

CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
520-770-3500
http://www.azgs.az.gov
inquiries@azgs.az.gov

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Richard Mieritz Mining Collection

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REPLY TO:

163400 XXXXXX MODOLSX ROFX
PHOENIX, ARIZONA 85049 16
TELEPHONE (602) 277-6053
2940 N. Casa Tomas

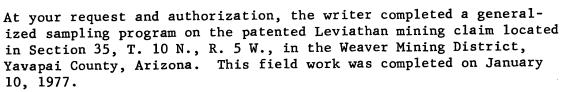
# Richard K. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

Mrs. Gloria Downer 72435 Cholla Drive Palm Desert, California 92260

Dear Mrs. Downer:



The purpose of the sampling program was to determine the mineral content contained in the quartz veins within the Leviathan claim. Through a possible lease to Mr. T. Spargo, the quartz vein may be surface mined as a flux material to be shipped to a smelter, and if so, you would receive a royalty on a per ton shipped basis.

Herewith then is the writer's report based on the sampling program, the sample results and on the writer's observations while on the property.

#### GEOLOGY and MINERALIZATION:

The property is situated in a generalized "gold" zone (Map No. 2), southwest of and near the base of "Rich Hill", a famous placer gold area. For the most part, the host or country rock is granite which has been intruded by many quartz veins, some of which are mineralized at the surface, some at depth and some completely barren. The history in the area of the Leviathan (Octave, Rincon and Blue Bucket mines) is one of deep-seated mineralization - very weak to barren on the surface. The Leviathan claim also hosts the massive granite country rock and a very prominent quartz vein of five to seven feet thick which generally strikes N.65°E. (about parallel to the claim length) and has variable dips from 55°N. through horizontal to about 15°S.

The vein is mostly white (some pink) bull quartz which contains in localized areas a small amount of brown to reddish iron oxide ( ${\rm FeO}_{\rm X}$ ) which can usually carry gold and silver values. The writer did not detect the presence of any base metals such as copper, lead or zinc.

#### SAMPLING PROGRAM:

The deep (400 foot?) shaft was not accessible (no shaft collar) and

GEOLOGY EXPLORATION EVALUATION FEASIBILITY OPERATION



the Adit and drift shown on the old maps had caved and were not. MIERITZ accessible. All that could be sampled was the surface exposure of the quartz vein or where exposed in the shallow surface pits and ost. The intended lessee plans to remove only that quartz white ONA, US can be mined by open (surface) mining. Consequently, the samples taken are ample to provide adequate information as to what metallic content can be expected when the silica flux is mined and shipped.

Five samples were taken, numbers 1416 through 1420. The general description of all is: white bull quartz with some brown to reddish limonite ( $\text{FeO}_{x}$ ). Occasionally, the quartz tends to a pegmatite because of the sparse visible occurrence of columbite (a valueless mineral not paid for by the smelter). All samples were assayed for gold and silver, while three were assayed for silica or insoluble in this case the same.

The included Iron King Assay Office Certificate shows the results of the samples. The locations of these samples and their results are shown on Map No. 3.

An analysis of the assay results indicates that if a "clean" quartz product is mined and shipped, the silica content should be upwards of 90% - allowing for a small amount of contamination from surface debris (soil, float other than quartz, etc.).

The five silver assays indicate a variance from one locality to the other, (the gold content not being a factor of influence), however, it is the opinion of the writer that a general average of 0.75 ounces silver per ton of the quartz vein would be a justified content.

The five gold assays indicate a greater spread in values. Gold was not visible in any of the samples, however, the presence, intensity and color of the limonites ( $\text{FeO}_{\text{X}}$  - iron oxides) in the quartz vein are certainly responsible for much of the gold content. The lighter the color, the lesser amount of  $\text{FeO}_{\text{X}}$ , the lower gold content. The darker the color, the greater amount of  $\text{FeO}_{\text{X}}$ , the greater the gold value. The five samples - widely spaced - indicate erratic distribution of gold values, however, as in the case of silver, it is the opinion of the writer that a general average content of 0.25 to 0.30 ounces gold per ton of the quartz vein would be a justified and reasonable content.

The writer opines that the material mined (a clean quartz product) would contain:

Gold - 0.27 ounces/ton @ \$130.00/oz \$35.10 Silver - 0.75 ounces/ton @ \$4.00/oz 3.00 Silica - 90.0 plus% - Smelter Flux rate (T. Spargo's contract)

It is not likely the Smelter would pay for the silver content. It is likely the Smelter would pay for some of the gold content.

In view of the above gold-silver contents and their value, as far as you are concerned, the royalty should be based on the "Flux" value (perhaps a flat rate per ton), plus a sliding scale royalty on the gold and silver values.

#### GENERAL:

With the information you provided and with what was in had WNA, obtained, the writer had no difficulty finding the property. Some difficulty was encountered finding the corners of the claim; in fact, only two corners were actually found, Corner II and Corner III - the original marked (chiseled) rocks in place were found. The writer tried to find Corners I, VII and VIII. Corner I has been buried or destroyed by road construction, Corner VII could not be found although there is a mound of rock in the approximate position and Corner VIII was not found, but Corner 4 of the Chester claim (Survey 2888), which is common to Corner VIII of the Leviathan, was found. Corners II, III, VII and VIII were flagged with lath, having two engineer's red ribbons and one engineer's yellow ribbon.

Registered

RICHARD E. MIERITZ

While on the property, Mr. Jim Turner - partner with T. Spargo - arrived and attempted to show me Corner I of the Leviathan, but was unable to do so. Mr. Turner indicated to the writer that they had a surveyor on the property and it was determined that the Leviathan claim was "pie shaped" - Mr. Turner's words. This is not the case. The Leviathan claim is marked on the ground as it is shown on the Maps - (yours and Map No. 3) - a right angle rectangle. My Brunton bearings in the western half of the claim check this out. It would be my opinion that the surveyor is in error unless there was a misunderstanding in the conversation between Mr. Turner and the writer.

As a suggestion for your protection, I strongly urge that all corners of the Leviathan be found or re-established and properly flagged. Had the writer had more time after taking the samples, more corners would have been found. The writer also re-establishes destroyed corners. Such should be done soon.

#### TRESPASS POSSIBILITIES:

During our telephone conversation, it was indicated you had not yet signed the lease, thus no entry upon the claim should be made - unless you granted verbal permission.

At the time of my visit, I found the following (Refer to Map No. 3):

- (1) Trailer house site excavated and leveled trailer house in position, on the Leviathan claim.
- (2) Access roads built east of the trailer house site.
- (3) A large area of surface dozing, blasting and excavation already completed over the western 1/5th of the claim and not in what I should term good miner-like fashion. Equipment such as compressor, airtrack drill, dozer and frontend loader on site and on the property, and
- (4) Mr. Turner indicated he had already shipped 2,000 tons.

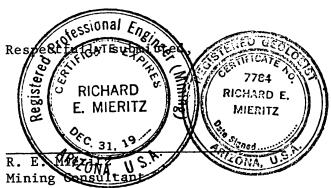
#### MINING:

The quartz vein, 6 to 7 feet wide, is very prominent over much of the claim, but it has a habit of changing strike and dip; in fact, a major portion of the vein forms a haphazard anticline in the southeastern half of the claim. It is this area the lessors intend to mine.

Observation by the writer of the worked areas indicates that much contamination of the quartz rock has occurred during the mining process. A clean product should command a higher price and if your lease contains an escalation clause based on price, then good mining practice becomes a factor.

A final note of concern should be your request of the lessee to provide bi-monthly maps of the operation of surface mining such that tonnage calculations can be made as a check against the reported tonnages by the Smelter when the royalty is paid. Mr. Turner had indicated he was going to mine the Leviathan as well as other claims in the area. The writer foresees possible problems in this direction if not counteracted or prevented at the onset of the lease. The lease should also permit you and/or your agent to inspect the operation at desired time intervals.

The lessee should know and be shown the exact position of all eight corners of your claim.



#### Inclusions:

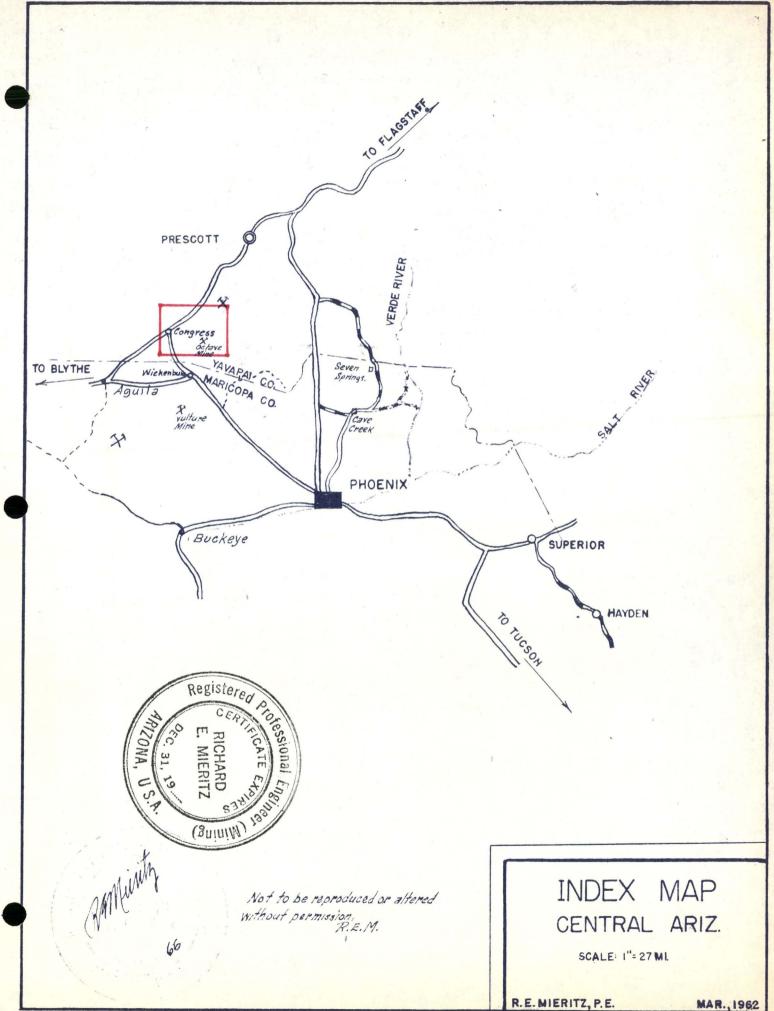
Iron King Assay Certificate

Map No. 1 - Index Map - Central Arizona

Map No. 2 - Location Map, SW Yavapai County, Arizona

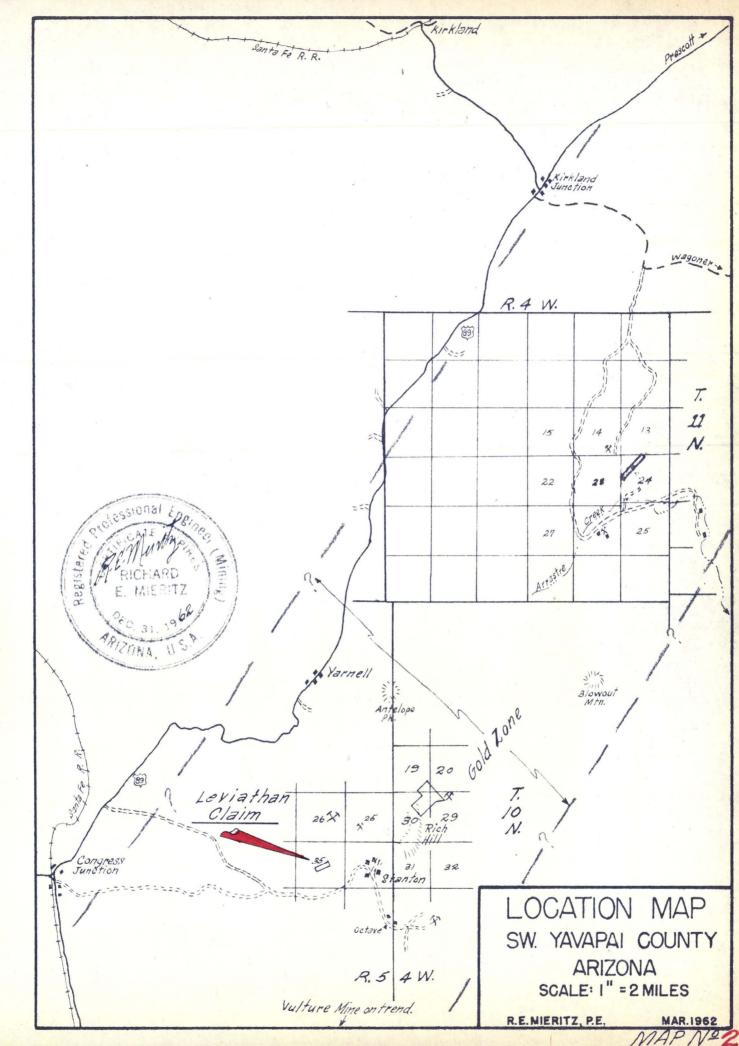
Map No. 3 - Surface Map, Leviathan Claim

January 15, 1977



ERITZ, P.E. MAR., 1962

MAP N.º 2



### IRON KING ASSAY OFFICE ASSAY CERTIFICATE

BOX 14 — PHONE 632-7410 HUMBOLDT, ARIZONA 86329

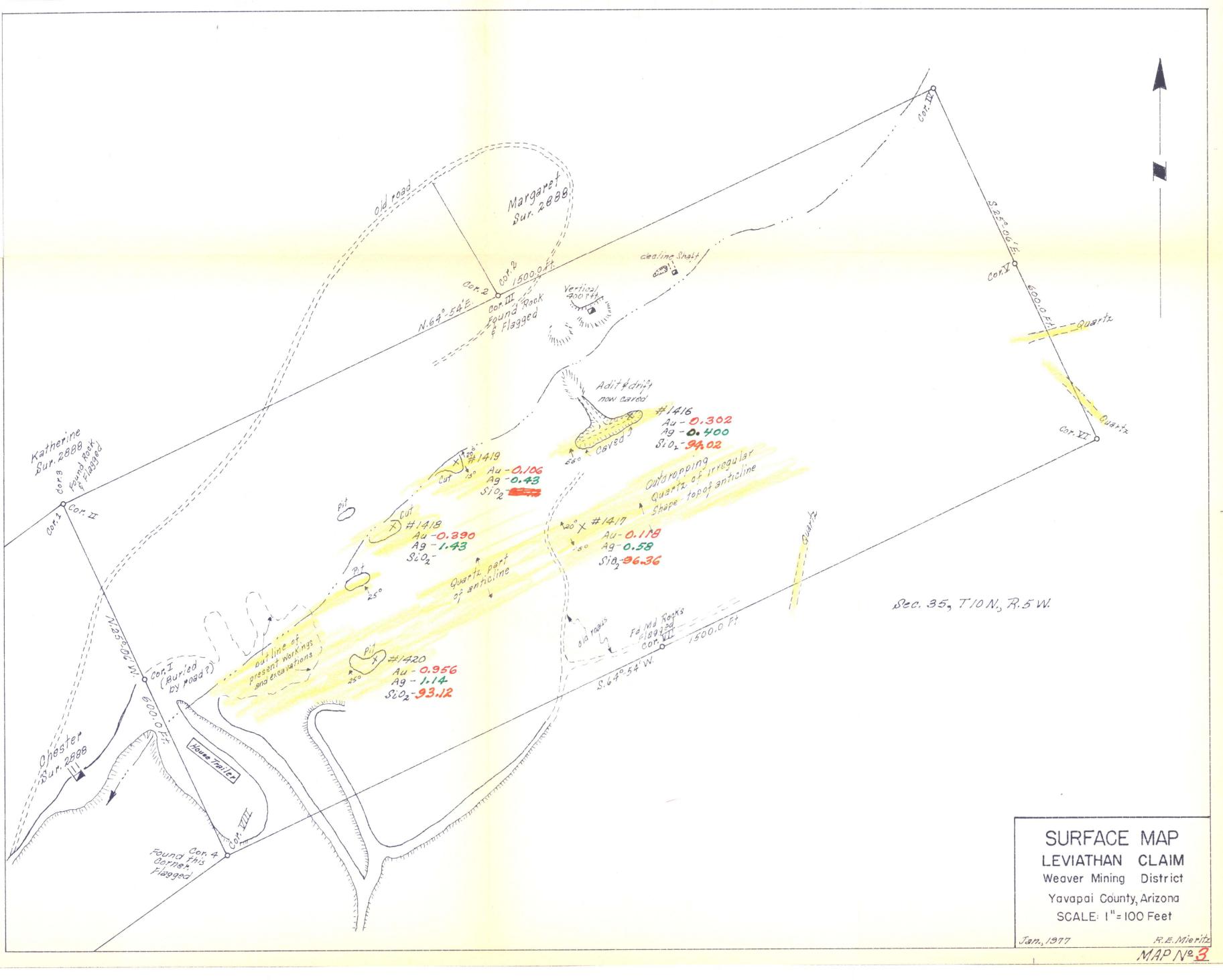
ASSAY MADE FOR RICHARD E. MIERITZ 2940 N. Casa Tomas Phoenix, Ariz. 85016



		Jan. 14, 1977									
Ref no.	DESCRIPTION	oz/ton Au	ez/ten Ag	%Insol		% Pb	% Zn	% Cu			
71-11-8	#1416	.302	0.40	94.02	·						
71=11=9	#1417	.118	0.58	96.36							
71-11-10	#1418	.390	1.43								
71-11-11	#1419	.106	0.43					-			
71-11-12	<del>#1</del> 420	.956	1.14	93.12				<b></b>			
			·								
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CHARGES <u>\$37.50</u>

assayer\_\_\_\_



# Richard F. Mieritz

MINING CONSULTANT

GEOLOGY EXPLORATION EVALUATION FEASIBILITY OPERATION

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

July 18, 1977

Mrs. Gloria Downer
P. O. Box 304
Palm Desert, California, 92260

Re: Leviathan Claim
Yavapai County, Ariz.

Dear Mrs. Downers.

Herewith an original - with photos - and one copy - without photos - of my Report as a result of my visit, examination and surveying of the claim and the work completed by Mr. Todd Spargo since my last visit to the property in February. The visit to the claim was made on July 12, 1977.

As requested by you, one copy of the report - with photos - will be hand delivered to Mr. Ferguson's Office.

I do have one extra set of photos in the event they would be needed at a future date.

I believe I have covered everything possible, but if you or Mr. Fergusen should have any questions, please contact me by phone or letter.

Thank you for calling me. My invoice is attached.

Sincerely yours,

R. E. Mieritz, Mining Consultant

cc: Mr. Fred E. Ferguson, Jr.

AN

EVALUATION REPORT

OF

WORK COMPLETED (Lessee -Todd Spargo)

on the

LEVIATHAN CLAIM

Yavapai County, Arizona

bу

Richard E. Mieritz Mining Consultant Phoenix, Arizona

July 18, 1977

CERT

RICHARD E. MIERITZ

REPLY TO: 1634 W. HAZELWOOD STREET PHOENIX, ARIZONA 85015 TELEPHONE (602) 277-6053

# Richard K. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED MINING ENGINEER AND GEOLOGIST

July 18, 1977

Mrs. Gloria Downer P.O. Box 304 Palm Desert, California 92260

Dear Mrs. Downer:

As a result of your telephone request and authorization of July 9, 1977, the writer re-visited the Leviathan patented lode mining claim (Lot 57) in the Weaver Mining District, Yavapai County, Arizona. The requested visit was completed on July 12, 1977.

The purpose of the visit was to observe the progress and type of work completed by the lessee - Mr. T. Spargo - between the time of the writer's previous visit on February 22, 1977 and the just completed visit.

The writer completely traversed and reviewed the entire surface area of the claim, stadia surveyed that area where the surface had been changed, took photographs of the new work and general area, calculated the survey data and plotted the results on an earlier prepared Map to determine the extent of the new work and Notessional Engine what surface changes such work created.

WORK COMPLETED:

Work completed between February 22 and July 12, 1977 can be classified into two categories - (1) mining work and (2) re clamation work, each being separately described below:

#### Mining Work:

Mining work has been carried on in two separate areas and designated on Map No. 3 as "Mining Work" and "Blasted Area."

The designated "mining work" centered around the "L" shaped trench approximately 400 feet northeast of Leviathan corner VIII (SW corner) and where the writer took sample #1240 on January 10, 1977 (See Map No. 2). Here the lessee has drilled, blasted and bulldozed the quartz vein exposure - expanding on the original smaller "L" shaped trench. A short dozer trail from the north end of the trench to a lower existing road was made. Although a small amount of broken material has been "piled" up as a "ridge" along the outline of the trench and at the east end, it is obvious from the Section Map No. 4 that some broken material has been removed from the trench - shipped??. The writer's opinion is that approximately 400 tons have been removed. This area was

surveyed in order to obtain the new or present surface outline in the specific area. The writer has used 50 feet by 20 feet by a five foot depth as dimensions for the 400 ton block. Twelve cubic feet to the ton was used as the conversion factor.

#### Blasted Area:

This area measures approximately 200 feet long, parallel to the main wash and has an average of 40 feet in width perpendicular to length. The area is located in the general area of pervious work (prior to January 10, 1977 and February 22, 1977) completed by the lessee on the north slope of the small circular shaped knob or hill in the southwest portion of the Leviathan claim and just south of the main drainage (wash) traversing the claim from its northeast corner (corner IV) to the southwest end center corner (corner I).

This area was not surveyed topography-wise because drilling and blasting most generally cause an irregular, blocky type surface and a 50% expansion of volume. The blasted area appears to be somewhat disturbed by mechanical loading equipment near the upper portion of the broken rock. The blasted area, as measured, would produce slightly in excess of 3,000 tons of broken material if it were drilled to an average depth of five feet. With broken rock remaining and the expansion criteria present, a volume of material in the removed is not reasonably calculable except as an estimate. The cate field opinion of the writer - perhaps, 500 tons, more or less.

#### RECLAMATION:

The one item of reclamation (?) completed by the lessee is the first bulldozed drainage canal so designated on Map No. 3. It is assume this canal was constructed so as not to deter or dam the natural flow of the main drainage near the southwestern end of the claim.

RICHARD E. MIERITZ

#### PHOTOGRAPHS:

Several colored photographs were taken by the writer on July 12, 1977, and these are mounted and herewith included as part and parcel of this report. Each photograph and/or group of photographs is separately described subject-wise and from what position and direction (arrows on Map No. 3) they were taken.

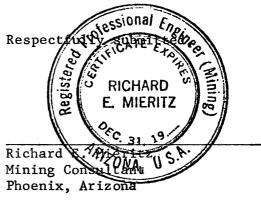
#### CONCLUSIONS - OPINION:

Based on the writer's previous and recent visits to the property, his geologic and mining knowledge and experience, the following are submitted for your consideration:

(1) In general, it is concluded and opined that the overall mining work has not been carried out in "miner-like"

fashion.

- (2) Based on the early survey and the recent survey and by calculations of same, approximately 400 tons of material have been removed from the "mining work" area and perhaps up to 500 tons of material were removed from the "blasted area." These tonnages reflect the time period from February 22 to July 12, 1977, the dates when the early and recent surveys were made.
- (3) Other than the "drainage canal", it appears the lessee has failed to provide any type of reclamation or restoration work in the "mining work" area, the "blasted area" or on the south slope of the hill which is north of the "main drainage." In essence, the writer opines that the general area of the lessee's work or operation has left the surface quite badly "scarred."
- (4) The property is void of any mechanical equipment and except for a very small amount of scattered debris, the area, including the house trailer site, is quite clean.
- (5) Having a partial knowledge of the Lease Agreement terms, it is the opinion of the writer that the Lessee, Mr. Todd Spargo, at this writing, is negligent with regard to proper "miner-like" fashion and reclamation or restoration of the surface to a satisfactory natural-like appearance.



#### Exhibits:

Map No. 1 - Location Map

Map No. 2 - Surface Map - Scale: 1" equals 100 feet Map No. 3 - Surface Map - Scale: 1" equals 50 feet

Map No. 4 - Cross-Sections - Leviathan Claim

Photo I

Photo II

Photo III

Photo IV

Photo V

Photo VI

Panorama view of the house trailer site, most of which is on the Leviathan Claim. Thotos taken from the roads edge near the inclined Shaft located on the Chester patented claim about 300 feet southwest of the southwest end center corner (No.I) of the Leviathan Claim. The direction of the Photo is southeast. PHOTO 1:

Panoramic view of the north slope of the circular hill in the southwest portion of the Leviathan Claim and showing the 'Mining Work" area in the upper left center of the Photo. Pictures were taken from survey station "B" and looking roughly south. PHOTO II.

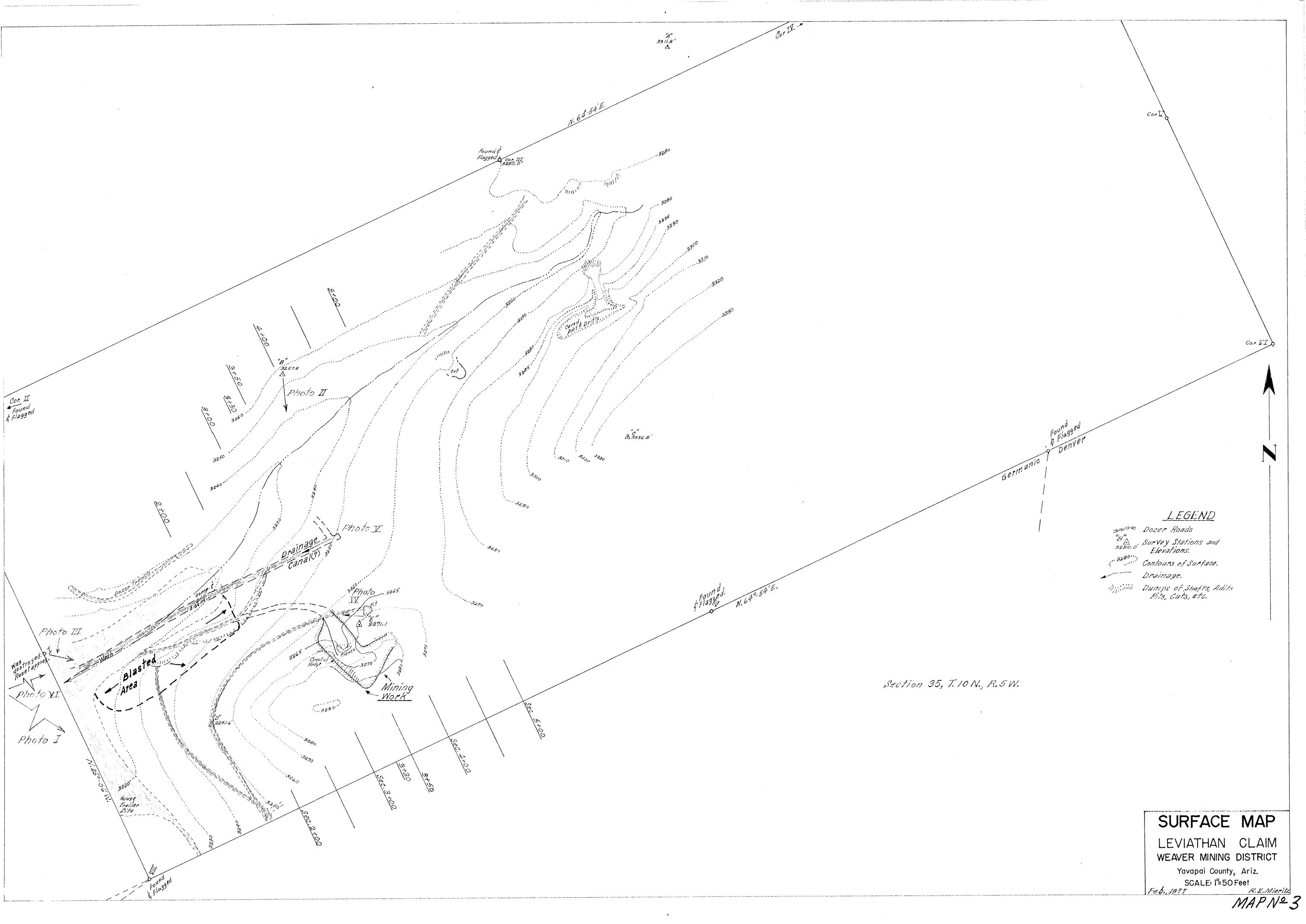
PROTO III: Photo shows "Blasted Area" as well as a portion of the "Drainage Canal". Picture taken from southwest end center corner (No. I) of the Leviathan Claim in a southeast direction.

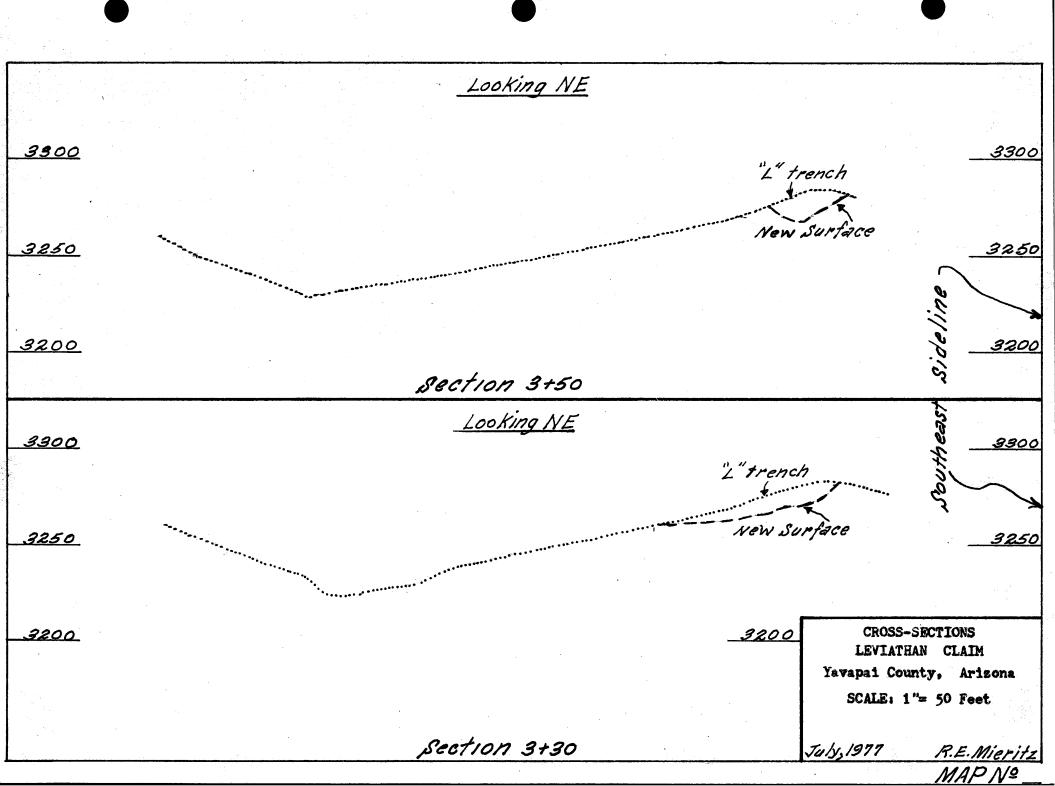
PHOTO IV:

Photo shows dozer trench on the north side of main wash and on the south slope of the hill in the northwest portion of Leviathan Claim. Photo taken from point midway between "L" shaped trench and nearby Pit just east of survey station "E".

<u>PHOTO V:</u> Photo shows "Drainage Ganal". Picture taken at junction point of long and short drainage canals at upper or east end of canal. Looking westerly from this point.

PROTO VI: Photo shows "Brainage Canal" in lower left of photo and the "Blasted Area" in lower center of photo. Photo taken from point on road near the inclined shaft on the Chester patented claim approximately 300 feet westerly of the southwest end center corner (No. I) of the Leviathan Claim and looking east.





Mr. Richard Mieritz 2940 No. Casa Tomas Pheonix, Arizona 85016

Dear Mr. Mieritz.

Enclosed are copies and some original papers, pertaining to the Leviathan mine.

The people interested in the mine are quite anxious for me to sign the contract and so, time is of the essence in this particular matter.

In order to save time and if you are interested in taking the samples of the Leviathan for the purpose of an assay report; I will enclose a letter allowing you access to the property.

The miners have already cut through a road off the Stanton Road, approximately two miles from the highway turnoff. They have large trucks and equipment at the site taking samples of quartz on the adjoining property. So possibly you will be asked for identification.

The man with whom I am dealing is Mr T. Spargo. I would appreciate knowing if you have worked for him or know him.

I tried calling back shortly after we talked on the phone today but no answer. I was sorry I didn't discuss finances with you in order to expedite this mayter. Hopefully, you will accept my offer of the enclosed check for two hundred dollars as initial payment. If you find that your fee will exceed four hundred dollars total please call me. If this is agreeable you can get the samples at your earliest convenience.

It is my understanding that the assay costs will be seperate from your fee and may be billed to me direct or through your office.

My husband would be available to meet you and go to the mine with you if you think that would be necessary.

Call me if you have any questions.

Sincerely,

Blosex A. Downer

P.O.Box 304

Falm Desert, Calif. 92260

714-346-2907

Called - 5-7-82 - Nat Downer # Arran has # for types

January 8, 1977

Mrs. Gloria Downer
P. O. Box#304
Palm Desert, California, 92260

Dear Mrs. Downer:

Thank you for your call of Thursday, also for the information on the Leviathan Mine. Thank you also for the anticipation of my request of an advance retainer, which has been my practice for quite a few years now.

I seldom do not take a job under three days of work, however, since your request is for a sampling program to provide you some information as to the values of the mineralization within the claim, it is thought that the office time can be reduced, thus, probably consuming two days to two and a half days total, plus such expenses as assaying charges for the samples, map printing charges, etc as well as meal expenses during the field trip and examination. In this instance I would not charge for transportation to and from the property.

My fee is \$200.00 per day. Sap printing charges, meals, postage and telephone calls might be approximately \$20.00. Sample or assay charges would be dependent on the number of samples taken. I would estimate this charge to be between \$40.00 and \$70.00.

If the weather is not too bed, I can possibly make the field trip this Monday (Jan. 10) or Tuesday at the latest. By making the round trip from Phoenix to the property, then through Prescott and Humboldt (Iron King Assay Office) and on to Phoenix, Mr. Statler could have the results to me by Thursday or Friday of next week and the report could be in your hands by the following Monday or Tuesday. That would be my educated estimate of a time table.

At the time of mailing the report to you I would also include the information you have provided me and all would be sent "Certified Mail," as you had done.

Thanking you for calling me, I remain,

Very truly yours,

R. Z. Mieritz, Mining Consultant.

1-19-77

Sincerely Gloria Donne

Dear Mr. Mieritz, again my thanks for on excellent report. My actorney, Fred Ferguson of Evano, Kitchel and Jenches, 363 No. First Ove. 6/ hoening-262-8811, will be contacting you. Pasibly you have talked with him already. If not be will be contacting you Q desuss the smeller reports Mr. Spargo is to sendhim. If you question themplease Contact Mr. Ferguson and dropme a note He is comending the contract to evidence the recummendations in your report. I sent him one of the reports. I governou some incorrect information about the smelter that I wont to alongy! Mr. Sporgo told me wednesday morning that be sent the one supporent to Insperation Snelter in Meani, He leves en Superior and has an address en Choener also. I do remember he mentioned that name in on early conversation and feel that he was correct and in the particular enstand nos en error. Glad your helping me.

ABC Secretarial - Printing

1506 8859 2564 Mr. Dichard E. Mieritz

JOS.S. JENCKES, JR [1908-1970]

WILLIAM A.EVANS JOHN F. BOLAND. JR. JAMES M. BUSH LESLIE T. JONES, JR STEPHEN W. POGSON DAVID WM. WEST ROBERT R. MILLS G. STARR ROUNDS WILLIAM W. CLEMENTS LEON D. BESS LEX J. SMITH JAMES G. SPEER JOSEPH P. HIENTON DAVID L. REAUGUREAU DEAN C. SHORT, II AMY R.COY

> PAUL M. HOGAN ROBERT J. POHLMAN

RALPH J. LESTER EARL H. CARROLL EDWARD C. LEBEAU BURTON M. APKER NEWMAN D PORTER WILLIAM H. JURY FRED E. FERGUSON, JR. JERRY W. LAWSON HAROLD J. BLISS, JR. JERRY L. HAGGARD F PENDLETON GAINES. III ROBERT J HACKETT ARNE M. ROVICK WILLIAM L.KURTZ JERRY C. BONNETT JOSEPH F. ABATE H DAVID HEUMANN DAVID P KIMBALL. III

NATHAN R. NIEMUTH

LAW OFFICES

Evans, Kitchel & Jenckes, P.C.

363 NORTH FIRST AVENUE PHOENIX, ARIZONA 85003

January 25, 1977

DENISON KITCHEL
ALFRED B. CARR
OF COUNSEL

TELEPHONE AREA CODE 602 262-8811

TWX 910-9511368

Mrs. Gloria Downer
P. O. Box 304
Palm Desert, California 92260

Dear Mrs. Downer:

Enclosed herewith is a copy of a statement on Inspiration Consolidated Copper Company letterhead dated January 20, 1977 stating that Mr. Spargo has delivered 962.8 wet tons of silica ore to the smelter as of that date. Also enclosed are copies of six assay certificates from the Inspiration Smelter indicating silica content of 92% to 96%, but essentially no gold or silver values for the approximately 1,000 tons of rock shipped to the smelter for testing. Mr. Spargo thought that he had your permission to build a road onto the claim and to ship the ore for purposes of testing its amenability.

Mr. Spargo states that the lack of significant gold or silver values is attributable to the fact that the smelter samples were taken by smelter personnel at a time when neither Mr. Spargo nor his representatiave were present. Mr. Spargo states that it is his intention to have an employee present at the smelter 24 hours a day in order to supervise the taking of samples. It is his estimate that the ore will average .12 ounces of gold per ton and less than one ounce of silver per ton. The smelter will not pay for anything less than one ounce per ton of silver or .03 ounces per ton of gold.

Mr. Spargo states it is his further intention to routinely send his portion of the samples taken by the smelter to Mr. Stan Kaloff of Superior, Arizona and to Mr. Carlos Rochin of Douglas, Arizona for assaying. In the event of any substantial difference between his assays and those of the smelter, a portion of the sample will be sent to an independent umpire assayer.

Very truly yours,

Fred E. Ferguson, Jr.

For EVANS, KITCHEL & JENCKES, P.C.

FEF/mav
Enclosures



## Inspiration Consolidated Copper Company

INSPIRATION, ARIZONA 85537

January 20, 1977

To Whom It May Concern:

The total tonnage of silica ore received by Inspiration to date from Thomas Spargo is 962.8 wet tons.

A copy of all the assays and lot numbers for this material are attached.

#### INSPIRATION CONSOLIDATED COPPER COMPANY ASSAY CERTIFICATE Inspiration, Artmos MINE La 511,512,513,514 Class \_ Date Per Ton of 2000 Lbs. Per Cent Si O, Per Cent Per Cent Per Cent Al, O, Per Cent Pe Per Cent CaO Smelter Lot Per Cert Oz. Silver Oz Gold Copper Per Sar Insoluble 010 597 6 ٥ SM-37 AL-169 Chief Chemist

### **INSPIRATION CONSOLIDATED COPPER COMPANY**

SMELTING DEPARTMENT ASSAY CERTIFICATE

Inspiration, Artsons

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Chief Chemist

## INSPIRATION CONSOLIDATED COPPER COMPANY

SMELTING DEPARTMENT ASSAY CERTIFICATE

Inspiration, Artsons

melter Lot	Per Ton o	2000 Lbs. Oz Gold	Per Cent Copper	Per Cent Insoluble	Per Cent Si O <sub>3</sub>	Per Cent Al, O,	Per Cent Pe	Per Cent CaO	Per Cert	Per O
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## INSPIRATION CONSOLIDATED COPPER COMPANY

ASSAY CERTIFICATE

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Chief Chemist

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# INSPIRATION CONSOLIDATED COPPER COMPANY SMELTING DEPARTMENT

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LAW OFFICES

Evans, Kitchel & Jenckes, P.C.

363 NORTH FIRST AVENUE - AREA 602 - 262-8811
PHOENIX, ARIZONA 85003

January 25, 1977

Mr. John C. Lady VERITY, SMITH, LACY, ALLEN & KEARNS, P.C. 902 Transamerica Building 177 North Church Avenue Tucson, Arizona 85701

Re: Downer/Spargo

Dear John:

As I previously advised you, Mrs. Downer became quite alarmed when she learned that Mr. Spargo had removed a substantial tonnage of rock from the mining claim before an agreement had been executed and before a reclamation plan had been submitted. In accordance with your authorization, I have discussed the matter with Mr. Spargo, who stated that he thought he had permission to construct a road and to remove a limited quantity of quarts rock for shipment to the smelter in order to test its amenability.

I have instructed Mr. Spargo to conduct no further mining upon the Leviathan claim until an agreement has been signed and a reclamation plan approved.

Mrs. Downer has retained Richard B. Mieritz, Mining Consultant, who has conducted a preliminary geological examination of the property and who will advise her on technical matters that may arise in the course of the lease. Mr. Mieritz has suggested several items which should be incorporated in the lease agreement as follows:

Add a new paragraph 5.f. as follows:

"5.f. Lessee shall furnish to Lessor monthly for each of the first six months of this Agreement and bi-monthly thereafter, a topographic plat of the Property showing the contours of Lessee's excavations on the Property. The plat shall indicate by a dotted line the contour of excavations as of the

Mr. John C. Lacy January 25, 1977 Page Two

date of commencement of this Agreement or as of the date of the preceeding plat furnished by Lessee, whichever is applicable, and shall indicate by solid line the contour of Lessee's excavations as of the date of the plat. The plat shall also state Lessee's estimate of the tonnage of Leased Substances mined from the Property during the applicable monthly or bi-monthly period."

Add new paragraph 12 as follows:

"12. Sales. It is Lessee's present intention to ship and sell Leased Substances only to the smelter at the Inspiration Consolidated Copper Company, Inspiration, Arizona 85537. Lessee shall not ship or sell Leased Substances to any other place or person without first having obtained the written consent of the Lessors, which consent shall not be unreasonably withheld."

Mrs. Downer has carefully reviewed paragraph 3(a)
"Production Royalty" and believes that it does not accurately
reflect her understanding of the arrangement proposed by Mr.
Spargo. In order to resolve the problem we have proposed, and
Mr. Spargo is agreeable to the following formula:

50 cents per ton for Leased Substances, plus

25 cents per ton where metal values are between \$10.00 and \$14.99 per ton;

75 cents per ton where metal values are between \$15.00 and \$19.99 per ton;

\$1.50 per ton where metal values are between \$20.00 and \$24.99 per ton; and

10% of "Gross Returns" where metal values exceed \$25.00 per ton.

Mr. Spargo and I have discussed his plan for reclamation of the property following his mining operations. As I understand it, he plans to strip the five to six foot thick layer of quartz rock which is exposed on the hillside and leave the hill in essentially the same configuration as it

Mr. John C. Lacy January 25, 1977 Page Three

exists now except that the decomposed granite constituting the foot wall will be exposed instead of the quartz vein. It will be necessary for Mr. Spargo to move some loose material in the northeast portion of the claim in order to expose the quartz vein above the gully in that area. Mr. Spargo has indicated he will push all such material back up on the hillside, smooth it out and reseed the disturbed area as he goes along. He has further indicated that he will keep the gully that runs the length of the claim free of debris in order not to obstruct the flow of surface waters through the gully. Please prepare a written reclamation plan with appropriate plan and cross section plats attached and signed by Mr. Spargo indicating his intentions. You should incorporate in the reclamation plan the type and quantity of grass recommended by the Bureau of Land Management for proper reseeding of the area and such other action as may be appropriate to promote adequate germination and to minimize soil errosion following mining operations.

Enclosed is a plan of the claim and a cross section prepared by Mr. Spargo which form the basis for his reclamation plan. However, I believe that this should be amplified somewhat to incorporate his specific undertakings. Mr. Spargo has advised me that he does not intend to mine the quartz vein below the surface level of the gully. Consequently, the reclamation plan at this time will contemplate only surface mining. In the event Mr. Spargo later determines to undertake underground or pit mining, an additional and further reclamation plan would be required. This limitation should be incorporated in your proposed reclamation plan. Mr. Spargo has also agreed to remonument the claim with eight 4" x 4"s and to maintain those corners during the lease term.

In order to save time it will be in order for you to mail directly to Mrs. Downer revised lease agreements and the reclamation plan, with copies to me.

Please add acknowledgements to the lease.

Very truly yours, FRED E. FERGUSON, JR.

Fred E. Ferguson, Jr. For EVANS, KITCHEL & JENCKES, P.C.

FEF/mav
Enclosures
cc: Gloria Downer
Todd Spargo
Richard E. Mieritz

2940 N. Casa Tomas

February 25, 1977

Gloria A. Downer P. O. Box 304 Palm Desert, California, 92260

Dear Mrs. Downers

Re: Leviathan Claim Yavapai Co., Arizona

Thank you for your calls of February 19th and 24th requesting I complete the work on the Leviathan claim to provide a basis for a check on the amount of material removed by Mr. Spargo as he works the claim for the silica rock.

The field work was completed on Tuesday, February 22nd by myself and a helper and involved surveying a sufficient area in order to prepare a surface topographic map where Mr. Spargo will be removing material for shipment to the smelter. Survey calculations and the preparation of the Map (enclosed) were completed on the 23rd and 24th.

The blank area in the southeastern quarter of the claim will be surveyed in future visits. The contour lines represent the outline of the present surface. As material is removed and at a convenient time, the "worked" area will again be surveyed and a new set of contours will be drawn. You will note I have indicated lines of Sections on the Map. These have been prepared. As the "worked" area is surveyed, the new surface outline will be plotted on the sections and from that a tonnage figure can be calculated, and can be compared to the reported tonnage and royalty payments made to you by the smelter. At that time I will send you a set of Sections to show how the tonnage was calculated.

I have an extra print of this Map and if you wish for me to send d copy to your lawyer, or Mr. Spargo, please advise.

As indicated to you over the phone on the 24th, everything at the property was the same—there had been no activity since my visit to the property on January 10, 1977.

My Invoice is enclosed, attached. A helper is required to do the field survey work. My Fee for this type of crew and work is \$265.00/day plus expenses for the two men. The normal Fee for a three man crew is \$250.00/day here in Phoenix. For surveying my Fee is \$125.00/day, as you can see by the Invoice.

The nest visit should be about one month after Mr. Spargo starts production, so if you can please advise me accordingly.

Sincerely yours,

Jear Mr. Mieritz, I received the letter from Mr. Sporgs yesterday that I have been waiting for since 2-14-17. So I mailed the contract to Mr. Ferguson to record with the instructions That Mr. Sporgo could begin operation as soon as he norted too, you sooner - Time flies too fast at times for confort. andosed is you etech ænd I com most grateful that you are helping me. I appreciate y our enterest in dropping by the few others. If and when the mening operations begin In M. Contacty on so you will hove teme to set up your next trip and perhops set up a regular schedule. again my thanks,

Sencerely, Gloria Dourner

March 15, 1977

Gloria A. Downer P. O. Box 304 Palm Desert, California, 92260

Re: Leviathan Claim
Yavapai County, Az.

Dear Mrs. Downers

On February 25, 1977 I forwarded to you my letter of that date as well as a print of a Map prepared as a result of the field work-surveying- as directed by your phone call of February 19th.

As of this date I have not had any advise from you that the above had been received either by phone call or by receipt of a check as payment of my Invoice which was included in the above mailing.

Unfortunately I have not had the opportunity to or be traveling in that direction, consequently do not know if Mr. Spargo has started his operation yet. Anytime I have the chance of travelling in that direction, I surely will detour for a few minutes to make a fast run up to the property because I know how difficult it is with the property here in Arizona and you living in Palm Desert.

If you can, drop me a short note indicating you have received my letter and the print of the Map. I hope you have not encountered further problems with the arrangements of the lease with Mr. Spargo.

Thanking you in advance, I remain,

Very truly yours,

R. E. Mieritz.

July 13, 1977

Mrs. Gloria Downer
P. O. Box 304
Palm Desert, California, 92260

Re: Leviathan Claim
Yavapai Dounty, Az.

Dear Mrs. Downers

This is just a short note to advise that I was able to visit the Levisthan claim on July 12, 1977, did some surveying and reviewed the entire claim for new work.

While there I also took several pictures. The roll of film has gone to the developer today, tomorrow I shall get the single copy of the prints and will then chose which prints I will use for the report and obtain two or three more copies of the required prints.

By Menday, July 18, I should have all prints of the photos and would then be able to complete and send you the report.

I will send one copy of the report to Mr. Fred Furguson, Jr. your attorney.

As a result, the report should be in your hands by July 20 or 21st at the latest.

Thank you for calling on me again, I remain,

Sincerely gours.

July 18, 1977

Mrs. Gloria Downer P. O. Box 304 Palm Desert, California, 92260

> Re: Leviathan Claim Yavapai County, Aris.

Dear Mrs. Downer:

Herewith an original - with photos - and one copy - without photos - of my Report as a result of my visit, examination and surveying of the claim and the work completed by Mr. Todd Spargo since my last visit to the property in February. The visit to the claim was made on July 12, 1977.

As requested by you, one copy of the report - with photos - will be hand delivered to Mr. Ferguson's Office.

I do have one extra set of photos in the event they would be needed at a future date.

I believe I have covered everything possible, but if you or Mr. Fergusen should have any questions, please contact me by phone or letter.

Thank you for calling me. My invoice is attached.

Sincerely yours,

R. E. Mierita, Mining Consultant

cc: Mr. Fred B. Ferguson, Jr.

2940 N. CASA TOMAS PHOENIX, ARIZONA 85016 TELEPHONE (602) 277-6053

## Richard K. Mieritz

MINING CONSULTANT

### ARIZONA REGISTERED MINING ENGINEER AND GEOLOGIST

Gloria Downer
P. O. Box 453
Yucca Valley, California, 92284

Re: Leviathan Patented Claim, Yavapai County, Arizona

At your request and authorization on January 4th and 22nd, 1983, the writer visited, observed and analyzed the precious metal recovery system to be used on the subject property by the "contractor" for Los Suertes Mining Corporation—leasee, of your Leviathan claim.

The writer also visited the property, observed the equipment and what has been completed thus far. Visits were made to the Sundance Equipment Rental (S. 75th Ave. and Southern Ave.) on January 22nd and to the Leviathan claim on January 23, 1983.

The purpose of this exercise, as you requested, is to provide you the writer's professional opinion as regards the present and planned operation of mining, exploration, precious metal recovery and security.

#### SUCCESSFUL OPERATIONS:

A successful mining-milling operation, whether large or small, is based on economics, operating personnel of knowledge and experience, exploration to determine if "ore" (a mineralized rock containing sufficient metal when mined and beneficiated will produce a profit), efficient, conventional mining methods, efficient milling methods and in the case of precious metal operation—Security.

These items are herein discussed under the categorized articles of Personnel, Ore Reserve, Mining, Milling and Security—all as they apply to the Los Suertes operation at the Leviathan claim.

#### PERSONNEL:

The President of Los Suertes Mining will be responsible for the operation at the claim. In the writer's opinion, he is knowledgeable to a degree in mining and milling, but definitely needs professional advise and guidance in both categories. This is in evidence as the

writer observed the "incompleted" milling (leaching) setup and the mining "trench work" completed. Apparently there was NO mill design drawn nor followed—rather the placement and erection of equipment completed on a "build as you go" basis. It is feared that the person in charge is not or would be receptive to suggestions or professional assistance. That ofcourse is his privilege. It could be detrimental to the project.

No doubt, the desire for a "CASH FLOW" and activity is "uppermost" regardless of the 'economics" involved and whether the "ore" would produce a profit or lose a lot of money.

The "contractor (Sundance Equipment Rental) will—as understood—do the mining and the milling with his equipment and will provide the necessary equipment for precious metal collection and recovery by an electrowinning process.

Observing the work completed at the property, it is the opinion of the writer that the contractor is knowledgeable in "earth moving" with heavy equipment, but lacks "know how" with regard mining. The hap hazard work completed thus far may be the result of a lack of plan and attackmentioned before. The contractors knowledge of "leaching and electrowinning" appears to be satisfactory in general terms but it is fearful that if "technical" problems arose, and they will, it might be that they could not be taken care of. It is fearful also that the "contractors" work (construction and repair) of equipment structuring is not what the writer would term "first class", but rather a "get by as easy as possible" attitude or desire. It is true — field improvising—is a must but it is just as easy to do a "neat" job as a "bad job".

Professional assistance and guidance is a must.

#### ORE RESERVE:

Other than some sampling (surface and in the new trench), no exploration has been done to determine the existance, grade and tonnage of a potential ore body. The writer was informed that Los Suertes has approximately 5,000 tons of 0.10 oz/ton gold mineralized material which will come from four or five separate areas or piles which will be used for the first "run"--or TEST if you will.

The writer is doubtful these "ore piles" would provide 5,000 tons. The volume does not seem to be there.

Other than the 5,000 tons, there is no "reserve indicated or proven. A certain tonnage can be inferred, but that figure has little value at this time and place, particularly since money has been expended setting up an operation on the basis of a "dream". This is not an unusual situation—since Arizona has had many more "mills" than it has had mines. In other words, "mills built before sufficient ore was developed" or before ore was ever found.

Money spent on Mills can be physically seen--money spent on ore development cannot be physically seen--except as a drill hole and perhaps

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figures on a map.

It is recommended that a comprehensive exploration program be conducted under the guidance of a "Professional" to determine the existance, tonnage and grade of a potential orebody before any other work is started after the completion of the present planned "5,000 ton test". The exploration work should include surface geological mapping, trenching, sampling on surface and exploratory cuts, drilling - preferably diamond core- and sampling. Preparation of maps and sections showing the results of the exploration is a MUST.

Such information is required for economic feasibility calculations, mine design (open pit or underground), milling test work and mill design to obtain greatest recoveries possible and determine production time frams, equipment kind and size.

#### MINING:

Before a mine operation can begin--there MUST be an orebody. At this writing, NO orebody exists.

The mining that is going on is "scratching" here, there and elsewhere--based on a few surface samples--tearing up the country side.

The supplied equipment—large dozer, large front end loader, portable crushing plant, moveable conveyors, dump trucks, etc. are operative but it is feared will be subject to frequent down time which will cause operation delay and/or complete shutdown. As currently evidenced, trouble with the front end loader which has stopped the "work" on the "leach pad" construction and completion. It is the opinion of the writer that some of the equipment is much to large for this operation.

The writer recommends no further work or mining be done --other than the 5,000 ton TEST until an orebody has been developed containing a reserve of at least a three year ore supply to satisfy a 100 ton per day production requirement.

The afore mentioned "scratching" could render the property useless or valueless in years to come if the practice were allowed to continue. As evidence—Mr. Spargo.

#### MILLING:

Milling is a general term to define a process to remove and recover metals and/or minerals from gangue (waste) material and produce a "concentrate" which becomes a "saleable product". It is a process which starts with the "crude mineralized" rock after it has been mined-removed from its mooring in the orebody in the earths crust.

Milling of any ore would include any combination of crushing, grinding, screening, gravity separation, leaching, flotation, heating, etc. Each of the preceeding operations are further divided and functionary to

#### Page Four

accomplish greater efficiencies toward concentration of the value sought. Los Suertes will utilize crushing, screening, leaching, precipitation and electrowinning to recover the precious metal—probably as "dore' bars". The above mentioned steps are in common use and if properly executed as is usually done at successful operations, there should be no problem.

Unsuccessful operations FAIL because of inexperienced personnel, too low grade mineralized rock, lack of "ore", improper equipment preparation, improper material preparation, improper solutions, and many other factors. The greatest contributor to failure is the unwillingness to seek and pay for a Professional experienced in this work. Leaching and metal recovery is NOT a "simple process", but everybody believes they can do it.

Los Suertes management indicated that the Leviathan "ore" (0.10 oz gold per ton) was laboratory bench tested by grinding the "ore" to 200 mesh and leaching in a container for 24 hours with a 2% cyanide solution. Ninety percent of the gold and 60% of the silver were recovered. I believe the work was completed by BRC--Bahamian Refining Co., Phoenix, but I am not sure of that. This test merely indicates the contained gold will leach with cyanide. Some ores contain gold but the cyanide will not take it into solution.

Ideal leaching is "contained leaching" (fine grinding of the ore to liberate or divorce the gold from the matrix and usually 95% will be taken into solution). A popular leach system for small mines is the "heap leach", which is what Los Suertes will use. Capital expenditures are kept to a minimum but there is a great loss in the recovery of the precious metals because the solution never gets to many of the precious metal particles inside the crushed fragments. Normally, ore material is crushed and screened to a ½" or smaller size—hopefully to "expose" the gold—silver so it comes in contact with the cyanide solution. Recovery of the metal by "heap leach" in the particle size range indicated, drops down considerably to about 50 or 60%.

Los Suertes crushing Unit is set to crush the material to 1" or less and they will remove the fines (3/8" or less in size). The "heap pile" will contain -1" to 3/8" material. This, in the opinion of the writer is to large a size and because of this could drop the recovery of metal to 35%.

If a "head assay" of 0.10 oz gold/ton were used, the 4,000 tons (20% fines removed) would contain 400 ounces gold. It is the opinion of the writer that a 35% recovery factor is likely to rule and that only 140 ounces gold could be recovered in a 30 to 60 day leach time period. Anything recovered over that amount would be icing, but with the conditions as they are, I would not expect more than the 140 ounces.

There is room for improvement here.

If there are 5,000 tons available for the heap leach pile and when in place on the pad (after removal of about 20% fines (-3/8" material)) the 4,000 tons should occupy a volume of 50 feet wide, 160 feet long and 8 feet high (64,000 cubic feet), or any combination to equal 64,000 CF.

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Removal of precious metals from solution is accomplished by one of two methods, (1) use of activated charcoal and (2) zinc dust precipitation. Economically, the writer opines that zinc dust precipitation is cheaper and certainly the simpliest. Security-wise, the writer opines there is less chance of "foul play" at the operation, or in shipment to a refinery.

Los Suertes Mining will be using the charcoal method of extraction utilizing a "Unit" built by the contractor and actually purchased about a year ago for another project, which, as I understand, failed. The contractor will also supply the "electrowinning" Unit which removes the gold from the second stage "pregnant" solution and electrically deposits the gold metal on a steel wool draped around an iron grate anode. The gold laden steel wool is place in a container and the steel wool is disolved using sulphuric acid—the resultant residue can be shipped to a refinery or melted and cast into dore' bars, the latter being the choice of Los Suertes management. A hundred dollars in bills is much easier to hide than one hundred dollars in coins.

Prior to electrowinning however is the charcoal precipitation of gold from solution. This is accomplished by pumping pregnant solution from the heap leach pad through the charcoal filled plastic tanks located in the "tank house"—a converted railroad freight car used for transporting cattle. After a particular tank filled with charcoal has precipitated sufficient precious metals (with this particular recovery Unit), the gold laden charcoal must be removed from the single precip tank and hand filled into the electrowinning system tank to again permit the gold to be leached and "stripped" from the charcoal in a heated (180 to 195° F.) system utilizing alcohol, lime and cyanide to return the gold into solution and pass to the electrowinning cell. What we have here is a double "leaching" system which provides several opportunities for value loss and subjects the concentrated values to potential theft.

#### SECURITY:

One usually considers "security" as armed guards, sophisicated alarm and closed TV systems, etc. This is not the case of precious metal recovery operations such as to be established at the Leviathan claim.

Actually, there are only two (2) points or places in the entire system from crude ore to the saleable concentrate or metal that physical theft can occur by a person or persons unknown. These are (1) stealing a portion of the gold laden charcoal when it is removed from the precipitation tank and placed in the electrowinning section and (2) theft of all or a portion of the recovered precious metal from the last stage (dissolving the steel wool) of the electrowinning process—whether it be the "sludge" or the dore metal. Theft could occur at the property or at any point while transporting the "values" from the property to a "respectable buyer (refinery)" of precious metal, such as Englehard in Anaheim, California.

Security in this case is dependent on "control" of the system at various

points and accomplished by "sampling" and the use of certain equipment to obtain data and figures to calculate where and how much precious metal is at this point, that point, etc. Such sampling not only checks the route, flow and metal content, it also determines the efficiency of the process and could poit out some problems.

The following are suggested points of equipment installation and sampling.

- (1) A continuous weightometer installed on feeder belt between crusher and belt discharge onto leach pad.
- (2) An automatic sampler installed at end of conveyor discharging onto leach pad.
- (3) Install flow meter after pregnant solution pump and befor charcoal precipitation system.
- (4) Install flow meter between last precipitation tank (in series) and before "barren" solution discharge.
- (5) Utilize scale (to nearest pound) to weigh charcoal before filling precipitation tanks and weighing gold laden charcoal when the precipitation tank is emptied.
- (6) Sample and assay "heads" -- from automatic sampler (#2 above)
- (7) Sample pregnant solution after flow meter but before entry to first precipitation tank in series.
- (8) Sample pregnant solution before entry to each succeeding charcoal precipitation tank.
- (9) Sample "barren solution" discharge--after flow meter.
- (10) Sample solution containing "stripped" metal before entry to electrowinning cell.
- (11) Sample solution after electrowinning has stopped.
- (12) Neither the "sludge" nor the "dore' bar need be sampled—the refinery will do that after the "melt". The material should be weighed before sending to the refinery. They will also weigh upon receipt. They also determine the moisture content if it is sludge. The sludge or dore' bar can be sampled before shipment if it is deemed necessary. At Englehard, the customer receives a "drilled sample" of the recovered metal and results are compared. If the results are too far apart, the third sample is an umpire sample. An agreeable settlement is made.

This constant sampling and recording of various data is the "security" for the process. It is not foolproof because a "smart" operator can "juggle" and arrange "results" to his liking, however, I am of the opinion there is no such person on the project who could manipulate all the figures involved if the above precautions are put into being and religously followed.

Transport security from mine to buyer would be a personnel problem, also a secrecy problem.

#### SUGGESTED IMPROVEMENTS:

Aside from the fact there appears to be little "on paper" design and planning, there are some immediate improvements that can be made, which are:

(1) The leach pad should have 4 to 6 inches of 1½" gravel placed on top of the plastic sheeting—not sand.

#### Page Seven

The sand-now on top of the plastic sheeting will deter solution flow as well as absorbing and retaining the solution which contains values (a loss) and not permit recovery of metal in solution. Gravel will provide fast, easy drainage of the pregnant solution on the slick surface of the plastic. The gravel should be "washed, crude gravel", not crushed. Since sand now covers part of the plastic laid down, the job should be finished with the sand on top but then a second Plastic sheet should be installed and the washed gravel placed on top of the second sheet, as indicated.

- (2) Provide wash drainage around the leach pad. A gulley washer down pour could badly damage the pad.
- (3) Change the "plumbing" on the present charcoal precipitation tanks—the piping has the solution goin the wrong way. Los Suertes management has recognized this error.
- (4) Install the electrowinning section into the building with the charcoal precipitation tanks. This will keep the "recovery system" in one building which can be locked.
- (5) Establish an assay Lab at the property to run gold-silver in rock or solution and free cyanide in solution. A duplicate sample (rock or solution) can be occasionally sent out to aa uninterested Registered Assayer as constant checks.
- (6) Before any more material is treated—after this first run—discard the present recovery system and install the Bi-Metal system or an equivalent system OR, go to the zinc dust precipitation system (State of Maine process) which simplifies the process and provides better security. The writer prefers the latter system.
- (7) Planned exploration and sampling under professional guidance of the potential ore zones is absolutely required as well as mine planning and design and a general revamping of the milling system to obtain maximum operation efficiency.

#### GENERAL:

While at the property on January 23rd, I looked at the dozer trench near the ridge top and at the mineralization in the southeast corner of the claim. Off hand, I can say a fair ore potential does exist but development by drilling is necessary—not by the usual "scratching" most operators do when professional guidance is not used—OR they do not want to spend the money.

I also sketched on my work sheet map the position of the crusher, leach pad, etc., merely to get an idea. All of this new work and subsequent work should be surveyed—similar to what was done when Spargo was active—except Los Suertes should be responsible for same.

Respectfully submitted,

R. E. Mieritz, Mining Consultant, Phoenix, Arizona. January 25, 1983



order, extra prints, |

Subject

Date\_

# SEND A SNAPSHOT!

everyone loves pictures...

They say more than a letter can...



Yn

































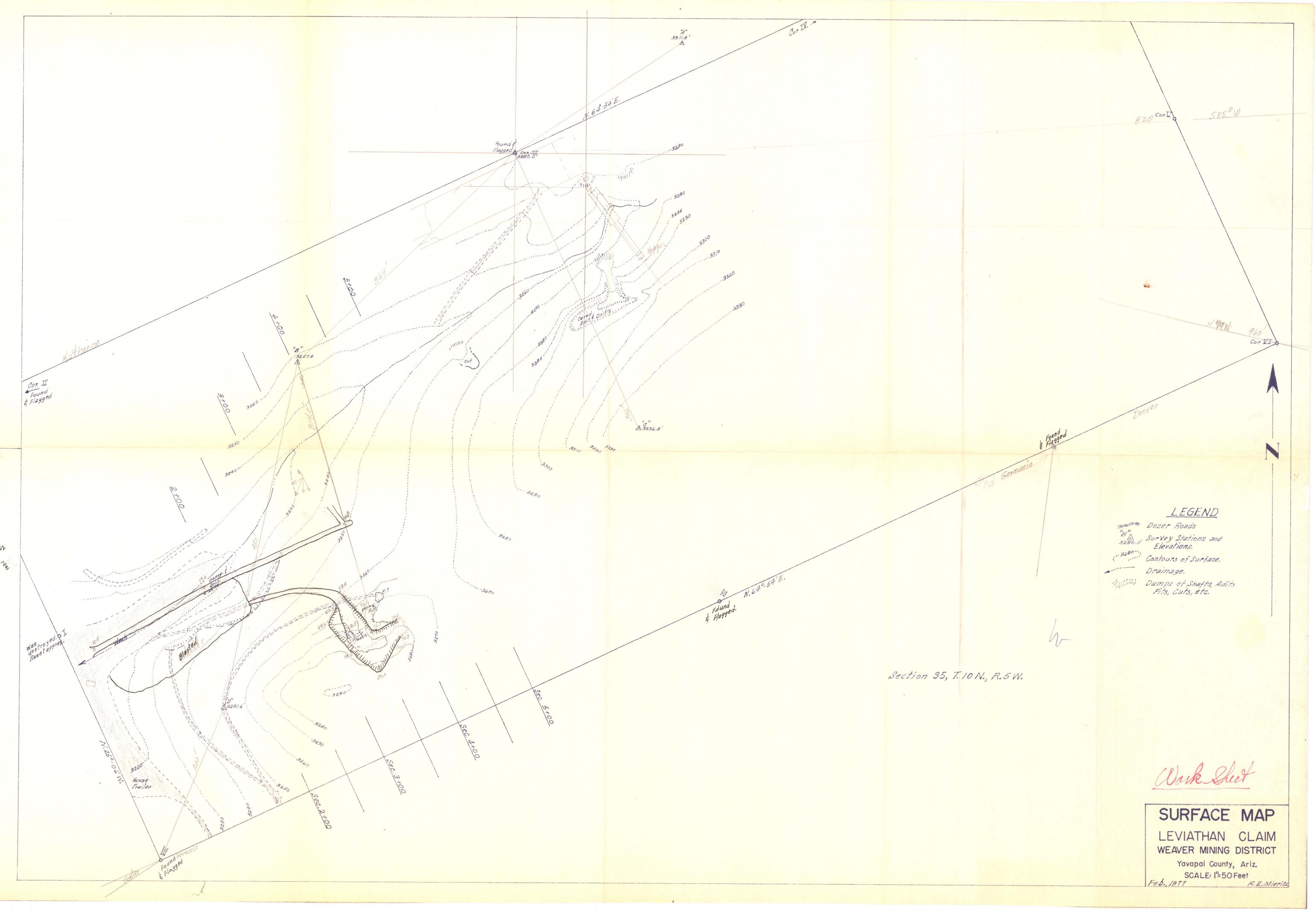












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Gloria Downer
P. O. Box 453
Yucca Valley, California, 92284

Dear Mrs. Downer:

Herewith my Letter Report indicating my professional opinion of the present operation of Los Suertes Mining Co. on the Leviathan claim.

I have attempted to advise you of all the ramifications with regard a mine operation and yet not get into ALL the details of such an operation. I could probably write for a couple more days but it would not be worth the time and expense to explain all in detail.

I am sure you will be able to "read between the lines" where necessary.

If the results of this first test do not come up to your expectations, I would be more apt to blame the operation and the way it is set up than on a "cheating" basis. I believe you will be able to pick out some of the bad points of the operation when reading the report.

Thank you for asking me to do this work for you. If there are any questions please call or write me.

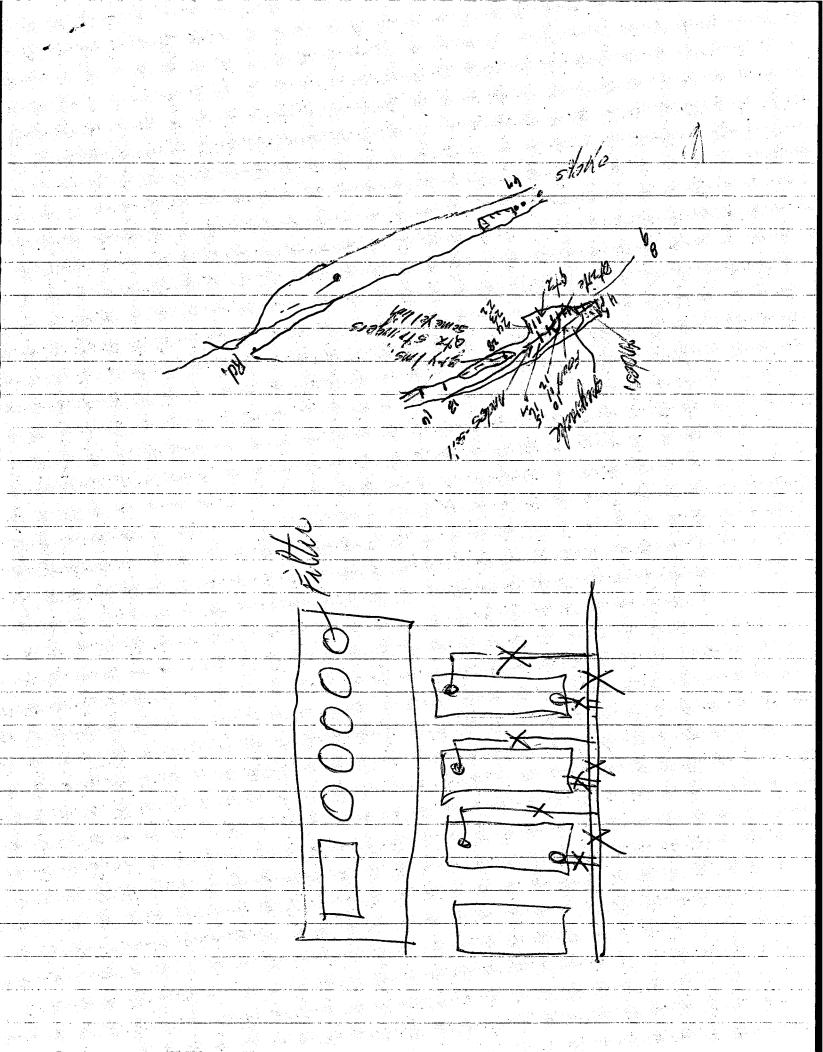
Sincerely,

R. E. Mieritz

240 gals/ton, 907 l=/4m - 1 cuff= 7.5 gals = 62.5# = 32 cuft/hn 20 pringirights = 1 oz Troy = 31. lgams 14.6 try ez = 1.0/b(16 oz) 19d = 3.78 liters = 9.33/kg, 1lit = 2.204 #5 10g/ton = 103/907h = 31.19mm/907ht or .0249mm/lit. all to Statler-> 1/tm. -

Thankly Water Supply Shace the good will good Sull This & July good Justing Space ho Capandard Zhappan. 321-22 Amps, - Steel wood - mineg, 205/ton 202. Steel plate. Modelle for 202.

Cap. 1.34 - Marcon 6-12 91,40/pl. No Cost on -21 get diesel/24 he seined 5000 tous. Juden -1-30×40×400= P.O. 453 2-15X 300 = Water fran Chistes 9gpm 1.0 453 Jucia Vally - 97284 Bul men shaft. Anker Jal. Bul f. 8" bank on tollow + g'on top. 619-364-3377 Somdende Egeip Gental 875th fre & Southern (Si Atside gate)



August 3, 1977

Mrs. Gloria Downer 8. O. Box 304 Palm Desert, California, 92260

Re: Leviathan Claim
Yavapai County, Ariz.

Dear Mrs. Downery

On July 18, 1977 I forwarded to you my Report on the work completed on the Leviathan Claim and as of my visit to the claim on July 12, 1977.

Although I have had no communication from you, it is assumed that you had received that original and one copy of the report a few days after July 18th.

Mr. Ferguson called me this past Monday, August 1, and had a few questions as to how much it might cost to rehabilitate the scarred surface to a shape which might not be too unsightly from the appearance standpoint and into a condition which would ease the erosion problem which has been created by the recent work. I provided Mr. Ferguson my opinions and dollar estimates which I am sure he will pass on to you.

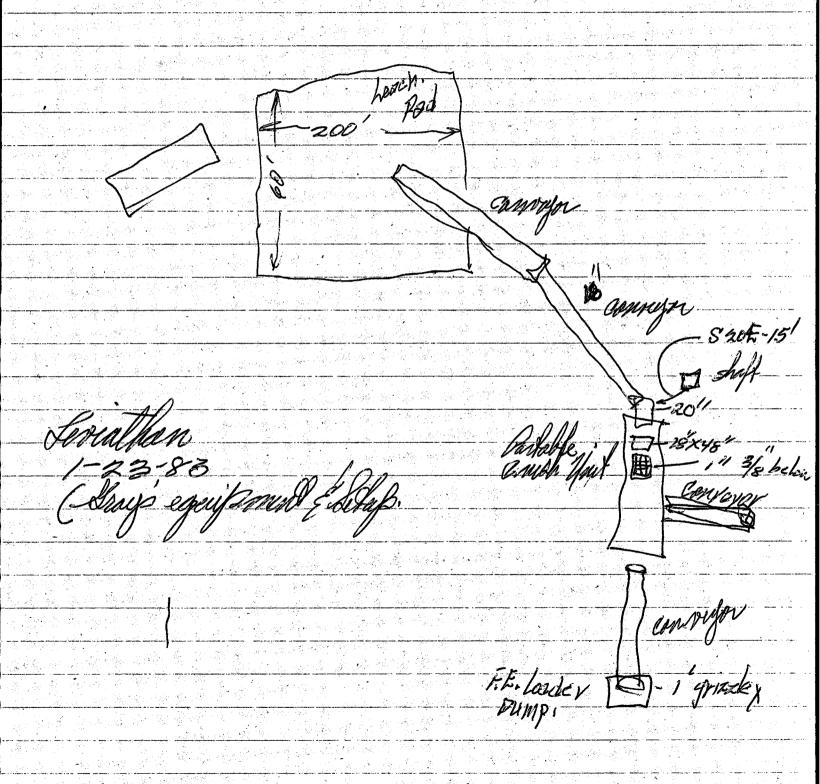
I have not as yet received your check for my invoice and if it has not been sent, would appreciate same.

Again, if any questions arise, or problems, please contact me or have Mr. Ferguson contact me.

Sincerely yours,

R. E. Mieritz, Mining Consultant

P.O. Boy 450 Juca Valley Calif. 97784 74-364-3374



## BIMETALS RECOVERY SYSTEMS, INC. 2942 W. SIERRA STREET PHOENIX, ARIZONA 85029

(602) 863-3499

SEPTEMBER 30, 1982

Mr. Richard E. Meritz 2940 Casa Thomas Phoenix, Arizona 85016

Dear Dick,

I am sending a brochure and this letter describing the Bimetals Portable Carbon Adsorption Plant to introduce equipment that may be useful in your gold and silver operations.

Bimetals Recovery Systems, Inc. is a young manufacturing company presently building portable carbon adsorption plants for the recovery of precious metals from cyanide leaching solutions.

The Model 2550 pictured on the attached brochure is capable of treating 25 to 50 gallons per minute of solution on a 24 hour per day basis. The plant consists of a filter, five carbon columns and a stripping /electrowin section. It is designed to continually strip precious metals from a low grade pregnant solution to a final high grade electrowin product. This product is suitable for shipment to a refiner or reduction to dore' metal.

The carbon columns and the stripping section are plumbed with rubber hose and quick disconnect couplings so that the columns can be rotated in circuit. This will achieve the highest rate of loading and the highest recovery available for a particular grade of pregnant solution. The stripping section is designed to strip the loaded carbon with a hot alcohol solution and electrowin with a modified Zadra cell. Plain steel wool is used to collect the values. The the main advantage of our system is that the carbon is not moved from the column for stripping. This eliminates several costly steps and the potential loss of values.

The entire unit is mounted on a 16 foot trailer for easy portability. It requires only a 25 amp-120 volt A.C. power source and a propane or natural gas hook up for operation in the system. It is anticipated that the operator will provide solution to the plant at 25 to 50 gpm and 30 to 40 psi. The operator will also provide activated charcoal at  $6\times12$  mesh and a 20% ethyl alcohol stripping solution.

The price of this unit is \$19,200 F.O.B. Phoenix, Arizona with 50% down at time of order and the balance in cash or certified check upon delivery. Time for construction is about one month.

Our original design was engineered for a 10,000 ton heap. Ideally the initial heap would contain about 0.10 ounces per ton of gold which would be about 60 percent recoverable by cyanide leaching. The leaching cycle would be completed in 30 to 60 days. This would yield about 600 ounces of gold for each pad. After leaching the solutions would be turned on to a new heap.

Our model 50100 has been designed to handle 50 to 100  $\,\mathrm{gpm}$  and is priced at \$31,500. It is based on the same design principals as the model 2550.

Bimetals has recently entered the Management and Consulting field for heap leaching operations and now offers engineering, testing and management services to organizations and individuals who have need of these services. The company also has contacts with several groups of investors who are willing to fund precious metal projects.

If you have use of our equipment or services please contact either myself at (602) 944-3763 or Art Christiansen at the above address for more information.

Sincerely,

Bimetals Recovery Systems H. Mason Coggin, P.E. and L.S.

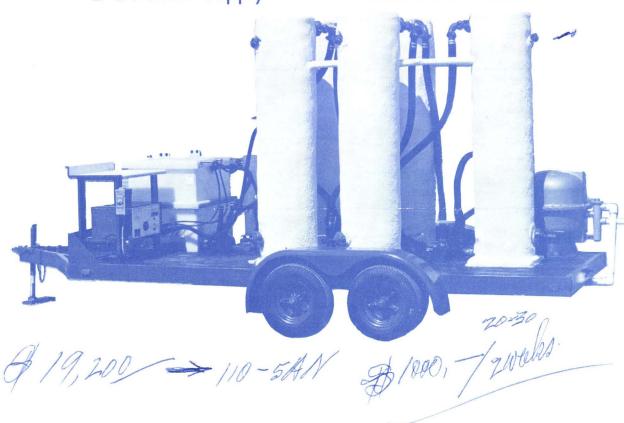
# PORTABLE

## CARBON ADSORPTION PLANTS

for Precious Metals

- Recovery
- Stripping
- Electrowinning

- 200 lb. Carbon Columns
  - DC Power Supply
- Black Iron Pipes & Valves
- 10.000 lb. Trailer

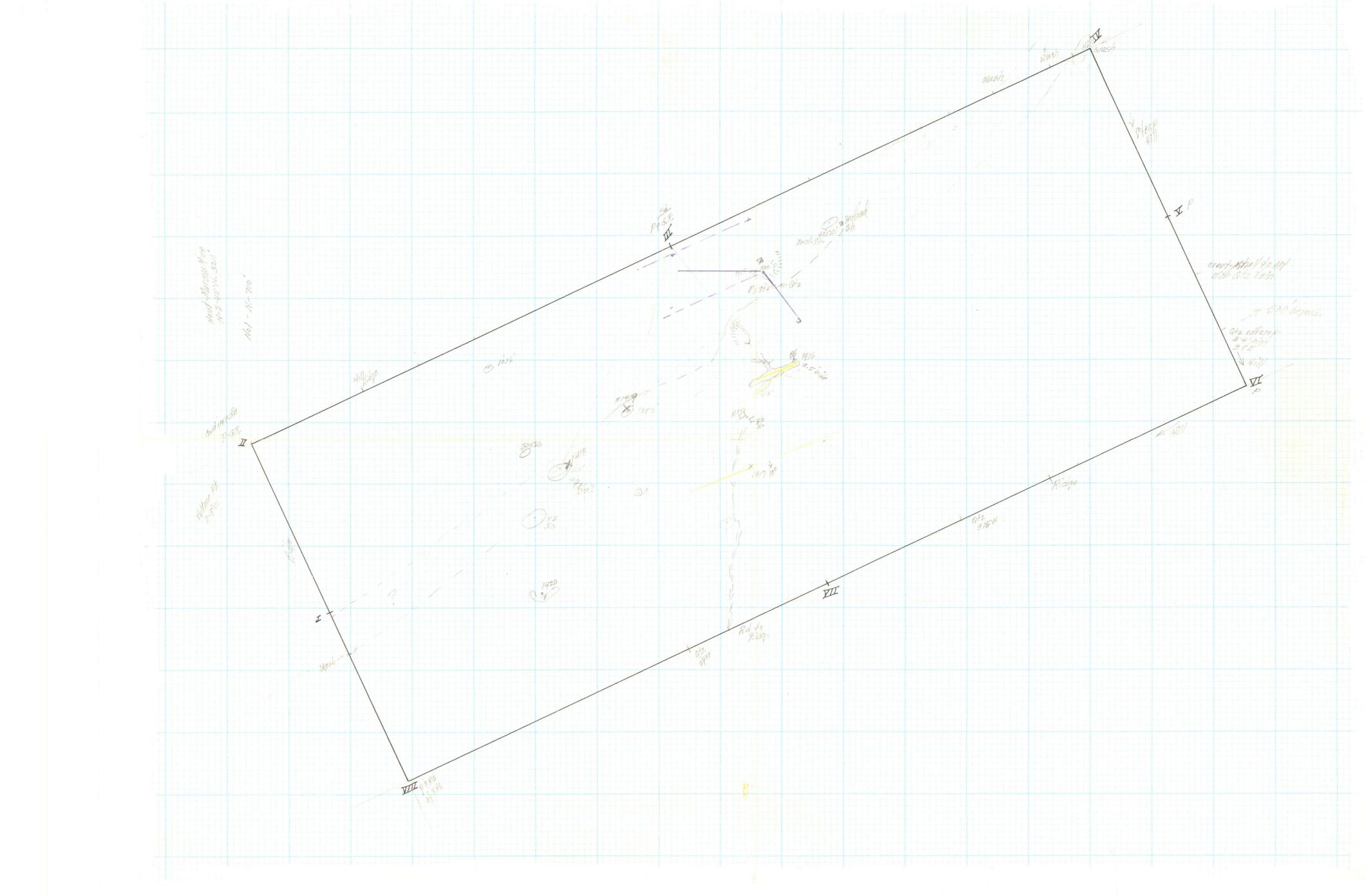


# PORTABLE CARBON ADSORPTION PLANTS for Precious Metals

- Recovery
- 10.000 lb. Trailer
- Stripping
- Electrowinning
- DC Power Supply
- Black Iron Pipes & Valves
- 200 lb. Carbon Columns

## Bimetals Recovery Systems Inc.

2942 West Sierra Street Phoenix; AZ 85029 (602) 863-3499



# State of Maine Mining Company

P.O. BOX 453 CHARLES ESCAPULE TOMBSTONE, ARIZONA 85638

PHONE (602) 457-3601 LOUIS ESCAPULE

Cyaniding silver and gold ores is not a new practice, however, some of the methods in use are comparatively new. One such method is to "heap" leach low grade ores. It is a cheap, fast way to recover precious metals from old dumps or open pit mining operations. The term "heap leaching" was probably coined by the copper mining industry, whereby low grade ore is stacked (heaped) on a prepared base (made impervious) and sprayed with a leaching agent, in the case of silver and gold, a dilute cyanide solution. The solution percolates down through the ore, dissolving the metal and collected for subsequent stripping.

Several methods of recovering the dissolved metals are used, such as carbon absorbtion, electrowinning, etc. but the simplest way is by use of powdered zinc or aluminum metal. In order for this method to work efficiently certain criteria must be met, first, the solution must be filtered to remove all suspended particles and, second, all or nearly all dissolved oxygen must be removed before adding zinc dust to precipitate the silver and gold, at which time it is a simple matter to filter and collect the metal.

The two precipitation plants we have designed and are currently manufacturing for sale are rated at 65 and 300 tons of solution per day (24 hrs.).

They are the Crowe-Merrill type, using zinc dust as the precipitant.

The 300 TPD Plant comes complete with reagent storage tanks, mix pump and a 2 HP pump for the spray system. The 65 TPD Plant does not come with tanks as 55 gallon drums can be used for this purpose.

Both are built on a rigid steel skid type frame for easy handling and transporting. The larger plant weighs less than a ton and the smaller around 400 lbs.

Both are easily operated by one person, requiring very little attention.

All components are designed for outdoor use and a shelter, although recommended, is not necessary.

# State of Maine Mining Company

P.O. BOX 453 CHARLES ESCAPULE TOMBSTONE, ARIZONA 85638

PHONE (602) 457-3601 LOUIS ESCAPULE

#### THE 300 TPD PLANT

The 300 TPD Precipitation Plant consists of clarifier pump and filters, vacuum deaeration system, zinc dust feeder and mixing cone, precipitation pump and filters, all mounted on a steel skid. Also included are three 500 gallon steel tanks for reagent storage and spray mix tank plus a 2 HP pump for pumping the solution onto a heap and a ½ HP pump for mixing reagents.

#### **SPECIFICATIONS**

- A. Automatic and continuous vacuum deaeration.
- B. Pressure monitored filter system.
- C. Non-corrosive pumps with mechanical seals.
- D. 20 lb. zinc dust hopper capacity.
- E. Variable rate zinc feeder.
- F. Electronic liquid level control in vacuum chamber.
- G. Steel skid mounted.
- H. Rain tight lectrical switch gear.
- I. Oil lubed vacuum pump.
- J. Power requirements: 8.5 KVA 220 volts, 1 ph 60 Hz. (or 50 Hz.)

The dimensions of this unit are  $8' \times 5' \times 7'11''$  high.

While this plant was designed for heap leaching operation it can be used in any mill system that generates pregnant cyanide solutions.

F.O.B. State of Maine Mine Tombstone, Arizona

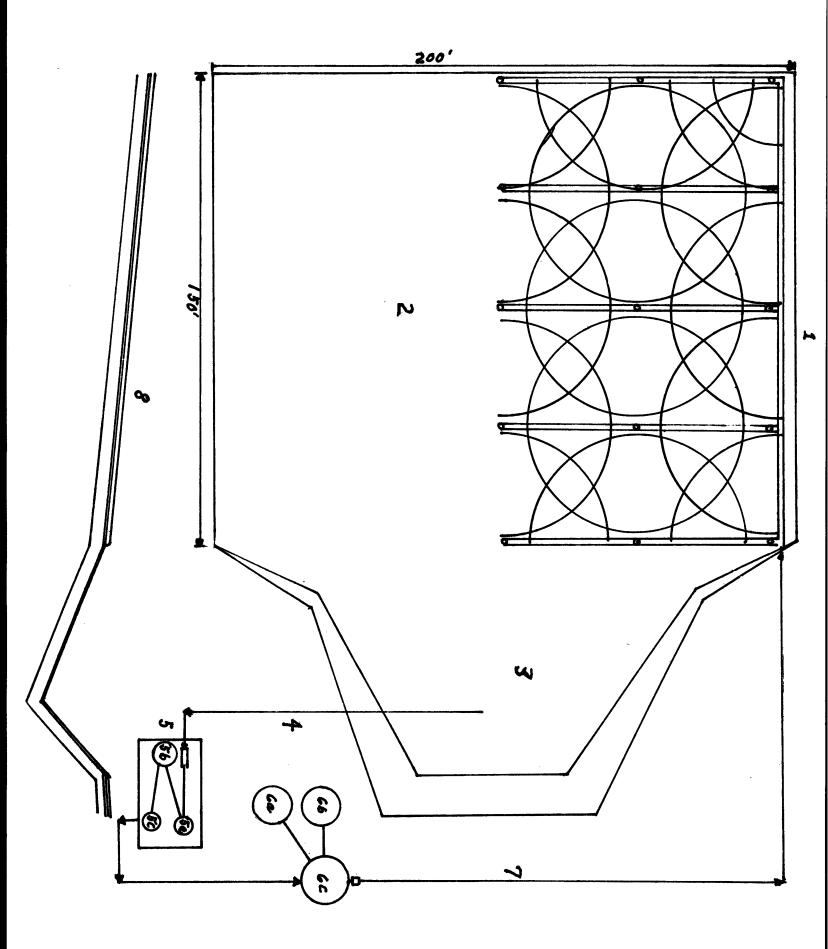
# State of Maine Mining Company

P.O. BOX 453 CHARLES ESCAPULE TOMBSTONE, ARIZONA 85638

PHONE (602) 457-3601 LOUIS ESCAPULE

#### SCHEMATIC OF HEAP LEACH SYSTEM

- 1. Spray system—30 ft. grid for sprays. 2 in. manifold, 1½" spray lines.
- 2. Five foot lift ready for spray lines.
- 3. Pregnant solution pond.
- 4. Pregnant solution into plant.
- 5. Plant
  - a) Clarifier filter
  - b) Vacuum chamber
  - c) Precip. filter
  - d) Barren solution
- 6. Mix tank
  - a) NaCN
  - b) Caustic
- 7. Cyanide solution return to spray system.
- 8. Cross-section of pad and pond. Pad has a 3-9% slope.
  - a) 2-3 in. of  $1\frac{1}{2}$ " gravel.
  - b) 15 in. compacted mill slimes.



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Dear Mr. Mieritz, I do apologize for being so løte wiek y over payment, Itold John Tworld mail you check and then I Couldnot find your letter with the fille. When you talked with John he nes correct in saying he thought I had mailed the check. It was just That I fold not told hein that the bill no mesploud. Enclosed is a check for three keendred dollows and I'm soony to fore back but please sand me another bill and I will mail the bolonce. If I fend the bill en the meantenne I will moet The bolove to you. Isincerely hope thes hosul inconveniencedy on. Many Thonks Serverel Dune for your report.

LOT NO <u>37</u>

SURVEY NO <u>580</u>

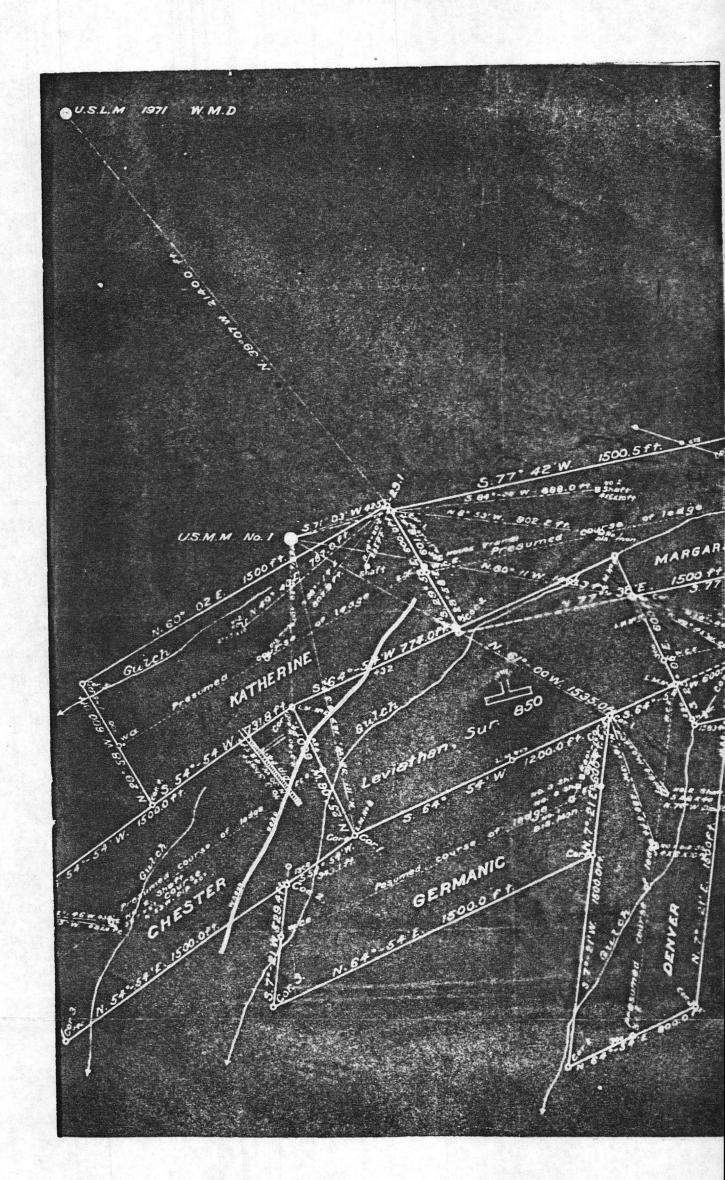
## Kield Notes

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Claimed by	Charles P. Stanton -	
Julian of		
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<del>,</del>	Edward N. Willon	— US D.S.
Survey executed by	4.	
Under instructions dated.	A Jane 11th	188 3
Survey commenced		188 <i>3</i>
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Thence S. 65. W Variation 15.31 Lask Cross like and descend, Cross ce Spew of the Vene bearing 5. 16. W. Cross deep Gulch lescus 674 S. 150 VV. -Let Post 2x4x32 let 12 beed in the grand Hucuker L. M. N.YIL Cross Road leading to the buildings & Lewel Top of Centraly Spew in Which the Lege is Educates 1500 S.W Comer of Claim. Iletapost 2x4x82 - 12 beet in the framed with pile of Stanes Huchted L. M. N. VIII No bearing aveilable There 15. 25 W (N. 250 W.) the Vanation 15.31. 2 at Cross Wash that rems from the N.E. Course & Crosses Certa of Lede 18 beet-wiside untial heavenered Clase in on Suited 300 manuel, the place of legining, the chaining levery 299:98 best a ahour Truckes thank Improvements Made upon this Claur by the Elceinand le. P. Stantan From mount Nº III, marked L. M. NºTIE S. 39.07'E- dish 200 feel to mouth of Gumel inside of the approaches Gunnel 5-5 heet lang 6 beck high and Ha feet livele the approaches are 30 hell-lane



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## UNITED STATES POSTAL SERVICE OFFICIAL BUSINESS

#### SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1 and 2 on reverse side.
- Moisten gummed ends and attach to back of article.

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, \$300



#### RETURN

Phoenix, Az, 85016

## IRON KING ASSAY OFFICE

## **ASSAY CERTIFICATE**

BOX 14 -- PHONE 632-7410

**HUMBOLDT, ARIZONA 86329** 

ASSAY
MADE
FOR

RICHARD E. MIERITZ
29140 N. Casa Tomas
Phoenix, Ariz. 85016

CHARGES \$37.50



ASSAYER

	DESCRIPTION	oz/ton Au	oz/ton Ag	Sinsol. X Fo	1977 % Pb	% Zn	% Cu
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71-11-12	#1420	•9 <b>56</b>	1.14	93.12			

### TO WHOM IT MAY CONCERN

Mr. Richard Mieritz, geologist,2940 No. Casa Tomas, Fheonix, Arizona, has complete access to the property, The Leviathan Mine, for the purpose of taking rock and ore samples.

Gloria A. Downer Gloria D. Downer

P.O.Box 304

Palm Desert, California 92260

PROTO V: Photo shows "Drainage Canel". Picture taken at junction point of long and short drainage canals at upper or east end of canel. Looking westerly from this point.

PROTO VI: Photo shows "Brainage Cenel" in lower left of photo and the "Blasted Area" in lower center of photo. Photo taken from point on read mear the inclined sheft on the Chester patented claim approximately 300 feet westerly of the southwest end center corner (No. 1) of the Levisthen Claim and looking east.

HOTO 1: Penorame view of the house trailer site, most of which is on the Levisthen Claim. Thotos taken from the roads edge mear the inclined Shaft located on the Chaster petented claim about 300 feet southwest of the southwest and center corner (No.I) of the Levisthen Claim. The direction of the Rhoto is southeast. Photo shows "Blasted Area" as well as a portion of the "Drainage Canel". Picture taken from southwest end center corner (No. I) of the Levisthan Claim in a southeast direction.

Photo shows doser treach on the morth side of main wash and on the south slope of the hill in the northwest portion of Levisthen Claim. Theto taken from point midway between "L" shaped treach and nearby Pit just cost of survey station "E".

THE GLOSS Denotable view of the morth slope of the circular hill in the couchwest portion of the Levisthen Claim and showing the "Mining Work" area in the upper left center of the Photo. Pictures were taken from survey station "3" and looking roughly south.