

Geological Assessment Report  
on the  
GOLD VALLEY CLAIM GROUP  
Slocan Mining Division  
Latitude 50°07' Longitude 117°47'  
N.T.S. 82K/4

for  
AQUARIUS RESOURCES LTD.  
320 - 475 Howe Street  
Vancouver, B.C.  
V6C 2B3

(field work between November 20 - 30th, 1982)

part 2  
of 2

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,869**

Report by:

Mr. D.G. Cardinal, P.Geol.  
Hope, B.C.  
September 26, 1983

**AQUARIUS RESOURCES LTD.**



TABLE OF CONTENTS

INTRODUCTION .....	Page 1
CLAIMS INFORMATION .....	2
LOCATION AND ACCESS .....	3
PHYSIOGRAPHY AND CLIMATE .....	4
WATER AND POWER .....	5
HISTORY .....	6-7
GENERAL GEOLOGY .....	8-9
HJ UNDERGROUND WORKINGS .....	10-11
SUMMARY AND CONCLUSIONS .....	12-13
COST BREAKDOWN .....	14

FIGURES:

1. Location Map	Report body
2. Claims Map	" "
3. HJ Underground	" "

APPENDICES:

I Certificate
II Certificate of Analysis
III Bibliography
IV Geological Evaluation Report
V Airborne Geophysical Report



INTRODUCTION

This report is filed to cover for assessment work credits and describes work conducted on the Gold Valley Group during the latter part of November 1982.

It also includes two (2) subsequent property reports (attached to the appendix) which are also submitted for assessment credits.

The property is presently optioned to Aquarius Resources Ltd. of Vancouver, British Columbia which conducted field work in November 1982 and in September 1983.



CLAIMS INFORMATION

The property is comprised of a contiguous block of four (4) claims totalling 60 units which enclose four, two post claims. The claims are presently optioned to Aquarius Resources Ltd. of Vancouver, British Columbia. Particulars are as follows:

<u>Claim</u>	<u>Units</u>	<u>Tag No.</u>	<u>Expiry*</u>
Gold Valley I	18	34052	August 19, 1983
Gold Valley II	18	15269	August 19, 1983
Gold Valley III	12	15268	August 19, 1983
Gold Valley IV	12	15270	August 19, 1983
HJ 1-4 incl.	4	8099-8102	November 25, 1983

\* Prior to assessment work credits.



LOCATION AND ACCESS

The legal corner posts at approximately the centre of the property are located 13 km. south of Nakusp within N.T.S. claim map 82 K4W.

Access is south from Nakusp for 11.3 km. to the Slewiskin Creek secondary road, thence east for 2.2 km. to a branch road. The legal corner posts and the workings are 0.8 km. to the south and at the terminus of the road.

Access on the property is provided by the Slewiskin Creek road which bisects the two northerly claims and the south branch road.



PHYSIOGRAPHY AND CLIMATE

The property is located within the Valhalla Range of the Selkirk Mountains. The topography is of moderate to steep timber covered slopes with elevations ranging from 480 meters in the northwest along the highway bordering the Upper Arrow Lake to 1950 meters in the southeast adjacent to Mountain Meadow.

The general climate of the area considering the elevations on the property should allow surface exploration work for nine months of the year.



WATER AND POWER

Water should be in abundant supply year round from the many variable water courses through the property. The workings are adjacent to a northerly flowing tributary of Slewiskin Creek.

Diesel-electric power would be required in the initial stages of exploration and development.



HISTORY

The Burton area was a gold mining camp founded around 1895 when gold mining was originally confined to placer production. Burton and Mineral City at Caribou Creek flourished upon the working on the placers and upon the location of gold in outcroppings at the turn of the century. Some of the old mines which were found included the Millie Mac, Mountain Meadows, Kincardin, Tillicum and many others. Since the depression of the 1930's, there was little activity in the old mines and it was not until 1979 when the activity in the area regenerated through a gold discovery made by Arnie Gustafson. Work carried out from the discovery to date and presently under exploration by La Teko and Esperanza resulted in the recent reporting of a significant zone of substantial gold mineralization.

On the Millie Mac, seven km. southwest of the Gold Valley property, work completed was over 800 meters of underground work with 300 tons of ore shipped to 1933.

From 1960 to 1979 production was reported at 119 tons which included some concentration.





HISTORY (cont'd.)

On the Skylark, a group of Crown Grants two km. south of the Gold Valley property, reported work includes a shaft exploring a zone of "rich ore".

To the east of the Skylark on Blue Grass Mountain, Mac Gold reportedly plans to explore a molybdenite-gold zone on which Brenda had earlier worked. "Two hundred pounds" of material was shipped from this zone in the spring of 1982.

Within the confines of the Gold Valley property and more specifically on the HJ claims, previous work consisted of the exploration of a quartz vein structure by two sets of workings at an elevation difference of 80 feet. The two drifts were commenced in the early 1960's by Fritz Jordon of Nakusp, British Columbia and worked on periodically to 1978. In November 1982 a combined airborne VLF magnetometer and VLF-EM survey were completed over the property.



GENERAL GEOLOGY

The general geology of the area is of the Triassic Slocan group of meta volcanics and sediments including limestones, argillites and quartzites. Intrusives of Jurassic and/or Cretaceous stocks envelope the Slocan group in this area in addition to the outcropping of small stocks and plugs within the enveloped group. The nearest known intrusives to the property occur within two km. north and two km. south. The intrusive to the south is of monzonite and phases thereof with the northern Allhouse Peak Stock of mainly monzonite with minor syenite and granite.

Major northerly trending fault structures are indicated south of the property. One of the fault structures projected through and along the eastern boundary of the claim group.

Mineralization in the area consists of gold-silver-lead-zinc values within quartz veins or quartz flooded meta sediments and/or meta volcanics. Gold-silver values are also reported in a green aphanitic rock.

On the Millie Mac, gold, silver values occur in block or crushed quartz veining within or close to a graphitic schist. The best values reportedly "occur within the lower 5 to 7 meters of schist". The adjacent andesites and argillites are void of mineralization postulated as being due to the deficiency of contained sulphur therein, thereby not precipitating mineral bearing hydrothermal fluids.



GENERAL GEOLOGY (cont'd.)

Clarke reports an average of 41 uncut assays along a zone length of 58 meters in a trench returned 0.146 oz. Au and 7.57 oz. Ag/ton.

On the Tillicum property gold values reportedly occur within the Milford series parallel and adjacent to an eastern contact. Bulk sampling in 1981 of the Money Pit of the Tillicum yielded 64 tons averaging 2.3 oz. Au/ton.

More recent assays from the property returned significant gold values within a zone extending for 100 meters along strike in addition to gold values over a large area. One of the zone gold values is reported as 26.27 oz. Au across 2.33 meters.

The Gold Valley property is heavily overburdened according to open file geological map 432 and is indicated to be completely underlain by grey to black phyllites, argillites, quartzites and minor tuffaceous sediments of the Slocan group with a general westerly strike and a moderate dip to the south.



HJ UNDERGROUND WORKINGS

A detailed mapping and sampling program was carried out on the second level of the HJ Mine. Forty nine (49) continuous chip samples were taken across the structure and the underground workings compass and chained with survey stations established every 5 m. for control.

The underground drift follows a shear structure in which a brecciated massive quartz vein occurs. In most places the vein is less than 0.5 m. in width. Near the south west-end of the mine face, is a lense of quartz breccia carrying fragments of altered argillite and minor sulphides. The breccia is believed to be the result of north-south cross-cutting faults. No replacement type mineralization was observed and the quartz in most places is massive and barren of mineralization.

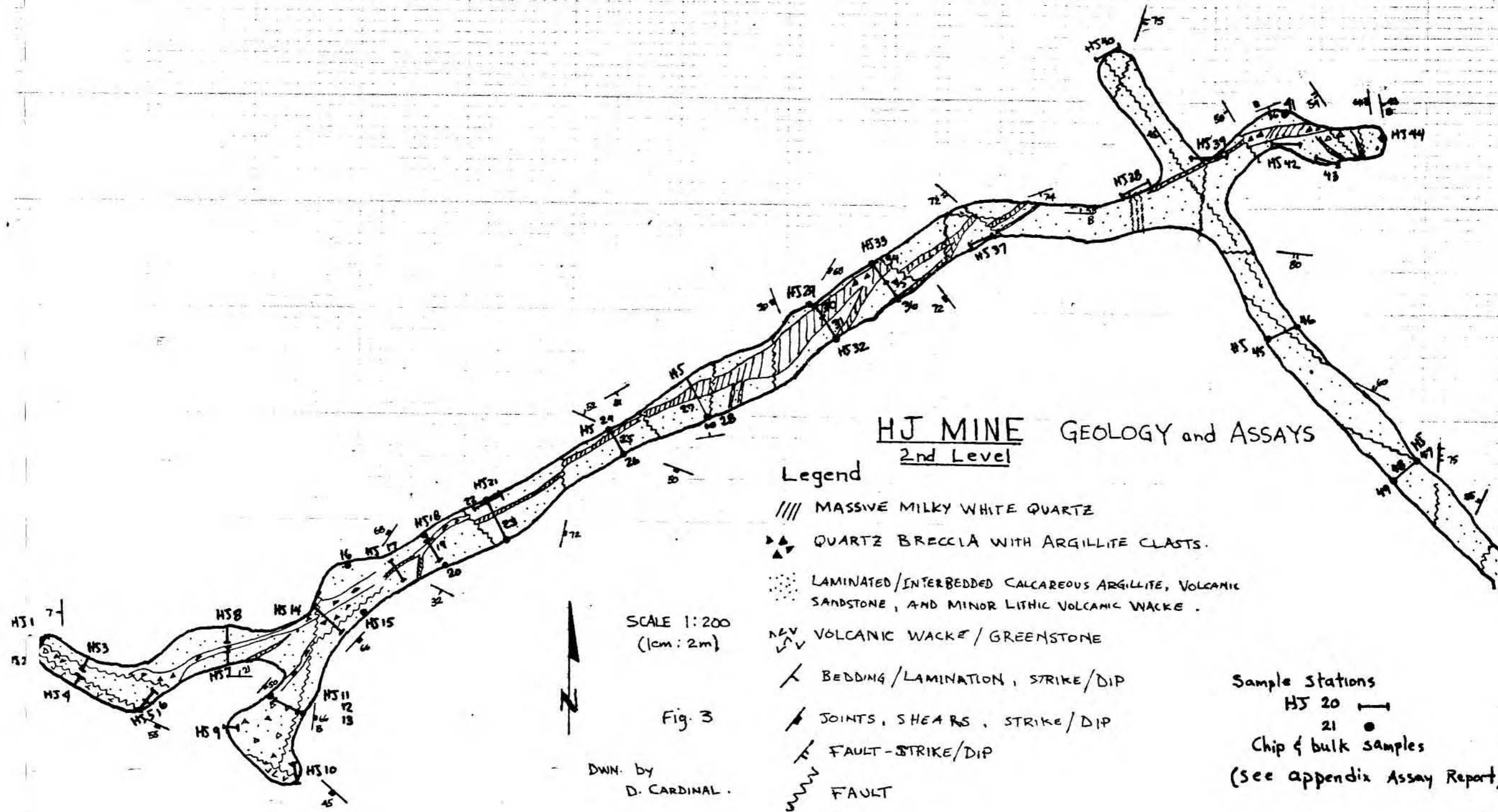
The sediments consist of steeply dipping, argillite, calcareous volcanic siltstone and volcanic clastic. Numerous small faults or slips cut the sediments and the shear structure with one set trending north-east and the other set trending north-west.



HJ UNDERGROUND WORKINGS (cont'd).

None of the chip samples collected proved encouraging and the shear structure mapped is believed to be only of limited size and potential. Similar type structures and mineralization can be found in the district and all were prospected and mined at a small scale. Possibility exists for larger structures but will require a lot of detail work to uncover.





SUMMARY AND CONCLUSIONS

The Gold Valley property examination was carried out during the latter of November 1982 in order to assess the underground workings and to determine possible potentials.

The property is presently optioned to Aquarius Resources Ltd. of Vancouver, British Columbia.

The property is located 13 kilometers south of Nakusp within N.T.S. claim map 82 K4W.

The Gold Valley property encompasses the HJ claims which consist of limited underground workings, in a quartz vein structure hosting minor gold and silver values. In November 1982 a combined airborne VLF magnetometer and VLF-EM survey were completed over the property.

General geology consists of meta volcanics and sediments of the Triassic Slocan group intruded by Jurassic and/or Cretaceous stocks and plugs.

The HJ underground workings were mapped and sampled in detail. Forty-nine (49) continuous chip and bulk samples were taken across the structure. The assays range between  $<.002 - .014$  oz/ton gold and  $<.01 - 0.94$  oz/ton silver.



None of the chip samples collected proved encouraging and the shear structure mapped is believed to be of limited size. Other possible larger structures may exist on the property but will require detail work to uncover because of the extensive overburden and tree cover.





COST BREAKDOWN

Personnel:

Senior Geologist, Nov. 20 - 26, 1982	
7 days @ \$300/day .....	\$2,100.00
Junior Geologist, Nov. 20 - 29, 1982	
10 days @ \$200/day .....	2,000.00
Field Supervisor, Nov. 20 - 29, 1982	
10 days @ \$250/day .....	2,500.00
Field Assistant, Nov. 20 - 26, 1982	
7 days @ \$150/day .....	1,050.00
Consulting:	
Airborne Geophysical (Western Geophysical Aero Data Ltd.)	4,200.00
Geological (Pan American Consultants Ltd.)	1,000.00

Field Expense:

Assays, 53 rock chip samples (Au, Ag & Cu) .....	670.00
Room and Board and Miscellaneous:	
2 men, 7 days @ \$70/day .....	980.00
2 men, 10 days @ 70/day/man .....	1,400.00
Vehicle and Maintenance:	
1, 4 x 4, 5 days @ \$60/day .....	300.00
2, 4 x 4, 7 days @ \$60/day .....	840.00

Office:

Report Writing, 2 days @ \$250/day .....	500.00
Drafting, 3 days @ \$25/hr - 24 hrs .....	600.00
Typing, Binding, Copies,	
1½ days @ \$16/hr - 10 hrs. ....	<u>160.00</u>
Total =	<u><u>\$18,300.00</u></u>



Respectfully submitted,

*Dan Cardinal*

Daniel G. Cardinal, P.Geol.



APPENDIX I

CERTIFICATE

I, Daniel G. Cardinal of the Municipality of Hope, British Columbia, do hereby certify that:

1. I am a professional geologist residing in Hope, B.C., mailing address, P.O. Box 594, Hope, British Columbia, V0X 1L0.
2. I am a graduate of the University of Alberta (1975) with a B.Sc. degree in Economic Geology and a graduate of the Northern Alberta Institute of Technology with a Geological Technologist diploma (1970).
3. I am a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and a member of the Canadian Institute of Mining and Metallurgy.
4. Since 1968, I have been actively involved in the Canadian mining industry both as a prospector and a professional geologist, and have assisted and instructed prospector's courses through the Department of Extension, University of Alberta.
5. I am presently employed by Aquarius Resources Ltd., as a permanent staff geologist to systematically carry out geological mapping, prospecting, geochemical, geophysical and diamond drilling programs.

*D. G. Cardinal*

Daniel G. Cardinal, P.Geol.



APPENDIX II

Certificate of Analysis



To: 920 - 475 Howe St.  
 Vancouver, B.C.  
 Attn: Dr. Warren Geiger

File No.: 82-0024  
 Date: December 3, 1982 10491  
 Samples: Rock chips

**CDN RESOURCE LABORATORIES LTD.**  
 #8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

**ASSAY REPORT**

Sample No.	Au (oz/ton)	Ag (oz/ton)
nJ 1	<.002	.09
2	<.002	.11
3	<.002	.09
4	<.002	.11
5	<.002	.08
6	<.002	.17
7	.007	.20
8	<.002	.15
10	<.002	.05
11	.006	.34
12	.006	.12
13	<.002	.17
14	.012	.94
15	<.002	.13
16	<.002	.20
17	.004	.43
18	<.002	.07
19	<.002	.33
20	<.002	.12
21	<.002	.08

*Must get some  
 check assays  
 #2415*

Rejects retained one month.  
 Pulps retained one month  
 unless specific arrangements  
 made

*W. Bullen*  
 Licensed Assayer of British Columbia

To: Aquarius Resources Ltd.  
 920 - 475 Howe St.  
 Vancouver, B.C.  
 Attn: Dr. Warren Geiger

File No.: 82-0034  
 Date: December 3, 1982  
 Samples: rock chips

**CDN RESOURCE LABORATORIES LTD.**  
 #8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

**ASSAY REPORT**

Sample No.	Au (oz/ton)	Ag (oz/ton)
HJ 22	< .002	.11
23	< .002	.10
24	< .002	.07
25	.004	.09
26	< .002	.03
27	< .002	.01
28	< .002	.10
29	< .002	.10
30	< .002	.05
31	< .002	.12
32	< .002	.22
33	< .002	.04
34	.007	.18
35/36	< .002	.21
37	< .002	.31
38	< .002	.20
39	.003	.17
40	< .002	.07
41	< .002	.04
42	< .002	.04

*Handwritten notes:*  
 New info  
 052 / 11/11/82  
 602 59 A  
 11/11/82

Rejects retained one month.  
 Pulps retained one month  
 unless specific arrangements  
 made

*Signature:* R. Beaman  
 Licensed Assayer of British Columbia

To: Advanced Resources Ltd.  
921 - 37th Ave St.  
Vancouver, B.C.  
Attn: Dr. Warren Geiger

File No.: 82-0034  
Date: December 3, 1982  
Samples: Rock chips

**CDN RESOURCE LABORATORIES LTD.**  
8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

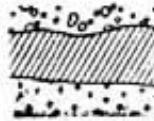
**ASSAY REPORT**

Sample No.	Au (oz/ton)	Ag (oz/ton)
43	< .002	.06
44	< .002	.02
45	< .002	.01
46	< .002	.10
47	< .002	.19
48	< .002	.01
49	< .002	< .01

Rejects retained one month.  
Pulps retained one month  
unless specific arrangements  
made

  
Licensed Assayer of British Columbia

Bondar-Clegg & Company Ltd.  
130 Pemberton Ave.  
North Vancouver, B.C.  
Canada V7P 2R5  
Phone: (604) 985-0681  
Telex: 04-352667



BONDAR-CLEGG

Certificate  
of Analysis

*(Haldon Valley)* *De Kuyper*

PORT: 423-0147 PROJECT: HJ-#1

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT
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NOTES

X HJ-2		<0.002
X HJ-7		0.005
) HJ-11		0.002
) HJ-14		0.012
X HJ-17		<0.002

) HJ-25		<0.002
X HJ-28		<0.002
X HJ-32		0.002
) HJ-37		<0.002
X HJ-47		<0.002

*R. Kuyper*



APPENDIX III

BIBLIOGRAPHY

- CLARKE, W.E. - Report on Proposed Exploration Program - Mollie Mac Property, Slocan M.D. for Semper Resources Incorporated January 21, 1980.
- ELC GEOPHYSICS LTD. - Geophysical Report on the RMW and RSM claim groups, Burton, B.C., for Richwood Industries Ltd., July 27 to August 27, 1972, Assessment Report No. 3922.
- ELC GEOPHYSICS LTD. - Geophysical Report on the Mollie Mack Black Bear and RMW claim groups, Slocan M.D. for Richwood Industries Ltd., July 1 to Sept. 14, 1971.
- GUSTAFSON, A. et al - Prospecting Report on the Golden Horn, Black Bear, Little Joe, Molly Fr. and Molly, Slocan Mining Division, August 2, 1979, Assessment Report No. 7692.
- HOY, T. - Geology of the Riondel Area, Centreal Kootenay Arc, Southeastern British Columbia, Bulletin 73, Ministry of Energy, Mines and Petroleum Resources, 1980.
- JORDON, F. - Personal communication.
- LITTLE, H.W. - Nelson Map-Area, West Half, British Columbia, Geological Survey of Canada, Memoir 308, 1960.
- MALCOLM, D.C. - H. J. Mineral Claims, McDonald Creek, Slocan Mining Division, British Columbia, August 6, 1967.
- WHITE, G.E. - VLF Airborne Magnetometer VLF Electromagnetic Survey Gold Va-ley I-IV and HJ 104 claims Tillicum Mountain Area, March 2, 1983.
- La Teko Resources Ltd., Esperanza Exploration Ltd. News Release, August 4, 1982.
- Nelson Daily News, Nelson, B.C., August 20, 1982
- Arrow Lakes News, Nakusp, B.C., August 19, 1982
- Geology - Lardeau West Half British Columbia, Open File 432.
- Mineral Deposits - Lardeau West Half British Columbia, Open File 464.

