

CONTACT INFORMATION

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Arizona Department of Mines and Mineral Resources Mining Collection

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O PART LOF Z

PRINTED: 12/11/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BOAZ

ALTERNATE NAMES:

SOUTHERN BELLE VEIN

JONES

RANKIN PROPERTY

YAVAPAI COUNTY MILS NUMBER: 845

LOCATION: TOWNSHIP 9 N RANGE 2 W SECTION 1 QUARTER N2 LATITUDE: N 34DEG 09MIN 13SEC LONGITUDE: W 112DEG 24MIN 57SEC

TOPO MAP NAME: MINNEHAHA - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

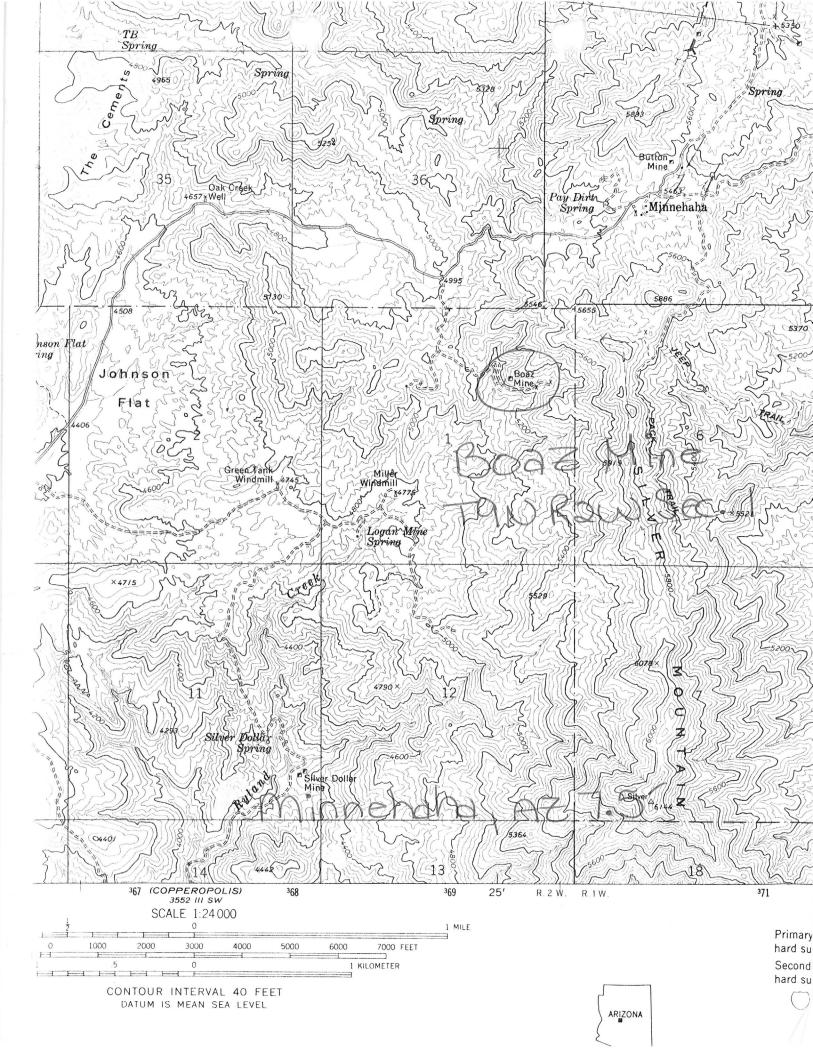
GOLD

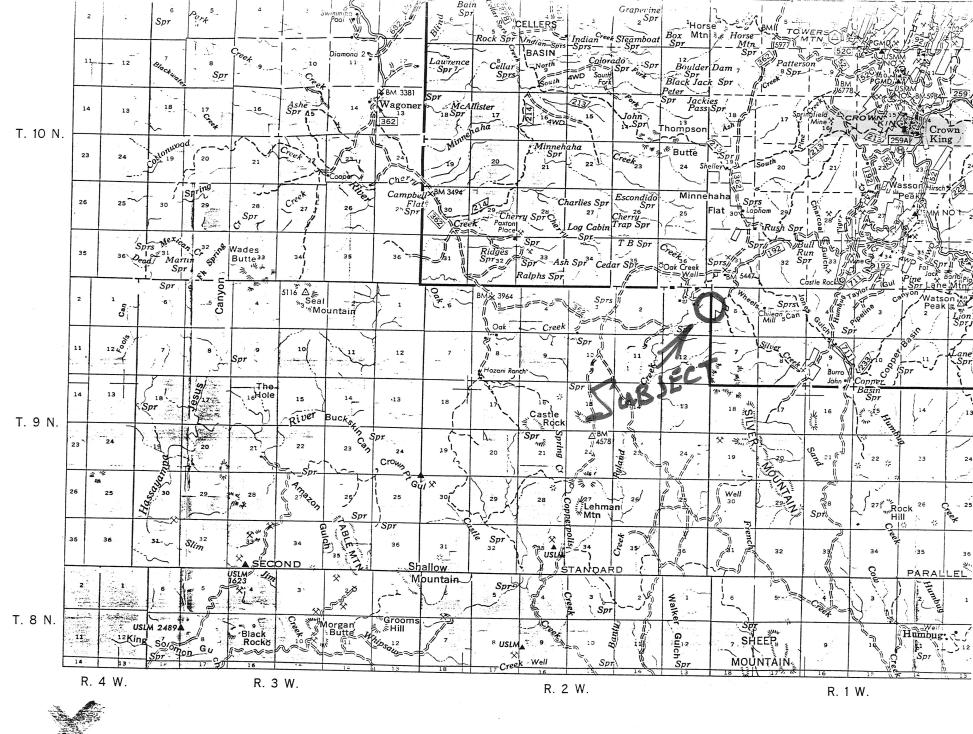
SILICON QUARTZ

SILVER

BIBLIOGRAPHY:

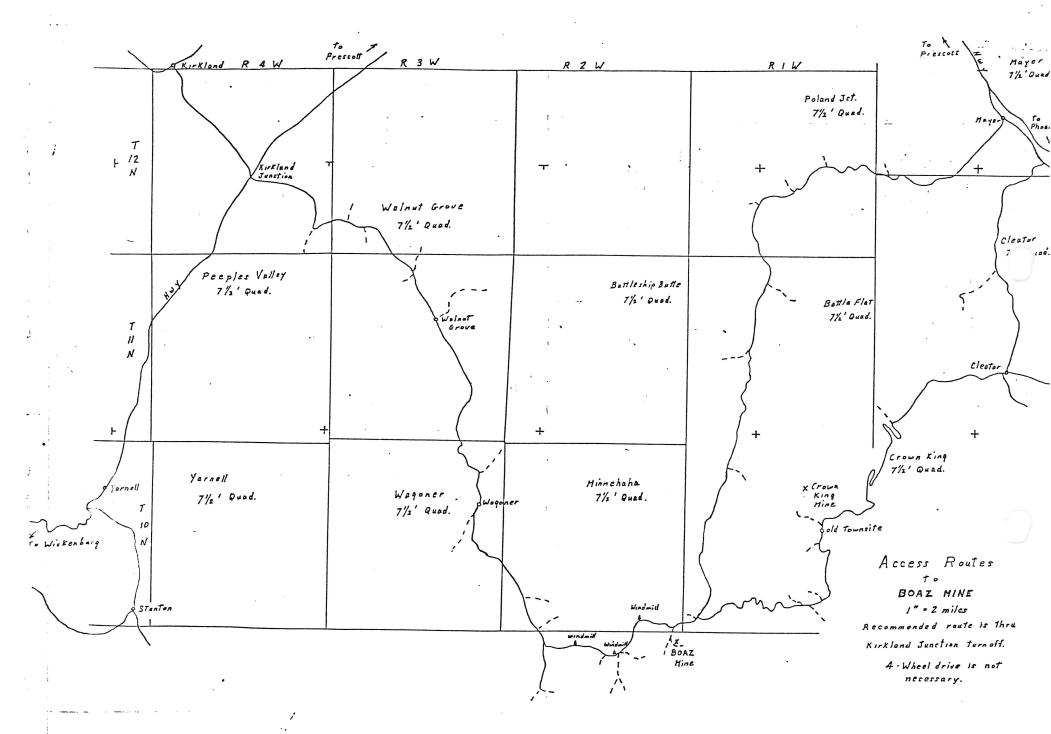
USGS MINNEHAHA QUAD
BLM MINING DISTRICT SHEETS 207 & 237
ADMMR BOAZ MINE FILE
LINDGREN, W. ORE DEPTS OF THE JEROME AND
BRADSHAW MTS QUADS USGS BULL 782 1926 P 177
CLAIMS EXTEND INTO SEC. 1 AND INTO SEC. 6
T9N-R1W
ABM BULL 137, P. 60

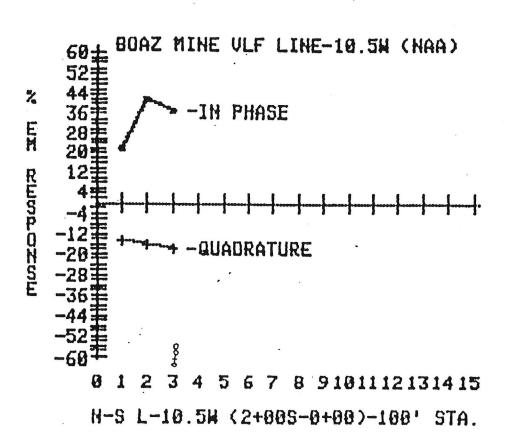


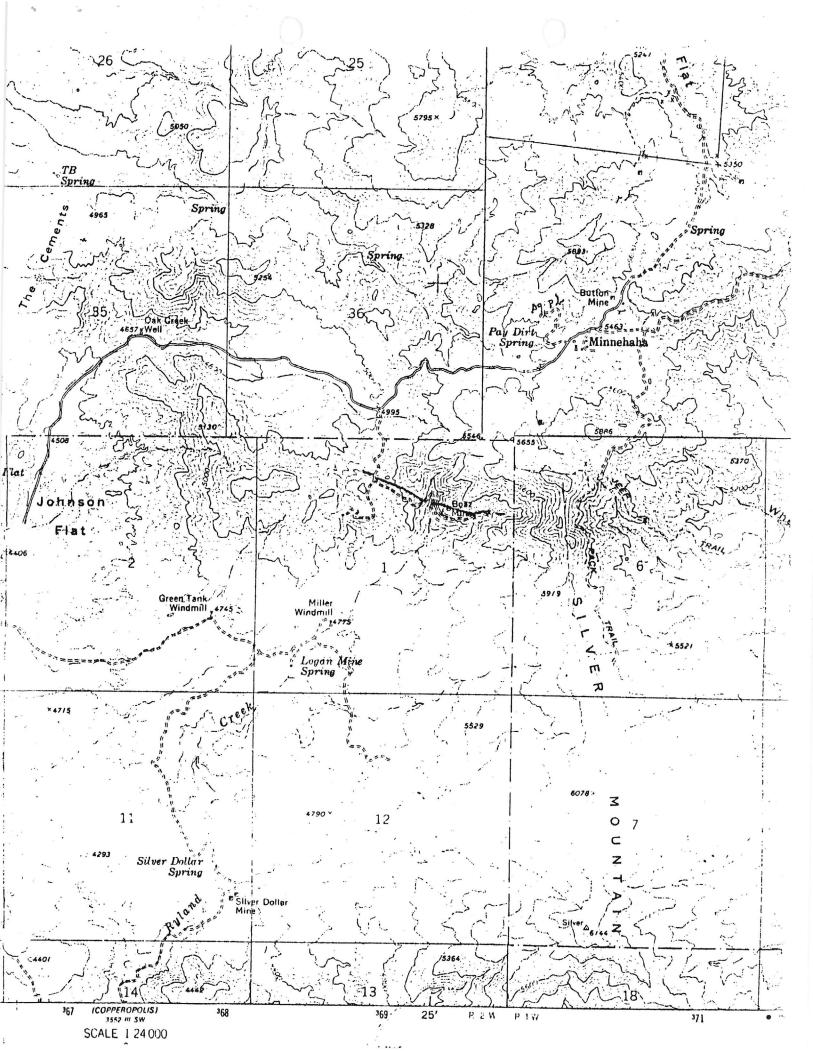


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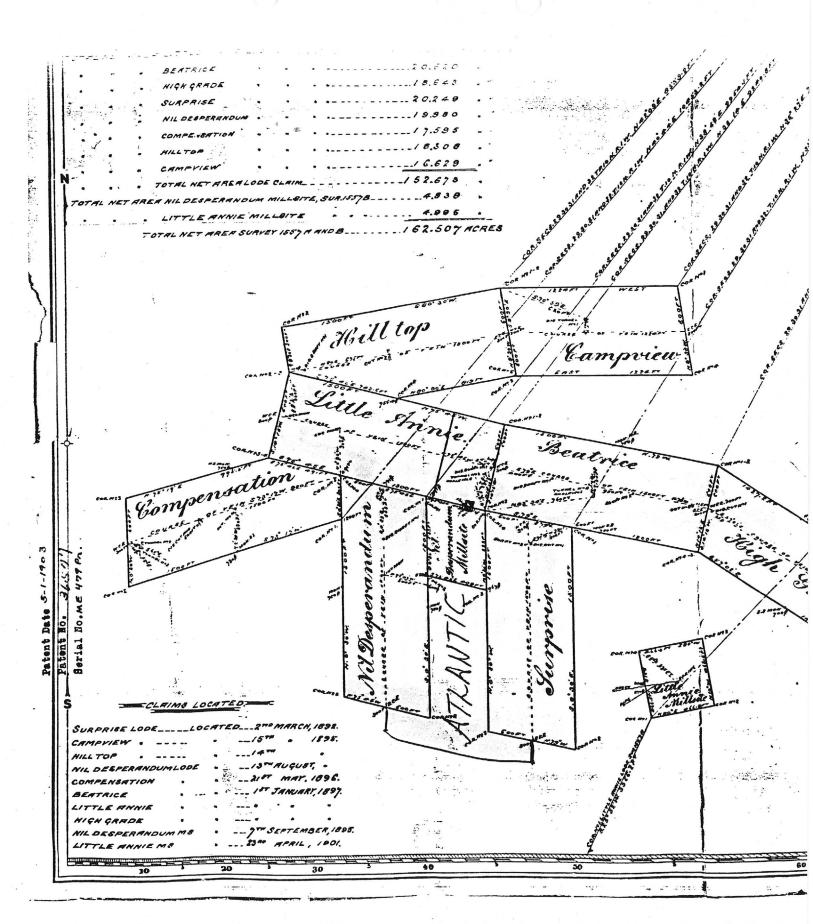
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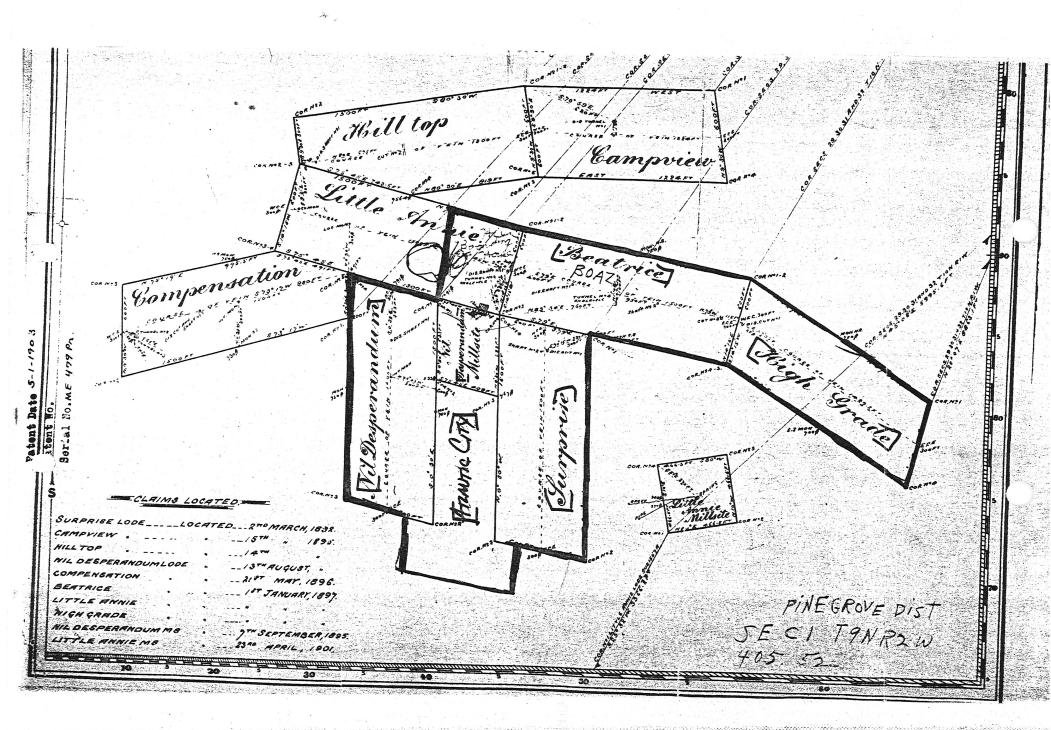


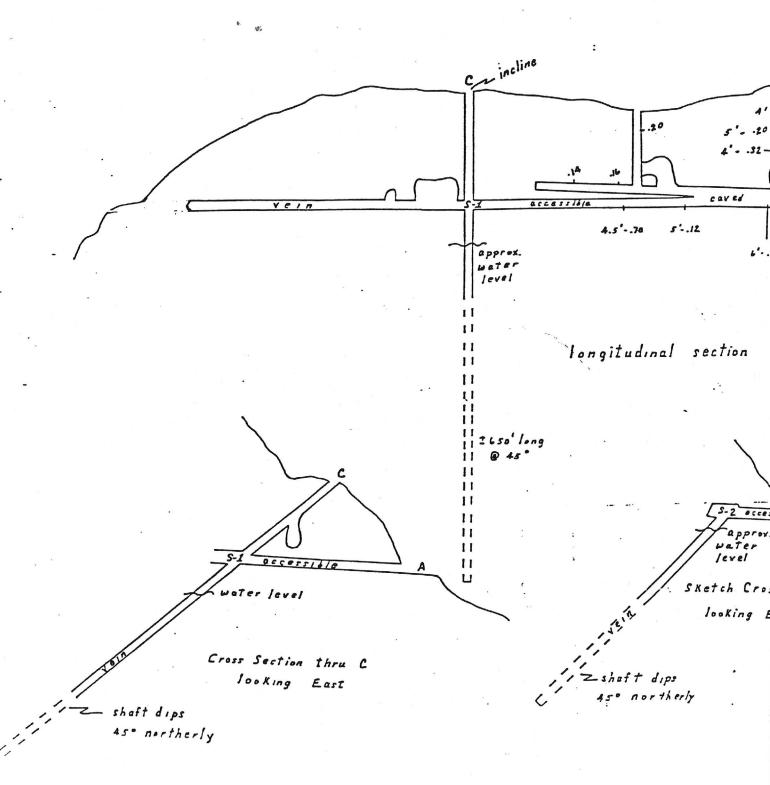




FB'

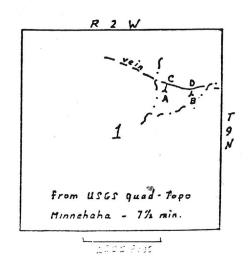






HA.

Note: Thickness and assay values probably determined in late 1930's. Gold values are oz. per ton



C

Copied and modified by C.R. Butler

Section thru S-2

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le B

NAME: NICHOLAS H. CAROUSO

BIRTHDATE: March 25, 1920

BIRTHPLACE: Oakland, California

MILITARY SERVICE: U. S. Navy, W. W. II, Honorable Discharge

SOCIAL SECURITY No. 552-16-6455

MARITAL STATUS: Married, (wife, Barbara Elizabeth Carouso) and 3 children (Mark, age 26 years; Joan, age 23 years; Valerie, age 19 years).

DEGREES: B.A., 1950; M.S., 1959, Dept. of Mineral Technology, Mining, College of Engineering, Univ. of California; and credits toward Ph.D. program, Univ. of Arizona.

PROFESSIONAL SOCIETIES: Member, American Institute of Mining, Metallurgical and Petroleum Engineers; Member, Arizona Geological Society; Member, American Radio Relay League; Member, Experimental Aircraft Association.

LISTED IN: Who's Who in Finance and Industry, Marguis; Dictionary of International Biography, Vol. 10, London, England; Critical Reader, and made significant changes in the Third Edition of "Economic Mineral Deposits", by M. L. Jensen and A. M. Bateman, 1979.

PROFESSIONAL EXPERIENCE

Aug. '65 - Present

PRESIDENT AND MEMBER OF BOARD OF DIRECTORS of Geo-Processing, Inc. Consulting and management in the mining and metallurgical fields, this includes utilization of exploration techniques, such as: geochemical; geophysical (extensive use of the Very Low Frequency electromagnetic geophysical instrumentation for exploration and evaluation of mineralized zones); geological; drilling; development of mining properties, both surface and underground; and the testing of the metallurgical characteristics of mineralized materials encountered; and extensive use of computers, word processing and engineering. Emphasis on gold, silver, mercury and copper.

Hydrometallurgical process research and development, for both precious and base metals—idea through patent stage. This includes placer gravity concentrating equipment, design and fabrication.

Recently located several gold placer deposits, in California, and Wyoming.

Currently, mining consultant for an open pit gold property in Nevada, and several placer properties in California. Also conducting an extensive precious metal exploration program, which includes: locating new properties and acquisition of existing properties, which will be available to clients.

MANAGEMENT SUPERVISOR of Bonanza-MJV, Joint Venture exploration The Bonanza-MJV claim group was initiated by myself after a project. comprehensive exploration effort conducted in the Superior, Ray and Globe areas, of Arizona, at my own expense. The Bonanza claim group area offered the best potential of producing an economically feasible The initial joint venture effort was self financed and property. incorporated Induced Polarization and Resistivity, Magnetics, Geochemical and Geological surveys all in a coordinated exploration Subsequent drilling gave very encouraging results. During a detailed Very Low Frequency electromagnetic survey was and the results of this survey correlated well with conducted previously developed data. During this past year bulldozer cuts have exposed multiple closely spaced veins carrying economic values in silver, this should prove to be a very successful open pit operation.

OCEAN ENGINEERING CONSULTANT -consulting for Ocean Resources, Inc., San Diego, California, in geophysical exploration of the ocean bottom. Research and development studies in the processing of manganese sea nodules. I was involved in the early work on these nodules which resulted in a basic process patent.

METALLURGICAL CONSULTANT -consulting in the field of extractive and process metallurgy.

Conducted process development studies at Discom Inc., a subsidiary of Talley Industries, Inc., Mesa, Arizona, resulting in favorable process modification to produce thin computer disks.

Conducted feasiblity studies for the processing of manganiferous silver ores from the Tombstone, Arizona area.

Aug. '63 - Aug. '65

CONCENTRATOR METALLURGICAL ENGINEER (Chief Metallurgist)
Kennecott Copper Corporation, Ray Mines Division, Hayden, Arizona.
Resigned this position to enter private business.

The functions of this position were the responsibility of a department head in maintaining optimum metallurgical performance of the concentrator and production control of the mines plant, supervision of the concentrator metallurgical department staff, and metallurgical process development and plant design. Instrumentation (process control) systems research and design emphasized. Designed X-ray on stream analysis system and supervised its successful completion and operation. Active in laboratory and plant research and testing of a new concept for recovery of molybdenite from copper sulphide concentrates. Designed and supervised the installation of an ore-water ratio system for fine crushing mill circuit. Assisted Precipitation

Plant personnel at the mine in a consulting capacity. Conducted preliminary studies on leaching characteristics of copper silicate ore which eventually resulted in the construction of a \$35,000,000 plant to process this ore. Conducted computer feasibility study for computer controlled process control of fine grinding and flotation circuits which resulted in the development of a working mathematical model. Completed comprehensive progress report of this feasibility study with definite recommendations. Acting Concentrator Superintendent when required.

Kennecott Copper Corporation company consultant - required to visit other Kennecott copper properties to assist in process modification.

CONSULTANT concurrant with the above position, active part time consulting in the mining industry.

Sept. '61 - '63

TEST ENGINEER "A" (Senior Metallurgist)
Kennecott Copper Corporation, Ray Mines Division, Hayden, Arizona.
Promoted to Concentrator Metallurgical Engineer (Chief Metallurgist).

The engineering functions for this position were to design process control systems (automation), to research and develop transducers for measurement of process variables, to prepare proposals, to act as staff supervisor for the installation of the proposed systems and to conduct engineering evaluation studies of new metallurgical processes. Research and development of new reagents for metallurgical processes.

CONSULTANT concurrent with the above position, active part time consulting in the mining industry.

Dec. '59 - Sept. '61

PLANT PRODUCTION ENGINEER (Product Engineer)
Eitel-McCullough, Inc., San Bruno, California.
Resigned this position to reside in a warmer climate for my son's health, and to return to the mining industry.

Engineering responsibility, staff and line, for the manufacture of Klystron Amplifier tubes. This position required background in chemistry, metallurgy and electronics, especially from a process Good public relations with production engineering standpoint. personnel required. Responsible for the preparation of process manuals and initiation of design modifications. Engineering supervision for raw material procurement to electronic testing of the finished product. Acting Liaison Engineer between research and development, and production.

June '59 - Oct. '59

GEOPHYSICAL ENGINEER

Phelps Dodge Corporation, Exploration Office, Douglas, Arizona. Resigned to return to California to assist parent during illness.

This position included both geophysical field surveying and office reduction and plotting of data. Geophysical surveying methods used were: induced polarization, both dipole-dipole and depth probing, self polarization, resistivity, electromagnetics, audio frequency magnetics and ground magnetometer surveys. Extensive placer exploration in Southern California.

Sept. '57 - '59

SENIOR RESEARCH ENGINEER

Berkeley Research Company, Berkeley, California. Employed while working on M. S. degree.

This position required a knowledge of chemistry, physics, metallurgy and electronics. Idea development in industrial processes and instrumentation, from idea to patent stage. Supervision of the research laboratory. Experience in wetting of Aluminum Oxide with Nickel, Cobalt, etc.

GRADUATE RESEARCH ENGINEER

This position was concurrent with employment at Berkeley Research Co., and graduate work for M. S. degree. Supervision of two graduate students in metallurgy, in conducting beneficiation studies on manganese sea nodules for Scripps Institute of Oceanologly. The studies were successful and eventually resulted in a basic process patent.

Apr. '56 - Sept. '57

RESEARCH CHEMIST

U. S. Bureau of Mines, Rare and Precious Metals Experimental Station, Reno, Nevada.

Resigned to return to University of California to complete M. S. degree started at University of Nevada, Mackay School of Mines, Reno, Nevada.

Constructed and operated a pilot plant for the separation and purification of rare earths by the ion exchange method. Pound lots of high purity (99.99%) rare earths were produced for reduction to the metal state and subsequent testing of alloy characteristics. Chemical engineering and metallurgy main emphasis.

Sept. '55 - April '56

SELF EMPLOYED

Carouso Laboratories, Concord, California and Carson City, Nevada. Terminated business to return to school for post graduate degree.

General testing laboratory, chemical and metallurgical. Designed and

manufactured a surveying instrument, electronic geophysical equipment and core drill bits (tungsten carbide and alloys). Designed and constructed a core drill rig and used it to drill geochemical and geophysical anomalies. Contract mineral exploration surveys and mining development. Emphasis on copper, silver and mercury.

April '53 - Sept. '55

PROFESSIONAL REPRESENTATIVE Riker Laboratories, Inc., Los Angeles, California. Resigned to become self employed.

This position pertained to public relations and sales promotion of new

April '50 - March '53

RESEARCH CHEMIST University of California, Berkeley, California. Resigned to gain experience in the public relations field.

This position pertained to classified research projects, conducted for the U. S. Navy. "Secret" clearance required.

Early experience, prior to military service and completion of bachelor's degree, was in mechanical design and fabrication in the tool and die industry: this included working experience with various types of machine shop equipment, and acting in a supervisory capacity as Production foreman over thirty precision machine operators. Early experience was also in the mining and metallurgical fields, assisting my father, who was very active in rare earths research.

Nicholas H. Carouso 611 Miller Valley Road Pine Plaza Suite #47 Prescott, Arizona 86301 (602) 778-7153

November 7, 1981

V.L.F. ELECTROMAGNETIC SURVEY BOAZ MINE, YAVAPAI COUNTY, ARIZONA PRELIMINARY SURVEY

INTRODUCTION

At the request of Mr. Bob Cable, of the Boaz Mine, a preliminary V.L.F. Electromagnetic survey was conducted on March 30, 1982, to determine the effectiveness of this type of survey for this property.

The survey lines were oriented to cover as much of the property as possible. The most pertinent information is obtained from survey lines crossing normal to the structure (perpendicular) and this was done in the area of most interest. Additional closely spaced lines should be considered in the future to detail the entire vein system. If this is done, then mathematical filtering can be performed on the data to make it more contourable and less noisy, which assists greatly in the interpretation.

The indication from the survey lines run is that the western area of property appears to have stronger structures and conductivity. This could be the result of the influence of two or more conductive structures intersecting in this area. However, generally speaking, the property seems to have merit.

The principle of operation used in this survey will be discussed along with the preliminary interpretation of the data.

VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY PRINCIPLE OF OPERATION

The VLF-transmitting stations operating for communications with submarines at sea, have a vertical antenna system. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. The instrument used for this type of survey, the EM-16, is simply a sensitive receiver covering the frequency bands of the VLF-transmitting stations with means of measuring the vertical field components.

The receiver has two inputs, with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt-angle is calibrated in percentage. The remaining signal in this coil is finally balanced out by a measured percentage of signal for the other coil (horizontal coil), after being shifted (electronically) by 90 degrees. This coil is normally parallel to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation P1/2-signal from the horizontal coil is a measure of the quadrature vertical signal. In other words, the vertical real-component (in phase reading) indicates the structure and the quadrature indicates how conductive the structure is.

INTERPRETATION OF SURVEY DATA

Line-0 (4+00N-6+00S), which was run across the vein indicated a steeply dipping conductive structure.

Line-5.5W (6+00N-7+00S), at station 2+00S indicated the strongest response along this line, and it is possible that the structure is closely paralleling the survey line.

Line-9W to 2E (0+00), this line parallels the footwall side of the vein and indicated that a good conductor was near.

Line-1E (0+00-3+00S), indicated a good conductor while crossing the vein.

Line-3E to 15E (3+00S), parallels the vein on the footwall side and indicated that the old workings were in a favorable area of the vein.

Line-15E (0+00-3+00S), this short traverse indicated possible faulting of the vein. Visual indications also favor this possibility.

Line-16E to 20E (1+00S), indicated a possible faulted zone, and the crossing of a conductor at an angle, less than 90 degrees.

Line-20E (1+00S-7+00S), indicated that a fair conductor was being encountered to the south.

Line-19E to 18E (7+00S), indicated that we were west of the conductor.

Line-18E (2+00S-7+00S), same as above, possibly to the west of the conductor.

Line-16E (1+00S-3+00S), indicated a small conductive zone.

Line-13.5E (1+00N-2+00S), indicated the crossing of the vein, poorly conductive.

Line-10E to 13E (1+00N), indicated possible interface along the hanging wall of the vein.

Line-10E (1+00N-0+00), on the hanging wall of the vein-

Line-8E to 9E (0+00), same as above.

Line-8E (0+00-2+00S), same as above.

Line-7E (2+00N-2+00S), indicated that the vein is steeply dipping to the north, approximately 50 degrees north.

Line-10.5W to 3.5W (along 2+00S), appears that a broad conductive zone is in this area, as the % EN response is much greater than to the east. Note, that the profile had to be plotted with twice the height as the others.

Line-10.5W (2+00N-0+00), Very good EM response, indicated that possibly strong conductive zones are intersecting in this area and continuing to the west, possibly deep. Additional lines to the west are recommended.

CONCLUSIONS AND RECOMMENDATIONS

The Boaz mine certainly appears to have merit. The V.L.F. electromagnetic geophysical survey indicated that there are strong conductive zones on the property.

The western area of the property gave stronger responses than the eastern area. It is felt that this area should be considered for additional mining exploration effort.

The conductive zone may be fairly deep, however, with additional V.L.F. survey lines, a close approximation could be possibly made. To give a close approximation of depth, the total response curve should be available, that is the maxima and minima of the In Phase data.

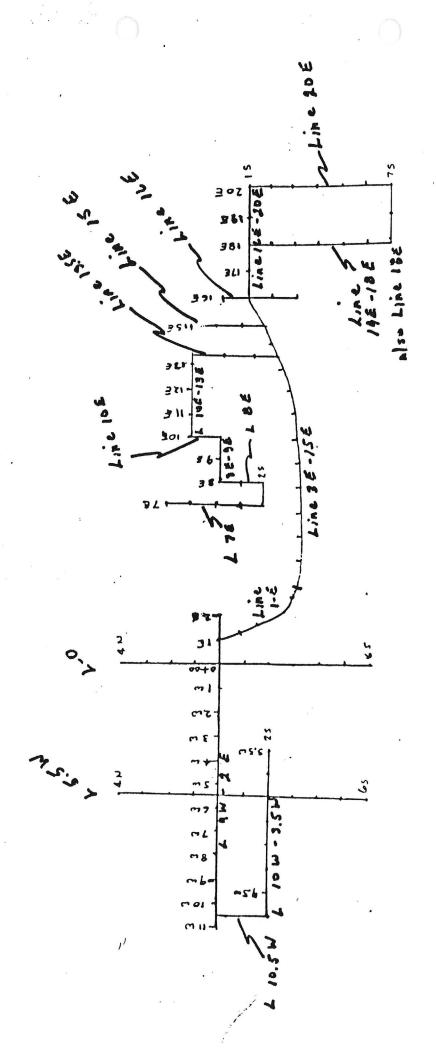
As this was a preliminary test to evaluate the effectiveness of the V.L.F. electromagnetic survey method, I believe it has accomplished its goal, and the data indicates that the Boaz mine is certainly a viable mining property.

Mikolis H. Carouso

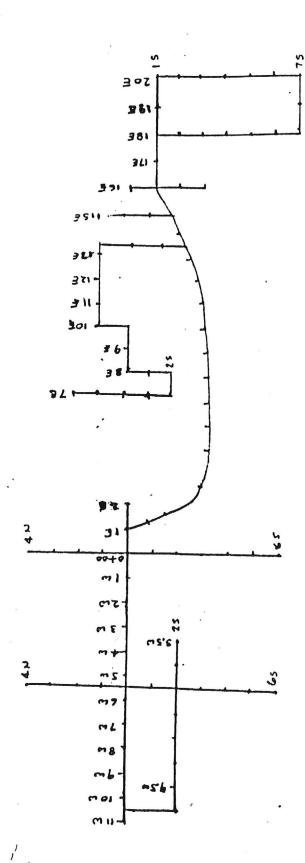
Nicholas H. Carouso President Geo-Processing, Inc. P.O. Box 1791 Prescott, Arizona 86302

(602) 778-7153

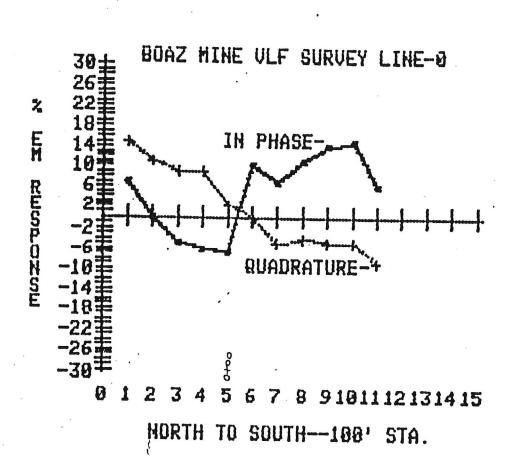
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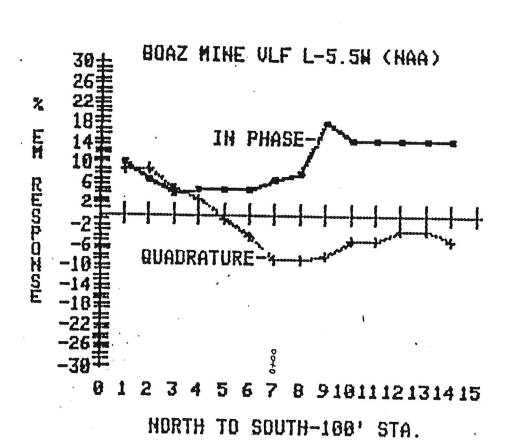


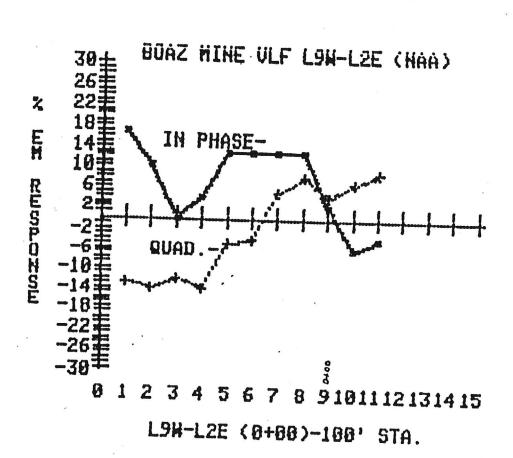
BOAZ MING VLF EM SURVEY SCORE: 1" + 400' 4-1-82

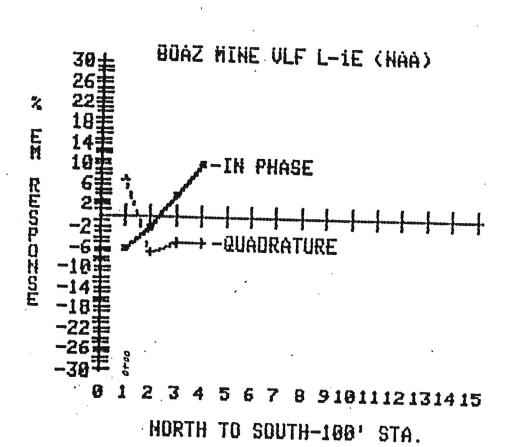


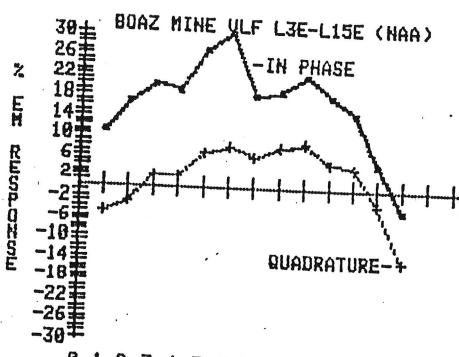
BOAZ MING VLF EM SURVEY SCALC: 1"=400' 4-1-82



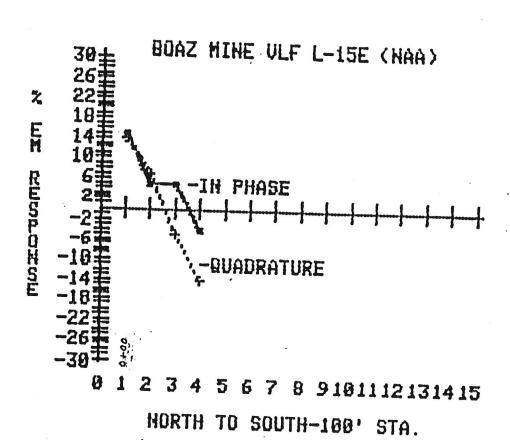


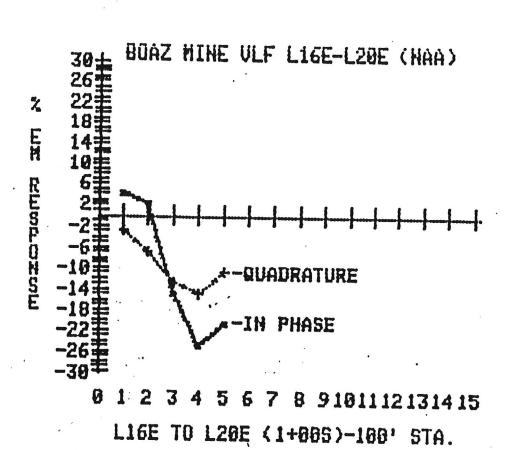


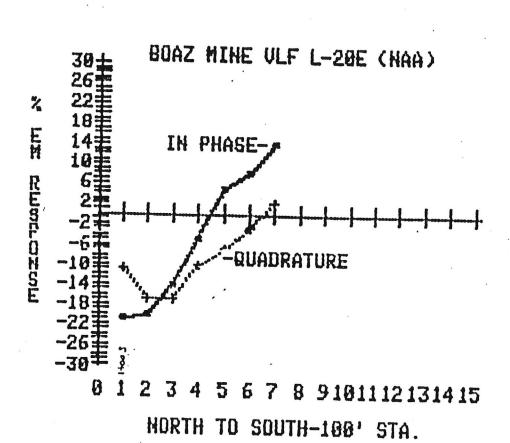


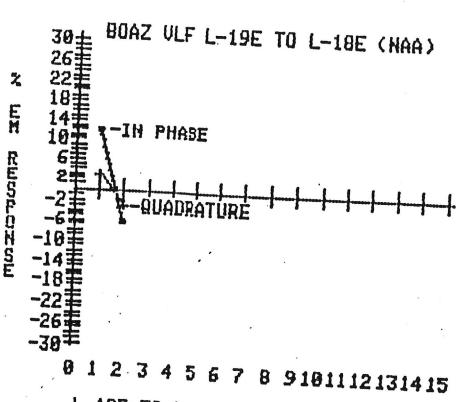


1 2 3 4 5 6 7 8 9101112131415 LJE TO L15E (3+865)-166' STA.

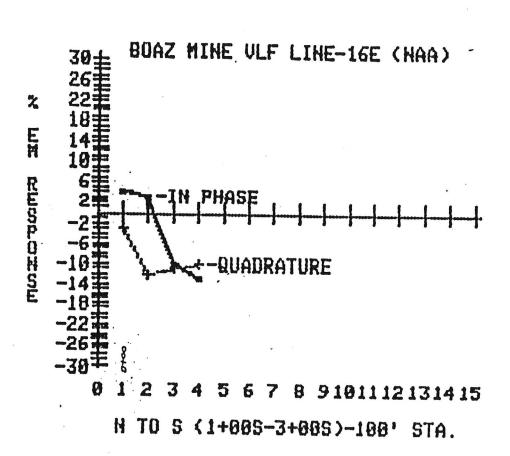


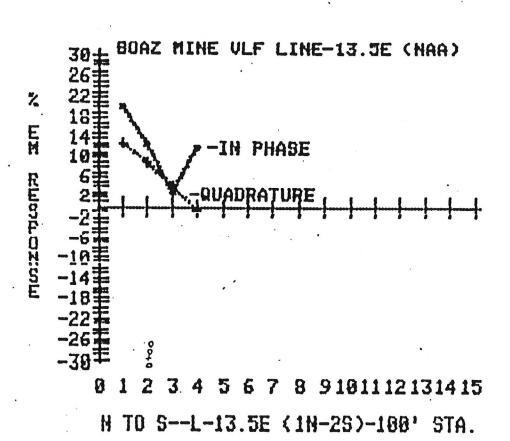


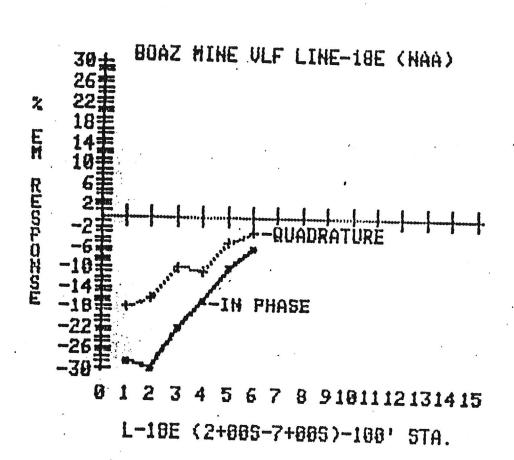


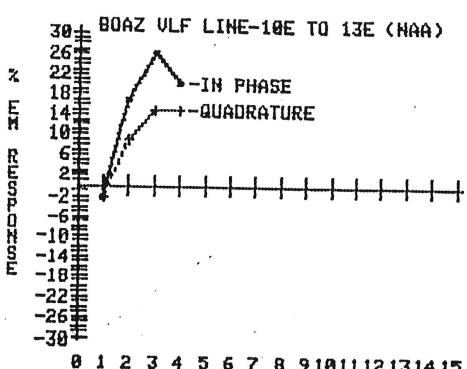


L-19E TO L-18E (7+008)-100' STA.

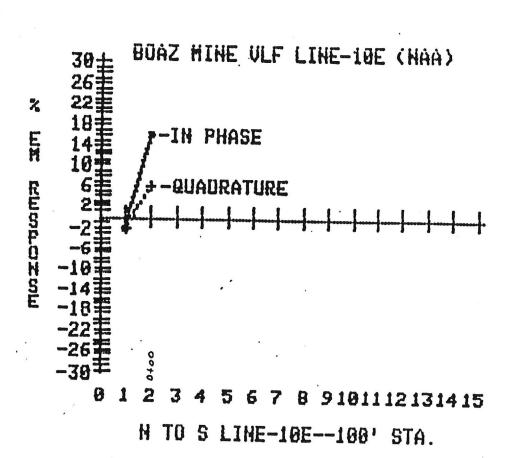


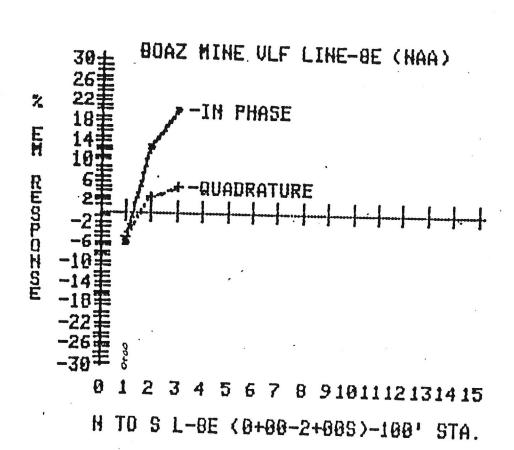


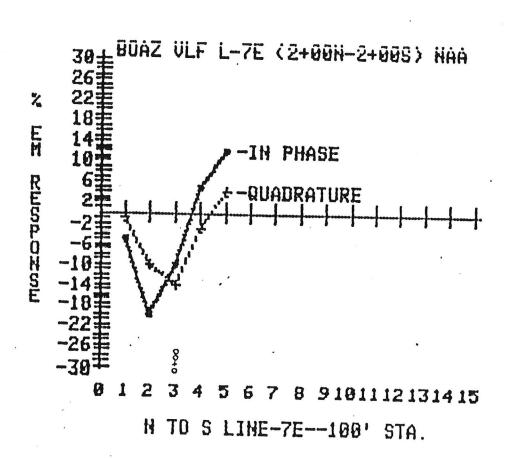


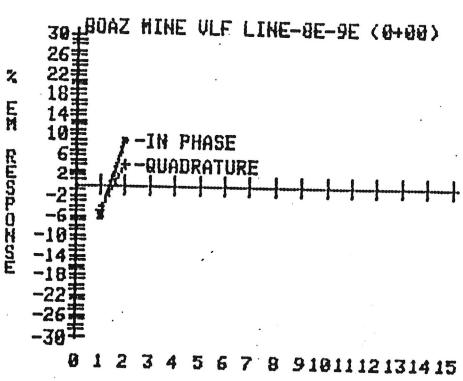


W TO E ALONG STA. 1+88H--188' STA.

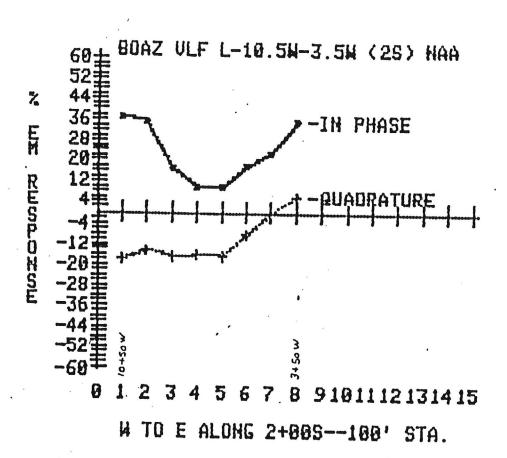








0 1 2 3 4 5 6 7 8 9101112131415 W TO E ALONG STA. 0+08--100' STA.



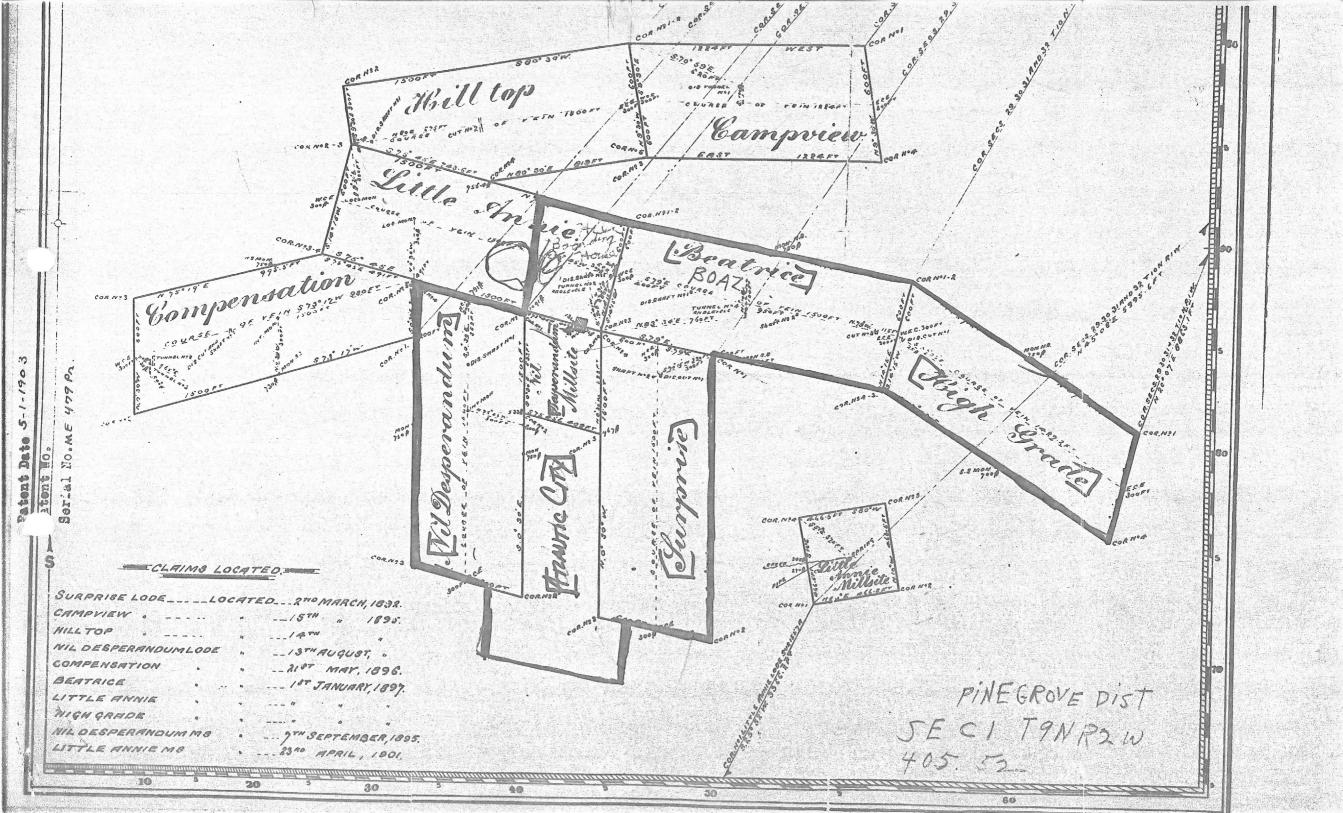
TriPlus Partners (- 2017)

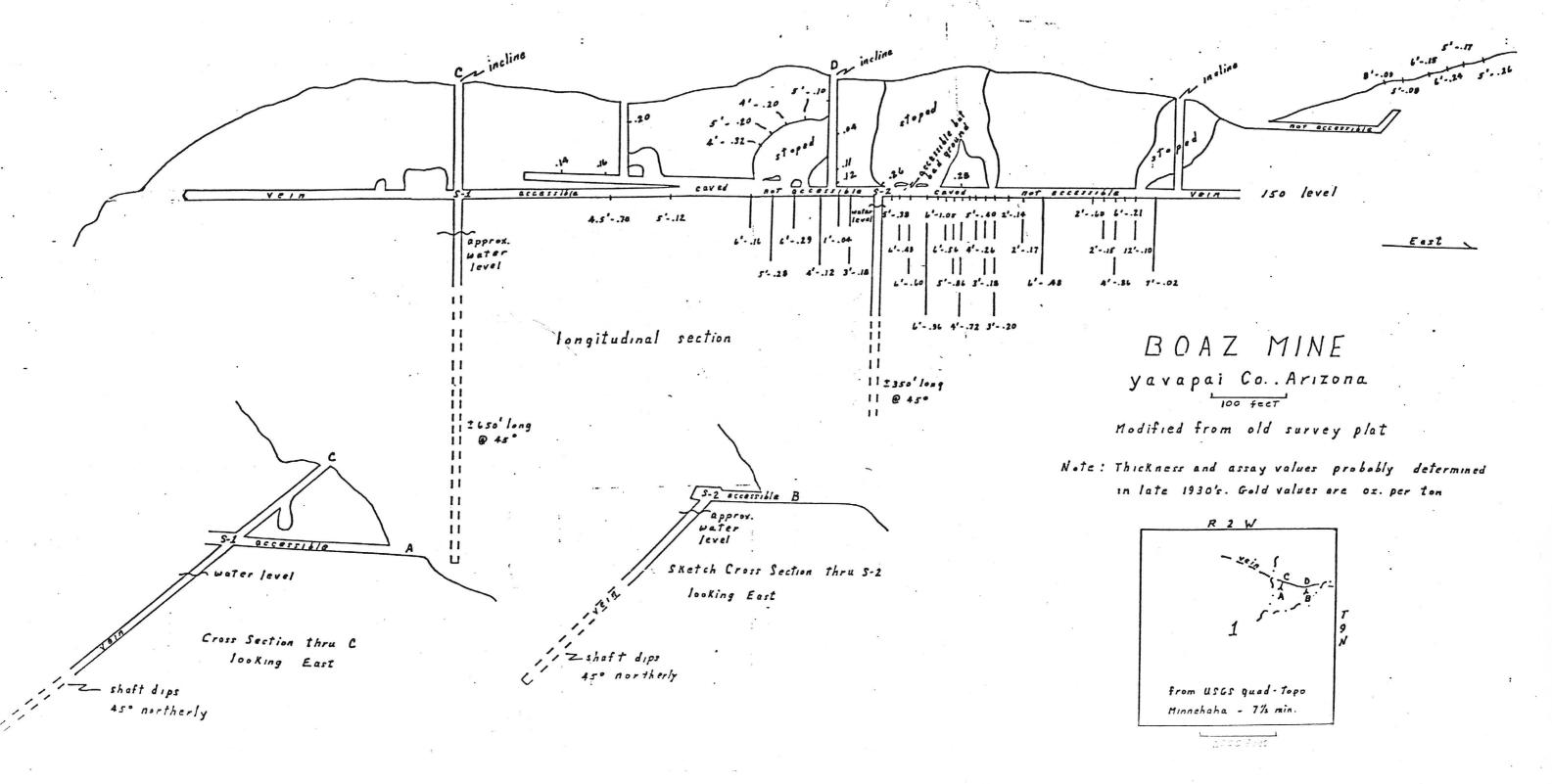
Chris Shaw

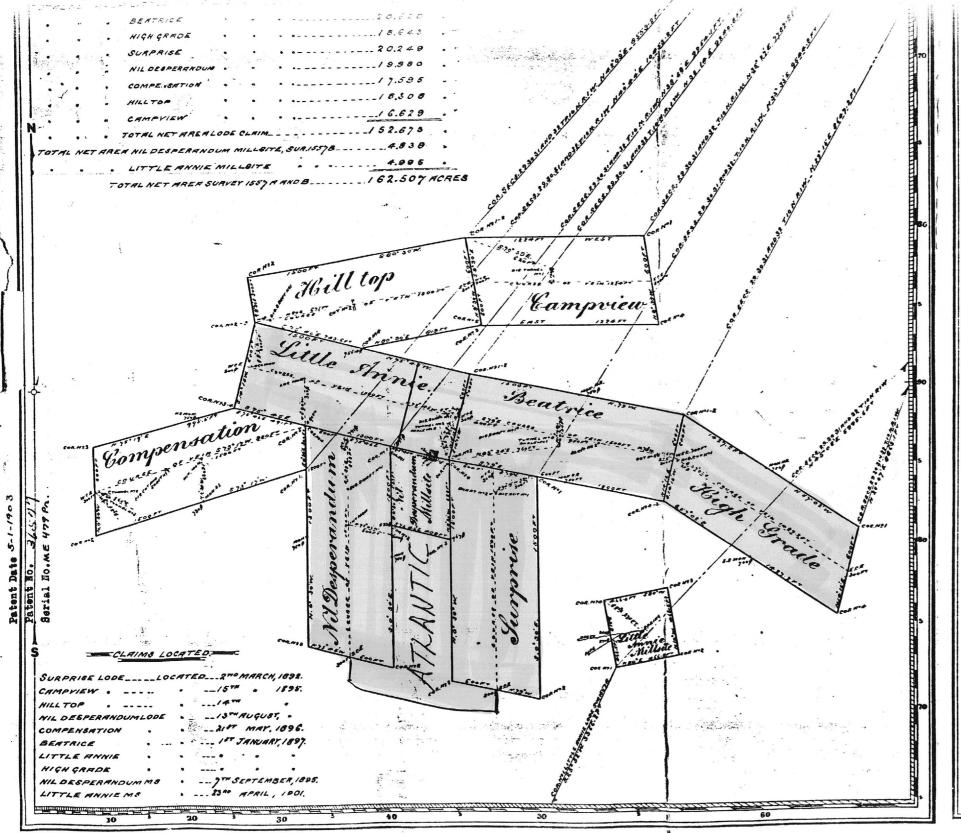
5350 North 16th Street, #106 Phoenix, Arizona 85016 602.604.2400 Fax 602.604.2401 chris@tripluspartners.com

REPORTED 1-28-2011 THEY OUR PROPERTY,

NIP







Prescott Land Distri

PLA

The Gro Mining Compan

KNOWN AS THE Gurgorise
Little Annie, Beatrice, High Grade
Nil Desperandum, Compensation Hotop, Campview, Nil Desperandum, mosite and Little Annie millsite
IN Brudshow or Tiger VINNG DISTRIC.
Yeavapai __COUNTY, Arizona____
Containing an Area of 162.507______Acres
Scale of 500 ____ Feet whe inch.
Variation 14 E_____

SCHEETED May 3th to 16th 1901 Bi J. J. Fisher C.S. Seput Mineral Surveyor

The Original Field Notes of the Survey of the Mining Claim of
The Oro Mining Company
brown as the Little Annie, Beatrice,
High Grade, Vil Desperandum,
Compensation Hill top Cumpriese
Luryrise Nil Desperandum millset
and Little Annie millsite.
from which this plat has been made under my direction

from which this plat has been made under my furecood have been examined and approved, and are on file in this lifter and I hereby certify that they furnish such an accurate descry tion of said Mining Claim as will, if incorporated into a pater serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments will perpetuate and fix the locus, thereof.

I further certification that Investigated Dollars worth of labor has been expended or improvements made upon said Stining. Claim by claimant or its grantors, and the said improvements consist of I shoufts, 5 cuts, 5 turnels, 1 winze 1003ft of levels 1-20 stamp mill and I mile of pipe line

that the location of said improvements is correctly shown; upon this plat, and that no portion of said labor or insprovements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Minin.
Claim made in conformity with said original field notes of the
survey thereof, and the same is hereby approved.

Tecson Ariz. Suren General for Oct. 14th 1901 Arizona