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06/27/90

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: ALTUDA

ALTERNATE NAMES:

MARICOPA COUNTY MILS NUMBER: 298

LOCATION: TOWNSHIP 7 S RANGE 1 W SECTION 19 QUARTER SW
LATITUDE: N 32DEG 47MIN 50SEC LONGITUDE: W 112DEG 24MIN 25SEC
TOPO MAP NAME: ESTRELLA - 15 MIN

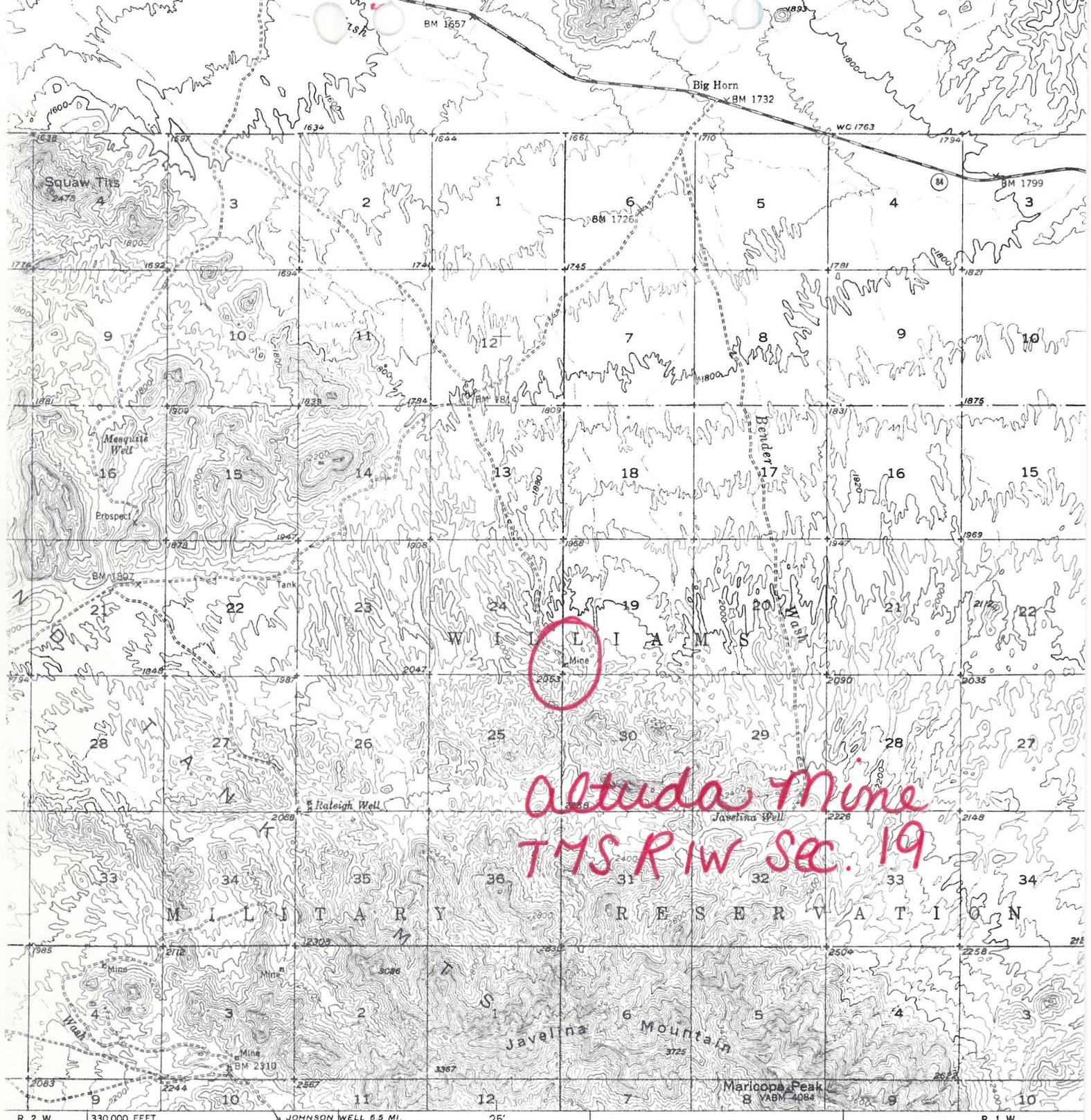
CURRENT STATUS: PAST PRODUCER

COMMODITY:

GOLD LODE
IRON HEMA-MAGNE
SILICON SILICA FLUX
SILVER

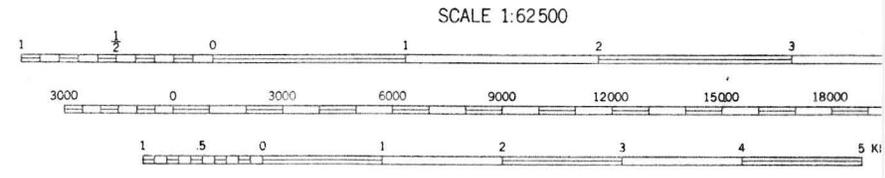
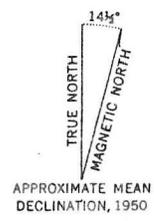
BIBLIOGRAPHY:

USGS ESTRELLA QUAD
MILLER G. ADMMR STATUS OF MIN RES INFO FOR
LUKE AIRFORCE RANGE P 86
USAEC FILE 172-484 PRELIM RECONN RPT P 409
ADMMR ALTUDA MINE FILE
ADDITIONAL WORKINGS: SEC 24, 25-T7S-R2W &
SEC 30-T7S-R1W



*Altuda Mine
TMS R1W Sec. 19*

shed by the Geological Survey
 s
 graphs by multiplex methods
 7. Field check 1950
 north American datum
 on coordinate system,
 wn in brown



Estrella 15'

CONTOUR INTERVAL 40 FEET
 DATUM IS MEAN SEA LEVEL
 THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY, FEDERAL CENTER, DENVER, COLORADO OR WASHINGTON
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ALTUDA MINE

REFERENCES

MARICOPA COUNTY
T7S R1W Sec. 19

Maricopa County MILS Index #298

Luke Airforce Range, p. 86

US AEC File 172 - 484; Prelim Reconn., rpt. p. 409

MILS Sequence number 0040130119

Krason, Jan, etal - Geology, Energy and Mineral Resources Assessment in the
Maricopa Area, 1982, p. 41

Estrella 15' topo (included in file)

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

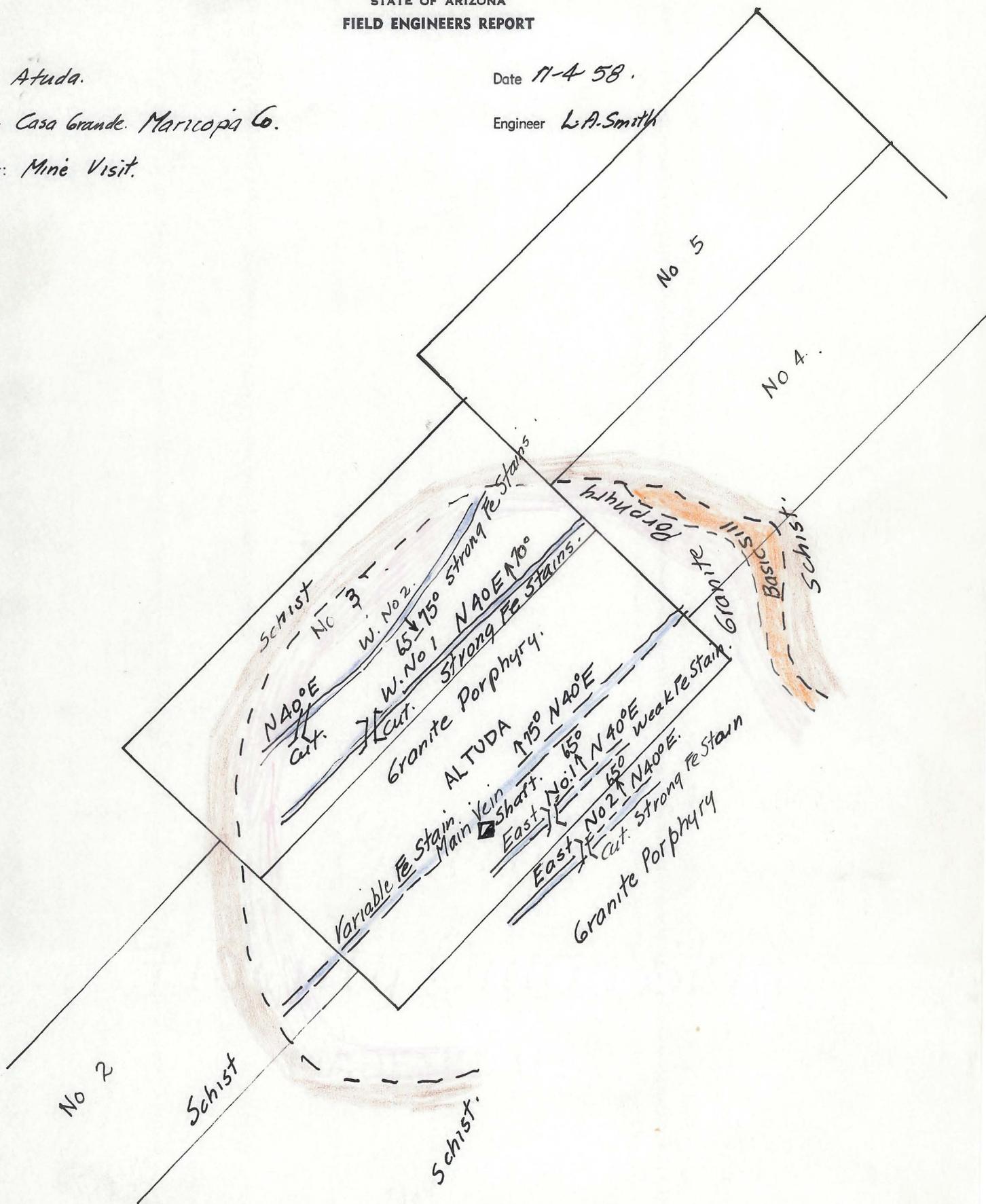
Mine *Atuda.*

Date *11-4 58.*

District *Casa Grande. Maricopa Co.*

Engineer *L.A. Smith*

Subject: *Mine Visit.*



Mr. Hamilton discussed what procedure could be taken relative to his Altuda Group near Gila Bend, which are declared invalid by the Army Engineers. The claims were laid out during 1950 and the withdrawal for the Gunnery Range was made during 1942. However, the withdrawal line in the Gila Bend area east of the Ajo highway was never posted and no notification was made in the papers or at the County Offices. Mr. Hamilton is writing to obtain a letter verifying the status to Jones. He then plans to submit his case to Goldwater. Whether he can obtain the desired compensation for all of, or part of the \$80,000 spent on the property, is problematic in view of the claims' invalidity.
LAS Conf. Report 5-5-59

Doyle Giles was notified of letter from David Jones, Army Engineer, that his group of claims, the Altuda Group, were null and void, since they were laid out after the withdrawal of the Gunnery Range. The claims were laid out in 1950 whereas the withdrawal was made in 1942. This means that joint tenure cannot be arranged. LAS Conf. Report
5-4-59

WR GW 9-6-77 - Mrs. Helen Moriarity, Secretary of U.S.B.M. in Phoenix called for information on the Altuda mine in T5S, R1W. It shipped several tons of siliva flux to the Ajo smelter in 1957, but hasn't been active lately due to being closed by the U. S. Army. 9-13-77 bh

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Altuda

Date November 4, 1958

District Casa Grande, Pinal County

Engineer Lewis A. Smith

Subject: Mine Visit (with Doyle Giles)
Supplementary ReportProperty: 5 claimsLocation: Sections 24, 25, T 7 S, R 2 W
" 19, 30 T 7 S, R 1 WOwners: Harry Hamilton et al (8 partners) Agent: Doyle Giles, Box 218, Gila BendWork: 1 - vertical shaft, 125 feet
Crosscuts and drifts on 65 plus & 100 plus foot levels

Geology: The area consists of pre-Cambrian schists intruded by a small domed granite-porphry stock. The granite apparently domed the schists after primary mineralization, since none of the veins could be traced into the altered schist. The schist contained considerable epidote along the contact. Between the granite and schist a basic sill has been intruded. The sill appears to be diabase or diorite.

The 5 veins are parallel and trend N 30-40° E and dip variably. The veins are quartz and granitic breccia cemented by quartz. The quartz is iron stained to a variable degree from pure white to a brown in color at the outcrops. The best gold values are mainly associated with the iron oxides indicating that pyrite was present. Some limonite indicates a limited amount of copper sulphides must have been present in the primary mineralization. The veins vary from 1½ feet to 4½ feet in width. They appear to follow shear fractures. A systematic sampling of the various outcrops would be advisable to determine whether sufficient gold is present to carry the material as silica flux.

The development work done except for the shaft on the main vein, is confined to a few shale cuts and was insufficient to evaluate the potential of the veins. Since the outcrops are intermittent in most case, it was not possible to determine the continuity of the veins definitely even though the strong fractures associated with them would infer considerable continuity. In places they may continue beneath the schist. Since most of the veins occupy shears, it would not be improbable that the ore shoots would tend to pinch and swell along the strike. However, in four of the five veins observed, the mineralized areas tend to widen in depth. This could mean that the veins, as seen, were not roots but could become more extensive with depth. This could best be proven by core drilling. In the shaft the vein consistency was evident.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Altuda

Date November 4, 1958

District Casa Grande, ~~Yuma~~ Maricopa County

Engineer Lewis A. Smith

Subject: Mine Visit (with Doyle Giles)
Supplementary Report

Property: 5 claims

Location: Sections 24, 25, T 7 S, R 2 W
" 19, 30 T 7 S, R 1 W ✓

Owners: Harry Hamilton et al (8 partners) Agent: Doyle Giles, Box 218, Gila Bend

Work: 1 - vertical shaft, 125 feet (150 originally)
Crosscuts and drifts on 65 plus & 100 plus foot levels

Geology: The area consists of pre-Cambrian schists intruded by a small domed granite-porphry stock. The granite apparently domed the schists after primary mineralization, since none of the veins could be traced into the altered schist. The schist contained considerable epidote along the contact. Between the granite and schist a basic sill has been intruded. The sill appears to be diabase or diorite.

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ALTUDA MINE

MARICOPA COUNTY

Altuda Mines, Inc. -

Mr. Lewis A. Smith reports composition of the Company -

Roy E. Wampler, President - Gila Bend, Arizona
Doyle C. Giles, 1st Vice President - Box 218, Gila Bend
John Hunt, 2nd Vice President - Gila Bend, Arizona
R. S. Gills, Secretary & Treasurer - Gila Bend
T. H. Farley, Director - Gila Bend
Carrol Reed, Director - Gila Bend
Santiago Cortez, Director - Gila Bend
Harry E. Hamilton, Director - Box 1743, Yuma, Arizona

1-10-58

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

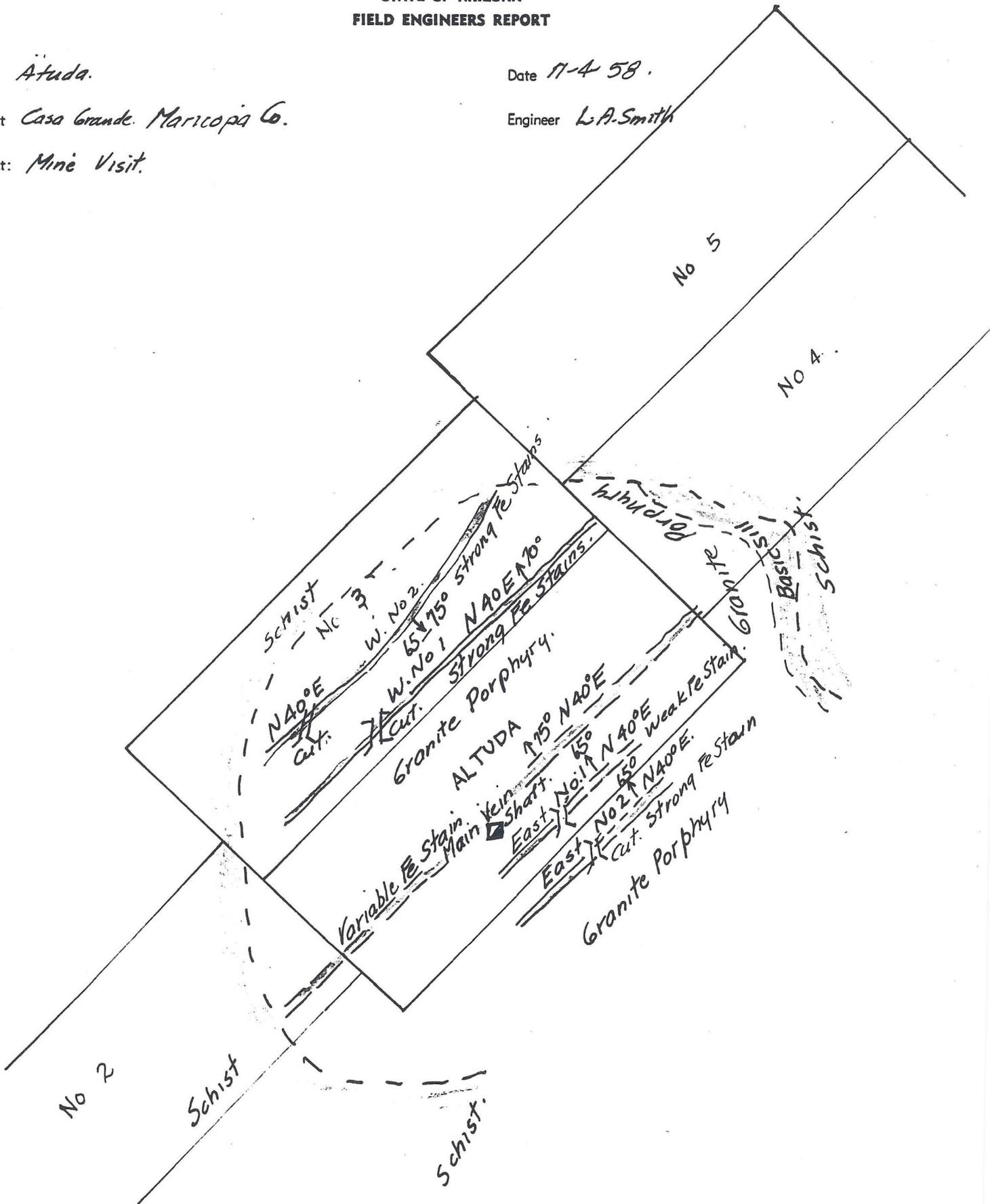
Mine *Atuda.*

Date *11-4-58.*

District *Casa Grande, Maricopa Co.*

Engineer *L.A. Smith*

Subject: *Mine Visit.*



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Altuda Mine

Date January 8, 1958

District Maricopa Co.

Engineer Lewis A. Smith

Subject: Report by Harry Hamilton

Location: 17 miles S. E. of Gila Bend

Owners: Harry Hamilton, Doyle Giles and Company

Agent: Doyle Giles, P. O. Box 218, Gila Bend, Arizona

Claims: 4

Material: Silica ore (87% + SiO₂, 4% Al₂O₃, 1% CaO, 0.6% Fe)

Geology: Quartz-vein, also carries 0.080 oz. gold, 0.165 oz. in silver, and 0.17% copper.

Charles Dunning reported that the vein was badly faulted by transverse fractures and that gold values were erratic. This checks with what Mr. Hamilton reported.

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date January 21, 1958

1. Mine: Altuda Mines, Inc.
24 & 25 7 South 2 West
2. Location: Sec. 19 & 30 Twp. 7 South Range 1 West Nearest Town Gila Bend, Ariz.
Distance 25 miles Direction South East Road Condition 17 miles paved, 8 miles graded
3. Mining District & County: Estrella Range of the Gila, Maricopa County
4. Former Name of Mine: None
5. Owner: _____
Address: _____
6. Operator: _____
Address: _____
7. Principal Minerals: Gold, Silver and Silica ore
8. Number of Claims: Four Lode Yes Placer _____
Patented No Unpatented Yes
9. Type of Surrounding Terrain: Foot Hills of Sand Tank Mountains

10. Geology & Mineralization: The area in which the Altuda Mine is located has been subjected to considerable volcanic action, followed by severe faulting. The country rock in which the fissure quartz veins lie is a granitic porphyry (complex), highly acid. It contacts a water white mica schist on claim #3. This schist on claim #3, extends West for a long distance. The line of contact runs approximately Northeast and Southwest with the schist on the Northwest side and the granitic porphyry on the Southeast side of the contact. At from 600 feet, to 1000 feet Southeast from the granitic porphyry --- mica schist contact, the mineral belt lies between Ajo, and Ray, mines.

11. Dimension & Value of Ore Body: Main vein runs from one to four feet in width, and at least three other veins run from one to two feet in width. The length of the veins have not been determined. The main vein strikes North-east, Southwest, and dips about 80 degrees to the Northwest.

The value of the ore body is undetermined, but has a Gold value of \$5.00, to \$200.00 per ton.

12. Ore "Blocked Out" or "In Sight" No ore blocked out, but the veins run several hundred feet in length.

Ore Probable: undetermined

13. Mine Workings—Amount and Condition: vertical shaft 125 ft., incline shaft 125 ft.

No.	Feet	Condition
vertical	125ft.	good
Shafts.incline	125ft.	fair
Raises		
Tunnels	none	
Crosscuts	two	65 & 100 ft. levels, connecting vertical and incline shafts.
Stopes	none	

14. Water Supply: at Big Horn station, 4 miles Northeast.

15. Brief History: This Mine was started in May, 1950, as Altuda Mines, Inc., and was worked for some time, making the vertical and incline shafts, and two cross cuts, to connect them.

As the corporation had insufficient funds to continue the development work, the property is available to be Leased to a responsible firm, to operate on a Royalty basis.

16. Signature: *Harry E. Hamilton* Sec'y-Treas.

17. If Property for Sale, List Approximate Price and Terms: For Lease, or would consider selling at a later date.

Harry E. Hamilton,
P.O. Box 1743,
Yuma, Arizona.

January 10, 1958.

Dept. of Mineral Resources,
Mineral Bldg.
Fairgrounds,
Phoenix, Arizona.

Attention: Lewis A. Smith, Field Engineer:

Dear Mr. Smith:

In regard to our conversation about the Altuda Mine, at Gila Bend, on January 9th., at the El Cortez Hotel, I am sending the analysis of our Silica Ore.

This analysis was made by Phelps Dodge Corp., at Ajo, Ariz., on February 23, 1951, of a car load of 72,964 lbs., shipped to them.

Smelter---	Gold	Silver	Copper	SiO ₂	Al ₂ O ₃	CaO	Fe
	.080	.165	.17	87.4	4.3	1.0	0.6

I want to thank you for the time and information you give me, and help you may give us, will be very much appreciated.

Awaiting your reply, when convenient, I am

Yours very truly,

Altuda Mines, Inc.

BY Harry E. Hamilton.
Harry E. Hamilton, Sec'y*Treas.

CHARLES H. DUNNING
MINING ENGINEER

1635 W. EARLL DRIVE
PHOENIX, ARIZONA

July 2nd, 1952

*File
Altuda
in Maricopa Co.*

Altuda Mines Inc.,
Box 365, Gila Bend, Ariz.

Att Mr. Harry Hamilton.

Gentlemen:-

At the request of your Mr. Hamilton I have made an examination of your mining property 17 miles east of Gila Bend with view to advising on further development.

Mr George Dotarford, mining engineer of Phoenix made a descriptive report on the property about two years ago and as there have been no changes except in development, descriptive details will not be repeated here.

The economic features of the mine consist of a series of mineralized fault fractures in a granitic porphyry. The important mineral is gold. Several of the fractures have a N 15 E strike but the main or largest vein has a N 65 E strike although it is bent or faulted to a N 15 E strike for a portion of its distance.

The quartz mineralization with attendant gold is spotty and irregular but occasionally contains bunches or pockets of exceedingly rich ore. The veins lack strength and continuity on the surface but there is a general tendency toward improvement with depth.

Development consists of a near-vertical (78) shaft in the footwall of the main vein, with crosscuts to the vein at the 80 foot level and at the bottom, 125ft. Each of these crosscuts is 36 feet long. The shaft is crotched and it would be difficult to repair it into a good working shaft. Some stoping was done at the ends of the above mentioned crosscuts. The crosscuts were connected together via the stope and the stope carried on to the surface at a 45 degree incline, thus forming a inclined shaft on the vein. It should be understood that this shaft is on an incline of 45 although it follows the vein which has a dip of 63, the shaft, so to speak, having both a dip and a rake.

The bottom of the vertical shaft is making a little water and it seems reasonably certain that another 100 feet in depth will encounter the sulphide zone, and it is quite likely that the veins will become stronger and steadier when such zone is reached.

It is my opinion that a limited amount of further development is justified although very speculative. In considering various possible plans for development such as deepening the 75 shaft, or driving a tunnel which would have to be followed by a winze, it is my opinion that deepening the 45 shaft is most feasible. The following advantages are apparent:

- (1) It would follow the ore and in small vein mines this is always the best policy.
- (2) It might encounter some high grade bunches or pockets which would help pay the cost.
- (3) It will approach an important intersection. This point of intersection cannot be determined because we do not know enough about the dip of the cross vein, but it is probably not over 100 feet on the 45 incline. We thus should obtain an intersection and the sulphide zone with a moderate amount of sinking in ore.

Therefore such a project is advised provided those financing it understand that there is considerable risk.

Respectfully Submitted,

MARICOPA COUNTY, ARIZONA

PROPERTY

The property consists of four (4) mining claims, namely, Altuda, Number one (#1), Number two (#2), and Number three (#3). The claims are legal size, fifteen hundred (1500) by six hundred (600) feet. A mill site will be located when it is thought necessary. The claims lie in a northeasterly southwesterly direction. The claims are not patented but have been monumented and registered according to law. Registration of the claims has not been checked. All assessment work has been completed.

LOCATION

The claims are located in Sections 24 and 25, Township 7S., Range 2W.; in Sections 19 and 30, Township 7S., Range 1W.; in the Estrella Range of the Gila Mining District; and in the southeast part of Maricopa County. A section corner is located about one hundred (100) feet north and one hundred (100) feet west of the southeast corner of the Altuda claim.

ACCESSIBILITY

The claims can be reached by traveling east on Highway eighty-four (84), from the Gila Texaco Service Station at Gila Bend, Arizona, sixteen (16.0) miles to a point where the Mesquite Springs dirt road joins the highway from the south. Travel south on this road one and six-tenths (1.6) miles to the junction of a road which turns left or east. Follow this road four and seven-tenths (4.7) miles to the Altuda Mine, a total of twenty-two and three-tenths (22.3) miles from Gila Bend. The entire dirt road is sandy and in good condition. Direct connection with the Southern Pacific Railway can be had at Gila Bend.

Physical Features

The claims of the Altuda Mines, Incorporated are located in the foothills of the Sandtanks mountain range, which lies about three (3) miles to the south. The foothills extend to the east and to the west. The surface is rough due to numerous small valleys and ridges lying in an approximate northeast southwest direction. The Estrella Range lies about four and one-half (4½) miles to the north, and between the foothills and this range the country is fairly level. The elevation at the mine is approximately twenty-two hundred (2200) feet above sea level.

TIMBER

There is no timber in the vicinity.

WATER

It is thought that sufficient water for milling and camp purposes can be obtained from a strong seepage area located in the foothills of the Sandtank Mountains about one (1) mile south of the mine. This would be accomplished by damming the present water flow, and if necessary, a large well can be sunk. It is presumed that the water can be piped by gravity to the mine.

CLIMATE

The weather during the winter months is ideal for outside work. During the summer months it gets very hot for outside work, but if proper judgment is used, all necessary work can be carried on.

EQUIPMENT

The equipment consists of a Carry-all and Fordson Tractor, equipped with a road blade, a bulldozer blade, and a scarifier; a twin cylinder Schram Compressor, driven by a twenty-two (22) horsepower Willis gasoline engine; one (1) three (3) ton Byron Jackson Crusher to one-quarter ($\frac{1}{4}$) inch, driven by a four (4) horsepower Fairbanks Morse engine; one (1) two (2) ton Gibson Mill driven by a three and one-half ($3\frac{1}{2}$) horsepower Onan gasoline engine; two (2) jack hammers; one hundred (100) feet of (1) inch air line; shovels, picks, single and double hand jack hammers, and a complete blacksmith shop outfit.

HISTORY OF NEIGHBORING MINES

There are no neighboring mines from which one can obtain information as to water level and other pertinent information on mining and geological conditions.

GEOLOGY

The area in which the Altuda Mine is located has been subjected to considerable volcanic action, followed by severe faulting.

The country rock in which the fissure quartz veins lie is a granitic porphyry (complex), highly acid. It contacts a water white mica schist on claim Number three (#3). This schist extends west for a long distance. The line of contact runs approximately northeast and southwest with the schist on the northwest side and the granitic porphyry on the southeast side of the contact. At from six hundred (600) feet to a thousand (1000) feet southeast from the granitic porphyry--mica schist contact, the granitic porphyry or mineral belt lies as closely as can be determined on a line connecting Ajo and the Ray Copper Mine.

It was reported to me by Mr. R. S. Gills' partner, Mr. Farley, that the main vein on the Altuda claim can be traced to the southwest and about fourteen (14) miles and to the northeast about seven (7) miles.

VEIN SYSTEM AND DESCRIPTION OF THE DEPOSIT AND OF THE ORE

The main vein on which the shaft is being sunk is about four (4) feet wide and is located in the approximate center of the Altuda claim. Metallic gold occurs in the quartz. About one-half ($\frac{1}{2}$) next to the hanging wall is a mixture of white quartz, banded iron oxide stained, and white quartz. This vein strikes northeast southwest and dips about eighty (80) degrees to the northwest.

About forty (40) feet southwest of the shaft on the top of the hill another vein, number two, has been opened. This vein has the same kind of quartz as the main vein but is only sixteen (16) inches wide. The strike and dip are the same as in the main vein.

A pit near the center of the northwest side line of the Altuda exposed vein number three. This vein is about four (4) feet wide. The strike of this vein is a curve. The vein curves from about the center of the southwest part of the Altuda claim to the pit and then back to the center of the northeast part of the claim. The dip of the vein at the pit is about seventy-five (75) degrees to the southeast. This vein may be the northwest arm of a syncline extension of the main vein, or it is possible that with all dips pointing to the center of the curve that a basin approximately three hundred and fifty (350) feet wide by eight hundred (800) feet long has been formed. If either deduction is right, it might be assumed that high grade values could be found in the bottom of the syncline or basin, whichever it might be.

ANALYSIS OF SAMPLES TAKEN ARE AS FOLLOWS:

Sample	Oz. Silver	Value	Oz. Gold	Value	Total
white quartz from shaft	.40	\$.36	1.6	\$ 56.00	\$ 56.36
shaft			2.7	\$ 94.50	\$ 94.50
shaft	.7	\$.63	.94	\$ 32.90	\$ 33.53
granitic porphyry from footwall of shaft			.07	\$ 2.45	\$ 2.45
selected high grade from shaft			12.46	\$435.10	\$435.10
number two vein at top of hill			.50	\$ 17.50	\$ 17.50
granitic porphyry from surface			.01	\$.35	\$.35
Vein number three on the northwest side line of Altuda claim	1.7	\$1.53	.51	\$ 17.85	\$ 19.38

POSSIBLE ORE RESERVES

No figures on ore reserves can be attempted at this stage of exploration. However, judging from the width and continuation of the various veins, a large tonnage of ore should be developed.

MINE WORKINGS

THE mine workings consist of a large open cut about twenty (20) feet deep which has followed the vein from the surface. The cut has now been enlarged by cutting back into the foot wall in order to get room to start the incline shaft. There are three (3) pits and two (2) open cuts on the various veins.

General

When the smelter at Ajo is completed, the management of the Altuda Mines, Incorporated have been informed that the smelter will pay seven dollars (\$7.00) per ton for a highly silicious ore carrying a minimum of five dollars (\$5.00) per ton in gold. The distance from the mine to the smelter is about sixty-five (65) miles. A trucking contractor has offered to truck the ore for two dollars and fifty cents (\$2.50) per ton.

Labor is plentiful, and materials are easily obtained.

CONCLUSION

This property as a speculative prospect is thought very favorable and judged to have considerable merit, which should warrant the expenditure of sufficient capital to insure the sinking of a shaft to an incline depth up to three hundred (300) feet, if conditions warrant.

After the shaft is sunk and conditions noted, including values, width of vein, etc., a program of development work can be planned.

RECOMMENDATION

It is recommended that a two compartment shaft be sunk: one compartment for unbalanced hoisting and the other for a pipe and ladderway. The size and manner of sinking the shaft, whether by contract or as a mine operation, is left to the management to decide.

The size and type of mill to be built will be determined later by the kind of ore exposed by the shaft.

The small horseshoe shaped valley lying between the shaft and the northwest sideline of the Altuda claim should be examined for placer gold.

Respectfully submitted,

George B. Botsford
Consulting Mining Engineer and Geologist

93 West Windsor Avenue
Phoenix, Arizona

May 15, 1950

Telephone: 5-0655

Description of property, (see map attached) for mining claims, mining machinery, gallas frame and skip, and track and head, 2 hoists with 610 ft. cable, 2 ore cars, 400 ft. track and ore bin, air compressor engine, light plant, tool grinder, two blowers, one Ford tractor with bulldozer, blade and scraper blade, and carisall, and scarfier blade, 48 Ford 3/4 ton pickup truck, one 50 ton rock crusher, one set 50 ton rolls line, shaft and pulleys, drill steel and bits, 2 jack hammers, one drift hammer, air hose, air piping and other small equipment.

Work and development of Altuda Mines to date 6/23/51

Shaft 8X8' Down 150' on 100' Level 30' cross cut 5X7' Drift on main ledge 100ft. 5X7' on ore A. 45% incline shaft on main ledge 5X7' 145' deep
An open cut 12X16X60 Ft. on No. 2 vein 500 tons ore blocked out and ready to be pulled out for milling. Ore to be treated at mine by Cyanide process.
50 tons of ore in bins ready to be processed.

From PROSPECTUS

THE ALTUDA MINES, INC.- INCORPORATED IN ARIZONA
MAY 16, 1950

EQUIPMENT

The equipment consists of a Carry-all and Fordson Tractor, equipped with a road blade, a bulldozer blade, and a scarifier; a twin cylinder Schram Compressor, driven by a twenty-two (22) horsepower Willis gasoline engine; one (1) three (3) ton Byron Jackson Crusher to one-quarter ($\frac{1}{4}$) inch, driven by a four (4) horsepower Fairbanks Morse engine; one (1) two (2) ton Gibson Mill driven by a three and one-half ($3\frac{1}{2}$) horsepower Onan gasoline engine; two (2) jack hammers; one hundred (100) feet of (1) inch air line; shovels, picks, single and double hand jack hammers, and a complete blacksmith shop outfit.

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The country rock in which the fissure quartz veins lie is a granitic porphyry (complex), highly acid. It contacts a water white mica schist on claim Number three (#3). This schist extends west for a long distance. The line of contact runs approximately northeast and southwest with the schist on the northwest side and the granitic porphyry on the southeast side of the contact. At from six hundred (600) feet to a thousand (1000) feet southeast from the granitic porphyry--mica schist contact, the granitic porphyry or mineral belt lies as closely as can be determined on a line connecting Ajo and the Ray Copper Mine.

It was reported to me by Mr. R. S. Gills' partner, Mr. Farley, that the main vein on the Altuda claim can be traced to the southwest and about fourteen (14) miles and to the northeast about seven (7) miles.

VEIN SYSTEM AND DESCRIPTION OF THE DEPOSIT AND OF THE ORE

The main vein on which the shaft is being sunk is about four (4) feet wide and is located in the approximate center of the Altuda claim. Metallic gold occurs in the quartz. About one-half ($\frac{1}{2}$) next to the hanging wall is a mixture of white quartz, banded iron oxide stained, and white quartz. This vein strikes northeast southwest and dips about eighty (80) degrees to the northwest.

About forty (40) feet southwest of the shaft on the top of the hill another vein, number two, has been opened. This vein has the same kind of quartz as the main vein but is only sixteen (16) inches wide. The strike and dip are the same as in the main vein.

A pit near the center of the northwest side line of the Altuda exposed vein number three. This vein is about four (4) feet wide. The strike of this vein is a curve. The vein curves from about the center of the southwest part of the Altuda claim to the pit and then back to the center of the northeast part of the claim. The dip of the vein at the pit is about seventy-five (75) degrees to the southeast. This vein may be the northwest arm of a syncline extension of the main vein, or it is possible that with all dips pointing to the center of the curve that a basin approximately three hundred and fifty (350) feet wide by eight hundred (800) feet long has been formed. If either deduction is right, it might be assumed that high grade values could be found in the bottom of the syncline or basin, which ever it might be.

ANALYSIS OF SAMPLES TAKEN ARE AS FOLLOWS:

Sample	Oz. Silver	Value	Oz. Gold	Value	Tot.
white quartz from shaft	.40	\$.36	1.6	\$ 56.00	\$ 56.36
shaft			2.7	\$ 94.50	\$ 94.50
shaft	.7	\$.63	.94	\$ 32.90	\$ 33.53
granitic porphyry from footwall of shaft			.07	\$ 2.45	\$ 2.45
selected high grade from shaft			12.46	\$435.10	\$435.10
number two vein at top of hill			.50	\$ 17.50	\$ 17.50
granitic porphyry from surface			.01	\$.35	\$.35
Vein number three on the northwest side. line of Altuda claim	1.7	\$1.53	.51	\$ 17.85	\$ 19.38

POSSIBLE ORE RESERVES

No figures on ore reserves can be attempted at this stage of exploration. However, judging from the width and continuation of the various veins, a large tonnage of ore should be developed.

MINE WORKINGS

THE mine workings consist of a large open cut about twenty (20) feet deep which has followed the vein from the surface. The cut has now been enlarged by cutting back into the foot wall in order to get room to start the incline shaft. There are three (3) pits and two (2) open cuts on the various veins.

General

When the smelter at Ajo is completed, the management of the Altuda Mines, Incorporated have been informed that the smelter will pay seven dollars (\$7.00) per ton for a highly silicious ore carrying a minimum of five dollars (\$5.00) per ton in gold. The distance from the mine to the smelter is about sixty-five (65) miles. A trucking contractor has offered to truck the ore for two dollars and fifty cents (\$2.50) per ton.

Labor is plentiful, and materials are easily obtained.

CONCLUSION

This property as a speculative prospect is thought very favorable and judged to have considerable merit, which should warrant the expenditure of sufficient capital to insure the sinking of a shaft to an incline depth up to three hundred (300) feet, if conditions warrant.

After the shaft is sunk and conditions noted, including values, width of vein, etc., a program of development work can be planned.

RECOMMENDATION

It is recommended that a two compartment shaft be sunk: one compartment for unbalanced hoisting and the other for a pipe and ladderway. The size and manner of sinking the shaft, whether by contract or as a mine operation, is left to the management to decide.

The size and type of mill to be built will be determined later by the kind of ore exposed by the shaft.

The small horseshoe shaped valley lying between the shaft and the northwest sideline of the Altuda claim should be examined for placer gold.

Respectfully submitted,

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May 15, 1950

Telephone: 5-0655

Description of property, (see map attached) for mining claims, mining machinery, gallas frame and skip, and track and head, 2 hoists with 610 ft. cable, 2 ore cars, 400 ft. track and ore bin, air compressor engine, light plant, tool grinder, two blowers, one Ford tractor with bulldozer, blade and scraper blade, and carrieall, and scarfier blade, 48 Ford 3/4 ton pickup truck, one 50 ton rock crusher, one set 50 ton rolls line, shaft and pulleys, drill steel and bits, 2 jack hammers, one drift hammer, air hose, air piping and other small equipment.

Work and development of Altuda Mines to date 6/23/51

Shaft 8X8' Down 150' on 100' Level 30' cross cut 5X7' Drift on main ledge 100ft. 5X7' on ore A. 45% incline shaft on main ledge 5X7' 145' deep
An open cut 12X16X60 Ft. on No. 2 vein 500 tons ore blocked out and ready to be pulled out for milling. Ore to be treated at mine by Cyanide process.
50 tons of ore in bins ready to be processed.

From PROSPECTUS

✓ THE ALTUDA MINES, INC.- INCORPORATED IN ARIZONA
MAY 16, 1950