CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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Arizona Department of Mines and Mineral Resources Mining Collection

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01/12/96

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: UFO CLAIMS

ALTERNATE NAMES:
LEHMAN COPPER
LONE STAR
CHAMPIE COPPER
CERSA MOJE 1-7 CLAIMS
RHOADES-IOLA

YAVAPAI COUNTY MILS NUMBER: 938B

LOCATION: TOWNSHIP 9 N RANGE 2 W SECTION 33 QUARTER W2
LATITUDE: N 34DEG 04MIN 39SEC LONGITUDE: W 112DEG 28MIN 33SEC
TOPO MAP NAME: COPPEROPOLIS - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER OXIDE
GOLD

BIBLIOGRAPHY:
USGS COPPEROPOLIS QUAD
ADMMR GOLDEN ASTER MINES FILE
ADMMR UFO CLAIMS FILE
BLM AMC FILES 68361 & 68894
ADMMR RHOADES-IOLA MINE FILE

*GENERAL REFERENCES

REFERENCE 1 F1 < ABGMT CLIPPINGS FILE DATA

REFERENCE 2 F2 < AZ DEPT MIN RES FILE DATA

REFERENCE 3 F3 < USGS BULL 782 p.185-186

REFERENCE 4 F4 < USBM - ABGMT FILE DATA

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 <

*RECORD TYPE B20 <X,1,M,>

DEPOSIT NUMBER B40 <

*REPORT DATE G1 <8,1,▼,1,1,> YR. MO.

*INFORMATION SOURCE B30 <1,2,

*FILE LINK IDENT. B50 < USBM 004 025 0417

*REPORTER(SUPERVISOR) G2 < ROTH, FRANCES A. (last, first, middle initial)

(DEWITT, ED (last, first, middle initial)

*REPORTER AFFILIATION G5 < ABGMT

*SITE NAME A10< CHAMPIE MINE

*SYNONYMS A11 < LONE STAR, LEHMAN

LOCATION

*MINING DISTRICT/AREA A30< CASTLE CREEK DISTRICT

*COUNTY A60< YAVAPAI

*STATE A50<A,Z,>

*COUNTRY A40<U,S,

*PHYSIOGRAPHIC PROV A63<1,2,▼,

*DRAINAGE AREA A62<1,5,0,7,0,1,0,2,▼,

LAND STATUS A64<0,0,▼, ,▼,( )

*QUADRANGLE NAME A90< COPPEROPOLIS (1,9,6,9,)>

QUADRANGLE SCALE A100<2,4,0,0,0,>

SECOND QUAD NAME A92<( )>

SECOND QUAD SCALE A91<

*ELEVATION A107<3,2,0,0,▼,F,T,>

UTM

*NORTHING A120<3,7,7,1,5,5,0,>

*EASTING A130<3,6,9,0,0,>

*ZONE NUMBER A110<+,1,2,>

*ACCURACY

ACCURATE (ACC) (circle)

ESTIMATED EST <

GEODETIC

*LATITUDE A70 < _ _ N

*LONGITUDE A80 < _ _ W

CADASTRAL

*TOWNSHIP(S) A77<0,0,9,N,▼, ,▼, ,▼, ,▼, >

*RANGE(S) A78<0,0,2,W,▼, ,▼, ,▼, ,▼, >

*SECTION(S) A79< 33 ,▼, ,▼, ,▼,

*SECTION FRACTION(S) A76< NE SW

*MERIDIAN(S) A81< GILA AND SALT RIVER

*POSITION FROM NEAREST PROMINENT LOCALITY A82< 3.4 MILES NORTH OF BLACK BUTTE

*LOCATION COMMENTS A83< LOCATION MEASURED FROM BETWEEN TWO ADITS. THERE IS A SHAFT TO THE SOUTHEAST. THE CHAMPIE MINE (LEHMAN) IS NOT THE GOLDEN ASTER MINE (LEHMAN)

* ESSENTIAL INFORMATION

+ ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

COMMODITY INFORMATION

COMMODITIES PRESENT C10 < CU, PB, F, AU >
ORE MINERALS C30 < CHRYS..OLLA, SPECULARITE, LIMONITE (AURIFERO.. >
COMMODITY SUBTYPES C41 < >
GEN. ANALYTICAL DATA C43 < >
COM. INFO. COMMENTS C50 < >

SIGNIFICANCE

PRODUCER

MAJOR PRODUCTS MAJOR < AG, CU, PB >
MINOR PRODUCTS MINOR < AU >
POTENTIAL PRODUCTS POTEN < >
OCCURRENCES OCCUR < >

NON-PRODUCER

MAIN COMMODITIES PRESENT C11 < >
MINOR COMMODITIES PRESENT C12 < >
OCCURRENCES OCCUR < >

*PRODUCTION

PRODUCER

PRODUCTION (YES) (circle) PRODUCTION SIZE (SML) MED LGE (circle one)

NON-PRODUCER

PRODUCTION UND NO (circle one)

EXPLORATION OR DEVELOPMENT

STATUS

PRODUCER

STATUS AND ACTIVITY A20 < 4 >

NON-PRODUCER

STATUS AND ACTIVITY A20 < >

DISCOVERER L20 < >
YEAR OF DISCOVERY L10 < > NATURE OF DISCOVERY L30 < B > YEAR OF FIRST PRODUCTION L40 < 1937 > YEAR OF LAST PRODUCTION L45 < 1965 >
PRESENT/LAST OWNER A12 < G. WESTERDAHL (1942) >
PRESENT/LAST OPERATOR A13 < A.W. NICKLE (1942) >
EXPL./DEV. COMMENTS L110 < 3 CLAIMS, ALL UNPATENTED >

DESCRIPTION OF DEPOSIT

DEPOSIT TYPE(S) C40 < VEIN >
DEPOSIT FORM/SHAPE M10 < TABULAR >
DEPTH TO TOP M20 < > UNITS M21 < > MAXIMUM LENGTH M40 < > UNITS M41 < >
DEPTH TO BOTTOM M30 < > UNITS M31 < > MAXIMUM WIDTH M50 < > UNITS M51 < >
DEPOSIT SIZE M15 (SMALL) M15 < MEDIUM > M15 < LARGE > (circle one) MAXIMUM THICKNESS M60 < 5 > UNITS M61 < FT >
STRIKE M70 < N30W TO N20W > DIP M80 < 35SW TO 45SW >
DIRECTION OF PLUNGE M100 < > PLUNGE M90 < >
DEP. DESC. COMMENTS M110 < >

DESCRIPTION OF WORKINGS

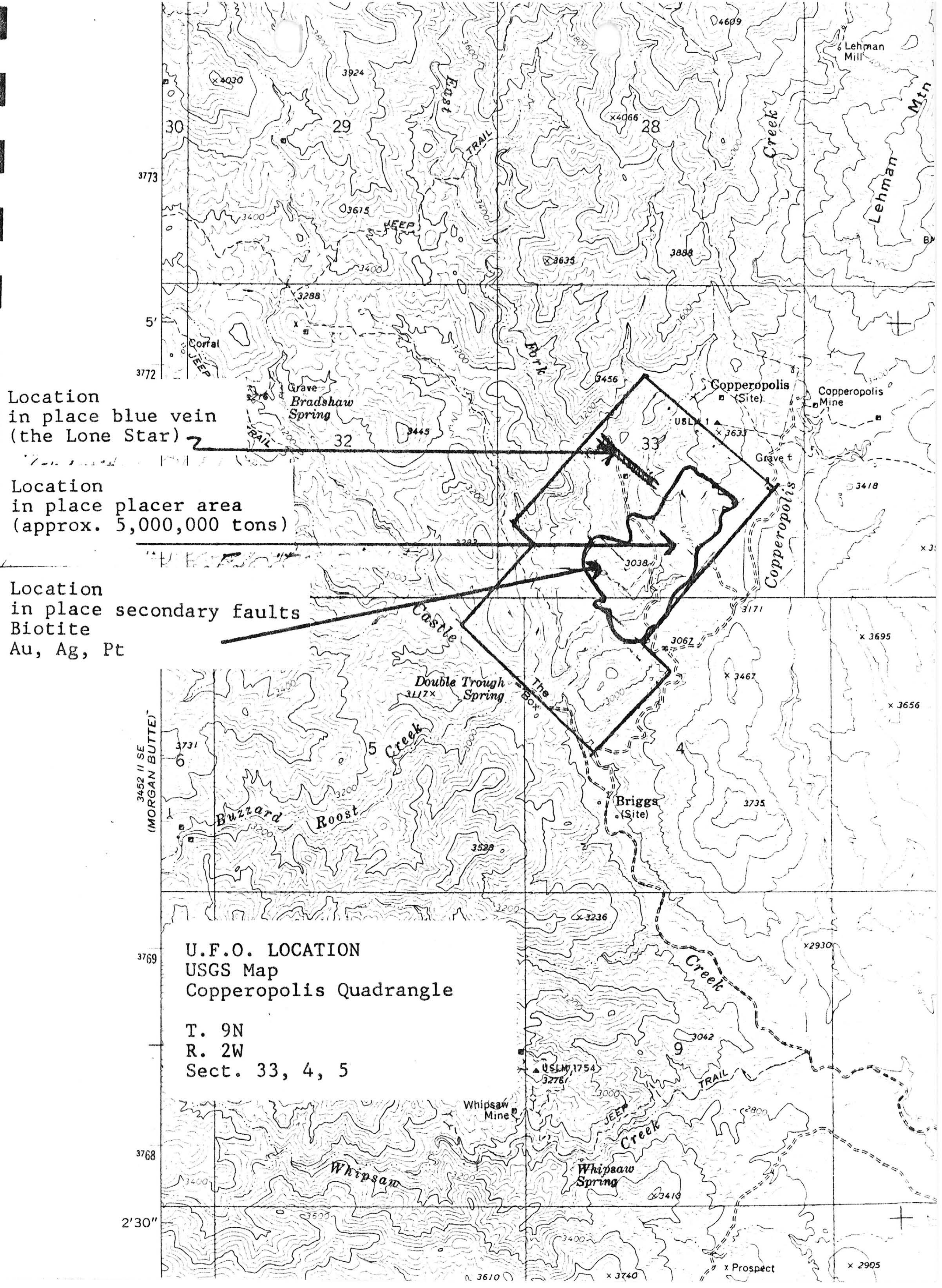
Workings are: SURFACE M120 UNDERGROUND (M130) BOTH M140 (circle one)
OVERALL LENGTH M190 < > UNITS M191 < >
DEPTH BELOW SURFACE M160 < > UNITS M161 < > OVERALL WIDTH M200 < > UNITS M201 < >
LENGTH OF WORKINGS M170 < > UNITS M171 < > OVERALL AREA M210 < > UNITS M211 < >
DESC. OF WORK. COM. M220 < TUNNEL FOLLOWS THE COPPER VEIN, DOWN THE HILL FROM THE TUNNEL IS A SHAFT WHICH IS ON THE LEAD VEIN
4 TUNNELS WITHIN A VERTICAL INTERVAL OF 200 FT >

GEOLOGY

AGE OF HOST ROCK(S) K1 < P.R.O.T., T.E.R.T., UNDATED, PROBABLY 1750 MILLION YEARS OR OLDER; UNDATED, PROBABLY MID-TERTIARY >
HOST ROCK TYPE(S) K1A < QUARTZ MICA SCHIST, AMPHIBOLE SCHIST, GRANITE; RHYOLITE >
AGE OF IGNEOUS ROCK(S) K2 < P.R.O.T., T.E.R.T., AS LINE K1 >
IGNEOUS ROCK TYPE(S) K2A < GRANITE; RHYOLITE, ANDESITE TO RHYOLITE FLOWS >
AGE OF MINERALIZATION K3 < P.A.L.E.O.-M.I.O., UNDATED, PROBABLY MIOCENE >
PERT. MINERALS (NOT ORE) K4 < QUARTZ, HEMATITE, >
ORE CONTROL/LOCUS K5 < FAULTING, SHEARING >
MAJ. REG. TRENDS/STRUCT. N5 < FOLIATION IN PRECAMBRIAN SCHIST TRENDS N20E TO N50E. TERTIARY VOLCANICS DIP NE, STRIKE NW >
TECTONIC SETTING N15 < >
SIGNIFICANT LOCAL STRUCT. N70 < VEINS PARALLEL LOW-ANGLE (LESS THAN 50 DEGREE DIP) FAULTS WHICH TREND NW >
SIGNIFICANT ALTERATION N75 < MINOR FE-STAINING >
PROCESS OF CONC./ENRICH. N80 < OXIDATION AT NEAR-SURFACE >
FORMATION AGE N30 < P.R.O.T., UNDATED, PROBABLY 1750 MILLION YEARS AND OLDER >
FORMATION NAME N30A < UNNAMED PRECAMBRIAN SCHIST >
SECOND FM AGE N35 < >
SECOND FM NAME N35A < >
IGNEOUS UNIT AGE N50 < P.R.O.T., AS LINE N30 >
IGNEOUS UNIT NAME N50A < GRANITE >
SECOND IG UNIT AGE N55 < P.A.L.E.O.-M.I.O., UNDATED, PROBABLY MID-TERTIARY >
SECOND IG UNIT NAME N55A < RHYOLITE DIKES, UNNAMED >
GEOLOGY COMMENTS N85 < DEPOSIT IS QUARTZ VEIN LOCALIZED ALONG LOW-ANGLE FAULT WHICH PROBABLY DISPLACES TERTIARY VOLCANIC ROCKS TO THE SOUTHEAST. DEPOSIT AGE PROBABLY MIOCENE >

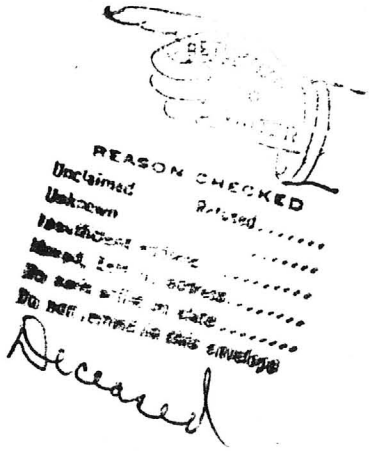
GENERAL COMMENTS

GENERAL COMMENTS GEN < >


Location
in place blue vein
(the Lone Star)
Location
in place placer area
(approx. 5,000,000 tons)
Location
in place secondary faults
Biotite
Au, Ag, Pt
U.F.O. LOCATION
USGS Map
Copperopolis Quadrangle
T. 9N
R. 2W
Sect. 33, 4, 5
East
Fork
Castle
Creek
The Box
Double Trough Spring
Bradshaw Spring
Grave
Corral
JEEP
TRAIL
Copperopolis (Site)
Copperopolis Mine
Copperopolis
Lehman Mill
Lehman Mtn
Briggs (Site)
Buzzard Roost
Whipsaw Mine
Whipsaw Spring
Whipsaw
Prospect
USLM 1754
3452 II SE
(MORGAN BUTTE)
3773
3772
3769
3768
5′
2′30″
30
29
28
32
33
6
5
4
9

State of Arizona
Mineral Building, Fairgrounds
PHOENIX, ARIZONA

PHOENIX, ARIZ.
APR 3
730PM
58



Mr. A. W. Nickle
Castle Creek,
via Morristown, Arizona

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

RECEIVED
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

A-220-10 W.F.O. WADE JENKINS 1993

Daily Territorial 5-31-85

Lone Star mine (Mo), Yavapai Co.

May 31, 1985, The Daily Territorial, Pag

ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

October 23, 1958

To the Owner or Operator of the Arizona Mining Property named below:

LONE STAR (Yavapai County) gold, copper, lead
(Property) (ore)

perty which we would like to have

PHOENIX, ARIZ.

's Report form with as complete detail
s, maps, assay returns, shipment returns
is before and which might interest a
perty.

Mr. G.A. Westerdahl
Castle Creek
Arizona

No Such Post Office
In Arizona B

Frank P Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

[redacted]

LONE STAR MINE

Yavapai County
Castle Hot Springs Dist.

5/4/83: Information extracted from the State Mine Inspectors' Start-Up Sheets gives American Mining and Exploration Inc., Leroy Pikus, President, 6112N. 12th Ave., Phoenix Arizona 85012, phone 602-242-9104 as beginning a cyanide operation at the UFO Mine in Yavapai County. They hope to extract gold and silver. Start-up date is May 1, 1983.

KAP WR 4/8/83: The owners of the UFO Mine were in to discuss what to expect from a consultant. They were shown numerous reports as examples. They are hoping to get some real answers as to recoverable gold content and tonnage in place.

NJN WR 2/24/84: John Challinor (c) reported that he did some sampling for Amax at the UFO Mine (Lone Star) Yavapai County. The results were not described as encouraging.

NJN WR 12/28/84: Jim Weatherby reported a placer operation in T9N R2W Sec. 33 SE$\frac{1}{4}$ of the SW$\frac{1}{4}$, Yavapai County, Lone Star Mine (f) Castle Creek District. Bill Dickey et al are mining residual material on the south side of the hill near BM 3028. Water is being supplied by a pipeline about one third mile long from Castle Creek.

LONE STAR MINE

Yavapai County
Castle Creek District

KAP WR 5/6/80: Max Long, P.O. Box 87, Morristown, Arizona 85342, and 1804 Elk Street, Space 27, Rock Springs, Wyoming 82901, phone (307) 362-8506, reported he has claims in the Wickenburg area, at the Old Lone Star Mine. His claims are the UFO Claims No. 1-10 and are located in Section 33, T9N, R2W, Black Rock Mining District, Yavapai County. He has been making mill tests and hopes to operate soon. He is concerned about claim staking activities in the area, which he feels may threaten his title.

RRB WR 12/18/81: Max Long of UFO near Wickenburg, Old Long Star Mine, Castle Creek District, section 33, T9N R2W was in for notes of Black Sands Talk. He reports assays of 20% Cu, 5 oz/ton Au and 0.1% Pt.

KAP WR 10/29/82: A rumor was received that a firm known as American Mining and Exploration is operating the UFO Mine (Lone Star file) in the Wickenburg area.

NJN WR 2/18/83: Bill Dickey, 105 Mountain View Drive, Rock Springs, Wyoming 89201, (307) 362-7798 and Max Lang, 1804 Elk Street, #27, Rock Springs, Wyoming 89201 visited. They are senior partners of UFO Mining Limited Partnership which owns the Long Star and U.F.O. Mines in Yavapai County. They provided a copy of a report on the Lone Star for our files. They are looking to go back and block out their ore reserves in a logical fashion now by hiring a registered consultant. They are thinking of hiring Dorman O'Leary to be their consultant.

KAP WR 3/18/83: John Challinor explained he has been hired by the people at the UFO Mine to sort out their problems. He has started with a routine sampling program.

KAP WR 3/25/83: John Challinor reported he is still working for the group at the U.F.O. Mine. He explained that Noble Metals proportedly is to received 75% of the UFO production.

NJN WR 9/18/87: Bill Dickie with UFO MIning Limited Partnership (card) reported that they have been constructing a mill at the UFO Claims no 1-10 (file) Yavapai County with the money they have raised in the last year. He promised to visit with pictures and more details soon.

UFO CLAIMS (F) YAVAPAI

KK

KATHY KARPAN
Secretary of State

Securities (307) 777-7370
FAX 634-9503

August 12, 1993

Nyal Niemuth
Arizona Department of Mines
and Mineral Resources
1505 West washington
Phoenix, AZ 85007

RE: UFO Mining Limited Partnership and Summit Mines International Ltd.

Dear Mr. Niemuth:

Thank you for your assistance today in explaining what information you had on UFO Mining. I have enclosed copies of the alleged claim locations, maps and lease agreements for your files.

We have received complaints against Max Long, General Partner of UFO Mining Limited Partnership and are conducting a preliminary inquiry into the allegations we received.

Sincerely,

Kathy Karpan
Secretary of State

Paul Yaksic
Securities Examiner

The Capitol
Cheyenne, Wyoming 82002-0020

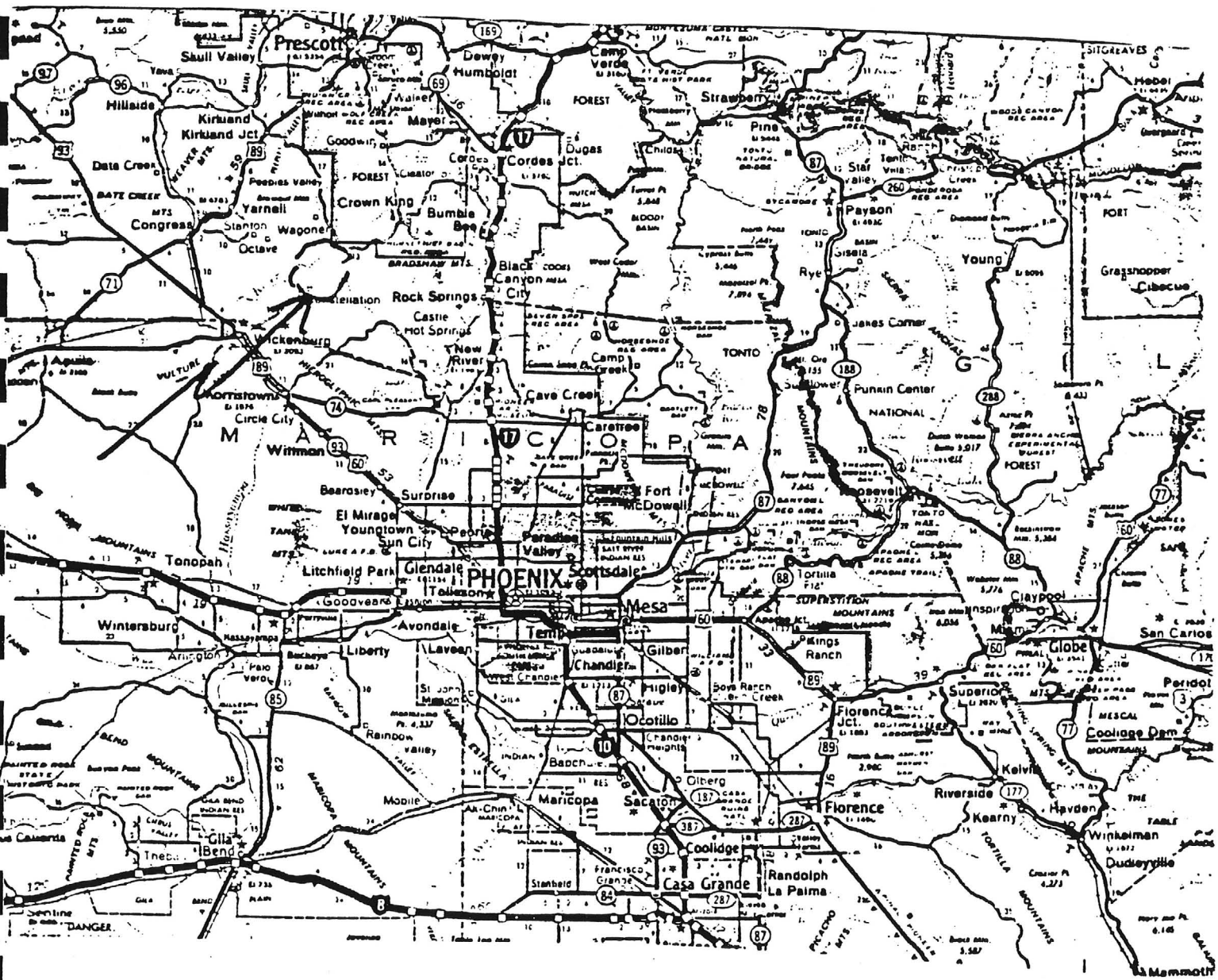
Recycled Paper

The U.F.O. Mine is approximately 52 miles northwest of downtown Phoenix. The surrounding area is best characterized as typical Arizona rough mountain desert.

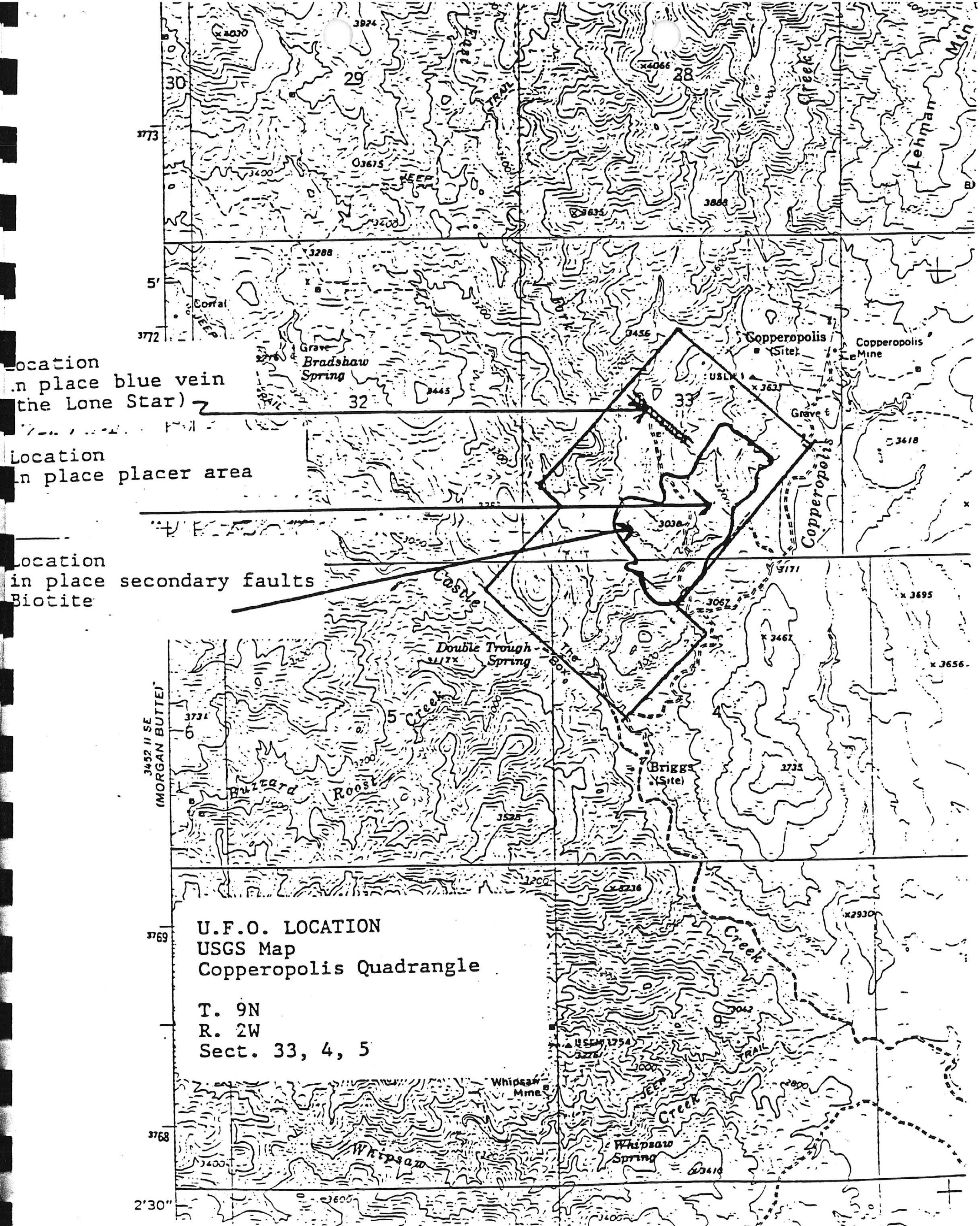
Access to the mine is via Highway 54 (a year round paved road) which continues to the Maricopa/Yavapai County line at Lake Pleasant Park. From there the county maintained but unpaved road continues for 15 miles to the Yavapai County Camp at Castle Creek. The next 4 miles is creek bottom to the influence of Buckhorn Creek. This area is maintained by the County as weather permits basically to assist local ranchers.

The last 6.1 miles is Castle Creek and the creek bottom is used for access to the mining property. This mileage is maintained by the mine owners. Passenger cars can, weather permitting, reach the mine property safely, but access with a pick-up truck is recommended.

The U.F.O. mine consists of 21 registered and properly certified mining lode claims for both placer and hard rock mining. Each claim is approximately 600' x 1,500'. The total acerage is 400±. Elevation is 3,000'.



Regional Location
U.F.O. MINE
Yavapai County, Arizona
Castle Creek Mining District


ocation
n place blue vein
the Lone Star)
Location
n place placer area
ocation
in place secondary faults
Biotite
U.F.O. LOCATION
USGS Map
Copperopolis Quadrangle
T. 9N
R. 2W
Sect. 33, 4, 5
Copperopolis (Site)
Copperopolis Mine
Copperopolis
Lehman Mtn
Bradshaw Spring
Double Trough Spring
Castle Creek
The Box
Briggs (Site)
Buzzard Roost Creek
Whipsaw Mine
Whipsaw Spring
Whipsaw Creek
3452 II SE (MORGAN BUTTE)

There are no municipal utilities available to the mine property. Power is supplied by an on site diesel generator. Telephone is available at the Yavapai County Camp or in Wickenburg. Satalite communications disc is available if desired.

In 1981 the mine applied for and was granted a permit for a water supply well. A 140' water well was completed and a delivery of 11 c.f.m. received. There is, at present, no restrictions on the number of wells which may be added should a future owner desire additional water. A 200,000 gallon water storage pond is on site for the present mining operations.

It is anticipated that at such time as the above purposes are accomplished, additional funds from other sources will be raised by the Joint Venture to pay for establishing a commercial mining operation of the UFO Mining Claims.

UFO Mining Limited Partnership will contribute the Claims to the Joint Venture. Omega Consulting will contribute its expertise.

The Partnership will receive a fifteen percent (15%) ownership interest in the Joint Venture, UFO Mining Limited Partnership will receive an eighty percent (80%) ownership interest, and Omega Consulting will receive a five percent (5%) interest in the Joint Venture.

Additional capital will be raised as needed in the future by exchange of a portion of UFO Mining Limited Partnership's interest in the Joint Venture, and it will obligate itself to raise necessary additional funds by exchanging a portion of its interest. The Partnership's fifteen percent (15%) interest in the Joint Venture will not be diminished, and the Joint Venture's ownership of the UFO Mining Claims will not be diminished in the future in order to raise additional funds.

Distributions

All profits and losses of The Partnership, after establishment of a reasonable reserve for working capital shall be allocated to the Limited Partners, pro rata to the percentage which their individual contributions bear to the total contributions of all Limited Partners. Distributions will be in cash or in kind.

It is not expected that cash will become available for distribution to the Limited Partners until the UFO Mining Claims are placed into commercial production, which will take place only after the pilot plant has been sufficiently operated to develop methods for commercial production of the claims; additional funds have been raised to establish a commercial operation; and the commercial operation has been successfully implemented. Any distributions will also be contingent upon it being determined feasible to commercially produce the claims.

Consequently, if any distributions are made, it is likely that they will not commence before January 1, 1988, and possibly considerably after that date.

The Mining Claims

The Mining Claims are all located in Yavapai County, Arizona, and are described as follows:

C #	Claim Name	Sec-T-R	Book	Page	Date of Location	Date of Amendment	Book	Page
3361	U.F.O. # 1	33 9N 2W	1245	692	9/21/79	7/10/83	1553	62
3362	U.F.O. # 2	33 9N 2W	1245	695	9/21/79	7/10/83	1553	64
3363	U.F.O. # 3	33 9N 2W	1245	698	9/21/79	7/10/83	1553	66
3364	U.F.O. # 4	33 9N 2W	1245	701	9/21/79	7/10/83	1553	68
3365	U.F.O. # 5	33 9N 2W	1245	704	9/21/79	7/10/83	1553	70
3366	U.F.O. # 6	33 9N 2W	1245	707	9/21/79	7/10/83	1553	72
8367	U.F.O. # 7	33 9N 2W	1245	710	9/21/79	7/10/83	1553	74
8368	U.F.O. # 8	33 9N 2W	1245	713	9/21/79	7/10/83	1553	76
3369	U.F.O. # 9	33 9N 2W	1245	716	9/21/79	7/10/83	1553	78
3370	U.F.O. # 10	33 9N 2W	1245	719	9/21/79	7/10/83	1553	80
90805	U.F.O. # 11	4 8N 2W	1513	915	2/1/83	7/10/83	1553	82
0806	U.F.O. # 12	4 8N 2W	1513	916	2/1/83	7/10/83	1553	84
0807	U.F.O. # 13	4& 33 8&9N 2W	1513	917	2/1/83	7/10/83	1553	86
90808	U.F.O. # 14	4& 33 8&9N 2W	1513	918	2/1/83	7/10/83	1553	88
90809	U.F.O. # 15	33 9N 2W	1513	919	2/1/83	7/10/83	1553	90
3834	U.F.O. # 16	33 9N 2W	1371	375	3/29/81	7/10/83	1553	92
28835	U.F.O. # 17	33 9N 2W	1371	373	3/29/81	7/10/83	1553	94
28836	U.F.O. # 18	4 8N 2W	1371	377	3/29/81	7/10/83	1553	96
0780	U.F.O. # 19	4 8N 2W	1505	450	11/20/82	7/10/83	1553	98
0781	U.F.O. # 20	4 8N 2W	1505	452	11/20/82	7/10/83	1553	100
90782	U.F.O. #21	4 8N 2W	1505	454	11/20/82	7/10/83	1553	102

E-21

The following report (ORE TESTING/ANALYSIS) was designed and conducted primarily to CONFIRM the presence of the Platimum group metals within the LONE STAR ore. These tests are confirming, as are those assays following the report from Kimball Laboratories and Beckman Industries. These tests and assays are analytical and were not intended or designed to be fully quanatative and they do not necessarily indicate production or recovery methods. Full quanatative analysis and recovery values will be determined and established through chemicall systems developed and built within a pilot plant program.

UFO MINE
ORE TESTING/ANALYSIS
3-31-86/ 4-5-86
CONDUCTED AT OMEGA MINERALS
PHOENIX, ARIZONA
CONDUCTED BY JIM COUINO/ ARLO STREECH

I. WEIGHTS

HEAD ORE FROM UFO MINE (by Stan Pownal)- 3500 lbs gross/

Delivered to, ground and table concentrated by
Archie Stutenroth
Casa Grande, Arizona

Ore loss- due to ove size grinding- 40%
Net weight concentrated- 2100 lbs.
Screen size- 20 mesh
Wt. Summary:
2100 lbs- gross
480 lbs- all concentrates
1620 lbs- tails
Weights for tests (returned to Omega Minerals):

			gross wt	water	bucket	net	
1.	Head Ore		42	-	2	40	lbs
2.	1st line		12 1/4	-	2	10	lbs.
3.	2nd line		22 1/2	-	2	20.5	lbs.
4.	3rd line (1)						
		1	77	3	2	75	lbs
		2.	100	3	2	95	lbs.
		3.	75	3	2	70	lbs.
						Total	240 lbs
5.	3rd line (2)						
		1	76	3	2	71	lbs.
		2	90	-	2	88	lbs.
		3	56	3	2	51	lbs.
						Total	210 lbs
6.	Tails sample		7	-	-	7	lbs.

Magnetic Seperation:
From Stutenroth #1 cons (reground at Omega)
From 30 gm sample
1. non magnetic portion 17.5 gm
2. magnetic portion 12.3 gm

(.2 gm lost on work surface)

NOTE: ALL Stutenroth ore had to be reground to 150 mesh before being used for chemical analysis or for fire assay. All tests that follow use regound ore samples.

II. METHODS

A. SILVER INQUART FIRE ASSAY (fire cons or head ore with silver inquart as a collector.)

1. silver inquart + litharge. Prefusion
2. after molten: + 10gm borax, +10gm sodium carbonate, +2gm silica, +3gm flour.
3. Furnace at approx 1900 degrees

B. STRAIGHT FIRING (fire cons or head ore with NO inquartation. Lead added and used as a collector.)

1. ore (150 gm)
2. blend with flux (for 150 gm, as follows)
   - 90gm litharge
   - 8 medium spons borax
   - 5gm flour
   - 6 heaping spoons soda ash
   - 1 heaping spoon calcium carbonate
   - 1 heaping spoon silica
3. cupel and furnace

C. SULPHERIC ACID PARTING (to dissolve buttons from silver inquart fire assay. Results should yield Au, some PTG as residue. The Os and Ru are lost in firing. Ag and Pd is in the solution. Deduct 4-10% of residue weight to compensate for silver not taken in solution.)

1. flatten silver bead as much as possible
2. place in sulpheric acid (at least 2 times height of metal- always keep metal covered with acid)
3. bring temp up until bubbles appear. (approx 240 deg.) don't raise temp beyond that point. Maintain this temp. Possibly reduce temp if bubbling is too violent
4. let part
5. decant as much liquid (silver) as possible without losing blacks.
6. add dist water until no silver sulphate is left
7. decant water. dry
8. powder residue remains. Weigh and read. (deduct 4-10% for silver not taken in solution.)

REFERENCE: Bugbee- Sulpheric parting

D. NITRIC ACID PARTING (residue = 99% of precious metals goes into solution with high silver inquart. Some Au, Pt, Ir will stay down depending on the amount of silver used in inquart.)

1. Nitric 50% / Dist water 50%
2. HOT plate but not boil
3. bring up temp
4. Dehydrate. Once it becomes dry it is silver nitrate crystals (white Powder). Bring up temp to 340 deg.- the silver nitrate will become liquid. Let cook. This causes precious metals to precipitate.

5. Remove fro heat and cool. Tip beaker hile cooling
6. Add dist water and decant. repeat 4 times
7. weigh and read precips

III. FORMULAS

A. To convert ppm from DCP Assay to oz per ton

$$\frac{\text{ppm X .02916 X vol of solution}}{\text{weight of sample}} = \text{oz per ton}$$

B. 30 gm ore sample represents 1 assay ton. 1 miligram result equals 1 ounce per ton of the material assayed. This is used for fire assays

IV. SOLUTIONS FOR DCP ASSAY (solutions used to put ore in form to be read by DCP machine)

A. NITRIC + HYDROGEN PEROXIDE METHOD (also known as Englehart method)

1. nitric + hydrogen peroxide (35%) Cook until no further action
2. add hydrocloric, 3 times solution.
3. cook. when action stops add 100 ml of 3-1 aqua regia
4. cook until sample turns white (about 12 hrs or as required)
5. read solution on DCP

B. JIM´S DCP SOLUTION

1. 35% peroxide + hypochlorite. Heat. (expect a violent reaction)
2. slowly add 150 ml hydrocloric acid
3. cook (hot boil) until 99% of the materials turn white. (1 1/2 to 5 hrs.) COVER BEAKER WITH WATCH GLASS
4. read solution on DCP

Note: tests S-9 and S-10 used Method A
tests S-11 and S-12 used Method B

5. Remove fr[illegible] heat and cool. Tip beaker [illegible]hile cooling
6. Add dist w[illegible]ter and decant. repeat 4 t[illegible]es
7. weigh and read precips

III. FORMULAS

A. To convert ppm from DCP Assay to oz per ton

$$\frac{\text{ppm X .02916 X vol of solution}}{\text{weight of sample}} = \text{oz per ton}$$

B. 30 gm ore sample represents 1 assay ton. 1 miligram result equals 1 ounce per ton of the material assayed. This is used for fire assays

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2. slowly add 150 ml hydrocloric acid
3. cook (hot boil) until 99% of the materials turn white. (1 1/2 to 5 hrs.) COVER BEAKER WITH WATCH GLASS
4. read solution on DCP

Note: tests S-9 and S-10 used Method A
tests S-11 and S-12 used Method B

TEST: S-1a
DATE: 4-2-86
METHOD: OMEGA MINERALS CHEMICAL LEACH

ORE: #1 STUT CONS

BY: A.S.

RESULT: INCOMPLETE DIGESTION ON UNGROUND ORE
TEST OVER.

TEST: S-1b
DATE: 4-2-86
METHOD: OMEGA MINERALS CHEMICAL LEACH

ORE: #2 STUT CONS

BY: A.S.

RESULT: INCOMPLETE DIGESTION ON UNGROUND ORE
TEST OVER

TEST: S-1c
DATE 4-2-86
METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: #1 STUT CONS

WGTS:
ORE: 5GM
Ag: 5GM

BY: A.S.

RESULT: NOT ENOUGHT SILVER FOR INQUART. TEST OVER

TEST: S-2
DATE: 4-3-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: #2 STUT CONS

WGTS:
ORE: 5GM
Ag: 15GM

RESULTS: SILVER BEAD: 15.7093 GM (SPLIT)
7.8472 GM- TO EV FOR ANAYLSIS
7.8621 GM- TO A.S.

A.S. PUT INTO NITRIC ACID PARTING SOLUTION, THEN FUSED TO NITRATE SALTS. (SHOULD LEAVE AU AND PTG AS RESIDUE) RESIDUE GIVEN TO EV FOR ANALYSIS.

TEST OVER

TEST: S-3
DATE: 4-2-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: #3 STUT CONS

WGTS:
ORE: 5 GM
Ag: 15 GM

RESULTS: SILVER BEAD 15.0620 GM (SPLIT)
8.5929 GM- TO EV FOR ANALYSIS
7.4691 GM- TO A.S.

A.S. PUT IN NITRIC ACID PARTING SOLUTION
SHOWS TR AU.

TEST OVER

T EST: S-3a
DATE: 4-3-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: TAILS- STUT (REGROUND AT OMEGA MINERALS)

WGTS:
ORE: 5GM
Ag: 15GM

RESULT: SILVER BEAD 15.3057 GM (SPLIT)
9.1390 GM- TO EV FOR ANALYSIS
6.1667 GM- TO A.S.

TEST:S-4
DATE: 4-3-86
BY: AS.

METHOD: SILVER INGUART FIRE ASSAY. STD FLUX

ORE: #1 STUT CONS

WGTS:
ORE: 5 GM
Ag: 15 GM

RESULTS: SILVER BEAD 15.4121 GM (SPLIT)
8.0456 GM- TO EV FOR FURTHER ANALYSIS
7.3665 GM- TO A.S.

A.S. PUT IN SULPHERIC ACID PARTING SOLUTION. SAME TEST AS LARGER SAMPLE IN TEST S-13. RESIDUE FROM THIS TEST COMBINED WITH RESIDUE FROM S-13. ALL GIVEN TO EV FOR ANALYSIS.

TEST OVER

TEST: S-5
DATE: 4-3-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: #1 STUT CONS

WGTS:
ORE: 5 GM
Ag: 30 gm

RESULTS: SILVER BEAD 29.8611 GM (SPLIT)
16.5069 GM- TO EV FOR FURTHER ANALYSIS
13.3542 GM- TO A.S.

A.S. PUT IN NITRIC ACID PARTING SOLUTION. BOIL DOWN. SHOWS TR AU.

TEST OVER

TEST: S-6
DATE: 4-3-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: HEAD ORE

WGTS:
ORE: 5 GM
Ag: 15 gm

RESULTS: SILVER BEAD: 14.9243 GM (SPLIT)
6.7567 GM- TO EV FOR FURTHER ANALYSIS
8.1676 GM- TO A.S.

TEST: S-7
DATE: 4-3-86
BY: A.S.

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX

ORE: #1 STUT CONS

WGHTS:
ORE 5 GM
Ag: 15 GM

RESULTS: SILVER BEAD 15.0227 GM (SPLIT)
7.8458 GM- TO EV FOR FURTHER ANALYSIS
7.1769 GM TO A.S.

TEST: S-8
DATE: 4-3-86
BY: A.S.- SILVER INQUART/ J.C. DCP ASSAY

METHOD: SILVER INQUART FIRE ASSAY. STD FLUX. SPLIT BEAD; PUT 1.040 IN ENGLEHART SOLUTION AND READ ON DCP. PUT OTHER PART IN NITRIC ACID PARTING SOLUTION, WEIGHED RESIDUE

ORE: BLEND 50/50 #1 STUT CONS AND #2 STUT CONS

WGTS:

ORE:	5GM-	#1
	5GM-	#2
Ag:	7GM	

RESULT: SILVER BEAD 6.9441 GM (SPLIT)
1.0410 GM - TO J.C. FOR DCP ANALYSIS
5.9031 GM - TO OMEGA MINERALS FOR SULPHERIC ACID PARTING

A. DCP ASSAY
WT. 1.0410
V= 500 ML

	OZ PER TON	PPM
Au	8.68	.62
Pt	7.00	.50
Pd	3.08	.22
Ru	11.90	.85
Rh	9.80	.70
Ir	33.11	2.40
Os	6.58	.47
Ag	nt	nt

reference JB LABS

B. SUPHERIC ACID PARTING

$$\frac{1.0410}{6.9441} = \%\ \text{OF BEAD USED IN DCP ASSAY}$$

WEIGHT OF PRECIP= 18.2 GM

WEIGHT OF PRECIP X % X3 (SAMPLE SIZE IS 1/3 ASSAY TON)
EQUALS 64.23 OZ AU & PTG PER TON

64.23 OZ PER TON
6.42 MINUS 10% SILVER NOT IN SOLUTION
57.81 Au and PTG per ton

TEST OVER

TESTS: S-9/ S-10/ S-11/ S-12 SEE BELOW
DATE 4-3-86
BY: J.C.

METHOD: ACID DIGESTION. DCP ASSAY

ORE: #1 STUT CON #2 STUT CON #3 STUT CON TAILS SEE BELOW

WGTS: 2.5 GM

RESULTS:

	TEST S-9 JB TST #2018 WT: 2.5 GM V= 250 ML ORE: #1 S CON		TEST S-10 JB TST #2019 WT: 2.5 GM V= 250 ML ORE: #2 S CON		TEST S-11 JB TST #2020 WT: 2.5 GM V= 90 ML ORE #3 S CON		TEST S-12 JB TST #2021 WT: 2.5 GM V= 75 ML ORE: TAILS	
	OZ/TN	PPM	OZ/TN	PPM	OZTN	PPM	OZ/TN	PPM
Au	1.14	.39	.5	.17	1.15	1.1	.70	.81
Ag	6.18	2.12	2.77	.95	3.78	3.6	2.79	3.20
Os	1.22	.42	1.10	.38	3.04	2.9	1.53	1.75
Pt	2.65	.91	2.50	.86	4.61	4.4	2.01	2.30
Pd	.99	.34	1.02	.35	1.40	1.34	.76	.87
Ir	6.99	2.4	6.59	2.26	16.06	15.30	8.22	9.40
Ru	3.26	1.12	3.06	1.05	6.40	6.1	3.15	3.6
Rh	2.80	.96	2.62	.90	5.45	5.2	1.05	1.2

NOTE: a. TESTS S-11 & S-12 RAN WITH "JIM SOLUTION"
b. TESTS S-9 & S-10 RAN WITH "ENGLEHART SOLUTION"

TEST: S-13
DATE:4-4-86
BY: J.C. & A.S.

METHOD: LARGE SILVER INQUART FIRE ASSAY. STD FLUX

ORE: BLEND OF STUT CONS AND TAILS TO EQUAL HEAD ORE

WGHTS:

#1 CONS	2.1GM
#2 CONS	61.4GM
#3 CONS	100.0GM
TAILS	292.0GM
TOTAL	455.0GM
Ag	220.0gm

TOTAL FIRING 677.0GM

RESULTS: SILVER BAR: 117.2 GM- 1ST POUR
98.5 GM- 2ND POUR
215.7 GM- TOTAL

BARS ROLED AND PUT INTO SULPHERIC ACID PARTING SOLUTION.
ON 4-5-86 DIGESTION OF BARS NOT COMPLETE. AVAILABLE RESIDUE GIVEN TO EV FOR ANALYSIS; SOME KEPT BY A.S. FOR ANALYSIS ON DCP AT JB LABS. A.S. TO COMPLETE BAR DIGESTION AND SEND RESIDUE TO EV FOR ANALYSIS.

TEST: S-14
DATE : 4-4-86
BY: J.C.

METHOD: DIRECT FIRE ASSAY. STD FLUX; LEAD COLECTOR

ORE: #1 STUT CON

WGTS:
ORE: 30 GM

RESULTS: CUPELED.
3.3 MG BEAD. APPEARS TO BE MOSTLY SILVER.
BEAD GIVEN TO EV FOR ANALYSIS

TEST OVER

E-36

TEST: S-15
DATE: 4-4-86
BY: J.C. & A.S.

METHOD: LARGE SAMPLE, STRAIGHT FIRE ASSAY. STD FLUX. LEAD COLLECTOR.

ORE: #1 STUT CONS

WGT: 500 GM

RESULTS: SILVER BAR 80.4 GR (SPLIT AS FOLOWS:)

10.38 GM TO EV FOR DCP ANALYSIS
18.5 GM TO EV FOR OTHER ANALYSIS
10.5 GM PARTED IN DILUTE NITRATE. RESIDUE WEIGHS 9 MG.
42.1 GR CUPELED. BEAD WEIGHS 10.9 MG. GIVEN TO EV FOR ANALYSIS.

TEST OVER

KIMBALL LABORATORIES
AND CONSULTING
600 EAST 11800 SOUTH
DRAPER, UTAH 84020
Telephone 571-3695

Certificate of Analysis

Date: April 29, 1986

Client: Harness-Mettling
423 Avenida Granada
San Clemente, California 92672

Sample Number: 22091 - 22095 (#1 Cons, #2 Cons, Tails)

Date received April 28, 1986

Submitted by: Harness-Mettling

Samples analyzed for: Gold, Silver, Platinum, Palladium (by several methods)

Results:

Sample	Method Used	Gold (oz/t)	Silver (oz/t)	Platinum (oz/t)	Palladium (oz/t)
#1 Cons	Fire Assay (followed by dissolution of residue by aqua regia and atomic absorption analysis)	0.309	1.765	0.016	0.014
	Special Fire Assay	0.405	(Less than added)	0.018	0.012
	Atomic Absorption Analysis	0.321	1.721	0.022	0.014
	Hydrogen Peroxide-hypochlorite; Hydrochloric Acid				
	Atomic Absorption	0.389	1.775	0.035	0.020
	DCP	3.646		13.987	3.15
	(fire assay of solution)	(0.467)			
#2 Cons	Fire Assay (same as above)	0.053	0.885	0.010	0.005
	Atomic Absorption Analysis	0.058	0.797	0.011	0.009
Tails	Fire Assay (same as above)	0.054	0.277	None Detected	None Detected
	Atomic Absorption Analysis	0.049	0.233	Less than 0.005	Less than 0.005

Remarks: Analysis of DCP solution for the following metals was also done with the indicated results: (#1 Cons)

Rhodium: 100.52 oz/t
Osmium: 4.45 oz/t

152.525 grams of #1 Cons (78.15 gms) and #2 Cons (74.375 gms) were fired in a gas furnace following exactly instructions given by Jim Cousino with the following results:

Gold: 0.193 oz/t Platinum: 0.017 oz/t
Rhodium: less than 0.001 oz/t
Palladium: 0.011 oz/t

By _____
G. Lyn Kimball, Manager

ALL VALUES REPORTED AS INDICATED

KIMBALL LABORATORIES
AND CONSULTING

600 EAST 11800 SOUTH
DRAPER, UTAH 84020
Telephone 571-3695

Certificate of Analysis

Date: April 30, 1986

Client: Harness-Mettling
423 Avenida Granada
San Clemente, California 92672

Sample Number: 22091 - 22095 (#1 Cons, #2 Cons, Tails)

Date received: April 28, 1986

Submitted by: Harness-Mettling

Samples analyzed for: As below indicated

Results: Page 2

Portions of a silver button furnished by Mr. Harness and Mr. Mettling were parted, one piece in nitric acid and another in sulfuric acid. The following results were obtained:

Nitric acid parting	Sulfuric acid parting
11.62 % Gold	11.60 % Gold

All methods of analyzing the materials, with the exception of the DCP method, are in general agreement.

Remarks:

By G. Lyn Kimball
G. Lyn Kimball, Manager

ALL VALUES REPORTED AS INDICATED

MEMO

report of assay results from Beckman Industries, Houston, Texas.

(Note: Beckman Industries is the manufacturer of the Direct Coupleing Plasma -DCP- analytical machine which has been used to read and identify the PTG metals throughout the recent analysis)

The written report has not been recieved by UFO Mining Limited Partnership.

Test conducted by: Paul Watson
Beckman Industries
Houston, Texas

Ore: Stut #1 Cons; Stut #2 cons; Stut Tails; Head Ore. (Lone Star Ore

	#1 Con	#2 Con	Tails	Head Ore
Ag	2.2	2.32	2.27	4.68
Au	nil	nil	nil	nil
Ir	2.7	5.3	3.9	5.1
Pd	2.5	4.0	2.8	3.0
Pt	.9	1.0	1.1	1.0
Rh	.5	.6	.5	.5

Unable to test for Os and Ru.
All values above are Oz per ton.

Solution: Jim Method (see ore test report)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine LONE STAR Date October 30, 1942

District Castle Creek, Yavapai County Engineer A. C. Nebeker

Subject:

Owner: G. A. Westerdahl, Castle Creek, Arizona.

Operator: A. W. Nickle (lessee), Castle Creek, via Morristown, Arizona.

Principal Metals: Gold-copper-lead

Production Rate: 9 tons per week of high grade - low grade left on dump.

Power - Amt. & Type: Portable compressor.

Operations - Present: Consists of some prospecting and drifting along the vein and saving what ore will stand for the high trucking charges.

Operations - Planned: If access road is constructed into the district it is proposed to develop both the lead vein and copper vein and move ore to the market as fast as possible.

Number Claims, Title, etc.: Three - title held by doing work and recording same.

Description - Topog. & Geog.: The property is located in the upper reaches of the Castle Creek wash, the hills being dissected by smaller ravines. The property is about 36 miles out from Morristown and by proposed road about 18 miles from Wickenburg.

Mine Workings - Amt. & Condition: The mine is opened by tunnel on the copper vein, and also a winze from tunnel level following the ore. Down the hill from the tunnel a shaft is being made on the lead vein.

Geology & Mineralization: The geology consists of the Yavapai schist and Bradshaw granite intruded by porphyry dikes. The vein which cuts the formation has a strike of N 30 W and a dip of 35 degrees S.W. The thickness of vein from 1 ft. to 5 feet. Mineralization is gold, copper, lead and iron ores with values in copper from 3% to 20%; leads running from 5 to 50% lead. The iron is well oxidized.

Ore - Positive & Probable, Ore Dumps, Tailings: There is not any positive ore worth mentioning as the ore has been sorted and shipped when opened up. There is a small dump of several hundred tons of ore which could not stand the trucking charges. It looks as if there could be developed a sizable tonnage of ore in this property.

Road Conditions, Route: The present route from Morristown is very poor, but with but a small amount of work this property can be connected with the new proposed road out from Wickenburg and the trucking distance will be cut by 50%.

Water Supply: It will be necessary to develop water in the creek bottom, which can be done easily.

Brief History: This property is like others in this Castle Creek district. It has been worked mostly for gold, but when copper ore assayed high enough to ship out it has been sent to market.

Special Problems: Roads

Remarks: Worth developing.

(Signed) A. C. Nebeker

Rams
97

HISTORY AND MINERALOGY

The Lone Star mine was relocated in 1973 and again in 1977 by Mr. Larry Raddon et.al., and has been periodically worked since then to recover materials applicable to the Lapidary industry. The mine is situated on the southern flank of the Bradshaw range of central Arizona, approximately 40 miles northeast of Wickenburg, Arizona. Access to the mine is provided by taking the Castle Hot Springs road northeast from Morristown to the Yavapai County maintenance camp then travelling 12 miles up the Castle Creek creek bed to a narrowing called "the box", then ½ mile northeast to the mine camp.

The mine area is semi-arid in nature with a mean elevation of 3200 ft. Rainfall is sporadic and received mostly between December and February. Practically all of the streams in the area are intermittent. Castle Creek was flooded for the first time in recent history during the spring of 1979 providing difficult access to the mine site for over a month. In general, the open season extends from September through May. Summer months are prone to very high temperatures which may affect working conditions.

Literature references on the Lone Star mine are scant, miscellaneous assay reports and mine production records are in the possession of Mr. Larry Raddon the mine operator.

A large tonnage of ore has been removed from the second and third levels of the Lone Star within the last fifty years.

Methods used included drifting, crosscutting, and stopeing of the high-grade vein. I estimate that approximately 4000 tons of high-grade ore has been removed from the second and third levels of the mine. The majority of ore left on these levels exists as debris on stope floor cribbings and as pillars up and down dip from the second level drift.

There is little doubt that this area, particularly the Lone Star and Copperopolis mines were worked by very early prospectors. The existance of an ore milling site and stone foundation outlines suggest that a mine camp was established to mill the gold bearing quartz facies outcropping southeast of the Lone Star. The presence of placer gold nuggets in this immediate area also suggests that these early camps were not large scale operations and did not recover all of the native metals present in the placer deposits.

The area containing the Lone Star mine is comprised of pre-cambrian granitic gneisses and schists with foliation strikes from N45°W to N75°W and dips from 45° to 75° southwest. Several facies can be recognized within this sequence, large 5 to 30mm black tourmaline crystals exist within the pegmatite facies, biotite-magnetite schists are present in units ranging to 5 meters in thickness, and granitic facies exist in thicknesses to 45 meters. The Lone Star vein is concordant to and emplaced in these granitic gneisses.

The immediately surrounding areas of pre-cambrian rocks are unconformably overlain by Tertiary volcanics (flows) and volcaniclastic sediments. The upward extent of the vein does not intersect overlying volcanics which suggests that the vulcaniism was a post-emplacement event. The lateral extent of the Lone Star vein is marked by two prominent granitic gneiss outcroppings. These outcroppings are light brownish red weathering and are not heavily mineralized.

The Lone Star vein is typically rust colored due to iron oxide weathering products, and areas in the high-grade zone (the center of the vein) show large quantities of colorful copper minerals including malachite, azurite, and chrysocolla. These minerals are contained in a matrix of nearly decomposed copper, iron, and lead sulphides with blotchy zones of magnetite, hematite, and limonite. Identifiable minerals in hand specimens include: azurite, malachite, chrysocolla, turquoise, limonite pseudomorphs after chalcopyrite and pyrite, hematite, magnetite, sphalerite, galena, cerussite, pyromorphite, and red to yellow haloes on galena nodules which are suspected to be litharge and/or minium. Polished ore sections show native silver ribbons as part of this assemblage.

Vein emplacement is of the Cordilleran type and is structurally controlled by the enclosing granitic gneisses. Minor variations in foliation dip and strike of these gneisses indicate a gentle fold and an enlargement of the ore body

along the axial plane of the fold (see figure 2). Epigenetic mineralization was influenced not only by structure but also by the permiability of the original biotite and orthoclase rich facies within the gneisses.

Hydrothermal solutions rising from depth provided the initial mineralization in the vein. The primary ore was most likely a chalcopyrite ore. Subsequent downward percolation of ground water altered the original sulphides to provide a suite of sulphosalts, carbonates, and oxides, as well as releasing native gold and silver. Gold contained in the vein exists as very small nuggets in quartz rich facies and nearly colloidal types in limonite rich facies. Most of the gold appears to have been a colloidal impurity in the original sulphide structures. The silver occurred as the impurity Acanthite associated with galena in the vein, and as native wire in quartz rich facies. Ground water alteration levels in the vein will decrease with depth. The enclosing gneissic rocks show a gradational level of mineralization outward from the central high-grade zone. This gradational alteration was drilled in level 4 (see figure 5) and its components were assayed to determine levels of metal content.

A vertical shaft was driven southwest of the level 2 drift area in an attempt to intersect the vein down dip. There is no evidence that the vein was intersected, questions on the nature of the vein at depth could be answered by an exploratory core drilling program.

RESERVES

Lone Star mine reserves are separated into the following categories:

1) MEASURED RESERVES are physically measurable high-grade ores exposed surficially and subsurface in levels 2-3.
2) INDICATED RESERVES are up-dip, and down-dip, and along strike indications of high-grade ore continuity bordering on measured reserve areas .
3) INFERRED RESERVES are calculated from a thinning but continuous high-grade vein to level 4 depth and bordering on indicated reserve areas.
4) DUMP RESERVES are physically measured mine dump materials in level 2, 3, and 4.

Type of Reserve	Level 1	Level 2	Level 3	Level 4	Totals
Measured	-	3704 ton	-	-	3704 ton
Indicated	450 ton	409 ton	851 ton	-	1710 ton
Inferred	225 ton	289 ton	1560 ton	-	2074 ton
Dump	-	1294 ton	963 ton	56 ton	2313 ton

Refer to figures 3 and 4

Level 4 reserves will be determined from assays of samples illustrated in figure 5. Confirmation of value in the level 4 ore zone will add significantly to reserve measurements.

NEW CLAIM AREAS

The Lone Star mine is located on an ore zone which is continuous and mappable with a general strike of N45°W and dip of 50° southwest. The vein has been prospected by crosscuts immediately northwest and southeast of the Lone Star.

The Copperopolis vein is located directly north of the Lone Star vein and has been extensively worked by declined shafts and crosscuts. The vein has a general attitude striking N75°W and dipping 65° to 70° southwest.

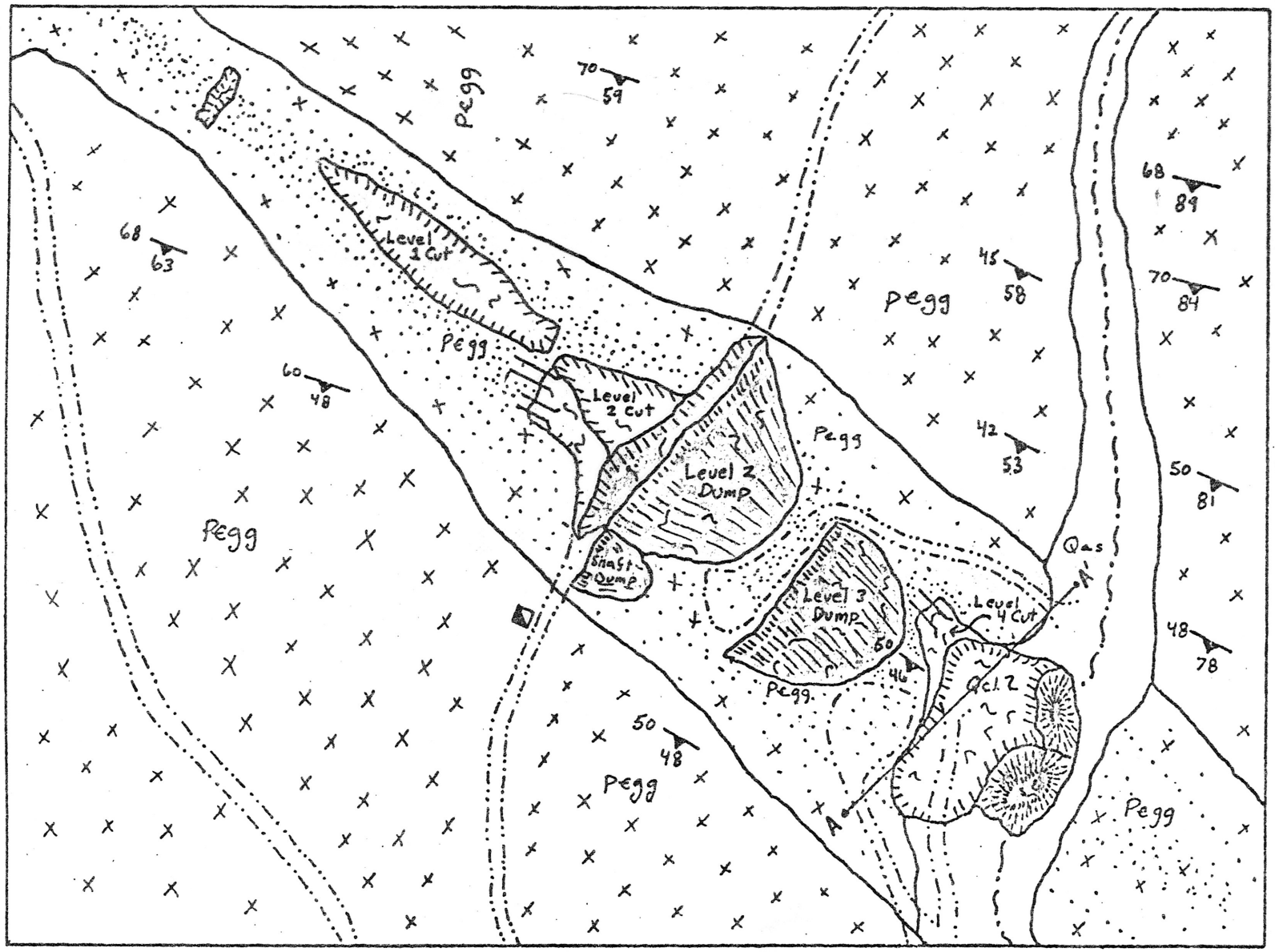
Strike projection of the Lone Star vein and the Copperopolis vein shows a probable intersection indicated by a nearly bald red knob outcropping one mile northwest of the Lone Star. There are no apparent workings on the knob and the area should be considered for future prospect work.

UFO #1 through #10 claims were located as a protective cover on the Lone Star lode claim area (see figure 6). The centerline of the new group approximates the strike of the Lone Star vein as it extends under Tertiary volcanic formations to the southeast. A significant deposit of lode, and in particular, placer gold may exist downstream from the Lone Star through UFO #5, UFO #6, and UFO #4. Prospect panning in UFO #4 produced small native gold nuggets of approximately $\frac{1}{4}$mm to $\frac{1}{2}$mm diameters.

These nuggets were sub-rounded to sub-angular and free of matrix or limonite staining. No estimates of the content of the placer areas are given here. Of primary concern to placering, the irregularity of water supply will dictate the type of processing necessary to recover free gold in this area. An accurate estimate of gold content can be arrived at by removal of 5 to 10 tons of colluvium and alluvium from the creek bed and mechanically concentrating it. The heavy metal concentrate could then be processed on site or shipped to a final recovery site. This area should definately be of interest to the company for further exploration and assesment. Additional claims may be necessary to adequately protect these adjoining lode and placer areas.

FIGURE 1

GEOLOGIC MAP
LONE STAR MINE, CASTLE CREEK MINING DISTRICT,
NE¼, SW¼, SECTION 33, T. 9 N., R. 2 W.,
YAVAPAI COUNTY, ARIZONA



LEGEND

- Pegg — Pre Cambrian Granitic Gneiss And Schists
- Gradational ore zone
- Hi-Grade Ore Zone
- Qas — Quaternary Alluvium - Stream
- Qcl — Quaternary Colluvium Ore Bearing
- Definate Contact
- 90 / 45 — Strike And Dip Of Foliation
- Intermittant Stream
- Jeep Trail, or Mine Access Road
- Mine Portal
- Vertical Shaft
- Mine Pit or Open Cut
- Ore Dump
- Waste Rock Dump
- A-A' — Cross Section Line

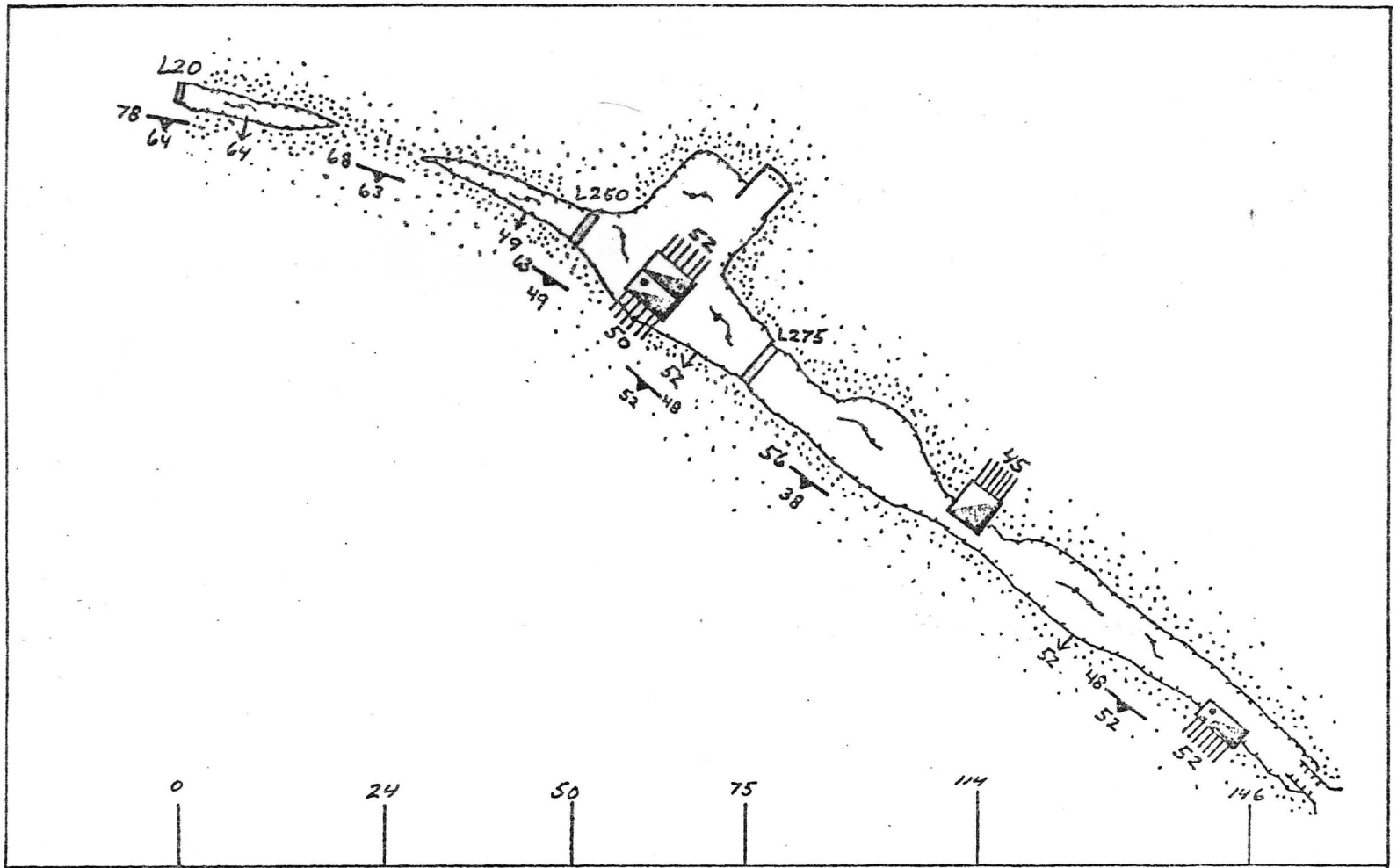
SCALE: 1 INCH = 75 FEET

75 50 25 0 25 50 75

FIGURE 2

LONE STAR MINE, CASTLE CREEK MINING DISTRICT,
NE 1/4, SW 1/4, SECTION 33, T. 9N., R. 2W.,
YAVAPAI COUNTY, ARIZONA

PLAT OF SECOND LEVEL DRIFT



STATION No.	0	10	16	24	34	40	50	56½	63½	75	83	100	103	114	122	130	140	146	154
VEIN WIDTH	28"	28"	15"	0"	4"	19"	44"	19'	9'6"	5'8"	3'2"	9'	3'2"	30"	6'1"	5'	3'6"	3'6"	3'6"
SAMPLE No.	L20	-	-	-	-	-	L250	-	-	L275	-	-	-	-	-	-	-	-	-

N

14°

LEGEND

- Hi Grade Vein Showing Dip (20)
- Gradational Ore Zone
- 72 / 12 Strike And Dip of Foliation (Hanging Wall)
- L20 Sample Number And Location
- 20 Inclined Manway Showing Inclination
- 10 Inclined Ore Raise Showing Inclination
- Declined Ore Raise Showing Declination (20)
- Crosscut
- Portal

SCALE:
1 INCH = 20 FEET

10 0 10 ft

LONE STAR MINE, CASTLE CREEK MINING DISTRICT.
NE¼, SW¼, SECTION 33, T. 9N., R. 2W.,
YAVAPAI COUNTY, ARIZONA

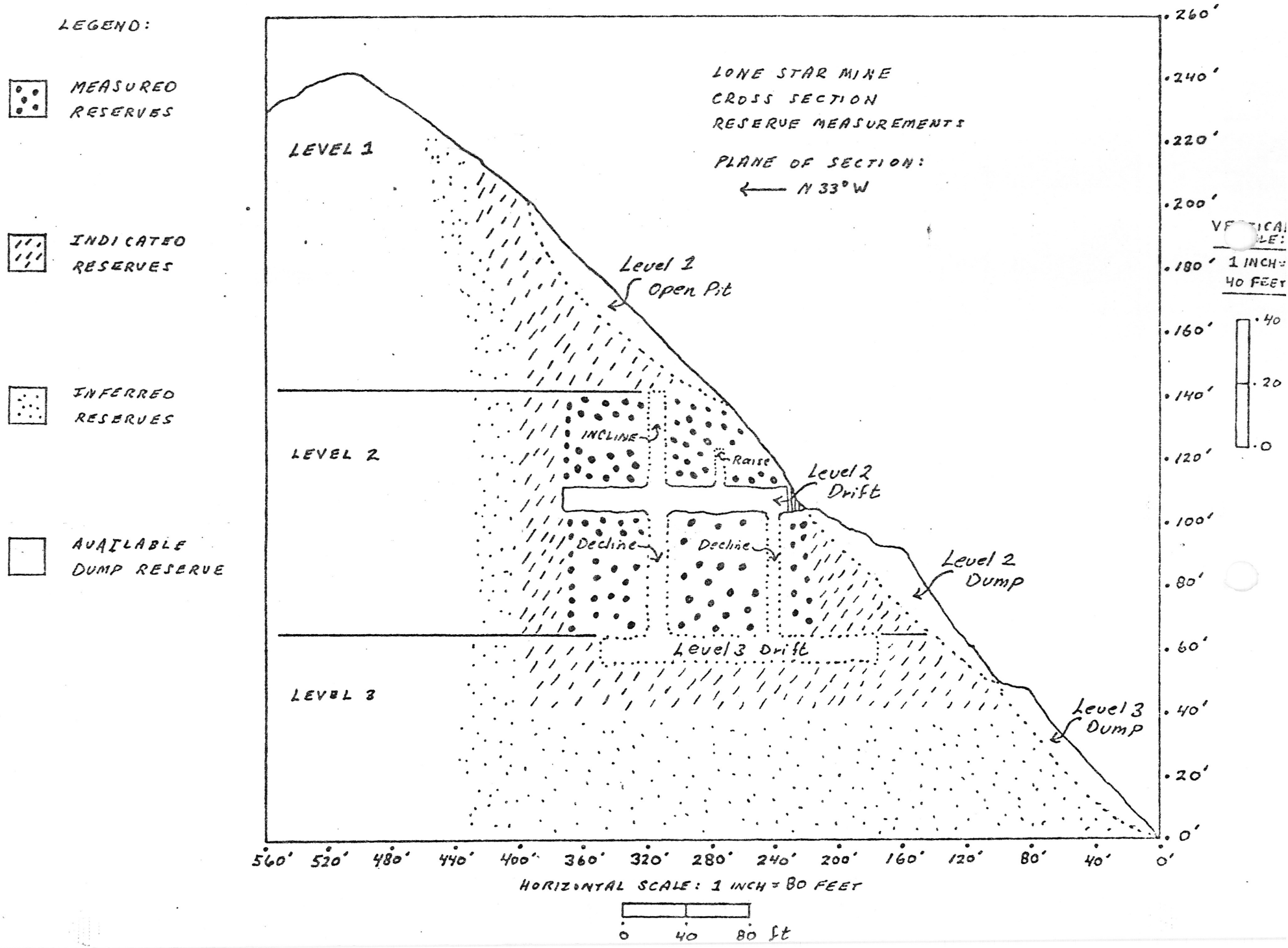
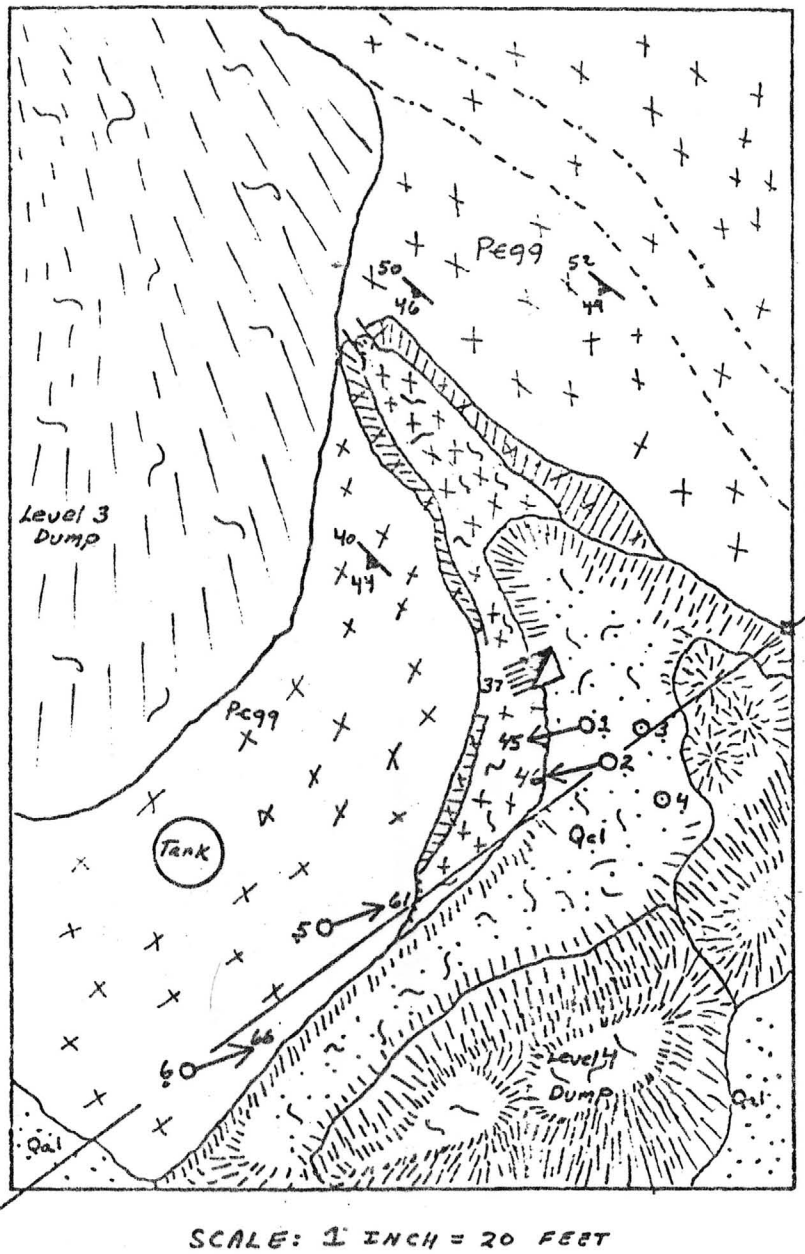


FIGURE 4

LONE STAR MINE, CATTLE CREEK MINING DISTRICT,
NE¼, SW¼, SECTION 33, T. 9N., R. 2 W.,
YAVAPAI COUNTY, ARIZONA



GEOLOGIC MAP
LONE STAR MINE
DEVELOPMENT LEVEL (LEVEL 4)

LEGEND

- Qal — Quaternary Alluvium
- Qcl — Quaternary Colluvium Ore Bearing
- Ore Bearing Dump
- Pegg: Pre-Cambrian Granitic Gneiss.
- Pegg: Pre-Cambrian Granitic Gneiss Ore Bearing
- 45 / 20 — Strike And Dip of Foliation
- 07 — Vertical Drill Hole and Hole Number
- 17 / 12 — Drill Hole Showing Bearing And Inclination. Adjacent Hole Number
- 20 — Declined Shaft Showing Bearing And Inclination
- Portal And Open Cut
- CLIFF FACE
- Development Pit or Open Cut
- Definate Contact
- Access Road or Trail
- Waste Rock Dump
- B-B' Cross Section Line

SCALE: 1 INCH = 20 FEET

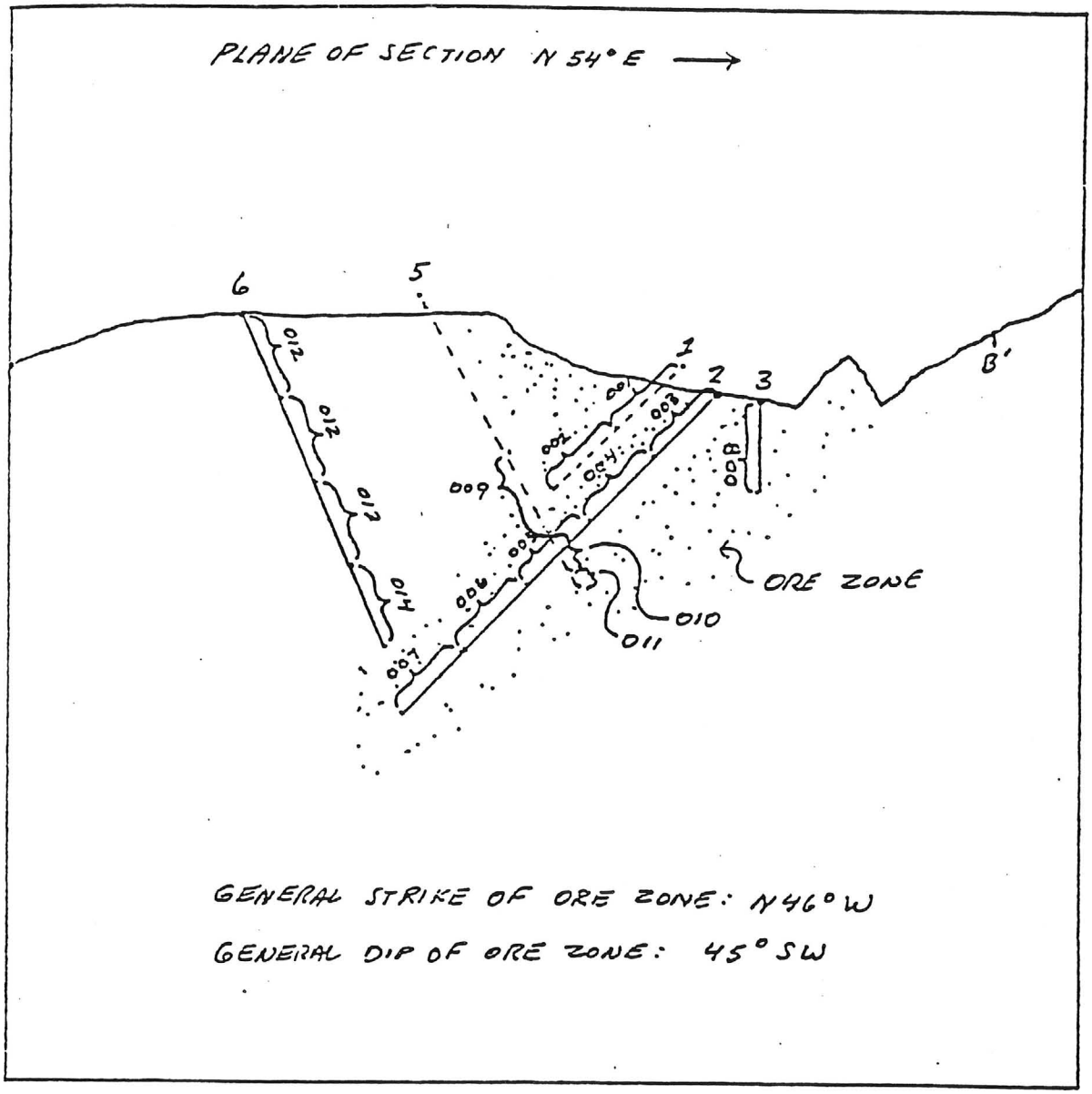
20 10 0 10 20
FEET

LEVEL 4 DUMP:

VOLUME (APPROXIMATE): 225 Cubic yards
DENSITY: 2.5 TONS / CUBIC YARD
TONNAGE: 563 TONS ORE BEARING

LONE STAR MINE, CASTLE CREEK MINING DISTRICT
NE¼, [illegible] ¼, SECTION 23, T. 9 N., R. 2 [illegible],
YAVAPAI COUNTY, ARIZONA

E-20



B-B' DRILL HOLE LOCATIONS

SCALE: 1 INCH = 20 FEET

Hole #	Bearing	Inclination	Assay Sample Numbers
1	S 80° W	45° SW	001, 002
2	S 82° W	46° SW	003, 004, 005, 006, 007
3	—	Vertical	008
4	—	Vertical	Abandoned
5	N 70° E	61° NE	009, 010, 011
6	N 70° E	66° NE	012, 013, 014

All Drill Holes Projected Onto Plane of Section B-B'

LONE-STAR

Measured Reserves
Level II--3,704 Ton

Indicated	Level	I	450 Ton
		II	409 Ton
		III	851 Ton
Inferred Reserves		I	225 Ton
		II	289 Ton
		III	1,560 Ton
		IV	11,252 Ton
Dump		II	1,294 Ton
		III	963 Ton
		IV	56 Ton
	Total		21,053 Ton

VALUE / $

	Assay		
.85	Copper	347.8 Ton	$ 591,235
8.50	Oz. Silver	18,231.0 oz	154,965
280.0	Oz. Gold	265.3	74,292

Prices as of June 17, 1979

Geologist: Mike Madsen

MR-36

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 31, 1941

Mine Rhoades - Iola

Location - Rhoades 1¼ miles north of Briggs. Iola 2½ miles north of G. A. Westerdahl's residence.

Mining District & County - Castle Creek Dist. Yavapai County

Former Name

Owner - A. H. Beam

Address - 228 S. McCormick Prescott, Arizona

Operator

Address

President, Owning Co.

President, Operating Co.

Gen. Mgr.

Principal Minerals - Copper and manganese. 10% molybdenum. pyrolusite 6 in. on foot wall.

Mine Supt.

Mill Supt.

Production Rate

Men Employed

Mill: Type & Cap.

Operations: Present

Power: Amt. & Type

Beam, A. H.
228 S. McCormick Box 54
Prescott, Arizona

7-31-41

Jun '53

Operations: Planned

See MR-36 - Re Mine Owners Report

RHOADES - IOLA , Yavapai Co.

Number Claims, Title, etc. - 2 unpatented claims.

Description: Topography & Geography - Surrounding country steep.

Mine Workings: Amt. & Condition - Location work, small amount of opencut on Rhoades claims. Location work on Iola, half mile from road.

Geology & Mineralization - Fissure veins on both claims. Igneous formation.
Malachite and Pyrolusite.

Ore: Positive & Probable, Ore Dumps, Tailings -

Dimensions and Value of Ore body - Rhoades claim 5 ft. thick, 300 ft. exposed.
Iola 4 ft. thick, 150 ft. vein exposed.
Pyrolusite has not been assayed.

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route - Roads fair.

Water Supply - Good water supply from Castle Creek.

Prief History - Rhoades claim joins Lone Star owned by G. A. Westerdahl which is for sale. 800 ft. tunnels. Assays of copper run 8 to 10 per cent.

Special Problems, Reports Filed - Recorded November 18, 1940
Book of Mines 149 - pages 180, 181

Remarks - G. A. Westerdahl has analysis of copper, chromium and molybdenum.
Lives 26 miles from Morristown on Castle Creek. He will show property.

If property for sale: Price, terms and address to negotiate - Rhoades $5,000;
$1,000 cash, balance one and two years.
Iola $1,000 cash.

SIGNED - A. H. Beam

228 S. McCormick
Prescott, Arizona

MR-36

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 31, 1941

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President, Operating Co.

Gen. Mgr.

Principal Minerals - Copper and manganese. 10% molybdenum. pyrolusite 6 in. on foot wall.

Mine Supt.

Production Rate

Mill Supt.

Mill: Type & Cap.

Men Employed

Power: Amt. & Type

Operations: Present

Operations: Planned

Number Claims, Title, etc. - 2 unpatented claims.

Description: Topography & Geography - Surrounding country steep.

Mine Workings: Amt. & Condition - Location work, small amount of opencut on Rhoades claims. Location work on Iola, half mile from road.

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Malachite and Pyrolusite.

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Iola $1,000 cash.

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228 S. McCormick
Prescott, Arizona

MR-36

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 31, 1941

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Former Name

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Gen. Mgr.

Principal Minerals - Copper and manganese. 10% molybdenum. pyrolusite 6 in. on foot wall.

Mine Supt.

Mill Supt.

Production Rate

Men Employed

Mill: Type & Cap.

Operations: Present

Power: Amt. & Type

Operations: Planned

Number Claims, Title, etc. - 2 unpatented claims.

Description: Topography & Geography - Surrounding country steep.

Mine Workings: Amt. & Condition - Location work, small amount of opencut on Rhoades claims. Location work on Iola, half mile from road.

Geology & Mineralization - Fissure veins on both claims. Igneous formation. Malachite and Pyrolusite.

Ore: Positive & Probable, Ore Dumps, Tailings -

Dimensions and Value of Ore body - Rhoades claim 5 ft. thick, 300 ft. exposed.
Iola 4 ft. thick, 150 ft. vein exposed.
Pyrolusite has not been assayed.

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route - Roads fair.

Water Supply - Good water supply from Castle Creek.

Brief History - Rhoades claim joins Lone Star owned by G. A. Westerdahl which is for sale. 800 ft. tunnels. Assays of copper run 8 to 10 per cent.

Special Problems, Reports Filed - Recorded November 18, 1940
Book of Mines 149 - pages 180, 181

Remarks - G. A. Westerdahl has analysis of copper, chromium and molybdenum. Lives 26 miles from Morristown on Castle Creek. He will show property.

If property for sale: Price, terms and address to negotiate - Rhoades $5,000;
$1,000 cash, balance one and two years.
Iola $1,000 cash.

SIGNED - A. H. Beam

228 S. McCormick
Prescott, Arizona

MR-36

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNERS REPORT

Date July 31, 1941

Mine Rhoades - Iola

Location - Rhoades 1¼ miles north of Briggs. Iola 2½ miles north of G. A. Westerdahl's residence.

Mining District & County - Castle Creek Dist. Yavapai County

Former Name

Owner - A. H. Beam

Address - 228 S. McCormick Prescott, Arizona

Operator

Address

President, Owning Co.

President, Operating Co.

Gen. Mgr.

Principal Minerals - Copper and manganese. 10% molybdenum. pyrolusite 6 in. on foot wall.

Mine Supt.

Mill Supt.

Production Rate

Men Employed

Mill: Type & Cap.

Operations: Present

Power: Amt. & Type

Operations: Planned

Number Claims, Title, etc. - 2 unpatented claims.

Description: Topography & Geography - Surrounding country steep.

Mine Workings: Amt. & Condition - Location work, small amount of opencut on Rhoades claims. Location work on Iola, half mile from road.

Geology & Mineralization - Fissure veins on both claims. Igneous formation.
Malachite and Pyrolusite.

Ore: Positive & Probable, Ore Dumps, Tailings -

Dimensions and Value of Ore body - Rhoades claim 5 ft. thick, 300 ft. exposed.
Iola 4 ft. thick, 150 ft. vein exposed.
Pyrolusite has not been assayed.

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route - Roads fair.

Water Supply - Good water supply from Castle Creek.

Prief History - Rhoades claim joins Lone Star owned by G. A. Westerdahl which is for sale. 800 ft. tunnels. Assays of copper run 8 to 10 per cent.

Special Problems, Reports Filed - Recorded November 18, 1940
Book of Mines 149 - pages 180, 181

Remarks - G. A. Westerdahl has analysis of copper, chromium and molybdenum.
Lives 26 miles from Morristown on Castle Creek. He will show property.

If property for sale: Price, terms and address to negotiate - Rhoades $5,000;
$1,000 cash, balance one and two years.
Iola $1,000 cash.

SIGNED - A. H. Beam

228 S. McCormick
Prescott, Arizona

MR-26

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

DEPT. MINERAL RESOURCES
JUL 31 1941
PHOENIX, ARIZONA

Date Recorded Nov 18 - 1940 Book of mines 149 page 180-181

1. Mine Rhoader - Iola

2. Location Rhoader 1½ miles north of Bagg; Iola 2½ mile north of ...

3. Mining District & County Yavapai County Castle Creek mining district

4. Former name

5. Owner A H Beam

6. Address (Owner) 228 McCormick Prescott Arizona

7. Operator

8. Address (Operator)

9. President, Owning Co.

9A. President, Operating Co.

10. Gen. Mgr.

14. Principal Minerals copper & manganese, Pyrolusite; ... on footwall

11. Mine Supt.

15. Production Rate

12. Mill Supt.

16. Mill: Type & Cap.

13. Men Employed

17. Power: Amt. & Type

18. Operations: Present

19. Operations: Planned

20. Number Claims, Title, etc. 2 unpatented

21. Description: Topography & Geography ~~copper malachite~~ (steep) ~~Pyrolusite~~ steep

22. Mine Workings: Amt. & Condition Location work small amount of open cut on Rhoader claim Location work on Iola half mile from road

(over)

23. **Geology & Mineralization** Fissure veins both claims
Igneous formation
Malachite + pyrolusite

24. **Ore: Positive & Probable, Ore Dumps, Tailings**

24A. **Dimensions and Value of Ore body** Rhodes 5 ft thick 300 ft exposed
Iola 4 ft thick 150 ft vein exposed
pyrolusite has not been assayed

25. **Mine, Mill Equipment & Flow-Sheet**

26. **Road Conditions, Route** fair

27. **Water Supply** Castle creek good supply

28. **Brief History** Rhodes claim joins Lone Star owned by G A Westerdahl which is for sale 800 ft [illegible]. assays of copper run 8 to 10 per cent

29. **Special Problems, Reports Filed**

30. **Remarks** G. A. Westerdahl has anylisis of copper chromium molybdenum lives 2½ miles from Morristown on Castle creek He will show up property

31. **If property for sale: Price, terms and address to negotiate.** Rhodes $5,000 $1,000 cash bal 1 and two years Iola $1,000 cash

32. **Signature** A H Bean 228 So Mc[illegible] Prescott Arizona

33. **Use additional sheets if necessary.**