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MAKE CARD
CREST RES. INC

K on

Report on the

Puppy Dog Group

Maricopa County

Arizona, U.S.A.

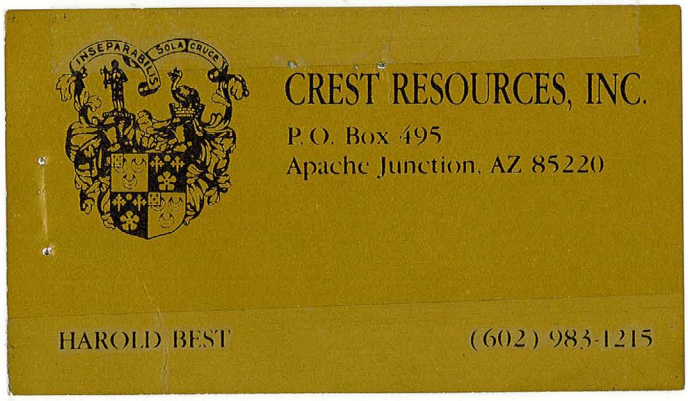
on behalf of

Rhyolite Resources Inc.

by

John R. Poloni, B.Sc., P.Eng.

May 12, 1983



John R. Poloni & Associates Ltd.
1512B - 56th Street
Delta, B. C.
V4L 2A8

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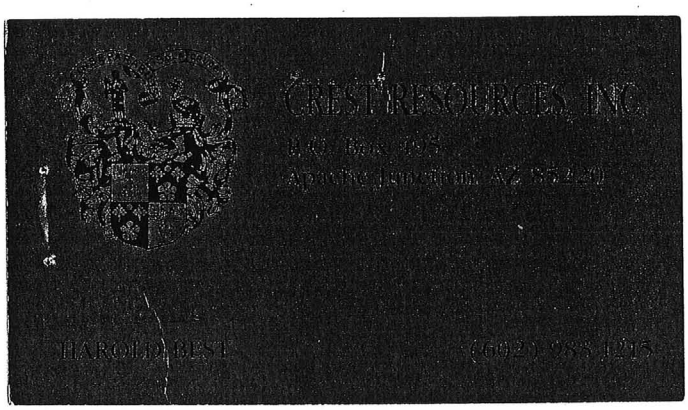

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1.0 Summary and Conclusions

The Rhyolite Resources property consisting of 53 located claims covers the contact area between younger basalts, volcanic flows and dikes and pre-Cambrian basement granites, schists, and gneisses, which has been altered, and highly fractured.

Numerous outcrops containing copper mineralization with frequent free gold have been explored in the past, by pits, trenches, and shallow shafts.

Mineralization is related to quartz-barite veins, fracture zones in the basement gneisses and granites, contact areas between basic dikes and the granites and also at the interface environment between younger flows and the pre-Cambrian basement.

Surface sampling has returned excellent gold-copper assays which warrant detailed exploratory surveys estimated to cost $184,000.00 U.S., as outlined in this report.

2.0 Introduction

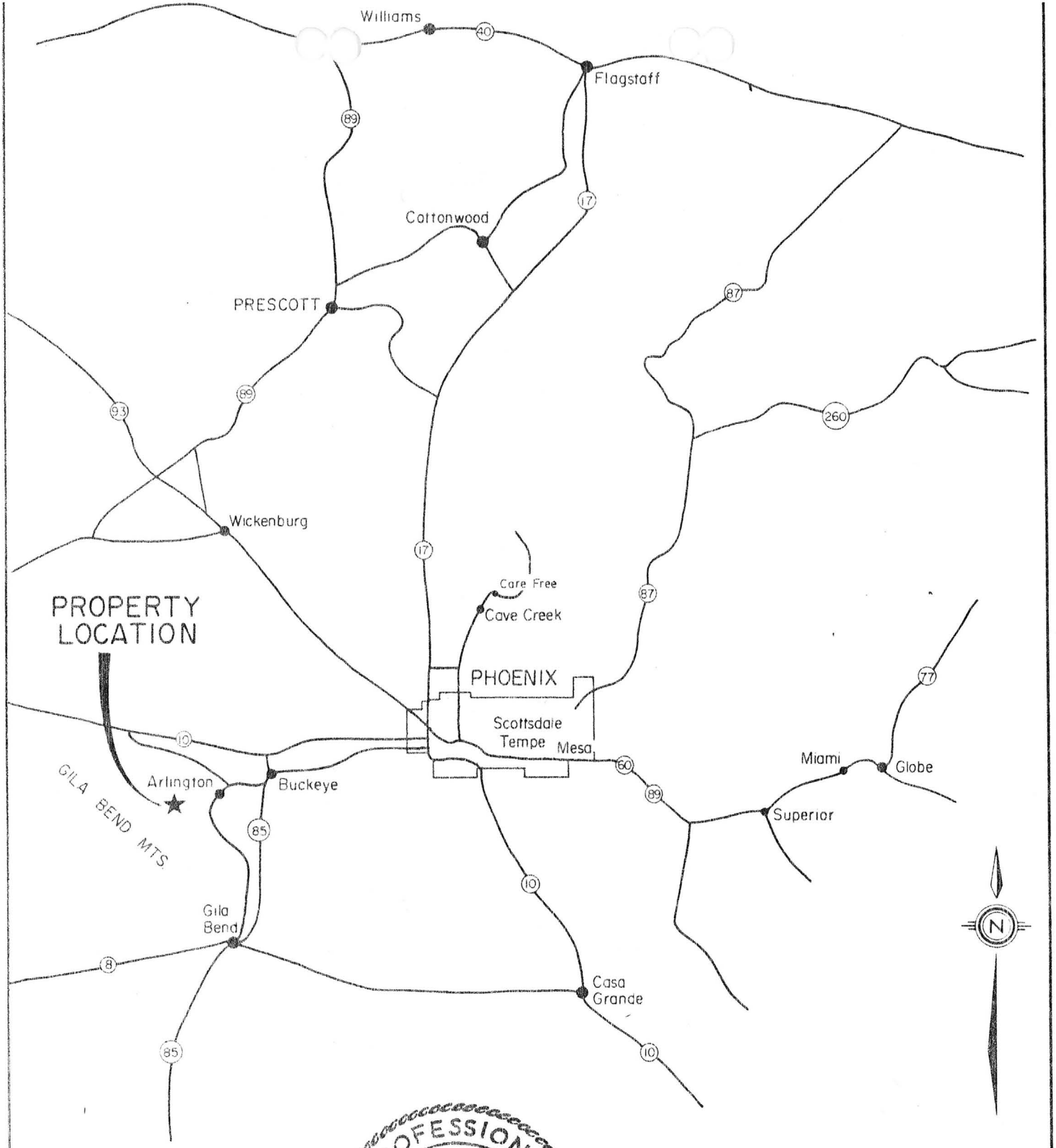
The Puppy Dog property consists of a group of 53 located claims situated in Township 2 south, Range 7 west covering parts of sections 10, 13, 14 and 15 in Maricopa County, Arizona.

Phoenix located approximately 45 miles east, is the nearest large city. Buckeye, a small town situated 15 miles from the claims can provide food and accommodations for exploration crews.

A property visit was undertaken by the author, during the period April 28 - 30, 1983, at the request of Mr. Jon Stewart, President of Rhyolite Resources Inc., to evaluate the economic potential of the claims.

Location Map

Plan No. 1



RHYOLITE RESOURCES INC.

PUPPY DOG GROUP
PROPERTY LOCATION MAP

MARICOPA COUNTY
ARIZONA, U.S.A.

JOHN R. POLONI & ASSOCIATES LTD.

DRAWN: J.R.P.	CHECKED: J.R.P.	PLAN No.
SCALE: 1" = 23.4 miles	DATE: MAY 12, 1983	

3.0 Location and Accessibility

The Puppy Dog claim group is located approximately 45 miles westerly of Phoenix, Arizona, 24 miles north Gila Bend, and 8 miles by gravel road west of Arlington.

The property is described as being in Twp. 2S, Range 7W, in Sections 10, 13, 14 and 15, of Maricopa County, Arizona.

Access from Phoenix is via highway 85 west through Buckeye, to Arlington, and then along secondary paved and gravel roads to the Aqua Caliente road and the claims.

Several jeep trails traversing the claim group and the relatively gentle terrain facilitate access to much of the area.

4.0 Claim Information

The property consists of 53 located claims in Maricopa County, Arizona, as shown on the accompanying Claim Map, Plan No. 2, included in Appendix D.

Rhyolite Resources Inc. has signed an agreement for the acquisition of 100% of the property, with the vendor retaining a 5% net smelter royalty.

A title search and the location of property boundaries in the field will be necessary.

5.0 Physical Features

The property covers moderately gentle desert terrain in the foothills of the Gila Bend Mountains. Local stream drainage is tributary to Centennial, Wash., part of the Gila River.

Gravel roads and jeep trails provide local access and all of the property can be easily examined on foot.

Elevations range from approximately 1,200 to over 1,400 feet at Black Butte.

Precipitation is light, as is typical of the desert area near Phoenix, occurring principally as winter and spring thunder showers. During rainstorms, dry washes can become torrents in a very short time.

Temperatures in mid summer are extremely high necessitating care in the undertaking of exploratory surveys.

6.0 History

The presence of gold-copper mineralization has been known for many years as is evidenced by numerous shafts, trenches, and pits. Prospectors were drawn to the area by copper stained outcrops frequently containing visible gold in quartz-barite veins, on fracture surfaces in basement intrusives and gneisses, at the contacts between intruding basic dikes and intrusives, and in overlying younger volcanic flows at basement contacts.

6.0 Recent surface sampling by the property vendor indicated values ranging between Tr. - 0.66 Au oz/T; 0.007 - 6.4% Cu. Seven E-size drill holes were completed. Assay data on sludge samples from holes No. 4 and 7 was made available by the owner. These indicated values ranging between Tr. - 0.59 Au oz/T on No. 4, and Tr - 5.7 Au oz/T on hole No. 7. Copper values ranged between 0.04 - 2.6% Cu, 0.04 - 4.0% Cu respectively.

Jon Stewart, President of Rhyolite Resources Inc., sampled pits, trenches and dumps during April 1983, obtaining very encouraging assay results for both gold and copper. Assays ranged between 0.001 - 1.865 Au oz/T and 0.170 - 9.550% Cu in nineteen samples taken. Assay data is shown on Plan No. 3 included in Appendix D.

The author visited the property on April 29, 1983. Drill core was examined and taken for assay. Rejects of assays on Drill Hole No. 7 were taken for check assays. Ten samples of surface cuts, pits, shafts and dumps were collected for analysis in Vancouver.

Results of these anslysis are as follows:

A. Diamond Drill Holes

No.	Footage	Recovered	Description	Assay Data Au oz/T	Ag oz/T	Cu %
DDH #1						
D1-1	0 - 22'	7.1'	Rhyolite?, Sil. Hem Intrusive	0.007	< 0.02	0.05
D1-2	22 - 30'	4.6'	Flow type, xtal tuff	< 0.002	< 0.02	0.01

End of Hole 30'

6.0

No.	Footage	Recovered	Description	Assay Data Au oz/T	Ag oz/T	Cu %
DDH #2						
D2-1	0 - 24'	14.1'	Hem Rich Sil pphy	<0.002	<0.02	0.04
		End of Hole 24'				
DDH #3	No core or sludge					
DDH #4						
D4-1	0 - 35'	9.1'	Rhyolite, minor Hematite and Copper staining	0.005	0.02	0.16
D4-2	35 - 66'	18.2'	Intrusive, sil Hematite, VG @ 48'	0.010	0.02	0.24
		End of Hole 66'				
DDH #5						
D5-1	0 - 13'	3.2'	Rhyolite, Hematite	0.002	0.12	0.13
D5-2	13 - 40'	13.1	Intrusive Granite	<0.002	<0.02	0.03
		End of Hole 40'				
DDH #6						
D6-1	0 - 40'	17.8'	Rhyolite, Mn films, Hematite	<0.002	<0.02	0.01
		End of Hole 40'				
DDH #7						
D7-1	0 - 23'	12.5'	Cu stained Sil ppy	0.089	0.03	0.72
D7-2	23 - 34'	5.8'	" " "	0.543	0.08	2.62
D7-3	34 - 49'	10.1'	" " "	0.310	0.05	2.54
D7-4	49 - 57'	6.1'	Intrusive, Silicified	0.031	0.03	0.50
		End of Hole 59'				

6.0 All drill holes were vertical and E-size core. Hole No. 7 tested a steeply dipping structure which had been explored by two shallow shafts, trenches and several pits. Hole No. 6 tested a basic dike. Holes No. 5 and No. 4 were located near No. 7 away from the mineralized structure. Hole No. 3 was shallow, remaining in overburden, designed to test an area of reportedly high magnetometer readings. Holes 2 and 1 were completed near the western boundary, in Rhyolitic-granitic environment.

B. Sludge sample rejects supplied by the owner were check assayed:

No.	Type	Assay New			Old	
		Au oz/T	Ag oz/T	Cu %	Au oz/T	Cu %
7001	DDH #7 Sludge	0.010	0.02	0.05	0.01	0.04
7002	" "	0.005	0.02	0.04	Tr	0.04
7003	" "	< 0.002	0.03	0.04	Tr	0.04
7004	" "	0.005	0.04	0.11	Tr	0.09
7005	" "	1.318	0.16	1.68	1.3	1.6
7006	" "	3.924	0.38	2.04	4.2	2.0
7007	" "	0.427	0.06	0.55	0.37	0.50
7008	" "	0.277	0.05	0.25	0.28	0.19

C. Samples from surface collected by the author are described as follows:

No.	Type	Assay Data		
		Au oz/T	Ag oz/T	Cu %
PD #1	Dump, material near DDH #7, Cu stain	0.111	0.10	6.63
PD #2	Dump, Sil, Cu stain	0.705	0.09	5.59
PD #3	Dump, Qtz Vein in shaft, Cu stain	0.243	0.05	9.64

6.0

No.	Type	Width	Assay Data Au oz/T	Ag oz/T	Cu %
PD #4	On Claim No. 6, Barite Quartz, Cu stain		0.154	0.03	2.41
PD #5	On Claim No. 9, Chip from pit 50' E of shaft	3.0	0.161	0.04	1.00
PD #6	West Boundary Area Claim No. 26, Bleached Intrusives, Cu stain		0.224	0.02	1.39
PD #7	Area of pits, trenches Claim No. 26, Barite Qtz Vein, fine grained dike		0.281	0.04	1.14
PD #8	On Claim No. 16 Sil material in intrusive, fracture surfaces, Cu stained, Shaft 12' deep		0.225	0.04	0.99
PD #9	On Claim 16, Dump from ± 75' Shaft		0.002	0.02	0.13
PD #10	Decline of 20', on Claim No. 16. Wall chip	2.0	0.245	0.04	1.81
Picked sample containing V.G., Cu staining Qtz. Jasper stringer in intrusives.			1.244	0.13	9.35

7.0 Geology

7.1 General Geology

The geology of the area consists of a northwesterly trending sequence of mountains formed by basalt and rhyolite flows and dikes overlying a basement complex of pre-Cambrian granite, gneiss and schist. The topography of the immediate area is relatively gentle with ridges reflecting resistant younger basalt flows, and older granites, gneisses and schists weathering low in profile, representing foothills and drainage slopes.

7.2 Local Geology

The Puppy Dog claims cover the northeasterly slopes of Black Butte, overlying basaltic rhyolitic and andesitic flows and dikes superimposed over pre-Cambrian granite, gneiss and schist. Contact areas between the younger rocks and the basement complex are frequently highly fractured and altered, with silicification occurring predominately as vein and fracture fillings, and occasionally as large quartz blowouts.

7.3 Minerology

Numerous pits, trenches, and shallow shafts exploring copper stained outcrop of malachite and azurite frequently containing visible gold, occur on the property. These workings have tested, quartz-barite veins and fracture fillings, contact zones between basic dikes and pre-Cambrian basement rocks, and volcanic flow-basement complex interfaces.

8.0 Exploration Potential

The claims are located in a well mineralized, altered, highly fractured contact environment, between volcanic flows and dikes and pre-Cambrian basement rocks, which contains areas of excellent copper-gold mineralization. Exploration is to be designed to test for copper-gold mineralization, in vein deposits, in large silicified zones in the intrusives and in the fracture controlled contact environment.

9.0 Recommendations

Detailed geological mapping, soil and drainage geochemistry, geophysics, surface sampling, supplemented with dozer work and drill testing are the recommended surveys.

Appendix A

Estimated Cost of the Recommended Surveys

Cost Estimate

Phase 1

1.0	Living Costs - food and accommodations	$ 8,000.00
2.0	Transportation - 4 X 4 Vehicle, air fares, etc.	4,000.00
3.0	Survey Control - line grid	6,000.00
4.0	Geological Mapping	8,000.00
5.0	Geochemical Surveys - soil and drainage, including assays	12,000.00
6.0	E-M Surveys	7,000.00
7.0	Surface Sampling	6,000.00
8.0	Consulting - Engineering	8,000.00
9.0	Contingencies	7,000.00
	Total Phase 1	$ 66,000.00

Phase 2

Drill testing in the area of old drill holes Nos. 4, 5 and 7 is necessary. Additional drilling will be evolved on the success of geochemical and geophysical surveys. It is estimated that drilling requirements will consist of 2,000 feet of NQ size and 2,000 feet of rotary reverse circulation drilling.

1.0	Diamond Drilling N.Q. size - 2,000 feet @ $25.00/foot	$ 50,000.00
2.0	Rotary Reverse Circulation Drilling - 2,000 feet @ $12.00/foot	24,000.00
3.0	Geologist and Helper	10,000.00

Phase 2 Cont'd

4.0	Living costs - supplies	$ 4,000.00
5.0	Assaying	5,000.00
6.0	Consulting	10,000.00
7.0	Contingencies	15,000.00
	Total Phase 2	$118,000.00
	Total Both Phases	U.S. $184,000.00

Respectfully submitted,

John R. Poloni, B.Sc., P.Eng.

Appendix B

References

References

1.0 Geologic Map of Arizona - U.S.G.S. and Arizona Bureau of Mines. 1 : 500,000

Appendix C

Certificate

Certificate

I, John R. Poloni, of 5502 - 8B Avenue, in the Municipality of Delta, in the Province of British Columbia,

DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist.
2. I am a graduate of McGill University of Montreal, Quebec, where I obtained a B.Sc. Degree in Geology in 1964.
3. I am a registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia.
4. I have practiced my profession since 1964.
5. I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
6. I have personally visited the Puppy Dog claims of Rhyolite Resources Inc. on April 29, 1983.
7. I have no interest in the properties and securities of Rhyolite Resources Inc., nor do I expect to receive or acquire any.
8. I consent to the use of this report by Rhyolite Resources Inc. in a submission to the Vancouver Stock Exchange and/or the British Columbia Superintendent of Brokers, and to distribute all or parts of the report to shareholders or other interested parties provided that the meaning is not altered by partial quotes.

Dated this 12th day of May, 1983.

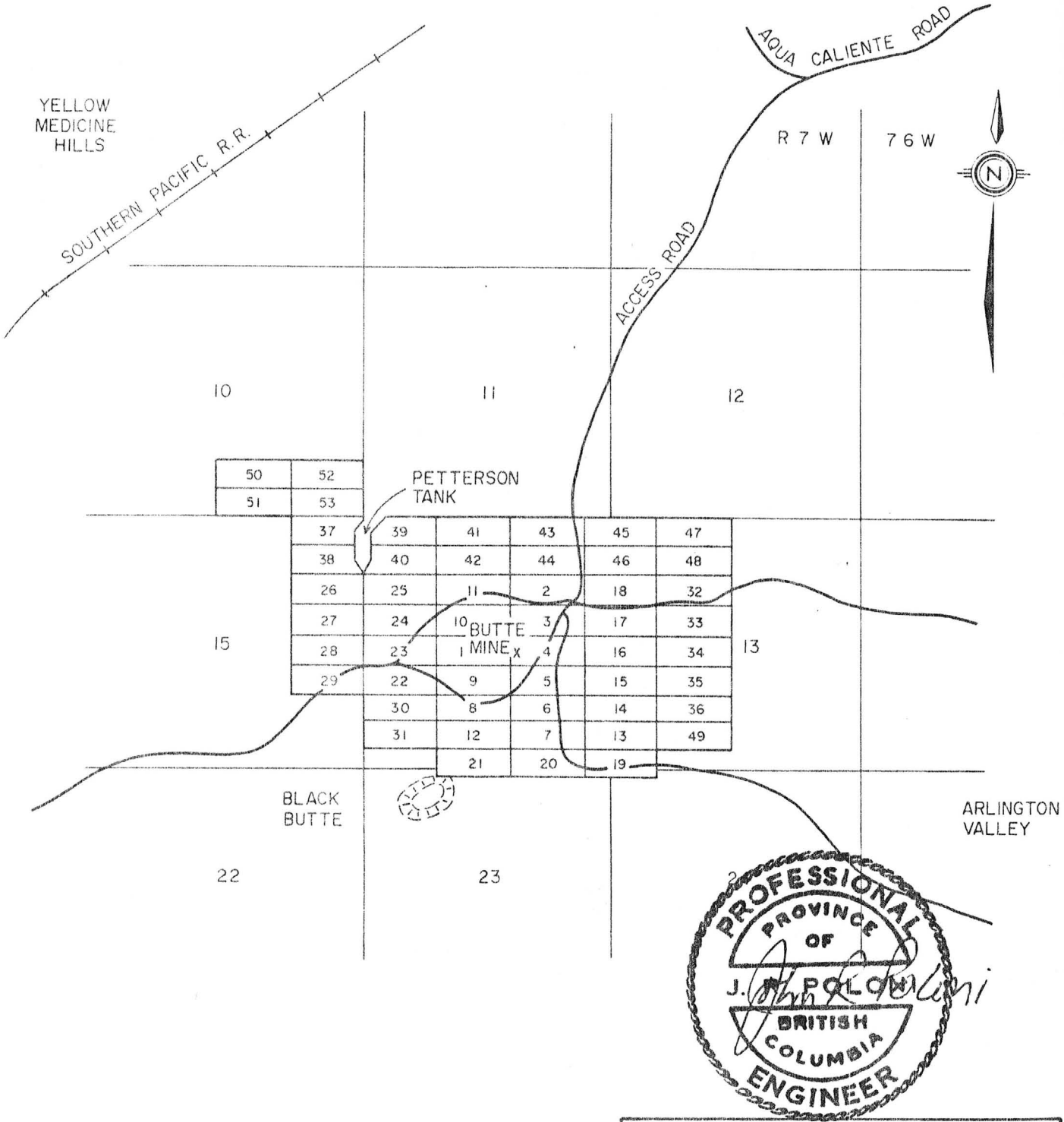
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
JOHN R. POLONI

John R. Poloni, P.Eng.

Appendix D

Maps		Scale
Plan No. 2	Claim Map	1" = 3,000'
Plan No. 3	Sample Location Plan	1" = 600'
Plan No. 4	Geology	1 : 500,000

Assay Data

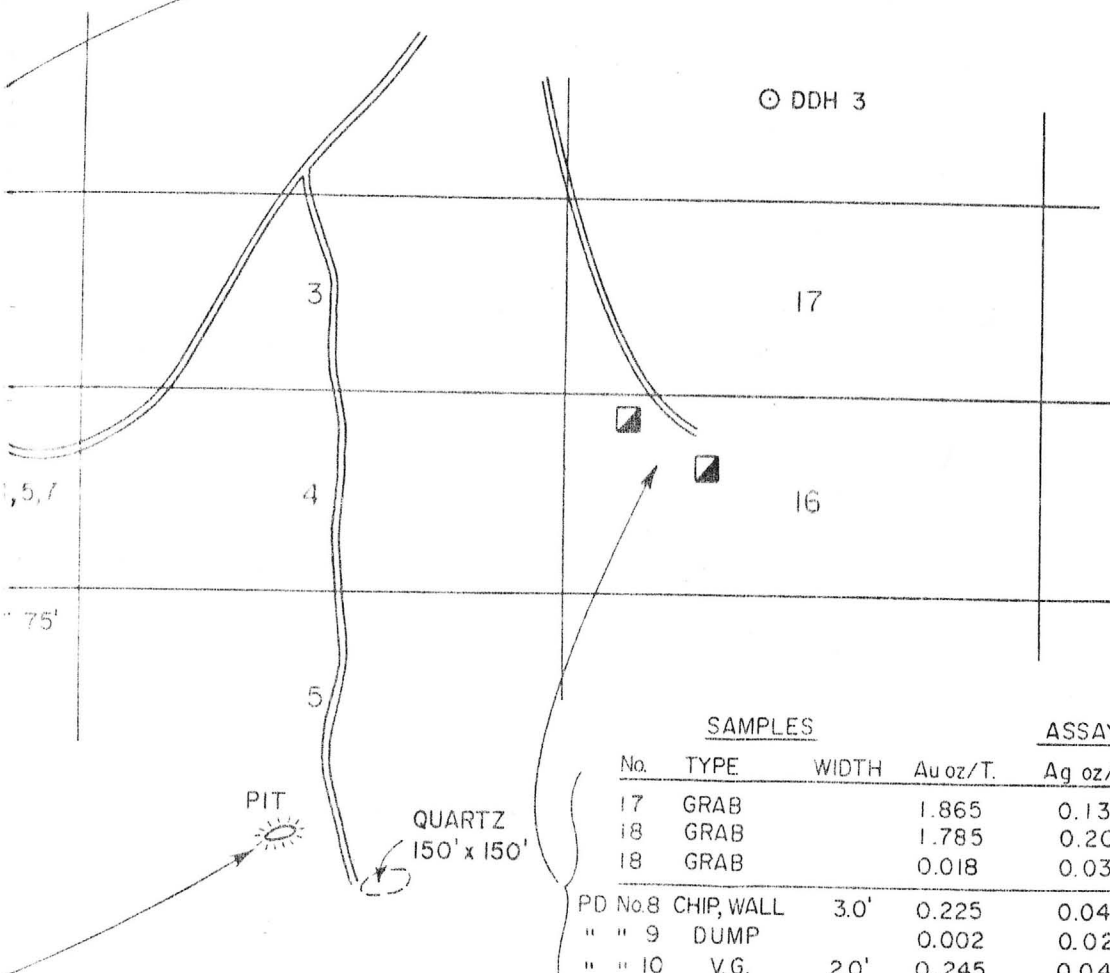


PROPERTY LOCATION

TWP 2S, RANGE 7W, SECTIONS 10, 13, 14, 15

RHYOLITE RESOURCES INC.		
PUPPY DOG GROUP CLAIM MAP MARICOPA COUNTY ARIZONA, U.S.A.		
JOHN R. POLONI & ASSOCIATES LTD.		
Drawn : J. R. P.	Checked : J. R. P.	Plan No.
Scale : 1" = 3000'	Date : May 12, 1983	2

SAMPLES			ASSAY DATA			
No.	TYPE	WIDTH	Au oz/T.	Ag oz/T.	Cu %	SAMPLER
1	O/C, DUMP, GRAB		0.001	0.01	0.170	J. S.
2	"		0.083	0.01	2.620	"
3	"		0.190	0.02	5.560	"
4	"		0.025	0.01	2.980	"
5	"		0.092	0.01	2.010	"
6	"		0.725	0.03	3.020	"
7	"		0.450	0.02	4.350	"
8	"		0.308	0.03	3.640	"
9	"		0.058	0.01	1.930	"
10	"		0.200	0.01	2.020	"
PD No. 1	DUMP, GRAB		0.111	0.11	6.63	J.R.P.
PD No. 2	DUMP, V.G.		0.705	0.09	5.59	"
PD No. 3	DUMP, GRAB		0.243	0.05	9.64	"
19			1.025	0.16	2.340	J.S.



SAMPLES			ASSAY			
No.	TYPE	WIDTH	Au oz/T.	Ag oz/T.	Cu %	SAMPLER
17	GRAB		1.865	0.13	9.550	J.S.
18	GRAB		1.785	0.20	9.300	J.S.
18	GRAB		0.018	0.03	2.990	J.S.
PD No.8	CHIP, WALL	3.0'	0.225	0.04	0.99	J.R.P.
" " 9	DUMP		0.002	0.02	0.13	J.R.P.
" " 10	V.G.	2.0'	0.245	0.04	1.81	J.R.P.
PICKED	V.G.		1.244	0.13	9.35	J.R.P.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. R. POLONI

RHYOLITE RESOURCES INC.

PUPPY DOG GROUP

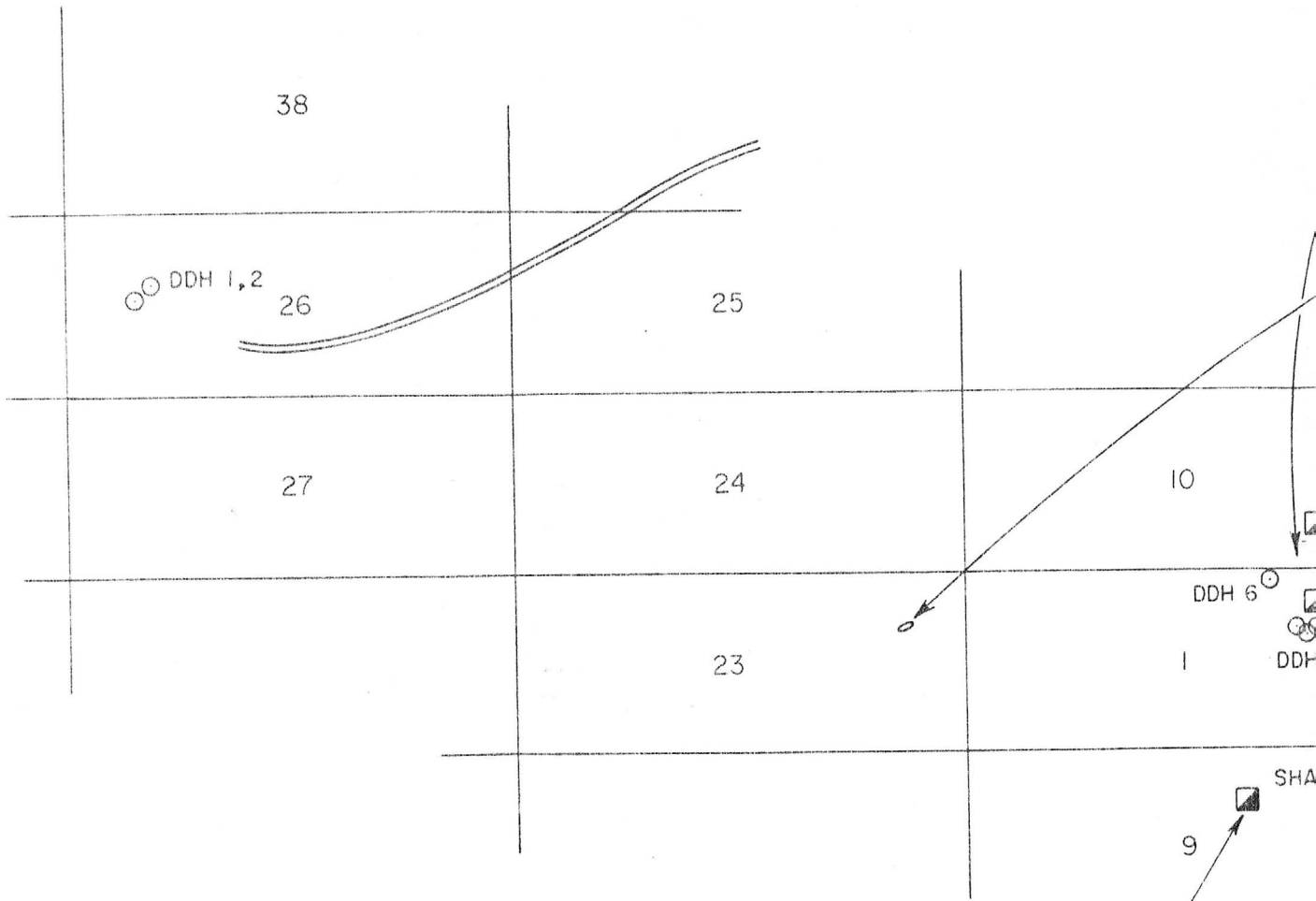
SAMPLE LOCATION PLAN

MARICOPA COUNTY

ARIZONA, U.S.A.

JOHN R. POLONI & ASSOCIATES LTD.

Drawn : J.R.P.	Checked : J.R.P.	Plan No.
Scale : 1" = 600'	Date : May 12, 1983	3



SAMPLES			ASSAY			
No	TYPE	WIDTH	Au oz/T	Ag oz/T	Cu%	SAMPLER
11	O/C, DUMP		0.128	0.01	3.730	J.S.
12	"		0.301	0.01	1.670	J.S.
13	"		0.202	0.01	1.620	J.S.
14	"		0.054	0.04	4.320	J.S.
15	"		0.062	0.06	0.695	J.S.
PD No. 6	DUMP		0.224	0.02	1.39	J.R.P.
PD No. 7	PITS, VEINS		0.281	0.04	1.14	J.R.P.
PD No. 4	PIT WALL		0.154	0.03	2.41	J.R.P.
PD No. 5	CHIP, PIT	3.0'	0.161	0.04	1.00	J.R.P.

NOTE SAMPLER - JON STEWART J.S.
JOHN POLONI J.R.P

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

~~BRKORDER: 423-0607 CLIENT: RHYOLITE~~

ALL COPIES TO:

RHYOLITE RESOURCES
BOX 31 BLACK POINT ROAD,
POWELL RIVER, B.C.
V8A 4Z2

Registered Assayer, Province 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

REPORT: 423-0607

FROM: RHYOLITE RESOURCES
DATE: 11-MAY-83 PROJECT: NONE GIVEN

SUBMITTED BY: J.POLONI

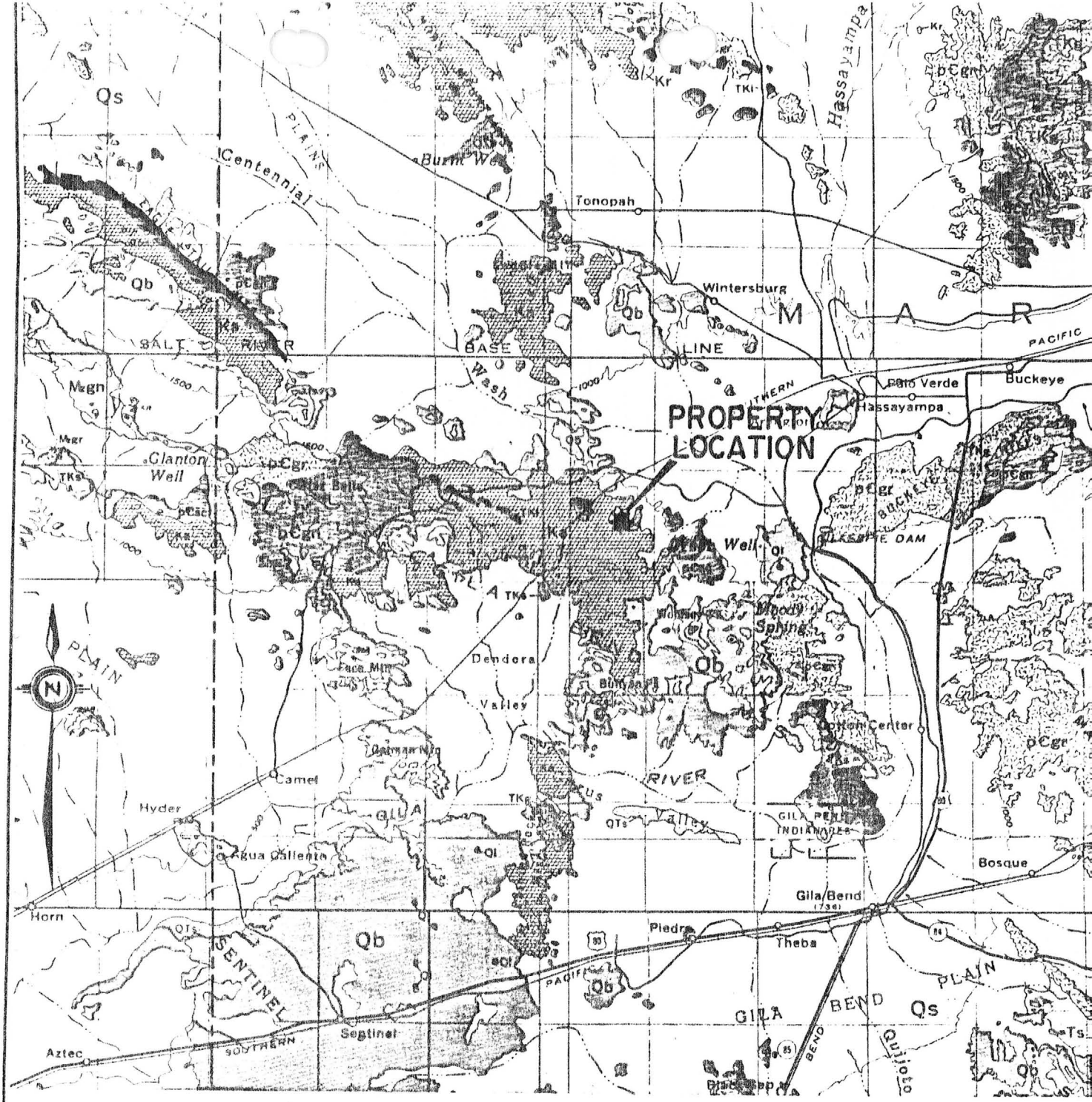
ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Au	.002 OPT			-100	OTHER	ASSAY PREP
Ag	.02 OPT			-100		SEIVE -100
Cu	.01 PCT			-100		

REPORT COPIES TO: RHYOLITE RESOURCES
MR. JOHN POLONI

INVOICE TO: RHYOLITE RESOURCES

RKR

Registered Assayer, Province of Ontario



LEGEND

PLEISTOCENE

- Qs SEDIMENTARY DEPOSITS – ALLUVIAL
- Qb BASALT
- Qi DIKES

UPPER CRETACEOUS

- Tki GRANITE, RHYOLITE
- Tkg GRANITE
- Tks SEDIMENTARY

LOWER CRETACEOUS

- Ka ANDESITE FLOWS & TUFFS

PRECAMBRIAN

- pCgr GRANITE
- pCgn GNEISS
- pCsc SCHIST

DATA USGS MAP ARIZONA

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J. R. POLONI

RHYOLITE RESOURCES INC.

PUPPY DOG GROUP
GEOLOGY

MARICOPA COUNTY
ARIZONA, U.S.A.

JOHN R. POLONI & ASSOCIATES LTD.

Drawn: J.R.P.	Checked: J.R.P.	Plan No. 1
Scale: 1:50,000	Date: MAY 2, 1983	

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

REPORT: 423-0607 PROJECT: NONE GIVEN

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT	Cu PCT	NOTES
P 7001		0.010	0.02	0.05	
P 7002		0.005	0.02	0.04	
P 7003		<0.002	0.03	0.04	
P 7004		0.005	0.04	0.11	
P 7005		1.318	0.16	1.68	
P 7006		3.924	0.38	2.04	
P 7007		0.427	0.06	0.55	
P 7008		0.277	0.05	0.25	
R PD-1		0.111	0.10	6.63	
R PD-2		0.705	0.09	5.59	
R PD-3		0.243	0.05	9.64	
R PD-4		0.154	0.03	2.41	
R PD-5		0.161	0.04	1.00	
R PD-6		0.224	0.02	1.39	
R PD-7		0.281	0.04	1.14	
R PD-8		0.225	0.04	0.99	
R PD-9		0.002	0.02	0.13	
PD-10		0.245	0.04	1.81	
R PICKED AU		1.244	0.13	9.35	
R 1-1		0.007	<0.02	0.05	
R 2-1		<0.002	<0.02	0.04	
4-1		0.005	0.02	0.16	
5-1		0.002	0.12	0.13	
6-1		<0.002	<0.02	<0.01	
7-1		0.089	0.03	0.72	
1-2		<0.002	<0.02	0.01	
4-2		0.010	0.02	0.24	
5-2		<0.002	<0.02	0.03	
7-2		0.543	0.08	2.62	
7-3		0.310	0.05	2.54	
7-4		0.031	0.03	0.50	

Registered Assayer, Province of British Columbia

MIN-EN LABORATORIES LTD.
EST 15TH STREET, NORTH VANCOUVER, 7M 1T2
PHONE: (604) 980-5814 OR (604) 988-4524

Certificate of Assay

TO: Rhyolite Resources Inc.,
301-1285 W. Pender St.,
Vancouver, B.C.

PROJECT No. Black Butt
DATE: April 22/83
File No. 3-204

SAMPLE No.		Cu %	Ag oz/ton	Au oz/ton		
75501C		.170	.01	.001		
02		2.620	.01	.083		
03		5.560	.02	.109		
04		2.980	.01	.025		
05		2.010	.01	.092		
06		3.020	.03	.725		
07		4.350	.02	.450		
08		3.640	.03	.308		
09		1.930	.01	.058		
10		2.020	.01	.200		
11		3.730	.01	.128		
12		1.670	.01	.301		
13		1.620	.01	.202		
14		4.320	.04	.054		
15		.695	.06	.062		
16		9.550	.13	1.865		
17		9.300	.20	1.785		
18		2.990	.03	.018		
75519C		2.340	.16	1.025		
		3.578 $\bar{Cu}$				
				0.416 $\bar{Au}$		

MINE-EN Laboratories Ltd.

CERTIFIED BY: [signature]

Arizona Testing Laboratories

817 West Madison Street □ Phoenix, Arizona 85007 □ 602/254-6181

Magma Engineering Company
For Attn: Mr. Robert L. Clausen Date April 12, 1983
Post Office Box 881
Chandler, Arizona 85224

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0793	7009 [illegible] - [illegible]	5.7		4.0			
	7010 [illegible] - [illegible]	1.4		1.5			
	7011 [illegible] - 57'	0.38		1.2			
	7012 [illegible] - 59'	0.37		0.59			

Respectfully submitted,
ARIZONA TESTING LABORATORIES

Registered Assayer
CERTIFICATE No.
CLAUDE EUGENE McLEAN JR.
ARIZONA U.S.A.

Claude E. McLean, Jr.

Arizona Testing Laboratories

817 West Madison Street ☐ Phoenix, Arizona 85007 ☐ 602/254-6181

Magma Engineering Company
For Attn: Mr. Robert L. Clausen
Post Office Box 381
Chandler, Arizona 85224

Date April 5, 1983

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0639	7001	0.01		0.04			
	7002	Trace		0.04			
	7003	Trace		0.04			
	7004	Trace		0.09			
	7005	1.3		1.6			
	7006	4.2		2.0			
	7007	0.37		0.50			
	7008	0.28		0.19			

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
Certificate No. 6258
Claude E. McLean, Jr.
Arizona, U.S.A.

Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

For Magma Engineering Company
Post Office Box 881
Chandler, Arizona 85224

Date February 17, 1983

ASSAY CERTIFICATE

Core Drill Cuttings - Black Butte Drill Hole #4

LAB NO.	IDENTIFICATION		OZ. PER TON		PERCENTAGES			
			GOLD	SILVER	COPPER			
0008	0-5'	4001	Trace		0.07			
	-10'	4002	Trace		0.04			
	-15'	4003	0.06		0.17			
	-20'	4004	0.29		0.40			
	-25'	4005	0.14		0.25			
	-30'	4006	0.13		1.7			
	-35'	4007	0.18		0.62			
	-40'	4008	0.28		0.40			
	-45'	4009	0.36		2.6			
	-50'	4010	0.12		1.1			
	-55'	40 B1	0.23	0.10	1.5			
	-60'	40 B2	0.15	0.10	1.1			
	-65'	40 B3	0.49	0.20	2.5			
	-70'	40 B4	0.59	0.20	1.1			

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
CERTIFICATE NO. 6258
CLAUDE EUGENE McLEAN, JR.
Date Signed 2-17-83
ARIZONA, U.S.A.

DRILL LOG

LOCATION Black Butte CPD# 1 HOLE #07 (7000) DATE 3-83

T.2S R7W Puppy Dog Claims

DEPTH	GEOLOGICAL DESCRIPTION		ASSAYS AU	ASSAYS CU
1				
2				
3				
4	Alluvial Material with granite porphyry			
5		7001	.01	.07
6				
7				
8	Granite porphyry - no oxides visable			
9				
10		7002	TR	.04
11	Granite porphyry - very light green - no oxides visable			
12	(2' core / 3' softer material)			
13				
14				
15	Same as above	7003	TR	.07
16	(2' core / 2' softer material)			
17				
18	Granite porphyry with some Cu oxides			
19	(1' core / 1' softer material)			
20		7004	TR	.09
21	Granite porphyry with abundant Cu Oxides.			
22	(3' core / 1' softer material)			
23				
24	Reddish hydrothermal silicious material with Cu oxides,			
25	cuprite & hematite. (2½' core / ½' softer material)	7005	1.3	1.6

DRILL LOG

LOCATION Black Butte CPD #1 HOLE # 07 (7000) DATE 3-83

DEPTH	GEOLOGICAL DESCRIPTION		ASSAY AU	ASSAY CU
26				
27	Hydrothermally altered mineralized material with abundant			
28	Cu oxides and hematite red coloration			
29	(3' core / 1' softer material)			
30	Quartz with Cu oxides (9" core / 3" softer)	7006	4.2	2.0
31	Fine grained quartz porphyry with Fe and Cu oxides			
32	in veinlets. (2 1/4' core / 3/4' softer)			
33				
34	Same as above with many black inclusions	7007	0.37	0.50
35	(1' core / 1' softer)			
36	Light greenish highly altered material with Fe +			
37	Cu oxides in veinlets.			
38	(1' core / 2' softer material)	7008	0.28	.1[illegible]
39	Same as above with abundant Cu oxides visable (1' core)			
40	Altered mineralized vein-type material with dark			
41	reds & greens Cu oxides abundant. Some quartz inclusions			
42	(2 3/4' core / 1/4' softer material)	7009	5.7	4.0
43	Altered rhyolite-textured volcanics with Cu-stained			
44	quartz veinlets & many Mn dendrites.			
45	(2 1/2' core / 1/2' softer material)			
46	Altered volcanics, 1st foot - then 2' chrysocolla-			
47	type material. Green drill return H_2O at 46'-47'.			
48	(3/4' core / 2 1/4' softer material)	7010	1.4	1.5
49	Quartz and Quartz porphyry with abundant			
50	reds and greens.			

DRILL LOG

LOCATION Black Butte CPD#1 HOLE # 07 (7000) DATE 4-83

DEPTH	GEOLOGICAL DESCRIPTION	ASSAY AU	ASSAY CU
51	(1½' core / 1½' softer material)		
52	Quartz Porphyry with moderate reds and greens.		
53	(1' core / 2' softer material)		
54	7011	0.38	1.-
55	Granite porphyry with native Cu distributed throughout.		
56	Very few Cu oxides		
57	(3' core / < ¼' softer stratas)		
58	Same as above but more brecciated. No Cu Oxides visible		
59	(1½' core / ½' softer material) 7012	0.37	0.5

Owner — BEVERLY HINRICHS
PO Box 495
APACHE JCT. AZ-
85220

Arizona Testing Laboratories

817 West Madison Street □ Phoenix, Arizona 85007 □ 602/254-6181

Magma Engineering Company
For Attn: Mr. Robert L. Clausen
Post Office Box 381
Chandler, Arizona 85224

Date April 5, 1983

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0639	7001	0.01		0.04			
	7002	Trace		0.04			
	7003	Trace		0.04			
	7004	Trace		0.09			
	7005	1.3		1.6			
	7006	4.2		2.0			
	7007	0.37		0.50			
	7008	0.28		0.19			

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Arizona Testing Laboratories

817 West Madison Street ☐ Phoenix, Arizona 85007 ☐ 602/254-6181

For Magma Engineering Company
Attn: Mr. Robert L. Clausen
Post Office Box 881
Chandler, Arizona 85224

Date April 12, 1983

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0793	7009 [illegible]	5.7		4.0			
	7010 [illegible]	1.4		1.5			
	7011 [illegible]	0.38		1.2			
	7012 [illegible]	0.37		0.59			

Respectfully submitted,
ARIZONA TESTING LABORATORIES

Registered Assayer
Certificate No. 5251
Claude Eugene McLean, Jr.
State of Arizona U.S.A.

Claude E. McLean, Jr.

DRILL LOG

LOCATION Black Butte CPD#1 HOLE # 04 [4000] DATE 1-83

T2S R7W Puppy Dog Claims

DEPTH	GEOLOGICAL DESCRIPTION	ASSAYS AU	ASSAYS CU
1	▨ = Alluvial □ = Granite-Quartz Porphyry □ = Volcanics ■ = Soft Materials ▩ = Mineralized		
2	Alluvial Material		
3		Tr	0.07
4			
5			
6	Granite Porphyry - no visable Cu oxides		
7	(2 ft. core / 5' softer material)		
8		Tr	0.04
9			
10			
11			
12	Granite porphyry with small amount limonite		
13	stain. No visable Cu Oxides.	0.06	0.1
14	(2' core / 3' softer material)		
15			
16			
17			
18		0.29	0.4
19			
20	Highly altered material with visable Cu oxides		
21	& limonite stains.		
22	(2' core / 8' softer material)		
23		0.14	0.2
24			
25			

DRILL LOG

LOCATION Black Butte CPD#1 HOLE # 04 DATE 1-83

DEPTH	GEOLOGICAL DESCRIPTION	ASSAYS AU	ASSAYS CU
26			
27			
28	Light reddish-brown volcanics (rhyolitic texture) with numerous	0.13	1.7
29	small limonite veinlets - No Visable Cu oxides.		
30	(2' core / 3' softer material)		
31			
32			
33	Same as above.	0.18	0.62
34	(2' core / 3' softer material)		
35			
36			
37			
38		0.28	0.40
39	Same as above		
40	(7' core / 3' softer material)		
41			
42			
43		0.36	2.6
44			
45			
46	Altered material with some Cu oxides - (light		
47	greenish) (1' core / 1' softer material		
48		0.12	1.1
49	Same as above		
50	(1½' core / 1½' sofer material)		

DRILL LOG

LOCATION Black Butte CPD #1 HOLE # 04 DATE 1-83

DEPTH	GEOLOGICAL DESCRIPTION	ASSAYS AU	AG	CU
51				
52				
53		0.23	0.10	1.5
54	Light reddish-brown volcanics (rhyolite texture)			
55	with numerous small limonite veinlets - No			
56	visable Cu oxides.			
57	(6' core / 4' softer material)			
58		0.15	0.10	1.1
59				
60				
61				
62	Same as above (light tan coloration)			
63	(2' core / 3' softer)	0.49	0.20	2.5
64				
65				
66				
67	Light tan volcanics with numerous			
68	limonite veinlets (Some vugs with quartz	0.59	0.20	1.1
69	crystal formations) No cu oxides visable.	CORE		
70	(3' core / 2' softer material)	Tr.		.2

Owner — BEVERLY HINRICHS
PO Box 495
APACHE JCT. AZ
85220

Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

H.E. BEST
PO Box 32
ARLINGTON AZ. 85322

For Magma Engineering Company
Post Office Box 881
Chandler, Arizona 85224

Date February 17, 1983

ASSAY CERTIFICATE

Core Drill Cuttings - Black Butte Drill Hole #4

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0008	0-5' 4001	Trace		0.07			
	-10' 4002	Trace		0.04			
	-15' 4003	0.06		0.17			
	-20' 4004	0.29		0.40			
	-25' 4005	0.14		0.25			
	-30' 4006	0.13		1.7			
	-35' 4007	0.18		0.62			
	-40' 4008	0.28		0.40			
	-45' 4009	0.36		2.6			
	-50' 4010	0.12		1.1			
	-55' 40 B1	0.23	0.10	1.5			
	-60' 40 B2	0.15	0.10	1.1			
	-65' 40 B3	0.49	0.20	2.5			
	-70' 40 B4	0.59	0.20	1.1			

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
CERTIFICATE NO. 6258
CLAUDE EUGENE McLEAN, JR.
Signed
ARIZONA, U.S.A.

Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

For Magma Engineering Company
Post Office Box 881
Chandler, Arizona 85224

Date February 17, 1983

ASSAY CERTIFICATE

Core Drill Cuttings - Black Butte Drill Hole #4

LAB NO.	IDENTIFICATION		OZ. PER TON		PERCENTAGES			
			GOLD	SILVER	COPPER			
0008	0-5'	4001	Trace		0.07			
	-10'	4002	Trace		0.04			
	-15'	4003	0.06		0.17			
	-20'	4004	0.29		0.40			
	-25'	4005	0.14		0.25			
	-30'	4006	0.13		1.7			
	-35'	4007	0.18		0.62			
	-40'	4008	0.28		0.40			
	-45'	4009	0.36		2.6			
	-50'	4010	0.12		1.1			
	-55'	40 B1	0.23	0.10	1.5			
	-60'	40 B2	0.15	0.10	1.1			
	-65'	40 B3	0.49	0.20	2.5			
	-70'	40 B4	0.59	0.20	1.1			

Puppy Dog Claims
Sec. 14 - T 2S. R 7W

Respectfully submitted,
ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
Certificate No. 6258
Claude Eugene McLean, Jr.
Arizona, U.S.A.

Arizona Testing Laboratories

817 West Madison Street □ Phoenix, Arizona 85007 □ 602/254-6181

For Magma Engineering Company
Attn: Mr. Robert L. Clausen
Post Office Box 881
Chandler, Arizona 85224

Date April 5, 1983

ASSAY CERTIFICATE

Core Drill Cuttings - Black Butte Drill Hole # 7

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
0639	7001	0.01		0.04			
	7002	Trace		0.04			
	7003	Trace		0.04			
	7004	Trace		0.09			
	7005	1.3		1.6			
	7006	4.2		2.0			
	7007	0.37		0.50			
	7008	0.28		0.19			
	Approx. 5' intervals						

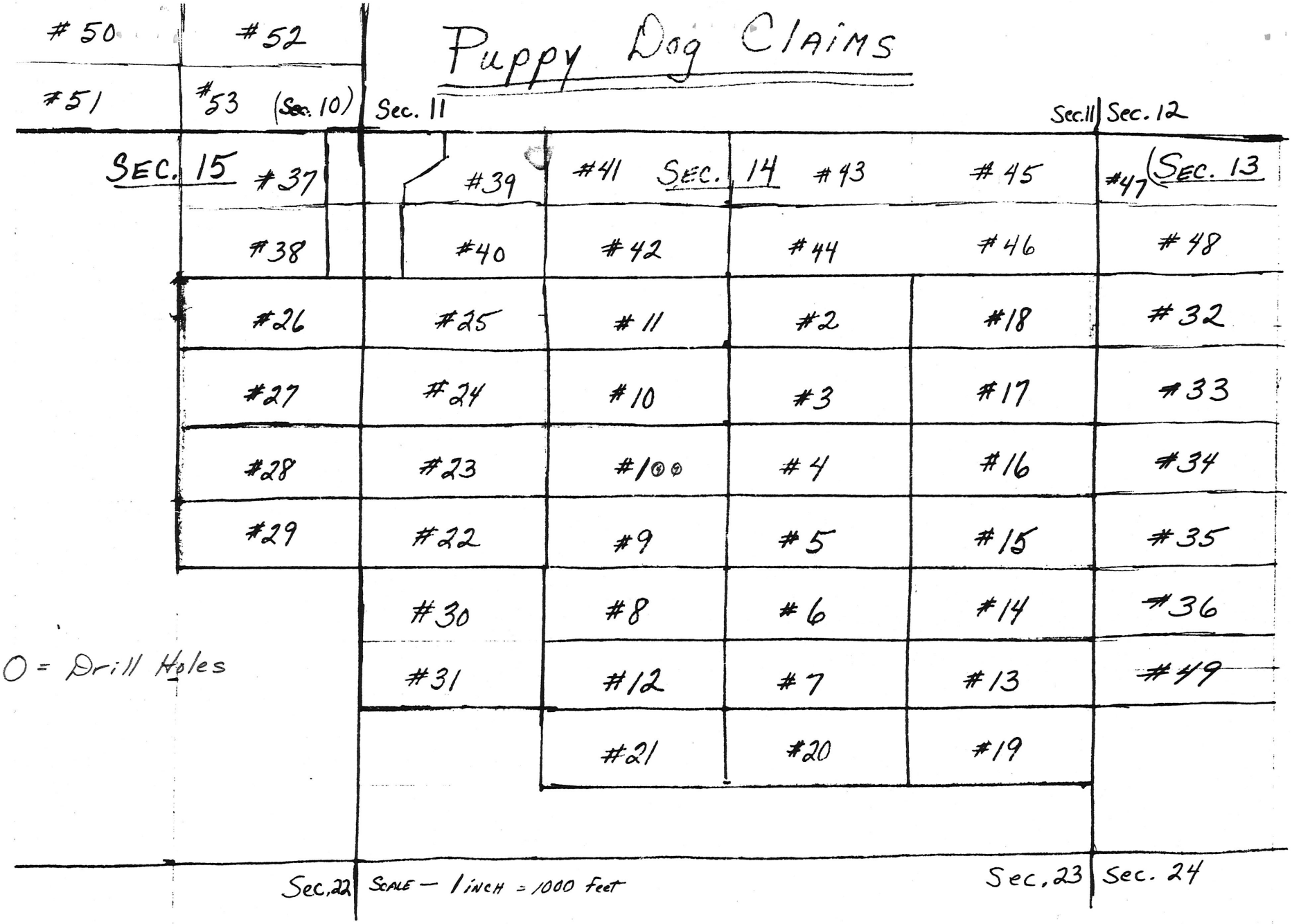
Puppy Dog Claims
Sec. 14 T2S R7W

Respectfully submitted,
ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
Certificate No. 6258
Claude Eugene McLean, Jr.
Arizona, U.S.A.

Puppy Dog Claims



O = Drill Holes

Township 2 S. — Range 7 W.

BEVERLY HINRICHS
[redacted]
P.O. BOX 495
APACHE JCT AZ. 85220