



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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PRINTED: 05/30/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: PITTSBURG

ALTERNATE NAMES:

MOHAWK
HOT SPOT CLAIMS

MOHAVE COUNTY MILS NUMBER: 294A

LOCATION: TOWNSHIP 14 N RANGE 19 W SECTION 27 QUARTER --
LATITUDE: N 34DEG 31MIN 09SEC LONGITUDE: W 114DEG 14MIN 03SEC
TOPO MAP NAME: CROSSMAN PEAK - 7.5 MIN

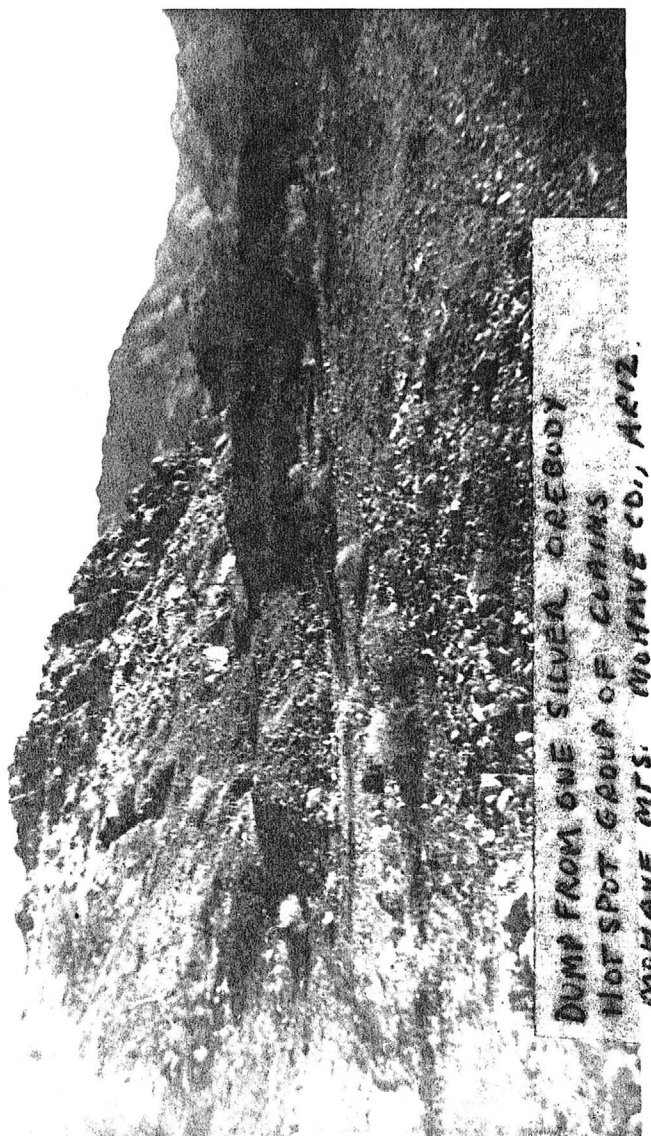
CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER
GOLD
LEAD

BIBLIOGRAPHY:

USGS CROSSMAN PEAK QUAD
USGS NEEDLES QUAD
ADMMR PITTSBURG FILE
ALSO IN SEC 34, N2
BLM AMC FILE 12216
WILSON, E.D. ET.AL., AZ. LODE GOLD MINES &
GOLD MINING 1967, P. 116



DUMP FROM ONE SILVER OREBODY
HOT SPOT GROUP OF CLAIMS
MOHAVE MTS. MOHAVE CO., ARIZ.

A-151-30

Name of Mine or Prospect: Pittsburg	Township 14N	Range 19W	Section 27	Priority C
Principal Minerals:	1:250,000 Quad Needles	7.5' - 15' Quad Crossman Peak		
Associated Minerals:	District Chemeheuevis	Principal Product		
Type of Operation: Underground: Shaft	County Mohave	State Ar.	Type of Deposit	
Ownership or Controlling Interest: Consult current USBLM mining claim records				
Access: From Lake Havasu City, Ar., proceed north on State Route 95 for 3 miles, turn right on light duty road 1.5 miles; then turn right on unimproved road and proceed for 5 miles. Turn right and travel 1 mile. Mine is shown on topographic quadrangle.				
Structural Control or Geological Association: "Older Precambrian Age; granite gneiss." ¹				
Age of Mineralization:				
Production History		Geochemical Analyses		
References				
1) Wilson & Moore (1959) Geologic map.				

HOT SPOT GROUP OF CLAIM

MOHAVE

Western Prospector & Miner, 1/75 - He has been working on a group of claims that contain what he describes as "large rich virgin silver orebodies on a fissure one mile long."

HOT SPOT GROUP OF CLAIMS

MOHAVE

Mike Korgich, Miami, Florida, hopes to develop orebody at Hot Spot mine near Lake Havasu City. He claims to have 2,000-3,000 tons of dump with 20 oz. Ag/ton and 2% lead. He promised further information. KAP WR
8/13/76

MM 14
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date June 22, 1939

Mine MOHAWK

District Mohave Mountains (So. West side)

Location About eight miles east of Havasu Lake on the Colorado River. Thirty-three miles SE of Topock.

Former name Pittsburg

Owner E. S. Gannon, John Arambel, H. Curtis

Address c/o Auto Club, 2601 S. Figueroa St., Los Angeles, California.

Operator

Address

President

Gen. Mgr. E. S. Gannon

Mine Supt. John Arambel

Mill Supt.

Principal Metals Gold & Silver

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present Not operating at present. In order to open up new ore shoot we have been running a crosscut in the 210' level. Expect to install a new compressor in October and finish the job.

Operations Planned We hope to sell the property when we open up the ore shoots in the 210' level, have been running two cross cuts about 360' apart. These cross cuts are, from all indications, within a few feet of the ore bodies. We have to put in a compressor in order to finish the job as the ground has become too hard to drill with a single jack.

Number Claims, Title, etc. Six. Held by right of location.

The Mohawk vein is a primary fissure cutting the range from NE to SW. Width of vein is from two to twelve feet.

Description: Topog. & Geog. The principal working is in the low foot hills of the range; one can reach all of the claims, with one exception, by automobile.

Mine Workings: Amt. & Condition The principal work has been done on the Mohawk claim where the discovery was made. Present workings are in a new shaft, depth 210' where drifts have been run for a distance of 340 feet. With one cross-cut 51' and one 55'.

(over)

Geology & Mineralization The country rocks are granite, metamorphosed granite and schist, cut by porphyry dikes.

Ore: Positive & Probable, Ore Dumps, Tailings On the dump and in a stope, about 220 tons low grade ore, average around \$15.00 a ton. Values mostly silver.

Mine, ~~Mill~~ Equipment & ~~Flow Sheet~~ Have a hoist and air pipe into the 210' level. No compressor at present.

Road Conditions, Route Road follows the State Highway from Topock east for a distance of eleven miles where it branches off to the Mohawk road, distance to mine twenty-two miles. It is a fairly good dirt road and is kept up by Mohave County.

Water Supply Comes from the Colorado River a distance of eight miles. When working a small force of two or three miners we get the water from Falls Springs, a distance of four miles. Water can probably be developed on the property later on when the property is further developed.

Brief History The property was discovered by Hutt & Hyde in 1933. Rich silver ore was found at the surface and a statement from Billy Hutt said - that they shipped out to smelters ore taken from the grassroots to a depth of 35' where they ran a level and stoped out the ore to and near the surface. The values averaged -silver 126 ounces; gold \$6.50 per ton. Returns were over \$16,000.00. They sold the property and the buyers informed me that they developed on down to a depth of 90' and that they received about \$18,000.00 for ore shipped to smelters. Since Special Problems, Reports Filed we have had the property we started a new plan of development and have received \$7,000.00 from shipments to smelters and mills.

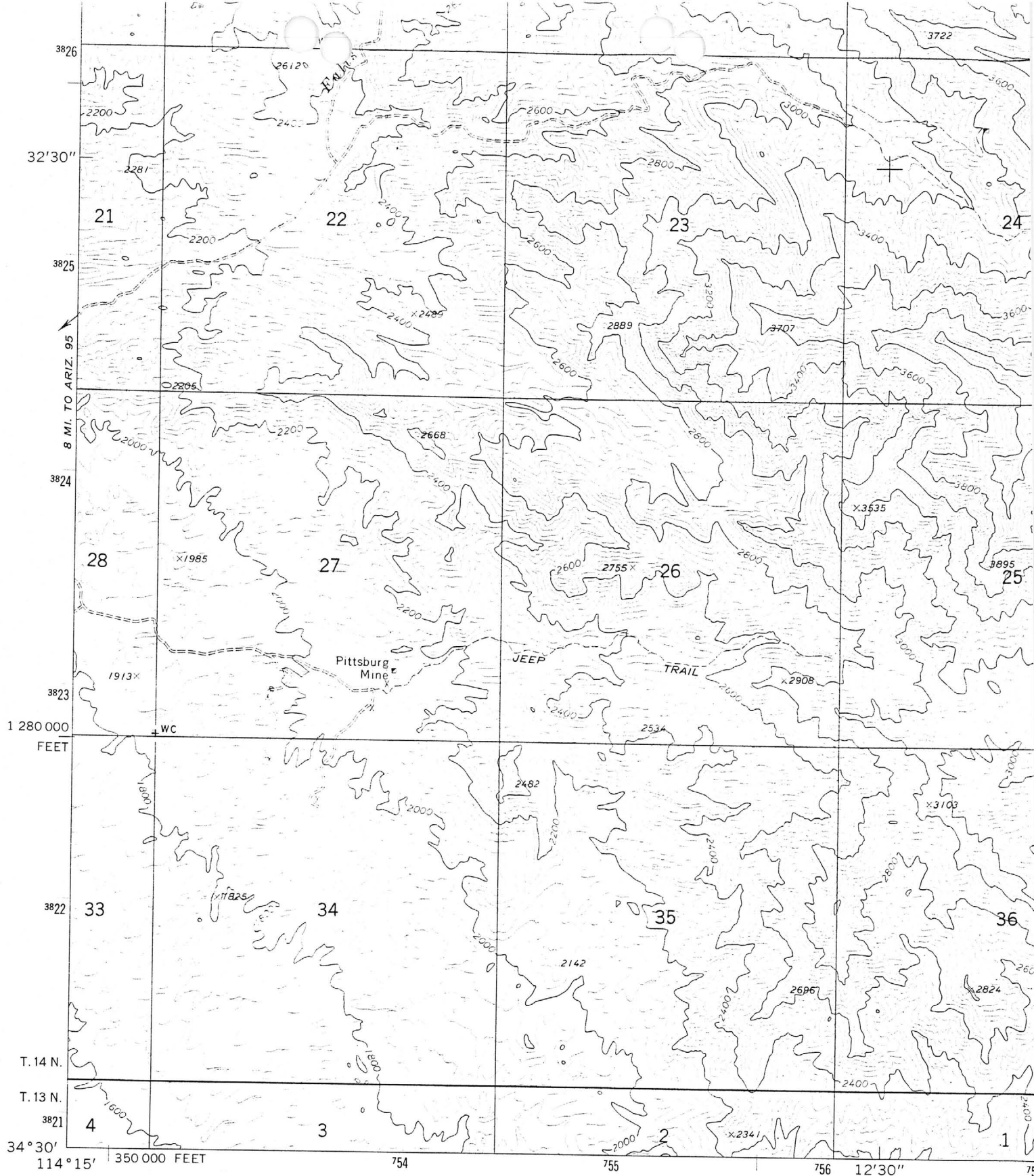
Remarks The property is what may be called a gold property, altho most of the values so far have been in silver. As depth is gained the values increase in gold. Four of the claims show the best values in gold at the surface.

If property for sale: Price, terms and address to negotiate. Will sell property on account of not being able to finance the necessary development.
Price on terms: \$25,000. Will be pleased to send parties interested a report showing that the possibilities for making a good mine are very favorable. We have built the first roads into the district and had to keep up the road for a distance of twelve miles for a number of years. The County has been doing work on the road for the last two years. The district has been almost isolated for a number of years.

Signed E. S. GANNON

Bus. Add: 2601 S. Figueroa St., Los Angeles, California.

Use additional sheets if necessary.



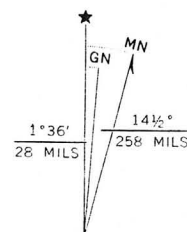
AVASU CITY SOUTH
3152 IV NE

Mapped, edited, and published by the Geological Survey

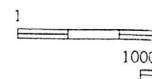
Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1969. Field checked 1970

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue



UTM GRID AND 1970 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



Lc Angeles, Cal.
July 19, 1939.

Dept. Of Mineral Resources,
Capitol Bldg. Phoenix, Arizona.

Dear sir;

Inclosed please find three reports on mining properties
in Mohave County, Arizona.

Very truly yours,

E S Gannon

2601 So. Figueroa St.

The mountains in which rich silver deposit is found consists of banded schist, diorite and an altered porphyry. This silver mine is located on a major fissure vein that trends northerly for about one-half mile. There is a working shaft about 75 feet deep. The deepest workings have a drift which follows the vein for about 75 feet north of the shaft and about 100 feet south of the shaft. The vein in these drifts is from 6 to 8 feet wide. There are many places near the surface where the vein shows a full face of rich ore. The vein is a hydrothermal deposit, deposited from a medium temperature magma anywhere from 4,000 to 12,000 feet below the surface. The vein from all indications was made up of the usual quartz-barite-sulphide formation. In this vein, the original silver and lead mineral was an argentiferous galena and tetrahedrite. From the drift to the surface, which is about 30 to 40 feet and perhaps from the permanent water table, the ore is all oxidized, full of cellular voids, where the sulphide mineral was partially leached out by surface waters and replaced by a stable yellow-colored Argentojarosite. In many places in the vein the ore is very heavy and full of Argentojarosite and partially decomposed silver-bearing sulphides. Lead is present to perhaps 3.2% or more. That the ore was a primary argentiferous galena and tetrahedrite can be seen in the vein where oxidation did not reach it. This will probably be the primary ore below the permanent water table and there may be an enriched zone above that. It is also possible that in the supergene zone at depth may be found native silver, argentite, or stromeyerite, and if any antimony or arsenic radicals reached this zone, pyargyrite, proussite, stephanite or polybasite may be found. It is very probable that in the primary zone below the water table will be found rich deposits of argentiferous galena/tetrahedrite. The water table may be found from ~~(UNDETERMINED)~~ feet below the surface of the outcropping. The vein matter consists of about 99% of oxidized ore and will run from 55 to 200 ounces per ton in silver. On the property is a deep shaft, about 300 or more feet deep, which has water in the bottom of it. Just to the north of the shaft the vein can be traced for a long distance as seen by the quartz outcrop on the surface. Where blasted, the surface vein to the north shows rich patches of primary ore which has escaped oxidation. The fissure continues south from the shaft into the south property. There is a shallow shaft, about 30 feet deep here, the vein on the surface being about 7 inches wide, but at the bottom of the shaft has widened out to 3 to 4 feet and will probably widen out to 8 feet as in the major workings. The surface outcrop here shows plentiful wulfenite as orange-colored crystals, copper stains and patches of argentiferous galena and tetrahedrite. Wulfenite, a lead molybdate is a common secondary product of galena veins that is found in the oxidized zone of lead and silver veins. This portion of the fissure vein also probably holds another huge body of rich Argentojarosite and sulphide ore. There is a dump which probably contains about ~~5,000~~ ⁴⁰⁰ tons of ore which contains the rejects from the high-grade ore which was shipped out in the early days. This dump, when crushed and screened, will show a large volume of sulphide and secondary silver and lead concentrates. When tested, these concentrates showed to be very rich in silver. This dump alone contains ~~MUCH~~ silver. This property was one of the early day silver bonanzas which by some rare fortune, most of the rich ore remains in it. There is no zinc in the ore and only stains of copper. The silver-bearing sulphides and secondary lead minerals may easily be recovered over a Wilfrey table, shaking table or flotation cells. The property is located in northern Arizona and has workable year round weather. There are 65 acres, including one millsite. The land has an intrinsic value, being situated near the Colorado River, within ten miles of Lake Havasu City, a popular boating, fishing, and resort town. We are selling the property for ~~(PRICE CAN BE~~ down as advanced royalties with the balance to be paid as follows ~~(NEGOTIATED)~~ per month or 10% of the net ore or concentrates shipped to the smelter or refinery, whichever may be greater. This is probably the richest silver property in Arizona and due to the high price of silver and the continual rising price of silver and the high demand for this metal, we predict this rich property will not remain long on the market. There is a good road to the mine. We will deal only with responsible principles who have the necessary financial resources to acquire this property.

Since Preliminary Report No. 1 has been written, much more new information has been disclosed. More work has been done on the property uncovering several hundred feet of the vein, the vein at the surface being about three feet wide and well mineralized with silver and lead. Another full-sized claim has been added to the original two, making a total of three claims (65 acres) in which we own almost a mile of the fissure vein in our three contiguous claims. From all indications this newly found vein, in the new claim, indicates a virgin ore body of very high-grade silver ore which will probably run into the thousands of tons of ore with values of silver of \$500.00 per ton, approximately. When the mine was first discovered, it was assumed that the yellow oxidized mineral in the ore was horn silver (cerargyrite), a chloride of silver, but upon investigation and examination by the Arizona Bureau of Mines, it was found to be Argentojarosite, a silver and iron sulphate, a silver mineral found only in several localities in the world. This yellow oxidized secondary silver mineral is found only in the oxidized secondary zones of silver deposits and occurs abundantly in our property, distributed throughout the oxidized zone. The primary ore that once filled this fissure vein, from the looks of ore we have recovered from the vein where oxidation has missed it, is in general a rich argentiferous galena admixed to a lesser extent with argentiferous tetrahedrite, a silver and copper mineral containing considerable silver. From all indications as evidenced by other similar hydrothermal silver ore deposits, it has been found that when the permanent water table is reached at depth, perhaps at several hundred feet from the surface, there will be a very rich supergene zone of rich massive silver ore, and below the water table the primary sulphide zone exist, composed most likely of rich argentiferous galena with lesser admixed argentiferous tetrahedrite.

Argentojarosite- $\text{Ag}_2\text{Fe}_6(\text{OH})_{12}(\text{SO}_4)_4$. Argentojarosite is a silver-iron sulphate. It occurs in minute micaceous scales, color yellow to brown, generally encrusted upon partially and decomposed argentiferous galena where the primary ore was originally a rich argentiferous galena. In many places the yellow Argentojarosite will be found in the ore widely distributed partially replacing the argentiferous galena or filling empty cellular voids that were originally occupied by galena. It is believed that the Argentojarosite was formed by the oxidation and interaction of the silver in the argentiferous galena with meteoric waters in the vicinity of volcanic rocks which radicals of sulphur, iron and potash served to act upon the silver sulphate solution from the decomposed galena to combine and form the rich secondary silver mineral Argentojarosite. Argentojarosite is similar in its physical properties to cerargyrite (horn silver) except that it is a sulphate with a small amount of iron in combination with it. Like cerargyrite (horn silver), Argentojarosite will dissolve in aqueous ammonia and the solution neutralized with nitric acid, throw down a milky white curdy precipitate which when exposed to sunlight turns to a dark violet color. Argentojarosite is a series of jarosite minerals which form combinations with sodium, ammonia, lead and silver. Jarosite which has been formed in the same manner as alunite (alumstone) is composed of sulphur trioxide, iron sesquioxide, potash and water. Both minerals are most commonly associated with acid volcanic rocks where the rock has been largely altered and either alunite or jarosite formed owing to the presence of sulphuric acid solutions or vapors. The conditions of formation usually indicate high pressures and temperature. Alunite and jarosite have been found in connection with sulphide ore bodies. If sulphuric acid solutions or vapors, high pressures and temperatures have been instrumental in the formation of this rich silver deposit, the indications of further rich ore bodies of silver can be expected at depth. This silver deposit and the one at the Tintic Standard Mine at Dividend, Utah, may have much in common, as at this rich silver mine in Utah, Argentojarosite has been common in the silver ores of this mine.

CONCLUSIONS- Tetrahedrite is the most common member of the sulpho-salt group. Commonly found in copper and silver veins as a primary ore, sometimes secondary in origin. There may be side fissures occurring on either side of the main fissure. This deposit is an episyngenic one (hydrothermal), in which the minerals were carried into open fissures, after the fissures were formed. The vein in the major working plunges down almost vertically, with perhaps 2 or 3 degree dip. The iron pyrite in the ore was readily changed by oxidation to an iron sulphate or to the hydrated oxide, limonite, with sulphuric acid free to act on the tetrahedrite/galena. Iron pyrite was a common gangue mineral in the oxidation zone. Wulfenite, found as yellow to orange-colored crystals, is of secondary origin being commonly found in silver-lead deposits. This lead molybdate was formed subsequent to the first oxidation reactions by the action of molybdenum-bearing waters upon cerrusite. Cerrusite is a common secondary lead mineral formed by the action of carbonated waters on galena. Both cerrusite and anglesite, which are both secondary lead minerals, are quite common in the oxidized ore. They are derived from the original argentiferous galena. No rare secondary lead or antimony minerals were observed. There is a dump of about 20,000 tons which may contain as much as 2,000,000 dollars of silver values as a low figure. This alone is a very valuable asset to this mine. Mention has been made of the heavy specific gravity of the ore. This is probably due to the fact that the ore contains barite, the precious metals, galena and secondary lead minerals. One cubic yard of this ore is about equal to two cubic yards of ore in usual mine ore. Evidence that an enriched supergene sulphide zone may be found is in the fact that there is a medium to a thick seam up to 3 inches thick of a sericitic or kaolinized gouge zone on the hanging wall, that is heavily impregnated with green copper carbonate. On testing this gouge material it reacted well for silver. Testing also showed that some compound or salt of lead was also present. This gouge seam on the hanging and foot walls, being soft and porous, may of served as a passageway for descending waters. These walls were thus impregnated with copper, silver, and antimony salts from the hydrothermal waters and from the leaching and oxidation of tetrahedrite/galena. These mineral impregnating surface descending waters would eventually find their way through the oxidized zone and finally encounter the primary ore at the water table and enrich that portion of the zone. That the fissure may extend further south than originally thought may be seen from a wide zone of soft porphyry material that is probably a capping over the area in which the fissure vein strikes. On either side of this soft porphyry zone is an unidentified unaltered country rock, in all probability being some sort of granite gneiss. It is presumed that this mass of soft porphyry was caused by the metamorphism of the rock, above or alongside of a hot ascending intrusive mineralized solution furthering the theory that rich silver ore shoots, such as the one that mined upon that produced rich silver ore both in quality and quantity will extend along the length and depth in this unusual rich and large silver anomaly.

This valuable silver property is located north of Parker, Arizona. A requisite we insist upon is that interested parties have a registered geologist or mining engineer as we have found by experience a layman generally cannot interpret the geology and mineralogy as a professional can. We also insist upon a copy of any engineering report made on this property as a condition of giving an option to purchase the property. There is a good road to the property. Water may be had by continuing an old deep shaft to the water table level. There is no electric power, nor is there any machinery or standing buildings. There are three contiguous claims with one millsite and two optional at owners' discretion. The claims cover the existing fissure vein and ore bodies for almost one mile.

In final conclusion, this fault fissure may run for miles across Mohave County, for the most part being obscured by alluvial fill overburden over the fault fissure. Because this fault fissure is in the vicinity of eruptive volcanic rock, it might be reasonably supposed that the valuable constituents of the vein were brought up from deep-seated hot magmas in the vicinity of these eruptive volcanic rocks.

FIELD REPORT No.4

The exposed rocks in the vicinity of the mine are eruptive volcanic and could be classified as an extrusive rhyolite porphyry. Through this fine-grained rhyolite porphyry an intrusive igneous rock (gneiss) was forced up through the surface from a deep-seated magma, through intense pressure and heat, creating a long series of fault fissure veins, movement of one wall past another, as evidenced by horizontal slickensides in the gouge zone, for a distance of almost one mile on our three contiguous claims. The igneous intrusive mass in general consists of in general, granite gneiss, schist or otherwise, which in the vicinity of the main workings has a width of over 100 feet or more. The oxidized vein material itself is a mixture of quartz and barite heavily mineralized by decomposed and partially decomposed argentiferous galena with lesser tetrahedrite, which vein matter is also heavily mineralized by the secondary silver-iron sulphate mineral argentojarosite, and some iron oxides, where evidently pyrite was a constituent of the ore. This oxidized ore runs very heavy in silver with subordinate amounts of lead, the lead in part being present as the carbonate cerussite and the sulphate as anglesite. In the empty cellular voids in the oxidized ore and on the decomposed galena, argentojarosite occurs abundantly, as yellow micaceous crusts. The vein in the main workings plunges almost vertically and is from 6 to 8 feet wide. The geological structure and mineralization of this property is almost identical to the famous Tintic Standard mine near Eureka, Utah, which production in just one year (1925) was over \$4,000,000. in silver alone, with silver then 65¢ an ounce. While no serious study has been made of the nature of other rocks in close proximity of the mine, it is believed that the extrusive rhyolite porphyry is underlain in the vicinity of the mine by Paleozoic sediments and flows. These may consist of limestones, dolomite, calcareous schists and quartzite. Due to the solubility of some of these rocks by carbonate and other waters, it is possible that large ore deposits may have been formed by replacement. In view of all physical evidence of the identical nature of the geology and mineralization of both mines, the potential of this mine should be further investigated as a possible producer of large amounts of silver, gold, lead and copper. The following are references where information on the Tintic Standard mine in Utah, can be found:

- I. Utah Geological And Mineral Survey, University Of Utah, Salt Lake City, Utah 84112.
2. Eng. Min. Jour. Press, August 8, 22, 1925.

Walter Busch
and
Richard DeKrause,
owners