



#### CONTACT INFORMATION

Mining Records Curator  
Arizona Geological Survey  
416 W. Congress St., Suite 100  
Tucson, Arizona 85701  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

The following file is part of the Doug K. Martin Mining Collection

#### ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

#### CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

#### QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

Pacific Cypress Minerals Ltd.  
Van Deeman Mine Project  
Progress Report  
November 1980 to January 1981

by

Douglas J. Brownlee, B.Sc.  
Geologist

February 18, 1981

## Summary:

The Van Deeman property is presently optioned by Pacific Cypress Minerals Ltd. from Mr. C. Kunkes. From November 1980 to January 1981, a program was carried out to test the precious metal content of altered rhyolite zones examined and high graded from the 1890's to 1940's.

D.J. Brownlee, geologist and two helpers carried out an extensive sampling and mapping program at this time. A total of 427 samples were taken, of which 82 gave results of 0.020 oz/t gold (Au) or better, however, no promising silver results were obtained.

The property geology consists of a Pre Cambrian gniess basement, which is cut by large muscovite plagioclase quartz pegmatite dikes. This is unconformably overlain by Cretaceous argillites, rhyolites, and andesites. This assemblage is cut by a series of faults, shears, and quartz veins, all heavily stained by hematite and manganese. Unconformably overlaying the Cretaceous assemblage's, are a series of olivine basalt flows of Quaternary age. In the northwest portion of the property the basalt contains a large inclusion of a coarse sandstone of Tertiary age.

The gold mineralization is confined to Faults, shears and quartz veins cutting the Cretaceous rhyolite. Some gold mineralization is found outside the Cretaceous rhyolite but is minor in size and extent.

## TABLE OF CONTENTS

### Summary

	Page
1.0 Introduction	1
2.0 Location and Access	1
3.0 Property	1
4.0 Physical Features	2
5.0 Previous Work	2
6.0 Property Geology	3
7.0 Geochemistry	5
8.0 Mineralogy	7
9.0 Conclusions and Recommendations	8

### Maps

	following page
Map #1 Property location	1
Map #2 Claim Map	1
Map #3 Regional Geology	3
Map #4 Property Geology	in pocket
Map #5 Location Map	in pocket
Map #6-13 Geochem. Sample Maps	in pocket

### Appendices

Appendix A	Assay Results
Appendix B	References
Appendix C	Utah International Data
Appendix D	Freeport Exploration Data

Introduction:

The Van Deeman property consists of 53 contiguous mineral claims. These claims were located by Mr. C. Kunkes, of Kingman, Arizona, on the western slope of the Black Mountains about 30 miles south of the Boulder Dam.

Pacific Cypress Minerals presently has the option on these claims, and this report is on the initial exploration carried out on the property.

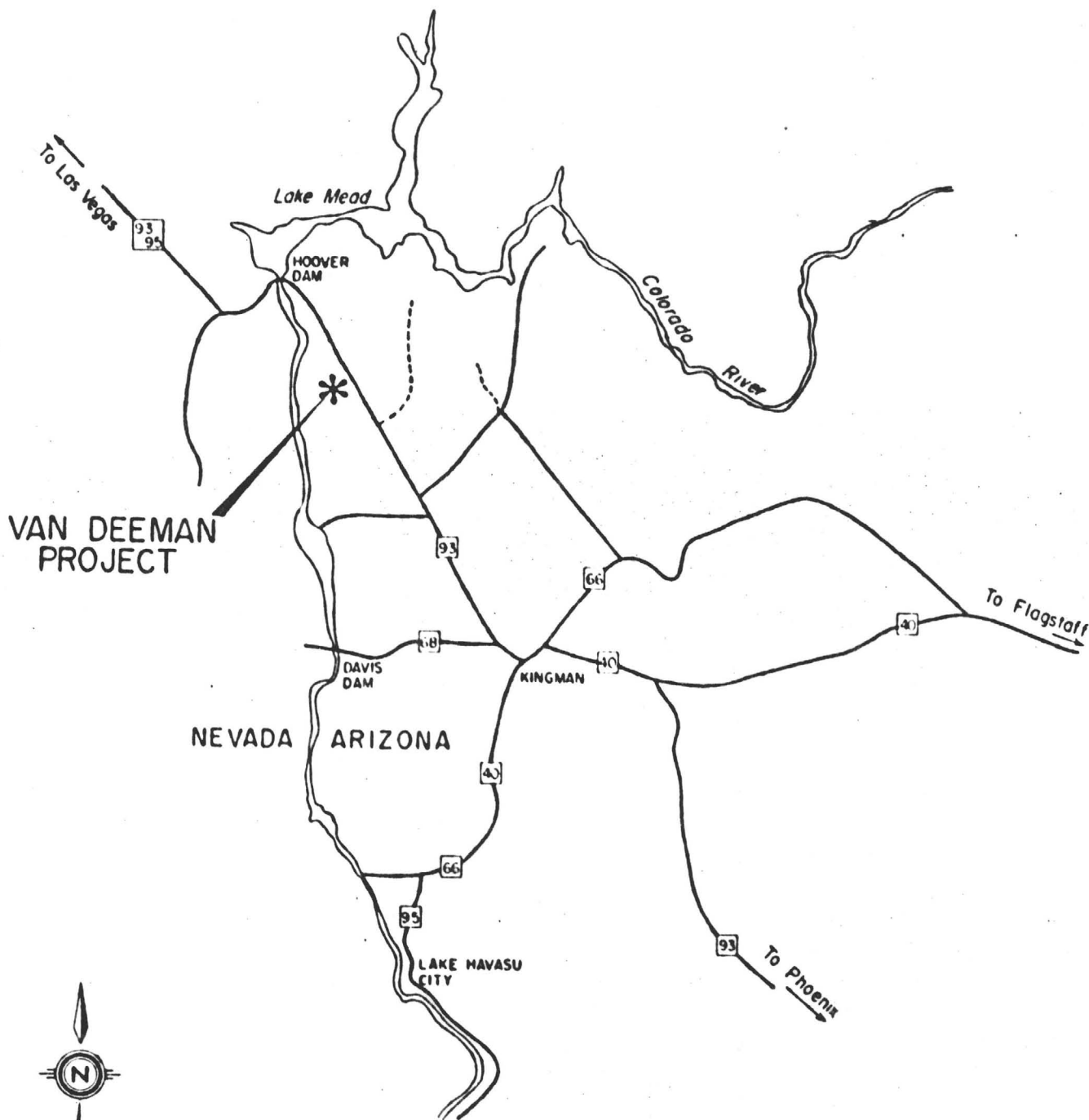
Location and Access:

The property is located in the north west corner of Mohave County, Arizona, in township 27 north and range 21 west (Map #1). Access to the property is by truck from the Boulder Inn Cafe on highway 93 via dry weather dirt road.

Property:

The property consists of 53 contiguous mineral claims, all in good standing (Map #2). They are:

<u>CLAIM NAME</u>	<u>IDENTIFICATION #</u>	<u>A.M.C. #</u>	<u>COUNTY RECORDER # BOOK AND PAGE</u>	<u>SECTION #</u>
LOST LOBO L.L.	3,5,7,9,11,13,15,16	89783 thru 89798	6U/207-247	29 & 30
JOHNY RAY J.R.	J.R., 1,2	89809 thru 89817	52/338-346	21
JOHNY RAY EXT. J.R.Ext.	5,6,7,8,9,10	89627 thru 89636	204/ 68- 78	28 & 29
GWEN G.	2,6,7,8,9,10	89637 thru 89646	120/406-415	21 & 29
QUEEN Q.	1,2,10	89611 thru 89613	6W/145-150	29
A's	1 thru 10	89677 thru 89686	52/347-356	28,19,30
B's	1,8,9	89687 thru 89696	52/381-390	29 & 32
C's	6,7	89697 thru 89706	52/371-180	28,29,32,33
D	6	89713	52/361-370	29 & 32
BOULDER INN B.I.	10	89626	122/509-528	28
BOX CANYON B.C.	1 thru 8	89477 thru 89485	229/179-202	28 & 29
LOST LOBO EXT. L.L.Ext.	1,2	89799 89800	204/ 79- 80	29 & 30



PACIFIC CYPRESS MINERALS LTD.

# VAN DEEMAN PROJECT PROPERTY LOCATION

WEAVER MINING DISTRICT  
MOHAVE COUNTY, ARIZONA

JOHN R POLONI & ASSOCIATES LTD.

DRAWN JRP

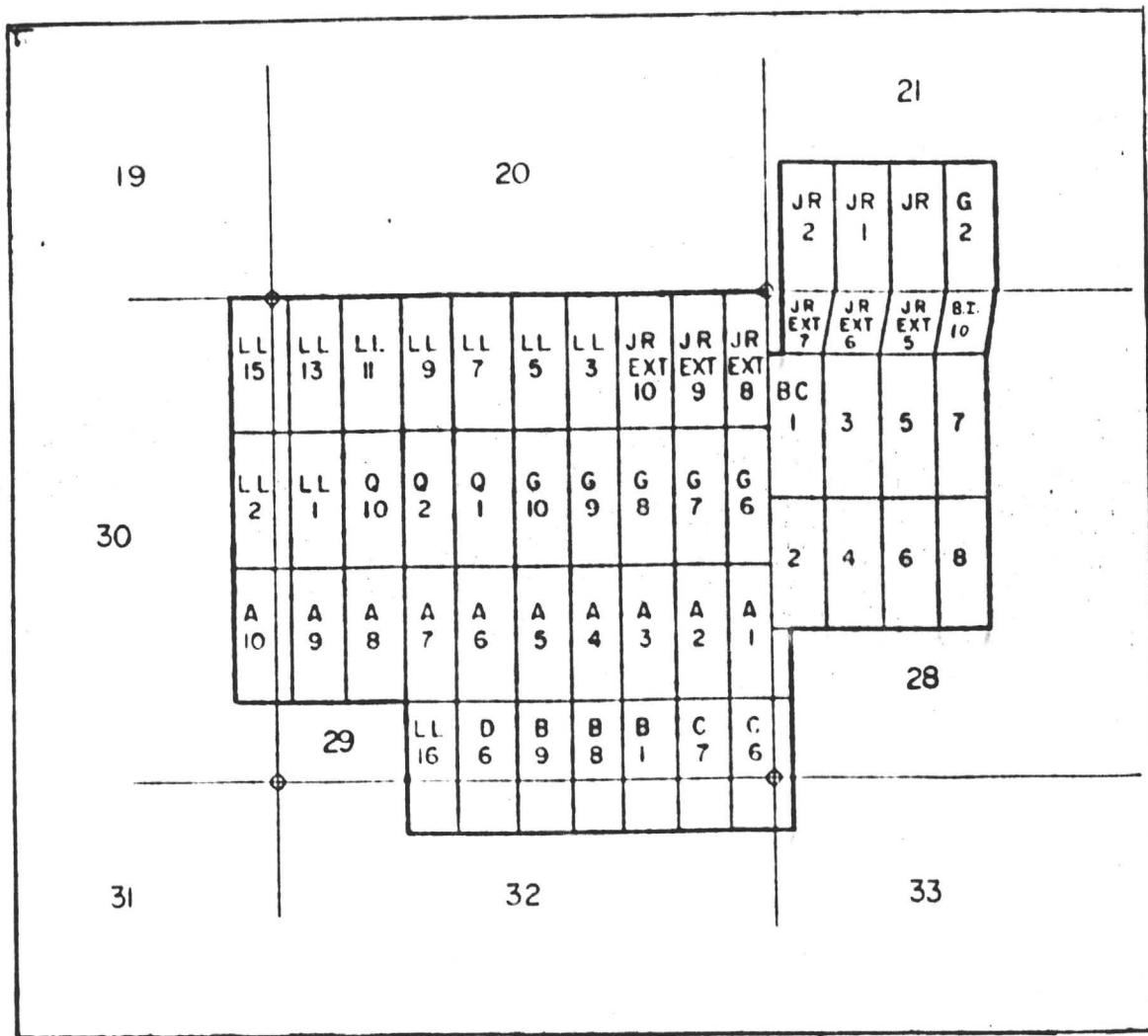
CHECKED JRP

MAP No

SCALE 1" ≈ 23.4 miles

DATE JAN 10, 1981

1



# LEGEND

L.L. LOST LOBO  
 J.R. JOHNY RAY  
 B.C. BOX CANYON  
 B.I. BOULDER INN  
 G. GWEI  
 Q. QUEEN

TWP 27N, R 21W



PACIFIC CYPRESS MINERALS Ltd.

VAN DEEMAN PROJECT  
 CLAIM MAP  
 MAP # 2

Mt. PERKINS QUAD. ARIZONA

DRWN. BY D.J. BROWNLEE

FEBUARY 1981

#### Physical Features:

The claims are located on the western slopes of the Black Mountains in north western Mohave County. The maximum relief on the property is about 800 feet, with the highest point being 3542 feet above sea level.

Vegetation consists of scrub brush, cactus, and infrequent grass.

Precipitation is 10 to 15 inches annually occurring mainly as rain, infrequently as snow. Surface water is minimal, with springs being seasonal.

#### Previous Work:

The area has experienced a long history of exploration and development, dating back to the 1890's when the Oatman, Chloride, and Golden Door camps were active.

From the 1890's to the 1940's, the prospectors and miners concentrated on high grade ore pockets, and at this time is when the majority of trenches, adits, and shafts were dug on the old Van Deeman Mine.

In the mid 1970's Utah International Inc. conducted an extensive program over the north and east portions of the property. They were looking for a low grade, high tonnage porphyry copper deposit. During this program an extensive soil geochem and geophysical surveys were conducted over the property and areas immediately to the north. In conjunction with this geologic and alteration maps at 1" to 200' were compiled. From the results of these surveys, three holes were drilled on the property and delineated a copper enriched slice of Pre Cambriary gniess, which is truncated to the north, south, west and at depth by a thrust fault, and to the east by a normal fault (Appendix D).

During the early summer of 1980, Freeport Exploration carried out a small sampling program in the west and northwest portions of the property. A total of 73 rock samples were taken with an average of .8 ppm gold (Au) reported. Freeport found that the gold appeared to be confined to small iron stained shear zones (Appendix E).



Property Geology:

Map #3 shows the regional geology of the area, with the major structural trend of the area seeming to trend north north west.

The basement rock on the property (Map #4), is a Pre Cambrian gniess, and is exposed in the eastern two thirds of the property. The foliation basically strikes north north east except where deformed by faults, or quartz veins. The gniess is composed of a low mafic plagioclase rich member and a chloritic schist member. The plagioclase rich member is whitish to slightly pinkish in colour, with 5-8 mm anhedral plagioclase in a clear quartz matrix. The gniess takes on a more schistic characteristic further to the west, with the plagioclase becoming more rounded, and the member as a whole taking on a reddish cast.

In the southeast corner of the property are large muscovite, quartz, plagioclase pegmatite dikes striking north north west.

These dikes do not extend far into the property but are extensive to the south east with some minor workings associated with them.

Unconformably overlaying the Pre Cambrian gniess and in portion infolded with the gniess is a Cretaceous unit. This unit is composed of chloritic argillites and rhyolitic and andesitic flows and tuffs. The chloritic argillite immediately overlays the gniess and is found interbedded with the rhyolite and andesite. The andesite is generally massive with a darker green colour than the argillite and with plagioclase phenocrysts discernable. The rhyolite is a light creamy white colour with no structures or phenocrysts discernable. The rhyolite is extremely well fractured, and the fracture surfaces are all coated with a hematite stain giving the rock an overall reddish colour. The Cretaceous unit is slightly folded and as a whole dips moderately to the north west and strikes to the north north east.



VAN DEEMAN  
MINE

NEVADA

ARIZONA

### LEGEND

- QTS - SAND, GRAVEL & CONGLOMERATE
- Qb - BASALT
- QTI - LAKE DEPOSITS
- Tr - RHYOLITE
- Lgr - GRANITE & RELATED CRYSTALLINE ROCKS
- Ka - ANDESITE
- Li - RHYOLITE & ANDESITE DIKE & PLUGS
- Kgv - VOLCANICS - RHYOLITE, LATITE, ANDESITE
- Sch - SCHIST
- gn - GRANITE

### NOTE

REF MAP - Geologic Map of Mohave County, Arizona  
Arizona Bureau of Mines

PACIFIC CYPRESS MINERALS LTD.

## VAN DEEMAN PROJECT GEOLOGY

WEAVER MINING DISTRICT  
MOHAVE COUNTY, ARIZONA

JOHN R. POLONI & ASSOCIATES LTD.

DRAWN JRP	CHECKED JRP	MAP No
SCALE: 1" = 6 miles	DATE: JAN 10, 1981	3

A series of faults cut the Pre Cambrian and Cretaceous rocks in the western portion of the property. These faults strike east-west or north-south with steep dips.

These faults provide the avenues along which the quartz veins intrude the property. These quartz veins are characterized by massive milky quartz with extensive fractures and vugs, which are coated by specular hematite and manganese. The quartz veins also intrude preferentially along the base, of, or just above the rhyolite-gneiss contact. In some cases, a dark grey calcite has intruded along the faults forming breccias. Also, in some places a plagioclase pegmatite with a specular hematite matrix has intruded along the faults. In general it is quartz which intrudes along the faults, and these quartz veins are usually the best indicators of the rhyolite contact.

In the east central portion of the property is a 100 by 50 foot quartz diorite plug of indeterminate age. It is a medium grained biotite hornblende plagioclase quartz chlorite, with the plagioclase extensively altered to clay and the biotite to chlorite. The edges of the plug and all fracture surfaces, are all extensively coated with a hematite stain.

Unconformably overlaying the whole assemblage in the north west are Quaternary olivine basalt flows. The basalt is a dark greenish grey colour with plagioclase phenocrysts discernable. The majority of the basalt exhibits the basal breccia texture. Along the contact with the Cretaceous rhyolite, the basalt has been intruded by many small calcite stringers.

Included in the basalt is a large block of coarse sandstone. This sandstone is most likely Tertiary in age and is derived from the Cretaceous volcanics. This block of sandstone indicates that the ridge in the north west corner of the property is the site of a major vent.

Covering the bottoms of the gulleys and washes, and the flat areas to the north and west are recent unconsolidated gravels.

# Geochemistry:

A total of 427 rock samples were taken on the property from November 1980 to January 1981. Map #5 shows the location of each of the sample location maps (Maps 6 through 13) with reference to topography and claims.

The samples were cut utilizing a rock hammer or a hammer and chisel, and cut in a linear line across any apparent structure. All samples are located on a grid, measured from a section or claim post.

Of the 427 samples taken, 82 samples ran better than 0.020 oz/t Au (gold). Of these, 23 came from the Van Deeman Mine site (Map #6), 9 from the original Van deeman (Map #7), 29 from the Lost Lobo section (Map #9), 4 from the Gold Cup (Map #8), 16 from the south west corner of the property (Map #8), and 1 from the holes that Mr. Kunkes drilled on the Van Deeman in 1979.

The samples which ran 0.020 or better on the Van Deeman indicates that the gold is situated along faults and shears in the Cretaceous ryholite. These gold bearing zones are less than 3 feet wide, and show a characteristic hematite stain. Also, the gold bearing portion of the fault does not extend laterally into the Pre Cambrian griess unless a quartz vien has intruded along the fault.

In the old Van Deeman section (Map #6), the gold bearing structures are the same, except along some faults the quartz has silicified the ryholite and slightly widened the zone of gold enrichment. However, the gold enrichment zones are generally less than 2 feet.

The Lost Lobo section gave results similar to the Van Deeman sections, except that the zone of gold enrichment seems to be wider, up to 4 or 5 feet. The greatest enrichment is found immediately below the quartz viens in shear zones up to .5 feet thick. The ryholite itself does not seem to generally carry gold, however in the Lost Lobo adit of 6 samples taken four have shown acceptable gold. The valves recorder were, 0.006, 0.004, 0.032, 0.133, 0.120, 0.110 oz/t gold (Au).

TABLE  
Van Deeman Property - all samples 7/0.015

VAN DEEMAN					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
8270	0.043	8991	0.095	9003	0.180
8983	0.030	8998	0.070	9006	0.030
8986	0.025	8999	0.380	9010	0.160
8987	0.170	9001	0.100	9021	0.180
8989	0.110	9002	0.210	9023	0.030
8990	0.160				

UPPER ADIT					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
9045	0.045	9053	0.120	9055	0.230
9049	0.068	9054	0.200	9056	0.092

OLD VAN DEEMAN					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
21759	0.049	21776	0.045	21785	0.550
21761	0.080	21777	0.020	21792	0.030
21762	0.027	21784	0.055	21800	0.120

LOST LOBO					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
20999	0.025	21885	0.077	21909	0.040
21810	0.024	21886	0.097	21912	0.073
21811	0.059	21888	0.031	21913	0.055
21817	0.059	21890	0.025	21914	0.038
21823	0.077	21893	0.072	21916	0.140
21824	0.048	21896	0.027	21921	0.031
21825	0.028	21901	0.032	21922	0.028
21826	0.098	21902	0.110	21923	0.049
21880	0.070	21903	0.120	21924	0.150
21881	0.092			21925	0.250

SOUTH WEST SECTION					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
21931	0.044	21955	0.022	21975	0.027
21932	0.036	21958	0.042	21726	0.041
21933	0.170	21960	0.160	21981	0.180
21934	0.026	21960	0.160	21982	0.055
21936	0.085	21967	0.061	20998	0.560
21953	0.100				

GOLD CUP					
Sample #	Av. oz/t	Sample #	Av. oz/t	Sample #	Av. oz/t
21739	0.260	21744	0.320	21745	0.039
21740	0.049				

The rest of the samples taken on the property show this relationship of the gold enrichment occurring along faults, shears, and quartz veins within the Cretaceous rhyolite. The only exception to this was found at the Gold Cup where the faults and shears in the Pre Cambrian gneiss showed the red hematite staining. These structures showed gold enrichment across 1 or 2 feet and generally less than .5 feet.

#### Mineralization:

Hematite and manganese constitute the basic mineralization found throughout the property. The hematite and manganese are found coating fracture surfaces, and infilling vugs in the majority of quartz veins on the property. Pyrite has also been noted on occasion in the quartz veins.

The hematite is also found along the faults and shears throughout the property. The hematite generally coats all fracture surfaces up to .5 feet from the fault on both hanging wall and foot wall. Throughout the rhyolite, hematite has coated the vast majority of the fracture surfaces, and infilled all and any spaces.

Near the contact with the Pre Cambrian gneiss in the south west corner of the property, pyrite crystals up to 3 mm across have been found in a rhyolitic tuff.

Copper carbonate staining is found at times within the quartz veins coating some fracture surfaces. At the Old Van Deeman Mine site, the copper carbonate staining was found to be pervasive throughout portions of the andesite.

The gold mineralization is limited to the hematite stained zones of faults and shears. The quartz veins carry some gold, however, the greatest concentration of gold seems to occur where the quartz has silicified the rhyolite adjacent to the faults. The gold mineralization also occurs erratically throughout the rhyolite.

Conclusions and Recommendations:

The main gold mineralization on the property occurs almost exclusively along fault zones and shears cutting the Cretaceous rhyolite. These mineralized zones are up to 1 foot thick, however, this may be thickened up to 4 feet in places by intrusion of quartz veins along the faults.

The only place where gold mineralization has been found outside the Cretaceous rhyolite, other than in adjacent quartz veins, is in faults and shears at the old Gold Cup shaft.

The geochem results indicate that the gold may be disseminated throughout the rhyolite, especially in the Lost Lobo section.

The Lost Lobo section has the potential for large enough tonnage of the Cretaceous rhyolite and associated quartz veins to warrant drilling. It is recommended that a reverse circulation percussion drill, drill two holes in this section of the property. Also, it is recommended that one hole be drilled in the Cretaceous rhyolite that is immediately west of the Gold Cup.

APPENDIX A  
ASSAY RESULTS



**BONDAR-CLEGG & COMPANY LTD.**

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

*Golden  
Door  
File*

## Certificate of Analysis

TO Pacific Cypress Minerals Ltd.  
1020 - 800 West Pender Street  
Vancouver, B. C. V6C 2V6

A20 - 1905

December 11, 1980

PROJECT: *Van Deeman*

I hereby certify that the following are the results of assays made by us upon the herein described core chip samples.

MARKED	PERCENT		MARKED	PERCENT		MARKED	PERCENT	
	oz/ton	oz/ton		oz/ton	oz/ton		oz/ton	oz/ton
	Au	Ag		Au	Ag		Au	Ag
8251	0.004	0.56	8270	0.043	0.20	8989	0.11	0.21
8252	<0.002	0.05	8271	<0.002	<0.02	8990	0.16	0.33
8253	<0.002	0.02	8272	<0.002	0.08	8991	0.095	1.11
8254	<0.002	0.03	8273	0.008	0.30	8992	0.006	0.03
8255	<0.002	0.02	8274	0.002	0.06	8993	0.016	0.08
8256	0.002	0.07	8275	0.002	0.09	8994	0.007	0.08
8257	<0.002	<0.02	8976	0.007	0.64	8995	0.011	0.03
8258	<0.002	<0.02	8977	<0.002	0.03	8996	0.006	0.05
8259	<0.002	0.02	8978	<0.002	0.15	8997	0.007	0.06
8260	<0.002	0.02	8979	0.017	0.43	8998	0.070	0.72
8261	<0.002	<0.02	8980	<0.002	<0.02	8999	0.38	1.16
8262	0.005	0.13	8981	0.003	0.15	9000	0.007	0.11
8263	0.005	0.05	8982	<0.002	<0.02	9001	0.10	0.48
8264	<0.002	<0.02	8983	0.030	0.15	9002	0.21	0.55
8265	<0.002	<0.02	8984	0.004	0.04	9003	0.18	0.43
8266	<0.002	<0.02	8985	0.005	0.04	9004	0.003	0.03
8267	<0.002	<0.02	8986	0.025	0.04	9005	0.002	0.03
8268	<0.002	0.02	8987	0.17	0.19	9006	0.030	0.23
8269	<0.002	0.03	8988	0.019	0.07	9007	0.003	0.02

**NOTE:**

Rejects retained two weeks  
Pulps retained three months

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA



BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

TO Pacific Cypress Minerals

A20 - 1905

Page 2

I hereby certify that the following are the results of assays made by us upon the herein described core samples.

MARKED	PERCENT oz/ton Au	PERCENT oz/ton Ag	MARKED	PERCENT oz/ton Au	PERCENT oz/ton Ag	MARKED	PERCENT oz/ton Au	PERCENT oz/ton Ag
9008	0.009	0.05	9027	<0.002	0.02			
9009	<0.002	<0.02	9028	<0.002	<0.02			
9010	0.16	0.24	9029	<0.002	0.02			
9011	0.006	0.19	9030	0.002	0.18			
9012	0.008	1.51	9031	<0.002	0.02			
9013	<0.002	0.02	9032	0.002	0.04			
9014	<0.002	0.02	9033	<0.002	<0.02			
9015	<0.002	0.07	9034	<0.002	0.02			
9016	0.002	0.41	9035	<0.002	0.02			
9017	0.005	0.03	9036	0.002	0.02			
9018	0.006	0.20						
9019	<0.002	<0.02						
9020	<0.002	<0.02						
9021	0.18	2.95						
9022	0.004	0.28						
9023	0.030	1.08						
9024	0.002	0.02						
9025	<0.002	0.02						
9026	<0.002	0.03						

NOTE:

Reject ☐ in two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

*R. H. Rogers*

*File  
sent copy to  
J. Poloni*



**BONDAR-CLEGG & COMPANY LTD.**

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

TO Pacific Cypress Minerals  
1020 - 800 West Pender Street  
Vancouver, B. C. V6C 2V6

A20 - 1949

December 29, 1980

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	Au		MARKED	Ag		MARKED	Au		MARKED	Ag	
	PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT
	oz/ton	oz/ton		oz/ton	oz/ton		oz/ton	oz/ton		oz/ton	oz/ton
9037	0.006	0.52	9057	0.004	0.02	21777	0.020	0.21			
9038	<0.002	<0.02	21758	0.004	0.06	21778	<0.002	<0.02			
9039	<0.002	0.07	21759	0.049	0.54	21779	<0.002	0.05			
9040	<0.002	0.02	21760	0.002	0.02	21780	<0.002	0.02			
9041	<0.002	0.02	21761	0.080	0.44	21781	<0.002	0.02			
9042	0.002	0.05	21762	0.027	0.89	21782	<0.002	0.03			
9043	0.002	0.02	21763	<0.002	0.11	21783	0.002	0.02			
9044	0.015	0.10	21764	0.014	0.32	21784	0.055	0.12			
9045	0.045	0.08	21765	0.010	0.08	21785	0.55	34.00			
9046	0.011	0.06	21766	0.002	0.13	21786	0.003	0.11			
9047	0.008	0.11	21767	0.006	0.31	21787	0.002	0.07			
9048	0.004	0.02	21768	0.002	0.05	21788	0.002	0.03			
9049	0.068	0.13	21769	0.003	0.04	21789	0.002	0.02			
9050	0.005	0.04	21770	0.005	0.06	21790	0.002	0.02			
9051	0.018	0.06	21771	0.003	0.04	21791	0.016	0.02			
9052	0.008	0.07	21772	0.004	0.05	21792	0.030	0.44			
9053	0.12	0.16	21773	0.002	0.05	21793	0.002	0.02			
9054	0.20	0.21	21774	0.005	0.05	21794	0.004	0.05			
9055	0.23	0.40	21775	0.004	0.06	21795	0.007	0.11			
9056	0.092	0.07	21776	0.045	0.14	21796	0.005	0.03			

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER PROVINCE OF BRITISH COLUMBIA

*R. A. Rose*



# Certificate of Analysis

PAGE 2

TO Pacific Cypress Minerals

A20 - 1949

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	Au		MARKED	Ag		MARKED	Au		MARKED	Ag	
	PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT		PERCENT	PERCENT
	oz/ton	oz/ton		oz/ton	oz/ton		oz/ton	oz/ton		oz/ton	oz/ton
21797	0.002	<0.02	21817	0.059	0.11	21838	<0.002	0.02			
21798	0.010	0.05	21818	0.005	0.05	21839	<0.002	0.02			
21799	0.006	0.11	21819	<0.002	<0.02	21840	<0.002	<0.02			
21800	0.12	0.27	21820	0.019	0.05	21841	<0.002	<0.02			
21801	0.005	0.03	21821	<0.002	0.04	21842	<0.002	<0.02			
21802	0.004	0.06	21822	0.010	0.10	21843	0.003	0.03			
21803	0.002	0.09	21823	0.077	0.09	21844	<0.002	<0.02			
21804	0.003	0.05	21824	0.048	0.06	21845	0.005	0.04			
21805	<0.002	<0.02	21825	0.028	0.05	21846	<0.002	0.03			
21806	<0.002	0.02	21826	0.098	0.06	21847	<0.002	<0.02			
21807	<0.002	<0.02	21827	<0.002	0.12	21848	<0.002	<0.02			
21808	0.003	0.02	21828	0.009	0.27	21849	0.002	0.02			
21809	<0.002	0.02	21830	0.004	0.02	21850	<0.002	<0.02			
21810	0.024	0.09	21831	0.002	<0.02	21851	0.002	<0.02			
21811	0.025	0.12	21832	<0.002	<0.02	21852	<0.002	<0.02			
21812	<0.002	0.02	21833	<0.002	<0.02	21853	0.002	0.04			
21813	<0.002	0.03	21834	<0.002	<0.02	21854	<0.002	0.03			
21814	<0.002	<0.02	21835	<0.002	<0.02	21855	<0.002	0.03			
21815	0.006	0.02	21836	<0.002	0.02	21856	0.007	0.03			
21816	0.010	0.03	21837	<0.002	0.02	21857	0.002	0.03			

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER PROVINCE OF BRITISH COLUMBIA



**BONDAR-CLEGG & COMPANY LTD.**

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

PAGE 3

TO Pacific Cypress Minerals

A20 - 1949

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	Au PERCENT	Ag PERCENT	MARKED	PERCENT	PERCENT	MARKED	PERCENT	PERCENT
	oz/ton	oz/ton						
21858	<0.002	0.04						
21859	<0.002	0.04						
21860	<0.002	0.04						
21861	0.007	0.15						
21862	<0.002	0.08						
21863	<0.002	0.06						
21864	<0.002	0.03						
21865	<0.002	0.10						
21866	0.003	0.10						
21867	<0.002	0.09						
21868	<0.002	0.07						
21869	0.019	0.09						
21870	0.10	0.10						
21871	0.005	0.05						
21872	0.003	0.08						

**NOTE:**

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

**BONDAR-CLEGG & COMPANY LTD.**  
**REGISTERED ASSAYER PROVINCE OF BRITISH COLUMBIA**

*R. K. Logan*



# BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

TO Pacific Cypress Minerals Ltd.

A21 - 61

1020 - 800 West Pender Street

January 30, 1981

Vancouver, B. C. V6C 2V6

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton
	Au	Ag		Au	Ag		Au	Ag
21876	0.012	0.20	21895	0.003	0.03	21914	0.038	0.02
21877	0.017	0.12	21896	0.027	0.13	21915	<0.002	<0.02
21878	<0.002	<0.02	21897	<0.002	<0.02	21916	0.14	0.25
21879	0.008	0.03	21898	0.002	0.02	21917	0.002	0.02
21880	0.070	0.08	21899	<0.002	<0.02	21918	0.004	0.03
21881	0.092	0.05	21900	0.003	0.02	21919	0.002	0.03
21882	0.005	0.02	21901	0.032	0.09	21920	0.009	0.02
21883	0.002	0.02	21902	0.11	0.08	21921	0.031	0.03
21884	<0.002	0.02	21903	0.12	0.09	21922	0.028	0.03
21885	0.077	0.07	21904	0.002	0.02	21923	0.049	0.19
21886	0.097	0.09	21905	<0.002	<0.02	21924	0.15	0.19
21887	0.002	0.02	21906	<0.002	<0.02	21925	0.25	0.15
21888	0.031	0.05	21907	<0.002	0.02	21926	0.004	0.02
21889	0.017	0.09	21908	0.017	0.26	21927	0.002	<0.02
21890	0.025	0.06	21909	0.040	0.08	21928	0.002	<0.02
21891	0.007	0.02	21910	<0.002	<0.02	21929	0.018	0.02
21892	0.008	0.04	21911	0.011	0.02	21930	0.002	0.02
21893	0.072	0.07	21912	0.073	0.05	21931	0.044	0.02
21894	0.012	0.02	21913	0.055	0.04	21932	0.036	0.11

### NOTE:

Reject retained two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA



# BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

TO Pacific Cypress Minerals

A21 - 61

Page 2

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton
	Au	Ag		Au	Ag		Au	Ag
21933	0.17	0.20	21952	0.002	0.02	21971	0.003	0.02
21934	0.026	0.03	21953	0.10	0.04	21972	0.003	0.02
21935	0.004	0.04	21954	<0.002	<0.02	21973	0.005	0.06
21936	0.085	0.03	21955	0.022	0.08	21974	<0.002	<0.02
21937	0.002	0.11	21956	0.002	0.02	21975	0.027	0.02
21938	0.002	0.08	21957	<0.002	<0.02			
21939	0.002	0.04	21958	0.042	0.38			
21940	0.009	0.40	21959	0.002	0.02			
21941	0.002	0.03	21960	0.16	0.07			
21942	0.004	0.03	21961	0.003	0.02			
21943	0.003	0.02	21962	0.002	0.02			
21944	0.005	0.02	21963	0.005	0.05			
21945	0.002	0.02	21964	<0.002	<0.02			
21946	0.007	0.03	21965	0.002	0.03			
21947	0.007	0.02	21966	<0.002	<0.02			
21948	0.002	0.02	21967	0.061	0.02			
21949	0.006	0.02	21968	0.012	0.02			
21950	<0.002	0.02	21969	0.002	0.02			
21951	<0.002	<0.02	21970	0.006	0.05			

cc Mr. J. Poloni

### NOTE:

Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA





# BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 • PHONE: 985-0681 • TELEX: 04-352667

## Certificate of Analysis

TO Pacific Cypress Minerals Ltd.  
1020 - 800 West Pender Street  
Vancouver, B. C. V6C 2V6

A21 - 107

February 13, 1981

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton	MARKED	PERCENT oz/ton	PERCENT oz/ton
	Au	Ag		Au	Ag		Au	Ag
21726	0.041	0.02	21745	0.039	0.15	21989	0.006	0.07
21727	<0.002	0.02	21746	0.002	0.07	21990	0.010	0.14
21728	0.004	0.02	21747	0.005	0.15	21991	0.003	0.05
21729	0.005	0.04	21748	0.002	0.02	21992	0.003	0.04
21730	0.004	0.04	21749	0.005	0.06	21993	<0.002	0.02
21731	0.002	0.02	21750	0.007	0.08	21994	0.004	0.03
21732	<0.002	0.02	21776	0.003	0.14	21995	<0.002	0.04
21733	<0.002	<0.02	21777	0.004	0.10	21996	0.009	0.07
21734	0.002	0.02	21778	0.002	0.03	21997	<0.002	<0.02
21735	0.005	0.07	21779	<0.002	0.07	21998	<0.002	0.03
21736	0.002	0.06	2180	0.008	0.07	21999	<0.002	<0.02
21737	<0.002	0.02	2181	0.18	0.08	22000	<0.002	<0.02
21738	0.004	0.02	2182	0.055	0.46			
21739	0.26	0.22	2183	0.003	0.02			
21740	0.049	0.02	2184	0.007	0.15			
21741	0.005	0.05	2185	0.053	0.40			
21742	0.003	0.03	2186	<0.002	<0.02	cc Mr. J. Poloni		
21743	0.005	0.14	2187	0.002	0.02			
21744	0.32	0.27	2188	0.013	0.19			

### NOTE:

Rejection retained two weeks  
Pulps retained three months  
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.  
REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

*R. H. Rogers*



To: Pacific Cypress Minerals Ltd.

REPORT NO. A21 - 121

PAGE No. 1

BONDAR-CLEGG &amp; COMPANY LTD.

DATE: February 13, 1981

1020 - 800 West Pender Street  
Vancouver, B. C.  
V6C 2V6

## CERTIFICATE OF ASSAY

Samples submitted: February 3, 1981  
Results completed: February 13, 1981

I hereby certify that the following are the results of assays made by us upon the herein described.....ores.....samples.

MARKED	GOLD		SILVER									
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
20976	0.014		0.19									
20977	0.002		0.02									
20978	0.013		0.19									
20979	<0.002		0.02									
20980	0.003		0.09									
20981	0.002		0.02									
20982	0.002		0.05									
20983	0.006		0.03									
20984	0.005		0.14									
20985	0.003		0.17									
20986	0.003		0.09									
20987	<0.002		0.16									
20988	0.005		0.05									
20989	0.004		0.13									
20990	0.004		0.29									
20991	<0.002		0.02									
20992	<0.002		0.13									
20993	<0.002		0.09									
20994	<0.002		0.02									
20995	0.002		0.03									
20996	<0.002		0.02									
20997	0.003		0.06									
20998	0.56		0.81									
20999	0.025		0.04									
21000	0.006		0.04									
					cc Mr. J Poloni							

## NOTE:

Rejects retained three weeks  
Pulp retained three months  
unless otherwise arranged.

*R. K. Logan*  
Registered Assayer, Province of British Columbia

APPENDIX B  
REFERENCES

## REFERENCES

- 1.0 Ransome, F.L. 1923 U.S.G.S. Bulletin 743, Geology of the Oatman Gold District, Arizona.
- 2.0 Schrader, F.C. 1930's, U.S.G.S. publication, Mineral Deposits of the Cerbat Range, Black Mountains and Grand Wash Cliffs, Mohave County, Arizona.
- 3.0 Geologic Map of Mohave County, Arizona. U.S.G.S. Arizona Bureau of Mines, Tuscon.

APPENDIX C  
UTAH INTERNATIONAL DATA

APPENDIX D  
FREEPORT EXPLORATION DATA