

Geochemical Assessment Report  
on a  
Reconnaissance Soil Geochemical Survey  
of a portion  
of the  
Hidden Creek Group  
(Mag A and Spuz D Mineral Claims)

situated on  
Hidden Creek  
and centered some  
6 Air Kilometers South East  
of  
Spuzzum

New Westminster Mining Division  
of  
Southern British Columbia

Latitude 49°40'N Longitude 121°20'W  
N.T.S. 92H/11W

Field Work on August 12, 13, and 14, 1978

by

AQUARIUS RESOURCES LTD.

Report by

D. R. Cochrane, P. Eng.  
March 8, 1979,  
Delta, B. C.



**Cochrane Consultants Limited**  
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Geotechnical Consulting / Exploration Services

geology  
geophysics  
geochemistry

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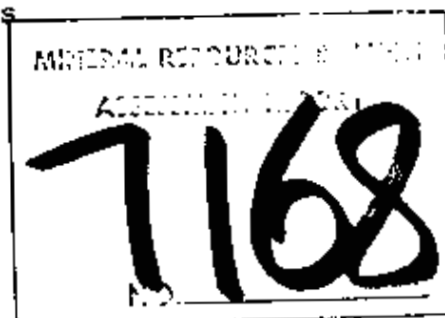
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BACKGROUND

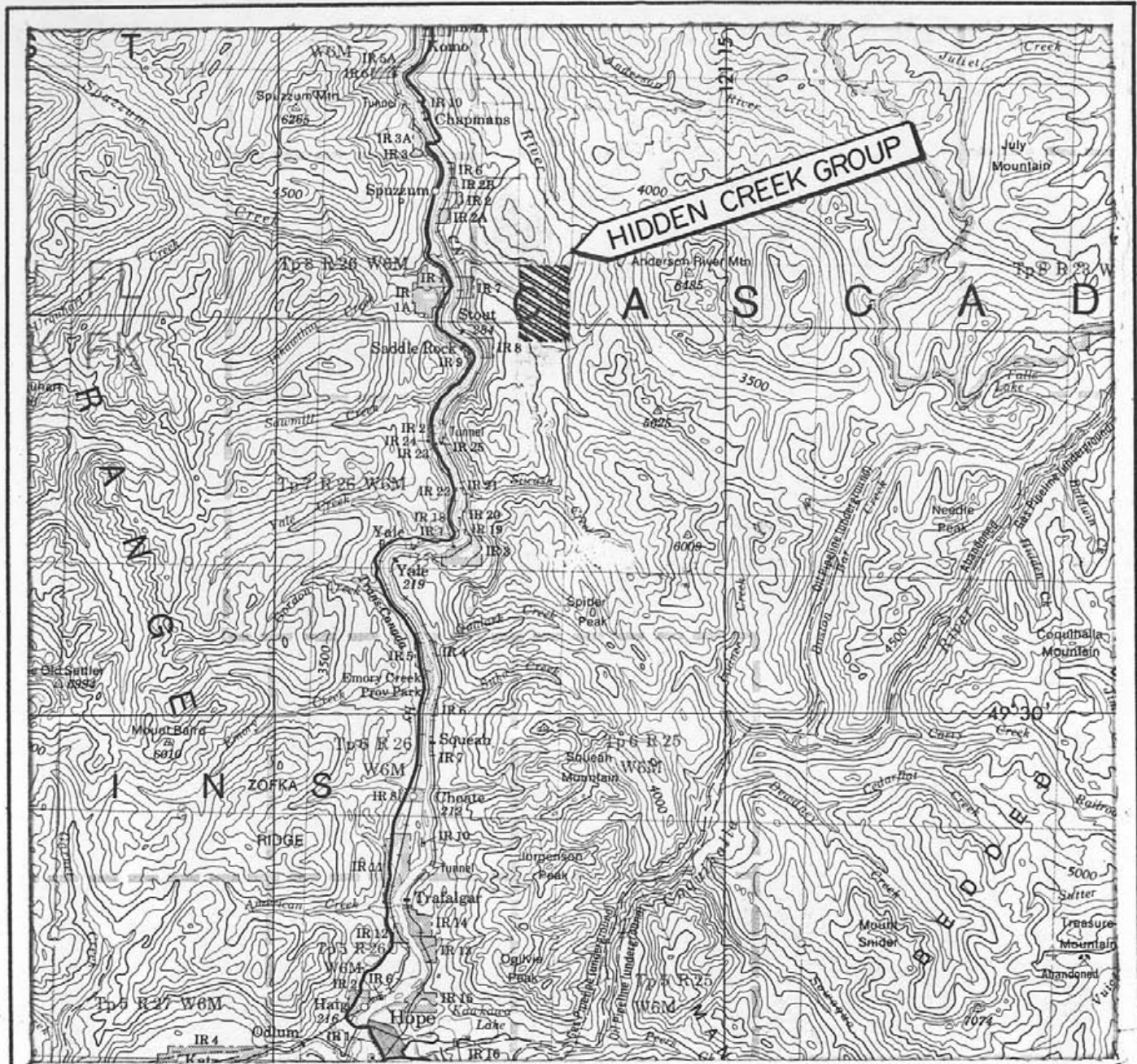
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The Hidden Creek Group of mineral claims lies along the northern portion of the Coquihalla Gold Belt and is part of a large number of mineral claims being actively explored for gold by Aquarius Resources Ltd. of Edmonton, Alberta.

The author was engaged as an independent consulting geological engineer by Aquarius, and has worked on portions of the belt since 1973, and on the Hidden Creek Group in 1977.

This report is designed for assessment work submission and assessment work details, including expenses incurred, are tabulated in Appendix I at the end of this report.






**AQUARIUS RESOURCES LTD.**  
 Hidden Creek Group Spuzzum B.C. N.T.S. 92H/11  
 Figure 1 New Westminster M.D.

Location Map

Scale: 1 to 250 000 or 1 inch equals approx. 4 miles



P. K. C. Feb. 1979

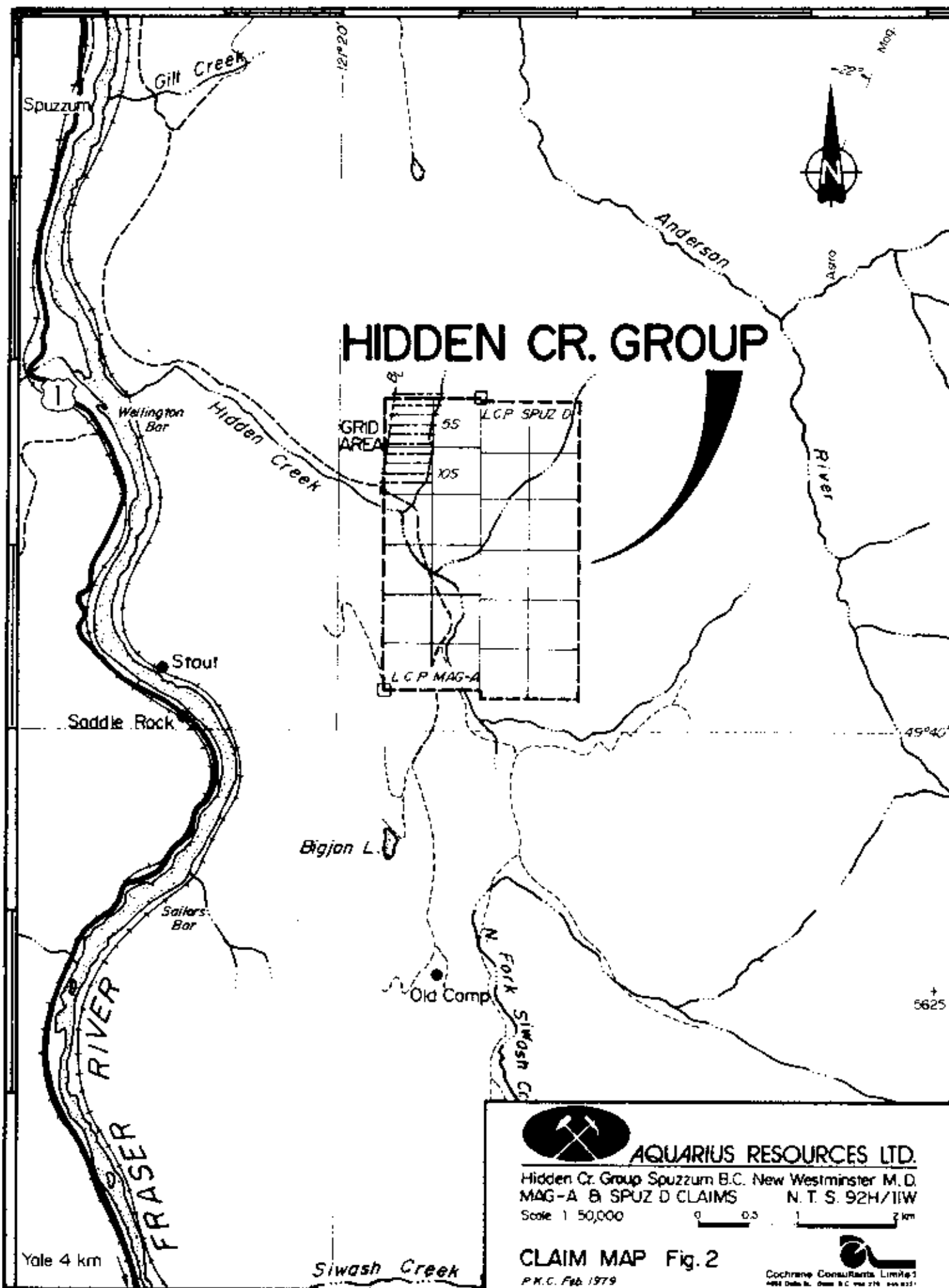
  
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LOCATION AND ACCESS

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The claims are located three (3) air kilometers east of the Fraser River, and thirty (30) air kilometers north of the town of Hope, in Southern British Columbia. Normal access is southerly along a logging road that leaves the Fraser Canyon Highway (B.C. No. 1) at a point just north of the Alexandra Bridge, and proceeds up Hidden Creek. At a point near Six Mile Creek (six miles from the Highway) the road crosses the eastern boundary of the claims and thereby provides fair access. A two way radio with the Cattermole Logging Company frequency is recommended to ensure road safety since the area is actively logged.





PROPERTY INFORMATION

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The Hidden Creek Group is comprised of two claims, namely; Mag A and Spuz D mineral claims. Pertinent claims information is listed below.

CLAIM	UNITS	RECORD NO.	ANNIVERSARY DATE	BEFORE CREDITS	AFTER CREDITS
Mag A	12	267	Feb. 16	1979	1980
Spuz D	12	314	Aug. 11	1979	1980

These claims form a contiguous block four (4) units wide (east-west) and six (6) units long and are registered in the New Westminster Mining Division.



## SETTING

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The claims lie in the North Cascade Mountain Range which is a rugged upland surface noted for steepness, thick bush and rain. Elevations in the general area range from 65 meters at Yale to 1,460 meters above sea level on the Anderson River Mountain east of the claims. Variation in topography within the claims boundaries is fairly modest, except in a few areas.

The Spuz and Maq claims straddle the Coquihalla Serpentine band and Hozameen Fault which marks the west boundary of the Methow Grabben, a major crustal feature separating Upper Jurassic Ladner Group slates from Paleozoic Hozameen Group cherts and metavolcanic rocks of unknown age.

This major feature is also the central axis of a series of gold occurrences which include five former gold producers, from south to north, namely; the Dawson (or Emancipation), Aurum, Pipestem (or Home Gold), Georgia No. 2 and Ward.





Past production is modest however, and is tabulated below:

PROPERTY	YEARS	TONS	OZ. GOLD	OZ. SILVER
Emancipation	1916-41	638	2,897	605
Aurum	1930-42	545	533	97
Pipestem	1935-37	1650	272	37
Georgia No. 2	1925	2	37	
Ward	1905	----	135	
Total			3,874	

Source: B. C. Dept. of Mines Record of Lode Metal  
Production Table 1, Index No. 3

Recent exploration interest in the area has been sparked by the higher price of gold on the open market, and by the discovery of a large tonnage deposit by Carolin Mines ( The Idaho Zone ) located several kilometers south-southeast of the Hidden Creek Group.



HISTORY

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The north west portion of the Mag A claim covers an old gold showing named the Majestic which is not described in Minister of Mines reports, but is listed in the "Min Dep" Files as:

MAP NO: : 037    PROPERTY NAME:    Majestic  
MINDEP ID.: 01349    COUNTRY: CANA    PROVINCE: BCOL  
MINING DIVISION:    NWES  
B-C MINERAL INVENTORY NO.: 092/H/NW033  
COMMODITIES PRESENT:    Au  
NTS MAP SHEET: 092/H/11/W    LATITUDE: 49.66  
LONGITUDE: 121.36  
UTM ZONE: 10U    EASTING: F0618500    NORTHING: F15501700  
ELEVATION (IN METERS): 0600  
RELIEF (IN METERS): 055  
PHYSIOGRAPHIC ZONE:    CMPR  
OBJECT PLOTTED:    SOURCE:    ADIT:    PROP. FILE  
PLOTTED BY:    BCDOM  
ACCESS:    05/140/SPUZZUM



There is evidence of a dump located on Six Mile Creek, just above its confluence with Hidden Creek and presumably the Majestic adit. In 1977 the author and Mr. J. Stewart panned a color or two of gold near the mouth of Six Mile Creek, and a few silt samples analyzed for gold were slightly anomalous. Consequently in the 1978 field season a flagged grid was established and upper B horizon soil samples collected and analyzed for gold.



## FIELD PROCEDURES

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A base line was blazed, flagged and chained southerly (at  $190^{\circ}$  true) from near the north-west corner of the Mag A claim (see Figure 2). From the base line, due easterly directed flagged and chained cross lines were established at 100 meter intervals. There are ten (10) cross lines, 500 meters long and designated 2 south through to 11 south. (see Figure 3).

Soil samples were collected from the B horizon at 25 meter intervals along all the cross lines and along the Hidden Creek Road at a 50 m spacing. In all there were just over 200 soil samples collected, placed in numbered kraft paper bags, air dried at the base camp and then shipped by 4 x 4 truck to Min-En Labs in North Vancouver.

At Min-En Labs the soil samples were screened to -80 mesh, and analysis for gold was by a Aqua Regia digestion and atomic absorption technique. Results are shown in Figure 3 with values in parts per billion.



The field crew worked from a trailer camp located south of the Hidden Creek Group and field work was supervised by Mr. J. Stewart of Aquarius Resources Ltd.

Analytical results were sent to the office of Cochrane Consultants and plotting was by Mr. B. A. Cochrane and Miss Phoebe Chu from these results and field notes.



## DISCUSSION OF RESULTS

The gold content of the upper B soil horizon on the Hidden Creek grid ranged from below detection limit ( $\leq 5$  ppb) to a high of 180 ppb. Previous geochemical experience in the area has suggested that values in excess of 50 ppb on reconnaissance work are anomalous and worthy of investigation. Values between 25 and 50 ppb are usually classed as possibly anomalous.

Based on this classification there are four (4) anomalous samples and three of these (60, 120 and 110 ppb) lie along the road traverse near the mouth of Six Mile Creek. The fourth, a 180 ppb, is on line 3+00 South, 0+75 m east of the base line.

Previous experience has suggested that areas anomalous with respect to the amount of gold in soil samples are usually indicative of coincident areas of high gold content in underlying bed rock. This is due to the extremely low mobility of gold in the weathering cycle, since most transportation is probably due to mechanical action (glacial



movement, soil creep and slump, water action, etc.) and is limited in areal extent except in precipitous topography. Therefore most of the plus 50 ppb values on the accompanying map probably are indicative of areas of nearly coincident bedrock which is also anomalous with respect to gold.

Additional, and more detailed soil sampling is recommended around the four (4) gold in soil anomalous values especially in the area between the logging road and line 11 south.

Respectfully submitted,



A circular professional seal for D. R. Cochrane, a Professional Engineer in the Province of British Columbia. The seal is partially obscured by a large, stylized signature in black ink that extends across the page.

D. R. Cochrane, P. Eng.

March 8, 1979,

Delta, B. C.



APPENDIX I

ASSESSMENT WORK DETAILS

PERSONNEL:

Field Person;	August 12, 13, 14, 1978	
	3 days at \$80.00/day .....	\$ 240.00
Field Person;	August 12, 13, 14, 1978	
	3 days at \$80.00/day .....	240.00
Supervisor;	Mr. J. Stewart, August	
	12, 13, 14, 1978	
	3 days at \$2000.00/month ....	200.00
P. Eng;	D. R. Cochrane	
	1/2 day at \$230.00/day .....	115.00

Various personnel of Cochrane Consultants Ltd.  
report preparation, drafting, typing and reproduction.  
(see below)

FIELD EXPENSES:

Vehicles;	Two 4 x 4's at \$25.00/day/truck..	150.00
	mileage - 432 km at \$.20/km ....	86.40
Accommodation;	Three (3) men, three days	
	at \$20.00/day/man .....	180.00
Min-En Labs Ltd.:	221 soil sample analyses	
	at \$4.40/sample .....	972.40
	<u>Report preparation (estimate)</u>	
	Drafting - 24 hours at \$12.00/hour .....	288.00
	Typing - 4 hours at \$9.00/hour .....	36.00
	Reproduction .....	90.00
Total .....		\$2,597.80

cont'd..





Appendix I (cont'd)

NOTE: As this cost breakdown is only part of the total exploration program costs have been assigned circa ad valorem.



## CERTIFICATE:

I, Donald Robert Cochrane, of the Municipality of Delta, British Columbia, do hereby certify that:

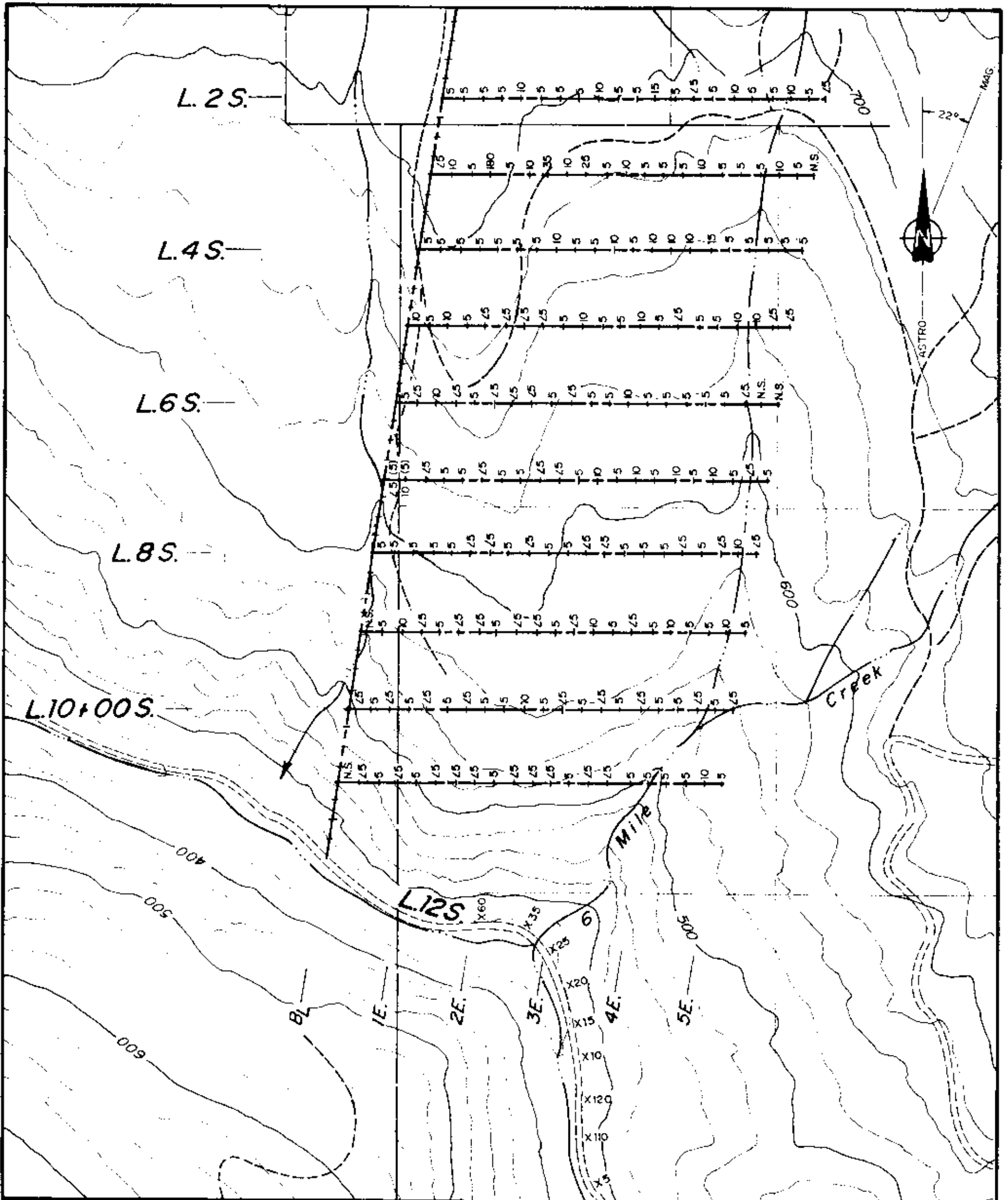
1. I am a consulting geological engineer with an office at 4882 Delta Street, Delta, B. C.
2. I am a graduate of the University of Toronto (1962) with a degree in Applied Geology (B.A. Sc.) and a graduate of Queen's University (1964) with a degree in Economic Geology (M.Sc., Eng.)
3. I have practiced my profession continuously since graduation while being employed by such companies as Noranda Exploration Co. Ltd., Quebec Cartier Mines, and Meridian Explorations Syndicate. I have been in private independant practice since 1969.
4. I have no interest, either direct or indirect in the properties or securities of Aquarius Resources Ltd., nor do I expect to acquire any such interest.
5. I am a member in good standing of the Association of Professional Engineers (A.P.E.) of the Province of British Columbia, and also a member of the A.P.E. in the Province of Ontario, Saskatchewan, Alberta, and the Yukon Territories.

March, 1979  
Delta, B. C.



D. R. Cochrane, P. Eng.





**AQUARIUS RESOURCES LTD.**

Hidden Cr. Group Spuzzum B.C. New Westminster M.D.  
MAG - A and SPUZ D CLAIMS N.T.S.92H/11W

Scale 1:5,000

**GEOCHEMICAL DATA**

Fig. 3

MINERAL RESOURCES DIVISION  
ASSESSMENT REPORT  
**7168**