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RECEIVED APR 1983

April 14, 1983

RECEIVED APR 21 1983

Mr. Ben F. Dickerson III
DMEA Ltd.
4203. N Brown Ave.
Scottsdale Arizona 85251

Dear Mr. Dickerson,

It has been about two weeks since we have met and I have delivered our brochure on the 21 gold ans silver placer claims we own in Black Canyon River Arizona. I trust you have had time to look over the brochure.

As I told you in our last meeting that we are looking for a good partner. We would prefer a mining company with expetise in helping on the decisions for a good test procedure to prove out our properties for sale. We have established what we think is a very fair price for all the mine owners of $2,600,000.00. You may have first right to purchase at this price after we prove the viability of the property. We have the property and the expetise to do the job. We need a partner to furnish the working capitol for 1/3 of the entire mining claims, which we think is a very fair offer and one that will be taken up soon. I understand that you have talked to Mr. Ed Whelan and expressed a interest to look further into this venture. If there any sarvace we can offer please feel free to call on us. I remain,

Your very truly,

Jack L. Neal

JACK L. NEAL
P.O. BOX 111
Globe Arizona 85501

JACK L. NEAL
P.O. BOX 111
GLOBE ARIZONA 85501

GLOBE, AZ
APR 15
PM
1983
85501

DMEA LTD.
4203 N BROWN AVE.
SUITE F
SCOTTSDALE ARIZONA 85251

CALLAHAN MINING CORPORATION

TO: Ben F. Dickerson, III

DATE: March 25, 1983

FROM: Richard S. Tully

COPIES: Charles D. Snead, Jr.
Bruce A. Bouley

SUBJECT: Black Canyon Placer, Yavapai Co., AZ

Regarding your memo of March 24, Callahan does not intend to pursue the Black Canyon Placer property.

Ben F. Dickerson III
Mineral Exploration Advice

DMEA Ltd.
4203 N. Brown Ave. - Suite F
Scottsdale, AZ 85251

602-947-0262
602-945-4630

March 24, 1983

TO: Richard S. Tully
FROM: Ben F. Dickerson, III
COPIES: Charles D. Snead, Jr.
Bruce A. Bouley
SUBJECT: Black Canyon Placer, Yavapai County, AZ

Attached is some "information" on the subject placer.

Favorable Aspects

(1) The area has had some historic gold production.
(2) The canyon does drain mineralized areas.
(3) It is relatively close to Phoenix.

Unfavorable Aspects

(1) The volume and grade of the river gravels is unknown.
(2) Only very rudimentary sampling (panning) has been done.
(3) It is alleged that some of the gold occurs in a peculiar (in mica) fashion.
(4) The claims may not be valid.

Conclusion

I do not think this property suitable for Callahan.

OFFICE COPY.
HOLD.—

GRAY/FISCUS/WHELAN

PLACER GOLD CLAIMS

EXPLORATION AND DEVELOPMENT

GUIDE

P. O. Box 535

Globe, Arizona 85501

PLACER GOLD CLAIMS
EXPLORATION AND DEVELOPMENT

PURPOSE

The following is a guide for the exploration and development of twenty-one gold claims located in the Black Canyon River area of the Black Canyon Mining District, Yavapai County, Arizona. It is produced for the purpose of organizing the authors' ideas concerning further exploration of the mining claims. It is not submitted as a proof of or statement on the precious metals content of those claims. All statements, contained herein, regarding the presence or existence of economically viable quantities of precious minerals or ores in the above-identified unpatented mining claims are speculative in nature. The purpose of the exploration program described herein is to prove, or disprove, the presence of locatable minerals in quantities which can be mined at a profit, through extensive testing and investigation of the mining claims.

The authors of this Guide desire that all parties reading this Guide understand the inherently speculative nature of the mining industry. Those parties should, independently of this Guide and all other statements by the holders of the mining claims, conduct their own in-

vestigations and reach their own conclusions as to the mineral potential and content of the mining claims.

INTRODUCTION

Yavapai County ranks first among gold producing counties of Arizona, producing well over $50,000,000.00 of record.[1] Its Black Canyon Mining District comprises an area about eighteen miles long by eight miles wide between the eastern foot of the Bradshaw Mountains and the Agua Fria River, from the vicinity of Cordes on the north to the Maricopa County line on the south. The Black Canyon River is like a big sluice box; this is why it has (deposits of) gold, silver and other minerals.[2]

Black Canyon's placer gold is coarse (in the form of nuggets), colloidal and fine, much being microscopic in size. Some has been discovered trapped in Mica flakes thus requiring grinding to release for chemical leaching processes. The river also carries a lot of heavy black sand in its mix of various minerals.

EXPLORATION PROCEDURE

Locales of greatest concentrations of potential precious ore-bearing material will be determined, primarily through core drilling. In addition, the most effective and efficient method for extraction (chemical

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[1]Geology of the Black Canyon Water Shet, bulletin, Arizona School of Mines, University of Arizona
[2]IBID.

leaching, electro winning or electro potential) will be determined. Other means will be used to capture any nuggets, but nuggets appear to be a much smaller part of the total values.

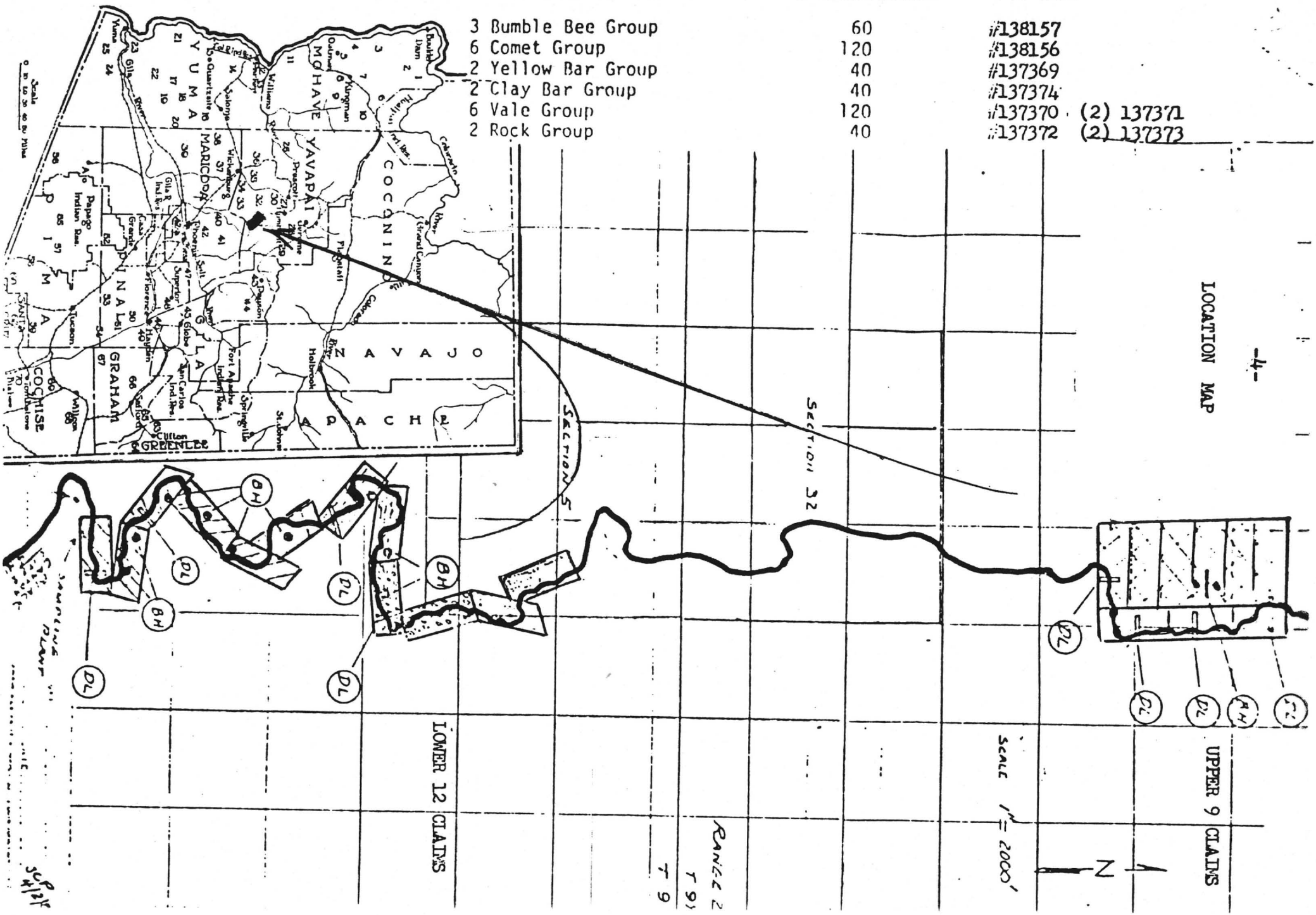
Operations will begin on the upper nine claims known as the Comet and the Bumble Bee and proceed as the following outline.

OPERATIONS	ACCOMPLISHMENT	TIMING ESTIMATES	
CORE DRILL LOCATE BEST OF ORE-BEARING PROPERTY	EXPLORATION 20/30 DAYS	60 days	
	Assemble and install machinery and equipment camp/shop head-quarters		
STRIP AND SCREEN TO A CONCENTRATE	POTENTIAL PRODUCTION		
SLUICE	Experimentation	120 days	180 days
HEAP LEACH OR VAT	and		
ELECTRO WINING OR ELECTRO POTENTIAL	Adjustments		
	Produces the gold or silver product		

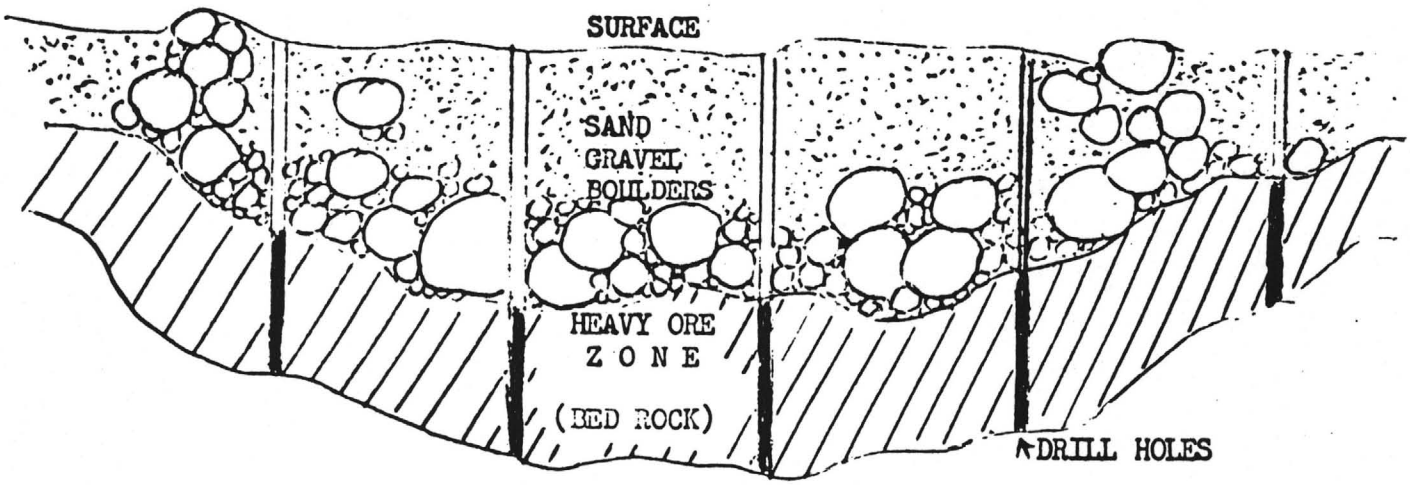
Potential Cash Flow

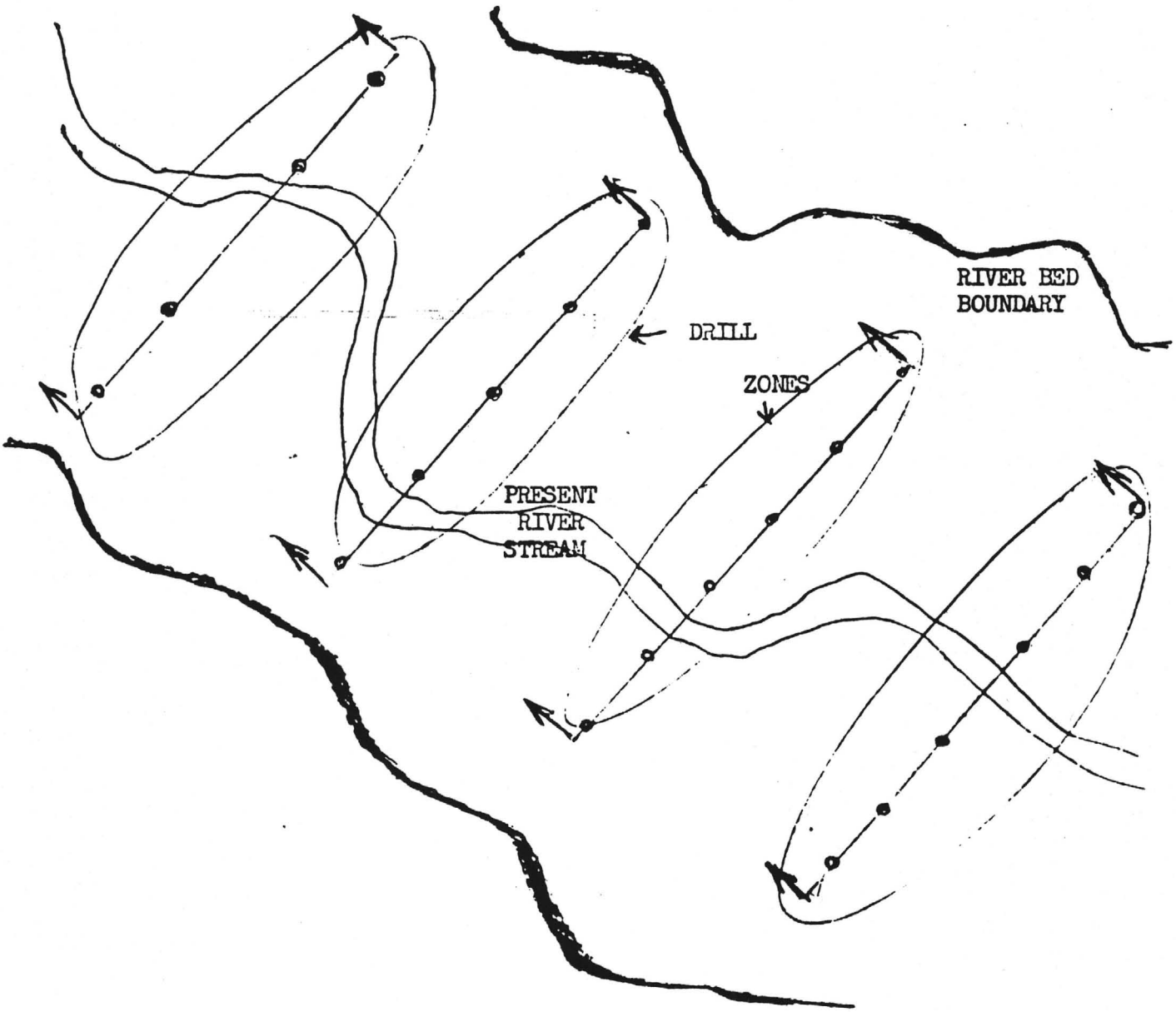
POTENTIAL PRODUCTION

Claim Names	Approx. Acres	A.M.C.
3 Bumble Bee Group	60	#138157
6 Comet Group	120	#138156
2 Yellow Bar Group	40	#137369
2 Clay Bar Group	40	#137374
6 Vale Group	120	#137370 (2) 137371
2 Rock Group	40	#137372 (2) 137373

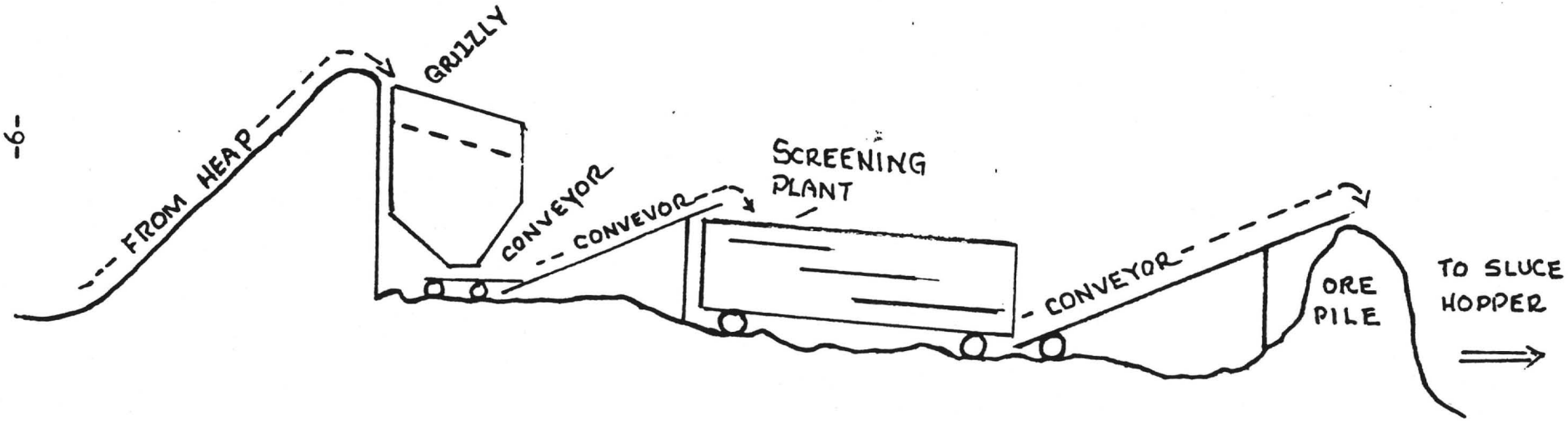


EXPLORATION

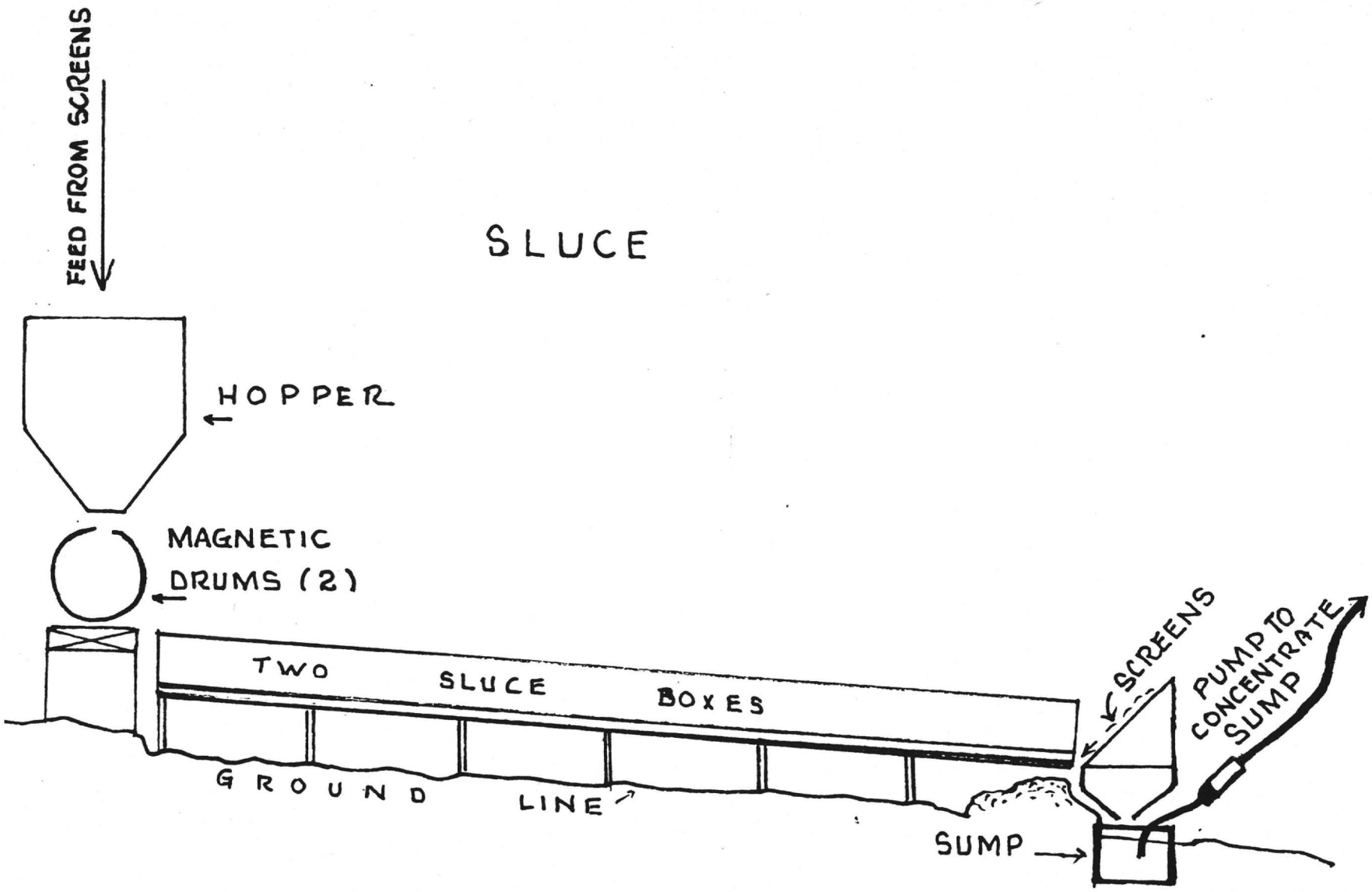




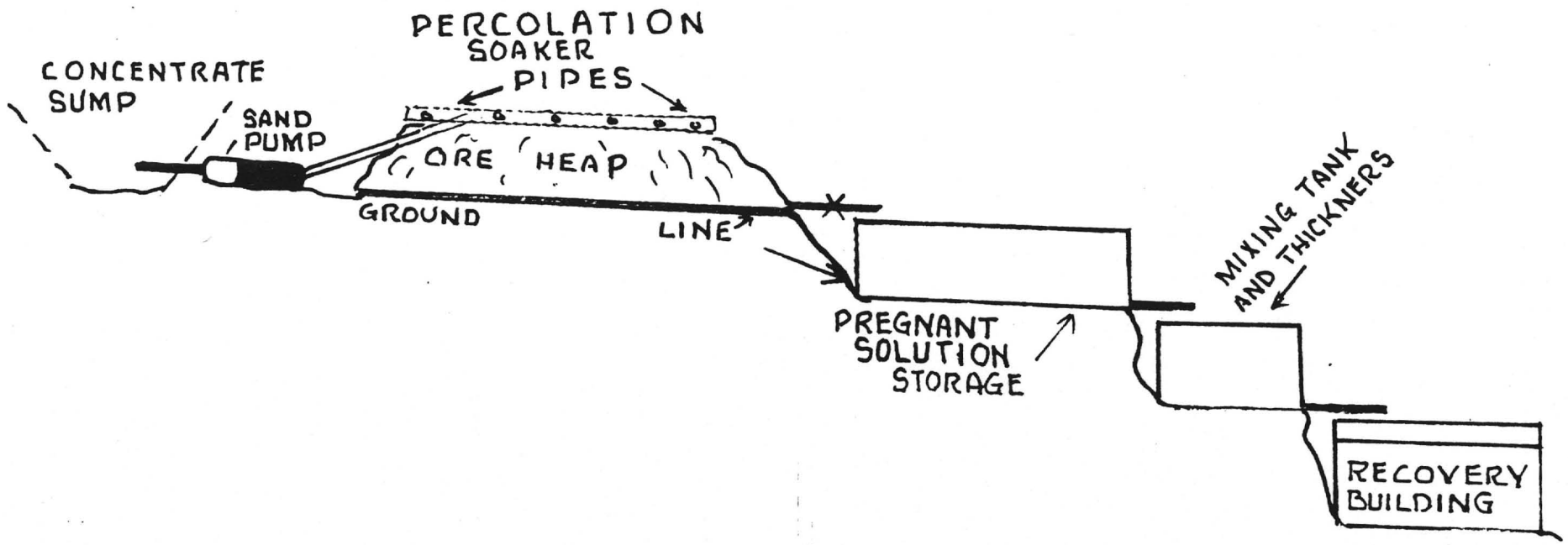
STRIP AND SCREEN TO A CONCENTRATE

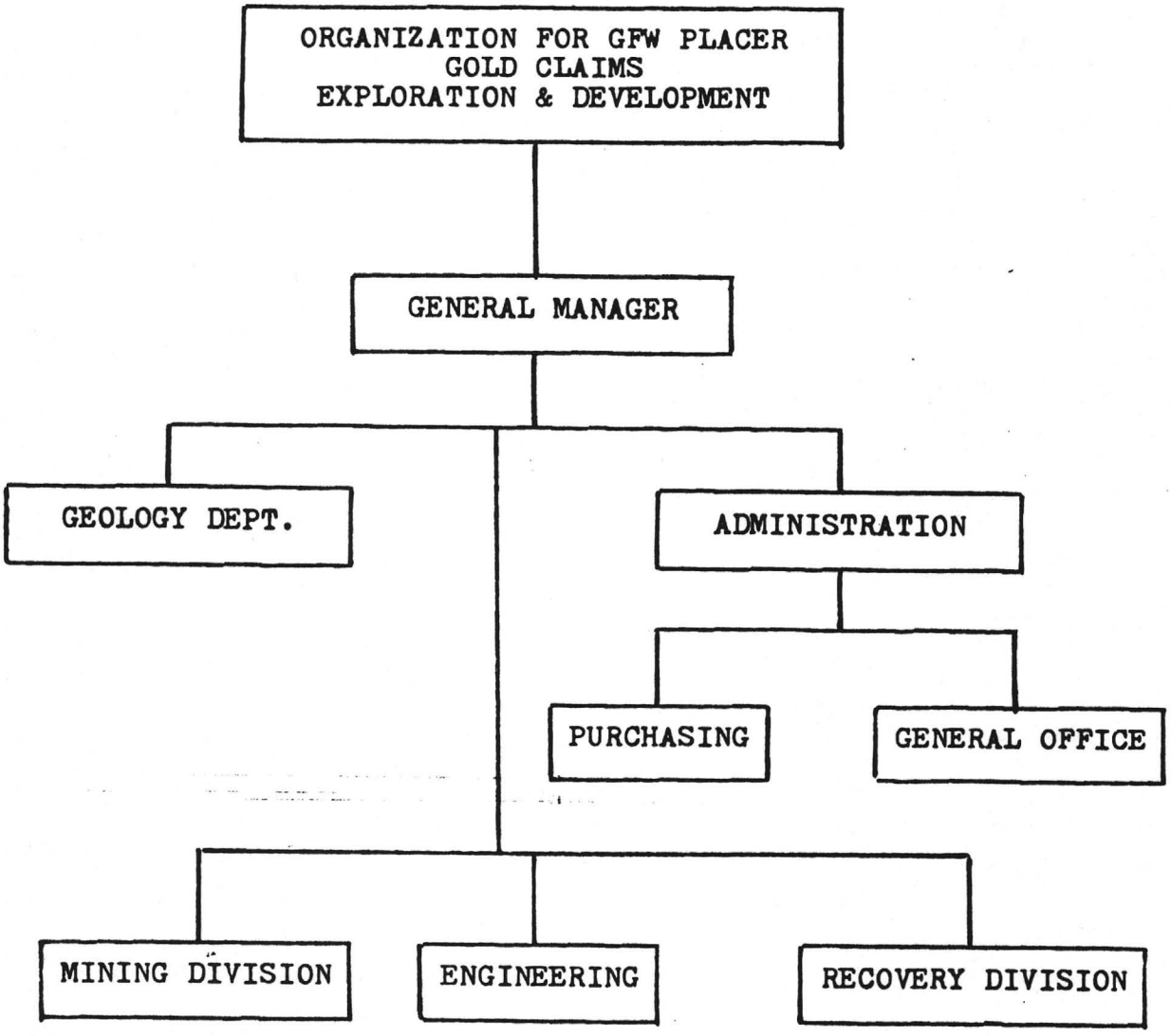


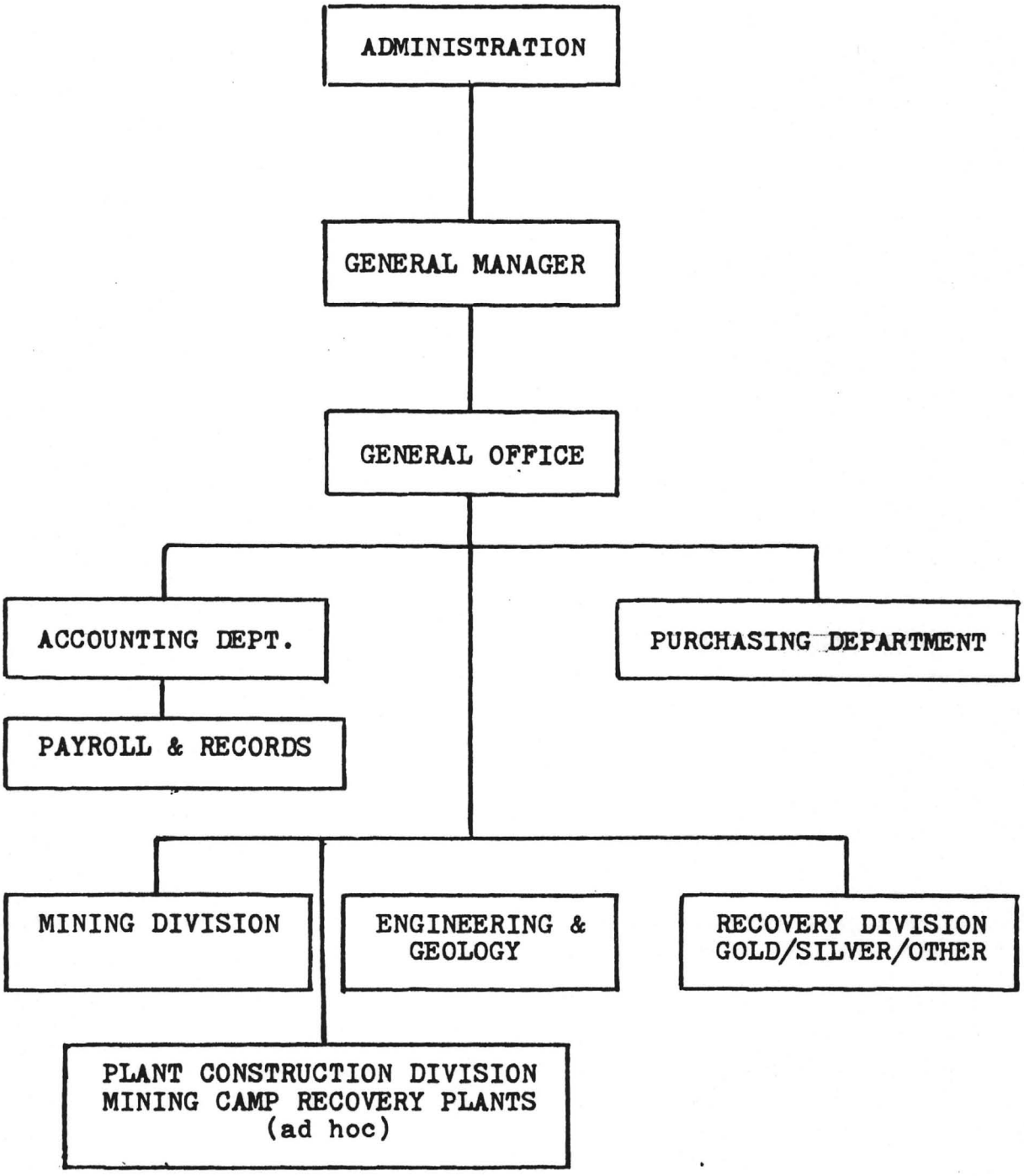
SLUCE

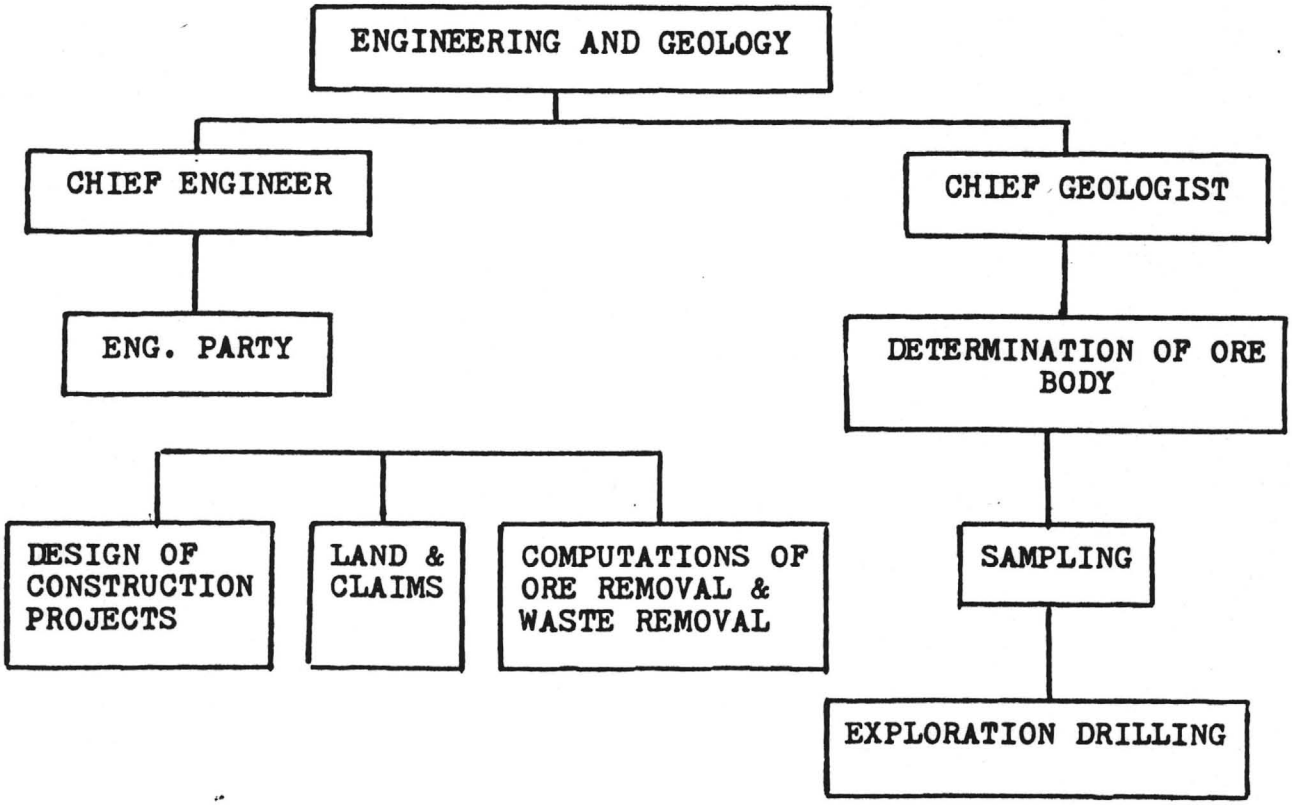

FEED FROM SCREENS
HOPPER
MAGNETIC
DRUMS (2)
TWO SLUCE BOXES
GROUND LINE
SCREENS
PUMP TO
CONCENTRATE
SUMP
SUMP

RECOVERY


PERCOLATION
SOAKER
PIPES
CONCENTRATE
SUMP
SAND
PUMP
ORE HEAP
GROUND
LINE
PREGNANT
SOLUTION
STORAGE
MIXING TANK
AND THICKNERS
RECOVERY
BUILDING


ORGANIZATION FOR GFW PLACER
GOLD CLAIMS
EXPLORATION & DEVELOPMENT
GENERAL MANAGER
GEOLOGY DEPT.
ADMINISTRATION
PURCHASING
GENERAL OFFICE
MINING DIVISION
ENGINEERING
RECOVERY DIVISION

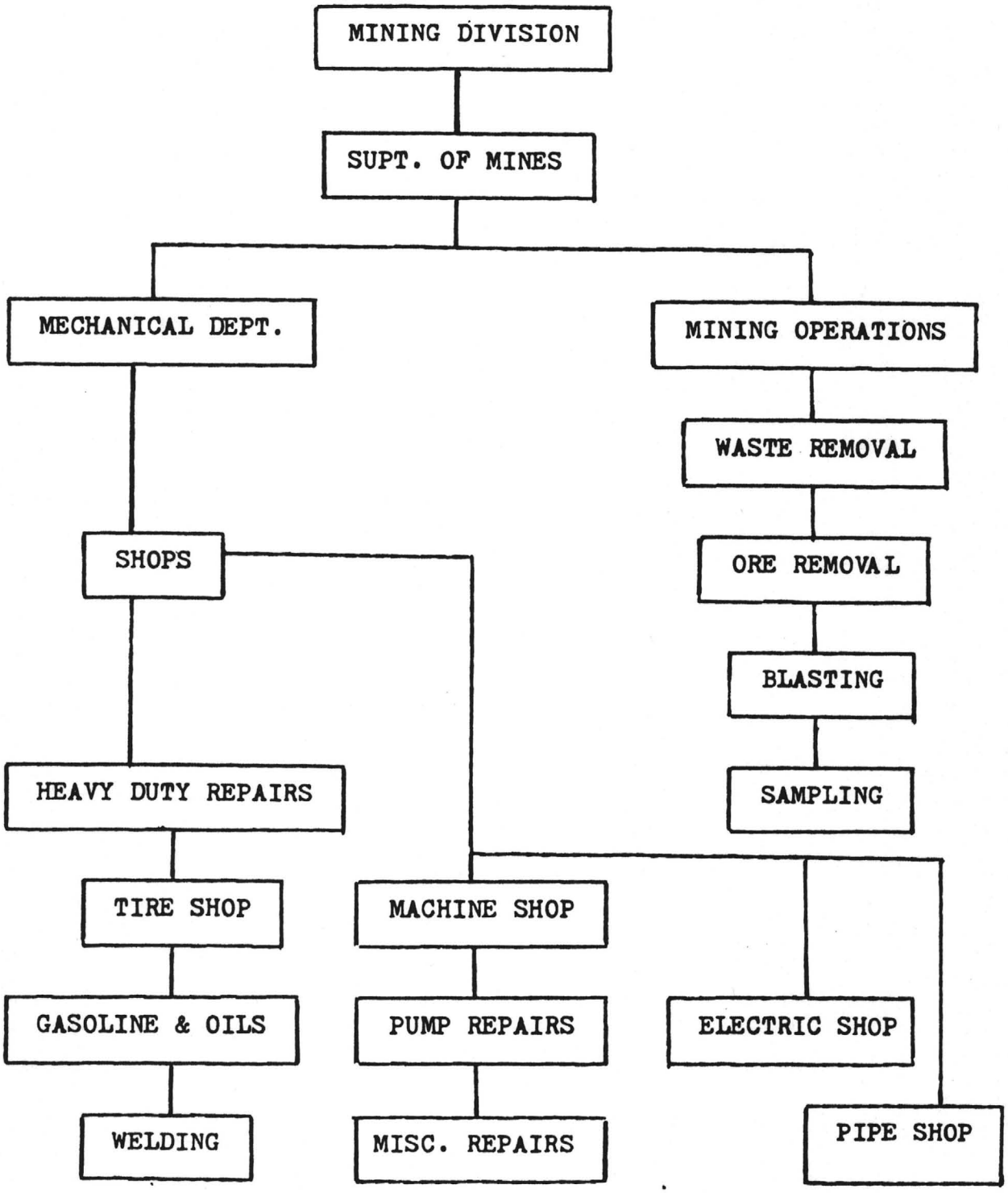

ADMINISTRATION
GENERAL MANAGER
GENERAL OFFICE
ACCOUNTING DEPT.
PAYROLL & RECORDS
PURCHASING DEPARTMENT
MINING DIVISION
ENGINEERING & GEOLOGY
RECOVERY DIVISION GOLD/SILVER/OTHER
PLANT CONSTRUCTION DIVISION MINING CAMP RECOVERY PLANTS (ad hoc)



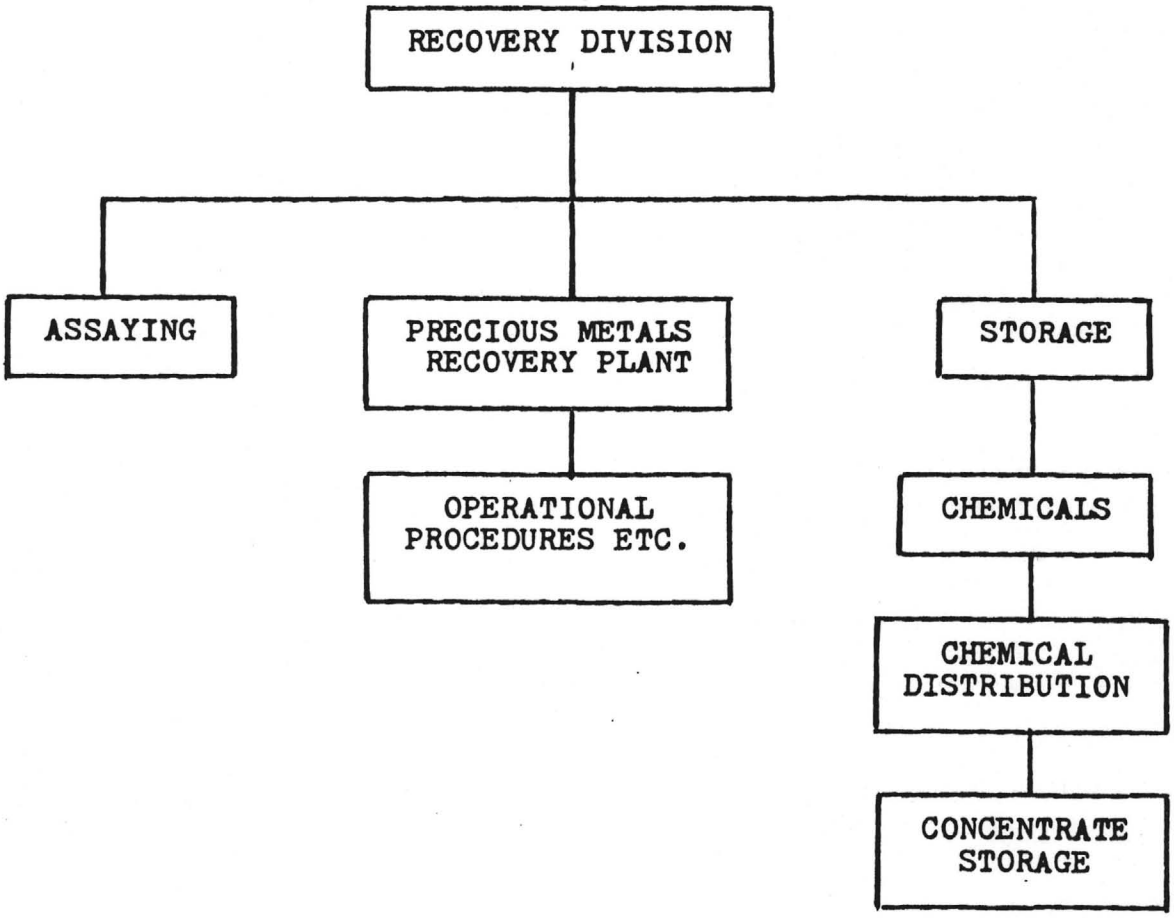
1 Engineer and
1 Rodman

2 Men

1 Field Geologist



From 7 to 12 employees
and/or earth moving contract(s)



1 man assay office	1 employee
1 plant operator	
3 shifts	3 employees

FUNDING REQUIREMENTS

ITEM/ACTIVITY	INITIAL START UP	WITHIN 60 DAYS	WITHIN 120 DAYS	TOTAL
EXPLORATION				
Drilling, mapping, assaying, etc.	18,000			18,000
HEADQUARTERS/SHOP/CAMP SETUP				
1 trailer (12 x 60)	6,000			6,000
3 trailers (12 x 60)		18,000		18,000
Water/sewer systems	3,000			3,000
Chain link fence, 1-acre installed	4,000			4,000
3-shift flood lighting system	3,000			3,000
Repair shop (1500 sq. ft.) (approximately)	17,000			17,000
*OFFICE EQUIPMENT/SUPPLIES	500		500	1,000
REROUTE ROAD TO CASTLE CREEK		1,500		1,500
*END LOADER	6,000	6,000	6,000	18,000
*BACKHOE	3,600	3,600	3,600	10,800
DUMP TRUCK 95-yd) reconditioned	6,500			6,500
DOZER (rental, 80 hours)	1,000	2,200		3,200
GENERAL PAYROLL (6-months)				
Administrative and labor	21,684	54,660	54,660	131,004
FICA (25%)	4,373	10,932	10,932	26,237
Industrial Insurance (5%)	1,093	2,733	2,733	6,559
Liability Insurance ($500,000/1,000,000)	2,000	1,000	1,000	4,000
FUEL (Gas/diesel/lubricants)	2,000	6,000	6,000	14,000
LEGAL SERVICES	2,500	2,500		5,000
PRODUCTION PLANT				
(Building 60 x 30)	38,000			38,000
Storage tank (13,000 gal.)	4,000			4,000
CONTRACT (25,000 cu. yds. screened to -5/8 delivered to plant)	45,000	45,000		90,000
Sub-total	189,250	154,125	85,425	428,800

*lease purchase

FUNDING REQUIREMENTS (cont)

ITEM/ACTIVITY	INITIAL START UP	WITHIN 60 DAYS	WITHIN 120 DAYS	TOTAL
RECOVERY PLANT				
ELECTRO WINNING	10,000			10,000
SLUCE	4,000			4,000
HOPPER	1,500			1,500
MAGNETIC DRUMS (2)	5,000	5,000		10,000
SWITCH PANELS (installed)	2,500			2,500
PUMPS, 6" + (2) 3" (800 gpm)	3,000	3,000		6,000
PLUMBING AND PIPE	4,000	4,000		8,000
LABORATORY	18,000	8,000		26,000
TANKER TRUCK (used) 18' flatbed	10,000			10,000
ELECTRO POTENTIAL PLANT (initial)	15,000	10,000		25,000
STORAGE TANKS (6) fibre glass (solution storage)		5,000		5,000
PUMPS (recirculate/reject) (4)		2,000		2,000
GRINDING MILL(s) -3- (15 tons/ hr) installation		5,000 5,000	10,000 7,500	15,000 12,500
*POWER GENERATORS (2)	3,000	13,500	13,500	30,000
Sub total	76,000	60,500	31,000	167,500
From previous page	189,250	154,125	85,425	428,800
TOTAL	265,250	214,625	116,425	596,300
Contingency (10%)	26,525	21,463	11,642	59,630
GRAND TOTAL	291,775	236,088	128,067	655,930

*lease purchase

WAGE AND SALARY SCHEDULE

1983/84

GENERAL MANAGER/SUPERINTENDENT	$2,500.00/month
ENGINEERING & GEOLOGY	2,500.00/month
MILL SUPERINTENDENT	2,500.00/month
ACCOUNTING	1,400.00/month
PAYROLL	1,400.00/month
PURCHASING	1,400.00/month
GENERAL LABOR Semi-skilled, unskilled	to $7.00/hour

HISTORICAL AND PERSPECTIVE

Modern mining technology and the extraction of ore through the new leaching processes have not yet been applied in the Black Canyon area. That gold and silver and other minerals are ever present in this area and have been successfully mined, intermittently, on a small scale by individuals and small groups, operating under very primitive conditions, particularly, during the immediate, pre-1900's and during the 1930's is a matter of historical record.[1] Recent assays and other investigative reports, attached herewith, are also indicative of potential.

Today's $500.00 gold and $12.00 silver prices are, of course, about fifteen times higher than those of the 1930's and prior years. Also today's mining technology captures a far greater percentage of the values present, capturing, for example, even the flour-sized flakes and granules not visible to the naked eye. (Leaching processes can turn even some of the waste dumps of early mining operations into profitable operations.)

To ascertain the full extent of the placer mineral deposits of all twenty-one claims and determine their econom-

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[1]Gold Placers and Placering in Arizona, Wilson, Bulletin 168, Bur. Mines, University of Arizona. Also, Arizona Lode Gold Mines and Gold Mining, Wilson/Cunningham and Butler, Bulletin 137, Arizona Bur. Mines, U of A

ical extractability and, further, to develop a viable, thus profitable mining operation is the purpose of this proposed, exploratory and developmental program.

The three Bumble Bee claims of this group of twenty-one were located in September, 1949, by the Fiscus family and, subsequently, turned over to the jurisdiction of Dale Fiscus, one of the GRAY/FISCUS/WHELAN partnership which, now and since its 1979 creation, has jurisdiction over all of the twenty-one claims. The adjoining six claims of the Comet group were located by Dale Fiscus and his family in January, 1974, and in April, 1974, Fiscus located the two claims of the Yellow Bar, the two of the Claybar and, in March, 1974, Fiscus located the Vale Groups #1 and #2 consisting of a total of six claims. The Rock claims #1 and #2 were purchased in 1976 by Pat Gray and through power of attorney to her father, Ralph Gray, are now administered by G/F/W.

Sometime prior to the organizing of the GFW partnership and during most of the year following, Gray, Fiscus and Whelan conducted thorough (but engineeringly unsupervised) exploratory type mining operations on some of the lower twelve claims and the Comet, financed by Whelan. The assay information gained by this operation is included herein.

During the year following the creation of the GFW partnership, GFW was approached for a real estate listing by Neal Realty and Peg Brown Realty (Ray Bert) which, in time was

consumated jointly with both realtors by the agreement of February 28, 1980, with the stipulation that the Realtors would arrange a fund for the financing of a reputable engineering firm's investigation and analysis of the property. The financier would receive a small ownership position in the claims for such funding.

A while after the listing agreement, the Realtors decided they wanted the claims for themselves and, subsequently became GFW's LESSEE under a one year, $2,520,000.00 Lease purchase agreement dated October 8, 1980. The Realtors organized the Bumble Bee Land and minerals company, an Arizona Corporation of ten people including themselves and assigned the lease to the Corporation. The BBLM lessees 'poor boyed' an investigational research effort with Mountain States Engineering Company, Vale, Arizona, in which the LESSORS (GFW) augmented the effort by providing free labor and the use of its equipment. The research was incomplete and unsatisfactory. The Mountain States conclusion on page 3, section 3 of its report to Bumble Bee Land and Minerals (paragraph 5), "The values represented by the samples processed in this program are sufficiently high to justify evaluation of the feasibility of initiation production on the properties."

The lease agreement between GFW and the realtors provided only that the Lessees pay to Lessors a 10% royalty

and guarantee to process a minimum amount of placer material. Inactivity (little or no mining) on the part of the Lessees caused confrontation between GFW and the (BBLM) lessees which then led into a new lease requiring LESSEES to cash guarantee monthly minimum rental payments to LESSORS. This new, four year lease/purchase agreement was consummated February 10, 1982 with Bumble Bee Land and Minerals, Ray Bert, President. It was cancelled by LESSORS November 5, 1982 when LESSEES ceased making rental payments, their contract having become delinquent July 15, 1982.

In August, 1981, new location papers were filed on all twenty-one claims by GFW, receiving new AMC identification numbers from the U. S. Bureau of Land Management registry.

In August, 1982, GFW discovered that EXXON had filed lode claims over GFW's placers and subsequently requested and received from EXXON their quit claim deeds to GFW for GFW's placers. EXXON's quit claim deeds are dated October 22, 1982.

An assay summary of the investigative work performed on the claims by GFW is presented on the following page. Subsequent pages are the reports developed through Bumble Bee land and Minerals Corporation.

As presented, herein, funding is required to implement a full program of exploration and to develop an efficient and effective extractive process. GFW invites

discussion with qualified finance leading to a joint venture arrangement.

SUMMARY OF GFW INVESTIGATIONS

11/21/78 to 6/19/80

DATE	ASSAY FIRM	LAB NO.	OUNCES PER TON GOLD	OUNCES PER TON SILVER
11-21-78	Arizona Testing Lab.	8459	.05	(no test)
2-23-79	" " "	9234	0.05	0.10
	" " "	"	trace	0.10
	" " "	"	0.02	0.50
	" " "	"	Nil	0.05
	" " "	"	0.11	2.3
	" " "	"	trace	0.15
	" " "	"	trace	0.30
4-10-79	" " "	9861	0.01	0.05
5-22-79	" " "	92	0.11	Nil
11-26-79	Iron King Assay Office	911-231	.056	0.08
"	" " " "	"	.162	0.06
2-7-80	" " " "	10-19	.002	Nil
"	" " " "	10-20	4.41	0.53
6-19-80	Arizona Testing Lab.	6475	0.09	(no test)

METAL RECOVERY SYSTEMS, INC.
426 SOUTH ROBSON
MESA, ARIZONA 85202
(602) 835-7592

January 8, 1982

Mr. Jim Brockert,
Bumble Bee Mine,
Bumble Bee, AZ

Dear Jim:

Here are the results we obtained from the eleven hour production run given to us.

Total sample is estimated at 1000 pounds.

20% magnetics (est) assayed at 1.6 oz/ton	= 0.16 oz Au
80% non-magnetics (est) assayed at avg. 2.0 oz/ton	= 1.60 " "
Metallic gold collected was 2.7319 grams	= 0.09 " "
	1.85 " "

1.85 oz Au/11 hour run = 4.04 oz/24 hour @ 85% recovery = 3.4 oz Au.

We hope that this will help you to see the viability and economic feasibility of operation, and look forward to working with you on further development in the near future.

Very truly yours,
METAL RECOVERY SYSTEMS, INC.

Tony Razzini, President

1450/ad

+ Sluice Box Nuggets (NOT COUNTED

VALE

METAL RECOVERY SYSTEMS, INC.
426 SOUTH ROBSON
MESA, ARIZONA 85202
(602) 835-7592

March 17, 1982

VALE CLAIM

Mr. Jim Brockert,
Bumble Bee Mine
Bumble Bee, AZ

SUBJECT: REPORT ON TESTS AND ASSAYS PERFORMED ON SAMPLES.

PERFORMANCE: A core sample was extracted from each of the ten samples presented. Each was panned and checked for any free gold. None of the samples were found to contain free gold visible to the naked eye.

Fire assays were conducted on all samples with the results as listed below. This was from 192 yds of Head Material

All 20 Mesh Material

IDENTIFICATION	VALUES
1. Table waste from 101 lb sample all Buckets	1.2 oz troy/ton Au
2. Wood sluice #2 — 7 lbs Concentrate } out of 65#s	0.4 " " " "
3. Wood sluice #1 — 5 lbs Concentrate } 65#s	12.0 " " " "
4. #2's Black Sands auger	3.2 " " " "
5. #1's Black Sands Auger 85#s	0.4 " " " "
6. #1's Pond 1½ lbs Concentrate, out of 65#'s	14.2 " " " "
7. #2 Sluice, last riffle Tested 7½ lbs	0.2 " " " "
8. #2's Pond 12 lbs Concentrate, out of 65#s	0.4 " " " "
9. #2 Sluice, last riffle Tested 7½ lbs	0.4 " " " "
10. 5 gal. bucket, no identification Tails	0.0 " " " "

Thank you for the opportunity to serve you, and we look forward to your future business.

Very truly yours,
METAL RECOVERY SYSTEMS, INC.

Tony Fazzini

Tony Fazzini, President

J and J Research and Development Inc.
Gold, Silver and Platinum Ores
2027 South McQueen Road • Mesa, Arizona 85202
Phone: (602) 892-4561

May 28, 1982

MEMO TO: Bumble Bee Land and Minerals Company
Mr. James P. Brockert

SUBJECT: Tests on Placer Sands

These sands are the final product of a sluice operation which the subject company has near Black Canyon City, Arizona. The nugget gold is recovered from their sluice boxes. A -20 mesh sand is recovered at the tail end of the sluice. It is claimed that about 30 tons of sand per hour is produced from this operation.

Our laboratory has studied the composition of these sands and found the main constituents to be silica sand, micaceous materials, iron products, garnet and calcite. Of all these products, the irons are the heavier and one would suspect they would carry the gold. Assays found them to contain an average of only .05 ounce of gold per ton. Some of the platinum groups were detected but not isolated. This would account for the poor showing on a regular concentrating table.

The irons make up about 20% of the sand (78% of the iron is magnetic). This black sand may prove of interest to a rare metal refiner.

After grinding, the iron was removed; the remaining material was further ground in a mortar until the mica was disintegrated. A microscopic examination revealed the gold to be isolated from its matrix.

J and J Research and Development Inc.
Gold, Silver and Platinum Ores
2027 South McQueen Road • Mesa, Arizona 85202
Phone: (602) 892-4561

It is concluded that the gold is precipitated between the leaves of the mica books and if separated and not reshaped, they will follow any up current in classification thus losing the values. Working with this observation, we adopted the following procedure:

A hundred gram sample was ground and classified wet to about -200 mesh; the +200 mesh portion was composed of the "heavies" such as the iron, garnet, etc. making up about 30 grams of the original 100. The assay showed .02 ounces per ton in gold value. The lighter "mud" (70 grams) was dried and assayed from which the results were 2.42 ounces per ton in gold and 3.82 ounces per ton in silver.

A plant must be designed that will meet these requirements: The mill must be capable of grinding the mica material to free the gold. This should be a wet process because of the volume.

To concentrate, there are several avenues. The gold must be changed from a flat sheet to a rounded nugget so that concentration can be better affected. We are proceeding with gravity, cyanide, flotation and amalgamation tests.

The grinding machine must be carefully selected as well. It is advisable to proceed with the Del Bentz machine to further substantiate a feasible operation and establish average values in the ore.

Respectfully submitted,

James W. Lower

James W. Lower
Mechanical Metallurgical Engineer

J and J Research and Development Inc.

Gold, Silver and Platinum Ores

2027 South McQueen Road • Mesa, Arizona 85202

Phone: (602) 892-4561

June 28, 1982

Memo to: Jim Crockert
Bumble Bee Land & Minerals Co.

Subject: Testing progress in addition to that of memo dated May 28, 1982

Assays completed:

1. 90 gram sample:
   Procedure: Concentrated ratio 22.5 to -1
   Assay of concentrates: Au 4.5 Oz. per ton
   Ag 13.5
   Assay of Raw Feed: Au 0.2 Oz. per ton
   Ag 1.0
2. Iron Concentrates:
   Procedure: Separated magnetics and non-magnetics
   Assay of magnetics: Au .08 Oz. per ton
   Ag 0.5
   Assay of non-magnetics: Au 0.05 Oz. per ton
   Ag 0.35
3. Sand:
   Procedure: 100 grams sand non-magnetics grind to 80 mesh, assayed mud after classifying and decanting:
   Au 2.42 Oz. per ton
   Ag 7.0
4. Concentrates from "Del Bentz" mill:
   Procedure: Concentrates from 2400 lb. run on sand
   Au 2.5 Oz. per ton
   Ag 7.5
5. Concentrates from 600 lb. run in "Del Bentz" mill
   Procedure: 476 grams cyanided (standard procedure)
   Pregnant solution pumped through resin, made dore' bar and electrowon same:
   Assay heads: Au 12 Oz. per ton
   Ag 30 Oz. per ton

5. Concentrates from 600 lb. (Cont'd)

KCN button: Au 1.086 Oz. per ton
Ag 3.0

Tails: Au 4.2 Oz. per ton
Ag 10.0

6. Sand:

Procedure: Ground 10 lbs. of sand in ball mill wet; added mercury, ground to 80 mesh.

Assay of Hg. Au .05 Oz. per ton
Ag Nil

Conclusion: Will not amalgamate.

7. Iron Oxide:

Procedure: Leach non-magnetics in dilute hydrochloric solution to free iron oxide.

Decant iron oxide:

Assay Au 31.69 Oz. per ton
Ag 60.5

8. Magnetics cyanide leach:

Procedure: Pregnant solution stripped with resin

Assay Au 0.65 Oz. per ton
Ag 2.30

9. Sand:

Procedure: 320 grams total, 80 gms. middlings and 240 gms. tails; cyanided 75 grams from heads.

Assay middlings Au 2.0 Oz. per ton
Ag 5.4

Tails Au 0.8 Oz. per ton
Ag Trace

Cyanide leach Au 0.75 Oz. per ton
Ag 1.50

10. 20 lb. sand ground 100 mesh

Procedure: Standard cyanide in mixer

Recovery from solution in resin extracting:

Au 0.02 Oz. per ton
Ag 1.0

11. 454 grams sand:
Use chlorine leach:
Assay: Au, trace

12. 454 grams concentrates from "Bentz" mill "off table" sample
Procedure: Free iron oxide with dilute hydrochloric solution and decant: Got a 75 -1 ratio of dry FeO

Assay:	Au	30.0 Oz. per ton
	Ag	10.0
Cyanided magnetics	Au	1.20 Oz. per ton
	Ag	3.5

13. Sands:
Procedure: Screened and washed slime from -20 mesh sands; ground to 60 mesh concentrated 9.36 -1 on 908 sample. Treated cons with dilute hydrochloric acid then decanted iron oxide.

Assay	Au	31.0 Oz. per ton
	Ag	60.0

Screen analysis of the furnished raw sands:

Mesh (Tyler)	Percentage	Assay Au
-20 +60	17%	0.20
-60 +100	48%	0.01
-100 +200	20%	Trace
-200 +325	14%	Trace
-325	1%	Trace

The above Au assays were from the rock in its natural state. Test 7 and 13 offered a good breakthrough and has developed a consistent pattern in all tests so far. It has the possibility of an economical process. All assays show the presence of platinum group minerals but quantities not ascertained.

Respectfully submitted,

James W. Lower

James W. Lower
Mechanical Metallurgical Engineer

ACTI
MINING C
P.O. BOX 533
TRONA, CALIFORNI
Telephone: (714) 372-

Date JUNE 27, 1982

Name BUMBLE BEE LAND AND MINERAL

Tests and fire assays in this program have indicated that this ore carries following amounts of precious metals:

1.5 TO 3 oz Au/ton .37 TO 1 oz Ag/ton ——— oz Platinum me

We have determined that CLS -1 or -13 non-cyanide leaching can recover approximately:

92 % Au 76 % Ag ——— % Pt metals

Precious metal recovery from your ore as given above depends upon the following conditions:

1. Pre-treatments as follows: 5% SOLUTION OF HCL FO TWO HOURS THEN WASH
2. Pulverize to mesh number 80.
3. Use CLS -1 or -13 at a strength of 3 oz per gallon of water. T would be approximately 80 pounds of CLS per ton of ore. The s tion may be re-used.
4. Leach at a temperature of 150° F. or ———.
5. Heat and agitate for a period of 18 hrs.
6. Add 8 gallons of HCl acid or ——— pounds of a powder per ton of ore.

The above conditions are the basic parameters for CLS leaching. These par are separate from other portions of the flow chart and may require some alt under various conditions. It will usually be found that an ore should be co trated before leaching. Concentrating will usually change the above parame

THIS ORE SHOULD BE CONCENTRATED BEFORE LEACHING FOR ECONOMICS.

LABORATORY SUPERVISOR

21

SUN CHIEF MINES

EXPLORATION

P. O. BOX 2819 • GLOBE, AZ. 85501
(602) 425-3156

RTIFICATE OF ASSAY

August 18, 1981

R	MARKS, ETC.	SAMPLE	Au					
		GMS.	oz/T					
	BBLM #1	0.097	0.684	1020 FIRST RUN		SHAKER		TABLE
	BBLM #2	0.379g	2.67	1050 SECOND RUN		SHAKER		TABLE
	BBLM #3	11.24g	79.569	VIBRATING SLUCE			3 LOS -	
				10 LOS -				

Calculated by
K. [illegible]
ASSAYER

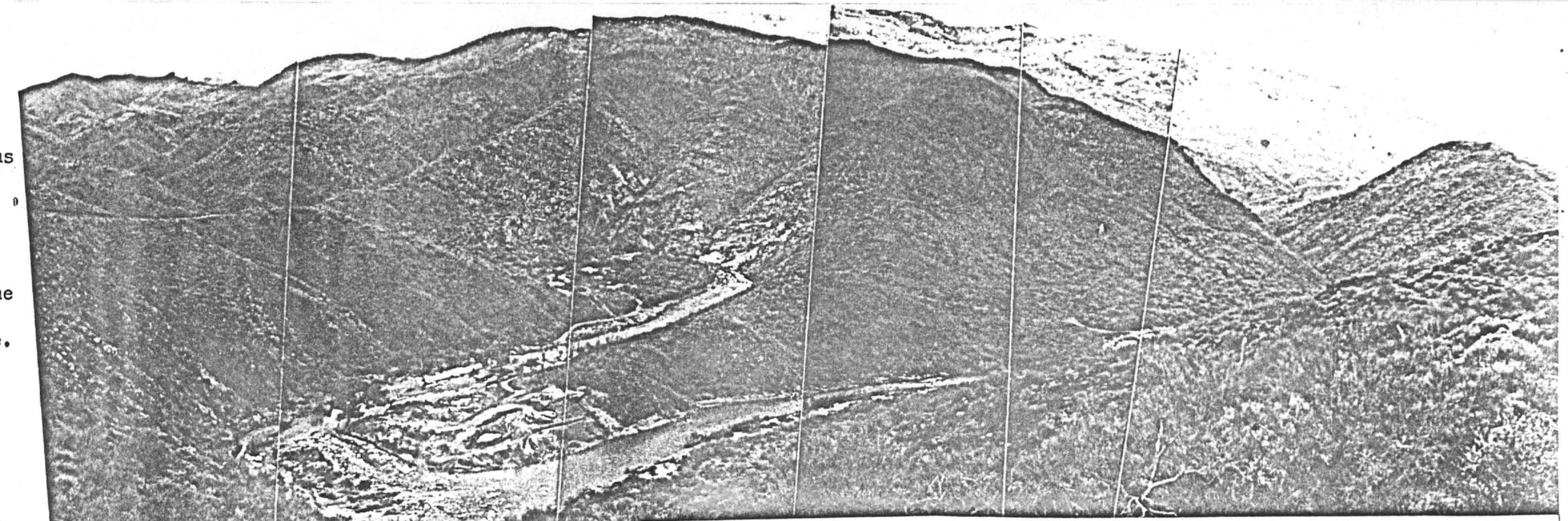
CONCENTRATE 3 TOL.

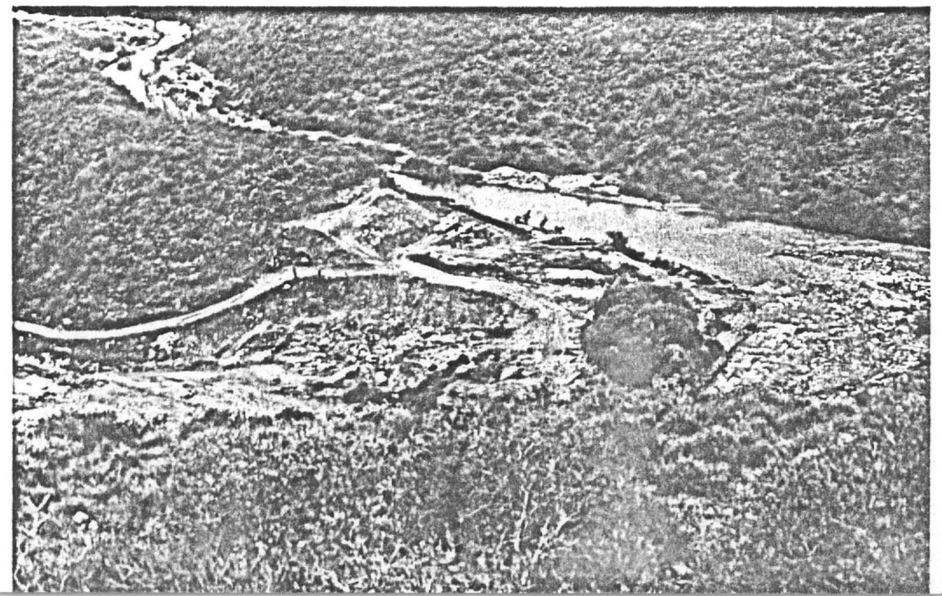
Typical of the 21 claims is this area of the lower twelve.

TOP, looking west at the mining site on the Vale.

LOWER RIGHT, Looking northerly, upstream at Vale #2, toward Rock, Yellow Bar and Clay bar.

LOWER LEFT, viewing the Vale from another angle,





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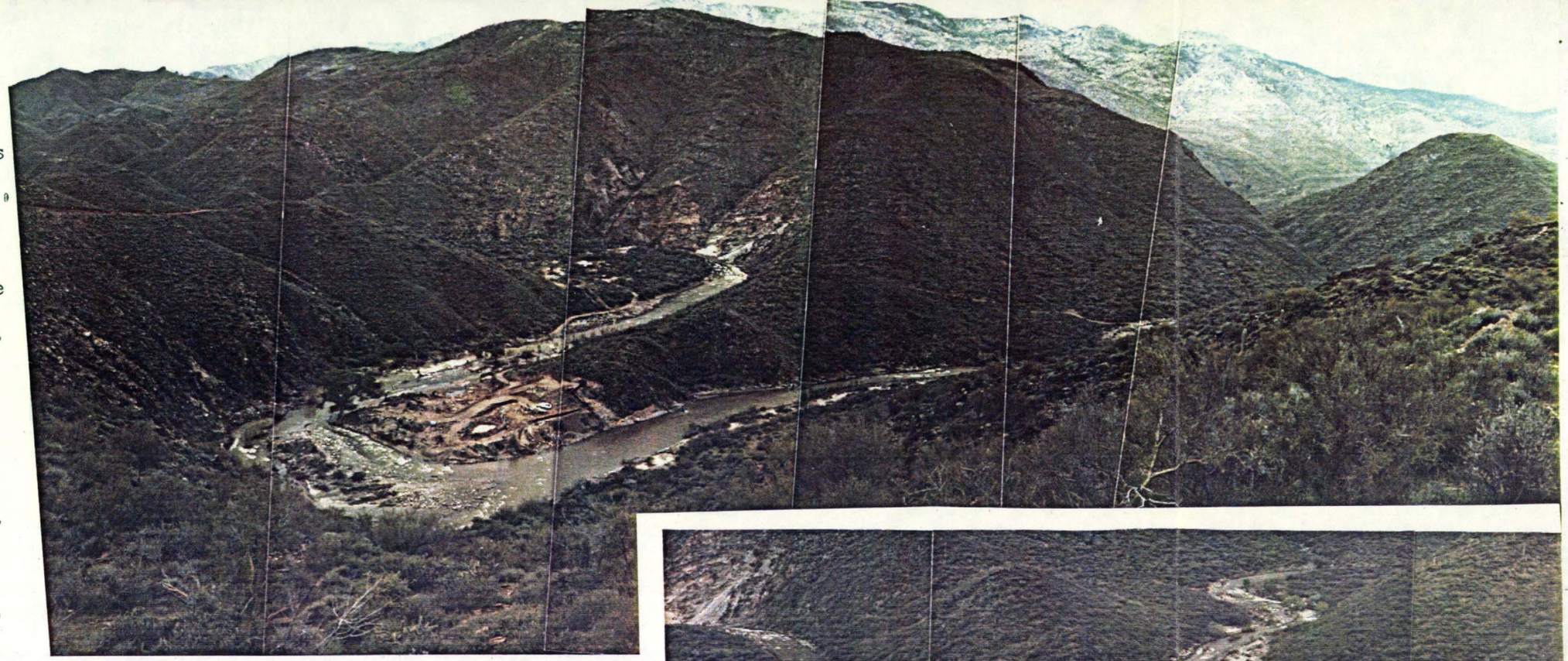


31¢ postage due. paid 3/28/83

GOLDEN EAGLE MINING

March 25, 1983

Mr. Ben F. Dickerson #III
DMEA LTD.
4203 N. BROWN AVE. SUITE F
SCOTTSDALE ARIZONA 85251

Dear Mr. Dickerson,

I am enclosing the two copies of the papers on our Golden Egale Mine (Placer) in Blackcayon River Arizona.

One is a brief Resumes of (Proposed) management of pilot plant operation for leach test.

The other is a copy of the interoffice correspondence from Jack Pierce engineer in charge of test to his Boss Dr R. Bhappu. This is the paper that he gives the estimates of the tonage you asked for.

If you need any more information or want to set a date to go up to the mines. Please call Mr. Ed Whelan who lives at 3318 E Elm Street Phoenix Arizona 85018 Telephone Number 956-6095. We also could have the mining engineers meet us at the mine when we go up so we could have a round table discussion of the whole project. We will await your call.

Yours very truly,

Jack L. Neal

JACK L. NEAL

GOLDEN EAGLE MINING CORPORATION (proposed)

BRIEF RESUMES OF
(proposed) DIRECTORSHIP AND MANAGEMENT

DIRECTORS:

Dale E. Fiscus, PRESIDENT, age 66, p.o. box 535, Globe, Arizona 85501 - Life long Arizona resident, retired - Thirty three years various mining activity, open pit and underground - Supervisory and management, mostly copper, some gold and other - As a young man of several years residence of the Bumble Bee/Black Canyon mining district and area, Fiscus with his parents and later with his own family, is the primary locator of most of subject, 21 gold claims.

RALPH M. GRAY, EXECUTIVE V.P., age 65, p.o. box 544, Black Canyon City, Arizona 85324 - Thirty year resident of Arizona, retired, - Occupations in ranching and heavy equipment operations, Phoenix and Black Canyon City areas - President and General Manager of his own contract back hoe service business in the Phoenix area for many years - General ranch forman for the large cattle ranch that operates in the area of subject gold claims. Now active, part time, raising and showing prize horses.

O. E. (Ed) WHELAN, SECRETARY TREASURER, age 62, 3318 E. Elm street, Phoenix, Arizona, 85018 - 1980 retired from U.S. Department of Interior, Bureau of Indian Affairs, high level administrative and management in commercial and industrial developing endeavors for and in the vicinity of Indian reservations throughout U. S. - Prior occupational activity in private ventures of residential development, design and construction - Also, developer and co-owner of a five, Arizona radio station commercial broadcasting enterprise, post war '40's through mid 50's.

JACK L. NEAL, V.P. (purchasing), age 64, 1011 Skyline drive, Globe Arizona 85501, over 50 year resident of Arizona - mining an occupational lifetime activity - Founded and operated Metate Asbestos corporation in 1951, a company of international marketing, operating six underground mines and three mills - Functioned as President and Board Chairman from 1955 until its 1972 closing due to EPA pressures which have caused the demise of the entire, U.S. asbestos industry, Johns Manville receiving the greatest media attention.

K.W. HAMMES, P.E., age 65, Hammes engineering company, P.O. box 551, Sedona, Arizona 86336 - Lifelong Arizona resident - 1938 graduate University of Arizona, B.S. degree civil engineering - 9-years activity with Miami Copper/Castle Dome/Copper Cities mining Companies as resident and chief engineer - Private consulting business - Globe, Arizona city engineer 8 years - With another, made original discovery of the huge copper ore body now occupied by Kennicott Copper co. at Safford. With sons, T.L. and K.W. jr., developed and perfected the ore recovery process known as "electro potential cell' - obtained a patent in 1974.

TIM L. HAMMAS, age 33, B.S. degree in Biology and Chemistry - P.O. Box 551, Sedona, Arizona 86336 - Lifelong Arizona resident - Project engineer for Hammas engineering company - With K. W. Hammas, researched and developed the new, patented, process for the recovery of precious and semi precious metals - During the recent three years, performing design and operating supervision for a commercial pilot plant of Thunderbird mining, milling and chemical corporation, also project engineering for Sedona research, owners of Gold and Silver properties and Pan American fiber Corporation owners of Asbestos properties.

INTEROFFICE CORRESPONDENCE

TO: Dr. R. Bhappu **DATE:** April 1, 1980

FROM: Jack Pierce **COPY TO:** George Potter

SUBJECT: Preliminary Report on Black Canyon Placer - Sampling

On March 22, 1980, I met with the following men at the Rock Springs, Arizona cafe at 9:30 a.m.

Jack NEAL		
[redacted]	-	Group Representative
Ralph Gray	-	Property Owner, local
Dale Fiscus	-	Property Owner, Globe
Ed Whelan	-	Property Owner, Phoenix

Together we visited the placer claims reasonably accessible by pick-up truck and returned to Rock Springs about 1:30 p.m. where we talked until 3:00 p.m.

Gray, Fiscus and Whelan have vested interest in 21 placer claims in 6 groups, totalling 420 acres and blanketing some 2.48 map miles of Black Canyon stream bed. Other interests divide the continuity of the client holdings with claims on the stream covering 2.18 map miles. The length of stream bed and active placer ground over that 4.66 miles of meandering gorge is estimated at about 20 percent in excess of map distance. Most, if not all, of the claims are 20 acres with dimension 600 feet by 1,500 feet, using the stream as the center of the claim width. There are several perched bars within the boundaries of these claims that denote ancient stream bed deposits to be tested. One notable one, of the extreme north end of subject property, is covered by the 120 acre Comet claims. In the aggregate there are several million yards of placer material to be sampled. (See the topo sheet and claims sketch attached.)

The placers in the stream bed area can best be classed as "boulder strewn stream placers" and the perched bars as "residual placers" of similar composition. The latter range up to 50 feet in elevation above the stream surface. Gold particals observed are flat and fairly coarse. The color indicates a high silver content.

There are no falls or rapids in this section of Black Canyon, which drops only 280 feet (2,440 to 2,160 foot elevation) in the 4.66 map miles (estimated 5.59 stream miles). This gives an average grade of 0.95 percent, which could indicate the feasibility of ponding a small production barge to work the gravels to bedrock in the stream bed throughout most of subject-placer course.

In spite of the flat profile, the recent (February 1980) heavy flooding completely obliterated the road in the canyon floor. Considerable road work must be included in a sampling cost estimate. The subject placer claims are accessible by ranch type roads over extremely sharp topography at three points from a paralleling north-south dirt access road. These access points are at each end and about midway to the subject property.

MEMO TO: R. Bhappu
FROM: J. Pierce
DATE: April 1, 1980
SUBJECT: Preliminary Report on Black Canyon Placer Sampling

PAGE TWO

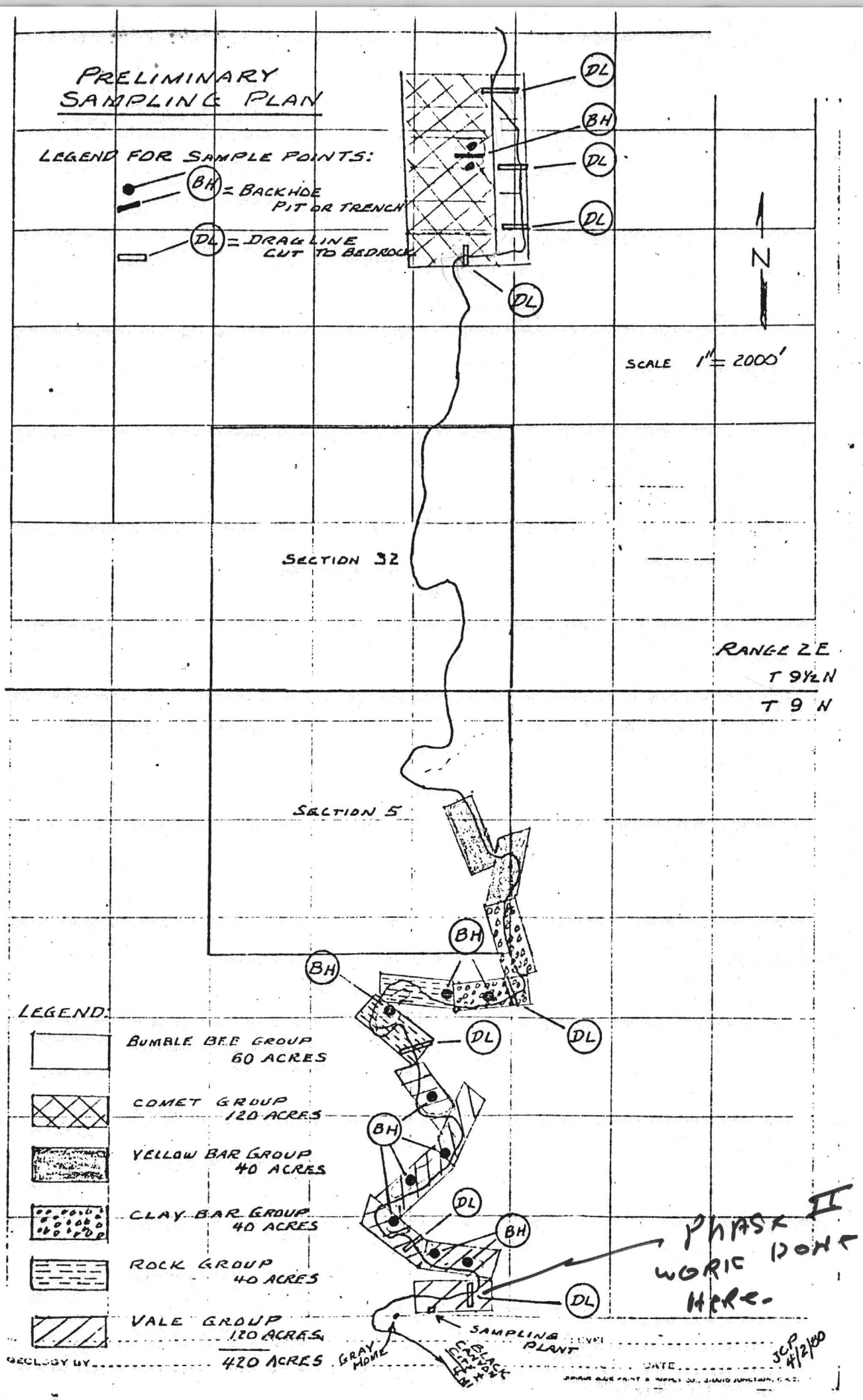
The prospective client group has installed a small sampling plant at the extreme south end of the subject property. It is comprised of a grizzly, a trommel screen and a sluice box about 15 feet long. This served to process samples from the southern-most claim immediately prior to the February flood.

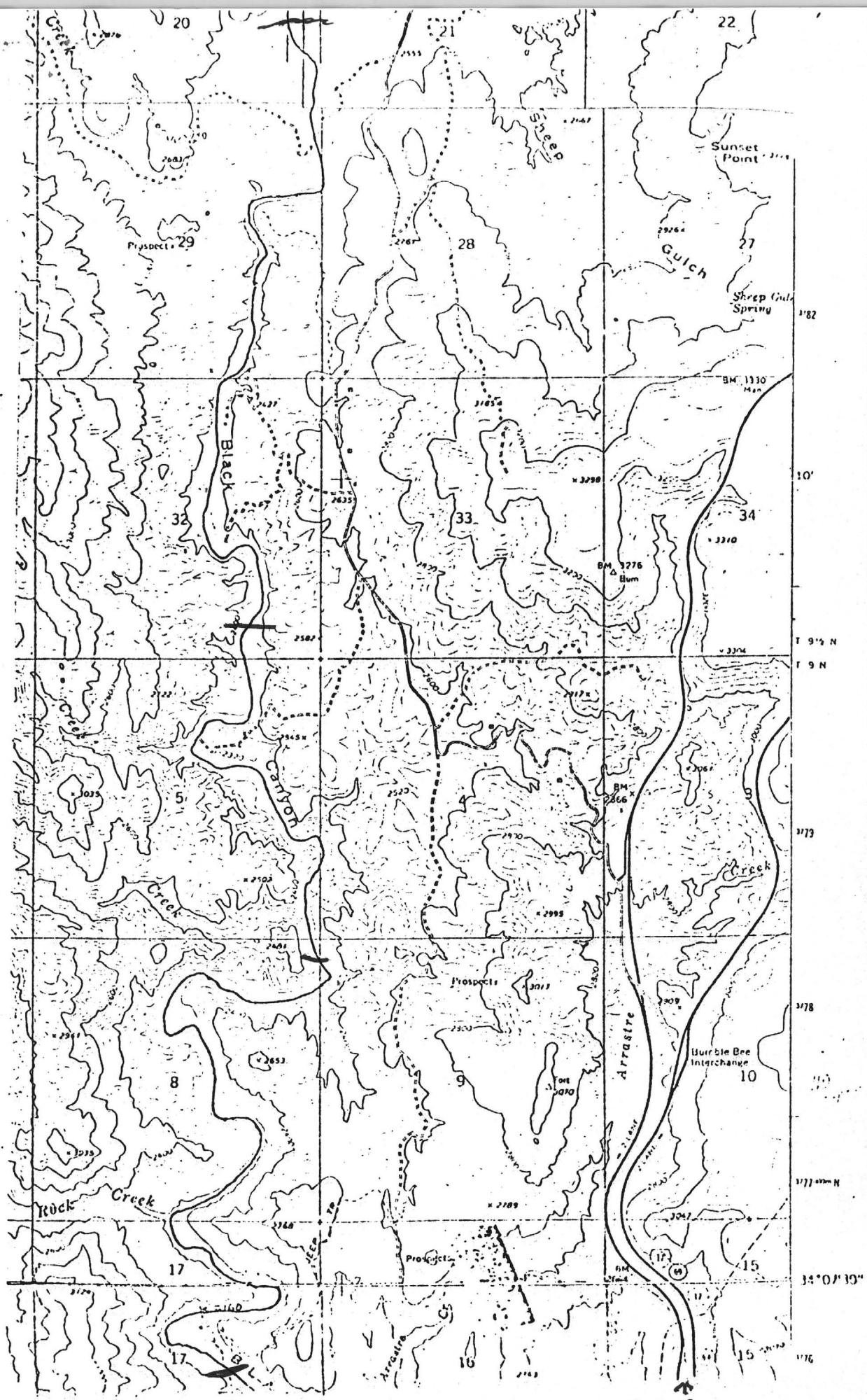
Office work, using applicable data together with my very brief and incomplete (due to rain and short allotted time) reconnaissance, revealed that additional field work is essential to the formulation of an intelligent sampling program and proposal. I must become more intimately acquainted with the property through one or two days additional reconnaissance.

It is obvious that an effective sampling program at the lowest possible cost will require an intimacy with all conditions on the property by the person responsible for the activity. There is no easy way and no prototype procedure to obtain conclusive sampling results and the success of the project rests on the judgement of engineer or engineers devising the sampling program and supervising it to fulfillment.

JCP:sco

Att.


PRELIMINARY SAMPLING PLAN
LEGEND FOR SAMPLE POINTS:
BH = BACKHOE PIT OR TRENCH
DL = DRAGLINE CUT TO BEDROCK
N
SCALE 1" = 2000'
SECTION 32
RANGE 2E
T 9½N
T 9 N
SECTION 5
LEGEND:
BUMBLE BEE GROUP 60 ACRES
COMET GROUP 120 ACRES
YELLOW BAR GROUP 40 ACRES
CLAY BAR GROUP 40 ACRES
ROCK GROUP 40 ACRES
VALE GROUP 120 ACRES
420 ACRES
SAMPLING PLANT
GRAY HOME
BLACK CANYON
PHASE II WORK DONE HERE.
JCP 4/2/80


20
21
22
Sheep
Sunset Point
Prospect
29
28
27
Gulch
Sheep Gulch Spring
BM 1330
Black
32
33
34
BM 3276
Bum
T 9½ N
T 9 N
Canyon
5
4
BM 2666
Creek
Prospects
Arrastre
Bumble Bee Interchange
8
9
10
Rock Creek
17
15
34°07'10"
16

US I-17

mountain states research & development

division of Mountain States Mineral Enterprises, Inc. P. O. BOX 17960, INTERSTATE 10 & VAIL RD., TUCSON, ARIZONA 85731 (602) 792-2800

April 30, 1980

[redacted]

Dear Mr. [redacted]: Ned & C.

In accordance with the agreement reached during our recent meeting in Tucson, our Mountain States Research and Development (MSRD) is pleased to submit the following proposal for the technical and economic evaluation of the Black Canyon Placer deposit.

It is our understanding that you and your associates wish for our MSRD to undertake a feasibility study to determine the economic viability of the Black Canyon Placer deposit in Arizona. The major components of such a study would include ore reserves and grade confirmation, the development of an effective flowsheet to recover the gold/silver values from the deposit, capital and operating cost estimates, and a realistic economic evaluation. In order to develop an appropriate project program and project cost estimates, it was decided to undertake a preliminary (limited) testing program on a cooperative basis under Phase I of the project.

The scope of work for the Phase I effort will include:

1. Client will arrange for taking a 20 cubic yard (about 30 tons) initial sample from a location which will be confirmed by Jack Pierce, Sr. Geologist of MSRD.

2. Jack Pierce will supervise the taking of the sample as well as its processing at the mine site.

3. The 20 yard sample will be processed at the mine site by the Client using the available or rented equipment. The flowsheet to be used for processing will include a trommel screen in closed circuit with a 10-mesh screen. Such a flowsheet will result in plus 5/8-inch fraction which will be discarded, minus 5/8-inch plus 10-mesh product which will be sampled and saved, and a minus 10-mesh fraction which will be shipped to Tucson for further processing by MSRD.

ISENNY ONLY PHASE I WAS DONE COST $6000 BY MSE. OF TUCSON. PHASE II WE STARTED LIMITED OPERATION, WITH ATTACHED FLOW SHEET

msme

4. MSRD will process the minus 10-mesh fraction using the Moving Belt Separator in closed circuit with a table to recover the gold values.

5. MSRD will prepare the overall metallurgical balance and provide a comprehensive program and cost estimates for evaluating the Black Canyon Placer deposit through the required feasibility study.

6. On successful completion of the Phase I, and if so authorized by the Client, MSRD in cooperation with the Client will undertake a more detailed study under Phase II of the project.

The cost of the Phase I effort by MSRD is estimated as follows:

1. Supervision by Jack Pierce for mining and processing of the 20 cubic yard sample Three (3) days @ $400 per day	$1,200
2. Further testing by MSRD in Tucson on minus 10-mesh sample, to be billed in accordance with attached Schedule E-0480 for labor and supervision and analytical charges	Open

We sincerely hope that the foregoing proposal for Phase I work will be acceptable to you. If you need additional information, please do not hesitate to contact us. If the proposal is acceptable, please sign the attached copy of the proposal and return it to us for our records. We are prepared to initiate the project immediately on its authorization.

Assuring you of our continued interest and cooperation in this timely project, and with warmest of personal regards.

Sincerely yours,

MOUNTAIN STATES RESEARCH AND DEVELOPMENT

Roshan B. Bhappu
Vice President and General Manager

Accepted by:_____ Date:_____

RBB:jm

Att.

cc: Jack L. Neal

MOUNTAIN STATES MINERAL ENTERPRISES, INC.

INTEROFFICE CORRESPONDENCE

TO: Dr. Roshan Bhappu **DATE:** April 3, 1980

FROM: Jack C. Pierce **COPY TO:**

SUBJECT: BLACK CANYON PLACER

My preliminary report of March 28, 1980 will serve as general background and this will expand on it, correct a few errors therein, better describe the setting and the problems in sampling, describe how I propose to conduct the sampling program and estimate the cost of that program.

It is now confirmed that the subject placer mining claims are legally held thru location years ago and annual work performance by the Ralph Gray and Dale Fiscus families. In 1979 Ed Whelan, entrepreneur of Phoenix, became interested in exploiting the ground and furnished some $15,000 to $20,000 to help the owners develop a small gravity plant and gain access to the lower claims in return for a 1/3 interest in the venture. It was soon evident that money and technology were insufficient to overcome difficult recovery of metal and that, if the Black Canyon placers are to be successfully exploited a great deal of those two ingredients must be applied. [redacted] Jack Neal, friends of the owners, are to provide the funds to have the placers evaluated and, if warrented, put into production.

Pending the outcome of MSRD's evaluation, the owners have agreed on a claims sale price of $170,000 per claim ($3,570,000 total). They are also open to a joint venture with a financial-

operating entity.

Four figures are included with this report:

1. The area covering the topography of the claims taken from the Bumble Bee and Black Canyon City 7.5 minute quadrangle maps with the stream bed inked in.

2. My sketch of the claims involved as corrected from my preliminary report sketch and showing in red the approximate location and configuration of the 6 principal bars on the southerly claims and the ancient perched placer at the north end.

3. The same base claim sketch showing my suggested sample points and suggested means of excavating such samples.

4. A flow sheet of the present gravity plant so that MSRD will be able to assess the usefulness of that equipment and that location to the sampling job. Ralph Gray owns a 10-ton dump truck at the site.

(Photos taken 3/31 and 4/1 should be helpful addition to this report).

Cubication of gravel bars, banks and stream bed is difficult in many cases due to lack of the depth dimension. Meaningful profiles cannot be drawn so yardage estimates must be made on judgement estimates from site observations. The owners have estimates ranging up to 18,000,000 yards and mine is 4,500,000 yards which breaks down into 1,127,000 yards for the bars and 3,380,000 yards for the channel and banks.

It is noteworthy that placering is being readied to commence this month on the claims separating the Gray-Fiscus groups of claims. The enterprise is , we understand, headed by a man named Scott who will start work about 1000 feet upstream from the upper Yellow Bar claim with a placering machine developed and built in California

which Scott has purchased and is en route.

The Sampling Project

Note the topography of Black Canyon at the lower 12 claims is exceedingly steep on the eastern (access) side of the gorge. The two roads to canyon floor in that stretch are narrow, steep and rough. Equipment such as backhoe and dragline will be difficult and expensive to move in and out.

The canyon floor abounds in boulders weighing in excess of 500 pounds which will impede road building and trench-pit digging. A boom dragline would be an ideal tool to rock-bucket the large boulders out of the way and to scraper-cut the active channel to bedrock. A backhoe-loader can be placed on site with the aid of a small track bulldozer and it will serve well in the bars and drier banks providing depth to bedrock is not beyond its reach. Backhoeing from dozer trenches might practically achieve a depth of 20 feet but we understand bedrock may be as deep as 50 or 60 feet in some places. The client group and I agree an evaluation is not complete without achieving bedrock at several points in the deeper gravel bars.

Samples should be taken from every group except the Yellow Bar Group, which two claims botton on shallow bedrock with no significant banks or bars. Mr. Gray informs that a road from sample plant (present location of gold plant described) to the most distant sample point in the southerly groups will have 8 stream crossings and will require 5 days to construct. The maximum haul distance is close to 2.5 miles, so I recommend we utilize the existing plant site where dumping, stockpiling and water supply are already established.

The northernmost groups, Bumble Bee and Comet, present a very different picture. They are not in a deep gorge, are near the Bumble Bee county-maintained road with about 1/2 mile of fairly easy access by any size equipment. However, they are about 7½ miles by road from the above sample plant site. Hence, consideration should be given to moving the plant to these companion claim groups even though only 5 samples are scheduled from these groups.

A preliminary sampling plan is shown on one of the sketches in this report. It shows 13 sample points which include the following:

Backhoe pits	11
Backhoe trenches	1
Dragline cuts	8
Total samples.	20

I estimate there will be an average of 20 yeards per sample excavated and processed in the sample plant to reduce it to a black sand concentrate. I am told the Black Canyon gravels contain 6% black sand. At 20 yeards processed the concentrate yield would be 1.2 cubic yards and this presents a significant handling and process problem. I need advice on means of reducing the sample, if there is an acceptable way, and/or reducing the black sand concentrate by acceptable procedures.

Personnel required for the road construction, sample plant erection and equipment move-in should require 8 working days by 4 men. Those same 4 men, with supervision by a fully qualified mining and treating specialist should carry the sampling program to completion in an additional 30 working day period. Ralph Gray is an experienced machine operator and expects to be employed at $10 per hour to build roads and operate the machines. Dale Fiscus is capable of light work and may fit into the work force some place.

The list of major equipment required to take and transport the placer bulk samples is:

Backhoe-loader	Rent $125/ day	$1600/month
Track dozer (small)	140	1800
Boom dragline (small)		
10-ton dump truck (Gray's)	20	250 (?)
" " " rental		

Miscellaneous small equipment and tood will largely be available from owner group or MSRD.

Fuel and lube for the major equipment will be a significant cost item. There will be no deliveries by vendors to the site.

From the flow sheet of the existing plant and a 100# sample of typical gravel from the site, MSRD will be able to draw its sample plant flowsheet and advise on many of the unknowns and plans advanced in this memo.

Hopefully R&D, Construction and Estimating can come up with the cost for the proposal to the Owner Group.

Jack C. Pierce

GRAVITY GOLD PLANT

AT RALPH GRAY HOME SEE MAP

MAXIMUM CAPACITY 50 YDS. IN 8 HRS.

TRUCK ROAD AND STOCKPILE

GRIZZLY

6' x 6' AT 30° 1½" PIPE BARS

- 1¾" → HOPPER → GATE
- + 1¾" → HILLSIDE DUMP

LAUNDER
STEEL 12" WIDE 5½" DEEP
18' LONG 24" DROP

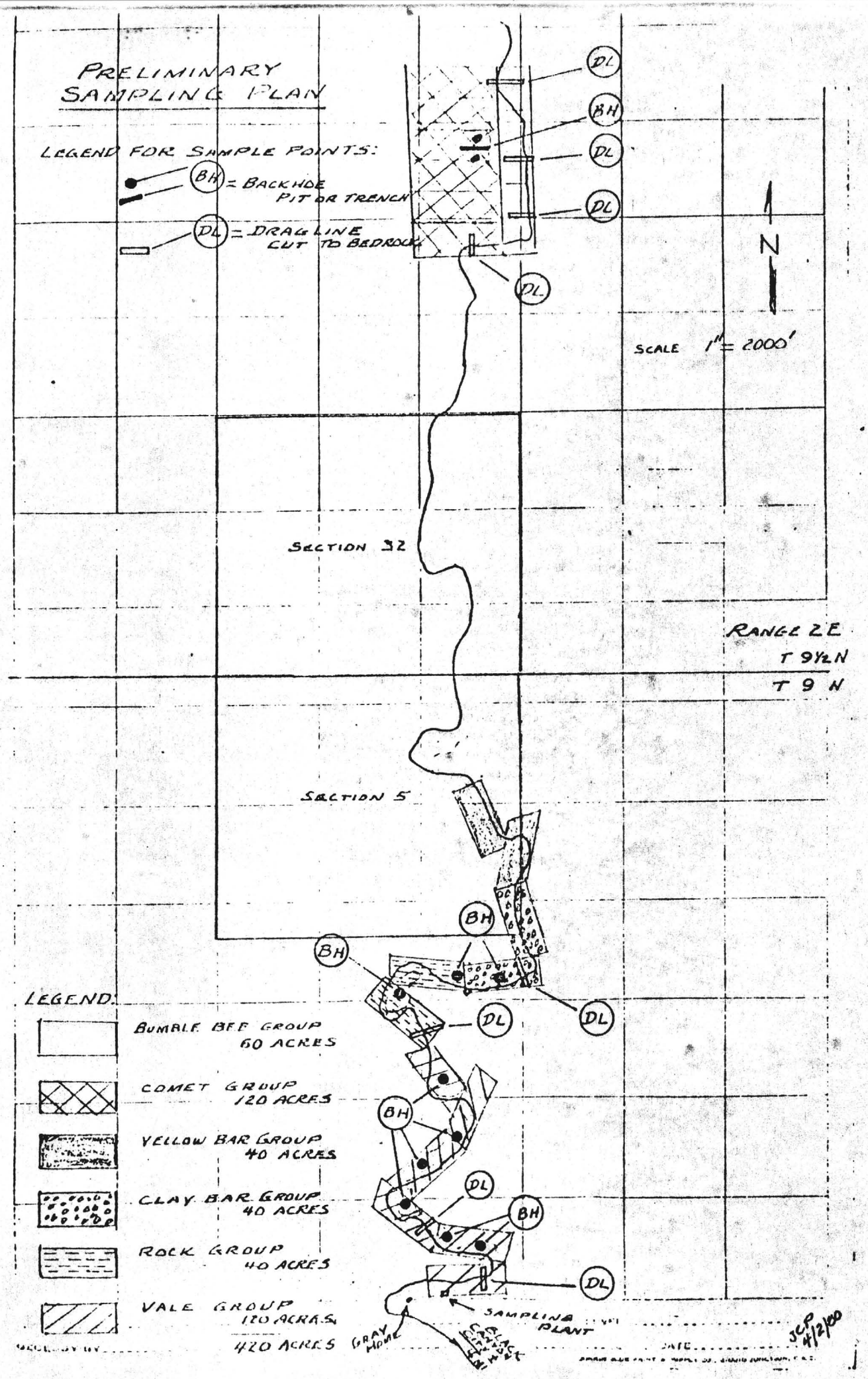
TROMMEL
2'-10" O.D. 10' LONG 16 HP GASOLINE MOTOR
6 LIFTERS 2½" HIGH SCREEN DISCHARGE 3'-7"
1/4" SQ. OPENING

- 1/4" → LAUNDER 10' LONG
- + 1/4" → HILLSIDE DUMP

SLUICE BOX - ADJUSTABLE SLOPE
12" DEEP 24" WIDE 25'-5" LONG
SECTIONALIZED AS FOLLOWS: (ALL CARPETTED)

5' 4-MESH SREEN CLOTH
3' 10-MESH " "
} ON CARPE
8' 1" RIFFLES 1' SPACE
6'-8" 1/8" X 1/2" BARS 1" ABOVE CARPET
2' RIFFLE PLATE 5 RIFFLES 2" HIGH
0'-9" PERFORATED PLATE 1/8" OPENIING

- -1/8" → CONC. BIN
- → TAILS TO HEAP


PRELIMINARY SAMPLING PLAN
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DL = DRAGLINE CUT TO BEDROCK
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SCALE 1" = 2000'
SECTION 32
SECTION 5
RANGE 2E
T 9½N
T 9 N
LEGEND:
BUMBLE BEE GROUP 60 ACRES
COMET GROUP 120 ACRES
YELLOW BAR GROUP 40 ACRES
CLAY BAR GROUP 40 ACRES
ROCK GROUP 40 ACRES
VALE GROUP 120 ACRES
420 ACRES
SAMPLING PLANT
GRAY HOME
JCP 4/2/00

DELMER L. BROWN
Consulting Geological Engineer
1095 Dudley Street
Lakewood, Colorado 80215

A Preliminary Geological Examination

of the DeVault Placer Claims

Yavapai County, Arizona

February, 1977

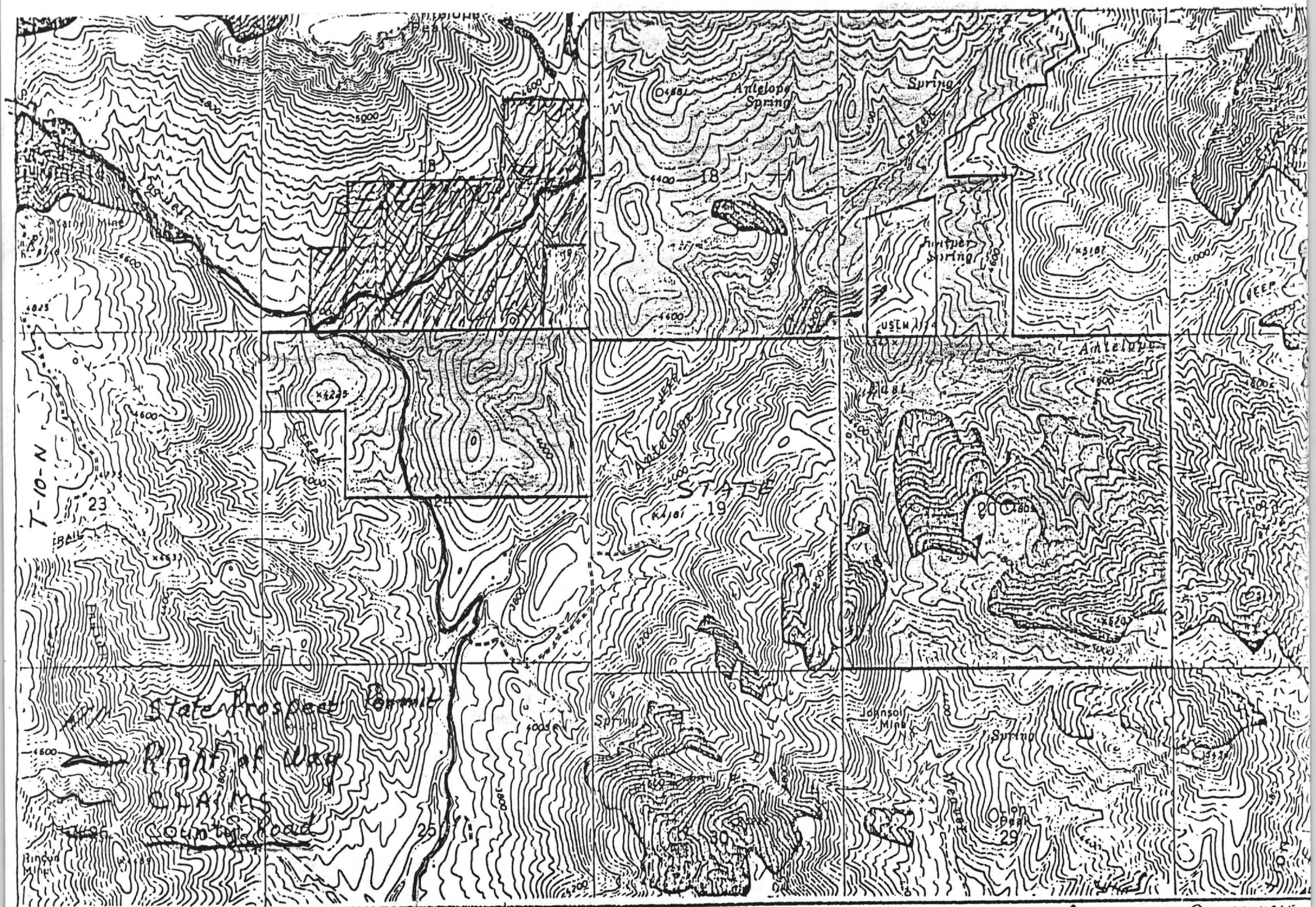
Delmer L. Brown
1095 Dudley Street
Lakewood, Colorado

Introduction and Summary

The DeVault placer claims, consisting of 86 unpatented placer claims, are located approximately 2 miles north-northeast of the now abandoned community of Stanton, Arizona.

In the area of interest, thick accumulations of ancient placer gravels have been deposited on a deeply dissected ancestral terrain. Following the deposition of the placers, Tertiary volcanic tuffs were deposited in the area, and overly the placer deposits.

A systemmatic mapping and sampling program has not been carried out on the placer properties, but a preliminary inspection of the claim area, upon which this report is based, certainly indicates that sufficient placer material is available to warrant a detailed investigation of the properties.



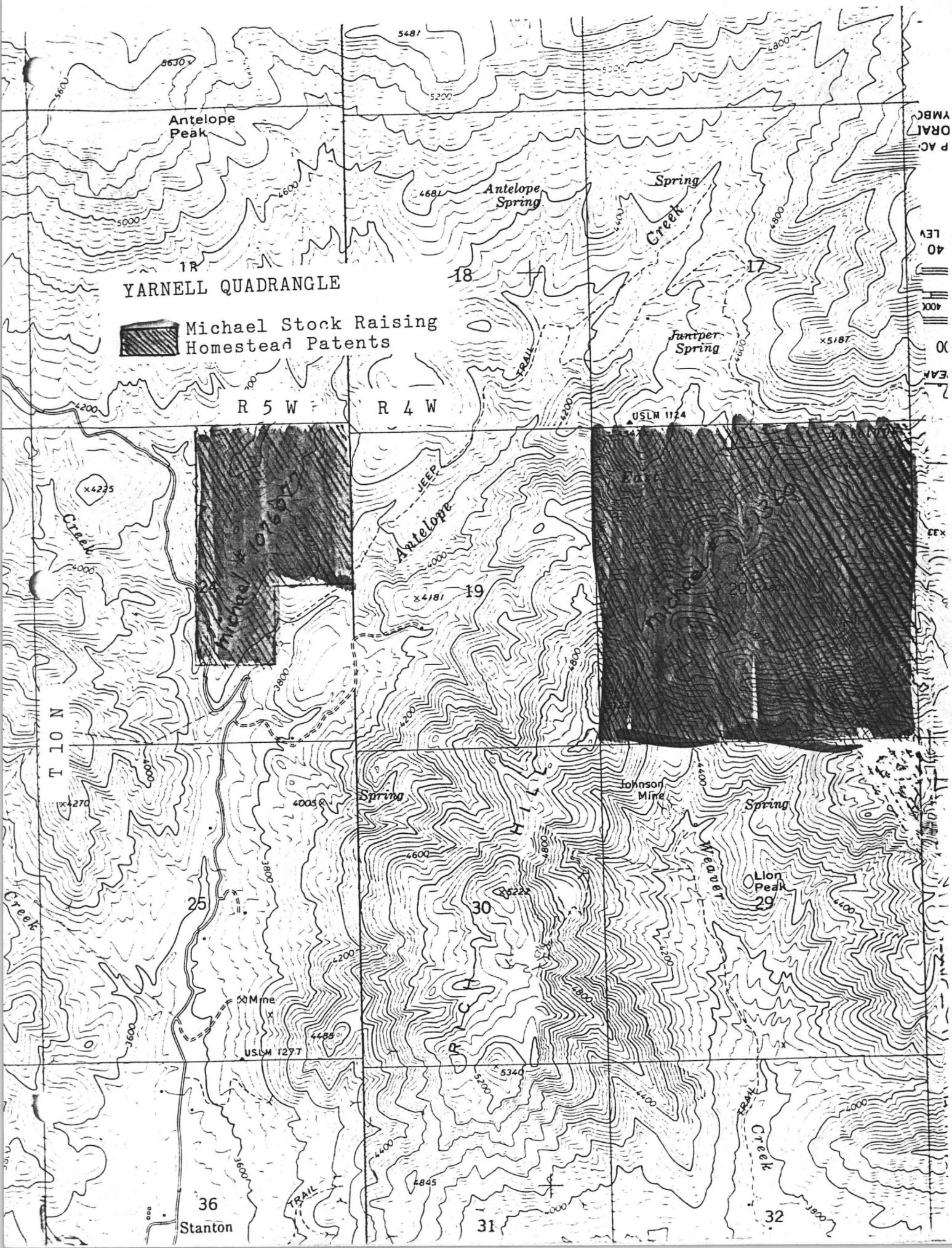
Location Sketch of the DeVault Placer Claims

Location and Topography

The DeVault placer properties are located in Yavapai County, Arizona, situated approximately 2 to 3 1/2 miles north-northeast of Stanton, Arizona, and approximately 2 miles southeast (aerial distance) from Yarnell, Arizona. The property may be reached by travelling U. S. Highway 89 from Phoenix to Congress Junction. Approximately 2 miles beyond (northeast) of Congress Junction, an unimproved road leads to the now-abandoned community of Stanton, Arizona, a distance of approximately 6 1/2 miles. From Stanton, another unimproved road leads northward along Antelope Creek into the claim area.

The DeVault placer properties consists of 86 unpatented placer claims, comprising the whole of Sections 18 and 20, and portions of Sections 17 and 24, Township 10 North, Range 4 West, Gila and Salt River Meridian, Yavapai County, Arizona. Plate 1 is a topographic map which shows the location of the DeVault group of placer claims, and a detailed listing of the claims is provided in Table 1. The properties are owned by Jack and Dorothy DeVault, Post Office Box 1498, Wickenberg, Arizona, 85358, telephone (602) ~~427-3250~~.

The topography of the area is one of a dissected and deeply eroded mountain front, with elevations in the area of the claims ranging from 3800 feet to 5300 feet. The entire area is readily accessible by means of established unimproved roads.


YARNELL QUADRANGLE
Michael Stock Raising Homestead Patents
Antelope Peak
Antelope Spring
Spring
Creek
Juniper Spring
Antelope
Creek
Michael # 1076
Michael # 360
JEEP TRAIL
TRAIL
USLM 1124
USLM 1277
Mine
Johnson Mine
Weaver
Lion Peak
Spring
Creek
Stanton
R 5 W
R 4 W
T 10 N
18
17
19
20
24
25
30
29
36
31
32

Vegetation in the area is sparse, consisting largely of native grasses, cacti, and low growing native shrubs.

The climate of the area is typical of desert areas at this elevation, very rarely reaching below-freezing temperatures in winter, but attaining high mid-summer temperatures.

The higher portions of the Weaver Mountains, located to the north, receive approximately 18 inches of rainfall per year. Antelope Creek, which diagonally transects the area of interest, and Weaver Creek, whose upper reaches extend into the claim area, are both south-flowing creeks which often have some water in their upper courses. In addition, several springs exist in the area.

Mining History of the Area

Following the accidental discovery of gold nuggets in some rich gravels on the top of Rich Hill in the early 1860's, there was considerable prospecting and exploration activity in the area which was to become known as the Weaver-Rich Hill mining district. Shortly thereafter, interest was kindled in the gold placers along Weaver and Antelope Creeks, where the gold was won through panning, rocking, and sluicing. By 1883, the placers had yielded more than one million dollars in gold (based on a gold price of $20 per ounce), but thereafter the deposits have been worked on an intermittent and sporadic basis.

During the early days of placer activity in the district, the lode gold deposit at the Octave mine was discovered. Little development of the Octave mine was attempted until the perfection of the cyanide process in the 1890's. Between 1900 and 1905, gold and silver ore worth $1,900,000 were mined from the Octave mine. Activity declined after 1905, and the mine was closed in 1930. Under the new ownership of the American Smelting and Refining Company, the mine was re-opened in 1934, and was worked until December, 1942. Lode production of the district declined sharply in 1943, and has been negligible since that time.

Placers in the district are credited with about 104,000 ounces of gold production, and the lodes with about 204,000 ounces, totalling

308,000 ounces gold. All but about 1500 ounces of the lode gold came from the Octave mine.

Virtually no attention has been given to the gold placers along the upper reaches of Antelope Creek, where the DeVault placer claims are located. This inattention is perhaps due to the fact that these placer gravels are ancient or "fossil" placers, which were subsequently overlain by Tertiary volcanics, and hence, to the early day prospectors, who did not understand their geologic origin, these gravels may not have seemed to have been a likely source for placer gold.

didn't give a damn either!

Geology of the Area

In the Weaver-Rich Hills district, the basement country rock consists largely of granite and quartz diorite, with lenses of schists. These rocks have been transected by dikes of pegmatite, aplite, and diabase. South of the DeVault properties, mineralized veins, chief of which is the Octave, occur along low angle fault zones which occur chiefly in the granite, but occasionally are recognized within the schist.

Severe erosion has caused the deep dissection of the Precambrian terrain of the area. Following this erosion, a very thick sequence of alluvial gravels were deposited along Antelope Creek. These alluvial gravels are exposed throughout the extent of the DeVault placer claims.

The deposition of the placers was followed by Tertiary volcanic activity, and is characterized by the deposition of a white water laid volcanic tuff (locally referred to as a pumice) which nearly everywhere outcrops at the top of the placer deposits.

Evidence of the severe erosion prior to the deposition of the placer gravels is readily apparent in the area, and is most strikingly demonstrated by the occurrence of placer accumulations around the periphery of resistant hills of granite and quartz diorite.

The source of the gold in these ancient placers has probably been derived from veins in the PreCambrian schists and granites of the

B.S.! Folk crystals only slightly rounded

western flank of the Bradshaw Mountains.

As mentioned previously, the top of the placer accumulations is marked by a very conspicuous white volcanic tuff. Close inspection of this tuff unit reveals that it was water ~~laid~~ lain, with the lower portion of the tuff bed being intermixed with placer gravels, and grading upward into water laid tuff beds devoid of gravel content. The thickness of this tuff unit is variable within the claim area.

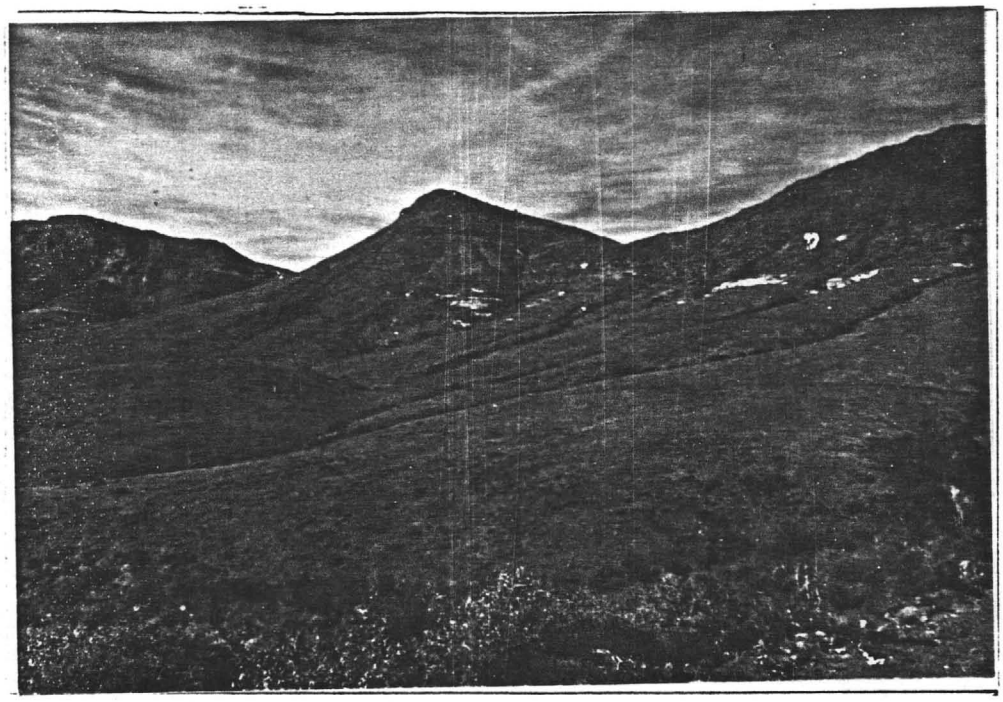


Plate 2

The gentle hillslopes seen in the center of the photograph are formed on the ancient placer deposits along the flanks of the present day Antelope Creek. Note the diagnostic white tuff layer which marks the top of the placer deposits.

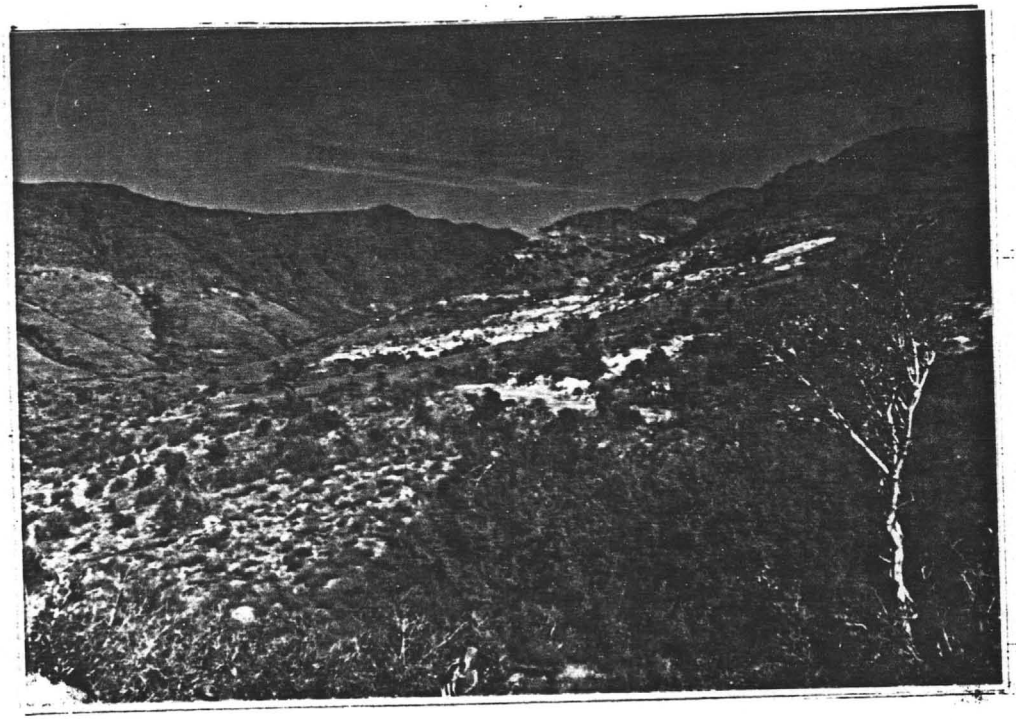


Plate 3

Photograph, looking northwest, showing the tuff unit which marks the upper horizon of the placer gravels. Below the tuff is the thick accumulation of ancient placer gravels, which range to more than 500 feet in thickness. Note that in the distant mountain range at the left hand portion of the photograph, the upper tuff unit is clearly visible, underlain by the placer deposits which are much lighter in color.

Character of the Placers

The thick sequence of placer accumulations on the DeVault properties can roughly be divided into upper and lower deposits. The lowermost deposits are very poorly sorted gravels, often containing fair sized boulders, and are invariably stained red due to the oxidation of pyrite, magnetite, and other iron minerals. Generally speaking, the clay content of these lowermost accumulations is quite high.

The uppermost gravels are white to light tan in color and are usually completely devoid of iron staining. They are medium to well sorted, containing only minor amounts of clay, and are often well consolidated and cemented with calcium carbonate (caliche).

The total thickness of the placer accumulations within the area has not been measured, but visual observation suggests a total thickness in excess of 500 feet in certain areas. Indeed, the thickness is somewhat variable throughout the area.

Within the claim area, there is no overburden of consequence overlying the placer gravels.

While a number of samples have been collected on the DeVault placer properties, the area has never been systemmatically sampled. Assays of the material have ranged from traces to more than ~~1~~ 1/2 ounces per ton. Spectrographic analyses of various concentrates have shown the existence of trace amounts of platinum and palladium.

Owing to the lack of data, it is impossible to ascertain at this time those areas of the placer deposit which have the higher gold content, their lateral, or their vertical extent. Inasmuch as the author of this paper made only a reconnaissance field inspection of the properties, no samples were collected for assay.

A systemmatic investigation of the DeVault placer properties is necessary to determine the thickness of the placer accumulations, their lateral extent, and the relative grade. Such an investigation would involve detailed field mapping, together with the collection of large-sized representative samples of the placer material which would most probably be processed and tested in a small scale portable placer plant to determine the gold yield. A preliminary inspection, upon which this report is based, certainly indicates that the quantity of placer gravels in the claim area is sufficiently large to warrant a sampling and evaluation program.

why?

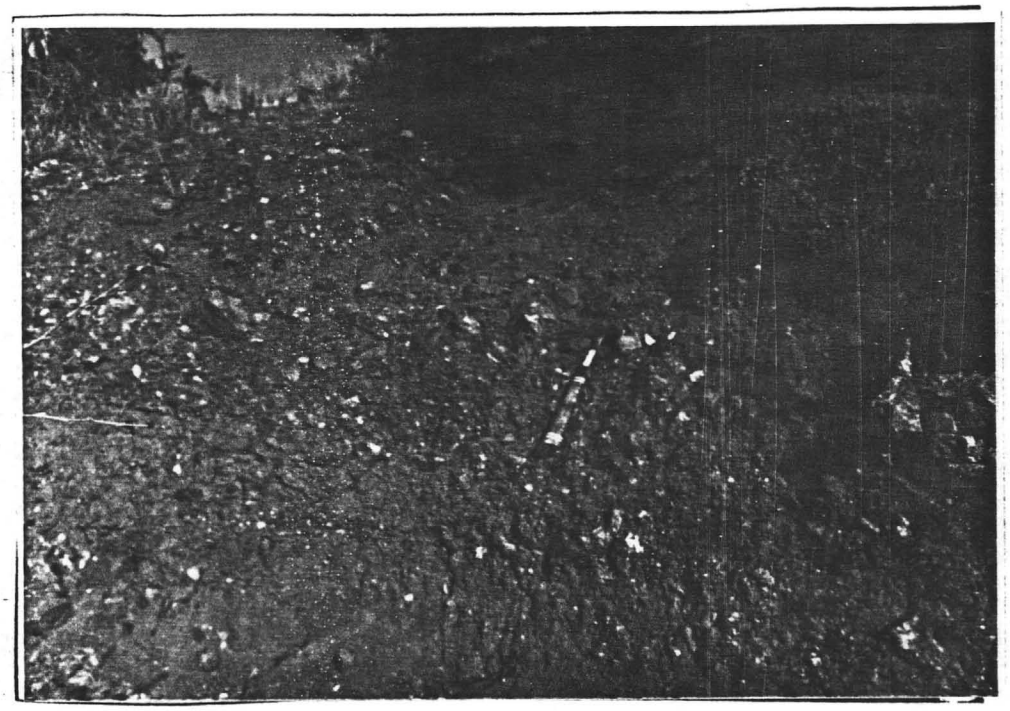


Plate 4

Close-up photograph showing the poorly sorted nature of the placer gravels in Section 20. Severe oxidation of pyrite and iron oxide minerals has allowed the development of red staining throughout much of the area.

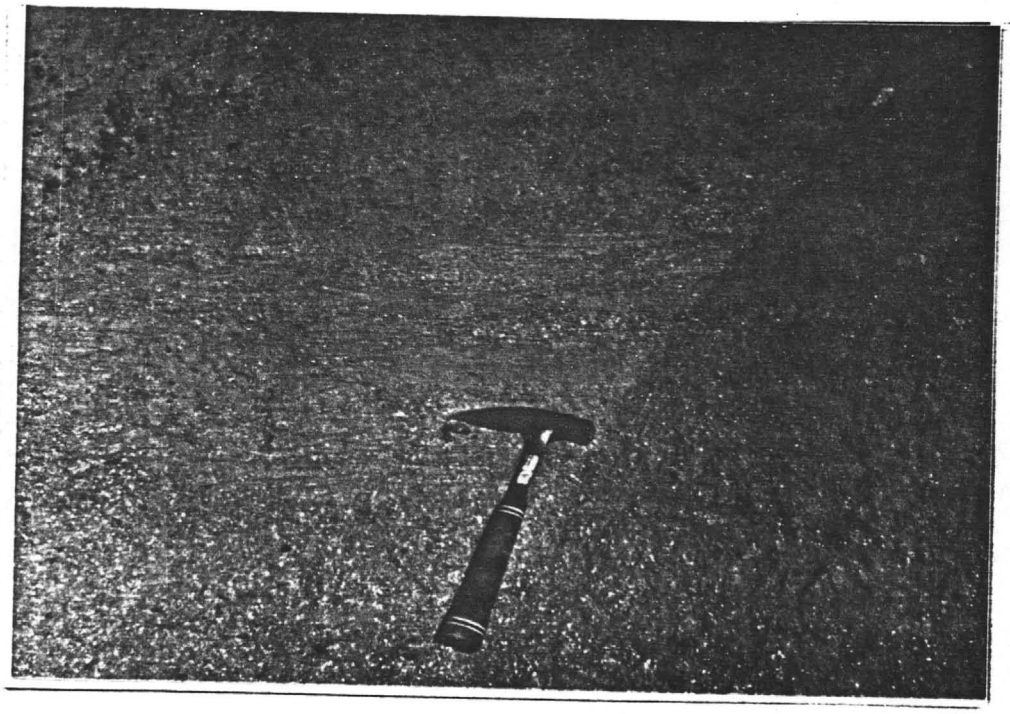


Plate 5

Close-up photograph of well sorted placer gravels in Section 18. In this specific area, the gravels are well sorted.

Table 1

The DeVault Placer Claims

Urium, Numbers 1 through 8	Section 24
Manurium, Numbers 1 through 6	Section 24
Red Hill, Numbers 1 through 10	Section 18
DeVault, Numbers 1 through 23	Sections 17,18
Patudium, Numbers 1 through 6	Sections 17,18
Who Knows	Section 17
Homestead, Numbers 1 through 32	Section 20

CONQUADCO, INC.
T. P. Stoltenberg & Curtis C. Wallace, Jr.
P. O. Box 873
Newark, Delaware 19711

CONQUADCO INC

For The Advancement of Man

Managers of Natural Resources, Industry, and Commerce

Please Reply To: T. P. Stoltenberg /P.O. Box 873 Newark, De 19711/

March 29, 1976

Mr. Jack DeVault
P.O. Box 1498
Wickenberg, Arizona 85358

Dear Mr. DeVault:

Because of the marginal commercial gold values reported herein, the Board of Directors of Conquadco, Inc. voted March 21, 1976 to terminate the mining lease agreements we have had with you and the Medds. This is notice of such termination. This decision was arrived at only after careful deliberation showed that considerably more samples (100-1000x) would be required to delineate ore features and our results to date did not justify the expense. Furthermore, we are not geographically situated to undertake that extensive a sampling and field geology program under such marginal conditions. We would wish that the reverse were true but such is not the case. The only future consideration in these properties that we should like to retain is a 30-day first right of refusal to respond to any future outside interest.

You will find attached a list of all fire assays run by us together with the atomic absorbtion (AA) gold analyses of the fire assay beads and other pertinent data. Cyanide leach tests on various particle size fractions obtained by milling and screening and/or classifying various ores are appended. Data on the fire assay beads that you sent to us include bead weights and x-ray analyses for gold by a scanning electron microscope. Four of the beads were imbedded in epoxy and sawed in half for mounting in the x-ray machine. One bead showed weak gold, one showed a trace, and the other two showed moderate amounts of gold. The dominant component in all of the beads is silver. Several thin sections of your ores were prepared for x-ray microprobe and scanning electron microscope examination -- no gold or platinum group metals were ever detected in raw rock by these analytical methods.

Note

didn't leach

The major source of error in early AA analyses of your samples by various laboratories and confirmed by our studies is non-specific absorbance caused by salt particles in the flame. Careful analytical technique can overcome this. Please let us know if we can be of any further assistance.

Sincerely,

T. P. Stoltenberg

Curtis Wallace, Jr.

DeVault
Ex 1 -

Location	Sampler	Bead Wt., Oz/Ton	Gold, Oz/Ton
Yarnell Hill	DeVault Bead	1.47	
" "	" "	0.80	
" "	" "	1.54	moderate by x-ra
" "	" "	1.0	weak " "
" "	" "	1.16	moderate " "
Johnson Pass	" "	1.10	
" "	" "	1.49	trace " "
Truck Stop	" "	1.20	
" "	" "	1.42	
" "	" "	1.86	
Johnson Pass Comp.	Wallace	0.64	.007 by AA
" " "	"	1.10	.191 " "
" " "	"	0.66	not run
Johnson P-Profile 1A	"	0.30	trace by AA
" " 1B	"	0.30	" " "
" " 2	"	0.42	" " "
" " 3	"	0.48	" " "
" " 4A	"	0.47	" " "
" " 4B	"	0.47	" " "
" " 5A	"	0.36	" " "
" " 5B	"	0.48	" " "
" " 6A	"	0.19	" " "
" " 6B	"	0.07	" " "
" " W1A	"	0.51	" " "
" " W1B	"	0.266	" " "
" " W2A	"	0.486	" " "
" " W2B	"	0.52	" " "
Micronizer-milled 1A	"	0.73	.049 " "
Johnson Pass Comp. 1B	"	0.57	.049 " "
" " 2A	"	0.62	.052 " "
" " 2B	"	0.63	.052 " "
" " 3A	"	0.32	.041 " "
" " 3B	"	0.45	.041 " "
" " 4A	"	0.42	.06 " "
" " 4B	"	0.30	.06 " "
" " 5A	"	0.42	.05 " "
" " 5B	"	0.53	.05 " "
Johnson Pass Comp. A	"	0.71	.00 " "
" " " B	"	0.64	.00 " "
" " " C	"	0.56	.049 " "
" " " D	"	0.58	.037 " "
Micronizer-milled Johnson Comp. #1	"	Cyanide Leach	.023 " "
Micronizer-milled Johnson Comp. #5	"	Cyanide Leach	.076 " "
Micronizer-milled Johnson Comp. #1	"	Bleach then Cyanide Leach	.074 " "
Johnson Pass Comp.	"	Cyanide Leach	.00 " "

1 Ton

1/2 Ton

Location			Sampler	Bead Wt., Oz/Ton	Gold, Oz/Ton
Truck Stop Comp.			Wallace	0.92	.161 by AA
" " "			"	0.78	.025 " "
" " "			"	0.48	not run
VIP-milled Truck Stop			"	0.56	.00 by AA
" " "			"	0.57	.00 " "
" " "			"	Bleach then Cyanide Leach	.08 " "
" " "			"	Cyanide Leach	.05 " "
Yarnell Hill			TPS	1.75	.157 " "
" "			Wallace	0.63	.00 " "
" "			"	0.70	.00 " "
" "			"	0.93	.00 " "
" "			"	0.68	.00 " "
" "	Comp.		TPS	0.564	.016
" "	"		Wallace	0.44	not run
" "	"		"	0.292	" "
" "	T142A		Geosurveys	0.62	.055 by AA
" "	T142B		"	0.46	.04 " "
" "	T143A		"	0.48	.035 " "
" "	T144A		"	0.34	.025 " "
" "	T144B		"	0.57	.025 " "
" "	T145A		"	0.60	.028 " "
" "	T145B		"	0.42	.028 " "
" "	T146A		"	0.70	.023 " "
" "	T146B		"	0.64	.023 " "
" "	T147A		"	0.566	.03 " "
" "	T147B		"	0.52	.03 " "
" "	T148A		"	0.63	.032 " "
" "	T148B		"	0.48	.032 " "
" "	T149A		"	0.494	.021 " "
" "	T149B		"	0.408	.021 " "
" "	T150A		"	0.63	.015 " "
" "	T150B		"	0.56	.015 " "
" "	T151A		"	0.596	.01 " "
" "	T151B		"	0.70	.01 " "
" "	T152A		"	0.612	.015 " "
" "	T152B		"	0.45	.015 " "
" "	T153A		"	0.55	.008 " "
" "	T153B		"	0.47	.008 " "
" "	T154		"	0.516	.015 " "
" "	COmp.		TPS	Bleach Then Cyanide	trace "
Quartz Streak		A	DeVault	0.26	.018 " "
Top #1		B	"	0.36	.018 " "
Quartz Streak Mid #2			"	no beads	
Quartz Streak		A	"	0.30	.02 " "
Bottom #3		B	"	0.41	.02 " "
Purple Rock		A	Wallace	0.376	.00 " "
YH Sea Bed		B	"	0.346	.00 " "
Grey Rock		A	DeVault	0.54	.02 " "
		B	"	0.776	.02 " "

Wilkinson & Sons Laboratories & Refinery

ASSAY REPORT

9491 SIERRA AVE.
FONTANA, CALIF.

TELEPHONE (714) 823-2264

CHARGES$ $ 3.50

SUBMITTED BY: Jack Devault

SAMPLE NO. (# 2)

WEIGHT used 29.2 grams

RECEIVED 8/?/74

DATE 8/17/74

orange

CHEMICAL ASSAY				FIRE ASSAY			
ONLY ON SPECIMEN LEFT AT LABORATORY				BASED ONLY ON SPECIMEN LEFT AT LABORATORY			
	OZ'S	PRICE	VALUE		OZ'S	PRICE	VALU
GOLD .115	$ 18.75 per ton	$ 156. en oz	$ 18.75 per ton	0.120 GOLD			
SILVER	heavy trace	$ 5.03 en oz	.89 ¢ per ton	SILVER			
PLATINUM				PLATINUM			
RHODIUM				RHODIUM			
PALLADIUM				PALLADIUM			
RUTHENIUM				RUTHENIUM			
IRRIDIUM				IRRIDIUM			
OSMIUM				OSMIUM			
COPPER				COPPER			
LEAD				LEAD			
MERCURY				MERCURY			
RS				OTHERS			

ASSAY BASED ON ASSAY TON OF 2,000 POUNDS

Duane Wilkinson
ASSAYER

WILKINSON ASSAYS
REPORT

9491 SIERRA AVE., FONTANA, CA. 92335 PHONE: (714) 823-4607

We buy gold rings, Dental, & Scraps, or refine yours for 10 % of metal.

SINCE 1967

CHARGES $: 3.50

SUBMITTED BY:

SAMPLE #: De Vault I.

Jack De Vault

WEIGHT USED: 29.2 grams

DATE TYPED : 2/20/76

#1 Sample
S.W. end of claim #3
Sample taken by Jack + me.

CHEMICAL ASSAY

METALS	oz's per ton	grams per ton	price per oz	value per ton
GOLD		4	$ 131.	$ 16.88
SILVER			heavy	trace
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
ER				
LEAD				

0.12902

FIRE ASSAY

METALS	oz's per ton	grams per ton	price per oz.	value per ton
GOLD				
SILVER				
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
COPPER				
LEAD				

Based only on specimens left at lab.
Assay based on assay ton of 2 thousand pounds.

Duane Wilkinson
ASSAYER

WILKINSON ASSAYS
REPORT

9491 SIERRA AVE., FONTANA, CA. 92335 PHONE: (714) 823-4607

We buy gold rings, Dental, & Scraps, or refine yours for 10 % of metal.

SINCE 1967

CHARGES $: 3.50

SAMPLE #: De Vault 2.

WEIGHT USED: 29.2 grams

DATE TYPED : 2/20/76

SUBMITTED BY:

Jack De Vault

#2 Sample
S. W. end of claim #3
about 100 ft higher up
than #1.

CHEMICAL ASSAY

METALS	oz's per ton	grams per ton	price per oz	value per ton
GOLD		4%	$ 131.	$17.94
SILVER			heavy	trace
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
COPPER				
LEAD				

0.137 oz

FIRE ASSAY

METALS	oz's per ton	grams per ton	price per oz.	value per ton
GOLD				
SILVER				
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
COPPER				
LEAD				

Based only on specimens left at lab.
Assay based on assay ton of 2 thousand pounds.

Duane Wilkinson
ASSAYER

WILKINSON ASSAYS
REPORT

9491 SIERRA AVE., FONTANA, CA. 92335 PHONE: (714) 823-4607

SINCE 1967

CHARGES $: 3.50

SAMPLE #: De Vault 3.

WEIGHT USED: 29.2 grams

DATE TYPED : 2/20/76

SUBMITTED BY:

Jack De Vault

#3 Sample
Top to bottom
(all mixed up)
Yarnell Road

CHEMICAL ASSAY

METALS	oz's per ton	grams per ton	price per oz	value per ton
GOLD		2½	$ 131.	$10.55
SILVER			heavy	trace
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
COPPER				
LEAD				

0.07 Ag oz

FIRE ASSAY

METALS	oz's per ton	grams per ton	price per oz.	value per to
GOLD				
SILVER				
PLATINUM				
PALLADIUM				
RUTHENIUM				
RHODIUM				
IRIDIUM				
OSMIUM				
TUNGSTEN				
URANIUM				
MERCURY				
COPPER				
LEAD				

Based only on specimens left at lab.
Assay based on assay ton of 2 thousand pounds.

Duane Wilkinson
ASSAYER

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS.
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Analysis No. 11279-1-2
February 16, 1976

Sample submitted by;
Jack Devualt
Box 1498
Wickenburg, Arizona 85358

SPECTRO-CHEMICAL ANALYSIS

SAMPLE MARK #1

Gold	Traces
Silver	Traces
Platinum	.019 oz. per ton
Palladium	.006 oz. per ton
Iridium	Traces
Rhodium	Nil
Osmium	Nil
Ruthenium	Nil

Analysis and report; by
ROBERT E. CRAIG & COMPANY

Robert E. Craig

Robert E. Craig

S.W. end of Claim
Sample taken by Jack

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona

Date February 16, 1976 Laboratory No. 11279-1
Sample No. #1
Qualitative Spectrographic Analysis
(Percentages Reported By Spectrographic Method are approximate)

ELEMENT		ELEMENT		ELEMENT	
Aluminum	2.04 %	Lithium	.021 %	Thorium	%
Antimony	%	Magnesium	21.07 %	Tin	%
Arsenic	%	Manganese	.09 %	Titanium	1.88 %
Barium	1.19 %	Mercury	%	Tungsten	%
Beryllium	%	Molybdenum	.008 %	Uranium	%
Bismuth	%	Nickel	%	Vanadium	%
Boron	%	Osmium	%	Zinc	%
Calcium	21.16 %	Palladium	%	Zirconium	%
Cadmium	%	Phosphorus	%	RARE EARTHS:	
Cesium	%	Platinum	%	Cerium	%
Chromium	.08 %	Potassium	.014 %	Dysprosium	%
Cobalt	%	Rhenium	%	Erbium	%
Columbium	%	Rhodium	%	Europium	%
Copper	%	Rubidium	%	Gadolinium	%
Gallium	Traces %	Scandium	%	Holmium	%
Germanium	%	Silicon(SiO_2)	.78 %	Lanthanum	%
Gold	%	Silver	%	Neodymium	%
Hafnium	%	Sodium	4.97 %	Praseodymium	%
Indium	%	Strontium	%	Samarium	%
Iridium	%	Tantalum	%	Ytterbium	%
Iron	17.06 %	Tellurium	%	Yttrium	%
Lead	%	Thallium	%	Flourine	%

FIRE ASSAY ON ABOVE SAMPLE

SEE SHEET NUMBER TWO

Au - Gold
Ag - Silver
Pt - Platinum

Balance to 100.0% composed of Oxygen

Analysis and report; by

Robert E. Craig

ROBERT E. CRAIG & COMPANY
Robert E. Craig

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Analysis No. 11279-2-2
February 16, 1976

Sample submitted by;
Jack Devault
Box 1498
Wickemburg, Arizona.

SPECTRO-CHEMICAL ANALYSIS

SAMPLE MARK #2

Gold	.009 oz. per ton
Silver	Traces
Platinum	.016 oz. per ton
Palladium	.008 oz. per ton
Iridium	.003 oz. per ton
Rhodium	Nil
Osmium	Nil
Ruthenium	Nil

S.W. end of claim #3
but 100 ft higher
up than Sample #1

Analysis and report; by
ROBERT E. CRAIG & COMPANY

Robert E. Craig

Robert E. Craig

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona

Date February 16, 1976 Laboratory No. 11279-2-1
Sample No. #2
Qualitative Spectrographic Analysis
(Percentages Reported By Spectrographic Method are approximate)

ELEMENT		ELEMENT		ELEMENT	
Aluminum	1.00 %	Lithium	.031 %	Thorium	%
Antimony	%	Magnesium	18.17 %	Tin	%
Arsenic	%	Manganese	%	Titanium	%
Barium	1.45 %	Mercury	%	Tungsten	.01 %
Beryllium	%	Molybdenum	%	Uranium	%
Bismuth	%	Nickel	.012 %	Vanadium	%
Boron	%	Osmium	%	Zinc	%
Calcium	21.06 %	Palladium	%	Zirconium	%
Cadmium	%	Phosphorus	%	RARE EARTHS:	
Cesium	%	Platinum	%	Cerium	.002 %
Chromium	.06 %	Potassium	.017 %	Dysprosium	%
Cobalt	%	Rhenium	%	Erbium	%
Columbium	%	Rhodium	%	Europium	%
Copper	%	Rubidium	%	Gadolinium	%
Gallium	%	Scandium	%	Holmium	%
Germanium	%	Silicon(SiO_2)	1.98 %	Lanthanum	.003 %
Gold	%	Silver	%	Neodymium	%
Hafnium	%	Sodium	6.04 %	Praseodymium	%
Indium	%	Strontium	%	Samarium	%
Iridium	%	Tantalum	%	Ytterbium	%
Iron	18.31 %	Tellurium	%	Yttrium	%
Lead	.05 %	Thallium	%		%

FIRE ASSAY ON ABOVE SAMPLE

Au - Gold

SEE SHEET NUMBER TWO

Ag - Silver Balance to 100.0% Composed of Oxygen

Pt - Platinum

Analysis and report; by

Robert E. Craig

ROBERT E. CRAIG & COMPANY
Robert E. Craig

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Analysis No. 11279-3-2
February 16, 1976

Sample submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona

SPECTRO-CHEMICAL ANALYSIS

SAMPLE MARK #3

Gold	.012 oz. per ton
Silver	.008 oz. per ton
Platinum	Traces
Palladium	.017 oz. per ton
Iridium	.002 oz. per ton
Rhodium	.004 oz. per ton
Osmium	Nil
Ruthenium	Nil

Analysis and report; by
ROBERT E. CRAIG & COMPANY

Robert E. Craig

Robert E. Craig

Composite Sample
(top & bottom)
(All mixed up)
Yarnell Road

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Submitted by:
Jack Devault
Box 1498
Wickenburg, Arizona

Date February 16, 1976 Laboratory No. 11279-3-1
Sample No. #3
Qualitative Spectrographic Analysis
(Percentages Reported By Spectrographic Method are approximate)

ELEMENT		ELEMENT		ELEMENT	
Aluminum	.93 %	Lithium	.021 %	Thorium	%
Antimony	%	Magnesium	20.06 %	Tin	%
Arsenic	%	Manganese	1.07 %	Titanium	.92 %
Barium	.78 %	Mercury	%	Tungsten	%
Beryllium	%	Molybdenum	%	Uranium	%
Bismuth	%	Nickel	.011 %	Vanadium	%
Boron	%	Osmium	%	Zinc	%
Calcium	31.39 %	Palladium	%	Zirconium	%
Cadmium	%	Phosphorus	%	RARE EARTHS:	
Cesium	%	Platinum	%	Cerium	%
Chromium	.05 %	Potassium	.05 %	Dysprosium	%
Cobalt	.006 %	Rhenium	%	Erbium	%
Columbium	%	Rhodium	%	Europium	%
Copper	%	Rubidium	%	Gadolinium	%
Gallium	%	Scandium	%	Holmium	%
Germanium	%	Silicon (SiO_2)	.02 %	Lanthanum	%
Gold	%	Silver	%	Neodymium	%
Hafnium	%	Sodium	3.01 %	Praseodymium	%
Indium	%	Strontium	.008 %	Samarium	%
Iridium	%	Tantalum	.004 %	Ytterbium	%
Iron	19.78 %	Tellurium	%	Yttrium	%
Lead	%	Thallium	%		%

FIRE ASSAY ON ABOVE SAMPLE

Au - Gold

Ag - Silver

Pt - Platinum

SEE SHEET NUMBER TWO

Balance to 100.0% composed of Oxygen.

Analysis and report by

Robert E. Craig

ROBERT E. CRAIG & COMPANY
Robert E. Craig

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Analysis No. 11269-1-2
February 4, 1976

Sample submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona. 85358

SPECTRO-CHEMICAL ANALYSIS

SAMPLE MARK #1

Gold	.142 oz. per ton
Silver	.03 oz. per ton
Platinum	.008 oz. per ton
Palladium	Traces
Iridium	Traces
Rhodium	Nil
Osmium	Nil
Ruthenium	Nil

Analysis and report; by
ROBERT E. CRAIG & COMPANY

Robert E. Craig

Robert E. Craig

top - George's
(white)
furnace & Rock

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Submitted by:
Jack Devault
Box 1498
Wickenburg, Arizona

Date February 4, 1976 Laboratory No. 11269-1
Sample No. #1
Qualitative Spectrographic Analysis
(Percentages Reported By Spectrographic Method are approximate)

ELEMENT		ELEMENT		ELEMENT	
Aluminum	Traces %	Lithium	.03 %	Thorium	%
Antimony	%	Magnesium	30.21 %	Tin	%
Arsenic	%	Manganese	.04 %	Titanium	%
Barium	.82 %	Mercury	%	Tungsten	%
Beryllium	%	Molybdenum	%	Uranium	%
Bismuth	%	Nickel	.02 %	Vanadium	%
Boron	%	Osmium	%	Zinc	%
Calcium	18.91 %	Palladium	%	Zirconium	%
Cadmium	%	Phosphorus	%	RARE EARTHS:	
Cesium	%	Platinum	%	Cerium	%
Chromium	.09 %	Potassium	.019 %	Dysprosium	%
Cobalt	%	Rhenium	%	Erbium	%
Columbium	%	Rhodium	%	Europium	%
Copper	%	Rubidium	%	Gadolinium	%
Gallium	.003 %	Scandium	%	Holmium	%
Germanium	%	Silicon(SiO_2)	Traces % ?	Lanthanum	%
Gold	%	Silver	%	Neodymium	%
Hafnium	%	Sodium	3.92 %	Praseodymium	%
Indium	%	Strontium	%	Samarium	%
Iridium	%	Tantalum	%	Ytterbium	%
Iron	10.78 %	Tellurium	%	Yttrium	%
Lead	%	Thallium	%		%

FIRE ASSAY ON ABOVE SAMPLE

SEE SHEET NUMBER TWO

Balance to 100.0% composed of oxygen.

Au - Gold
Ag - Silver
Pt - Platinum

Analysis and report by

Robert E. Craig

ROBERT E. CRAIG & COMPANY
Robert E. Craig

Top - Georgia (white)

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Analysis No. 11269-2-2
February 4, 1976

Sample submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona. 85358

SPECTRO-CHEMICAL ANALYSIS

	SAMPLE MARK #2
Gold	.017 oz. per ton
Silver	Traces
Platinum	.021 oz. per ton
Palladium	.004 oz. per ton
Iridium	Traces
Rhodium	Nil
Osmium	Nil
Ruthenium	Nil

Analysis and report; by
ROBERT E. CRAIG ~~& COMPANY~~

Robert E. Craig

Robert E. Craig

Middle Georgia

ROBERT E. CRAIG & CO.

MINING & METALLURGICAL
CONSULTANTS.
BOX 577
SUN VALLEY, CA. 91352
(213) 767-2681

Submitted by;
Jack Devault
Box 1498
Wickenburg, Arizona

Date February 2, 1976 Laboratory No.11269-2
Sample No. #2
Qualitative Spectrographic Analysis
(Percentages Reported By Spectrographic Method are approximate)

ELEMENT		ELEMENT		ELEMENT	
Aluminum	.01 %	Lithium	.02 %	Thorium	%
Antimony	%	Magnesium	14.22 %	Tin	%
Arsenic	%	Manganese	.06 %	Titanium	%
Barium	.93 %	Mercury	%	Tungsten	%
Beryllium	%	Molybdenum	%	Uranium	%
Bismuth	%	Nickel	%	Vanadium	%
Boron	%	Osmium	%	Zinc	%
Calcium	12.67 %	Palladium	%	Zirconium	%
Cadmium	%	Phosphorus	%	RARE EARTHS:	
Cesium	%	Platinum	%	Cerium	%
Chromium	.10 %	Potassium	.009 %	Dysprosium	%
Cobalt	%	Rhenium	%	Erbium	%
Columbium	%	Rhodium	%	Europium	%
Copper	%	Rubidium	%	Gadolinium	%
Gallium	%	Scandium	%	Holmium	%
Germanium	%	Silicon(SiO_2)	55.41 %	Lanthanum	%
Gold	%	Silver	%	Neodymium	%
Hafnium	%	Sodium	3.84 %	Praseodymium	%
Indium	%	Strontium	.01 %	Samarium	%
Iridium	%	Tantalum	%	Ytterbium	%
Iron	12.74 %	Tellurium	%	Yttrium	%
Lead	%	Thallium	%		%

FIRE ASSAY ON ABOVE SAMPLE

SEE SHEET NUMBER TWO

Au - Gold
Ag - Silver
Pt - Platinum

Analysis and report by
Robert E. Craig
ROBERT E. CRAIG & COMPANY
Robert E. Craig

Middle - Gwing's (white)

UTE RESEARCH LABORATORIES

40 North 400 West
SALT LAKE CITY, UTAH 84103
Telephone (801) 359-3252

P. O. Box 119
FT. DUCHESNE, UTAH 84026
Telephone (801) 722-2254

Certificate of Analysis

Date: August 29, 1974

Client: Jack DeVault
Box 1498
Wickenburg, Arizona
85358

Sample Number: 080874-6 (#1)
080874-7 (#2)

Date received: August 8, 1974

Submitted by: Jack DeVault

Samples analyzed for: Gold, Silver, Spectrographic Analysis

Results:

		Gold	Silver
Purple	(#1)	~~.000 oz/ton~~	~~0.0379 oz/ton~~
Orange	(#2)	0.244 oz/ton	0.0233 oz/ton

Does not apply Different Sam

Spectrographic Analysis

(#1)

Major Constituents: Silica, Iron

Minor Constituents: Sodium, Potassium, Calcium

Trace Constituents: Magnesium, Vanadium, Titanium, Lead, Coppe Strontium, Barium

(#2)

Major Constituents: Silica, Iron, Calcium

Minor Constituents: Sodium, Titanium, Potassium

Trace Constituents: Lithium, Barium, Zinc Strontium, Magnesium, Copper, Manganese, Vanadium

Remarks:

By G. Lyn Kimball

G. Lyn Kimball, manager

ALL VALUES REPORTED AS INDICATED

BLUE MOUNTAIN EXPLORATION
GEORGE Sintay, Geologist
Isee Rt.
Canyon City, Oregon 97820

IRON KING ASSAY OFFICE
BOX 47
HUMBOLDT, ARIZONA 86329

STATEMENT

BLUE MT. EXPLORATION
C/o George Sintay
Izee Rt. Canyon City, Ore. 97820

PLEASE RETURN THIS STUB WITH YOUR REMITTANCE. YOUR CANCELLED CHECK IS YOUR RECEIPT. $426.00

DATE	DESCRIPTION	CHARGES	CREDITS	BALANCE
4/19	Assays	$116.00		
	CN agitation test	70.00		
	CN perc leach tests	240.00		
	Total	$426.00		
				$426.00
	pd			

PAY LAST AMOUNT IN BALANCE COLUMN ▲

2K874 Red.form

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410

HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR

BLUE MT. EXPLORATION
George Sintay, Consultant Geologist
Izee Rt. Canyon City, Ore. 97820

April 19, 1979

SAMPLE DESCRIPTION	GOLD oz/ton	mgs recovered		Silver oz/ton	mgs recovered
Test I, Sample #2.					
1370 grams of ore agitated on the rolls for 24 hours with 1000 ml. of water 10gm NaCN and 2 gm CaO.					
CN consumption = 4.3 lbs per ton #3.00 CN					
Head assay	.022	1.033		0.14	6.57
Tail assay (calc.)	.004	.160		0.11	5.16
Recovered		.873 =	84.5%		1.41=21
Test II, Sample #3.					
1300 grams of ore agitated on the rolls for 24 hours with 1000 ml. of water 10gm NaCN and 2 gm of CaO.					
CN consumption = 5.7 lbs/ton #4.00 CN					
Head assay	.034	1.575		0.17	7.57
Tail assay	.016	.773		0.04	5.79 ~~1.78~~
Recovered		.802 =	50.9% ~~49.1%~~		1.78=21

Conclusion: The CN consumption is high but could probably be improved by ? using much less to start with. The slimes involved in this type of a procedure would present a problem. The agitation makes a considerable amount.

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410

HUMBOLDT, ARIZONA 86329

ASSAY MADE FOR

BLUE MT. EXPLORATION
George Sintay, Consultant Geologist
Izee Rt. Canyon City, Ore. 97820

April 19, 1979

SAMPLE DESCRIPTION	Gold	Silver		Gold	Silver
Test III, Sample #4, Heads, oz/ton	.038	0.10	Tails	.011	0.07
" IV, " #5, " "	.006	0.08	"	.011	0.12
" V, " #6, " "	.030	0.07	"	.008	0.08
" VI, " #7, " "	.020	0;16	"	.009	0.07
" III, " #4, Total contained XE	14.38	37.85	"	4.16	26.49
" IV, " #5, " "	2.27	30.28	"	4.16	45.42
" V, " #6, " "	1.35	30.28	"	3.03	34.06
" VI, " #7, " "	6.90	55.22	"	3.11	24.16
" III, " #4, oz/ton soln. 36hr	.002	Tr			
" 60hr	.0064	.014			
84hr	.0072	.022	*no mgs contained	1.10	3.39
" IV, " #5 oz/ton soln. 36 hr	.008	.016			
60 hr	.0092	.012			
84 hr	.0316	.058	"	4.87	8.93
" V, " #6 oz/ton soln. 36 hr	.0048	.060			
60 hr	.0056	.090			
84 hr	.0104	.072	"	1.60	11.09
" VI " #7 oz/ton soln 36 hr	.018	.054			
60 hr	.0395	.050			
84 hr	.0390	.054	"	2.46	9.86

* Mgs. of au, ag recovered in soln. in total sample.

Walter

IRON KING ASSAY OFFICE

PHONE
32-7410

BOX 14
HUMBOLDT, ARIZ. 86329

April 19, 1979

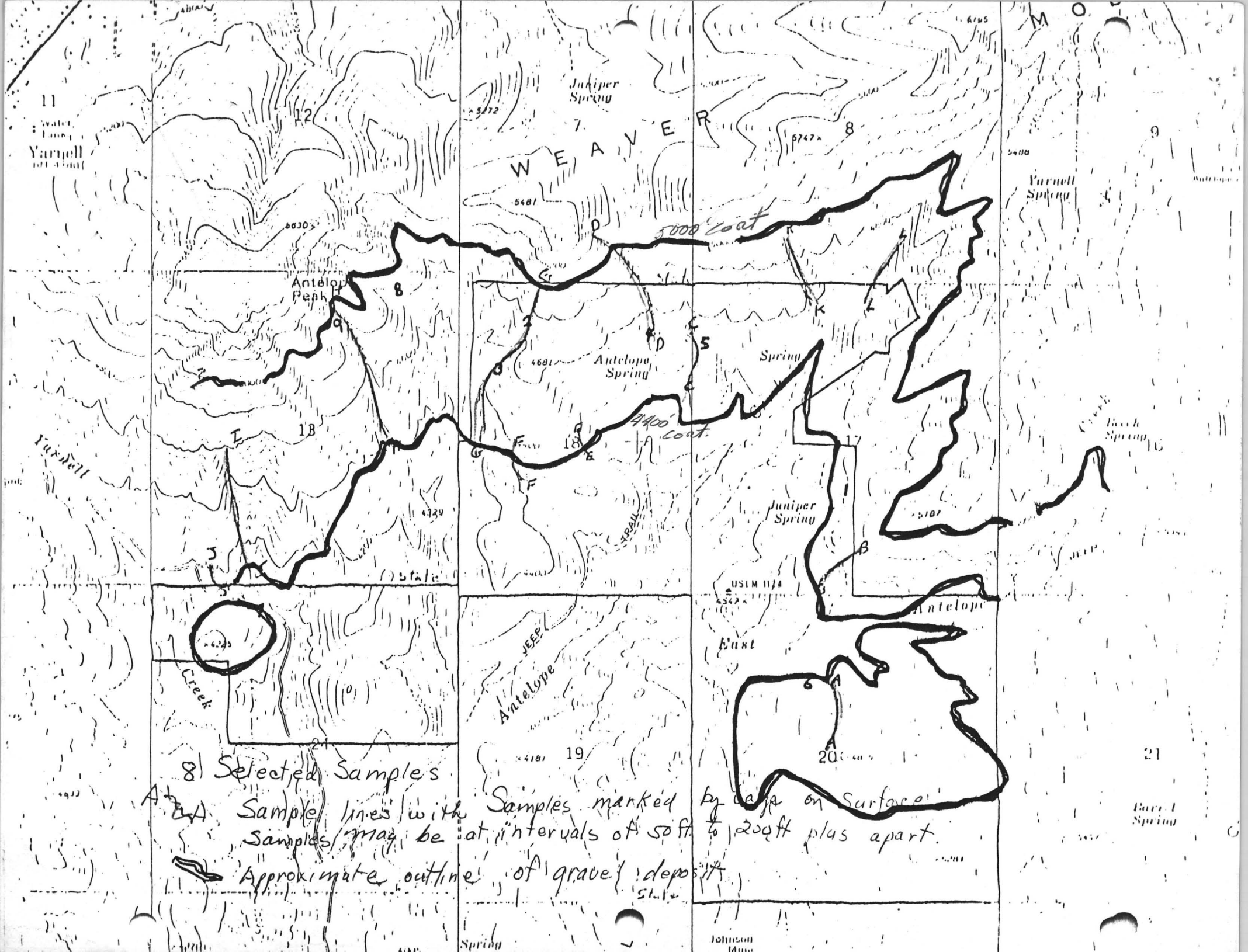
Tests III, IV, & V were run with 11,040 grams of ore and test VI was run with 10,066 grams. These were perc leach thru a 4" tube 4' long.
All four tests were started with CN equal to 2.7 lbs per ton of solution and enough CaO to maintain a pH of 9. The CN content stayed above 0.5 lbs per ton withany additional CN added. Also no extra CaO was added.

Conclusion:
There seemed to be no trouble for the solution to percolate using 20 to 30 ml per minute for the 4" tube but towards the last it did start slowing down on Tests V and VI. The solution came through clear. The extraction seemed quite slow for gold as fine as this must be.

Respectfully submitted,

Walter S Statler

Sample #	@ 84 hrs % Recovery Au	@ 84 hrs % Recovery Ag
4	71.1	30.0
5	Tails more than heads ?	Tails more than heads ?
6	73.2	"
7	55.0	56.2

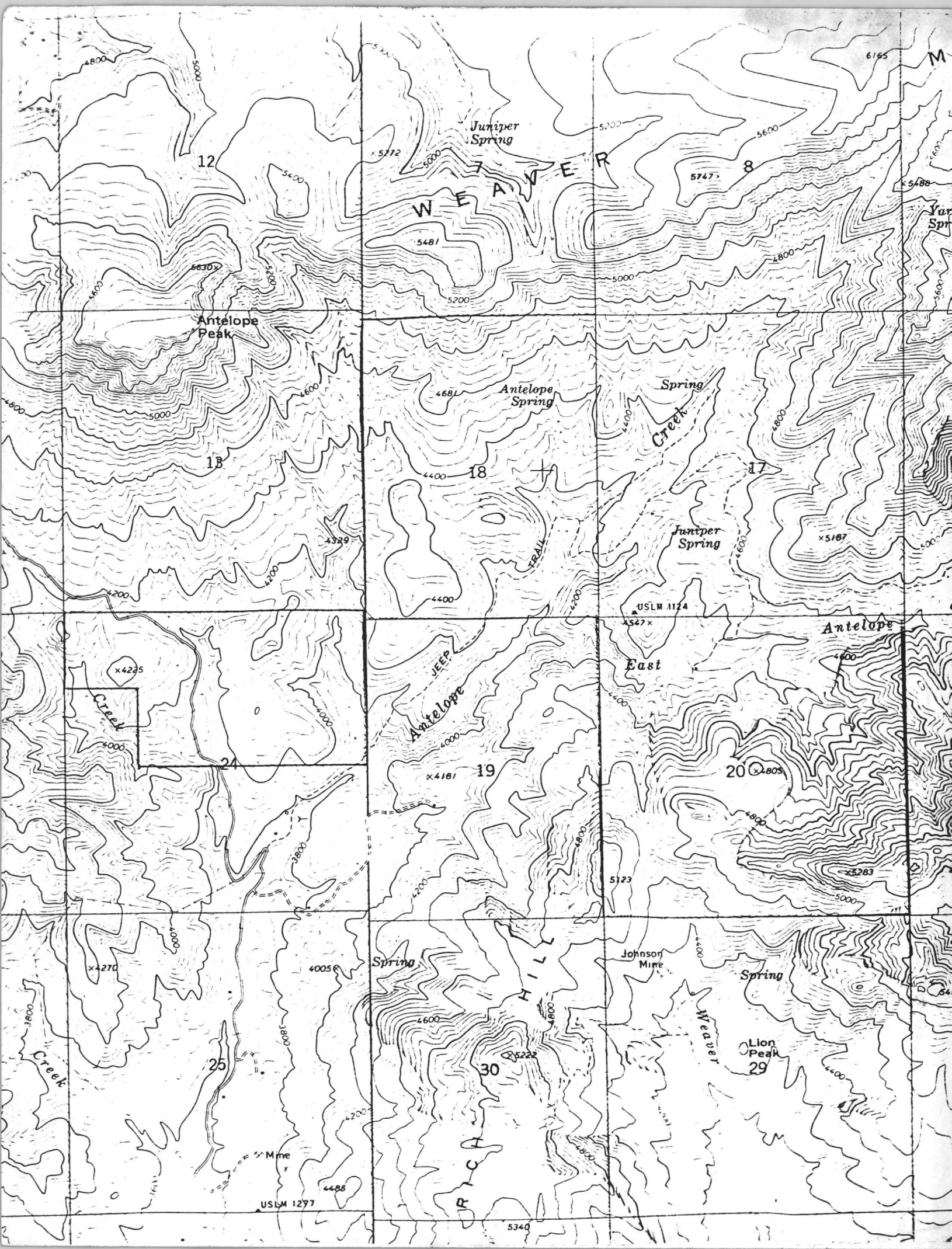


8) Selected Samples

Area Sample lines with Samples marked by tape on Surface

Samples may be at intervals of 50 ft to 200 ft plus apart.

Approximate outline of gravel deposit


Juniper Spring
WEAVER
Antelope Peak
Antelope Spring
Spring
Creek
Juniper Spring
TRAIL
USLM 1124
Antelope
East
JEEP
Antelope
Creek
Spring
Johnson Mine
Spring
HILL
Weaver
Lion Peak
Creek
Mine
USLM 1297
12
8
13
18
17
24
19
20
25
30
29

Bell Ranch

ARIZONA STATE LAND DEPARTMENT
Nonrenewable Resources & Minerals

Plan of Operation

The following information must be submitted to, and approved by the Department prior to initiating exploration or mining activities on State land. The plan is approved for a period of one year beginning on the date approved. Any change in the below described operations must first be approved by the Department.

Plan evaluation and approval may require 30 days.

PROSPECTING PERMIT OR MINERAL LEASE NUMBER(S) 08-81644, 08-81646, 08-89013, 08-8960

NAME IN WHICH ISSUED Ted H. Eyde, Ben F. Dickerson III

NAME OF OPERATOR Ben F. Dickerson III d/b/a DMEA Ltd. TELEPHONE (602) 945-4630

ADDRESS OF OPERATOR 7340 E. Shoeman Lane, Suite 111B(E), Scottsdale 85251

NAME OF FIELD REPRESENTATIVE Donald C. White
(If different than operator include address and telephone)
319 S. Mt. Vernon Avenue, Prescott, AZ 86301 (602) 778-3140

1) LAND DESCRIPTION AND MAP
Attach as Exhibit A to this Plan a topographic map of the referenced property.

County Yavapai Township 12N/13N Range 1 E Section(s) 2, 36, 26

2) PERIOD OF OPERATION
The operation is proposed to begin on March 1/85 and end on Feb.28/86.
If operations are proposed to exceed one year, an addendum to this plan must be filed prior to the plan expiration date.

3) ACCESS
Show on Exhibit A existing and proposed routes. Describe in detail the extent of all improved or newly constructed access. Note any locked gates.
All existing roads were established previously. The surface and mineral rights of Section 35, T. 13 N., R. 1 E., are leased (privately) to others. No use can be made of the surface.

4) VEHICLES AND EQUIPMENT
List by type and size all vehicles and equipment which will be used in connection with the operation. Include the capacity of concentrators for placer operations. Cat D-8h dozer; Air-trac drill1, with or without down-the-hole hammer, air compressor, and 4WD vehicles.

5) SCOPE AND TYPE OF OPERATION
Describe the type and extent of the operation to be performed. Include the estimated area of disturbance and provide detailed information for any earth moving or site clearance operations. For placer type exploration include the amount of material to be processed from each test site, and the dimension of test sites.
Estimated area of disturbance: less than 5 acres

Most disturbance in roads and drill sites. Air-trac requires minimal site requirements. Trenches, if any, for bulk sampling, will not exceed 100 ft. in length or 10 ft. in depth. Overall disturbance minimal.

6) AFFECTED LAND
Indicate to the nearest 300 feet the location of all proposed prospecting sites (Exhibit A). If necessary complete Exhibit B or provide coordinate description (topographic grid or distance from section corner). For placer type exploration include the location of concentrators.

Coordinate description: Submit as an attachment.

7) DRILLING
For all drilling operations indicate the type of drilling operation, drilling medium (air, water e.g.), hole diameter, and proposed total depth.

Hole I.D.	Total Depth	Hole I.D.	Total Depth	Hole I.D.	Total Depth

Air Trac mounted percussion drilling will be employed. AS many as 40 holes, of 5 in. or less in diameter, not exceeding 120 ft. in depth, will be drilled. The drilling media will be air.

If drilling is anticipated indicate the method of plugging and abandonment. Indicate the marsh funnel viscosity if applicable.
Drill holes will be back-filled with rock cuttings and the top of the hole will be plugged with cement.

8) WATER USE
If the use of water is required, describe the location and quantity to be used. not applicable

9) RECLAMATION
Describe actions taken to minimize environmental impacts and state plans for reclamation of disturbed areas. If applicable include measures for erosion control, recontouring, seed bed preparation, method of seeding, seed species, etc. Unless otherwise approved reclamation is to be completed within the approved plan period of one year.
As much us as possible will be made of present roads and sites. New roads will be designed to minimize erosion. Excavations will be filled and leveled; drill sites and roads will be reclaimed and seeded with appropriate species where practicable. (Note: portions of these lands have been previously explored and the surface damaged by others.)

10) ANTIQUITIES AND NATIVE PLANTS
If required, the applicant agrees to obtain archaeological clearance prior to the following surface disturbance:

A. Prospecting Permit: All land surface affected by exploration activities including access roads.

B. Mineral Lease: All acreage under application. The applicant will be directly contacted by the Arizona State Museum.

Archaeological clearance must be obtained through the Arizona State Museum.

10) ANTIQUITIES AND NATIVE PLANTS (cont.)
If the destruction or removal of protected plants is necessary to enjoy the privileges of a permit or lease, the applicant agrees to obtain written permission from the Arizona Commission of Agriculture and Horticulture. The applicant also agrees to purchase said plants from the Arizona State Land Department. Native plants are as described under the Arizona Native Plant Law.

REGISTERED GEOLOGIST
CERTIFICATE NO.
16476
BEN F.
DICKERSON III
ARIZONA

APPLICANT: _____
Signature and Date
Ben F. Dickerson III 2-15-85
d/b/a DMEA Ltd.

Applicant must be the permit holder or duly authorized representative.

Following the Department's evaluation of this plan, two copies will be sent to the applicant noting any conditions which may be required by the Department. The applicant shall sign and return one copy which will attach to, and become a part of, the permit or lease.

CONDITIONS OF APPROVAL: _____

Applicant agrees to abide by the methods and extent of the operations described herein. Applicant also agrees to abide by the above listed CONDITIONS OF APPROVAL.

APPLICANT: _____
Signature and Date

FOR DEPARTMENT USE ONLY

PLAN NUMBER _____

BOND AMOUNT _____

APPROVED FOR THE PERIOD: BEGINNING _____ EXPIRING _____

APPROVED BY: _____

REASONS FOR DENIAL: _____

DATE OF PERMIT OR LEASE ISSUE: _____

DATE LAST PLAN SUBMITTED: _____ PLAN NUMBER _____

REMARKS: _____

DMEA Ltd.
Mineral Exploration Advice

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

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

February 22, 1985

Mike Rice
Natural Resource Planner
State Land Department
1624 W. Adams
Phoenix, Az 85007

Re: Amended Plan of Operations
P.P. Nos. 08-81644, 08-81646,
08-89013, 08-89608

Dear Mr. Rice:

Please refer to our proposed Plan of Operations, dated February 15, 1985.

The plan proposed drilling with an Air-Trac. Subsequently, we have discovered that no adequate Air-trac drill of the required type is available in the southwest at an economic cost.

Therefore, we propose to substitute a Schramm rotary rig (or equivalent) employing a down-the-hole hammer with reverse circulation sampling.

Some additional drill site leveling may be required, and the holes may be as much as 6 in. in diameter and 175 feet deep. Otherwise, no other items in the original plan will be changed.

These are minor changes, and we trust that you can accept them and approve the Plan of Operations in an expeditious manner.

We will be at the AIME meeting in New York next week, and will telephone you in case you need any additional information.

Very truly yours,

Ben F. Dickerson III

Ben F. Dickerson III

cc: T.H. Eyde
bcc: D. White