



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 A. F. Budge Mining Ltd. Mining Collection

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**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504  
(602) 945-4630  
FAX (602) 949-1737

December 5, 1989

GD Resources, Inc.  
450 E. Glendale Avenue  
Sparks, Nevada 89431

Would you kindly have the enclosed samples, numbered 7006 and 7012, analysed for gold, silver, iron and silica and report the results at your earliest convenience by FAX.

Thank you.

Sincerely,

Carole A. O'Brien

encl.

sent UPS NEXT DAY AIR



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

November 16, 1989

(602) 945-4630  
FAX (602) 949-1737

Mr. Doran Cross  
MAC Contracting  
General Engineering Construction  
4949 West Superior Avenue  
Phoenix, AZ 85043

Dear Mr. Cross:

This letter will confirm our agreement wherein A.F. Budge (Mining) Limited will sell to MAC Contracting, 800 cubic yards (more or less) of waste rock from the U.V.X. Mine in Jerome, Arizona for \$0.50 per cubic yard.

Sincerely,

Ronald R. Short  
General Manager

RRS:ca



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504  
(602) 945-4630  
FAX (602) 949-1737

November 20, 1989

Verde Exploration Ltd.  
Room 4201  
40 Wall Street  
New York, NY 10005  
Attention: Donald Jenkins

Dear Mr. Jenkins:

Paul Handverger requested that I send the enclosed check to you.

The check, in the amount of \$9,725.85, represents property taxes owed on the leased portions of Verde's property per Mr. Handverger's letter of November 1, 1989, a copy of which you have received.

Sincerely,

Carole A. O'Brien  
Mining & Financial Coordinator

encl. (1)

cc: John Menke  
Paul Handverger



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

(602) 945-4630  
FAX (602) 949-1737

21 November, 1989

GD Resources, Inc.  
450 E. Glendale Avenue  
Sparks, NV 89431

Would you please have the enclosed sample,  
#10004/11001, analysed for gold and silver, and report the  
results at your earliest convenience via FAX.

Thank you.

Sincerely,

  
Carole A. O'Brien

encl. (1)  
Jerome Flux  
10004/11001  
11-13-89



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

(602) 945-4630  
FAX (602) 949-1737

To: Randy Barnes  
Phelps Dodge Corporation  
Hidalgo Smelter, Playas, New Mexico

From: Ronald R. Short  
A.F. Budge (Mining) Limited  
Scottsdale, Arizona

Date: November 21, 1989

This letter will confirm the conversation we had today wherein  
A.F. Budge (Mining) Limited will accept your assay results for

Jerome flux shipment: -

number 10004

Sincerely,

Ronald R. Short  
General Manager



**DAWSON  
METALLURGICAL  
LABORATORIES, INC.**

P.O. Box 7685  
5217 Major Street  
Murray, Utah 84107-0685  
Phone: 801-262-0922

June 27, 1988

A.F. Budge Mining Ltd.  
7340 East Shoeman Lane  
Suite 111-B-(E)  
Scottsdale, Arizona 85251

Attn: Carole A. O'Brien

Subject: Results of Gold Analysis on a Leach Residue Sample From United Verde Extension Sample UVX-902-W. Our Project No. P-1534.

Dear Ms. O'Brien:

A leach residue from United Verde Extension sample UVX-902-W was submitted for gold analysis after sample digestion by various acids. Previous testwork on this sample, reported June 3, 1988 re: DML P-1534, indicated that relatively high leach residue assays were obtained even after extremely fine grinding to 99 percent minus 200 mesh.

A sample of leach residue from test No. 1 was submitted to Western Analytical for gold and silver assay after sample digestion with aqua regia, aqua regia + perchloric, and aqua regia + perchloric + hydrofluoric acids. The difference in gold and silver assay after sample digestion by these various acids indicates the degree of sulfide and/or silicate encapsulation of precious metals, as indicated below:

Acid Digestion

- |   |   |
|---|---|
| 1 - Aqua Regia                            | : Dissolves sulfides & free gold                            |
| 2 - Aqua Regia + Perchloric               | : Dissolves sulfides, free gold, and carbonaceous material. |
| 3 - Aqua Regia, Perchloric, Hydrofluoric: | Dissolves sulfides, free gold, carbonaceous, and silicates. |

The difference between digestion method No. 3 and the other two is therefore an indication of the degree of silica encapsulated gold. Results, summarized on the following page, indicate a high degree of silica encapsulation of gold and silver in the leach residue from Test No. 1.

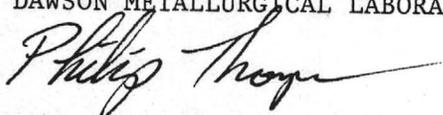
June 27, 1988  
A.F. Budge Mining Ltd.  
Page -2-

P-1534: A.F. Budge  
Test No. 1 Leach Results Analysis

<u>Digestion Method</u>	<u>Assay, ppm</u>	
	<u>Au</u>	<u>Ag</u>
Aqua Regia	1.33	15.4
Aqua Regia + Perchloric	1.42	14.7
Aqua Regia + Perchloric + Hydrofluoric	2.22	205
Fire Assay	1.75	184

If you have any questions or comments, please call.

Sincerely,  
DAWSON METALLURGICAL LABORATORIES, INC.



Philip Thompson,  
Vice President

cc: Mr. Frank Millsaps

PT-cac



**DAWSON  
METALLURGICAL  
LABORATORIES, INC.**

P.O. Box 7685  
5217 Major Street  
Murray, Utah 84107-0685  
Phone: 801-262-0922

June 27, 1988

A.F. Budge Mining Ltd.  
7340 East Shoeman Lane  
Suite 111-B-(E)  
Scottsdale, Arizona 85251

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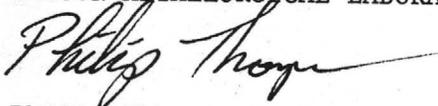
June 27, 1988  
A.F. Budge Mining Ltd.  
Page -2-

P-1534: A.F. Budge  
Test No. 1 Leach Results Analysis

<u>Digestion Method</u>	<u>Assay, ppm</u>	
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Aqua Regia + Perchloric	1.42	14.7
Aqua Regia + Perchloric + Hydrofluoric	2.22	205
Fire Assay	1.75	184

If you have any questions or comments, please call.

Sincerely,  
DAWSON METALLURGICAL LABORATORIES, INC.



Philip Thompson,  
Vice President

cc: Mr. Frank Millsaps

PT-cac

WESTERN ANALYTICAL, INC.  
2417 South 2700 West  
Salt Lake City, Utah 84119  
(801) 973-9238

CERTIFICATE OF ANALYSIS

June 13, 1988

P88-346

Your P-1534 United Verde ext. leach residue, test #1

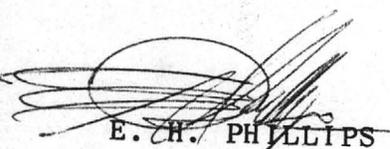
DAWSON METALLURGICAL LAB  
MR. HARMEL DAWSON  
P. O. BOX 7685  
MURRAY, UTAH 84107

Dear Mr. Dawson:

Transmitted herewith are the analytical data for the sample delivered to our laboratory for Ag\* and Au analysis.

SAMPLE IDENTIFICATION	Ag* ppm	Au ppm
Aqua regia digestion	15.3	1.39
Duplicate	15.5	1.27
A/R + perchloric	14.8	1.44
Duplicate	14.6	1.39
A/R + perchloric + Hydrofluoric	210.	2.21
Duplicate	200.	2.22

\*Background corrected



E. C. PHILLIPS  
Laboratory Director

Charges: \$40.00

EHP/ap

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

March 28, 1989

Carole A. O'Brien  
Ron R. Short  
Anthony F. Budge  
A.F. BUDGE (MINING) LTD.  
4301 N. 75th Street, Suite 101  
Scottsdale, AZ 85251

Dear Carole, Ron and Tony:

I was able to meet March 14th with Carole and Ron and clear up some misinterpretations with regard to confidentiality of information related to the Verde District. First, we agreed that there are really three separate issues:

- a) Verde district overall
- b) United Verde mine owned by P.D.
- c) U.V.X. mine leased by Budge

Then we discussed both the sources of information dealt with and the status of Budge's interest in each of those areas. For the Verde district and United Verde areas, the only sources have been published maps and reports and otherwise public information. Budge's efforts in the district were confined to a couple days reconnaissance which turned up geochemistry anomalies on P.D.-owned old mine sites which Budge has no interest in pursuing. Budge's interest in the United Verde never involved any field work or sampling, only a joint venture proposal to Phelps Dodge which has never been answered and has not been pursued in over two years. Budge has no plans to repropose any program there.

Thus the district-wide and United Verde issues (all exclusive of U.V.X.) are public information sources and totally inactive as far as Budge is concerned. For these reasons no restrictions can be put on my activities on behalf of other clients within those areas.

The U.V.X. is clearly a different matter. There my work has contributed to discoveries now being mined within the confines of a lease held by Budge. Budge activities at, and information related to U.V.X., are certainly proprietary and would of course be kept confidential. That includes but is not restricted to reserves, mining plans, and geologic information not already published in three papers approved by Budge (AZ Geol. Soc. Digest XVI, 1986; Geol. Soc. Amer. Abstracts, 1986; and Northwest Mining Convention paper, 1988).

So, to summarize, I see no conflict in my ongoing involvement on behalf of Budge at U.V.X. and my activities for others elsewhere in the Verde district. Fiduciary responsibilities of work at U.V.X. will continue to be respected.

Sincerely,



Don C. White  
Geologist, C.P.G.

# U.V.X. GOLD PROJECT RESERVES

Calculated by D.C. White + R.W. Hodder; April 30, 1988

Carde - source copy

AREA	High Au* - Low Fe†					High Au - High Fe					Subtotal - High Au				
	Tons	Au	Ag	Au(eq)	Fe	Tons	Au	Ag	Au(eq)	Fe	Tons	Au	Ag	Au(eq)	Fe
MORGAN (1) (Incl. 902, 907, new with Apr. 30 est.)	25,000	.28	7.0	.38	2	28,000	.16	10.8	.32	12	53,000	.22	9.1	.35	7
809 (2) (Sept. 3, 1987 memo)	10,000	.27	1.1	.29	3	2,000 (plus 5% Cu)	1.10	4.1	1.16	22	12,000	.41	1.6	.43	6
911 (3) (new, approx.)	8,000	.23	4.9	.30	4	— None —					8,000	.23	4.9	.30	4
<u>SUBTOTAL - VERDE AREA</u>	43,000	.27	5.2	.34	3	30,000	.22	10.4	.38	13	73,000	.25	7.4	.36	7
905-S (4) (new, approx.)	7,000	.16	8.0	.28	3	— None —					7,000	.16	8.0	.28	3
GOLD STOPE H.W. (5) (Nov. 1986 memo)	6,000	.25	2.0	.28	5	— None —					6,000	.25	2.0	.28	5
<u>SUBTOTAL - GOLD STOPE AREA</u>	13,000	.20	5.2	.28	4	— None —					13,000	.20	5.2	.28	4
<u>SUBTOTAL - FLORENCIA AREA (6)</u>	— None —					— None —					— None —				
<u>TOTALS - ALL AREAS (7)</u>	56,000	.25	5.2	.33	3	30,000	.22	10.4	.38	13	86,000	.24	7.0	.34	7

	Low Au - Low Fe					Low Au - High Fe					Subtotal - Low Au					TOTALS - Low + High Au				
	Tons	Au	Ag	Au(eq)	Fe	Tons	Au	Ag	Au(eq)	Fe	Tons	Au	Ag	Au(eq)	Fe	Tons	Au	Ag	Au(eq)	Fe
	15,000	.13	2.2	.15	2	19,000	.12	2.7	.16	19	34,000	.12	2.5	.16	9	87,000	.18	6.5	.28	8
	35,000	.16	1.0	.17	4	14,000	.15	1.9	.18	20	49,000	.16	1.2	.17	9	61,000	.21	1.3	.22	8
	35,000	.09	4.9	.16	4	— None —					35,000	.09	4.9	.16	4	43,000	.12	4.9	.19	4
	85,000	.13	2.8	.16	4	33,000	.13	2.4	.17	19	118,000	.13	2.7	.16	8	191,000	.18	4.5	.24	7
	— None —					11,000	.18	4.0	.24	20	11,000	.18	4.0	.24	20	18,000	.17	5.6	.25	13
	6,000	.15	2.0	.18	5	— None —					6,000	.15	2.0	.18	5	12,000	.20	2.0	.23	5
	6,000	.15	2.0	.18	5	11,000	.18	4.0	.24	20	17,000	.17	3.3	.22	15	30,000	.18	4.1	.24	10
	45,000	.15	0.5	.15	5	— None —					45,000	.15	0.5	.15	5	45,000	.15	0.5	.15	5
	136,000	.14	2.0	.17	4	44,000	.15	2.8	.19	20	180,000	.14	2.2	.17	8	266,000	.17	3.8	.23	8

\* High Au  $\geq 0.25$  oz/t Au(eq) Low Au  $\geq 0.10$  oz/t Au(eq) but  $< 0.25$  oz/t Au(eq)  
 Footnotes (1) through (8) on appended sheet  
 Au(eq) = Au + .015(Ag)

† Low Fe  $\leq 5$  wt.% Fe High Fe  $> 5$  wt.% Fe  
 Note: Cross computations may not check to last decimal place; rounding error.

TABLE 1

Footnotes to U.V.X. Gold Project Reserve Table  
R.W.H. & D.C.W., April 30, 1988

- 1) Morgan/902/907 or "central Verde area" reserves newly tabulated by R.W.H. both individually, and combined, as drill indicated by core holes from Morgan, 902 and 907 diamond drill stations, five plans crossing the bodies at 25-foot elevation intervals compiled by D.C. White, accessory data from the old files, stope sheets, and geologic interpretation, all summarized in memo by R.W. Hodder and D.C. White April 30, 1988.
- 2) 809-area reserves are drill indicated, taken from memos by Hodder and White, Sept. 3, 1987, Hodder and White, Oct. 31, 1987, and Hodder, Dec. 12, 1987. No correction has yet been applied for survey errors learned subsequent to these memos, however, the approximately 4° rotation should not change the reserves very much. New plots and revised reserves will follow.
- 3) 911-area reserves, south of the Florencia Fault, are drill indicated but only crudely estimated as normal plans and sections are yet to be compiled. Estimates are compiled by D.C. White, using drill sections only. More accurate estimates for this area will follow.
- 4) 905-S reserves are those found west of the newly accessed 905-S drift, south of and on strike with the mined portion of the Gold Stope, and both above and below the 950 level. They are reasonably assured estimates for the approximately 40% of the body above the 950 level as there are three crosscuts (902-W, 905-11 and 905-12) and two raises (905-11-R, 905-12-R) within and bounding the body. The other 60% of the estimated 905-S reserve is only "possible", as estimated by analogy to the main Gold Stope body and extrapolated from the 905-S x-cuts by D.C. White, April 30, 1988.
- 5) Gold Stope Hanging Wall reserves are those estimated to remain in pillars and margins of the 1920's-30's mining area and may or may not be recoverable from an engineering standpoint. These were presented in section and chart form by D.C. White, Nov., 1986.
- 6) Florencia area reserves are those north of the Florencia Fault and east of the Verde area and Gold Stope/905-S areas. They are drill indicated by two Phelps Dodge holes (UVX-1, 2) and the initial three Budge holes (1104-1, 2, 3) as summarized in the memo by White and Hodder, Nov. 2, 1985 and by charts by White, March, 1986.
- 7) Total reserves as of April 30, 1988 with exploration ongoing. Areas such as the 903-level between the 911 and 907 drilling may contain some small reserve, as too the 1205-vein area at depth (1200 to 1100 levels) and some as yet untested areas of the 809 zone. The total of such areas is unlikely to exceed another 30,000 s.t. of 0.30 oz/s.t. Au (eq). Perhaps half that grade and tonnage is likely.
- 8) Gold equivalent (Au(eq)) taken as Au + .015 (Ag) based upon economic equivalence at \$450/oz Au and \$6.5/oz Ag.

To: John Lacy

From: Carole A. O'Brien

Date: 27 April, 1992

The following spreadsheet details expenditures at UVX through  
March 31, 1989.

Total costs:	\$4,011,443.78
Revenues:	(\$224,728.02)
"Net" costs:	\$3,786,715.76
= "Preproduction Account"	

LAW OFFICES  
**BOYLE, PECHARICH, CLINE & WHITTINGTON**

JAMES P. BOYLE, JR.  
ROBERT S. PECHARICH  
BARRY B. CLINE  
WILLIAM R. WHITTINGTON  
ROBERT C. KOZAK

125 NORTH GRANITE STREET  
P. O. BOX 1191  
PRESCOTT, ARIZONA 86302-1191

TELEPHONE (602) 445-0122  
FAX (602) 445-8021

January 24, 1992

ATTN: Carole O'Brien  
A. F. Budge (Mining) Ltd.  
UVX Mine  
4301 N. 75th Street, #105  
Scottsdale, AZ 85251

RECEIVED JAN 27 1992

**Re: Verde Exploration, Ltd.  
Budge (Mining) Ltd.**

Dear Ms. O'Brien:

The taxes on the UVX Mine operation are due on March 1, 1992.  
Please let me know when the taxes are paid.

Sincerely,

BOYLE, PECHARICH, CLINE &  
WHITTINGTON



Robert S. Pecharich

RSP/cd

LAW OFFICES  
BOYLE, PECHARICH, CLINE & WHITTINGTON

JAMES P. BOYLE, JR.  
ROBERT S. PECHARICH  
BARRY B. CLINE  
WILLIAM R. WHITTINGTON  
ROBERT C. KOZAK

125 NORTH GRANITE STREET  
P. O. BOX 1191  
PRESCOTT, ARIZONA 86302-1191

TELEPHONE (602) 445-0122  
FAX (602) 445-8021

February 28, 1992

Mr. Joseph Langlois  
State of Arizona  
Department of Revenue  
Division of Property Valuation and  
Equalization  
Centrally Valued Properties  
1600 W. Monroe  
Phoenix, AZ 85007

Re: Verde Exploration, Ltd.

Dear Mr. Langlois:

As I discussed with you by telephone, I represent Verde Exploration, Ltd., which is the owner of mine property, which is currently being leased to an operator, A.F. Budge (Mining), Ltd.. I have attached the annual report of mines (other than copper). I have completed it on behalf of Verde Exploration to the extent of Verde's knowledge. Most of the information, of course, is not in the possession of Verde but is in possession of the operator, A.F. Budge (Mining). I understand that you have forwarded a separate report form to A.F. Budge for them to complete.

I assume that Budge (Mining) will complete its portion of the report and return it to you on or before April 1, 1992. If same is not received from Budge (Mining), please let me know.

If you have any questions, please telephone.

Sincerely,

BOYLE, PECHARICH, CLINE &  
WHITTINGTON



Robert S. Pecharich

RSP/cd

Enclosure

xc: ✓ Carole A. O'Brien, A.F. Budge (Mining), Ltd.

RECEIVED MAR 02 1992

TE: 01/15/92  
TEST ACTIVITY: / /  
PORT:PS1220-12

OPERATING LAND BY TAXPAYER

XPAYER NUMBER ASS-NUM	COUNTY ALPHA NUMBER	AREA CODE	PARCEL NUM BK MP PARC	ACREAGE	LAND FCV	LINE NO	LEGAL DESCRIPTION
61-913	13	0300	401 03 003D	66.57	33,285	01 23 16N 02E	VERDE DIST: ALL OF PTNS OF MARCH, 02 CONGLOMERATE, FLORENCIA, COPPER SPIKE, LITTLE DAISY, 1/8 03 INTEREST VERDE, LONESTAR, COPPER CHIEF ALSO FR THE PARKER 04 GROUP; ALL OF PARTS OF VERMONT, UTAH, TEXAS, CUSTER 05 LYING OUTSIDE JEROME CONT 66.57 AC 2205/589.
61-913	13	0300	991 20 300	.00	66,607	01 23 16N 02E	ORE DEPOSIT VALUE.
EA TOTAL		2 PARCELS		66.57	99,892		
COUNTY TOTAL		2 PARCELS		66.57	99,892		
XPAYER TOTAL		2 PARCELS		66.57	99,892		



CONFIDENTIAL



ANNUAL REPORT OF  
MINES (OTHER THAN COPPER)  
**DUE: APRIL 1, 1992**

TO

STATE OF ARIZONA, DEPARTMENT OF REVENUE  
Division of Property Valuation and Equalization  
Centrally Valued Properties  
1600 W. Monroe  
Phoenix, Arizona 85007  
(602)542-3529

**Year Ending December 31, 1991**

61-913  
BOYLE, PECHARICH, CLINE & WHITTINGTON  
RE VERDE EXPLORATION  
125 GRANITE STREET  
PRESCOTT, ARIZONA 86302-1191

OFFICIAL MAILING ADDRESS  
(Please indicate corrections of name and/or address)

**I N S T R U C T I O N S**

This report form is required to be filed in order to provide the information necessary for the determination of the full cash value of mining property valued under provisions of ARS 42-143.

Return complete report, including this page. **DO NOT DETACH ANY PAGES.**

The report, complete with all attached schedules, supplementary information, copies of stockholder reports, recent prospectus documents, and Securities and Exchange Commission 10K reports, must be completed and returned to the above address by April 1, 1992.

**REFUSAL OR FAILURE TO FILE:**

**FAILURE TO FILE** a completed report **ON OR BEFORE APRIL 1**, or the extended due date if an extension is granted, will result in a valuation of one hundred five percent of the prior year's full cash value or a value based upon other information available to the Department. **IN ADDITION, A PENALTY** will be assessed in the amount of the lesser of one-half of one percent of the value estimated by the Department or one hundred dollars per day for each day the taxpayer fails to file the report. The number of days late will be calculated from the **original due date, April 1, 1992.** (ARS 42-153)

**MINES (OTHER THAN COPPER)**

Company: Verde Exploration, Ltd.

For the Year Ended December 31, 1991

**FILING INSTRUCTIONS ARE ENCLOSED**

Please refer to filing instructions when completing this report. Call area code 602 phone number 542-3529 for assistance. Abbreviations used in this report include: Pounds = LBS, Gallons = GAL, Ounces = OZS, Tons = TNS, Total -TOT, Leach = LCH

**MINING COMPANY PROPRIETARY DATA**

Name of Property: United Verde Extension

Name of Owner: Verde Exploration, Ltd.

Name of Operator/Lessee: A.F. Budge

Address of Operator/Lessee: c/o Carole O'Brien, 4301 N. 75th St., #105  
Scottsdale, Arizona, 85251

Official Responsible for this Report: Robert S. Pecharich

Telephone Number: 602-445-0122

Contact Person Regarding Information in this Report: Robert S. Pecharich

Telephone Number: 602-445-0122

Type of Mine—Underground, Open Pit, Leach, In-Situ: \_\_\_\_\_

Principal Saleable Product: \_\_\_\_\_

Other Saleable By-Products: \_\_\_\_\_

Date Production Started: \_\_\_\_\_

Date Production Stopped: \_\_\_\_\_ Permanent or Temporary: \_\_\_\_\_

Average Weighted Sales Price Per Unit Received for Each Product Sold in the Year 1991:  
\_\_\_\_\_

**MINES (OTHER THAN COPPER)**

Company: \_\_\_\_\_

Year Ended December 31, 19\_\_

**ORE RESERVE DATA**

Mineral Reserves: Ore as of January 1, 1992. Ore reserves should include all owned or leased ores held by the company. Show the tons of reserves held by each category below:

	FEDERAL	PRIVATE	STATE	INDIAN
1. Mill Ore Total Tons	_____	_____	_____	_____
Ore Grade-Main Prod.	_____	_____	_____	_____
Ore Grade-Byprod.	_____	_____	_____	_____
Cutoff Grade -	_____	_____	_____	_____
2. Oxide or Leach Ore Total Tons	_____	_____	_____	_____
Ore Grade-Main Prod.	_____	_____	_____	_____
Ore Grade-Byprod.	_____	_____	_____	_____
Cutoff Grade -	_____	_____	_____	_____
3. Waste Tons (Excluding Low Grade or Protore Material that will be Dump Leached).	_____	_____	_____	_____
4. Stripping Ratio (Waste + Low Grade Leach)/(Mill Ore + Oxide Ore)				_____
Stripping Ratio (Waste)/(Mill Ore + Leach Ore)				_____
Total Ore Tons (Mill and Oxide Ore)	_____			
Total Waste and Low Grade Leach Tons	_____			
Projected Operating Life in Years-Mill	_____	Oxide Ore Leach	_____	Low Grade Leach
			_____	_____

**PRODUCING MINE LAND**

Indicate **TYPE** of land by letter designation—**P** for patented claims and fee land, **U** for unpatented lands, **S** for severed mineral rights, **L** for leased lands, **R** for rights-of-way, **O** for other ownership rights.

COUNTY	BOOK	MAP	PARCEL	TAX CODE	TYPE	ACRES	LEGAL DESCRIPTION
13	401	03	003-D	991-20-300Y-6		66.6	

(Continued on next page)



**MINES (OTHER THAN COPPER)**

**CONFIDENTIAL**

Company: \_\_\_\_\_

For Year Ended December 31, 19\_\_

	ANNUAL HISTORICAL PLANT OPERATIONS RECORD					FUTURE PROJECTIONS			
	1987	1988	1989	1990	1991	PHASE 1	PHASE 2	PHASE 3	PHASE 4

**METAL OR MINERAL PRODUCED**

Name of Major Product									
Name of Byproduct #1									
Name of Byproduct #2									

**MINE PRODUCTION**

Operating Days/Year									
Tons Underground Ore									
Tons Open Pit Mill Ore									
Tons Leach Ore Mined									
Tons Waste Mined									
Total Tons Mined									
Strip Ratio-Waste:Ore									

**MILL PRODUCTION**

Operating Days/Year									
Tons Ore Milled/Day									
Tons Ore Milled/Year									
Ore Grade									
Mill Recovery-%									
Smlt/Rfny Recovery-%									

**LEACHING PRODUCTION**

Operating Days/Year									
Tot Tons Ore in Dumps									
Dump Recovery for Ore									
Added During Year-%									
Dump Recovery for All									
Ore Added to Date-%									

**PERSONNEL LEVELS (Include Both Hourly and Salaried Personnel Levels)**

Mine Dept. Personnel									
Mill Dept. Personnel									
Leach Dept. Personnel									
Other Dept. Personnel									
Total Personnel Level									

**MINES (OTHER THAN COPPER)**

**CONFIDENTIAL**

Company: \_\_\_\_\_

For Year Ended December 31, 19\_\_

**ANNUAL HISTORICAL PLANT OPERATIONS RECORD**

**FUTURE PROJECTIONS**

	1987	1988	1989	1990	1991	PHASE 1	PHASE 2	PHASE 3	PHASE 4
--	------	------	------	------	------	---------	---------	---------	---------

**SILVER & GOLD PRODUCTION**

Ounces of Silver									
Average Selling Price									
Value-Silver Produced									
Ounces of Gold									
Average Selling Price									
Value-Gold Produced									

**URANIUM PRODUCTION**

Pounds of Uranium									
Average Selling Price									
Value-Uranium Produced									

**COAL PRODUCTION**

Tons of Coal Produced									
Average Selling Price									
Value of Coal Produced									

**OTHER PRODUCTS (Describe Units, ie. \$/TON, \$/LB)**

Quantity Produced									
Average Selling Price									
Value of Product									

**OTHER BYPRODUCTS (Describe Units, ie. \$/TON, \$/LB)**

Quantity-Byproduct #1									
Average Selling Price									
Value of Byproduct #1									
Quantity-Byproduct #2									
Average Selling Price									
Value of Byproduct #2									

**PRODUCTION REVENUES**

Main Product Values-\$									
Value-All Byproducts-\$									
Miscell. Revenues-\$									
Gross Product Value-\$									

**MINES (OTHER THAN COPPER)**

CONFIDENTIAL

Company: \_\_\_\_\_

For Year Ended December 31, 19\_\_

ANNUAL HISTORICAL PLANT OPERATIONS RECORD

FUTURE PROJECTIONS

	1987	1988	1989	1990	1991	PHASE 1	PHASE 2	PHASE 3	PHASE 4
<b>OPERATING COST (Expressed in \$ per unit to four decimal places; indicate type of units-lbs tons ozs other )</b>									
Mining									
Milling & Processing									
Smelting & Refining									
In-situ Leaching									
Heap/Vat Leaching									
Solvent Extraction									
Electrowinning									
Precipitating									
Byproduct Costs									
Marketing									
Freight									
Overhead									
Shutdown/Strike Exp									
Allowed Royalty/Rent									
Property Tax									
Severance Tax									
Other Costs									
<b>TOTAL OPERATING COST</b>									
<b>INCOME TAXES</b>									
Tax Cost									
<b>CAPITAL COSTS</b>									
Environmental Items									
Replacement Items									
<b>TOTAL PRODUCTION COST</b>									
Production Cost-\$/Unit									
<b>VALUE OF PRODUCTION</b>									
Gross Product Value \$									
Gross Product Cost \$									
Excess of Value-Cost \$									
Excess of Value-\$/Unit									
<b>OPERATING COST DETAIL</b>									
Interest Exp. in Costs									
Depreciation in Costs									

Company \_\_\_\_\_

Operation \_\_\_\_\_

**MINES (OTHER THAN COPPER)**  
**SCHEDULE OF DEPRECIABLE ASSETS**  
 Based on Original Cost by Year of Acquisition  
 (Figures in Thousands of Dollars)

County of \_\_\_\_\_

For the Year Ending December 31, 19\_\_

Year	Leased and Owned Mining Equipment			Office Equipment	Refinery & Milling Plant	SXEW and Leaching Plant	Environmental and Acid Plant	Smelting Plant	Miscellaneous Buildings & Structures	Tot Original Cost by Year Acquisition
	Small Scale Equipment	Large Scale Equipment	Shovels & Draglines							
1991										
1990										
1989										
1988										
1987										
1986										
1985										
1984										
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1963										
1962										
1961										
1960										
1959										
1958										
1957										
TOTAL										

**LOCATION BY TAX AREA CODE OF  
ORIGINAL COST FOR REAL AND PERSONAL PROPERTY**  
Based on Original Cost  
(Figures Expressed in Thousands of Dollars)

Company \_\_\_\_\_

County of \_\_\_\_\_

Operation \_\_\_\_\_

For the Year Ending December 31, 19\_\_

1. PERSONAL PROPERTY

TAX AREA CODE	MINING EQUIPMENT	SMELTER EQUIPMENT	ENVIRONMENTAL EQUIPMENT	OFFICE EQUIPMENT	REFINING & MILLING	SXEW & LEACH EQUIPMENT	CONSTRUCTION IN PROGRESS	MISCELLANEOUS EQUIPMENT	TOTAL ORIGINAL COST
TOTAL									

2. IMPROVEMENTS

TAX AREA CODE	MINING STRUCTURES	SMELTER STRUCTURES	ENVIRONMENTAL STRUCTURES	OFFICE STRUCTURES	REFINING & MILLING	SXEW & LEACH STRUCTURES	CONSTRUCTION IN PROGRESS	MISCELLANEOUS STRUCTURES	TOTAL ORIGINAL COST
TOTAL									

**MINES (OTHER THAN COPPER)  
SUPPLIES INVENTORY SCHEDULE**

Company \_\_\_\_\_

County of \_\_\_\_\_

Operation \_\_\_\_\_

Based on Original Cost

For the Year Ending December 31, 19\_\_

SUPPLY CATEGORY	ORIGINAL COST OF ALL SUPPLIES	ORIGINAL COST OF CONSUMABLES (FUEL, TIRES, REAGENTS)	ORIGINAL COST OF OF SALVAGE ITEMS	NET ORIGINAL COST LESS CONSUMABLES & SALVAGE
MINE MILL & Leaching SMELTER ENVIRONMENTAL OFFICE				
MISCELLANEOUS BUILDINGS				
TOTAL COST				

VALUE OF ALL METAL INVENTORIES AS OF YEAR END IN \$ \_\_\_\_\_  
 REPORT ORIGINAL COST BEFORE ALLOWANCES FOR DETERIORATION, DEPRECIATION OR SALVAGE. SALVAGE ITEMS DO NOT INCLUDE INSURANCE PARTS OR INACTIVE INVENTORY.

**CONSTRUCTION WORK IN PROGRESS SCHEDULE**

DESCRIPTION OF PROJECT	USE CATEGORY	DATE CONSTRUCTION STARTED	DATE OF EXPECTED COMPLETION	TOTAL PROJECTED CAPITAL EXPENDITURE	CAPITAL EXPENDED TO DATE ON PROJECT
TOTAL COST					

LIST PROJECTS IN EXCESS OF 1\$ MILLION EXPENDED. USE CATEGORY REFERS TO MINE, MILL, SMELTER, ENVIRONMENTAL, OFFICE OR BUILDINGS.

MINES (OTHER THAN COPPER)  
LEASED EQUIPMENT SCHEDULE

Company \_\_\_\_\_

County of \_\_\_\_\_

Operation \_\_\_\_\_

For the Year Ending December 31, 19\_\_

DESCRIPTION	ECONOMIC LIFE	SERIAL NUMBER	OWNER OR LESSOR	LEASE TERMS		LEASE PAYMENT	LEASE EXPENSE	ORIGINAL COST	PURPOSE
				START	END				

PURPOSE REFERS TO REPLACEMENT --R, EXPANSION --X, OR ENVIRONMENTAL --E

**MINES (OTHER THAN COPPER)**

Company: \_\_\_\_\_ For The Year Ended December 31, 19\_\_

**ADDITIONAL INFORMATION**

List any additional information which you believe should be considered in determining the value of this mine.

**VERIFICATION**

Under the penalties of perjury, I do solemnly swear or affirm that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge, information, and belief, it is true, correct, and complete.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

VERDE EXPLORATION, LIMITED

40 WALL STREET  
NEW YORK, N. Y. 10005

TELEPHONE 425-0333

September 8, 1987

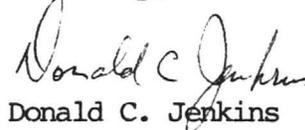
To Verde Directors:

Enclosed is a draft of John Menke's letter to be mailed to the Corporation's stockholders with the notice of the meeting (to be held on October 7th) and proxy card. The mailing must be made no later than September 23rd and the printer must have final proofs by September 16th.

Please review the letter promptly and then let either John or me hear of any suggestions you may have for modifications, alterations or corrections. John's phone number is 914-723-2602; mine is 212-425-0333.

Thanks.

Sincerely,

  
Donald C. Jenkins

DCJ:cd

D R A F T

September 1, 1987

To the Stockholders:

This report will summarize the results of exploration work since the report to you on April 4, 1983, and the results of our modest real estate activities and our financial condition.

Exploration

It is convenient to discuss the several exploration efforts in three parts:

- A. the Old "UVX" Mine Area, a small group of patented claims
- B. the South "Oak Wash" Area, a large group of unpatented claims
- C. the Main Block of Patented Claims and all other mineral properties.

A. Old "UVX" Mine Area

Paul Handverger, Vice President and Geologist, studied the 90-acre UVX mine area in 1980 and 1981 and wrote two reports, the second dated September 15, 1984, recommending exploration for gold adjacent to the old mine workings. As a consequence of his earlier work, Phelps Dodge Corporation started exploration in 1981 on this small patented area. They relinquished their lease on June 23, 1983 after having found

gold mineralization in the two holes that they drilled from the reopened, underground workings on the 1100 ft. level. (See Table 1.)

Table 1. Phelps Dodge Corporation, 1100 ft. Level

	<u>Intercepted Width, Ft.*</u>	<u>Gold Oz. Per Ton</u>	<u>Silver Oz. Per Ton</u>
PD UVX-1	95	0.072	0.59
best section in above	20	0.196	1.54
PD UVX-2, 3 intervals	199 (total)	0.063-0.093	0.25-2.14
best section in above	35	0.177	0.39

\*Throughout this report the actual measured intercepted width cut by the diamond drill core hole is given; the true width is not yet known accurately, but usually will be less than the widths shown in the tables.

On April 1, 1985 A.F. Budge (Mining) Limited, an English corporation, leased this mine area property and has been exploring it ever since. Drifts (underground horizontal passageways) were opened on two more levels (800 ft. and 950 ft.) to reach positions to serve as drill stations. Beginning at the old Phelps Dodge Corporation 1100 ft. drill station they drilled three additional holes. (See Table 2.)

Table 2. Budge, 1100 ft. Level

	<u>Intercepted Width, Ft.</u>	<u>Gold Oz. Per Ton</u>	<u>Silver Oz. Per Ton</u>
1104-1	92	0.055	0.43
1104-2	78*	0.042-0.091	0.49-1.26
1104-3	49	0.087	0.30

\* Total of four separate intercepts with range of assays as given. The best internal section (1104-2) was 14 ft. of 0.144 oz. per ton gold with little silver.

Then, on the 950 ft. level they drilled 14 holes. (See Table 3.)

Table 3. Budge, 950 ft. Level

	<u>Intercepted Width Ft.</u>	<u>Gold Oz. Per Ton</u>	<u>Silver Oz. Per Ton</u>
(1985) 901-1	26	0.058	1.39
to 901-2	-	very low assays	
901-3	26	0.081	2.08
(1987) M-1	54	0.168	1.24
M-2	28	0.106	1.47
M-3	84	0.425	15.10
M-4	99	0.101	2.07
M-5		(no mineralized intercept)	
M-6	47	0.257	6.67
M-7		(no mineralized intercept)	
M-8	54	0.097	0.97
M-9	57	0.180	1.59
M-10		(no mineralized intercept)	
M-11	45	0.249	7.04

All the mineralized core holes include sections of higher grade over shorter widths. (When drilling ended, three holes were still in gold mineralization.) The best such interior section (in M-3) included 39 ft. of 0.777 oz. per ton gold and 28.77 oz. per ton silver.

Two experimental rotary bit holes (chips only, no cores obtained) were drilled at a steep angle and a "manhole" was raised from the 950 ft. level in the "Gold Stope" area. These confirmed the presence of gold mineralization, but of unknown economic importance.

Most recently, they have drilled nine holes from the 800 ft. level; all were mineralized. (See Table 4.)

Table 4. Budge, 800 ft. Level

	<u>Intercepted Width Ft.</u>	<u>Gold Oz. Per Ton</u>	<u>Silver Oz. Per Ton</u>
(1986) 806-1	90	0.09	1.4
to 809-1	54	0.138	1.45
(1987) 809-2	53	0.202	1.49
809-3	56	0.15	1.04
809-4	187	0.181	2.30
809-5	31	0.155	1.06
809-6	11	0.112	2.58
809-6	26	0.147	1.45
809-7	54	0.106	2.52

Again shorter sections showed higher grades. The best such included section (in 809-4) was 15 ft. of 1.0 oz. per ton gold or 49 ft. of 0.433 oz. per ton gold.

The diamond drill holes reported above were generally drilled flat (at small angles to the horizontal). The drill stations at different levels are not one above another, but are displaced laterally to test different areas. (See the schematic plan of UVX Mine Drilling attached herewith.)

At the time of this writing drilling has stopped and three mine crews are cutting drifts in a southerly direction to establish new drill stations.

As we do not yet know the size of this deposit nor mining costs, we cannot yet say whether it may be mined at a profit. Nevertheless, we are pleased that mineralization has been found as forecast in the 1980 to 1984 work.

If mining proves to be economic, the agreement with Budge provides for Verde to receive 15% of net cash flow until Budge's expenses to start-up and any net losses are repaid from their 85% of net cash flow. Thereafter, Verde would receive 30%. Budge has, to date, spent about \$1.8 million dollars on the work described above.

B. South "Oak Wash" Area

Since the 1960's Verde's South area comprising more than 200 unpatented claims has been studied by several joint venturers and by Dr. Peter Price and Paul Handverger for Verde, gradually increasing our understanding of this region. We have obtained geophysical and geochemical anomalies and have recently intercepted non-economic metal sulfides in one drill hole and evidence of strong hydrothermal alteration in a second. We have also discovered on the surface a thin, as yet non-economic, vein of quartz carrying gold. Two samplings of the quartz vein, separated by about six feet ran:

1. seven inches; 0.340 oz. per ton gold + 0.933 oz. per ton silver
2. eleven inches; 0.213 oz. per ton gold + 0.408 oz. per ton silver

Traces of gold were also found along this narrow vein for about 900 ft.

Occidental Minerals drilled two holes intersecting altered rocks and disseminated sulfides. Newmont Exploration conducted electromagnetic studies and Verde drilled four holes, one intersecting 151 ft. of low grade copper and zinc mineralization; the best (but not economic) intercept included 5 ft. of 0.39% copper and 1.10% zinc.

The South area is presently being studied 100% for our own account. Our understanding of the structural geology is still incomplete; studies will continue this autumn on the recently drilled cores and on the Precambrian outcrops of the western, footwall part of this property which borders on the Verde fault.

C. Main Block of Patented Claims and Other Properties

We are currently having discussions with a major mining company, which has been drilling in the vicinity, about leasing the A and A property and perhaps the main group of patented claims, the Haynes group of patented claims and some few miscellaneous unpatented claims. This large property is also incompletely understood despite the excellent work most recently accomplished by Coca Mines. There remain important geologic indications which have not yet been tested.

Before they relinquished their lease this year, Coca conducted geological, geophysical and geochemical studies. They drilled six holes totalling 8,457 feet, mostly exploring our northern patented claims without finding significant mineralization. They also deepened an older Anaconda hole, AV-27, with an interesting intersection at 1,791.4 ft.; ten inches of 0.755 oz. per ton gold and 1.05% copper.

Newmont drilled one vertical hole, NV-1, 1,516 ft. deep on the A and A and found no mineralization.

Verde assayed an older Anaconda hole, AV-10, with average results of 0.035 oz. per ton gold, 1.97 oz. per ton silver and 0.45% zinc over 5 ft. selected from a 10 ft. zone of massive sulfide. This "Cambruzzi" hole may have exploration significance.

Much work needs to be done on this Main Block and the other associated properties.

\* \* \* \* \*

The Jerome massive sulfide district is large, has hosted two significant ore bodies, and is located in a major belt of Precambrian volcanic rocks, the same type of geologic environment that hosts other major ore deposits in North America and the world. We believe that the district merits more exploration.

Verde controls about 216 patented claims (about 3350 acres) and about 264 unpatented claims (about 5280 acres). Verde owns about 188 patented claims and Jerome Verde Development Company, 58% owned by Verde, owns about 28 patented claims. Verde owns all the unpatented claims.

It is recognized that some of the patented acreage may have real estate value but at present it will continue to be held for its mineral potential.

Real Estate and Financial Activities

Since our last report we have essentially completed the sale of surface land rights to various homeowners in Jerome for a total of more than \$150,000. Together with approximately \$125,000 realized from the rights offering to stockholders in 1974, these sums have materially strengthened the company's finances and have provided an investment fund to help assure continuity of the corporation.

Recently, land leases have averaged \$45,000 per year, mostly from short term joint venture exploration projects. These projects have provided several million dollars of exploration by the joint venturers on the company's claims. The lease income has provided funds for Verde to conduct its own modest exploration required for annual assessment work for the unpatented claims. It has also provided for early "seed" studies such as the one that started the gold exploration of the old UVX mine area. However, opportunities for such income tend to be intermittent and unpredictable.

A small light industrial complex has been created at the old High School property in Jerome which provides a modest net income.

The financial reports are attached herewith.

In July 1985 Sibyl R. Golden and Richard T. Moolick were elected directors and we welcome them.

Schematic Plan  
UVX Mine  
Drilling by

**BUDGE** A.F. Budge (Mining) Limited

806 drift on 800 Level

806 Drill Station



Hole 806-1 drilled January, 1986

809 Drill Station  
Holes 809-1, 2 & 3  
drilled May, June, 1987

500 ft.  
to  
Edith  
Shaft

901-w drift on 950 Level

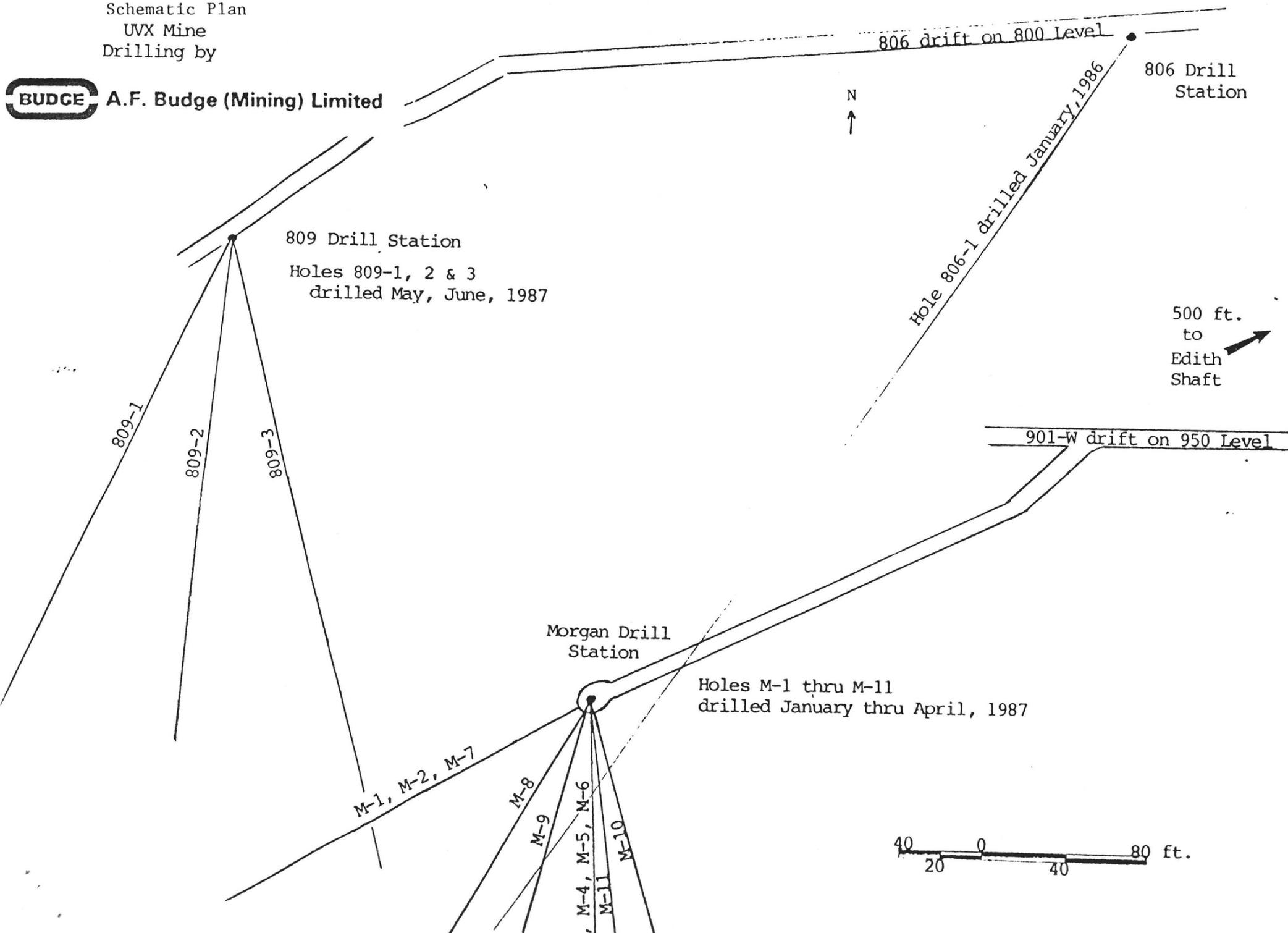
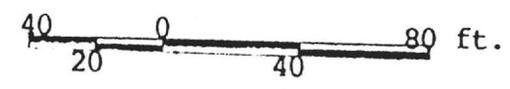
Morgan Drill Station

Holes M-1 thru M-11  
drilled January thru April, 1987

809-1  
809-2  
809-3

M-1, M-2, M-7

M-8  
M-9  
M-4, M-5, M-6  
M-10  
M-11



LAW OFFICES  
**BOYLE, PECHARICH, CLINE & WHITTINGTON**

JAMES P. BOYLE, JR.  
ROBERT S. PECHARICH  
BARRY B. CLINE  
WILLIAM R. WHITTINGTON  
ROBERT C. KOZAK

125 NORTH GRANITE STREET  
P. O. BOX 1191  
PRESCOTT, ARIZONA 86302-1191

TELEPHONE (602) 445-0122  
FAX (602) 445-8021

November 12, 1991

ATTN: Carole O'Brien  
A. F. Budge Mining Ltd.  
UVX Mine  
4301 N. 75th Street, #105  
Scottsdale, AZ 85251

RE: Verde Exploration, Ltd.  
Budge Mining Ltd.  
Our File No. 3378

Dear Ms. O'Brien:

Please be advised that I represent Verde Exploration, Ltd. In checking on payment of tax bills, I find that taxes payable by Budge Mining on the UVX Mine operation have not yet been paid. The taxes are due November 1, 1991, although due to a misprint on the bill the County is accepting payment until November 15, 1991. Please let me know when the taxes are paid.

Sincerely,

BOYLE, PECHARICH,  
CLINE & WHITTINGTON



Robert S. Pecharich

RSP/bfw

cc: Paul Handverger

LAW OFFICES  
BOYLE, PECHARICH, CLINE & WHITTINGTON

JAMES P. BOYLE, JR.  
ROBERT S. PECHARICH  
BARRY B. CLINE  
WILLIAM R. WHITTINGTON  
ROBERT C. KOZAK

125 NORTH GRANITE STREET  
P. O. BOX 1191  
PRESCOTT, ARIZONA 86302-1191

TELEPHONE (602) 445-0122  
FAX (602) 445-8021

October 1, 1991

RECEIVED OCT 3 1991

Ronald R. Short, General Manager  
A. F. Budge (Mining) Limited  
4301 North 75th Street  
Suite 105  
Scottsdale, Arizona 85251-3504

RE: Verde Exploration, Ltd.  
Budge Mining - Tax Bill Parcel No. 991-20-300

Dear Mr. Short:

Please be advised that I am the attorney for Verde Exploration, Ltd. As a courtesy and a reminder to you, please note that the 1991 real property taxes on the property which you lease from Verde Exploration, Ltd., in Jerome, Arizona, are due. Please forward to me a copy of your check evidencing payment so I can mark the taxes paid on this property.

Sincerely,

BOYLE, PECHARICH,  
CLINE & WHITTINGTON



Robert S. Pecharich

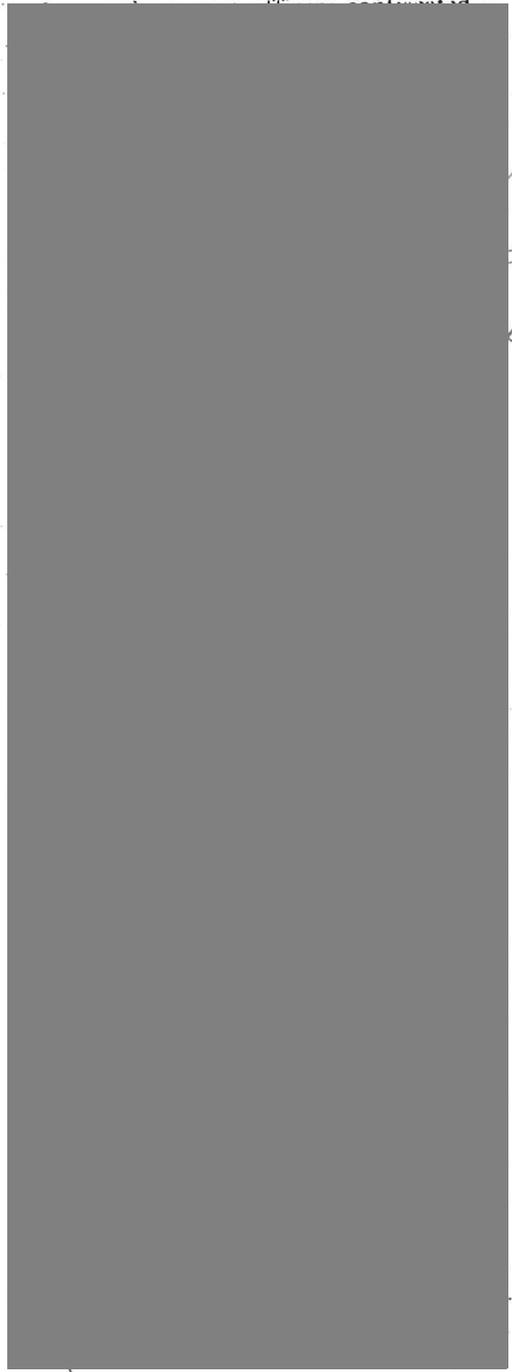
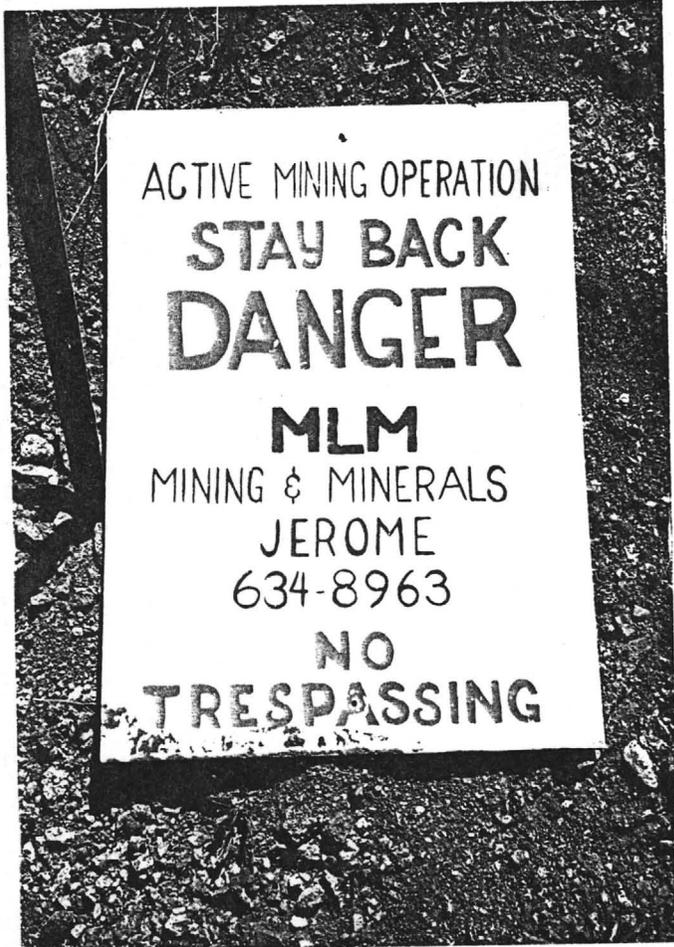
RSP/bfw

Carde

Our adjacent leases down Bitter Creek Gulch!

# Politician's home hit in drug raid

Prescott  
Sun  
6-17-87



lessee  
as per  
PCW's  
memo  
6-15-87

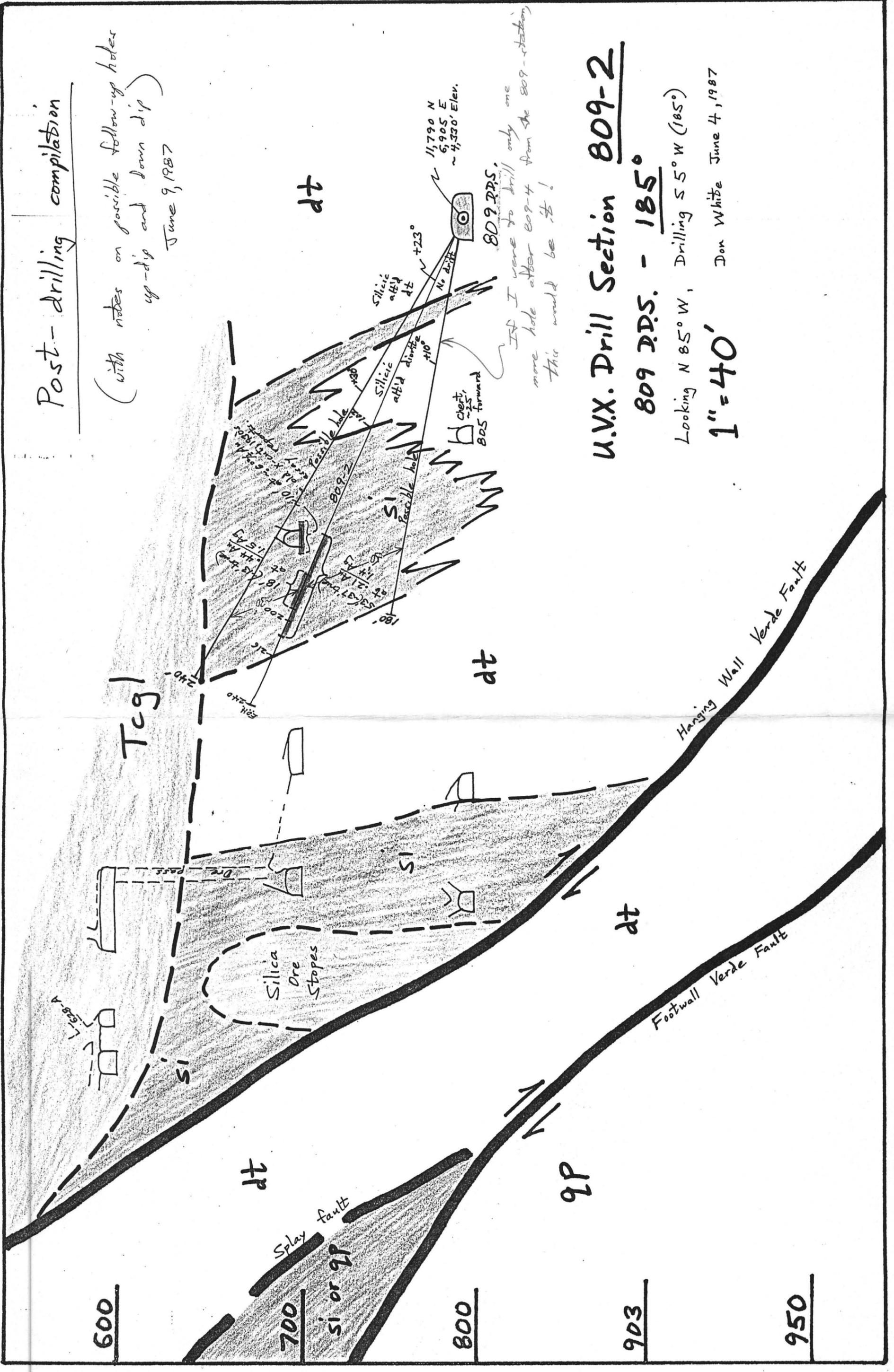




Coode

# Post-drilling compilation

(with notes on possible follow-up holes  
up-dip and down dip)  
June 9, 1987



## U.V.X. Drill Section 809-2 809 R.D.S. - 185°

Looking N 85° W, Drilling S 5° W (185°)  
1" = 40'  
Don White June 4, 1987

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

June 16, 1987

Donald F. Ranta  
Phelps Dodge Corporation  
2600 North Central Ave.  
Phoenix, AZ 85004-3015

Dear Don,

I enjoyed the opportunity to meet you and Bob Ludden on June 5 at the U.V.X. I hope the insights into our gold exploration were worthwhile.

As I concluded to you orally, it appears that we shall be looking at no more than 100,000 short tons of flux-quality, high grade ( $\geq .3$  oz/t Au) or alternatively, no more than 300,000 s.t. of lower grade more ferruginous reserves. The former may be mineable alone and shipped direct to P.D.'s Hidalgo smelter or others. The larger tonnage, lower grade reserve may not be suitable as flux and constitute an insufficient reserve to justify a mill. Furthermore, I see the same situation likely to prevail at your United Verde property. Hence Budge's interest in joint venturing gold exploration at the U.V. in hope of aggregating enough tons to make a viable operation.

In light of the U.V. gold reserves being too small for P.D. to bother with alone, but your possibly having something to gain by any exploration/operating success we might have, it seemed you were willing to reconsider your earlier decision to deny any joint venture.

If any data or opinions I could render would help you on this matter, please do not hesitate to call me. Please let Carole O'Brien or myself know if some terms may still be worked out for Budge to explore the U.V. hanging wall gold zone. I think it would be an exciting and possibly rewarding exploration venture.

Sincerely,



Don White  
Geologist, C.P.G.

DW:sk

cc: Robert B. Ludden  
Carole A. O'Brien ✓  
Anthony F. Budge

CONFIDENTIAL MEMO

TO: Carole A. O'Brien, Pete Flores

FROM: Don White

DATE: June 11, 1987

SUBJECT: Safety issues related to Paul Landrum at U.V.X.

I'm a geologist, not a mine superintendent or administrative coordinator. Thus I have the opportunity to see Pete's crews at work and can judge them in a detached manner. I feel compelled to pass along observations on one crew member, Paul Landrum, the mechanic.

I can state categorically that he is an unsafe worker. He is careless, forgetful, disregarding of routine safety precautions, and hard of hearing. It is no accident that he is the only individual to have banged up the company pickup. He wasn't looking where he was going. He started a fire underground with a torch with no water hose around and the fire hazard of welding on top of old timbers is quite clear. That no one was overcome by smoke in that incident was remarkable.

Paul did exactly the same thing at the surface. While cutting salvage material from a large waste pile with a torch, he ignited the pile and it very nearly burned some overhead electric lines. The large pile turned completely, only barely in control. Had it been a less drizzly day it may have been serious.

Paul has been known to overflow the diesel compressor tank, flooding the mine yard with the entire overflow contents of the diesel fuel tank. He had walked away, left it unattended, and forgotten about it. Talk about a fire hazard!

This note is prompted, in part, by last night when Paul was used as a substitute hoistman, in Tony Medina's absence, on night shift. With Paul's forgetfulness and hearing problem, I feel he is a very hazardous hoistman. Paul could daydream away while hoisting and not even hear the reminder bell as the cage approaches the collar, for instance. The consequences could be tragic. Furthermore, I hear he very nearly killed a couple miners at the McCabe Mine when he moved the ore bucket, which was on station, without any bells or communication. Only their safety lines prevented them from dropping to the bottom of the shaft. No one knows what he was thinking. He probably wasn't!

My own opinion of Paul as a worker, aside from safety, is not any better. He is basically lazy. He is far better at telling you that something is not going to work than at doing anything about it. In fact he's a chronic malcontent, always starting

Carole A. O'Brien, Pete Flores  
June 11, 1987  
Page 2  
CONFIDENTIAL MEMO

rumors amongst the crew as to layoffs, complaining as to wages and playing the cynic as to exploration success. Those few times I have asked his help on something, he'd beg off saying his back couldn't take it or he can't lift that way.

The miners have not been happy with his "repair" jobs. Locomotive brakes he has just worked on still don't work, seals he has messed with still leak. He does little preventive maintenance, even when time allows. He's basically lazy with no drive. He makes no secret of his unhappiness at U.V.X. and anxiety to go elsewhere. I gather that Pete rather wishes Paul would leave, and have always left it at that until he was utilized as hoistman. At that point I'm too directly at risk.

I believe Paul is a hazard to others as well as himself and on that basis feel his employment at U.V.X. is unwise.

DW:sk

M E M O

TO: Carole A. O'Brien

FROM: Don White

DATE: June 16, 1987

SUBJECT: Handverger's "lease" of specimen rights southeast  
of U.V.X.

It seems Paul Handverger has leased someone rights to collect azurite and malachite in Bitter Creek gulch just SE of Budge's lease boundary at the U.V.X. Whitey heard a couple blasts down there last week so I investigated.

The access road is being used (grass is worn down) and a locked cable is strung across the access road near its junction with the U.V.X. Mine Road south of our lease. New signs are posted along the road in the gulch bottom, due south of the state museum and the old waste glory hole. They say:

Active Mining Operation  
MLM Mining and Minerals  
Jerome, 634-8963  
No Trespassing

I phoned the number posted and learned from Mimi Courier that "we were given a lease by Paul Handverger to collect specimens to a depth of 25 feet." That apparently was worked out in the weeks just before he left for Alaska last month. Neither Carole nor Pete nor I knew anything about it. It certainly seems rude of Handverger to do that unannounced when the complaints for surface blasting noise are going to come to us, when misunderstandings with the state park folks are likely, and when Verde's financial gain is certainly most minimal but their liability risks are heightened.

DW:sk



**VERDE EXPLORATION, LIMITED**

2160 Old Jerome Highway  
Clarkdale, Arizona 86324

March 17, 1987

DMEA LTD.

MAR 20 1987

RECEIVED

Mr. A. F Budge  
A. F Budge (Mining) Limited  
West Carr Road  
Retford, Nottinghamshire, England DN22 7SW

Dear Tony:

I'm sorry to have missed your last visit to Jerome and our scheduled meeting to discuss matters of mutual interest. I had an unexpected family emergency occur in the East. I would like to reschedule our meeting for your next visit to Arizona.

As discussed by phone, Verde Exploration is very interested in drilling the Verde fault footwall mineralized zone. We consider this area to be an important target in Budge Mining Company's leased area. I would like to review with you the reasons for this hole, and to discuss the best timing and location to complete the hole successfully. Under the terms (Paragraph 6.e.) of the Verde-Budge Lease Agreement, the hole is called for by April 1, 1987. This letter serves to postpone the requirement of starting the hole for two additional months. During this period we will meet to discuss and mutually agree to the best way and time to drill the hole.

The recent drilling results (M1 through M3) confirm my original 1980 projections and the opinions expressed to you last February after the hole 806-1 gold interception. Verde Exploration is looking forward to a profitable future with Budge Mining.

Sincerely yours,

  
Paul A. Handverger  
Vice President

cc: John Menke  
Verde Exploration Ltd.  
DMEA ✓

**VERDE EXPLORATION, LIMITED**

2160 Old Jerome Highway  
Clarkdale, Arizona 86324

March 24, 1987

Pete F. Flores, Mine Superintendent  
A. F. Budge (Mining) Ltd.  
Box 938  
Jerome, Arizona 86331

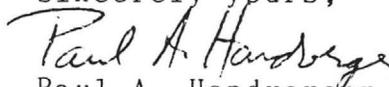
DMEA LTD.  
MAR 26 1987  
RECEIVED

Dear Pete:

Today, I was informed that some people have used my name to visit the mine facilities and examine the confidential mine model. Never have I given anybody this invitation and I never will.

In the future, nobody is to be shown anything geological except under the personal direction of A. F. Budge (Mining) Ltd. management, DMEA personnel, or myself representing Verde Exploration, or other officers or directors of Verde Exploration Ltd. If any person should attempt to use somebody's name in the future to get on the UVX project, please get their name, and contact Don White, Carole O'Brien or me immediately.

Sincerely yours,

  
Paul A. Handverger  
Vice President

cc: DMEA  
Verde Exploration

Status and Proposed Plan of Operations

U.V.X. Property

July 22, 1987

<u>Date</u>	<u>Activity</u>
July 24	Ore pocket and hoisting facilities completed
July 27	Test of hoist and loading facilities
July 28	Hoisting muck from 902 transfer raise area Collar hole 809-7 bearing 232 degrees at +23 degrees.
August 3	Have determined raise and drift inaccessible. Start drift to 902 Drill Station.  2 crews working on 901-S.
September 1	902 Drill Station completed.
November 1	901 Drill Station completed. (This assumes driving 550 feet of new drift.)
February 1	Connection drift to 902 Station completed. (This also assumes driving 550 feet of new drift and setting up 906 Drill Station along the way.)

Status  
and  
Proposed Plan  
of  
Operations

<u>Date</u>	<u>Activity</u>
July 24	Ore pocket and hoisting facilities completed
July 27	Test of hoist and loading facilities
July 28	Hoisting muck from 902 transfer raise area Collar hole 809-7 at +23°, S 52° W.
August 3	Have determined raise and drift inaccessible. Start drift to 902 Drill Station.  2 crews working on 901-S.
August 9	Finish hole 809-7. Demobilize diesel compressor. Dismiss Longyear.
September 1	902 Drill Station completed.  (Worst case scenarios)
November 1	901 Drill Station completed. (This assumes driving 550 feet of new drift).
February 1	Connection drift to 902 Station completed. (This also assumes driving 550 feet of new drift and setting up 906 Drill Station en route).

Dated: 7-23-87  
CO'B



**A.F. Budge (Mining) Limited**

January 29, 1990

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504  
(602) 945-4630  
FAX (602) 949-1737

Tami Thompson  
GD Resources, Inc.  
450 E. Glendale Avenue  
Sparks, Nevada 89431

Dear Tami:

Enclosed is a sample of flux, numbered BF-1.

Would you please analyse this sample for gold, silver, iron and silica.

This sample has priority over others I have sent you in that we are dealing with the Chino Smelter and need to exchange assays on this one.

Would you please report the results at your very earliest convenience by FAX.

Thank you.

Sincerely,

*Carole A. O'Brien*  
Carole A. O'Brien

encl (1)



1501 S. CHERRY / TUCSON, ARIZONA 85713 / PHONE 602-882-0835

ARIZONA TANK LINES, INC.

INTERSTATE TRANSPORTATION AGREEMENT

CONTRACT NO. 3

This Transportation Agreement entered into as of the 2nd day of January, 1990, by and between A.F. Budge Mining Ltd., Hereinafter referred to as Shipper, and Arizona Tank Lines, Inc. of 1501 South Cherry Street, Tucson, Arizona 85713, Hereinafter referred to as Carrier. Shipper and Carrier agree to the following rates effective January 2, 1990, thru February 2, 1990, for a haul of approximately 1000 ton.

Commodity: Sand From: Jerome, Arizona To: Hurley, New Mexico

Rate: \$30.90 a Ton Minimum: 27 Ton per truck load

\* Rates are stated in dollars per ton. A \$15.00 per hour late charge for loading delay over 2 hours will be charged.

Shipments moving under this contract will be governed by the rules and regulations as set out in Arizona Tank Lines, Inc.'s Tariff ICC ARZL 100-A on bulk freight or ICC ARZL 101 on non-bulk freight.

By: *Larry Woodring*

ARIZONA TANK LINES, INC. (CARRIER)  
1501 S. CHERRY ST.  
P.O. BOX 26338  
TUCSON, ARIZONA 85726

By: *Ronald Short*

A.F. BUDGE MINING LTD. (SHIPPER)  
4301 N. 75th St.  
SUITE 101  
SCOTTSDALE, ARIZONA 85251



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

(602) 945-4630  
FAX (602) 949-1737

December 30, 1989

GD Resources, Inc.  
450 E. Glendale Avenue  
Sparks, Nevada 89431

Would you please have the enclosed sample of Jerome flux, numbered 11003, analysed for gold and silver and report the results at your earliest convenience by FAX.

Thank you.

Sincerely,

Carole A. O'Brien

encl. (1)



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

December 21, 1989

(602) 945-4630  
FAX (602) 949-1737

Paul A. Handverger  
Verde Exploration Ltd.  
2160 Old Jerome Highway  
Clarkdale, AZ 86324

Dear Paul:

Ron asked me to send my completed sheets on expenditures at U.V.X. through November, 1989. Arizona Tank Lines have not invoiced us for 8 trucks in November; this is estimated at about \$6,624. And Phelps Dodge owes us for 3 lots of flux shipped in October and 5 lots shipped in November. Using our assays from samples taken from each truck, these lots are estimated to produce revenues of \$158,407 for October and \$208,475 for November.

In reviewing my files, I see where we did take total expenditures back to September 1, 1988 when we started to hoist ore. At a 70% level of capacity, we probably should have taken these costs only back to November 1, 1988. But even then, the credits of \$80,000 exceeded the 15% owing to Verde.

Please call if you have any questions.

Sincerely,

Carole A. O'Brien

encls.



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504  
(602) 945-4630  
FAX (602) 949-1737

January 11, 1990

GD Resources Inc.  
450 E. Glendale Avenue  
Sparks, Nevada 89431

Dear Tami:

Would you please analyse the enclosed two samples of Jerome flux (numbered # 11005 and # 11006/12001) for gold and silver and report the results at your earliest convenience via FAX.

Thank you.

Sincerely,

Carole A. O'Brien

encls. (2)

GD RESOURCES, INC.  
450 E. Glendale Ave.  
Sparks, Nv. 89431  
Tel. 702-358-9229

Certificate of Analysis

DATE RECEIVED: 1-30-90

DATE REPORTED: 1-31-90

JOB NO. 3076

REPORT TO: Carole O'Brien

CHARGE TO: A.F. Budge Mining

SUBMITTAL NO. 8149

P.O. No.:

Sample No.	oz/t Au	oz/t Ag	% Fe	% SiO <sub>2</sub>
Lot #BF-1	0.269	1.212	3.917	91.664
	0.263	1.293	3.941	91.077
	0.248	1.173		

*J. Thompson*

GD RESOURCES, INC.  
450 E. Glendale Ave.  
Sparks, Nv. 89431  
Tel. 702-358-9228

Certificate of Analysis

DATE RECEIVED: 2-13-90

DATE REPORTED: 2-15-90

JOB NO. 3112

REPORT TO: Carole O'Brien

CHARGE TO: A.F. Budge Mining

SUBMITTAL NO. 8157

P.O. No.:

Sample No.	oz/t Au	oz/t Ag	% Fe	% SiO2
Lot No. BFC-2	0.241	1.315	2.958	93.27
14-26	0.233	1.308	3.014	91.73
	0.236	1.303		

*J. Thompson*



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

February 21, 1990

Mr. Art Verdugo  
Magma Copper Company  
P.O. Box M  
San Manuel, AZ 85631

(602) 945-4630  
FAX (602) 949-1737

Re: Siliceous fluxing ore from Jerome

Dear Mr. Verdugo:

This letter will confirm our telephone conversation of yesterday wherein we discussed the availability of siliceous fluxing ores from our mining operations at the United Verde Extension Mine located in Jerome, Arizona. Currently, we are producing about 2,000 tons per month and expect this to increase to 2,500 tons per month later in the year.

We are currently mining material which averages approximately 0.25 oz/ton gold, 1.3 oz/ton silver, 3% iron and 90% silica. We anticipate the gold grades to increase; silica, iron and silver to remain about the same. Copper has been relatively uniform at about 0.4%, although a few shipments have assayed above 1%. We are enclosing a listing of our 1989 shipments to Phelps Dodge's Hidalgo Smelter and also 2 recent shipments to the Chino Smelter. Rock size distribution is approximately 50% minus 10 mesh, 15% plus 10 mesh minus 2 inch, and 35% plus 2 inch minus 10 inch.

We would propose to sell this material to Magma as is, in exchange for payment for the contained gold, silver and copper. If you would prefer a sized product, we would be willing to install a crushing plant, and sell this material to Magma at a mutually beneficial price.

We appreciate any consideration you may be able to give to this proposal.

Very truly yours,

Dale H. Allen  
Production Manager

DHA:ca  
w/ attachments  
c: L.E. Major  
w/ attachments

Date	Lot #	Dry tons	Grade opt gold	Grade opt silver	Iron %	Copper %	Silica %
February	3001	284.23	0.417	7.81	4.57	0.32	89.99
March	4001	512.40	0.378	6.49	13.61	0.20	82.26
	4002	521.94	0.390	9.18	9.73	0.33	86.10
April	5001	623.46	0.124	1.71	6.80	0.31	84.30
	5002	413.65	0.187	3.47	6.50	0.32	84.20
May	6001	471.81	0.330	4.85	8.60	0.50	83.23
	6002	544.99	0.494	12.44	10.10	0.39	81.10
	6003	523.87	0.372	7.62	12.40	0.49	78.20
	6004	538.34	0.487	11.97	15.80	0.77	74.53
June	7001	525.37	0.681	15.84	13.30	0.46	76.60
	7002	499.75	0.700	14.78	11.29	0.46	76.60
	7003	541.25	0.444	9.99	12.10	0.22	77.60
	7004	592.48	0.505	13.10	11.10	0.22	80.00
	7005	438.76	0.530	8.91	7.90	0.23	85.50
July	8001	157.61	0.530	8.91	7.90	0.23	85.50
	8002	475.90	0.490	10.33	11.50	0.28	79.80
	8003	471.13	0.406	4.73	8.90	0.25	84.00
	8004	473.38	0.304	4.61	9.10	0.19	83.10
	8005	582.49	0.309	3.48	6.60	0.29	84.30
	8006	795.09	0.494	7.91	8.50	0.18	84.30
	8007	314.66	0.792	4.19	4.80	0.21	89.40
August	9001	104.85	0.792	4.19	4.80	0.21	89.40
	9002	526.04	0.800	2.83	3.50	0.19	92.90
	9003	428.26	0.539	3.35	3.50	0.31	92.90
	9004	509.66	0.515	5.40	6.80	0.63	86.10
	9005	426.06	0.475	5.86	5.70	0.32	88.60
	9006	211.28	0.210	2.11	4.70	0.32	88.80
September	10001	322.19	0.210	2.11	4.70	0.32	88.80
	10002	218.21	0.189	2.17	4.10	0.30	92.30
	10003	537.33	0.214	2.31	6.30	0.97	84.40
	10004	429.04	0.294	2.24	5.10	0.43	86.30
October	11001	106.58	0.294	2.24	5.10	0.43	86.30
	11002	537.52	0.331	1.91	3.40	0.24	91.10
	11004	403.02	0.369	1.53	4.70	0.24	89.50
	11003	590.96	0.487	1.61	3.70	0.34	90.80
	11005	533.87	0.332	1.90	4.60	0.40	88.40
	11006	404.72	0.211	1.60	4.50	0.49	89.40
November	12001	134.79	0.211	1.60	4.50	0.49	89.40
	12002	643.50	0.361	2.20	4.00	0.32	88.00
	12003	377.52	0.324	1.50	3.80	1.14	89.30
	12004	564.96	0.307	1.50	4.00	0.62	88.00
	12005	512.45	0.224	1.62	4.60	0.63	83.70
	12006	217.29	0.165	1.40	4.30	0.33	89.40
December	13001	324.24	0.165	1.40	4.30	0.33	89.40
	13002	532.61	0.153	2.57	13.40	0.55	74.90
	13003	532.42	0.173	2.86	10.60	0.87	77.40
	13004	529.83	0.253	1.66	5.30	1.02	84.50

GD RESOURCES, INC.  
450 E. Glendale Ave.  
Sparks, Nv. 89431  
Tel. 702-358-9229

Certificate of Analysis

DATE RECEIVED: 1-30-90

DATE REPORTED: 1-31-90

JOB NO. 3076

REPORT TO: Carole O'Brien

CHARGE TO: A.F. Budge Mining

SUBMITTAL NO. 8149

P.O. No.:

Sample No.	oz/t Au	oz/t Ag	% Fe	% SiO <sub>2</sub>
Lot #BF-1	0.269	1.212	3.917	91.664
	0.263	1.293	3.941	91.077
	0.248	1.173		

*J. Thompson*

GD RESOURCES, INC.  
450 E. Glendale Ave.  
Sparks, Nv. 89431  
Tel. 702-358-9228

Certificate of Analysis

DATE RECEIVED: 2-13-90

DATE REPORTED: 2-15-90

JOB NO. 3112

REPORT TO: Carole O'Brien

CHARGE TO: A.F. Budge Mining

SUBMITTAL NO. 8157

P.O. No.:

Sample No.	oz/t Au	oz/t Ag	% Fe	% SiO2
Lot No. BFC-2	0.241	1.315	2.958	93.27
14-26	0.233	1.308	3.014	91.73
	0.236	1.303		

*J. Thompson*

*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 13, 1987

To: Anthony F. Budge

Subject: Projected Revenues/Profits based on Reserves in  
Memo of 4-12-87

---

Reserves: 44,500 t. 0.289 oz/t gold; 6.74 oz/t silver

Smelter pay based on figures in memo of 4-09-87

Revenues from smelter:

0.289 x .85 x \$400 - \$4	=	\$ 94.26
6.74 x .85 x \$5.50 - \$0.35	=	\$ 31.16
90% silica flux	=	\$ 15.00

---

\$ 140.42

Costs:

Mining @ \$40/ton	-	40.00
Transportation	-	23.00
Crushing	-	2.00

---

\$ 75.42

Net Profit (85%) \$ 64.00 x 44,500 = \$ 2.85 mm

M E M O

TO: Carole A. O'Brien, A.F. Budge  
FROM: Don White  
DATE: January 17, 1987  
SUBJECT: Longyear contractor at U.V.X.

The diamond drilling is going poorly. Wednesday's shift produced 10 feet of core. Thursday's shift produced 3 feet of core (4 hours out of ten on drill repair). Friday's shift produced 2 feet of core (2 hours lost with frozen and burst water lines). Hole M-1 encountered chert harder than ordinary steel at 70' in our up-angle hole of 42° with HQ core. While air pressure has been used by Longyear as an excuse for poor performance, it has not likely been a problem the three days mentioned. Other pneumatic equipment has not been used while the drill is operating and the sound and r.p.m. of the drill seemed good.

I offer a different explanation of Longyear's poor performance; incompetence and poor management, mainly the latter. We contracted Longyear partly for their experience gained on the same rocks last year. Despite that, they are on the job without the proper bits to drill chert. Jack Hayslip never was able to get a bit expert to advise him but he experimented and found that certain bits ("#9 and 10 green" if I recall correctly) worked best. Longyear arrived without such bits for this job and hasn't even considered ordering them until Friday afternoon when I urged the driller (Burt Hansen) to do so. I find it appalling that Russ Beddow and Joe Reedy would commence this job so unprepared. It is now going to take several days to receive better bits even though I asked the driller six days ago whether he was prepared with bits for the chert.

This memo is prompted by my phone call to Beddow last evening and one from Tony Budge this morning. Clearly our costs are way too high to tolerate the poor show Longyear is giving now. My discussion with Beddow gave absolutely no reason to believe they can change for the better. Beddow's message was simple; take-it-or-leave-it. He offered to remove his rig and crew from the premises but never did offer to send a bit expert, to expedite bit delivery, to supply an experienced second crew, or to improve supervision of the project. His responses were full of non sequiturs and inadequate excuses. He was defensive, rude, and totally unsatisfying in his responses. His behavior was quite unfitting of a contractor interested in quality, reputation, or customer satisfaction.

This is no different than last year. Then we had Hayslip to carry on; now we have a crew that make no secret of their dissatisfaction with underground work. The second crew being talked about consists of two new, inexperienced helpers, one Joe Reedy's son. Dennis Sager, the present helper would be second shift driller. This does not bode well for the future. When I asked Beddow about Jerry Schroeder, whom I understand we were promised if at all available, he said you all heard him say at the Northwest Mining Convention (two months ago) that he was tied up with a big contract. Why then

Carole A. O'Brien, A.F. Budge  
January 17, 1987  
Page Two

did he promise Carole a mere two weeks ago to try to get him and then not do so? Schroeder himself says he has not been contacted.

Drilling HQ on the threshold of our target zone at a mere 90 feet from the collar is not the time to compromise sample size. Reducing to NQ will no doubt speed up drilling and we may be forced to do so (with a nearly 50% loss of sample size!) but if Longyear was doing its job properly we would be making much better progress even with HQ core.

If I had the authority over such matters (rather than confined to the role of geologist) I would have accepted Beddow's offer to leave the project. I can't help but feel someone else (Centennial - ?) could do much better. We have about 1,000 feet of drilling planned in chert for the five drill fences from the Morgan drill station alone. This compares to 600 feet in chert for all the 1104, 901, and 806 drilling last year, combined. We need a driller who can and wants to do the job right.

DW:sk

UNITED VERDE EXTENSION

GOLD PROJECT - PUBLISHED REFERENCES

- Anderson, C.A., Blacet, P.M., Silver, L.T., Stern, T.W.; 1971  
Revision of the Precambrian stratigraphy in the Prescott-Jerome area, Yavapai Co., AZ; USGS Bull. 1324-C, pC-1 - C16  
Fig.2 scale 1:270,000
- Anderson, C.A., and Creasy, S.C.; 1958  
Geology and ore deposits of the Jerome area, Yavapai Co., AZ  
USGS Prof. Paper 308; 185p; p135-149 on UVX; incl. level plans  
and sections, scale 1:2,400
- Anderson, C.A. and Creasy, S.C.; 1967  
Geologic map of the Mingus Mountain 15' quad., Yavapai Co., AZ  
USGS GQ-715; scale 1:62,500
- Anderson, C.A. and Nash, J.T.; 1972  
Geology of the massive sulfide deposits at Jerome, AZ -  
A reinterpretation; Econ. Geol. V.67 N.7; p845-863
- Anderson, C.A. and Silver, Leon T.; 1976  
Yavapai Series - A greenstone belt; Contribution No. 2507 -  
Division of Geological and Planetary Sciences, California  
Inst. of Tech.; also in: AZ Geol. Soc. Digest, V.X, March, 1976  
p13-26
- Anderson, Phillip; 1977  
Massive sulfide deposits applied to problems of Precambrian  
stratigraphy, Arizona - a discussion; Econ. Geol. V.72, p110-111
- Anderson, Phillip and Guilbert, John M.; \_\_\_\_\_  
The Precambrian massive sulfide deposits of Arizona - a distinct  
metallogenic epoch and province; Fifth IAGOD Quadrennial  
Symposium; p39-48
- Bain, George W.; 1973  
Geology of the massive sulfide deposits at Jerome, AZ -  
a reinterpretation; Econ. Geol. V.68, p709-711
- Blain, C.F. and Andrew, R.L.; 1977  
Sulphide weathering and the evaluation of gossans in mineral  
exploration; Minerals Science Engineering, V.9 N.3, July, 1977  
p119-150
- Bouley, B.A. and Hodder, R.W.; 1976  
Massive sulfide deposits applied to problems of Precambrian  
stratigraphy, Arizona; Econ. Geol. V.71 N.4, p817-820
- Brewer, James W. Jr.; 1981  
Jerome, a story of mines, men, and money; a historical booklet  
on Jerome, AZ published by Southwest Parks and Monuments Assoc.  
Globe, AZ; 12p,
- D'Arcy, R.L.; 1930  
Mining practice and methods at the United Verde Extension  
Mining Co., Jerome, AZ; US Bur. of Mines Info. Circ. 6250, 12p

UNITED VERDE AND U.V.X.

HISTORICAL REFERENCES

- Blandy, J.F.; 1883  
The mining region around Prescott, AZ; Am. Inst. Min. Metall. Eng. Trans., V.11, p286-291
- Darton, N.H.; 1910  
A reconnaissance of parts of northwestern New Mexico and northern Arizona; USGS Bull. 435, 88p
- Darton, N.H.; 1925  
A resume of Arizona geology; AZ Bur. of Mines Bull. 119, 298p
- Fearing, J.L. Jr.; 1926  
Some notes on the geology of the Jerome district, Arizona; Econ. Geol., V.21, p757-773
- Finlay, J.R.; 1918  
The Jerome district of Arizona; Eng. and Min. Jour., V.106 p557-562 and p605-610
- Hamilton, Patrick; 1883  
Resources of Arizona; 2nd Ed., San Francisco, A.L. Bancroft and Co., 275p
- Hamilton, Patrick; 1884  
Resources of Arizona; 3rd Ed., San Francisco, A.L. Bancroft and Co., 414p
- Provot, F.A.; 1916  
Jerome mining district geology; Eng. and Min. Jour., V.102 p1028-1031
- Pullen, J.B.; 1941  
Modified mining methods in the United Verde mine; Am. Inst. Min. Metall. Eng., Tech. Paper 1273, 18p
- Ralston, O.C.; 1930  
Possibilities of zinc production in Arizona; Min. Jour., V.14, p11
- Ralston, C.O.; 1930a  
Research at the United Verde; Min. Cong. Jour., V.16, p384-385
- Reber, L.E. Jr.; 1922  
Geology and ore deposits of the Jerome district; Am. Inst. Min. Metall. Eng. Trans., V.66, p3-26
- Reber, L.E. Jr., 1938  
Jerome district; AZ Bur. of Mines Bull. 145, p41-65
- Young, H.V.; 1930  
Historical sketch of the United Verde Copper Co.; Min. Cong. Jour., V.16, p303-305

- Donnelly, Michael E. and Hahn, Gregory A.; 1981  
A review of the Precambrian volcanogenic massive sulfide deposits in central Arizona and the relationship to their depositional environment; p11-20 in:  
Dickinson W.R. and Payne W.D., editors; 1981  
Relations of tectonics to ore deposits in the southern cordillera  
AZ Geol. Soc. Digest, V. XIV, Tucson, AZ
- Hansen, M.G.; 1930  
Geology and ore deposits of the United Verde Mine;  
Mining Congress Jour. V.16, p306-312
- Lausen, Carl; 1928  
Hydrous sulphates formed under fumarolic conditions at the United Verde Mine; Amer. Mineralogist, V.13, p203-225
- Lausen, Carl; 1930  
The Precambrian greenstone complex of the Jerome quadrangle;  
Jour. Geol., V.38, p174-183
- Lehner, R.E.; 1958  
Geology of the Clarkdale quadrangle, AZ; USGS Bull. 1021-N  
p511-592, plate 45 scale 1:48,000
- Lindgren, Waldemar; 1926  
Ore deposits of the Jerome and Bradshaw Mountains quadrangles, Arizona; USGS Bull. 782, 192p, plate 1 - Jerome 30'quad.  
plate 2 - Bradshaw Mtns. 30' quad., both 1:125,000
- Norman, G.W.H.; 1977  
Proterozoic massive sulfide replacements in volcanic rocks at Jerome, AZ; Econ. Geol. V.72 N.4, p642-656
- Rickard, T.A.; 1918  
The story of the U.V.X. bonanza; Min. Sci. Press, V.116  
p9-17, p47-52
- Schwartz, G.M.; 1938  
Oxidized copper ores of the United Verde Extension mine;  
Econ. Geol., V.33, p21-33
- Vuich, John S.; 1974  
Strata-bound sulfide deposits and suggestions for exploration in Arizona; AZ Bur. of Mines-Geol. Survey Branch, Circ. No.16, 11p

POSSIBLE SOURCES OF UNPUBLISHED DATA ON U.V.X.

- 1) Verde Exploration/Mining Co.
- 2) Coca Mines Co.
- 3) Phelps Dodge Corp.
- 4) AZ Department of Mines and Mineral Resources
- 5) AZ Bureau of Mines/Geological Survey
- 6) Paul Handverger
- 7) Paul Lindberg
- 8) Fred Gibbs

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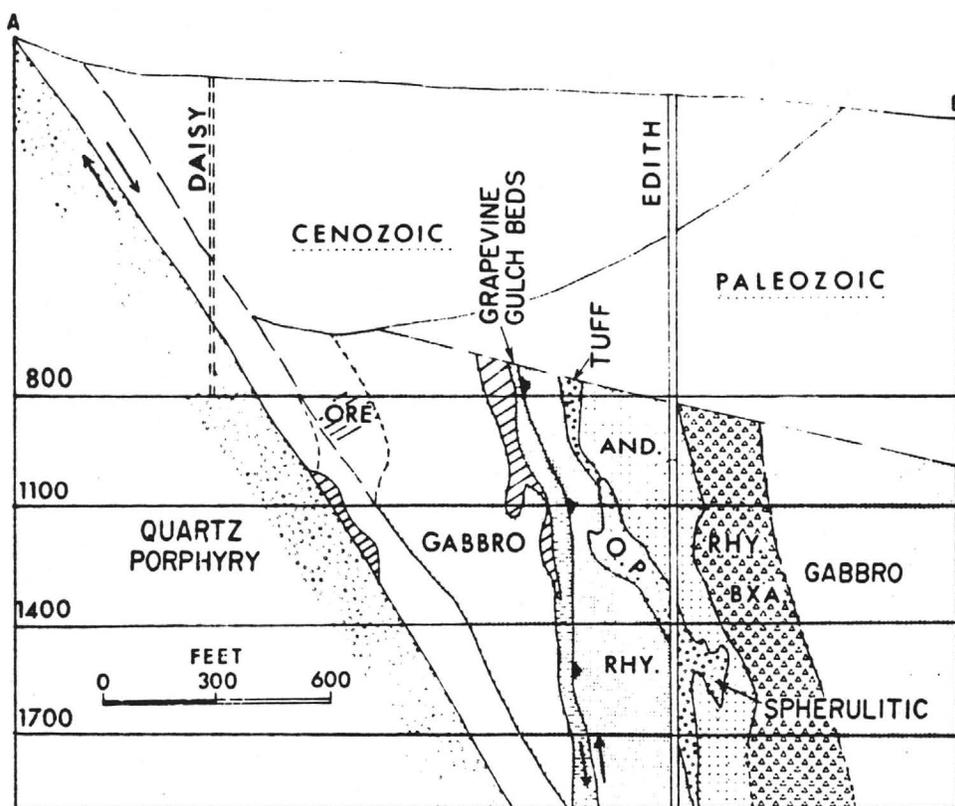


FIG. 4. U.V.X.—Mine Section A-B (location Fig. 2).

gabbro and of the porphyry at the Reverse Fault suggests that the quartz porphyry is older than the fault and that the gabbro if not older may be approximately contemporaneous. The mineralization is definitely younger than the porphyry and may be younger than, or contemporaneous with, the fault, which would make it younger than, or contemporaneous with, the gabbro.

### Massive Sulfide Deposits

#### Introduction

Theories concerning the origin of the sulfide deposits in the Jerome district must account for their spatial and mineralogical relationships to enclosing rocks and structures. Sedimentary and volcanic horizons which form hosts to the deposits occur in the district's three main tectonic lines. The

# IRON KING ASSAY INC.

06-Jan-87

LAB JOB #: MSC01215  
 Client name: DMEA Ltd.  
 Billing address: 7340 E. Shoeman Lane  
 Suite 111-B-E  
 Scottsdale, AZ 85251  
 Phone number: 778-3140

No. Samples: 3  
 Date Received: 01-02-87  
 Submitted by: Don White

INVOICE ATTACHED

### ANALYTICAL REPORT

Client ID	Lab ID		Fire Assay	
			Au oz/ton	Ag oz/ton
MSC01215				
925-1	1215-	1	0.082	1.07
925-2	1215-	2	0.007	0.83
925-3	1215-	3	1.540	1.55

DMEA LTD.  
 JAN 9 1987  
 RECEIVED



	True Width	Gold oz/t	Silver oz/t
Low grade envelope			
Averages in M-3 Zone	43	0.171	2.64
in 809 Zone	33	0.153	1.29
Totals	38	0.163	2.05
High grade core			
Averages in M-3 Zone	14	0.248	2.99
in 809 Zone	11	0.223	1.19
Totals	13	0.237	2.18

If a continuous zone exists between  
the M-3 Zone and the 809 Zone for  
a strike length of 400 feet, we could have:

400 ft. x 80 ft. x 38 ft = 87,000 tons with  
14,000 ounces gold  
175,000 ounces silver

or,

400 ft. x 80 ft. x 13 ft. = 30,000 tons with  
7,000 ounces gold  
65,000 ounces silver

using a 14 cu.ft. tonnage factor

### Assumptions and Parameters

gold	\$450.00	per ounce
silver	\$7.50	per ounce
low grade reserves	87000	tons
grade (gold)	0.163	oz/t
grade (silver)	2.05	oz/t
high grade reserves	30000	tons
grade (gold)	0.237	oz/t
grade (silver)	2.18	oz/t
cost, mining rock	\$60.00	per ton
Gold Recovery (CIL)	0.9	90%
Silver Recovery (CIL)	0.75	75%
Processing, CIL	\$9.00	per ton
Transportation	\$12.00	per ton

### UVX Mine Options

Assumptions: Gold at \$450.00/ounce  
Silver at \$7.50/ounce

(A) Indicated Low Grade Reserves of 87,000 tons of 0.163 oz/t gold and 2.05 oz/ton silver  
Indicated by drilling from Morgan & 809 Drill Stations

(B) Indicated High Grade Reserves of 30,000 tons of 0.237 oz/t gold and 2.18 oz/ton silver  
Indicated by drilling from Morgan & 809 Drill Stations

	(A)	(A)	(B)	(B)
	Ore to Inspiration Smelter	Ore to CIL Plant at UVX	Ore to Inspiration Smelter	Ore to CIL Plant at UVX
Gross Revenues	\$7,112,439	\$5,823,073	\$3,317,870	\$3,247,425
Operating Costs				
Mining	\$5,220,000	\$5,220,000	\$1,800,000	\$1,800,000
Processing	\$0	\$783,000	\$0	\$270,000
Transportation	\$1,044,000	\$0	\$360,000	\$0
Operating Profit	\$848,439	(\$179,927)	\$1,157,870	\$1,177,425



**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

Telecopier: (602) 949-1737

I.S. Parrish  
Derry, Michener, Booth & Wahl  
(DMBW, Inc.)  
13949 W. Colfax Avenue, Suite 110  
Golden, CO 80401

Via: telecopier

Dear Mr. Parrish:

Would you kindly provide details on the second invoice (#10-008) which we received last week in connection with the Jerome Project (copy following).

Thank you.

Sincerely,

Carole A. O'Brien

Total pages: 2  
November 17, 1987

**DERRY, MICHENER, BOOTH & WAHL**  
**(DMBW, INC.)**

*MINING AND GEOLOGICAL CONSULTANTS*

- 13949 W. Colfax Ave., Suite 110
- Golden, Colorado 80401
- Telephone: (303) 233-8786
- Telex: 450349
- Telecopier: (303) 232-2586

October 2, 1987

**DMEA LTD.**

**OCT 6 1987**

**RECEIVED**

Ms. Carole A. O'Brien  
A. F. Budge Limited  
7340 E. Shoeman Lane, Suite 111 "B"(E)  
Scottsdale, AZ 85251

Dear Ms. O'Brien:

Enclosed with this letter please find a memorandum giving our estimate of stoping costs for the Budge operation at Jerome, Arizona. Please note that the costs are restricted to direct stoping costs.

While we have not been asked to comment upon the present operation, we feel professionally obliged to offer one or two observations.

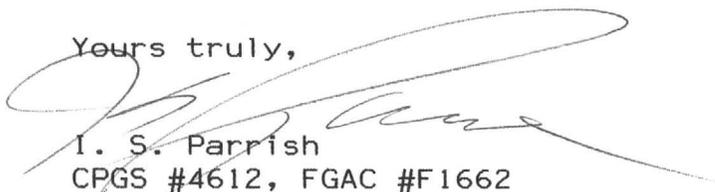
First, there is inadequate survey control underground. The drive to the current drill station broke into the old workings which the existing survey had shown to be some distance away. There is also an elevation discrepancy between the old and new surveys. Such errors are more than a nuisance, they can result in additional costs and could lead to dangerous conditions. A young engineer on site is being utilized primarily as a laborer. His time could perhaps be better applied.

Second, there is a need for a review of the program starting with estimates of capital and operating costs, over and above stoping costs as in the attached memorandum. The potential of the property to pay back these costs, plus the costs accumulated to date should be discussed. In this line, consideration of the low grade copper and low grade gold potential should be considered.

Lastly, employment of a qualified, experienced engineer should be considered to direct the underground program.

DMBW was pleased to assist you in the present study. If we can be of further assistance, please contact us.

Yours truly,

  
I. S. Parrish  
CPGS #4612, FGAC #F1662  
Partner/Economic Geologist

Enc.

**DERRY, MICHENER, BOOTH & WAHL  
(DMBW, INC.)**

MINING AND GEOLOGICAL CONSULTANTS

- 13949 W. Colfax Ave., Suite 110
- Golden, Colorado 80401
- Telephone: (303) 233-8786
- Telex: 450349
- Telecopier: (303) 232-2586

FROM: DERRY, MICHENER, BOOTH & WAHL  
TO: A.F. BUDGE LTD.  
RE: INVOICE OF FEES & EXPENSES FOR SEPTEMBER & OCTOBER, 1987  
DATE: OCTOBER 5, 1987  
PROPERTY: JEROME PROJECT

NUMBER: 9-005

Professional Fees

I.S. PARRISH	3.00 HOUR	255.00
BRIAN HESTER	1.25 HOURS	87.50
M. JANECK	2.50 DAYS	1,400.00

SUBTOTAL	1,742.50
Subcontracted Labor	

TOTAL PROFESSIONAL FEES 1,742.50

Expenses

Hotel & Meals	133.99
Travel	108.32
AutoRent	
AutoExpense	
Postage/Freight	
Phone/Telecopy	0.25
Reproduction	
Supplies	
Assays	
Misc.Expenses	

**DMEA LTD.  
OCT 10 1987  
RECEIVED**

TOTAL	242.56
Plus 10%	

TOTAL EXPENSES 242.56

Outside Services

Total	0.00
Plus 15%	0.00

TOTAL OUTSIDE SERVICES 0.00

TOTAL DUE ON A.F. BUDGE 1,985.06

TERMS: Due when rendered. Amounts 30 days past due assessed 2% per month.

# Hole No. 902-4

Page 1 of 3

UVX Mine - 950 Level  
902 D.D.S. ~ 4,180' Elev.

Collar location: Grid: 11,405 N - 7,215 E

Inclination: +14° at collar

Azimuth: 175° (S5°E) at collar

Length: 215 feet

Longyear Co., Phoenix, AZ

Driller: Bert Hansen + Dennis Sager, drillers

Core recovery: ~80% in chert (mostly silt/grit)  
~95% in diorite

Dates: November 5 thru 12, 1987

Iron King Array, Inc. - Humboldt, AZ

Assayer: using Fine Array, one assay ton, and AA following for low grades.

Logger: Don White, geologist

Remarks: Drilled with Longyear 34, pneumatic rig. HQ core thru 77 ft, NQ core 77'-215' (EQH). Overall drilling rate 19.5 ft/shift, 10 hr. shifts, 2 shifts/day.

All casing + steel removed from hole.

Core Size	RQD	Runs/recovery	Core boxes	Footage	Graphic log	Au (oz/t)	Ag (oz/t)	Rock type	Lithology	Note: Sense-of-orientation indicators poor but crudely indicate 40-60° angle of bedding to core axis. Conservative overall estimate 45°. Therefore true thicknesses are ~.7 times drill intercepts.
HQ core; 2.5" diam.	φ	95	Skeleton Box A		<p style="text-align: center;">Carole's reproducible copy</p>			Argillic- altered diorite	φ-50' Diorite - variously altered as follows: φ-24' Red-gray, very fine grained, crudely foliated, argillic-altered diorite with red hematite-lined fractures in abundant orientations. So-called "red blocky chert" on old plans.	
	10	95								
	φ	95								
	φ	95								
	40	95								
	60	95								
	40	95								
	φ	95								
	φ	95								
	φ	95								
φ	20							Silicic- altered diorite	24'-48' Silvery gray + pale purple-gray/white (blotchy) silicic-altered diorite. Crude foliation 45-60° to core axis.	
φ	20							diorite	48'-50' Red-gray diorite breccia + gouge (tectonic) with ~20% gray chert clasts against contrast.	





80	φ	118
90	φ	164
70	φ	60
90	φ	77
90	φ	48
		215

si. bx.  
 Massive & banded (unsplit)  
 Fault shattered

204'-212' Red-gray massive and beige, banded hornfelsed silica with ~60% fine purple-gray redist clasts (φ 3", X = 1"). Banding variably 40°-60° to core axis.  
 212'-215' (E.O.H.) Same as 204'-212' but texturally shattered to split-poor size amounts. Virtually ignorable to core; destroyed bit in 3-foot run. Likely a HW splay of the Verde Fault.

Higher grade array intervals noted above.

Lower grade averages include:

- a) Two higher grade grit intervals (99'-112' and 165'-192') = 93' (~65' true) at  $\frac{.10}{6.7}$  oz/k Ag
- b) Overall grit zone from 99' to 204' = 105' (~74' true) at  $\frac{.10}{6.1}$  oz/k Ag

plus low grade divider (112'-165' = 53' at  $\frac{.066}{2.53}$ )







Client ID	Lab ID	FA/AA Au oz/ton	Fire Assay Ag oz/ton
AFB02039			

---

HOLE #902-2 / Core Sample (Re-split)

93-95'                      2039- 16                      0.070                      6.16

\*Results for these samples were achieved by straight Fire Assay.





Client ID	Lab ID	FA/AA Au oz/ton	Fire Assay Ag oz/ton
AFB01999			
906-20	1999- 15	0.049	0.73
906-21	1999- 16	0.115	2.24 *
906-22	1999- 17	0.176	2.18 *
906-23	1999- 18	0.021	0.76
906-24	1999- 19	0.003	0.55
906-25	1999- 20	0.013	0.49
906-26	1999- 21	0.015	0.49
906-27	1999- 22	0.187	5.42 *
906-28	1999- 23	<.001	0.39
906-29	1999- 24	<.001	0.56

\* Results for these samples were achieved by straight Fire Assay.



# IRON KING ASSAY INC.

16-Oct-87

LAB JOB #:	AFB01973	ATTN: Carole A. O'Brien
Client name:	A. F. Budge (Mining) Ltd.	No. Samples: 9
Billing address:	7340 E. Shoeman Lane Suite #111-B-E Scottsdale, AZ 85251	Date Received: 10-12-87 Submitted by: Don White
Phone number:	(602) 945-4630 / 778-3140	INVOICE ATTACHED

### ANALYTICAL REPORT

Client ID	Lab ID	FA/AA Au oz/ton	Fire Assay Ag oz/ton	
-----				
UVX BATCH #77				
906-11	1973-	1	0.231	4.61 *
906-12	1973-	2	1.141	4.68 *
906-13	1973-	3	0.137	0.49 *
906-14	1973-	4	0.063	0.10
906-15	1973-	5	0.019	0.45
906-16	1973-	6	0.023	0.70
906-17	1973-	7	0.011	0.43
991-1	1973-	8	0.058	1.17
991-2	1973-	9	0.124	0.98 *



\* Results for the samples were achieved by straight Fire Assay.



20 Mayfair Drive,  
London, Ontario,  
Canada N6A 2M6

November 27, 1987

**DMEA LTD.**

**NOV 30 1987**

**RECEIVED**

Ms. Carole A. O'Brien,  
A.F. Budge (Mining) Limited,  
7340 E. Shoeman Lane,  
Suite 111 "B" (E),  
Scottsdale, Arizona,  
85251

Dear Carole:

Thanks for the opportunity to keep up on the UVX project. Good to work with you folks. Attached is a billing for the last trip during which I took in the GSA-SEG meetings in Phoenix and hence charged half the airfare and reduced the car rental by the one day I had the car before going to Jerome. I am still waiting for billing on the car from Detroit to London during my return but thought I would get this off now as I have a chance to catch the mail in the U.S. today.

I have reservations for Phoenix on the evening of December 9 and will be at the UVX first thing on the morning of the 10th to meet with Don. Will be talking to you for sure from there.

All the best, and thanks.

Yours truly,



R.W. Hodder

# IRON KING ASSAY INC.

Page 1

11-Dec-87

LAB JOB #:	AFB02096	ATTN: Carole A. O'Brien
Client name:	A. F. Budge (Mining) Ltd.	No. Samples: 21
Billing address:	7340 E. Shoeman Ln. Suite #111-B-(E) Scottsdale, AZ 85251	Date Received: 12-08-87
Phone number:	(602) 945-4630 / 778-3140	Submitted by: Don White

INVOICE ATTACHED

## ANALYTICAL REPORT

Client ID	Lab ID	FA/AA	Fire Assay
		Au oz/ton	Ag oz/ton

UVX BATCH #97

902-1	2096-	1	0.002	0.33
902-2	2096-	2	0.192	0.56 *
902-3	2096-	3	0.222	0.55 *
902-4	2096-	4	0.248	6.03 *
902-5	2096-	5	0.077	3.19
902-6	2096-	6	0.131	5.72 *
902-7	2096-	7	0.006	0.35
902-8	2096-	8	0.074	0.84
902-9	2096-	9	0.005	0.51
902-10	2096-	10	0.002	0.45
902-11	2096-	11	0.024	0.78
902-12	2096-	12	0.003	0.31
HOLE #902-7				
131-133'	2096-	13	0.035	0.26
133-136'	2096-	14	0.041	0.75
136-139'	2096-	15	0.024	0.84

*low iron  
10ft  
.221 2.38*

*0.174 3.21  
17ft trace*



Client ID	Lab ID	FA/AA Au oz/ton	Fire Assay Ag oz/ton
AFB02096			
-----	-----	-----	-----
139-142'	2096- 16	0.002	0.75
142-146'	2096- 17	0.002	0.58
146-150'	2096- 18	0.007	0.87
150-155'	2096- 19	0.005	1.26
155-159'	2096- 20	0.063	1.00
159-160'	2096- 21	0.024	0.70

\*Results for these samples were achieved by straight Fire Assay.



Carole

M E M O

TO: Carole A. O'Brien  
FROM: Don White  
DATE: February 29, 1988  
SUBJECT: Graham McDonald, candidate for U.V.X. Surveyor and Mining Engineer

Graham McDonald is presently a mining engineer for Cyprus Bagdad. He arranged a day off to visit the U.V.X. project on Thursday, February 25th. He is a Rhodesian expatriate with 12 years underground mine surveying experience in Rhodesia (Zimbabwe). His last seven years, since emigrating to the U.S., have been with Cyprus managing grade control and production planning.

As I see it, Mr. McDonald has many characteristics and qualifications for a position at the U.V.X., including:

- 1) He claims to prefer underground work over his present office and open pit job.
- 2) He seems to be a hands-on doer, a fellow willing to handle all levels of responsibility including surveying through mining method selection and planning.
- 3) He likes small operations with their attendant small managerial staffs, short chain of command, and greater flexibility and opportunity.
- 4) He says he's familiar with grade control issues at Bagdad, cost analyses, and often plays a liaison role between engineering and production staffs for the sake of production planning.
- 5) He communicates well, both orally and in writing judging by some of his Cyprus memos he provided me.
- 6) He is mature enough (47 and married, 2 children) and seemingly motivated enough to delve into new responsibilities seriously and stick to them.

His interest in a job change seems to stem from disgruntlement with the large corporate structure of Cyprus. One manifestation of that is their unwillingness to open any more responsible positions to him for his lack of formal education in engineering. He is not content to accept that. At the same time, he is looking for something at least as secure as the position he now has for he does not want to be looking again in a just a few years.

While I have met Mr. McDonald only the one day, he seems the sort of individual a small mine needs for surveying and mining engineering roles subordinate to a mine manager. I recommend he be checked further with some references and then, if appropriate, considered for a staff position.

Attachment: G. McDonald resume

## GRAHAM McDONALD

309 Allen Street  
P. O. Box 92  
Bagdad, Arizona 86321  
(602) 633-2901

### OBJECTIVE:

A responsible position in Natural Resource Development and Utilization requiring planning and operational skills where my Mine Engineering and Surveying experience can be effectively employed.

### QUALIFICATIONS:

<sup>Twenty</sup>~~Seventeen~~ years international experience in underground and open-pit mining of both precious and base metals including:

- Departmental Management
- Short and Long Range Mine Planning
- Production Planning
- All aspects Mine Surveying
- Engineering/Production Liaison
- Ore Control
- Grade Forecasting
- Establishment of New Procedures
- Surveyor Training

### ILLUSTRATIONS

**OF PERFORMANCE:** Reduced ore dilution from 15% to 3% by establishing improved short range planning and ore control utilizing new informational procedures and effective communications.

#### U.S.A.

Instrumental in the introduction of Delay Blasting in production rounds which resulted in better fragmentation and less pit-wall damage.

Established liaison and communication between Engineering and Production staff where very little had existed. Developed trust in Planning function which lead to improved production.

Created six-month grade forecast methods for use by General Manager in predicting metal recoveries and revenue.

Prepared monthly, quarterly and yearly production reports comparing achieved results with planned objectives.

#### RHODESIA

Managed Survey (Engineering) Department and supervised all mine planning, surveying and drafting activities of 28 employees. Maintained high degree of professional integrity throughout department.

Originated and developed new survey, sampling and office procedures for a newly opened mine. Trained staff of unskilled employees and created sound survey/planning department.

Performed with minimum supervision while serving as junior supervisor and carried out all responsibilities relative to underground and surface survey for mine section.

**RELATED  
EXPERIENCE:**

**Cyprus Bagdad Copper Co.;** Bagdad, Arizona 7½ 4 years  
**Mine Engineer:** Responsible for short range mine and  
and production planning and ore control.

**Messina Transvaal Development Co.;** Sinoia, Rhodesia 12 years  
- Alaska Mine, Sinoia; Gwaai River Mine, Dett, Rhodesia.  
**Senior (Chief) Surveyor:** Managed Survey (Engineering)  
Department . . . all mine planning, drafting and surveying  
activities. (2 years)

**Sectional Surveyor:** Supervised all survey activities for  
3 underground shafts at Alaska Mine. (3½ years)  
Similar responsibilities for newly opened Gwaai River Mine.  
(1½ years)

**Shaft Surveyor:** (2 years)

**Opencast Grade Control Officer:** (3 years)

**Union Carbide Corp.;** Mimosa Mine, Shabani, Rhodesia. 1 year  
**Resident Surveyor:** Responsible for establishing and  
maintaining survey department of a new mine.

**EDUCATION:**

Equivalency of B.S. Degree evidenced by: P.F.

- Rhodesian Government Mine Surveyors Certificate
- Rhodes University, South Africa - one year of  
three year degree.

**OTHER:**

Elected Member, Rhodesian Institute of Surveyors.

Eight years service with Rhodesian Army as a volunteer on  
a call-up basis.

**PERSONAL:**

Date of Birth: March 28, 1940, Married, Two Children,  
Excellent Health.



Appalachian State University  
Boone, North Carolina 28608

704/262-3049

March 23, 1987

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

Dear Don,

Thank you for the presentation on the U.Y.X. mine. We appreciate you taking the time from your schedule for the presentation. Examination of the level maps, mine model and core samples along with your discussion provided an excellent 'short course' on the geology of the U.Y.X. and a particular type of Au mineralization.

If you should travel through North Carolina again, please stop by the geology department at A.S.U. and we will will return the favor with a tour of some Blue Ridge geology.

Thank you,

Kelly Vance  
Jack Allison  
Susan Wilson  
Tony Tinsley  
Lorment Leatherman  
Lissa A. Smith  
Joseph Narsamias  
Steven Jarrett  
Wendy Binnings

U.V.X. VERDE TARGET AREA DRILLHOLE SUMMARY

D.D.H.	Collar location (UVX grid)			Orientation at collar		E.O.H. Inclination	Length of hole	Chert Intercepts	Angle of Intercept to bedding	Remarks							
	N	E	Elev.	Bearing	Inclination												
806-1	11,890	7,335	4,335	533.5 W	-4°	-12°	633	84-108 481-615	60°	Drilled Jan, 1986							
M-1	Morgan D.D.S. 11,565 7,060 4,177			S60°W (fence 5)						Intercept 100' NW of 806-1							
M-2											+42°	+45°	262	70-247	60°		
M-3											+60°	+60°	226	76-85 109-205	90°	Up-dip from M-1	
M-4											+20°	Not Surveyed	233	131-233+	45°	Aborted at void 233-240	
M-5											S2°E (fence 3)	+50°	+48°	295	100-280	30° ?	Far up-dip from M-3
M-6											+10°	Not Surveyed	198	164-198+	45°	Down-dip from M-3	
M-7											+30°	Not Surveyed	195	148-195+	45°	Little up-dip from M-3	
M-8											S60°W (fence 5)	+25°				Presently drilling	
	S30°W (fence 4)	+25°				Next hole planned											

Table 1

Compiled by Don White  
Updated to April 3, 1987

U.V.X. VERDE TARGET AREA DRILLING/ASSAY SUMMARY

Drill Fence	D.D.H.	Initial inclination of hole	Ratio of true thickness to drill intercept	High grade intercepts				Low grade intercepts			
				Drill intercept (feet)	True thickness (feet)	Grade (oz/t)		Drill intercept (feet)	True thickness (feet)	Grade (oz/t)	
						Au	Ag			Au	Ag
	806-1	-4°	.87	514-527 568-578	11 9	.24 .18	2.2 0.9	504-594	78	.09	1.4
Fence 5	M-1	+42°	.87	122-138	14	.24	1.5	122-176	47	.17	1.1
Morgan DDS				157-176	16	.23	1.6				
	M-2	+60°	1.00	124-136	12	.16	1.5	118-150	32	.10	1.4
	M-3	+20°	.70	151-185	24	.88	32.5	146-233+	61+	.41	14.6
Fence 3	M-4	+50°	.50	107-130	12	.14	3.4	107-235	64	.09	1.8
Morgan DDS				190-203	7	.29	2.1				
	M-5	+10°	.70	None	--	--	--	None	--	--	--
	M-6	+30°	.70	158-178	14	.40	5.2	148-195+	33+	.26	6.7
Fence 5	M-7	+25°	.87	None	--	--	--	None	--	--	--
Fence 4	M-8	+40°	.87	90-94	4	.22	3.7	90-144	47	.10	1.0
				107-118	10	.17	0.6				
S15°W	M-9	+20°	.77	104-121	13	.39	1.8	104-157	41	.19	1.6
S17°E	M-10	+23°	Deflected	None	--	--	--	None	--	--	--
S7°E	M-11	+25°									

Table 2

Compiled by Don White  
Updated to April 30, 1987

Carole

U.V.X. VERDE TARGET AREA DRILLHOLE SUMMARY

D.D.H.	Collar location (UVX grid)			Orientation at collar		E.O.H. Inclination	Length of hole	Chert Intercepts	Angle of Intercept to bedding	Remarks	
	N	E	Elev.	Bearing	Inclination						
806-1	11,890	7,335	4,335	533.5 W	-4°	-12°	633	84-108 481-615	60°	Drilled Jan, 1986	
M-1	Morgan D.D.S. 11,565 7,060 4,177			S60°W (fence 5)	+42°	+45°	262	70-247	60°	Intercept 100' NW of 806-1	
M-2					+60°	+60°	226	76-85 109-205	90°	Up-dip from M-1	
M-3				+20°	Not Surveyed	233	131-233+	45°	Aborted at void 233-240		
M-4				S2°E (fence 3)	+50°	+48°	295	100-280	30°	Far up-dip from M-3	
M-5					+10°	Not Surveyed	198	164-198+	45°	Down-dip from M-3	
M-6					+30°	"	195	148-195+	45°	Little up-dip from M-3	
M-7				_____	S60°W (fence 5)	+25°	"	129	84-114	60°	Beneath M-1
M-8				_____	S30°W (fence 4)	+25°	"	187	74-187+	60°	Between M-1 and M-3
M-9				_____	S15°W	+20°	"	183	83-183+	50°	NW of M-3
M-10				_____	S17°E	+23°	"	278	None	Deflected	SE of M-3
M-11				_____	S7°E	+25°	"				

Table 1  
 Compiled by Don White  
 Updated to April 30, 1987

Don White  
521 East Willis St.  
Prescott, AZ 86301

April 29, 1987

Paul A. Handverger  
VERDE EXPLORATION, LTD.  
2160 Old Jerome Hwy.  
Clarkdale, AZ 86324

Dear Paul,

Accompanying are copies of the various items we discussed in person yesterday, including:

- 1) Drill hole logs for all UVX "Verde area" drilling to date, holes 806-1 and M-1 thru M-10. M-11 is now drilling and is likely to be the last hole from the Morgan D.D.S.
- 2) Histograms of precious metal assays and ratios in M-3 and M-6.
- 3) Plan and section for the next proposed drill hole from the 809 D.D.S. on the 800-level.
- 4) Summary tables 1 and 2 of drill hole statistics and mineralized intercepts.

Here's hoping you have a fruitful season in Alaska.

Regards,



Don White  
Geologist, C.P.G.

DW:sk

Enclosures

cc: Carole A. O'Brien ✓

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

April 29, 1987

William A. Rehrig  
APPLIED GEOLOGIC STUDIES, INC.  
2875 West Oxford, #3  
Englewood, CO 80110

Robert Kerrich  
Dept. of Geological Sciences  
UNIV. OF SASKATCHEWAN  
Saskatoon, Saskatchewan  
Canada S7N 0W0

Dear Bill and Rob,

I sure appreciated the chance to show you both around the Vulture Mine last week and in so doing glean your views on the genesis, structure, and age.

I hope you'll stand by your promise to share results of the various studies you mentioned performing on Vulture samples for your own account. Items of possible use to us that were talked about included:

- a) Oxygen studies to match mineralized quartz veins in the mine to quartz porphyroblasts in the stock.
- b) Fluid inclusion studies.
- c) Thin section/petrographic study on the Vulture stock and perhaps on the mineralized veins.
- d) Whole rock/chemical study of Vulture stock.

If you are willing to share such results, we will be happy to let you know the results of our radiometric age dating now in progress. Those results may be several weeks away yet, since the samples were just posted the day we met at the Vulture.

I appreciate the chance to meet you each and look forward to our exchange of information in the future.

Best Regards,



Don White  
Geologist, C.P.G.

DW:sk

cc: Carole A. O'Brien ✓



# M-9/10 Driller's Rept. Summary

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<u>Date</u>	<u>Feet in shift</u>	<u>± Footage</u>	<u>Client Hours</u>	<u>+</u> <u>Explanation</u>	<u>Remarks</u>
<u>M-9</u> 4-14 Nite	9	9	2	Moving to M-9	
4-15 Day	35	44			
N	30	74			
4-16 D	15	89			
N	12	101			
4-20 D	22	123			
N	18	141			
4-21 D	8	149	3	Placing casing	Reduced to NQ at 147'
N	15	164			
4-22 D	19	183 (Eq.H.)			
N	—	—	1	Pulling casing	

10 shifts + 6 hours  
18.3 ft/shift

## M-10

4-22 N	8	8	5	Moving + setting	Commenced hole <u>NQ</u>
4-23 D	37	45			
N	55	100			
4-24 D	60	160			
N	48	208			
4-27 D	13	221			
N	44	265			
4-28 D	13	278 (Eq.H.)			

Hole aborted at 278' because of deflection of chert contacts at very oblique angle.

8 shifts and 5 hours  
34.8 ft/shift

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 9, 1987

To: Anthony F. Budge

Subject: Cost/Revenue Comparison between shipping UVX ore to  
Smelter and treating it CIP at Vulture

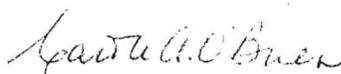
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The attached sheet shows a general cost comparison between shipping the UVX ore to a smelter, e.g. Inspiration at Claypool, Arizona, and treating the ore at the CIP plant at the Vulture.

The figures for Net Profit clearly indicate that it would be more profitable to send to the smelter.

However, the following considerations should be noted:

1. No processing plant would need to be constructed either underground or on surface at UVX, if the ore went to the Vulture.
2. Material containing any amounts of iron could be shipped to the Vulture for treatment.
3. Smelters invariably settle up to 90 days following delivery. Some will settle on a metal price at the time of delivery; others may settle on a price "published in Metals Week for the second calendar month following the calendar month product is received". (Quote from Inspiration contract).
4. Settlement for dore shipments are at least 90% on delivery, with the balance in 30 days.
5. The smelter may deny acceptance of our shipments in favor of more regular, long term suppliers.

  
Carole A. O'Brien

Assumptions: \$400.00/ounce gold  
 \$ 5.50/ounce silver

135 miles from Jerome to the Vulture  
 210 miles from Jerome to Claypool Smelter

Smelter will pay:  
 gold - 85% less \$4.00/ounce  
 silver - 85% less \$0.35/ounce  
 silica - \$7.50/ton plus \$0.50/unit  
 (unit = 1% above 75%)

Transportation: 10¢ per ton mile  
 plus 10%

Recovery in C.I.P.:  
 85% gold  
 85% silver

UVX ore grade:  
 0.25 oz/ton gold  
 1.75 oz/ton silver  
 (90% silica)

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UVX Ore Shipped to Smelter in Claypool

UVX Ore Treated (C.I.P.) at Vulture

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Mining	\$ 40.00/ton
Transportation	\$ 23.00/ton
Crushing	\$ 2.00/ton
	<hr/>
	\$ 65.00/ton

Mining	\$ 40.00/ton
Transportation	\$ 15.00/ton
Processing	\$ 9.50/ton
	<hr/>
	\$ 64.50/ton

Revenues:

0.25 x .85 x \$400 - \$4	=	\$ 81.00
1.75 x .85 x \$5.50 - \$.35	=	\$ 7.80
(90 - 75) x 0.50 + 7.50	=	\$ 15.00

0.25 x .85 x \$400	=	\$ 85.00
1.75 x .85 x \$5.50	=	\$ 8.15

---

\$ 103.80/ton

---

\$ 93.15/ton

Operating Profit: \$ 38.80/ton

\$ 28.65/ton

Net Profit based on  
 85% Budge, 15% Verde \$ 32.98/ton

\$ 24.35/ton

**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 12, 1987

To: Anthony F. Budge

Subject: Probable Ore Reserves in the Verde Area of the U.V.X.,  
tested in recent drilling from the Morgan Drill Station

Section III

Block M-4:  $\frac{10'+29'}{2} \times 40' = \frac{780 \text{ sq.ft.}}{12 \text{ cu.ft./t.}} = 65 \text{ t./ft.}$

Block M-6:  $\frac{29'+50'}{2} \times 48' = \frac{1,896 \text{ sq.ft.}}{12 \text{ cu.ft./t.}} = 158 \text{ t./ft.}$

Block M-3:  $\frac{50'+55'}{2} \times 29' = \frac{1,523 \text{ sq.ft.}}{12 \text{ cu.ft./t.}} = 127 \text{ t./ft.}$

Section V

Block M-1:  $\frac{20'+50'}{2} \times 55' = \frac{1,925 \text{ sq.ft.}}{12 \text{ cu.ft./t.}} = 160 \text{ t./ft.}$

Main Zone

			<u>Gold</u>	<u>Silver</u>
Block M-4:	65 t./ft. x 95 ft. =	6,100 t.	0.289 oz/t	2.09 oz/t
Block M-6:	158 t./ft. x 95 ft. =	15,000 t.	0.257 oz/t	6.67 oz/t
Block M-3:	127 t./ft. x 65 ft. =	8,200 t.	0.571 oz/t	20.53 oz/t
Block M-1:	160 t./ft. x 95 ft. =	15,200 t.	0.168 oz/t	1.24 oz/t
	<u>Totals &amp;</u>	44,500 t.	0.289 oz/t	6.74 oz/t
	<u>Averages</u>			

12,800 ounces gold  
290,000 ounces silver

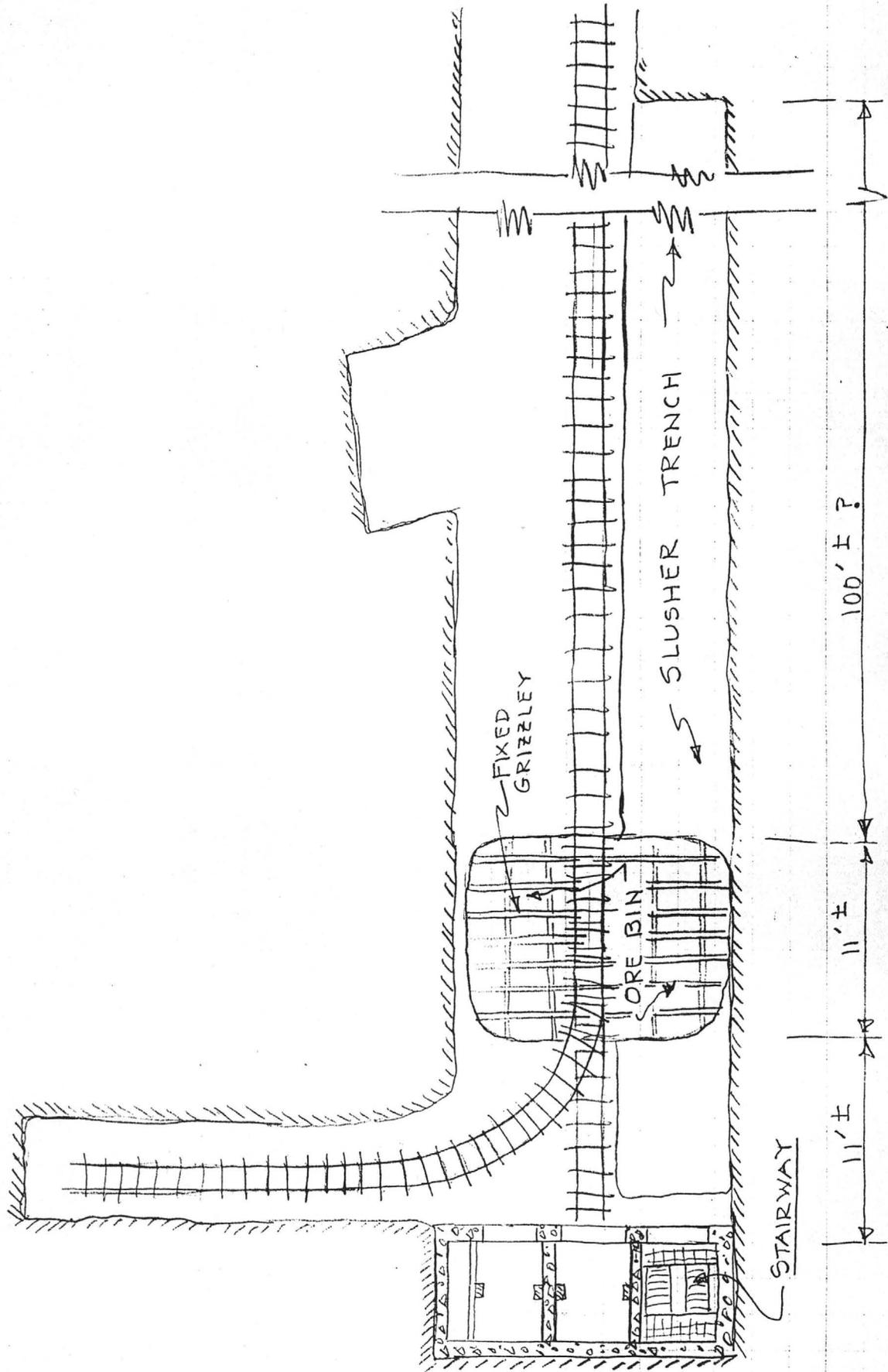
Auxiliary Zone (Separate??)

$\frac{115 \text{ ft.} \times 12 \text{ ft.} \times 30 \text{ ft.}}{12 \text{ cu.ft./t/}} = 3,450 \text{ t.}$       0.152 oz/t    2.48 oz/t

500 ounces gold  
8,500 ounces silver

UVX Drilling Summary

Hole No.	From	To	Width (ft)	Gold oz/t	Silver oz/t	Value		With	(ft)	From	To	Gold oz/t	Silver oz/t	Value	
						@ \$350 gold \$6 silver								@ \$350 gold \$6 silver	
UVX-1 (P-D)	165	260	95	0.072	0.59	\$28.74		20	240	260	0.196	1.54	\$77.84		
UVX-2 (P-D)	170	303	133	0.073	0.25	\$27.05		35	268	303	0.177	0.39	\$64.29		
1983	482	516	34	0.063	2.14	\$34.89									
	615	647	32	0.093	0.52	\$35.67									
1104-1 (Budge)	193	285	92	0.055	0.43	\$21.83		15	240	255	0.112	0.53	\$42.38		
1104-2 (Budge)	209	252	43	0.082	0.49	\$31.64		14	238	252	0.144	0.38	\$52.68		
1985	326	334	8	0.065	0.83	\$27.73									
	572	587	15	0.042	1.26	\$22.26									
	598	610	12	0.091	0.77	\$36.47									
1104-3 (Budge)	227	276	49	0.087	0.30	\$32.25		9	227	236	0.143	0.32	\$51.97		
901-1	332	358	26	0.058	1.39	\$28.64		6	335	341	0.145	0.65	\$54.65		
901-3	300	326	26	0.081	2.08	\$40.82		7	314	321	0.183	3.13	\$82.81		
806-1 (Budge)	504	578	74	0.102	1.28	\$43.38		13	514	527	0.236	2.24	\$96.04		
1986								10	568	578	0.177	0.88	\$67.23		
			Width (ft)	Gold oz/t	Silver oz/t		Width (ft)			Gold oz/t	Silver oz/t				
Weighted average of 10 zones; widths over 20 ft.			51.2	0.078	0.77	\$32.07	Weighted average of 9 zones			14.3	0.171	0.96	\$65.71		



SLUSHER TRENCH

$$= \left( 6 \times 4' \times 100' \times 100 \# / ft^3 \right) \div 2,000 \# / Ton = 120 TON$$

U.V.X. VERDE TARGET AREA DRILLHOLE SUMMARY

D.D.H.	Collar location (UVX grid)			Orientation at collar		E.O.H. Inclination	Length of hole	Chert Intercepts	Angle of Intercept to bedding	Remarks
	N	E	Elev.	Bearing	Inclination					
806-1	11,890	7,335	4,335	533.5 W	-4°	-12°	633	84-108 481-615	60°	Drilled Jan, 1986
M-1	Morgan D.D.S. 11,565 7,060 4,177			S60°W (fence 5)	+42°	+45°	262	70-247	60°	Intercept 100' NW of 806-1
M-2					+60°	+60°	226	76-85 109-205	90°	Up-dip from M-1
M-3				+20°	Not Surveyed	233	131-233+	45°	Aborted at void 233-240	
M-4				S2°E (fence 3)	+50°	+48°	295	100-280	30°	Far up-dip from M-3
M-5				+10°	Not Surveyed	198	164-198+	45°	Down-dip from M-3	
M-6				+30°	"	195	148-195+	45°	Little up-dip from M-3	
M-7				S60°W (fence 5)	+25°	"	129	84-114	60°	Beneath M-1
M-8				S30°W (fence 4)	+25°	"	187	74-187+	60°	Between M-1 and M-3
M-9		S15°W	+20°	Now drilling		83-	NW of M-3			
M-10		S15°E	+20°	Next hole planned			SE of M-3			

Table 1  
Compiled by Don White  
Updated to April 21, 1987

U.V.X. VERDE TARGET AREA DRILLING/ASSAY SUMMARY

Drill Fence	D.D.H.	Initial inclination of hole	Ratio of true thickness to drill intercept	Drill intercept (feet)	High grade intercepts			Low grade intercepts			
					True thickness (feet)	Grade (oz/t) Au	Ag	Drill intercept (feet)	True thickness (feet)	Grade (oz/t) Au	Ag
	806-1	-4°	.87	514-527 568-578	11 9	.24 .18	2.2 0.9	504-594	78	.09	1.4
Fence 5	M-1	+42°	.87	122-138	14	.24	1.5	122-176	47	.17	1.1
Morgan DDS				157-176	16	.23	1.6				
	M-2	+60°	1.00	124-136	12	.16	1.5	118-150	32	.10	1.4
	M-3	+20°	.70	151-185	24	.88	32.5 ←	146-233+	61+	.41	14.6
Fence 3	M-4	+50°	.50	107-130	12	.14	3.4	107-235	64	.09	1.8
Morgan DDS				190-203	7	.29	2.1				
	M-5	+10°	.70	None	--	--	--	None	--	--	--
	M-6	+30°	.70	158-178	14	.40	5.2	148-195+	33+	.26	6.7
Fence 5	M-7	+25°	.87	None	--	--	--	None	--	--	--
Fence 4	M-8	+40°	.87	90-94	4	.22	3.7	90-120	26	.12	1.1
				107-118	10	.17	0.6				
S15°W	M-9	+20°									
S15°E	M-10	+20°									

Table 2

Compiled by Don White  
Updated to April 21, 1987

M E M O

TO: Carole A. O'Brien, cc: A.F. Budge, H. King  
FROM: Don White  
DATE: May 3, 1987  
SUBJECT: Metallurgical samples for Phelps Dodge and Magma Copper Corporations

In response to your request last week I have assembled a sample for each Phelps Dodge and Magma to study for flux suitability at their smelters. The two samples were personally taken by Howard King on Friday, May 1, when he was at the U.V.X., for his delivery to P.D. and Magma representatives.

Each of the samples is a box of twelve (12) bagged coarse rejects from assayed core. Each of the aggregated samples amounts to twenty-one (21) pounds of sample. Both samples are visually expected to be excellent flux quality (>90% SiO<sub>2</sub>; negligible Fe, Al<sub>2</sub>O<sub>3</sub>, As, Hg, or other contaminants).

One sample is the rejects from our entire high grade intercept from Morgan D.D.H. M-9. It represents the likely mineable interval of 27 ft. (~21 ft. true) at .30 oz/t Au, 1.9 oz/t Ag but the available rejects will average .23 oz/t Au, 2.0 oz/t Ag as detailed on the attached tabulation.

The other sample represents a three-part, discontinuous zone of mineralization intercepted in Morgan D.D.H. M-8. Hence it is not realistically a mineable continuum. However, it does meet the smelters needs for a minimum 20-pound sample representing the chemical characteristics of what we hope to produce. In aggregate, the M-8 sample represents 26 ft. (~23 ft. true) at .16 oz/t Au, 1.2 oz/t Ag but the available rejects will average .15 oz/t Au, 1.5 oz/t Ag.

If P.D. is our favored buyer at the moment, I suggest the more auriferous and better representative M-9 sample be provided them and the M-8 sample to Magma.

DW:sk

# M-9 Intercept for Metallurgical Study

Bag Sequence (Number)	Footage (Core interval)	Feet (Represented)	Pounds (of coarse rejects)	Assays (oz/t)	
				Au	Ag
1	104-107	3	4.0	.203	3.12
2	107-109	2	1.8	.335	1.67
3	109-111	2	1.0	.305	2.03
4	111-113	2	1.8	.614	1.59
5	113-115	2	0.5	.241	1.58
6	115-119*	4	3.8	.184	1.18
7	119-121	2	0.9	.181	1.26
8	121-123	2	2.0	.148	1.72
9	123-125	2	1.6	.156	2.28
10	125-127	2	0.9	.158	2.26
11	127-129	2	1.4	.155	1.89
12	129-131	2	1.3	.124	1.99

27 feet  
(~21' true)  
at .30% Au  
1.9% Ag  
if assays  
averaged with  
weighting by  
footage

TOTALS 12 Samples

27  
feet sampled

21.0  
pounds  
of rejects

.23% Au    2.0% Ag

Average grade of  
coarse rejects  
(ie., intervals weighted by mass)

\* 115-119 interval had only 20% core return and no remaining coarse rejects; therefore the 114-119 sludge sample was used in its place. Corresponding assays are those for the sludge sample.

UVX Project  
Don White  
May 3, 1987

# M-8 Intercept for Metallurgical Study

Bag sequence (Number)	Footage (core interval)	Feet (Represented)	Pounds (of coarse rejects)	Average	
				Au ( $\frac{oz}{t}$ )	Ag
1	90-92	2	2.7	.186	4.26
2	92-94	2	2.5	.261	3.05
3	94-96	2	2.0	.043	1.15
4	96-98	2	2.0	.085	1.07
— Gap —	98-105	7	—	Lean grades	
5	105-107	2	3.0	.062	.64
6	107-110	3	1.4	.108	.82
7	110-112	2	1.4	.124	.22
8	112-114	2	1.5	.187	.54
9	114-116	2	0.8	.250	.74
10	116-118	2	1.0	.235	.46
11	118-120	2	0.7	.078	.55
— Gap —	120-141	21	—	Lean grades	
12	141-144	3	2.0	.263	1.44

26 ft  
(~23 true)  
at .16% Au  
1.2 % Ag  
if assays  
averaged with  
weighting by  
footage.

TOTALS 12 samples

26  
feet sampled

21.0  
pounds of  
rejects

.15 % Au 1.5 % Ag

Average grade of  
aggregated coarse rejects  
(i.e., intervals weighted by mass)

UVX Project  
Don White  
May 3, 1987

DERRY, MICHENER, BOOTH & WAHL, INC.

MEMO TO: CAROLE A. O'BRIEN  
FROM: M. JANECK  
RE: MINING COSTS AT UNITED VERDE EXTENSION FOR BUDGE MINING,  
LTD., JEROME, ARIZONA  
DATE: OCTOBER 2, 1987

On Monday, September 21, 1987 I was commissioned by Derry, Michener, Booth & Wahl, Inc. to examine the underground workings of the United Verde Extension Mine, hereafter referred to as UVX. The purpose of the visit was to estimate from available data approximate mining costs and to observe the competency of the different rock types underground.

The property is located about 95 miles north of Phoenix, Arizona at the old Copper Camp of Jerome, Arizona.

The primary source of data for this report has been Don White, Geologist of Budge Mining, and the memorandum to Carole A. O'Brien, Coordinator/Geologist of Budge Mining, by R. W. Hodder and D. C. White, dated September 3, 1987. The data from Mr. White was in the form of cross sections drawn from the results of an approximately 18 hole diamond drilling program which is still going on.

During the morning of September 23rd sections and a model of the ore bodies were examined and during the afternoon the 950 and 800 levels of the Edith shaft were examined. Mr. White accompanied me on the tour of the underground workings.

The data from which the ore blocks have been worked up consist entirely of diamond drill core. No mine workings are in ore grade material. Reserves are considered as drill indicated. Tonnages for the various areas will be used in this report as given and no attempt will be made to comment on grade, dilution, or tonnage calculation. Total potential of 468,000 tons of 0.22 ounces of gold per ton equivalent is given in Table 2 of the September 3rd memo, whereas Table 3 of this same memo lists 532,000 tons of 0.21 ounces gold per ton equivalent. Rather than resolve this discrepancy I will use the figure of 500,000 tons with 0.21 ounces gold per ton equivalent in this report.

The term equivalent refers to converting the inherent silver value in U.S. dollars to what that value would be worth in gold at prevailing prices. As an example at \$450/Troy ounce gold and \$7.50 per Troy ounce silver, one ounce of silver would equal .0167 Troy ounces of gold. Tons are in the standard U.S. ton of 2,000 pounds.

It appears at the present stage of knowledge that up to four types of material may be produced

- 20 - High gold, high silica, less than 5% iron, no copper
- Low gold, high silica, less than 5% iron, no copper
- High gold, low silica, high iron, no copper
- 10 - Low gold, low silica, high iron, with copper (looking ahead)

and, since this material may go to different markets, as much separation between the different classes of material as possible is desirable. Since some of the material is in close proximity, a mining method that is at least semi-selective should be chosen for those areas. The method should be as mechanized as possible with a minimum of physical labor involved in ground support, drilling, and so forth. This factor would rule out the timber support methods such as square setting and Mitchell slicing which are labor intensive and drive costs too high.

In previous operations when massive sulfides were mined underground fires were a constant hazard. Because of the high sulfide content of the ore fires could start from ore in chutes or the friction from crushing pillars, so any mining method which involves the above conditions should be avoided. This isn't so much a concern with the class of areas discovered to date, but if exploration should turn up massive sulfides in the future, fires could be a factor.

The rock appears to stand well where the workings are in silica, or silica altered rocks, and I believe the stopes can be opened up to widths of 15 to 30 feet. The development openings should be kept out of the propylitically and argillically altered diorite whenever possible. These rocks have a tendency to spall and could be dangerous if attempts are made to open them up too much. The drill station at approximately 11,380 N; 7,200 E on the 950 level reflects this altered type of rock.

Some of the ore bodies in the vicinity of 11,600 N; 6,900 E are rather flat so that a stoping method which is not only selective, but follows the ore as it rises in elevation is required.

Considering the preceding facts, I propose that the most economical means of mining would be to use three methods.

1. Where selectivity is needed and the bodies lie rather flat, a mechanized cut and fill using stope jumbos and Load-Haul dumps. This method would lend itself to ground that would fail if opened up too large. Cemented tailings for fill will provide ground support in areas of weak ground. To use the cut and

cemented fill method would require access to tailings either produced on the property or brought in. I am assuming these can be obtained within ten miles of the property.

2. Where ground is firm and great selectivity isn't desired, blast hole stoping would be the recommended method. These stopes would be 8 feet and wider to enable rubber tired equipment to work. This is the least costly mining method.

3. Shrinkage stoping, while the most costly method and most labor intensive, is recommended in areas where the ore is narrow (less than 8 feet). Shrinkage has the further disadvantage that it ties up about 70% of the broken ore until the stope is completed. The advantage of this method is it enables recovery of narrow ore bodies at a moderate cost.

If these three methods are used I estimate that the following tonnages would be produced:

Cut & Fill	250,000 tons
Blast Hole Stopping	175,000 tons
Shrinkage	75,000 tons

The mining costs for each method I estimate as follows:

Cut & Fill	\$22 to \$27 per ton
Blast Hole Stopping	\$18 to \$23 per ton
Shrinkage	\$43 to \$50 per ton

The above costs refer to stoping costs only and do not include development, general administration, or capital cost of an adequate mining plant. The Cut & Fill and Blast Hole methods, while enjoying lower stoping costs, do involve additional capital costs as compared to shrinkage stoping.

The above tonnages and costs are based on an ore production rate of 100,000 tons per year, which would mine out reserves in five years. This is a short mine life over which to write off both a processing plant and an enlarged mining plant. To mine the above tonnage would require a mining plant capable of about 375 tons per day of ore and about 75 tons per day of waste.

The present plant has a capacity of between 30 and 50 tons per 24 hour operating day. This is inadequate for the contemplated tonnage.

To achieve the above costs a professional staff, experienced and dedicated to the above methods, should be in place. The staff should be balanced as to experience and education.

*Milroy "Mel" Janock*  
*Engineer of Mines*

**DERRY, MICHENER, BOOTH & WAHL**  
(DMBW, INC.)

- 13949 W. Colfax Ave., Suite 110
- Golden, Colorado 80401
- Telephone: (303) 233-8786
- Telex: 450349
- Telecopier: (303) 232-2586

MINING AND GEOLOGICAL CONSULTANTS  
June 4, 1987

**DMEA LTD.**

**JUN 8 1987**

**RECEIVED**

Ms. Carole A. O'Brien  
A.F. Budge Limited  
7340 E. Shoeman Lane, Suite 111 "B" (E)  
Scottsdale, AZ 85251

Dear Ms. O'Brien:

RE: Budge/Jerome Project

On Wednesday, June 3, accompanied by Don White, I visited the Budge operation at Jerome, Arizona. The morning was devoted to review of plans, sections, assay results, and drill core. After lunch we toured the 800 and 950 levels off of the Edith Shaft.

I was favorably impressed with the quality and degree of geological control, of the core logging, and presentation of data. Nonetheless, I was pleased to hear that Mr. White has begun preparation of a proper set of cross sections to augment the present sections drawn along the axis of various drill holes. There is also need for an enlarged longitudinal section to allow plotting of the present 800 level drilling on the same plate as the Morgan station holes. Mr. White had prepared an "inclined section" which can be a most useful presentation. I am unsure, now, whether he has corrected for the slope distance between holes. Similarly, his longitudinal section may need hinge lines to properly represent the data. Lastly, as discussed with White, a composite plan should be drawn showing the ore body (M3) outline at 25' level intervals.

The present program calls for drilling holes from the 800 level to cut the upplunge extension of the M3 ore. A drive on the 950 will crosscut into and raise on the M3 ore. One word of caution. The M3 hole is of an anomalously high grade. The values occur in a porous grit. The hole is positioned just below and in the wall of an old "silica" stope. It is possible that the exceptional values in M3 represent a "salting", or pseudo-placer deriving a portion of its value from fine flour gold that settled into the ground underlying the old stope area. Reducing hole M3 to the values of other holes in this zone would still yield a respectable 0.25 oz. Au/ton grade over 15-20 feet, but is less than the .4 or more grade were M3 to be taken at face value.

Which brings me to my main concern. Why is all of your interest centered on the M3 zone and, more specifically, on the high

*Highly unlikely.*

grade-high silica core of the zone? This target is limited in size and circumscribed by stringent quality specifications, if it is to be sold as a flux.

The M3 zone appears to average about 20' wide, 100' long, and can be traced from about the 950 to below the 600, say 300' vertical height. The bulk of the material is light so a factor of 16 cft. may be appropriate. In all, the zone has a potential of about 36,000 tons. With high mining costs, a modest profit of about \$30/ton can be forecast. This yields a total "profit" of about \$1,080,000. Say 1 million dollars. Considering the past expenditures and the probable cost of additional development, this seems rather thin. Add to this the fact that no assurance can be given that the grade will hold, or that the specifications for flux can be met.

A more interesting target to my eye is the lower grade envelope about the high grade core of M3. The entire zone would be about 55' thick and up to 200' long. Grade is lower. Probably on the order of 0.15 to 0.20 oz. Au/ton, but much more assured. Mining cost per ton of the larger zone would be one half to two thirds of that for the smaller area. Potential profit would be greater. The problem is that at present no processing facilities exist to treat the ore.

The tonnage in even an enlarged M3 zone is insufficient to justify a mill, or even an agitation vat leach. Current activities elsewhere in central Arizona suggest that custom milling may soon be available. Developments at the Vulture operation may provide a processing route.

The processing problem then may not be insurmountable. Therefore, I return to my question of why emphasize the flux-grade gold ore?

I suggest that you gather your staff and compile a series of possible scenarios as to target, potential, probability, and profit, and adjust your program to emphasize the target best suited to your corporate goals. Your goals themselves should be scrutinized. Possible joint partnerships should be considered vis a vis production scenarios.

I would suggest the following as possible targets:

- high grade gold suitable for flux
- high grade gold not suitable for flux
- lower grade gold custom milled
- lower grade gold vat leached
- lower grade gold milled and leached

Projections of the probable grade and tonnage available for each category and of the "blue-sky" potential in each category can be made. Enough is known about the ore distribution at Jerome that it is safe to say that no more than say 100,000 tons of high grade flux ore can be projected. Similar projections can be made for other categories.

Recovery rates can be approximated.

Costs to explore, develop, and mine can be estimated.

Probabilities of success can be assigned.

With these parameters in place, potential profits can be forecast along with probability or risk factors.

A program to develop the mine can then be intelligently laid out.

Perusal of the mine plans indicate that past mining and exploration has been efficiently and thoroughly carried out. You are left essentially with a "salvage" operation. This can be lucrative, but must be directed carefully. On the basis of a very brief review I would presume to offer the opinion that the present program is not the optimum, but has evolved without the benefit of critical review. As an example I cite the proposed offsetting of hole #2 of the current 800 level program. Offsetting this upward extension of the M3 ore will not offer any significant increase in grade, or tonnage, or assurance of the ore outline. In fact, it could detract from the "saleability" of the zone. I would not drill an offset to this hole at this time.

I would not end on this essentially pessimistic note. Let me add that there is an unquantifiable potential that this may be more than a "salvage" operation. This potential, if it exists, will lie in new ore zones removed from the present workings.

Finding of such as yet undiscovered ore deposits will result from extending knowledge gained in and during mining of the "salvage" ore. Just how great this potential is I cannot predict. I do not believe such bodies will be found by "wildcatting". If they do exist they will be found by imaginative extension of controls and trends indicated in the main parts of the mine.

I was asked to visit your operation to offer comments and an overview and to suggest ways by which I could possibly assist you in developing the mine for production.

The preceding pages offer my comments and overview for your consideration. Mr. White is doing an excellent job at compiling, presenting and interpreting the geology. There is little assistance I can effectively offer here.

The day to day direction resulting from discussions between yourself and Mr. White preclude any need for any services at this level.

The area which I believe needs immediate attention, as I have discussed earlier is in overall aims, objectives, and priorities. I believe that these can be best determined by round table discussions between yourself, Mr. White, your engineer, etc., possibly with input from your client or principal. If I can be of any useful service it would be in this area. I could assist you in organizing, or even by participating in this "brainstorming" session. I could also confer with you on a periodic (say quarterly) basis to review and adjust goals and objectives, or on an irregular as needed basis.

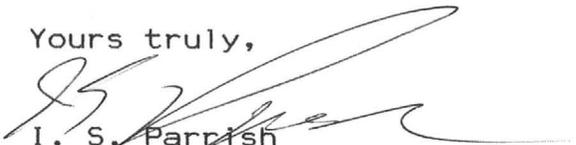
DMBW and I act in similar roles for various other clients such as Stan West Mining (McCabe Mine), Campbell Red Lake (Detour Lake Mine), NSR (Rand Malartic project), and others. A fee schedule is attached for your files.

Should I be out of the country, Mr. Brian Hester would be available until my return. We also offer engineering services - Charles Pitcher of our Toronto Office has consulted for many years in the area of mining engineering and Mr. Bill Cohan of Grand Junction, Colorado also works through our office as an associate. Resumes and summaries of experience of these people are appended to this letter.

In short, should you wish to have DMBW assist you, we can offer qualified senior experienced professionals on a daily or short term basis. We recognize, however, that you have a qualified staff of your own and may not need any additional expertise.

I thank you for the opportunity to have visited the Jerome operation. An invoice for my time and expenses is attached. I enjoyed meeting with you and wish you the best of success.

Yours truly,



I. S. Parrish  
CPGS #4612, FGAC #F1662

cc: D. White

Encls: Fee Schedule, Resumes, Invoice



**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

FAX: (602) 949-1737

March 29, 1988

James H. Lundy, Jr.  
Senior Process Engineer  
Inspiration Mines Inc.

Via: Telecopier to (602) 473-7055

Dear Mr. Lundy:

Would you kindly furnish me with the following information in regards to shipment of siliceous fluxing ore from our property at Jerome, Arizona.

- 1) Who do I contact in regards to a "test" shipment?
- 2) We have approximately 100 tons stockpiled now. How much would we need to ship to determine its suitability for flux?
- 3) How much notice do you require prior to shipment?
- 4) If Inspiration is unable to accept this test shipment, could you recommend another buyer/recipient.

Sincerely,

*Carole A. O'Brien*

Carole A. O'Brien  
Mining Coordinator



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

(602) 945-4630  
FAX (602) 949-1737

February 17, 1989

Steve Kay  
GD Resources Inc.  
450 E. Glendale Avenue  
Sparks, NV 89431

Dear Steve:

Enclosed is our sample from Phelps Dodge, cut from 300 tons of flux we sent to the Hidalgo smelter last week.

We have to exchange assays with them.

Would you please run this sample for gold, silver, FeO and SiO<sub>2</sub>.

We would appreciate the results as quickly as possible.

Please call me if you have any problems or questions concerning this sample.

Thank you.

Sincerely,

Carole A. O'Brien

encl.



**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 10, 1988

Paul A. Handverger  
2160 Old Jerome Highway  
Clarkdale, AZ 86324

Dear Paul:

As promised, I enclose a copy of latest metallurgical report on UVX material, plus disc prepared on Lotus 1-2-3 with assays from the various stations, i.e. UVX902, UVX 911, etc., and Summary.

Will get those financials to you as soon as I can put them together and have them approved in England.

Best regards.

Sincerely,

Carole A. O'Brien

encls.

Month	Area mined	Tons hoisted	Grade opt gold	opt silver	Approximate Value of Production
September	809	776	0.139	1.19	not shipped
October	809/907	749	0.134	3.38	not shipped
November	907/902	1,354	0.129	5.41	\$56,000.00
December	902	1,250	0.336	7.99	\$209,000.00
January	902	1,296	0.336	7.99	\$209,000.00
February	902	1,974	0.336	7.99	\$213,000.00
March	902	1,184	0.336	7.99	\$205,000.00
April	902	2,158	0.229	2.64	\$170,000.00
May	902	2,822	0.411	10.81	\$417,000.00
June	902	2,578	0.512	16.39	\$553,000.00
July	902	216	0.372	5.28	\$29,800.00
	900	1,071	0.603	1.34	\$312,000.00
August	900	1,932	0.408	1.11	\$195,000.00
September	900	1,961	0.284	1.51	\$153,000.00
October	900	2,966	0.302	1.21	\$287,000.00
November	900	278	0.228	1.15	\$16,000.00
December	900	944	0.211	0.93	\$85,000.00
		23,984 wet tons	0.355	6.14	\$3,109,800.00
Actual smelter receipts		21,469 dry tons	0.384	5.32	\$3,129,173.89

MINING  
EXPLORATION  
ENGINEERING

FRED M. JOHNSON, C.P.G.  
GEOLOGIST  
P.O. BOX 2162  
DURANGO, COLORADO 81302

OFFICE 303 247-0118  
RESIDENCE 247-3560

October 18, 1988

Carol O'Brien  
A.F. Budge Mining, Ltd.  
7340 E. Shoeman Lane  
#111 B East  
Scottsdale, AZ 85251-3335

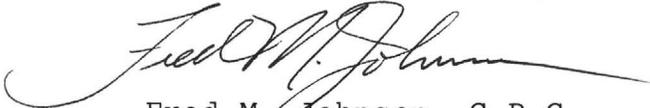
Re. United Verde Extension Mine, Arizona

Dear Ms. O'Brien:

Ken Phillips of the Arizona Department of Mines suggested I contact you because of my experience with both exploration and production geology related to massive sulphide and gold deposits of Yavapai County, Arizona. I have worked at the Iron King as Mine Geologist both in production and exploration of massive sulphide, base metal deposits and gold bearing quartz zones along the noses of recumbent folds. I have consulted for both Ranchers Exploration and Santa Fe Minerals on the deposits of Yavapai County.

I believe that I can offer an invaluable service in exploration and production to A.F. Budge Mining, Ltd., including geological staff organization and grade control. I would be happy to discuss a consulting proposal with you, or a member of your staff, at your convenience. I am enclosing a copy of my resume and a partial list of clients for your file.

Sincerely,



Fred M. Johnson, C.P.G.

FMJ/tj  
encl.

RESUME

of

FRED MAYNARD JOHNSON

Certified Professional Geologist

Registered Professional Geologist

Business Address: P.O. Box 2162, Durango, CO 81301  
(303) 247-0118

Home Address: 2711 New Mexico Ave., Durango, CO 81301  
(303) 247-3560

Date of birth: April 14, 1939

Place of birth: Abilene, Texas, U.S.A.

Health: Excellent

Married, two children

EDUCATION

University of Texas at El Paso (Texas Western College), El Paso, Texas. Bachelor's Degree in Geology received June 2, 1962.

LANGUAGES

Fluent Spanish, some German and Italian.  
Current passport.

PROFESSIONAL  
MEMBERSHIPS &  
REGISTRATION

Member, American Institute of Professional Geologists (Certificate Number 2718), Four Corners Geological Society, Society of Mining Engineers of A.I.M.E. Registered Professional Geologist, Arizona, Registration Number 13699, Registered Professional Geologist, Delaware, Registration Number 245.

EXPERIENCE

1971 to date

Consulting Geologist, offering services in mining geology, minerals exploration, hydrogeology and engineering geology. Mining and

EXPERIENCE (continued)

- exploration experience in base and precious metals, uranium, coal and industrial minerals. Specific experience in exploration project management, mine rehabilitation and development supervision. Clients include mining companies, federal and local government agencies, and engineering and geological consultants. Projects in the U.S.A., Mexico and Canada.
- 1975 Spring      Instructor of Geology, Fort Lewis College, Durango, Colorado, temporary.
- 1972 to 1973      Vice President and General Manager, Continental Resources and Development Corporation, Silverton, Colorado.
- 1968 to 1971      Chief Geologist, Dixilyn Corporation, Mining Division, Silverton, Colorado. In charge of production geology and exploration in U.S.A., including Alaska, and Bolivia. Exploration and mining experience in base and precious metals, industrial minerals and uranium.
- 1967 to 1968      Mine Geologist, Idarado Mining Company, Ouray, Colorado. In charge of underground production and exploration geology in a 1600 t.p.d., complex base metal sulfide mine.
- 1966 to 1967      Mine Geologist, Iron King Mine, Shattuck Denn Mining Corporation, Humboldt, Arizona. In charge of all underground production and exploration geology in a 1000 t.p.d., volcanic, complex base metal sulfide mine. Other duties included district exploration.
- 1964 to 1966      Exploration Geologist and Geophysicist,

EXPERIENCE (continued)

Heinrichs Geoexploration Company, Tucson, Arizona. Duties included exploration using geology, geochemistry and geophysics (i.p., resistivity, magnetics, s.p., and e.m.), engineering geology (foundation site studies) and groundwater geology. Exploration experience in porphyry copper deposits, base and precious metals and uranium.

1962 to 1964

Commissioned Officer, U.S. Army Corps of Engineers, service in the United States and Germany.

REFERENCES

A list of references and clients will be furnished upon request.

PARTIAL LIST OF CLIENTS

AND REFERENCES

Mining and Minerals:

Ashland Exploration w/R.E. Lauth, C.P.G.  
Behre Dolbear and Company  
Calder and Company (Perma Resources)  
Cotter Corporation (Schwartzwalder Mine)  
Dolores County, Colorado  
Fort Lewis College, Durango, Colorado  
Four Corners Research Institute  
Hecla Mining Company  
Henrietta Mines, Inc.  
Henrietta Mines, Ltd., Canada  
Latch, Billy F., C.P.G.  
Meridian Minerals Company  
Montezuma County, Colorado  
Mountain Gravel and Construction  
National King Coal, Inc.  
Northwest Pipeline Corporation  
Northwood, Ltd., Canada  
Phelps Dodge Corporation  
Ranchers Exploration and Development Corporation  
Santa Fe Minerals Corporation  
Sears Bank and Trust Company  
Shell Oil Company  
Southern Ute Tribe  
U.S.F.S.

Engineering Geology:

Brown Engineering, Inc.  
Burnett Construction, Inc.  
Clark, Reed and Associates  
Ernst Engineering, Inc.  
Four Corners Research Institute  
Goff Engineering, Inc.  
National King Coal, Inc.  
Smith Engineering, Inc.  
Thomas Engineering

References:

David Hogan  
President  
Western Resources  
Suite 205  
10010 Indian School Rd. NE  
Albuquerque, NM 87112

References (Con't.):

Herb Campbell  
President  
Olympic Resources  
P.O. Box 27293  
Albuquerque, NM 87125

Dave Fitch  
Western Exploration Manager  
Hecla Mining Company  
195 N Edison  
Suite 14  
Reno, NV 89502

# Post-graduate theses in Canadian universities on geologic research related to mineral deposits, 1983-1986

COMPILED BY  
Q. GALL AND T. BIRKETT  
Mineral Deposits Research Committee,  
Geology Division, CIM

*11 theses of  
interest to Don White  
for UVX & Vulture  
projects  
Are duplicating  
& Univ. Microfilm center*



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Whenever two people meet there are really six people present.  
There is each man as he sees himself, each man as the other person sees him, and each man as he really is.  
William James

Three references  
& use to  
U.V.X. project  
(in obscure journals)

Author : Fleet, M.E., Barnett, R.L., Morriss, W.A.

Date : 1987

Title : Prograde metamorphism of the Sudbury igneous complex.

Source1 : Can. Mineralogist,

Source2 : Vol. 25, no. 3, September pp. 499-514.

Location : Ontario

Author : Freyssinet, P., Zeegers, H., Tardy, Y.

Date : 1987

Title : Secondary gold in ferricretes, dissolution, migration, precipitation.

Source1 : Comptes Rendus, \*FRE

Source2 : Vol. 305, no. 10, September 30, pp. 867-874.

Location :

Author : Friedman, G.M.

Date : 1987

Title : Deep burial diagenesis: its implications for vertical movements of the crust, uplift of the lithosphere and isostatic uproofing - a review.

Source1 : Sedimentary Geology,

Source2 : Vol. 54, no. 1-2, September pp. 165-

Location :

Author : Geology Today,

Date : 1987

Title : An electrical method for mineral prospecting. A layman's guide to mise a la masse.

Source1 : Geology Today,

Source2 : Vol. 3, no. 6, November-December pp. 210-212.

Location :

Author : Gleason, J.M.

Date : 1987

Title : Faulty random number generators affect benefits of latin hypercube sampling.

Source1 : Geobyte,

Source2 : Vol. 2, no. 4, November pp. 38-41.

Author : Moore, J.C., Byrne, T.

Date : 1987

Title : Thickening of fault zones: a mechanism of melange formation in accreting sediments.

Source1 : Geology,

Source2 : Vol. 15, no. 11, November pp. 1040-1043.

Location :

Author : Mulugeta, G., Koyi, H.

Date : 1987

Title : Three dimensional geometry and kinematics of experimental piggyback thrusting.

Source1 : Geology,

Source2 : Vol. 15, no. 11, November pp. 1052-1056.

Location :

Author : Maldrett, D.L., Lachaine, A., Maldrett, S.N.

Date : 1987

Title : Rare earth elements, thermal history and the colour of natural fluorites.

Source1 : Can. Jour. Earth Sciences,

Source2 : Vol. 24, no. 10, October pp. 2082-2088.

Location :

Author : Narseyev, V.A., Sidorov, A.A.

Date : 1987

Title : Relationship of gold ore deposits to disseminated and massive sulfide ore associations.

Source1 : Doklady Acad. Sci. USSR Earth Sci. Section,

Source2 : Vol. 284, no. 5, July pp. 58-60.

Location : USSR

Author : Nilsson, D.

Date : 1987

Title : Productivity in mining.

Source1 : International Mining,

Source2 : Vol. 4, no. 10, October pp. 38,40-41,43.

Location :



Author : Northern Miner Magazine,

Date : 1987

Title : Annual review.. individual commodities.

Source1 : Northern Miner Magazine,

Source2 : Vol. 2, no. 11, November Au pp. 17-18, Ag p.21, cu p. 25.etc

Location :

Author : Oszczepalski, S.,Rydzewski, A.

Date : 1987

Title : Paleogeography and sedimentary model of the Kuperschiefer in Poland.

Source1 : Zechstein Facies in Europe, Lecture notes in Earth Sciences,

Vol. 10, Springer Verlag,

Source2 : pp. 189-206.

Location : Poland

Author : Ottley, D.J.

Date : 1987

Title : Metalliferous mining in the USA.

Source1 : Mining Magazine,

Source2 : Vol. 157, no. 5, November pp. 396-397.

Location : USA

Author : Ovcharenko, F.D.,Ulbert, Z.R.,Garbara, S.V.,Kogan, B.S.,Pertsov,  
N.V.

Date : 1987

Title : Mechanism of biogenic deposition of authigenic gold inclusions in finely divided sediments.

Source1 : Doklady Acad. Sci. USSR Earth Sci. Section,

Source2 : Vol. 284, no. 5, July pp. 183-186.

Location : USSR

Author : Parsons, R.B.

Date : 1987

Title : A future for flow through?

Source1 : C.I.M. Bull.,

Source2 : Vol. 80, no. 907, November pp. 78-80.

Location :

**Konsult International Inc.**

44 Gemini Road, Willowdale, Ontario, Canada M2K 2G6 (416) 223-7750

March 8, 1988

A.F. Budge (Mining) Limited  
7340 E. Shoeman Lane  
Suite 111 "B" (E)  
Scottsdale Arizona 85251  
USA

Attn: C. O'Brien

Dear Carole:

Please find enclosed a copy of a recent letter received from Don White. I felt it was a good response as I perceived Don to be 'rather' a non-nonsense realistic geologist who would become interested but aware that there would be attributed costs.

As you are aware, I sent off several examples and a covering letter to Don from Phoenix after the AIME and SEG field trip but did not place any subscription costs in the package. We discussed the potential of the service for your group which would cover a copy to Don.

I have sent him the three requests which were generated out of The January Scanning Service.

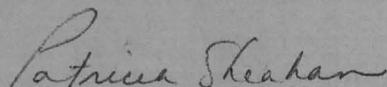
I have taken the liberty of enclosing an invoice for the Scanning Service to you at this time.

The Prospectors and Developers Meeting is on in Toronto and they have the largest delegate registration ever. There was one main session of Flow through Shares with emphasis on trying to pursue their continuation and need. One never knows if there is ever a time in this industry to just be contemplative!

My father has been in the intensive care unit of an Ottawa Hospital and is now in the hospital proper- finally rallying from deteriorating heart disease. I will be driving to Ottawa for three or four days over this coming weekend and hopefully settling him back at home with extended care. Children mature and settle... then it is back to parents... but I think you would welcome the 'problem' having lost your father in such a sad manner.

Take care and I will be happy to hear from you and with hope in a positive mode.

Yours very truly,



Patricia Sheahan

Cost Accounting for UVX Project, Jerome, Arizona

Total project costs to 2-28-86,  
excluding option payment: \$551,262.87

Total footage drilled: 3,517 ft.: end of program

Overall cost per foot: \$156.74

	Total	Cost per ft.	Percent total
Drilling & assays (includes deposit)	\$155,950.08	\$44.34	28.3
Rent on hoist	\$12,000.00	\$3.41	2.2
Insurance	\$5,000.00	\$1.42	0.9
Maps, publications, etc.	\$1,721.28	\$0.49	0.3
Legal	\$9,879.89	\$2.81	1.8
Consultants' fees & expenses	\$45,779.61	\$13.02	8.3
BMI Payroll	\$89,722.21	\$25.51	16.3
Equipment Rentals, Supplies & Contracted Services	\$101,785.04	\$28.94	18.5
T&E & Misc.	\$11,621.55	\$3.30	2.1
BMI Supervision, & Administration	\$50,367.59	\$14.32	9.1
BMI Management Fee	\$35,324.65	\$10.04	6.4
APS (includes deposit)	\$30,349.20	\$8.63	5.5
Mountain Bell	\$1,792.18	\$0.51	0.3
Totals	\$551,293.28		100.0
DMEA Supervision	\$33,075.00	\$10.06	

Project: U.V.X., Jerome, Arizona  
Inception Date: April 1, 1985  
Expenditure Summary

Inception  
to Date

Date: July 31, 1988

Payroll	\$953,833.44
Lease/Option payments	\$70,000.00
Equipment rentals:	
Compressor	\$67,433.08
Other	\$1,074.12
Mobilzation/demobilization	\$8,643.08
Building Rentals (BMI)	\$5,750.00
Equipment Rentals (BMI)	\$26,505.00
Rental on hoist (P-D)	\$18,000.00
Fuel	\$34,296.72
Lubricants	\$2,374.67
Timber	\$38,222.80
Rock Bolts	\$15,216.29
Other ground support items	\$8,307.48
Explosives	\$41,879.48
Drill steel, bits, etc.	\$13,728.57
Pipe, fittings, etc.	\$35,111.19
Rail, bolts, spikes, etc.	\$15,392.20
Cable, fittings, etc.	\$3,998.09
Motors, batteries for mucker	\$2,832.03
Janitorial supplies	\$2,077.21
Safety supplies	\$1,296.23
Welding Supplies	\$5,119.67
Miscellaneous supplies	\$73,663.63
Electrical supplies	\$8,937.86
Ventilation	\$4,747.69
Freight	\$19,451.88
Repairs (equipment)	\$12,236.10
Contract drilling	\$619,897.37
Assays and analyses	\$38,929.67
Metallurgical work/tests	\$4,082.00
Electrical contractors	\$37,130.03
Headframe/ore pocket modifications/fabrications	\$32,415.05
Electrical modifications, compressor installation	\$47,667.31
Contract surveying	\$8,599.51
Rental, surveying equipment	\$343.55
Other contract work	\$20,019.51
Utilities (APS)	\$179,488.50
Utilities (Telephone)	\$8,938.68
State Compensation Fund	\$36,721.29
Group Insurance	\$59,648.76
Other Insurance	\$8,750.00
Taxes	\$6,333.72
Employment physicals	\$5,034.85
Other medical expense	\$181.60
Travel & Expense (BMI)	\$11,268.96
Administration (BMI)	\$13,102.45
Project Management Fee (BMI)	\$39,359.34
Clarkdale office rent	\$400.00

Misc. office supplies/expenses	\$4,694.32
Maps and publications	\$142.00
Vehicle registration	\$494.40
Cash advances/expense reimbursements	\$10,126.35
Recruiting/interviews	\$2,269.24
Relocation expenses	\$2,889.72
Advertising	\$1,717.27
Consultants: (includes fees & expenses)	
Geological	\$173,344.93
Metallurgical	\$865.54
Mining	\$53,676.51
Legal	\$12,737.68
Drilling	\$540.85
Other	\$2,226.47
Equipment purchased:	
Trucks for personnel	\$35,958.03
Surface vehicles	\$3,000.00
Mine cars	\$3,479.00
Mucker/locomotive	\$15,160.00
Mine phones	\$1,540.75
Surveying equipment	\$2,549.50
Drills	\$17,339.00
Office equipment	\$904.90
Hoisting equipment	\$121,100.00
Other	\$8,758.75
BMI Equipment	\$80,000.00
UNC Equipment (cage, skip, fans, etc.)	\$16,100.00
Credit for sale of drifter:	(\$6,548.75)
	\$3,233,507.12

Brooks Minerals Charges  
June 1, 1985 to June 1, 1986

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Payroll	\$88,930.13
Payroll Burden	\$18,619.38
Supervision (Brooks & Brady)	\$41,100.00
Equipment & Building Rentals	\$32,726.29
Supplies	\$43,361.38
Contracted Services	\$15,703.81
Travel & Expense	\$8,716.15
Administration	\$13,102.45
Other & Miscellaneous	\$671.01
Total Direct Cost	\$262,930.60
Management Fee	\$39,359.34
Total	\$302,289.94

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A.F. Budge (Mining) Limited Expenses  
April 1, 1985 to December 31, 1986

Option Payment to Verde	\$50,000.00
Rent to PD on Hoist	\$18,000.00
Hoist Purchase	\$118,000.00
Brooks' Equipment Purchase	\$80,000.00
Other Equipment Purchase	\$32,948.80
Payroll	\$129,599.29
APS (includes deposit)	\$58,802.01
Other Utilities	\$3,444.80
Supplies	\$51,284.25
Contracted Services & Freight	\$8,844.07
Equipment Rental	\$7,200.88
Maps, Blueprints & Miscellaneous	\$5,952.87
1985 Longyear Drilling	\$148,753.51
Assays & Analyses	\$7,897.42
Insurance (includes State Fund)	\$18,751.15
Medical & Physicals	\$2,158.30
John Lacy: Legal Services	\$11,442.37
Don White Fees & Expenses	\$56,124.35
Other Consultants Fees & Expenses	\$12,742.11
Sub-total	\$821,946.18

A.F. BUDGE (MINING) LTD.  
U.V.X. GOLD PROJECT DRILLING SUMMARY

<u>Drill Stations</u>	<u>Number of Holes</u>	<u>Azimuths</u>			<u>Inclinations</u>			<u>Total Footage</u>	<u>Silica Footage</u>
		<u>Min</u>	<u>Max</u>	<u>Range</u>	<u>Min</u>	<u>Max</u>	<u>Range</u>		
1104*	3	243°	243°	0°	-11°	+15°	26°	1,737	600
901	3	220°	245°	25°	-20°	+18°	38°	1,146	88
806	1	213°	213°	0°	-4°	-4°	0°	633	158
Morgan	11	143°	227°	84°	+10°	+60°	50°	2,396	946
809	9	144°	220°	76°	-5°	+33°	38°	2,606	1,190
902	7	167°	246°	79°	+14°	+45°	31°	1,163	776
911	10	125°	250°	125°	-45°	+20°	65°	1,362	1,313
907	5	180°	240°	60°	+20°	+60°	40°	584	473

TOTALS      8 drill stations, 49 holes, 11,627 feet drilled, of which 5,544 feet drilled in silica.

\*Excluding two holes drilled by Phelps Dodge; U.V.X.-1,2.

Compiled by Don White  
Updated to March, 1988

U.V.X. PHASE I DRILLING - DRILLHOLE SUMMARY

D.D.H.	Orientation at collar		Length of Hole (ft)	Silica Intercepts (ft)
	Azimuth	Inclination		
1104-1	243°	+5° (+2° at 300') (+4° at 567')	567	192-331 362-413
1104-2	243°	+15° (+18° at 520') (+21° at 710')	730	209-350 521-642 712-730+
1104-3	243°	-11° (-15° at 420')	440	207-335 420-422
1104 TOTALS			1,737	600
901-1	222°	+11° (+8° at 330')	358	329-358+
901-2	220°	-20°	421	244-249
901-3	245°	+18° (+7° at 350')	367	272-326
901 TOTALS			1,146	88
806-1	213°	-4° (-7° at 250') (-9° at 400') (-12° at 500',600')	633	84-108 481-615
PHASE I TOTALS	3 drill stations	11 holes	3,516 feet drilled	846 feet drilled in silica

1104 D.D.S. location; U.V.X. Mine - 1100 level - Center of rig; ~11,308N ~8,140E ~4,020 Elev.

901 D.D.S. location; U.V.X. Mine - 950 level - Center of rig; 11,693N 7,756E 4,182 Elev.

806 D.D.S. location; U.V.X. Mine - 800 level - Center of rig; 11,897N 7,332E 4,332 Elev.

Compiled by Don White  
Updated to March, 1988



U.V.X. 809 D.D.S.\* DRILLHOLE SUMMARY

D.D.H.	Orientation at collar		Length of Hole (ft)	Silica Intercepts (ft)
	Azimuth	Inclination		
809-1	202° (S23°W)	+23°	336	59-74 179-245 304-336
809-2	180° (Due S)	+23°	240	39-48 102-216
809-3	166° (S14°E)	-5° (-7° at 280')	370	49-97 105-152 279-370+
809-4	220° (S40°W)	+23°	369	157-369+
809-5	181° (S1°W)	+12°	195	80-115 135-190
809-6	213° (S33°W)	+23°	339	149-339+
809-7	220° (S40°W)	+16°	335	234-335+
809-8	181° (S1°W)	+33°	235	152-229
809-9	144° (S36°W)	-5°	187	71-169

809 D.D.S.

RANGES/TOTALS: 9 holes      144°      -5° to      2,606 feet      1,190 feet  
                                  thru      +33°      drilled      drilled in silica  
                                  220°      (38° vertical fan)  
                                  (76° lateral fan)

\*809 D.D.S. location; U.V.X. Mine - 800 level  
 Center of rig, 11,790 N, 6,912 E, 4,326 Elev.

Compiled by Don White  
 Updated to March, 1988

U.V.X. 902 D.D.S.\* DRILLHOLE SUMMARY

<u>D.D.H.</u>	<u>Orientation at collar</u>		<u>Length of Hole (ft)</u>	<u>Silica Intercepts (ft)</u>
	<u>Azimuth</u>	<u>Inclination</u>		
902-1	167° (S13°E)	+40°	230	65-230+
902-2	192° (S12°W)	+14°	194	39-107 155-194+
902-3	223° (S43°W)	+25°	120	34-110
902-4	167° (S13°E)	+14°	215	50-215+
902-5	246° (S66°W)	+25°	98	51-98+
902-6	246° (S66°W)	+45°	146	49-143
902-7	223° (S43°W)	+45°	160	37-159

902 D.D.S.  
RANGES/TOTALS:    7 holes                    167°                    +14°                    1,163 feet                    776 feet  
   thru                    thru                    drilled                    drilled in silica  
   246°                    +45°  
   (79° lateral fan) (31° vertical fan)

\*902 D.D.S. location; U.V.X. Mine, 950 level  
Center of rig; 11,384N 7,208E 4,186 Elev.

Compiled by Don White  
Updated to March, 1988

U.V.X. 911 D.D.S.\* DRILLHOLE SUMMARY

<u>D.D.H.</u>	<u>Orientation at collar</u>		<u>Length of Hole (ft)</u>	<u>Silica Intercepts (ft)</u>
	<u>Azimuth</u>	<u>Inclination</u>		
911-1	180° (Due S)	+20°	110	0-110+
911-2	180° (Due S)	-25°	130	0-123
911-3	230° (S50°W)	+20°	180	0-160
911-4	230° (S50°W)	-25°	122	0-112
911-5	150° (S30°E)	-25°	140	0-140+
911-6	150° (S30°E)	-42°	182	0-170
911-7	205° (S25°W)	-25°	104	0-104+
911-8	230° (S50°W)	-45°	105	0-105+
911-9	125° (S55°E)	-45°	183	0-183+
911-10	250° (S70°W)	-25°	106	0-106+

911 D.D.S.  
RANGES/TOTALS:    10 holes    125°    +20    1,362 ft.    1,313 ft.  
   thru    thru    drilled    drilled in silica  
   250°    -45  
   (125° lateral fan)(65° vertical fan)

\*911 D.D.S. location; U.V.X. Mine, 950 level  
Center of rig; 11,025N 7,660E 4,177 Elev.

Compiled by Don White  
Updated to March, 1988

U.V.X. 907 D.D.S.\* DRILLHOLE SUMMARY

<u>D.D.H.</u>	<u>Orientation at collar</u>		<u>Length of Hole (ft)</u>	<u>Silica Intercepts (ft)</u>
	<u>Azimuth</u>	<u>Inclination</u>		
907-1	180° (Due S)	+30°	166	66-166+
907-2	240° (S60°W)	+40°	105	9-105+
907-3	240° (S60°W)	+20°	107	7-100
907-4	240° (S60°W)	+60°	121	11-121+
907-5	210° (S30°W)	+30°	85	11-85+
907 D.D.S. RANGES/TOTALS: 5 holes	180° thru 240°	+20° thru +60°	584 feet drilled	473 feet drilled in silica
(60° lateral fan) (40° vertical fan)				

\*907 D.D.S. location; U.V.X. Mine, 950 level,  
Center of rig; 11,262N 7,309E 4,180 Elev.

Compiled by Don White  
Updated to March, 1988



**JEROME  
HEADLANDS  
PRESS**  
P.O. Box N  
Jerome, AZ 86331  
(602) 634-8894

February 16, 1989

Ron Short  
A.F. Budge Mining  
Suite 101  
4301 N. 75th Street  
Scottsdale, AZ 85251

Dear Ron:

Thank you very much for speaking with me last week about Budge's mining efforts here in Jerome.

As I told you, when I have time I usually like to send my articles prior to publication to people that I'm quoting. It's also a way for me to ensure that I got the facts straight.

Please read the enclosed and get back to me if there's anything misrepresented from our conversation.

I appreciate your efforts to be cooperative with our community.

Yours truly,

Diane Rapaport

## GOLD MINING IN JEROME: UPDATE 1989

Can mining and tourism co-exist in Jerome?

Jerome residents were dubious after mining trucks filled with 25-27 tons of ore were trailed by 51 cars and pick-ups Saturday February 4. "It took me half an hour to go three miles from the old Jerome high school to the convenience store," said one Jerome resident.

According to Ron Short, A.F. Budge Mining General Manager, eleven trucks went down the hill filled with 300 tons of representative samples of ore material for the Phelps Dodge's Hidalgo Smelter in Playas, <sup>New</sup>Mexico. Five trucks went first; then six.

Gold and silver are what A.F. Budge (Mining) Limited has been looking for since early 1985. They leased mining rights from Verde Exploration Limited (successor to the Little Daisy's United Verde Extension) and have shored up tunnels below the Edith Shaft. The new activity is easily visible to the public as they begin the drive up to the State Park's Douglas Mansion Museum.

The gold they're finding, however, is not the 'free' gold that panners look for. Its an integral part of rock called <sup>SILICA</sup>'chert' commonly used in mining processing as 'flux'. During that process, the gold (as well as silver) is chemically 'freed up". According to Short, an average of .2 ounces of gold and 7 ounces of silver per ton of material

Mining 1989  
Copyright 1989 by Diane Rapaport  
2

would make mining on a small scale "perhaps economic."

In May 1988, A.F. Budge went from an exploration stage to a 'development stage'--an assessment of how much production grade ore there might actually be and an active pursuit of markets.

According to Short, as much as 1/4 of a million tons of <sup>mineralized</sup> production <sup>economic</sup> ~~rock~~ ore has already been found. <sup>of which a small portion is</sup> ~~profitable~~

Now its a matter of finding a buyer and negotiating a profitable contract.

To accomplish this, A.F. Budge sent representative samples of ore to four prospective buyers. Phelps Dodge was the first to respond with a request for a representative sample. That's what was trucked to Mexico in February.

If Budge negotiates a contract, Short said that the intent would be to "take out 100 tons per day, five days a week, in 4-5 trucks, each of which would carry 25-27 tons. "Our intent is not to truck ore out on Saturdays. We would try to do it in the morning hours at a time that would least disturb the community. "

Short's statement is consistent with the cooperative tone of Budge officials at a well attended Jerome Town Meeting last May when they announced completion of their exploration stage. In that same meeting, ADOT officials revealed that a <sup>certain</sup> considerable amount of money had been added to road funds orginally allocated for improvements to the stretch of road between the mine and Highway 89A in Jerome

*not true*

to accomodate projected mining needs. Improvements included adding 1 1/4 inches of asphalted concrete to the 2 3/4 inches originally spec'd and more substantial guard rails to accomodate heavy trucking.

Short recently stated that working with the community was a priority. "We want to cooperate with the community. We have no goals to disturb the community."

His statement is also consistent with past efforts to conciliate Jerome citizen complaints about noise caused by the air compressor, truck back-up signals, and dumping. Budge ceased night activities and baffled the sound from the air compressor.

Jerome Mayor Francesca Segretti said she would do her best to work with the A.F. Budge Mining in the interest of Jerome citizens. "Jerome receives no revenue from mining. When the mines abandoned Jerome in the fifties, new pioneers resurrected its crumbling walls and decayed sewer lines and built a new town. People have invested a lot of money in remodeling and new building to promote tourism. That's their 'stake' in this town and we will do our best to protect it.

"We must find a way to successfully co-exist," says Segretti. "We have no other choice."

To: Anthony F. Budge/ Michael Yates

From: Carole A. O'Brien

Date: June 26, 1989

Quick evaluation of U.V.X.; possible breakeven scenario at current dollars and without considering Verde royalty.

Cummulative expenditures	
April 1, 1985 thru April 30, 1989	(\$4,207,521)
Receipts from Phelps Dodge thru 4/30/89	\$365,109
	<hr/>
	(\$3,842,412)
Anticipated May receipts	\$358,991
Estimated May costs	(\$112,885)
	<hr/>
	(\$3,596,306)
Stockpiled on surface; "Net" after shipping costs on 5,000 tons averaging 0.35 opt gold, 8.0 opt silver	\$556,000
	<hr/>
	(\$3,040,306)
Capital (not including hoist purchase)	\$232,000
	<hr/>
Project loss at current dollars	(\$2,808,306)
Anticipated June revenues on 1,000 tons of 0.7 opt gold/14 opt silver (using \$30 mining costs, \$30 shipping and \$360 gold, \$5.20 silver prices)	\$217,700
	<hr/>
	(\$2,590,606)

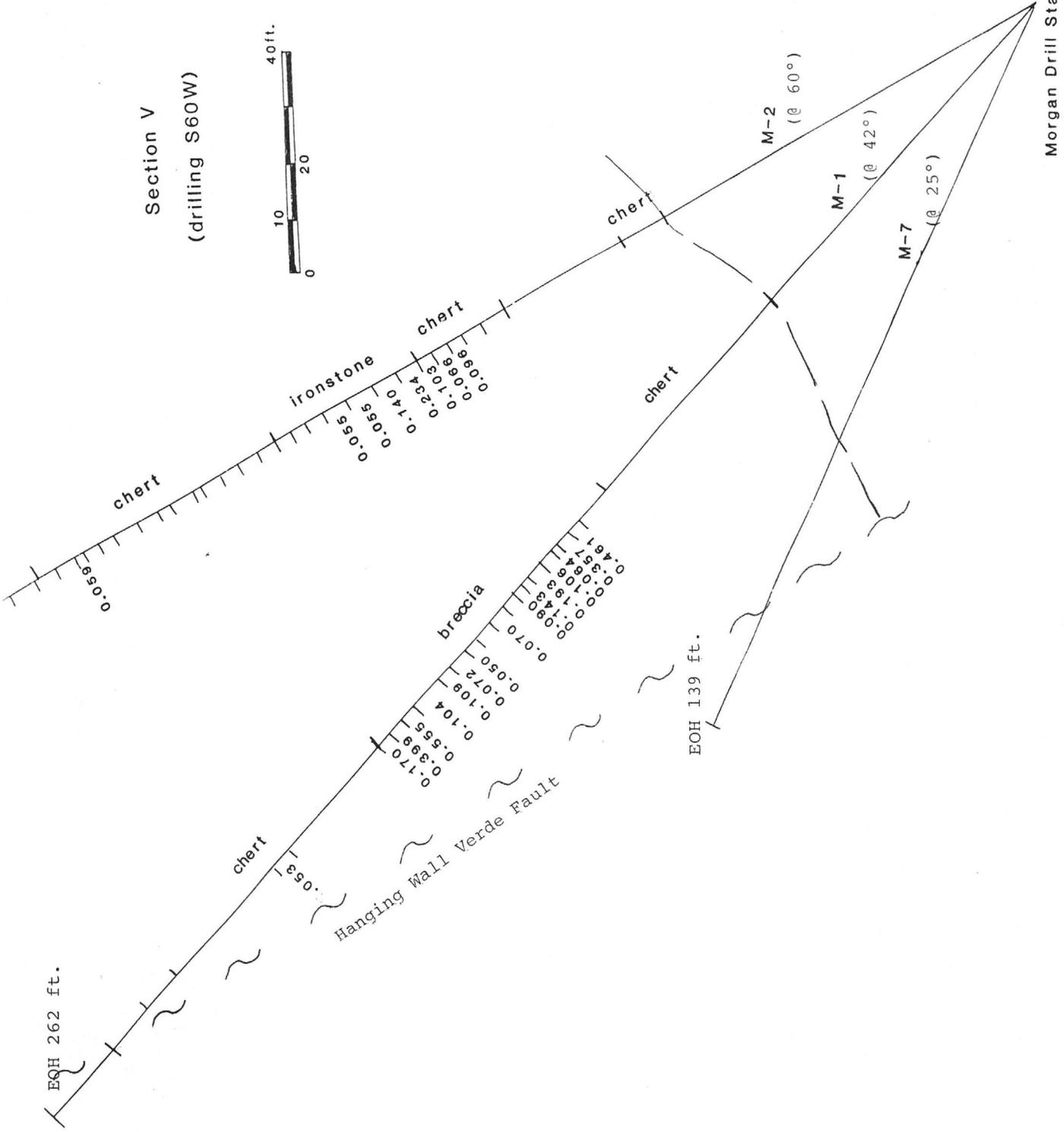
Breakeven on project

Requirements: see following sheet

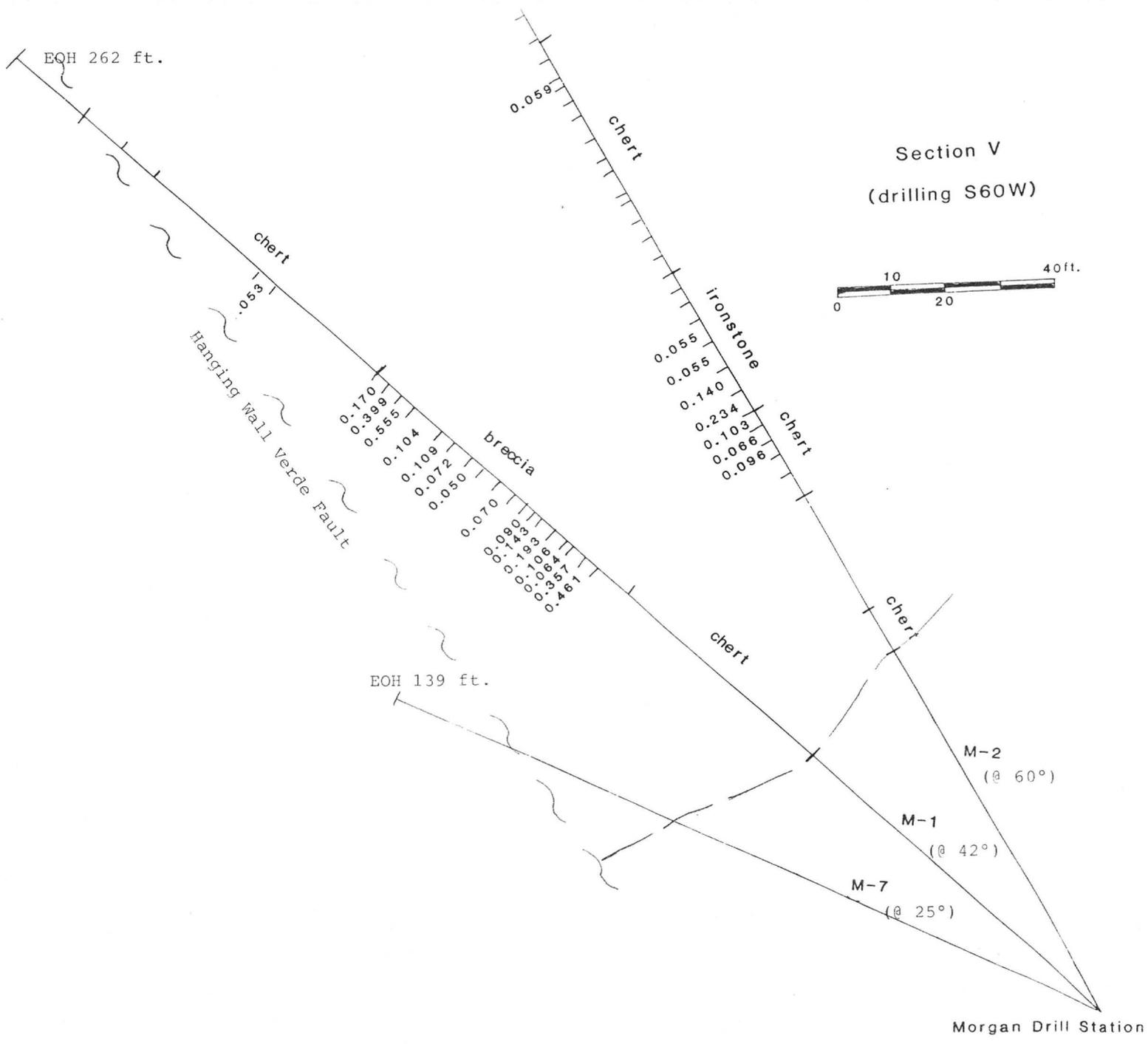
31,000 tons of 0.35 opt gold and 8.0 opt silver

or, 13,000 tons of 0.65 opt gold and 14.0 opt silver

Section V  
(drilling S60W)



Morgan Drill Station

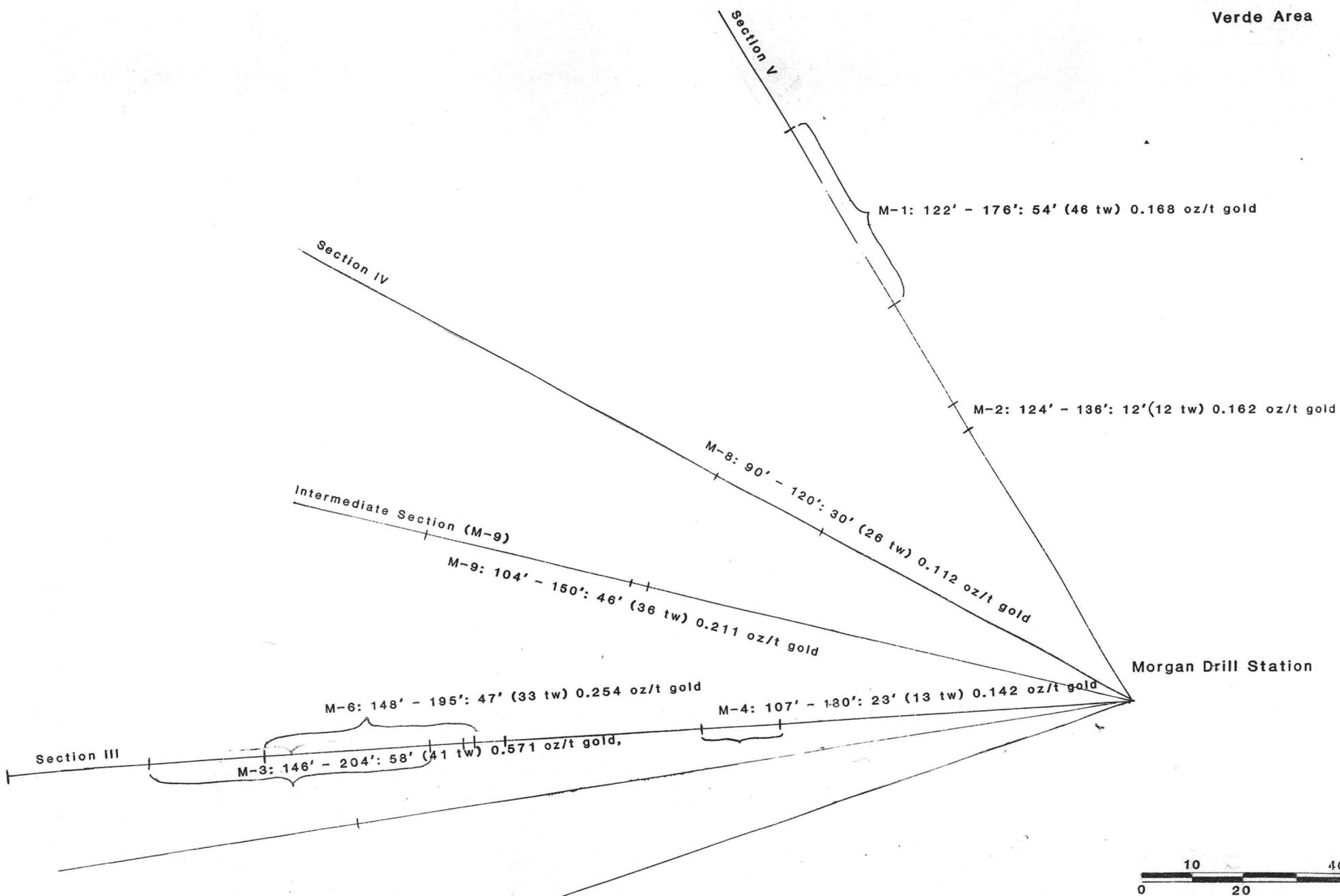




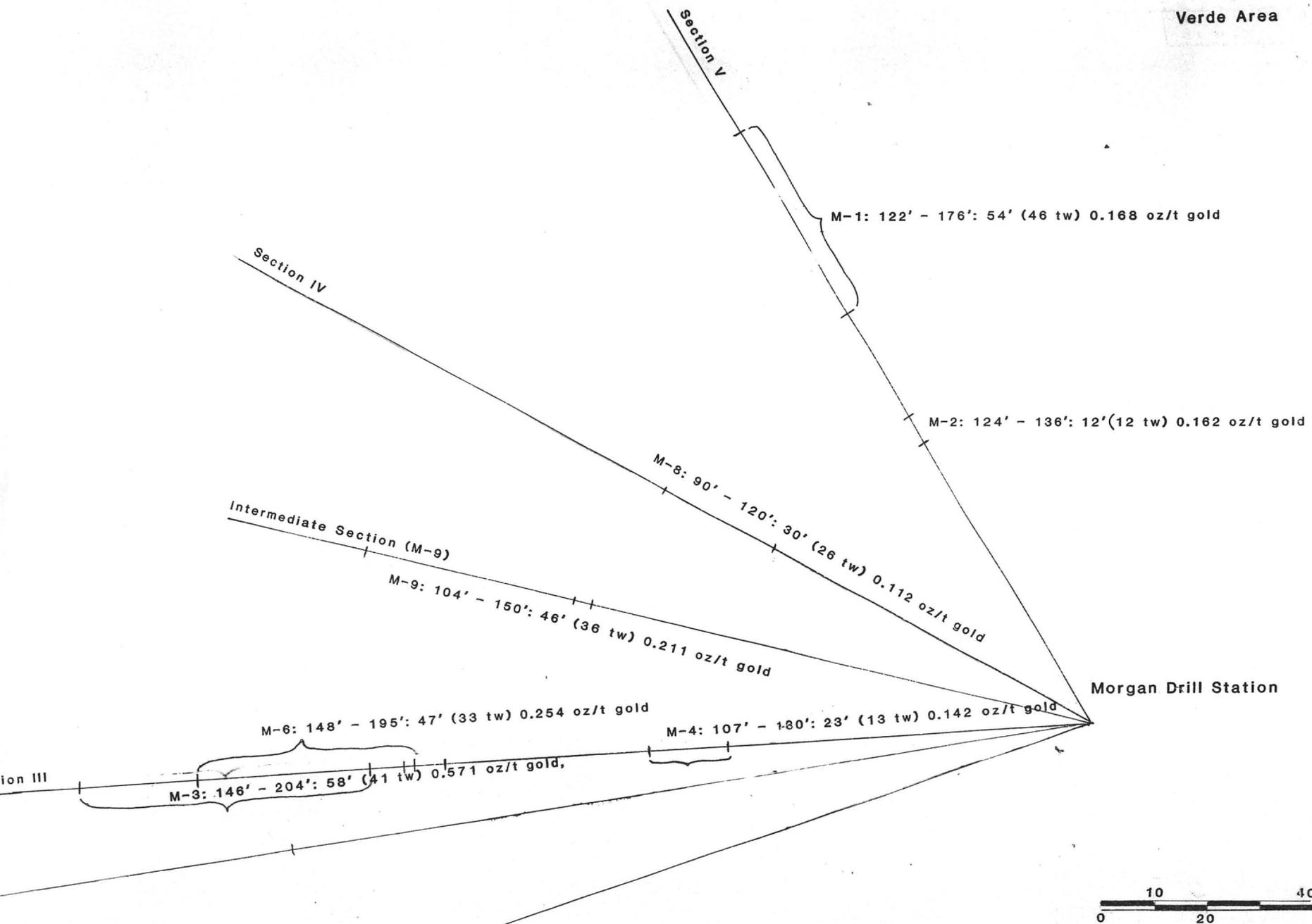




Plan  
of the  
Verde Area



Plan  
of the  
Verde Area

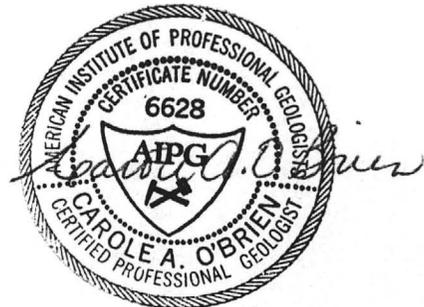


A.F. Budge  
April 12, 1987  
page 2

These projections will be confirmed or denied following the completion of hole M-8 on Section IV.

Further confirmation may be expected following the completion of a hole drilled on the intermediate section at a direction of S15°W.

Revised reserve estimates will be made upon receipt of all results from this drilling.



Hole No.	From	To	Interval ft.	Gold oz/t	Silver oz/t	From	To	Interval ft.	Gold oz/t	Silver oz/t
806-1	504	578	74	0.102	1.28	514 568	527 578	13 10	0.236 0.177	2.24 0.88
M-1	122	176	54	0.168	1.24	122 157	138 176	16 19	0.235 0.226	1.52 1.56
M-2	118	146	28	0.106	1.47	124	136	12	0.162	1.53
M-3	146	230	84	0.426	15.10	153 185	181 204	28 19	1.040 0.147	38.04 3.63
M-4						107 190	130 203	23 13	0.142 0.289	3.42 2.09
M-5	no mineralized intercepts									
M-6	148	195	47	0.257	6.67	158	177.5	20.5	0.382	
M-7	no mineralized intercepts									
M-8						90	120	30	0.112	1.09
M-9						104	150	46	0.211	1.62
M-11						168	187	19	0.265	7.28

MEMORANDUM

To: Anthony F. Budge

From: Carole A. O'Brien

Date: October 8, 1987

Subject: Strategy for UVX Project

A meeting was held on Tuesday, October 6, at the UVX to discuss present plans and future strategy. Present at this meeting were Pete Flores, Don White, Joe Fernandez and myself.

On that day, Longyear had completed hole 809-9 from the 809 drill station on the 800 level. Longyear began to dismantle the rig in preparation for the move to the 902 station on the 950 level.

Crews were advancing on the 906 drift, turning on the 991 new heading towards the 911 drill station.

The 911 station will be reached during the week of October 26. The position of this station is just across the Florencia fault and it may take 2 weeks to excavate the station due to poor ground conditions. It was deemed advisable to push on past the station a distance of 40 feet to intersect the 903 drift and check possible access along to 903-W and 903-N to 903-IR (an internal raise to the 903 intermediate level) and 1115-IR (an internal raise to the 1100 level). Drilling should begin from the 911 station during the week of November 16.

From the 902 drill station, we plan to drill three holes: 902-1 at a bearing of about 180 degrees (due south), approximately 200 feet; 902-2, bearing 210 degrees, approximately 300 feet; and 902-3, bearing about 270 degrees, approximately 200 feet. This drilling will take about 4 weeks to complete, coinciding with availability of the 911 station.

Hole 902-1 should be collared today or at latest, early tomorrow. Cundo and Ron will then begin access to the Audrey Shaft for ventilation purposes. This access will be completed next week. The crew will then advance on the 902-W hook-up, working south of the 902 drill station and advancing in an easterly direction. There is approximately 260 feet of the 902-W open in this direction before we reach a cave located approximately at 7340E and 11260N. Cundo and Ron will work on this heading until the other crews finish up in the 911 area. At this point, the other crews will take over completion of the hook-up and Cundo and Ron will begin a bean hole raise to the 903 intermediate level from a point just west of the 902 raise. This raise will serve as access to the upper levels, hopefully as far as the 800 level, for muck disposal and will also provide access to the M-3 zone to obtain a bulk sample for shipment to the

smelter(s) for determination of suitability for sale as flux.

This raise, coinciding with commencement of drilling at the 911 station, could be started during the week of November 16.

Upon completion of the 902-W hook-up (possibly by mid-December depending on ground conditions), the crews would move to the 800 level to advance on a new heading south from the 809 drill station a distance of approximately 120 feet to the old 805 drift. This area lies immediately above the "grit" intercept in hole 809-9. A small ore pocket will be excavated at the shaft station and muck hoisted in the same manner as from the ore pocket on the 950 level. An ore pocket would not be needed if, in raising to the 903/800 levels, sufficient drifts were found to be open to the north towards the 805 drift and muck could be transferred along these drifts and down to the 950 level. However, the timing on these two programs is indeterminate and it would be preferable to advance on both headings, i.e. from the south towards the 809 intercept and from the north. In any event, the 800 level drifts need to be enlarged and refurbished to enable future mining crews to work on the stopes in the M-3 area.



A.F. Budge (Mining) Limited

TO: Ronald R. Short

DATE: December 18, 1990

FROM: John W. Norby  
John A. McKenney

COPIES: Anthony F. Budge  
Carole A. O'Brien  
Dale H. Allen  
File

SUBJECT: RESULTS OF 950 LEVEL DIAMOND DRILLING TO DATE  
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SUMMARY

August-November UVX Mine exploration core drilling from the 950 level (18 holes, 2871 ft) tested the 907 Up-Dip, 900 Down-Dip, 905-S Up-Dip and Faulted Targets. Testing of the down-dip extension of the 900 grit orebody (presently in production) below the 950 level was frustrated by premature hole termination in expanding clays. However, limited drill results indicate that the 900-A segment (eastern portion) probably does not extend below the 950 level and that the 900-B segment (western portion) does not extend in a southerly direction below this level. The down-dip central and northern extensions of the 900-B chert/grit body will be tested by drifting on the 950 development sublevel and on the 950 haulage level.

Recent 907 Up-Dip drilling, along with previous drilling, indicates a non-flux quality but ore grade copper-gold-silver trend along the northeast margin of the Verde iron silica layer in the 907 area between the 950 and 800 levels, with potential to contain 10-25,000 tons. Exploration/development drifting on this trend is recommended in conjunction with development of the similarly non-flux 809 copper-gold-silver reserve when a market for these non-flux ores can be developed.

Drill testing of the Faulted Target identified a thin, but consistent, iron-rich (non-flux), gold-bearing structure hosted by a larger but barren chert body. The structure is of ore grade (0.35 oz/ton gold) but not over a mineable width, so exploration drifting on this trend is not an immediate priority.

Exploration of the up-dip portion of the 905-S chert trend indicated uneconomic grade and non-flux quality in this portion of the 905-S trend. The gold-grit potential of this chert/grit layer is down-dip below the 950 level.

Exploration of the 911 chert/grit body where it extends above the 950 level is in progress. A subsequent short drill program will test the projected connection of the 905-S and 911 chert/grit bodies. Recently, a below-950 level exploration program testing the Florencia area was suggested by Verde Exploration in place of the deep massive sulfide exploration hole stipulated in the lease agreement. Budge Mining awaits details of this proposal.

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## INTRODUCTION

In August, the exploration core drill was moved down from the UVX Mine 800 level to the 950 level where it subsequently tested the 900 Down-Dip, 907 Up-Dip, 905-S Up-Dip, and Faulted Targets. Drilling from this level is currently testing the 911 Up-Dip target and a short drill program is planned to test the 905-S/911 Connect area.

Results from the April-July 800 level core drill exploration program were summarized in an August 22 memo by John Norby. This memo is a progress report on 950 level target test drilling. Significant drill results are listed in Table 1 and abbreviated logs are contained in Table 2.

## 900 DOWN-DIP TARGET

Four -14 degree down angled holes (M-12 thru -15) totalling 683 ft, drilled from the 950 level Morgan drill station, partially tested the down-dip extension of the 900 grit orebody, 28-42 ft below the 950 level. Holes were drilled in a fan pattern testing a 47 degree arc of ground. Although not yet logged in detail, the drilled core appears to be entirely diorite, not potential gold grit hosting chert. However, only one of four holes could be drilled to completion due to clay expansion and subsequent binding of drill pipe.

Drill results indicate that the bulk of 900-A orebody (eastern grit segment) does not extend significantly below the 950 level, although the extreme north margin of this orebody was not closed off due to the premature termination of the northeasternmost hole, M-15. These results concur with the apparent pinching out of this grit segment near the 950 level against the prominent local north-south fault as indicated by recently developed exposures in the 950 development sublevel.

The middle two holes (M-12 and -13) targeting the central and northern down-dip extensions of the 900-B orebody (western grit segment) could not be completed through vertical clayey structures which bisect and/or bound this grit body on its eastern margin in the above development sublevels. A previous exploration hole, 807-1, drilled downward from the 800 level intersected near ore grade mineralization in the northern extension of the 900-B grit trend at about the elevation of the A sublevel (14.5 ft @ 0.092 oz/ton gold and 0.99 oz/ton silver). The southwesternmost recent hole, M-14, was drilled to completion and intersected only diorite, indicating that the grit-hosting 900-B chert does not extend southward where tested about 40 ft below the 950 level. Planned development drifting on the main 950 haulage level and on the 950 development sublevel will characterize the down-dip projection of the central and northern down-dip extensions of the 900-B grit-bearing chert body.

### 907 UP-DIP TARGET

The 907 Up-Dip target consists of the more iron-rich and cherty up-dip extension of the 907 portion of the near vertical northwest striking Verde silica trend. Grit orebodies (Morgan and 907) occur where this trend intersects the similar striking but 55 degree northeast dipping hanging wall segment of the Verde fault at about the 950 level. Up-dip from this grit and away from the Verde fault, the silica trend consists of more competent and iron-rich material (non-flux) locally hosting economic gold values and significantly contains increasing copper and silver values with increasing elevation. At the 800 level this trend has been partially mined out for its high grade copper oxide content. Where previously tested by drill holes 907-2 and -3 the the northeast margin of the iron silica trend where in contact with diorite 20-40 ft above the 950 level contains an average 6-10 true ft grading 0.22 oz/ton gold and 3.2 oz/ton silver.

Seven drill holes (908-7 thru -13) totalling 809 ft tested the 907 Up-Dip target from a drill station set up in the 907 gold grit stope. Drill fences were completed on 015, 063 and 107 degree azimuths. The two upper holes on the initial 3-hole 063 azimuth fence were of ore grade, although not of flux quality. The middle angle 063 azimuth hole (908-7, +59 degrees) intersected 47.5 ft grading 0.319 oz/ton gold, 5.08 oz/ton silver and 2.3% copper before it terminated in an historic working assumed to be a copper oxide production stope. The upper angle 063 azimuth hole (908-9, +68 degrees) tested the silica section above the copper stope and intersected 70.5 ft grading 0.050 oz/ton gold, 2.59 oz/ton silver and 3.3% copper, including a 10.5 ft section surrounding massive hematitic chalcocite on the northeast margin of the silica section grading 12.9% copper with 0.034 oz/ton gold and 2.81 oz/ton silver.

The more easterly directed 2-hole 107 azimuth fence intersected encouraging but economically marginal mineralization. The higher angle 908-11 (+65 degrees) hole intersected 45 ft grading 0.084 oz gold/ton, 1.94 oz/ton silver and 1.0% copper but the hole was not completed to the diorite contact. The other 107 azimuth lower angle hole also did not test the margin of the silica trend where the highest grades of copper and locally gold are apparently concentrated.

Similarly the higher angle (+63 degrees) hole of the 2-hole, more northerly 015 azimuth fence intersected encouraging but uneconomic mineralization within the silica trend (32 ft grading 0.063 oz/ton gold, 0.81 oz/ton silver and 1.6% copper) but did not test the prospective northeast contact of this trend.

Drill results and the configuration of mapped copper stopes suggests that the remaining unmined portion of the 907 Up-Dip area has the potential to be developed into an economic copper-gold-silver non-flux orebody. This area is similar to the 809 copper-gold-silver non-flux reserve in iron-content, metal make-

up, size potential, grade and geometry. Best drill intercepts in the 907 Up-Dip area are in the higher angle holes indicating that the better mineralization occurs at about 4300 elevation, 80 ft above the 907 stope. An exploration raise into this area with subsequent exploration drifting along the chalcocite layer on the northeast margin of the iron silica trend is recommended. A raise from the 907 stope roughly along the path of the upper two 063 azimuth drill holes would generate ore grade development muck, as would drifting on chalcocite. Similarly, 50 ft of horizontal exploration drifting from the 907 stope over to the contact of the iron silica with the diorite could prove up some ore in the vicinity of the 907-2 and -3 intercepts. This drift exploration has potential to add to the UVX reserve base if a processing contract for non-flux ore is obtained. The more defined 809 non-flux copper-gold-silver reserve could initially fulfill such contract.

#### FAULTED TARGET

The Faulted Target was originally indicated by a trend of 0.18-1.22 oz gold/ton assays along stope ribs on the 903 level located in a chert layer sandwiched between the hanging and footwall segments of the Verde Fault. Five holes totalling 917 ft tested the trend of this mineralization over 150 ft of strike length, around the elevation of the 903 level. Core drilling identified a discrete, northwest trending, contiguous, but thin (2-10 ft), higher grade (0.29 - 1.20 oz/ton) structural trend within the otherwise barren larger chert body. This auriferous trend is unfortunately iron-rich and therefore not of flux quality. The trend is open-ended down-dip and to the southeast.

The lower two holes (908-1, 908-4) of the 3-hole 227 degree azimuth drill fence, in conjunction with the 903 level gold-bearing channel samples that these holes were targeted on, define the better portion of the gold-bearing structure. Drill hole 908-1 intersected 10 ft grading 0.405 oz/ton gold and <0.5 oz/ton silver, and 908-4 intersected 5 ft grading 0.288 oz/ton gold and 1.01 oz/ton silver. This portion of the trend contains very roughly 2000 tons grading 0.35 oz/ton gold with insignificant silver. The next step in developing this reserve would be to drive an exploration drift on the 950 level over to the structure and then raise on it up into the area of the better drill intercepts. However, the thinness of this mineralized structure suggests that dilution to a consistent mining width would make this target uneconomic.

#### 905-S UP-DIP TARGET

The 905-S area is the south extension of the Gold Stope chert/grit trend. By analogy with the Gold Stope immediately to the north and to a lesser extent with the 911 area to the southeast, the heart of the 905-S precious metal mineralization

probably occurs at or below the 950 level. However, the current drill program is concentrated on targets above the 950 level for economic mining reasons. Two holes (585 ft total) were completed 40 ft above raise channel sample information in an attempt to enlarge and improve the above 950 level 905-S reserve previously estimated to contain 7200 tons of non-flux (13% iron), economically marginal rock grading 0.17 oz/ton gold and 5.6 oz/ton silver.

Where intersected by these holes, the host trend consists of non-flux iron-rich silica (versus grit-bearing chert down-dip) containing significant but uneconomic grades of precious metals over mineable widths. Specifically, this iron silica trend grades 0.086 oz/ton gold, 4.35 oz/ton silver, and <0.5% copper over 35.5 ft where intersected by the more northern 907-6 hole (nearer the Gold Stope), and 0.045 oz/ton gold, 1.88 oz/ton silver, and 0.56% copper over 39 ft where intersected by the more southern 907-7 hole (nearer the 911 area). These intercepts contain higher grade, but thinner and less contiguous intervals at their margins. The northern hole intersected 5 ft grading 0.221 oz/ton gold and 2.41 oz/ton silver near the western margin of the iron silica, and the southern hole intersected 3 ft grading 0.195 oz/ton gold and 2.1 oz/ton silver at the eastern margin of the iron silica.

In summary, the previously defined 905-S reserve straddling the 950 level is non-flux and economically marginal. Its up-dip extent tested by these two exploration holes is also iron-rich and contains uneconomic metal values. There is down-dip potential for flux quality, gold grit in the trend, but this untested material could only be accessed from the 1100 level. There is also further up-dip limited potential for a copper-gold-silver non-flux orebody.

#### 911 UP-DIP TARGET

Previous drilling on the 911 grit/chert body defined significant reserves below the 950 level. Previous drilling indicated approximately 43,000 tons of flux quality grit/chert (4% iron) grading 0.12 oz/ton gold and 4.9 oz/ton silver. This resource apparently contains two smaller, higher grade pods that together total 8000 tons grading 0.230 oz/ton gold and 4.90 oz/ton silver.

An in-progress six hole (998 ft) drill program is designed to test the up-dip (or more specifically up-plunge) extensions of the higher grade pods above the 950 level. At this higher elevation the 911 body may not be of flux quality, as a 50 ft section of the southeast portion of the target grit which is exposed in the 911 drift of the 950 level is visually iron-rich. However, 10 channel samples of this exposure average an encouraging 0.153 oz/ton gold and 6.38 oz/ton silver.

905-S/911 CONNECT TARGET

The 905-S/911 Connect Target consists of a poorly defined grit-bearing chert trend that connects the 905-S portion of the north trending Gold Stope chert/grit with the 911 portion of the northwest trending Verde chert/grit. A minimal program of two short drill holes (189 ft) has been designed to explore this previously untested trend 50 ft above the 950 level (a mineable back if successful).

Table 1. 1990 UVX Mine 950 Level Exploration Drill Results.  
12/18/90

900 DOWN-DIP TARGET (Flux)

Core Hole	Drill Interval (ft)	Drill Length (ft)	Gold (oz/ton)	Silver (oz/ton)	Copper (%)
M-12	No significant intercept				
M-13	No significant intercept				
M-14	No significant intercept				
M-15	No significant intercept				

907 UP-DIP TARGET (Non-Flux)

Core Hole	Drill Interval (ft)	Drill Length (ft)	Gold (oz/ton)	Silver (oz/ton)	Copper (%)
908-7	40.5- 88.0	47.5	0.319	5.08	2.3
908-8	59 - 77	18	0.017	0.72	2.3
908-9 within	147.0-157.5 87.0-157.5	10.5 70.5	0.034 0.050	2.81 2.59	12.9 3.3 ← = 470
908-10*	64 - 88	24	0.090	2.94	0.5
908-11* within	82 - 88 82 -127	6 45	0.207 0.084	3.11 1.94	0.5 1.0
908-12* within	83 - 98 83 -115	15 32	0.098 0.063	1.00 0.81	1.6 1.6
908-13	48.5- 51	2.5	0.125	2.31	1.8

\* Not completed to diorite contact

Table 1, con't. 1990 UVX Mine 950 Level Exploration Drill Results. 12/18/90

FAULTED TARGET (Non-Flux)

Core Hole	Drill Interval (ft)	Drill Length (ft)	Gold (oz/ton)	Silver (oz/ton)	Copper (%)
908-1	136 -146	10	0.405	1.46	<.5
908-2	No significant intercept				
908-3	154 -156	2	1.195	0.28	Pndg
908-4	105 -110	5	0.288	1.00	0.25
908-5	143 -158	15	0.047	0.53	0.11

905-S UP-DIP TARGET (Non-Flux)

Core Hole	Drill Interval (ft)	Drill Length (ft)	Gold (oz/ton)	Silver (oz/ton)	Copper (%)
907-6	227.5-232.5	5	0.221	2.41	<.5
within	223.5-259.0	35.5	0.086	4.35	<.5
907-7	251 -254	3	0.195	2.10	0.42
within	215 -254	39	0.045	1.88	0.56

911 UP-DIP (Flux)

Core Hole	Drill Interval (ft)	Drill Length (ft)	Gold (oz/ton)	Silver (oz/ton)	Copper (%)
911-12	Assays Pending				
911-11	In Progress				

Table 2. 1990 UVX Mine 950 Level Exploration Abbreviated Core Hole Logs.

900 DOWN-DIP TARGET (Flux)

(All holes drilled from Morgan drill station located at:  
11553N, 7077E, 4186 el.)

Holes Not Yet Logged in Detail.

M-12 (-18, 330)

0 - 136 Diorite  
136 TD (Hole terminated by expanding clay in fault)

M-13 (-18, 314)

0 - 109 Diorite  
109 TD (Hole terminated by expanding clay in fault)

M-14 (-18, 299)

0 - 167 Diorite  
167 TD

M-15 (-18, 346)

0 - 148 Diorite  
148 TD (Hole terminated expanding clay)

Table 2. 1990 UVX Mine 950 Level Exploration Abbreviated Core Hole Logs, con't.

907 UP-DIP TARGET (Non-Flux)

(All holes drilled from 908 drill station located at:  
11251N, 7216E, 4214 el.)

+ Southeast Extension 907 Gold-Silver Grit Body

\* Target Gold-Copper-Silver Horizon

908-7 (+59, 063)

0 - 4	Grey chert and clay
4 - 16+	Grit (907 extension)
16 - 19	Iron silica
19 - 40	Grey chert breccia
40 - 88*	Iron Silica
88	TD (terminated by stope)

908-8 (+40, 063)

0 - 15+	Grit (907 extension)
15 - 50	Gray chert
50 - 79*	Iron silica
79 -100	Diorite
100	TD

908-9 (+68, 063)

0 - 19+	Grit (907 extension)
19 - 30	Iron silica
30 - 88	Grey chert breccia
88 -139*	Iron silica
139 -151.5*	Gray chert
151.5-154.5*	Massive chalcocite
154.5-179	Diorite
179	TD

908-10 (+39, 107)

0 - 26+	Grit (907 extension)
26 - 32	Iron silica
32 - 40	Gray chert
40 - 90*	Iron silica
90 -100	Gray chert
100	TD (Not completed to second iron silica body or diorite contact)

Table 2. 1990 UVX Mine 950 Level Exploration Abbreviated Core Hole Logs, con't.

907 UP-DIP TARGET, Con't. (Non-Flux)

(All holes drilled from 908 drill station located at:  
11251N, 7216E, 4214 el.)

+ Southeast Extension 907 Gold-Silver Grit Body

\* Target Gold-Copper-Silver Horizon

908-11 (+65, 107)

0 - 20+	Grit (907 extension)
20 - 54	Iron silica
54 - 78	Gray chert
78 - 127*	Iron silica
127	TD

908-12 (+63, 015)

0 - 14+	Grit (907 extension)
14 - 23	Iron silica
23 - 115*	Gray Chert
115	TD (Not completed to diorite contact)

908-13 (+32, 015)

0 - 20+	Grit (907 extension)
20 - 73	Gray chert
73 - 100	Diorite
100	TD

Table 2. 1990 UVX Mine 950 Level Exploration Abbreviated Core Hole Logs, con't.

FAULTED TARGET (Non-Flux)

(All holes drilled from 908 drill station located at:  
11251N, 7216E, 4214 el.) \* Target Gold Host

908-1 (+19, 227)

0 - 13	Gritty silica
13 - 40	Diorite
40 -146*	Gray chert
146	TD

908-2 (+35, 227)

0 - 4	Gray chert
4 - 21	Grit and clay
21 - 92	Diorite
92 -103	Iron silica
103 -178*	Gray chert
178 -225	Beige banded silica
225	TD

908-3 (+18, 195)

0 - 10	Hematitic chert breccia
10 - 22	Diorite
22 - 68	Gray chert
68 - 120	Diorite
120 - 140	Iron silica
140 - 149 *	Gray chert
149 - 157 *	Iron silica
157 - 212	Diorite
212	TD

908-4 (-11, 227)

0 - 13	Diorite
13 - 17	Iron Silica
17 - 27	Beige banded silica
27 - 94	Gray to hematitic chert breccia
94 - 98	Beige banded silica
98 - 129*	Iron silica
129	TD

908-5 (+17, 248)

0 - 42	Diorite
42 - 52	Beige banded silica
52 -137	Gray chert
137 -184*	Iron silica
184 -205	Blue diorite
205	TD

Table 2. 1990 UVX Mine 950 Level Exploration Abbreviated Core Hole Logs, con't.

905-S TARGET (Non-Flux)

(Both holes drilled from 907 drill station located at:  
11269N, 7309E, 4184 el.) \* Target Gold Host

907-6 (+18, 078)

0 - 221	Diorite
221 - 259	Iron silica
259 - 266*	Gray chert
266 - 282	Diorite
282	TD

907-7 (+18, 066)

0 - 215	Diorite
215 - 253*	Iron silica
253 - 262	Beige banded silica
262 - 303	Diorite
303	TD

911 UP-DIP TARGET (Flux)

(All holes drilled from 911 drill station located at:  
11025N, 7660E, 4177 el.)

911-12 (0, 230)

Completed, But Not Yet Logged

911-11 (+11, 250)

In Progress

Hole #	Depth	Drilling \$	Bit Cost	Supplies	Standby	Amount
908-7	88'	1841 <sup>-</sup>	990 <sup>88</sup>	82 <sup>50</sup>	110 <sup>-</sup>	
908-1	146'	3143 <sup>-</sup>	4394 <sup>60</sup>	480 <sup>50</sup>	1347 <sup>50</sup>	
908-2	71'	1370 <sup>25</sup>	585 <sup>75</sup>	82 <sup>50</sup>	-	
90	154'	5876 <sup>50</sup>	6637 <sup>62</sup>	469 <sup>-</sup>	82 <sup>50</sup>	
908-3	9'	159 <sup>75</sup>	1814 <sup>72</sup>	-	-	
	203'	3960 <sup>75</sup>		165 <sup>-</sup>	55 <sup>-</sup>	
908-5	205'	4141 <sup>25</sup>	3845 <sup>80</sup>	402 <sup>62</sup>	55 <sup>-</sup>	
908-9	54'	1123 <sup>50</sup>	2100 <sup>60</sup>	82 <sup>50</sup>		
	125'	2503 <sup>75</sup>	2195 <sup>-</sup>	82 <sup>50</sup>		
908-8	100'	1995 <sup>00</sup>	2485 <sup>-</sup>			
908-13	100'	1990 <sup>50</sup>	1106 <sup>-</sup>	150 <sup>50</sup>		
908-12	115'	2359 <sup>25</sup>	3364 <sup>90</sup>	82 <sup>50</sup>		
908-10	100'	1965 <sup>00</sup>	1842 <sup>-</sup>			
908-11	127'	2499 <sup>25</sup>	2437 <sup>13</sup>		137 <sup>50</sup>	
908-4	130'	2583 <sup>50</sup>	1756 <sup>30</sup>	82 <sup>50</sup>	55 <sup>-</sup>	
907-6	(249' 33')	4659 <sup>25</sup> 745 <sup>25</sup>	991 <sup>02</sup> 1389 <sup>63</sup>	233 <sup>50</sup> 150 <sup>50</sup>	110 <sup>-</sup>	
907-7	303'	5669 <sup>75</sup>	1860 <sup>42</sup>	247 <sup>50</sup>	192 <sup>50</sup>	
911-11	41' 76'	1062 <sup>25</sup> 1587 <sup>50</sup>	3082 <sup>56</sup> 2090 <sup>59</sup>	1692 <sup>35</sup> 150 <sup>50</sup>		1681 <sup>25</sup> 271 <sup>-</sup>
911-11A	103'	2130 <sup>75</sup>	7033 <sup>08</sup>		137 <sup>50</sup>	2834 <sup>75</sup>
911-14	96' 79'	1768 <sup>50</sup> 1567 <sup>25</sup>	1843 <sup>07</sup> 1446 <sup>72</sup>	82 <sup>50</sup> 82 <sup>50</sup>	440 <sup>-</sup>	220 <sup>75</sup> 275 <sup>-</sup>
911-15	116'	2256 <sup>50</sup>	2378 <sup>-</sup>	82 <sup>50</sup>	110 <sup>-</sup>	
911-16	114'	2183 <sup>50</sup>	4422 <sup>06</sup>	82 <sup>50</sup>		
+ 911-11A	71'	1498 <sup>25</sup>		82 <sup>50</sup>	3080 <sup>-</sup>	1376 <sup>55</sup>
911-12	127'	2525 <sup>25</sup>	3139 <sup>08</sup>	82 <sup>50</sup>	440 <sup>-</sup>	

Station to Station man

1980<sup>00</sup>  
3080<sup>00</sup>  
1210<sup>00</sup>  
275<sup>00</sup>  
220<sup>00</sup>  
1875<sup>00</sup>  
1980<sup>00</sup>  
2282<sup>50</sup>  
24400<sup>00</sup>  
1100<sup>00</sup>  
110<sup>00</sup>  
1980<sup>00</sup>  
550<sup>00</sup>  
990<sup>00</sup>  
550<sup>00</sup>  
825<sup>00</sup>  
495<sup>00</sup>

Core Boxes  
2385.33

Hole #	DEPTH	DRILLING Cos	BIT Cost	SUPPLIES	STANDBY	Convent cost
805-1	224'	4082 <sup>00</sup>	1261.12	139.70	962 <sup>50</sup>	
805-2	227'	4267 <sup>75</sup>	1582.19	417.12	82 <sup>50</sup>	
805-3	247'	4494 <sup>75</sup>	1306 <sup>63</sup>	165.00	-	
805-4	206'	3725 <sup>50</sup>	976 <sup>44</sup>	165.00	137 <sup>50</sup>	
805-5	84'	1517 <sup>00</sup>	422 <sup>52</sup>	165.00	110 <sup>00</sup>	
805-6	193'	3700 <sup>25</sup>	1354. <sup>86</sup>	222.20	110 <sup>00</sup>	1561 <sup>75</sup>
805-7	269'	5110. <sup>75</sup>	1423 <sup>01</sup>	417.12	27 <sup>50</sup>	
700-1	193'	3893. <sup>25</sup>	2292.84	222.20	-	
700-2	142'	3685 <sup>50</sup>	1151.16	82.50	-	
	39'	799 <sup>75</sup>	-	82.50	-	
700-3	165'	3478 <sup>75</sup>	3603.60	82.50	-	
701-1	90'	1734 <sup>50</sup>	1496.70	82.50	-	
701-2	93'	1989 <sup>75</sup>	2315.70	150.50	-	
	24'	457 <sup>00</sup>	385 <sup>92</sup>	11-		
702-1	170'	3457 <sup>50</sup>	4545 <sup>80</sup>	165 <sup>00</sup>	165-	
702-2	182'	3753 <sup>00</sup>	3898 <sup>44</sup>	165-	55-	
702-3	21'	372 <sup>75</sup>	4230 <sup>81</sup>	-	-	
	240	4699 <sup>50</sup>	-	139 <sup>70</sup>	13-70	
702-4	204'	3841 <sup>00</sup>	534.48	82 <sup>50</sup>		
807-1	262'	4870 <sup>50</sup>	592 <sup>12</sup>	82 <sup>50</sup>	55 <sup>00</sup>	
807-2	17'	356 <sup>75</sup>	-			
807-2	279'	5144 <sup>75</sup>	-		55 <sup>00</sup>	
807-3	276'	5119 <sup>00</sup>	256 <sup>68</sup>	150 <sup>50</sup>		
807-4	197'	3579. <sup>25</sup>	0			

	Depth	Outlay \$	Bal \$	Surplus	standing	amount
m-1	136'	2589 <sup>50</sup>	—	334 <sup>62</sup>	1127 <sup>50</sup>	
m-2	109'	1920 <sup>75</sup>	148 <sup>24</sup>	545 <sup>-</sup>		
m-3	167'	2966 <sup>75</sup>		165 <sup>-</sup>	110 <sup>-</sup>	
m-4	100'	1775 <sup>-</sup>	547 <sup>60</sup>		55 <sup>-</sup>	
	48'	918 <sup>56</sup>				

Casing + Reaming \$

700-2	* 992. <sup>75</sup>
701-2	294. <sup>25</sup> + 82. <sup>50</sup>
702-3	472. <sup>50</sup>
702-4	82. <sup>50</sup>
908-7	1404. <sup>25</sup>
908-1	2154. <sup>25</sup>
908-2	2486. <sup>25</sup>
908-3	110 <sup>-</sup>
908-5	587. <sup>25</sup>
908-9	442. <sup>50</sup>
908-13	165. <sup>00</sup>
908-12	137. <sup>50</sup>
908-10	110. <sup>00</sup>
908-11	55. <sup>00</sup>
908-4	192. <sup>50</sup>
907-6	192. <sup>50</sup> + 409 <sup>-</sup>
907-7	342 <sup>-</sup>
911-15	55. <sup>00</sup>
911-16	82. <sup>50</sup>
911-11A	326. <sup>50</sup>
911-11	1160. <sup>25</sup> + 442. <sup>50</sup>
911-14	110 <sup>-</sup>
m-1	623 <sup>-</sup>
m-3	577. <sup>50</sup>
m-2	577. <sup>50</sup>
m-4	495 <sup>-</sup>
911-12	193. <sup>75</sup>

MEMORANDUM

To: Anthony F. Budge  
From: Carole A. O'Brien  
Date: July 2, 1987  
Subject: Risk/Reward/Targets  
U.V.X. Mine

Mr. Irwin Parrish recommended a report detailing the target, potential, probability and reward for several classes of reserves at the U.V.X. I said such a report could be prepared and promised one this week. I have spent several days since meeting with Don on Wednesday, June 24, and many hours on the computer trying to formulate the scenarios Parrish suggested. I cannot seem to put them together. And what I am doing may be counterproductive; Don White and Bob Hodder are working on a reserve statement for the M-3 zone, based on the new cross-sections, and the different "ore" types.

Bob Hodder will be in tomorrow afternoon and I will wait and see what he and Don have done. Meanwhile, I think the situation at the U.V.X. can be summarized as follows:

(1) we have identified gold bearing cherts from our drilling from the Morgan and 809 drill stations. These cherts may or may not be a continuous zone. With a strike length of 400 feet between the intercept in hole M-11 and the intercept in hole 809-1, a vertical height of 80 feet, and a width of 15 feet for the high grade, flux quality core, we could have between 30,000 and 40,000 tons of material, which, depending on how you treat high grade intercepts such as that encountered in hole M-3, could grade as high as 0.25 oz/ton gold. The zone would grade at least 0.20 oz/ton.

(2) the economics on mining 35,000 tons of 0.20 oz/ton gold and 2.0 oz/ton silver (see next page) shows an operating profit of \$821,625 sending ore to Inspiration Smelter, or \$813,750 processing the ore at a CIL Plant of our own in Cottonwood, for example. Neither option will completely recover the \$1.58 million spent to date on the project, nor recover the approximately \$1.0 mm required for a CIL Plant.

(3) we have yet to confirm recoveries of gold and silver in a CIL Plant, and a contract with any smelter will depend on the results of a trial shipment of at least 100 tons.

(4) actual mining costs are still unknown.

(5) we have been reasonably successful (ore grade intercepts in 11 of 14 holes drilled to date) in finding gold bearing cherts by drilling areas based on the old assay data.

### Assumptions and Parameters

gold	\$450.00	per ounce
silver	\$7.50	per ounce
high grade reserves	35000	tons
grade (gold)	0.20	oz/t
grade (silver)	2.00	oz/t
cost, mining rock	\$60.00	per ton
Recovery in CIL (gold)	0.9	90%
Recovery in CIL (silver)	0.75	75%
Processing, CIL	\$9.00	per ton
Transportation	\$12.00	per ton

### UVX Mine Options (July 2, 1987)

Assumptions: Gold at \$450.00/ounce  
Silver at \$7.50/ounce

High Grade Reserves of 35,000 tons  
of 0.20 oz/ton gold and 2.0 oz/ton silver  
identified from drilling

	Ore to Inspiration Smelter	Ore to CIL Plant at UVX
	<hr/>	<hr/>
Gross Revenues	\$3,341,625	\$3,228,750
Operating Costs		
Mining	\$2,100,000	\$2,100,000
Processing	\$0	\$315,000
Transportation	\$420,000	\$0
Operating Profit	\$821,625	\$813,750

(6) other areas have been identified in the mine, where assay data confirms presence of gold bearing cherts. These areas have been described in previous memos from Don White.

(7) by mid-July we should be in a position to hoist waste and ore from the mine.

(8) the 902 transfer raise (connecting the 600, 700, 800, 903 and 950 levels) has been reached and is open to the 903 intermediate level.

(9) we have a location-surveying problem which, until resolved, does not give a very firm basis for any reserve calculations or mining plans.

Our immediate options are:

(A) Stop. Cut our losses and find Joint Venture partner.

(B) Continue and find the 100,000 tons of high grade flux ore which I. Parrish says "...it is safe to say...can be projected." The economics of mining 100,000 tons of material grading 0.25 oz/ton gold and 2.5 oz/ton silver look quite appealing (see following page).

Current status:

800 level: Longyear continues to drill hole 809-4, which at noon today was at 320 feet, in chert, and in no danger of encountering any stopes. The chert contains almost 5 percent copper in the form of copper carbonates (add-on value from the smelter?), and is described as silica ore in old records. Gold values unknown.

950 level: Crew is at 902 transfer raise en route to 902 drill station, hopefully along old drift.

950 level: work on ore pocket and loading facility continues.

Recommendations based on Option (B):

(1) Order 350 hp. compressor on 1-yr. lease with option to purchase.

(2) Continue with hole 809-4 to diorite/fault contact (another 100 ft., or about 5-6 shifts); drill hole 809-5 at a bearing of 185 degrees, beneath hole 809-2 to test vertical continuity (180 ft., about 10-12 shifts). Dismiss Longyear on completion, about July 17.

(3) Using 902 transfer raise, access 903 intermediate level to sample M-3 zone and obtain sufficient survey points to correct

Assumptions and Parameters

gold	\$450.00	per ounce
silver	\$7.50	per ounce
high grade reserves	100000	tons
grade (gold)	0.25	oz/t
grade (silver)	2.5	oz/t
cost, mining rock	\$60.00	per ton
Recovery in CIL (gold)	0.9	90%
Recovery in CIL (silver)	0.75	75%
Processing, CIL	\$9.00	per ton
Transporation	\$12.00	per ton

UVX Mine Options (June 29, 1987)

Assumptions: Gold at \$450.00/ounce  
Silver at \$7.50/ounce

Indicated High Grade Reserves of 100,000 tons  
of 0.25 oz/ton gold and 2.5 oz/ton silver

	(B)	(B)
	Ore to Inspiration Smelter	Ore to CIL Plant at UVX
Gross Revenues	\$11,746,875	\$11,531,250
Capital	\$0	\$1,000,000
Operating Costs		
Mining	\$6,000,000	\$6,000,000
Processing	\$0	\$900,000
Transportation	\$1,200,000	\$0
Operating Profit	\$4,546,875	\$4,631,250
Recovery of Capital	(\$0)	(\$1,000,000)
Sunk Costs	(\$1,580,000)	(\$1,580,000)
Aditonal Exploration	(\$900,000)	(\$900,000)
Net Profit on Project	\$2,066,875	\$1,151,250

location problem.

(3) Continue towards 902 drill station; one shift drilling from the 902 station per Don White's recommendations of June 30, until 901 station is available. The 901 station provides access, which, according to Don White's memo of June 16, is the "most likely area to contain more gold at U.V.X."

(4) Send a shipment of flux quality material to Inspiration on which to base a smelter contract. Continue to study alternate processing of ore at CIL Plant, based on metallurgical testing currently in progress. Start test mining in the M-3 zone from the 903 intermediate level; stockpile on surface.

These recommendations are based on the belief that (a) contrary to Irwin Parrish's suggestions, a Joint Venture partner would dilute our interest significantly and any near term cash flow would be impossible to realize, (b) the risk involved now is not so great as it was a year ago, and (c) mining the M-3 the zone simultaneously with exploration and development of other areas at least minimizes the risk of total loss.

To: Anthony F. Budge

From: Carole A. O'Brien

Date: August 22, 1987

Subject: Status and Recommendations for U.V.X. Project

### Drilling Contractor

It appears now we will not be getting any competitive bids from either Centennial or Ruen. Centennial claims they are too busy; Ruen would not be able to send anyone to evaluate the job and bid for 6 weeks.

Longyear has proposed another cost increase. Their latest is \$87.35 per hour plus \$5.00 per ft. drilled. This equates to approximately \$56.38 per ft. based on average advance of 1.7 ft/hour. In our opinion, an hourly rate provides no incentive to make footage. We would propose to offer them \$25 per ft. in diorite and \$65 per ft. in chert.

### 809 Area

Disregarding hole 809-3, which was designed to test the upward extension of the M-3 zone, we have drilled 6 holes in this area for a total of 1,814 feet. We intersected mineralization ranging from 38 ft. (true?) of 0.106 in hole 809-7 to 35 ft. (true?) of 0.433 in hole 809-4.

The highest grade intercept is open approximately 60-80 feet to the west to the diorite contact. A hole bearing 231°-232° would define the limits of this high grade zone. In holes 809-2 and 809-5, a zone has been identified which has promise for equal or better grades up dip. A hole, bearing 185° at +33° would prove this. Don would prefer this hole over the previous one. However, this hole runs risks of a) hitting a drift on the 700 level, and/or b) entering the overlying Tertiary conglomerates and missing the zone. Another hole that should be drilled is one intermediate between hole 809-1 and 809-6 to provide information on the continuity and relationship of the two indicated zones.

These three holes totalling + 840 feet could be drilled in 5-6 weeks at an approximate cost, based on increased drilling charges, of \$50,000.00.

### 902 Area

We should be driving new drift on Monday towards the 902 DDS. With one shift, the 75-ft. drift should take 3 weeks to complete. Station should be ready for drilling by mid-September.

### 902 Area cont'd

Don has proposed 11 holes from this station for a total of 2,090 feet, or, at \$60/ft., \$125,400. This drilling should take about 123 shifts, or 12½ weeks.

### 911 Area

At this time, we do not know whether access to this area will be via the 901-S or the 990. By the end of next week, we should know whether the 901-S is open and useable.

We are 420-450 feet away from the 911 DDS. Depending on our rate of advance, we could possibly be there in 12 weeks.

### Recommendations

The results that drilling provides are critical to our future plans and operations. Based on Hodder's calculations, we have indicated reserves of over 50,000 tons in the M-3 zone containing over 15,000 gold equivalent ounces. In the 809 zone, we have partially indicated reserves of at least 30,000 tons containing at least 6,000 gold equivalent ounces.

Our priority areas for additional reserves are the 911 area and the southern extension of the M-3 zone. We should start drilling these areas as soon as a station is available.

My recommendations therefore are as follows:

1. In lieu of any alternate drilling contractor, settle on a contract with Longyear immediately for resumption of drilling as soon as the 902 DDS is available.
2. Access the 911 area and have the 911 DDS ready and available as soon as 902 drilling is finished. This will mean a fairly rigid drilling schedule in the 902 station for optimum number of holes to adequately define the zone.
3. Drill the 911 area.
4. And at our leisure, coincident with production, do our fill in drilling in the areas where required, e.g., 809 area.

U.V.X. GOLD PROJECT - DRILLING/ASSAY SUMMARY

<u>Area/DDH</u>	<u>Thickness</u> (ft)	<u>Grade</u> <u>Au</u>	<u>(oz/t)</u> <u>Ag</u>	<u>Length/Height</u> (ft)	<u>Tons</u> <sup>(1)</sup> (K)	<u>Contained</u> <u>oz. Au(K)</u>	<u>REMARKS</u>
<u>Florenzia area</u>							
UVX-1	20	.20	1.5				Phelps Dodge Corp holes from 1104 D.D.S; intercepts closer to Florenzia fault and main massive sulfide body than DMEA drilling
UVX-2	35	.18	.4				
1104-1	15	.11	.5				
1104-2	14	.14	.4				Other mineralization deep in hole relates to Verde area
1104-3	19	.12	.3				
TOTAL	21	.16	.6	150/200	52	8	Not counting areas south of Florenzia fault which are mineralized but likely caved into main orebody's void. Could be reached by cleanup of 200' old drifts.
<u>1205/Gold stope area</u>							
901-1	6	.15	.6				Aborted in hanging wall, drilling difficulties
901-2	-	-	-				
901-3	7	.18	3.1				Possibly lower grade than reality because of poor core recovery (20%) in 10' over back of 903 sublevel drift.
Compilation from old data	20	.30	1.5	Irregular	20	6	
<u>Verde area</u>							
806-1	<u>64</u>	.11	1.4	500/200	<u>530</u> 106	58 26	Within which are higher grade zones such as <u>13</u> ft. averaging 0.24 oz/t Au, 2.2 oz/t Ag.
<u>U.V.X. TOTAL</u> <sup>(2)</sup>	-	.12	1.3	---	588	70	Plus 750,000 contained ounces Ag.

(1) Tonnage factor = 12 cu. ft. per ton

(2) All three areas weighted by tons; based upon two P.D. drill holes, seven DMEA drill holes, old data in proximity to the gold stope, and estimates of deposit dimensions based upon compilation of old mine geology data. Grade could be increased by a factor of two if only higher grade intercepts ( $\geq 0.2$  oz/t Au) are used but tonnage would be cut by at least half.

Hole No.	Length	Drill site/ level	Drilling dates		Target
			Start	End	
806-1	633	800	12-16-85	01-29-86	Verde area
1104-3	440	1100	10-29-85	?	
1104-2	730	1100	09-17-85	10-28-85	
1104-1	567	1100	08-12-85	09-16-85	
901-1	358	900	09-16-85	10-22-85	
901-2	421	900	10-29-85		
901-3	367	900	11-20-85	12-09-85	Gold Stope
Sub-total	3,516				
M-1	262		01-09-87	02-05-87	
M-2	226		02-09-87	02-16-87	
M-3	233		02-17-87	02-26-87	
M-4	295		02-26-87	03-12-87	
M-5	198		03-12-87	03-23-87	
M-6	195		03-24-87	03-31-87	
M-7	129		03-31-87	04-07-87	
M-8	187		04-07-87	04-14-87	
M-9	183		04-14-87	04-22-87	
M-10	278		04-22-87	04-28-87	
M-11	210		04-28-87	05-04-87	
Sub-total	2,396				
809-1	336		05-06-87	05-20-87	
809-2	240		05-20-87	05-29-87	
809-3	370		05-29-87	06-16-87	
809-4	369		06-16-87	07-06-87	
809-5	195		07-06-87	07-10-87	
809-6	339		07-10-87	07-24-87	
809-7	335		07-27-87	08-06-87	
809-8	235		09-22-87	09-30-87	
809-9	187		09-30-87	10-06-87	
Sub-total	2,606				
902-1	230		10-09-87	10-21-87	
902-2	194		10-21-87	10-29-87	
902-3	120		10-30-87	11-04-87	
902-4	215		11-05-87	11-12-87	
902-5	98		11-12-87	11-18-87	
902-6	146		11-19-87	11-30-87	
902-7	160		11-30-87	12-08-87	
Sub-total	1,163				
911-1	110		12-14-87	12-21-87	
911-2	127				
911-3	178				

911-4	100
911-5	140
911-6	156
911-7	104
911-8	97
911-9	170
911-10	106

Sub-total 1,288

907-1	165
907-2	105
907-3	107

03-16-88	03-21-88
03-21-88	03-23-88

Sub-total 377

Sub-total 7,830

<u>Date</u>	<u>Drilling</u>	<u>Other activities</u>
January 9, 1987	collared hole M-1	
February 9	M-2	
February 17	M-3	
February 26	M-4	advancing on 806 drift
March 12	M-5	to 809 drill station
March 24	M-6	
March 31	M-7	
April 7	M-8	working on 901-S to 912
April 14	M-9	raise for muck disposal
April 22	M-10	abandoned 912: move to 1100
April 28	M-11	level to clean out raise
May 6	809-1	started turnout from Morgan
May 20	809-2	station
May 29	809-3	working on ore pocket
June 16	809-4	120 ft. on new drift
July 6	809-5	working on loading chutes
July 10	809-6	
July 27	809-7	hoisting muck from ore
		pocket/loading chutes
		mucking on 902 raise
		drifting around raise area
		advance along old drift
September 8		advance to 902 drill station
September 18		40 ft. in to station
September 21		cutting 902 station
		at intersection of 990 with
		902-W

MEMORANDUM

To: Anthony F. Budge

From: Carole A. O'Brien

Date: September 1, 1987

Subject: Exploration at U.V.X.: Expenditures during the period  
January 1, 1987 to July 31, 1987.

From January, when we began our second round of drilling, to the end of July, 1987, we have spent \$718,018.02 on the UVX project. Of that, \$200,735.37 went for direct drilling costs; \$38,244.56 for indirect drilling costs (compressor rentals and fuel); \$11,686.00 for assays; \$21,905.11 for headframe modifications and ore pocket construction; \$78,256.82 for consultants. The remaining equates to a daily cost of operating, opening new drifts and rehabilitating old drifts of about \$2,400.00, or \$1,200.00 per shift.

During this 8 month period we drilled 4,507 feet from two drill stations (73 feet were drilled in August and accompanying expenses during this period are not included).

Costs can be allocated as follows:

Direct drilling	\$ 44.54 per foot
Indirect (compressor, fuel)	\$ 8.49
Assays	\$ 2.59
Geologist (D. White)	\$ 8.65
Misc. & other consultants	\$ 8.71
Sub-total	\$ 72.98 per foot

Overall costs \$ 159.31 per foot

With increase in drilling in chert, costs in future may be closer to \$180 per foot. With proposed drilling of 5,000 feet, this is equivalent to \$900,000.00.

Based on previous experience, the 5,000 feet of drilling will take 7 months, to about April 30, 1988.



**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

November 23, 1987

Paul Handverger  
2160 Old Jerome Highway  
Clarkdale, Arizona 86234

Dear Paul:

This is to confirm our phone conversation of November 20, 1987 regarding water discharge from the Josephine Tunnel. It is our understanding that current statutes require permits either from the Arizona Department of Water Resources or Department of Environmental Quality or both.

We agreed to sample and have analysed water samples from the tunnel. The water samples will be analysed for constituents required in EPA drinking water standards; including heavy metals, arsenic, nitrates, fluoride, pesticides, herbicides and radionuclides. Cost of the sampling, transportation to the lab, and analysis is estimated at \$500.

If Verde Exploration has any previous analyses of the water I would appreciate a copy. Also, copies of other data, agreements or records regarding water discharge from the tunnel would be most helpful in preparing any permit application.

Since the tunnel may drain all of the UVX property and not exclusively land A. F. Budge (Mining) Ltd. has leased, any permit application should probably be prepared and submitted jointly. May I suggest we meet to discuss and plan this effort after the results of the water analyses are complete.

Regards,

A. J. Fernandez  
Senior Mining Engineer

CAROL

3-7-90

PLEASE SEND  
A COPY OF THE  
RESULTS OF THIS  
TEST. THANK



# Accu-Labs Research, Inc.

11485 W. 48th Avenue Wheat Ridge, Colorado 80033  
(303) 423-2766

December 31, 1987

Page 1 of 2

Mr. A.J. Fernandez  
A.F. Budge (Mining) Limited  
7340 E. Shoeman Lane  
Suite 111 "B" (E)  
Scottsdale, AZ 85251-3335

DMEA LTD.  
JAN 4 1988  
RECEIVED

RE: 9416-25904-1  
Date Samples Rec'd 12-2-87

## REPORT OF ANALYSIS

ALR Designation	9416-25904-1-1
Sponsor Designation	JT 1
	<u>12-1-87</u>
Determination: mg/L	
Pesticides:	
Lindane	<0.004
Endrin	<0.0002
Methoxychlor	<0.1
Toxaphene	<0.005
Herbicides:	
2,4,5-TP (Silvex)	<0.01
2,4-D	<0.1
Gross Alpha, total, ± counting error*, pCi/L	1 ± 6
Gross Beta, total, ± counting error*, pCi/L	8 ± 6
Barium, total	<0.2
Cadmium, total	<0.005
Chromium, total	<0.005
Mercury, total	<0.0001
Silver, total	0.012
Arsenic, total	<0.005
Lead, total	<0.005
Selenium, total	0.016
BOD	**
Fecal Coliforms, Colonies per 100 mLs	<1

December 31, 1987

Page 2 of 2

Mr. A.J. Fernandez  
A.F. Budge (Mining) Limited

RE: 9416-25904-1  
Date Samples Rec'd 12-2-87

REPORT OF ANALYSIS

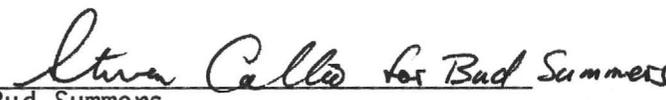
ALR Designation	9416-25904-1-1
Sponsor Designation	JT 1
	<u>12-1-87</u>
Determination: mg/L	
Nitrate (as N)	2.1
Total Cyanide	<0.005
Fluoride	<0.5

\*Variability of the radioactive disintegration process (counting error) at the 95% confidence level,  $1.96\sigma$ .

\*\*Analysis not performed within recommended maximum holding time.

These samples are scheduled to be discarded 30 days after the date of this report.

  
\_\_\_\_\_  
Chris Shugarts  
Organics Chemistry  
Supervisor

  
\_\_\_\_\_  
Bud Summers  
Radiochemistry  
Supervisor

  
\_\_\_\_\_  
Cathy Shugarts  
Water Laboratory  
Supervisor

CS/BS/CS/dh 

DECONCINI McDONALD BRAMMER YETWIN & LACY

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

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February 20, 1992

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(602) 241-0100  
FAX: (602) 241-0220

PLEASE REPLY TO TUCSON

Mark S. Gladner, Esq.  
CROSBY & GLADNER, P.C.  
111 W. Monroe, Suite 706  
Phoenix, AZ 85003

Re: **Your Client Zurich American Insurance  
Your File No. 69-106**

Dear Mr. Gladner:

Your letter of February 11, 1992, to Ronald Short at A.F. Budge (Mining) Ltd., has been referred to this office for response. You are indeed correct that A.F. Budge had previously corresponded with GAB Business Services, Inc. related to a ceiling collapse that occurred at the United Verde Extension Mine in March of 1991.

A.F. Budge has been operating at the UVX since 1985, and it is my understanding that at the time of the incident they had been mining the stope that experienced the collapse for some months. Your suggestion that "previous attempts have been made to reinforce, concrete and shore potential problem areas" was somehow a suggestion that the workplace was not safe is silly. Actions to reinforce or otherwise protect underground work places is a part of normal underground operations and is simply a methodology of insuring working conditions are safe. These activities occur on a regular basis in all underground mines, and in fact, the absence of such activities might suggest a disregard for safety considerations. Further, the mine is the subject of frequent inspections by the Federal Mine Health and Safety Administration. The workplace in question was inspected by MSHA both before and subsequent to the ceiling collapse and no action or inaction by A.F. Budge or its contractors was found to be inappropriate.

The fact of the matter is that the workplace in the mine where the activity was taking place was considered by both A. F. Budge and Boart Hardmetals, Inc. (the contractor) to be "safe and clean." As indicated in the previous letter transmitted by my client to GAB

DECONCINI McDONALD BRAMMER YETWIN & LACY

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

Mark S. Gladner, Esq.

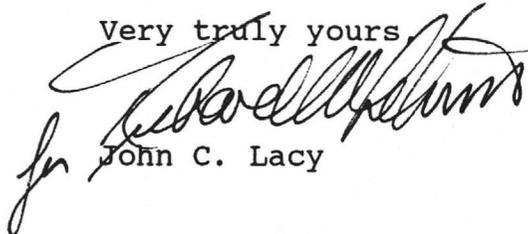
February 20, 1992

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Business Services, it is clear that some responsibility was placed on the contractor to raise any issues as to questions concerning the condition of the working premises. None had been raised prior to the event, and the failure was totally unexpected and beyond the control of A.F. Budge.

Accordingly, we respectfully decline your demand for reimbursement for loss of the equipment involved. Please direct any further communication in this matter to this office.

Very truly yours



John C. Lacy

bpm

c: Carole A. O'Brien  
Ronald Short

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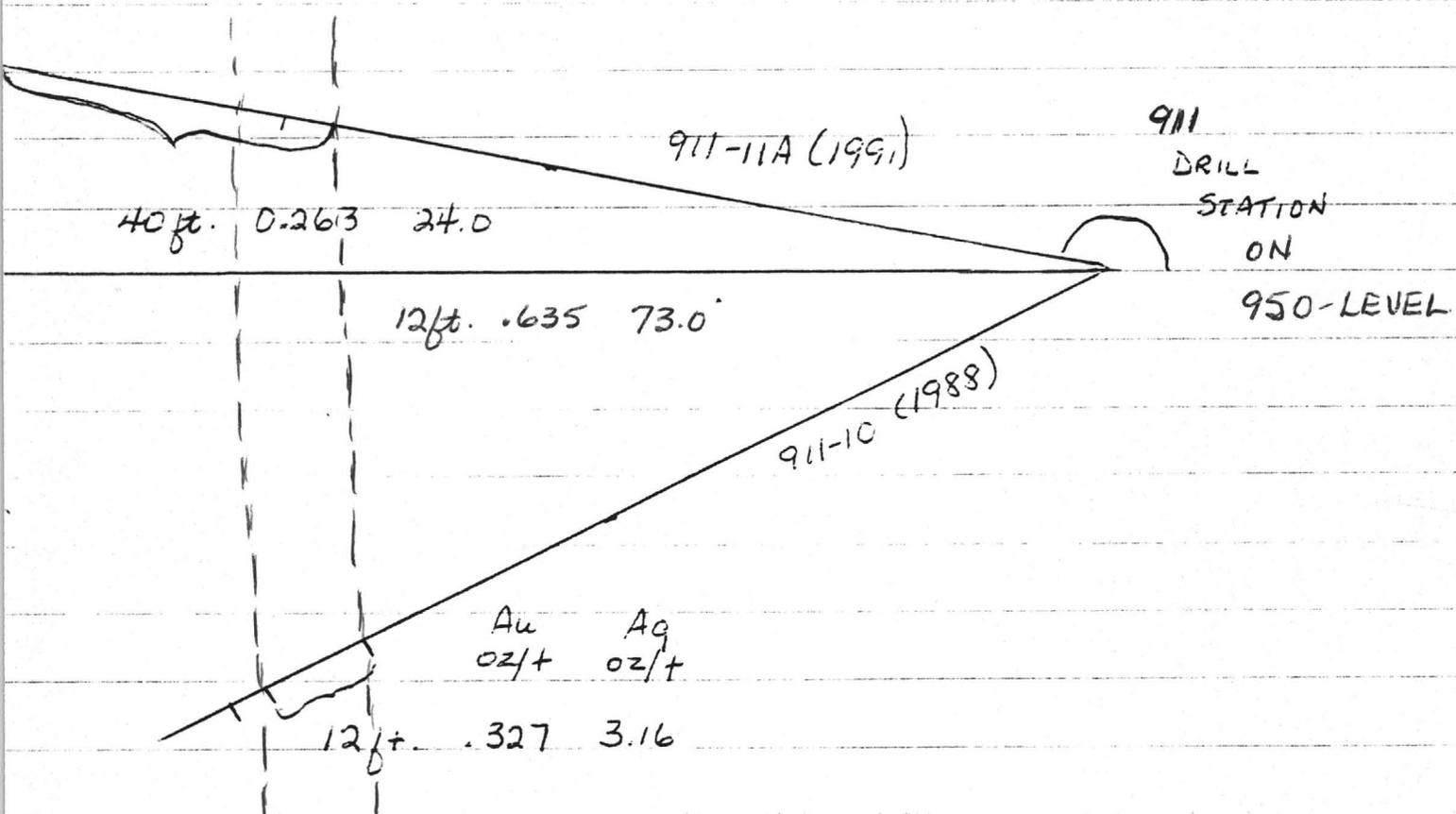
Lab Job #; AFB0146

Client name: A. F. Budge Mining Ltd.

ANALYTICAL REPORT

Client ID AFB0146	Lab ID	Fire Assay Au oz/ton	Fire Assay Ag oz/ton	AA/Cu wt%
1421	0146-17	0.190	3.69	1.03
1422	0146-18	0.166	4.58	0.17
1423	0146-19	0.101	7.53	0.12
1424	0146-20	0.091	3.25	0.06
1425	0146-21	0.115	3.43	0.09
1426	0146-22	0.091	3.05	0.15
1427	0146-23	0.106	1.82	0.22
1428	0146-24	0.103	6.03	0.09





VERTICAL DIMENSION : 80 FT.  
 WIDTH : 12 FT.  
 STRIKE LENGTH : ?

100 x 12 x 480 = 48,000 t.  
 @ .4 oz/ton gold & 4.0 oz/t silver  
 19,000 ounces gold  
 + 192,000 ounces silver  
 "Net" @ \$375 gold + \$3.80 silver = \$3,360,000

# IRON KING ASSAY

Page 1

1-22-91

LAB JOB#: AFB0174

Client Name: A. F. Budge Mining Ltd.

Billing Address: 4301 N. 75th St.  
Suite #101  
Scottsdale, AZ 85251-3504

Phone: (602) 945-4630

ATTN: Carole A. O'Brien

No. Samples: 38

Date Received: 1-16-91

Submitted By: R. Short

INVOICE ATTACHED

ANALYTICAL REPORT

*Hole # 911-11A*

Client I.D.	LAB I.D.	Fire Assay				
		Au oz/ton	Ag oz/ton	Au oz/ton	Ag oz/ton	
AFB0174						
1429	174-1	.046	.84			<i>drilled above 911-10 @ + 11° 250 azimuth.</i>
1430	174-2	.009	.91			
1431	174-3	.008	.90			
1432	174-4	.011	.88			
1433	174-5	.048	4.05			
1434	174-6	.039	3.50			
1435	174-7	.079	4.98			
1436	174-8	.010	1.53			
1437	174-9	.024	3.67			
1438	174-10	.059	5.71			
1439	174-11	1.797	203.40	1.645	223.67	
1440	174-12	.853	124.93	.716	116.61	
1441	174-13	.117	4.36	.113	3.72	
1442	174-14	.086	4.33	.070	3.55	
1443	174-15	.106	3.68			
1444	174-16	.055	1.88			
1445	174-17	.073	2.09			
1446	174-18	.040	1.33			

	<i>Au</i>	<i>Ag</i>
	<i>oz/t</i>	<i>oz/t</i>
<i>86'-91': 5 ft.</i>	<i>1.419</i>	<i>171.65</i>
<i>91'-120': 29 ft.</i>	<i>.075</i>	<i>2.63</i>
<i>120'-126': 6 ft.</i>	<i>.209</i>	<i>4.30</i>
<i>86-126: 40 ft.</i>	<i>.263</i>	<i>24.0</i>



Client I.D.	LAB I.D.	Fire Assay	
		Au oz/ton	Ag oz/ton
AFB0174			
1447	174-19	.050	1.57
1448	174-20	.063	1.20
1449	174-21	.059	2.09
1450	174-22	.210	4.79
1451	174-23	.208	3.80
1452	174-24	.071	2.31
1453	174-25	.100	3.78
1454	174-26	.014	1.13
1455	174-27	.012	.85
1456	174-28	.007	1.06
1457	174-29	.009	1.05
1458	174-30	.019	.88
1459	174-31	.014	1.03
1460	174-32	.007	.89
1461	174-33	.006	.96
1462	174-34	.021	.95
1463	174-35	.039	6.68
1464	174-36	.027	2.02
1465	174-37	.009	.65
1466	174-38	.005	.39



12000 N

Audrey Shaft

Edith Shaft

809 DDS

Morgan DDS

Gold Stope

11500 N

902 DDS

11000 N

911 DDS

6500 E

7000 E

7500 E

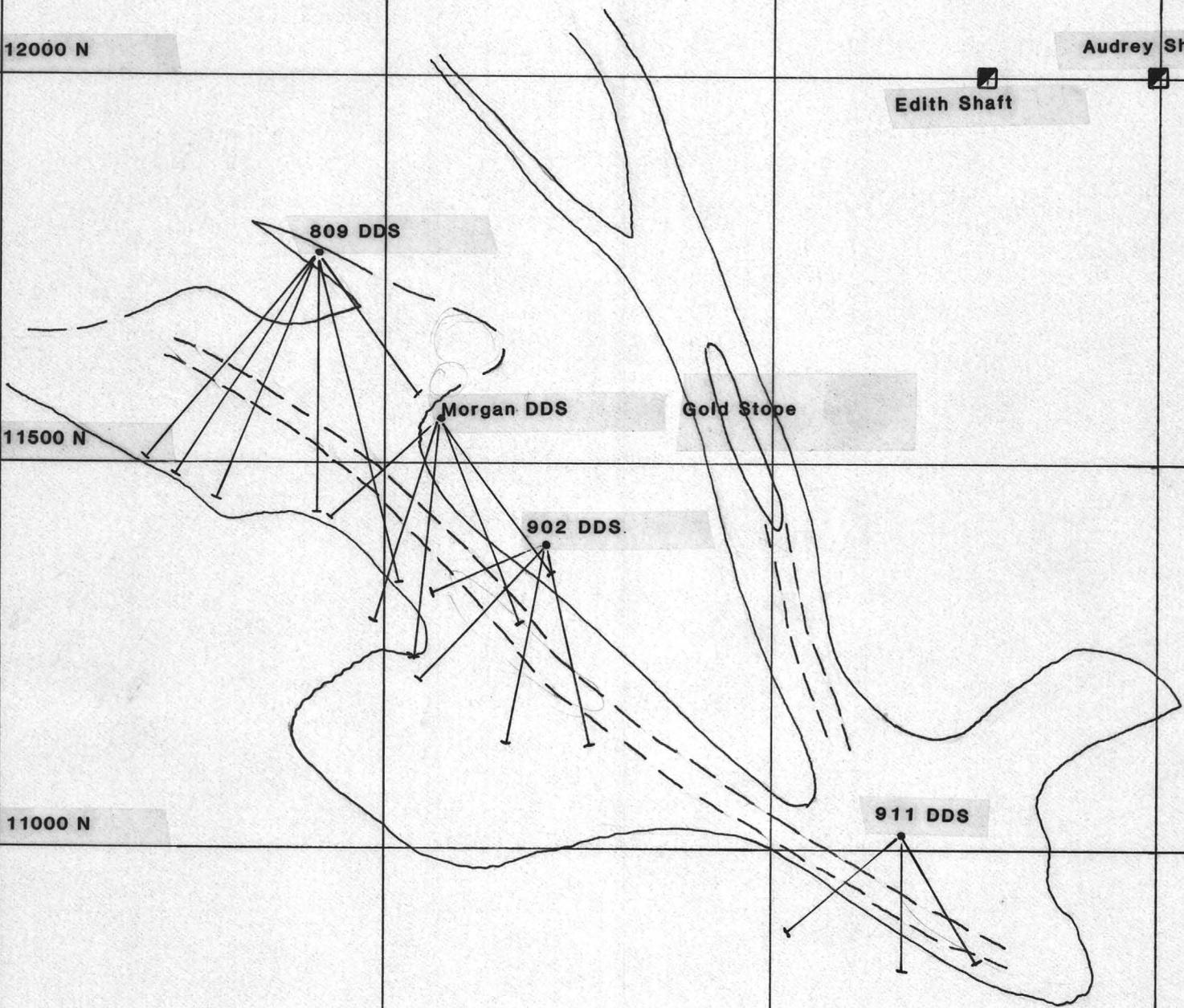
8000 E

# UVX Project

Sketch map to accompany  
memo to AFB, February 10, 1988

Scale: 1 inch - 200 feet

C.A. O'Brien



A.F. Budge (Mining) Limited

To: Ron Short  
John Norby

Date: August 31, 1990

From: John McKenney

Copies: A.F. Budge  
C.A. O'Brien  
D.H. Allen  
File

Subject: Update on Exploration Drilling at the U.V.X. Mine

Summary

Drilling from the 807 D.D.S. testing the north extension of the Gold Stope trend has been completed. No encouraging indications of mineralization were found.

Two holes from the new 908 D.D.S. have been completed. A significant intercept of high grade gold mineralization was encountered in the first hole (#908-7) testing the 907 up dip target. The second hole (908-1) successfully penetrated the target zone of the "faulted target." Assay results are pending.

Ongoing evaluation of the 809/900 trend is yielding encouraging Cu values along with low grade Au and Ag values.

807D.D.S.

Drilling from the 807 D.D.S. was completed on 8/8/90. Four holes testing two targets were completed. Hole #807-1, Az 245°, -25°, 279' tested and confirmed the connection of the 900 orebody on the 950 level with the maintop Cu stope below the 950 level. It drilled 15' of chert grading .092 opt. Au and 0.99 opt. Ag which included 6' grading .159 opt. Au and 1.11 Ag.

Holes #807-2,3&4, Az 60°, +12°, 279'; 60°, -12°, 276' & 30°, -22°, 197' respectively, tested the north extension of the Gold Stope Au mineralized trend. No encouraging indications of mineralization were encountered.

908 D.D.S.

The first hole (908-7, Az 63°, +59°) was designed to test the new 907 up dip target area. It was completed on 8/22 at a total depth of 88'.

Summary log

0'-4' chert and clayey limonitic rock  
4'-16' low Fe grit  
16'-20' FeSiBx  
20'-34' mod FeSiBx  
34'-40' red hematite SiBx  
40'-88' E.O.H. FeSiBx

Preliminary assay results yielded a 41' intercept of FeSiBx grading .366 opt. Au and 5.83 opt. Ag which included 26' grading .566 opt. Au and 7.69 opt. Ag which in turn included 20' grading .703 opt. Au and 9.18 Ag. Assays for Cu/Fe and Si are pending. Poor core recovery (approx. 63%) for the entire hole and approx. 45% for the highest grade intercepts dictates caution in interpreting these results. Five more holes to further test and characterize this target area are planned.

Hole #908-1 has successfully reached the "faulted target" at the 903 sublevel elevation. This hole (Az 227°, +19°) was begun on 8/22 and completed on 8/29 at a total depth of 146'. Reaming, casing and 1' drill runs were required for most of the hole due to terrible drilling conditions.

Summary log

0'-12.5' grit  
12.5'-35' diorite  
35'-39.5' gritty silica  
39.5'-47' dioritic fault gouge  
47'-59.5' gritty silica  
59.5'-88' gray translucent chert, well brecciated in target zone  
Logging and sampling has not been completed to date.

### 809/900 Trend

Ongoing evaluation of the 809/900 silica trend continues to yield encouraging results. Recent Cu assays indicate Cu values of 3.95wt.% Cu on the 700 level east of 6960E with .07 opt. Au and 2.41 opt. Ag. This equals a rough Au eq. of .292 opt. Au (using \$1.00 Cu, \$4.00 Ag, \$400 Au, no deduct and 100% recovery). Known higher grade Au zones exist in this area. Fe and Si analysis are pending but a visual estimate is 20% Fe and 65% Si. Evaluation of this area is continueing. See assay Sheets #1,2&3 attached.

A.F. Budge (Mining) Limited

TO: R.R. Short

DATE: August 22, 1990

FROM: J.W. Norby

COPIES: A.F. Budge  
C.A. O'Brien  
D.H. Allen  
J.A. McKenney  
File

SUBJECT: EXPLORATION UPDATE

UVX UNDERGROUND GOLD FLUX MINE, JEROME, ARIZONA  
(John A. McKenney, Mine Geologist)

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PROGRESS TO DATE

Planned UVX 1990 exploration drilling from stations on or above the 800 level is complete, having core tested five gold-bearing chert/grit trends with a total of 20 holes (4044 ft). These drilled targets are 1) the Northwest Morgan trend (9 holes, 1824 ft), 2) the 809 chert body (6 holes, 1024 ft), 3) the upper extension of the 900 orebody above the in-production stope (1 aborted hole, 165 ft), 4) the north extension of the 900-B orebody at the elevation of the A level (1 hole, 279 ft), and 5) the Northwest Gold Stope chert/grit trend (3 holes, 752 ft). The cost of this drill program initiated in early April has totalled \$101,500 through mid-July.

Northwest Morgan drilling failed to identify a new large grit body, but did extend the higher grade portion of the Morgan grit trend to the northwest and up, about 90 ft from previous drilling and 160 ft from where mining stopped on the Morgan orebody (6/89). The first step-off hole (805-2) northwest of previous drilling, intersected 20.5 ft grading 0.277 oz gold/ton and 2.4 oz silver/ton which occurs within 59 ft grading 0.117 oz gold/ton and 1.32 oz silver/ton. This result, along with previous drill results suggest that the higher grades occur within about a 50 vertical ft section which climbs to the northwest from the Morgan stope. Other 1990 holes completed further to the northwest of 805-2, and above and below this trend intersected thinner chert horizons of lower grades (less than 0.1 oz gold/ton). Several additional holes planned further northwest on trend were cancelled.

Secondary benefits were realized from the Northwest Morgan drilling program, as all holes had significant intercepts at the collar, in addition to those in the Northwest Morgan target. The 7 holes collared at the 805 drill station intersected an average 20.1 ft grading 0.156 oz gold/ton and 0.92 oz silver/ton at the collar, locally extending the southern margin of the 900-B orebody. The two Northwest Morgan holes collared at the 700 drill station defined and upgraded the local southern margin of the 809 chert reserve, intersecting 29 ft grading 0.195 oz gold/ton and 0.96 oz silver/ton (700-1), and 16 ft grading 0.182

oz gold/ton and 1.36 oz silver/ton (700-2) at their collars. The first 8 ft of these two holes averaged 0.401 oz gold/ton and 1.29 oz silver/ton.

The 809 chert reserve was tested in its center by two holes collared at the 701 drill station. Flat hole 701-1 found ore grade mineralization at the elevation of the 700 level, intersecting 18 ft grading 0.133 oz gold/ton and 4.05 oz silver/ton at the collar and a second separate 43 ft interval grading 0.185 oz gold/ton and 2.00 oz silver/ton which contains a higher grade 12 ft interval grading 0.365 oz gold/ton and 1.67 oz silver/ton. This intercept indicates that the chert mineralization outlined 60 ft below in 809 sublevel development extends upward to the 700 level. The second hole in this central area, 701-2, failed to extend the mineralization 35 ft above the 700 level, intersecting only 71 ft grading 0.059 oz gold/ton and 4.28 oz silver/ton.

The 809 chert reserve was tested in its northwest extent by four holes collared at the 702 drill station. These holes indicate that the higher grade central trend within the 809 chert reserve extends to the northwest but is of lower tenor there. Holes testing this trend at about the elevation of the 700 level intersected 42 ft grading 0.091 oz gold/ton and 3.68 oz silver/ton (702-1) and 24 ft grading 0.128 oz gold/ton and 1.51 oz silver/ton (702-2). Additionally, these holes were extended to test the far northwest portion of the Northwest Morgan trend in the area of what had been termed the 809 High Grade based on one high grade intercept from an earlier drill program. These recent holes indicate that the far Northwest Morgan trend is low grade to barren and that the 809 High Grade intercept is not repeatable.

Six holes were planned to test the unmined portion of the 900 chert/grit orebody 50 and 100 ft above the 800 level production stope, all to be drilled from the 700 drill station. The first hole, 700-3 (50 ft up), had penetrated about halfway into the upper extension of the main 900-A orebody when it was noticed that drill water was leaking into the underlying production stope, jeopardizing the integrity of these active workings. The hole was terminated short of the up projection of the higher grade grit layer at the diorite contact and the other planned 5 holes were put on indefinite hold until 900 stope mining is complete. The last 32 ft of the hole contained 0.187 oz gold/ton and 4.86 oz silver/ton (including 9 ft grading 0.325 oz gold/ton and 4.15 oz silver/ton) in the upper extension of the 900-A orebody. The hole also intersected 18 ft grading 0.135 oz gold/ton and 7.01 oz silver/ton in the upper extension of the 900-B orebody, and a third 10 ft interval grading 0.214 oz gold/ton and 1.90 oz silver/ton above the 805 drill station collar intercepts. In fact, the entire completed 165 ft of the hole was mineralized chert grading 0.091 oz gold/ton and 3.63 oz silver/ton, indicating that at an elevation above the 800 level the 900 chert/grit orebody is continuous with the 809 chert

reserve. The 809/900 Up-dip chert body represents a significant flux quality mineral reserve of perhaps 100,000 tons (J.A. McKenney recent very rough estimate) of marginal grade in the 809 area (with a higher grade core) and encouraging but largely undetermined grade in the 900-Updip area. More detailed reserve estimates on the overall chert resource and on the higher grade portions will be completed in the near term.

The 900-B chert/grit trend on the A sublevel projects north to historic on-trend workings that were thought by J.A. McKenney to possibly indicate grit workings. A single hole, 807-1, testing this idea confirmed the extension of the chert/grit trend but unfortunately found that the tenor decreases to the north. The hole intersected 14.5 ft grading 0.092 oz gold/ton and 0.99 oz silver/ton, including 6 ft grading 0.159 oz gold/ton and 1.11 oz silver/ton.

Three holes were recently completed (8/8) testing the northwest extension of the Gold Stope chert trend. This is a new area, not defined by previous drilling. No chert body was intersected in the holes, indicating the Gold Stope chert trend pinches out to the northwest. Some silicified sections were encountered but positive assays results are not anticipated.

## FUTURE WORK

Two drift exploration projects have recently been started, 3 core drill target tests are planned from the 950 level, an additional 3 core drill target tests collared on this same level are under consideration, and the deep massive sulfide drill test required under the Verde lease is being discussed. The 950 sublevel and Hanging Wall Gold Stope drift exploration projects should partially pay for themselves with gold-bearing development muck. A total of 16 holes (3687 ft, \$140,000) will test the 907 Up-dip, the Faulted Target, and the 900 Down-dip planned 950 level targets. A total of 13 holes (1931 ft, \$80,000) will test the 905-S/911 Connect, the 905-S Up-dip, and the 911 Up-dip additional 950 level targets under consideration. The Verde lease hole is estimated at 850 ft (\$30,000).

The 950 sublevel exploratory development is being driven below the A sublevel of the 900 orebody, testing for the downward extension of this chert/grit body which has the rough configuration of a vertical cylinder. The floor of the A sublevel contains higher grades (>0.3 oz gold/ton), providing encouragement for ore at deeper levels, but the extent of this projected mineralization is unknown.

Raises are currently in progress on the Hanging Wall Gold Stope grit body, which historically produced an estimated 35,000 tons grading 0.4 oz gold/ton and 2 oz silver/tons. Current development is targeting pillars and hanging wall remnants left behind. Up-dip and on-trend exploration drifting is also planned along the chert/grit unit.

The core drill was recently moved from the 800 level down to the 950 level where the first drill hole into the 907 Up-dip target is in progress. This target, recently identified by J.A. McKenney is located above and east of the 907 development stope. Old records indicate a "40 ft section of high gold and copper in the 3rd and 7th floors of (a local) raise", and a previously drilled hole (907-4), intersected 5 ft grading 0.69 oz gold/ton and 2.6 oz silver/ton in limonitic vuggy iron silica nearby. Current plans are to test this target with 7 shorter holes (782 ft, \$30,000). All of the planned holes will be completed only if initial drill results are positive. These holes testing the 907 Up-dip target and also those testing the Faulted Target will be drilled from the new 908 drill station located within the mined out 907 stope (southeast Morgan orebody).

The Faulted Target target is so named because it consists of a mineralized slice of chert sandwiched between the hanging and footwall segments of the Verde Fault. Past channel sampling indicates grades of 0.18-1.22 oz gold/ton. Six holes (1505 ft, \$50,000) are presently planned to test this virtually unknown terrane with potential for a larger chert-hosted gold body of good flux quality.

Plans are being formulated to drill an initial 3 holes (about 1400 ft, \$60,000) into the downward projection of the 900 orebody below the 950 level from the in-place Morgan drill station. This target will be tested last in order to provide the maximum time for 950 sublevel development of the 900 orebody above the target area, which will better indicate the configuration and trend of the gold-host chert/grit body at its lower extremity. As before, further drilling on this target will be contingent upon first pass drill results. Ore discovered by this drilling will only be mineable from the 1100 level. However, if the downward projection of the 900 orebody is similar in size and grade to that part of the orebody now being mined, then lower level development would be justified.

The chert/grit trend extending south from the 905-S area to where it is cut off by the Florencia fault contains ore grade grit and chert in working exposures. A drill program of 7 relatively short holes (745 total ft, \$30,000) would core sample this previously untested segment of the eastern chert unit. (which hosts the Gold Stope grit orebody 200 ft to the north).

The 905-S area, located immediately south of the Gold Stope, contains an average 25 ft of interlayered grit and chert (locally iron-rich) grading 0.17 oz gold/ton and 7.9 oz silver/ton where channel sampled in two raises. Two holes (584 ft, \$25,000) have been designed to test this area another 50 ft above these raises. Additional local raising and drifting would accomplish the same test and would in fact provide a three dimensional examination of the potential orebody. Additionally, the 905-S chert/grit trend provides one of the most attractive targets occurring below the 950 level. So if lower level targets are to be considered, several holes drilled downward from the 950 level could delineate reserves on this trend which would be mineable from the 1100 level.

Drilling to date on the 911 flux quality grit body has defined a 43,000 ton resource grading 0.12 oz gold/ton and 4.9 oz silver/ton, which could be enlarged with more drilling (possibly doubled), particularly in the up and southeast directions. About one fifth of the 911 reserve is higher grade, averaging 0.23 oz gold/ton and 4.9 oz silver/ton. The planned drill program (4 holes, 602 ft, \$25,000) is designed to locate additional, contiguous higher grade portions of this grit body. Additional holes, particularly testing the southeast extension, would be added if initial results are encouraging.

The UVX lease agreement with Verde Exploration required drilling an 800-850 ft down angled hole (\$30,000) collared on the 950 level. This hole would test a geologically indicated massive sulfide (copper) target located in the footwall of the Verde fault at about the 1600 level of the mine.

Number of cars sampled	Sample No.	Date	Specific area sampled	Gold oz/t	Silver oz/t
30	4274	9/04/90	900	0.250	1.18
30	4275	9/05/90	900	0.318	1.21
30	4276	9/05/90	900	0.222	0.79
30	4277	9/04/90	900	0.330	1.77
30	4278	9/05/90	900	0.445	1.22
30	4279	9/04/90	900	0.150	0.77
30	4280	9/06/90	900	0.503	1.37
30	4281	9/06/90	900	0.202	0.77
30	4282	9/06/90	900	0.435	1.09
30	4283	9/04/90	900	0.158	0.94
30	4284	9/06/90	900	0.397	1.46
30	4289	9/10/90	900	0.415	1.11
30	4290	9/10/90	900	0.403	1.04
30	4291	9/10/90	900	0.441	1.13
30	4292	9/10/90	900	0.513	1.30
30	4293	9/11/90	900	0.296	1.20
30	4294	9/11/90	900	0.241	0.98
30	4295	9/07/90	900	0.681	1.25
30	4296	9/07/90	900	0.488	1.06
30	4297	9/07/90	900	0.616	1.44
30	4298	9/07/90	900	0.647	1.61
30	4299	9/11/90	900	0.192	0.89
16	4300	9/11/90	900	0.271	0.98
32	4301	9/11/90	900	0.155	0.63
32	4302	9/11/90	900	0.200	0.81
30	4303	9/11/90	900	0.378	1.07
22	4308	9/12/90	900	0.383	1.26
32	4309	9/12/90	900	0.354	1.12
30	4310	9/12/90	900	0.380	1.11
30	4311	9/12/90	900	0.350	1.04
30	4312	9/12/90	900	0.398	1.16
20	4313	9/12/90	900	0.311	0.98
30	4314	9/13/90	900	0.396	0.12
32	4315	9/13/90	900	0.362	1.07
30	4316	9/13/90	900	0.512	1.06
30	4317	9/13/90	900	0.382	1.14
32	4318	9/13/90	900	0.306	0.92
30	4319	9/13/90	900	0.343	1.02
32	4322	9/14/90	900	0.292	0.98
36	4323	9/14/90	900	0.430	1.00
30	4326	9/17/90	900	0.503	1.37
32	4327	9/17/90	900	0.322	1.17
32	4328	9/18/90	900	0.411	1.00
30	4329	9/17/90	900	0.358	1.00
30	4330	9/17/90	900	0.480	1.01
30	4331	9/15/90	900	0.302	0.86
30	4335	9/19/90	900	0.314	1.42
38	4336	9/18/90	900	0.292	1.22
24	4337	9/18/90	900	0.414	1.22
30	4338	9/18/90	900	0.295	1.03
20	4339	9/18/90	900	0.428	1.16

30	4340	9/19/90	900	0.280	0.99
30	4341	9/19/90	900	0.325	1.26
30	4342	9/20/90	900	0.313	1.26
30	4343	9/19/90	900	0.504	0.86
30	4344	9/19/90	900	0.248	0.81
30	4345	9/20/90	900	0.437	1.05
30	4346	9/20/90	900	0.554	0.94
30	4347	9/20/90	900	0.271	0.99
30	4348	9/20/90	900	0.704	0.91
30	4351	9/21/90	900	0.346	1.29
30	4352	9/24/90	900	0.235	1.20
30	4353	9/24/90	900	0.319	1.39
34	4354	9/21/90	900	0.391	1.11
30	4355	9/21/90	900	0.366	0.90
30	4356	9/21/90	900	0.338	0.97
30	4359	9/24/90	900	0.181	0.92
30	4360	9/24/90	900	0.526	1.22
30	4361	9/24/90	900	0.505	1.00
30	4362	9/24/90	900	0.237	1.01
30	4363	9/26/90	900	0.234	1.13
30	4364	9/26/90	900	0.371	1.03
30	4365	9/26/90	900	0.326	1.02
31	4366	9/25/90	900	0.387	1.04
30	4367	9/26/90	900	0.380	0.74
30	4368	9/25/90	900	0.430	0.99
30	4369	9/25/90	900	0.608	1.28
30	4370	9/26/90	900	0.318	0.99
30	4371	9/26/90	900	0.430	1.16
34	4376	9/29/90	900	0.289	0.75
30	4379	9/28/90	900	0.297	1.01

September production from 900 stope (to September 29)

2,421 cars	0.368	1.07
3,196 tons		

Quantity	Amount	Type	Date	Purchaser
30.7	40.61	U	2-1	Short
18.6	23.45	R	2-1	Flores
14.5	19.76	U	2-1	Flores
11.3	15.00	U	2-4	Cundo
25.45	32.05	R	2-4	McKenney
60.6	75.75	R	2-4	Flores
30.47	40.19	U	2-6	Flores
20	26.38	U	2-6	Short
11.57	15.00	U	2-8	Cundo
13.18	17.39	U	2-8	Flores
14.65	19.32	U	2-8	Flores
10.61	14.00	U	2-10	Cundo
11.8	15.62	U	2-11	Flores
17.8	23.56	U	2-12	Flores
32.74	43.19	U	2-15	Flores
12.27	17.90	P	2-15	Cundo
24.26	30.55	R	2-15	McKenney
54.1	68.22	R	2-17	Flores
27.5	35.6	U	2-18	Short
11.25	14.85	U	2-19	Cundo
30.5	40.30	U	2-19	Flores
25.17	33.20	U	2-19	Flores
28.8	38.00	U	2-20	Short
12.88	17.00	U	2-21	Cundo
42.5	53.63	R	2-21	Flores
25.13	31.65	R	2-22	McKenney
16.84	21.89	U	2-23	Flores
11.7	15.15	U	2-23	Cundo
7.96	10.35	U	2-26	Cundo
31.7	41.20	U	2-27	Cundo
18.89	24.55	U	2-28	Flores
7.97	10.35	U	2-28	Cundo
11.3	15.00	U	2-31	Cundo
55.3	69.29	R	no date	Flores

Total monthly charges \$1,014.13



IRON KING ASSAY

Page 1

10-Jan-91

Lab Job #: AFB0165 ATTN: Carole A. O'Brien  
 Client name: A. F. Budge Mining Ltd No. samples: 5  
 Billing address: 4301 N. 75th ST. Date received: 08-Jan-90  
 Suite #101 Submitted by: R. Short  
 Scottsdale, AZ. INVOICE ATTACHED  
 85251-3504  
 Phone number: 945-4630

ANALYTICAL REPORT

Client ID	Lab ID	Fire Assay AU oz/ton	Fire Assay Ag oz/ton
AFB0165			
4417	0165-1	0.565	1.06
4418	0165-2	0.051	1.01
4419	0165-3	0.368	1.02
4420	0165-4	0.353	2.90
9913	0165-5	0.055	0.69



RECEIVED JAN 16 1991

P.O. BOX 66 \* HUMBOLDT, AZ. 86329 \* PHONE (602) 632-7410

Silver Valley Laboratories

P. O. BOX 929  
ONE GOVERNMENT GULCH  
KELLOGG, IDAHO 83837  
PHONE (208) 784-1258

TELECOPIER TRANSMITTAL

DATE: 3-4-91

ATTENTION: Carole O'Brien

FROM: Carol Williams

NUMBER OF PGS.: 2 (Including this page)

MESSAGE:

Silver Valley Labs telecopier number (208) 783-0891

SILVER VALLEY LABORATORIES, INC.  
 P.O. Box 929 - One Gov't Gulch  
 Kellogg, Idaho 83837  
 (208) 784-1258

AF BUDGE MINING  
 4301 N. 75TH ST. #105  
 SCOTTSDALE, AZ 85251-3504

ATTN: CAROLE O'BRIEN

MARCH 1, 1991	U1AF0201.057	
TEST FOR:	Au	Ag
METHOD:	FIRE	FIRE
USED:	ASSAY	ASSAY
RESULTS IN:	oz/ton	oz/ton
3003	.324	1.01

CHARGES	\$25.00
	=====
TOTAL CHARGES	\$25.00

*Chris Christopherson*  
 Chris Christopherson, Assayer

SILVER VALLEY LABORATORIES, INC.  
P.O. Box 929 - One Gov't Gulch  
Kellogg, Idaho 83837  
(208) 784-1258

A.F. BUDGE  
4301 N. 75TH ST. #105  
SCOTTSDALE, AZ 85251-3504

ATTN: CAROLE O'BRIEN

FEBRUARY 26, 1991    U1AF0201.050

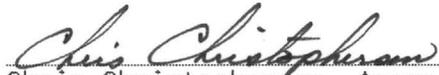
TEST FOR:	Au	Ag
METHOD:	FIRE	FIRE
USED:	ASSAY	ASSAY
RESULTS IN:	oz/ton	oz/ton

3002	.278	1.14
------	------	------

CHARGES	\$25.00
	=====
TOTAL CHARGES	\$25.00

  
Chris Christopherson, Assayer

RECEIVED MAR - 1 1991

SILVER VALLEY LABORATORIES, INC.  
 P.O. Box 929 - One Gov't Culch  
 Kellogg, Idaho 83837  
 (208) 784-1258

A.F. BUDGE  
 4301 N. 75TH ST. #105  
 SCOTTSDALE, AZ 85251-3504

ATTN: CAROLE O'BRIEN

FEBRUARY 26, 1991 U1AF0201.050

TEST FOR:	Au	Ag
METHOD:	FIRE	FIRE
USED:	ASSAY	ASSAY
RESULTS IN:	oz/ton	oz/ton
3002	.278	1.14

CHARGES	\$25.00
	=====
TOTAL CHARGES	\$25.00

*Chris Christopherson*  
 Chris Christopherson, Assayer

GEOLOGY OF CENTRAL AND NORTHERN ARIZONA  
GEOLOGICAL SOCIETY OF AMERICA  
ROCKY MOUNTAIN SECTION GUIDEBOOK  
J.D. NATIONS, C.M. CONWAY, and G.A. SWANN, EDITORS  
FLAGSTAFF, ARIZONA, 1986

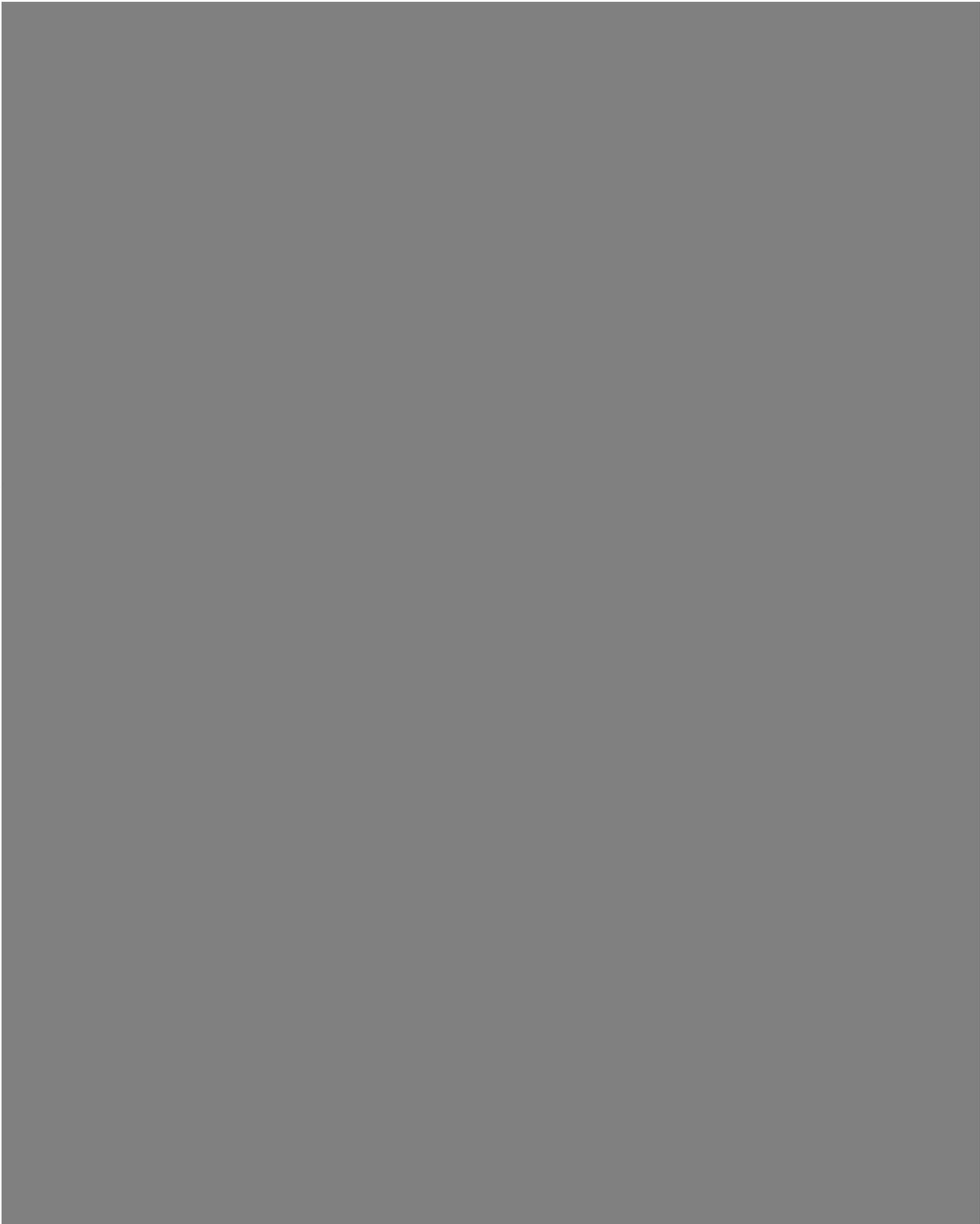
## A BRIEF GEOLOGIC HISTORY AND FIELD GUIDE TO THE JEROME DISTRICT, ARIZONA

Paul A. Lindberg  
205 Paramount Drive  
Sedona, Arizona 86336

INTRODUCTION

JEROME DISTRICT MINERAL PRODUCTION





Carole

Cape Cod Times  
MAY 1987

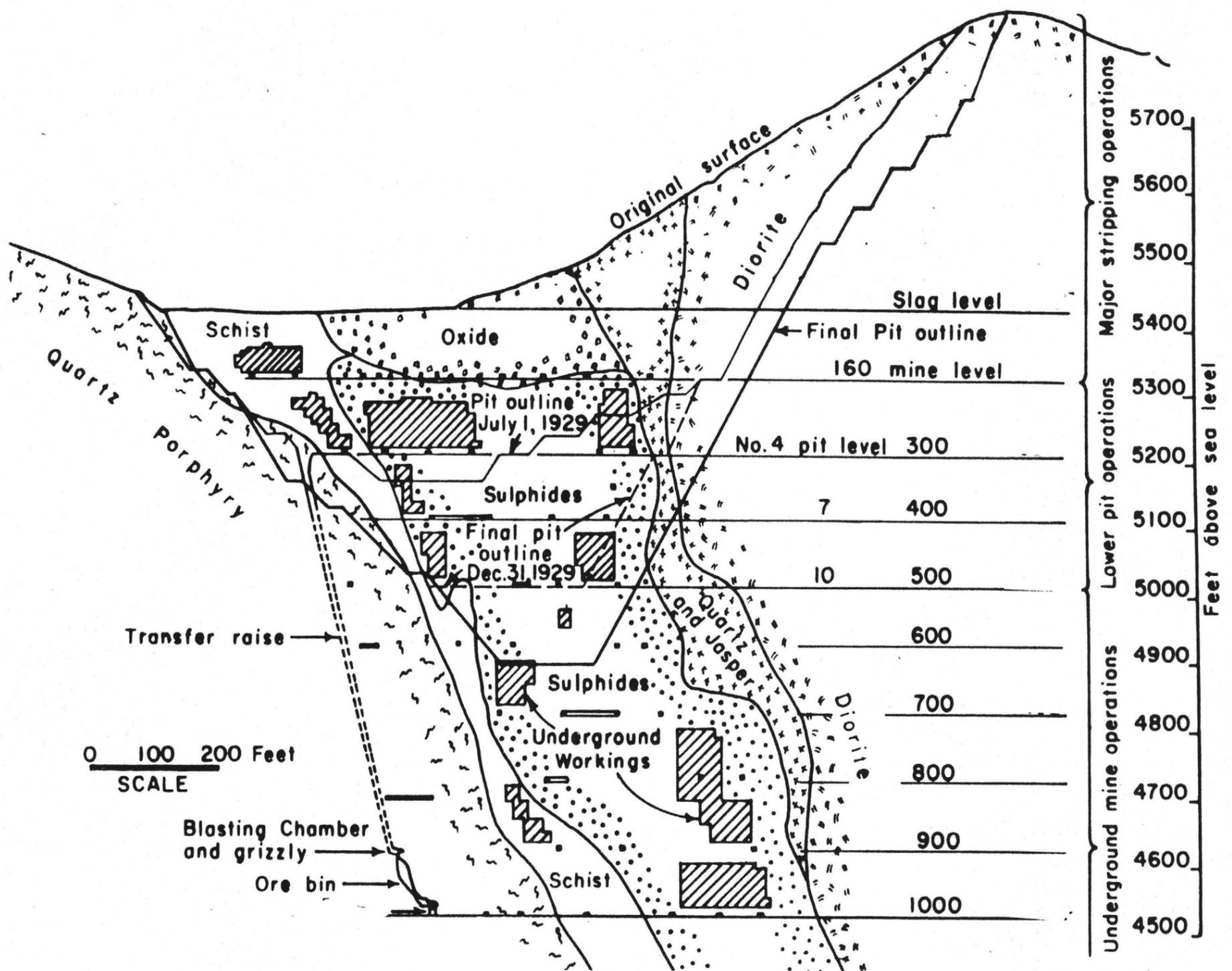
Q: How do you wish they would

can game alone!

Large  
game

SUNDAY CAPE COD TIMES, JULY 19, 1987

PAGE 75



Typical section of the United Verde Open Pit as of July 1, 1929; north-south dip of the complex orebody to the porphyry foot-wall and the diorite. This section shows the underground workings as far down as the 1000 level to which material from the pit was dropped through transfer raises via the Hopewell Tunnel system. The hanging wall pit slope was maintained during the depression years because the support for this wall had been provided by underground caving above the 1200 level; the resulting pit outline (as of 1940) is shown.

On the northwest side of the orebody and these had weakened the overlying mass of diorite. These factors induced cor-  
 ruptions of the diorite and as a result the removal of ore

To: Tony Budge

From: Ron Short

Date: August 12, 1991

Re: U.V.X. Mine 1100 Development Proposal

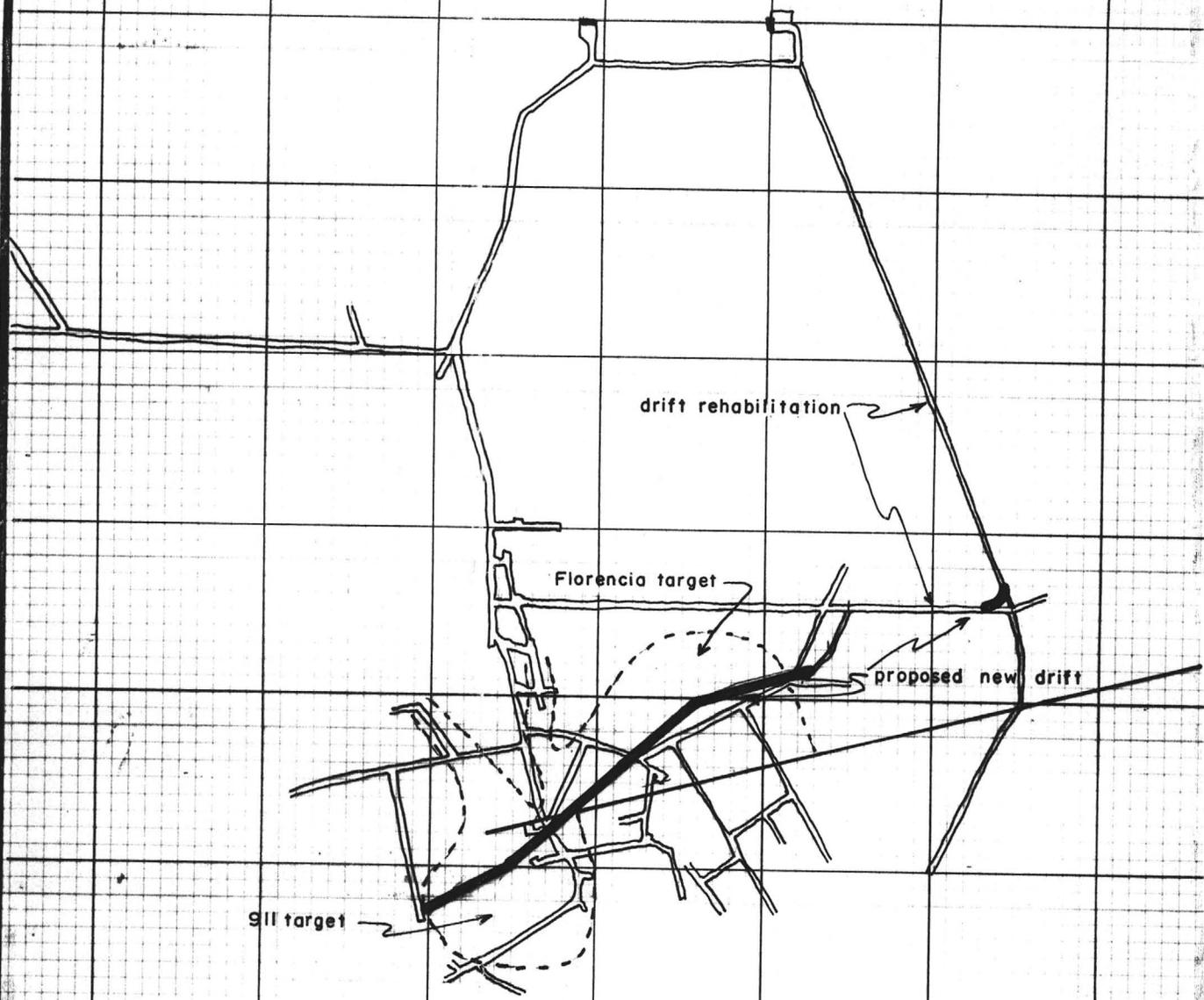
-----

Previous diamond drilling between the 950 and 1100 levels has intersected high grade silica grit identical to the most productive high grade gold ores previously mined in the gold stope, 900 stope and Morgan/902 stope. Hole 911-6 intercepted 31' of this grit grading 0.250 oz/t Au and 2.00 oz/t Ag. Based on this intercept and the known association of high grade grit pockets around similar intercepts previously encountered, it is proposed that development of the 1100 level proceed.

#### DEVELOPMENT PLAN

Development to explore the 911 area above the 1100 level would consist of drift rehabilitation, 550' of new drift and 230' of manway, ventilation and access raises. Initial exploration development would take 14 months and cost \$400,000 (tables 1 & 2).

This development would cross cut the Florencia Au/Ag bearing chert zone and the 911 target area (fig.1). The Florencia target area consists of two northerly trending, structurally controlled gold bearing zones intersected in five diamond drill holes. The most favorable intercepts were



drift rehabilitation

Florenxia target

proposed new drift

911 target

UVX MINE  
1100 LEVEL  
1"=200'

8/12/91

JMK

in hole UVX-1 (10' @ 0.350 oz/t Au and 1.02 oz/t Ag) and hole UVX-2 (24' @ 0.219 oz/t Au and 0.38 oz/t Ag).

The main 911 target area is cross cut by two diamond drill holes. Hole 911-6 intercepted the zone 60' above the 1100 level and consisted of 31' grading 0.250 oz/t Au and 2.00 oz/t Ag. Hole 911-5 intercepted the same zone 35'-70' above the 911-6 intercept and consisted of 78' of chert and grit grading 0.100 oz/t Au and 6.00 oz/t Ag. These intercepts compare favorably with hole 809-9 (37' @ 0.190 oz/t Au & 1.20 oz/t Ag) which penetrated the 900 orebody.

The 900 orebody eventually produced 49,539 tons grading 0.305 oz./t Au and 1.17 oz/t Ag. The 911 target area is open to the east, southeast, downdip and has the potential of hosting a grit orebody similar to the 900 orebody.

Table #3

ECONOMIC EVALUATION #1

Assumptions:

40,000 tons of ore @ 0.400 oz/t Au & 2.00 oz/t Ag

Sale to smelter under current terms

Au = \$365.00/oz

Ag = \$4.00/oz

$\begin{array}{r} \$127.604 \\ 5.7 \\ \hline \$133.304 \end{array}$

Revenues:

40,000 tons @ \$135.56/t = \$5,422,400 *5,332,160*

Costs:

Development = \$403,100

Mining cost @ \$50.00/t = \$2,000,000

Shipping cost @ \$32.00/t = \$1,280,000

Estimated Profit = \$1,738,900 *\$1,649,060*

ECONOMIC EVALUATION #2

Assumptions:

20,000 tons of ore @ 0.300 oz/t Au & 2.00 oz/t Ag

Sale to smelter under current terms

Au = \$365.00/oz

Ag = \$4.00/oz

$\begin{array}{r} 95.703 \\ 5.7 \\ \hline \$101.403 \end{array}$

Revenues:

20,000 tons @ ~~\$135.56/t~~ = \$2,055,800 *\$2,028,060*

Costs:

Development = \$403,100

Mining cost @ 50.00/t = \$1,000,000

Shipping cost @ \$32.00/t = \$540,000

Estimated Profit = \$12,700 *(\$15,040)*

TABLE #2

1100 LEVEL DEVELOPMENT COSTS

	SEPT	OCT	NOV	DEC	JAN 92	FEB	MARCH	APR
DIRECT COSTS								
Station Cleanup & Slusher Trench	7,500.00							
Drif Rehab. & Pipe		11,700.00						
1103 to 1104 Drift Connect			5,800.00					
Refuge Chamber & Vent			1,400.00					
1104 Drill Station Cleanup				4,800.00				
Drifting				6,100.00	12,200.00	12,200.00	12,200.00	12,200.00
Vent & Chute Rse to 950								
MW Raise up 60'								
Stope Exploration								
INDIRECT COSTS	*	*	*	*	*	*	*	*
Contingency								26
TOTALS	7,500.00	11,700.00	7,200.00	10,900.00	12,200.00	12,200.00	12,200.00	38

\*=9/91 - 3/92 cost  
accounted for in  
Gold Stope area

	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT		TOTAL
										7,500.00
										0.00
										11,700.00
										0.00
										0.00
										5,800.00
										0.00
										0.00
										1,400.00
										0.00
										0.00
										4,800.00
0.00	12,200.00	12,200.00	12,200.00	12,200.00						0.00
										79,300.00
										0.00
										0.00
					10,000.00	10,000.00				20,000.00
										0.00
					3,300.00	3,300.00				6,600.00
										0.00
							11,400.00	5,600.00		17,000.00
										0.00
*		26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	13,000.00		169,000.00
										0.00
									80,000.00	80,000.00
										0.00
										0.00
0.00	12,200.00	38,200.00	38,200.00	38,200.00	39,300.00	39,300.00	37,400.00	18,600.00	80,000.00	403,100.00

UNX MINE - 1100 LEVEL DEVELOPMENT

	SEPT	OCT	NOV	DEC	JAN 92	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT
1100 Lvl DEVELOPMENT														
1100 STATION CLEANUP # SLUSHER TRENCH														
1200' DRIFT REHAB & PIPE														
1103 TO 1104 DRIFT CONNECTION														
REFUGE CHAMBER & VENTILATION														
1104 DRILL STATION CLEANUP														
NEW DRIFT TO TARGET AREAS														
VENT & CHUTE RISE TO 950 LEVEL														
MARKWAY RISE TO SUB LEVEL ELEV 1100 WITH 1100														
1100 LEVEL DEVELOPMENT IN GRIT														
CONTINUED STORM DEVELOPMENT IF WARRANTED														



Carole

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

May 30, 1989

Anthony F. Budge  
Carole A. O'Brien

Ronald R. Short  
A.F. BUDGE (MINING) LTD.  
4301 N. 75th Street  
Suite 101  
Scottsdale, AZ 85251

RECEIVED MAY 31 1989

Dear Tony, Carole, and Ron:

Accompanying are my statements for minor work on the U.V.X. and Vulture during May, summarized as follows:

<u>PROJECT</u>	<u>FEES</u>	<u>EXPENSES</u>	<u>TOTAL</u>
Vulture	\$420.00	\$76.30	\$496.30
U.V.X.	<u>420.00</u>	<u>70.40</u>	<u>490.40</u>
TOTALS	\$840.00	\$146.70	<u>\$986.70</u>

I trust the Vulture I.P. work is completed and that you are acting on its findings. If I may contribute to that effort this fall I shall be happy to. Until August or so I am pretty fully committed to a Nevada project.

Ron tells me to nix the Vulture fault extension study; that he has you all convinced it can't be economic anyway! I can't refute his logic if the numbers he uses for the assumed discovery are accepted. Financial analyses on undiscovered deposits, however, are rather disturbing to me. If your wishes change again and it becomes worth doing, simply let me know.

Ron wanted me to look briefly at what one sees in the UVX 902 stope (I prefer to call it the Morgan body which is what it was dubbed when drilled and defined). I spent one day inspecting and photo-documenting the geology there and also in the 950-to-800 raise. A memo on that is accompanying.

Sincerely,



Don White  
Geologist, C.P.G.

DW:sk

Enclosures





Carde

M E M O

TO: Ron Short, Carole O'Brien, A.F. Budge  
FROM: Don White  
DATE: May 30, 1989  
SUBJECT: UVX 800 raise and the possibility of a substantial 809-9 orebody

The new escapeway raise from the 950 level to the 800 level, subparallel to the old Morgan Winze, reveals clues to what lies just NW of that raise. The so-called 809-9 auriferous silica body lies just behind the footwall of the raise. Its bottom probably occurs about the elevation of the small grit intercept 40 feet above the 950 level. That would be the site to drift out along the grit to test its plan dimensions. A raise from the 800 level in grit (as per my Sept. 1988 1" = 20' plan) could test the vertical continuity. A substantial high-silica, low iron, 0.2 oz/t Au, 1.0 oz/t Ag body appears likely. One would have to make such a body economic through choice of mining plan and by efficient management.

Ron has requested a report from me defining remaining reserves in light of current production and geological understanding. I need some documentation of what that production and geologic knowledge is in order to apply it. If John McKenney or anyone else can compile production statistics then I shall be happy to calculate remaining drill indicated reserves. And if the present state of geologic knowledge can be documented at all I shall apply it to other areas to propose sites for further exploration potential. Either way, the geologic documentation of what has been produced and substantially developed in the 902 and 809-4 areas is crucial to any further efforts.

I look forward to either receiving such information from John McKenney or being allowed to compile it as part of the project. Please let me know which to plan on.

DW:sk

Carole

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

March 7, 1989

Anthony F. Budge  
Carole A. O'Brien ✓  
Ronald R. Short  
A.F. BUDGE (MINING) LTD.  
4301 N. 75th St.  
Suite 101  
Scottsdale, AZ 85251

Dear Tony, Carole, and Ron:

I am an independent consultant with a number of clients. One of them recently requested a writeup of exploration opportunities in the Verde District. Obliging them but not willing to reveal any proprietary information of Budge's without permission, I phoned Carole to see whether U.V.X. reserves could be included. This was with the knowledge that Budge's mining plan is one of high-grading less than 10% of the drill-indicated reserves, completing that effort by July 1989, and then farming it out.

Carole's response related from Tony was, "OK, so long as we get a copy." Now how can I give Budge a copy of my exploration advice district-wide when someone else is paying for that advice? And why not share reserves with a potential buyer now, when that's your very intention within a short while? I see it as a total non-sequitur.

With regard to my work for others in the Jerome area, consider:

- 1) I have pushed the U.V. as a target for Budge, in writing, no less than half a dozen times and no efforts are now being made to explore there.
- 2) I have recommended other P.D.-owned targets with open-pitabile gold potential based on reconnaissance with Bob Hodder. That reconnaissance was cut short by Ron and no action was taken on the findings.
- 3) I have alerted Budge to silica bodies just beyond the 80-acre U.V.X. lease but also cautioned you on their depth, sulfidic nature, and difficulty of exploration. They were deemed outside Budge's interests.
- 4) I was told by Ron in January not to work on the U.V.X. in any way unless specifically requested by him.
- 5) I have presented papers on the U.V.X (written and presented on my own time and at my expense) to Arizona and national geological professional societies on three occasions (Tucson, 1986; Flagstaff, 1987; Spokane, 1988) with Budge approval. There are no great secrets of the U.V.X. gold/silica geology, only

Anthony F. Budge  
Carole A. O'Brien  
Ronald R. Short  
March 7, 1989  
Page Two

the reserves.

So if I am recognized by the geologic community as conversant with gold deposits, with the U.V.X., and with the Verde District in general, and I'm not being utilized by Budge on those issues, then surely I am a free agent to assist others. That is my livelihood. My knowledge is my asset for sale. I see nothing at issue there. Of course I will not reveal anything proprietary such as reserves without your consent. In the same way I can not reveal other's secrets which in this case include the client's identity.

My advice to you, however, is that nothing be deemed secret. How is anyone interested in the property to make decisions without facts and figures? And they want them independently, not from Budge, but from a third party. They know I do not operate on any finder's fee or bonus system but only straight fee-paid consulting. That's what they want.

I hope these issues won't be any problem in the future. I see no reason they should be. Laying them out here is mainly for the record.

Regards,



Don White  
Geologist, C.P.G.

DW:sk

DeCONCINI McDONALD BRAMMER YETWIN & LACY

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

EVO DeCONCINI (1901-1986)

JOHN R. McDONALD	J. WM. BRAMMER, JR.
RICHARD M. YETWIN	JOHN C. LACY
DINO DeCONCINI	ROBERT M. STRUSE
WILLIAM B. HANSON	JOHN C. RICHARDSON
DAVID C. ANSON	JAMES A. JUTRY
SPENCER A. SMITH	MICHAEL R. URMAN
DENISE M. BAINTON	DAVID F. GAONA
KAREN J. NYGAARD	LUIS A. OCHOA
SUSAN E. MILLER	GARY F. URMAN
MARK D. LAMMERS	FRANCES J. HAYNES

2525 EAST BROADWAY BOULEVARD, SUITE 200  
TUCSON, ARIZONA 85716-5303  
(602) 322-5000  
FAX: (602) 322-5585

May 15, 1989

3030 NORTH THIRD STREET, SUITE 200  
PHOENIX, ARIZONA 85012-3002  
(602) 241-0100  
FAX: (602) 241-8554

PLEASE REPLY TO TUCSON

RECEIVED MAY 17 1989

Carole A. O'Brien  
A.F. Budge (Mining) Limited  
4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

**Re: Confidentiality Clauses in Agreements**

Dear Carole:

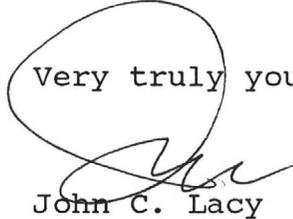
I have enclosed for your consideration two form agreements:

- a. Employment Agreement designed for a geologist with an addendum providing for various benefit packages; and
- b. Consulting Agreement for a multitude of professional services including geologist and landman.

Both agreements contain clauses defining the nature of confidential and proprietary information and place specific restrictions on the use of such information. The clauses also provide a mechanism for release of the restriction.

If you have any additional thoughts, I would be pleased to discuss them with you and prepare a form for your use. I do recommend, however, that a program be instituted requiring similar types of agreements with both employees of and consultants to A. F. Budge.

Very truly yours,



John C. Lacy

bpm

Enclosures  
0512890920.jcl2.860348

JCL  
09-22-86

### EMPLOYMENT AGREEMENT

BY THIS EMPLOYMENT AGREEMENT ("Agreement"),

dated this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_,

by and between \_\_\_\_\_, whose  
principal office is located at \_\_\_\_\_  
("Employer"),

and

\_\_\_\_\_ ("Employee"),

Employer and Employee, in consideration of the mutual covenants and promises hereinafter contained and for other good and valuable consideration, have agreed as follows:

1. Employment.

1.1 Employer employs Employee in the capacity of \_\_\_\_\_ to serve and perform such duties as set forth in the job description dated \_\_\_\_\_ (including amendments hereafter made) and at such times and places and in such manner as Employer may in its sole discretion from time to time direct.

1.2 Such employment is contingent on Employee's furnishing to Employer (or granting permission to Employer to obtain) an abstract of motor vehicle reports showing moving violations, if any, committed by Employee from all states in which Employee has resided during the period two years preceding the date of this Agreement. If such report is unacceptable to Employer, within its sole discretion, Employer may immediately terminate employment of Employee without the two week notice required under Paragraph 3.2.

2. Place of Employment.

2.1 Employee has been employed to perform services for Employer based in \_\_\_\_\_ or at any other place which may be designated by Employer.

3. Termination of Employment.

3.1 EMPLOYMENT UNDER THIS AGREEMENT IS ON AN "AT WILL" BASIS AND MEANS THAT THIS AGREEMENT MAY BE TERMINATED, FOR ANY REASON, WITH OR WITHOUT CAUSE, AT ANY TIME, AT THE OPTION OF EMPLOYER OR THE EMPLOYEE.

3.2 If either party elects to terminate this Agreement the party so electing shall provide the other party with at least two (2) weeks written notice of such election to terminate.

#### 4. Salary.

4.1 Employee is employed at a salary rate of \$\_\_\_\_\_ per \_\_\_\_\_. It is understood that the words used to described any terms and conditions of this Agreement (i.e., per hour or per year) are for convenience of description and not promises of employment for any particular period.

4.2 Employee shall be paid on the 1st and 15th day of the month.

4.3 Employee shall work such hours and shifts as may be required by Employer. The salary set forth in Paragraph 4.1 shall be the full salary agreed upon for service under this Agreement and payment to and acceptance of such salary by Employee shall constitute a full release of Employer for services performed during the pay period.

4.4 Salary payments shall be subject to deduction of any indebtedness due to Employer by the Employee, including without limitation, all deductions expressly provided for in this Agreement and all deductions required or authorized by law or the Employee.

4.5 Upon Employee's separation of employment from Employer, Employee shall be entitled to be paid Employee's monthly salary which shall be prorated based upon the number of days worked by Employee in the applicable pay period.

#### 5. Benefits.

5.1 The Employee is entitled to receive the benefits described in Exhibit A attached hereto and made a part hereof by this reference. **QUALIFICATION FOR BENEFITS IS CONTINGENT UPON SUCCESSFUL COMPLETION OF A PRE-EMPLOYMENT PHYSICAL.**

5.2 If Employee's permanent residence is not the place of employment designated in Paragraph 2.1, Employer shall reimburse employee for the actual cost of moving household goods to Employee's point of origin upon any termination of this Agreement. Employee may also elect as his or her point of origin the place of employment designated in Paragraph 2.1 upon termination if Employee has been required to relocate.

5.3 If Employer requires Employee to relocate to another location away from the place of employment designated in Paragraph 2.1, Employer shall reimburse Employee for the actual cost of moving household goods to such other location.

5.4 As a condition of entitlement to reimbursement under Paragraphs 5.2 and 5.3, Employee shall furnish Employer with an estimate of all costs of moving household goods in advance for approval.

6. Reimbursement of Business Expenses.

6.1 If the Employee is required by Employer to travel outside the geographical limits of the \_\_\_\_\_ metropolitan area, Employer will reimburse Employee for reasonable and necessary traveling, accommodation and living expenses (collectively referred to as "travel expenses") incurred while conducting Employer's business under this Agreement.

6.2 In lieu of direct reimbursement for travel expenses, Employer may pay Employee a per diem allowance, to be determined by Employer, to cover all or part of such expenses.

6.3 Employee shall properly manage any expense advances and shall keep receipts and accurate records of all expenditures showing (a) the amount of the expenditure, and (b) the time, place and nature of the travel expense.

6.4 Any payments made to the Employee in connection with such travel expenses which remain or are unaccounted for at the time of Employee's separation from employment with Employer shall be deemed an indebtedness owed to Employer. Employee specifically authorizes Employer to withhold the amounts representing such indebtedness from Employee's final paycheck, or in the event said indebtedness is not discovered by Employer prior to Employee's receipt of his or her last paycheck, Employee agrees and promises to remit said indebtedness to Employer within ten (10) days of receipt of written notice to Employee of any remaining indebtedness.

7. Confidentiality.

7.1 Employee acknowledges (a) that Employer is engaged in a highly competitive business of exploration for minerals and that the safeguarding of information related to mineral exploration data and opportunities is vital to the success of such business; (b) that during any period of employment by Employer, Employee may acquire "Confidential Information" related to Employer's business activities; and (c) that during such period, Employee may also acquire information regarding business opportunities that may be of interest to Employer.

7.2 Employee shall: (a) not disclose any Confidential Information, or any information regarding business opportunities, to anyone other than appropriate individuals within Employer's

corporate organization, unless such disclosure is reasonably believed to be in the interest of Employer, and (b) promptly bring to the attention of Employer any Confidential Information or information regarding business opportunities, and (c) not use to the advantage of Employee, or to the detriment of Employer, any Confidential Information or information regarding business opportunities, and will transfer to Employer any property or other advantage that Employee may obtain as a result of any unauthorized use of Confidential Information or information concerning business opportunities. Such transfer shall be made at Employer's election, following full disclosure of all of the terms of such acquisition and at employee's acquisition cost.

7.3 The obligations set forth in Paragraph 7.2 above shall continue to exist after the termination of employment with Employer. Employee shall not use any information related to property acquisitions of interest to Employer to acquire individual rights or on behalf of third parties in competition with Employer for a period of two years after the termination of employment. If Employee desires to obtain rights in any area about which information related to Employer's business opportunities was received during the course of employment during the two-year period of exclusion, such area may be identified to Employer (attention \_\_\_\_\_) and Employer shall provide Employee with a prompt indication of any continuing interest in such area. If no continuing interest is expressed, Employee shall be free to acquire rights in such area.

7.4 "Employer," as used in this Agreement includes the parent corporation of \_\_\_\_\_, subsidiary corporations of \_\_\_\_\_, subsidiary corporations of \_\_\_\_\_, together with any partnerships and joint ventures in which Employer has a substantial interest.

7.5 "Confidential Information," includes, without limitation, any technical information, geological concepts, data, designs, drawings, specifications, discoveries, methods, patentable or unpatentable ideas, or know-how relating to Employer's business activities; provided, however, that it does not include information which: (a) was in employee's possession prior to employment with Employer and has previously been reduced to writing, which writing may be duly authenticated and corroborated; (b) at the time of disclosure is in the public domain; (c) after disclosure is published or otherwise becomes part of the public domain through no fault of employee (but only after, and only to the extent that, it is published or otherwise has become part of the public domain); or (d) if after the date hereof such information becomes lawfully available to employee from any third party not then under any secrecy obligation to Employer.

7.6 This Agreement shall not operate to reduce the scope of any contractual, legal or fiduciary obligations Employee may otherwise have to Employer.

8. Employee Conduct.

8.1 Employee agrees to follow the rules, policies and regulations of Employer, written and unwritten, and further agrees and acknowledges that these rules, policies and regulations may be changed, interpreted, withdrawn or added to by Employer at Employer's sole option, with or without notice to Employee.

8.2 Employee acknowledges that automobile insurance rates imposed on Employer may reflect the driving records of employees. Employee therefore agrees to inform Employer in writing of any moving vehicular citation occurring when Employee was engaged in activities for Employer within 72 hours after such citation was received and shall thereafter inform Employer in writing of the eventual disposition of such citation.

9. Severability.

9.1 If any provision of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall nevertheless remain in full force and effect.

10. Governing Law.

10.1 In recognition that the principal office of Employer is located in the State of Arizona, the parties understand and agree that the Agreement shall be governed, interpreted and enforced solely in accordance with the laws of the State of Arizona.

11. Survivability of Agreement.

11.1 All covenants and promises contained in this Agreement shall survive Employee's separation of employment from Employer.

12. Extent of Agreement.

12.1 There can be no modification of this Agreement unless it is expressly set forth in a written instrument signed by both Employer and Employee. Such modifications include, without limitation, any commitment for employment for any specified duration.

12.2 Employee agrees and certifies to Employer that Employee has read the foregoing Agreement and fully understands its terms and conditions, that such terms and conditions constitute the entire agreement with Employer and that no

promises or understandings have been made other than those stated above.

SIGNED, effective the date set forth above.

EMPLOYER

By \_\_\_\_\_

EMPLOYEE

\_\_\_\_\_

**EXHIBIT A**  
**Benefits Programs**

Employee classification: Contract Professional

Employer has voluntarily adopted policies or programs offering additional benefits to employees who have completed certain time periods of service ("qualifying periods") with Employer. While employed under this Agreement, Employee shall be entitled to receive the benefits that are available to employees who have completed the applicable qualifying period. For purposes of calculating the qualifying period, Employee's period of service must be uninterrupted.

A benefits book is maintained by \_\_\_\_\_ and may be consulted for the details of all benefits. All forms must be processed and all administration of benefits will be channeled through such individual.

Such benefits, which may be modified or discontinued at anytime at Employer's sole option, presently include but are not limited to the following:

(1) Group and other insurance programs such as health, dental, life, short term disability, and long term disability (required employee contributions to such programs will be made by payroll deductions of amounts that may be fixed from time to time by Employer);

(2) Paid vacation of one week for each six months of work completed;

(3) Paid holidays according to Employer's designated holidays; and

(4) Retirement program which requires the completion of ten years of employment with Employer and which is based on an original qualifying period of the lesser of one year or 1,000 hours of uninterrupted employment with Employer.

Employee acknowledges that he or she is being paid a fee under contract for services rendered to Employer and that Employee is not, therefore, entitled to participate or receive benefits under the profit-sharing plan for salaried employees of Employer.

\_\_\_\_\_  
Employee's initials

\_\_\_\_\_  
Date

A-1  
**EXHIBIT A**  
**Benefits Programs**

Employee classification: Temporary Professional

Employer has voluntarily adopted policies or programs offering additional benefits to employees who have completed certain time periods of service ("qualifying periods") with Employer. While employed under this Agreement, Employee shall be entitled to receive the benefits that are available to employees who have completed the applicable qualifying period. For purposes of calculating the qualifying period, Employee's period of service must be uninterrupted.

A benefits book is maintained by \_\_\_\_\_ and may be consulted for the details of all benefits. All forms must be processed and all administration of benefits will be channeled through such individual.

Such benefits, which may be modified or discontinued at anytime at Employer's sole option, presently include but are not limited to the following:

(1) Paid vacation of one week for each six months of work completed;

(2) Paid holidays according to Employer's designated holidays; and

(3) Retirement program which requires the completion of ten years of employment with Employer and which is based on an original qualifying period of the lesser of one year or 1,000 hours of uninterrupted employment with Employer.

\_\_\_\_\_  
Employee's initials

\_\_\_\_\_  
Date

0420872058.JCL.PRTNRSH.P.AGRMNT

JCL  
12-01-87

CONSULTING AGREEMENT  
( \_\_\_\_\_ Project)

BY THIS CONSULTING AGREEMENT,

effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 198\_\_,

by and between \_\_\_\_\_,  
whose address is \_\_\_\_\_,  
("Consultant"),

and

\_\_\_\_\_,  
whose address is \_\_\_\_\_,  
("Company"),

Company has agreed to retain Consultant and Consultant has agreed to perform certain services for Company under the following terms and conditions:

1. Retainer; Term

Company does hereby retain the services of Consultant for a term of \_\_\_\_\_ (\_\_\_\_\_) \_\_\_\_\_ unless extended by mutual consent of the parties or terminated under the provisions of Section 7 hereof.

2. Relationship of Parties

Consultant is engaged in an independent contracting business of providing consulting services in [**describe services**]

**Claimstaking:** staking mining claims on public domain of the United States.

**Landman:** mineral land titles and property acquisition.

**Technical services:** plant design, drafting, engineering and other technical services.

**Geologist:** geology other engineering disciplines related to mineral land evaluation.

**Hydrologist:** groundwater hydrology for the identification, acquisition and development of water rights and the development of water resources for mine development.

Consultant, its employees, servants and agents, shall perform services required by this Agreement as an independent contractor and shall not be considered as an employee or agent of Company.

3. Payment of Consultant

The consulting services required by this Agreement shall be compensated at the rate of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) per day. The consulting fee shall be prorated if only a partial day (8 hours) is worked. Consultant shall provide vehicles for its employees and shall be reimbursed by Company at the rate of \_\_\_\_\_ cents (\$.\_\_\_\_) per mile for all travel. If Consultant rents such vehicles, reimbursement shall be at the cost to Consultant. Company shall reimburse Consultant for the cost of meals and required lodging. Any expenses required for the performance of Consultant's activities hereunder (e.g., drafting, typing, maps, publication, reproductions, field and office supplies) shall be reimbursed at actual cost; provided, however, that Consultant shall advise Company in advance of the nature and approximate cost of such materials required hereunder. Consultant shall invoice Company once per month for services performed hereunder and shall present receipts for all reimbursable costs. Minor charges may be presented on the statement of Consultant.

**[If compensation is based on a special schedule, attach the schedule to this agreement and use the following as an exhibit]**

3. Payment of Consultant

The consulting services required by this Agreement shall be compensated at the rates fixed in Schedule \_\_\_ to this Agreement.

4. Activities of Consultant

a. Scope of Project - Consultant shall use its best efforts to perform the work required by the terms and conditions detailed in Schedule \_\_\_ attached hereto and incorporated herein by this reference.

**[Special provisions for landman]**

a. Scope of Project - Consultant shall use its best efforts to arrange for land acquisition by Company in the area specifically outlined in Exhibit A. Consultant shall not represent that it has the authority to enter into any contracts, and that any agreements negotiated with any landowner as a result of Consultant's efforts shall be offers subject to approval by Company.

b. Reports - Consultant shall maintain a log of telephone and personal contacts with any landowners by individual and date. Consultant shall also advise Company on a monthly basis through a monthly summary of activities of such contracts. Consultant shall also report impressions of progress in negotiations, competitor activity, adverse political climate or any other

matters that may affect Company's ability to prospect and mine within the general area described in Exhibit A.

**[Special provisions for technical services]**

a. Scope of Project - Consultant shall use its best efforts to complete preliminary engineering drawings and cost data [describe facility and or processes]. Information necessary for the Consultant to perform work required by Company shall be provided to the Consultant in a timely manner by Company and shall be the responsibility of Company.

b. Reports - Consultant shall furnish Company with drawings and cost estimates prepared or undertaken by Consultant under the terms of this Agreement. If no information is in final form, Consultant shall furnish Company with a summary report of activities undertaken during the previous month.

**[If exclusive services are being performed, use the following]**

a. Exclusive Retainer - Consultant agrees that he will conduct all of his professional consulting activities for Company only. Company in turn agrees to provide Consultant with work under this Agreement equivalent to sixty percent of Consultant's "Available Time." Available Time shall mean the dates designated by Consultant's schedule of his availability for work as furnished to Company not later than the 15th day of each month for the following month. Consultant agrees to not be unavailable for consulting activities for periods in excess of one week, except for one four-week period during the one-year term of this Agreement or by prior arrangement.

**[If the Consultant is being required or permitted to acquired property rights on behalf of the company, use the following.]**

b. Acquisition of Properties - Consultant may, in [his own name] the name of Company, stake mining claims on public domain of the United States or acquire mineral exploration and mining rights by permits or leases from the State of \*. [If acquisition made in the name of Consultant in State land in Arizona or other states that prohibit acquisition by agents acting on behalf of undisclosed principals, add the following sentence.] If such acquisition is made, Consultant shall be the legal owner of such mineral properties and shall not hold title to such mineral properties as a trustee, agent, attorney-in-fact or in any other representative capacity for Company; provided, however, that Company is hereby granted an option to acquire such mineral property rights by payment to Consultant of all expenses related to the acquisition of such mineral rights and all costs and expenses related to the evaluation thereof performed by Consultant. Such option shall exist during the term of this Agreement, and if not exercised, Consultant shall be free to deal

with such mineral properties in its own behalf. All of such properties shall be added as appropriate as a Schedule \_\_\_ to this Agreement.

**[Special provisions for claim staking]**

a. Scope of Project - Contractor shall perform services of located unpatented mining claims within an area specifically set forth in Schedule \_\_\_ hereto.

**[General provisions to be included in all contracts]**

c. Representations - Consultant represents and warrants that Consultant is (1) familiar with the scope of work required by the terms of this Agreement, (2) familiar with the Project Area, the terrain and working conditions, the type of equipment and facilities necessary to complete performance of the Project, and (3) that all licenses and permits required for the performance of the work required hereunder have been or will be acquired by Consultant prior to undertaking performance required hereunder.

d. Insurance - Consultant shall maintain automobile and public liability insurance in an amount acceptable to Company and shall furnish Company with reasonable evidence of the existence of such insurance.

5. Confidentiality

**[Short form]**

Consultant shall maintain strict security over all knowledge and information acquired or developed during the performance of this Agreement. Consultant shall not divulge such knowledge or information directly or indirectly to any person without the prior consent of the Company.

**[Long form where patentable ideas may be generated]**

a. Secrecy - Consultant shall maintain strict security over all knowledge and information acquired or developed during the performance of this Agreement. Consultant shall not divulge such knowledge or information directly or indirectly to any person without the prior written consent of the Company. This secrecy obligation shall not apply to any information that (1) is now generally known or readily available in the industry or otherwise publicly available, or that becomes so known or readily available without the fault of either Consultant or the Company but only to the extent that such information is available; (2) is possessed by Consultant without restriction as to disclosure or use prior to any disclosure by the Company; or (3) is disclosed

in any issued patent, publication, or other source from and after the time it becomes generally available to the public.

b. Patents - Consultant agrees that the Company shall be the sole owner and retain the right to use any technical data, know-how, reports, studies, records and information generated or developed for Company by Consultant under and during the term of this Agreement. Company shall own and have the sole interest in any invention or discovery and all letters patent issuing thereon made or conceived by Consultant, any employees or permitted subcontractors during the term of this Agreement. Consultant agrees to cooperate in the filing and prosecution of any patent application arising from work performed under this Agreement.

c. Application - Any employees or permitted subcontractors of Consultant performing work under the terms of this Agreement shall execute statements indicating that they have been advised of the obligations of this Section 5 and have agreed to be bound by the terms thereof. The absence of any such agreement with an employee of Consultant or permitted subcontractor shall not relieve Consultant from its obligations under this Section 5.

**[Long form where Consultant is in a position to acquire knowledge that could put Consultant in competition with Company]**

a. Secrecy - Consultant shall maintain strict security over all knowledge and information acquired or developed during the performance of this Agreement including without limitation "Confidential and Proprietary Information." Consultant shall not divulge such knowledge or information directly or indirectly to any person without the prior written consent of Company. Consultant shall not disclose Confidential Information to anyone other than appropriate individuals within Company's corporate organization (unless such disclosure is reasonably believed to be in the best interest of Company), nor take advantage of any business opportunities. Consultant shall further promptly bring to the attention of Company any disclosure of Confidential or Proprietary Information. Consultant further agrees to transfer to Company any property or other advantage that Consultant may obtain as a result of any unauthorized use of Confidential or Proprietary Information. Such transfer shall be made at Company's election, following full disclosure of all of the terms of such acquisition and at employee's acquisition cost. This secrecy obligation shall not apply to any information that (1) is now generally known or readily available in the industry or otherwise publicly available, or that becomes so known or readily available without the fault of either Consultant or Company but only to the extent that such information is available; (2) is possessed by Consultant without restriction as to disclosure or use prior to any disclosure by Company; or (3) is disclosed in any issued patent, publication, or other source from and after the time it becomes generally available to the public.

b. Definitions -

(1) "Confidential Information" includes, without limitation, any technical information, geological concepts, data, designs, drawings, specifications, discoveries, methods, patentable or unpatentable ideas, or know-how relating to Company's business activities.

(2) "Proprietary Information" includes information related to business opportunities that are or may be of interest to Company.

(3) "Company," as used in this Agreement includes subsidiaries of Company's corporate parent and partnerships and joint ventures in which the Company has more than a ten percent interest.

c. Survival - The obligations set forth in this Section 5 shall continue to exist after the termination of this Agreement. Consultant shall not use any information related to property acquisitions of interest to Company to acquire rights for himself or on behalf of third parties in competition with Company for a period of two years after the termination of this Agreement. If Consultant desires to obtain rights in any area about which information related to Company's business opportunities was received during the course of this Agreement during the two-year period of exclusion, such area may be identified to Company (attention Manager-Lands) and Company shall provide Consultant with a prompt indication of any continuing interest in such area. If no continuing interest is expressed, Consultant shall be free to acquire rights in such area.

6. Notice

Any notice required shall be given in writing and personally delivered or deposited in the United States Mail and addressed to the parties as indicated in the recital of the parties hereto. Delivery shall be complete upon mailing as evidenced by the postmark on the envelope. Each of the parties may change its mailing address by notice given as set forth above.

7. Termination

This Agreement may be terminated at any time by either party upon ten (10) days' written notice to the other party. In such event, Company shall have no further obligation to Consultant except to make any payments which have theretofore become due under Section 3 hereof, and Consultant shall have no further obligation to furnish such reports as may be required hereunder except for reports related to activities undertaken prior to the effective date of termination.

8. Assignment or Subcontracting

Consultant shall not assign or subcontract, in whole or in part, any of the services to be furnished under this Agreement without the prior written consent of Company.

SIGNED this \_\_\_\_\_ day of \_\_\_\_\_, 198\_\_,  
effective on the date set forth above.

CONSULTANT:

COMPANY:

\_\_\_\_\_  
Soc.Sec.# \_\_\_\_ - \_\_\_\_ - \_\_\_\_

By \_\_\_\_\_

SERVICE.AGR.CONSULTANT



**A.F. Budge (Mining) Limited**

4301 North 75th Street  
Suite 101  
Scottsdale, AZ 85251-3504

(602) 945-4630  
FAX (602) 949-1737

To: Randy Barnes  
Phelps Dodge Corporation  
Hidalgo Smelter  
Playas, New Mexico 88009

From: A.F. Budge (Mining) Limited  
Scottsdale, Arizona 85251

Date: April 5, 1990

This letter will confirm the conversation we had today wherein  
A.F. Budge (Mining) Limited will accept your assay results for  
one (1) Jerome flux shipment: -  
numbered 4006/5001

Sincerely,

Carole A. O'Brien

for: Ronald R. Short  
General Manager

A.F. Budge (Mining) Limited

TO: A.F. Budge

DATE: September 1, 1989

FROM: J.A. McKenney

COPIES: R.R. Short  
J.W. Norby  
C.A. O'Brien  
D.H. Allen  
file

SUBJECT: UVX MINE CURRENT DEVELOPMENT, NEAR TERM DEVELOPMENT, AND  
PLANNED EXPLORATION ABOVE THE 950 LEVEL

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INTRODUCTION

The purpose of this memo is to review development currently underway, additional planned development, and exploration of targets above the 950 level at the UVX mine. Additionally, an economic evaluation of the Gold Stope Hanging Wall/905-S area is presented and other defined but currently uneconomic UVX resources are reviewed.

CURRENT DEVELOPMENT

900 Orebody

Development of the 900 gold stope proceeds with excellent gold grades encountered to date. On Sublevel B (78 ft above the 950 level), the orebody is open-ended both to the northwest and southeast. Exploration drifting on this level is continuing to the northwest and drifting to the southeast will continue when the gob-filled Morgan winze (blocking advancement) is mucked out. The Sublevel B ore zone is from 40 to 70 feet wide and 120 feet long to date. Sublevel C (110 feet above the 950 level) and the 800 level are currently under development. Geologic mapping to date suggests that the 900 orebody strikes N35W, dips 50-80SW, and plunges 20SE. This orebody is separate from but parallel to the Morgan/902 orebody. Present estimates are that the 900 stope will contain at least 7000 tons grading 0.5 opt Au and 1.5 opt Ag.

The 900, Morgan/902, and Gold Stope/905-S orebodies consist of unconsolidated, high silica, banded, sandy breccia (mine term grit) consecutively enveloped by chert (locally high iron), brown sericite-quartz altered diorite (mine name beige-banded), and green less altered recognizable diorite. Drilling and mapping indicate this sequence extends well beyond drilled grit orebodies in the southwestern and eastern areas of the UVX mine suggesting additional high grade grit zones exist both above and below the 950 level in these areas. The northwest up-dip and southeast down-dip plunge projections of the above mentioned ore zones are

prime exploration targets. Several of these targets will be explored by drifting in conjunction with development of the 900 orebody and the 809 High Grade Zone. Remaining grit targets will be explored by drill or locally by drifting.

#### 809 High Grade Zone

Drifting to the northwest and southwest to further delineate and block out the 809 High Grade Zone is planned as soon as manpower is available. Exploration drifting to date has just reached the northeastern margin of this area with assays of 1.006 opt Au/ 12.84 opt Ag and 0.457 opt Au/ 2.61 opt Ag encountered at the end of the drift. Further development drifting is initially anticipated to be predominately in ore grade material, based on local drill results.

Previous interpretation of 809 drill results suggests 2000 tons of ore grading 1.1 opt Au and 4.1 opt Ag exists in this area, but additional ore reserves are possible if this high grade ore zone connects to the Morgan/902 orebody to the southeast. A significant portion of the 809 High Grade Zone is expected to carry up to 22% iron, requiring blending with high silica, lower grade ore.

#### NEAR TERM EXPLORATION

Exploration of three additional gold targets with good potential is planned. These are the Faulted Target (903-W), the 905-S/911 Connect, and the Morgan/902 Northwest Projection.

#### Faulted Target (903-W)

Old assay maps of the 903-W cross cut indicate a 7-15 ft wide northwest trending zone grading 0.18-1.22 opt Au southwest of and parallel to the Morgan/902 orebody. Diamond drill hole 902-2 attempted to test this zone but was aborted due to poor drilling conditions and high costs.

Drifting is the preferred means of exploration in this area due to the risk of drilling failure and the advantage of a three dimensional look at the ore zone. Exploration by drifting and raising is planned for this high grade gold target. Approximately 95 ft of drift and 85 ft of raise driven from the 950 level will access this area. Exploration expenses are projected at \$50,000.

#### 905-S/911 Connect

Recent mapping and past chip sampling located high gold values in grit southeast of the 905-S gold body in a southeast trending

zone which projects northeast of and parallel to the 991 drift. Six to ten quick and relatively inexpensive longholes (using development jackleg drills and long hole steel) will be collared along the 991 drift testing the favorable diorite/chert contact projected to occur northeast of this drift. This exploration will be performed in-house, costing 2-3 man days each of a miner and geologist. Further exploration plans will be developed if warranted.

#### Morgan/902 Area Northwest Projection

The up-plunge northwest projection of the Morgan/902 ore zone has been partially tested by diamond drill holes M-1, M-2, and 809-3, which defined a reserve of 1800 tons grading 0.23 opt Au and 1.6 opt Ag. Drilling will attempt to expand this reserve. Approximately six 400 ft holes will be required to test the area, costing an estimated \$48,000.

Favorable geology exists in this area at the 800 level. This zone also projects upward into the 809 High Grade Zone currently being developed.

#### ECONOMIC EVALUATION OF GOLD STOPE HANGING WALL/905-S DEVELOPMENT

The adjacent Gold Stope Hanging Wall and the 905-S zones are best developed in conjunction with each other. Recent reserve estimates indicate that the former contains 4800 tons (above the 950 level) grading 0.20 opt Au and 2.0 opt Ag. A 1938 UVX engineering report states reserves of 6000 tons grading 0.40 opt Au and 4000 tons grading 0.15 opt Au remained at the completion of mining. This reserve is assumed to be in the Gold Stope hanging wall above the 950 level. Because of the uncertainty of its location, only the lower grade figures are used in the economic evaluation. Significant problems in mining next to the gob-filled Gold Stope can be expected but should not prohibit mining. The iron content of this reserve is unknown.

The 905-S zone is estimated to contain 7200 tons grading 0.17 opt Au and 5.0 opt Ag (above the 950 level), based on core drilling. Sixty percent of this is expected to contain 20% iron necessitating blending prior to smelter shipment. Feasibility of selective mining of low iron ore only is questionable.

The economic evaluation of the Gold Stope Hanging Wall/905-S area (Table 1) indicates that this reserve as a whole could not be profitably mined under current economic conditions. The 905-S area by itself would generate an estimated \$80,000, but there is no current market for high iron ore. Only limited potential exists for an increase in tonnage or grade in the combined area. No development or exploration of this reserve is planned until precious metal prices are considerably higher.

Table 1. Economic Evaluation of the Gold Stope Hanging Wall/905-S Reserve above the 950 Level.

GOLD STOPE HANGING WALL

Metal Value

4800 tons x 0.20 oz Au/ton x \$370/ oz Au x .85 toll	\$301,920
4800 tons x 2.0 oz Ag/ton x \$5.20/oz Ag x .85 toll	\$ 42,432
	-----
Total	\$344,352

Costs - Development, Mining, Shipping

300 ft new drift x \$270/ft	\$ 81,000
60 ft raises x 3 x \$270/ft	48,000
40 ft sub drifts x 3 x \$270/ft	32,400
4800 tons x \$30/ton mining	144,000
	-----
Development and Mining Subtotal	\$305,400
25% contingency for gob-fill control	76,350
	-----
Development and Mining Subtotal	\$381,750
4800 tons x \$30/ton shipping	144,000
	-----
Total	\$525,750

Profit (-Loss) (-\$181,398)

905-S AREA

Metal Value

7200 tons x 0.17 oz Au/ton x \$370/ oz Au x .85 toll	\$384,948
7200 tons x 5.0 oz Ag/ton x \$5.20/oz Ag x .85 toll	\$159,120
	-----
Total	\$544,068

Costs - Mining, Shipping (old drifts and raises are in)

150 ft rehab of drift x \$200/ft	30,000
7200 tons x \$30/ton mining	216,000
7200 tons x \$30/ton shipping	216,000
	-----
Total	\$462,000

Profit \$ 82,068

COMBINED GOLD STOPE HANGING WALL AND 905-S

Profit (-Loss) (-\$ 99,330)

## ADDITIONAL RESOURCES

In addition to the reserves discussed, defined but currently uneconomic resources exist in the 809 and 907 areas.

### 809 Area

Approximately 22000 tons grading 0.168 opt Au and 0.95 opt Ag exist in the 809 area. This resource consists of very hard, massive, high silica (92%) chert ideal for smelter flux. This block of potential ore is partially developed and good potential exists to significantly expand this resource. A minimum gold price of \$421/oz is needed under the current mining, shipping and toll cost scenario before exploitation of this lower grade area will proceed.

### 907 Area

Approximately 10800 tons of high silica, low to high iron, silica grit grading 0.12 opt Au and 3.51 opt Ag was left unmined at the southeast end of the 907 stope. Under current cost conditions a minimum gold price of \$445/oz is required to profitably mine this area. Potential to expand this resource is poor and no work is currently planned.

## COMMENT

The recent discovery of the high grade 900 grit orebody proves new economic grit zones can be discovered at UVX. Additionally, the similar lithologic and structural settings of the 900 and Morgan/902 orebodies suggests an exploration model, increasing the potential for discovery of additional grit orebodies. Exploration plans will continue to be developed to expand upon current reserves.



**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

March 31, 1987

Darrell Carver  
Wisco Supply, Inc.  
P.O. Box 24237  
3928 E. Airplane  
Phoenix, AZ 85034

Dear Darrell:

It's the little jobs that always take the longest. I finally compiled a list of all the bits, adaptors, couplings, etc., etc. for the PR-123 and all is attached.

Let me know what might be possible in way of purchase, trade-in, or consignment purchase.

At the moment, the drill is sitting at the mine in Jerome collecting dust, and we do not anticipate any need for it.

Best regards.

Sincerely,

A handwritten signature in cursive script that reads "Carole".

Carole A. O'Brien

w/attachments



**John Clark Inc.**

4955 Bannock Street  
Denver, Colorado  
80216 U.S.A.

Tel: 303/892-5800  
Telex: 45-4557

December 15, 1986

A. F. Budge Company  
7340 East Shoeman Lane  
Suite 111BE  
Scottsdale, Arizona 85251

DMEA LTD.  
DEC 24 1986  
RECEIVED

Attention: Mr. Joe Fernandez

Reference: Our Proposal D1801

Dear Sir;

Thank you for your order. Enclosed is literature on JCI and additional information on JCI equipment. As we discussed perhaps the 50M has application at your Jerome property.

The Used Long Hold Drill is as follows:

- One Only Gardner Denver PR-123 "Reconditioned"
- One Only Air Motor Screw Feed "Reconditioned"
- One Only Remote Control Valve.
- 100' 4' Extension Steel.
- One lot of Associated Hardware.

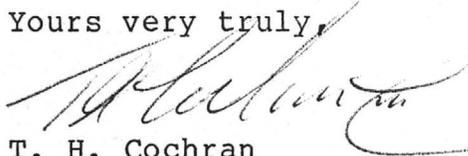
Price . . . . . \$10,000.00 U.S.

"TEN THOUSAND DOLLARS"

Terms:

- 1. F. O. B. Denver
- 2. Payment required prior to shipment.
- 3. Price does not include State and Federal Taxes.
- 4. Delivery - Week of January 5, 1987.

Yours very truly,

  
T. H. Cochran  
Area Manager

Additional parts purchased for PR-123 Drifter

From F&H Mine Supply

1	41760 Shank Adaptor	\$	66.46
1	2½" Button Bit w/ 1¼" rope thread		87.23
10	1" Hex 1" Rope 4' Drill Steel @ 64.50		645.00
1	RT125 - 300 B 3"		101.25
2	RT125 - 250 B 2½" @ 152.50		305.00
25	L.H. Expand Shells @ 1.14		28.50
			<hr/>
			\$ 1,233.44

From Wisco Supply

12	DIXO 9511 WB1 Whip Check @ 13.30	\$	159.60
2	T34M37 Bit 2½" @ 61.80		123.60
1	P33NO5 1¼" Shank		75.00
1	1/5Rx1.25R Adaptor		53.50
33	CDS125 Couplings @ 22.50		742.50
1	91AF 3" Button Bit		114.15
3	91WJ 2½" X Face Bit @ 61.80		185.40
5	CDS12504H 1¼R - 4' Steel @ 54.00		270.00
6	CDS125 1¼R Couplings @ 22.50		135.00
10	91AF 2" 1¼R Button Bits @ 51.26		512.60
6	T34B37 1¼R " " @ 57.83		346.98
			<hr/>
			\$ 2,718.33

Original Purchase from JCI

\$ 10,000.00

Total Investment: \$ 13,951.77

1989 (U.V.X.)

Month	Lot #	Trucks	Tons	Contained		Payable		Gold price \$/oz
				ounces gold	ounces silver	ounces gold	ounces silver	
February	3001	11	284.2300	118.5240	2,220.6900	101.3380	1,898.6900	\$390.5700
March	4001	20	512.4000	193.6870	3,325.4800	165.6020	2,843.2800	\$392.8200
	4002	20	521.9400	203.5570	4,791.4100	174.0410	4,096.6600	\$394.1250
Monthly totals		40	1,034.34	397.24	8,116.89	339.64	6,939.94	
April	5001	19	492.6700	61.0910	842.4700	43.9960	566.3200	\$384.3400
	5001	5	130.7900	16.2180	223.6500	11.6790	150.3400	\$386.0400
	5002	13	337.6100	63.1330	1,171.5100	50.3550	952.5600	\$386.0400
	5002	3	76.0400	14.2200	263.8600	11.3420	214.5500	\$384.0200
	BF 1 - 18	18	455.2230	173.8130	3,517.2700	148.6600	3,007.2500	\$383.0200
	BF 19 - 20	2	52.3350	22.1910	533.8200	18.9700	456.4100	\$377.4000
Monthly totals		60	1,544.67	350.67	6,552.58	285.00	5,347.43	
May	6001	18	471.8100	155.6970	2,288.2800	133.1210	1,949.7500	\$377.4000
	6002	16	415.6900	205.3510	5,171.1800	175.5750	4,421.3600	\$377.4400
	6002	5	129.3000	63.8740	1,608.4900	56.9950	1,375.2600	\$371.1400
	6003	14	367.4600	136.6950	2,800.0500	116.8740	2,394.0400	\$371.1400
	6003	6	156.4100	58.1850	1,191.8400	50.8180	1,019.0300	\$363.0300
	6004	16	413.3200	201.2870	4,947.4400	172.1000	4,230.0700	\$363.0300
	6004	5	125.0200	60.8850	1,496.4900	54.2770	1,279.5000	\$361.7000
Monthly totals		80	2,079.01	881.97	19,503.77	759.76	16,669.01	
June	7001	16	421.5000	287.0420	6,674.4500	245.4210	5,706.6500	\$361.7000
	7001	4	103.8700	70.7360	1,644.7800	63.2510	1,406.2900	\$369.4100
	7002	14	367.7400	257.4180	5,433.3600	220.0920	4,645.5200	\$369.4100
	7002	5	132.0100	92.4070	1,950.4500	82.7710	1,667.6400	\$361.3100
	7003	21	541.2485	240.3150	5,407.0900	205.4690	4,623.0600	\$361.3100
	7004	23	592.4775	299.2020	7,761.4900	255.8180	6,636.0700	\$367.3300
	7005	6	153.5300	81.3710	1,367.9500	69.5720	1,169.5900	\$367.3300
	7005	11	285.2300	151.1720	2,541.4000	132.7750	2,172.9000	\$374.8000
Monthly totals		100	2,597.61	1,479.66	32,780.97	1,275.17	28,027.72	
July	8001	6	157.6105	83.5330	1,404.3100	71.4210	1,200.6800	\$381.7880
	8002	18	475.9000	233.1910	4,916.0500	199.3780	4,203.2200	\$381.7880
	8003	12	315.4800	128.0850	1,492.2200	109.5130	1,267.7600	\$381.7880
	8003	6	155.6500	63.1940	736.2300	55.5980	625.4800	\$377.6600
	8004	18	473.3800	143.9080	2,182.2800	123.0410	1,848.3100	\$377.6600
	8005	6	157.2100	48.5780	547.0900	41.5340	445.0600	\$377.6600
	8005	16	425.2800	131.4120	1,479.9700	112.7210	1,203.9700	\$371.2900
	8006	12	320.4700	158.3120	2,534.9200	135.3570	2,167.3600	\$371.2900
	8006	18	474.6200	234.4620	3,754.2400	209.2120	3,209.8800	\$371.8700
	8007	12	314.6600	249.2110	1,318.4300	213.0750	1,103.0400	\$371.8700
Monthly totals		124	3,270.26	1,473.89	20,365.74	1,270.85	17,274.76	
August	9001	4	104.8500	83.0480	439.3700	74.9110	367.5900	\$369.3600
	9002	20	526.0400	420.8320	1,488.6900	379.8010	1,164.3900	\$369.3600

	9003	16	428.2600	230.8320	1,434.6700	203.0170	1,159.5100	\$364.8700
	9004	11	296.4000	152.6460	1,600.5600	133.7510	1,368.4800	\$364.8700
	9004	8	213.2600	109.9290	1,151.6000	96.2340	984.6200	\$365.6300
	9005	12	320.1600	152.0760	1,876.1400	130.0250	1,604.1000	\$365.6300
	9005	4	105.9000	50.3030	620.5700	44.7690	530.5900	\$364.2300
	9006/10001	4	104.8300	22.0140	221.1900	17.9260	160.3300	\$364.2300
	Monthly totals	79	2,099.70	1,221.68	8,832.79	1,080.43	7,339.61	
September	9006/10001	16	428.6400	90.0140	904.4300	73.2980	655.6000	\$360.1200
	10002	4	108.6900	20.5420	235.8600	16.4170	172.4300	\$360.1200
	10002	4	109.5200	20.6990	237.6600	16.5430	173.7500	\$359.3880
	10003	4	107.9300	23.0970	249.3200	18.8660	185.5800	\$358.5400
	10003	16	429.4000	91.8920	991.9100	75.0590	738.3500	\$362.1600
	10004/11001	4	107.0000	31.4580	239.6800	26.8360	176.8700	\$362.1600
	10004/11001	12	322.0400	94.6800	721.3700	80.7680	532.3300	\$367.4700
	Monthly totals	60	1,613.22	372.38	3,580.23	307.79	2,634.91	
October	10004/11001	4	106.5800	31.3350	238.7400	26.7310	176.1800	\$365.4400
	11002	20	537.5200	177.9190	1,026.6600	152.1210	720.0100	\$365.4400
	11003	4	107.0900	52.1530	172.4100	44.5910	112.9200	\$365.4400
	11003	18	483.8700	235.6450	779.0300	201.4770	510.2400	\$362.4400
	11004	15	403.0200	148.7140	616.6200	127.1510	394.3600	\$367.5600
	11005	10	267.2800	88.7370	507.8300	75.8700	355.4800	\$367.5600
	11005	10	266.5900	88.5080	506.5200	76.4840	354.5600	\$368.3900
	11006/12001	15	404.7200	85.3960	647.5500	69.5910	422.9300	\$368.3900
	Monthly totals	96	2,576.67	908.41	4,495.36	774.02	3,046.68	
November	11006/12001	5	134.7900	28.4410	215.6600	23.1770	140.8500	\$376.0200
	12002	19	509.3600	183.8790	1,120.5900	157.2160	822.6200	\$376.0200
	12002	5	134.1400	48.4250	295.1100	41.4030	216.6400	\$383.9000
	12003	14	377.5200	122.3170	566.2800	104.5800	358.6400	\$383.9000
	12004	4	108.4500	33.2940	162.6800	28.4670	103.0200	\$383.9000
	12004	17	456.5100	140.1490	684.7700	119.8270	433.6800	\$390.7100
	12005	10	269.2400	60.3100	436.1700	49.6210	286.4700	\$390.7100
	12005	9	243.2100	54.4790	394.0000	46.5790	258.7700	\$401.2670
	12006	4	108.4800	17.8990	151.8700	13.9130	92.7500	\$401.2670
	12006	4	108.8100	17.9540	152.3300	15.3510	93.0300	\$411.1200
	Monthly totals	91	2,450.51	707.15	4,179.46	600.13	2,806.47	
December	13001	12	324.2400	53.5000	453.9400	41.5840	277.2300	\$411.1200
	13002	4	106.7600	16.3340	274.3700	12.4750	209.9400	\$411.1200
	13002	16	425.8500	65.1550	1,094.4400	55.7070	837.4300	\$406.1100
	13003	4	106.1600	18.3660	303.6200	14.4220	238.0100	\$406.1100
	13003	16	426.2600	73.7430	1,219.1000	63.0510	955.6800	\$413.0500
	13004	4	105.4100	26.6690	174.9800	22.3310	116.1600	\$413.0500
	13004	16	424.4200	107.3780	704.5400	91.8080	467.7100	\$411.6100
	Monthly totals	72	1,919.10	361.15	4,224.99	301.38	3,102.16	
	Yearly totals	813	21,469.31	8,272.72	114,853.47	7,095.51	95,087.38	

Gold revenues	Silver revenues	Other revenues	Smelter deductions	Other deductions	Total revenues	Gross value of product Gold	of product Silver
\$39,579.58	\$11,169.99		\$0.00		\$50,749.58	\$46,291.92	\$13,064.32
\$65,051.78	\$17,289.99		(\$1,169.81)		\$81,171.95	\$76,084.13	\$20,222.24
\$68,593.91	\$24,820.64		(\$608.06)		\$92,806.49	\$80,226.90	\$29,029.96
\$133,645.69	\$42,110.62	\$0.00	(\$1,777.87)	\$0.00	\$173,978.44	\$156,311.03	\$49,252.20
\$16,909.42	\$3,278.99					\$23,479.71	\$4,877.90
\$4,508.56	\$876.78		(\$149.63)		\$25,424.13	\$6,260.80	\$1,304.33
\$19,439.04	\$5,555.33					\$24,371.86	\$6,832.25
\$4,355.55	\$1,238.60		(\$62.05)		\$30,526.48	\$5,460.76	\$1,523.26
\$56,939.75	\$17,345.82	\$1,593.28	(\$398.79)			\$66,573.86	\$20,287.61
\$7,159.28	\$2,574.15	\$183.18	(\$67.51)	(\$898.58)	\$84,430.58	\$8,374.88	\$3,010.74
\$109,311.61	\$30,869.67	\$1,776.46	(\$677.98)	(\$898.58)	\$140,381.19	\$134,521.88	\$37,836.10
\$50,239.87	\$10,996.59		(\$368.01)	(\$15.00)	\$60,853.45	\$58,760.05	\$12,905.90
\$66,269.03	\$24,786.14					\$77,507.68	\$28,989.64
\$21,153.12	\$7,477.29		(\$670.34)		\$119,015.25	\$23,706.20	\$8,745.36
\$43,376.62	\$13,016.40					\$50,732.98	\$15,223.87
\$18,448.46	\$5,298.96		(\$1,005.83)		\$79,134.60	\$21,122.90	\$6,197.57
\$62,477.46	\$21,996.36					\$73,073.22	\$25,726.69
\$19,631.99	\$6,661.40		(\$1,835.74)	(\$42.00)	\$108,889.47	\$22,022.10	\$7,791.10
\$281,596.55	\$90,233.14	\$0.00	(\$3,879.92)	(\$57.00)	\$367,892.76	\$326,925.13	\$105,580.12
\$88,768.78	\$29,710.25					\$103,823.09	\$34,748.86
\$23,365.55	\$7,515.21		(\$1,150.56)	(\$27.00)	\$148,182.23	\$26,130.59	\$8,789.70
\$81,304.19	\$24,825.66					\$95,092.78	\$29,035.88
\$29,905.99	\$8,735.10		(\$793.10)	(\$27.00)	\$143,950.83	\$33,387.57	\$10,216.46
\$74,238.00	\$24,215.59		(\$990.49)		\$97,463.10	\$86,828.21	\$28,322.34
\$93,969.63	\$35,303.89		(\$906.49)		\$128,367.03	\$109,905.87	\$41,291.13
\$25,555.88	\$6,222.22					\$29,890.01	\$7,277.49
\$49,764.07	\$11,405.55		(\$250.09)		\$92,697.63	\$56,659.27	\$13,339.81
\$466,872.09	\$147,933.47	\$0.00	(\$4,090.73)	(\$54.00)	\$610,660.83	\$541,717.39	\$173,021.66
\$27,267.68	\$6,392.12		(\$89.84)		\$33,569.96	\$31,891.90	\$7,476.20
\$76,120.13	\$22,376.89		(\$785.24)		\$97,711.78	\$89,029.53	\$26,171.82
\$41,810.75	\$6,749.24					\$48,901.32	\$7,944.21
\$20,997.14	\$3,267.51		(\$409.88)		\$72,414.75	\$23,865.85	\$3,846.07
\$46,467.66	\$9,655.57		(\$440.24)		\$55,683.00	\$54,348.30	\$11,400.23
\$15,685.73	\$2,324.99					\$18,345.97	\$2,858.00
\$41,852.18	\$6,308.80		(\$104.85)		\$66,066.86	\$48,791.96	\$7,755.04
\$50,256.70	\$11,356.97					\$58,779.66	\$13,282.98
\$77,799.67	\$16,684.96		(\$596.32)		\$155,501.97	\$87,189.38	\$19,514.54
\$79,236.20	\$5,733.60				\$84,969.80	\$92,674.09	\$6,853.20
\$477,493.84	\$90,850.65	\$0.00	(\$2,426.37)	\$0.00	\$565,918.12	\$553,817.95	\$107,102.28
\$27,669.13	\$1,914.78		(\$0.42)		\$29,583.48	\$30,674.61	\$2,288.68
\$140,283.30	\$6,065.31		(\$2.10)		\$146,346.50	\$155,438.51	\$7,754.59

\$74,074.81	\$5,977.27		(\$1.71)		\$80,050.38	\$84,223.67	\$7,395.72
\$48,801.73	\$7,054.51					\$55,695.95	\$8,250.89
\$35,186.04	\$5,134.79		(\$124.36)		\$96,052.71	\$40,193.34	\$6,005.59
\$47,541.04	\$8,365.38					\$55,603.55	\$9,784.07
\$16,306.21	\$2,750.05		(\$1.70)	(\$27.00)	\$74,933.98	\$18,321.86	\$3,216.41
\$6,529.19	\$830.99				\$7,360.18	\$8,018.16	\$1,146.43
\$396,391.44	\$38,093.09	\$0.00	(\$130.29)	(\$27.00)	\$434,327.24	\$448,169.64	\$45,842.38
\$26,396.08	\$3,342.90				\$29,738.98	\$32,415.84	\$4,611.69
\$5,912.09	\$879.22					\$7,397.59	\$1,202.65
\$5,945.36	\$885.47				\$13,622.14	\$7,438.97	\$1,211.17
\$6,764.22	\$938.85					\$8,281.20	\$1,261.31
\$27,183.37	\$3,785.52		(\$48.36)		\$38,623.59	\$33,279.61	\$5,085.52
\$9,718.93	\$906.81				\$10,625.74	\$11,392.83	\$1,228.84
\$29,679.82	\$2,798.99				\$32,478.81	\$34,792.06	\$3,792.96
\$111,599.85	\$13,537.77	\$0.00	(\$48.36)	\$0.00	\$125,089.26	\$134,998.09	\$18,394.15
\$9,768.58	\$918.07				\$10,686.65	\$11,451.06	\$1,244.07
\$55,591.10	\$3,751.97				\$59,343.07	\$65,018.72	\$5,349.93
\$16,295.34	\$588.43					\$19,058.79	\$898.43
\$73,023.32	\$2,592.02				\$92,499.10	\$85,407.17	\$3,957.47
\$46,735.62	\$2,009.26				\$48,744.89	\$54,661.32	\$3,141.68
\$27,886.78	\$1,811.17					\$32,616.17	\$2,587.39
\$28,175.94	\$1,814.64				\$59,688.53	\$32,605.46	\$2,592.37
\$25,636.63	\$2,164.56				\$27,801.18	\$31,459.03	\$3,314.16
\$283,113.30	\$15,650.12	\$0.00	\$0.00	\$0.00	\$298,763.42	\$332,277.73	\$23,085.50
\$8,715.02	\$730.59				\$9,445.60	\$10,694.38	\$1,118.63
\$59,116.36	\$4,266.93					\$69,142.18	\$5,812.50
\$15,894.61	\$1,139.96				\$80,417.86	\$18,590.36	\$1,552.87
\$40,148.26	\$1,887.16				\$42,035.43	\$46,957.50	\$2,979.77
\$10,928.48	\$542.09					\$12,781.57	\$856.02
\$46,817.61	\$2,374.83				\$60,663.01	\$54,757.62	\$3,749.80
\$19,387.42	\$1,568.71					\$23,563.72	\$2,388.47
\$18,690.62	\$1,492.67				\$41,139.42	\$21,860.62	\$2,272.72
\$5,582.83	\$535.01					\$7,182.28	\$876.04
\$6,311.10	\$529.71				\$12,958.66	\$7,381.25	\$867.37
\$231,592.31	\$15,067.67	\$0.00	\$0.00	\$0.00	\$246,659.98	\$272,911.47	\$22,474.18
\$17,096.01	\$1,578.55				\$18,674.56	\$21,994.92	\$2,584.73
\$5,128.72	\$1,195.40					\$6,715.23	\$1,562.26
\$22,623.17	\$4,671.18		(\$1,235.65)		\$32,382.82	\$26,460.10	\$6,104.79
\$5,856.92	\$1,327.62					\$7,458.62	\$1,693.59
\$26,043.22	\$5,376.66		(\$734.74)		\$37,869.67	\$30,459.55	\$6,858.66
\$9,223.82	\$653.52					\$11,015.63	\$984.44
\$37,789.09	\$2,597.66				\$50,264.09	\$44,197.86	\$3,913.02
\$123,760.95	\$17,400.58	\$0.00	(\$1,970.39)	\$0.00	\$139,191.14	\$148,301.90	\$23,701.49
\$2,654,957.20	\$512,916.78	\$1,776.46	(\$15,001.91)	(\$1,036.58)	\$3,153,611.95	\$3,096,244.15	\$619,354.37

on

Total

\$59,356.24

\$96,306.37

\$109,256.86

\$205,563.23

\$28,357.62

\$7,565.12

\$31,204.11

\$6,984.03

\$86,861.47

\$11,385.63

\$172,357.97

\$71,665.95

\$106,497.32

\$32,451.56

\$65,956.85

\$27,320.47

\$98,799.91

\$29,813.21

\$432,505.26

\$138,571.95

\$34,920.29

\$124,128.66

\$43,604.03

\$115,150.55

\$151,197.00

\$37,167.50

\$69,999.07

\$714,739.05

\$39,368.09

\$115,201.35

\$56,845.52

\$27,711.91

\$65,748.53

\$21,203.97

\$56,547.00

\$72,062.64

\$106,703.92

\$99,527.29

\$660,920.23

\$32,963.29

\$163,193.09

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\$63,946.83  
\$46,198.93  
\$65,387.62  
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\$9,164.59

\$494,012.03

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\$8,600.24  
\$8,650.15  
\$9,542.51  
\$38,365.13  
\$12,621.67  
\$38,585.02

\$153,392.24

\$12,695.14  
\$70,368.64  
\$19,957.22  
\$89,364.65  
\$57,803.00  
\$35,203.57  
\$35,197.83  
\$34,773.19

\$355,363.24

\$11,813.01  
\$74,954.68  
\$20,143.23  
\$49,937.26  
\$13,637.59  
\$58,507.42  
\$25,952.19  
\$24,133.35  
\$8,058.31  
\$8,248.62

\$295,385.65

\$24,579.65  
\$8,277.50  
\$32,564.88  
\$9,152.21  
\$37,318.20  
\$12,000.07  
\$48,110.87

\$172,003.39

\$3,715,598.52