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Phoenix, AZ 85007
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07/22/98

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: LUZENA ALLUVIUM

ALTERNATE NAMES:

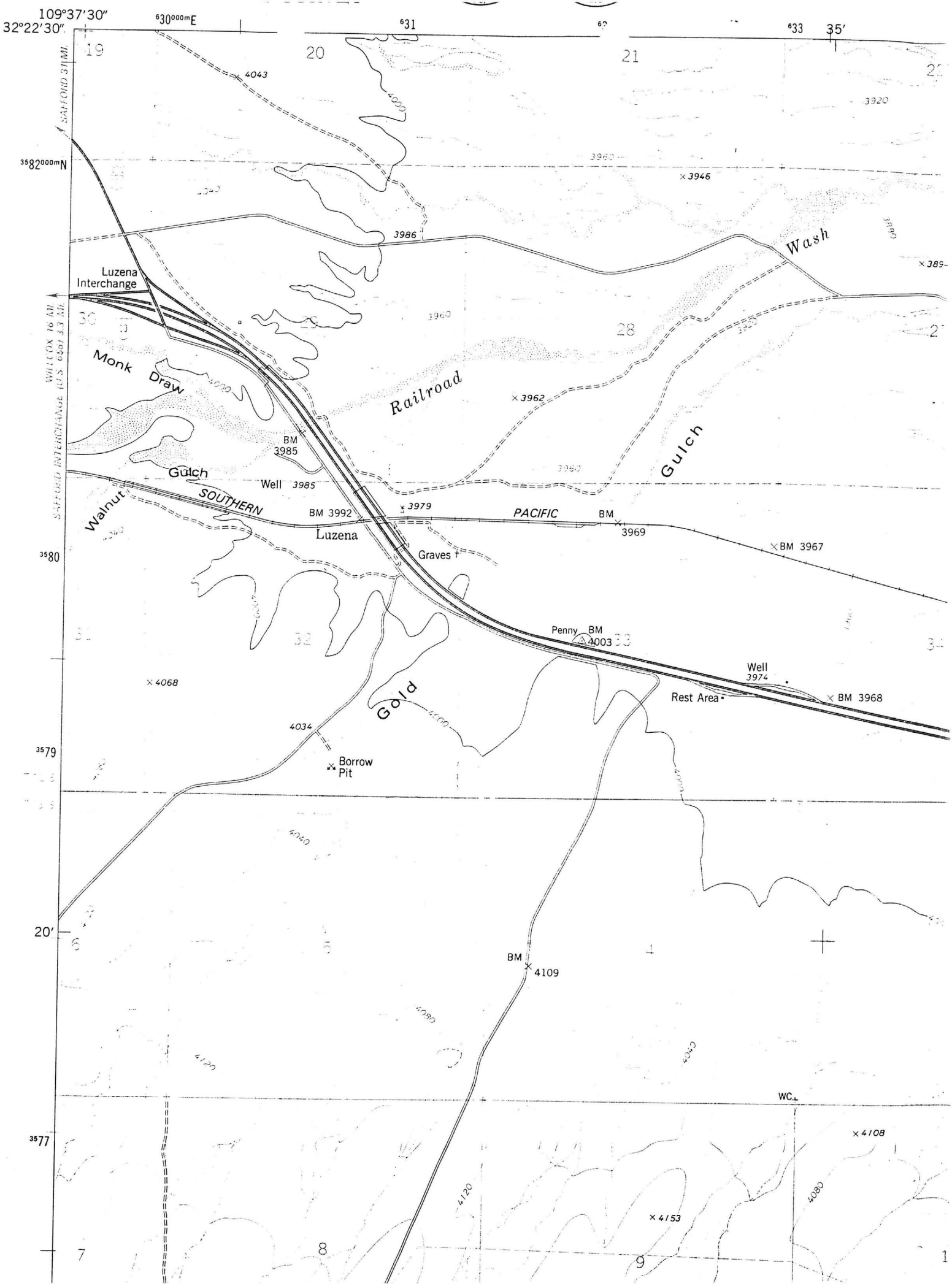
COCHISE COUNTY MILS NUMBER: 927

LOCATION: TOWNSHIP 12 S RANGE 27 E SECTION 29 QUARTER SW
LATITUDE: N 32DEG 21MIN 17SEC LONGITUDE: W 109DEG 36MIN 50SEC
TOPO MAP NAME: LUZENA 7.5 MIN

CURRENT STATUS: OTHER

COMMODITY:
UNKNOWN

BIBLIOGRAPHY: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SAFFORD 37 MI.
WILLCOX 16 MI.
SAFFORD INTERCHANGE (U.S. 666) 3.3 MI.
Luzena Interchange
Monk Draw
Railroad
Wash
Gulch
Walnut Gulch
SOUTHERN PACIFIC
Luzena
Graves
Penny
Gold
Rest Area
Borrow Pit
BM 3985
Well 3985
BM 3992
BM 3969
BM 3967
BM 3968
BM 4003
Well 3974
BM 4109
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LOZENA ALLOUN ff COCHRUE

U.S. Securities and Exchange Commission

LONE STAR CASINO

Securities and Exchange Commission

Litigation Release No. 18015 / March 5, 2003

Defendant Paul J. Montle Found in Contempt for Failure To Pay $415,000 Judgment; Court Finds Defendant Montle Hid Assets and Orders Payments on Judgment Be Made

***Securities and Exchange Commission v. Paul J. Montle, et al.*, 98 CV 3446 (S.D.N.Y.) (MP) (March 3, 2003)**

The Securities and Exchange Commission ("Commission") announced today that on March 3, 2003, the Honorable Milton Pollack, United States District Judge for the Southern District of New York, found defendant Paul J. Montle ("Montle") in contempt for failure to pay the Commission's $415,000 judgment ("Judgment") against him. The Court ordered Montle to pay the July 12, 2001 Judgment in monthly installments of $10,000 (beginning March 13) and to turn over assets to the Commission.

In 1998, the Commission brought a civil enforcement action in the Southern District of New York against Montle as the lead figure in a series of federal securities law violations, which essentially included: (1) publishing, or causing to be published, numerous false and baseless sales reports and projections regarding Viral Testing Systems Corporation; (2) making false statements in Commission filings regarding Lone Star Casino Corporation; and (3) orchestrating a market-manipulation scheme designed to maintain and raise artificially the stock price of RMS Titanic, Inc.

On July 12, 2001, after a bench trial, Judge Pollack entered a judgment against Montle (the AJudgment@) on all counts alleged in the Commission's complaint. Judge Pollack: (1) permanently enjoined Montle from violating various sections of the federal securities laws, including, Section 17(a) of the Securities Act of 1933, Section 10(b) of the Securities Exchange Act of 1934, and Rule 10b-5 thereunder; (2) ordered Montle to pay the Commission disgorgement plus pre-judgment interest thereon, totaling $365,092.25; (3) ordered Montle to pay a $50,000 civil penalty; (4) barred Montle for the period of five years from acting as an officer or director of a public company; and (5) prohibited Montle from participating, directly or indirectly, in the sale of securities pursuant to Regulations D and S of the Securities Act of 1933.

Montle failed to pay the Judgment, and the Commission subsequently sought information from him concerning his assets. However, Montle refused to produce this information, and on January 17, 2002, Judge Pollack ordered Montle to do so. On January 30, 2002, after Montle still refused to provide the requested information (and to pay the Judgment), the Commission sought civil contempt sanctions against him. In a final attempt to avoid payment, Montle filed for bankruptcy protection in the U.S. Bankruptcy Court for the Southern District of Texas. In April 2002, the Commission obtained a dismissal of Montle's bankruptcy proceeding, and the Commission renewed its request for contempt sanctions before Judge Pollack. Judge Pollack initially held that request in abeyance pending further investigation of Montle's assets.

On January 8, 2003, the Commission renewed its contempt motion against Montle in light of evidence that Montle had been hiding assets from the Commission. On March 3, 2003, Judge Pollack granted the Commission's contempt motion and ordered Montle to pay the Commission in monthly installments of $10,000, with the first payment due March 13, 2003. Additionally, Judge Pollack ordered Montle to produce information to the Commission regarding his assets and to turn over certain assets. The order also allows the Commission to move the Court for

an order of commitment if Montle "disobeys this Order in any respect." Judge Pollack found that Montle had engaged in "obstructionism" by failing to produce key documents to the Commission. Judge Pollack further noted that Montle's "continuing refusal to pay a penny of the Judgment, at the same time that he maintained an admittedly extravagant lifestyle and hid assets, strikes this Court as contumacious conduct."

http://www.sec.gov/litigation/litreleases/lr18015.htm

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From https://www.sites.234.com

Luzena Deposit Gross Profit Projection

Preamble:

In order to understand the terms used in this Projection, it may be necessary for the reader to refer to the List of Definitions that appear at the end of this report. Where possible, technical terms used in the mining industry and that appear in this report, are typed in *ITALICS* for easier reference.

The Sand & Gravel Plant presently under construction by Arizona Mining Corporation at its site in the Luzena Basin near Willcox, Cochise County, Arizona is designed to economically extract precious and base metals, including gold, silver, platinum, palladium, magnetite, sand, gravel, clay, top soil, decorative stone and *DECORATIVE BOULDERS.*

This Gross Profit Projection is the result of approximately 5 years of intensive exploration, testing, and development of the Luzena Basin. Geophysical, geo-chemical and statistical data was obtained and analyzed from many sources. These sources include The National Stone Aggregates Association, The Arizona Geological Survey, The American Society of Applied Technology, Thermodyne Systems Inc., Au Consolidated Inc., Cosmos Systems Inc., Mineral Processing Laboratories LLC, Hazen Research Inc., (RDI) Resource Development Inc., CTE-Commercial Testing & Engineering, The Colorado School of Mines-Department of Metallurgical Engineering, Iseman Consulting, Salt River Sand and Rock Ltd., James P. Coates, P.Eng., Syd Williams, PHD. Mineralogy, David Garske, PHD. Mineralogy, Norman Arrison, PHD. Chemistry, Cone Geochemical Inc., Jacobs Assay Office, Exrall Laboratories, ACTLabs and Skyline Labs.

This Projection includes revenues from the sale of all recoverable precious and base metals and is based on known private and public mining costs using existing and proven sand and gravel technology. The *CASH COST TO PRODUCE* used in this projection is Five Dollars ($5.OO) per ton of *BANK RUN*. The cost to recover and refine precious and base metals is an additional Fifty Cents ($.50) per ton *BACK TO BANK RUN*. Therefore, the total CASH COST TO PRODUCE is Five Dollars and Fifty Cents ($5.50) per ton of *BANK RUN*. Ninetyfive percent (95%) of all *BANK RUN* material is recoverable and saleable.

Exploration, sieve analysis (*CLASSIFICATION*), hydro, pyro, and chemical analysis for metallurgical breakdown are now complete. *PILOT PLANT* processing of *BULK TESTS* of several thousand tons of *BANK RUN* material has further authenticated the ability to extract all of the saleable products.

Economic and profitable bulk material processing at the Luzena Deposit is possible for several reasons. First, the Luzena Deposit is located at a highway interchange on Interstate Highway 10 (I-10) approximately 13 miles east of the town of Willcox and south of the town of Safford, Arizona. This assures easy access to the site and the proximity of local markets for labor, equipment, materials and administrative infrastructure.

Second, a transcontinental railroad transverses the Luzena Deposit with a nearby siding. This will facilitate the economic transportation and marketability to all bulk materials. This factor is very important because it renders the Luzena site a totally integrated processing facility.

Third, the size of the Luzena Deposit is massive. It will provide almost endless reserves.

Fourth, the Sand & Gravel Plant under construction at the Luzena Deposit will only employ gravity and water to achieve its desired result. It is also located on deeded land and is therefore, exempt from planning and zoning permits. It uses no chemicals and there is no grinding of bulk materials that produce dust. These factors are important because there is no risk of environmental pollution requiring costly clean up. The acquisition of expensive dust filtration equipment and permitting is avoided.

Fifth, the project employs existing technology. Thousands of Sand & Gravel Plants exist in the southwestern USA providing millions of tons of product to feed growing markets. Parts and equipment is "off-the-shelf" and does not require extensive and expensive engineering and maintenance. The same scenario exists for precious metals recovery technology and equipment.

Sixth, the Luzena Deposit can be economically mined using regular earth moving equipment. No drilling, blasting or removal of overburden is required to mine this site to a depth of at least 100 feet over an area of 13.5 square miles.

Other reasons include the availability of adequate water permitted for mining use, the availability of 3 phase power and local weather that is suitable for year-round working conditions. Also, being located in the state of Arizona, a traditional mining state in the United States of America, the Luzena Deposit has low political risk.

All of the above factors give this project a high profit potential.

FIGURE 1
This table names all saleable products, the percentage of total represented and the gross value of each per ton of *BANK RUN* in U.S. Dollars.

PRODUCT		%	**GROSS VALUE / TON**		**VALUE / TON OF BANK RUN**	
Base Metals/ S & G Aggregates			Local	Export *		
Magnetite		5	$100.00		$5.00	
Clay		5		$80.00	$4.00	
Top Soil(fines)		5		$80.00	$4.00	
Concrete sand		25	$24.00	$42.00	$6.00	
Mortar sand		25	$24.00	$42.00	$6.00	
Concrete sand		25	$24.00	$42.00	$5.76	
Boulders		1	$100.00		$1.00	
Sub-total		**90**				**$31.76**
PRECIOUS METALS MINERALS:			**Assayed Grade in GPT (grams/ton)&**			
Silver	Ag)		$18.70		$3.00	
Platinum	Pt)		$0.10		$1.93	
Palladium	Pd)	5	$0.15		$2.50	
Gold	Au)		$3.00		#$25.50	
Other@						
Sub-total		5	$21.95			$32.93
Total		**95**				**$64.93**

SUBSCRIPT NOTATIONS:
* Export prices are higher and can consume the massive quantities of materials produced. Local Market prices were used in values/ton of bank run to allow for freight.
# 1 gram/ton carries a value of $8.50. Assayed Au grades are currently running better than 3 GPT.
@ Other PRECIOUS METALS MINERALS as listed in the DEFINITONS OF TECHNICAL TERMS are recoverable and have value, however, more study is required to include them in this projection.
& Value indicated for each ton of BANK RUN mined.

FIGURE 2
This table demonstrates cash flow based on the values in Figure 1. The gross and net revenue estimates are inclusive of all base metals, sand and gravel aggregates and precious metals as they relate to the production of 1 gram of Gold. This is because the process necessary to produce 1 gram of Gold will result in the production of the other saleable by-products and also include all the costs to extract them.

Daily:		
3 GPT x 4000 TPD x $64.69 BTBR. Gross RevenRevenue	=	$258,760.00
Less: $5.50 CCTP x 4000 TPD	=	$22,000.00
Daily net after CCTP	=	$236,760.00
Yearly:		
300 working days per year	=	$7,628,000.00
Less: $5.50 CCTP x 4000 TPD x 300 days	=	$6,000,000.00
Yearly net after CCTP	=	$71,628,000.00

FIGURE 3
This table indicates the economic life of the project. Table 1 indicates ORE RESERVES in the 640-acre claim presently under development by Arizona Mining Corporation to a depth of 100 feet and assayed in 5-foot depth intervals. Table 2 indicates ORE RESERVES over the entire 8,600 acres of the Luzena Deposit.

Table 1:		
640 acres mined to a depth of 100 feet	=	139,492,000.00 Tons
To delplete the reserve at 4000 TPD	=	116.25 Years
To deplete the reserve at 8000 TPD	=	58 Years
Table 2:		
8600 acres mined to a depth of 100 feet	=	1,847,772,480.00 Tons
To deplete the reserve at 4000 TPD	=	1,284.09 Years
To deplete the reserve at 8000 TPD	=	642.05 Years

NOTE: ORE RESERVES may go much deeper. For example, Phelps Dodge, a major copper mining company, has been mining to 2000 feet in open PIT mines just north and South of the Luzena Basin Project for many years.

DEFINITIONS FOR TECHNICAL TERMS APPEARING IN ITALICS:

BackTo Bank Run (BTBR): When an assay is calculated from concentrate results, it is to define what the results are from to true bank run values.

Bank Run (BR): All material removed from the Bank of the Pit to the Plant before GRIZZLY Classification. This term is synomynous with Head Ore.

Bulk Tests: Large samples, one ton to 100 tons or more.

Cash Cost To Produce (CCTP): The actual cash spent on labor, maintenance, fuel, supplies, administration, etc. It does not include discovery or development of ore reserves. This directly defines the cost to produce an ounce of Au.

Classification: Determining the size of particles to pass to the next stage of processing.

*Clay (Luzena Area):*Pottery quality and Brick stock.

Concrete Rock: Washed rock, classified to minus 3/4" to plus 3116". No fines.

Concrete Sand: Washed sand, classified to minus 3/16" for structural concrete.

Decorative Boulders: Larger than 8" each and up to 1000 lbs. Deposit: Derived from deposition of minerals, an ore body, potential reserves.

Grams Per Ton (GPT): Means grams per ton.

Grizzly: A device to reject any object larger than 8". Types are fixed, vibrating, self-unloading, wet sprayed, etc.

Gross Income (GI): Means gross income.

Magnetite (Fe, Mg) (Fe2 04): Basic Iron Oxide which can be removed with magnets.

Mortar Sand: Washed sand, classified to minus l/8"down to minus 20 mesh for block and brick mortar and stucco.v

Ore Reserves: Unmined but known commercial ore.

Ounces Per Ton (Oz/PT): Means ounces per ton. (Troy)

Pilot Plant: A miniature version of a large plant to determine what is most effective and prove up the ability to actually recover values from bank run in bulk samples.

Pit: The hole in the ground being mined (Open Pit Mine).

Precious Metals Minerals: All compounds of elements containing precious metals. Examples: Sylvanite (Au Ag) Te2, Stephanite Ag5 Sb S4, Stermbergite Ag Fe2 S3. Petzite Ag3 Au Te2, Krennerite Au Te2, Argenite Ag2S, Bismuthian Gold Au Bi, Auricupride Cu3 Au, Kostovite Cu Au Te4, Bogdanovite Au5 (Cu Fe)3 (TePb)2. All of the above are heavy minerals and will naturally gravity concentrate.

Tons Per Day (TPD): Means tons per day.

from https://www.sire234.com

Luzena Deposit Gross Profit Projection – Amended

Figure 1
This table names all saleable products, the percentage of total represented and the gross value of each per ton of HEAD ORE in US dollars.

PRODUCT		%	GROSS VALUE / TON		VALUE / TON OF BANK RUN	
Base Metals/ S & G Aggregates			Local	Export *		
Magnetite		5	$100.00		$5.00	
Clay		5		$80.00	$4.00	
Top Soil(fines)		5		$80.00	$4.00	
Concrete sand		25	$24.00	$42.00	$6.00	
Mortar sand		28	$24.00	$42.00	$6.00	
Decorative stone		25	$24.00	$42.00	$5.76	
Boulders		1	$100.00		$1.00	
Sub-total		**93**				**$31.76**
PRECIOUS METALS MINERALS:			**Assayed Grade in grams/ton @**	**Value/Gram 2nd L.Fix &**		
Silver	Ag)		$18.70	$0.14	$2.61	
Platinum	Pt)		$3.00	$18.90	$56.71	
Palladium	Pd)	7	$2.40	$19.61	$47.07	
Rhodium			$3.00	$50.64	$151.91	
Gold	Au)		$3.00	$8.79	#$26.37	
Sub-total		7	$30.10	$98.08		$284.67
Total		**100**				**$316.43**

SUBSCRIPT NOTATIONS:
* Export prices are higher and can consume the massive quantities of materials produced. Local Market prices were used in values/ton of bank run to allow for freight.
# 1 gram of Au has a value of US$8.79.
@ Value indicated for each ton of BANK RUN mined.
& 2nd London Fix as at June 08, 2001.

FIGURE 2
This table demonstrates cash flow based on the values in Figure 1. The gross and net revenue estimates are inclusive of all base metals, sand and gravel aggregates and precious metals as they relate to the production of 1 gram of Gold. This is because the process necessary to produce 1 gram of Gold will result in the production of the other saleable products and also include all the costs to extract them.

Daily:		
4000 TPD x $316.43 BTBR. Gross Revenue	=	$ 1,265,720
Less: $5.50 CCTP x 4000 BTBR	=	22,000
Daily net after CCTP	=	$ 1,243,720
Yearly:		
300 working days per year	=	$ 379,716,000
Less: $5.50 CCTP x 4000 TPD x 300 days	=	6,000,000
Yearly net after CCTP Gross Revenue	=	$ 373,716,000

Note: These gross revenue projections are from the production of Plant 1 only. GAG's business plan is to build 12 such facilities at a double capacity of 8,000 TPD.

Media and information releases

Printer version

03-098 ASIC obtains orders against promoters of goldmining venture

Wednesday 19 March 2003

The Australian Securities and Investments Commission (ASIC) has successfully applied to the Supreme Court of New South Wales for orders against Mr Cameron Willard McEwen.

The Court orders prohibit Mr McEwen, a Canadian national, from leaving mainland Australia without the Court's consent up to and including Monday 24 March 2003, and to surrender his passport to the Court.

As part of the orders, Mr McEwen, Great American Gold Limited and Fortress International Limited are also prohibited from taking, sending or transferring money, financial products or other property out of Australia.

American Gold and Fortress International are believed to be incorporated in the Bahamas and are not registered in Australia.

The orders against Mr McEwen were originally made by Justice Bryson on 6 March 2003.

ASIC sought the orders as a result of an ASIC investigation into the alleged promotion of financial services in Australia by Mr McEwen, Great American Gold and Fortress International. The investigation is continuing.

ASIC is concerned that Mr McEwen, Great American Gold and Fortress International may have been promoting investments in an American-based mining venture, in contravention of the Corporations Act.

ASIC has been assisted in its enquiries by the British Columbia Securities Commission in Canada, and the Arizona Corporation Commission and Arizona Department of Mines in the United States.

The matter is due to return to Court on 24 March 2003.

Updated:
19/03/2003

U.S. Securities and Exchange Commission

Securities and Exchange Commission

Litigation Release No. 18015 / March 5, 2003

Defendant Paul J. Montle Found in Contempt for Failure To Pay $415,000 Judgment; Court Finds Defendant Montle Hid Assets and Orders Payments on Judgment Be Made

***Securities and Exchange Commission v. Paul J. Montle, et al.*, 98 CV 3446 (S.D.N.Y.) (MP) (March 3, 2003)**

The Securities and Exchange Commission ("Commission") announced today that on March 3, 2003, the Honorable Milton Pollack, United States District Judge for the Southern District of New York, found defendant Paul J. Montle ("Montle") in contempt for failure to pay the Commission's $415,000 judgment ("Judgment") against him. The Court ordered Montle to pay the July 12, 2001 Judgment in monthly installments of $10,000 (beginning March 13) and to turn over assets to the Commission.

In 1998, the Commission brought a civil enforcement action in the Southern District of New York against Montle as the lead figure in a series of federal securities law violations, which essentially included: (1) publishing, or causing to be published, numerous false and baseless sales reports and projections regarding Viral Testing Systems Corporation; (2) making false statements in Commission filings regarding Lone Star Casino Corporation; and (3) orchestrating a market-manipulation scheme designed to maintain and raise artificially the stock price of RMS Titanic, Inc.

On July 12, 2001, after a bench trial, Judge Pollack entered a judgment against Montle (the AJudgment@) on all counts alleged in the Commission's complaint. Judge Pollack: (1) permanently enjoined Montle from violating various sections of the federal securities laws, including, Section 17(a) of the Securities Act of 1933, Section 10(b) of the Securities Exchange Act of 1934, and Rule 10b-5 thereunder; (2) ordered Montle to pay the Commission disgorgement plus pre-judgment interest thereon, totaling $365,092.25; (3) ordered Montle to pay a $50,000 civil penalty; (4) barred Montle for the period of five years from acting as an officer or director of a public company; and (5) prohibited Montle from participating, directly or indirectly, in the sale of securities pursuant to Regulations D and S of the Securities Act of 1933.

Montle failed to pay the Judgment, and the Commission subsequently sought information from him concerning his assets. However, Montle refused to produce this information, and on January 17, 2002, Judge Pollack ordered Montle to do so. On January 30, 2002, after Montle still refused to provide the requested information (and to pay the Judgment), the Commission sought civil contempt sanctions against him. In a final attempt to avoid payment, Montle filed for bankruptcy protection in the U.S. Bankruptcy Court for the Southern District of Texas. In April 2002, the Commission obtained a dismissal of Montle's bankruptcy proceeding, and the Commission renewed its request for contempt sanctions before Judge Pollack. Judge Pollack initially held that request in abeyance pending further investigation of Montle's assets.

On January 8, 2003, the Commission renewed its contempt motion against Montle

in light of evidence that Montle had been hiding assets from the Commission. On March 3, 2003, Judge Pollack granted the Commission's contempt motion and ordered Montle to pay the Commission in monthly installments of $10,000, with the first payment due March 13, 2003. Additionally, Judge Pollack ordered Montle to produce information to the Commission regarding his assets and to turn over certain assets. The order also allows the Commission to move the Court for an order of commitment if Montle "disobeys this Order in any respect." Judge Pollack found that Montle had engaged in "obstructionism" by failing to produce key documents to the Commission. Judge Pollack further noted that Montle's "continuing refusal to pay a penny of the Judgment, at the same time that he maintained an admittedly extravagant lifestyle and hid assets, strikes this Court as contumacious conduct."

http://www.sec.gov/litigation/litreleases/lr18015.htm

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LUZENA ALLUVIUM / COCHISE CO

U.S. Securities and Exchange Commission

SECURITIES AND EXCHANGE COMMISSION

Litigation Release No. 17066 / July 13, 2001

SEC OBTAINS FINAL JUDGMENT AGAINST PAUL J. MONTLE INCLUDING A FIVE-YEAR BAR ON MONTLE SERVING AS AN OFFICER OR DIRECTOR OF ANY PUBLIC COMPANY, OVER $360,000 IN DISGORGEMENT AND INTEREST, AND A $50,000 CIVIL PENALTY.

***Securities and Exchange Commission v. Paul J. Montle, et al.*, 98 Civ. 3446 (MP), U.S.D.C., S.D.N.Y.**

The Securities and Exchange Commission ("Commission") announced that on Thursday, July 12, 2001, the Honorable Milton Pollack of the United States District Court for the Southern District of New York entered a final judgment against Paul J. Montle ("Montle"). Following a four-day bench trial in May of this year, the Court entered a judgment against Montle on all of the Commission's claims against him.

The judgment

- Permanently enjoins Montle from future violations of Section 17(a) of the Securities Act of 1933 ("Securities Act") and Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act"); Section 13(b)(5) of the Exchange Act; and Section 13(b)(2) of the Exchange Act;
- Bars Montle for five years from serving as an officer or director of any public company;
- Bars Montle for five years from participating in the sale of securities under Regulations S and D of the Securities Act;
- Orders Montle to disgorge his ill-gotten gains of $187,459.25 and prejudgment interest of $177,633; and
- Orders Montle to pay a $50,000 civil penalty.

The Court found that Montle's "violations involving fraud and deceit were numerous and ongoing," and that his "actions were knowing departures from the securities laws." The Court further found that Montle's testimony in his own defense "was without even the semblance of credibility" and "was infected by the same variety of distortion and outright falsehood that accompanied his deceptions in the arena of publicly held companies," and concluded that "there is strong evidence that [Montle] is likely to violate the securities laws in the future."

The Court further found that:

- Montle violated the federal securities laws regarding three public companies: Viral Testing Systems Corporation ("VTS"), which marketed an HIV diagnostic test called "Fluorognost"; Lone Star Casino Corporation ("Lone Star"), which sought to own and operate gambling casinos; and RMS Titanic, Inc. ("Titanic"), which attempted to salvage artifacts from the sunken Titanic ocean liner.

AKA L S CAPITAL SUBSIDIARIES INC. COCHISE MINING

- As CEO and a director of VTS, Montle made material misrepresentations in two trade publications and a VTS press release regarding VTS's revenues and projected revenues and related matters. For example, in an article that appeared in Today's Investor, Montle overstated VTS Fluorognost revenues by more than double, projected grossly overstated future revenues, and falsely claimed that the American Red Cross had

"endorsed" Flu gnost.

- As Chairman and CEO of Lone Star, Montle intentionally omitted from numerous public SEC filings that Lone Star had sold more than a million shares of its stock to foreign investors, thus concealing significant dilution. Montle also attempted to cover up this fraud by falsely altering Lone Star's Board of Director's minutes, omitting the stock sales from Lone Star's books and records, failing to disclose the sales to Lone Star's securities counsel, and creating sham stock purchase agreements.

- Montle also orchestrated a scheme to manipulate the stock of Titanic, causing it to open at an arbitrarily high price of $5 per share, climb to $11 within two months, and subsequently fall below $5. Through this scheme, Montle obtained ill-gotten gains totaling at least $187,459.25.

Montle, age 53, resides in Massachusetts.
http://www.sec.gov/litigation/litreleases/lr17066.htm

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ADMMR

Arizona Department of Mines and Mineral Resources
1502 West Washington, Phoenix, AZ 85007 Phone (602) 255-3795
Toll Free in Arizona 1-800-446-4259 FAX (602) 255-3777

Apr. 3, 1998
Cochise 8
Field Trip

The Director, H. Mason Coggin, visited the site of a sampling operation at the confluence of Monk Creek and I-10. (T12S R27E Sec. 29 SW) The operators had errected a large trommell and had apparently sampled in the surrounding area with a backhoe. In addition to the trommel there was a Mesa gold reversing table and a36 inch Knellson Concentrator. About 21 piles of about 10 yards each were placed around the trommel apparently the results of a sampling program. There was no one on the site and it did not look like the site had seen any activity for several days. A Gradeall and three yard loader completed the operating equipment. It did not look as the project were being pushed.

AESOP32/97

GLOBO DE PLOMO
P.O. Box 872
Douglas AZ 85608

Ship to: 510 E Globo Lane
Douglas AZ 85607
Tel: (520) 364-9637
Fax: (520) 805-9985

7 July 1997

Joe Kapler
ÆSOP ENTERPRISES, INC.
1431 East Bates Pkwy.
Englewood, CO 80110

Dear Joe:

OF TECK ?

Enclosed with this letter are descriptions of four samples of heavy concentrate sent by Ken Shonk. I have not done all the things he requested at this stage, particularly any SEM work. Nor have I taken photomicrographs of the gold grains for I am not equipped to do so.

My impression is that the freed gold flakes are all of a high degree of fineness and where seen in samples (6862, 63, 64) they all appear to be of similar size and character. Sample 6861 and 6863 also contain curious rusty nuggets and evidence that gold was deposited as a supergene mineral on coatings of goethite-stained nontronite which occur on the surface of fragments of massive microcrystalline Fe-oxides. I will retain the samples here in case further work seems justified for I imagine that Ken will be doing some follow up sampling to assure himself that these are real samples and not manipulated ones.

The fact that I found fresh galena in one sample and that gangue minerals include bits of schistose quartz-muscovite rock as well as numerous flakes of quartz and muscovite reminds me very much of pyritic veins that run along the length of the Dos Cabezas Mountains - mostly on the north side - and appear to be of great age. These have been prospected for gold in the past and are characterized by high pyrite content and galena as a common accessory mineral.

Regards,

Sidney A. Williams
SAW:bj

encls.

FILE #: 32109-65
QUAD: LUZENA
PROPERTY: NEW GOLD COCHISE, AZ
CHARGE TO 0051 KENNETH N. SHONK

AZGC97-6861

The bulk of this material is magnetite of octahedral habit and remarkably uniform grain size and it shows no evidence of surficial oxidation. A few grains of perfectly fresh galena are dispersed in the sample as well. Much of the remainder is massive microcrystalline hematite, sometimes gradational into pitchy hisingerite near the surface of the fragments and these grains are often filmed with a curious bright yellow scum that appears to be goethite stained nontronite. Flakes of native gold were found plastered on this yellow surface occasionally and the sample also contains more substantial nuggets of rusty gold which appears to cement small fragments of similar microcrystalline hematite. The sample also contains well rounded particles of massive microcrystalline hematite of equant crystal habit and these appear to have suffered a greater degree of transport then other grains in the sample.

AZGC97-6862

This sample is very small and most of the grains in it are flat gold nuggets, all of which seem to have an identical degree of fineness which is apparently quite high. Small patches of native silver were seen in one of the nuggets. A few bits of hisingerite and massive microcrystalline hematite coated with goethite stained nontronite are also present but gold was not seen attached to these.

AZGC97-6863

This sample consists chiefly of small octahedra of magnetite that are almost perfectly fresh and show little evidence of abrasion. Gangue minerals are more prevalent in this sample than any previous one and include bits of schistose and quartz-rich country rock. Native gold is fairly common including rusty nuggets identical to those seen in sample 6861 and flakes of cleaner gold, that also appear to be of a high degree of fineness and were freed within the sample.

AZGC97-6864

This sample consists chiefly of tiny crystals of magnetite that are totally replaced by hematite and no magnetic response was found. Gangue minerals are also quite common including flakes of

AZGC97-6864 con't.

muscovite and quartz crystals (which may be quite perfect in outline). Native gold is also present, almost all of it seen as small flat flakes much like the nuggets described in sample 6862 and the degree of fineness appears to be very high.

Gold Gulch Mineralized Alluvium

Geological Engineering Report

By

Michael Bradshaw, Geological Engineer

May 12, 1998

ABSTRACT

The prospect area of the Dos Cabezas Mountains and the San Simon Basin is part of the Basin and Range province, which covers most of Nevada, Arizona, and New Mexico. This metallogenic province has been one of the most productive geologic mineral belts in the world. As mineral-processing technology develops it will continue to provide world class mining opportunities. The group effort between George Keeper First Nations, Inc. (GKFNI), AU Consolidated, American Society of Applied Technology (ASAT) and other experts in the field of mineral exploration and processing have developed a method of extracting precious metals from the ***basin sediments***. Microscopic study has revealed multi-agents of transport for the metals in these thick layers of sediments. Hydrothermal solutions generated by strato-volcanoes, associated dike systems and a shallow heat source are the dominant source of the area's mineralization. Chemical weathering forming localized supergene enrichment and erosion of mineral deposits of the Dos Cabezas Mountains provide both precious and base metals.

STATE OF ARIZONA

OFFICE OF THE ATTORNEY GENERAL

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1275 WEST WASHINGTON, PHOENIX 85007-2926

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TELEFAX COVER SHEET

DATE: June 10, 1999

TO: Nile

COMPANY: Dept. of Mines and Mineral Resources

FAX NUMBER: 255-3777

PHONE NUMBER: 255-3795

NUMBER OF PAGES: 5 (including cover sheet)

FROM: Special Agent KATHLEEN KEMPLEY

DIVISION: Special Investigations Section

FAX NUMBER: (602) 542-4882

PHONE NUMBER: (602) 542-4853 or (602)542-7920 (direct line)

MESSAGE: This is the info I received from the Alberta Securities Division. Let me know what you think. Thanks!

Fortress International Ltd.

55 Frederick Street, P.O. Box N-7511, Nassau, Bahamas
Tel: (242) 326-7754 Fax: (242) 325-6740
EMail: fortress@grouper.batelnet.bs

INTERNATI
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INFORMATION RELEASE

ARIZONA MINING PROJECT

INTRODUCTION:

Fortress International Ltd. is pleased to release information concerning a new mining project. This project has significant benefits.

1. It involves the mining and processing of gold, a commodity that will play a strategic role in the world economy in the near future.

2. It is located in the United States, a politically stable area of the world.

3. It has proven and economically viable reserves of gold; the project has enormous revenue potential.

The implications for investors in this project are also significant.

1. Product will be refined offshore.

2. Revenues will accumulate and be disbursed offshore.

3. The project will be privately owned and managed offshore.

The following information summarizes the project.

EXECUTIVE SUMMARY

ORGANIZATIONAL STRUCTURE:

Fortress International Ltd. (FIL) is a Bahamian company that specializes in offshore corporate management services, offshore investment banking, and corporate financing. FIL is the financial manager of this project.

Great American Gold Ltd. (GAG) is a Bahamian resource and development company, with international affiliates involved in mining operations. GAG is the beneficial owner of this project. GAG has retained FIL as its financial manager and agent. GAG has acquired Gold Gulch mining, Ltd.

Gold Gulch Mining, Ltd. (GGM) is an Arizona mining company that has leased deeded land, mineral claims and exploration permits from AU Consolidated, Inc., in the area.

AU Consolidated Inc. (AU) is an Arizona holding company that owns deeded land and mineral claims in the project area.

BUSINESS PLAN:

1. AU Consolidated is the owner of deeded land and mineral claims comprising approximately 500 square miles in Cochise County, Arizona.

2. GAG has sub-leased certain deeded land, mineral claims and exploration permits from AU comprising approximately 8,200 acres of land situate in an area known as Gold Gulch, in Cochise County, Arizona, approximately 10 miles from the town of Wilcox. Wilcox is located on Interstate 10, approximately 60 miles east of Tucson, Arizona.

3. Of the approximately 8,200 acres of claims, 640 acres are subject to an engineering report (the report) completed for AU by James Coates, PE, a certified mining engineer. It confirms a proven gold reserve of 1,226,000 troy ounces to a depth of 15 feet with an average grade of 0.153 troy ounces per ton and probable reserves totaling 5,312,000 ounces. GAG controls approximately 480 acres of the claims subject to the report.

4. Gravity concentration can recover more than 90% of the gold. Costs to mine and process the ore are calculated at be approximately USD$75.00 per ounce, making the study area one of the most economically viable prospects in the world. This is because of very low processing costs, which eliminate the need for drilling, blasting, crushing and grinding of ore; very similar to a sand and gravel operation.

5. The geology of the deposit and the homogeneity of the material suggest that the total reserves held by GAG are even greater. According to the report, further preliminary statistics suggest that the average grade may be considerably higher.

6. The property referred to in the report is categorized by the author as a "World Class" reserve of gold with no reservations as to its size and economic viability.

7. At USD$250.00 per ounce, the net present value of the proven reserve covering the 480 acres of the study area as outlined in the report is more than USD$229,875,000.00. Assuming the values extend over the entire 8,200 acres of claims held by GAG, the net present value of the reserves is approximately USD$4,000,000,000.00.

8. The above estimate does not account for reserves of silver, platinum, and mercury known to exist, the by-products of production, such as aggregate, soil and clay, nor does it take into account the probable reserves estimated to be 4 times the proven reserves.

9. GAG will proceed to develop its claims by establishing an infrastructure and completing required exploration work. It will also construct a 15,000-ton per day ore processing facility and proceed into production without delay.

10. Adjacent to the claims owned by GAG and comprising 160 acres of the engineering report, are additional claims owned by a third party. These claims are also subject to a separate engineering report that fully substantiates the results obtained in the report completed by AU. These claims have been under development for the past 16 months. This mine is operated by Cochise Sand and Gravel, Inc. (CSG). CSG has recently completed construction of a 3,000 ton per day ore processing facility and this mine is now in production.

11. To facilitate the earliest development of its claims and benefit from the experience and knowledge of a mine operator familiar with the area, GAG has contracted CSG to operate its mine.

12. To finance the development of the claims, GAG, will raise USD$15,000,000.00 through a private convertible debenture issue. It will offer to investors up to 25% of its interest in the 8,200 acre mining project in units of USD$15,000.00. The convertible debenture will carry an annual rate of interest of 12%. At the investor's option, interest will be paid annually, or re-invested.

13. Based on the proven reserves in the study area accruing to the claims owned by GAG, (480 acres), the net present value of the 25% interest in GAG is approximately USD$57,500,000.00. Each unit of GAG convertible debenture will have a net present value of USD$57,500.00. This assumes that this issue is fully subscribed (1,000 units) and does not account for any revenues generated from development of the balance of the approximately 8,200 acres controlled by GAG.

14. It is also the intent of GAG to complete an underwriting of common stock on one of the major international stock exchanges. This will be accomplished by pledging a small number of the claims controlled by GAG to the public domain.

15. Investors will have the option to convert their interest in the debenture issue for the common stock of GAG, or any new entity created or acquired for this purpose. The conversion will occur on a one for one basis; each unit of USD$15,000.00, plus any accumulated or accrued interest, will purchase 15,000 or more shares of the common stock of GAG or the new entity created or acquired for this purpose.

16. It is anticipated that the value of the common stock referred to above, when issued on, any stock exchange, will appreciate dramatically due to the "world class" nature of this project. This will provide a substantial bonus to participants in the debenture issue.

17. GAG has also contracted the services of Fortress International Ltd. (FIL) to act as its consultant concerning financial and administrative management, banking services, financing, promotion and public relations.

Information supporting this project is available for review. This information includes engineering reports, geological reports, location maps, and preliminary budgets. All questions relating to this circular should be directed to Fortress International Ltd.

ADMMR

Arizona Department of Mines and Mineral Resources
1502 West Washington, Phoenix, AZ 85007 Phone (602) 255-3795
Toll Free in Arizona 1-800-446-4259 FAX (602) 255-3777

Verbal Information Summary

Mine: Luzena Alluvium	**Date: July 14, 1998**
County: Cochise	**AZMILS #**
Location: T12S and T13S, R27 E, Sec. numerous	**Engineer: Nyal Niemuth**

Summary from meeting at ADMMR with Richard Bradshaw, Director Engineering for Au Consolidated, also with Cosmos Mining.

Companies involved

Au Consolidated
Richard Bradshaw, Director Eng.
Box 631
Willcox, AZ 85644
Ph: 520-847-2534

Au Consolidated
Frank Cobb, President
10959 W. Yukon
Sun City, AZ 85373
Ph: 602-566-3739

Au Consolidated is an Arizona Corporation (Frank Cobb, President). Other companies involved through partnerships or leases of property include the following. **GKFNI** - George Keeper- First Nations (Yucca Gold Canadian Native American?); **Gold Gulch Mines**, (GGM) an Arizona Corp. with the same share holders as AU Consolidated (it is 88% owned by Au Consolidated). **New Gold** of Kentucky, and **L.S. Capital,** a publicly traded over the counter corp., **Micron Gold** (Simmons brothers) an Arizona Corporation, **Red Rock Mining** (Bill Whipkey president and major share holder) is also a publicly traded over the counter company.

Property

Mr. Bradshaw visited ADMMR at the suggestion of Richard Ducote of the *Arizona Daily Star,* Tucson. Mr. Whipkey of Red Rock Mining has been trying to get publicity by having the newspaper to release a story on their purported large gold discovery.

Mr. Bradshaw claims that the property is very large, carrying 1 gram of gold per yard, but recovery is poor until "scrubbing" of the material takes place. Therefore plans are to use a fine gold recovery system called Cosmos Dynamic concentrator. Amalgamation is reported to work and the fines may be amenable to cyanide but recovery by such methods is poor until "scrubbing" of the material takes place. Less than 3% of the values are greater than 30 mesh. Most sampling has been reported as being done in or near existing sand and gravel pits. Five water wells are available in the area.

A 5 ton /day pilot plant is set up near the Luzena interchange. It consists of an impact mill and Knelson Concentrator. There is no sluice as no gold is recovered by sluicing. A similar plant was at Salt River Sand and Rock on the Agua Fria River and operated by Cosmos for 6 years. Mr. Bradshaw reported it recovered $1-2/yard at $350/oz. where a Knelson concentrator only recovered $.30/yard. They are no longer there as Salt River ran operation to produce sand and gravel not to optimize gold recovery. Twelve similar plants were reported operating in California at Gridley and also on the American, Feather and Yuba rivers at sand and gravel operations.

Initial testing was by sampling and straight amalgamation. Bank to bank yields were 1 gram per yard. After testing the former Granite Construction gravel pit, they discovered that the Creighton Ranch was for sale. Two and a half years ago they purchased surface and mineral rights that belonged to the Creighton Ranch. A small amount of land is leased from the Clump ranch with holdings to the south. Additional land is held by federal mining claims and Arizona state lease applications. Part of the claimed area extends to the north in the Hospital Flat area, Graham Co. It is not shown on the accompanying land status map.

Red Rock Mining is seeking independent verification of their process to raise money and to acquire the state leases. If the head material is not "scrubbed" no recovery occurs, zero recovery by fire assay before scrubbing. The gold is "between" plates of clay. Origin of the gold is reported as from two sources, placer from quartz veins in the Dos Cabezas mountains to the south and deposition from solution in lake beds.

Mr. Bradshaw provided a number of reports for ADMMR's file.

These include:

1) Land Status Map

2) Bradshaw, Michael, October, 1996, Report on proposed placer gold production, located in the San Simon Valley of Arizona.

3) Bradshaw, Michael, May, 1998, Gold Gulch Mineralized Alluvium, geological engineering report.

4) Mineral Resource Development Inc. June, 1998, Bottle Roll Testing of Gold Gulch Samples.

5) Coates, James, November, 1997, Gold Gulch Project, engineering report prepared for GKFNI.

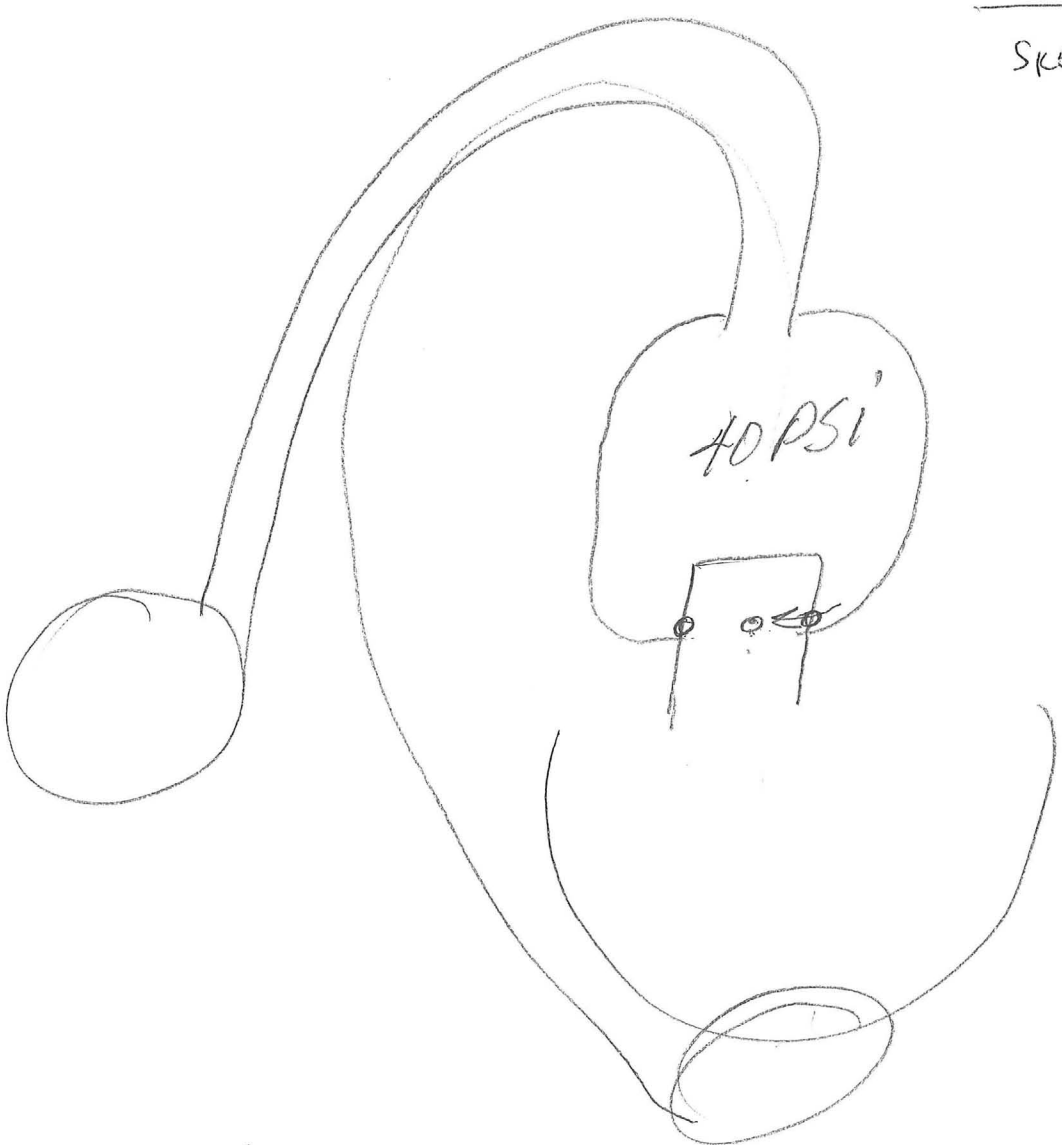
6) Coates, James, June, 1998, Verification sampling and testing program on properties in Cochise County, AZ, conducted for Au Consolidated, Inc.

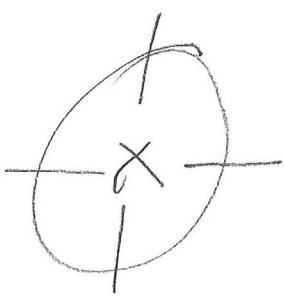
7) Williams, Sidney, July, 1997, Letter (to Teck Corp.?) describing mineralogy of 4 samples.

7/1998

SCRUBBER/IMPACTOR

SKETCH BY R. BRADSHAW





Richard J. Bradshaw
Director - Engineering

FRANK COBB PRES.

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GEOLOGIC PROVINCE

The prospect area is part of the Basin and Range Province of southeast Arizona. The Basin and Range are characterized by predominately northwest trending mountains separated by low-lying basins filled with eroded material from the surrounding ranges. **Figure 1** and **Figure 2** show where the Basin and Range Province lies in relation to the continental United States, as well as a detailed picture of southern Arizona. The Dos Cabezas and the San Simon Basin make up the north central part of Cochise County. The mountains are elliptical in plan trending west-northwest and cover some 120 square miles. The Basln itself stretches from the Mexican border to Safford, Arizona, covering over 400 square miles. Over half of the range is made up of Precambrian metasedimentry rocks and granitoid intrusions. These were burred by Paleozoic and Mesozoic sediments, mostly marine in origin. During the Laramide orogeny, the range was faulted parallel to the structural axis by, steeply dipping normal faults, thrust and strike-slip (about one mile implied detachment). Laramide intrusion events began in late Cretaceous with massive intrusion breccas and dark aphanitic magmatic bodies covering a 16 square mile area on the east central part of the range. Intrusion of quartz diorite and quartz monzonite stocks continued into the pliestocene epoch. Mid-tertiary activity included several andesitic and dacitic dike groups as swarms and ring dike features related to basin faulting and a series of collapse caldera features of the strato-volcanic type.

Figure 1 – Basin and Range Province

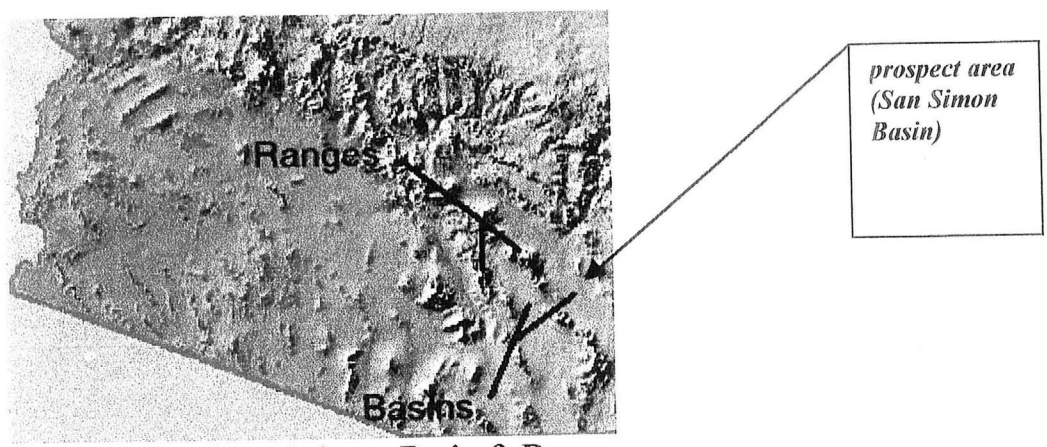

Figure 2 – Southern Arizona Basin & Range

During these geologic events triggered by Pacific/North American plate convergence thousands of feet of thickness of pebble and cobble conglomerate and arkose were tilted and folded and interbedded with volcanic flows and ash beds. Dynathermal methamorphic-tectonic events caused the sedimentary beds to fold into a major anticline/syncline several miles long. A second thermal contact metamorphism episode emplaced a biotite bearing pluton in place of chlorite in at least two large areas.

Palezoic and mesozoic sections are significant also in the development of ore bodies. In brief they are limestone, lime-pebble conglomerates and pelitic clastic members of the Bisbee Group. It is not known how much of these extend under the quaternary alluvium in the lower areas of the range.

A very unique welded volcanic breccia underlies about four/fifth's of the sixteen square mile volcanic field. It is a complex intrusive mass of dark rocks with aphanitic ground mass and phenocrysts or xenolithic fragments. It is intruded by small plugs and dikes of basalt and andisite. The breccia has three main types classified by color of groundmass: green, purple and white. The green matrix breccia makes up most of the east area and can be found through the adjoining basin. Fragments include most of the igneous country rock as well as limestone, shale, and quartzite. Historically it has been mined along contacts. The breccias originated as a complex mass of fluidized fragments. The rising mass was a violently penetrating throat of an eruption vent of great size. The breccia terrain of the Dos Cabezas is the largest of its kind in the world.

After this violent episode a 12 million year quite period followed, then in mid-tertiary magmatic events stirred again with four dike groups and a stock nine miles long (Plagioclase Andesite "Turkey Tracks"), the unit has 33 dikes which intruded into the basin's edge trending west-northwest. Potassium-Argon Dating dated them at 35.2 +/- 3.1 million years. There are also 25 more dikes making up a separate swarm 13 miles long, made of hornblende andesite porphyry. Several other major contributors to hydrothermal mineralization of basin sediments are a large number of dacite porphyry sills and dikes and several small stocks of the same unit, the granodiorite stock called the nine-mile stock hosting many dikes quartz veins and pegmatites (29 million years).

The basin can be divided into four stratigraphic units:

1. The Gila Conglomerates, making up the clastic west edge on the basin edge;
2. Drainage washes more linear on the upper reaches of their origin and meandering as they enter the inner-basin;
3. Eolian dunes which vary in color and size depending on the source area;
4. Fine grain lake deposits occurring in lower areas.

PRECIOUS MINERAL ORIGIN & DEPOSITION IN BASIN SEDIMENTS

The following list of geologic features provides ample proof of favorable mineral deposition.

- Bordering collapsed caldera(s)/associated ring dikes;
- Accumulation of pyroclastic material including sublimates containing gold;
- Soil profiles showing epigenic deposition (discussed below in greater detail);
- Volcanic vents and marginal fault systems;
- Faulted and deformed sediments of paleozoic and mesozoic age;
- Geochemical, geological, and geophysical studies add confirmation to the district indication of a major buried intrusion (mineral bearing porphyry) between the Dos Cabezas and the Fisher Hills volcanics.

The mineral wealth of the basin has been known for almost 100 years. Many successful load-mining ventures have taken place in the Dos Cabezas Mountains for both precious and base metals. However, the complexity and fineness of the sediments has insured that they would only be given up when an understanding of the mineralogy meets with the technology to concentrate and extract the metals. With a great deal of tenacity and the aid of groups such as ASAT, the author believes that the key to the elusive treasures has been acquired.

Epigenic Gold formed at or near the surface. Many of the areas along the faults' volcanic vents shallow intrusions of the basin have had recent volcanic activity. The basin has subsided as the gold bearing streams drain from the mountains. An inter-basin lake was oligomicitic. Possibly due to hot springs and under water vents expelling fold bearing gases. Examination of the concentrate revealed gold had precipitated inside the shells of cephalopods and placeopods on the soft tissue parts from gold in solution, indicating an oligomicitic lake. ASAT has an excellent article on this occurrence (**Captured in Passing, Chapter Seven. "Epigenic Gold in Dry Lake Beds", pg.7**). They also discovered gold lined mollusk in the concentrate confirming our theory. ASAT went on to explain how gold will precipitate on gelatinous surfaces as a reducing agent.

Gold Tubes were identified by a high-powered microscope, and explained by Walter Lashley (Director, ASAT) as to their origin and characteristics. The technical paper on the Gila Conglomerate (**Captured in Passing, Chapter One. "Tubes of Gold", pg. 5**) explained the phenomenon. The soil from the Gila Conglomerate was similar to the prospect area and ran approximately 0.50 ounces-per-ton by fire assay using the custom formula. Concentrate from GKFNI's mineral claim contained the needle-like tubes, normal looking flat nuggets and iron stained nuggets. In the magnetic fraction clusters of magnetite surround a red oxide with gold particles in the cluster.

The source of the tubes was assumed to be the clays trapping by adsorption (ionic bond). After much study of their crystallography and surface emission micrographs, the

conclusion was that the gold was a psuedomorph having a purity of over 900 fine. Thus, an epigenic deposit has been concluded on the prospect area.

MICROSCOPIC EVALUATION

Basically all the noble metals of the basin sediments are microscopic and in some way or another, bound to clays, cemented to other grains or still entrapped in their original host rock.

The only way to determine the nature of the ore is by the use of a powerful microscope (100 magnification or more). Only then are the modes of deposition and method of recovery learned.

Observations of gold size, crystal shape surface stains and color have revealed the geologic history of the ores. Again, help from ASAT and an adequate background in crystallography made interpretation straightforward. Examples of gold recovered from GKFNI's concentrates are typical of the western portion of the San Simon Basin (with the exception of an unusually high concentration of metallic mercury).

Our microscope is equipped to adopt a video camera with a monitor and printer capable of producing high quality videos and photos of the many rare and beautiful minerals. At the present that equipment has not been installed, therefore, a written description will have to suffice.

The gold occurs as crystals, wires, flat sheet-like clusters, different colorations, striated, as various minerals of gold (to be discussed later), deposited on or in organic life and any gelatinous material, also incorporated in minerals common to sulfide deposits.

Following is a detailed description of these:

- Euhedral isometric crystals mostly octahedrons ranging in sizes of 10 to about 50 microns form in nature where the sediments are unconsolidated earthy. The gold bearing solution has a pH from 5 to 8. The accompanying minerals will not have iron or magnesium surface straining;
- Wire gold crystals (tubes) up to a millimeter in size are derived from horizons containing cementing material in quartz pebble conglomerates. The cement must be completely dissolved to recover this gold. Impact milling alone has proven ineffective, however, a scrubber with emphasis on slurry collision designed by Richard Bradshaw has been successful in breaking down the cements and the ionic bonds of the clay bound gold;
- Flat nuggets ranging form 50 microns to nearly one millimeter are common. Dr. Sid Williams, a renowned expert on gold in the southwestern desert Basin and Range Province, described the gold flakes from the concentrates as follow: "The freed gold flakes are all of a high degree of fineness and are of similar size and character. In some samples the rusty nuggets and other evidence that the gold was deposited as a supergene mineral on coating of

goethitic-strained nontronite which occur on the surface of fragments of massive microcrystaline iron oxides.";

- Gold deposited around organic material and within the soft gelatinous parts of mollusks. The first gold lined mollusk was found by Walter Lashley of ASAT. Since then the author has encountered both cephalopod and placepod which acted as a reducing agent to precipitate gold, iron and manganese minerals from mineral bearing surface waters;
- Sublimates from volcanic and fumarolic processes are concentrated in the magnetic fraction of the concentrates. The author has developed two stages of magnetic separation using different gauss intensity. The sublimates report to the second stronger separator. A separate pre-leach and leach phase is used on these.

In summary, microscopic study and evaluation must be completed before the construction of a processing system. In simple terms, you must know what you are dealing with before you can successfully extract these noble metals.

As part of the on-going economic study, the author is currently determining if other mineral known to carry gold, silver and PMGs are present in the ore. The specific gravity of many of these is in the range of 5 to 9. Therefore, must be considered when processing concentrate.

- Gold minerals include:

1. **Montbrayite (Au_2Te_3):** A hydrothermal mineral found with chalcopyrite;
2. **Sylvanite ($(Au, Ag)Te_4$):** A low temperate hydrothermal occurrence;
3. **Calaverite ($AuTe_2$):** Vein deposited, often with pyrite derived from alteration of magnetite and associated with other sulfides of gold and sphallerite;
4. **Cuproauride (AuCu):** Found with copper of any form with chromite, niccolite;
5. **Maldonite (AuBi):** A hypogene mineral usually accompanied by pyrite, marcasite, and sphallerite;
6. **Aurostibite ($AuSb_2$):** A hypogene mineral formed as water cools below 150 degrees Celsius. Accompanied by stibite, pyrite, arsenopyrite and marcasite.
7. **Electrum (Au, Ag):** Gold and Platinum Group Metals (PGMs) are commonly found in many minerals of sulfides, sulfosalts, arsenides and antimonides. Our investigation of this potential is on going through microscopic study of high-grade concentrates.

- Gold in base metal tellurides and selenides include:

1. **Hessite (Ag2Te)**
2. **Altaite (PbTe)**

3. **Melonite (NiTe2)**
4. **Clausthalite (PbSe)**

ORE PROCESSING

Numerous tests have demonstrated that gravity concentration and screening can reduce head ore to concentrate by a ratio of 20:1 in a rough concentrate, and then upgraded to 100:1 as a finish concentrate.

Hydrogenous scrubbers designed by Richard Bradshaw are used for intense scrubbing to liberate the values from cementing agents and ionic clay bonds.

1 ton head ore

↓ ↘ **up to 5% magnetic**

100 pounds rough concentrate

↓

20 pounds finish concentrate

The finish concentrate and magnetic fraction will be found and leached separately. The leach method designed by ASAT (Saturated Saline Nitric Acid solution) is environmentally safe, simple and relatively inexpensive leach alternative. It is the best method the author has encountered for ore with both oxides and sulfides. Joey Keeper prepared a report on the meeting with ASAT expands on the process.

Attested to this 12th day of May, 1998

Michael Bradshaw, Geological Engineer

ASAT – Silver City, New Mexico 4/30/98

Today Mike Bradshaw, a geological technician, and myself met with Walter Lashley, the Director of Research for the American Society for Applied Technology (ASAT), in Silver City, New Mexico. Many aspects of the Gold Gulch Mineralized Alluvium property was discussed, including a possible leaching system for the extraction on the precious metals, the geology that may have formed the deposit, as well as characteristics of gold and other minerals that may be found within the deposit. Mr. Lashley offered advice free of charge as ASAT is a non-profit scientific foundation; however, the foundation does charge nominal amounts for quantitative techniques used to determine mineral amounts (e.g. fire assay), brochures, and videos.

After explaining to Mr. Lashley previous findings of GKFNI on the property in question, he critiqued the mechanical process used in the test runs to "liberate" the precious metals. Although Mr. Lashley agreed with the general principle behind GKFNI's theories on the deposit (i.e. wash the ore very well, with lots of force so as to liberate the precious metals from the silicates), Mr. Lashley suggested that a few changes be made to the testing system. These are listed below:

- **Determine the pH of the soil**. Mr. Lashley explained that the precious metals may be "locked-up" due to the pH level. In other words, if the pH of the soil is alkaline, introduce an acidic compound in the washing system to help "liberate" the precious metals. The same is true if the soil is found to be acidic. If the soil is relatively neutral, than tests should be run changing the pH above and below seven. The pH of the soil will be determined by GKFNI in the next few days in order to determine what reagents to add to the tests.
- **Sodium Carbonate as a Cleaning Agent**. Previously GKFNI was using a biodegradable soap to help "clean" the clays for the extraction process. Mr. Lashley explained how this soap creates a film on the gold and other precious metals, which in effect decreases the chances of a higher recovery. He suggested that for our next set of tests we use sodium carbonate as a cleaning agent and that sodium triphosphate would work as well. GKFNI will use the first product mentioned in it's next set of tests.

As for the leaching circuit, Mr. Lashley suggested that ASAT run a quantitative test on some concentrates that is prepared using the above suggestions. An SSN test would be completed on the concentrate to determine if that particular leaching method would work. An SSN test (Saturated saline/nitric acid solution) is a leach using an acidic solution to extract the precious metals based at a certain cell potential. This method has many benefits, including: simplicity, relatively inexpensiveness, and it is environmentally friendly. In fact, this leaching method has been endorsed by the State of Washington as an environmentally friendly alternative to leaching precious metals.

An alternate method recommended by Mr. Lashley is to use an Elutriation tower as an extraction method. GKFNI has previously endorsed this philosophy as a method to enrich the concentrate, by classifying the clays. JB Recovery Systems has, on a small scale, successfully been able to extract the precious metals from the Gold Gulch property once it has been prepared with the washing method described above. The problem encountered by GKFNI with the elutriation method of JB Recovery Systems is the method's durability in a production setting. Perhaps ASAT's Elutriation tower may work at a production level, further investigation is required on the subject.

During the next few days GKFNI, with the help of Mike Bradshaw, will prepare approximately a dozen samples from the Gold Gulch property using the washing method, with changes made to the pH determination and cleaning agent. GKFNI will then pursue Mr. Lashley's suggestion that an SSN test be completed on the samples in order to determine if that particular leaching system will prove economical results on a production basis.

Joe Keeper, B. Comm. (Honours)

Verification Sampling and Testing Program on Properties in Cochise County, Arizona

Conducted for
Au Consolidated, Inc.

By: James A. Coates P.E.

June 1,1998

Purpose

It is the purpose of this document to report verifiable and certifiable results of metallurgical testing on samples gathered by the author from properties controlled by AU Consolidated, located in Cochise County, Arizona.

Background

AU Consolidated controls private, state and federal land situated in Cochise County, Arizona. Samples taken by AU Consolidated and others indicate that gold mineralization is present in economic concentration over a large area with undefined boundaries. At the time of writing this report, various entities have entered into agreements with AU consolidated with the intent of independently evaluating reserves and, if satisfied, developing mines in the area. None of these entities has begun commercial production.

The nature of the mineralization precludes the use of recovery technologies commonly associated with placer type deposits. Many extractive metallurgical tests have been conducted on ores from the AU Consolidated properties but to date no definitive results have been successfully implemented on a commercial scale. Au Consolidated has demonstrated that hydraulic attrition followed by gravity concentration using a "Cosmos" concentrator can successfully recover a significant portion of the fine gold from the property.

The author was asked to independently sample and witness a bulk metallurgical test on ore recovered from two parcels of fee simple land held by AU Consolidated.

Samples

Six bulk samples were excavated by a tractor-mounted backhoe fitted with a one-foot wide trenching bucket. The backhoe was able to dig to a depth of ten feet.. The bucket was inspected for contamination prior to excavating each sample.

Three of the samples were taken along a northwest to southeast diagonal across the SW¼ of Section 25 Township 12 South Range 47 West.. The remaining three samples were taken from the SW¼ of Section 29 Township 12 South Range 47 West.

At each sample location, approximately 1,000 pounds of material was excavated by backhoe to a depth of ten-feet. Samples 1 through 3 were taken from the SW¼ of Section 25, Township 12S, Range 27E in Cochise County Arizona.

Sample #1 - This sample was taken by expanding an existing sample trench located near station 1700N, 1600E excavated for L.S. Capital. Material at the top of the trench is comprised mostly

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of brown sandy soil. A minor amount of gravel and some cobbles were present. Near the bottom of the trench the color changed to a red brown similar in appearance to weathered hematite. Gravels and cobbles were the predominant materials at the bottom of the trench. Thin, discontinuous bands of alkali were noted in the first six feet of the trench.

Sample #2 - This sample was taken from a previously unsampled site northwest of Sample #1. The red-brown, sandy surface was free of large cobbles and boulders. Excavation of the trench was extremely difficult through the first four feet of compacted material. Below four feet, the proportion of coarse, red-colored gravels increased significantly. Digging became easier below the hard surface layer.

Sample #3 - Taken approximately 1,200 feet southeast of sample #1 from an area exhibiting a brown color and strewn with gravel and cobbles. The site appears to be in a tongue or bifurcation of a shallow surface drainage. The surface elevation is lower than site #1. Down to a depth of eight feet, there was no change in color. The fine material looked like soil. Starting at a depth of eight feet, the color changed to a dark red-brown. It is interesting to note that that rocks and cobbles were present on the surface but not in the interval immediately below the surface to the eight-foot depth where the abrupt color change occurred.

Samples 4 through 6 were taken from the SW¼ of Section 29, Township 12S, Range 27E, also in Cochise County, Arizona.

Sample #4 - This sample was taken on the northwest flood plane of Railroad Wash about one quarter mile north of the point where I-10 crosses the drainage. The site is on extremely flat terrain located about 100 feet from the toe of a terrace that appears to be the boundary of the flood plain. Excavation of the sample was rapid through the fine brown silt composing the sample. No sands, gravels or cobbles were encountered at any elevation in the trench.

Sample #5 - Taken on a finger of uneroded flood plain southeast of Railroad Wash the first seven feet of this sample were identical in apparent composition, structure and color with Sample #4. At a depth of about seven feet, red sand, gravels and cobbles were encountered. White stains indicated the possible presence of carbonates or secondary sulfates such as caliche and gypsum.

Sample #6 - This sample was taken atop of the southwest bank of Railroad Wash on the terrace above the flood plain west of the property operated by George Keeper. The surface at the site was comprised of a red-brown sandy soil. Gravels and cobbles were encountered at about three feet demonstrating a definite change in texture.

All sample materials were loaded into three pickup trucks, covered with plastic, and transported to the Black Canyon Mill for processing.

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Milling

The ore was transported to the Black Canyon Mill, a custom processing facility located in Black Canyon, Arizona. The mill is an open-air facility consisting of a feed hopper from which ore is conveyed to a crusher and passed through a screen deck for classification. In the case of the samples taken by the author, the ore passed directly through the crusher and screens and was fed to a Stuttenroth rotary impact mill where it was reduced to a minus 20-mesh product. The discharge from the Stuttenroth passed through a wet magnetic separator. Magnetic concentrates were collected as a separate sample for further analysis. The demagnetized slurry was fed to two reciprocating tables set in series. The concentrate and middlings from the first table were fed to the second table while the rejects from the first table were dumped into a flume which transported the material to a custom bowl concentrator. The concentrate and middlings from the second table were collected as separate samples.

Each set of three samples was combined into a single run. Samples 1,2 and 3, totaling approximately 3,800 pounds, comprised one mill run with samples 4, 5, and 6 totaling approximately 2,900 pounds, comprising the other.

Gravity concentrates and middlings from the second table along with magnetic concentrates and bowl concentrates were transported by the author to the RDI laboratory in Wheatridge, Colorado. Each sample was subjected to a cyanide leach for 48 hours. The leach solutions were analyzed by Cone Geochemical for both gold and silver using spectrographic methods. The leach residues were fire assayed to determine the percent extraction obtained by leaching the ore.

The gold assay values reported by RDI are listed in Table 1. Silver values are not included in this report but are included in the RDI report. The values reported in Table 1 indicate that the samples of ore from Section 25 had a total head grade of 0.175 grams per ton (0.005 troy ounces per ton). The average head grade of samples taken from Section 29 was 0.926 grams per ton (0.0297 troy ounces per ton). It must be noted that neither grade includes the values in the magnetic concentrates. These values, though small, will result in an upward adjustment of the grade for both the Section 25 and the Section 25 samples.

Further review of the results in the table indicate that nearly 37% of the gold was not captured in the gravity circuit at the Black Canyon Mill. Thus it is imperative that a highly efficient gravity concentration system be employed in any plant designed to process this ore. The Cosmos concentrator, acting like an infinitely long Deister or Wilfley table, should capture a higher percentage of the material than the tables used at the Black Canyon Mill.

Conclusion

It is the conclusion of the author that Section 29 contains, at a minimum, 1.00 gram of gold per short ton of ore. This conclusion is based on the assay results from certified laboratories on

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samples collected by the author and processed through the Black Canyon custom mill. However, based on prior extensive tests by the author on ore from the Au Consolidated properties it can be demonstrated that hydraulic scrubbing increases the gold recovery by a minimum of 70%. Since the ore was not scrubbed at the Black Canyon Mill, the author can unequivocally state that the mill losses were very substantial. Further, it is the author's opinion that the low efficiency of the Black Canyon Mill contributed to the loss of gold. Though a precise estimate of the gold loss cannot be made, 75% would be a reasonable estimate.

Despite the probable high losses at the Black Canyon Mill, it is evident that the gold contained in ore from the Au Consolidated properties may be economically recovered using efficient gravity concentration methods.

Certification

I , James A. Coates certify that the foregoing report has been prepared using accepted engineering principles and practices. It is further attested that all information is factual and has been derived from observations, calculations and assays performed by the author or laboratories and consultants known by the author to be reliable and reputable.

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Colorado 16440

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Table 1 Head Analyses of Gold Gulch Samples			
No.	Sample Description	Head Assays, g/T	
		Au	Ag
1.	T2 #1 Sec 29 (24.5 Kg)	13.95	12.3
2.	Conc Sec 29 (50.25 Kg)	1.27	24.3
3.	T1 #1 Sec 25 (22.5 Kg)	0.51	3.09
4.	Conc Sec 29 (40.25 Kg)	0.89	30.2
5.	T1 #1 Sec 29 (18.50 Kg)	0.10	<1.7
6.	T2 #1 Sec 29 (9.5 Kg)	10.45	19.9
7.	Conc Sec 25 (56.75 Kg)	0.41	9.3
8.	T2 #2 Sec 25 (41.00 Kg)	0.07	<1.7
9.	Conc Sec 25 (39.25 Kg)	1.06	10.6
10.	T2 #2 Sec 29 (9.75 Kg)	0.34	2.7
11.	T2 #1 Sec 25 (21.75 Kg)	0.10	<1.7
12.	Mag Sec 29	0.55	6.2
13.	Mag Sec 25 (19.75 Kg)	0.27	6.2
14.	Mag Sec 25 (10.5 Kg)	0.07	2.1

Table 2
Bottle Roll Cyanide Leach Test Results for Gold Gulch Samples
(40% Solids, pH>10.5, 4 g/L NaCN, 48 hr Leaches)

No.	Sample Description	Leach Liquor			Residue			Extraction %		Cal. Head g/T		Reagent Consumption, Kg/T	
		Vol. Liters	Assay ppm		Wt. Kg	Assay ppm		Au	Ag	Au	Ag	Lime	NaCN
			Au	Ag		Au	Ag						
1.	T2 # 1 Sec 29 (24.5 Kg)	1.4896	14.0	14.1	0.9932	0.154	1.8	99.3	92.2	21.15	22.8	1.8	0.52
2.	Conc Sec 29 (50.25 Kg)	1.5084	0.8	17.1	0.9937	0.018	2.4	98.5	91.5	1.23	28.3	3.7	0.09
3.	T1 # 1 Sec 25 (22.5 Kg)	1.4863	1.95	1.94	0.9991	0.036	0.4	98.8	87.8	2.94	3.3	1.6	0.30
4.	Conc Sec 29 (40.25 Kg)	1.4930	0.58	15.3	0.9944	0.016	2.0	98.2	92.0	0.89	25.0	4.4	0.1
5.	T1 # 1 Sec 29 (18.50 Kg)	1.4918	0.04	0.94	0.9945	0.003	0.2	95.2	87.6	0.06	1.6	2.4	0.1
6.	T2 # 1 Sec 29 (9.5 Kg)	1.5095	5.65	6.38	0.9973	0.096	0.8	98.9	92.3	8.65	10.5	1.5	0.38
7.	Conc Sec 25 (56.75 Kg)	1.4861	0.41	5.51	0.9943	0.009	0.6	98.6	93.2	0.62	8.8	3.9	0.06
8.	T2 # 2 Sec 25 (41.00 Kg)	1.5088	0.08	0.52	1.0023	0.001	<0.2	99.2	79.6	0.12	0.98	1.9	0.15
9.	Conc Sec 25 (39.25 Kg)	1.5108	0.37	5.85	0.9947	0.017	0.8	97.1	91.7	0.58	9.7	3.6	0.08
10.	T2 # 2 Sec 29 (9.75 Kg)	1.5133	0.24	1.77	0.9947	0.017	0.4	95.6	87.1	0.38	3.1	3.4	0.19
11.	T2 # 1 Sec 25 (21.75 Kg)	1.5093	0.05	0.79	0.9928	0.010	0.3	88.4	80.0	0.086	1.5	2.2	0.26
12.	Mag Sec 29	1.5184	0.22	3.50	1.0060	0.015	0.4	95.7	93.0	0.35	5.7	8.9	2.70
13.	Mag Sec 25 (19.75 Kg)	1.5178	0.22	2.95	0.9324	0.012	0.5	96.8	90.6	0.37	5.3	9.6	1.44
14.	Mag Sec 25 (10.5 Kg)	1.5225	0.02	1.56	0.9904	0.002	<0.2	93.9	92.3	0.03	2.6	9.0	0.40

Table Concentrate

Sample Set	Sample Weight (lbs)	Concentrate Produced (kg)	Concentrate Produced (lbs)	Cocentration Ratio (unitless)	Gold Assay Values (ppm)	Gold Assay Values (g/ton)	Head Grade (g/ton)
Section 25	3800	22.5	49.60	76.61	2.94	2.67	0.035
Section 29	2900	24.5	54.01		21.15	19.19	
		18.5	40.79		8.65	7.85	
			94.80	30.59	15.77	14.31	0.516

Table Middlings

Sample Set	Sample Weight (lbs)	Concentrate Produced (kg)	Concentrate Produced (lbs)	Cocentration Ratio (unitless)	Gold Assay Values (ppm)	Gold Assay Values (g/ton)	Head Grade (g/ton)
Section 25	3800	41.00	90.39	42.04	0.12	0.11	0.003
Section 29	2900	9.75	21.50	134.91	0.38	0.34	0.003

Cone Concentrates

Sample Set	Sample Weight (lbs)	Concentrate Produced (kg)	Concentrate Produced (lbs)	Cocentration Ratio (unitless)	Gold Assay Values (ppm)	Gold Assay Values (g/ton)	Head Grade (g/ton)
Section 25	3800	56.75	125.11		0.62		
		39.25	86.53		0.58		
			211.64	17.95	0.60	0.55	0.030
Section 29	2900	40.25	88.74		0.89		
		50.25	110.78		1.23		
			199.52	14.54	1.08	0.98	0.067

Tailings

Sample Set	Sample Weight (lbs)	Tailings (kg)	Tailings (lbs)	Cocentration Ratio (unitless)	Gold Assay Values (ppm)	Gold Assay Values (g/ton)	Head Grade (g/ton)
Section 25	3800	1701	3750	1.01	0.12	0.11	0.107
Section 29	2900	1297	2858.71	1.01	0.38	0.34	0.340

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Gold Gulch Project
Engineering Report
Prepared for
GKFNI

By
James A. Coates P.E.
Colorado 16440

November 14, 1997

Summary

Analysis of large samples taken by GKFNI, witnessed by the author, and analyzed by an independent laboratory show that the Gold Gulch Project contains substantial recoverable reserves of gold, silver, and mercury. Reserves on the 160-acre parcel controlled by GKFNI are summarized in Table 1.

Table 1
Recoverable Reserves by Category

Category	Gold (troy ounces)	Silver (troy ounces)	Mercury (pounds)
Proven	720,000	1,400,000	1,490,000
Probable	360,000	700,000	740,000
Inferred	2,510,000	4,900,000	5,220,000
Total	3,590,000	7,000,000	7,450,000

It is the author's opinion that the stratigraphic uniformity and the lateral extent of the deposit suggest that the ultimate reserves may be far greater than those listed in Table 1.

Physiography and Geology

The project area, known as Gold Gulch, is situated in Cochise County, Arizona approximately 15 miles northeast of the town of Willcox along Interstate 10, in Range 27 East, Township 12 South. Though the deposit appears to extend over several square miles, this report is limited to discussing the results of tests conducted on samples taken from a parcel of private land in Section 28 Range 27 East, Township 12 South.

The project is situated on a nearly flat alluvial valley extending over several square miles. The Dos Cabezas Mountains and the Morenci Mining District to the north form the natural boundaries of the deposit. The surface topography is characterized by gently rolling hills crossed by intermittent streams that have cut moderately deep channels through the property. These channels range in depth from three to thirty-feet. Railroad Wash and Gold Gulch are the most significant drainages in the immediate project area.

The geology, which appears to be quite uniform over the entire project area and for many miles beyond, is best described as unconsolidated alluvial valley fill. Sediments exposed in Railroad Wash show the deposit to be flat lying with well-classified faces changes ranging from boulders (rocks > 256 mm) to clays. The high degree of classification and

the size range of the constituent material indicate that the sediments were deposited over a long period of time during which the flow regime changed cyclically between high and low energy. The larger material (boulders and cobbles) range in chemical composition from quartz to basalt. No quartz examined by the author had inclusions of free metals or sulfides. Some mafic material appeared to contain phenocrysts that had been leached out. The clay fraction of the sediments is reddish-brown in color and contains a high percentage of magnetite, hematite and pyrolusite. Both biotite and muscovite are present in the sediments as small platelets. Free gold and mercury are present but difficult to observe without the aide of a microscope.

Mineralization

Gold, silver and mercury are present in the ore as free metals and amalgams. The most recent tests indicate that the particles of gold and beads of mercury range in size from sub-micron to about 0.5 mm. Though no rigorous size analysis has yet been done, leach tests on screened fine material indicate that a significant portion of the gold occurs as sub-micron particles.

The gold at Gold Gulch appears to be bimodal in depositional characteristics. Particles larger than approximately 100 microns have a classic nugget appearance while the smaller particles are often crystalline in appearance. The larger particles were probably deposited as a placer while the smaller particles are probably the result of chemical deposition. The existence of hot-water springs in the immediate vicinity of the project site and faults adjacent to the mountains suggest the possibility of mezothermal fluid transport of gold.

Mercury is present in the form a small beads of free metal. Cinnabar and other mercury containing minerals appear to be absent.

Microscopic examination of the black sands indicates that hematite and magnetite comprise approximately five percent of the Gold Gulch ore.

Base metal minerals of copper, zinc and bismuth are present as small grains of chalcopyrite, sphalerite and bismuthinite respectively.

Sampling and Testing

The Gold Gulch project area has been extensively sampled by many people who report excellent results. However, the author cannot attest to the accuracy of the cited tests or the reliability of the assay results. Samples as large as twenty tons have been taken from the project site and processed through gravel plants and other types of small mills. Unfortunately, very few of these tests have been documented or corroborated by outside laboratories. Additionally, the possibility of sample contamination can not be eliminated since most of the test facilities had previously processed gold ore or placer materials.

GKFNI contracted with the author to conduct supervised tests and independent analyses of samples taken from Gold Gulch to confirm or refute the presence of economic mineralization. In response, the author traveled to the project site and witnessed the excavation of twelve sample trenches. Trenches were spaced approximately 440 feet apart in a rectangular pattern covering the 160-acre project site. Each trench was excavated to a depth of approximately 15 feet by a tractor-mounted backhoe. Approximately 1,000 pounds of material was removed from each trench and sampled. In addition to field tests conducted on the trench sample material, discussed in the author's prior report, sample splits ranging in weight from 50 to 70 pounds were placed in thoroughly cleaned or new 5-gallon polyethylene buckets for subsequent analyses.

The results of the field test were disappointing, yielding only small quantities of visible gold. The test demonstrated that gravity concentration is only marginally effective with the Gold Gulch ore. Grab samples of the tailings material from the field test unit were fire assayed with excellent results. The high fire assay values suggested that the precious metals had passed through the concentrator and thus were contained in the small size fractions of the ore.

At the suggestion of the author, GKFNI agreed to conduct a cyanide leach on the ore to determine the total recoverable gold and silver in the ore. A small-scale leach system was built for the test. The unit was constructed of virgin materials free of contamination and consisted of a partially submerged trommel with a 40-mesh screen followed by a hydraulic scrubber. A submersible pump was placed in the trommel tank. The discharge of the pump was split into two streams, each of which was routed to opposite sides of a polyethylene scrubber tank. The counter-opposing streams cleaned the small, entrained particles and provided sufficient energy to break the weak electrostatic bonds between the extremely small precious metal particles and the clays.

Six of the twelve trench samples were processed through the system. Each sample was screened and agitated for approximately 2 hours. At the end of the agitation, four samples of the slurry were extracted. Two of the samples were sent to laboratories in Arizona and Colorado for fire assays. The third sample was brought to a pH of 11 by the addition of sodium hydroxide. After adjusting the pH, sodium cyanide was added until a concentration, equivalent to one pound of cyanide per ton of ore, was achieved. These samples were sent to the Colorado laboratory for an ICP analysis. Prior to assaying, the bottles were agitated for six hours at ambient temperature. However, the slurry densities of the samples were quite high limiting the effectiveness of the shaker table. Despite the lack of proper agitation, the laboratory results were very revealing. As expected, the fire assays (Appendix A) showed virtually no gold or silver. The cyanide leach results (Appendix B) showed very significant values of gold, silver and mercury. The ICP mercury assay was requested because the results of a neutron activation analysis of the field test tailings indicated that the ore contained approximately 8000 ppm mercury.

The low fire assay values are a result of the extremely high mercury concentration. If the ratio of mercury to gold is small, the effect of mercury on a fire assay is insignificant.

However, if the ratio of mercury to gold is high, the gold may be amalgamated in the mercury and be virtually impossible to fire assay.

Table 2
Ore Grade calculations

Gold ICP Analysis												
Test		Pulp	Sample	ICP Solution Assay			Calculated Pulp Assay				Ore Grade	
Sequence	Pit	Weight	Volume	Au	Ag	Hg	Au	Au	Au	-40 Mesh	Au	Au
	(#)	(gr)	(ml)	(ppm)	(ppm)	(ppm)	(ppm)	(ozt)	(gr/ton)	(%)	(gr/ton)	(ozt)
1	8	37.42	250.0	3.33	5.37		20.92	0.610	18.974	33.471	6.351	0.204
2	9	11.19	250.0	1.61	1.20		35.33	1.030	32.046	12.705	4.071	0.131
3	4	27.61	250.0	9.09	5.22		78.67	2.295	71.368	30.903	22.055	0.709
4	7	58.52	480.0	1.82	2.47	42.0	14.20	0.414	12.882	27.459	3.537	0.114
5	6	64.74	480.0	2.58	4.73	49.9	18.10	0.528	16.417	23.929	3.928	0.126
6	10	44.27	250.0	2.63	7.79	121.0	13.80	0.403	12.519	47.596	5.959	0.192
Totals		243.8	1960.0									
Averages											4.769	0.153
Std Dev											1.287	0.041

Silver ICP Analysis												
Test		Pulp	Sample	ICP Solution Assay			Calculated Pulp Assay				Ore Grade	
Sequence	Pit	Weight	Volume	Au	Ag	Hg	Ag	Ag	Ag	-40 Mesh	Ag	Ag
	(#)	(gr)	(ml)	(ppm)	(ppm)	(ppm)	(ppm)	(ozt)	(gr/ton)	(%)	(gr/ton)	(ozt)
1	8	37.42	250.0	3.33	5.37		33.73	0.984	30.598	33.471	10.241	0.329
2	9	11.19	250.0	1.61	1.20		26.33	0.768	23.885	12.705	3.035	0.098
3	4	27.61	250.0	9.09	5.22		45.18	1.318	40.984	30.903	12.665	0.407
4	7	58.52	480.0	1.82	2.47	42.0	19.27	0.562	17.483	27.459	4.801	0.154
5	6	64.74	480.0	2.58	4.73	49.9	33.18	0.968	30.098	23.929	7.202	0.232
6	10	44.27	250.0	2.63	7.79	121.0	40.88	1.192	37.081	47.596	17.649	0.567
Totals		243.8	1960.0									
Averages											9.265	0.298
Std Dev											5.400	0.174

Mercury ICP Analysis												
Test		Pulp	Sample	ICP Solution Assay			Calculated Pulp Assay				Ore Grade	
Sequence	Pit	Weight	Volume	Au	Ag	Hg	Hg	Hg	Hg	-40 Mesh	Hg	Hg
	(#)	(gr)	(ml)	(ppm)	(ppm)	(ppm)	(ppm)	(ozt)	(gr/ton)	(%)	(gr/ton)	(ozt)
1	8	37.42	250.0	3.33	5.37					33.471		
2	9	11.19	250.0	1.61	1.20					12.705		
3	4	27.61	250.0	9.09	5.22					30.903		
4	7	58.52	480.0	1.82	2.47	42.0	327.7	9.56	297.28	27.459	81.63	2.624
5	6	64.74	480.0	2.58	4.73	49.9	350.0	10.21	317.52	23.929	75.98	2.443
6	10	44.27	250.0	2.63	7.79	121.0	634.9	18.52	575.97	47.596	274.14	8.814
Totals		243.8	1960.0									
Averages											143.92	4.63
Std Dev											112.81	3.63

The remainder of the slurry from each trench sample was carefully concentrated in a vortex ellutriator. Significant quantities of metallic gold and mercury were observed in the concentrate.

The visual confirmation of gold and mercury in the ore coupled with the ICP analyses unequivocally refute the fire assay results. The ore grade was; therefore, calculated from the ICP solution assays. The data used to calculate the ore grades and the results of the calculations are shown in Table 2. The gold, silver, and mercury grades are calculated to be 0.153, 0.298, and 4.63 troy ounces per ton respectively.

Recovery

Gravity concentration of the Gold Gulch ore is only marginally effective due to the small size of the precious metal particles. Tests using the Knelson concentrator and a concentrator manufactured by JB Recovery Systems recovered only a small fraction of the contained gold. The value of the gravity concentration tests was in visually confirming the presence of precious metals and mercury.

Leach tests on the ore conclusively demonstrate that gold, silver and mercury can be economically recovered using a closed circuit cyanide leach. The ore contains only minute quantities of cyanocides which means that the loss of cyanide to base metals is minimal. Once complexed with cyanide, the precious metals along with the mercury can be adsorbed onto activated charcoal. The loaded charcoal can be stripped and the resulting pregnant liquor processed electrochemically to recover the metal values.

Reserve Calculations

Proven, probable and inferred reserves were calculated over the extent of the 162.58 acres comprising the parcel of private land controlled by GKFNI. The reserve calculations are based solely on the bulk samples extracted by backhoe from twelve uniformly spaced sites over the Southeast ¼ of Section 28, Township 12 South, Range 28 East in Cochise County. Each bulk sample was extracted at an approximate depth depth of 15 feet below the surface. Ore grades are based on ICP assays of leach solutions. Tonnages were calculated based on a specific weight of 90 pounds per cubic foot of ore. Other individuals have historically used specific weights ranging from 92 to 95 pounds per cubic foot. The author has measured the bulk density of the ore from several samples and does not agree with these higher specific weights.

The definitions of the reserve classifications are as follows:

- **Proven** - Proven reserves are those extending from the ground surface to a depth of 15 feet. This is the interval over which physical samples were extracted and assayed.

- **Probable** – Probable reserves are those reserves ranging in depth from 15 to 22.5 feet below the surface. The uniformity of the deposit suggests a high degree of vertical continuity. Examination of sediments exposed to depths of approximately 30 feet along Railroad Wash reveal no discontinuity or change in physical characteristics of the strata below 15 feet.

- **Inferred** – Inferred reserves are those lying between 22.5 feet and the piezometric surface of the water table. The average depth to water in the numerous wells in the area is about 150 feet. For purposes of reserve estimation, the mining depth has been limited to 75 feet. There is very strong evidence that the formation is extremely uniform from the ground surface down to bedrock. In the center of the valley, depth to bedrock is estimated to be 1,500 feet.

The mine pit design is not known at the time of this report and therefore the highwalls of the pit are assumed to be vertical. In reality, this will not be the case. Highwalls will be laid back to the angle of repose. Laying back the highwalls will reduce the tonnage that can be removed from the mine. If the pit edge is ultimately congruent with the legal boundary the reserve loss would amount to approximately 14.3 percent. This loss could easily be made up by increasing the mining depth to 90.5 feet. At this revised depth, the bottom bench of the pit would still be 59.5 feet above the water level.

Conclusion

In conclusion, the Gold Gulch Property contains, at minimum, 720,000 recoverable ounces of gold along with 1,400,000 ounces of silver and 1,490,000 pounds of mercury. With no overburden, the unconsolidated materials can be mined without blasting, and processed without crushing or grinding. Costs of operation should be comparable to a sand and gravel excavation with the added cost of reagents.

If would be difficult to imagine a scenario in which this property could not be economically developed.

Certification

The methods and procedures used in the analysis of the ore and the calculation of reserves conform to accepted engineering standards. The author certifies that all calculations are based on factual data and are within acceptable limits of accuracy.

Attested to this 14th Day of November, 1997

James A. Coates P.E. - Colorado 16440

APPENDIX A

FIRE ASSAYS

Sample ID	Au	Sample Weight	Specific Gravity	Bottle Size
Units	oz/t	grams		
#4 SLURRY	-0.002	24.84	—	250ml
#6 SLURRY	-0.002	64.36	—	480ml
#7 SLURRY	-0.002	53.14	—	480ml
#8 COURSE	-0.002	430.37	—	bag
#8 MIDDLINGS	-0.002	119.62	1.67	250ml
#8 SLIMES	-0.002	45.23	—	250ml
#9 SLURRY	-0.002	9.28	—	250ml
#10 SLURRY	-0.002	46.49	—	250ml
#4 SLURRY DUP	IS	—	—	—
#6 SLURRY DUP	-0.002	—	—	—
#7 SLURRY DUP	-0.002	—	—	—
#8 COURSE DUP	-0.002	—	—	—
#8 MIDDLINGS DUP	-0.002	—	—	—
#8 SLIMES DUP	-0.002	—	—	—
#9 SLURRY DUP	IS	—	—	—
#10 SLURRY DUP	-0.002	—	—	—

(-) INDICATES BELOW DETECTION LIMITS
DUP INDICATES DUPLICATE ANALYSIS
IS INDICATES INSUFFICIENT SAMPLE
— INDICATES NO ANALYSIS PERFORMED

ACTLABS, Inc CERTIFICATE OF ANALYSIS, APPROVED BY: Chrott

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APPENDIX B

ICP SOLUTION ASSAYS

PACKAGE: Au, Ag and Hg

Certificate COA1211
Report Date: 11/12/97

Sample ID	Ag	Au	Hg	Sample Weight	Bottle Size
Units	ppm	ppm	ppm	grams	
#4 SLURRY	5.22	9.09	-2	27.61	250ml
#6 SLURRY	4.73	2.58	49.9	64.74	480ml
#7 SLURRY	2.47	1.82	42	58.52	480ml
#8 MIDDLINGS	not analyzed	not analyzed	not analyzed	not analyzed	250ml
#8 SLIMES	5.37	3.33	-2	37.42	250ml
#9 SLURRY	1.2	1.61	-2	11.19	250ml
#10 SLURRY	7.79	2.63	121	44.27	250ml

(-) INDICATES BELOW DETECTION LIMITS

ACTLABS, Inc. CERTIFICATE OF ANALYSIS, APPROVED BY: Chott

ACTLABS

ACTLABS, Inc.

Results and Invoice to:				CERTIFICATE	COA1211
					November 12, 1997
JIM COATES				P.O. / REFERENCE #	
1220 IVY LANE					
CASPER	WY	82609			

CERTIFICATE OF ANALYSIS

PACKAGE: Au, Ag and Hg

Christina M. Mott
Technical Director

11485 WEST I-70 FRONTAGE ROAD NORTH, WHEAT RIDGE, CO 80033 • TEL: 303-456-2981 • FAX: 303-425-5417

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RDi SM
Mineral Resource Development Inc.

June 18, 1998

Mr. Richard Bradshaw
Au Consolidated
P.O. Box 631
Wilcox, AZ 85644

RE: BOTTLE ROLL TESTING OF GOLD GULCH SAMPLES

Dear Mr. Bradshaw:

Resource Development, Inc (RDi) has completed the metallurgical testing of Gold Gulch samples at the request of Mr. Jim Coates. This memorandum summarizes the test procedure and results obtained in the study.

Fourteen 5-gallon buckets of slurry samples were received for testing. Each sample was filtered and dried. The dried sample was broken up, blended and 200-gram and 1 Kg representative samples were split out for head assay and bottle roll tests respectively. The 200-gram sample was pulverized and submitted for head assays. The head analyses, given in Table 1, indicate that gold values ranged from 0.07 g/T to 13.95 g/T and the silver values ranged from <1.7 g/T to 30.2 g/T.

The magnetic fractions were reground for 15 minutes in a ceramic ball mill at 50% solids. The bottle roll tests were performed at 40% solids, pH>10.8 and 4 g/T NaCN for 48 hours. Free NaCN and pH were periodically checked (i.e., 4,8 and 24 hours) and appropriate additions made. The test results, given in Table 2, indicate that gold extraction was generally greater than 90% and silver extraction was greater than 80%. The NaCN consumption was low (<0.5 Kg/T) for all sample except magnetic fractions.

Please let us know where to return the remaining samples. An invoice for the testing services is being sent under separate cover.

If you have any questions regarding these results, please feel free to call us.

Sincerely,

Deepak Malhotra

DM/jm

cc: Mr. Jim Coates

Table 2
Bottle Roll Cyanide Leach Test Results for Gold Gulch Samples
(40% Solids, pH>10.5, 4 g/L NaCN, 48 hr Leaches)

No.	Sample Description	Leach Liquor			Residue			Extraction %		Cal. Head g/T		Reagent Consumption, Kg/T	
		Vol. Liters	Assay ppm		Wt. Kg	Assay ppm		Au	Ag	Au	Ag	Lime	NaCN
			Au	Ag		Au	Ag						
1.	T2 # 1 Sec 29 (24.5 Kg)	1.4896	14.0	14.1	0.9932	0.154	1.8	99.3	92.2	21.15	22.8	1.8	0.52
2.	Conc Sec 29 (50.25 Kg)	1.5084	0.8	17.1	0.9937	0.018	2.4	98.5	91.5	1.23	28.3	3.7	0.09
3.	T1 # 1 Sec 25 (22.5 Kg)	1.4863	1.95	1.94	0.9991	0.036	0.4	98.8	87.8	2.94	3.3	1.6	0.30
4.	Conc Sec 29 (40.25 Kg)	1.4930	0.58	15.3	0.9944	0.016	2.0	98.2	92.0	0.89	25.0	4.4	0.1
5.	T1 # 1 Sec 29 (18.50 Kg)	1.4918	0.04	0.94	0.9945	0.003	0.2	95.2	87.6	0.06	1.6	2.4	0.1
6.	T2 # 1 Sec 29 (9.5 Kg)	1.5095	5.65	6.38	0.9973	0.096	0.8	98.9	92.3	8.65	10.5	1.5	0.38
7.	Conc Sec 25 (56.75 Kg)	1.4861	0.41	5.51	0.9943	0.009	0.6	98.6	93.2	0.62	8.8	3.9	0.06
8.	T2 # 2 Sec 25 (41.00 Kg)	1.5088	0.08	0.52	1.0023	0.001	<0.2	99.2	79.6	0.12	0.98	1.9	0.15
9.	Conc Sec 25 (39.25 Kg)	1.5108	0.37	5.85	0.9947	0.017	0.8	97.1	91.7	0.58	9.7	3.6	0.08
10.	T2 # 2 Sec 29 (9.75 Kg)	1.5133	0.24	1.77	0.9947	0.017	0.4	95.6	87.1	0.38	3.1	3.4	0.19
11.	T2 # 1 Sec 25 (21.75 Kg)	1.5093	0.05	0.79	0.9928	0.010	0.3	88.4	80.0	0.086	1.5	2.2	0.26
12.	Mag Sec 29	1.5184	0.22	3.50	1.0060	0.015	0.4	95.7	93.0	0.35	5.7	8.9	2.70
13.	Mag Sec 25 (19.75 Kg)	1.5178	0.22	2.95	0.9324	0.012	0.5	96.8	90.6	0.37	5.3	9.6	1.44
14.	Mag Sec 25 (10.5 Kg)	1.5225	0.02	1.56	0.9904	0.002	<0.2	93.9	92.3	0.03	2.6	9.0	0.40

Table 1 Head Analyses of Gold Gulch Samples			
No.	Sample Description	Head Assays, g/T	
		Au	Ag
1.	T2 #1 Sec 29 (24.5 Kg)	13.95	12.3
2.	Conc Sec 29 (50.25 Kg)	1.27	24.3
3.	T1 #1 Sec 25 (22.5 Kg)	0.51	3.09
4.	Conc Sec 29 (40.25 Kg)	0.89	30.2
5.	T1 #1 Sec 29 (18.50 Kg)	0.10	<1.7
6.	T2 #1 Sec 29 (9.5 Kg)	10.45	19.9
7.	Conc Sec 25 (56.75 Kg)	0.41	9.3
8.	T2 #2 Sec 25 (41.00 Kg)	0.07	<1.7
9.	Conc Sec 25 (39.25 Kg)	1.06	10.6
10.	T2 #2 Sec 29 (9.75 Kg)	0.34	2.7
11.	T2 #1 Sec 25 (21.75 Kg)	0.10	<1.7
12.	Mag Sec 29	0.55	6.2
13.	Mag Sec 25 (19.75 Kg)	0.27	6.2
14.	Mag Sec 25 (10.5 Kg)	0.07	2.1

REPORT ON PROPOSED

PLACER GOLD PRODUCTION

Located in the

San Simon Valley of Arizona

Prepared for:

Cosmos Mining Corporation

Prepared by:

Michael J. Bradshaw
Geological Engineer
October 1996

STATE OF ARIZONA)
) ss.
County of Maricopa)

Subscribed and sworn to before me, the undersigned notary public, this 4th day of October, 1996, by Michael J. Bradshaw..

Notary Public

My Commission Expires:

June 3, 2000

OFFICIAL SEAL
CATHERINE L. CROWLEY
NOTARY PUBLIC - ARIZONA
MARICOPA COUNTY
My Comm. Expires 6-3-00

1 INTRODUCTION

At the request of Mr. Frank Cobb, the original locator of the prospect area, I began investigating, sampling and processing material from the subject area in March 1996.

In excess of 20 trips were made from Phoenix to the area, to obtain samples, with Mr. Cobb, Mr. Haist, Mr. R. J. Bradshaw and myself.

Sample sizes ranged from 100 pounds each to bulk samples of up to two tons.

This report discusses my examination of the property, the samples and geological history of the area.

2 CONCEPT

The *Cosmos* concept is recovering gold on a major scale from "sand," without chemicals, at a feasible cost. The BUZZ WORD to date is HEAP LEACH from hard rock mining. Low grade ore, low operating cost on a major scale, but with CYANIDE. Mother Nature has ground the rock, put it in large sand deposits but made it impossible to leach with cyanide and too fine for any past state of the art gravity devices. *Cosmos* Concentrators can now recover the very fine gold using only water. This concept will make the new buzz word SAND! *Cosmos* intends to be the leader.

3 DEFINITION OF TERMS

3.1 BANK YARDS: The traditional way of defining placer gold reserves based on cubic yards of undisturbed gravel in a deposit. Normally reported as value per yard or milligrams of gold per yard.

3.2 PLANT CONCENTRATING CAPACITY: The size fraction contained in the slurry to be processed through the concentrators will be a minus 1/8" and will be discussed in tons per hour, day, month, year, etc.

Therefore, values may be discussed in reserves as value or grams per yard and production values or grams per hour may be discussed from tons of material.

4 NATURE OF THE GRAVELS

The San Simon Valley is located in the southeast corner of Arizona. Both Interstate 10 and the Southern Pacific Railroad run through the prospect acreage. The basin drainage is to the north into the Gila River and is at an elevation of about 3,700 feet (Fig. 1). The city of Willcox is 12 miles to the west and Safford is some 25 miles to the north.

4.1 GEOLOGIC SETTING

San Simon Valley just west of these mountains occupies a deep graben edged by northwest-trending basin and range faults which are concealed beneath broad alluvial fans that merge to form bajadas. The San Simon River, usually dry, is a tributary of the Gila River, a watercourse that cuts across southern Arizona in a predominately westward direction. Flat-lying limestone and clay within San Simon Valley's deep layers of sediment show that periodically in Pliocene and Pleistocene time this valley held mountain-grit lakes. Sloping layers of coarse, porous **alluvial** (stream-deposited) sand and gravel converge near the center line of the valley. Near the mountains, storm-fed streams sink into porous sand and gravel layers and flow down along them, trapped by overlaying impermeable clay layers. Wells in the center of the valley tap this water. because the well heads are lower than the level at which water enters the aquifers, well water rises to the surface without pumping. The valley's agriculture depends on the **artesian** water for irrigation.

To the west, between the Dos Cabezas (Two Heads) Mountains to the southwest and the Pinaleno Mountains north of the highway route, young layers of valley fill have worn away, revealing underlying Pliocene and Pleistocene gravel and clay and sand, most of it distinctively orange-brown because of gradual oxidation of minor amounts of iron minerals. These sediments are well exposed near the reststop at milepost 358, which is in Section 33, T12S, R27E within Phase I of *Cosmos Mining Corp* holdings. More of them extend northward along San Simon Valley.

4.2 EXPLORATION GEOPHYSICS AND SAMPLING

Aeromagnetic and gravity data constitute the geophysical input for the definition of prospect areas 1 and 2.

Gravity measurements helped provide insight on the geologic features such as the flanking faults surrounding the basin and sediment thickness. Major gravity anomalies show a more straightforward relationship to topography and outcrop pattern. Density values within crystalline bedrock generally have a smaller range than the difference between values for Crystalline bedrock and alluvium, thus the gravity minimums provide a generalized picture of the distribution of deep fault-controlled basins.

The subsurface bedrock relief, like that of the conspicuously linear ranges and basins of this part of the Basin-and-range province, is generally related to mid-Tertiary faulting. The northwest-trending gravity high of the Dos Cabezas Mountains, somewhat more westward-oriented than the north-northwest-trending lows over Sulfur Springs and San Simon Valleys, suggest the outline of the structurally high crystalline basement terrace. Aeromagnetic anomalies that lie within such structurally high area indicated by gravity are inferred to represent plutonic bodies or bodies of varying composition that are juxtaposed by faulting.

5 HISTORY

The placers on the north flank of the Dos Cabezas Mountains (Teviston district) are found in mountain gluches and on pediments at the edge of the mountains. Most of the placer mining was concentrated in the area between Gold Gulch (sec. 24, T. 13 S., R. 26 E., Luzena quadrangle) and Ash Gulch (sec. 22 and 27, T. 13 S., R. 26E). The placer gravels on the pediment drained by Gold Gulch consist of coarse to fine granitic sand with some clay and many coarse, semigrounded boulders. Gravels sampled to a depth of 6 feet assayed $4.08 per cubic yard (1933 gold prices).

Production History: The Dos Cabezas placers reportedly were discovered in 1901, but lode deposits in the district were known in the 1860's and worked intermittently since the 1870's. Although some reports suggest that the placers were known before 1901, I have found no production records from that time. Most of the placer gold was recovered by drywashing the gravels, and, when water was available, by sluicing and panning.

The placers in the Teviston district have been worked intermittently since the 1900's, but earlier history is unknown. Small dryland dredges worked placers in Gold Gulch in 1933, and a the Inspiration placers during the period 1937—38. The Ash Gulch placers were actively worked during the period 1930—31.

Production records combine gold recovery from the Teviston and Dos Cabezas districts, although the placers in the Teviston district were richer than those in the Dos Cabezas district.

Source: The gold in the placers was derived from erosion of gold-bearing quartz veins exposed throughout the Dos Cabezas Mountains. Most of the important lode-gold mines occur within and near, major fault zone 2½ miles north of Dos Cabezas village where small, closely spaced gold-quartz-sulfide veins occur; other gold mines are north of this fault zone. A geochronologic study of the mountain range indicates that some gold-quartz veins are younger than 29 m.y. (million years).

Literature:

Allen, 1922: Discovery; location; origin (Dos Cabezas district).

Bray, 1933: Describes dryland dredge used at Gold Gulch.

Church, 1887: Notes non-activity in placer mining, although lode mining was active.

Engineering and Mining Journal, 1931: Assay results of sampling at Gold Gulch placer.

Erickson, 1968: Dates mineralized quartz veins.

Gardner and Johnson, 1934: Placer-mining techniques in Gold Gulch; drywashing; type of gravel.

Heikes and Yale, 1913: Value of gravels; size of large nugget (Teviston district).

Land, 1931: History; size of nuggets; emphasis on lode deposits (Dos Cabezas district).

U.S. Bureau of Mines, 1931: Location of placer-mining operation.

6 Au CONSOLIDATED/COSMOS TESTING

It is the opinion of this writer that the most positive procedure for sampling a placer deposit is to process bulk samples through a pilot plant to duplicate a large plant process.

All bulk samples were brought from the field into the testing facilities at *Cosmos Systems, Inc.* at Aqua Fria, Arizona. The samples were weighed, processed and the gold recovered was weighed and value results were determined by the actual gold recovered.

Gold fine tests indicate the gold recovered is 917 FINE (91.725% Au content).

The accuracy of this type of testing is dependable and if anything, conservative.

7 AVAILABILITY OF WATER

Wells producing one thousand gallons per minute are available on-site to purchase or to buy water. The *Cosmos Mining Corporation* has budgeted funds to purchase one of these wells. Ample aquifers exist under the entire prospect area as described in Section 4 herein.

8 ACCESS AND RAPID MINING PERMITS

Phase I and II have existing gravel pits located on-site. Therefore, placer operations are identical and accordingly require no additional extensive reports to begin mining.

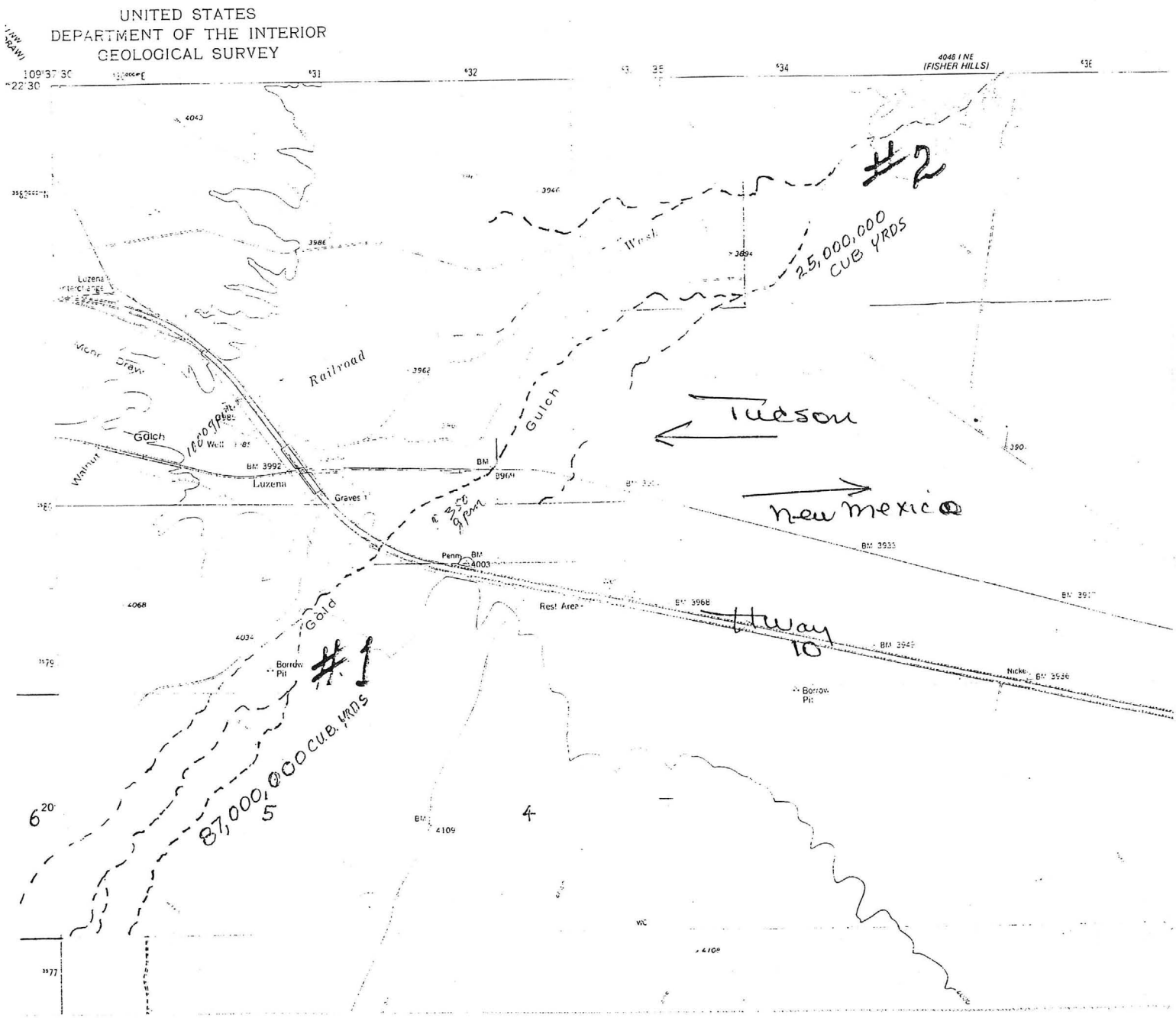
9 ESTIMATED RESERVES

Phase I 87,000,000 cubic yards at 1 gram per yard.
Phase II 25,000,000 cubic yards at 1 gram per yard.

10 CONCLUSIONS AND RECOMMENDATIONS

Adequate sampling and processing has been completed to proceed with a processing plant capable of 200 tons per hour. A budget has been completed and five (5) year projects have been calculated to indicate a potential lucrative operation.

Therefore, it is recommended to begin full scale operations as set forth in the Five Year Projection.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