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03/05/90

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: VIZINA MINE

ALTERNATE NAMES:

COCHISE COUNTY MILS NUMBER: 215

LOCATION: TOWNSHIP 20 S RANGE 22 E SECTION 11 QUARTER SE
LATITUDE: N 31DEG 42MIN 50SEC LONGITUDE: W 110DEG 04MIN 05SEC
TOPO MAP NAME: TOMBSTONE - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER
LEAD
GOLD LODE

BIBLIOGRAPHY:

KEITH, S.B., 1973, AZBM BULL. 187, P. 80
ADMMR VIZINA MINE FILE

ABM BULL # 143 pp 43,45,103. 100 89 90 91 - VIBINA

See: A Brief History and Review of Ore Grades and Production in the Tombstone Mining District with Emphasis on the Contention Mine Area. By Mike Greeley (DMR publication)

TOMBSTONE, ARIZONA, THURSDAY, MARCH 19, 1970

FIELD NOTES.

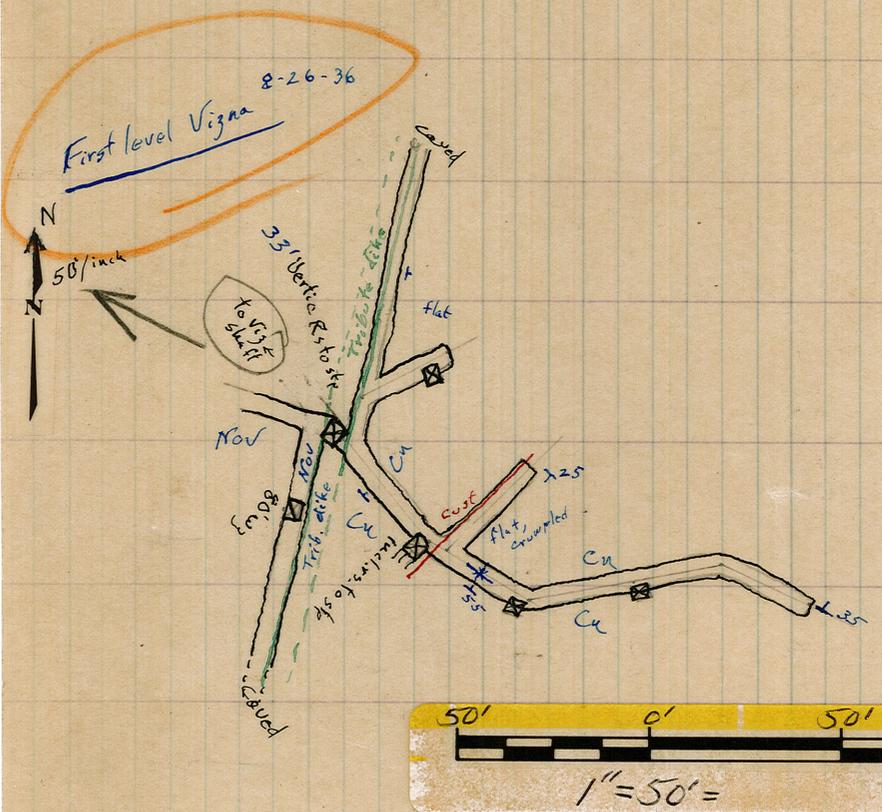
No.

Shaft 

Level

Surface

Latitude	Departure	Totals	Elev.	REMARKS
+	-	Lat.	Dept.	



DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Frankovich Exploration Date Nov. 14, 1962
Vizina Shaft *see 26 T. 20 S. R. 14 E*
District Tombstone District, Cochise Co. Engineer Axel L. Johnson
Subject: Field Engineers Report. Information from Wayne Fitzgerald & Personal visit.

References Report of May 11, 1962 and previous reports.

Present Activity Mine closed down.

Review Engineer visited property and found the shaft concreted over. Was informed that exploration activities were suspended in September, and that there did not appear any indications that they would be resumed in the near future. Frank Frankovich is reported to have left for California, and H. C. Smith is reported to have gone back to his home in Globe.

Additional The Frank Frankovich Exploration Co. still operates Mine Tours through the Good Enough Mine and the Million Dollar Stope. See report on Good Enough Mine.

Brown-Hale & Associates (oil-gas mining), L. Frank Hale, General Manager, 736 Monroe, N. E., Albuquerque, N. Mexico, bought out Frankovich Company. Not Active yet. Just completed negotiations. (info from Dr. W. C. Lacey 3/19/64).

ALJ MEMO TO MR. Frank P. Knight 3/20/64

Comp. document regarding
See "New Projects"

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Frankovich Exploration
Vizina Shaft

Date May 11, 1962

District Tombstone District, Cochise Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from H.C. Smith & Frank Frankovich.

References: Report of June 17, 1960 and previous.

Lessee: Frank J. Frankovich, 3351 N. 6th Ave., Phoenix, Ariz. (at present staying at the Rose Tree Inn, Tombstone). 1015 E. Allen St., Tombstone (10-62)

Contractor: H.C. Smith, Box 571, Tombstone, Ariz. (Home address - Globe, Ariz.)

Present Activity: Underground exploration work on contract. 3 men working.

Review of Recent Operations: Mr. Smith started the work at the Vizina shaft about 2 months ago. Since then the following work has been done:

- Built headframe.
- Installed hoist and air compressor.
- Built shaft collar and repaired shaft to 100 ft. level.
- Repaired drift on 100 ft. level.
- Drove about 25 ft. of drift on 100 ft. level.

Proposed Plans: Mr. Frankovich stated that he would like to clear up a few controversial items in regard to his lease before making his future plans public.

See: MINING WORLD July, 1962, p 41

Active 10-1962 - 3 men working.

Visited Vizina Shaft at Tombstone (closed down).
Axel L. Johnson - WR - 11-17-62



STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA



CONFIDENTIAL

March 22, 1962

To: Frank P. Knight, Director
From: Axel L. Johnson, Field Engineer
Reg: Frankovich proposed exploration work.

At the Tombstone conference on March 15, Mrs. Betty Pappas, City Clerk of Tombstone informed me as follows:

- (1) Frank Frankovich, on Feb. 16, wrote a letter to Tombstone officials, asking for approval from their zoning commission to conduct exploration and mining activities on Lots 1 & 2, Block 5, City of Tombstone.
- (2) On Feb. 27, this approval was granted.
- (3) Letter of Feb. 16 also stated that H.C. Smith, Box 347, Globe, Ariz. will do the exploration and development work on contract.
- (4) I was also informed that Mr. Frankovich was in Tombstone on March 1st and stated at that time that he had to go back to San Francisco for medical attention.
- (5) Mr. Smith has not arrived in Tombstone yet to start the exploration work.

Grand Junction

July 12, 1960

Thomas Bardon

Tombstone Silver Prospect

T. W. Newell

I am enclosing a memorandum on the Frank J. Frankovich submittal in Tombstone. Because of the work starting the MRE our examination was delayed.

Carl looked the area over last week and visited with several people who are well acquainted and qualified to discuss the more recent work in the Tombstone area. As you know, we have known of the area for many years and thought it to be mined out. Since there is always a chance that an ore extension might have been found we were compelled to revisit and determine from the latest information if a company size operation were possible.

It does not appear favorable that the Vizina and Mountain Maid claims will develop into a mining property of significance.


T. W. Newell

TWN:dl

cc: Dan M. Kentro
Prescott, Ariz.

Grand Junction

July 12, 1960

T. W. Newell

Tombstone Silver Prospect

C. W. Appelin

Mr. Frank J. Frankovich submitted the Vizina and Mountain Maid mining claims of the Tombstone Development Company holding to Shattuck Denn through Mr. Dan M. Kentro. Machine copies of the data are included with this memo for background detail.

I examined the property on July 9 and 10 and discussed the area with Mr. Jim Giacoma on the claim site. Because there is little to see on the ground I visited with several people that are familiar with Tombstone geology and the work done by Phelps Dodge Corporation, Eagle Pitcher Company, Anaconda Company and others that have mapped, drilled and worked out detailed geology on the area. It was unfortunate that Mr. Frankovich could not be in Tombstone as he was confined to a hospital due to a serious eye operation.

Mr. Giacoma explained the general trend picture of the "saddle reefs" or "rolls" from which the silver ores of the Tombstone district have been mined. The bulk of the district production has been mined from the crests of a series of anticlines. These crests have been referred to in literature on the Tombstone district as "saddle reefs".

It has been noted by many observers that because of the general anticlinal plunge, the mineralization necessarily must be shallow in the Vizina claim area. Mr. Giacoma stated that the ore has been, in his experience, shallow in this vicinity probably from a few feet to possibly sixty feet. This is fairly well borne out with the workings in the so-called "Million Dollar Stope" which was abruptly cut off by the Tribute Dike. Since that mining, no one has been successful in finding a significant extension of the ore further in the Vizina claim.

T. W. Newell
July 12, 1960
Page 2

Mr. Frankovich has made a detailed study of the fault relationships and the structure and feels there is evidence that the dike-fault combination was post ore. He thinks that the fault movement was down and the ore extension should be encountered in that area in reasonable depth. There is no way to visually determine that he is correct. Further, he has worked out some fairly convincing block diagram relationships which can only be proven by diamond drilling and underground work.

No doubt the geologists and engineers of the major mining companies looked into the fault block structure picture of the entire district as ore is specifically related to structure when their detailed mapping studies were made. Similarly, many independent operators and the smaller firms spent their time and money looking for the clues that might have indicated extensions of the ore trends in the vicinity. Thus, all the extensions possibilities have been thoroughly studied for many years. It is hard to conceive that a significant ore occurrence has now been pinpointed to the extent that \$20,000 worth of work will develop a significant ore body. Mr. Frankovich and Mr. Slick have invested \$64,000 thus far trying to prove his theory and have been unsuccessful.

Observing the area and trends on the ground and studying the map on old operations, if there is anything that might be of sufficient size to warrant a company operation, it would be expected in the south eastern part of the Tombstone district. A large part of this area was prospected by Newmont. Newmont sunk a shaft and diamond drilled to test for deep extension of the ore and to determine the relationship of the igneous intrusive to the known ore emplacement. Eagle Pitcher tested the area where the limestone bedding plunges into and blow the regional water table. Mr. Giacoma said the rumors were that some limestone replacement copper ore was found in the Naco limestone but the Eagle Pitcher Company did not find enough to warrant further exploration.

In discussing the Vizina and Mountain Maid claims with Mr. Frankovich on the telephone he agreed that the chances for a company sized ore occurrence was not to encouraging. He agreed that the area to the southeast has the better potential for a large

T. W. Newell
July 12, 1960
Page 3

occurrence and he will, at a later date after further study, make his maps on that area available to Shattuck Denn for consideration.

To prospect the southeast area a company must plan to do a similar amount of work that was done by Newmont. This would entail sinking a shaft and drifting to encounter most of the trend projections, and extensive mapping. Diamond drilling has been most discouraging as the silver chloride ore does not core well. Mr. Giacoma said that in the past on occasion they have actually penetrated good ore in the district and were not aware of it until they found their bore hole while mining. This would rule out a drilling project.

C. W. Appelin

C. W. Appelin

CWA:dl

FRANK J. FRANKOVICH
Consulting Geologist
3351 NORTH SIXTH AVENUE
PHOENIX, ARIZONA

May 5, 1960

Mr. D. M. Kentro
Shattuck-Dem Mining Corporation
Humbolt, Arizona

Re: Tombstone Silver Prospect

Dear Mr. Kentro:

As per your suggestion at the close of our meeting yesterday I am writing this letter to set forth my proposals regarding my Tombstone silver prospect.

Herewith are also three enclosures:

1. A mine-workings and claim map taken from Arizona Bureau of Mines Bulletin No. 143 showing present legal control of property and four of the most obvious unprospected ore-trends.
2. A three-dimensional generalized diagram showing the correct structural interpretation of the so-called "west side cut-off" of the fabulous Vizina "roll" and ore body.
3. A geologic cross-section through the cross-cut which I recently drove on the 100 foot level to prove the displacement of the Tribute fault.

It is not unreasonable to estimate that 50,000 tons of ore assaying about \$200 per ton ~~can~~ can be mined from the Vizina prospect. Because of the unusually favorable economics involved in this area, the ore will net after all costs at least \$150 per ton. Development costs will be nominal.

To bring this prospect to its present state required 20 months of my time and a total of \$64,000 invested directly in the claims outlined in blue and red on the accompanying map.

I estimate that an additional \$20,000 must be invested in the property to find ore in quantity. This money would be used for drilling, advancing the cross-cut and raises. For \$20,000 my partner, Tom Slick, will give a one-third interest in the Vizina and Mountain Maid claims (outlined in blue). This money will be spent on these two claims alone according to a previously agreed on plan. Some mutually acceptable plan can be agreed upon for raising additional money if needed.

An alternate plan is as follows: A third party can undertake the evaluation of the prospect with an agreed on minimum

May 5, 1960

exploration program, and then at their option put the prospect into production for a one-half interest in the two claims (Vizina and Mountain Maid) or, withdraw from the prospect entirely. The minimum exploration program required would be: 1.) Advance the main cross-cut 100 feet, 2.) Advance two raises for a combined total of 100 feet of advance, and 3.) drill 1500 feet of diamond core hole (EX if desired).

As for the property controlled by Mr. C. Andrade, I can not speak for him, except to say I am sure he will be willing to work out a plan which would allow a new investor to work profitably in the area.

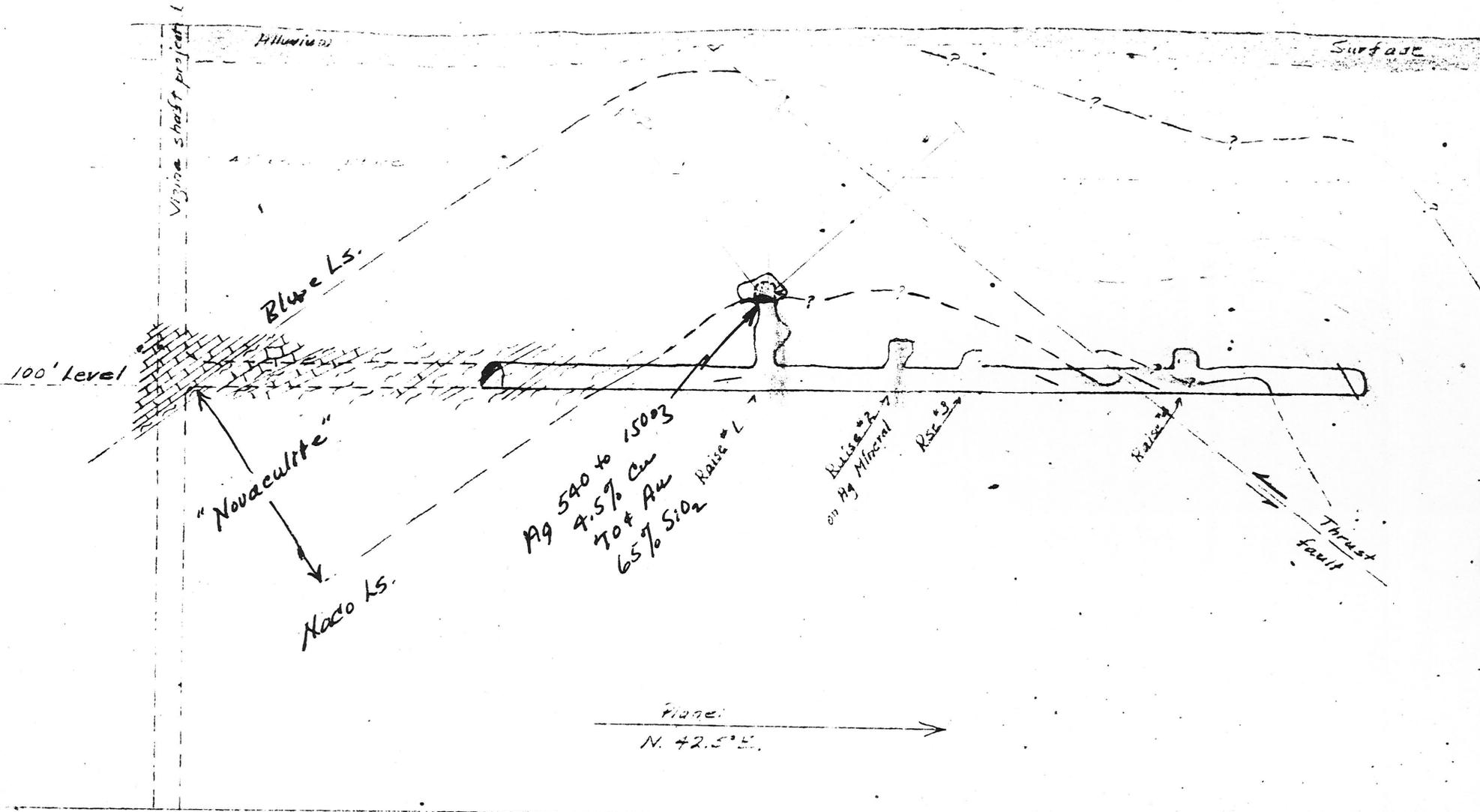
As regards the other property which I have--I am not sure under what kind of agreement I would want to commit it. I am willing to do so, however, and how would depend largely on what happens with the Vizina and Mountain Maid claims.

I would like to hear from you in regard to this proposal as soon as you are able and find it convenient. I enjoyed meeting and talking to you and your men and hope the meeting will be mutually profitable.

Very truly yours,

F. J. Frankovich
F. J. Frankovich

Red-shaded area shows position of re bodies with respect to stratigraphic and structure about 100 feet east of the section on other side of the Tribute dike and fault. The ore was discontinuous along anticlinal crest, and was most persistent along the north flank and in the "saddle". The favorable beds are shaley and impure fossiliferous blue marine limestones found about in the middle of the "Novaculite" formation, which is essentially an irregularly silicified, very fine-grained limestone.



Cross-section Along Bonanza Fissure

Horiz. & Vert. scales: 1" = 40'

F. J. Frankovich

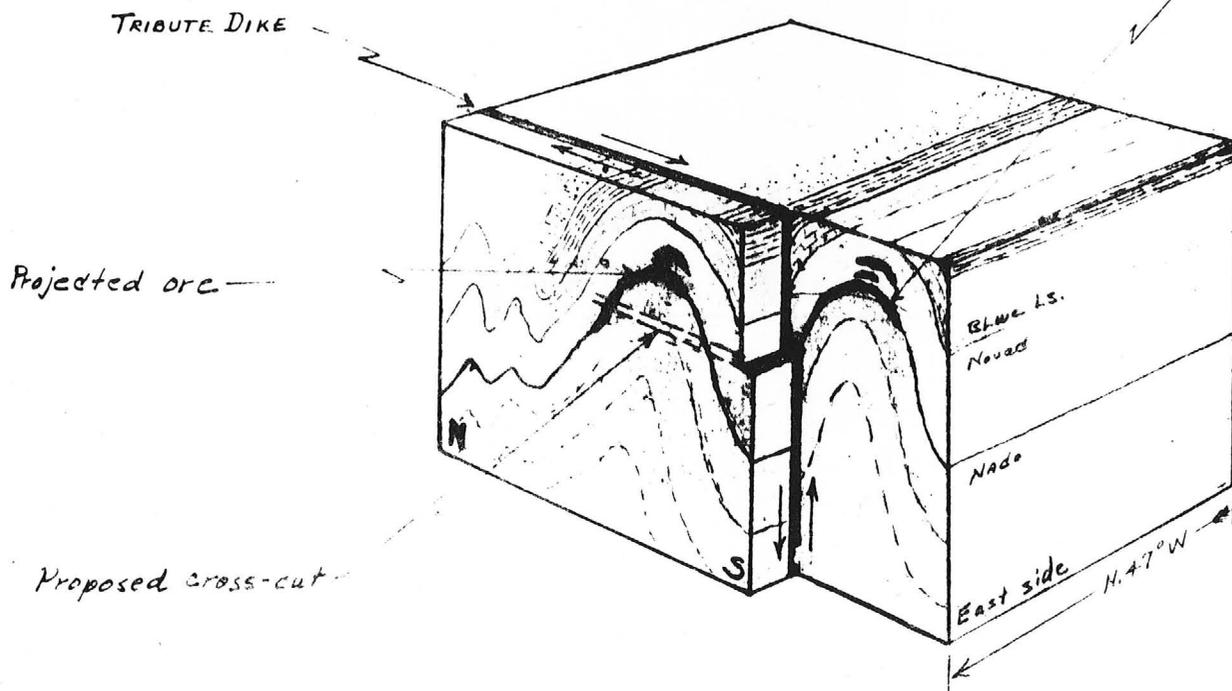
2/15/60

This drawing was made before I was able to gain access to the underground workings and was based on inference from drill hole data.

The "proposed cross-cut" has been largely completed and has proved the structural interpretation to be correct. The actual shape of the Vizina anticlinorium, however, is somewhat different than shown. Its true shape is shown on the attached cross-section drawn along and from data found in the cross-cut recently completed.

Careful examination of the old stopes has shown that the stratigraphic position of the ore was stratigraphically higher than shown in this sketch. The true position of the ore, just east of the fault, with respect to stratigraphy and structure is shown outlined in red on the accompanying true cross-section.

Mined-out
ore - Silver



Generalized block diagram of faulting west of Tribute Dike showing approximate position of ore on top of Vizina "roll." Roll was mined out by 1893 on east side and is so far not tested on the west side of fault.

F. J. Frankovich
Sept. 1959

Vizina mine
Cochise Co.

REPORT OF THE
VIZINA
Consolidated Mining Co.
TOMBSTONE, ARIZONA.

June , 1881.

T H E

VIZINA CONSOLIDATED MINING
COMPANY,

OF TOMBSTONE, ARIZONA.

Organized under the Laws of the State of New York, April 12, 1880.

Capital Stock, \$5,000,000, divided into 200,000 shares of the par
value of \$25 each.

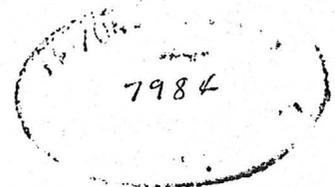
OFFICERS:

T. E. SUMNER, *President.*
J. E. HASKELL, *Vice-President.*
JAMES AMM, *Secretary.*

DIRECTORS:

T. E. SUMNER.
J. E. HASKELL.
JAMES AMM.
F. E. BODEN.
C. H. FILKINS.

Office of Company, 30 Pine Street, New York.



NEW YORK:
John Hamilton, Stationer and Printer, 52 John Street.
1881.

REPORT

ON THE MINES AND OTHER PROPERTY OF THE VIZINA CONSOLIDATED MINING COMPANY, OF TOMBSTONE, ARIZONA.

30 PINE ST., NEW YORK, June, 1881.

To the President and Directors of the Vizina Consolidated Mining Company,

GENTLEMEN:

In submitting for your consideration the following concise statement or brief report on the condition of the Vizina Consolidated Property, permit me to direct your attention to the extract from James H. Day's report, and to the extract from the more recently compiled and exhaustive sketch or report on the condition of the Tombstone Mines, prepared by J. D. Power for the San Francisco *Daily Exchange* of March 14th, 1881, and which will appear in their proper place in this report. The examinations by these gentlemen were made separately and independently of each other, consequently the extracts to be given farther along may be looked upon with confidence, as being in the main accurate and reliable expressions of opinions on the part of the aforesaid experienced mining experts. You are to be specially congratulated on the

acquisition of so valuable and highly promising a property as the Vizina Consolidated; and if all mining operators would but employ the care and the caution you have displayed in the selection of this mining property, much of the hazard attending investments of this character would be entirely avoided, and would prove a source of no small profit instead of loss to the impetuous unreasoning promoters of such ventures.

LOCATION AND CHARACTER OF PROPERTY.

The Vizina Consolidated Mining Property, consisting of the Vizina, the Poor X and the Yreka, is situated in the Tombstone Mining District, 25 miles east of Benson, on the Southern Pacific, Cochise County, in the south-eastern section of the Territory of Arizona. It is, as just stated, 25 miles east of Benson, which is the Southern Pacific Freighting and Staging Station for the Tombstone District, and the milling points on the San Pedro, notably Contention City and Charlestown; and it is 75 miles south-east of Tucson, the present Territorial Capitol, and the chief business center of the territory embraced within the limits of South-eastern Arizona. Geographically considered, its location is most desirable, being placed within easy reach of the great southern trans-continental highway, spanning the two great populous and business extremes of the Continent.

There is also an excellent wagon road from the milling points on the San Pedro to the property, and a good daily stage line connects it with Benson. But, in addition to the excellent rail facilities above noted, Tombstone promises to be in a short while brought into more direct connection with the East by means of the Atchison, Topeka & Santa Fe Railroad, which is now being pushed rapidly forward on its course to Tucson, where it is to form junction with the Guaymas & Sonora Railroad, already completed to Hermosillo; and graded for a considerable distance beyond the latter place.

TOPOGRAPHY AND GEOLOGICAL FORMATION.

That portion of the property covered by the Vizina location lies immediately west of the leading business thoroughfare of the town of Tombstone, and partly fronts on and cuts obliquely across Toughnut Street to the north-west, 1500 x 600 feet to its end lines; thence beyond lies the Poor X and the Yreka, each 1500 x 600 feet. These are adjoining parallel locations, and trend, like the Vizina, obliquely across the lower or western section of the town survey to the north-west. The whole, or nearly the whole surface of these three locations has been laid out into town lots of great value, known as the Vizina survey, which has quite recently, by order of the Town Council, been incorporated with the original survey of the plat of Tombstone, thus largely enhancing the value of the former survey. This tract, upon which are to be immediately erected City and County buildings of great cost, is valued at \$55,000, and with the increase in population and business now setting in, this value will be largely augmented in the next few months.

The altitude of the City of Tombstone is placed at about 5,000 feet above the sea level; so the elevation of the Vizina property is precisely the same, for there are no inequalities in the surface configuration of either. To the west the country slopes gradually toward Contention City and Benson, and on the east and south-east are a range of low sloping hills, upon which are located many promising properties. On the northernmost end of this back ground range are located the celebrated Western (Contention), the Grand Central and the Head Center properties, and lower down its western slopes, and immediately adjoining the Vizina on the east, about 10 degrees south, are situated those two now famous parallel locations, the Toughnut and the Goodenough, now being successfully operated by the Tombstone M. & M. Co. of Philadelphia, which, to the present date, has disbursed fifteen consecutive

dividends of \$50,000 each, or \$750,000 in all. Add to this amount the \$400,000 paid in dividends by this property while operated under the old Toughnut incorporation of Arizona, and before it became merged in the present Company, and we have, as a result, \$1,150,000, which have been disbursed in dividends by those two locations since placed upon a paying basis in 1879. In addition, the Western Company had paid to date a total, in dividends, of \$900,000, and the Grand Central and the Head Center, which are now large bullion producers, will soon be added to the role of the dividend-paying Mines of the camp.

The present actual monthly bullion output from the WESTERN, the TOMBSTONE M. & M. CO., HEAD CENTER, GRAND CENTRAL and VIZINI CONSOLIDATED, foots up \$430,000, exclusive of the aggregate yield of the Bob Ingersoll, the Wedge Consolidated, the Stonewall and the Bradshaw Companies; and which added to the former amount gives \$500,000 per month, or at the rate of \$6,000,000 per year, and with proper milling capacity the above properties could turn out \$10,000,000.

The geological formation of the Vizina property may be classed as metamorphic lime and porphyry, the latter the underlaying and the former the overlaying rock structure. The same is the formation of the section covered by the 11 locations of the Tombstone M. & M. Co., and by the Girard farther to the east; but the formation in the region of the Western, the Head Center, the Sulphuret and the Grand Central, is of an almost exclusive porphyritic nature, while there is a different character encountered toward the south-west of the Vizina. In each of these formations have been uncovered rich and extensive ore bodies, and it is doubtful that there is within the limits of the Western Hemisphere a mining district showing so much rich ore than is to be seen in the various developed properties of the Tombstone District at present.

THE SURFACE GROUND.

As shown above, consists of the Vizina, the Poor X and the Yreka, each 600 x 1500 feet, as shown on the map of the Tombstone town site, and on the particular map of Vizina survey, which for some time back has been incorporated with the Tombstone Municipal survey. These three claims were located August 6th, 1878, and were among the first locations made in the district, and the first surveyed prior to the location of the Tombstone town site; therefore, the title to them is as perfect as it is possible for any title to be.

UNDERGROUND DEVELOPMENTS.

These, their extent and locations, are fully and clearly shown on the accompanying maps and plans. The Vizina is opened by two shafts and what may be styled an open cut, which enters the ground convenient to the Goodenough end line (Tombstone M. & M. Co.) This was the point of discovery, the ore having been reached at a depth of about 20 feet from the surface, whence it pitches gradually to the north-west. The old shaft is 56 feet deep, and the present new and elegant double compartment has reached a total depth to date of three hundred and fifteen feet (315). At a point 100 feet from the top is opened the first Station, which is connected with the ore bodies in both the Amm and Haskell drifts and workings, from which have been extracted large quantities of rich ore, and since there yet exists considerable Vizina ground between the northernmost extremities of these drifts and workings and the present finely developed ore bodies lying to the north-east of the main cross-cut, and about 340 linear feet from the shaft, and course $91^{\circ}-32'$ north of east of the Amm and Haskell drifts, it is almost certain that rich ore bodies will also be met with in that strip of unde-

veloped territory. One hundred and ninety-eight feet north of east from the shaft is being sunk the main winze. It is now about 60 feet deep, and pitches slightly to the north of east and follows the foot wall. Assay values ranging from \$5 to \$195 per ton have been frequently obtained from the material through which this winze is being driven, toward the next lower level, which will likely be opened 300 feet from the surface. The present large ore showing exists to the north-east and north of the main shaft, and in the region of the north-eastern extremity of the main east cross-cut from said shaft. The ground in this region is most favorable to the existence of large interstratified ore bodies, in the laminated, or rather the stratified formation prevailing in the whole region north and west of the Tombstone M. & M. Co.'s hoisting works. The ore showing indicated shows a clear breasting of above 90 linear feet, stretching from east to west, with pitch of the stratification to the north and north-west, at an angle of somewhere about 30° to 35°. At a point to the east in this extensive ore breast has been quite recently uncovered what promises to become a very valuable ore body. The conditions surrounding it are all favorable to this view. It is, of course, at this writing, impossible to definitely determine the quantity of ore in sight, or to state its dimensions, or to how far north it will extend. That it will extend to the Company's boundary line, 195 feet farther to the north, may be set down as among the things likely to be realized.

Although the full dimensions of this and the other ore bodies are unknown, yet it is certain that they are by no means small, and the strongly marked, rich, and characteristic mineral-formations contained within their supposed limits, and the favorable character of the geological formation compassing them, affords unmistakable proofs of the richness and extent of the ore bodies mentioned. The Vizina is an exceptional mine in this—that it has been profitably operated from the day of its purchase without having had to draw upon much of its working capital,

of which only a small quantity (stock) has been sold, the wants of the property having been all met by its own ample returns. But, prosperous though the past of this property has been, its future promises to be more prosperous still, seeing that the developments noted are all confined to the 100-foot level of the mine. With increased depth will come increased values, for experience proves (at least so in this district) that the grade of the ores improve toward the deep, the same as their continuity downwards prove the prospective value and the permanence of a mine.

CHARACTER OF THE ORE.

The mineral is an admixture of rich chlorides and carbonates of silver, which carries considerable horn silver and a blending of argentiferous sulphides and oxides of lead; but in so small proportions as not to interpose any hindrance to the process of amalgamation. The gangue is an admixture of quartz, porphyry and talc, while the ore is as represented above. In regard to the extent in depth of the metalliferous deposits, it may be remarked that in this mine they have been penetrated to a depth of above 150 feet, while in the properties to the east and south they have been explored to depths ranging from 300 feet in the Toughnut and Goodenough to 400 and 500 feet in the region of Contention Hill, and at these depths the ore is both more abundant and richer than it was found to be higher up in the workings; and all precedent and analogy point to the conclusion that those ores will be found to continue downward to great depths.

It may be said that while the actual explorations of the deposits into which the Vizina Consolidated has opened have been carried but to a very limited extent, they have demonstrated the existence of ore bodies of vast dimensions, both laterally and longitudinally, and which gives every promise of a continuity to the deep.

[EXTRACT FROM JAMES M. DAY'S REPORT.]

TOMBSTONE, ARIZONA, March 20, 1881.

Mr. T. E. Sumner, President Vizina Consolidated Mining Company,

DEAR SIR:

As requestd by you, I have to-day visited and examined the Vizina Mine, in company with its Superintendent, under whose efficient management the development has been carried on for some months.

About six weeks ago I visited the mine for the first time, and was very much surprised at what I then saw; but at this, my second visit, after a more careful examination, I am more thoroughly convinced that I was correct in the opinion I then expressed to some of my friends—*“That the Vizina Mine is destined at no distant day to take its place in the front rank of the great bullion producers of the Tombstone District: a district that will in the near future astonish the whole world with its IMMENSE PRODUCTION OF THE PRECIOUS METALS.”*

You have a very large amount of ground, WELL LOCATED, GOOD TITLE, and EXCEEDINGLY VALUABLE for building, as well as for MINING PURPOSES. The main shaft is well constructed and in excellent condition, and has attained a vertical depth of more than 250 feet. From the first station, at a depth of 100 feet, a drift has been extended in a neast-erly direction over 300 feet, passing through a dolomite or metamorphic lime formation; stratas of quartzite are to be seen occasionally. Good indications were found at various places in the drift, and where carried on, in many instances, good ore was encountèred.

The largest, and I think richest development of ore to be seen in the mine at present, is N.E. of the winze, in HASKELL drift, about 250 feet from the main shaft. It is well defined, four feet wide, and sixty

feet long, averaging not less than \$80 per ton. The character of the ore is chloride and horn silver, and can be worked in the mill to a high percentage. From the 100-foot level a winze has been sunk on a very favorable-looking vein, giving fair assays, to a depth of 30 feet. I regard the prospect here as highly favorable. This winze will serve a double purpose,—that of ventilation and development,—as eventually a drift from the main shaft will connect with it. There are the SUMNER and AMM drifts, with up-veins and cross-drifts too numerous to mention in detail, most of which show more or less ore of good quality.

On the whole, the mine looks fully as well, if not better, than when I examined it first. I am satisfied the property is *an excellent one, and that it has a bright future before it.* As to the amount of ore in sight, it is difficult to determine; but *that it is large, is certain.*

In conclusion, permit me to congratulate you and the Stockholders of the Vizina Consolidated Mining Company on the possession of so valuable a property, and you, individually, together with the Superintendent, on the excellent judgment displayed by you in the management of the affairs of the Company.

Respectfully yours,

JAMES M. DAY.

P. S.—Since writing the above, I have been shown some very handsome samples of native silver ore, from the shaft of the Goodenough Mine, taken from a point about 250 feet in depth. There is a marked change in the formation of the bottom of the Vizina shaft, and as they are only about 300 feet apart, and the vein in the Goodenough tending toward the Vizina, I predict that at or near the 300-foot level a good body of ore will be discovered.

J. M. DAY.

Below will be found a table of 77 assays of ore, taken from various quarters of the mine. These were made by the Company's assaver, and being made with great care they may be accepted as entirely accurate. The table covers the month of April, the number made daily being given, and the main averages calculated and carried out, as shown, in the margin.

VALUE OF THE ORE.

The following table shows the daily assay values for the month of April:

	No. Assays.	Average rate per ton.
April 2, 1881.	4	\$ 90 00
" 4, "	2	139 00
" 5, "	4	184 90
" 6, "	3	662 30
" 7, "	3	7 31
" 9, "	3	121 30
" 10, "	4	31 38
" 13, "	2	49 00
" 14, "	5	72 22
" 15, "	2	293 48
" 18, "	6	42 20
" 19, "	2	47 55
" 20, "	2	52 23
" 21, "	5	82 28
" 22, "	8	105 04
" 23, "	6	75 10
" 25, "	2	59 00
" 27, "	2	119 47
" 28, "	4	159 34
" 29, "	5	83 73
" 30, "	3	139 55

General for month, \$116.25, and for seventeen days in May, \$187.56.

AMOUNT OF ORE WORKED AND BULLION OUTPUT.

The ore taken from the Vizina Consolidated Mine up to May 31st, 1881, amounted to nineteen hundred and fourteen (1914) tons, and the value of the bullion produced amounted to one hundred and twenty-four thousand (\$124,000) dollars.

[EXTRACT FROM J. D. POWER'S REPORT, IN SAN FRANCISCO DAILY
EXCHANGE, MARCH 14TH, 1881.]

"I find that the ore output to date has been 1600 tons, and the milling yield, or returns, about 80 per cent., which gives an aggregate bullion yield to date of \$125,000. The Company is now shipping daily to the Boston mill 15 tons, equal to \$1200 per diam, or at the rate of \$36,000 per month.

"The hoisting works are north-west, or rather to the west of the Tombstone M. & M. Co., and adjoining the Goodenough on the east and the Survey on the south-west, and courses diagonally across the lower or north-west section of the town of Tombstone. It is opened by three shafts, 20.56 and 220 feet deep respectively, the last being the present new main working double compartment shaft, and the first the discovery shaft, in which the ore was cut 20 feet below surface. The new shaft has, so far, but one level, 100 feet deep; it is extended 120 feet below this point in a highly metamorphic formation. The shaft is a 4 x 4 foot double compartment, well timbered throughout, with stout 2½ inch Oregon plank." * * *

"The formation in the workings of this mine, as in the workings of all east of it, is highly metamorphic, and shows more talcose schist and

vitrious-looking, but still mineralized, quartzite than seen elsewhere in the district. The ground in the region of the present bottom of the shaft is very favorable indeed; the structure more metamorphosed and compact, and largely mineralized, showing that the dolomite and marbleized lime found higher up is fast disappearing toward the deep.

FIRST LEVEL,

One hundred feet deep, opens east and runs to first ore shute, 190 feet from shaft, and is thence continued 60 feet farther east to a pair of ore shutes, and thence some distance farther, making total distance from shaft about 290 feet. The first 200 feet of this cross-cut were run through metamorphic lime. Crossing this belt, a semi-porphyrific formation comes in, and beyond is quartzite in face of drift, freely mineralized and liable to give way to ore at any moment. The two ore shutes above mentioned extend upwards, one 30 feet, and the east one 75 feet, on an incline of 75° . At the head of this ore shute is met a large circular excavation in hard vitrious quartzite formation, encasing good ledge formation having good ore and which, as in the case of all the mines of the district, expands and contracts with the change of ground. General strike of ledge west 10 south and east about ten points north. Convenient to this last mentioned point was encountered a second and distinct ledge, intersecting the other at a point about 75 feet below the surface, above which it showed no outcrop and was discovered in the usual course of explorations.

“Leaving the last chamber, the old course is continued in ore, and at a point on its course, and overhead, is another large chamber, from which were extracted about 1,000 tons of prime ore. In such a formation, large ore bodies are the rule, instead of the exception, as have been

abundantly shown me in my underground examinations of the various properties of this district that I have inspected since last January. * * *

"This property is an excellent one, and that there is a bright future before, it none who carefully examine it can deny. As to the quantity of reserves in sight, it is hard to say with anything like certainty, but that they are large on this level is evident enough, and with small labor enough ore could be released from place to increase the daily shipments to the mill to at least 30 tons, or double the quantity now shipped. As in the case of other mines in the district, but yet partially developed, depth alone is all that is wanting to place the Vizina Consolidated among the most productive and valuable properties; and when this depth comes to be reached, the present metamorphic lime and quartzite will terminate, and a purely porphyritic understructure take their place, the same as is shown in the workings of the regions south-east of the Girard, in the Sulphuret, the Head Center, and the Western and the Grand Central."

The report from which the foregoing extracts are made was written last February, it must be remembered nearly three months ago. In this period the condition of the property has been very materially changed—so changed, indeed, that it shows nearly double the exploratory work, and more than double the quantity of ore in sight at the former date.

HOISTING WORKS.

The building measures 76 x 36; main, or front part, 42 feet; high and back part, 32 feet; carpenter shop, south wing, 40 x 20 feet; blacksmith shop, north wing, 40 x 20 feet. Gallows frame constructed out of 20 x 14 inch timbers, and is a fine piece of work. It is 36 feet high,

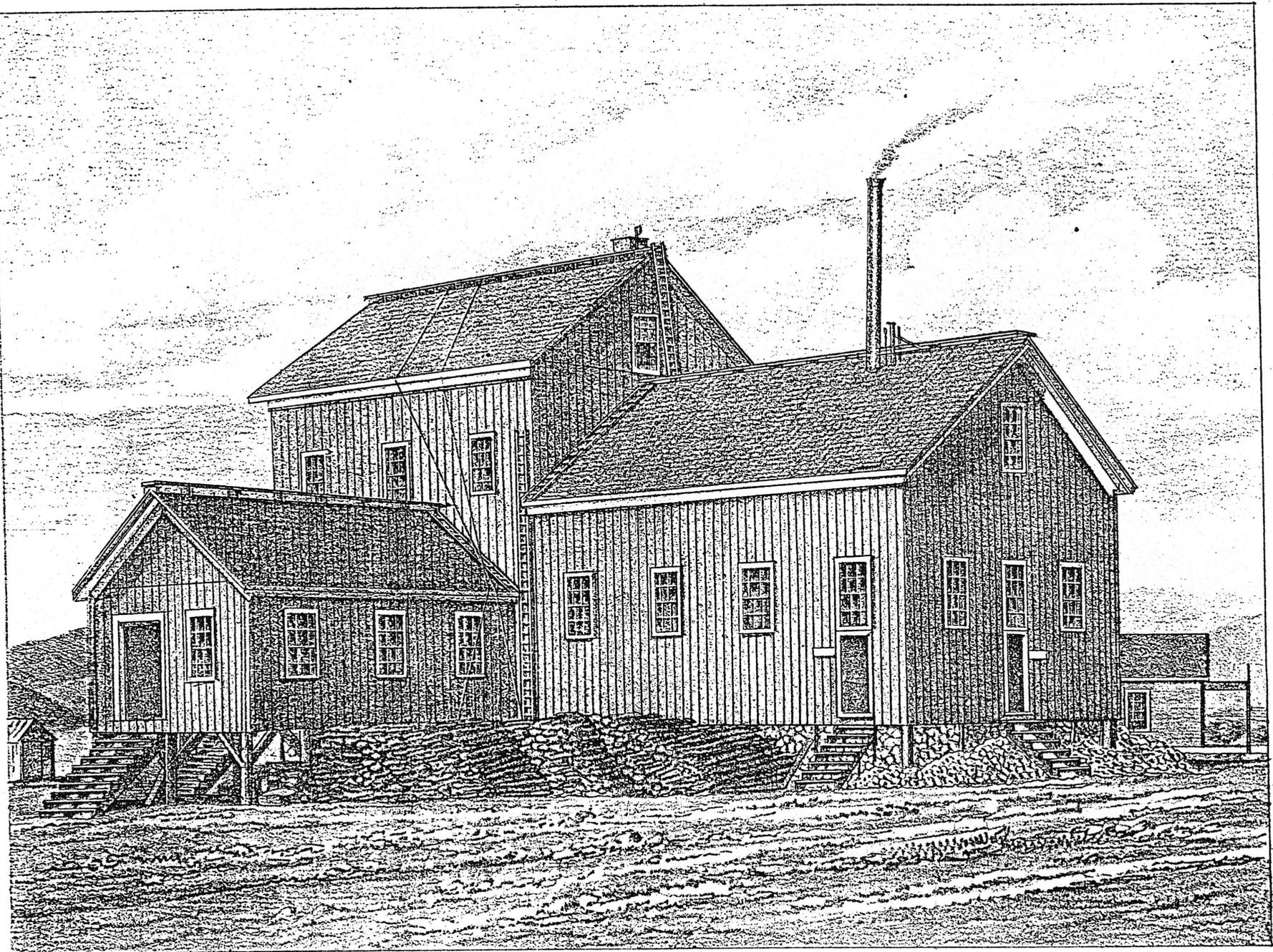
sheaves six feet in diameter, engine one of Howkins patent double-eight, upright, and carries shaft and belting for circular saw, and air-blower attached, and the building all round the walls inside is hung with large coils of hose, fully nozzled, ready for a moment's emergency in case of fire, the water being supplied directly from the Sycamore Spring Company's mains, which gives 280 feet of pressure, and more than enough to throw a stream to twice the height of the buildings, and to deluge all round them for many hundred yards.

The buildings and machinery are all in excellent order, and the latter is capable of hoisting from a depth of 700 feet, to which depth it will furnish power enough to sink. In conclusion, the work of development is being vigorously prosecuted in every quarter of the mine, and ore-extracting goes on systematically and vigorously, and it is certain that ample and satisfactory returns will continue to reward your vigorous, careful and strictly economical and experienced management.

I remain, very respectfully yours,

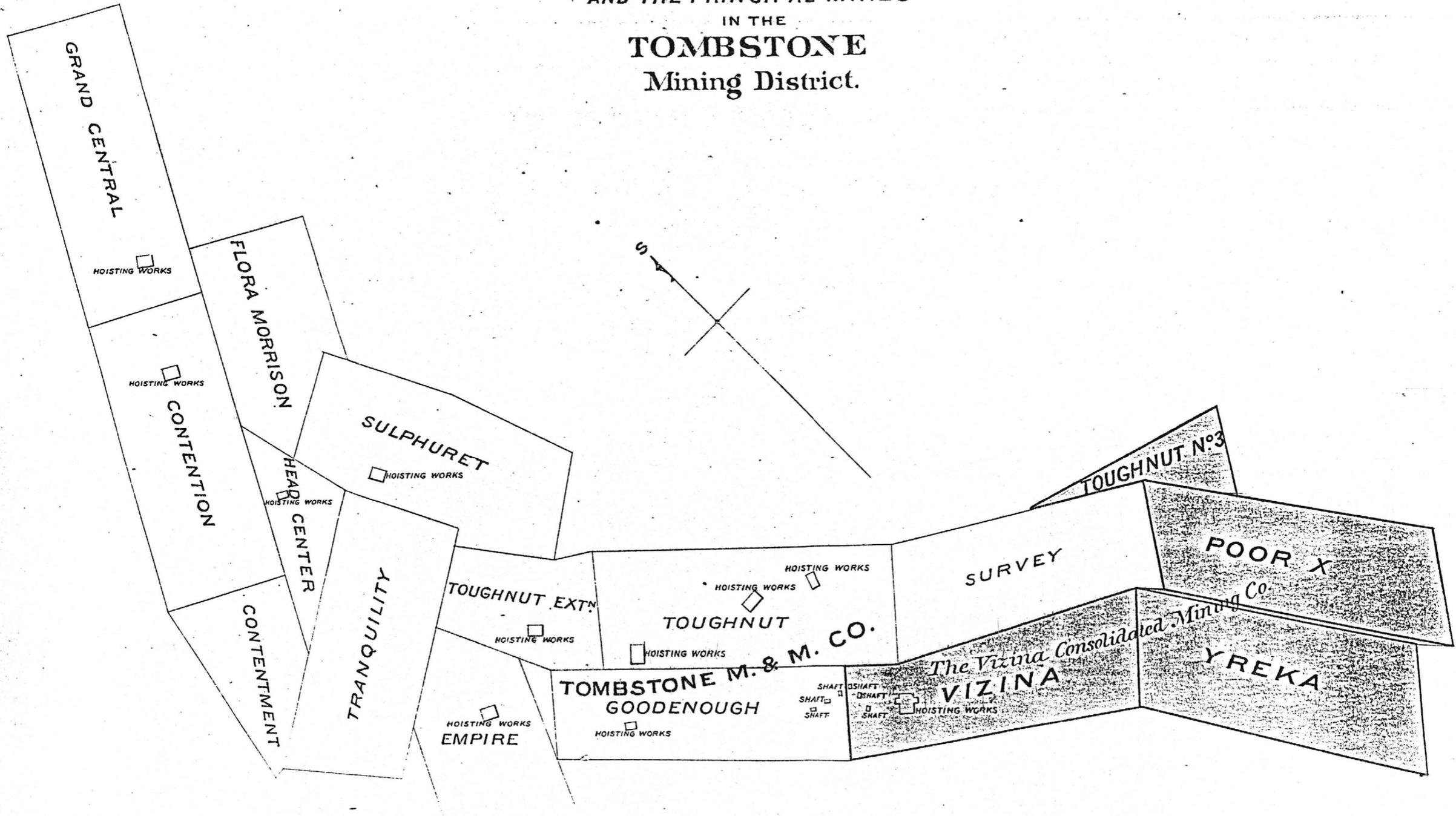
FRANK S. EARLE,

Mining Expert.



HOISTING WORKS OF
The Vizina Consolidated Mining Co.
TOMBSTONE, ARIZONA.

PLAN
Showing the location of
THE VIZINA CONSOLIDATED MINING CO.
AND THE PRINCIPAL MINES
IN THE
TOMBSTONE
Mining District.



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Frankovich Exploration
Vizina Shaft
District Tombstone District, Cochise Co.

Date June 17, 1960
Engineer Axel L. Johnson

Subject: Present Status. Information from Frank J. Frankovich, Box 303, Tombstone, Arizona.

References: Reports of Feb. 12, 1960, Dec. 10, 1959 & Oct. 15, 1959.

Present Activity: Mr. Frankovich and son are doing underground geologic mapping of the old stopes and other underground workings at the Vizina Mine.

Mr. Frankovich states that he has been able to raise additional funds for the resumption of the exploration work, and that this work will be started as soon as the legal papers have been prepared and signed. He states they should be ready to start in about 3 weeks.

Proposed Plans: Plans call for drilling at least 10 additional holes upward from the 100 ft. level of the Vizina Mine. The holes will be drilled at an angle of about 60° with the horizontal, and will average about 90 ft. The drill holes will pass through the Novaculite Formation and through the blue limestone (Bisbee Group) above the Novaculite up to within 10 ft. of the surface.

Mr. Frankovich plans to do his own diamond drilling by renting a drill and hiring a diamond driller. In this way, he estimates that he can do the drilling for about \$3.50 per foot.

FRANK J. FRANKOVICH
Consulting Geologist
3351 NORTH SIXTH AVENUE
PHOENIX, ARIZONA

May 5, 1960

Mr. D. M. Kentro
Shattuck-Dem Mining Corporation
Humbolt, Arizona

Re: Tombstone Silver Prospect

Dear Mr. Kentro:

As per your suggestion at the close of our meeting yesterday I am writing this letter to set forth my proposals regarding my Tombstone silver prospect.

Herewith are also three enclosures:

1. A mine-workings and claim map taken from Arizona Bureau of Mines Bulletin No. 1143 showing present legal control of property and four of the most obvious unprospected ore-trends.
2. A three-dimensional generalized diagram showing the correct structural interpretation of the so-called "west side cut-off" of the fabulous Vizina "roll" and ore body.
3. A geologic cross-section through the cross-cut which I recently drove on the 100 foot level to prove the displacement of the Tribute fault.

It is not unreasonable to estimate that 50,000 tons of ore assaying about \$200 per ton ~~can~~ can be mined from the Vizina prospect. Because of the unusually favorable economics involved in this area, the ore will net after all costs at least \$150 per ton. Development costs will be nominal.

To bring this prospect to its present state required 20 months of my time and a total of \$64,000 invested directly in the claims outlined in blue and red on the accompanying map.

I estimate that an additional \$20,000 must be invested in the property to find ore in quantity. This money would be used for drilling, advancing the cross-cut and raises. For \$20,000 my partner, Tom Slick, ~~and~~ will give a one-third interest in the Vizina and Mountain Maid claims (outlined in blue). This money will be spent on these two claims alone according to a previously agreed on plan. Some mutually acceptable plan can be agreed upon for raising additional money if needed.

An alternate plan is as follows: A third party can undertake the evaluation of the prospect with an agreed on minimum

D. M. Kentro

-2-

May 5, 1960

exploration program, and then at their option put the prospect into production for a one-half interest in the two claims (Vizina and Mountain Maid) or, withdraw from the prospect entirely. The minimum exploration program required would be: 1.) Advance the main cross-cut 100 feet, 2.) Advance two raises for a combined total of 100 feet of advance, and 3.) drill 1500 feet of diamond core hole (EX if desired).

As for the property controlled by Mr. C. Andrade, I can not speak for him, except to say I am sure he will be willing to work out a plan which would allow a new investor to work profitably in the area.

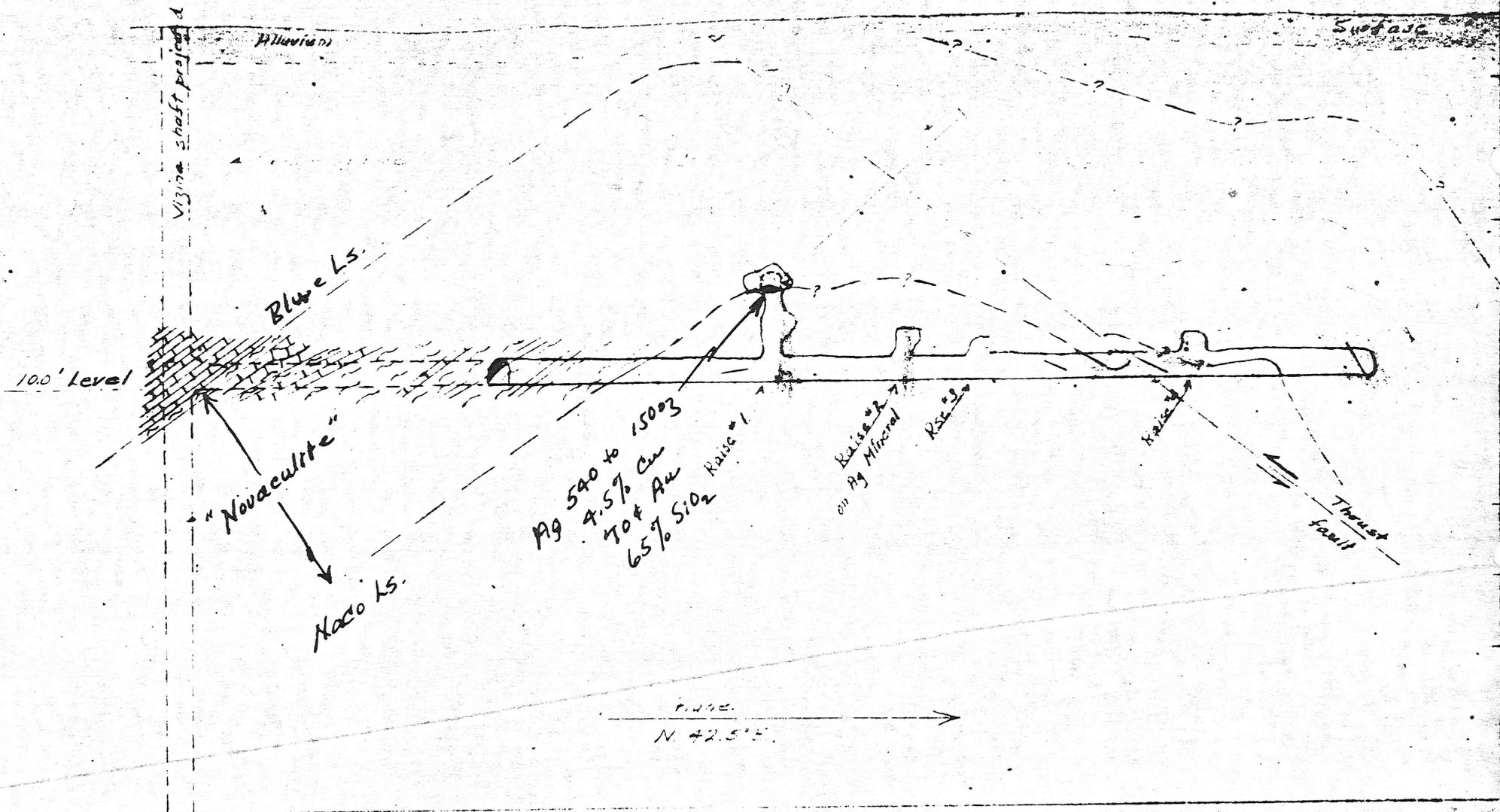
As regards the other property which I have--I am not sure under what kind of agreement I would want to commit it. I am willing to do so, however, and how would depend largely on what happens with the Vizina and Mountain Maid claims.

I would like to hear from you in regard to this proposal as soon as you are able and find it convenient. I enjoyed meeting and talking to you and your men and hope the meeting will be mutually profitable.

Very truly yours,

F. J. Frankovich
F. J. Frankovich

Red-shaded area shows position of re bodies with respect to stratigraphic and structure about 100 feet east of the section on other side of the tributary dike and fault. The ore was discontinuous along anticlinal crest, and was most persistent along the north flank and in the "saddle". The favorable beds are shaley and impure fossiliferous blue marine limestones found about in the middle of the "Novaculite" formation, which is essentially an irregularly silicified, very fine-grained limestone.

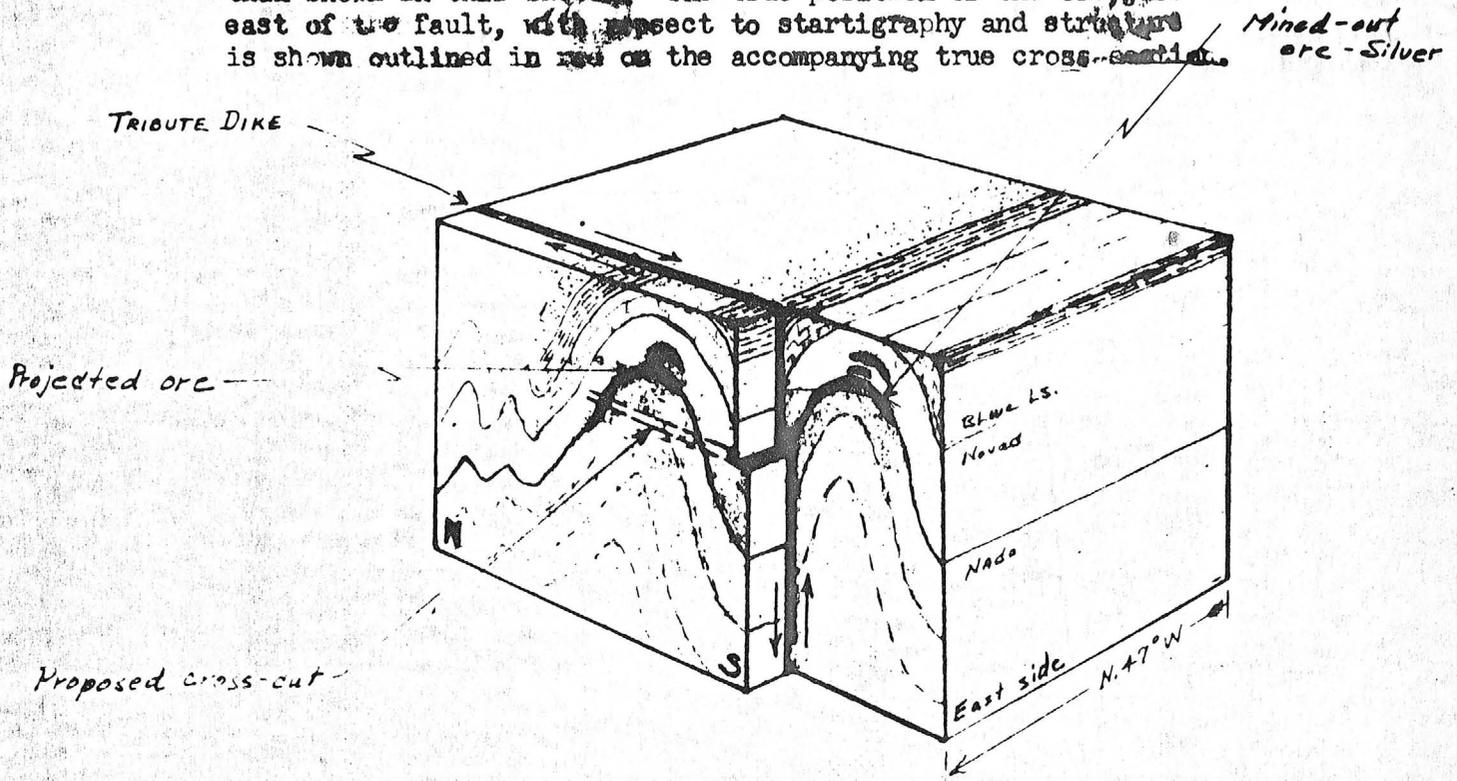


Cross-section Along Bananza Fissure
 Horiz. & Vert. scales: 1" = 40'
 F. J. Frankovich
 2/17/60

This drawing was made before I was able to gain access to the underground workings and was based on inference from drill hole data.

The "proposed cross-cut" has been largely completed and has proved the structural interpretation to be correct. The actual shape of the Virginia anticlinorium, however, is somewhat different than shown. Its true shape is shown on the attached cross-section drawn along and from data found in the cross-cut recently completed.

Careful examination of the old stopes has shown that the stratigraphic position of the ore was stratigraphically higher than shown in this sketch. The true position of the ore, just east of the fault, with respect to stratigraphy and structure is shown outlined in red on the accompanying true cross-section.



Generalized block diagram of faulting west of Tribute Dike showing approximate position of ore on top of Virginia "roll." Roll was mined out by 1893 on east side and is so far not tested on the west side of fault.

F. J. Frankovich
Sept. 1959

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Frankovich Exploration
Vizina Shaft

Date April 15, 1960

District Tombstone District, Cochise Co.

Engineer Axel L. Johnson

Subject: Present Status. Information from Don Seliger of Seliger Texaco Station.

References Report of Feb. 12, 1960 and previous reports.

Present Mining Activity None. Mr. Seliger reports that exploration work was closed down about 3 weeks ago on account of shortage of funds, and that Mr. Frankovich expects to resume operations as soon as additional funds have been secured.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Frankovich Exploration
Vizina Shaft

Date Feb. 12, 1960

District Tombstone District, Cochise Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Frank Frankovich, Box 303, Tombstone, Ariz.

References Reports of Dec. 10, 1959 and Oct. 15, 1959.

Present Mining Activity Diamond drilling from underground -- 1 drill rig --
2 men working.

Present Operations The drift, mentioned in report of Dec. 10, 1959, was driven N 30 deg. E for a distance of 240 ft., with the results mentioned in said report. This was in Naco Limestone.

Diamond drilling from this drift was started about Dec. 15, with one drill rig working. One horizontal drill hole has been completed for a distance of 100 ft., and a second drill hole is now being drilled upward above the drift.

Proposed Plans It is planned to drill about 12 holes, the holes to average about 100 ft., drilling upward through the Novaculite formation, which overlies the Naco Limestone found in the drift.

MINING WORLD - Feb. 1960
Underground exploration work is con-



DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine	Frankovich Exploration Vizina Shaft	Date	December 10, 1959
District	Tombstone	Engineer	Frank P. Knight
Subject:	Field visit		

The work mentioned in Johnson's report of October 15 is progressing with 4 men at work. The drift from the Vizina shaft crosscut N.E. along the west side of the Tribute dike has cut an anticline. Near the apex is a short 8 inch wide streak of \$200 ore that might open up above in the favorable horizon near the novaculite contact. S.W. and N.E. of this streak near the beginning and end of the drift to date there are silver chloride and bromide showings and some manganiferous carbonates. Frankovich regards results of exploration work so far as encouraging. Underground work has been in progress for the past two months.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine **Frankovich Exploration**
Vizina Shaft
District **Tombstone**
Subject: **Field visit**

Date **December 10, 1959**

Engineer **Frank P. Knight**

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FRANKOVICH EXPLORATION

COCHISE COUNTY
TOMBSTONE

Frank Frankovich has leased the VIZINA MINING CLAIM from Newmont Exploration, Ltd., and has been given permission to diamond drill through several streets of Tombstone. Says geology of area leads to believe that area offers good prospecting because of its location adjacent to old MILLION DOLLAR stope.

Taken from MINING WORLD, Nov. 1959

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Frankovich Exploration Date October 15, 1959
District Tombstone District, Cochise County Engineer Axel L. Johnson
Subject: Field Engineers Report. Information from Frank Frankovich.

Location: Under, and directly south of the City of Tombstone. The Vizina patented claim is directly below Toughnut St., City of Tombstone and includes the Million Dollar Stope. The Mountain Maid patented claim adjoins the Vizina on the NE and is also under the city. The remaining patented and unpatented claims leased by Mr. Frankovich are directly south of the City of Tombstone.

Number of Claims: 10 patented claims and 4 unpatented claims.

Owners: The Vizina patented claim is owned by the Newmont Exploration Co. The Mountain Maid patented claim is owned by the City of Tombstone. The Townsite patented claim is owned by Stanley M. Secrist, 15 Calle Conquista, Tucson, Ariz. The 7 remaining patented claims have various other ownerships. The 4 unpatented claims were staked out by Mr. Frankovich of the address shown below. The surface of the Vizina and Mountain Maid patented claims are owned by a number of Tombstone property owners and held by quit claim deeds. According to Mr. Frankovich, they have been deeded the surface down to a depth of 40 ft.

Lessee: Frank J. Frankovich, 3351 N. 6th Ave., Phoenix, Ariz.

Principal Minerals: Principally Silver, with a small amount of Gold, Copper, Lead and Zinc.

Present Mining Activity: Exploration by means of diamond drilling and drifting.

Geology & Mineralization: See Arizona Bureau of Mines Bulletin No. 143 "Geology and Ore Deposits of the Tombstone District, Arizona" pages 89 to 91 incl.

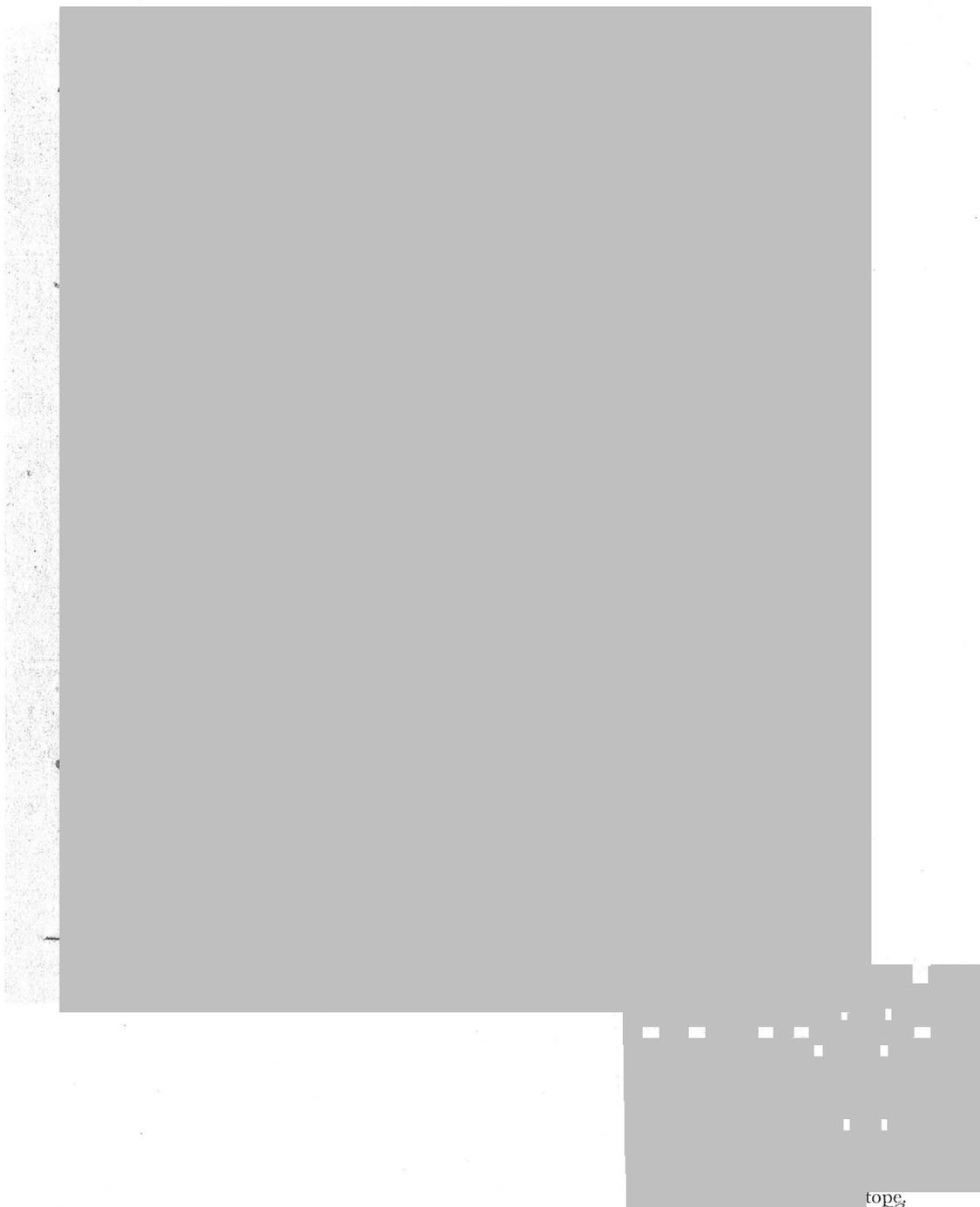
Past History & Production: According to the Arizona Bureau of Mines Bulletin No. 143, the Vizina claim alone produced over \$500,000 worth of ore in the 3 years of its active operation about 1889.

Old Mine Workings: See Arizona Bureau of Mines Bulletin No. 143, Plate XVIII, Figure 4 on p 90, and description on p 91.

Present Mining Operations: During the past summer, 3400 ft. of diamond drilling has been completed. This drilling was done under contract to Metler Bros. Drilling Co., Tucson, Ariz. and to John Cloeter, Tucson, Ariz. 17 holes were drilled, which averaged 200 ft. in depth, the deepest hole being 500 ft. deep.

According to Mr. Frankovich, the results have been encouraging, but no commercial ore has been blocked out to date. Three rolls were located and a considerable amount of silver mineralization was found. The interpretation of the drill hole logs were handicapped by the inability to get cores and sludge samples due to the great amount of brecciation and fissuring. Mr. Frankovich will now start exploration work by drifting from the old Vizina shaft, in order to explore the Vizina roll west of the Tribute Dyke. (See Ariz. Bureau of Mines Bulletin No. 143 - Plate XVIII.) This drift will be driven east from the 85 ft. level of the Vizina shaft for a distance of about 200 ft. to the intersection with the Tribute Dyke.

BREWERY GULCH GAZETTE - September 3, 1959



topc
-59