



CONTACT INFORMATION  
Mining Records Curator  
Arizona Geological Survey  
3550 N. Central Ave, 2nd floor  
Phoenix, AZ, 85012  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

The following file is part of the G. M. Colvocoresses Mining Collection

#### **ACCESS STATEMENT**

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

#### **CONSTRAINTS STATEMENT**

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

#### **QUALITY STATEMENT**

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

## HILLSIDE

DISTRICT: Bagdad, Yavapai County  
LOCATION: 4 miles No. Bagdad. Camp Elevation 3050'. Hauling to Hillside station costs \$20.00 per ton.  
OWNERS & OPERATORS: John Lawler Estate. Idle. Dan Lawler, Caretaker.  
DATE VISITED: 1917, August 26th.

### NOTES:

Quartz fissure vein cutting through mica schist. The outcrop was discovered through erosion of a short length of the overlying malpais. Diamond drilling might discover similar ore bodies possibly now covered up with lava. Hillside vertical shaft is 200' deep with four levels. No. 3 level is driven about 700' both North and South of shaft. The vein dips slightly West, while the mica schist country rock has a flat dip E. The vein shows much crustification and the fissure has perhaps been opened several times. The footwall is slickensided in places but there is no parting seam to break to and in mining, the quartz would be difficult to keep clean. The ore is about 14" to 15" wide while the schistose vein matter, apparently mostly barren, is about 8' wide. Zincblende shows up throughout the level, but is in a larger amount at the South end. The South breast shows 1' of quartz with zinc blende which might make a nice concentrate. Masses of skeleton silica in places along the level suggest much leaching by sulphuric acid. I was forbidden to take samples but chips broken along the level by my assistant assayed (H-163) Au. Tr.; Ag. 8.24; Zn. 5.3%.

No. 4 level, less than 100' below No. 3 level, has been driven 900' North and 1000' South. Heavy pyrite shows up in places, especially on the foot wall, and more or less zinc blende throughout. The South breast shows Au. 1.92 oz; Ag. 14.32; Zn. 5.5%. The sample consisted of pieces of clean quartz and probably would assay higher than ore as mined. The ore above Levels 1 and 2, in the oxidized zone, has been practically all stoped out and the ground is timbered so that inspection affords little information. I am informed that the owners claim total reserves of 27,000 tons averaging \$22.00 a ton in gold and silver for the whole mine. The value of the ore on the lowest level (the 4th) is said to be \$16.00 in gold and silver without any allowance for zinc

and the tailing pile is said to contain 10,000 tons valued at \$8.00 per ton. T. A. Rickard, who was Consulting Engineer to the operating company in 1892, informs me that the ore was rich for a length of 200', and the main ore body was 1500' long, but below water level the ore became poor and the proportion of zinc increased rapidly.

The buildings are all more or less dilapidated and apparently were never very elaborate. A roaster plant, never completed, contains a Bruchner type Roaster, a Fraser & Chalmers steam engine and two boilers. The mill building contains a five stamp battery, ball mill, two old type wilfley tables and a Wilfley Slimer.

T. E. Buell, who has had some kind of a verbal option on the property, after the recent forfeiture of one by Tovote, informs me that the price asked by the owners is \$350,000.00. At any such price the property does not appear to me to be attractive, even if the owners' claims as to tonnage available and values are approximately correct. It is, however, a possible producer of zinc concentrate with gold and silver values.

The Hillside Extension, an idle prospect now owned by Howell, has an inaccessible tunnel, said to be 500' long, and there are several other locations, all idle, on the supposed strike of the Hillside vein, but I was unable to obtain any information from Dan Lawler or elsewhere locally as to discoveries of value on them though some assessment work is said to be kept up.

\*\*\*\*\*

DISTRICT: Bagdad, Yavapai County

PROPERTIES: Hillside

LOCATION: 4 mi. N. Bagdad Camp. Elevation 3050'. Hauling to Hillside station costs \$20.00 per ton.

OWNERS & OPERATORS: John Lawler Estate. Idle. Dan Lawler, Caretaker.

DATE VISITED: August 26th, 1917.

NOTES:

Quartz fissure vein cutting through mica schist. The outcrop was discovered through erosion of a short length of the over-

lying malpais. Diamond drilling might discover similar ore bodies possibly now covered up with lava. Hillside vertical shaft is 200' deep with four levels. No. 3 level is driven about 700' both North and South of shaft. The vein dips slightly West, while the mica schist country rock has a flat dip E. The vein shows much crustification and the fissure has perhaps been opened several times. The footwall is slickensided in places but there is no parting seam to break to and in mining, the quartz would be difficult to keep clean. The ore is about 14" to 15" wide while the schistose vein matter, apparently mostly barren, is about 8' wide. Zincblende shows up throughout the level, but is in a larger amount at the South end. The South breast shows 1' of quartz with zinc blende which might make a nice concentrate. Masses of skeleton silica in places along the level suggest much leaching by sulphuric acid. I was forbidden to take samples but chips broken along the level by my assistant assayed (H-163) Au. Tr; Ag. 8.24; Zn. 5.3%.

No. 4 level, less than 100' below No. 3 level, has been driven 900' North and 1000' South, Heavy pyrite shows up in places, especially on the foot wall, and more or less zinc blende throughout. The South breast shows 1' of quartz. Chips along this level assayed (H-164) Au. 1.92 oz; Ag. 14.32; Zn. 5.5%. The sample consisted of pieces of clean quartz and probably would assay higher than ore as mined. The ore above Levels 1 and 2, in the oxidized zone, has been practically all stoped out and the ground is timbered so that inspection affords little information. I am informed that the owners claim total reserves of 27,000 tons averaging \$22.00 a ton in gold and silver for the whole mine. The value of the ore on the lowest level (the 4th) is said to be \$16.00 in gold and silver without any allowance for zinc, and the tailing pile is said to contain 10,000 tons valued at \$8.00 per ton. T. A. Rickard, who was Consulting Engineer to the operating company in 1892, informs me that the ore was rich for a length of 200', and the main ore body was 1500' long, but below water level the ore became poor and the proportion of zinc increased rapidly.

The buildings are all more or less dilapidated and apparently were never very elaborate. A roaster plant, never completed, contains

a Bruchner type Roaster, a Fraser & Chalmers steam engine and two boilers. The mill building contains a five stamp battery, ball mill, two old type Wilfley tables and a Wilfley Slimer.

T. R. Buell, who has had some kind of a verbal option on the property, after the recent forfeiture of one by Tovote, informs me that the price asked by the owners is \$350,000.00. At any such price the property does not appear to me to be attractive, even if the owners' claims as to tonnage available and values are approximately correct. It is, however, a possible producer of zinc concentrate with gold and silver values.

The Hillside Extension, an idle prospect now owned by Howell, has an inaccessible tunnel, said to be 500' long, and there are several other locations, all idle, on the supposed strike of the Hillside vein, but I was unable to obtain any information from Dan Lawler or elsewhere locally as to discoveries of value on them though some assessment work is said to be kept up.

Holland

April 1937

HILLSIDE MINE

Conference with H. L. Williams, Genl. Mgr. in Prescott

They now have a metallurgical problem. Their mill heads are running about \$10.00 per ton and they make a recovery of 98% by flotation, but ore has become more basic with depth and ratio of concentrations has dropped from 12 to 5. The concentrates now carry a lot of worthless marcasite and arsenopyrite and the freight and treatment charges are \$8.75 per ton. About 30 tons per day are being produced with the following average analysis.

Au	1.18 oz. per ton
Ag	17.00 oz. per ton
Cu	0.75% " "
Pb	10.00% (galena)
Zn	7.00% (sphalerite)
As	3.00
Fe	35.00
S	35.00
Insol	8.00

No chance to drop out the iron without losing much of the values. Considering cyanide, or small furnace or chemical process. Ask for analysis of the crude ore.

## HILLSIDE MINE

(note by G. M. Colvocoresses - October 1937)

The Hillside Mine has been operating steadily for the past four years with good mining and milling equipment installed by the Hillside Mines Co. which purchased the property from the Lawler Estate.

Recently it is reported that this company has sold or leased to other parties and that the management will be changed.

H. L. Williams of Prescott is one of the owners and has been manager of operations for some years.

Most of the production has been made from high grade ore left near the old workings and from the pillars and gob in the old stopes. It is claimed that the profits have exceeded \$1,000,000.

Since the first of 1937 it has become necessary to mine below the 400' level where the ore is much more basic and generally of lower grade resulting in the production of a low grade concentrate on which the freight and treatment charges have absorbed most or all of the profits.

With improvements in the metallurgy, proper development and greater economy in operation, I think this mine may have quite a profitable future.

Copied

District: Bagdad, Yavapai County

Properties: Hillside

Location: 4 Miles No. Bagdad. Camp Elevation 3050'. Hauling to Hillside station costs \$20.00 per ton.

Owners & Operators: John Lawler Estate. Idle. Dan Lawler, Caretaker.

Date Visited: 1917, August 26th.

Notes: Quartz fissure vein cutting through mica schist. The outcrop was discovered through erosion of a short length of the overlying malpais. Diamond drilling might discover similar ore bodies possibly now covered up with lava. Hillside vertical shaft is 200' deep with four levels. No. 3 level is driven about 700' both North and South of shaft. The vein dips slightly West, while the mica schist country rock has a flat dip E. The vein shows much crustification and the fissure has perhaps been opened several times. The footwall is slickensided in places but there is no parting seam to break to and in mining, the quartz would be difficult to keep clean. The ore is about 14" to 15" wide while the schistose vein matter, apparently mostly barren, is about 8' wide. Zincblende shows up throughout the level, but is in a larger amount at the South end. The South breast shows 1' of quartz with zinc blende which might make a nice concentrate. Masses of skeleton silica in places along the level suggest much leaching by sulphuric acid. I was forbidden to take samples but chips broken along the level by my assistant assayed (H-163) Au. Tr; Ag. 8.24; Zn. 5.3%.

No. 4 level, less than 100' below No. 3 level, has been driven 900' North and 1000' South. Heavy pyrite shows up in places, especially on the foot wall, and more or less zinc blende throughout. The South breast shows 1' of quartz. Chips along this level assayed (H-164) Au. 1.92 oz; Ag. 14.32; Zn. 5.5%. The sample consisted of pieces of clean quartz and probably would assay higher than ore as mined. The ore above Levels 1 and 2, in the oxidized zone, has been practically all stoped out and the ground is timbered so that inspection affords little information. I am informed that the owners claim total reserves of 27,000 tons averaging \$22.00 a ton in gold and silver for the whole mine. The value of the ore on the lowest level (the 4th) is said to be \$16.00 in gold and silver without any allowance for zinc, and the tailing pile is said to contain 10,000 tons valued at \$8.00 per ton. T.A. Rickard, who was Consulting Engineer to the operating company in 1892, informs me that the ore was rich for a length of 200', and the main ore body was 1500' long, but below water level the ore became poor and the proportion of zinc increased rapidly.

The buildings are all more or less dilapidated and apparently were never very elaborate. A roaster plant, never completed, contains a Bruchner type Roaster, a Fraser & Chalmers steam engine and two boilers. The mill building contains a five stamp battery, ball mill, two old type Wilfley tables and a Wilfley Slimer.

T.E. Buell, who has had some kind of a verbal option on the property, after the recent forfeiture of one by Tovote, informs me that the price asked by the owners is \$350,000.00. At any such price the property does not appear to me to be attractive, even if the owners' claims as to tonnage available and values are approx-

Property: Hillside (Cont.)

imately correct. It is, however, a possible producer of zinc concentrate with gold and silver values.

The Hillside Extension, an idle prospect now owned by Howell, has an inaccessible tunnel, said to be 500' long, and there are several other locations, all idle, on the supposed strike of the Hillside vein, but I was unable to obtain any information from Dan Lawler or elsewhere locally as to discoveries of value on them though some assessment work is said to be kept up.

*To files*

April 1937

HILLSIDE MINE

Conference with H. L. Williams, Genl. Mgr. in Prescott

They now have a metallurgical problem. Their mill heads are running about \$10.00 per ton and they make a recovery of 98% by flotation, but ore has become more basic with depth and ratio of concentrations has dropped from 12 to 5. The concentrates now carry a lot of worthless marcasite and arsenopyrite and the freight and treatment charges are \$8.75 per ton. About 30 tons per day are being produced with the following average analysis.

Au	1.18 oz. per ton
Ag	17.00 oz. per ton
Cu	0.75% " "
Pb	10.00% (galena)
Zn	7.00% (sphalerite)
As	3.00
Fe	35.00
S	35.00
Insol	8.00

No chance to drop out the iron without losing much of the values. Considering cyanide, or small furnace or chemical process. Ask for analysis of the crude ore.

## HILLSIDE MINE

(note by G. M. Colvocoresses - October 1937)

The Hillside Mine has been operating steadily for the past four years with good mining and milling equipment installed by the Hillside Mines Co. which purchased the property from the Lawler Estate.

Recently it is reported that this company has sold or leased to other parties and that the management will be changed.

H. L. Williams of Prescott is one of the owners and has been manager of operations for some years.

Most of the production has been made from high grade ore left near the old workings and from the pillars and gob in the old stopes. It is claimed that the profits have exceeded \$1,000,000.

Since the first of 1937 it has become necessary to mine below the 400' level where the ore is much more basic and generally of lower grade resulting in the production of a low grade concentrate on which the freight and treatment charges have absorbed most or all of the profits.

With improvements in the metallurgy, proper development and greater economy in operation, I think this mine may have quite a profitable future.

*copy*

District	Properties	Location	Owners & Operators	Date Visited	Notes
Bagdad, Yavapai County	Hillside	4 mi. N. Bagdad Camp. Elevation 3050'. Hauling to Hillside station costs \$20.00 per ton.	John Lawler Estate. Idle. Dan Lawler, Caretaker.	1917 Aug. 26th.	<p>Quartz fissure vein cutting through mica schist. The outcrop was discovered through erosion of a short length of the overlying malpais. Diamond drilling might discover similar ore bodies possibly now covered up with lava. Hillside vertical shaft is 200' deep with four levels. No. 3 level is driven about 700' both North and South of shaft. The vein dips slightly West, while the mica schist country rock has a flat dip E. The vein shows much crustification and the fissure has perhaps been opened several times. The footwall is slickensided in places but there is no parting seam to break to, and in mining, the quartz would be difficult to keep clean. The ore is about 14" to 15" wide while the schistose vein matter, apparently mostly barren, is about 8' wide. Zincblende shows up throughout the level, but is in a larger amount at the South end. The South breast shows 1' of quartz with zinc blende which might make an nice concentrate. Masses of skeleton silica in places along the level suggest much leaching by sulphuric acid. I was forbidden to take samples but chips broken along the level by my assistant assayed (H-163) Au. Tr; Ag. 8.24; Zn. 5.3%.</p> <p>No. 4 level, less than 100' below No. 3 level, has been driven 900' North and 1000' South. Heavy pyrite shows up in places, especially on the foot wall, and more or less zinc blende throughout. The South breast shows 1' of quartz. Chips along this level assayed (H-164) Au. 1.92 oz; Ag. 14.32; Zn. 5.5%. The Sample consisted of pieces of clean quartz and probably would assay higher than ore as mined. The ore above Levels 1 and 2, in the oxidized zone, has been practically all stoped out and the ground is timbered so that inspection affords little information. I am informed that the owners claim total reserves of 27,000 tons averaging \$22.00 a ton in gold and silver for the whole mine. The value of the ore on the lowest level (the 4th) is said to be \$16.00 in gold</p>

*Hillside*

District	Properties	Location	Owners & Operators	Date Visited	Notes
Bagdad, Yavapai County (Contd)	Hillside (Contd)				<p>and silver without any allowance for zinc, and the tailing pile is said to contain 10,000 tons valued at \$8.00 per ton. T. A. Rickard, who was Consulting Engineer to the operating company in 1892, informs me that the ore was rich for a length of 200', and the main ore body was 1500' long, but below water level the ore became poor and the proportion of zinc increased rapidly.</p> <p>The buildings are all more or less dilapidated and apparently were never very elaborate. A roaster plant, never completed, contains a Bruchner type Roaster, a Fraser &amp; Chalmers steam engine and two boilers. The mill building contains a five stamp battery, ball mill, two old type Wilfley tables and a Wilfley Slimer.</p> <p>T. R. Buell, who has had some kind of a verbal option on the property, after the recent forfeiture of one by Tovote, informs me that the price asked by the owners is \$350,000.00. At any such price the property does not appear to me to be attractive, even if the owners' claims as to tonnage available and values are approximately correct. It is, however, a possible producer of zinc concentrate with gold and silver values.</p> <p>The Hillside Extension, an idle prospect now owned by Howell, has an inaccessible tunnel, said to be 500' long, and there are several other locations, all idle, on the supposed strike of the Hillside vein, but I was unable to obtain any information from Dan Lawler or elsewhere locally as to discoveries of value on them though some assessment work is said to be kept up.</p>