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PRINTED: 04-27-2012

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SILVER HILL MINE GROUP

ALTERNATE NAMES:  
INDIANA-ARIZONA MINE GROUP

PIMA COUNTY MILS NUMBER: 278

LOCATION: TOWNSHIP 12 S RANGE 9 E SECTION 31 QUARTER NW  
LATITUDE: N 32DEG 20MIN 53SEC LONGITUDE: W 111DEG 28MIN 17SEC  
TOPO MAP NAME: SILVER BELL PEAK - 15 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:  
COPPER OXIDE  
LEAD OXIDE  
SILVER  
GOLD LODE

BIBLIOGRAPHY:  
ADMMR SILVER HILL MINE GROUP FILE  
ADMMR "U" FILE CU 64

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

PIMA COUNTY

SILVER HILL MINE

*MILS #276*

*6-ARR-2*

*Ind. L. Arizona file*

*Silver Hill mine (file)*

MM 1174	Rosasite
1405	Rosasite
1597	Calcite, Aragonite Incl. Manganese
MM-6534	Azurite, Malachite, Rosasite, Tenorite, Calcite
MM M 521	Alunite
MM M896	Rosasite, Aurichalcite, Conichalcite
MM M897	Aurichalcite, Conichalcite, on Hematite
MM M898	Rosasite, Aurichalcite, and Conichalcite
MM M899	Conichalcite, Aurichalcite, on Limonite
M 763	Malachite & Azurite

SILVER HILL MINE

PIMA COUNTY

T125R8E, sec 25

Western Minerals are on last hole of project at Indiana Arizona and will move over to Silver Hill area and complete project with help from office of Minerals Exploration.  
GWI

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The Indiana-Arizona finished the first phase of their OME exploration - that is drilling at the Indiana Arizona and Silver Hill mines. GWI QR 4-1968

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See: Arizona-Indiana (file)

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MG WR 2/27/81: Mr. Dennis Elzinga (phone Marana AZ) 682-4491, was in to give me the following information: Mr. Harlow Jones, 1707 Home Federal Tower, Tucson AZ 85701, phone (Marana AZ) 682-5224, is owner of a new company incorporated this year called Minex. This company plans to begin open-pit operations at the Indiana-Arizona and Silver Hill Pb-Zn-Ag mines in Pima County.

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NJN WR 11/14/86: Graham Sutton (c) reported that he recently mined the Blue Lemming pocket of the Silver Hill Mine (file) Pima County for aurichalcite, rosasite, and smithsonite. Donations of the material made to the Mineral Museum include specimens MM-M896 - MM-M899.

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MG WR 2/20/87: Mrs. Carolyn Zakis of Benson and her parents, Mr. & Mrs. Dawn of Chicago, report they own the Silver Hill mine, (file, Pima Co).

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# Silver Hill(f) Pima

No. 21  
by  
Raymond Grant



Some of you may have seen Dave Shannon's ad in the Mineralogical Record for ozarizawaite from the Silver Hill Mine west of Tucson. This is really interesting Arizona material because it is not like any other reported ozarizawaite. This mineral has been reported as yellow to yellow-green crusts. The specimens that I have seen are very unimpressive. There are two previous Arizona localities. It has been found at a few places in the Bisbee area, especially at the Shattuck Mine where it was massive pistachio green material. The other locality is the Omega Mine in Pima County. The Silver Hill specimens are glassy botryoidal to

crystalline masses. There were even some microscopic single crystals. Only a little of the material was collected because underground the specimens are not impressive. Dave Riley found the material and said that it looked interesting, but Dave Shannon wasn't convinced, but under the microscope Dave Shannon recognized that it was interesting material and I ran an x-ray pattern and found it to be ozarizawaite, which was hard to believe, because it didn't fit the description at all. So Dave ran a spectrograph on it and determined the specific gravity, while I ran another x-ray pattern. Every thing showed it to be ozarizawaite.

Silver Hill has been producing some other interesting minerals the past few months. These include malachite, azurite, smithsonite, plumbojarosite (found by Dave Shannon), aurichalcite and rosasite. Some of the smithsonite was a nice deep blue color like the New Mexico material. I was told that Les Presmyk has a one inch azurite crystal from Silver Hill and other people have told me of one inch malachite pseudo after azurite from there. Very recently Dan Helm found a great piece of fibrous malachite as large as a beer flat!

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**HINT:** How often have you bought a bottle of cologne, a coffee mug or some other such item with that sticky price label on it? As you try to remove it, it seems that some of that sticky backing glue just never will come off. Well, try putting a little rubber cement on the glue. Let it dry and then rub off. Presto, the sticky glue comes with it!

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
FIELD ENGINEERS REPORT

Mine Silver Hill Date September 24, 1942  
District Silver Bell Engineer George A. Ballam  
Subject: Production Possibilities Survey

Mr. A. R. Byrd, Jr., 319 E. Congress St., Tucson, informed me that he has received a \$20,000 RFC loan for development of the property which he is leasing from the Silver Hill Consolidated Copper Company.

He expects to begin work in about two weeks, planning on reaching production of 100 tons per day as development progresses. The road to the property has been improved and haulage will be by truck to Marana, thence rail to the Hayden smelter. Ore runs 5% Cu and 5-6 ozs. Ag. About 30 men will be employed.

Mr. Byrd is anticipating considerable difficulty in regard to obtaining equipment. I put him in touch with Mr. Walsh of the local WPB office to aid in getting emergency orders until he obtains his serial number. He will keep in touch with me for assistance along other lines. Advised him to get his quota lined up. Has lost a couple of good miners to defense plant in N.M. Forced a separation by getting fired. He is pretty pessimistic about the labor freezing plan, and expressed it crisply.

(Signed) Geo. A. Ballam

SILVER HILL, A. R. Byrd, Jr., Lessee, Tucson, Arizona.

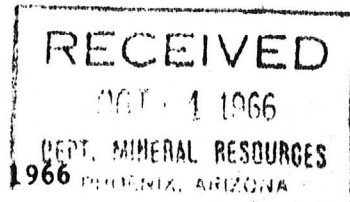
A \$20,000.00 Development Loan has recently been granted on this property and the lessee expects a production of 100 tons per day of 5% copper ore while development is progressing. This tonnage, however, may be limited by lack of labor as several men have already forced their separation following the labor freezing order.

Based upon his own and other's priority experience the lessee is somewhat doubtful about obtaining equipment and supplies.

Providing men and material are available for this operation, a production of 150,000 pounds of copper monthly can soon be reached in direct smelter shipments.

Report by Earl F. Hastings, October 9, 1942, to Copper Branch, War Production Board.

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
FIELD ENGINEERS REPORT



Mine INDIANA ARIZONA  
AND THE SILVER HILL MINE  
District SILVER-BELL

Date September 28, 1966

Engineer G. W. Irvin

Subject: Mine visit on September 28, 1966

References See previous reports. See A. Ruff Thesis 6/29/51

Location--- Sec. 25 - T 12 S - R 8 E

Owner-- Western Minerals Corp. 8967 Ladue Road, St. Louis Mo.  
' Wm Knox , president.

Operator---- ' Western Minerals Corp. P. O. Box 161, Marana, Arizona.  
' Anthony Lane, Manager. ' Ed. Stone, Geologist.

Number of Claims.---- 15 patented at Indiana Arizona and 5 at Silver Hill which  
adjoins on the south. Besides the 20 patented claims there are  
35 unpatented.

Principal Minerals--- Lead, Zinc and Copper.

Present activity--- Cleaning up, underground. The company has applied for  
a OME loan of \$231,000 to be used immediately for 3000' of  
underground core drilling, and 4350' of drilling from the surface.  
The plans call for intersection of the favorable zones at from  
600 to 1200' below the surface. This is in both the above areas.  
If sufficient ore is found a shaft will be sunk and lower level  
development work commenced.  
The loan application asks for 65% to be government financed, as  
silver is included along with the lead, copper, & zinc.

At the present time copper is being recovered from the mine water.  
which contains 8 to 12 lbs of copper per 1000 gallons of water.  
About 15 to 20 gallons per minute are being pumped thru the  
copper recovery tanks. (This is experimental).

At present 9 men are being employed.

(the above information from Mr. Lane the Manager)

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

~~FIELD ENGINEERS REPORT~~

NEWS ITEM

Mine Silver Hill Mines

Date Feb. 6, 1952

District Silver Bell Mining Dist., Pima Co.

Engineer Axel L. Johnson

Subject: News Item --- Source of Information--- George D. Skinner

Location 41 miles north-west of Tucson. Go NW on Highway 84 for 27 miles, and turn into Marana Air Base---then follow road south, cross old Silver Bell Highway, go 6 or 7 miles, then turn right due west to an auxiliary Marana Air Field--- follow A. S. & R. signs to old Cocino Ranch house, and continue south to Silver Bell camp.

Number of Claims 17 claims---- 5 patented claims, and 12 unpatented claims.

Owners George D. Skinner, 136 N. Stone Ave., Tucson, Ariz. (at Ariz. Trust Co.)  
4 other persons also have an interest in the property.

Metals Found Lead, Silver, Copper, and Zinc.

Men Employed None. Mine is idle.

Production Rate No Production.

Milling Facilities None.

Geology and Mineralization The ore occurs as replacements in limestone. The ore is a mixture of carbonates and sulphides.

Ore Values Lead-- from 4 to 8 %; Silver -- from 4 to 8 oz.: Zinc-- about 8 %:  
Copper-- from 4 to 8 %.

Old Workings and Installation One shaft-- 400 ft. deep, first 300 ft. in fairly good shape. Below the 300 ft. level it is probably caved in.  
One drift -- 300 ft. long.  
One--- 100 ton Ore Bin.  
Change Room and Tool Shed.

Past Operations Last operations were made 3 years ago.  
Past operations included 120 cars of ore shipped to El Paso and Douglas.

Proposed Plans Will sell or lease.

**DEPARTMENT OF MINERAL RESOURCES**  
STATE OF ARIZONA  
**FIELD ENGINEERS REPORT**

Mine Silver Hill Mine Date Jan. 13, 1967  
District Silver-Bell District - Pima County Engineer G. W. Irvin  
Subject: Present Status

Is included in the operations and ownership of the Indiana Arizona Mine.  
See Indiana Arizona report of September 28, 1966.  
Last visit to area by Field Engineer on December 1, 1966

June 23, 1941

Mr. Phil Snyder  
P. O. Box 842  
Tucson, Arizona

Dear Mr. Snyder:

I have the questionnaire relative to the potential copper production from the Silver Hill Mine. I am somewhat at a loss to understand the answers that you give to some of our questions. Under the question "How much copper could this property produce annually on a 14¢ price", you state "24 - 50 ton cars". Do you mean that you could produce 2,400,000 pounds of copper, or do you mean that you could produce 1,200 tons of ore? If you mean tons of ore, it will be necessary for us to know the value of the ore, or the copper content, in order to include it within this report. The government authorities are not interested in tons of ore but the copper that they can get.

Included within this report we anticipate putting a brief description of the properties which will be listed as potential producers. In order to have these brief reports uniform in their contents we have gotten up another questionnaire showing the points we want to cover, and it will be greatly appreciated if you will fill in one of these questionnaires for the Silver Hill Mine and return it to us.

I hope that you can get this information back to us very promptly as we are supposed to complete this report and get it back to Washington by the end of this month.

Thanking you, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors  
Arizona Department of Mineral Resources

CFW:LP  
Enc.



QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property... *Silver Hill Mine*.....

Location... *New Sed. Mining District*.....

Ownership... *Silver Hill Mines Incorporated*.....

Name of Manager... *Phil Snyder (also, Lessee)*.....

Post Office address... *P.O. Box #842*.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940... *32 Tons -*.....

1941 rate of copper production based upon first four months... *103 1/2 Tons -*.....

How much copper could this property produce annually

on a 14 cent price? *24 - 50 Ton Cars -*

on a 16 cent price? *48 - 50 Ton Cars*

on an 18 cent price? *96 - 50 Ton Cars*

on a 20 cent price? *200 - 50 Ton Cars -*

What price copper is necessary for this property? ..... *16*..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? ... *Larger Blast Compressor, Jack Hammer, more adequate Water supply & more Man Power*

a 16 cent price could be assured? ... *Same as for 14¢ Copper, Plus more Man Power & Better roads, About Ten Thousand Dollars*

18 cent price? ... *Same as aforementioned, plus additional Development Work, Plus Five Thousand Dollars -*

20 cent price? ... *Same as for 18¢ Copper, Plus Ten Thousand Dollars - Making \$25,000.00*

For what length of time would assurance of price and sale of full production be necessary? ... *Five years -*



How long would it take, after financing has been provided for, before production on the above basis could be reached? *Sixty days*

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? *No*

If not, do you believe that your company would be amenable and agreeable to government financing? *Yes*

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? *Yes*

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes *Glad to keep in any & every way possible*

What would be your ideas on financing and carrying out such a plan as is indicated by these questions? *Erecting a Government Custom Smelter, at a convenient Locality; also hope the Government will not only stabilize a higher Price for Copper, but will stabilize the Price for Treatment, Smelting & etc.*

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey

Date *June 18 - 41* Signed *Phil. Snyder*

**DEPARTMENT OF MINERAL RESOURCES**

**REPORT TO OPA ON  
ACTIVE MINING PROJECT**

Date..... 4-11-45  
 Name of Mine..... Silver Hill  
 Owner or Operator..... Geo L. Dillard  
 Address..... PO Box 5226 Tucson  
 Mine Location..... Silver Hill Dist

**Filing Information**

File System.....  
 File No.....  
 This chart to be used for gallons of gasoline required per month.

**PRESENT OPERATIONS:** (check X)

Production ; Development.....; Financing.....; Sale of mine.....;  
 Experimental (sampling).....; Owner.....  
 Other (specify).....

**PRODUCTION: Past and Future.**

Approx. tons last 3 months  
 Approx. present rate per 3 months  
 Anticipated rate next 3 months  
 If in distant future check (X) here

**SILVER HILL MINE**

Cu, Ag, Zn

Pima 10 - 2 T 11 S, R 8 E

Sherwood Owens, Box 769, Tucson '41

531 - 128 - 9E

**EQUIPMENT OPERATED:**

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	1941 Buick	825 mi	for one month
Light or Service Trucks	.....	.....	.....
Ore Hauling Trucks	.....	.....	.....
Compressors	.....	.....	.....
Other Mine or Mill Eqpt.	.....	.....	.....

**PRODUCT PRODUCED OR CONTEMPLATED:** Name metals or minerals.

Copper

**REMARKS:**

Mr Dillard is employed by A.R. Byrd operator of this property, as mine supt.

**ARIZONA DEPARTMENT OF MINERAL RESOURCES**

By..... George L. Dillard

# DEPARTMENT OF MINERAL RESOURCES

## REPORT TO OPA ON ACTIVE MINING PROJECT

Date 1/20/45

Name of Mine Silver Bell

Owner or Operator RA Burney (foreman)

Address 2743 N. Martha St Tucson

Mine Location 50 mi NW Tucson

Filing Information

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

**PRESENT OPERATIONS:** (check X)

Production ; Development.....; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify).....

**PRODUCTION: Past and Future.**

Tons

Approx. tons last 3 months .....

Approx. present rate per 3 months .....

Anticipated rate next 3 months .....

If in distant future check (X) here .....

**EQUIPMENT OPERATED:**

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	1940 Nash	700	.....
Light or Service Trucks	.....	.....	.....
Ore Hauling Trucks	.....	.....	.....
Compressors	.....	•	.....
Other Mine or Mill Eqpt.	.....	.....	.....

**PRODUCT PRODUCED OR CONTEMPLATED:** Name metals or minerals.

Copper, Lead

**REMARKS:**

Mr Burney has recently taken the job as mine foreman at this property

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By.....

George A. Ballou

# DEPARTMENT OF MINERAL RESOURCES

## REPORT TO OPA ON ACTIVE MINING PROJECT

Date 11/24/44  
 Name of Mine Silver Hill  
 Owner or Operator A.R. Byrd Jr  
 Address 319 E Congress Tucson  
 Mine Location Silver Bell

**Filing Information**

File System.....  
 File No.....  
 This chart to be used for gallons of gasoline required per month.

**PRESENT OPERATIONS:** (check X)

Production.....; Development.....; Financing.....; Sale of mine.....;  
 Experimental (sampling).....; Owner's occasional trip.....;  
 Other (specify).....

**PRODUCTION: Past and Future.**

Tons

Approx. tons last 3 months .....  
 Approx. present rate per 3 months .....  
 Anticipated rate next 3 months .....  
 If in distant future check (X) here .....

**EQUIPMENT OPERATED:**

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars			
Light or Service Trucks	<i>Equipment as listed</i>		
Ore Hauling Trucks	<i>Holt, Blower, Compressor</i>		
Compressors	<i>Generator, Pumps</i>		<i>1750 gal</i>
Other Mine or Mill Eqpt.			

**PRODUCT PRODUCED OR CONTEMPLATED:** Name metals or minerals.

Copper

**REMARKS:**

.....  
 .....  
 .....

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By George A. Bellon

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.... Silver Hill Mine.....

Location..... Silver Bell Mining District.....

Ownership..... Silver Hill Mines, Incorporated.....

Name of Manager..... Phil Snyder (also Lessee).....

Post Office address..... P. O. Box 842.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940.. 32 tons.....

1941 rate of copper production based upon first four months.. 103 1/2 tons.....

How much copper could this property produce annually

on a 14 cent price? .. 24 - 50 ton cars.....

on a 16 cent price? .. 48 - 50 ton cars.....

on an 18 cent price?... 96 - 50 ton cars.....

on a 20 cent price?... 200 - 50 ton cars.....

What price copper is necessary for this property? .. 16..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? .. Larger hoist, compressor, jackhammer, ... more adequate water supply and more manpower.....

a 16 cent price could be assured? Same as for 14¢ copper, plus more man power..... and better roads - about ten thousand dollars.....

18 cent price? .. Same as aforementioned, plus additional development work, plus..... five thousand dollars.....

20 cent price? .. Same as for 18¢ copper plus ten thousand dollars - making \$25,000.....

For what length of time would assurance of price and sale of full production be necessary? .. Five years.....

How long would it take, after financing has been provided for, before production on the above basis could be reached? Sixty days

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? No

If not, do you believe that your company would be amenable and agreeable to government financing? Yes

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? Yes

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes Glad to help in any and every way possible.

What would be your ideas on financing and carrying out such a plan as is indicated by these questions? Erecting a government custom smelter at a convenient locality; also hope the government will not only stabilize a higher price for copper but will stabilize the price for treatment, smelting, etc.

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.

Date June 18, 1941 Signed Phil Snyder

NAME OF MINE: SILVER HILL

COUNTY: PIMA  
DISTRICT: Silver Hill  
METALS: CU

OPERATOR AND ADDRESS:

MINING STATUS

DATE:	OPERATOR AND ADDRESS:	DATE:	MINING STATUS
5/1/44	A. R. Byrd, Jr. Box 5226, Tucson	5/1/44	Shipping
7/45	Sherwood Owens, Box 769, Tucson	7/45	Shipping

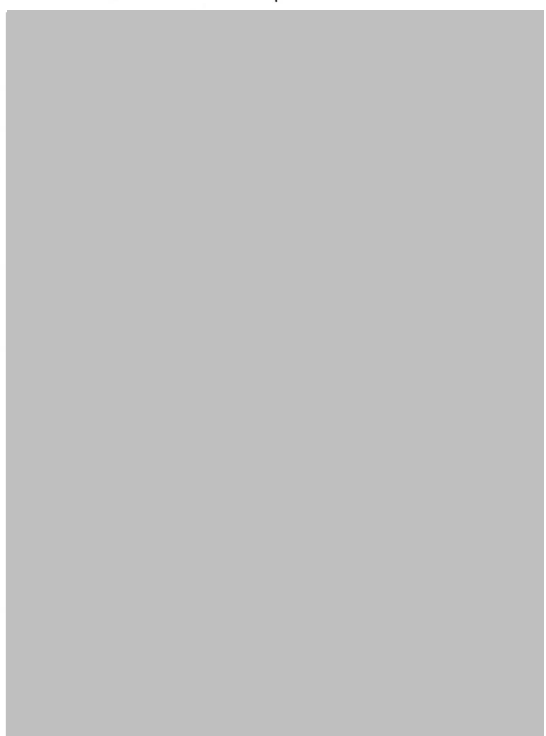
COPPER, SILVER

SILVER HILL  
Silver Bell Dist.

A. N. Byrd, Jr.  
319 E. Congress St.  
Tucson, Ariz.

Report by G.A. Ballam

9-24-42



MINING JOURNAL - 10-15-42

Survey, Department of the Interior 325/68

See: Production Possibilities of the Marginal Copper Mines in Arizona, 1941, p. 101



SILVER HILL MINE

PIMA COUNTY

Arizona-Indiana (file)



SILVER HILL, A. R. Byrd, Jr., Lessee, Tucson, Arizona.

A \$20,000.00 Development Loan has recently been granted on this property and the lessee expects a production of 100 tons per day of 5% copper ore while development is progressing. This tonnage, however, may be limited by lack of labor as several men have already forced their separation following the labor freezing order.

Based upon his own and other's priority experience the lessee is somewhat doubtful about obtaining equipment and supplies.

Providing men and material are available for this operation, a production of 150,000 pounds of copper monthly can soon be reached in direct smelter shipments.

Report by Earl F. Hastings, October 9, 1942, to Copper Branch, War Production Board.

June 23, 1941

Mr. Phil Snyder  
P. O. Box 842  
Tucson, Arizona

Dear Mr. Snyder:

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I hope that you can get this information back to us very promptly as we are supposed to complete this report and get it back to Washington by the end of this month.

Thanking you, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors  
Arizona Department of Mineral Resources

CFW:LP  
Enc.

Arizona Department of Mineral Resources, Capitol Building, Phoenix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property... *Silver Bell Mine*

Location... *Silver Bell Mining District*

Ownership... *Silver Bell Mines Incorporated*

Name of Manager... *Phil Snyder (also, Lessee)*

Post Office address... *P.O. Box # 842*

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940... *32 Tons -*

1941 rate of copper production based upon first four months... *103 1/2 Tons -*

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on a 14 cent price? *24 - 50 Ton Cars -*

on a 16 cent price? *48 - 50 Ton Cars*

on an 18 cent price? *96 - 50 Ton Cars*

on a 20 cent price? *200 - 50 Ton Cars -*

What price copper is necessary for this property? ..... *16* ..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the

event a 14 cent price could be assured? *Large Heat Compressor*

*Jack Hammer, would require water supply & more man power*

a 16 cent price could be assured? ... *Same as for 14¢ Copper* ...

*Plus more man power & better roads. About Ten Thousand Dollars -*

18 cent price? *Same as aforementioned, plus additional*

*Development Work, Plus Five Thousand Dollars -*

20 cent price? *Same as for 18¢ Copper, Plus*

*Ten Thousand Dollars - Making \$25,000.00*

For what length of time would assurance of price and sale of full production be ne-

cessary? *Five years -*

How long would it take, after financing has been provided for, before production on the above basis could be reached? *Sixty days*

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? *No.*

If not, do you believe that your company would be amenable and agreeable to government financing? *Yes*

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? *Yes*

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes *Glad to keep in any & every way possible*

What would be your ideas on financing and carrying out such a plan as is indicated by these questions? *Establishing a Government Custodian at a convenient locality; also hope the Government will not only stabilize a higher price for copper, but will stabilize the price for treatment, smelting, & etc.*

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.

Date *June 18 - 41* Signed *Phil Snyder*



DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
FIELD ENGINEERS REPORT

RECEIVED

OCT - 4 1966

DEPT. MINERAL RESOURCES  
PHOENIX, ARIZONA

Mine INDIANA ARIZONA  
AND THE SILVER HILL MINE  
District SILVER-BELL

Date September 28, 1966

Engineer G. W. Irvin

Subject: Mine visit on September 28, 1966

References See previous reports. See A. Ruff Thesis 6/29/51

Location--- Sec. 25 - T 12 S - R 8 E

Owner-- Western Minerals Corp. 8967 Ladue Road, St. Louis Mo.  
Wm Knox, president.

Operator---- Western Minerals Corp. P. O. Box 161, Marana, Arizona.  
Anthony Lane, Manager. Ed. Stone, Geologist.

Number of Claims.---- 15 patented at Indiana Arizona and 5 at Silver Hill which  
adjoins on the south. Besides the 20 patented claims there are  
35 unpatented.

Principal Minerals--- Lead, Zinc and Copper.

Present activity--- Cleaning up, underground. The company has applied for  
a OME loan of \$231,000 to be used immediately for 3000' of  
underground core drilling, and 4350' of drilling from the surface.  
The plans call for intersection of the favorable zones at from  
600 to 1200' below the surface. This is in both the above areas.  
If sufficient ore is found a shaft will be sunk and lower level  
development work commenced.  
The loan application asks for 65% to be government financed, as  
silver is included along with the lead, copper, & zinc.

At the present time copper is being recovered from the mine water.  
which contains 8 to 12 lbs of copper per 1000 gallons of water.  
About 15 to 20 gallons per minute are being pumped thru the  
copper recovery tanks. (This is experimental).

At present 9 men are being employed.

(the above information from Mr. Lane the Manager)

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date: 11/24/44
Name of Mine: Silver Hill
Owner or Operator: A.R. Byrd Jr.
Address: 319 E Congress Tucson
Mine Location: Silver Bell

Filing Information

File System:
File No.:
This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production; Development; Financing; Sale of mine;
Experimental (sampling); Owner's occasional trip;
Other (specify)

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months
Approx. present rate per 3 months
Anticipated rate next 3 months
If in distant future check (X) here

EQUIPMENT OPERATED:

Table with 4 columns: Type, Quantity or Horse Power, Miles or Hours Per Month, Gallons Required Per Month. Includes handwritten entries for Personal Cars, Light or Service Trucks, Ore Hauling Trucks, Compressors, and Other Mine or Mill Eqpt. with a total of 1750 gal.

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Copper

REMARKS:

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By: George A. Belton



# DEPARTMENT OF MINERAL RESOURCES

## REPORT TO OPA ON ACTIVE MINING PROJECT

Date..... 1/29/45  
 Name of Mine..... Silver Hill  
 Owner or Operator..... PA Burney (foreman)  
 Address..... 2743 N. Martha St Tucson  
 Mine Location..... 50 mi NW Tucson

**Filing Information**

File System.....  
 File No.....  
 This chart to be used for gallons of gasoline required per month.

**PRESENT OPERATIONS:** (check X)

Production ; Development.....; Financing.....; Sale of mine.....;  
 Experimental (sampling).....; Owner's occasional trip.....;  
 Other (specify).....

**PRODUCTION: Past and Future.**

Tons

Approx. tons last 3 months .....  
 Approx. present rate per 3 months .....  
 Anticipated rate next 3 months .....  
 If in distant future check (X) here .....

**EQUIPMENT OPERATED:**

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	<u>1940 Nash</u>	<u>700</u>	.....
Light or Service Trucks	.....	.....	.....
Ore Hauling Trucks	.....	.....	.....
Compressors	.....	.....	.....
Other Mine or Mill Eqpt.	.....	.....	.....

**PRODUCT PRODUCED OR CONTEMPLATED:** Name metals or minerals.

Copper, Lead

**REMARKS:**

Mr Burney has recently taken the job as mine foreman at this property

**ARIZONA DEPARTMENT OF MINERAL RESOURCES**

By.....

George A. Callahan

**DEPARTMENT OF MINERAL RESOURCES**

**REPORT TO OPA ON  
ACTIVE MINING PROJECT**

Date..... 4-11-45  
 Name of Mine..... Silver Hill  
 Owner or Operator..... Geo L. DeLard  
 Address..... PO Box 5226, Tucson  
 Mine Location..... Silver Hill Dist

**Filing Information**

File System.....  
 File No.....  
 This chart to be used for gallons of gasoline required per month.

**PRESENT OPERATIONS:** (check X)

Production ; Development.....; Financing.....; Sale of mine.....  
 Experimental (sampling).....; Owner.....  
 Other (specify).....

**PRODUCTION: Past and Future.**

Approx. tons last 3 months  
 Approx. present rate per 3 months  
 Anticipated rate next 3 months  
 If in distant future check (X) here

**SILVER HILL MINE**  
 Cu, Ag, Zn  
 Pima 10 - 2 T 11 S, R 8 E  
 Sherwood Owens, Box 769, Tucson

'41

531 - 125 - 9E

**EQUIPMENT OPERATED:**

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	1941 Buick	825 mi	for one month
Light or Service Trucks	.....	.....	.....
Ore Hauling Trucks	.....	.....	.....
Compressors	.....	.....	.....
Other Mine or Mill Eqpt.	.....	.....	.....

**PRODUCT PRODUCED OR CONTEMPLATED:** Name metals or minerals.

Copper

**REMARKS:**

Mr DeLard is employed by A. R. Byrd operator of this property, as mine supt.

By..... George A. Ballan



NAME OF MINE: SILVER HILL

COUNTY: PIMA  
DISTRICT: Silver Hill  
METALS: CU

OPERATOR AND ADDRESS:

MINE STATUS

DATE:  
5/1/44

A. R. Byrd, Jr.  
Box 5226, Tucson

DATE:  
5/1/44 Shipping

7/45

Sherwood Owens, Box 769, Tucson 7/45 Shipping

COPPER, SILVER

SILVER HILL  
Silver Bell Dist.

A. N. Byrd, Jr.  
319 E. Congress St.  
Tucson, Ariz.

Report by G.A. Ballam

9-24-42

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.... Silver Hill Mine.....

Location..... Silver Bell Mining District.....

Ownership..... Silver Hill Mines, Incorporated.....

Name of Manager..... Phil Snyder (also Lessee).....

Post Office address..... P. O. Box 842.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940... 32 tons.....

1941 rate of copper production based upon first four months... 103 1/2 tons.....

How much copper could this property produce annually

on a 14 cent price? .. 24 - 50 ton cars.....

on a 16 cent price? .. 48 - 50 ton cars.....

on an 18 cent price?... 96 - 50 ton cars.....

on a 20 cent price?... 200 - 50 ton cars.....

What price copper is necessary for this property? .. 16..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the

event a 14 cent price could be assured? .. Larger hoist, compressor, jackhammer,....

.... more adequate water supply and more manpower.....

a 16 cent price could be assured? Same as for 14% copper, plus more man power.....

.... and better roads - about ten thousand dollars.....

18 cent price? .. Same as aforementioned, plus additional development work, plus.....

.... five thousand dollars.....

20 cent price? .. Same as for 18% copper plus ten thousand dollars - making \$25,000.....

For what length of time would assurance of price and sale of full production be ne-

cessary? .. Five years.....

How long would it take, after financing has been provided for, before production on the above basis could be reached? Sixty days

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? No

If not, do you believe that your company would be amenable and agreeable to government financing? Yes

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? Yes

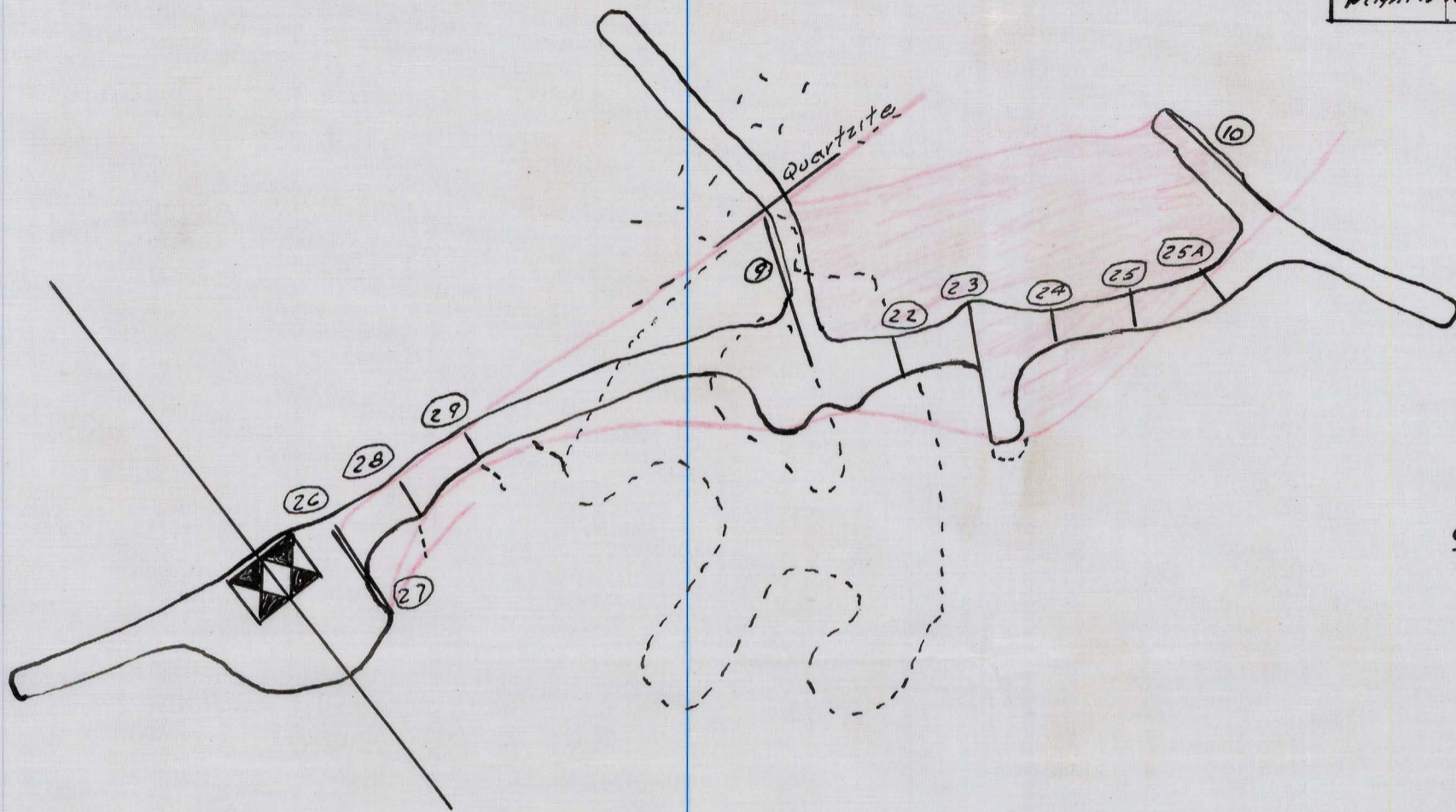
Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes  
Glad to help in any and every way possible.

What would be your ideas on financing and carrying out such a plan as is indicated by these questions? Erecting a government custom smelter at a convenient locality; also hope the government will not only stabilize a higher price for copper but will stabilize the price for treatment, smelting, etc.

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey

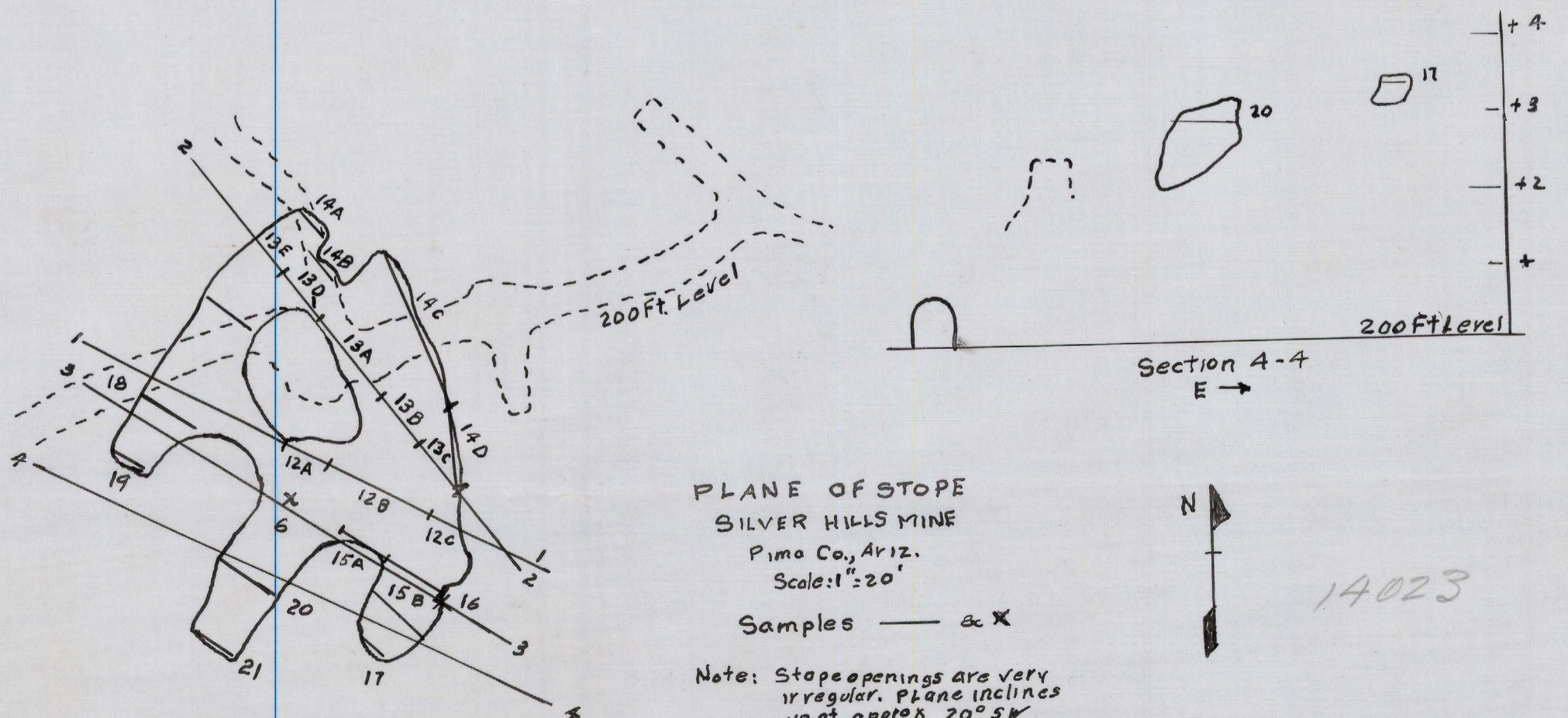
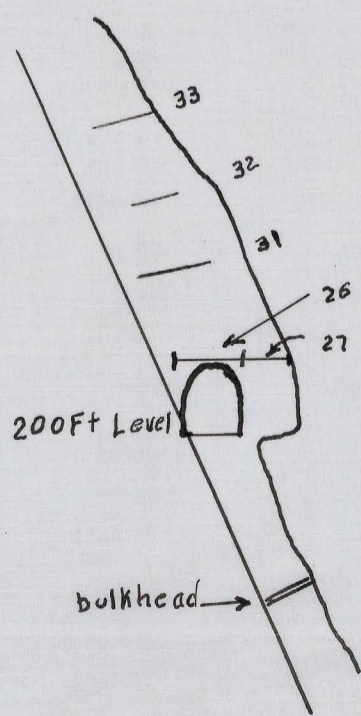
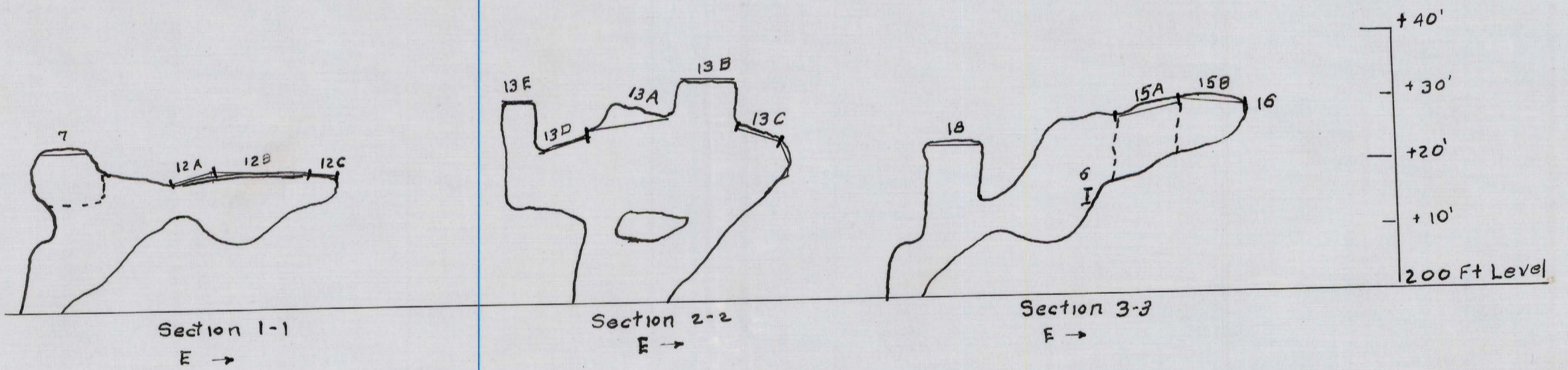


Sample	Width	Oz. Ag	% Cu	% Pb	% Zn
No. 9	240"	3.3	3.62	.10	.49
10	216"	3.4	3.02	.10	.29
22	42"	6.8	4.15	3.53	1.26
23	222"	7.6	5.00	2.24	.66
24	60"	4.2	3.26	1.02	.55
25	60"	6.6	1.25	2.65	.60
25A	60"	No ore	Not sampled		
26	90"	3.2	11.90	.68	
27	60"	nil	4.10	.75	20.79
28	40"	1.2	4.55	.61	29.70
29	60"	No ore	Not sampled		
Weighted Average		3.9	3.99	.79	



200 FT. LEVEL  
SILVER HILLS MINE  
Pima Co. - Arizona  
Scale: 1" = 20'

T.P. Lane  
8-20-42



PLANE OF STOPE  
SILVER HILLS MINE  
Pima Co., Ariz.  
Scale: 1" = 20'

Samples — & X

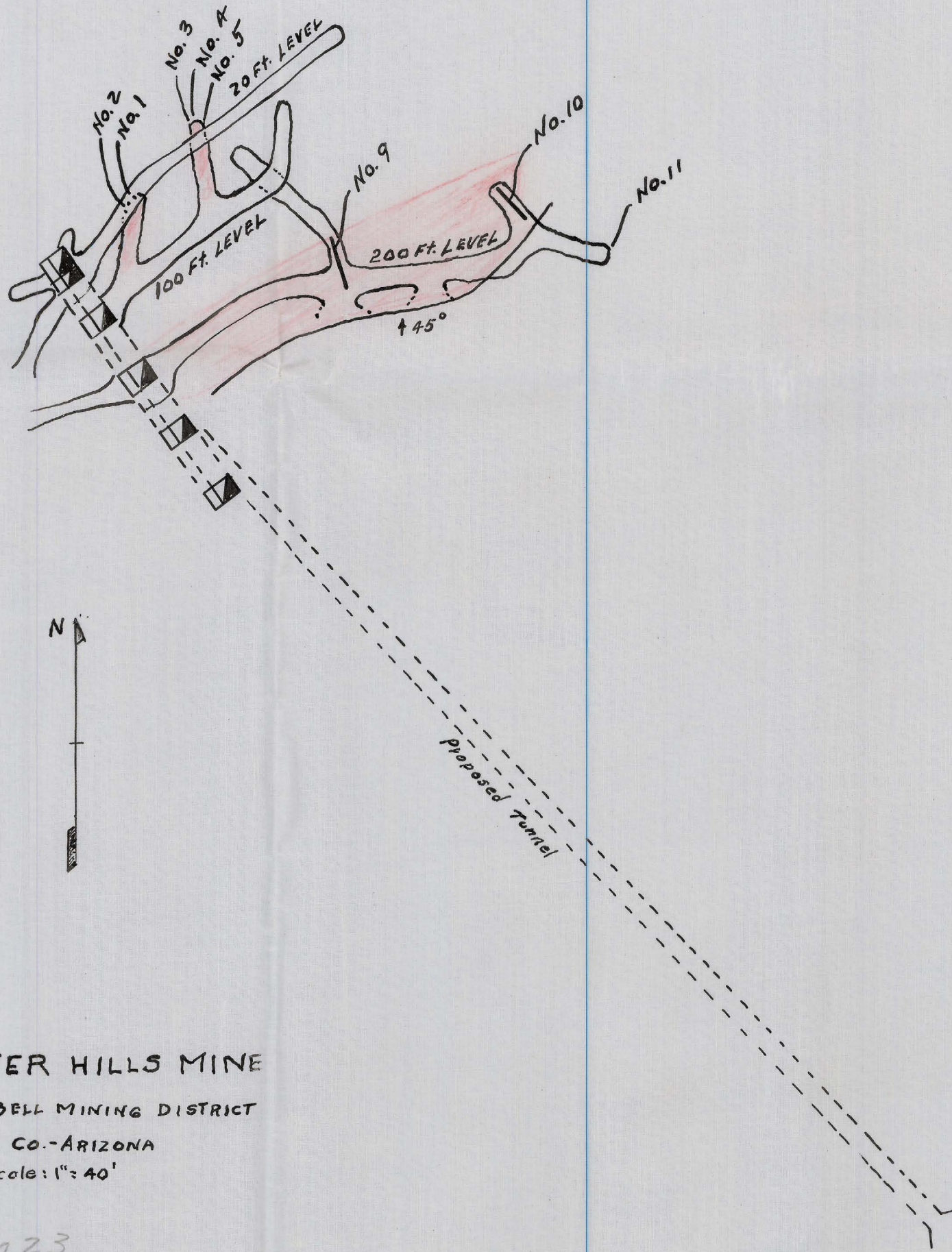
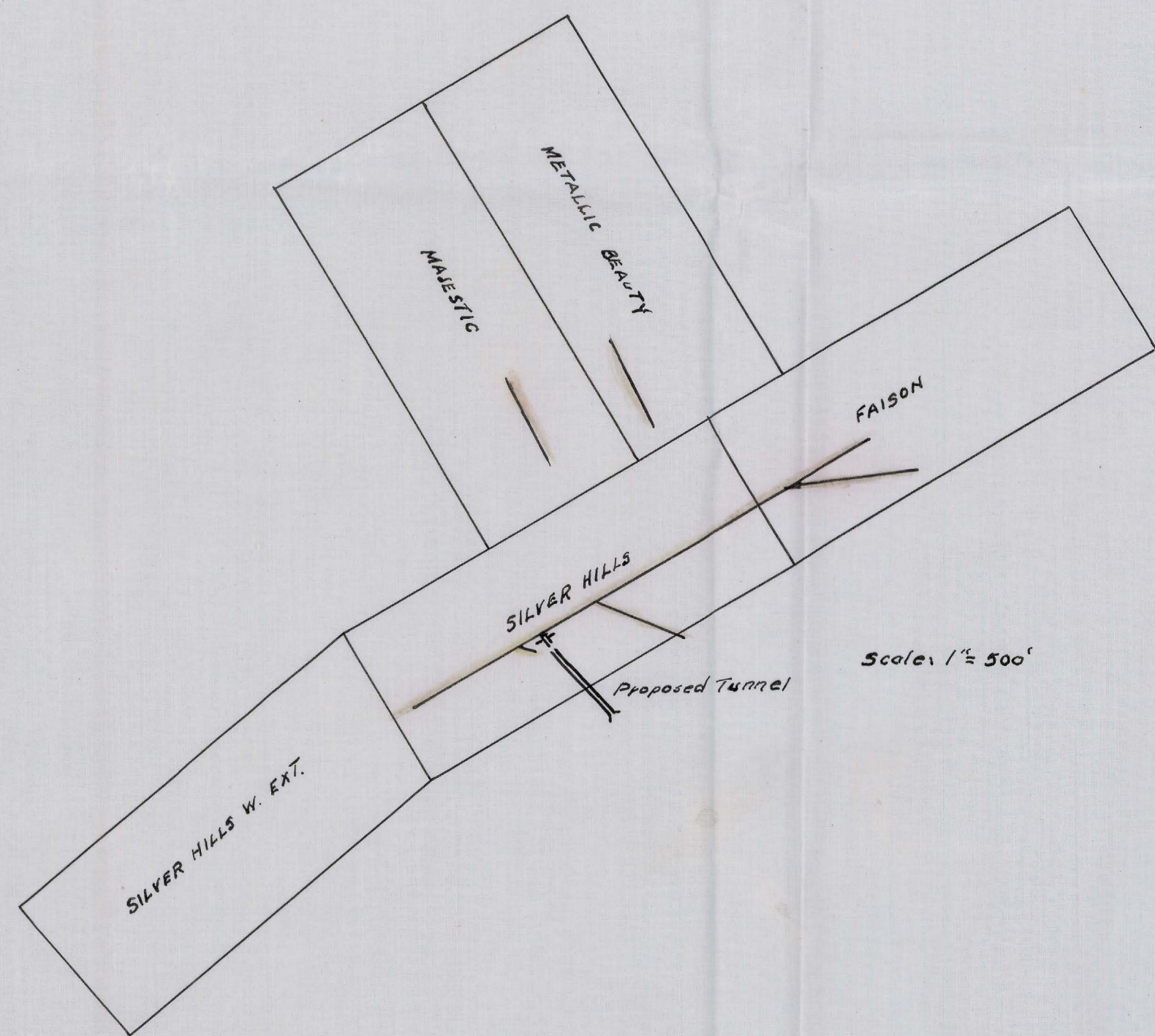
Note: Stope openings are very irregular. Plane inclines up at approx. 20° SW

14023

T.P.L.  
8/20/42

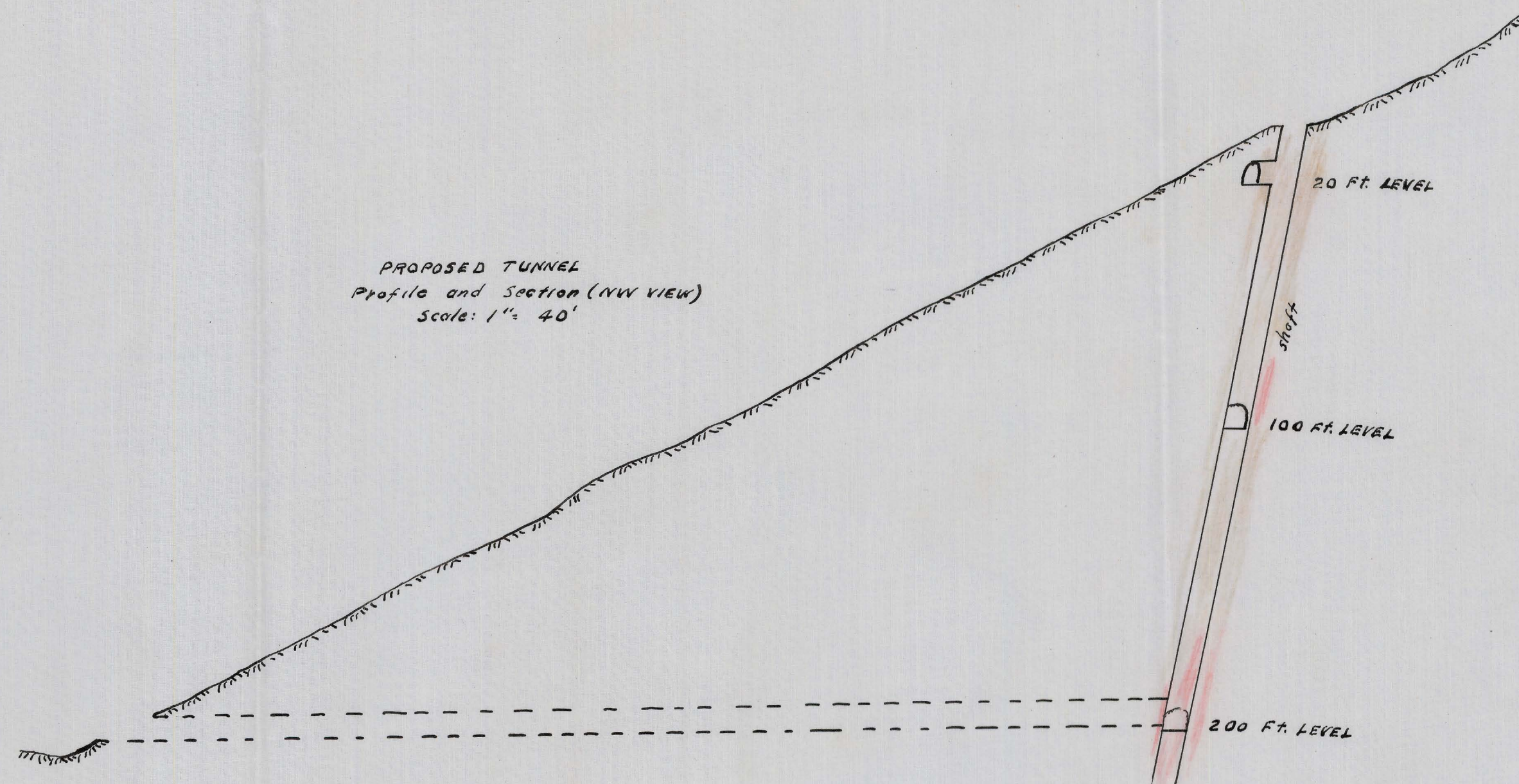
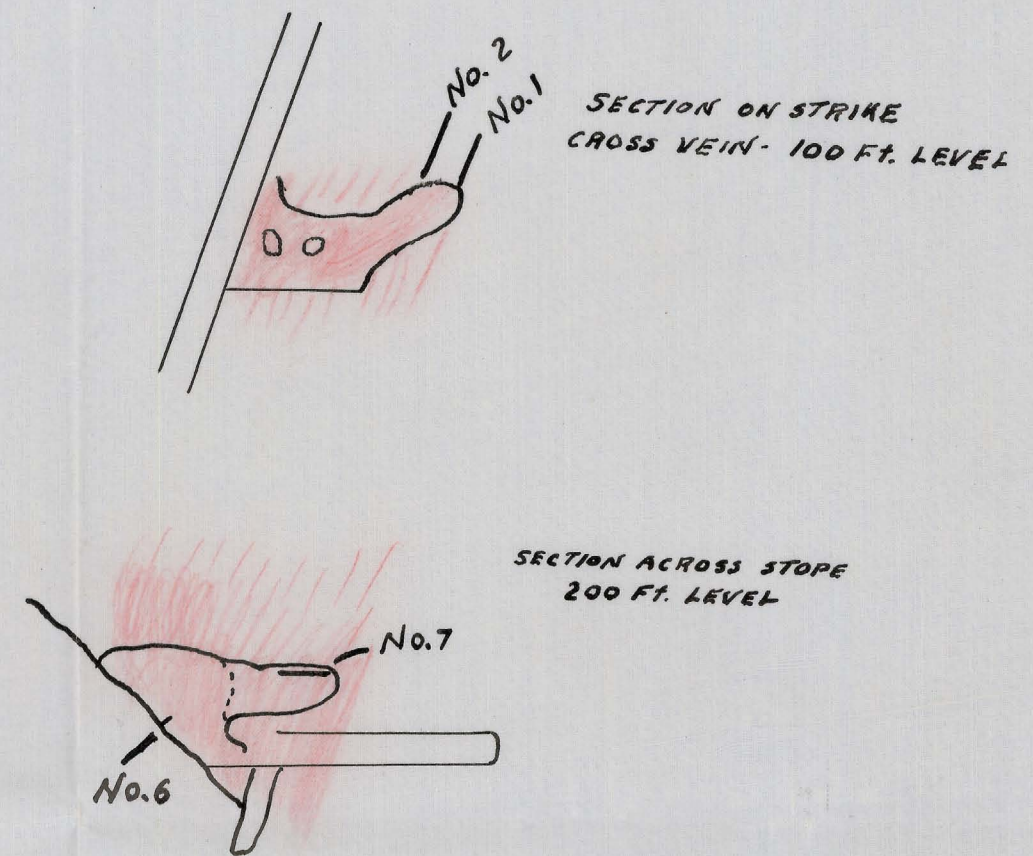
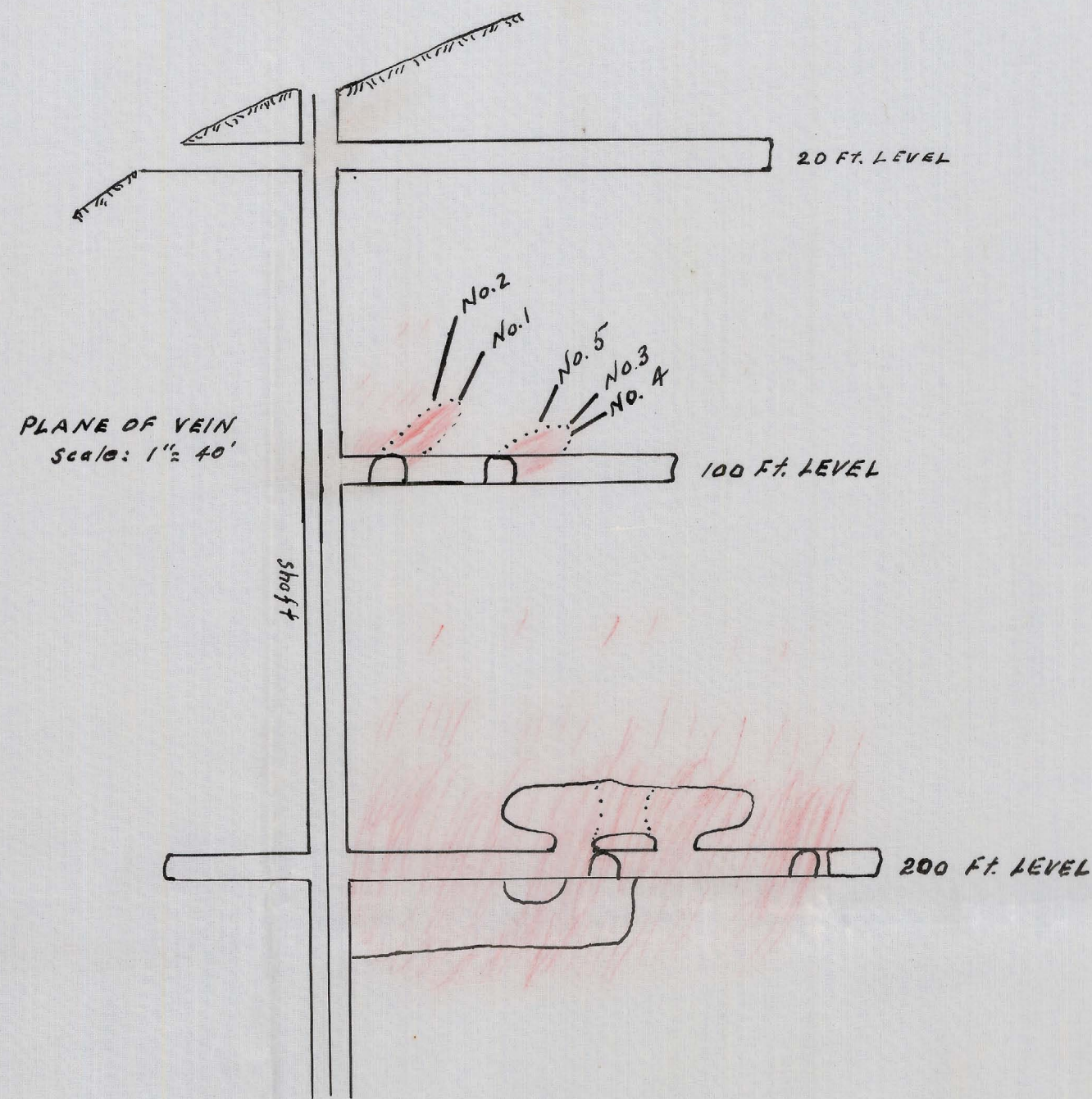


Sample	Width	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn
1	8 1/2"	.01	10.5	4.57	11.21	2.57
2	4 1/2"	.01	10.3	0.70	17.10	1.00
3	2 1/2"	Tr.	1.7	1.30	Tr.	1.60
4	4 1/2"	.01	5.5	3.47	0.21	2.20
5	7 1/2"	Tr.	3.7	4.02	Tr.	1.19
6	2 1/2"	Tr.	Tr.	0.75	0.21	46.13
7	9 1/2"	.01	5.7	3.27	Tr.	0.79
8	Muck	Tr.	5.1	4.22	0.15	3.57
9	20 Ft.	.01	3.3	3.52	0.10	0.49
10	18 Ft.	Tr.	3.4	3.02	0.10	0.29
11		.02	21.9	0.20	9.20	0.70



SILVER HILLS MINE  
SILVER BELL MINING DISTRICT  
PIMA CO.-ARIZONA  
Scale: 1" = 40'

14023



T.R.L. and  
7/5/02  
Proceeds: 10/30/02  
g.c.o.