

82-#953

10987

# ~~10807~~

Trenching and Drilling Report

on the

LIKELY PROJECT

CARIBOO MINING DIVISION

NTS 93A/11W, 12E

Latitude  $52^{\circ}39'$ ; Longitude  $121^{\circ}36'$

Owner: CAROLIN MINES LIMITED

&

AQUARIUS RESOURCES LTD.

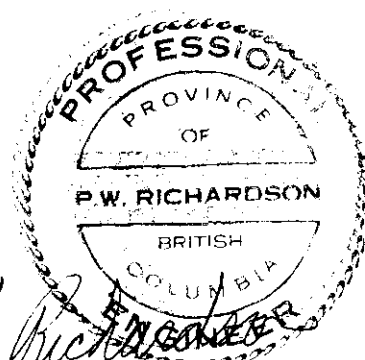
Operator: CAROLIN MINES LIMITED

BY

P. W. RICHARDSON, PH.D., P.ENG.

Vancouver, B.C.

January 20, 1983



10987

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## SUMMARY

The Likely Project consists of 27 modified grid claims containing a total of 394 units, which are jointly owned by Carolin Mines Limited and Aquarius Resources Limited. The claims are drained by several streams that produced placer gold in the past and are underlain by an assemblage of mafic lavas, volcanoclastic sediments and intrusive rhyolite to diorite dykes and stocks. Previous work by various operators on the potential of lode mineralization on the area of the claims has entailed limited soil geochemistry, diamond drilling, reconnaissance geological mapping and an airborne magnetometer and electromagnetometer survey. In November 1981, a soil geochemical programme was designed to investigate the three areas of anomalous response outlined by an airborne survey done by Carolin Mines Ltd. Numerous isolated high gold-in-soil geochemical values were found throughout these grid areas. A broad area of slightly anomalous gold-in-soil associated with high arsenic occurs in the southern half of the central grid. In November 1982, a programme of nine backhoe trenches and one short diamond drill hole was completed.

## INTRODUCTION

The Likely Project encompasses an area of approximately 10,000 hectares located in an area of placer workings between the Cariboo and Quesnel Rivers near the town of Likely, B.C. The claims were optioned from R. E. Mickle by Aquarius Resources Limited and Carolin Mines Limited on the premise that local bedrock gold deposits produced the placer gold. Added encouragement was received when Dome Mines Limited announced discovery of a gold deposit 6 km west of the Likely Project in 1981. The Cariboo Bell copper-gold porphyry deposit lies 8 km southwest of the Property.

An airborne magnetometer and electromagnetometer survey was conducted in February 1981, and several anomalous areas were found. Field inspection of these anomalous areas was carried out by R. Hrkac and D. Rennie in May 1981. Linecutting and soil sampling were completed by Amex Exploration Services Limited under contract in November and early December 1981.

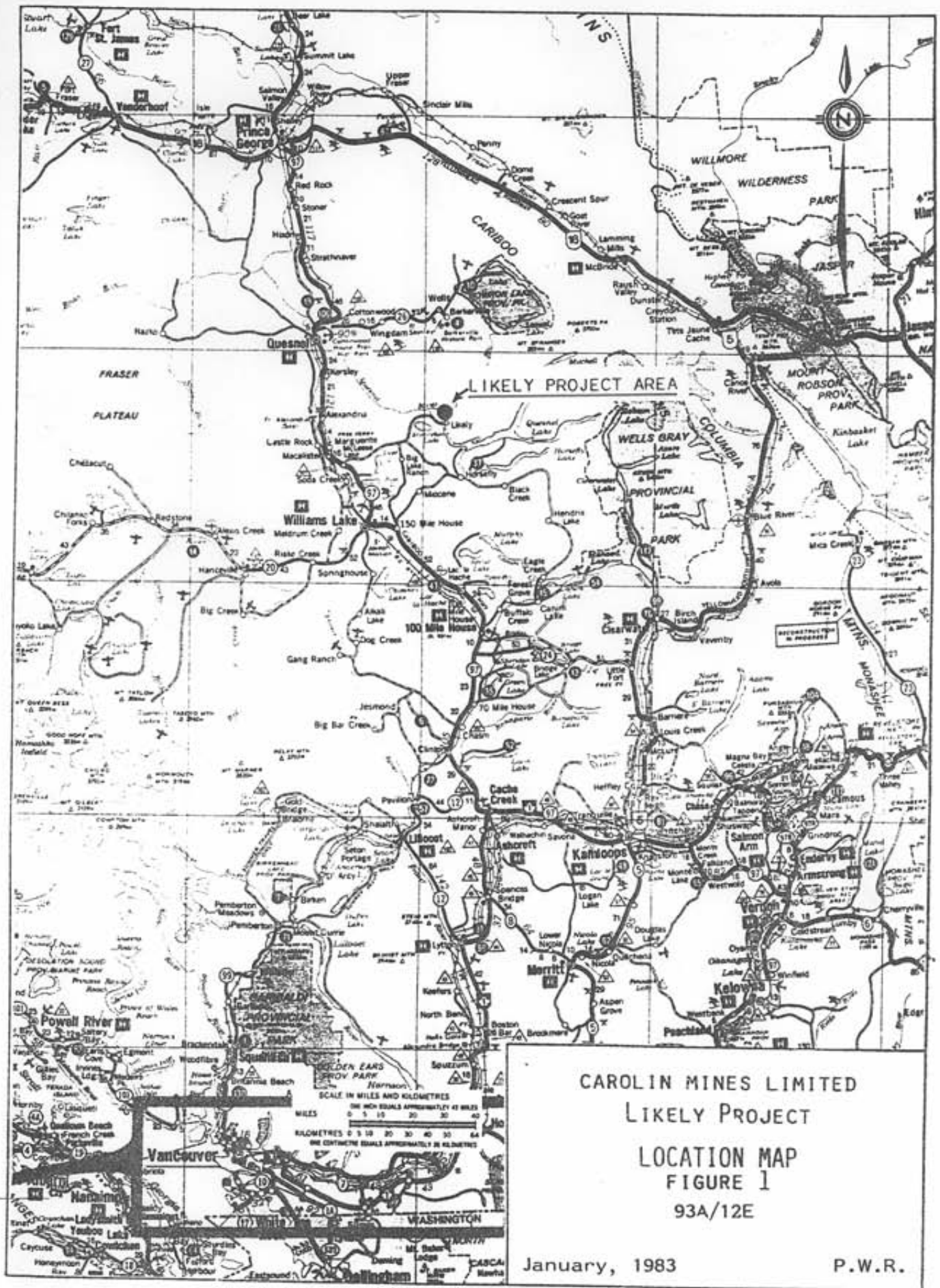
This report deals with a modest trenching and drilling programme which was done to begin investigation of the geochemical anomalies. The results are being submitted as assessment work.

### LOCATION AND ACCESS

The Property is immediately east of the towns of Likely and Quesnel Forks between Spanish and Quesnel Lakes in the south to Kangaroo Creek in the North (Figure 3). Most of the claims are south of the Cariboo River and northeast of the Quesnel River.

The area is accessible from Highway 97 at 150 Mile House by 75km of all-weather gravel road to Likely (Figure 1). All-weather roads lead from Likely to Quesnel Forks and Keithley Creek through the central portion of the Property. Numerous logging roads, which vary from good two-wheel-drive roads to overgrown walking paths, provide access to the edges of the property. Logging has extended to the east boundary of the JUN 9 Claim along Westenhiser Creek north of the Cariboo River, and access to the Kangaroo drainage is by foot.

Elevations vary from 604m on the Quesnel River to 1500m on the March 1 Claim (Figure 2).



### CLAIMS AND CLAIM GROUPS

The Likely Project consists of 27 modified grid claims, two 2-post claims and one fractional claim totalling 394 units which are jointly owned by Carolin Mines Limited and Aquarius Resources Limited (Figure 3). The claims have been grouped for applying assessment work into four groups as follows:

## T A B L E I

List of Claims and Claim Groups (from north to south)

<u>GROUP NAME</u>	<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>UNITS</u>	<u>DATE RECORDED</u>	<u>EXPIRY DATE</u> •
Group 1	JUN 6	1794	20	July 7, 1980	July 7, 1984
	JUN 7	1795	20	July 7, 1980	July 7, 1984
	JUN 8	1796	20	July 7, 1980	July 7, 1984
	JUN 9	1797	20	July 7, 1980	July 7, 1984
	JUNE	1050	20	June 28, 1979	June 28, 1984
100 units total					
Group 2	DUG	999	12	May 22, 1979	May 22, 1984
	Rose 4 Fraction	4197	1	Dec. 15, 1981	Dec. 15, 1983
	Rose 3	4196	15	Dec. 15, 1981	Dec. 15, 1983
	Rose 2	3992	12	Aug. 24, 1981	Aug. 24, 1983
	Easy 7	1007	20	May 23, 1979	May 23, 1984
	Easy 6	923	20	Dec. 7, 1978	Dec. 7, 1983
	TY	1051	20	June 29, 1979	June 29, 1984
100 units total					
Group 3	Easy 4	880	20	Nov. 2, 1978	Nov. 2, 1984
	Easy 1	877	20	Nov. 2, 1978	Nov. 2, 1984
	Easy 5	881	6	Nov. 2, 1978	Nov. 2, 1984
	Aug 1	1149	6	Aug. 31, 1979	Aug. 31, 1984
	Easy 3	879	15	Nov. 2, 1978	Nov. 2, 1984
	E2	4321	6	May 17, 1982	May 17, 1984
73 units total					
Group 4	Nov 4	1366	20	Dec. 6, 1979	Dec. 6, 1983
	March 1	1531	20	Mar. 17, 1980	Mar. 17, 1984
	March 2	1532	4	Mar. 17, 1980	Mar. 17, 1984
	Jun 11	1799	18	July 7, 1980	July 7, 1983
	Jun 10	1798	18	July 7, 1980	July 7, 1983
	Lake 1	3994	8	Aug. 24, 1981	Aug. 24, 1983
88 units total					
not grouped	Rose 1	3993	2	Aug. 24, 1981	Aug. 24, 1983
	Gold 1	1800	1	July 7, 1980	July 7, 1983
	Gold 2	1801	1	July 7, 1980	July 7, 1983
	Jul 1	1852	9	Aug. 8, 1980	Aug. 8, 1983
	J1	4406	10	July 29, 1982	July 29, 1983
	J2	4407	10	July 29, 1982	July 29, 1983
33 units total					

\* Expiry date after the assessment work applied for in the present report is credited.



## HISTORY

The first gold discovery in the Cariboo was in mid 1859 on the Horsefly River about 20km south of the Likely Project. By late 1859, numerous miners were working shallow diggings on gravel bars around the junction between the Cariboo and Quesnel Rivers. Subsequent discoveries of richer placer deposits at Keithley Creek in 1860 and then the bonanza of Williams Creek in 1861 attracted a stampede of men through the area.

Quesnel Forks townsite was laid out by the Royal Engineers in 1861, and remained the main supply centre for the Cariboo until 1865 when the Cariboo Wagon Road was completed via Quesnel and Lightning Creek.

Placer mining in the Quesnel Forks region is discussed in detail by Cockfield and Walker (1933), and is summarized as follows:

1. Shallow workings were mined on the gravel flat around the Quesnel Forks townsite where gold was found on certain clay layers. Glaciofluvial bench gravels were also productive along the Cariboo River.
2. High level gravels from buried channel deposits on bed-rock were worked on a large scale at the Bullion Mine hydraulic operation 5km downstream from Likely. Another high level old channel deposit was worked along lower Morehead Creek, 13km downstream from Quesnel Forks.

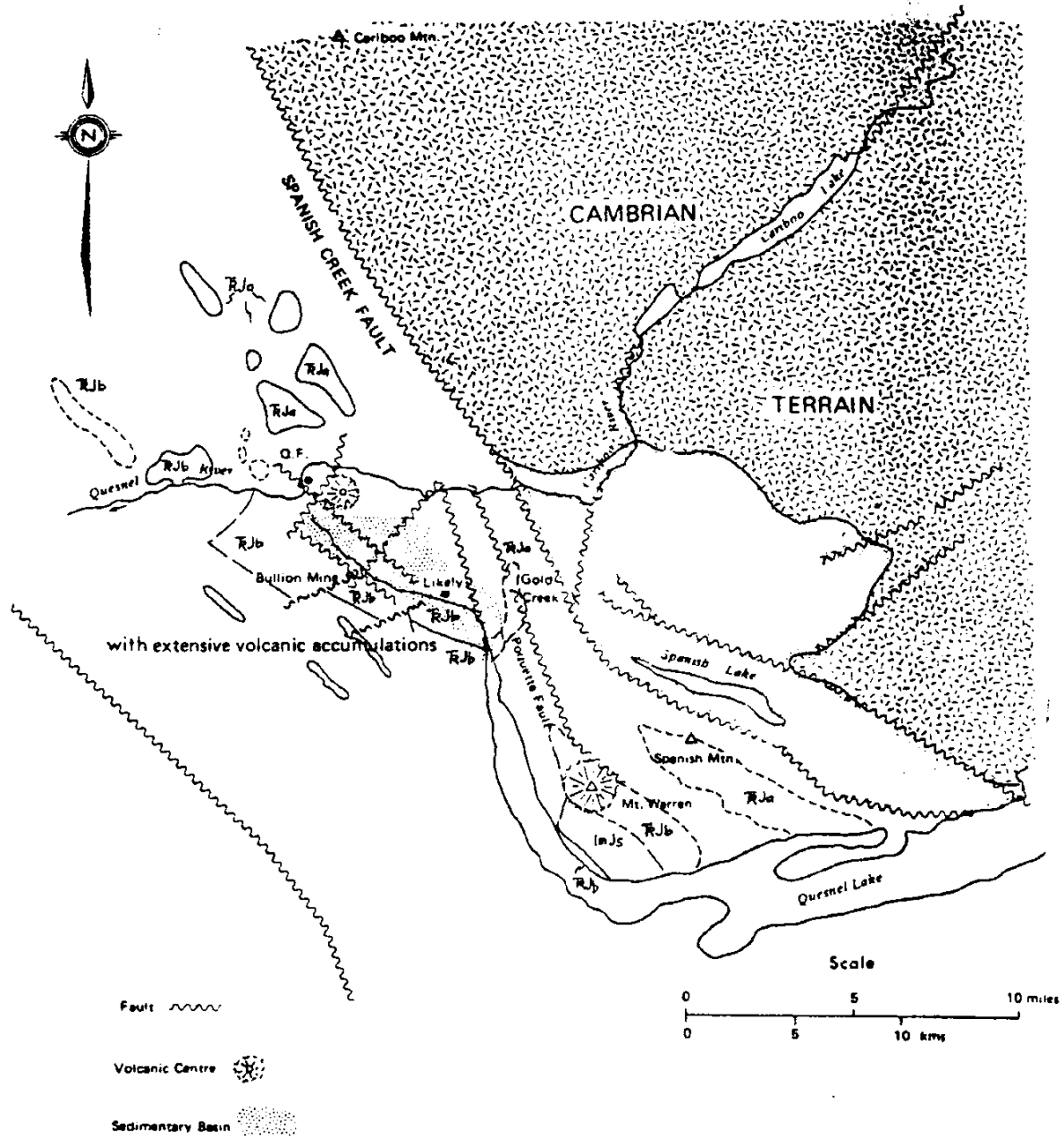
3. Recent bar gravels on the Quesnel River were deposited from small tributary creeks cutting the old high level channel. Gravels in the small tributary creeks were also extensively mined.
4. Apparently eluvial (residual) concentrations of gold were found in Cedar Creek and Poquette Creek Valley.

The famous Bullion Mine operated from 1894 to 1905, when somewhat over 12 million yards of Pleistocene gravels were processed to yield \$1,233,936.51. More recently, the Bullion Mine was operated on a smaller scale between 1933 and 1942.

Placer gold has been found in all creeks draining the Likely Project claims. The most notable production came from Cedar Creek, Likely Gulch, Gold Creek, Rose Gulch and Spanish Creek.

Recent exploration has resulted in the discoveries of the Cariboo Bell porphyry copper-gold deposit on Mount Polley and the Dome Mines Limited Quesnel River Gold Deposit between lower Maud Creek and Slide Mountain. A significant proportion of the gold in the placer deposits in the Likely Area probably originated from similar types of bedrock mineralization.

Regional geological setting of Likely district, B.C. (after Campbell 1978 and Godfrey 1980)



- ImJs Jurassic conglomerate, greywacke, shale Norian and younger ( )
- Rjb Augite porphyry basalt breccia, minor flows tuff and tuffaceous argillite; local andesitic basalt
- RJa Basaltic tuff and breccia, generally fine-grained argillite,

CAROLIN MINES LIMITED

LIKELY PROJECT

REGIONAL GEOLOGY

Figure 2  
83A/12E

Jan. 1983

P.W.R.

## GEOLOGY

### A. REGIONAL GEOLOGY

The regional geology of the Quesnel Lake Area has been compiled by Campbell (1961). More detailed studies were recently conducted by Bailey (1975). A major revision of the pre-Mesozoic stratigraphy has been completed by Campbell (1978).

The claims are on the eastern margin of the Quesnel Trough, a 35km wide, northwesterly-trending, Early Mesozoic, volcanic-sedimentary belt of regional extent which is fault-bounded against metamorphosed Paleozoic and older rocks to the west in the Pinchi Geanticline and to the east by the Omineca Geanticline (Campbell and Tipper, 1970; Figure 2). The equivalent tectonic element northwest of latitude 58°N, the Whitehorse Trough, is predominantly sedimentary in contrast with the mainly volcanic facies in the Quesnel Trough. Although strata in the Quesnel Trough are characterized by broad folds and steep block faults, the folds are tighter and inclined to the west locally along the eastern edge of the trough, indicating that there was southwestward tectonic transport in the western part of the Omineca Belt. Godfrey (1980) has recognized this type of folding along the "Kangaroo Creek Fault Zone" in central Likely Project.

A profound regional fault that can be traced over 100km to the north occurs along the east edge of the Likely Property, and has been described by Littlejohn (1977). It is called the Spanish Creek Fault by Godfrey (1980).

Two major regional volcanic suites are recognized by Campbell (1978). Both are Norian, which is 200 million years old, and perhaps slightly younger in age. The westernmost unit is composed of pyroxene basalt, pillow lavas and breccias which are locally analcite-bearing. The eastern unit is mainly fine-grained basaltic tuff and breccia with minor argillite and chert.

An important feature of Quesnel Trough is narrow linear zones of lower Jurassic syenite to monzonite stocks and related sub-volcanic intrusive phases. These alkalic plutonic rocks are often associated with copper-gold mineralization.

## B. PROPERTY GEOLOGY

Approximately 90% of the claim area is obscured by glacial and glaciofluvial overburden. Bedrock is best exposed in road cuts and along the steep valley walls of the Cariboo and Quesnel Rivers. Outcrop is relatively common around Poquette Lake. Angular rubble on ridges and hill tops appears indicative of underlying rock types.

Rocks on the claim group include a series of sediments and metamorphic rocks: argillites, phyllites, quartzites, slates, schists and greenstones. These rocks are generally exposed on the margins of the Property in steep sided valleys.

The main rock unit on the Property is a volcanic series of andesitic and basaltic flows, agglomerates and tuffs. The volcanic sequence has been intruded by small dykes and sills of diorite, syenite and rhyolite and by at least one diorite stock. The outcrops of the basalt and andesite were found to contain pyrrhotite and pyrite. Some gold values were obtained in the quartz veins in the rhyolite dykes.

## 1982 PROGRAMME

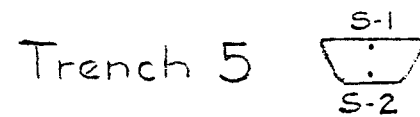
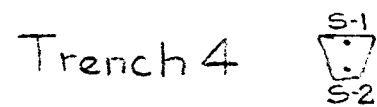
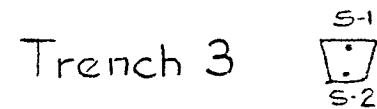
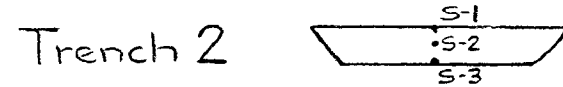
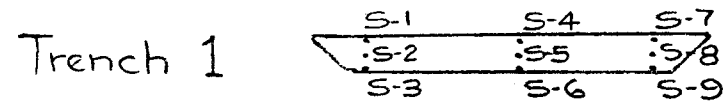
In 1982, a backhoe trenching programme of nine trenches was carried out using a John Deere 450 tractor with a backhoe. In addition, one short diamond drill hole was drilled with a Hydro Wink machine to test the bedrock in an area where the overburden was too deep to be reached by the trenching (Figure 3). The trenches were reported as physical work, but are included herein so there will be a record of the soil sampling results down the sides of the trenches even though most did not reach bedrock (Figure 4). Where the trenches reached bedrock, chip channel samples were collected with the results reported in Appendix I and on Figure 4.

On the northern grid where the trenches did not reach bedrock, one diamond drill hole DDH 82-C-1, was drilled (Appendix II). Only unmineralized basalt was encountered.

## CONCLUSIONS

A modest trenching and drilling programme was undertaken in areas shown to contain anomalous soil samples in order to determine whether trenching or additional geophysics and geochemistry is the best approach for the next major exploration programme on the property. The present programme did not reveal mineralization, and it appears that additional geological and geochemical surveys should be done next.

### North Grid



### GEOCHEMICAL

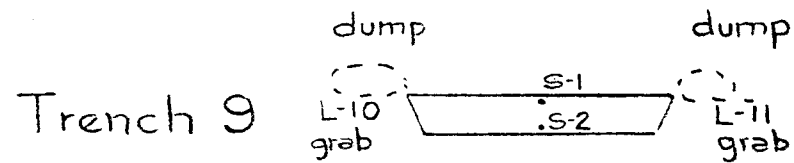
All results are in PPM.

SAMPLE No.	Cu	As	Au ppb
TR-1 S-1	84	38	5
2	76	27	5
3	65	18	5
4	55	15	5
5	112	31	5
6	84	26	20
7	65	28	10
8	82	49	110
TR-1 S-9	76	17	15
TR-2 S-1	52	9	5
2	110	34	15
TR-2 S-3	82	46	20
TR-3 S-1	90	28	25
TR-3 S-2	70	80	25
TR-4 S-1	105	28	70
TR-4 S-2	108	32	60
TR-5 S-1	166	76	25
TR-5 S-2	164	41	40
TR-9 S-1	164	36	30
TR-9 S-2	160	48	45

### Central Grid

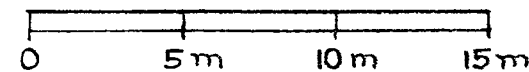


### South Grid



Scale

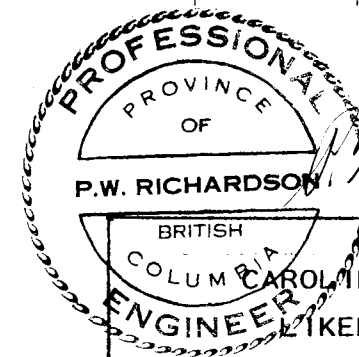
1:500



PROFILES

### ASSAY

Sample	Cu%	Ag oz/ton	Au oz/ton
L - 1	.04	.01	.002
2	.02	.01	.001
3	.01	.01	.001
4	.01	.01	.001
5	.01	.01	.001
L - 6	.01	.01	.002
L - 8	.01	.01	.003
9	.01	.01	.001
10	.03	.01	.006
L - 11	.01	.01	.002



COLUMBIA CAROLIN MINES LTD.  
LIKELY PROJECT  
BACKHOE TRENCHES  
Figure 4  
93A/12E

January 27, 1983

P.W.R.



STATEMENT OF COSTS

The programme was carried out in the period  
November 8 - 20, 1982.

Group 1 - Trenches 1-4

5½ days trenching @ \$500	\$ 2,750
Truck Rental 5 days @ \$40	200
Board & Lodging - 2 men @ \$100/day	500
Supervision:	
John DeLeen	200
Ray Hrkac	<u>350</u>
	\$ 4,000

Group 2(a) DDH 82-C-1

Overburden 6.4m + mobilization	1,200
Core 5.5m	300

(b) Trenches 5 & 6

2 days trenching @ \$500	1,000
Truck Rental 4 days @ \$40	160
Room & Board 4 days @ \$100/day	400
Supervision:	

John DeLeen	300
Ray Hrkac	<u>700</u>

\$ 4,060

Group 3 - Trench 7

Trenching - 1 day	\$	500
Truck Rental - 1 day		40
Board & Lodging		100
Supervision:		
John DeLeen		50
Ray Hrkac		<u>50</u>
		740

Group 4 - Trenches 8 & 9

Trenching - 2 days @ \$500		1,000
Truck Rental - 2 days @ \$40		80
Board & Lodging - 2 days @ \$100		200
Supervision:		
John DeLeen		650
Ray Hrkac		<u>1,000</u>
		2,930

GRAND TOTAL           \$ 11,730



*P.W. Richardson*  
P. W. Richardson, P.Eng.

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Parsnip River British Columbia Sheet 93; Geological Survey of Canada Map 1424A, Scale 1:1,000,000 Map plus correlation chart.

STATEMENT OF AUTHOR'S QUALIFICATIONS

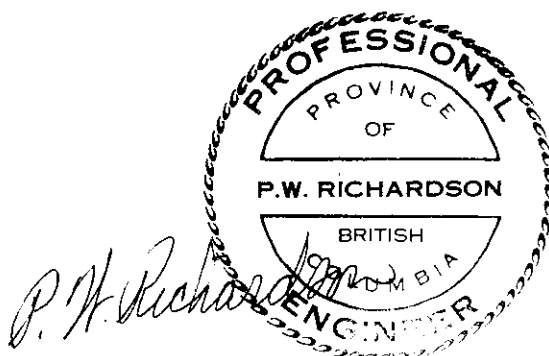
P. W. Richardson, Ph.D., P.Eng.

B.A.Sc.(1949), M.A.Sc.(1950) from the University of British Columbia in Geological Engineering.

Ph.D.(1955) from Massachusetts Institute of Technology in Economic Geology and Geochemistry.

- 1950-52: Mine Geologist at Sullivan Mine, B.C.
- 1955-66: Exploration Geologist with Dome Exploration (Canada) Limited, Toronto.
- 1966-68: Exploration Geologist with Amax Exploration Limited, Vancouver.
- 1968-78: Vancouver Manager for Newconex Canadian Exploration Ltd.
- 1978-  
Jan. 31/81: Principal of Richardson Geological Consulting Ltd.
- Feb. 1/81-  
Present: Vice-President, Exploration of Carolin Mines Ltd.

I have had an interest in and have practised exploration geo-chemistry from 1953 to the present time. In addition, I have supervised numerous trenching and drilling programmes from 1949 to the present time.



APPENDIX I

ASSAY CERTIFICATES



To: Carolin Mines Ltd.,  
4th Floor 535 Howe St.,  
Vancouver, B.C.  
V6C 2C2

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone: 253 - 3158

File No. 82-1555 B

Type of Samples Rocks

Disposition \_\_\_\_\_

# ASSAY CERTIFICATE

No.	Sample	Cu%	Ag oz/ton	Au oz/ton					No.
1	L - 1	.04	.01	.002					1
2	2	.02	.01	.001					2
3	3	.01	.01	.001					3
4	4	.01	.01	.001					4
5	5	.01	.01	.001					5
6	L - 6	.01	.01	.002					6
7									7
8	L - 8	.01	.01	.003					8
9	9	.01	.01	.001					9
10	10	.03	.01	.006					10
11	L - 11	.01	.01	.002					11
12									12
13									13
14									14
15									15
16									16
17									17
18									18
19									19
20									20

All reports are the confidential property of clients.

DATE SAMPLES RECEIVED Nov. 22, 1982

DATE REPORTS MAILED Nov. 24, 1982

ASSAYER

DEAN TOYE, B.Sc.  
CHIEF CHEMIST  
CERTIFIED B.C. ASSAYER







ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B. C. V6A 1R6

phone:253 - 3158

To: Carolin Mines Ltd.,
4th Floor 535 Howe St.,
Vancouver, B.C.
V6C 2C2

File No. 82-1556

Type of Samples Soils

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Table with columns: SAMPLE No., Cu, As, Au ppb, and numbered rows 1-40. Data includes sample IDs like TR-1 S-1, TR-2 S-1, etc., and corresponding assay values for Cu, As, and Au.

All reports are the confidential property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Nov. 22, 1982

DATE REPORTS MAILED Nov. 26, 1982

ASSAYER [Signature]

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

APPENDIX II

DRILL LOG OF DDH 82-C-1

Carolin

LOCATION: B.L. @ 3+50 S  
(North Grid)  
AZIMUTH: -

DIAMOND DRILL RECORD

HOLE NO  
82-C-1

PROPERTY: LIKELY PROJECT

DIP: - 90° LENGTH: 11.89 m ELEVATION: CLAIM NO: DUG

STARTED: CORE SIZE: A Q DATE LOGGED: Nov 23 1982 SECTION:

COMPLETED: DIP TESTS: NONE LOGGED BY: John DeLeon & Ray Howes

PURPOSE: To test geochemical anomaly in area of overburden too deep for trenching.

METRES		DESCRIPTION	SAMPLE No.	METRES		LENGTH METRES	Au oz/ton	Ag oz/ton	Cu %	Pb %	Zn %
from	to			from	to						
0	6.40	overburden									
6.40	9.75	basalt - dark green - porphyritic fine grained ground mass with altered inclusions - 2-6 mm in diameter - inclusions are augite? plus stringers of white carbonate chlorite, carbonite and lepidote alteration. Moderate to strong; HCl reaction and moderate to strong magnetic - fine pyrite	44151 44152	6.4 8.075	8.075 9.75	1.675 1.675	.0001 .0001	.003 .003	.011 .011	.001 .001	.006 .006
9.75	11.89	basalt medium green - texture breccia with fragments several millimeters to several centimeters fragments fine grained ground mass with porphyritic texture. Numerous 1 mm black chlorite coated fractures - HCl reaction weak to moderate - Non magnetic fine grained pyrite less than 1%. Alteration - chlorite - carbonate - lepidote alteration. veinlets of carbonate - No quartz veins. <1% fine disseminated pyrite	44153 44154	9.75 10.75	10.75 11.89	1.0 1.14	.0001 .0001	.006 .006	.011 .009	.001 .001	.007 .006

APPENDIX III

ANALYTICAL PROCEDURES

ACME ANALYTICAL LABORATORIES LTD.  
852 East Hastings Street,  
Vancouver, B.C.

GEOCHEMICAL ANALYSIS PROCEDURE

GOLD

The samples are ignited overnight at 600°C. The minus 80 mesh portion is ground in a ring grinder and 10 grams are digested with dilute hot aqua regia. The clear solution is extracted with methyl isobutyl ketone. Gold is determined in the methyl isobutyl ketone extract by atomic absorption. The remaining ground pulp is then set aside and saved for use in other analytical methods or to check initial results.

# ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

## Multi Element Analysis by ICP

### Digestion of Sample \*

0.5 gram samples are digested with hot aqua regia for one hour and the sample is diluted to 10 ml. The diluted sample is aspirated by ICP and the analytical results are printed by Telex, either in percent or ppm as shown.

Please Note : This digestion is partial for Al, Ca, La, Mg, P Ti, W and very little Ba is dissolved.

### Report Format

HO/22N 3850W  
EGC

BURN # 1 GE16      15:46      3FEB1981

IS  
1357

MO	CU	PB	ZN	AG	NI	CO	MN	FE%	AS
3.92	41.5	9.00	136	.332	15.3	5.70	312	3.167	5.73
U	IS	TH	IS	CD	SB	BI	V	CA%	P%
4.11	.371	.424	1073	.960	1.94	4.51	52.7	1.107	.206
LA	IN	MG%	BA%	TI%	B	AL%	IS	IS	W
22.1	3.50	.2589	.0184	.0014	-.05	1.720	0	3.06	.276

\*O/M1  
EGC

BURN # 1 GE16      15:48      3FEB1981

1358

.563	29.3	34.6	171	.154	33.4	11.5	794	2.536	8.77
3.57	.044	2.79	765	1.08	.635	4.25	54.8	.6452	.109
6.42	2.88	.6008	.0252	.0753	-.37	1.944	0	2.32	-.61

### Code :

HO, \*O, EGC  
/22N 3850 W  
/M1  
15:46 3FEB1981  
BURN # 1 GE16  
IS

Computer Instructions.  
Sample Number.  
ACME Geochem standard for quality control.  
Time and Date of Analysis.  
Geochem Computer Program.  
Internal Standard.

\* All samples were sieved to -80 mesh and pulverized to -150 mesh.



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Interpretation of Results

Standard M-1 is a certified geochem standard used to monitor the results. M-1 has the following analysis.

1.	Mo	:	in ppm	M1	2.	ppm
2.	Cu	:	in ppm	M1	28.	ppm
3.	Pb	:	in ppm	M1	38.	ppm
4.	Zn	:	in ppm	M1	180.	ppm
5.	Ag	:	in ppm	M1	0.3	ppm
6.	Ni	:	in ppm	M1	32.	ppm
7.	Co	:	in ppm	M1	12.	ppm
8.	Mn	:	in ppm	M1	800.	ppm
9.	Fe	:	in %	M1	2.5	%
10.	As	:	in ppm	M1	8.	ppm
11.	U	:	in ppm	M1	3.	ppm
12.	IS	:	Internal Standard.			
13.	Th	:	in ppm	M1	3.	ppm
14.	IS	:	Internal Standard.			
15.	Cd	:	in ppm	M1	2.	ppm
16.	Sb	:	in ppm	M1	3.	ppm
17.	Bi	:	in ppm	M1	2.	ppm
18.	V	:	in ppm	M1	54.	ppm
19.	Ca	:	in %	M1	0.62	%
20.	P	:	in %	M1	0.11	%
21.	La	:	in ppm	M1	8.	ppm
22.	In	:	in ppm	M1	2.	ppm
23.	Mg	:	in %	M1	0.67	%
24.	Ba	:	in %	M1	0.023	%
25.	Ti	:	in %	M1	0.07	%
26.	B	:	in ppm	M1	12.	ppm
27.	Al	:	in %	M1	1.9	%
28.	IS	:	Internal Standard.			
29.	IS	:	Internal Standard.			
30.	W	:	in ppm	M1	1.	ppm

Notes:

1. Zinc over 5000 ppm interferes on W channel.
2. Iron over 1. % interferes on In and Sb channel.

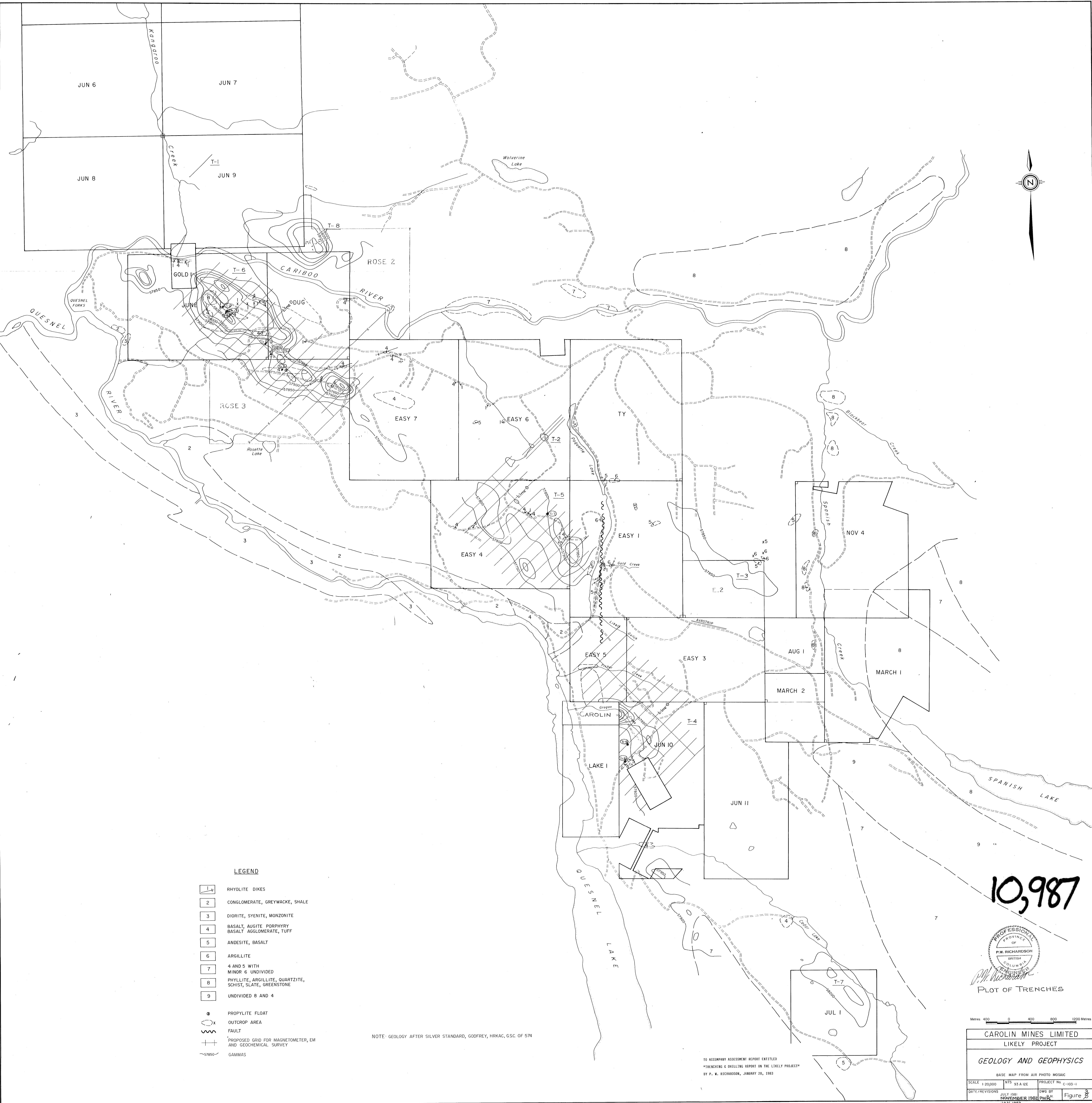
Monitoring of Results:

If analysis of standard M-1 is different than the certification, then compensate (add or subtract) samples appropriately.

Standardization:

Complete set of USGS standards, Canadian Certified Reference Materials and 72 specpure metals from Johnson Matthey.





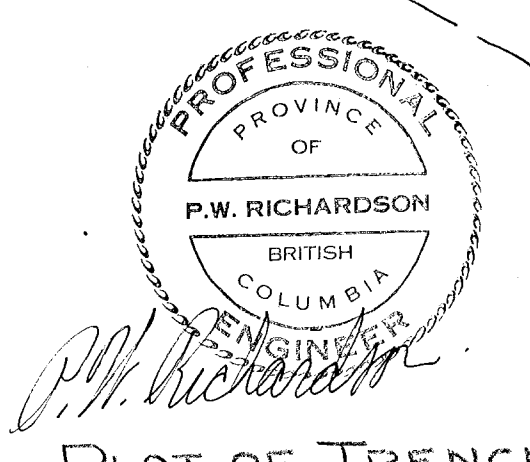
**LEGEND**

- 1+ RHYOLITE DIKES
- 2 CONGLOMERATE, GREYWACKE, SHALE
- 3 DIORITE, SYENITE, MONZONITE
- 4 BASALT, AUGITE PORPHYRY  
BASALT AGGLOMERATE, TUFF
- 5 ANDESITE, BASALT
- 6 ARGILLITE
- 7 4 AND 5 WITH  
MINOR 6 UNDIVIDED
- 8 PHYLLITE, ARGILLITE, QUARTZITE,  
SCHIST, SLATE, GREENSTONE
- 9 UNDIVIDED 8 AND 4
- PROPYLITE FLOAT
- ⊗ OUTCROP AREA
- FAULT
- + PROPOSED GRID FOR MAGNETOMETER, EM  
AND GEOCHEMICAL SURVEY
- ~5750 GAMMAS

NOTE: GEOLOGY AFTER SILVER STANDARD, GODFREY, HRKAC, GSC OF 574

TO ACCOMPANY ASSESSMENT REPORT ENTITLED  
"TRENCHING & DRILLING REPORT ON THE LIKELY PROJECT"  
BY P. W. RICHARDSON, JANUARY 20, 1983

10,987



PLOT OF TRENCHES

Metres 400 0 400 800 1200 Metres

CAROLIN MINES LIMITED			
LIKELY PROJECT			
<b>GEOLOGY AND GEOPHYSICS</b>			
BASE MAP FROM AIR PHOTO MOSAIC			
SCALE 1:20,000	NTS 93 A 12E	PROJECT No. C-103-1	
DATE/REVISIONS	JULY 1982	DWG BY	3
	NOVEMBER 1982	fw/h	Figure 2
	JAN 1983		