

Lane Mine Primary Data



PRINTED: 11-09-2007

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: LANE

ALTERNATE NAMES:

YAVAPAI COUNTY MILS NUMBER: 839

LOCATION: TOWNSHIP 9 N RANGE 1 W SECTION 11 QUARTER SW
LATITUDE: N 34DEG 07MIN 51SEC LONGITUDE: W 112DEG 20MIN 02SEC
TOPO MAP NAME: CROWN KING - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
SILVER
GOLD

BIBLIOGRAPHY:
USGS CROWN KING QUAD
LINDGREN, W. ORE DEPTS JEROME & BRADSHAW MTS
QUADS USGS BULL 782 1926 P 178
ADMMR LANE FILE

L RESOURCES

na
grounds
DNA



RETURN TO WRITER
REASON FOR NON-DELIVERY & RETURN
Unclaimed
Deceased
Moved, Let no address
No such post office in state named

~~Mr. John Revello
Crown King,
Arizona~~

LANE MINE

YAVAPAI COUNTY

R. C. Hanford visited office re Lane Mine - he said going was rough and a lot of timber is required to hold a caved section encountered.

FTJ WR 7/4/69

JHJ Memo 1/12/81: Fred Lorette of Mayer has reportedly sold his Acquisition Claims. He also owns the Lane Mine. He has recently been cleaning out the tunnel and doing some assaying. Joe T. Stockdale, Box 614, Elfrieda, Arizona 85610, is interested in leasing the Lane Mine.

LANE MINE Sec. 11, T. 9 N., R. 1 W.

YAVAPAI COUNTY
SOUTHERN PART

Tues. Jan. 8, 1963 - Phil Hoyt of Phoenix, checking files on Lane mine. Says he has 3 men working up there.

E. G. WILLIAMS - Weekly Report - 1-11-63

Wed. Jan. 23, 1963 - Learned that Phil Hoyt had been packing supplies into Lane mine on mules.

E. G. Williams - Weekly Report - 1-25-63

The Lane silver mine in the Bradshaw Mountains of Yavapai County is being re-opened, and an exploration and development program has been started by Philip S. Hoyt & Son of Scottsdale, Arizona. A drift is being driven on the 400 level to explore the vein several hundreds of feet below the bottom of the old workings. Last reported operation was in 1888 when good grade silver ore was mined and packed by Burro train to Prescott, and then hauled in wagons to the Colorado River for shipment to Swansea, Wales. Increased zinc content in depth was reportedly the cause for the closure of the mine.

Taken from MINING WORLD, Feb. 1963, p 31

Phillip Hoyt called to report that his group may drive a 400-ft tunnel at the Lane Mine (near Crown King). He was seeking equipment for a small experimental mill.

LAS WR 2/26/65

Phillip Hoyt was in and stated that no progress can yet be reported as to the Lane Mine.

LAS WR 5/7/65

Lane Mine was optioned to Dysart and Lothmann of Albuquerque, N. M. for a short period.

LAS WR 6/18/65 *3 unreported items*

The Lane Mine had not started their exploration program but their road to the property has been finished. Exploration is expected to start soon.

FTJ 3rd Quarterly Report 4/1967

Phone call from R. C. Hanford - re Lane Mine which he is rehabilitating.
FTJ WR 9/22/67

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

August 20, 1958

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

<u>The Lane Mine (Yavapai County)</u>	<u>Lead, zinc</u>
(Property)	(ore)

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

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Robert C Hanford and Phil Hoyt
Address: Fort Misery (Crown King) Ariz
2. Mine: Lane Mine 3. No. of Claims - Patented _____
Unpatented _____
4. Location: _____
5. Sec 11 Tp 9 1/2 N Range 1 W 6. Mining District Silver Mt ?
7. Owner: Phillip Hoyt
8. Address: 3049 ~~A~~ Marigold Dr., Scottsdale
9. Operating Co.: R.C. Hanford
10. Address: Fort Misery (Crown King)
11. President: Same 12. Gen. Mgr.: R.C. Hanford
13. Principal Metals: Ag 14. No. Employed: 2
15. Mill, Type & Capacity: _____
16. Present Operations: (a) Down (b) Assessment work (c) Exploration
(d) Production (e) Rate _____ tpd.
17. New Work Planned: Clean out Caved section on 400' level
adit and drift on ore if it occurs to this level.
About 300' to go.
18. Miscl. Notes: _____
Application for O&E loan approved. Loan is
for 75% of estimated 30,000 to complete the work
including \$2500 for road work.

Date: Nov. 27, 1967

(Signature)

F. I. Johnson
(Field Engineer)

EXHIBIT "A"

Report by
Mark Bradshaw
1917

THE LANE MINE, ARIZONA

The LANE MINE is situated in the southern part of Yavapai County, Arizona, in the Bradshaw Mountains; it was originally located by James Lane in the early Eighties and soon after sold to the Tuscumbia Mining Company for \$15,000.

The mine, whose values are principally silver, has a production of between \$300,000 and \$400,000 gross.

It was worked continuously for a period of about 4 years when it closed down in 1886 and has not been worked since that time; the cause for it's closing down was due largely to the excessive cost of marketing it's ores: packing them to mills 25 miles distant at a cost of \$30 per ton, the high cost of milling with it's attendant milling losses, and the further cost of packing and hauling it's concentrates from mill to railroad.

The first concentrates were hauled to Yuma, about 200 miles distant: afterwards they were hauled to Prescott, over 30 miles distant. They were shipped to the Selby smelter at San Francisco.

The concentrates from the Lane were not wanted at that time by smelters because of the zinc content in the concentrate and it was with difficulty that they could be marketed at all; while the percentage of zinc did not exceed, as a rule 10%, an amount which is not penalized at this time. It was very undesirable to the smelters of 30 years ago.

FORMATION, VEIN SYSTEM, DEVELOPMENT

The formation in which the mine lies is a granite, both hanging and footwalls: a muscovite, biotite granite, muscovite predominating.

When located the mine was named THE THREE SISTERS MINE because of the three veins, parallel to each other within a distance of 60 feet, the two outside veins.

The distance between the extreme hanging wall vein and the vein in center is about 45 feet with granite between the two veins; the distance center vein and footwall vein is about 12 feet with no appreciable amount of granite between them, the filling consisting mainly of gangue material, more or less broken up and ground; this gangue material carries some iron sulfides, probably marcasite.

The course of the vein is North 50° East-South 60° west: the dip about 75° Westerly.

The main values occur as a sulfide: Galena (lead Sulfide) being the main mineral. Some Zinc Sulfide (Sphalerite) is contained in the ore, but not in sufficient quantity to be penalized in either the crude ore or the concentrate; however, its occurrence is in sufficient quantity to be separated from the lead in the milling process, making the Zinc a valuable asset of the milled ores.

Only one of the three veins was ever worked during the life of the mine, the other two veins were not even prospected for values below the surface; no crosscuts were ever run from the center vein (the vein worked) to either the hanging or the footwall veins. This is important in opening up this mine-the prospecting of the two virgin veins.

In the vein from which the ore was taken the values were very high in silver; the lower value which they were able to ship at a profit was ores going 200 ounces silver per ton or better. All ore which went under the 200 ounce mark was either left standing in the mine, or dumped back into stope as worthless fill material. With the exorbitant cost of marketing the product it may readily be seen why lower ore would not pay at that time.

The mine was first worked by shaft sinking, and afterwards worked from a drift tunnel which cut the orebody at a depth of 180 feet below the collar of the shaft. Very little ore was taken from beneath the level of this tunnel as water would run into the underhand stope which would take considerable time each shift to unwater before mining could be done. There were never any pumps on the property, and the shaft was sunk by windlass. The depth of the underhand stope, according to miners who worked in the mine, is not to exceed 20 feet.

The tunnel through which the ore was taken is now open a distance of 218 feet, or to the beginning of the ore enrichment; at 190 feet in one can observe stringers of silver-lead ore coming in and at 218 feet in, the lens is from 4 to 8 inches wide, farther than that distance the mine has been stoped and filled; the ore attaining a width of 4 feet in the next 100 feet, according to workmen. The value of this ore exceeded 200 ounces of silver per ton and was all shipped.

A sample was taken by the writer at the point where the stoping was started which went as follows:

Gold, \$3.40 per ton: Silver, 904.7 ounces.

This sample was taken from a 4 inch streak. Another sample taken 200 feet in tunnel, or 18 feet nearer tunnel adit than first sample went:

Gold, \$1.80: Silver, 234.4 ounces per ton; which of this sample taken, 6 inches. At the places these assays were taken it will be remembered that the ore shoot was just starting. Some ore could be recovered at this point, but as its amount would likely be limited, it would not be profitable work to open, to clean out, this tunnel at this time to secure the ore, as it may be done so readily from the lower tunnel which has been started and is proposed to continue to this orebody tapping it 204 feet below, vertically, the present tunnel from which the ore was taken.

The Company owning the mine, while taking out the body of ore from their main working tunnel to crest of hill, a vertical distance of 180 feet, prosecuted no development work as evidenced by their failure to crosscut to either of the two virgin veins, the extreme hanging and foot walls, mentioned above. After they came to the end of their blocked ore the Company discharged their main working force and gave a contract to drive a drift tunnel which would pierce the orebody 204 feet below their working tunnel. The distance which this tunnel has to be run, according to measurements taken by writer, in order to get directly beneath the ore body above, is 604 feet.

The contract let by the Company was for 400 feet, which was completed. No further contract was ever let by the Company, but the workmen who contracted and completed the 400 feet of tunnel secured a lease from the Company shortly after the complete shut-down.

This lease was secured by the main contractor who took in three partners; they began to drive tunnel on to orebody. After driving 25 or 30 feet farther an altercation arose between, or among, partners, with the result that the work stopped.

The main lessee strove to interest local men to finance the driving ahead of the tunnel, but being rather irresponsible because of his habits, he could get nobody to furnish the funds, so the mine was no longer worked and has lain idle ever since.

At present this tunnel may be done into a distance of 210 feet; at this point material from above has sluffed down closing the tunnel for inspection further. It is reasonable to believe, however, that the tunnel is not closed for the rest of the distance in to face, but after clearing this obstruction away, one will likely be able to go a distance in fairly good tunnel before encountering another place which may have fallen and closed tunnel.

The perfect way the hanging wall has stood in the tunnel for the 210 feet which may be seen in tunnel argues that the material thrown into stope above (from which the ore was extracted) may be readily recovered and shipped or milled if found by assay to contain sufficient value, after that point has been reached from lower tunnel.

The material which has sluffed from this hanging wall in the 210 feet would not fill a mine car, proving a hard, firm hanging wall in stope above. The footwall side of this tunnel is not so solid, as it is not the true footwall; and the gangue material, referred to above, has crumbled considerably. Most of the material which has come down in tunnel contains iron sulfide, which would lead one to believe that crosscutting should be done to the true footwall where there is every likelihood of any orebody, independent of the one sought in driving present tunnel ahead.

At a distance of 465 feet from the present orebody (to the east) another enrichment of the vein outcrops on surface. Shipping ore was taken from the vein at this point, but was never sought for at depth. Prospecting for this enrichment could be done while ore is being stopped from main orebody, whose existence has been proven to 180 feet depth. Cost of this work could be paid from ore shipments.

Further depth may be attained by driving a tunnel lower than the tunnel started and proposed to finish, as the steepness of the hill below would permit of another tunnel to be driven to advantage.

WATER

Sufficient water will be encountered in tunnel for all mining purposes, and for domestic purposes a spring about 2,500 feet distant will supply sufficient for this use.

MILL

Should the orebodies prove to be of sufficient size to justify the erection of a mill, an aerial tram would be built to Humbug Creek, which is below the mine, about 1-1/4 miles distant (to west of mine). Tramway would be gravity tram, as a descent of about 2,000 feet is made in this distance to Creek. The main County road could then be reached from Millsite by building about a mile of wagonroad.

TRANSPORTATION

The shipping point for all ore and concentrate from Lane mine would be Crown King, Arizona. For ore the route would be: from Crown King to a point about 2-1/2 miles distant from mine runs a reasonably good mountain wagonroad: this road may be extended one mile further closer to mine, at reasonable cost: from this point for about 1/2 mile roadbuilding would be expensive, because of the topography of the country, thence on to mine the road could be built at reasonable cost, thus connecting mine with railroad.

At present the method of getting materials in, and ores out, would be by packtrain. With the present road repaired and one mile additional built everything could be hauled for 9 miles by auto truck or team, thence by packtrain to mine, a distance of about 1-1/2 mile. The cost of transporting ores this way would not exceed six or seven dollars per ton.

TIMBER

All necessary timber may be had at a distance of about 2 miles from mine this must be purchased from the U.S. Govt. Government charge per running foot is nominal, 2-1/2 cents.

ESTIMATED COST

\$8,500 will be sufficient treasury fund to prove the existance of this orebody; this included the purchase of all materials needed, living quarters erected, tunnel driven ahead to tap orebody which shows on surface 465 feet east of the main orebody sought for. Also crosscutting to other veins mentioned above and their prospecting, is included in this estimate.

After material has been delivered on ground the time to do required work which does not include the prospecting of vein 465 feet east, would be 60 to 90 days.

TITLE

Title to BORINO LODE CLAIM, on which mine is situated, is vested in one John Revello, or Crown King, Arizona. Bond and Lease on said claim is held by one E.L. Riggs, of same place. Both, title and contract held by Riggs, are perfect.

Two adjoining claims, the SULU LODE and the TONOPAH LODE, are owned by E.L. Riggs. The title to these two claims is good. Acquired by relocation after failure for two years by former locator to perform work on ground.

RECOMMENDATION

The following facts have been established in the examination of the property:

The lower tunnel was never driven under the ore which was mined above:

The ore was persistent to the depth of 180 feet, with ore going down in bottom of tunnel operated by former owners:

The vein in lower tunnel shows a high state of mineralization in places, which tunnel will give 204 feet of stoping ground once the orebody has been reached in this tunnel:

These, coupled with the fact that the amount to be expended in completely developing and proving this ground, is so small in comparison with the amount to be returned from ore shipments, once the ore has been reached. I do not hesitate to recommend that this property be worked.

I would suggest that it be worked along the following lines:

To clear out the lower tunnel, timbering faulty places: to drive tunnel ahead a distance of at least 180 feet from its present face: to erect temporary living quarters: to expend no money for surface improvements, outside of those absolutely necessary until ore body has been proven up.

To crosscut and prospect the extreme hanging and footwalls.

Under competent management this work may all be done within the expenditure mentioned above (\$8,500) and in my opinion the work done you will have a producing mine.

Respectfully,

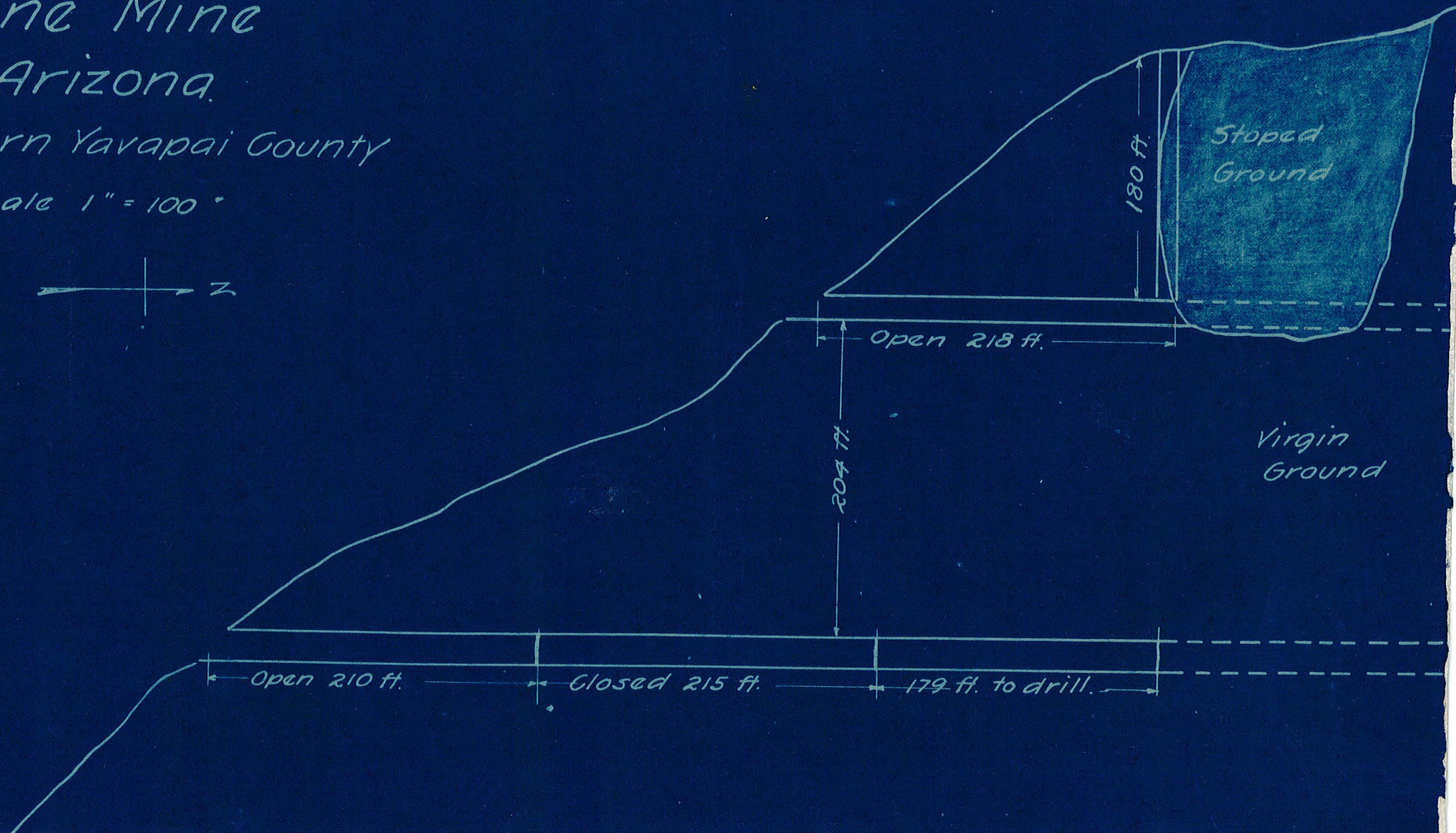
(Mark Eradshaw)

Date of Examination, February 17, 1917.

Lane Mine
Arizona.

Southern Yavapai County

Scale 1" = 100'



(<https://www.usgs.gov/>)

Mineral Resources (<https://www.usgs.gov/energy-and-minerals/mineral-resources-program>)
/ [Online Spatial Data \(/\)](#) / [Mineral Resource Data System \(MRDS\) \(/mrds/\)](#)

Lane Mine

Past Producer in Yavapai county in Arizona, United States with commodities Gold, Silver, Lead, Zinc

Map (<https://www.google.com/maps/place/34.13784,-112.32435/@34.13784,-112.32435,12z/data=!3m1!1e3>)

[XML \(/mrds/xml/10027870\)](#)

[JSON \(/mrds/json/10027870\)](#)

[KML \(/mrds/kml/10027870\)](#)

[B \(/mrds/grade-summary.php?dep_id=10027870\)](#)

Geologic information

Identification information	
Deposit ID	10027870 (/mrds/show-mrds.php?dep_id=10027870)
MRDS ID	M004286
Record type	Site
Current site name	Lane Mine
Related records	10161820 (/mrds/show-mrds.php?dep_id=10161820)

Geographic coordinates	
Geographic coordinates:	-112.32435, 34.13784 (WGS84)
Elevation	1707
Relative position	4.5 MILES S OF CROWN KING.

Political divisions (FIPS codes)

Yavapai (county)
Arizona (state)
United States (country)
North America (continent)
Land (continent)

USGS map quadrangles

Crown King (quadrangle 1:24,000 scale)
Bradshaw Mountains (quadrangle 1:100,000 scale)
Prescott (quadrangle 1:250,000 scale)

Hydrologic units (watersheds)

Agua Fria (hydrologic unit)
Lower Gila-Agua Fria (hydrologic accounting unit)
Lower Gila (hydrologic subregion)
Lower Colorado (hydrologic region)

Federal lands

Prescott National Forest (National Forest)
National Forest FS (Type of land area)
FS (Federal land areas administered by FS)

Geographic areas		
Country	State	County
United States	Arizona	Yavapai

Public Land Survey System information					
Meridian	Township	Range	Section	Fraction	State
Gila and Salt River	009N	001E	11,12		Arizona

Commodities	
Commodity	Importance
Gold	Primary
Silver	Primary
Lead	Tertiary
Zinc	Tertiary

Materials information

Materials	Type of material
Sphalerite	Ore
Quartz	Gangue

Alteration
(Local) Propylitic, Sericitic

Host and associated rocks	
Host or associated	Host
Rock type	Plutonic Rock > Granitoid > Quartz Monzonite
Chronological age	1720
Dating method	U-Pb (zircon)
Type of media	Zircon
Stratigraphic age (youngest)	Proterozoic
Host or associated	Host
Rock type	Volcanic Rock (Aphanitic) > Felsic Volcanic Rock > Rhyolite

Nearby scientific data	
(1) Early Proterozoic granitic rocks (/geology/state/sgmc-unit.php?x=-112.32435&y=34.13784)	List (/general/near-point.php?x=-112.32435&y=34.13784&d=0.01&format=html) Map (/mrds/map-graded.html?x=-112.32435&y=34.13784&z=14)

Geologic structures		
Type	Description	Terms
Regional	Proterozoic Rock Is Massive And Unfoliated	
Local	Dikes Of Rhyolite Trend N15e To N35e	

Ore body information

General form	LENS, MASSIVE
Strike	N50E
Dip	75NW
Thickness	1.22M

Controls for ore emplacement

Igneous Intrusions

Comments on the geologic information

LANE MOUNTAIN DISTRICT CONTAINS SMALL PORPHYRY-RELATED DEPOSITS SPATIALLY ASSOCIATED WITH RHYOLITE DIKE SWARMS.

Economic information

Economic information about the deposit and operations

Development status	Past Producer
Commodity type	Metallic
Deposit size	Small
Significant	No
Discovery year	1882
Discoverer	James Lane
Discovery method	Ore-Mineral In Place
Year of first production	1883

Mining district

District name Lane Mountain District

Land status

Ownership category National Forest

Ownership information

Type	Owner
Owner	R. C. Hanford, P. S. Hoyt
First year	1969

Workings at the site

Type of workings	Underground
Length	250.55M
Overall depth	117.04M
Overall length	184.1M

Reference information

Links to other databases

Agency	Database name	Acronym	Record ID	Notes
USGS	Mineral Resources Data System	MRDS	M004286	
U.S. Bureau of Mines	Minerals Availability System	MAS	0040251261	

Bibliographic references

Deposit

LINDGREN, 1926, USGS BULL 782, P. 178.

Deposit

ABGMT CLIPPINGS FILES.

Deposit

ABGMT-USBM FILE DATA.

Deposit

ARIZONA DEPT OF MINERAL RESOURCES FILE DATA.

Other Database

CIMRI

General comments

Subject category	Comment text
Deposit	THIS RECORD CONTAINS DATA FROM DUPLICATE RECORD D002385 OF J.W. HASLER WHICH HAS BEEN DELETED FROM MAIN MRDS. ; INFO.SRC : 1 PUB LIT; 2 UNPUB REPT
Deposit	Discovery Year: EARLY 1880'S

Reporter information				
Type	Date	Name	Affiliation	Comment
Reporter	01-APR-1972	Gere, W.	U.S. Geological Survey	
Updater	01-MAR-1979	Johnson, Kris H. (Creasey, S.C.)	U.S. Geological Survey	
Updater	01-JAN-1982	Roth, Frances A. (Dewitt, Ed)	Arizona Bureau of Geology and Mineral Technology	
Updater	01-DEC-1992	Orris, Greta J.	U.S. Geological Survey	

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White House (<https://www.whitehouse.gov/>) | E-gov (<https://www.whitehouse.gov/omb/management/egov/>) |

No Fear Act (<https://www.doi.gov/pmb/eeo/no-fear-act>) | FOIA (<https://www2.usgs.gov/foia>)

Four miles southeast of the Button mine, near Copper Basin, is the Lane mine, at an altitude of 5,500 feet. This mine is said to be on a silver-bearing vein with quartz and spar. Some high-grade ore was taken out near the surface. In the mint report for 1884 it is stated that there was a 4-stamp mill on the property and that 300 tons were crushed, yielding \$50,000 in silver and gold. The owner is John Revello, who also is said to have a claim on a gold vein near the Pacific mine from which some drusy quartz rich in native gold was extracted.