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A.F. Budge (Mining) Limited

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DATE: December 18, 1990

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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 characterized 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 where 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
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



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6.26% Cu  
69.8% SiO<sub>2</sub> 81%  
.063 Au  
2.94 Ag  
.4. Agennum  
15.8 Fe

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