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A

GEOLOGIC and EXPLORATION

APPRAISAL REPORT

on the

CEDAR MINES

in the

Cedar Valley Mining District

Mohave County, Arizona

by

Richard E. Mieritz
Mining Consultant
Phoenix, Arizona

September 25, 1975

TABLE of CONTENTS

	<u>Page</u>
INTRODUCTION	1
PROPERTY, LOCATION and ACCESSIBILITY	1
FACILITIES	1
HISTORY, DEVELOPMENT and PRODUCTION	1
PRESENT DEVELOPMENT	2
GENERAL GEOLOGY	2
MINERALIZATION	2
SAMPLES and RESULTS	3
RECOMMENDATIONS	4

Included Exhibits:

Assay Certificate - Iron King Assay Office, Humboldt, AZ
Map No. 1 - Sample Map - Silver Queen Adit
Map No. 2 - Sample Map - Arnold Shaft (20 ft. level)

INTRODUCTION:

At the request of and authorization by Douglas Martin of the C. R. Ward Corporation, Phoenix, Arizona, the writer visited, examined and limitedly sampled the Cedar Mines property on September 16 and 17, 1975. Mr. C. R. Ward accompanied the writer to indicate the various points and locations of interest, mineral-wise.

The purpose of the examination was to determine the type, mode and strength of silver mineralization existing within the mining property and to gather sufficient on-the-ground information to formulate an opinion of the property and provide recommendations if justified, as to what route or procedure should be taken to explore, develop and/or operate said property.

This report is based on the writer's personal examination of the property, his geologic knowledge of the general area, on the results of several samples taken on the property by the writer and a review and study of factual data provided by the C. R. Ward Corporation.

PROPERTY, LOCATION and ACCESSIBILITY:

The Cedar Mines mining property includes several patented and unpatented claims. C. R. Ward Corporation has all the factual data regarding the claims, however, for the purpose of this report, such claim names as the Arnold, Silver Queen, General Lee, Joiner and Montezuma should be remembered. The latter two claims are unpatented.

The Cedar Mines property is approximately 16 miles by road northwest of Wikieup, a small community on U. S. Highway 93 between Wickenburg and Kingman, Arizona. More specifically, the property is located in parts of Sections 23, 25, 26 and 36 of T. 16½ N. and R. 15 W. - as shown on the Diamond Joe Peak topographic map.

A County maintained gravel road from U. S. Highway 93 (2.8 miles north of Texaco Station in Wikieup) services the general area and the property. Automobile travel to the Company's campsite on the Arnold claim is possible.

FACILITIES:

No facilities or natural gas exist on or near the property. A small spring just north of the camp provides a small source of domestic water.

HISTORY, DEVELOPMENT and PRODUCTION:

Discovery, development and production in the area (property) date back to pre-1883. The C. R. Ward Corporation has much factual data on the historical and production considerations of the property, thus, any presentation of such information here would be repetitious. Silver ore was discovered, mined and shipped to a smelter.

PRESENT DEVELOPMENT:

The C. R. Ward Corporation, since acquiring the property by lease, has made accessible several underground workings, particularly on the Arnold, Silver Queen and General Lee claims, as well as some surface cuts on these claims and on the Montezuma claims. Opening of the Silver Queen Adit, the partial sand mucking and de-watering of the Arnold Shaft and the re-opening of the General Lee Adit are of significant value inasmuch as this work permits observation of the geologic structures, the mineralization and the taking of samples to help appraise the existing conditions.

Several samples were taken by the C. R. Ward Corporation in the Silver Queen and General Lee Adits, with poor results. The writer has also taken several samples to support the geologic conditions suspected by the writer as a result of the field examination. Results of the samples are detailed under the heading "Samples and Results."

GENERAL GEOLOGY:

The country rock in the area is, for the most part, pre-Cambrian granite and granite gneiss with remnants of schist, quartzite, pegmatite dikes and andesite dikes.

Strong structures (mostly faults) traverse the area in a northerly-southerly direction, varying from N. 20° W. to N. 20° E. and generally dip steeply (70°-80°) to the east. The property covers five or six such structures, two of which appear to be much stronger than the others.

These structures tend toward parallelism, being approximately 600-700 feet apart except for the two stronger structures which are only about 100 feet apart. These latter two are referred to as the East vein and West vein. Early maps indicate these structures converge in strike on the surface and become a strong structure on the Live Yankee claim, some 2500 feet south of the Arnold Shaft.

MINERALIZATION:

Gold, silver, copper, lead and zinc mineralization is limited to the structures. Of these, silver, as argentite and some chlorides - bromides, is the major value with gold, copper, lead and zinc being very minor in value. Occasionally, the gold may have values in excess of 0.10 oz/ton. The base metal mineralization is straightforward as chalcopryrite, galena and sphalerite for the copper, lead and zinc values. A small amount of white-yellow pyrite accompanies the other sulphides.

The writer closely examined and sampled the East vein (Arnold) and the West vein (Silver Queen - General Lee). Each has its distinctive characteristics. The West vein is probably the stronger of the two structures which contains considerable gouge (1.0 to 3.0 feet) usually of white to pale green color and carrying some oxides of iron (limonites) of yellow to brown in color. Some pyrite is visible under the glass. The Hanging wall of the West vein is moderately defined as contrasted to the somewhat

ill-defined Footwall. Samples of the gouge indicate very low values of all metals. Within the West structure are lenses of injected quartz along the Hanging wall. It is those lenses, small or large, which contain good values, particularly in silver. Iron limonites are also much stronger in these lenses. Insufficient exposure of such lenses prevents statements as to length, width, depth, or frequency, however, in the case of the Silver Queen, (old Map of Silver Queen workings), the mined strike length on the 90 foot level is about 120 feet. In contrast, the quartz lense near the North Drift face of the Adit (See Map No. 1) is but 12 feet long. The writer took a specimen grab sample of this material to indicate the association of mineralization with the quartz lenses as compared to the "gouge" of the structure.

The Adit on the General Lee claim also intersects the West vein and the characteristics of the structure here are similar to those of the Silver Queen underground exposure above described. No samples were taken here since eight samples were taken by C. R. Ward Corporation with low results similar to the Silver Queen samples. The 562 foot easterly driven Adit did crosscut four minor structures, all quite parallel to the East and West veins, east of the East (Arnold) vein.

The East vein structure has, where observed on the 20 foot level in the Arnold Shaft, well defined Foot and Hanging walls. Gouge (1 to 2 feet wide) follows the Footwall and carries only minor silver values. Quartz, with the usual iron limonites, pyrite, chalcopyrite, galena, sphalerite and argentite, forms the Hanging wall portion of the structure against a good wall. Two samples each of the gouge and quartz on the 20 foot level were taken north and south of the shaft. Good to excellent silver values were obtained from the quartz Hanging wall samples while the gouge Footwall samples showed poor results. (See Map No. 2.)

SAMPLES and RESULTS:

Eleven samples were taken by the writer, mostly as character samples in order to define the occurrence and strength of the mineralization associated with the structures, in particular the East (Arnold) vein and the West (Silver Queen) vein, since both structures produced silver ore in the early days, and, since both structures are accessible to limited visual examination.

The samples taken are described and their respective assay results are shown in the included Sample Schedule.

A study of these results, coupled with the observance of the geologic characteristics of the structures, clearly indicates that the carrier of the values is the post structure injected quartz along the Hanging wall which usually contains a small or minor amount of base metals of copper, lead and/or zinc, along with some pyrite. The gouge of the structures can definitely be ruled out as being a carrier of values.

It is also apparent that the quartz presence along the Hanging wall will pinch and swell and perhaps create a lensic situation which could be quite sporadic in length, width and depth dimensions.

SAMPLE SCHEDULE

Sample Number	Sample Description	Per Ton			
		Ounces Gold	Ounces Silver	% Lead	% Copper
1322	Grab of small rock pieces - vein material - piled near shaft (12 feet deep) on Joiner claim. N-S vein, 75° E. Yellow-brown limonites, Quartz.	0.026	6.68		
1324	One piece of pale green colored gouge from inside Montezuma Adit showing pyrite and chalcopryrite.	Tr.	0.50		0.040
1325	One selected piece of quartz from lense 15 feet back of face in the North Drift of the Silver Queen Adit. Pyrite, chalcopryrite, iron oxides - yellow-brown, some red.	0.104	45.30		
1326	1.8 feet across Footwall gouge, 6 feet South of Arnold Shaft on the 20 foot level. Sparse sulphides, some yellow-brown limonite.	0.016	0.21		
1327	1.0 feet across Hanging wall quartz, 6 feet South of Arnold Shaft on the 20 foot level. Moderate yellow-brown-red limonite, some pyrite, chalcopryrite, galena, sphalerite, strong argentite.	1.530	91.63	1.06	0.148
1328	1.8 feet across Footwall gouge with 2 inches of quartz, 6 feet north of Arnold Shaft on 20 foot level. Galena, pyrite and chalcopryrite in quartz, little in gouge. Iron oxides like #1326.	0.006	0.490	0.04	0.024
1329	1.7 feet across quartz Hanging wall, 2 feet North of Arnold Shaft on 20 foot level. Pyrite, chalcopryrite, iron oxides, some argentite.	0.112	9.670	Nil	0.068
1330	2.3 feet across back (Foot-Hanging walls), 8 feet South of E-W Silver Queen Adit in caved portion. Highly altered, greenish-purple cast to gouge (West vein).	0.016	0.180		
1331	3.0 feet across back (Foot-Hanging walls), 8 feet North of E-W Silver Queen Adit. Gouge, moderate tan-brown iron oxides, 3" white quartz, sparse pyrite, chalcopryrite.	0.020	1.680		
1332	3.0 feet across back, Hanging wall to irregular Footwall, altered rock, little gouge, some iron limonite. No visible sulphides. 55 feet N. of Silver Queen Adit.	Tr.	0.920		
1333	2.0 feet across structure at opening to Mexican Stope on General Lee claim. Clay, altered rock, little iron oxide, some yellow (silver chloride?).	0.046	3.270		

The sample results also indicate the area of interest - at the moment - should be the East vein - Arnold Shaft area. Early maps (year 1927) indicate the Arnold Shaft to be 295-300 feet deep - with a short 40 foot level south, a short 50 foot level north, a long 100 foot level and a long 200 foot level, both mostly to the north. If the stope outlines are correct, there is much area that can be explored and should have a good potential grade-wise.

RECOMMENDATIONS:

In view of the above mentioned evidence and criteria, the writer submits the following suggestions and recommendations for consideration.

- (1) No operation of the mine should be considered at this time because there is no positive calculable ore present.
- (2) Sand muck and de-water the Arnold Shaft to below the 100 foot level to permit access to same.
- (3) When (2) has been completed, geologically map and detail sample the accessible workings.
- (4) If results of sampling indicate ore grade material, obtain a 500 to 1000 pound average sample of the material for metallurgical testing to determine the best mill flow sheet required to produce the best concentrate possible with the greatest recovery efficiency.
- (5) Diamond drill four holes fanned from two surface drill sites, both east of the shaft; one site south of the shaft and the other site north of the shaft with all holes directed to intersect the structure about 30 to 40 feet above the 100 foot level in order to test the blocks between the shaft collar Adits (north and south) and the 100 foot level.
- (6) If (3) and (5) show good results, continue to de-sand and de-water the Arnold Shaft to the 200 foot level and follow through with geological mapping and sampling.
- (7) Additional exploration laterally by underground drifting on the structure should follow to develop sufficient ore reserves to justify a mining operation.

Respectfully submitted,

R. E. Mieritz
Mining Consultant
Phoenix, Arizona

September 25, 1975

IRON KING ASSAY OFFICE ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329



ASSAY
MADE
FOR

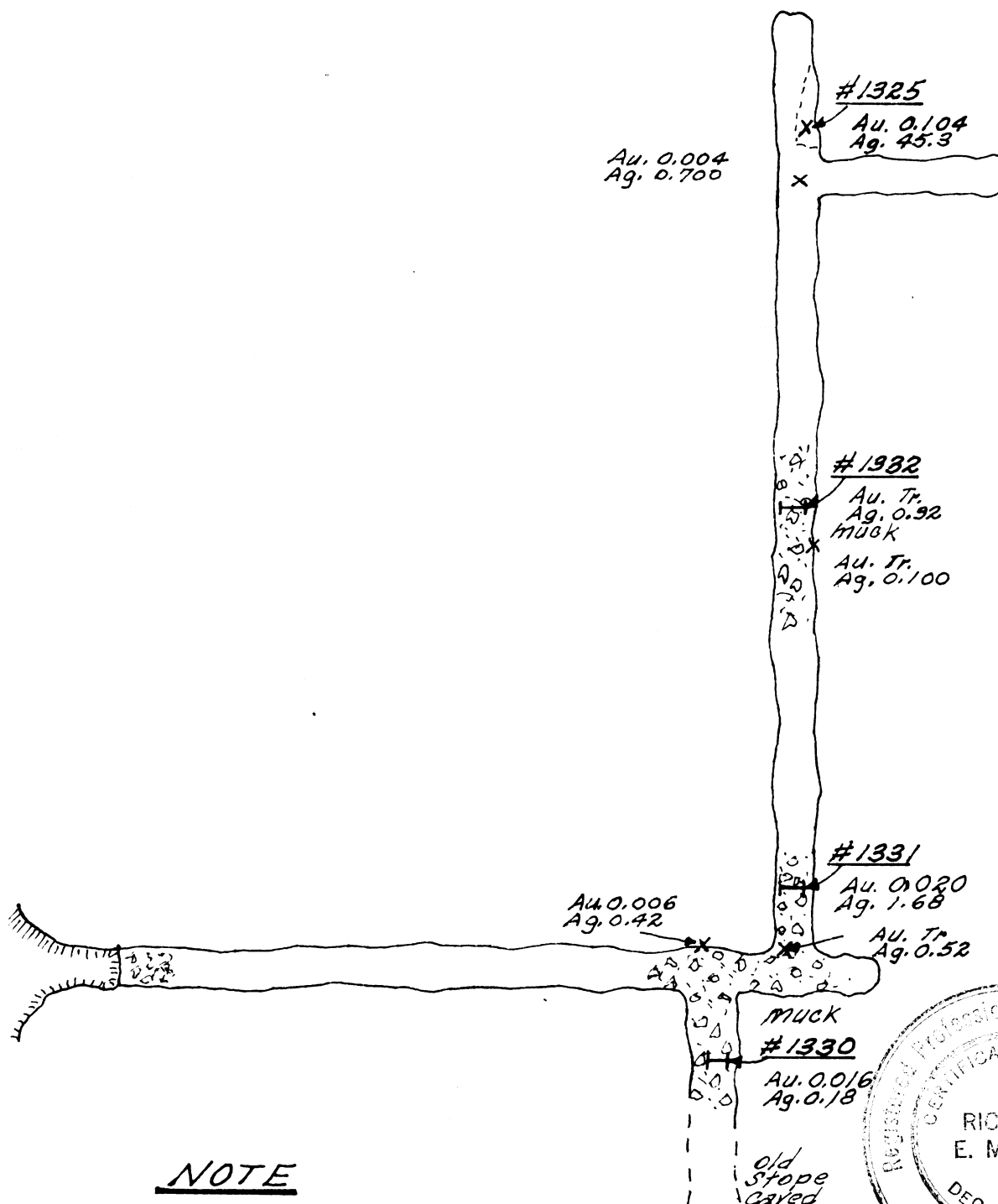
RICHARD E. MIERITZ
2940 N. Casa Tomas
Phoenix, Ariz. 85016

Sept. 23, 1975

Ref no.	DESCRIPTION	oz/ton Au	oz/ton Ag		% Fe	% Pb	% Zn	% Cu
9-18-1	#1322	.026	6.68					
9-18-2	#1323	Tr	3.26					0.92
9-18-3	#1324	Tr	0.50					0.04
9-18-4	#1325	.104	45.30					
9-18-5	#1326	.016	0.21					
9-18-6	#1327	1.530	91.63			1.06		0.148
9-18-7	#1328	.006	0.49			0.04		0.024
9-18-8	#1329	.112	9.67			N11		0.068
9-18-9	#1330	.016	0.18					
9-18-10	#1331	.020	1.68					
9-18-11	#1332	Tr	0.92					
9-18-12	#1333	.04	3.27					

CHARGES \$67.00
1.00 SC Total \$68.00

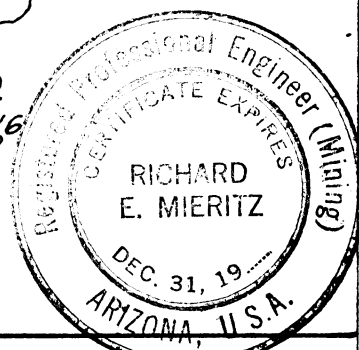
ASSAYER



NOTE

#1325 - denotes samples taken
by R.E. Mieritz, 9/17/75.

X - denotes samples taken
by C.R. Ward Corp.

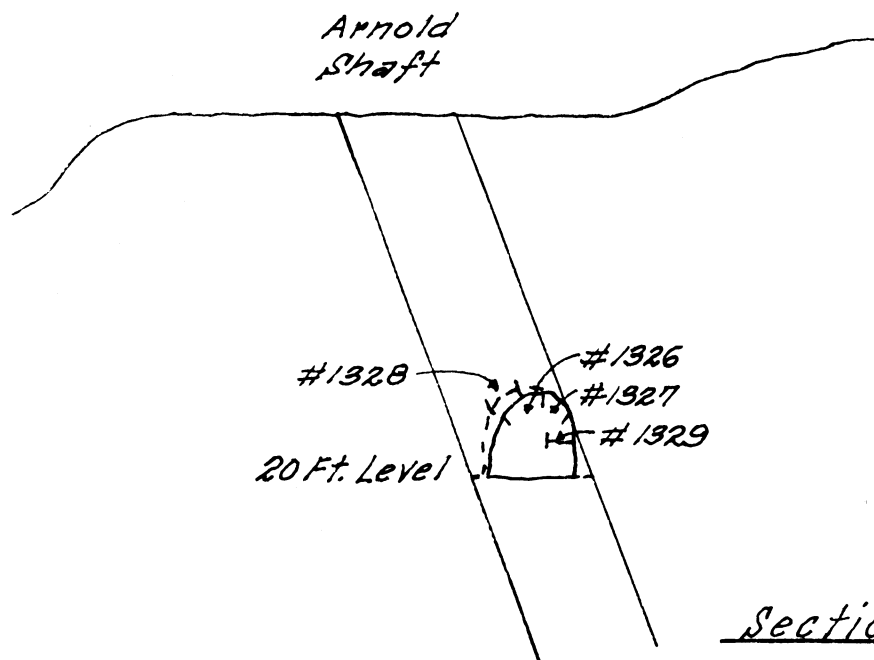


SAMPLE MAP
SILVER QUEEN ADIT
CEDAR MINES
Mohave County, Arizona
SCALE: 1" = 20 Feet

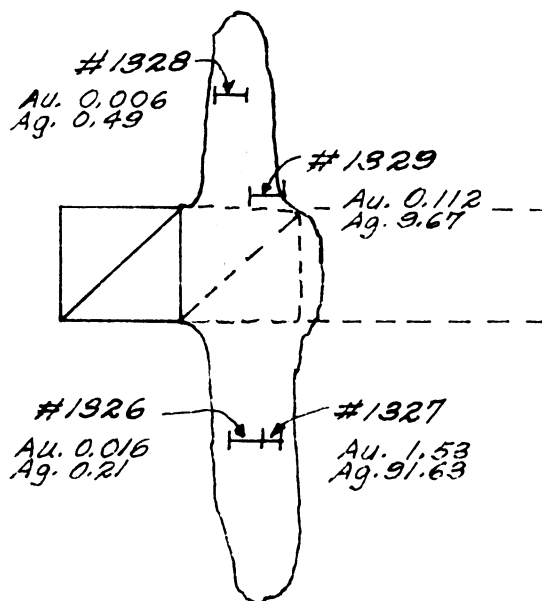
Sept., 1975

R.E. Mieritz

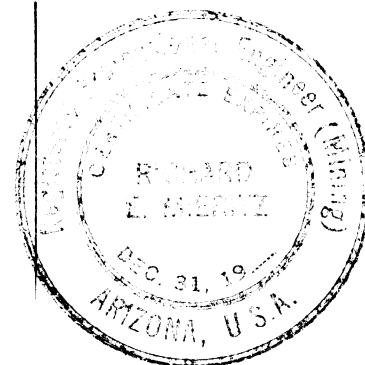
MAP No



Section
Looking North



Plan
Arnold Shaft
&
20 Ft. Level



SAMPLE MAP
ARNOLD SHAFT
(20 Ft. Level)
CEDAR MINES
Mohave County, Arizona
SCALE: 1" = 10 Feet

Sept. 1975

R.E. Mieritz

MAP No

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
2940 N. Casa Tomas
Phoenix, AZ 85016

October 27, 1975

Charles R. Ward Corp.
4728 N. 21st Avenue
Phoenix, AZ 85015

Gentlemen:

At the request of and authorization by Messrs. C. R. Ward and Douglas Martin of the above mentioned corporation, the writer visited the Cedar Mines Project, Mohave County, Arizona, on October 21, 1975, for the purpose of reviewing the Arnold Shaft clean-up work and to examine geologically and otherwise the south stope area made accessible by the shaft clean-up work.

After the brief visual examination, ten samples of the "vein" structure exposed in the stope were taken by the writer. Another sample was taken by the writer of the vein material gathered by the shaft workmen which could possibly be used as a metallurgical sample to determine the best mill flow sheet for the Arnold mineralized material.

CONCLUSIONS and RECOMMENDATIONS:

The results of the examination, and more importantly, the assay results of the samples taken, indicate the following:

- (1) Significant gold-silver mineralization exists within the sampled area to justify continued exploration and rejuvenation work to further the cause of development work,
- (2) The mineralized material gathered as a sample for metallurgical testing is satisfactory for such testing, and
- (3) The shaft clean-up work could possibly prove a potential water source most vital to a milling operation.
- (4) The present work has added to reduce the risk which could be present in future work had not this work been done.

These same results of the examination and the sampling suggest the following;

- (1) Continue de-watering and de-mucking the shaft first below the 100 level and second below the 200 level.
- (2) Rejuvenate the north and south portions of the 100 level to permit roof and floor sampling of the north drift, as well as floor sampling of the south drift.
- (3) Send the metallurgical sample to the laboratory in Long Beach, California, requesting the determination of the best flow sheet and equipment for the best - economical recovery rates, first for gold-silver, second for lead, zinc and copper.

- (4) Be prepared to finance the cost of de-watering and de-mucking the shaft from the 100 level to below the 200 level, and to finance rejuvenation of the 200 level as well as a detailed sampling program on this level.
- (5) Be prepared to finance planned underground exploration which could lead to a development stage and production if items 2, 3 and 4 are successful result-wise.

GEOLOGY and MINERALIZATION:

Examination of the mineralized structure in the south stope indicates very good strike length strength as well as dip length strength. The quartz filling of the fault structure does thin and thicken, producing a lensic effect strike-wise and the same could be true dip-wise but such is not known since no other dip-wise exposure of the structure is accessible at this time. The quartz vein usually favors the center of the structure or hugs the footwall with 4 to 6 inches of gouge underlying same. Occasionally the quartz splits with a portion of the quartz near the footwall and a portion near the hanging wall, and separated by a horst of granite, extremely altered, but mineralized almost as well as the quartz itself.

For the most part, the quartz is fractured which should make for easy drilling and blasting. It can, at times, be quite hard and solid, but not the rule, at least not so in the south stope length examined.

The quartz is quite well colored due to the presence of iron limonites of the yellow to brown and red varieties, exhibits white to yellow pyrite, weak to strong, also some chalcopyrite (CuFeS), galena (PbS) and sphalerite (ZnS). Argentite appears to be the mineral responsible for the silver content in the higher ranges. The pyrite could be responsible for a portion of the gold and silver content, as could the copper, lead and zinc minerals.

SAMPLING:

Opening or making the south drift stope area accessible is the first big step of the Cedar Mines Project, and has provided the first "real" look at the structure at depth. The structure's strength and performance at this depth is good and justified the writer taking samples to provide some factual data for geologic analysis and physical metal content to be used as a basis for either moving forward on the project or to discontinue the exploration and possible development.

The writer took 10 samples of the mineralized zone in the "back" of the stope. For the most part, the samples were taken at 20 foot intervals commencing at a point 50 feet south of the shaft wall. The first 50 feet were most difficult from the standpoint of accessibility and sample taking, thus, no samples taken. Also, the area between 120 to 150 feet south of the shaft wall is quite "hairy", thus, best left undisturbed and no samples taken.

Samples were personally taken by the writer, geologically described and

delivered to the Iron King Assay Office, Humboldt, Arizona.

An eleventh sample was taken of the mineralized material gathered by the workmen, which is to be used for a metallurgical sample - mall test. The assay results indicate the material to contain gold and silver with the silver content close to what the writer would consider average for the Arnold ore body - at least to this day and date. The gold content is somewhat higher than the writer would expect - the expectation being between $\frac{1}{4}$ and $\frac{1}{2}$ an ounce per ton.

Sample locations are shown on the attached Longitudinal Projection Map of the Arnold Mine and the sample data and results are tabulated in the included Sample Schedule.

Respectfully submitted,

R. E. Mieritz
Mining Consultant
Phoenix, Arizona

SAMPLE SCHEDULE
100 South Stope - Arnold Shaft

Sample Number	Sample Length	Sample Description	Ounces per ton		Dollar Value		
			Gold	Silver	Gold	Silver	Total
1342	1.6 Ft.	Across back, 50 feet south of Shaft wall, quartz fractured, quite soft, moderate Py, some Cpy, PbS., limonites.	0.072	1.25	10.80	5.25	16.05
1343	2.6 Ft.	Across back, 70 feet south of shaft wall, clear and milky quartz, fractured, some Py, Cpy, brownish limonites, somewhat vuggy.	0.164	4.60	24.60	19.32	43.92
1344	2.7 Ft.	Across back, 90 Feet south of shaft wall, milky quartz, (6-8") on F.W., sugary quartz balance with some altered Gr., moderate to strong Py with some Cpy, brown to red limonites.	0.248	25.67	37.20	107.81	145.01
1345	4.5 Ft.	Across back, 100 feet south of shaft wall, 2.5 feet quartz in center between Foot and Hanging walls, balance altered Gr., but mineralized. quartz fractured, sugary, Py, Cpy some limonites.	0.208	5.97	31.20	25.07	56.27
1346	2.0 Ft.	Across back, 120 feet south of shaft wall, 8" quartz in center, gouge foot and hanging walls, balance quartz and Gr., fractured, wet, some Py, Cpy and PbS, possibly some manganese.	0.122	14.08	18.30	59.14	77.44
1347	4.0 Ft.	Across back, 150 feet south of shaft wall, mostly quartz, some gouge and altered Gr. much Py, some Cpy and brown to red limonites, black, non-metallic mineral in quartz.	1.746	42.11	261.90	176.86	438.76
1348	3.0 Ft.	Across back, 170 feet south of shaft wall, 12 to 14 inches quartz in center and to Hanginh wall with gouge on both walls. Some Py, Cpy and AgS (argentite). Some brownish limonite.	2.600	21.80	390.00	91.56	481.56
1349	3.5 Ft.	Across back, 190 feet south of shaft wall, milky veinlets of quartz with altered Gr. between, hard, some sugary quartz, some Py, Cpy and some yellow to brown limonite.	0.710	24.73	106.50	103.87	210.37
1350	3.2 Ft.	Across back, 210 feet south of shaft wall, strong Py in quartz and Gr. Quartz veinlet thins and expands, some moderate limonite some Py, Cpy. Quartz near footwall.	0.370	17.35	55.50	72.87	128.37
1351	2.6 Ft.	Across back, 220 feet south of shaft wall, 8" white quartz on footwall, balance as black quartz and some quartz-Gr. breccia with thin quartz stringers. Footwall is diorite, Gr. Hanging.	0.202	3.10	30.30	13.02	43.32
1352		Check sample of the mineralized material gathered by the workmen as a metallurgical sample to be sent to Long Beach, Calif. Contained clear to milky quartz, altered Gr., Py, Cpy, PbS and AgS.	0.930	24.41			

Gold price calculated on basis of \$150.00 per ounce.

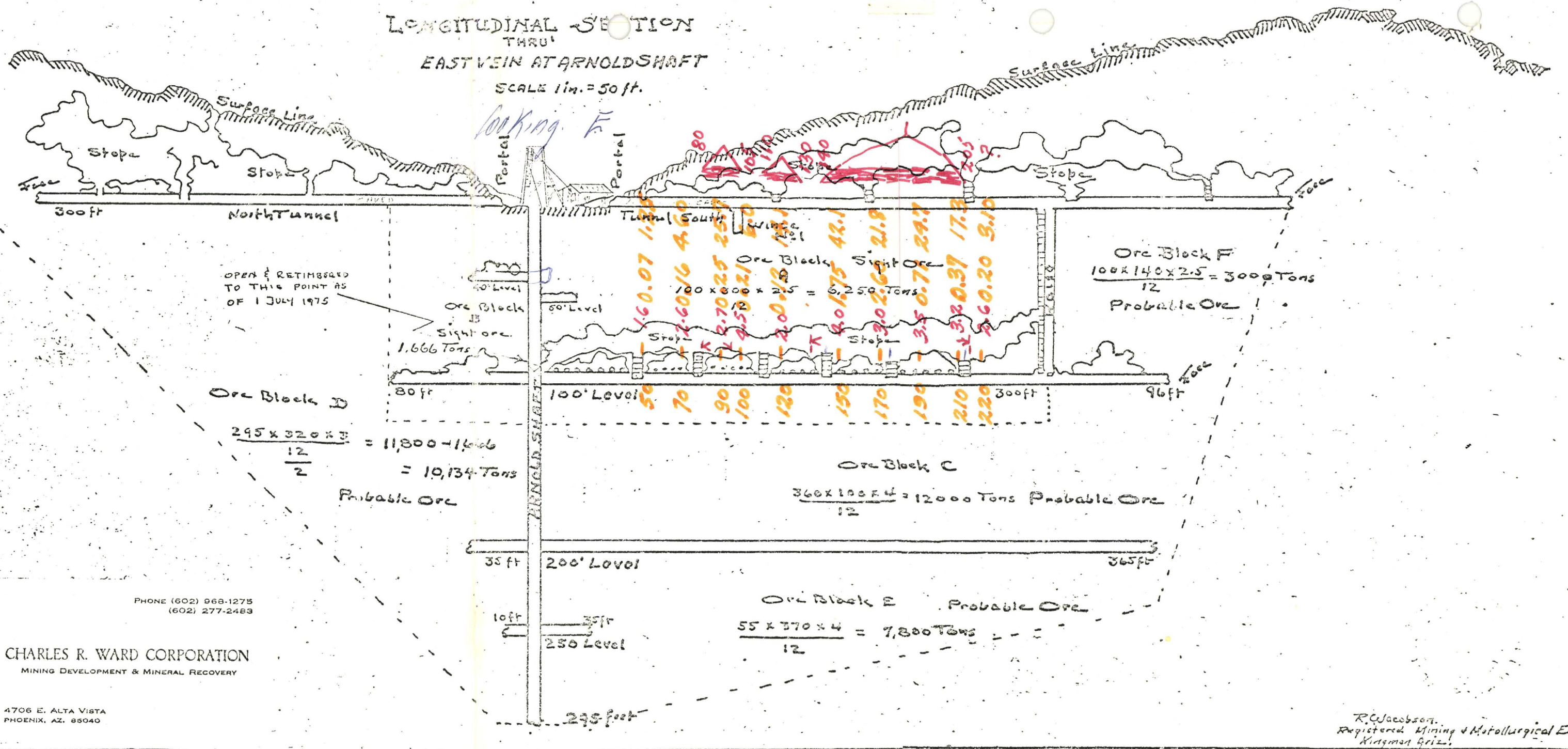
Silver price calculated on basis of \$4.20 per ounce.

At the present time, gold and silver prices are fluctuating from day to day, consequently, the writer has used the above values as an average mean for the next six months, at which time the prices should settle down close to the prices used.

LONGITUDINAL SECTION THRU EAST VEIN AT ARNOLD SHAFT

SCALE 1 in. = 50 ft.

Looking E



PHONE (602) 968-1275
(602) 277-2483

CHARLES R. WARD CORPORATION
MINING DEVELOPMENT & MINERAL RECOVERY

4706 E. ALTA VISTA
PHOENIX, AZ. 85040

R. Jacobson
Registered Mining & Metallurgical Eng.
Kingman, Ariz.

REPLY TO

XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX
TELEPHONE (602) 277-6053

2940 N. Casa Tomas
Phoenix, AZ 85016

Richard E. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

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The quartz is quite well colored due to the presence of iron limonites of the yellow to brown and red varieties, exhibits white to yellow pyrite, weak to strong, also some chalcopyrite (CuFeS), galena (PbS) and sphalerite (ZnS). Argentite appears to be the mineral responsible for the silver content in the higher ranges. The pyrite could be responsible for a portion of the gold and silver content, as could the copper, lead and zinc minerals.

SAMPLING:

Opening or making the south drift stope area accessible is the first big step of the Cedar Mines Project, and has provided the first "real" look at the structure at depth. The structure's strength and performance at this depth is good and justified the writer taking samples to provide some factual data for geologic analysis and physical metal content to be used as a basis for either moving forward on the project or to discontinue the exploration and possible development.

The writer took 10 samples of the mineralized zone in the "back" of the stope. For the most part, the samples were taken at 20 foot intervals commencing at a point 50 feet south of the shaft wall. The first 50 feet were most difficult from the standpoint of accessibility and sample taking, thus, no samples taken. Also, the area between 120 to 150 feet south of the shaft wall is quite "hairy", thus, best left undisturbed and no samples taken.

Samples were personally taken by the writer, geologically described and

delivered to the Iron King Assay Office, Humboldt, Arizona.

An eleventh sample was taken of the mineralized material gathered by the workmen, which is to be used for a metallurgical sample - mill test. The assay results indicate the material to contain gold and silver with the silver content close to what the writer would consider average for the Arnold ore body - at least to this day and date. The gold content is somewhat higher than the writer would expect - the expectation being between $\frac{1}{4}$ and $\frac{1}{2}$ an ounce per ton.

Sample locations are shown on the attached Longitudinal Projection Map of the Arnold Mine and the sample data and results are tabulated in the included Sample Schedule.

Respectfully submitted,

R. E. Mieritz
Mining Consultant
Phoenix, Arizona

SAMPLE SCHEDULE
100 South Stope - Arnold Shaft

Sample Number	Sample Length	Sample Discription	Ounces per ton		Dollar Value		
			-Gold	Silver	Gold	Silver	Total
1342	1.6 Ft.	Across back, 50 feet south of Shaft wall, quartz fractured, quite soft, moderate Py, some Cpy, PbS., limonites.	0.072	1.25	10.80	5.25	16.05
1343	2.6 Ft.	Across back, 70 feet south of shaft wall, clear and milky quartz, fractured, some Py, Cpy, brownish limonites, somewhat vuggy.	0.164	4.60	24.60	19.32	43.92
1344	2.7 Ft.	Across back, 90 Feet south of shaft wall, milky quartz, (6-8") on F.W., sugary quartz balance with some altered Gr., moderate to strong Py with some Cpy, brown to red limonites.	0.248	25.67	37.20	107.81	145.01
1345	4.5 Ft.	Across back, 100 feet south of shaft wall, 2.5 feet quartz in center between Foot and Hanging walls, balance altered Gr., but mineralized. quartz fractured, sugary, Py, Cpy some limonites.	0.208	5.97	31.20	25.07	56.27
1346	2.0 Ft.	Across back, 120 feet south of shaft wall, 8" quartz in center, gouge foot and hanging walls, balance quartz and Gr., fractured, wet, some Py, Cpy and PbS, possibly some manganese.	0.122	14.08	18.30	59.14	77.44
1347	4.0 Ft.	Across back, 150 feet south of shaft wall, mostly quartz, some gouge and altered Gr. much Py, some Cpy and brown to red limonites, black, non-metallic mineral in quartz.	1.746	42.11	261.90	176.86	438.76
1348	3.0 Ft.	Across back, 170 feet south of shaft wall, 12 to 14 inches quartz in center and to Hanginh wall with gouge on both walls. Some Py, Cpy and AgS (argentite). Some brownish limonite.	2.600	21.80	390.00	91.56	481.56
1349	3.5 Ft.	Across back, 190 feet south of shaft wall, milky veinlets of quartz with altered Gr. between, hard, some sugary quartz, some Py, Cpy and some yellow to brown limonite.	0.710	24.73	106.50	103.87	210.37
1350	3.2 Ft.	Across back, 210 feet south of shaft wall, strong Py in quartz and Gr. Quartz veinlet thins and expands, some moderate limonite some Py, Cpy. Quartz near footwall.	0.370	17.35	55.50	72.87	128.37
1351	2.6 Ft.	Across back, 220 feet south of shaft wall, 8" white quartz on footwall, balance as black quartz and some quartz-Gr. breccia with thin quartz stringers. Footwall is diorite, Gr. Hanging.	0.202	3.10	30.30	13.02	43.32
1352		Check sample of the mineralized material gathered by the workmen as a metallurgical sample to be sent to Long Beach, Calif. Contained clear to milky quartz, altered Gr., Py, Cpy, PbS and AgS.	0.930	24.41			

Gold price calculated on basis of \$150.00 per ounce.

Silver price calculated on basis of \$4.20 per ounce.

At the present time, gold and silver prices are fluctuating from day to day, consequently, the writer has used the above values as an average mean for the next six months, at which time the prices should settle down close to the prices used.

NORTH

Looking West

Surface

Surface

Arnold Shafit

Page

pad 0.5

pillars or muck? -

Raise & Motway

$$\frac{1351}{\text{No}} \quad \frac{12.6 \times 10^{-3} - 3.10}{\text{W/dth}} \quad \frac{\text{Au}}{\text{Ag}}$$

1350 ~~3.2 - 3.70 - 17.35~~

1349 (3.5-X-710-2473

1348 $\sqrt{3.0 - 1X} = 2.600 - 21.80$

$$1347 \quad \boxed{40.1x - 1.746 - 42.11}$$

1346 \cdot $\frac{12.01 \times 10^{-12} - 14.08}{12.01 \times 10^{-12} - 14.08}$

1345
7/11/77
~~75K-208-5.97~~

1343

1342. $1.6 \times 10^{-7} - 1.25$

132

629

100,001

200' 1/2"

250' 4v.

SAMPLE LOCATION MAP
(Longitudinal Projection)

ARNOLD SHAFT MINE
CEDAR MINES
Mohave County, Arizona

Scale: 1" = 50 Ft.

Oct., 1975

R. E. Moritz

MAP 1/2 1

J. & J. SMELTING & REFINING CORP.

17474 CATALPA P.O. BOX 727

HESPERIA, CALIF. 92345

714-244-8642

JOSEPH REGO

PRESIDENT

JOHN REGO

VICE PRES. GEN. MGR.

LEWIS B. KEAN

ATTORNEY

PRODUCTION FLOW SHEET ANALYSIS

Prepared for:

ALPHA MANAGEMENT CORP.
4728 N. 21st Street
Phoenix, Arizona 85015

Prepared by:

John E. Rego
Vice President, General Manager
J. & J. SMELTING & REFINING CORP.
17474 Catalpa (P.O. Box 727)
Hesperia, California 92345

Preparation date:

December 15, 1975

This PRODUCTION FLOW SHEET ANALYSIS consists of 25 pages.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 1 of 25 pages

RECEIVED HEAD ORE AND PAYMENT IN FULL - Receipt was given for 267.75 pounds of head ore from the ARNOLD SHAFT of the CEDAR MINES PROJECT, on October 28, 1975. Payment in full of \$1,500.00 (Fifteen Hundred Dollars) was received on November 13th, 1975.

LOCATION OF MINE - The ARNOLD SHAFT, of the CEDAR MINES PROJECT is located in Mohave County, Arizona. The ARNOLD SHAFT has had previous proven production and is being rejuvenated for production.

ACCEPTANCE CONDITIONS - J. & J. SMELTING & REFINING CORP., accepted this head ore on the basis that it was a collective representation of the head ore to be mined. Throughout this certified analysis, all determinations and statements of fact are based completely on the 267.75 pounds of head ore received at this facility. We can only analyze what we receive.

MILLING PROCEDURES OF HEAD ORE FOR PRODUCTION FLOW SHEET ANALYSIS The entire sample of 267.75 pounds of head ore was crushed to 3/8" minus using a 5"x6" Denver Jaw Crusher. After primary crushing, the ore was further reduced to 6 mesh utilizing a 12" Denver Gyratory Cone Crusher.

SELECTION OF HEAD ORE for this report was accumulated in the following procedures. The total 267.75 pounds of primary and secondary crushed head ore was reduced to 102.5 pounds using an ore splitter. Pulverization was performed on the selected 102.5 pounds by means of a Bico-Braun Pulverizer with a new set of U51 & U52 grinding plates to insure no form of contamination from previously milled ores. Thirty (30) mesh is used in the first pulverization for all head ore assay procedures and the first concentration analysis of this head ore.

Head ore assay samples were removed with a batch sampling system. The batch sampling technique works on the basis of taking a two ounce sample, (after thoroughly mixing) from each and every two pounds of pulverized head ore from the collector tray of the pulverizer.

The batch sampling procedure, or method of selection of milled head ore, insures the best possible average assay values and complete representation of the total 102.5 pounds pulverized to 30 mesh. The combined total of 11.5 pounds was captured by this sampling system. A small Denver Laboratory ore splitter was used

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 2 of 25 pages

Selection of Head Ore cont'd.

to reduce this collected weight down to 14 ounces, for initial head ore assays, test smelt and spectrographic analysis. The remaining portion of batched head ore was returned to the other 30 mesh milled ore for concentration selection and analysis.

HEAD ORE CONCENTRATION SELECTION - All remaining 30 mesh head ore was thoroughly mixed and run through an ore splitter to obtain positive representative samples for concentration.

Precisely 20 pounds of 30 mesh head ore was removed for the first concentration analysis. The other concentrates were produced from 20 pounds at 65 mesh, 20 pounds at 36 mesh, 20 pounds at 40 mesh and finally 20 pounds at 65 mesh for flotation analysis.

This gave a total of 100 pounds of various grinds or meshes of head ore for table and flotation concentration ratio, assay evaluation and rate of recovery analysis. All five quantities were reweighed prior to concentration to get exact concentration ratios with a positive starting weight.

HEAD ORE ANALYSIS - At this production facility, we are extremely thorough in all phases of this Production Flow Sheet Analysis, because we certify all data in this report. Ascertaining head ore values is one of the most important phases. Importance is stressed on the absolute necessity of a positive starting point for concentration values in relation to head ore values.

One must be cognizant of this fact because the RATE OF RECOVERY of head ores, in a concentrated form, is the deciding factor in whether or not ANY mine, be it hard-rock, open-pit or alluvial (placer), is commercially feasible to its investors.

Head ore analysis for flow sheets at this facility, consists of eight (8) fire assays and a four (4) assay ton test smelt. Only six (6) of the eight fire assays are listed and averaged; the high and low fire assays are not utilized. They will be mentioned in the notes concerning this hard-rock head ore.

All head ore assay analysis samples were extracted from the 14 ounces of head ore accumulated in the aforementioned milling and selection procedures. Assays at this facility use 29.166 Grams per assay unit, which is one assay ton of head ore or concentrate, not one-half or less this amount, as used in most assay labs throughout the country.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 3 of 25 pages

Since J. & J. is a smelter and refinery, we do not use chemical assays for basically gold and silver ores. We utilize chemical assays only when the major metal is other than gold and silver.

PRICES USED TO DETERMINE DOLLAR VALUE for gold and silver in this report were based on L.M.E. (London Metals Exchange) spot prices on Monday, November 17, 1975. Prices that day were as follows:

Gold (Au.) \$142.00 per fine Troy ounce (999.5+)
Silver (Ag.) \$ 4.33 per fine Troy ounce (999+)

The above prices will be used throughout this text for every determination of value.

HEAD ORE FIRE ASSAY ANALYSIS (6 of 8 used)

(1)	Gold (Au.)	.219 Troy ounces per ton	(\$ 31.10)
	Silver (Ag.)	12.622 Troy ounces per ton	(\$ 54.65)
	Total value per ton of head ore is.....		\$ 85.75
(2)	Gold (Au.)	.208 Troy ounces per ton	(\$ 29.54)
	Silver (Ag.)	11.929 Troy ounces per ton	(\$ 51.65)
	Total value per ton of head ore is.....		\$ 81.19
(3)	Gold (Au.)	.297 Troy ounces per ton	(\$ 42.17)
	Silver (Ag.)	12.173 Troy ounces per ton	(\$ 52.71)
	Total value per ton of head ore is.....		\$ 94.88
(4)	Gold (Au.)	.227 Troy ounces per ton	(\$ 32.23)
	Silver (Ag.)	12.024 Troy ounces per ton	(\$ 52.06)
	Total value per ton of head ore is.....		\$ 84.29
(5)	Gold (Au.)	.231 Troy ounces per ton	(\$ 32.80)
	Silver (Ag.)	12.238 Troy ounces per ton	(\$ 52.99)
	Total value per ton of head ore is.....		\$ 85.79
(6)	Gold (Au.)	.189 Troy ounces per ton	(\$ 26.84)
	Silver (Ag.)	10.914 Troy ounces per ton	(\$ 47.26)
	Total value per ton of head ore is.....		\$ 74.10

AVERAGE VALUES OF GOLD AND SILVER IN HEAD ORE

Gold (Au.)	.2285 Troy ounces per ton	(\$ 32.45)
Silver (Ag.)	11.9833 Troy ounces per ton	(\$ 51.89)

TOTAL AVERAGE VALUE PER TON OF HEAD ORE IS.....\$ 84.34

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 4 of 25 pages

TEST SMELT ON FOUR ASSAY TONS OF HEAD ORE

Test smelting procedures are performed as a cross-check of head ore values. The test smelt was fired in our laboratory natural gas pot furnace with a capacity of well over 2,800° Fahrenheit. All test smelts at this facility are conducted with new #10 Dixon graphite crucibles. This completely eliminates all possibility of contamination from a previously used crucible.

Flux for Head Ore Test Smelt

116.664 Grams.....	Head Ore (four assay tons)
85.000 Grams.....	Soda Ash
75.000 Grams.....	Borax
5.750 Grams.....	Flour
4.500 Grams.....	Cream of Tartar
1.500 Grams.....	Sodium Nitrate
1.1.000 Grams.....	Sodium Chloride
2.500 Grams.....	Fluorspar
20.000 Grams.....	*Litharge (yellow powdered lead)

*Litharge - This amount (20.000 Grams) of powdered lead was used as a collector of gold and silver, in commercial smelting far less than half this amount would be required.

Test smelt collected precious metals are refined by a basic refining procedure called cupellation. By cupellation, the lead is absorbed into a porous boneash container (cupel) and only gold and silver, along with small quantities of impurities remain. The remaining metal, after cupellation is called an assayers button or assayers bullion. The assayers button is weighed, then parted in a 25% nitric acid solution. Determinations of gold and silver contents are evaluated by weight using a precision analytical balance. If there isn't sufficient silver to part the button, silver is added to the smelt to insure parting. This is determined in a test assay of the head ore. A minimum of 66.67% silver is required for parting procedures.

FURNACE TIME AND TEMPERATURE

The laboratory pot furnace was charged cold, smelted for 2.5 hours, at a maximum temperature of 1,900° Fahrenheit (to eliminate silver losses due to oxidation). Higher smelt temperatures create losses in silver; also cause loss in cupellation. With silver the lower the temperature, the overall recovery is improved.

SMELT SLAG

The test smelt poured very liquid, marbelled well, with no evidence of complexity or impurities. The flux worked exceedingly well with this head ore.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 5 of 25 pages

ACTUAL TOTAL WEIGHT OF GOLD AND SILVER IN TEST SMELT

Gold	{Au.}	.946 Milligrams
Silver	{Ag.}	48.562 Milligrams

VALUE PER TON OF HEAD ORE IN TEST SMELT (above weight divided by 4)

Gold	{Au.}	.2365 Troy ounces per ton	(\$ 33.58)
Silver	{Ag.}	12.1405 Troy ounces per ton	(\$ 52.57)

TOTAL VALUE PER TON OF HEAD ORE BY TEST SMELT IS.....\$ 86.15

SPECTROGRAPHIC ANALYSIS - at J. & J. SMELTING & REFINING CORP.,
we send out for spectrographs, mainly to check on silica and
ferrous metal content to aid in concentration and smelting.
Secondly, to check the possibility of other valuable metals and
rare earths.

Spectrographs are performed by PACIFIC SPECTROCHEMICAL LABORATORY
INC. They are a well respected firm in Los Angeles, California.

The original spectrographic report is entered as page 6 in this
Production Flow Sheet Analysis.

TO: J. & J. Smelting & Refining Corp.
17474 Catalpa P.O. Box 727
Hesperia, Calif. 92345

Attn: John E. Rego

PURCHASE ORDER NO.

(213) 838-5939

Page 6 of 25 pages
(213) 870-3749

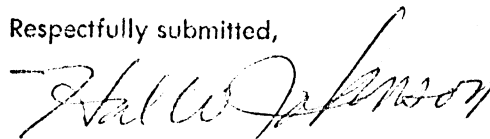
Pacific Spectrochemical Laboratory, Inc.
Chemical and Spectrographic Analysis
2558 Overland Avenue
Los Angeles, California 90064
November 21, 1975

SEMIQUANTITATIVE ANALYSIS

"P.F.S.A.
Martin/Alpha Mgmt."

Si-	35.%
Al-	7.1
Ca-	0.83
Mg-	0.63
Fe-	5.1
Ni-	0.011
Ti-	0.32
Pb-	0.14
Mn-	0.020
Ga-	0.0035
Mo-	0.061
V -	0.022
Cu-	0.035
Ag-	0.027
Zn-	0.52
Zr-	0.017
Co-	0.0079
Sr-	0.058
Cr-	0.043
Au-	ND X 0.002
Pt-	ND X 0.002
Pd-	ND X 0.002
Other elements	Nil

Respectfully submitted,



PACIFIC SPECTROCHEMICAL LABORATORY, INC.

J. & I. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 7 of 25 pages

NOTES ON HEAD ORE ANALYSIS

FIRE ASSAY ANALYSIS - This particular head ore has no form of complexity in its native (raw) state and would be easily adaptable to direct smelting. Fire assay slag was clear of impurities. Clear slag, such as this, indicates ALL METALLICS have been collected in the lead portion of the assay, and hence all gold and silver would be in the assayers bullion.

The high and low assays not listed and averaged of the fire assays, had values of \$96.38, (\$42.61 gold and \$53.77 silver) and \$72.91, (\$26.08 gold and \$46.83 silver) per ton respectively.

The flux worked perfectly on the head ore in all eight fire assays.

Previous assay results from other firms have shown considerably more value in their assay reports; for this reason we must assume the sample we received was conservative.

TEST SMELT ANALYSIS - Total value increased \$1.81 or 2.1% per ton over fire assay average value. This is not uncommon when comparing test smelts and single fire assays. The flux used, mentioned in this report functioned perfectly.

This flux was also used in head ore fire assays in lesser quantity (25% of each portion, except litharge was kept at 20 grams).

CONCLUSIONS OF HEAD ORE ASSAY ANALYSIS

We are going to use the \$84.34 fire assay average value per ton for a head ore value in all concentration testing to follow. This means for a basis in rate of recovery of head ore values in a concentrated form.

CONCENTRATION ANALYSIS

Concentration is a process in which head ore is crushed, milled and classified to desired fineness or mesh. Then by means of removing non-valuable mass, or bulk, from its metal content, it is condensed or concentrated, thus increasing its value per ton and decreasing its waste matter.

The three basic forms of concentration all use gravity, motion and water. These forms of concentration are tables, mineral jigs and flotation cells, or a combination of these three in the recovery system.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 8 of 25 pages

Concentration Analysis cont'd.

The primary reasoning behind concentration analysis is to ascertain these basic facts. If the head ore can retain good recovery in relation to its head ore values in a concentrated form. This statement in simplest terms means what percentage of head ore values is retained in the concentrate, when the concentrate value is divided by its ratio of concentration and compared to head ore values. The above statement involves one term, RATE OF RECOVERY. Rate of recovery is the most important factor in this report. As previously mentioned, it is the deciding factor of whether or not the mine has commercial feasibility and adequate profit potential to prudently proceed.

If FLOTATION is necessary, due to loss of retention of head ore values in jig and/or table concentration: a twenty pound 65 mesh sample, will be analyzed for comparison of recovery. Gold and silver ores, such as is evident in the ARNOLD SHAFT, USUALLY REQUIRE FLOTATION RECOVERY, BUT NOT ALWAYS.

Finally, if roasting is required to improve recovery.

As strange as it may seem, in this modern age of recovery expertise, simple panning is still a valuable asset to help determine some of the above answers. Panning gave the following pertinent facts: the head ore does not require roasting (no visible float sulphides); the ore contains considerable pyrites and other iron elements. Due to difference in specific gravity between the silica and metal elements, it is entirely possible this ore may have good recovery without flotation. This would be a tremendous asset for numerous reasons. 1) Lower mill cost. 2) Good flotation ore dressers are a rare commodity today. 3) Qualified personnel are seldom available, to run a flotation recovery system correctly and efficiently.

The five, twenty pound quantities of milled head ore were concentrated in the following manner. The first four were table concentrated, the last concentrated by flotation.

- I TWENTY POUNDS OF HEAD ORE @ 30 MESH
Concentrated down to 41.33 ounces or a 7.743:1 concentration ratio. (Minimum concentration)
- II TWENTY POUNDS OF HEAD ORE @ 65 MESH
Concentrated to 30.000 ounces or a 10.666:1 concentration ratio. (Maximum concentration and mesh)

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.,
Phoenix, Arizona

December 15, 1975

Page 9 of 25 pages

Concentration Analysis cont'd.

III TWENTY POUNDS OF HEAD ORE @ 36 MESH

Concentrated down to 39.75 ounces or a 8.050:1 concentration ratio. (Near optimum mesh and concentration)

IV TWENTY POUNDS OF HEAD ORE @ 40 MESH

Concentrated down to 39.375 ounces or a 8.127:1 concentration ratio. (Optimum mesh and concentration)

V TWENTY POUNDS OF HEAD ORE @ 65 MESH (FLOTATION)

Concentrated down to 35.75 ounces or a 8.951:1 concentration ratio by flotation.

Note: Details in all aspects of flotation testing and recovery will be covered in a special section after all data concerning table concentration.

NOTES ON TABLE CONCENTRATION

I 7.743:1 CONCENTRATE - At J. & J. SMELTING & REFINING CORP., we concentrate products in a manner in which every possibility is taken into consideration. This ratio of concentration is the starting point for further concentration analysis. Like panning, but more detailed, it gives us data regarding the head ore (e.g. need for roasting and flotation, free-milling ability, slimability and sulphide conditions).

The first concentrate was thoroughly analyzed prior to any other concentrates being produced. Maximum retention of metal was obtained in this ratio, with a minimum rate of concentration.

As a point of definition: 7.743:1 Ratio means, it would require 7.743 tons of 30 mesh milled head ore to produce one ton of this particular concentrate.

II 10.666:1 CONCENTRATE - Maximum rate of concentration was attained in this ratio, also maximum mesh. Logically, we go to both ends of the spectrum in our first and second concentrates. (To check retention of values: relating one extreme to the other.)

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 10 of 25 pages

Notes on Table Concentration cont'd.

- III 8.050:1 CONCENTRATE - This rate of concentration and mesh are near optimum for table concentration with this head ore.
- IV 8.127:1 CONCENTRATE - This is the best overall ratio and mesh for table concentration. Forty mesh unlocked the gold portion best and seemed ideal for tabling at this rate of concentration.

PERTINENT DATA CONCERNING TABLE CONCENTRATION

All of the concentrates were produced on the same 4'x12' Dunham Economy Concentration Table, to insure similar results under the same circumstances and conditions.

For evaluation, all table concentrates were dried, weighed, thoroughly mixed and quartered, prior to extracting assay samples from each concentrate. A total of three assays of each concentrate were fire assayed and averaged. Concentrates with their relatively even values and rather small quantity usually do not require more than three assays to determine their values.

Considerable time delay has been caused by adverse weather conditions (freezing temperatures and wind), beyond our control concerning table concentration.

ASSAY ANALYSIS OF ALL TABLE CONCENTRATES

I ANALYSIS OF 7.743:1 CONCENTRATE @ 30 MESH

(1)	Gold (Au.)	1.457 Troy ounces per ton	(\$ 206.89)
	Silver (Ag.)	63.183 Troy ounces per ton	(\$ 273.58)
	Total value per ton of concentrate is.....		\$ 480.47
(2)	Gold (Au.)	1.394 Troy ounces per ton	(\$ 197.95)
	Silver (Ag.)	62.651 Troy ounces per ton	(\$ 271.28)
	Total value per ton of concentrate is.....		\$ 469.23
(3)	Gold (Au.)	1.612 Troy ounces per ton	(\$ 228.90)
	Silver (Ag.)	63.235 Troy ounces per ton	(\$ 273.81)
	Total value per ton of concentrate is.....		\$ 502.71

AVERAGE VALUES OF GOLD AND SILVER IN 7.743:1 CONCENTRATE

Gold (Au.)	1.488 Troy ounces per ton	(\$ 211.25)
Silver (Ag.)	63.023 Troy ounces per ton	(\$ 272.89)

TOTAL AVERAGE VALUE PER TON OF 7.743:1 concentrate...\$ 484.14

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 11 of 25 pages

Assay Analysis of All Table Concentrates cont'd.

II ANALYSIS OF 10.666:1 CONCENTRATE @ 65 MESH

(1)	Gold (Au.)	1.893 Troy ounces per ton	(\$268.81)
	Silver (Ag.)	75.134 Troy ounces per ton	(\$325.33)
	Total value per ton of concentrate is.....		\$594.14
(2)	Gold (Au.)	1.851 Troy ounces per ton	(\$262.84)
	Silver (Ag.)	73.433 Troy ounces per ton	(\$317.96)
	Total value per ton of concentrate is.....		\$580.80
(3)	Gold (Au.)	1.803 Troy ounces per ton	(\$256.03)
	Silver (Ag.)	74.518 Troy ounces per ton	(\$322.66)
	Total value per ton of concentrate is.....		\$578.69

AVERAGE VALUES OF GOLD AND SILVER IN 10.666:1 CONCENTRATE

Gold (Au.)	1.849 Troy ounces per ton	(\$262.56)
Silver (Ag.)	74.362 Troy ounces per ton	(\$321.98)

TOTAL AVERAGE VALUE PER TON OF 10.666:1 CONCENTRATE \$584.54

III ANALYSIS OF 8.050:1 CONCENTRATE @ 40 MESH

(1)	Gold (Au.)	1.496 Troy ounces per ton	(\$212.43)
	Silver (Ag.)	64.377 Troy ounces per ton	(\$278.75)
	Total value per ton of concentrate is.....		\$491.18
(2)	Gold (Au.)	1.589 Troy ounces per ton	(\$225.64)
	Silver (Ag.)	63.908 Troy ounces per ton	(\$276.72)
	Total value per ton of concentrate is.....		\$502.36
(3)	Gold (Au.)	1.527 Troy ounces per ton	(\$216.83)
	Silver (Ag.)	64.762 Troy ounces per ton	(\$280.42)
	Total value per ton of concentrate is.....		\$497.25

AVERAGE VALUES PER TON OF GOLD AND SILVER IN 8.050:1 CONCENTRATE

Gold (Au.)	1.537 Troy ounces per ton	(\$218.30)
Silver (Ag.)	64.349 Troy ounces per ton	(\$278.63)

TOTAL AVERAGE VALUE PER TON OF 8.050:1 CONCENTRATE \$496.93

J. & J. SMELTING & REFINING CORP.

CERTIFIED

PRODUCTION FLOW SHEET ANALYSIS

ALPHA MANAGEMENT CORP.

Phoenix, Arizona

December 15, 1975

Page 12 of 25 pages

Assay Analysis of All Table Concentrates cont'd.

IV ANALYSIS OF 8.127:1 CONCENTRATE @ 36 MESH

(1)	Gold (Au.)	1.668 Troy ounces per ton	(\$236.86)
	Silver (Ag.)	66.434 Troy ounces per ton	(\$287.66)
	Total value per ton of concentrate is.....		\$524.52
(2)	Gold (Au.)	1.714 Troy ounces per ton	(\$243.39)
	Silver (Ag.)	68.175 Troy ounces per ton	(\$295.20)
	Total value per ton of concentrate is.....		\$538.59
(3)	Gold (Au.)	1.584 Troy ounces per ton	(\$224.93)
	Silver (Ag.)	65.880 Troy ounces per ton	(\$285.26)
	Total value per ton of concentrate is.....		\$510.19

AVERAGE VALUE PER TON OF GOLD AND SILVER IN 8.127:1 CONCENTRATE

Gold (Au.)	1.655 Troy ounces per ton	(\$235.06)
Silver (Ag.)	66.830 Troy ounces per ton	(\$289.37)

TOTAL AVERAGE VALUE PER TON OF 8.127:1 CONCENTRATE \$524.43

RATES OF RECOVERY OF TABLED CONCENTRATES

TOTAL RATE OF RECOVERY - This term means the percentage of values retained when the concentrate value is divided by its concentration ratio and compared by value and percentage to the original head ore values.

This is without doubt the most important factor of this flow sheet whether concentration will be by tabling or flotation. It determines the commercial feasibility of the mine in terms of up-grading or concentration. The rate of recovery becomes extremely imperative on all head ores that require ore dressing, on, or near the mine site.

In addition to total rate of recovery, we also break-down the gold and silver recovery data. This shows where the losses are and gives additional insight into the need for flotation recovery on this head ore, (due to losses in silver recovery). Gold recovery proved to be very good in all concentrates and was mostly in the pyrite portion of the head ore.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 13 of 25 pages

TOTAL RATES OF RECOVERY OF CONCENTRATES

- I 7.743:1 RATIO...Total recovery was \$62.53 or 74.140% of head ore value of \$84.34 per ton.
- II 10.666:1 RATIO..Total recovery was \$54.80 or 64.975% of head ore value of \$84.34 per ton.
- III 8.050:1 RATIO...Total recovery was \$61.73 or 73.192% of head ore value of \$84.34 per ton.
- IV 8.127:1 RATIO...Total recovery was \$64.53 or 76.512% of head ore value of \$84.34 per ton.

NOTES: TOTAL RECOVERY

Overall recovery was about average, except the 10.666:1 concentrate. It was too severely concentrated for this head ore and caused excessive losses; the mesh was also too fine for this head ore. In fact, if this was the average headore in the mine, jigs and tables would be adequate for recovery. Higher silver and gold content, most of which are in a sulphide form, necessitates the need for flotation.

GOLD RECOVERY IN TABLED CONCENTRATES

- I 7.743:1 RATIO - GOLD RECOVERY - Percentage of gold recovery was 84.068% of head ore value, or \$27.28 out of head ore gold value of \$32.45 per ton.
- II 10.666:1 RATIO - GOLD RECOVERY - Percentage of gold recovery was 75.871% of head ore value, or \$24.62 out of head ore gold value of \$32.45 per ton.
- III 8.050:1 RATIO - GOLD RECOVERY - Percentage of gold recovery was 83.575% of head ore value, or \$27.12 out of head ore gold value of \$32.45 per ton.
- IV 8.127:1 RATIO - GOLD RECOVERY - Percentage of gold recovery was 89.122% of head ore value, or \$28.92 out of head ore gold value of \$32.45 per ton.

GOLD RECOVERY NOTES: Good to excellent in all gold portions of the tabled concentrates.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 14 of 25 pages

SILVER RECOVERY IN TABLED CONCENTRATES

- I 7.741:1 RATIO...SILVER RECOVERY - Percentage of silver recovery was 67.913% of head ore value, or \$35.24 out of head ore silver value of \$51.89 per ton.
- II 10.666:1 RATIO...SILVER RECOVERY - Percentage of silver recovery was 58.181% of head ore value, or \$30.19 out of head ore silver value of \$51.89 per ton.
- III 8.050:1 RATIO...SILVER RECOVERY - Percentage of silver recovery was 66.680% of head ore value, or \$34.60 out of head ore silver value of \$51.89 per ton.
- IV 8.127:1 RATIO...SILVER RECOVERY - Percentage of silver recovery was 68.626% of head ore value, or, \$35.61 out of head ore silver value of \$51.89 per ton.

SILVER RECOVERY NOTES: Recovery was below average for commercial recovery. The losses will increase as the silver values increase in sulphide forms. Roasting of head ore would help the sulphide condition in the higher grade silver ore in other sections of the mine. FLOTATION is always best for sulphide ores and usually eliminates the need for roasting.

The principal of flotation is natural for silver ores in sulphide form, because, sulphides naturally float and rise to the surface. Another plus for flotation concentration is that the gold portion is basically locked in the pyrite content of this head ore and is readily float concentrated in a bulk concentrate of all sulphides.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 15 of 25 pages

FLOTATION CONCENTRATION ANALYSIS

This form of concentration was performed in a laboratory test cell under controlled conditions. For this reason the determinations are the best possible with this head ore. As mentioned previously in this text, 65 mesh was utilized for this analysis.

The flotation reagents used were: XANTHATE 301 and AEROFLOAT 15. The quantity used in each of these flotation reagents was equivalent to .14 pounds per ton of Xanthate 301 and .01 pounds per ton of Aerofloat 15. In actual use in a six cell arrangement the amount per ton should lower to .10 on Xanthate 301 and remain the same on Aerofloat 15. These reagents are produced by American Cyanamid Company and are available worldwide.

As noted in the text to follow, the recovery was very good utilizing bulk flotation of all sulphides.

FLOTATION CONCENTRATION

Twenty pounds of 65 mesh head ore concentrated by flotation down to 35.75 ounces or a ratio of 8.951:1. PULP DENSITY was kept between 35 and 40%. Xanthate 301 is a dry reagent and Aerofloat 15 is a liquid.

ANALYSIS OF 8.951:1 FLOTATION CONCENTRATE

This analysis was assayed by a test smelt of 35 ounces (34.02 assay tons). The flux was the same used for all the head ore assay determinations and functioned perfectly.

TOTAL METAL CONTENT OF SMELT

Gold (Au.)	59.433 Milligrams
Silver (Ag.)	3,268.165 Milligrams

CONTENT PER TON OF 8.951:1 FLOTATION CONCENTRATE

Above weights divided by 34.02 gave the following results in terms of a single ton unit of concentrate.

Gold (Au.)	1.747 Troy ounces per ton	(\$248.07)
Silver (Ag.)	96.066 Troy ounces per ton	(\$415.97)

TOTAL VALUE PER TON OF 8.951:1 CONCENTRATE IS.....\$664.04

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 16 of 25 pages

RATES OF RECOVERY OF 8.951:1 FLOTATION CONCENTRATION

TOTAL RATE OF RECOVERY - Total Recovery was \$74.19 or 87.965% of head ore value of \$84.34 per ton.

GOLD RECOVERY BY FLOTATION - Gold Recovery was \$27.69 or 85.331% of head ore value of \$32.45 per ton.

SILVER RECOVERY BY FLOTATION - Silver Recovery was \$46.47 or 89.555% of head ore value of \$51.89 per ton.

NOTES ON FLOTATION

The most pertinent factor in recovery by flotation will be your ore dresser's ability and expertise in flotation concentration. Using flotation, he will be the man who must be able to adjust to the changes in your head ore for consistently good recovery.

Reagents can be fed into the recovery circuit between the conditioner and flotation cells with any of the commercial feeders supplied by all major equipment dealers.

The Xanthate 301 should be mixed in a 10% solution. This is accomplished by mixing 10 pounds of Xanthate 301 with 90 pounds of water. Aerofloat 15 is a liquid and can be fed either into the 10% Xanthate solution or separately.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Pge 17 of 25 pages

FLOWSHEET MILLING AND FLOTATION RECOVERY CIRCUIT CAPACITY ---
100/144 TONS PER 24 HOURS

This mill is designed for maximum recovery with minimal initial investment, cost of operation and maintenance. The extra 44 tons capacity will cost no more than 5% over a 100 tons mill for equipment. Milling and maintenance cost will remain the same. The only additional cost will be for mining the extra 44 tons of head ore.

J. & J. SMELTING & REFINING CORP., recommends DENVER EQUIPMENT COMPANY West of the Rockies for their excellent equipment, prompt service and parts availability.

See page 17 for EQUIPMENT LIST, SIZE AND POWER REQUIREMENTS

EQUIPMENT LIST, SIZE AND POWER REQUIREMENTS

J. & J. SMELTING & REFINING CORP.	EQUIPMENT DESCRIPTION	MACHINE SIZE	H.P.
	(1) Mine Run Hopper	200 Ton/Shaker Feeder	3
	(2) Denver Jaw Crusher	15"x24" - Open 1½" Type H	50
	(3) Denver Belt Conveyor	18"x72" - All Conveyor belts length to be determined by mine site elevations	5
	(4) Denver Vibrating Screen	2'x6' Double Screen 1" and ½"	2
	(5) Denver Belt Conveyor	18" x elevation requirements	5
	(6) Denver Jaw Crusher	10"x20" - open ½" Type D	30
	(7) Denver Belt Conveyor	18" x elevation requirements	5
	(8) Fine Ore Bin	150 Ton - Chute feeder	-
	(9) Denver Variable Speed Belt Conveyor	15" x elevation requirements	3
	(10) Denver Ore Sampler	Automatic Type - Dry ¾ x 15"	1
	(11) Denver Ball Mill	6'x6' or 5'x10'	125
	(12) Denver Spiral Classifier	36" Model 150 M.F.	3
	(13) Denver Conditioner	4'x4'	2
	(14) Denver D.R. Rotation Cells	18 SP Model - 6 cell	22.5
	(15) Denver Wet Sampler	Automatic Type	1
	(16) Denver Thickener (optional)	6'x5'	.5
	(17) Denver Disc Filter	4'x4' filters	1.5
	(18) Denver Dryer (optional)	24" x 15'	3
Total power requirement.....			262.5 H.P.
Power requirement without optional equipment (items # 16 & 18).....			259.0 H.P.
Additional Miscellaneous H.P. for pump etc., 12/15 H.P. (overall mill H.P.).			280/285 H.P.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORPORATION
Phoenix, Arizona

December 15, 1975

Page 19 of 25 pages

GENERATOR REQUIREMENT

To operate the mine and mill it will require a 500 K.W. Deisel Generator using 480 volts output. This size was predetermined by Mr. Ward.

WATER REQUIREMENTS

Water to be induced through the ball mill at the rate of 15 G.P.M. (gallons per minute), per ton of feed per hour. If necessary, re-use of waste water can be accomplished by re-cycling waste water in various ways. One would require item # 16 (see equipment list) Thickener, as a dewatering device. Another simple method is a tailings pond with a floating pump to recirculate waste water. Whether or not a water storage tank will be necessary, depends on water availability. Maximum G.P.M. at 144 tons per day operation of mill would require 90 gallons per minute. Running at 100 tons per day the water requirement is 62.5 G.P.M. This will give a 22.5% solids to water feed to ball mill.

MILL SEQUENCE OF OPERATION

The principle of this mill is to process the primary and secondary crushing procedures at any time prior to ball milling operation and storage in a 150 ton fine ore bin. Ball mill to be fed with a variable speed conveyor at any rate from 4.17 to 6.00 tons per hour, (144 tons per day). Actually feed can be as high as 6.25 tons per hour or 150 tons per 24 hours.

This enables mine run ore deliveries to mill at any time in the cycle. With continuous operation of the ball-mill and recovery systems independent of the primary and secondary crushing unit of the mill.

OPERATIONAL SEQUENCE

PRIMARY AND SECONDARY CRUSHING

Mine run hopper feeds primary crusher through a shaker feeder directly into 15"x24" Jaw Crusher set at $1\frac{1}{2}$ " opening. A belt feeder conveyor unloads unto a 2'x6' vibrating screen with a 1" upper screen and a $\frac{1}{2}$ " lower screen. The overflow and 1" primary crushed head ore is secondary crushed using a 10"x20" Jaw Crusher. The undersize $\frac{1}{2}$ " material goes directly into the fine ore bin. This is accomplished with a common conveyor belt extending behind the secondary crusher to receive $\frac{1}{2}$ " ore from the lower vibratory screen. The 10"x20" Jaw Crusher is set at $\frac{1}{2}$ " opening and is rated at a minimum of 6 tons per hour at this setting. All $\frac{1}{2}$ " crushed head ore is stored in the fine ore bin for milling to-65 mesh.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 20 of 25 pages

MILLING TO -65 MESH

A variable speed conveyor feeds the ball mill at the desired rate and water is induced at the ball mill at the rate of 15 gallons per minute per ton of ore being milled. Ball mill should be run at 23.5 R.P.M.'s.

The ball charge for $\frac{1}{2}$ " feed should be 40% to 45% of the internal volume of the ball mill. At 45% the ball charge would be 10.75 tons of steel balls. The balls should be from 4" down to $\frac{3}{4}$ " for initial charging to mill. Replacement balls of 3" and 4" should be put into the seasoned charge of balls as necessary.

Ball mill type should be Trunnion Overflow, with a spout feeder. Discharge by gravity feed directly, as possible, into the spiral classifier.

Oversize (+65 Mesh) milled ore can be pumped from the classifier using a Denver SRL $1\frac{1}{2}$ " x $1\frac{1}{4}$ " pump that is rubber lined. This pumps capacity is from 15 to 70 G.P.M.

CONDITIONING FOR FLOTATION CONCENTRATION

The -65 mesh milled head ore from the spiral classifier goes directly into the 4'x4' conditioner. It should exhaust at 35 to 40% pulp density to the flotation cells. Gravity should be used for feed flow whenever possible.

REAGENT FEEDER

The Reagent Feeder should be placed between the conditioner and flotation cells. A 10% solution, (as mentioned previously in this report), should be utilized for the Xanthate 301 Reagent and Aerofloat 15 already a liquid and can be induced with no problems.

FLOTATION CELLS

Denver D.R. Cells can be regulated at 35 to 40% pulp density with Denver's "Auto-Flot" level control. This system requires 1 to 2 PSI air pressure for proper aeration and the proper air pressure system can be supplied with the purchase of the SP-18 - 6 cell flotation cells.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 21 of 25 pages

HANDLING OF FLOTATION CONCENTRATE

The concentrates produced by the flotation recovery system can be handled best in the following manner. All concentrate can be dewatered using a Denver Thickener and the water pumped back into the circuit at the ball mill. The dewatered concentrate can then be filtered down to approximately 11% moisture utilizing a Denver Disc Filter. If complete drying is desired the disc filtered flotation cake can be dried using a Denver 24"x15' Rotary Dryer. The dewaterer and dryer are optional equipment.

This mill can produce from 10 to 15 tons of concentrate every 24 hours.

HANDLING OF TAILINGS

The tailings should be handled in anyway necessary to best suit the mill site area. You could use conveyors, sand pumps, etc., Stacking boom conveyors would be our recommendation because you could spread your tailings in a 180° arc and place them anywhere.

SAMPLERS OF HEAD ORE AND CONCENTRATES

The head ore should be sampled dry between the fine ore bin and the ball mill. Commercial samplers can be regulated to sample anywhere from every minute to once per hour. We recommend 2 to 4 times per hour.

Concentrate sampling should take place between the flotation cells and the dewaterer or disc filter if the dewatering device isn't used. The wet samples should be checked 4 times per hour.

Tailings should also be checked at regular intervals, usually once per hour is sufficient.

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 22 of 25 pages

MILLING OPERATIONAL COST

This mill will require five men to operate per shift at first, after the bugs are worked out it can be reduced to three men and a qualified ore dresser per shift. It is possible, that only one ore dresser can handle the operation.

Not having knowledge of the current labor situation in terms of wages it is difficult to calculate labor cost per day in your area. Based on 100 tons per 24 hours your overall cost per ton of mill operation should not exceed \$15.00. This cost could be reduced by running 144 tons per day because the mill cost will remain a constant and would then be less than \$11.00 per ton of operation.

OVERALL COST OF MINING AND MILLING

Figuring on a cost of \$20.00 per ton to mine the head ore and deliver to the mill, combined with milling cost, the total cost per ton should be approximately \$35.00.

TOTAL COST OF MILL

Generator Plant - 500 K.W. 480 Volts Primal
Complete - Ready to operate with all safety
equipment etc. Cummins = \$60,000 (delivery extra).
*Detroit = \$50,000 *includes delivery

Fuel Requirement (either generator)
#2 Deisel Fuel @ 36/38 G.P.H.

Total mill and recovery system (new) \$233,000
**Total equipment & generator cost \$283,000
**This price does not include installation of equipment, cost of buildings etc., only the mill equipment and generator cost for all new equipment. Estimated installation and related costs approximately an additional 25% over equipment and generator cost.

CONCLUSIONS OF MILL OPERATION

Gentlemen:

We feel the cost per ton of operation, will be in excess of \$60.00 per ton. This feeling is based on the following costs per ton of head ore, with 100 tons per day operation.

Cost of Mining.....	\$20.00
Cost of Milling and Recovery.....	\$15.00
Cost of Fuel for Generator	\$ 2.80
Cost of Refining, Transportation and sales.....	\$23.00
Total Direct cost of operation.....	\$60.80

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 23 of 25 pages

Conclusions of Mill Operation cont'd.

The aforementioned costs will have to be weighed very cautiously prior to actual acceleration into this mining endeavor. Feasibility must be decided within your group, we cannot make this judgement for you.

I might add this cost total does not include higher echelon salaries and benefits, nor insurance costs and analytical services which will be required daily.

GROSS INCOME / COST EVALUATION

100 TONS PER DAY MILL OPERATION

GROSS INCOME - 100 tons @ \$74.00 per ton	\$7,400.00
DIRECT COST OF OPERATION @ \$61.00 per ton	<u>\$6,100.00</u>
GROSS PROFIT PER DAY.....	\$1,300.00

144 TONS PER DAY MILL OPERATION

GROSS INCOME - 144 tons @ \$74.00 per ton	\$10,700.00
*DIRECT COST OF OPERATION @ \$58.00 per ton	<u>\$ 8,400.00</u>
GROSS PROFIT PER DAY.....	\$ 2,300.00

* Additional cost is for mining cost for 44 tons.

* * * * *

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 24 of 25 pages

SYNOPSIS

Gentlemen:

We have very extensively and precisely analyzed the ARNOLD SHAFT head ore in this Certified Report. Being cognizant of the fact, much higher value sulphide ore is available for milling, we feel this venture has commercial feasibility. Weighing all factors, good and bad, this determination is based on prudent judgement and expertise.

Profit structure projections on 100 tons per day, based solely on the head ore analyzed at this facility is slightly over 18% gross profit. This covers all direct costs of operation from mining to sale of flotation concentrate. This percentage is based on head ore value of \$84.34 a ton, recovering \$74.19 per ton through the flotation recovery system, with a \$60.80 per ton total direct cost factor. As the head ore value increases, the gross profit generated will increase accordingly.

Operation of the mill at around 150 tons per day will have the same cost factor as 75/100 T.P.D. production, and is advisable in terms of common sense and more profit. In fact, it would lower your total cost per ton of operation by over \$4.00 per ton. Eventhough it would cost an extra \$1,000 a day for mining; no additional cost for milling ore.

Indirect costs for management, insurance and analytical services on your head ore, concentrates and tailings cannot be determined in this report. These factors must also be included in your overall cost of operation and in turn deducted from the gross profit of 18% plus.

In closing, J. & J. SMELTING & REFINING CORP., wishes to give the following thoughts and advice, for your consideration. First, locate all equipment, management and personnel, recheck claim markers and claim filings if necessary, secure a market for your concentrate and have adequate capital before proceeding. Remember, without these basics, the best mine in the world would be a tremendous headache, to say the least.

Secondly, after solving the above basics. Be advised, all the profitable mines in operation today would be working at a loss without operating at peak efficiency. This statement, in relation to your mine, means you must have qualified management, miners, ore dressers and lower echelon employees to show a profit at the

J. & J. SMELTING & REFINING CORP.

CERTIFIED
PRODUCTION FLOW SHEET ANALYSIS
ALPHA MANAGEMENT CORP.
Phoenix, Arizona

December 15, 1975

Page 25 of 25 pages.

SYNOPSIS cont'd.

bottom line of your books. Personally, we believe you have the nucleus for a profitable operation in the ARNOLD SHAFT of the CEDAR MINES PROJECT.

Finally, we wish to extend our warmest and best wishes, in all your mining endeavors, now and in the future.

I hereby certify
PRODUCTION FLOW
solely on the
at this produc

ATION

figures in this Certified
true and correct, based
on material we received for analysis

J. & J. SMELTING & REFINING CORP.

JOHN REGO
V. PRES., GEN. MGR.
714 241-5642

John E. Rego

John E. Rego
Vice President, General Manager

JER/jhr

J. & J. SMELTING & REFINING CORP.

17474 CATALPA
P.O. BOX 727
HESHERIA, CAL. 92345



February 3, 1983

Dr. Mel Alexander
Cedar Minerals Corp.
P. O. Box 187
Cashion, Arizona, 85329

Dear Dr. Alexander:

Thank you for your phone call of February 1, 1983. It was unexpected and I
ad I was surprised -- first because my letter of January 20th was
merely that of advising I had mentioned the Cedars property, along
with three others, to one of my sincere, reliable clients--giving
you his name -- because the Cedars might meet his requirements. It was mention
was mentioned to him, because-- in my opinion-- the Cedars prospect
has potential if developed in an orderly and miner-like fashion. If
the project is to his liking-- I am sure he would contact you one
way or another.

I was secondly surprised at the fact you did not inquire as to
whether the outstanding balance due on my February 26, 1982 INVOICE
--\$293.23-- was paid--particularly since there have been repeated req
quests for payment by letter and telephone conversations -- and
always verbally promised a check would be sent,--but never has.

I am sure you look "unkind" on patients who do not acknowledge their
obligations. I do also.

Sincerely,

R. E. Mieritz,
Mining Consultant.

PLAT OF THE CEDAR'S

(X) LODE CLAIM
() PLACER CLAIM
() MILLSITE

MOHAVE

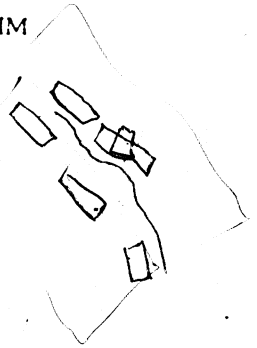
County, Arizona

Range 15 W.

Township 16 1/2 N.

Ced. 1	Ced. 18	Ced. 19	Ced. 36
Ced. 2	Ced. 17	Ced. 20	Ced. 35
Ced. 3	Ced. 16	Ced. 21	Ced. 34
Ced. 4	Ced. 15	Ced. 22	Ced. 33
Ced. 5	Ced. 14	Ced. 23	Ced. 32
Ced. 6	Ced. 13	Ced. 24	Ced. 31
Ced. 7	Ced. 12	Ced. 25	Ced. 30
Ced. 8	Ced. 11	Ced. 26	Ced. 29
Ced. 9	Ced. 10	Ced. 27	Ced. 28

SCALE 1" = 2000'



The bearing and distances between corners is as follows: beginning at the _____ corner, a 2" PIPE post or monument at which the location notice is posted; thence _____ a distance of _____ feet to a 2" PIPE post or monument, the _____ corner; thence _____ a distance of _____ feet to a 2" PIPE post or monument, the _____ corner; thence _____ a distance of _____ feet to a post or monument, the _____ corner; thence _____ a distance of _____ to the place of beginning. Each corner post or monument bears or contains markings sufficient to designate the corner of the claim to which it pertains and the name of the claim. The _____ corner of the claim bears _____ a distance of _____ feet from the Section corner common to Sections 26, 25, 35, 36, Township 16 1/2 N., Range 15 W., G. & S. R. Meridian.

Dr W. Mel Alexander

Locator

16 Apr '02

THIS IS TO ADVISE MR. WALKER TO LOOK OVER CEDAR PROPERTY WITH YOUR GOOD HELP, LARRY.

Wm Alexander

January 19, 1983

Mr. Harry Faulkner
Suite 412
1200 W. Pender Street
Vancouver, B. C., V6E 2S9

Dear Mr. Faulkner:

Thank you for your phone call of yesterday in regards your wanting a possible mining property for a project. I have done a little head scratching and have come up with a few that might interest you. I will only cover these potentials very briefly in this initial letter but providing you some names and phone numbers you can use for a contact to get more information. All these are properties I have examined, looked at and/or done some work on them so I am quite familiar with same. I would not suggest these properties unless I felt that they have considerable merit and if properly and diligently persued could well become a profitable operation--if size is not a factor.

Blue Bell Mine, Yavapai Co., Arizona.

I mentioned this one to you over the phone and to contact Mr. Jim Proudfoot, North Bay Ontario, telephone 705-474-4728. Joint venture. Underground, 2.5 to 3.0% Cu., gold at lower levels 0.1 to 0.15+ and silver 1.0 to 2.0. Shaft needs retimbering collar to + or - 300 feet, mine needs dewatering with good to excellent chance of copper in solution from 700 or 800 level down to 1500 lv. Proudfoot (Pronto Exploration) believes good chance of "gold" mine at further depth. Proudfoot has all the dope on the mine. S. B. Owens, Tucson, Az. is the owner. Proudfoot has lease.

Cedars Mine, Mohave Co., Arizona.

Examined this mine five or six years ago. Sampled stope on the 60 foot level which averaged about 0.25 in gold and about 25.0 in silver with some lead, copper and zinc. An old mine with 100 lv, 200 and 300 Lv. which is flooded. Had production in the old days. Was in litigation for some time. Some patented claims. Needs dewatering and clean up, some ore reserve -- about 5-6,000 tons where sampled above the 100 level. Not much but at \$350.- to 400.- per ton, that is a fair piece of change. Owner is Dr. Mel Alexander, can usually be reached at (602)-932-3091, Box 187, Cashion, Ariz., 85329 or (213)-944-2060 (office) or (714)-521-1800 both in the L. A., Calif. area. He is hard to get in contact with because of the "extra" businesses he carries on. He is difficult.

Johnston Gold property, Lincoln Co., Nevada

Westward Energy & Resources (Vancouver Exchange) needs help--maybe joint venture. I did the work on this property for Westward in 1980. 60,000 tons indicated at 0.12 gold and 1.2 silver. Open pit. needs small 200 ton mill, (contained leach). I wrote Mine-Mill Proposal report last September. Contact Mr. Stuart Lewis, Pres., Westward Energy in Houston, Suite 170, 7670 Woodway Dr., Zip 77063, telephone 713-780-4016, and then after that, Barrister Sargent H. Berner, DuMolin Black, 1004-995 Howe Street, Vancouver--for possible copy of my Reportd

Some profit could be realized but it would do better on the stock. Custom milling of 4,000 tons showed gold recovery at about 90% and silver at 70%.

The last one is:

Tombstone Area

Mr. Robert J. Walton, Attorney, Suite Six, 7120 Fourth Street, Scottsdale, Ariz., 85251, (602)994-4114, has quite a large area tied up--new claims, southwest of the Tombstone silver area, Cochise Co., Ariz. I have been on the claims taking some character samples and from the "structures" getting up to 23 ounces silver. His target appears to be a "low grade" area around 5 to 6 ounces which could be open pit. Some work is goin on at this time. By the time you receive this, he may have additional information.

I have advised him that you might call him.

Tombstone, as you may know, was quite a silver producing area. It is always best to "look in your own back yard" first before stepping out on a "wildcat". There could be something there.

Except for Jim Proudfoot, I have advised each of the individuals that I have brought their properties to you and that you may or may not contact them. At least if you did, the "ice" would have been broken and you would not be going in "cold".

I have much information on the first three properties and you may wish to send someone down to look at same, etc.

Hope this might help you.

Sincerely,

R. E. Mieritz

January 20, 1983

Sherwood B. Owens
P. O. Box 769
Tucson Arizona, 85702

Hi Dad:

Last Monday I had a call from a "repeat" client in Vancouver who wants a gold-silver property.

I gave him a brief outline of the Blue Bell and told him to contact Jim Proudfoot -- Pronto -- as a possible joint venture since that is what Proudfoot is heading for. It seems the Vancouver stock exchange is going "wild" because of the price of the metals and the fact that there was quite a "strike" in Canada. Perhaps the "activity" will continue and not fall flat on its face in a short period of time.

The clients name is Harry Faulker, in my opinion, quite an honest diligent and trustworthy promoter. One of his corporations has some oil/gas production in Kentucky and I have worked for him on several occasions. His record of payment for work is excellent and that is usually a good sign as to his character. I have never met him--everything being done over the phone, and I have yet to be disappointed in what he has said.

Whether he will contact Proudfoot, I do not know. His address is Suite 412, 1200 West Pender Street, Vancouver, B. C., V6E, 2S9, (604) 922- 7128 (home) or office, (604) 669-2812.---just in case he should call you as I also advised him that you were the owner of the Blue Bell.

Enclosed is a copy of a letter I sent to Proudfoot after receiving the registered letter he sent on December 23, 1982.

I do not know what the attorney Larry Clark has done with the received documents. As far as I am concerned, we took care of the necessary filing before all this started.

Carolyn is working this week at the lawyers office. Some work needs catching up.

Love to both of you and have a enjoyable time on your trip.

Sprade
Larry Taiman - Fisher St Wickiup 765-2385
Karl Schmid - Flagstaff 799-3867

Cane Springs - to Mine - 10.4 miles.

Cedar turnoff to Cane Springs 12.2 miles

" " to Texaco 2.7 miles.

Cane Springs - halfway between M.P. 109-108

Shrader - Cashion - Certified Producers Assoc.
P.O. Box 187 - 932-3091
Cashion, Az 85329-

Prospect Permit PP-78097 - Amended - 2-27-82
NE 1/4 Sec 30 160 T 18N - R 14W.
E 1/2 NW 1/4 " " 80
E 1/2 SW 1/4 " " 80
Lots 2-3-4. " " 120 ±
440 (437 Ac.)

Memo

From
DR. MEL ALEXANDER

13 Feb '82

MR MIERITZ:

I AM SORRY WE MISSED
EACH OTHER TODAY.

ENCLOSED IS INFO. THE MINE
SHAFT GROUND IS STRONG WINDY ROAD
UP (OR DOWN TO) SHAFT.

I HOPE THE PICTURE HELPS.

BILL ME AT ADDRESS ON CARD.

THANKS

WPA Bly

I WILL BE IN PHX OFFICE 23-27 Feb.
I MUST FILE ON FRIDAY 26 Feb.

Liberado - 255-4631
File P-78097 - Feb 27. ★
Sec. 30, T18N, R14W.
Mohave County, Ariz.

of claims -

Value of Assessment work to be
done \$

by what date must assessment
work be done. -

Prop - 10.00/ac/yr - 3 yrs.

50.00/ac. → 2 yrs

5% →

437 ac

20
8740

Dr Alexander - 932-3091

213-944-2060
714-521-1800

March 23, 1980

Dr. Alexander
Executive Leasing
14241 E. Imperial Highway
Suite "J"
LaMirada, California, 90638

Dear Dr. Alexander:

About ten days ago, I had called your office, leaving word with your Secretary of who I was and the subject I wished to discuss with you.

You may recall that in September, 1975, I had prepared a Geological and Exploration Report on the Cedars Mine, Mohave County, Arizona.

The purpose of my call and this letter is to ask if you and your organization may be interested in leasing with option to buy the Cedars Mining property?

I do have one client who might be interested in such a situation if you and your group would be agreeable. I ofcourse do not know the status of the property at this time.

I do not promote mining properties, that is not my business nor my source of income. The client desires a gold property and as a result I mentioned the Cedars to him.

I would appreciate a note from you as to whether the property is available and if so, would you be open to a possible lease with option to buy?

Thanking you in advance, I remain,

Sincerely yours,

R. E. Mieritz,
Mining Consultant.

January 19, 1983

Dr. Mel Alexander
P. O. Box 187
Cashion, Arizona, 85329

In March, 1980, I wrote to you asking if you would be interested in making a deal on the Cedars with one of my clients. In August 1981 I learned from Tom Anderson that he was handling the Cedars for you. In February 1982 you finally advised me that you would be open for a deal on the Cedars.

I assumed you were sincere on that advise and as a result I presented the Cedars to Mr. Robert Walton who was willing to make a deal at that time. As of yesterday, Mr. Walton advised he had not dealt with you since there was no firm commitment on your part and as a result, he has moved on to other activities.

The above historical sequence of events is not particularly encouraging from the standpoint of a deal sincerity. Any of my clients I direct or suggest a property to their attention, are sincere and trustworthy in their intentions. If they are not, I do not have anything to do with them.

Yesterday, a repeat client contacted me and desires a mining property project of precious metals. I have given him your name and telephone number. He is Mr. Harry Faulkner and could well call you if the information I submitted to him on the Cedars is of interest to him.

The Cedars, even though it has had some past production, is in the class of a prospect with strong potential, yet unproven, thus, requires considerable exploration and sampling and much "dead" money be spent. I am sure you would take that into consideration when/if terms are spelled out in a firm commitment so that the prospective party is assured of the terms, etc. Such activity would resolve the question of whether a "deal" is possible within a short period of time--rather than a long-drawn out affair. As indicated in any legal document, "time is of the essence".

Mr. Faulkner will not receive the information I provided until the first part of next week, the mail being so unreliable.

Sincerely,

R. E. Mieritz



Sunrise

Technology Inc.

5-4-82

DICK-

*We have interest
in This property if
The doctor will provide
Some idea as to his
intentions .*

RJW

1. Rewater shaft
2. Construct drainage canal
diversion around shaft.
3. Open Sdits
4. Clean levels - Sdits
5. Sample completely
6. Lay track
7. Repair ore shafts
8. Raise (up) ore body.
9. Stack pile ore
10. Small Camp required
about 4 men + Office +
change house.
11. Repair entrance road.

Equipment

Generator
Fuel Oil storage tanks
Butane storage tanks
3 - Trailers
2 - Buildings - Change House
Camp Kitchen
water pump - pipe (water,
airline,
compressor 125 for start
Fan - Ventilation
(air vent)

HOIST ?

Larry Laymon
Box 1066 Wickenburg
Fixed Sta for Tule.

Karl Schmid -



DATE April 23, 1982

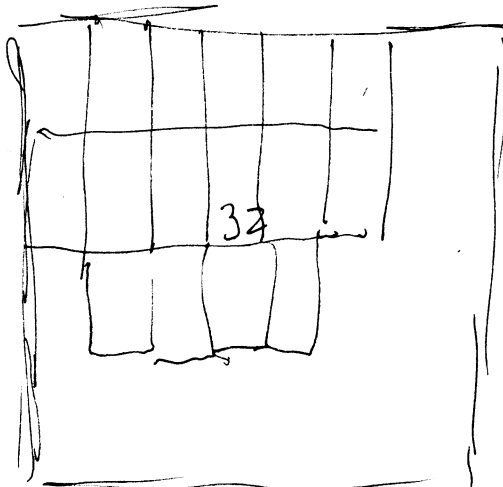
CONFIDENTIAL INFORMATION AGREEMENT

In consideration of the proprietary nature of columbium information disclosed this date to Sunrise Technology, Inc. (Robert Walton) and the location of said possible deposits in Maricopa County, at Section(s) 32, R 4W, T 6N, Arizona, Walton and Sunrise hereby agree to maintain confidential all such information concerning the said columbium thereof as proprietary information of Franklin D. Troxel for a period of four (4) years from the date hereof or until earlier disclosed to the general public by Franklin D. Troxel. Further, Walton and Sunrise agree to negotiate a mutually acceptable contract before entering on the property for exploration or mining activity.

SUNRISE TECHNOLOGY, INC.

By: _____ Pres.
Robert John Walton

Robert John Walton (individually)



Jerry - Jaymow

Canoe Week → Sherando

2000 04-5 yrs - Lurefume
4500000 - Lede.

602. 50 → 309

178097

E 1/2 NW 1/4

NE 1/4

Sec 30

T18N - R4W

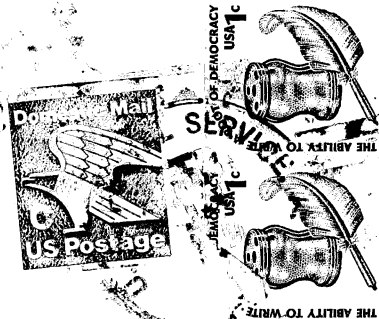
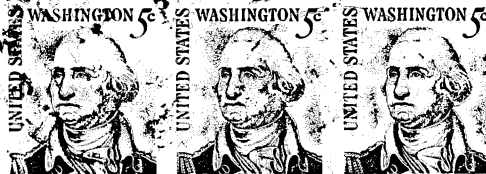
437 ac
22-

n		
n	4	8
n	20	
	4	

CERTIFIED PRODUCERS ASSOCIATION

"Sun Country Milk"

P.O. Box 187 — Cashion, Arizona 85329



MR. RICHARD MIERITZ
2940 N. CASA TOMAS
PHOENIX, AZ 85016

Sample Schedule (15)
 Silverado area - ~~Sec. 30~~, T. 18N, R. 14W. (14)
 Mohave County, Arizona (22)

	Alt	Ag.	
2433	N.	.70	2.0' chip across part of Qtz zone. ^{Wall - N. 35° W.} Fe, gr min.?
2434	N.	.162	2.2' chip Qtz, mass, but fac. Hy FeO.
35	Tr	Tr	5.0' chip mix all gr - Rhy (par) Qtz, ^{Hy FeO} white, ^{Fe, gr min.} yellow-brown
36	N	.180	3.0' chip mass w/ht all Qtz, Hy yel. green-brown FeOx
37	N	6.66	3.0' Hy yel-brown FeOx, CuOx, some AgS.
38	N	.110	5.0' exposed Qtz with some FeOx thin to face.
39	Tr	.118	3.5' mass Qtz (wh) w. red FeOx
40	.006	.112	2.5' " " " and 1 ft Qtz & gr.
41	Tr	.122	5.0' chip across Qtz outcrop. FeOx yel-tan.
42	N	2.04	4.8' " " wh Qtz - FeOx on face, some CuOx
43	N	.110	2.5' of gauge in Tr N of Shaft.
44	Tr	.70	5.0' All gr - in road cut yel-brown FeOx
45	Tr	.24	5.0' " " " " " mass Qtz, ^{Hy FeO} white yel-brown FeOx
46	Tr	.112	18.0' Qtz outcrop - between roads north of Shaft - FeOx
47	Tr	.130	3.5' Qtz breccia - bench, FeOx, ^{FeO} white chert, ^{FeO} white chert
48	N	.136	3.6' " " lower bench - same structure.
49	N	1.08	16' across ^{back} stry FeOx ⁱⁿ Qtz zone - 5' inside.

Paul Schmid-Flagstaff
 779-3867

17, 10, 25

9

on the property either for explanation,
assessment expenses or rental fees

[Signature]

$$\cancel{10.80} \quad \cancel{5.25} = \cancel{16.05}$$

$$\cancel{24.60} \quad \cancel{19.32} = \cancel{43.92}$$

$$\cancel{37.20} \quad \cancel{107.81} = \cancel{145.01}$$

$$\cancel{31.20} \quad \cancel{25.07} = \cancel{56.27}$$

$$\cancel{18.30} \quad \cancel{59.14} = \cancel{77.44}$$

$$\cancel{261.90} \quad \cancel{176.86} = \cancel{438.76}$$

$$\cancel{390.00} \quad \cancel{91.56} = \cancel{481.56}$$

$$\cancel{106.50} \quad \cancel{103.87} = \cancel{210.37}$$

$$\cancel{55.50} \quad \cancel{72.87} = \cancel{128.37}$$

$$\cancel{30.30} \quad \cancel{12.02} = \cancel{42.32}$$

$$\cancel{\text{@ } 150.00} \quad \text{@ } 4.20 =$$

Sample schedule
 Arnold 100' S. of
 corner. Put on
 Stake
 Arnold shaft

	<u>Am</u>	<u>Ag</u>	
1342	50' .072	1.25	1.6'
1343	70' .164	4.60	2.6'
44	90' .248	25.67	2.7'
45	100' .208	5.97	4.5'
46	120' .122	14.08	2.0'
47	150' .1746	42.11	4.0'
48	170' .2000	21.80	3.0'
49	190' .1710	24.73	3.5'
50	210' .370	17.35	3.2'
51	220' .202	3.10	2.6'
52	930	24.41	
Grab-Mill Samp.			

$$\begin{array}{r} 4.25 \\ 11 \\ \hline 425 \\ 425 \\ \hline 4675 \end{array}$$

$$\begin{array}{r} 46.75 \\ 4.00 \\ 8.50 \\ \hline 49.25 \\ 1.00 \\ \hline 50.25 \\ \hline 51.25 \end{array}$$

**IRON KING ASSAY OFFICE
ASSAY CERTIFICATE**

BOX 14 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329



ASSAY
MADE
FOR

RICHARD E. MIERITZ
2940 N. Casa Tomas
Phoenix, Ariz. 85016

October, 28, 1975

Ref no.	DESCRIPTION	oz/ton Au	oz/ton Ag	g/s	% Fe	% Pb	% Zn	% Cu
10-22-33	#1342	.072	1.25					
10-22-24	#1343	.164	4.60					
10-22-25	#1344	.248	25.67					
10-22-26	#1345	.208	5.97					
10-22-27	#1346	.122	14.08					
10-22-28	#1347	1.746	42.11					
10-22-29	#1348	2.600	21.00					
10-22-30	#1349	.710	24.73					
10-22-31	#1350	.370	17.35					
10-22-32	#1351	.202	3.10					
10-22-33	#1352		24.41	4.28	4.00	0.56	16.20	0.08

CHARGES \$61.25
SC 2.00 Total \$63.25

ASSAYER

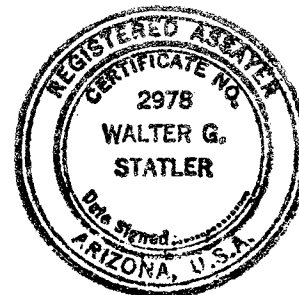
	Au	Ag	Pb	Cu	
1322	.026	6.68			dump - on top -
1323	Tr.	3.26		.92	Proyce Hatch prop.
1324	Tr.	.5		.04	greenish gouge -
1325	.104	45.3			Specimen - hence - S.Q. drift, 15' from face
1326	.016	.21			Arnold FW. - S.
1327	1.53	91.63	1.06	.148	" HW. S
1328	.006	.49	.04	.024	" FW. N
1329	.112	9.67	nil	.068	" HW. N
1330	.016	.18			S.Q. - S.D. toward Shaft 8'S.
1331	.02	1.68			S.Q. - N.D. - 8' N.
1332	Tr.	.92			" " 55' N.
1333	.046	3.27			Max. Slope - (Surf.)

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410

HUMBOLDT, ARIZONA 86329



ASSAY
MADE
FOR

RICHARD E. MIERITZ
2940 N. Case Tomas
Phoenix, Ariz. 85016

~~Nov. 11, 1975~~

[illegible]

CHARGES \$12.00

ASSAYER

800.0 ~~Track~~ -

802.8 mailbox - Cedar Mine (left turn - West)

807.0 junction \bar{c} road to rt - stay on main road

811.2 ↓

↓

↓

813.6 sign Cedar Mine - take rt. fork of "Y"

815.9 camp

~~Small shaft - good cellar - good hand pump
and mud pipe pump. Still had frame.~~

Sample Schedule

1216-1216-1
Per Ton

Sample Number	Sample Description	ounce gold	silver	lead	o/c	o/c
1322	{ End of small rock pieces - min. material - full near shaft (22 feet deep) on Gerdner claim. N-S vein, 75° E. yellow-brown limonite, some pieces of quartz pale green color gangue from inside Montezuma, with some pyrite and chalcopyrite.	0.026	6.68			0.1
1324	{ One collected piece of quartz from lower 15 feet back of face in the North Drift of the Silver Queen shaft. Pyrite, chalcopyrite, iron oxides - yellow, some red.	72	0.50			0.046
1325	{ 1.8 feet across fracture gangue, 6 feet South of Arnold shaft on the 20 foot level. Sparse sulphide, some yellow-brown limonite.	0.104	45.30			
1326	{ 1.0 feet across hanging wall quartz, 6 feet South of Arnold shaft on the 20 foot level. Magnetite, yellow-brown limonite, some pyrite, chalcopyrite, galena, sphalerite, strong argentite.	0.016	0.21			
1327	{ 1.8 feet across fracture gangue with 2 inches of quartz, 9 feet north of Arnold shaft on 20 foot level. Galena, pyrite, chalcopyrite in quartz, some in gangue. Iron oxides like #1326.	1530	91.63	1.06		0.148
1328	{ 1.7 feet across quartz hanging wall, 2 feet North of Arnold shaft on 20 foot level. Pyrite, chalcopyrite, iron oxide some argentite.	0.006	0.490	0.04		0.024
1329	{ 2.3 feet across back (East - hanging wall), 8 feet South of E-W. hanging wall ^{Silver Queen shaft} in main and portion. Highly altered, greenish gray color east to gangue (west run.)	0.112	96.70	Nil		0.068
1330	{ 3.0 feet across back (East - hanging wall), 8 feet North of E-W. Silver Queen shaft.	0.016	0.180			
1331	{ Gangue, moderate ton - brown iron oxides, 3 white quartz, sparse pyrite, chalcopyrite, 0.02		1.680			
1332	{ 3.0 feet across back, hanging wall to irregular fracture, altered rock, little quartz, some iron limonite. No visible sulphides. 55 feet West Silver Queen shaft.	72	0.920			
1333	{ 2.0 feet across structure at opening to Mexican shaft on Silver Queen claim. Clay, altered rock, little iron oxide, some yellow (silver chloride?)	0.046	3.270			

2940 N. Casa Tomas
Phoenix, Arizona, 85016

November 3, 1975

C. R. Ward Corp.
4728 N. 21st Avenue
Phoenix, Arizona, 85015

Gentlemen:

Enclosed herewith is the assay certificate for the samples I had taken on and in the Arnold stope area of Cedar Mines near Wikieup on October 21, 1975. The certificate was not received until a day or two ago, consequently I was not able to include same in the report.

I also enclose a copy of a letter I have sent to the Iron King Assay office requesting additional assays of the pulps of some samples. This, of course, is in light of the good zinc assay received on sample #1352, the material obtained for the metallurgical sample. I wish to determine whether the zinc is responsible as the carrier of the gold and silver values as contrasted to the pyrite possibility.

We will note that the total charges for the assay work was \$63.25 and my invoice carried the charge as \$51.25. The assay Office prices have risen, consequently, I GUESSED wrong, but this can be made up on the next go around, particularly if I received the additional zinc assays.

I also enclose the hotel receipt listed in my out of pocket expenses.

Would appreciate your keeping me informed on the results of the mill tests completed by the group in Long Beach.

Sincerely,

R. E. Mieritz

June 13, 1980

Mr. Charles R. Ward
P. O. Box 242
Graham, Washington, 98338

Dear Mr. Ward:

Upon my return home last evening I found your letter awaiting me wherein you requested a copy of the Cedars Mine Reports which I prepared in the later part of year 1975.

Herewith a copy of the original reports I completed on the referred to property.

As to personal reference Mr. Ward, all I can say is that during our course of doing business, I found you to be an honest individual, knowledgeable as to the mining business and an individual who paid invoices promptly. I was not personally acquainted with your experience and knowledge prior to our business connection, nor really with your activities thereafter. I completed the examination and reports on the Cedars Mine property, was paid by your Company for the work completed and we have had no further business dealings or personal dealings since then.

Sincerely yours,

R. E. Mieritz,
Mining Consultant.

Graham, Wash.

6-9-80

Dear Dick & CARROLL:

Just to refresh your memory
This is Charles R. Ward that had
the Ward corp. there in Phoenix.
Have been up in the Pac. NW.
for almost 2 years.

Dick, I am being sued over
the sale of the "Cedars Mines" out
of Wietieap Adiz. I am being
sued for Fraud, by a Frank
Baretta, don't know if you recall
the case from 2 or 3 years back. He
claims that the mine reports and
Record were false. I have to go
before a judge here in Tacoma Wn.
the 19th of June. I need a copy
of your Report on the "Cedars Mines".
Would also appreciate to the fullest
if you could write some kind of

II

A Character Reference and
Creditability Letter on my behalf.

He is suing FOX over
\$150,000.

What ever your Fee please let
me know so I can Rush a
check or money order.

We live about 20 mile S.E. of
Tacoma & got very little Dist
from St. Helen's, That is SO FAR

Have been Running a D-8
cat building Roads & clearing land.

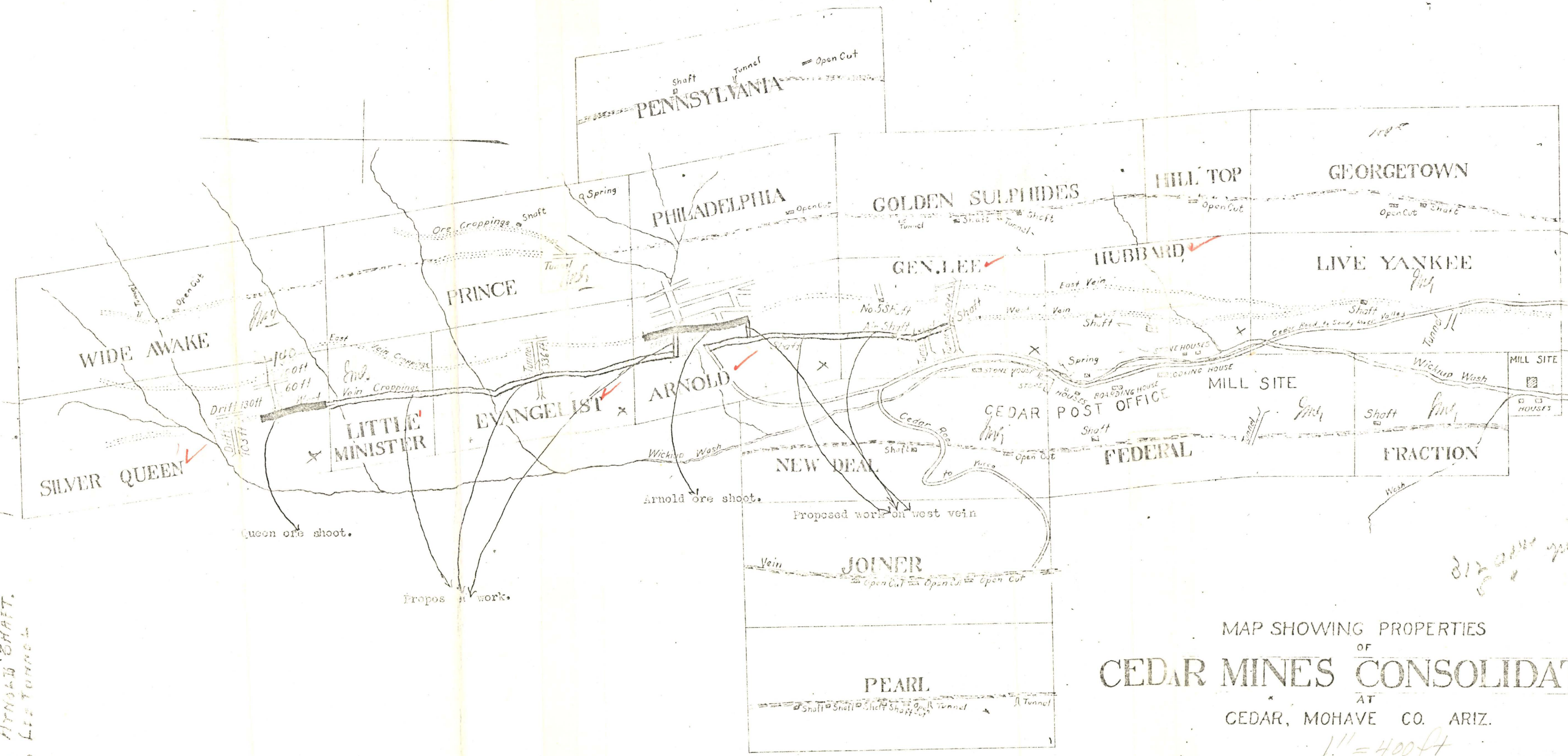
Tried To call you a Few
minutes ago - (6:30 PM our Time)

Sincerely
Ray Ward.

God! can it Rain here.

Charles R. Ward help you deets
P.O. Box 242 Necessary.
Graham Wash
98338

4650 Elev Mill.
 5600 Queen Summit. 5275
 5000 Arnold Shaft.
 4850 Little Minister



MAP SHOWING PROPERTIES
 OF
CEDAR MINES CONSOLIDATED
 AT
 CEDAR, MOHAVE CO. ARIZ.

1" = 400ft

I.M. George
 Kingman Ariz.

CHARLES R. WARD CORP.
 4728 No. 21st AVENUE
 PHOENIX, ARIZONA 85015