



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

The following file is part of the A. F. Budge Mining Ltd. 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.

Conde

Don White
521 E. Willis St.
Prescott, AZ 86301
602/778-3140

May 3, 1987

Peter McLean
Dept. of Geology
UNIV. OF WESTERN ONTARIO
London, Ontario
Canada N6A 5B7

Dear Peter,

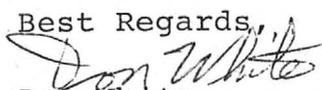
Thank you very much for the petrographic report on the U.V.X. drill hole M-3 samples. Your analysis and the photos are very helpful in our effort to unravel what the interesting mineralization really is and means. I now have some other chemical data which, along with the gold and silver assays, raises yet more questions. If you have any time to give us, perhaps we can get some more help.

Attached are some semi-quantitative spectrographic results including those for two of the M-3 samples you studied, M-3-157 and 164. Both are very auriferous and extremely argentiferous. While you have identified native gold, electrum, and rutile (TiO_2) in those sections, I suspect there must be some other silver-bearing mineral(s) to explain the 1,200-2,000ppm Ag assays. Note that the Ti analyses are low (~ 20 -30ppm) compared to Sn (300-500 ppm) Pb (50-500ppm) Cu (300-700ppm) Bi (30-50ppm) and perhaps As (~ 200 ppm). Is it possible that we have any native silver (Ag) argentite (Ag_2S) argentiferous galena [$\text{Pb}(\text{Ag})\text{S}$] proustite (Ag_3AsS_3) cassiterite (SnO_2) calaverite (AuTe_2) sylvanite [$(\text{Au},\text{Ag})\text{Te}_2$] or other minerals that could explain these spectrographic results? It seems probable to me that these exceptionally high silver values must be occurring in something other than electrum and that the rutile may really be some silver \pm lead \pm tin mineral, perhaps a telluride or sulfide. Do you think this issue is resolvable using your microprobe?

I call your attention to the spectrographic Fe analyses too. They are roughly one tenth the iron equivalent of your hematite and goethite abundance estimates. Certainly I can appreciate from your photos that the fine disseminated and massive colloform iron oxides overwhelm the eye. Perhaps the semi-quantitative results, however, will allow you to "calibrate" the visual estimates. I should have more accurate whole rock analyses including FeO , Fe_2O_3 , SiO_2 , Al_2O_3 , CaO , MgO , Na_2O , and K_2O very soon. I will forward a copy of that data to you.

If you have any questions or suggestions as to specific elemental analyses that would help your work, do not hesitate to call. We can have the pulps run for any element of import, either for more accuracy than the spectrographic results or for those elements not included in the spectrographic results.

Thanks again for your help.

Best Regards,

Don White
Geologist, C.P.G.

Enclosures
cc: R.W. Hodder, C.A. O'Brien

PETROGRAPHY OF UVX DRILL HOLE M3

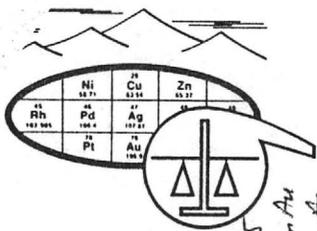
by

Peter McLean

April, 1987

Samples from M-3 DDH core:

<u>Footage</u>	<u>Unit</u>	<u>Assays (oz/t)</u>	
		<u>Au</u>	<u>Ag</u>
143'	Banded chert	.004	.80
157'	Grit	.447	58.72
164'	Grit	.916	35.42
193'	Breccia	.065	1.90
231	Very ferruginous bx	.033	1.35



SKYLINE LABS, INC.

1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UQX 047
PAGE 2

M-1 122-125
Grit - 15 ppm Au
118 ppm Ag

M-2 127-131
"Ironstone" - very
ferrous chert bx
8 ppm Au
52 ppm Ag

M-3 156-158
Grit - 15 ppm Au
2,000 ppm Ag

M-3 163-166
Grit - 31 ppm Au
1200 ppm Ag

M-3 181-185
Grit - 4.6 ppm Au
129 ppm Ag

ITEM NO.	SAMPLE NO.
2	M1-122-125
13	M2-127-131
17	M3-156-158
20	M3-163-166
25	M3-181-185

ITEM

2

13

17

20

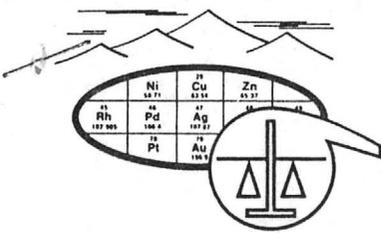
25

ELEMENT

%	Fe	Ca	Mg
	15%	.03%	.02%
	20%	.03%	.02%
	1.5%	.02%	<.02%
	2%	.02%	<.02%
	5%	.02%	<.02%

PPM

Ag (assy)	100 (118)	20 (52)	1000 (2,000)	700 (1200)	70 (129)
As	5000	2000	200	<200	200
B	<10	70	<10	<10	<10
Ba	100	100	70	10	50
Be	<2	<2	<2	<2	<2
Bi	30	<10	50	30	<10
Cd	<50	<50	<50	<50	<50
Co	<5	20	<5	<5	<5
Cr	30	50	20	<10	20
Cu	3000	5000	700	300	700
Ga	30	30	<10	<10	<10
Ge	<20	<20	<20	<20	<20
La	<20	<20	20	20	<20
Mn	100	100	50	10	20
Mo	50	50	<2	<2	<2
Nb	30	20	20	<20	<20
Ni	<5	5	5	<5	<5
Pb	2000	100	500	50	20
Sb	<100	<100	<100	<100	<100
Sc	<10	<10	<10	<10	<10
Sn	1000	500	500	300	150
Sr	<100	<100	<100	<100	<100
Ti	200	200	30	20	50
V	1000	1500	100	30	30
W	<50	<50	<50	<50	<50
Y	<10	<10	<10	<10	<10
Zn	1500	2000	<200	<200	<200
Zr	150	20	70	20	<20



SKYLINE LABS, INC.

1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

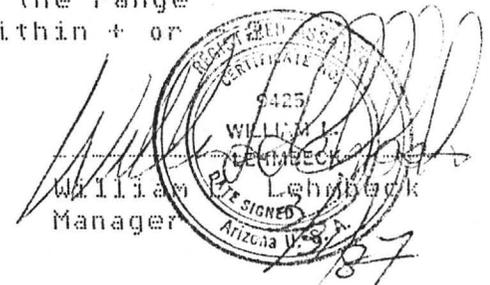
REPORT OF SPECTROGRAPHIC ANALYSIS

JOB NO. UQX 047
March 31, 1987
M1-120-122 TO
M3-181-185
RECEIVED 3-16-87

Mr. Don White
521 East Willis ST.
Prescott, AZ 86301

Analysis of 5 Samples

The attached pages comprise this report of analysis. Values are reported in parts per million (ppm), except where otherwise noted, to the nearest number in the series 1, 1.5, 2, 3, 5, 7, 10, etc. within each order of magnitude. These numbers represent the approximate boundaries and midpoints of arbitrary ranges of concentration differing by the reciprocal of the cube root of ten. The 'accepted' value is considered to be within + or - 1 step of the range reported at the 68 % confidence level and within + or - steps at the 95 % confidence level.



cc: A.F. BUDGE (MINING) LTD.
Attn: C. A. O'Brien
7340 E. Shoeman Lane, 111-B (E)
Scottsdale, AZ 85251

Don White
521 East Willis St.
Prescott, AZ 86301
602/778-3140

May 3, 1987

William L. Lehmbeck, Manager
Skyline Labs, Inc.
P.O. Box 50106
Tucson, AZ 85745

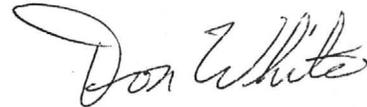
Dear Bill,

I have received the five (5) pulps from job UQX-047-A. What I still need are all the pulps, pronto, from job UQX-047. That means I need the other 20 pulps which I requested be sent nearly a month ago in a phone call to a secretary/receptionist (no one else was in the office).

What keeps us from using your services more often is this kind of slowness. With job UQX-047 our turnaround from time of sending samples to receiving written assay reports was 30 days. The follow-up analyses requested are now about 20 days and not yet received. The pulps have been awaited equally long. We are accustomed to 3 day turnaround and, with a local lab, no hassle with acquiring pulps for other work.

I look forward to receiving my pulps soon and your response as to whether Skyline can cut our turnaround time by about two-thirds (to 10 days, including 2 days mail each way). If not, I believe we'll simply not use your laboratory any further.

Sincerely,



Don White
Geologist, C.P.G.

cc: Carole A. O'Brien ✓

Carole

Don White
521 East Willis St.
Prescott, AZ 86301
602/778-3140

April 17, 1987

Mr. Harold Kruger
Geochron Labs, Inc.
24 Blackstone St.
Cambridge, MA 02139

Dear Mr. Kruger,

As we discussed on the phone yesterday, I have forwarded about ten pounds of quartz monzonitic plutonic rock for Rb-Sr age dating.

What we would like is both a whole rock and mica separate analysis. Any fragment you feel is best suited for the whole rock analysis is fine. We took as much care as possible to acquire the freshest specimens though there are still some visible manganese dendrites.

For the mica separation, it sounds as though your tricks-of-the-trade can be put to use to minimize the chance of interference from sericite which no doubt occurs in some small fraction with the muscovite and biotite.

I further understand that your rates are \$410 for each of the Rb-Sr analyses and \$50 for the mica separation or an approximate total of \$870.00 for the work I am requesting. Would you please send the bill and a second copy of the results to:

Carole A. O'Brien
A.F. Budge (Mining) Ltd.
7340 East Shoeman Ln.
Suite 111-B-(E)
Scottsdale, AZ 85251

If there are any problems or need for any more sample, do not hesitate to phone.

Thank you for your service.

Regards,



Don White
Geologist, C.P.G.

DW:sk

Carole

Don White
521 East Willis St.
Prescott, AZ 86301
602/778-3140

April 20, 1987

Mr. Jon Powell
Teledyne Isotopes
Age Determination Laboratory
50 Van Buren Ave.
Westwood, NJ 07675

Dear Mr. Powell,

I have enclosed a sample bag of galena-bearing quartz for your use in a Pb-Pb age determination as we discussed on the phone a few days ago.

My understanding is that you can dissolve the necessary galena and perform the isotopic determination for \$250. Please send a second copy of the results and the billing to:

Carole A. O'Brien
A.F. Budge (Mining) Ltd.
7340 East Shoeman Ln.
Suite 111-B-(E)
Scottsdale, AZ 85251

If there are any problems or need for any more samples, do not hesitate to phone.

Thank you for your service.

Regards,



Don White
Geologist, C.P.G.

DW:sk

CN Bottle Roll Test *

Client ID Lab ID
MSC01434

	pH	SOLUTION % Recovery	SAMPLES NaCN Consumed (1b/ton of ore treated)
24 hrs.	11.0	+100.00	0.68
48 hrs.	11.0	+100.00	No Test
72 hrs.	11.0	111.62	1.86

TAIL ASSAY

	Au oz/ton	Ag oz/ton
1426-18 Tails	0.014	0.82

Samples pulled for analysis at 24 hrs. and 48 hrs. were not corrected for volume loss. The sample pulled at the end of the test is corrected for volume loss.



CN Bottle Roll Test *

Client ID
MSC01434

Lab ID

	pH	SOLUTION % Recovery (lb/ton of ore treated)	SAMPLES NaCN Consumed
24 hrs.	11.0	+100.00	0.68
48 hrs.	11.0	+100.00	No Test
72 hrs.	11.0	111.62	1.86

TAIL ASSAY

	Au oz/ton	Ag oz/ton
1426-18 Tails	0.014	0.82

Samples pulled for analysis at 24 hrs. and 48 hrs. were not corrected for volume loss. The sample pulled at the end of the test is corrected for volume loss.



M3 184'

Ore minerals

Goethite- 70 %
Hematite- tr
Electrum ? - tr

Gangue minerals

Quartz- 30 %

Textures

Quartz - Quartz occurs as pods and matrix. Pods contain both coarse (up to 1.5mm) and fine-grained (< .02mm) quartz with serrated grain boundaries and undulose extinction. Coarse-grained quartz is altering to fine-grained quartz along grain margins and some pods appear to be the end result of this alteration. Pods are commonly rimmed by massive goethite but rarely brecciated by goethite. Matrix quartz is fine-grained (< .05 mm) and occurs in the massive goethite.

Goethite - Massive, amorphous goethite dominates the slide. The goethite rims pods of quartz and brecciates several pods.

Hematite - Minute (< .02 mm), anhedral grains of hematite occur in the massive goethite.

Electrum ? - Anhedral, fine-grained (< .02 mm) electrum ? occurs in the massive goethite.

Don, heres the
last thin section
description for drill
hole M3. Have
a good summer
Sent Special Delivery Apr. 30
Arrived May 8
8 days! Thanks
Pete Maclean

Carde

APPLIED GEOLOGIC STUDIES, INC.

2875 West Oxford
Suite #3
Englewood, Colorado 80110
(303) 761-5624

May 1, 1987

Mr. Don White
Geologist, C.P.G.
521 East Willis St.
Prescott, AZ 86301

Dear Don:

Both Rob and I quite appreciated your taking the trouble to show us the Vulture property and allow the sample collecting. These samples will be used for geochemical and isotopic research that Rob is engaged in at the University of Saskatchewan.

I have received your letter of April 29 and would concur with your requests except amended as follows: We only gathered enough material to perform the following kinds of research: Whole rock and trace element analyses and oxygen isotopic determinations on the stock (two samples; one least altered and one highly altered). The mineralized quartz samples will be used for oxygen work to compare with quartz from the pluton. I don't think Rob is set up for fluid inclusion work but I'll let him contact you on that score. I also suppose thin-sections will be prepared and descriptions integrated into the other work.

Knowing Rob's present schedule (much traveling) and other commitments, I would not care to venture an estimate of when the Vulture data will be forthcoming. I will be in touch with him and will press for its earliest completion and release.

Again, thanks for your help.

Sincerely,



Dr. William A. Rehrig
President and Chief Geologist

cc: Dr. Robert Kerrich



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

May 18, 1987

Mr. Patrick J. Ryan
Senior Vice President
Phelps Dodge Corporation
2600 North Central Avenue
Phoenix, Arizona 85004-3015

Dear Mr. Ryan:

As you may recall, A.F. Budge (Mining) Limited currently has a lease agreement with Verde Exploration, Ltd. and Jerome-Verde Development Corporation, covering a major portion of the United Verde Extension Mine in Jerome. In December of 1986, A.F. Budge (Mining) Limited acquired the hoisting equipment and facilities at the Edith Shaft.

Our exploration efforts to date have indicated the presence of a small, but significantly mineralized zone located near the hanging wall of the Verde Fault, which may be economic. Current plans include drifting to this zone in order to obtain bulk samples to determine their grade and suitability for shipment as smelter flux.

One of our major concerns is subsidence in the area, especially as our activities will involve mining close to the fault and under the town of Jerome, albeit 800 feet below surface. It is our understanding that Phelps Dodge carried out some subsidence monitoring and control in the past. To establish our own monitoring network, we would very much appreciate having access to this data, if at all possible.

Another potential problem, should we elect to use a modified cut-and-fill mining method, is a source of fill. One approach we have considered is sand fill. Would it be possible to obtain some information, i.e. volume, composition, etc., on the Tuzigoot tails located north of Cottonwood-Clarkdale? This source may provide a material suitable for our purposes.

And last but not least on this multiple inquiry request: In the course of our exploration work, our geologist, Don White, has, with the assistance of R.W. Hodder, from the University of Western Ontario in Canada, formulated some guidelines to prospecting outside of our lease area. One area which indicates a potential for the occurrence of similar mineralization is the United Verde. We would like to investigate the possibility of entering into a joint venture or lease/option arrangement with Phelps Dodge to explore there.

P.J. Ryan
May 18, 1987
Page 2

A meeting on any or all of the above subjects might be to our mutual benefit. We look forward to a response at your earliest convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read "A. F. Budge". The signature is stylized with a large initial "A" and "F" and a cursive "Budge".

Anthony F. Budge
President

AFB:ca



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

May 20, 1987

This will acknowledge receipt of check no. 147, in the amount of \$4,101.00, from Laurie A. Woodall, Personal Representative for the Estate of Ben F. Dickerson III, representing payment of monies owing to A.F. Budge (Mining) Limited which were in Mr. Dickerson's account at the time of his death. Actual amount in account on January 8, 1987 was \$4,101.02.

Accepted:

Carole A. O'Brien

Carole A. O'Brien
for A.F. Budge (Mining) Limited



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

June 5, 1987

Mr. John J. LeFever
Manager, Metals Division
Western Energy Company
16 E. Granite Street
Butte, MO 59701

Dear Mr. LeFever:

Per Mr. E.K. Lehmann's request, I am sending you some background information on A.F. Budge Limited. This information is contained in brochures and the latest copy of his Directors Report and Accounts, 31 December 1986.

Sincerely,

Carole A. O'Brien
Mining & Financial
Coordinator

encls.

c: A.F. Budge
E.K. Lehmann



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 8, 1987

Mr. Daniel P. Dalrymple
1253 Fremont Ct.
Cordes Lake
Mayer, AZ 86333

Dear Mr. Dalrymple:

Pete Flores just reminded me the other day that we owed you for 14 hours running the hoist at the UVX in Jerome. Our check in the amount of \$154.00 is enclosed.

Thank you for being available. We will certainly keep you in mind in the event we need another hoistman.

Sincerely,

A handwritten signature in cursive script that reads "Carole A. O'Brien".

Carole A. O'Brien

encl. (1)



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 8, 1987

Pete F. Flores
U.V.X.
P.O. Box 938
Jerome, AZ 86331

Dear Pete:

Enclosed is your check to reimburse you for your cash expenses. Also, a copy of your statement with my corrections on it.

Jose's check for his mileage to the Vulture is also enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carole".

Carole A. O'Brien

encls.



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 8, 1987

Peter H. Hahn
3608 Big Bend Lane
Reno, NV 89509

Dear Pete:

As I mentioned last evening on the phone, I am enclosing the executed Assignment and Quitclaim Deed on the Cimarron to be recorded with BLM and also at Tonopah. You can send the recorded copy back to me and I will forward a copy to John Lacy.

Also enclosed is our check in the amount of \$5,791.78 per your statement for fees and expenses in March.

Thanks.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carole".

Carole A. O'Brien

encls.



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 21, 1987

Don White
521 E. Willis
Prescott, AZ 86301

Dear Don:

Hope the Pony Express is running on time this week. Bob Hodder asked me to mail his check to you so he could get it on Thursday when he sees you. It is enclosed.

In reflecting on your comments last night about the bulk sample for metallurgical tests, I think we should try to get a sample of whatever material is most comparable to what we may be mining out in the Verde area. Only you can determine that. If material is available from the 901-W, east of the Gold Stope, and it contains at least 0.15 oz/t gold, then let's get Pete to have his crew cut out a couple hundred pounds. You could mark the section to be sampled perhaps on Friday morning. We may have some drums left over at the Vulture in which we can ship the sample to Dawson.

Will bring the gold book for you to look at this Saturday when we have our AIPG field trip.

Regards.

Sincerely,

Carole A. O'Brien

encl(1)



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 27, 1987

Classified
Mining Record
P.O. Box 1030
Castle Rock, CO 80104

Dear Sir:

Would you kindly run the attached "Wanted" ad
for two consecutive weeks in your newspaper.

Please send invoice to my attention at the above
address.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Carole A. O'Brien".

Carole A. O'Brien
Mining Coordinator

w/attachment



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 27, 1987

South Willard Medical Clinic
C.W. Welly
P.O. Box 280
Cottonwood, AZ 86326

Dear Dr. Welly:

Enclosed is our check, no. 1521, in the amount of \$324.20 to cover payments for medicals administered to Joe Davis and Cundo Jaurequi.

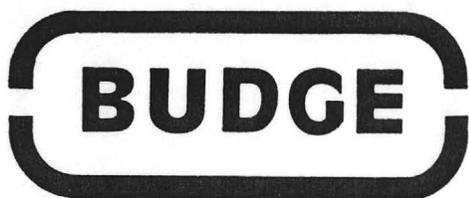
Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Carole A. O'Brien".

Carole A. O'Brien

encl. (1)



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 24, 1987

Advertising Dept.
Paydirt
P.O. Drawer 48
Bisbee, AZ 85603

Dear Sir:

Would you kindly place the attached want ad in your Southwestern issue for May. Also, would you insert it in the Rocky Mountain edition if it has not already gone to press.

Please send your invoice to my attention at the above address.

Should you require any additional information, please do not hesitate to contact me.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Carole A. O'Brien".

Carole A. O'Brien
Mining Coordinator

w/attachment



A. F. Budge (Mining) Limited

7340 E. Shoeman Lane, Suite 111 "B" (E)

Scottsdale, AZ 85251-3335

(Business Office)

Telephone: (602) 945-4630

Telex: 751739

April 24, 1987

Advertising Dept.
Paydirt
P.O. Drawer 48
Bisbee, AZ 85603

Dear Sir:

Would you kindly place the attached want ad in your Southwestern issue for May. Also, would you insert it in the Rocky Mountain edition if it has not already gone to press.

Please send your invoice to my attention at the above address.

Should you require any additional information, please do not hesitate to contact me.

Thank you.

Sincerely,

Carole A. O'Brien
Mining Coordinator

w/attachment

DMEA Ltd.
Mineral Exploration Advice

Ben F. Dickerson III
Registered & Certified Geologist
Carole A. O'Brien
Certified Geologist

7340 E. Shoeman Lane
Suite 111 "B" (E)
Scottsdale, AZ 85251-3335
(602) 945-4630
Telex: 75-1739

April 24, 1987

Dr. W.J. Schlitt
c/o Brown & Root U.S.A., Inc.
P.O. Box 4574
Houston, TX 77210-4574

Re: Ben F. Dickerson III Award

Dear Joe:

This is a very delayed reponse to your letter of March 3, copy of which I passed along to Ted Eyde. Neither he nor I really understand exactly what you want me to do.

I have been on the computer almost every day this week trying to formulate something on this award. The results of my efforts are attached. A copy will be passed to Ted this weekend when I see him for our AIPG field trip.

Please let me know if I'm on the right track with this, or completely out in left field.

Best regards.

Sincerely,



Carole A. O'Brien

encls.

DMEA Ltd.
Mineral Exploration Advice

Ben F. Dickerson III
Registered & Certified Geologist
Carole A. O'Brien
Certified Geologist

7340 E. Shoeman Lane
Suite 111 "B" (E)
Scottsdale, AZ 85251-3335
(602) 945-4630
Telex: 75-1739

April 24, 1987

Dr. W.J. Schlitt
c/o Brown & Root U.S.A., Inc.
P.O. Box 4574
Houston, TX 77210-4574

Re: Ben F. Dickerson III Award

Dear Joe:

This is a very delayed reponse to your letter of March 3, copy of which I passed along to Ted Eyde. Neither he nor I really understand exactly what you want me to do.

I have been on the computer almost every day this week trying to formulate something on this award. The results of my efforts are attached. A copy will be passed to Ted this weekend when I see him for our AIPG field trip.

Please let me know if I'm on the right track with this, or completely out in left field.

Best regards.

Sincerely,



Carole A. O'Brien

encls.

Carole

Don White
521 East Willis St.
Prescott, AZ 86301
602/778-3140

May 3, 1987

Stephen G. Harding
Dept. of Geology
UNIV. OF WESTERN ONTARIO
London, Ontario
Canada N6A 5B7

Dear Stephen,

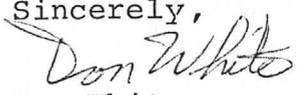
I commend you for a job well done on your thesis. Thank you for the copy with original photos and for all the help it provides me in understanding the diorite. Your work goes far beyond what I could determine megascopically and explains many of the questions Bob Hodder and I have had for over a year now.

I have generalized your graph, figure 5, for my own use (copy enclosed). If I have erroneously interpreted any of your work, please let me know.

As to your conclusion about the "chert" conceivably being a product of intensive silicic alteration and not a pre-diorite rock type, I have to say no. It is a reasonable extrapolation of the trends you see and have documented. The chert, however, contains abundant primary structural and textural characteristics that peg it as a combined chemical sediment and volcanoclastic. We also have several more drill intercepts now exhibiting the clear intrusive contact of sill against chert wall rock and an intrusive breccia of chert clasts up to 20 feet into the sill.

Your final conclusion about gold concentration being related to structural/chemical inhomogeneities which provided sites for hydrothermally leached and transported gold is a great one. Indeed, that is what our latest drilling seems to be documenting and thinking in that direction is proceeding rapidly. We find a clear 5-20 foot thick zone of massive and then banded chert bounding the sill. The "banding" appears to be more superimposed (hydrothermal) than primary (sedimentary). I see the massive and banded zones as hornfelsed cherts adjacent to the diorite. The best gold and silver grades are in the most porous cherts (decarbonatized (-?-) silica grits) immediately beyond the hornfelsed chert.

If you are considering any further studies that would require a masters thesis or the like, I shall be happy to work with you on this or any number of U.V.X.-related topics. I am confident you would do a splendid job of helping our project.

Sincerely,


Don White
Geologist, C.P.G.

cc: C.A. O'Brien
R.W. Hodder

