/CONTRACTORS

Cal Everett (Project Geologist)
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V7M 1H8

Murray Jones (Senior Geological Assistant)
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V1X 2Z6

(Contractors)

Mountain Pacific Forestry Ltd. (Drill Site Preparation)
Box 585
Clearwater, B.C.
V0E 1N0

Ultra-Mobile Diamond Drilling Ltd. (Diamond Drilling)
12720 - 24th Ave.
Surrey, B.C.
V4A 2E6

E1

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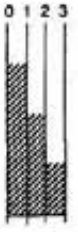
DRILL LOG

PROJECT: LEN 2140	GROUND ELEV.: ~ 1450m
HOLE NO.: LBC 83-1	BEARING: 090°
LOCATION: 0+755 4+00E	DIP: -88° VERTICAL
	TOTAL LENGTH: 94.12 m
LOGGED BY: C Everett / M Jones	HORIZONTAL PROJECT: x 3m.
DATE: Sept 28/83	VERTICAL PROJECT: 94.0m.
CONTRACTOR: Ultra Light Diamond Drilling	
CORE SIZE: BQ	
DATE STARTED: Sept 29/83	
DATE COMPLETED: Sept 29/83	
DIP TESTS: 45.72m - 89° 94.12m - 88°	

ALTERATION SCALE



absent

slight

moderate

intense

TOTAL SULPHIDE SCALE

traces only

< 1%

1% – 3%

3% – 10%

> 10%

COMMENTS

LEGEND

PAGE 1 OF 10 | PROJECT: LUN 2140 | HOLE NO. 83-1

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
0		CASING 6'		0.0 - 2.2 OVERBURDEN							
				2.2 - 399 LIMESTONE / TSHINAKIN Fm ton							
				PALE WHITE - GREY WHITE WKLY DOLOMITIC CRYSTALLINE LIMESTONE CONTAINING NARROW 0.1 - 1.0 m TECTONICALLY BRECCIATED SECTION WITH LIMESTONE FRAGS ROTATED							
5.0				IN A DARK ORANGE ANKERITIC CARBONATE MATRIX Commonly cont. 1 - 5% DISS py NO COMPOSITIONAL BANDING NOTED 2.2 - 399 fr LIMONITE ON FRACTURES							
				- IRREGULAR ANKERITE BRECCIA SECTIONS FROM 3.7 - 4.3, 5.0 - 5.6, 5.8 - 5.9, 6.25 - 6.7, 7.8 - 7.9, 8.15 - 8.2, 8.7 - 9.0, 11.3 - 11.5, 12.0 - 12.3, 14.3 - 14.6, 15.9 - 16.7							
10.0	78										
	66										
15.0	92			17.3 - 17.6 fine lam. py @ 70° CA.							
	78										
20.0											

PAGE 2 OF 10	PROJECT: Len 2140	HOLE NO. L8C 83-

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS % Cu	ASSAYS % Pb	ASSAYS % Zn	ASSAYS oz/t Ag	oz/t Au
2.2 - 7.8 tr diss. pyrite										
7.3 - 8.3 5-10% diss py in Bx. LS @ 65°CA.		7.8	8.3	0.5	14'104	.005	.01	.01	.05	.001
8 - 13.9 tr diss py										
13.9 - 14.7 5% fg diss py in Andesitic LS Bx. zone		13.9	14.7	0.8	14'105	.017	.01	.03	.09	.001
14.7 - 17.6 tr py										
17.6 - 17.2 5% py in Bx. py fracture fillings @ 55°CA										
17.2 - 19.0 tr diss py, cpy, sph?										

N2/E2

GE 3 OF 10 | PROJECT: [illegible] 2140 | HOLE NO. LBC 83-1

% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
20.0										
89			ANN: PY 8 ZONES FROM 22.5-22 m, 22.95-23.1, 23.6-23.8, 24.3-24.7, 27.9-28.1, 28.5-28.7							
82										
25.0										
30.0			29.5-29.6 Ang. ANKERITIC FRAGS IN WHITE LIMESTONE @ 80°CA							
			31.5-31.8 SUB-BRECCIATED FEL. PARTIAL ASSIMILATION OF CARBONACEOUS MATERIAL.							
			34.3-39.9 CONTACT FAULT BRECCIA ZONE HIGHLY ANKERITIC MATRIX LOCALLY DENSE, tr-1% DISS PY, 50% LOST CORE. BRECCIATION @ 70°CA.							
26										
15										
77										
73										
50										
40.0										

PAGE 4 OF 10 | PROJECT: Len 2140 | HOLE NO. LBC 83-1

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS % Cu	ASSAYS % Pb	ASSAYS % Zn	ASSAYS oz/t Ag	oz/t Au
19.7-21.5 5-8% py, tr cpy in sulk. Bx zone.		19.7	21.5	1.8	14606	.069	.01	.01	.08	.003
21.5-39.9 tr-1% Ag bearing py										
25.0-26.0 tr py, cpy, sphal on fine fractures @ 50°CA.										
34.3-39.9 FAULT BRECCIA ZONE ~50% LOST CORE		34.3	36.1	1.8	14607	.020	.01	.02	.02	.001
		36.1	37.5	1.4	14608	.007	.01	.03	.03	.001
		37.5	38.4	0.9	14609	.014	.01	.03	.01	.001
		38.4	39.9	1.5	14610	.032	.02	.05	.01	.001

N2/E2

PROJECT: [illegible]

HOLE NO. LBC85-1

	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.	
40.0				39.9 - 42.3 SEVERE VOLCANIC - FOLIATED, PALE YELLOW GREEN, FOL. @ 60° CA CONTAINING 3-5% PY, TR SPH, GN, CPY IN QTZ STRINGERS AND AS FLATTENED BLEBS ALONG FOLIATION - PROBABLY ALT. SED.								
				42.3 - 42.55 FOLIATED SHEARED ARGILLITE - BLK CARBONACEOUS ARG (50%) FRGS ROTATED IN AN EMERALD								
45.0				GREEN TALCY (POSSIBLY SERPENTINE BEARING MATRIX) CONT. TR PY. - BULL QTZ - GRAPHITE VS FROM 43.4 - 43.55 — 42.3 → 42.7 m.								
			8x 80°									
				43.55 - 53.20 CHLORITIC VOLCANIC — BASIC TUFF - DK GREEN TO DK GREY, BRECCIATED BASIC TUFF WITH BLK CARBONACEOUS (?) MATERIAL ALONG FOLIATIONS AND AS MATRIX								
			85° FOL.	43.55 - 43.95 - MODERATE SILICIFICATION								
50.0				43.95 - 45.63 - WK CARBONATE ALT'N 45.0 - 45.63 - TR FUCHSITE ON FRACS/FOL 46.85 - 47.10 - GRAPHITIC GOUGE, WITH BRECCIATED QZ - GRAPH VN 48.0 - ATTITUDE OF Bx'N @ 40° CA								
				49.2 - FOLIATION @ 85° CA 50.6 - 53.9 - MOD. CARB. ALT'N 50.65 - 53.20 - MIX OF ARGILLITE AND VOLCANIC CLASTS IN BRECCIA, ARG. FROM BELOW								
55.0				50.6 - 53.20 - MORE MASSIVE VOLCANIC. LESS CARBONACEOUS MATERIAL IN MATRIX								
	50			53.20 - 63.20 ARGILLITE - GRAPHITIC, BLK, QZ STRINGERED.								
	60			ARGILLITE. - QZ STR'S HAVE CREATED Bx'N OF UNIT - INTER BANDS OF BASIC VOLCANIC THROUGHOUT								
60.0												

PAGE 6 OF 10	PROJECT:	Lon 2140	HOLE NO. LBC93-1

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Cu	ASSAYS Pb	ASSAYS Zn	ASSAYS Ag	ASSAYS Au
39.9-42.3 2-5% py, minor cpy, gn,		39.9	42.3	2.4	14611	.007	.01	.02	.01	.001
42.3-43.55 - 1-3% Diss Py										
43.55-43.95 - 5-10% Py IN BLEBS ALONG FRACS AND AS DISS.		43.55	43.95	0.40	11612	.021	.01	.01	.01	.009
43.95-50.61 - 3% D.ss Py MOSTLY AS BLEBS, minor Diss		45.0	46.18	1.18	14613	.006	.01	.01	.01	.001
50.61-53.20 - 2-1% Diss Py										
53.20-63.20 - 1-5% Diss Py AS BLEBS, SEEMS TO CONCENTRATE IN SILICEOUS BNDS										

N2/E2

PROJECT: LEN 2140

HOLE NO. LBC-83-1

	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.	
60.0			@ tuff	55.9 - 55.95 - BASIC VOLCANIC TUFF 60.1 - 60.2 BASIC VOLCANIC - TUFF(?) 61.80 - 61.65 - BASIC VOLCANIC, DK GREEN, MICROPORPHYRITIC(?)								
	60		@ 45°	63.20 - 65.60 BASIC VOLCANIC TUFF - F. GRAIN, DK GREEN TO GREENISH-YELLOW BASIC TUFF. UNIT IS MASSIVE, NOT APPARENTLY Bx'D								
65.0			ARG	- WK SERICITIC ALT'N T/O 63.5 - FOLIATION @ 45° CA 64.60 - 64.75 - ARGILLITE, AS ABOVE INTERVAL 53.20 - 63.20								
				65.60 77.63 GRAPHITIC ARGILLITE - GREY TO BLK, GRAPHITE ON FOLIATIONS, SKB - BRECCIATED BY QZ STRS - UNIT HAS TUFFACEOUS(?) SECTIONS								
70.0				CONTAINING FD PHENOS 69.80 - 70.25 - BASIC VOLCANIC, MINOR Bx'N, TR. FUCHSITE 71.05 - 71.30 - BRECCIA - ARGILLACEOUS MATRIX WITH ARG/VOLC CLASTS								
	70											
75.0			ARG 55°	75.0 - FOLIATION @ 55° CA								
				77.63 - 81.36 ARGILLITE / BASIC VOLC BRECCIA - GREEN TO LT GREY/BLACK, CARBONACEOUS MATERIAL ALONG FOL/FRACS, AND FORMING Bx MATRIX								
80.0												

PAGE 8 OF 9	PROJECT: LEN 2140	HOLE NO. LB2-83-1

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS				
63.30 - 65.60 - 3% Diss Py Blebs										
65.60 - 69.80 - 3-5% Py in Blebs										
69.80 - 70.6 - 3% Py Diss										
70.6 - 71.3 - 5-7% Py Diss		70.7	72.25	1.55	14614	.009	.01	.01	.01	.001
71.3 - 73.9 - 3-5% Py Diss Blebs										
73.9 - 77.63 - 1-3% Diss Py										
77.63 - 80.45 - 1-3% Diss Py										

N2/E2

PAGE 4 OF 10 | PROJECT: LEN 2140 | HOLE NO. LBC-83-1

% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
			80.0							
		8x55°	81.00 FOLIATION @ 55° CA							
			81.36-84.12 BRECCIATED GRAPHITIC ARGILLITE - BLK TO GREY, FOLIATED/CRENULATED, GRAPHITIC ARGILLITE. · BxN DUE TO ABUNDANT QZ STRINGERS, NO DOMINANT ATTITUDE · GRAPHITE ABUNDANT ALONG FOLIATIONS							
			85.0							
			- FOLIATIONS VERY DISTURBED 83.80 · FOLIATION @ 65° CA							
			84.12 END OF HOLE							
			90.0							
			95.0							
			100.0							

PAGE 10 OF 10	PROJECT: LEN 2140	HOLE NO. LEN-83-1

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS				
80.45 - 81.36 - 5-10% Py in Diss Blebs/Swirls - Also, 1% Po, Diss Blebs		80.45	81.36	0.88	14615	.005	.01	.01	.01	.001
81.36 - 84.12 - 1% Diss Py in Blebs										

...GE	OF	PROJECT:	HOLE NO.

% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.	
				A	B	C	D	E			

APPENDIX B

Geochemical Methods

Drill core samples were split at the LBC 83-1 drill site and shipped to Min-En Labs in North Vancouver for analysis. All samples are tested for copper, lead, zinc, silver and gold. Base metals and silver results were obtained by atomic absorption analysis. The analytical technique for gold is by fire assay and atomic absorption finish.

Pulps for all samples are stored at the Esso Minerals Canada office in Vancouver, B.C. Split drill core is stored at the LBC 83-1 drill site.