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Magma Copper Company

ASSAY CERTIFICATE "A"

CENTROID Cu. Co.

Date 7-15-57

No.	LOCATION & REMARKS	CU %	AG OZ.	AU OZ.				
C-1	DDH #3 506' to 511'	0.15						
C-2	" 511' to 520'	0.15	✓					
C-3	" 520' to 543'	0.15						
C-4	DDH #2 271' to 273'	0.30	✓					
C-5	" 273' to 277'	0.70	✓					
C-6	277' to 283'	0.10	✓					
C-8	DDH #8 235' to 245'	0.05	✓					
C-9	2' Channel Centroid #17 Claim	0.25						
C-10	DDH #2 316' to 321	0.10	✓					
C-11	" 321 to 322 2.9	0.50	✓					
C-12	DDH #2 (323'-26')	0.15	✓					
C-13	DDH #2 (326-336)	0.80	✓					
C-7	DDH 8 - (216-235)	0.10	✓					
H-W-1	Got samples from	0.55						
H-W-2	House Which Dump.	0.55						
H-W-3	" " "	0.45						
H-W-4	" " "	0.35						
H-W-5	" " "	0.55						

0.49%

#9 5' 245 2045

R E Hickman

CHIEF CHEMIST

Magma Copper Company

ASSAY CERTIFICATE "A"

Centroid Copper Co

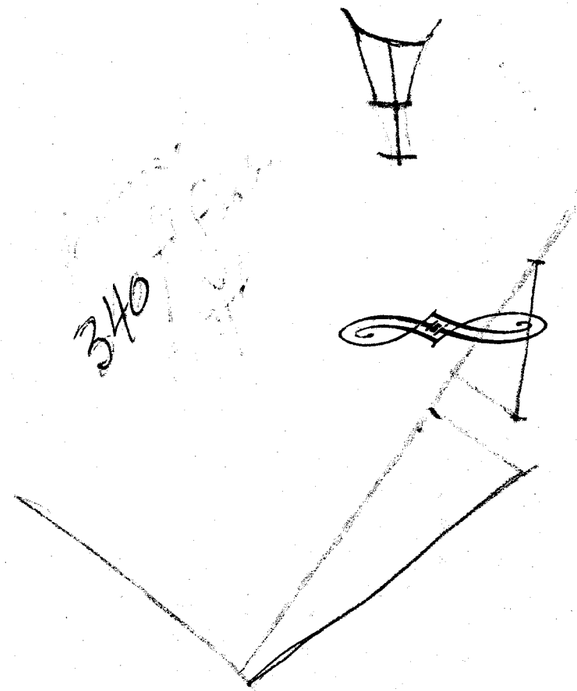
Date 7-22-52

No.	LOCATION & REMARKS	CU %	AG OZ.	AU OZ.				
	#61	1.00	—	—				
	C-14	2.00		0.03				
	C-15	0.70		0.02				
	C-16	0.90		0.01				
	C-17	0.65		0.07				
	C-18	0.20		0.02				
	C-19	0.50		0.02				

M-B Bam

CHIEF CHEMIST

Prospertus



CENTROID CONSOLIDATED MINES
909 North First Street
Phoenix, Arizona

Prospectus

CENTROID CONSOLIDATED MINES

~~309 North First Street~~
Phoenix, Arizona

Telephone AL 4-2511 — P. O. Box No. 2236

Incorporated under the laws of the State of Arizona - 1936

CAPITALIZATION:

Total authorized capital	$300,000.00
3,000,000 shares common stock	Par $0.10

Fully paid and non-assessable

THE COMPANY OFFERS TO THE PUBLIC: 100,000 shares of its common capital stock at a selling price of $0.50 per share. The per unit and aggregate offering price, commissions and net proceeds to issuer is set forth in the following table:

	Offering Price	Underwriting Discounts and commissions	Net Proceeds to Issuer
Per unit	$ 0.50	$ 0.10	$ 0.40
Aggregate	50,000.00	10,000.00	40,000.00

TRANSFER AGENT

First National Bank of Arizona—Trust Department

The shares of stock are offered subject to prior sale and to withdrawal, cancellation or modification of the offer without notice.

NOTE: This prospectus has been filed with the Securities Department of the Arizona Corporation Commission, and also with the Federal Securities and Exchange Commission, under its regulations exempting from registration offerings not exceeding $300,000.00. The offering herein described has been registered with the Arizona Corporation Commission.

BECAUSE THESE SECURITIES ARE BELIEVED TO BE EXEMPT FROM REGISTRATION UNDER THE FEDERAL SECURITIES ACT, THEY HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION, BUT SUCH EXEMPTION, IF AVAILABLE, DOES NOT INDICATE THAT THE SECURITIES HAVE BEEN EITHER APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION, OR THAT SAID COMMISSION HAS CONSIDERED THE ACCURACY OR COMPLETENESS OF THE STATEMENTS IN THIS COMMUNICATION.

No person has been authorized to give any information or to make any representations other than those contained in this prospectus, and if given or made, such information or representations must not be relied on as having been authorized by the company or by any person named in this prospectus. The statements herein contained are made as of the date of this prospectus unless another date is specified.

August 5, 1952

PURPOSE OF OFFERING

The aggregate net proceeds to the issued will be expended, as nearly as can be estimated, as follows:

	Estimated
Administration, legal and engineering	$ 7,500.00
Drifting, cross-cutting, sinking, Horse whim ore body	15,000.00
New head frame, power house, B. S. Shop, setting 25 H. P. hoist, incidental tools, etc., rehabilitation of timbering, main vertical shaft	10,000.00
Diamond drilling from the main shaftway	5,000.00
Timbering in main shaft and cross cut on 300 foot level	2,500.00
TOTAL	$40,000.00

Priority of expenditure of the funds will be in the order above listed.

Some of the officers and directors may assist in selling the securities herewith offered for sale, in which event, they would be entitled to and would be paid, the commission of Ten ($0.10) Cents per share, noted above. THE CORPORATION, CENTROID CONSOLIDATED MINES, RESERVES THE RIGHT TO WITHDRAW THIS OFFER WITHOUT PRIOR NOTICE.

CORPORATE DATA

The company was organized in the year 1936, as a mining company, under the laws of Arizona. The Articles of Incorporation, as amended, authorize the issuance of 3,000,000 shares of common capital stock, of a par value of $0.10 per share.

1,680,950 shares have been issued and are outstanding.
1,319,050 shares are unissued.

3,000,000 total shares authorized.

PROPERTIES

The principal assets of the corporation are set forth on the attached balance sheet. A survey map of the properties is also attached. The claims consist of:

Jubilee Group
Hancock Group
Centroid Group
Black Hawk Group
Oversight
and
Capella Group

Comprising 37 unpatented mining claims, approximately 1-½ miles on the strike of the several vein systems and one mile wide. 23 of the claims are surveyed and mapped by J. W. Waara, U. S. Mineral Surveyor; 4 claims unsurveyed. These latter lie easterly from Jubilee 4, contiguously.

Location

Lying astride of and surrounding Cunningham Pass, Yuma County, Arizona, the mining claims groups are part of Sec. 7, 18 and 19, Range 12 west, Gila and Salt River Base and Meridian, and Sections 12, 13 and 24, Range 13 west, Gila and Salt River Base and Meridian.

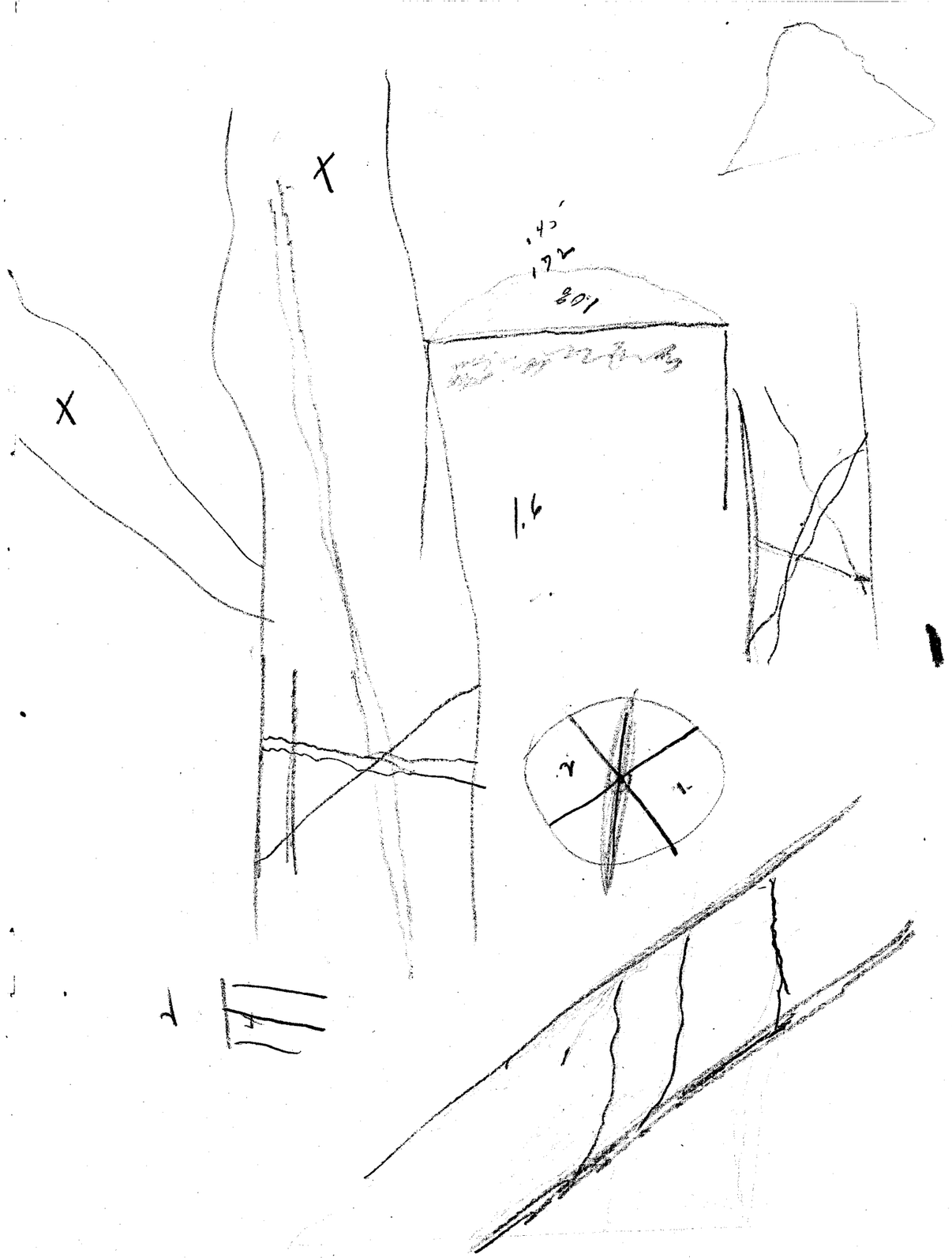
A Yuma County map is attached, upon which as been drawn the approximate location of the Centroid properties, eight miles northerly from the A.T.&S.F. Railroad Station, at Wenden, Arizona, and the surrounding mining properties which have been producers of valuable minerals. The Swansea Copper mine, a producer of much copper, lies approximately 20 miles northwesterly from Centroid property. Its ore is similar to that of Centroid.

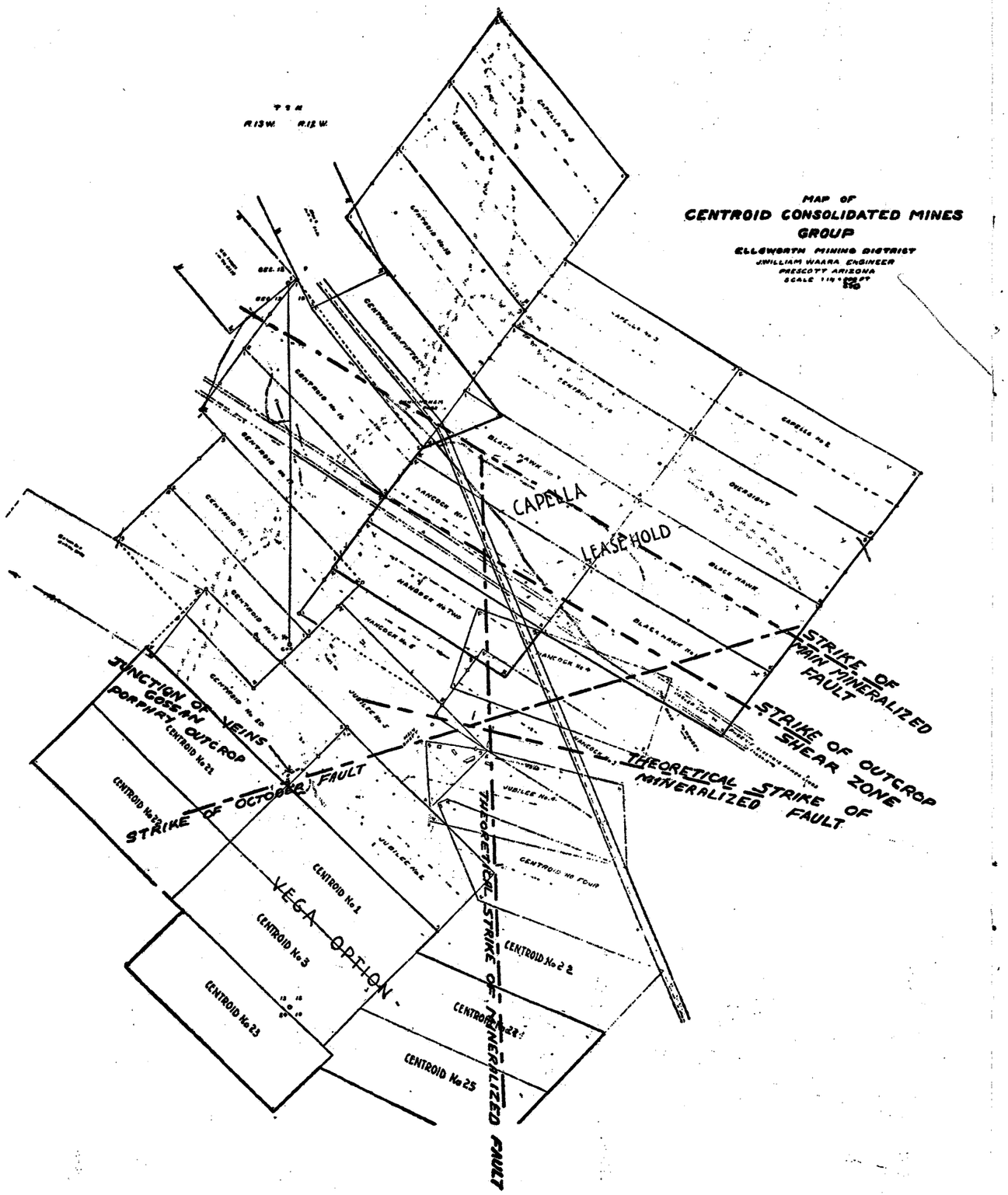
Geology

Pre cambrian, intruded by quartz porphyry, diabase, diorite, granite porphyry, pegmatite—and near the shears an ancient marine lime. (A map of the regional geology, showing the location of the Cunningham Pass, taken from Arizona State Geologic Map, is attached).

Structure

A wide mineralized fault runs through the Centroid Properties for over a mile, making its way finally through Cunningham Pass both northwest and southeast, presumably burying itself





northwesterly in Butler Valley and southeasterly in McMullen Valley. A claim map attached shows the approximate location of this mineralized fault and its theoretical extensions both northwesterly and southeasterly.

Westerly from the main mineralized fault, and extending both northwesterly and southeasterly, is an area spoken of by mining engineers as (1) a shear zone, or, (2) several parallel shears. The claim map attached shows the approximate location of this shear zone or the several parallel shears, with their theoretical extensions.

Atop the foothills, further west, is the principal outcrop of the Centroid properties. This apex of an important junction of wide mineralized veins, a fracture zone and intruded diorite in the vein matter, is prominent with outcropping copper stained porphyry. The claim map attached shows the approximate location of this outcrop.

Mineralization

Copper, gold, silica and iron appear to predominate.

Development

During the past fifty years (and probably before the year 1900—but of which we have no authentic information) intermittent prospecting has been carried on in the Cunningham Pass District. However, most of this prospecting has been done in search of high grade outcrops that would produce shipping grade ores. This type of prospecting, when carried on, has resulted in intermittent shipments of profitable ores, but has not properly prospected the district's possibilities as to the existence of large low grade deposits. Even so, this type of development has opened up pay ores near the surface, and such ores have been shipped to smelters from the mining properties known as the Critic, Bullard, Little Giant, Cuprite and Robinson. This last mentioned (Robinson) is now the location of the Centroid properties.

The present development of Centroid properties is being concentrated on large outcrops and adjoining mineralized areas in an effort to prove that these large veins and junctions will develop into large low grade deposits, or produce the much sought for secondary copper with gold and silver.

On the mining claim Hancock No. 2, open cuts found good grades of shipping ore and a shaft was sunk to a depth of fifty feet on a diorite contact which produced more evidence in the form of oxydized shipping grade of copper-gold ore. Along the foothills (being the westerly portion of the Centroid properties) every mining claim showed satisfactory mineralization in holes, shafts, open cuts and tunnels, the minerals exposed or shipped to the smelter being predominantly of gold, silver, copper, iron and silica.

Of late years, shafts were sunk on the mining claims Jubilee No. 5, Centroid No. 4 and Jubilee No. 2, each one encountering most encouraging deposits of oxydized and leached ores, and opening up wide, crushed (brecciated) shears or mineralized faults. Geological and mining engineering advice appears to indicate strongly that greater depth is necessary. Diamond drilling is advised.

On the mining claim Jubilee No. 5 is located the main vertical shaft. This shaft was sunk to the 300 foot level and a long cross cut sent forward for 600 feet, cutting at 200 feet from the shaft bottom a diorite dike, from 200 feet to 300 feet, a zone of porphyry and gneis, and from 300 feet to 326 feet, a wide, brecciated mineralized fault, so crushed and open that the downward percolating waters have impoverished the 26 feet of crushed, quartz porphyry; the secondary values are presumed at a greater depth. This fault or shear is known as the October vein and carries some pyrite, some chalcopyrite, and in places bornite carrying gold was found covered with a black oxide of copper or what might be termed in other districts—sooty chalcocite. (Note: The water being pumped from this shaft is of a red rusty color). This main vertical shaft and its underground workings on the 300 foot level was done by a former owner, Consolidated Arizona Mines, and under the immediate supervision of its then General Manager, W. B. Harris, who is at this writing the President and General Manager of Centroid Consolidated Mines.

A sketch map of this shaft and its underground workings is attached with a cross section of the immediate area correlating the main shaft with the Horse Whim Workings on the adjoining mining claim Jubilee No. 2; here, the Centroid company has, during the past eighteen months, widened and straightened out the shaft to the 200 foot level, extended the upper drifts, sunk the shaft to a depth of 386 feet, and completed over 500 feet of drifting and crosscutting in an oxydized and leached ore body.

A former owner, in the early part of this century, dug a prospect hole to about 100 feet, using a horse whim to pull his muck from the shaftway. During 1937 this shaft was sunk to 215 feet by the present owners, Centroid Consolidated Mines. The present development and all improvements have been, from the collar of the Horse Whim Shaft, and all underground workings to the present incline depth of 386 feet, prosecuted in its present stage by the present owners, Centroid Consolidated Mines.

The extension of the west drift, now in ore, for another 200 feet added to the work planned east of the shaft, should allow our geologists and mining engineers to properly appraise what appears at this time to be an important discovery. With this work done, perhaps before, the main vertical shaft will have been de-watered and a diamond drill hole sent approximately parallel to the south cross cut so as to cut the October Vein at or about the 700 foot level. A laboratory examination of the cores will be made, directed by our consulting geologist and mining engineer, and upon justifiable evidence, the daimond drilling operation will be extended.

Unless dips and strikes are opened up, as in the case of the Horse Whim ores, so that they may be seen, especially where they junction in the case of the Horse Whim Ores, with the October Vein, and possibly form along a junction, valuable ore bodies, diamond drilling directed by a qualified mining engineer would be the most feasible, most economical and most satisfactory. The objectives in this proposed diamond drilling would be the Horse Whim ores at a greater depth than the 300 foot main vertical shaft whether they be primary or the much sought for secondary copper.

On the 375 foot level, reference is here made to the map attached and marked at different points, B, C, D, E, F and G, with Assay Index. These assays were taken from the better looking ore showings, and are selected samples taken from ore in place. On the same map attached, there is marked point A. At this point a wide exposure, gradually rolling toward the October Vein and heading toward the gossan outcrop, asayed 1.6% copper over a width of fourteen feet. As all headings on the 375 foot level show a thoroughly oxydized and leached area it is planned to extend each of the headings and ascertain if possible, the limits of the oxydized and leached area or reach an objective presumably on a wall where the oxydization and the leaching is less pronounced and pay ore in volume may be mined. It is presumed that the junction of veins, diorite in the vein matter, intrusive porphyry and the downward extension of the fracture zone will be met ahead in the extreme west drift on the 375 foot level.

Ore and Vein Forming Agencies

1. Brecciation.
2. Introduction of hematite, usually as cement in breccia veins, but also as massive bodies, veins and stringers. The brecciation is due probably to the granite porphyry intrusion; the hematite pervades the pegmatites—therefore it is later.
3. Introduction of siderite, chalcopyrite and pyrite.
4. Deposition of quartz, chalcopyrite and pyrite; oxidation and secondary enrichment have been very pronounced.

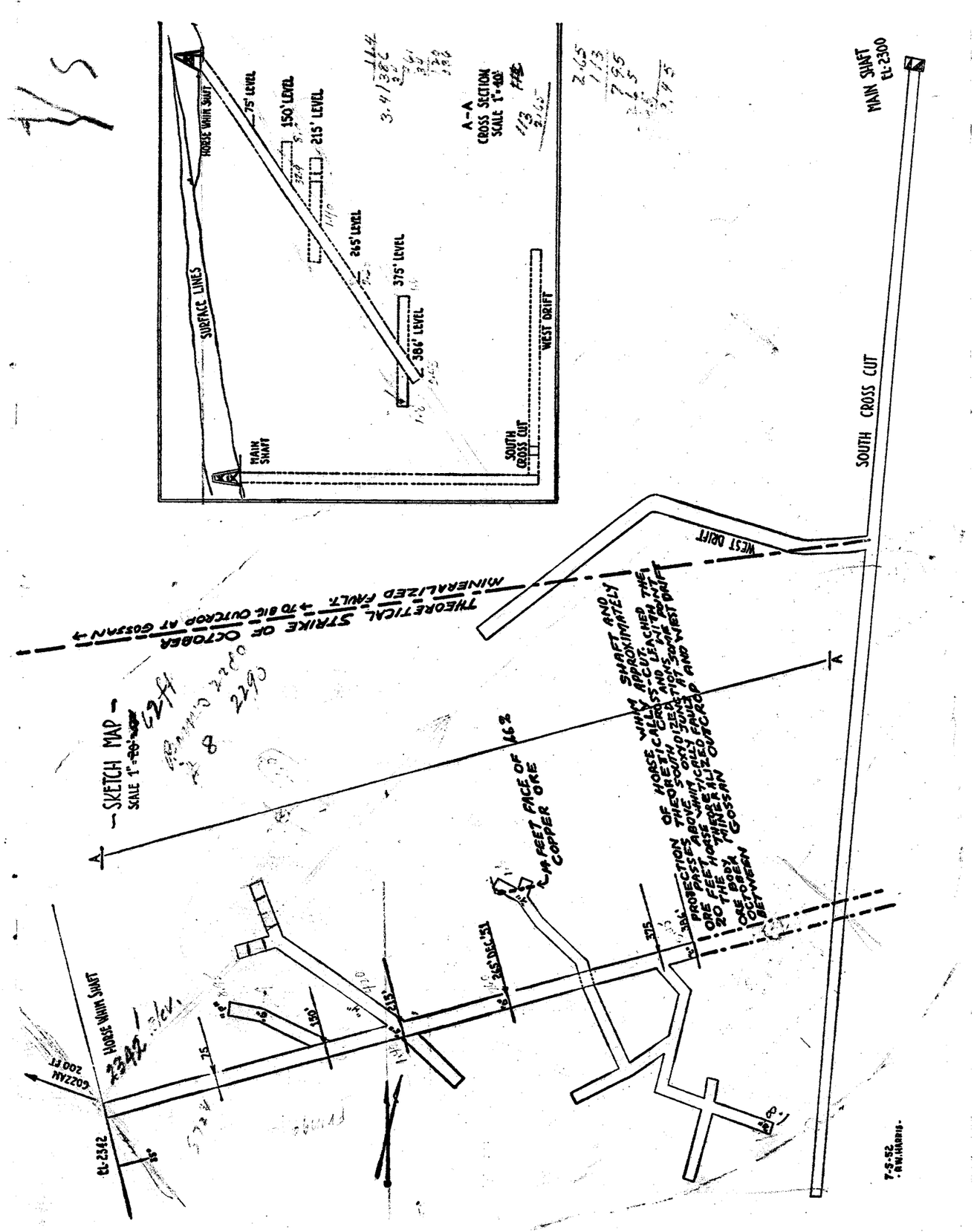
Engineering Analysis

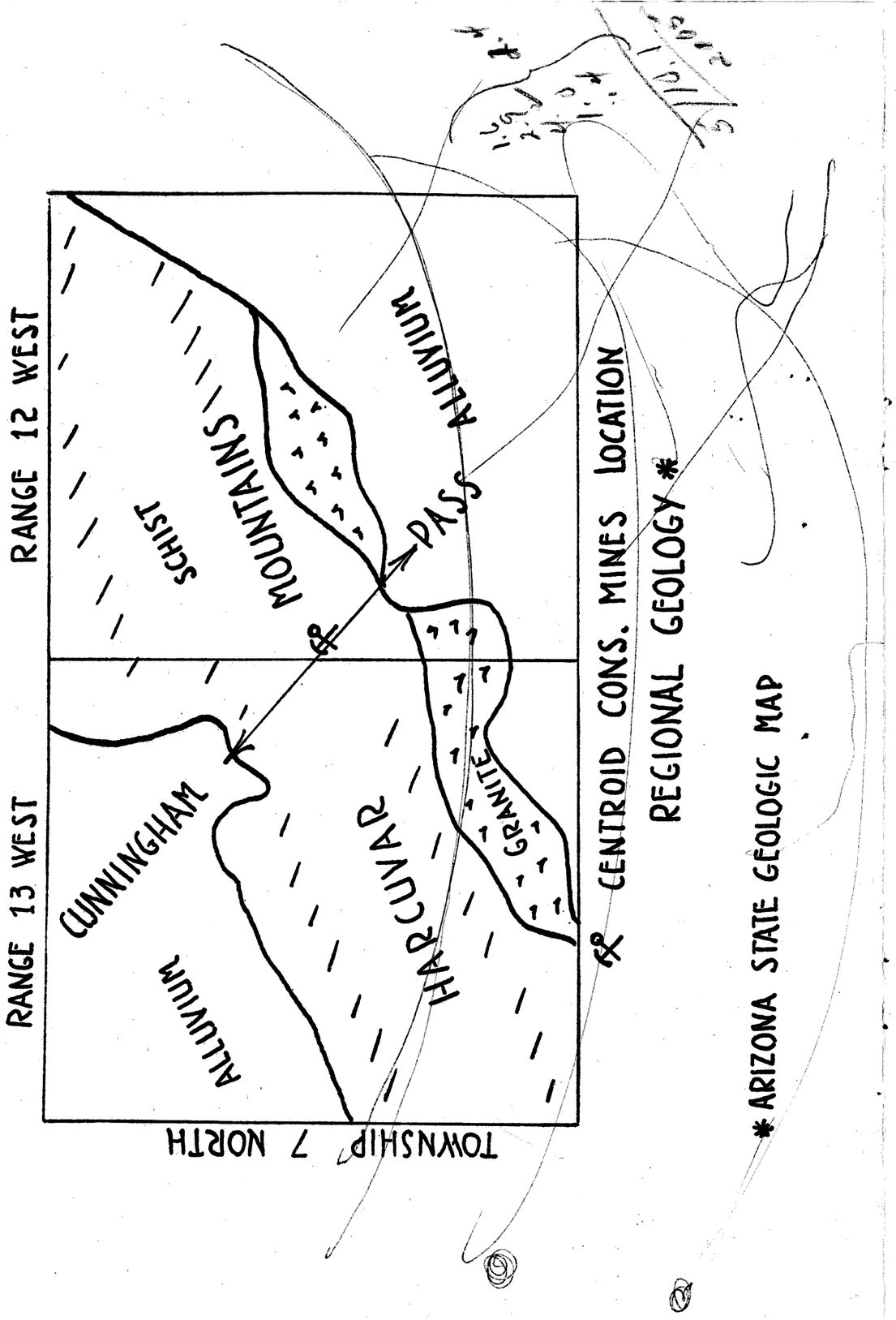
W. Tovote, E. M. reports on the properties as follows:

"The Desert Vein (NOTE: one of the big outcrop) has a remarkable outcrop of hematite and quartz, surrounded by wide areas of crushed chloritized porphyry. Copper stain is found as well in the hematite quartz, as in the altered decomposed porphyry. The vein occurs at and near a schist-granite-porphyry contact and diorite dikes are intruded in the vein zone. The big outcrop is apparently due to the intersection of several veins." (Copy of the Tovote report is dated January, 1919 and is on file with the Arizona Corporation Commission at Phoenix, Arizona.

Charles H. Dunning, E. M., reports as follows:

"Your property has most excellent geological conditions for the formation of large and profitable ore bodies. The development already completed has made an excellent showing and tends to prove the theories which the surface conditions indicate." (Copy of the Dunning report is dated 1935 and is on file with the Arizona Corporation Commission at Phoenix, Arizona).





Edwin Walter Mills, E. M. states:

"I consider the geological conditions of your entire mining claims area to be very favorable and to warrant the conclusion that further prospecting and development work will surely lead to the discovery of large and profitable ore bodies." (Copy of Mr. Mills' report is dated March, 1937 and is on file with the Arizona Corporation Commission at Phoenix, Arizona).

R. Burton Rose, M. S., Mining Geologist, San Jose, California, says in a letter dated April 8, 1952:

"Geologic and mineralogic indications show marked leaching effect and the probability of appreciable deeper secondary enrichment."

MANAGEMENT AND CONTROL

The name, address and business experience of each officer and director of the company is stated below:

Mr. William B. Harris—President, General Manager and Director.
P. O. Box 2236
Phoenix, Arizona
Telephone: AL 4-2511

Mr. Harris has had forty years mining, prospecting, millwriting and mine construction experience, in a supervisory capacity.

Mr. Robert W. Harris, Vice-President and Director
P. O. Box 1021
Phoenix, Arizona
Telephone: AL 4-2511

Mr. Robert W. Harris has had five years mining and prospecting experience, three years supervising of labor, five years office work and accounting, and fifteen years as a corporation executive.

Mrs. Virginia J. Harris, Secretary-Treasurer and Director
P. O. Box 2236
Phoenix, Arizona
Telephone: AL 4-2511

Mrs. Harris served as a member of the Arizona State Legislature for two years, where she was chairman of the Mines and Mining Committee, and a member of the Committee on Corporations, Banking and Insurance. Twenty-five years as a corporation executive.

Mr. A. C. Haigler, Assistant Secretary and Director
1211 North First Street
Phoenix, Arizona
Telephone: AL 3-3065

Mr. Haigler has had thirty years mining experience.

Mr. Glen F. Blair, Director
4626 South Central Avenue
Phoenix, Arizona
Telephone: BR 6-0274

Mr. Blair has had several years mining experience in Utah and Arizona. Twenty-six years as business executive in his own business, agriculture and allied pursuits.

The controlling interest in the outstanding stock is held as follows:

W. B. Harris	18,634 shares
W. B. Harris and Virginia J. Harris	410,000 shares
W. B. Harris and Virginia J. Harris, as joint tenants with right of survivorship	176,783 shares
Virginia J. Harris	50,000 shares
Robert W. Harris and W. B. Harris	50,000 shares
Robert W. Harris	29,014 shares
A. C. Haigler	3,320 shares
A. C. Haigler and Violet Haigler	16,610 shares
Glen F. Blair	17,000 shares

Upon the organization of the company in 1936, 551,958 shares were issued to W. B. Harris, Trustee. The consideration for this original issue was the conveyance to the company of the entire physical assets of Consolidated Arizona Mines, an Arizona corporation, which were purchased by Mr. Harris at execution sale under a judgment in his favor against that company, in the amount of $38,823.87.

The actual cost of the properties to Mr. Harris was $38,823.87. The total consideration of $55,195.80 reflects the actual cost, plus expense of maintenance and upkeep of the properties, engineering reports, taxes and miscellaneous expense incurred over a period of approximately two years.

The stock now held by the Harris family, i.e., W. B. Harris and Virginia J. Harris, and their son, Robert W. Harris, over and above the original issue mentioned, was issued in consideration of actual cash, labor and services rendered the company since its organization.

Mr. A. C. Haigler acquired 320 shares by direct purchase, and 16,610 shares were issued him in consideration of services rendered over a period of twelve months.

Mr. Glen P. Blair acquired his stock interest by direct purchase for cash.

CONTRACTS AND LITIGATION

Lease to Capella Copper Company

During 1952, Centroid Consolidated Mines leased to Capella Copper Company, an Arizona corporation, the undeveloped mining claims owned by the company, designated on the attached claims map as the "Capella Leasehold." Capella Copper Company has a total authorized capital of $750,000.00, divided into 3,000,000 shares of a par value of $0.25. Initially 33,000 shares of Capella stock were issued to each of the original incorporators, Mr. Albert C. Haigler, Mr. Glen F. Blair and Robert W. Harris, son of Mr. William B. Harris. The consideration for the issue was services and expense in organization of the company, and locating additional claims adjoining the Capella Leasehold.

This stock, aggregating 99,000 shares, has been placed in escrow with the First National Bank, Phoenix, Arizona, Trust Department, under an agreement that it may be released only on order of the Arizona Corporation Commission, and the owners of such stock shall not be entitled to sell or transfer the same without the consent of the Arizona Corporation Commission, and shall not, pending such escrow, participate in any distribution of assets to stockholders until after the owners of all other securities shall have been paid in full. By agreement, all voting rights in the escrowed stock remains in Centroid until such time as Capella shall have issued to Centroid 51% of its total authorized capital stock, under the terms of the lease agreement.

The stock structure of Capella is so arranged that Centroid Consolidated Mines will at all times retain voting stock control of Capella, the latter being a subsidiary corporation. Each member of the Board of Directors of Capella Copper Company is a member of the Board of Directors of Centroid Consolidated Mines. Mr. Albert C. Haigler is President, Mr. Glen F. Blair is Secretary-Treasurer, and Mr. William B. Harris is Vice-President. These officers constitute the Board of Directors of Capella Copper Company.

The lease with Capella Copper Company contains the following important provisions:

1. Capella has agreed to pay Centroid as rental for the five-year term, 251,000 shares of the capital stock of Capella.

2. Capella agrees to institute a diamond drilling development to cost $50,000.00.

3. At the completion of the diamond drilling, Capella agrees to work continuously with reasonable diligence.

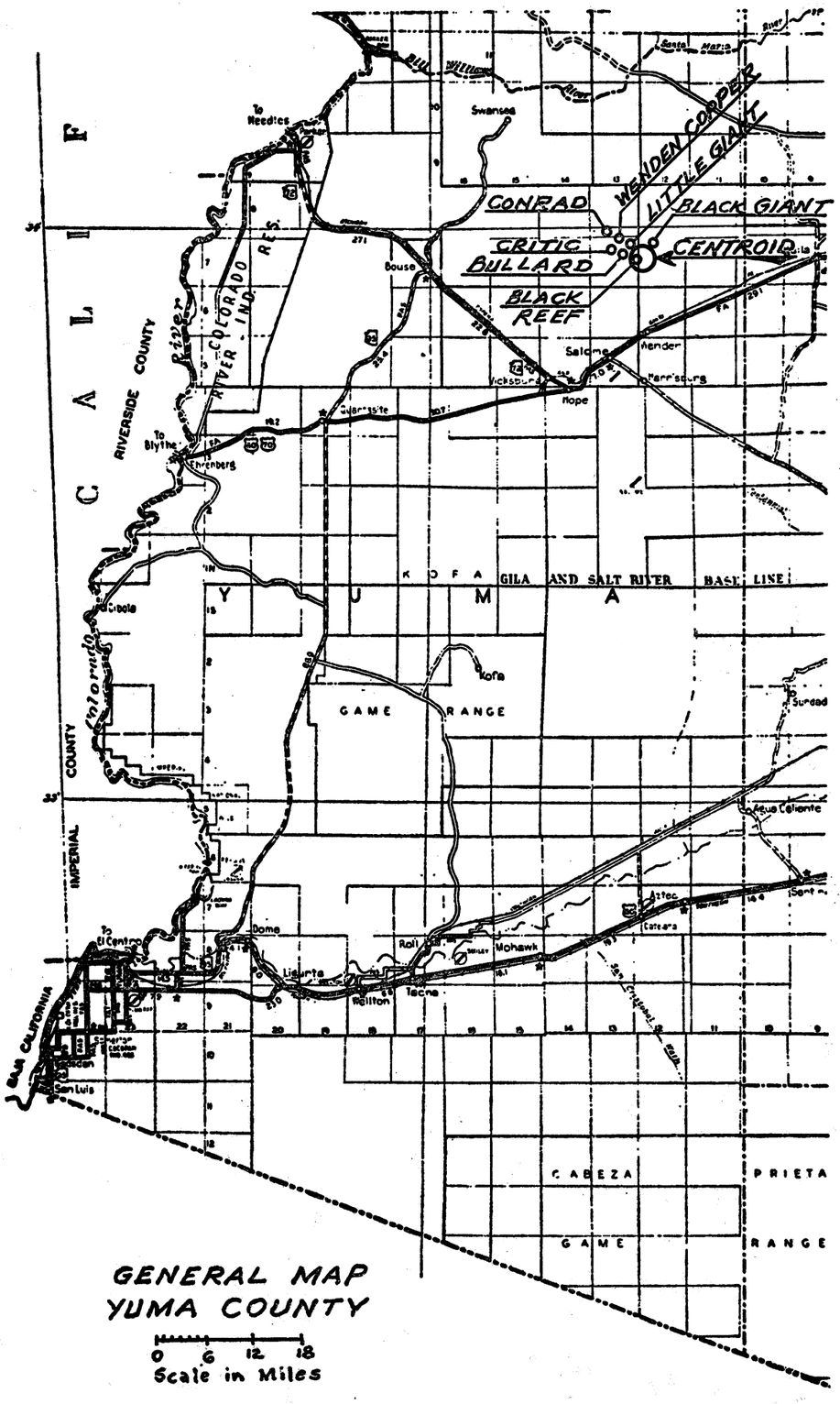
4. During the term of the lease (five years) Capella Copper Company is granted the option to extend the term of the lease an additional forty-five years, the rental for the extended term being 51% of the authorized capital stock of Capella.

5. No ore royalty is payable. Capella is entitled to all ores mined from the leasehold.

The performance of the obligation of Capella to carry on the diamond drilling program is contingent upon its ability to finance such program. Present plans of Capella are to sell sufficient of its capital stock to finance the drilling program.

In a lengthy report on the Capella Leasehold, Mr. R. Burton Rose, M. A., Mining Geologist, states:

"Deposition of the copper ore deposits, a prime Capella objective, is controlled by movement on the intersecting fault system after the hematite deposition and prior to the copper ore impregnation (and to a lesser degree) by channels left open. In this concept, the



major shear zone provided the access path for the copper solution from a deep-seated source and should contain the greatest copper ore accumulation."

The Number Two drill hole is pointed so that the Black Hawk vein and dikes showing copper content in the outcrops and a typical copper gossan, will be cut at an approximate vertical depth of 200 feet. Further diamond drilling is contemplated by Capella Copper Company upon completion of the preliminary diamond drilling advised by Mr. Rose. Mr. Rose further states in his report on Capella Copper Leasehold:

"Extreme leaching in the major shear zone near pole 340 (Note: in the vicinity of diamond drill hole No. 1) indicates the presence of a secondary enrichment zone at an indeterminate depth."

Hence, shallow drill holes first, deeper drilling later.

Vega Lease and Option to Purchase

A map of the Centroid properties under lease and option to Russell D. Van Houten and Edward S. Tanner is attached. This option includes the mining claims Centroid No. 1, Centroid No. 3, Centroid No. 21, Centroid No. 22, Centroid No. 23, Centroid No. 24 and Centroid No. 25 surveyed by J. W. Waara, U. S. Mineral Surveyor, and is referred to as the "Vega" leasehold. This block of marginal claims lying south of the Centroid principal development is cut through with one major fault in which there has been intruded a thoroughly oxydized diorite dike, and there are extensions of both shears and veins having their origin at or near the "Big Outcrop" reported upon by W. Tovote, Geologist and mining engineer.

The term of the lease is ten years; rental $700.00 by April 30, 1953 and $3,500.00 per year thereafter for nine years.

Lessees have the option to purchase the claims for Seventy Thousand ($70,000.00) Dollars, rental and royalty to apply on the purchase price. Lessees agree within a reasonable length of time, after the completion of all preliminary details, to diamond drill and develop the properties.

Lessees are believed to be responsible operators and the development should add much to the progress of Centroid, and of the Cunningham Pass District; certainly potential copper deposits should be explored at this time.

Litigation

The company has filed a complaint against the United States of America in the Federal District Court, District of Arizona, seeking $10,000.00 damages arising out of the construction by the Bureau of Reclamation of power lines across the company's claims without procuring easement or permission from the company.

Attention is called to what experience has taught us in the past—that all great mines once were prospects.

The history of all is very much the same, in that for years the prospector dug holes in the rocks in a "trial and error" operation which seldom, if ever, reached the desired objective. Discouragement and failure usually resulted. Rich outcrops were scarce and massive pay dirt for the most part was beyond the limits of pick and shovel work. Of late, however, science has made the game a lesser gamble; geophysical reconnaisance may now locate and map barriers, reefs, domes, faults and a probable loci for ores. Hazards and costly mining may thus in many cases be reduced. True, the science of mining has not reached a stage of perfection but the help it can give today is far superior to what the miner had access to at the turn of the century.

Conclusion

The undersigned believes that the plan of development of Centroid Consolidated Mines will result in the discovery of valuable ore bodies, and in handing you this prospectus, it has occurred to us that you might consider it a favor to be invited to join in an attractive speculation, which we recommend as such.

CENTROID CONSOLIDATED MINES,

a corporation

BY: (signed) W. B. HARRIS
President

(From Phoenix Gazette July 5, 1952)

COPPER REMAINS KING

"Official figures for 1951 show that Arizona again led all other states in the nation in the production of zinc, copper, lead, gold and silver.

The total value of the minerals was $235,289,045, a healthy 17% higher than in 1950.

Copper of course was far and away the most profitable single mineral produced. Slightly more than $200,000,000 worth of copper ore was extracted. Gold, silver, lead and zinc production, all fell off last year, due to exhaustion of veins. But COPPER REMAINED KING!

In view of the major new copper deposits now being developed, there is no reason to believe copper won't keep its crown firmly in place for many years to come."

ASSAY INDEX

See sketch map of Main Vertical Shaft and Horse Whim Shaft underground workings.

(A) 14 foot face, west drift, 375 foot level - Gold, $0.35 Copper - 1.60%
(B) Face, East Cross cut, 375 foot level - Gold, $0.35; Silver $0.72; Copper - 1.80%
(C) Bottom of shaft - Gold, $1.40 Copper - 2.45%
(D) At 300 feet, shaft bottom - Gold $0.35 Copper - 7.60%
(E) At 215 foot level, drillings - Gold, $0.35; Silver $0.36; Copper - 1.40%
(F) Drift 150 foot level, Gold, $14.00 Copper - 8.95%
(G) Drift 150 foot level, oxydized shoot, Gold, $33.60; Silver $0.54; Copper - 32.90%
(H) Drift 215 foot level, slacked material from walls, oxydized, Gold $0.35
Copper - 4.20% (By fire assay. Leaching gives higher content)

Yuma, Arizona
July 26, 1952

Board of Directors
Centroid Consolidated Mines
Wenden, Arizona

Gentlemen:

At your request, we have made an examination of the accounts of your corporation for the period of from January 1, 1952 to July 25, 1952. Attached you will find Balance Sheet of Centroid Consolidated Mines as of July 25, 1952.

This Balance Sheet has been prepared from data obtained from the records of your corporation and data received from Mr. W. B. Harris, President of the Board of Directors, and is a result of the consolidation of all receipts and expenditures of the corporation since its inception to April 24, 1951, and detailed records from that date to July 25, 1952.

Inasmuch as all expenditures to this date have been for development, exploration and fixed assets, the total of such expenditures has been capitalized and is reflected in the Balance Sheet under "Fixed Assets". For this reason, no Profit and Loss Statement has been prepared, the same not being applicable.

No attempt has been made to place an actual value on the assets of the corporation, the values as shown by the Balance Sheet being stated at cost to the corporation.

In my opinion, the following Balance Sheet reflects substantially the true financial condition of your corporation on July 25, 1952, taking into cosideration all records submitted to us for examination, and subject to the foregoing comments.

Respectfully submitted,

LAWLER & CROWDER, ACCOUNTANTS

By: *E. G. Lawler*
E. G. Lawler, Partner

CENTROID CONSOLIDATED MINES

BALANCE SHEET

July 25, 1952

A S S E T S

CASH ON HAND AND IN BANKS:			
First National Bank of Arizona - Phoenix			$ 2,503.52
ACCOUNTS RECEIVABLE:			
Canyon Copper Co.		4,481.62	
Vega Copper Co.		200.00	
Other		50.00	4,731.62
FIXED ASSETS:			
Mining Claims - Cost	38,823.87		
Development & Exploration Cost to Date	128,554.66	167,378.53	
Buildings	15,983.69		
Machinery & Equipment	10,341.37		
	26,325.06		
Less: Reserve for Depreciation	3,225.66	23,099.40	190,477.93
OTHER ASSETS:			
Insurance Deposit			510.00
TOTAL ASSETS			$ 198,223.07

L I A B I L I T I E S

ACCOUNTS PAYABLE:			
Harmon V. Averyt		250.00	
Harry I. Newman		100.00	
William A. Snyder & Samuel J. Rhose		720.00	
Virginia J. Harris		1,601.10	
Other		46.34	2,717.44
CONTRACTS PAYABLE:			
First National Bank of Arizona		424.65	
Commercial Credit Corp.		466.02	890.67
Federal Withholding Tax Payable			22.30
Total Liabilities			3,630.41
CAPITAL & SURPLUS:			
3,000,000 shares authorized, 10¢ per share Par Value outstanding 1,680,950 shares (unissued 1,319,050 shares)		168,095.00	
Less: Purchase Discounts & Selling Commissions Paid		22,745.84	
		145,349.16	
Paid in Capital Surplus:			
Premium of 15¢ per share paid for 328,290 shares stock sold over and above par value		49,243.50	194,592.66
TOTAL LIABILITIES AND CAPITAL			$ 198,223.07

Bancroft - Bul. #51 - Deposits - Northern Yavapai Co., Ariz.

Boone - Critic -

Width of vein few inches to 3 to 4 feet
Changes abruptly barren to several grades - due to post mineral faulting (?) longitudinal, both horizontal and vertical (evidenced in property)
Strike is N 50-60 W. - 70-80 SW.
Quartz - calcite, barite fills post mineral fractures.
Oxide zone above water level - chrys. & chalcopy. small amount of mala, cuprite & chalcocite
Below water level - 320 ft in dr. #3 ore mineral is CC. & py. Qtz abundant some magnetite. Sulfide ore contains 50-60 Si, 10-14 Fe, 1 to 1.6 S, 12 Cu ½-1 oz Au.
Lower down Si to 75%
Origin - Ores derived from leaching and subsq. concentration of values in py & cpy, thus small probability being the source of gold values and chalco in vein (due to downward moving waters.

Normal mica - orthoclase granite - changes abruptly to gneiss and including between the layers of gneiss the resulting schistose phases of former basic intrusives. Whole series cut by innumerable dikes of pegmatite and aplite with prominent diabase intrusives.
On rim of Critic - Schistosity strikes 15° dip NW. - Walls NE across wash - dip is NE. -

Little Giant - (formerly Black Giant) 1-15-1940
Work done on Wisconsin claim. 300 ft incline
Vein NW, & dips NE. - During World War produced ± $70,000
in gold & copper - down to 200 level - On the 150 level cuprite
as high as 45 % copper, & gold - most of ore shipped was
bornite and chalcocite.

Dyke running E-W - thru Wisc - cuts system - has
mineralization in it.

- (Little Giant (Wisconsin) - Info from H. C. Budall -
Salome, Ariz.

Aztec - Mrs Rhoda Nohlechuck. - Wenden Ariz.
Shipments to Hayden. $50.00/ton

2 veins - 1 to 7 feet wide. - transverse dip 80° NE -
75 ft apart - on 210' level 35' apart.

40,000 tons ore on dump - $8.00 - 4,000 tons blocked
out in mine - chalco. & chalcocite.

1-10-40

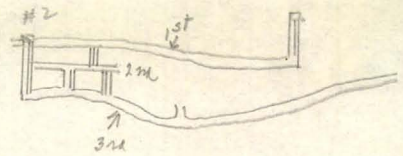
Columbia - Charles Mathews, Congress, Arizona.
4 tunnels

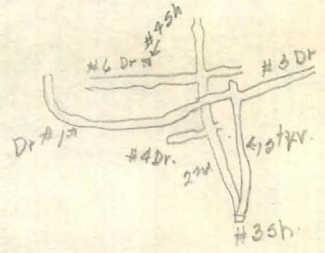
#1 - @ 2600 ft.	- 460 ft N.W.	
#2 - 2650 ft	260 ft " "	
#3 2675	200 " "	
#4 2705	140	

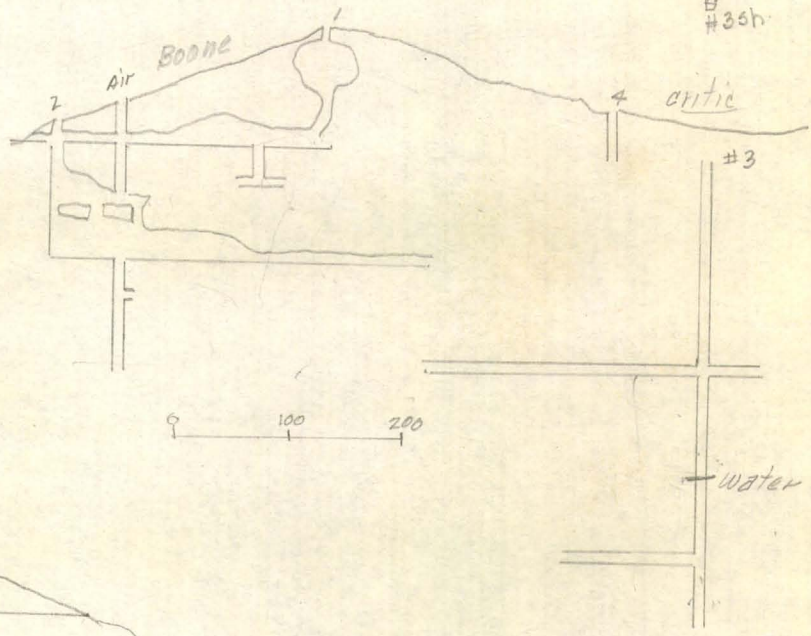
8" of 25% ore
110 wk.
150' deep

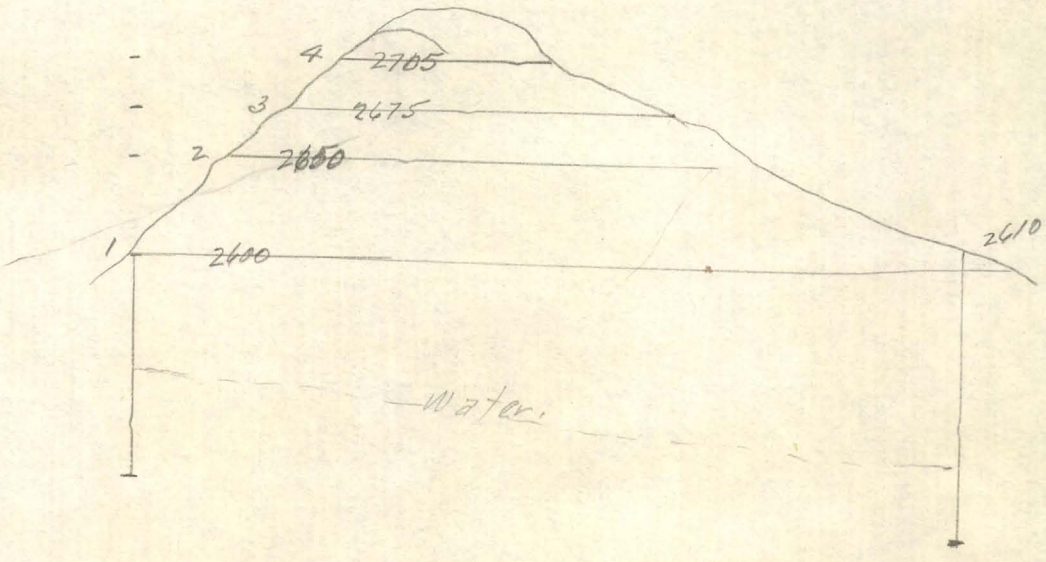
Shaft 115 - water at 60 ft. at SE - Shaft @ NW at (2610)
Tunnel 375' SE.
No ore - Jones

Mineral - bornite cpy. — (Bryuna mine 15 mi west. - oxidized copper to 480 ft - barren for 60 feet. thin massive sulphides.) Outcrop same condition.

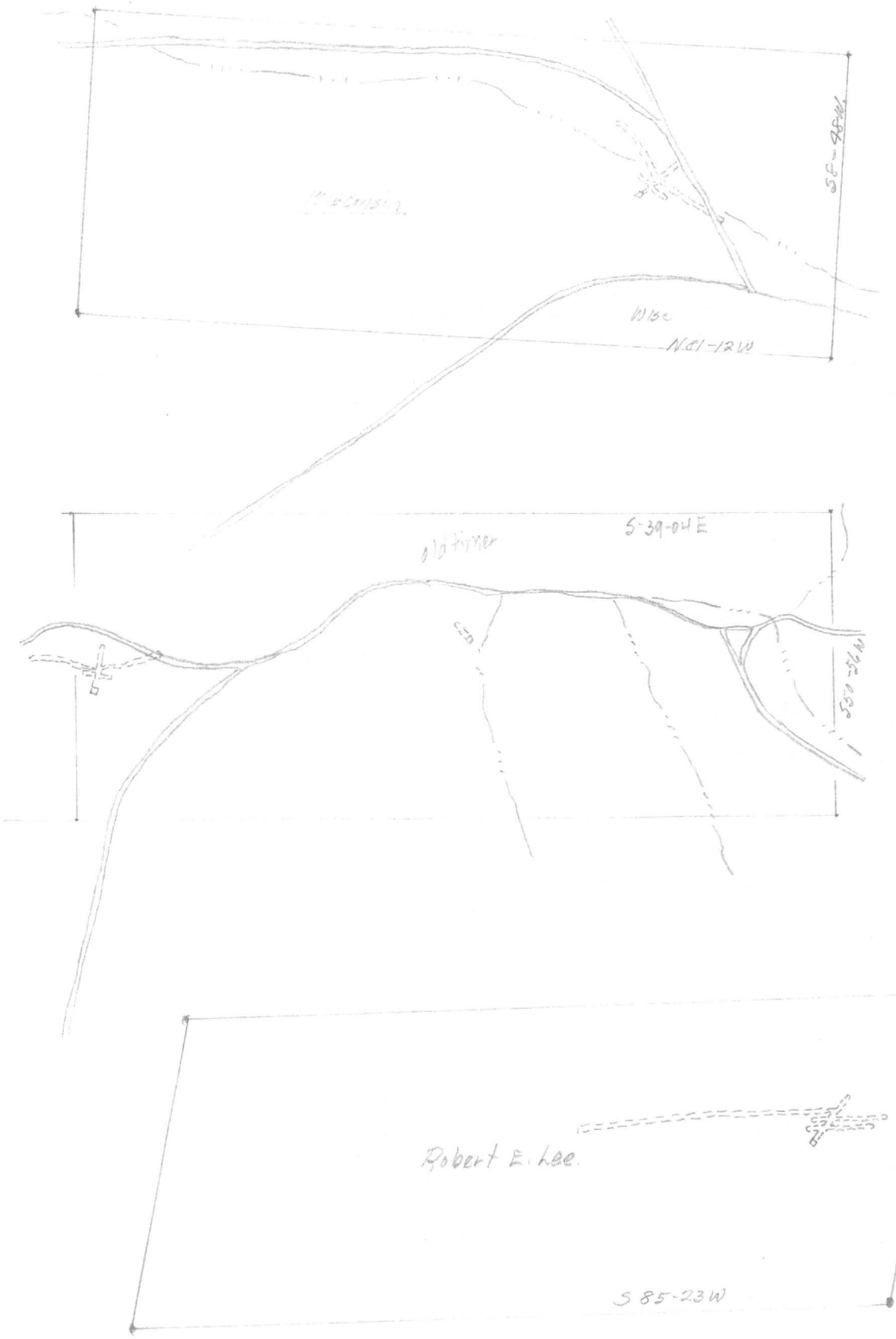

#2
1st
2nd
3rd


#5th
#6 Dr
#3 Dr
Dr #1
#4 Dr.
2nd
#35h.


Air
Boone
1
2
4
critic
#3
0
100
200
water


4
2705
3
2675
2
2650
1
2600
2610
Water.

Black-
old timer
Immelein
Wisconsin
Teddy.



S-33-15W
N-40-30W
N 36-37 W
N 53-22 W
N-58-15
N39-15E
Mohawk
Disc.
2
3
4
5
7

THANK

YOU

A -051- 135

MAY 22

Pen Refills

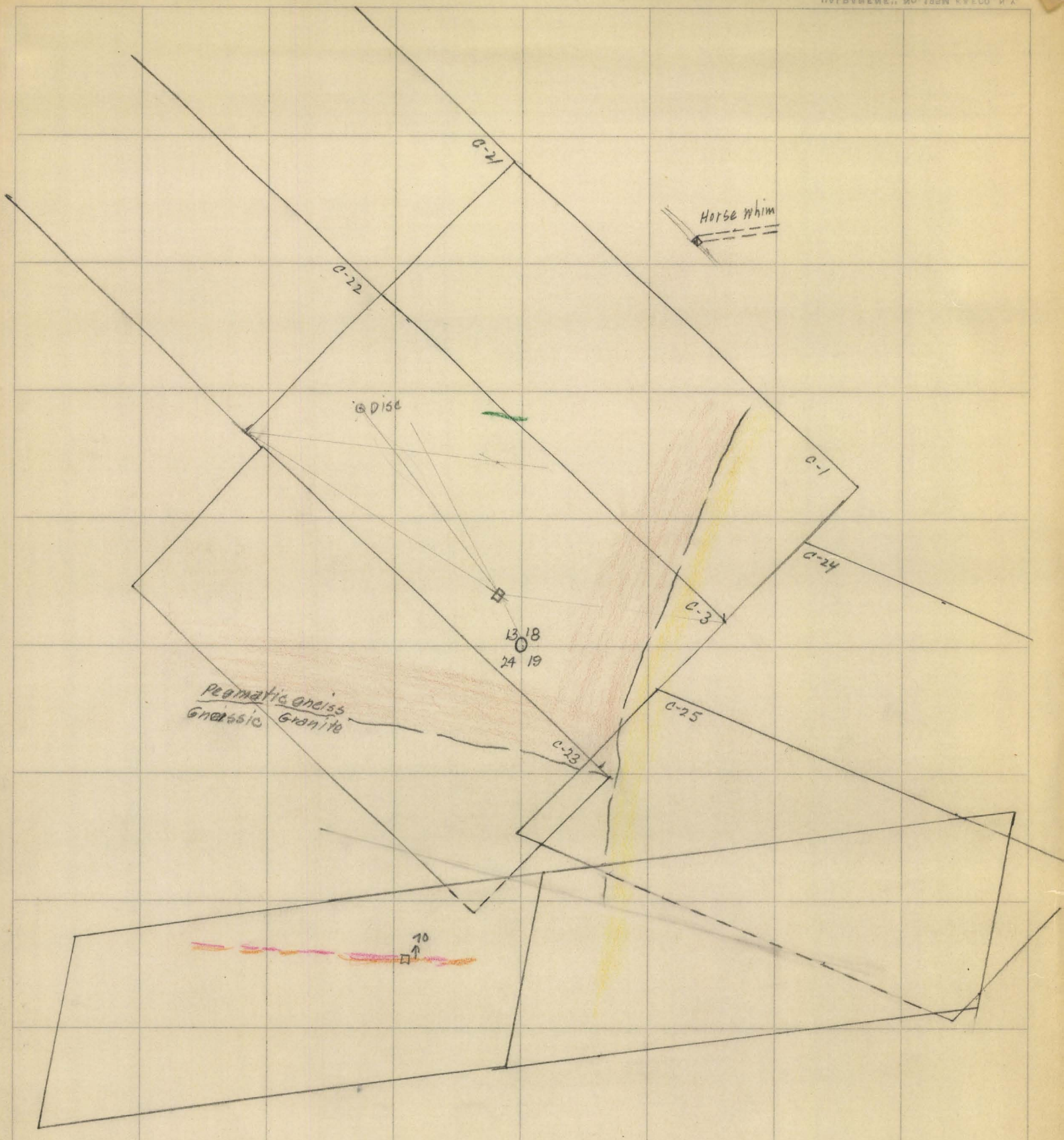
THANK

YOU

-1.02- 139

MAY 22

Pen Refills

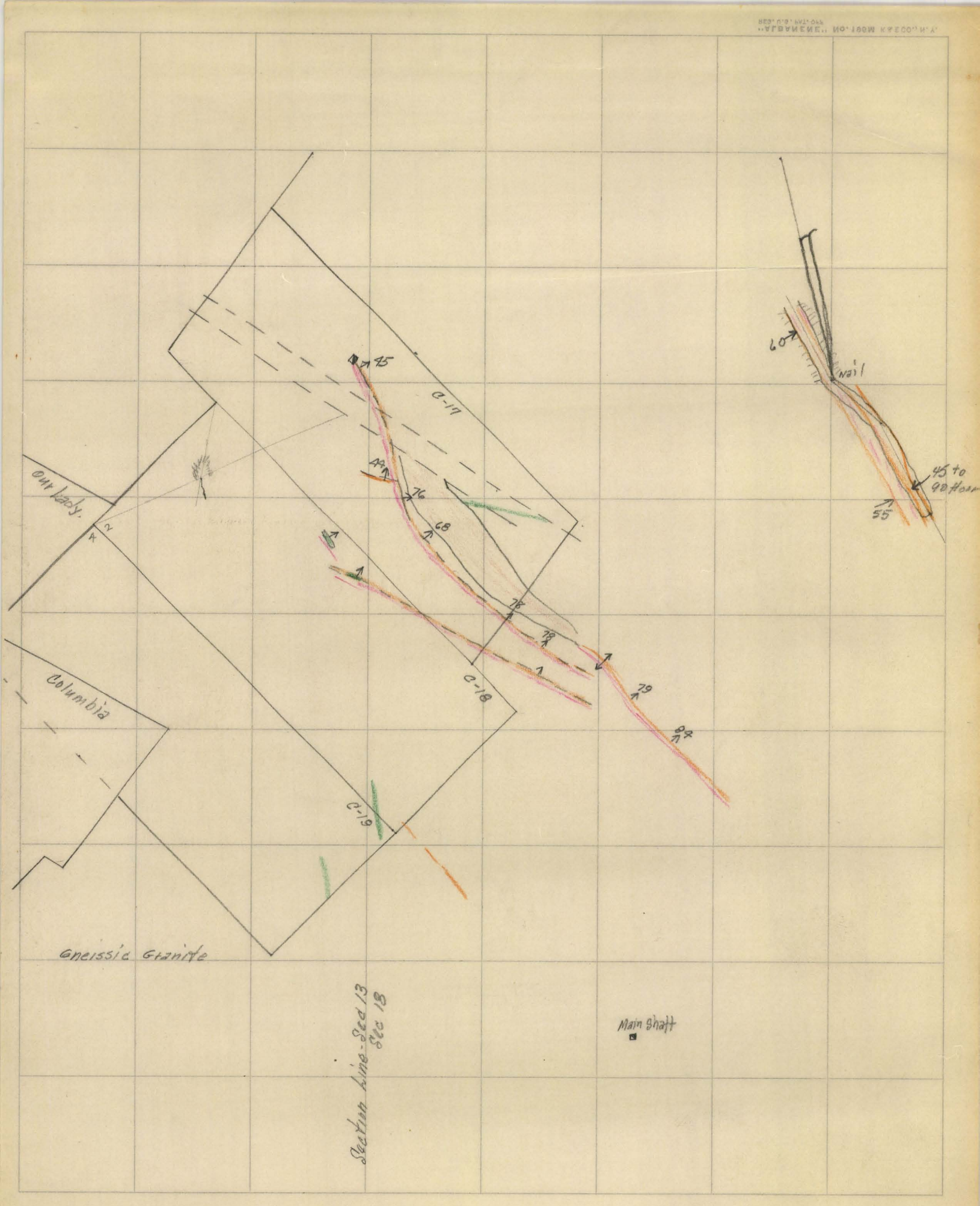


MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ SCALE 1" = 400' DATE 3-9-59

MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ SCALE 1" = 400' DATE 3-9-37

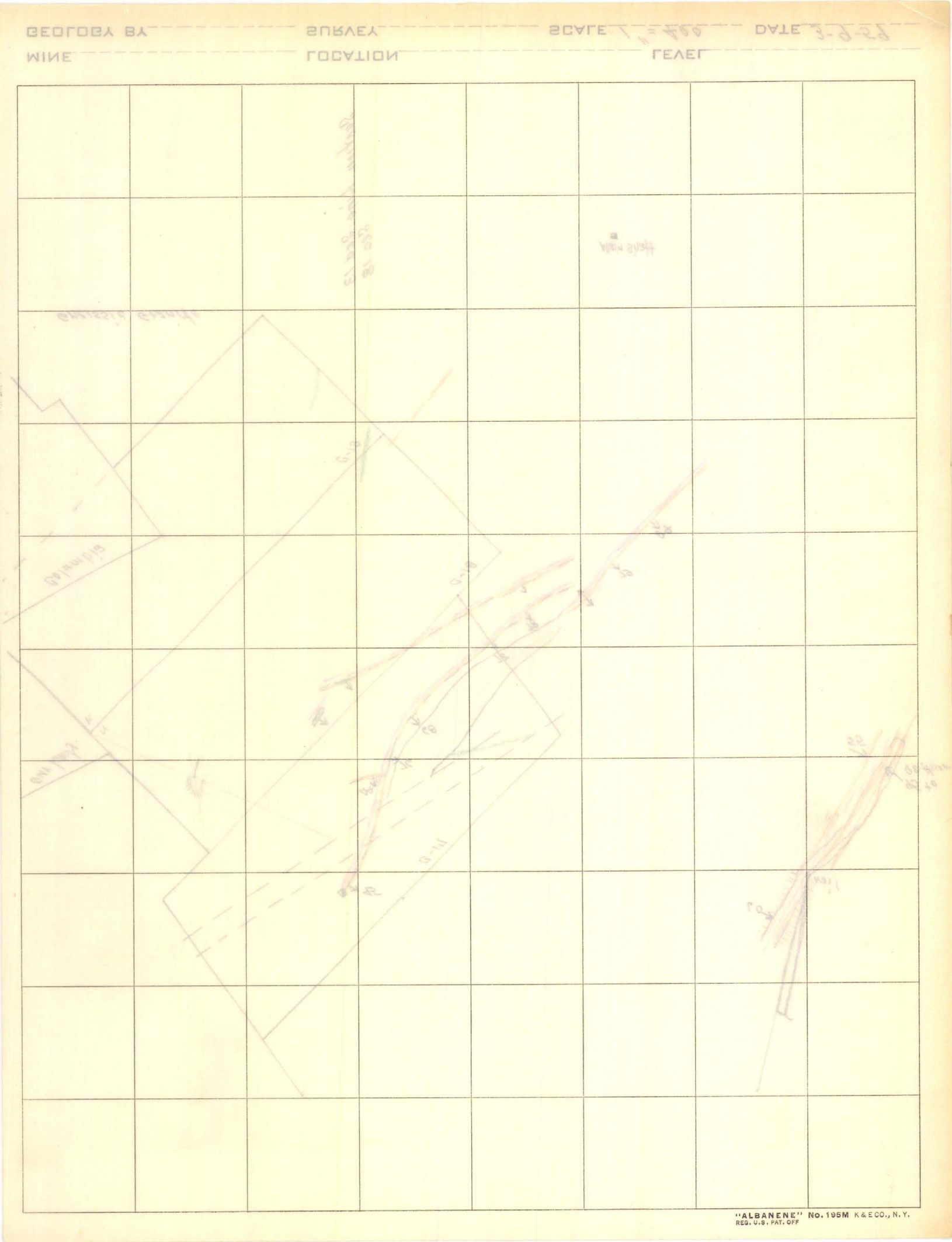


MINE_____ LOCATION_____ LEVEL_____

GEOLOGY BY_____ SURVEY_____ SCALE 1"=400 DATE 3-9-59

GEOLOGY BY _____ SURVEY _____ SCALE _____ DATE _____

MINE _____ LOCATION _____ LEVEL _____



DD Hole #2

From	To	Core Rec.	% Core Rec.	Mineralization: CuFeS$_2$ FeS$_2$ FeO$_x$ Stringers at:	Remarks
0	NX 10'	5.0	50%		Gneissic Granodiorite(?) Very high in Silica (+90%) Some Biotite & Hornblend. Little FeO$_x$ min along fractures " " "
10	BX 14	4.0	100%		" " "
14	28	10.0	72%		" " "
28	38	10.0	100%	29.0 / 35.2 / 36.7 —	" " " 1/4" FeO$_x$ filled fractures (Hematite)
38	49	10.0	91%	40.7 \ 41.3 /	Gneissic Granodiorite(?) Very High in Silica. 3/4" Hematite Vein. 42.3
49	59	10.0	100%	51.7 — 56.4 —	1/4" " Stringers in Gneissic Granodiorite. Pegmatite dike from 42.3 to 57.5 = Very high in Feldspar. 52.5
59	70	10.0	91%		Gneissic Granodiorite. No mineralization.
70	81	10.0	91%		Pegmatic bands & blebs (feldspar) 87.0' to 88.0 Very few Hematite Stringers.
81	100	9.0	100%		" " " " " "
100	AX 113	10.0	78%	101.5 / 103.5 /	Gneissic Granodiorite. Small bands of pegmatite & blebs.
113	123	10.0	100%	116.0 \	" " " 125.3
123	134	10.0	91%		Basalt from 125.3 to 149.8
134	144	10.0	100%		
144	155	10.0	91%	157.7 /	Pegmatite 149.8 to 157.7. 149.8 Basalt dike from 157.7 With one Hematite Stringer & FeS$_2$ Specks.
155	166	10.0	91%		Basalt
166	176	10.0	100%		"
176	186	10.0	100%		"
186	196	10.0	100%	197.6 — 198.0 —	Gneissic Granodiorite With Little pegmatite from 197.6 197.6
196	206	10.0	100%		"
206	216	10.0	100%	216.7 /	"
216	226	10.0	100%		Basalt dike 224.2 - 226.6 224.2 226.6
226	236	10.0	100%	229.5 / 230.8 /	Pegmatite dike 235.6
236	247	10.0	91%		Gneissic Granodiorite 235.6 to 241.7 241.7 Very Pegmatic granodiorite. Basalt 241.7 - 243.2 243.2 " Feldspathic (or) "
247	257	10.0	100%	248.0 /	" " "
257	271	10.0	72%	270.0 271.2 273.5 274.0 274.6	" " " Horse Whim Veins
271	283	10.0	83%	282.9	" " " 1/4" & Less Stringers of CuFeS$_2$ = 3.6' of Cu min. 275.9 275.4
283	293	10.0	100%	285.1 \ 290.0 \	" " "
293	310	10.0	59%	301.0 / 308.5 \	" " " Very Little CuFeS$_2$ along FeO$_x$ filled fractures
310	316	4.8	90%		Specks of CuFeS$_2$ & one 1/4 Stringer of FeO$_x$ Very Light & highley altered pegmatite
316'	322'	6.0	100%	321.0 321.3	" " " Very Strong FeO$_x$ Min & CuFeS$_2$ at 321 to 322 in What appears to be highley Altered pegmatite
322'	326'	2.7	70%	322.0 322.6	" " "
326'	336'	2.5'	25%		" " "
336'	351'	0.6	3%		" " " Good Cu & Fe in broken Core.
351'	366'	1.0	5%		Very Light altered pegmatite specks Cu

DD Hole #3

From	To	Core Rec. EXCore	% Core Rec.	Mineralization CuFeS2 FeS2 FeO2 Stringers at:	Remarks
0'	29'	3.5'	5%		No mineralization. Slightly pegmatic gneissic granodiorite (?)
29'	34'	1.0'	20%		Pegmatite dike from 29.0' to 33.0'
34'	44'	10.'	100%		Slightly pegmatic gneissic granodiorite (?)
44'	52'	6'	75%		" " " "
52'	63'	6'	67		" " " "
63'	67'	4'	100%		" " " "
67'	78'	11'	100%		Very ~~feldspathic or~~ pegmatic gneissic granodiorite
78'	87'	8'	89%		" " " "
87'	88'	1'	100%		" " " "
88'	97'	4'	44%		" " " "
97'	104'	5.4'	77%		" " " "
104'	114'	10'	100%		gneissic granodiorite from 104 to 121.0 (104, 121.0)
114'	123'	9'	100%		" " " "
123'	133'	9.5'	95%		Very feldspathic or pegmatized gneissic granodiorite (135.0)
133'	138	3.2'	64		~~Pegmatite dike high~~ in feldspar from 135.0 to 139.5
138'	139.5'	1.5'	100%		Feldspathic gneissic granodiorite (139.5')
139.5'	144'	5.5'	100%		Slightly pegmatic gneissic granodiorite(?) With Very few FeO2 (Hemetite) Stringers
144'	152'	7'	87%		" " " "
152'	157'	3.5'	70%		" " " "
157'	163'	3.5'	59%		" " " "
163'	170'	4.6'	61%		" " " "
170'	176'	5.3'	89%		" " " "
176'	183	2.2'	31%		" " " "
183'	192	9'	100%	191.0	" " " "
192'	202	10'	100%		" " " "
202'	209	3.5'	50%	205.8	Few Hemetite Stringers. Highley pegmatic gneissic granodiorite
209'	219	7'	70%		" " " "
219'	226	6'	86%		" " " "
226'	230	2'	50%		" " " "
230'	238	6.5'	82%		" " " "
238'	246	6'	75%		" " " "
246'	257	9.5'	82%		" " " "
257'	267	9.0'	90%	261.0 261.5-262.0 264	One foot of CuFeS2 mineralization. " " " "
267'	274	2'	29%	273	" " " "

DD Hole #3 Cont'

From	To	Core Rec.	% Core Rec.	Mineralization $CuFeS_2$ FeS_2 FeO_x Stringers a.t.	Remarks	Core
274'	279'	3.7'	74%		Very few Hematite Stringers. Highley pegmatic gneissic granodiorite.	
279'	283'	2.'	50%		" " " "	
283'	293'	9'	90%		" " " "	
293'	298'	2'	40%		" " " "	
298'	305'	4'	57%		" " " "	
305'	313'	8'	100%		" " " "	
313'	323'	8.5'	85%		" " " "	
323'	331'	1.8'	22%		" " " "	
331'	341'	5'	50%	334.0	" " " "	
341'	347'	3.5'	58%	347.0	" " " "	
347'	351'	3.0'	75%		" " " "	
351'	355'	3.3'	82%	352.0 354.0 355.5	Very ~~dioritic~~ looking schistose material 352 to 354 Highley pegmatic gneissic granodiorite(?) 354.0 to 355'	
355'	358'	2'	67%		~~Basalt~~	
358'	363'	3.7'	74%		"	
363'	371'	1.3'	16%		"	
371'	380'	7.2'	80%	371.0 371.5 373.5	" Pegmatite dike 371.0 to 371.5 378.0 to 380.0	360
380'	383'	2.8'	93%		Very schisty basaltic material 380.0 to 384	384
383'	395'	8.5'	71%		Highley pegmatic gneissic granodiorite(?)	
395'	405'	1.4'	14%		" " " "	
405'	420'	1.4'	9%		" " " "	
420'	435'	0.4'	3%	1.0' ppm min. location	One foot of copy min. location(?)	
435'	445'	0.4'	9%		" " " "	
445'	450'	0.3'	6%		" " " "	
450'	460'	1.5'	15%		" " " "	
460'	463'	0.3'	10%		" " " "	
463'	475'	2.7'	22%		" " " "	
475'	478'	0.7'	5%		" " " "	
478'	484'	1.2'	20%		" " " "	
484'	490'	1.0'	17%		Diorite? Black Schist From 485.0 to 494.7	
490'	495'	1.6'	32%	494.0	" " " Pegmatite Dike 494.7-495'	
495'	500'	5.0'	100%		" " "	
500'	506'	6'	100%		Pegmatic gneissic granodiorite.	
506'	511'	4.5'	90%	509 to 510	Highley pegmatic gneissic granodiorite(?)	
511'	520'	4.5'	50%		" " Black Schist from 519.8 to 520.0	

DD Hole #3 Cont'

From	To	Core Rec.	% Core Rec	Mineralization CuFeS$_2$	FeS$_2$	FeOx	Remarks
520'	526'	5.6'	92%				Black basaltic(?) Schist Pegmatite dike 522.0 523.5
526'	532'	6.0'	100%	529.0 530.5 531.0 532.0 532.5 538.0			" " Pegmatite dike 530.0 532.0 Small stringers of cpy from 529 to 542.0
532'	541'	6.0'	67%	541.0			Highley pegmatic gneissic granodiorite
541'	546'	4.4'	88%				" " " "
546'	555'	7.2'	80%				Very pegmatic gneissic granodiorite
555'	559'	3.8'	95%				" " " "
559'	561'	1.5'	75%				" " " "
561'	566'	4.3'	86%				" " " "
566'	575'	8.2'	91%				" " " "
575'	585'	4.5'	43%				" " " "
585'	592'	5.2'	75%				" " " "
592'	595'	1.0'	33%				" " " "

Core

Additional

3 - 1

6 3

7 2

8 2

8

DD Hole #8

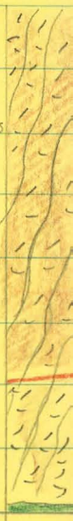
From	To	Core Rec BX	% Core Rec	Mineralization Cu FeS₂ FeS₂ FeOx Stringers at:	Remarks	Core
0'	15'	No Core.				
15'	30'	10'	67%		Gneissic granodiorite to 18.0'	18'
					Basalt from 18.0' to 30.0'; Few FeOx Stringers	
30'	46'	10'	62%	45.6	Basalt Pegmatite dike 30.0-32.2	
					" " 34.6-36.7'	
46'	66'	11'	55%		Basalt Dikes 152.0-152.5	
					Gneissic granodiorite " " 164.0-165.0	
66'	75'	9'	81%		Basalt	
75'	86'	10	91%		½" Veins (FeOx) 84.0 to 84.5'	
					"	
86'	96'	9.5'	97%		Basalt dike- 86.0-87.0'	
					Gneissic granodiorite " " 94.0' 96.0'	
96'	105'	8.5'	77%		Gneissic granodiorite Some Small Veins of pegmatite also blebs.	
105'	115'	9.5'	97%		" " " few FeOx (Hair like) Stringers	
115'	125'	10'	100%		" " " " "	
125'	133'	8'	100%		" " " " " "	
133'	143'	10'	100%		" " " " " "	
143'	155'	9'	75%		" " " " " "	
155'	164'	9'	100%	CuFeOx 159.2	Very Little pegmatic material in gneissic granodiorite	
164'	178'	8'	57%		" " " " " "	
178'	189'	7'	64%		Very pegmatic gneissic granodiorite	
189'	208'	8'	73%	194.2	Somewhat pegmatic gneissic granodiorite(?)	
208'	225'	10'	59%	211.3 211.8 224.0	" " " "	
225'	245'	5.7'	38%	235.0 236.0	" " " " No Mineralization	
245'	262'	10'	59%		Very pegmatic gneissic granodiorite(?) No Mineralization	
262'	274'	10'	83%		Some pegmatic material in gneissic granodiorite(?) No Mineralization	
274'	284'	9.5'	97%		" " " No Mineralization	
284'	293'	9'	82%		" " " Few FeOx (Hairlike) Stringers	
293'	303'	10'	100%	Veins?	Very pegmatig gneissic grd. Pegmatite Dike 293-294 Several FeOx filled Stringers	
303'	315'	6.5'	81%		" " " "	
315'	335'	10'	50%		" " " " Few FeOx filled Stringers	
335'	358'	10'	44%		" " " " "	
358'	370'	10'	83%		" " " " " Somewhat pegmatic gneissic granodiorite from 340.2 to bottom of hole	

DD Hole #7

From	To	Core Rec.	% Core Rec.	Mineralization ($CuFeS_2$, FeS_2, FeO_x Stringers ±)	Remarks	Core
10'	10'	No Core.			Very pegmatic gneissic granodiorite(?).	
10'	31'	10'	AX 48%	19.5 19.1	" " " "	
31'	50'	10'	53%		" " " "	
50'	68'	10'	55%	55.2 67.7	" " " "	
68'	83'	10'	67%	68.0 68.5	" " " "	
83'	96'	10'	77%	85.0	" " " "	
96'	106'	10'	100%	97.3 97.8 105.0	" " " "	
106'	118'	10'	83%	one foot of fault Sprobs 115.0	" " " "	
118'	133'	10'	90%	130.1 132.5	" " " Hematite Veins ½".	
133'	150'	10'	59%	133.1 135.7	" " "	
150'	167'	10'	59%		" " " Several Hematite Veins from 150.0 to 160.0	
167'	180'	10'	77%		" " "	
180'	189'	9'	100%	181.0 183.0 185.0 187.0 187.8	" " "	
189'	199'	10'	100%	192.0 193.5 194.7	Slightly pegmatic gneissic granodiorite(?)	
199'	209'	10'	100%		" " " "	
209'	222'	10'	77%		" " " Very few FeO_x Stringers	
222'	232'	10'	100%		" " " "	
232'	242'	10'	100%		" " " "	
242'	252'	10'	100%		" " " "	
252'	262'	10'	100%		Pegmatic gneissic granodiorite(?)	
262'	272'	10'	100%		Very pegmatic gneissic granodiorite(?)	
272'	282'	10'	100%		" " " "	
282'	292'	10'	100%		" " " "	
292'	302'	10'	100%		" " " "	
302'	312'	10'	100%		" " " Pegmatite dike 309.5-310.1	
312'	323'	10'	100%		" " "	
323'	333'	10'	100%		" " "	
333'	343'	10'	100%		" " " Pegmatite dike 338.0-340	
343	365'	10'	100%		" " " Pegmatite dike 352.0-356	
365'	375'	10'	100%		" " "	
375'	385'	10'	100%		" " " Few FeO_x Stringers 384.0-385	
385'	398'	10'	77%	384.5	" " " Few FeO_x filled Stringers	
398	400'	2'	100%		" " "	
400'	411'	10'	91%		" " " Several small FeO_x Stringers	

DD Hole #7 Cont'

From	To	Core Rec	% Core Rec	Mineralization Cu FeS$_2$ FeO$_x$ Stringers at:	
411'	421'	10'	100%		Very pegmatic gneissic granodiorite.
421'	431'	10'	100%		" " " " Few FeO$_x$ Stringers
431'	441'	10'	100%		" " " " "
441'	453'	10'	83%		" " " " "
453'	477'	10'	92%		Very Pegmatic & Slightly gneissic granodiorite
477'	488'	10'	91%		" " " "
488'	498'	10'	100%		Somewhat pegmatic gneissic granodiorite.
498'	500'	2'	100%		Last 6 inches of hole is ~~Granite~~ Diorite



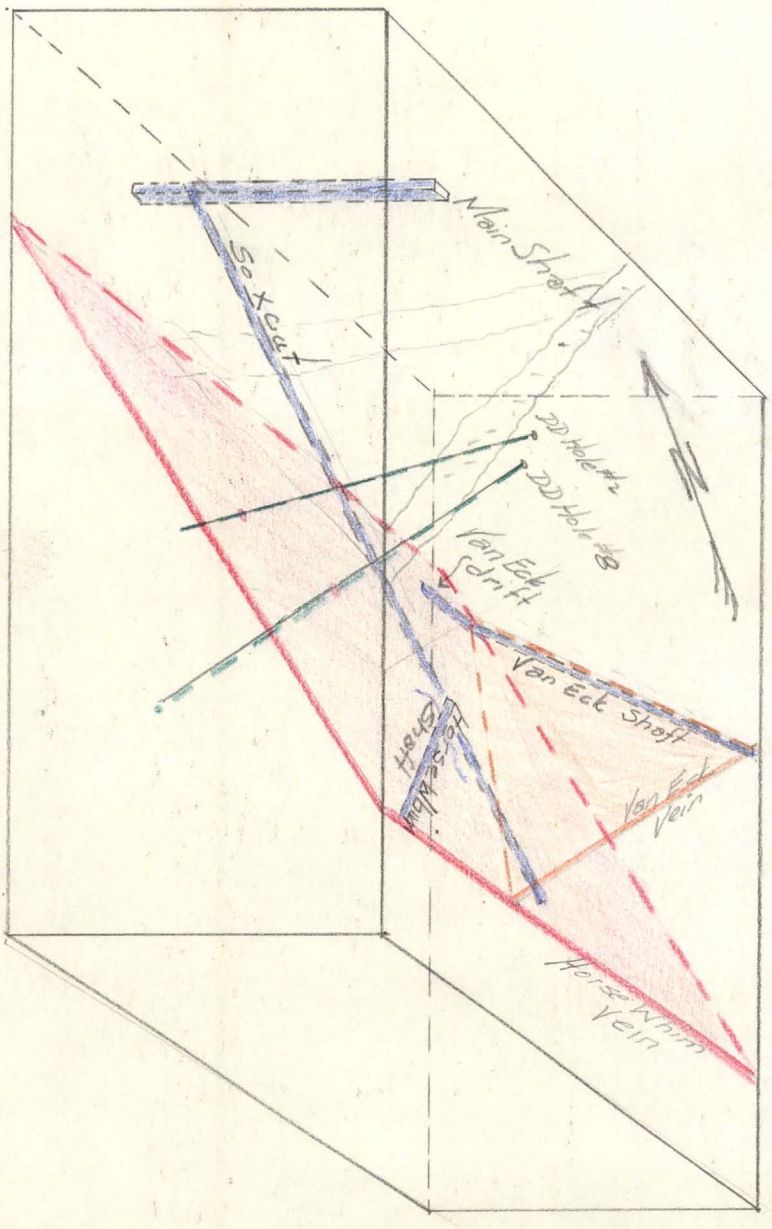
DD Hole #6

From	To	Core Rec.	% Core Rec.	Mineralization Cu Fe S Stringers etc	Mineralization FeS_2	Mineralization FeO x	Remarks	Core
0'	29'	0	0%				No Core	
29'	38'	3.7'	41%				No mineralization. Gneissic granodiorite (Silica = ± 90%; Mica & Hornblend 10%	
38'	43'	3'	60%				" " Pegmatite dike 42.9-43.2	
43'	48'	1.3'	26%				" "	
48'	53'	1.8'	36%				" "	
53'	63'	1.2'	12%				" "	
63'	68'	4.8'	96%				Slightly pegmatic gneissic granodiorite	
68'	73'	5.0'	100%				Gneissic granodiorite	
73'	78'	4'	80%				Few Small Hematite filled Stringers. Slightly pegmatic gneissic granodiorite	
78'	83'	3.2'	64%				" " " "	
83'	88'	4.8'	96%				" " " "	
88'	93'	4'	80%				" " " "	
93'	98'	5'	100%				" " " "	
98'	102'	2.1'	53%				" " " "	
102'	107'	1.5'	30%				" " " "	
107'	117'	3.7'	37%				" " " "	
117'	122'	4.6'	92%				" " " "	
122'	127'	4.4'	88%				" " " "	
127'	132'	5.0'	100%				" " " "	
132'	137'	4.7'	94%				" " " "	
137'	142'	5.0'	100%				" " " "	
142'	147'	5.0'	80%				" " " "	
147'	152'	4.0'	100%				" " " "	
152'	158'	5.5'	100%				" " " "	
158'	163'	5'	100%				" " " "	
163'	168'	5'	100%				" " " "	
168'	178'	10'	100%				" " " "	
178'	183'	5'	100%				" " " "	
183'	193'	10'	100%				" " " "	
193'	198'	5'	100%				Pegmatite dike 193.5-200	
198'	203'	5'	100%				" " "	
203'	213'	9.5'	95%				" " "	
213'	223'	10'	100%				" " "	
223'	235'	12'	100%				Pegmatite dike from 230.0' to 238.0'	

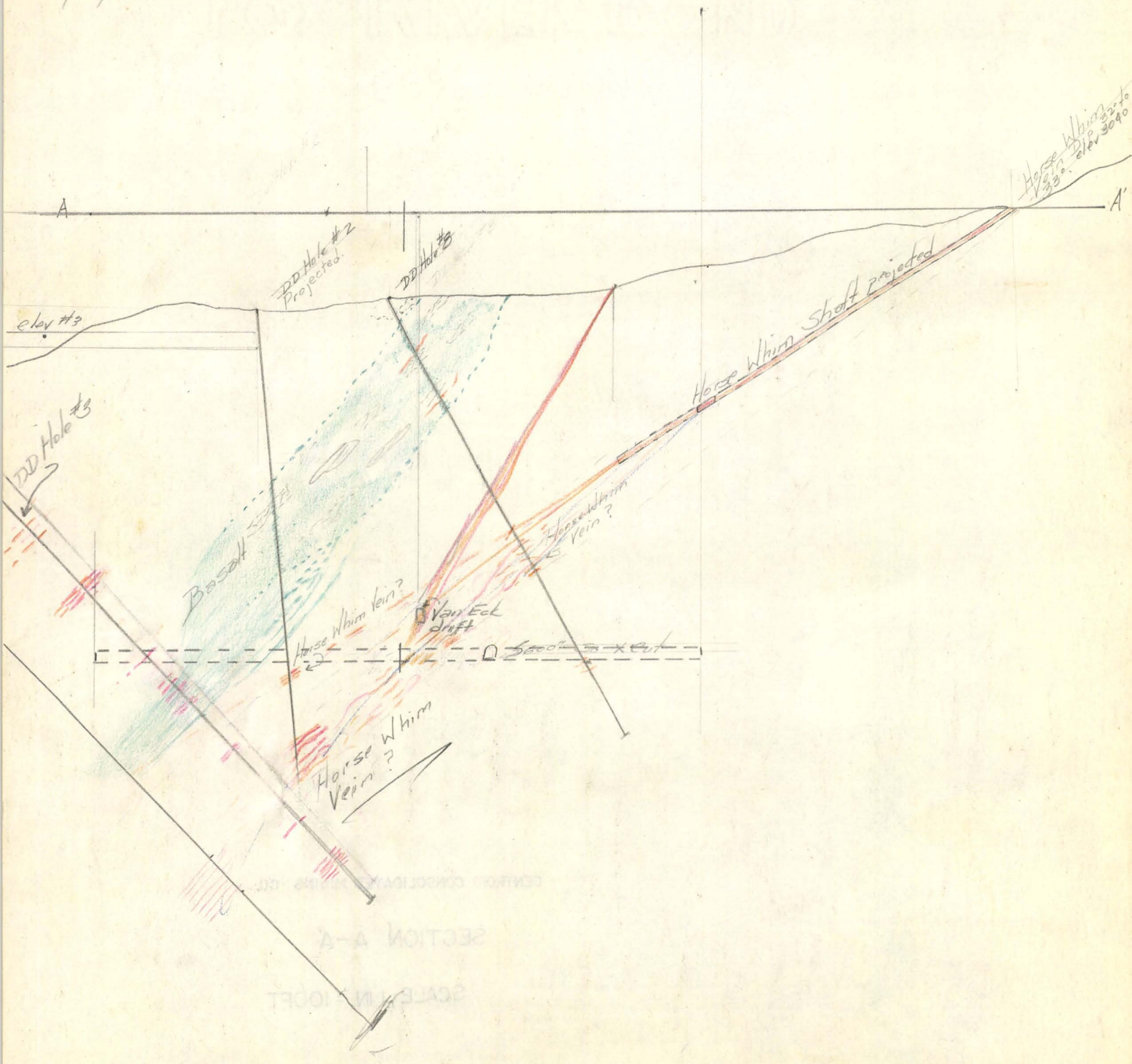
DD Hole #6 Con't

From	To	Core Rec.	% Core Rec.	Mineralization $CuFeS_2$	FeS_2	FeO_2	Remarks	Core
235'	246'	10'	91	None			Few Hematite filled stringers Slightly pegmatic gneissic granodiorite(?)	
246'	256'	8'	80	"	"	"	Pegmatite dike 250.0' to 252.6'	
256'	264'	7.7'	96%	"	"	"	Slightly pegmatic gneissic granodiorite(?)	
264'	272'	6'	75%	"	"	"	" " " "	
272'	282'	10'	100%	"	"	"	pegmatite dike from 279.0' to 281.0'	
282'	292'	10'	100%	"	"	"	Slightly pegmatic gneissic granodiorite(?)	
292'	302'	3.3'	33%	"	"	"	" " " "	
302'	305'	3'	100%	"	"	"	" " " "	

Block Diagram
Centroid Mine



3049
2904
336

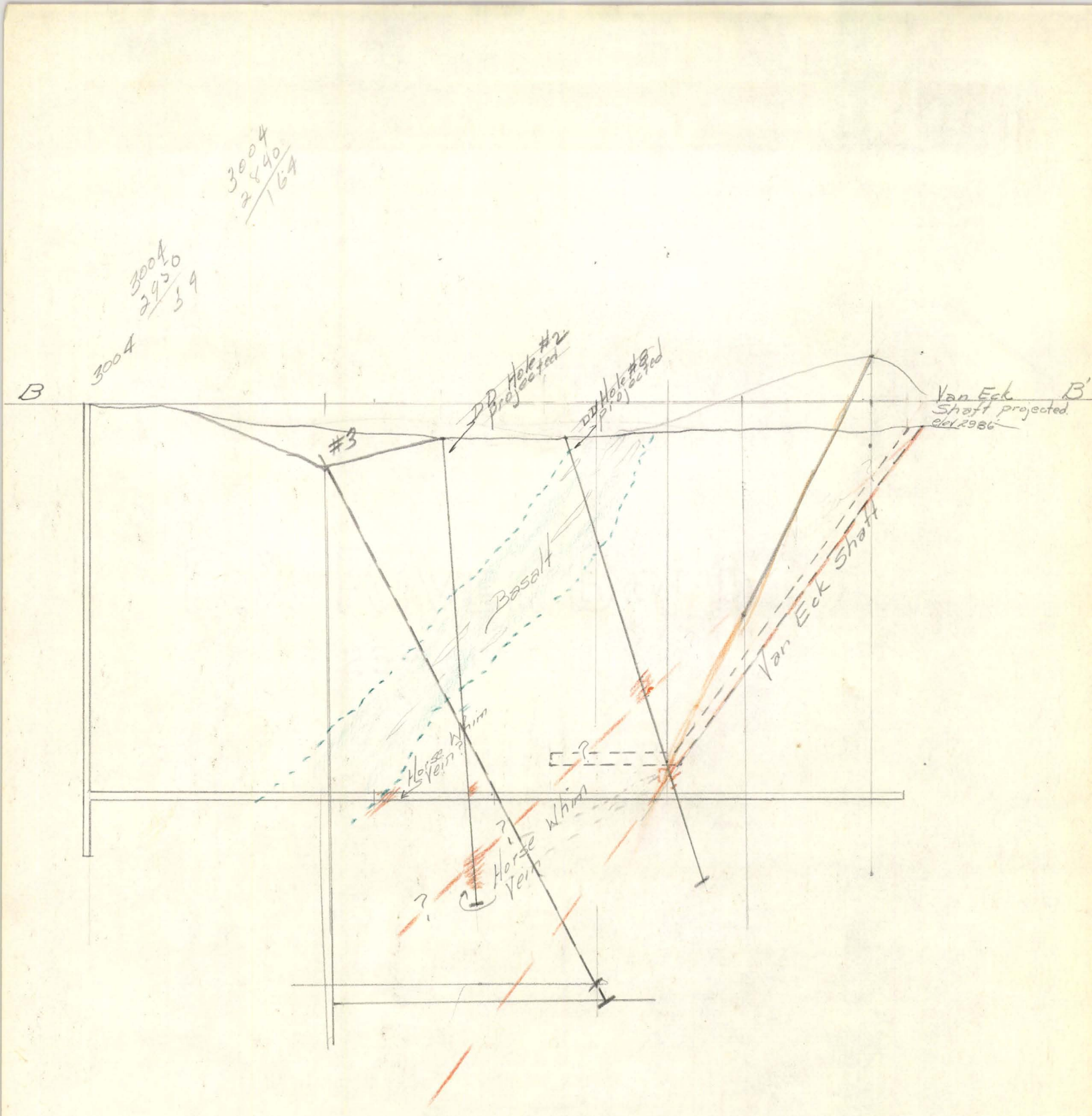


Section A-A'
Scale 1"=100'

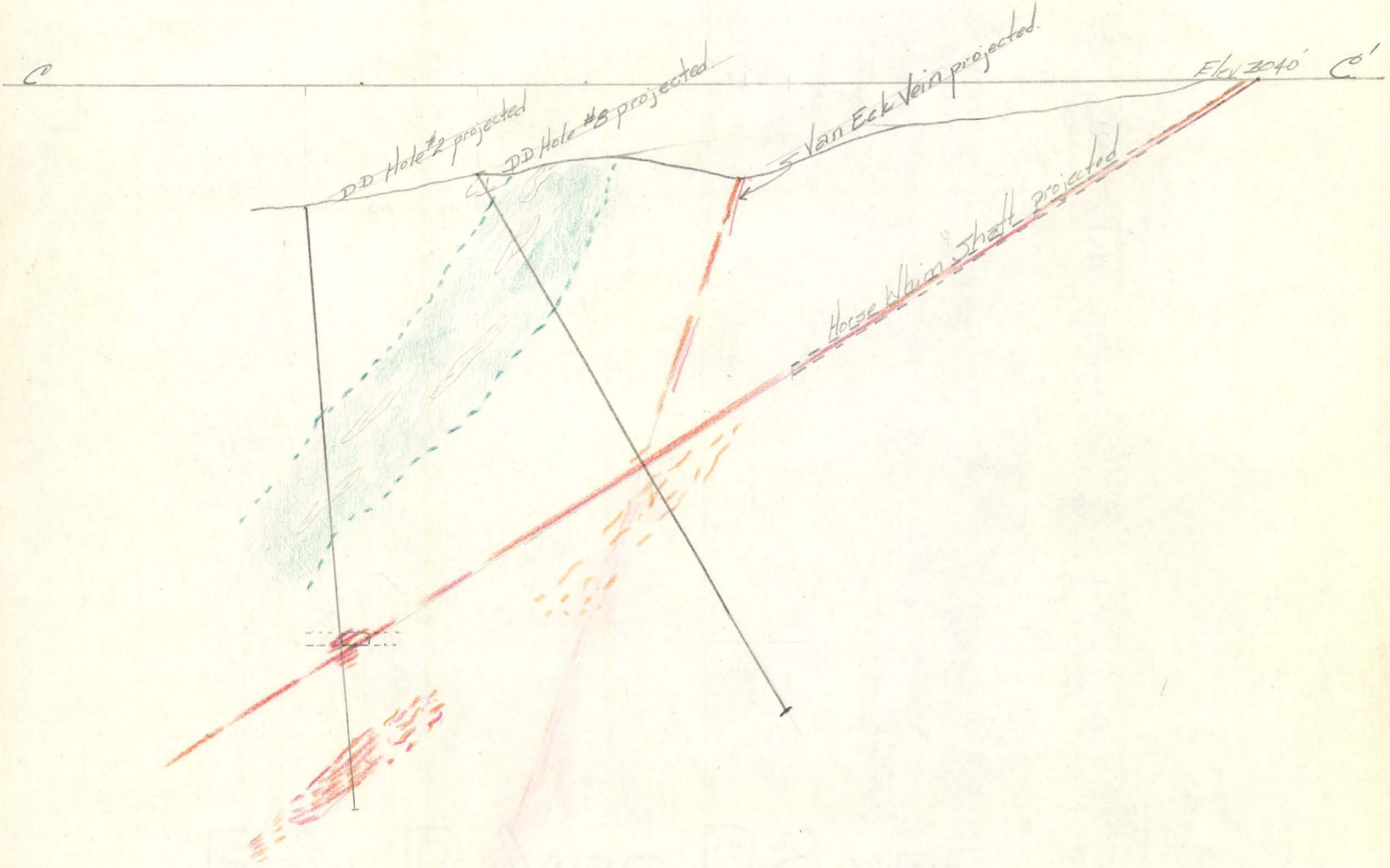
CENTROID CONSOLIDATED MINING CO.

SECTION A-A'

SCALE: 1 IN. = 100FT


B
B'
Van Eck
Shaft projected
elev. 2986'
DD Hole #2
Projected
DH Hole #8
Projected
#3
Basalt
Van Eck Shaft
Horse Whim
Horse Vein
Horse Whim
Horse Vein
?
?
?

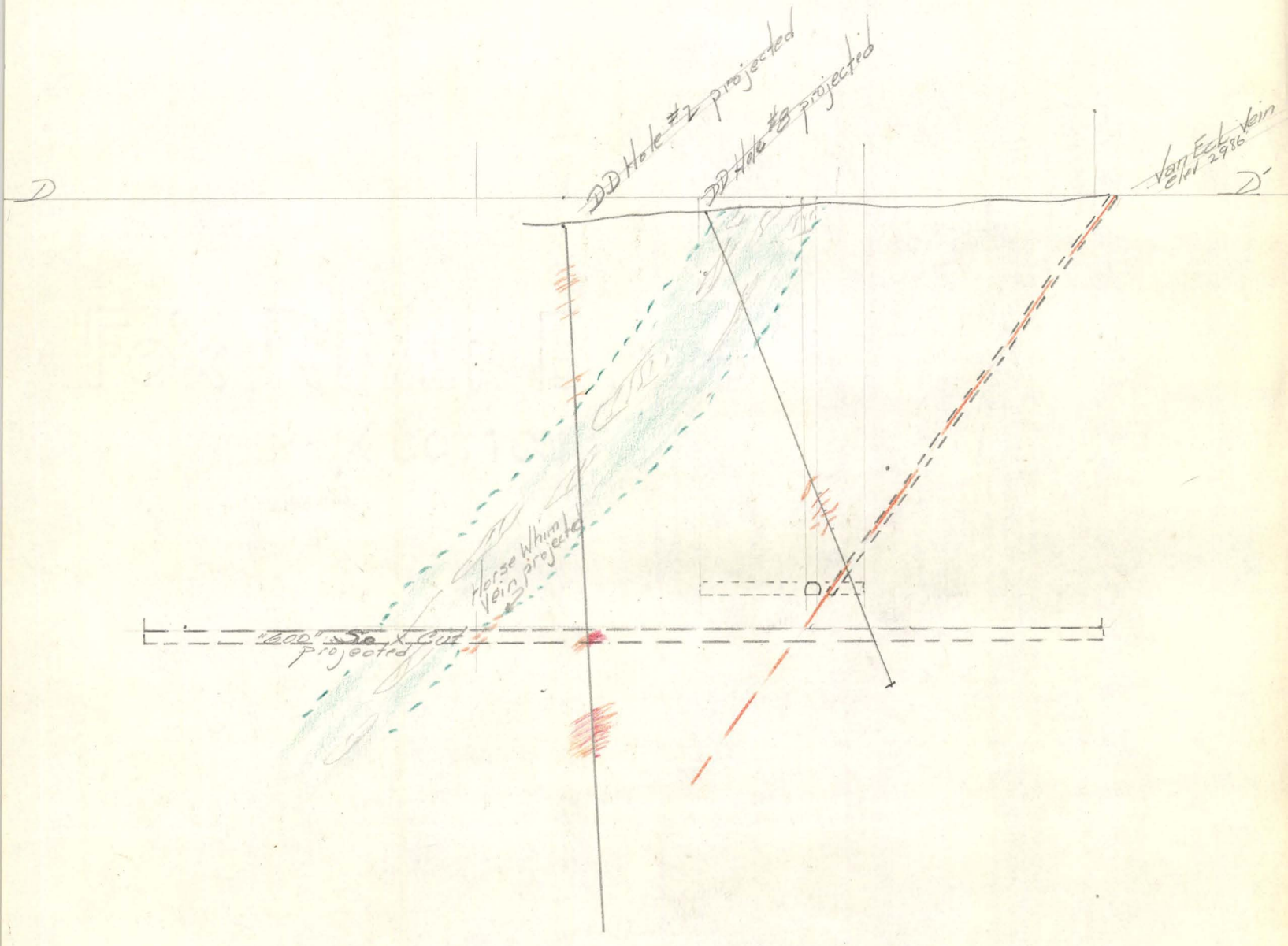
Scale 1" = 100'



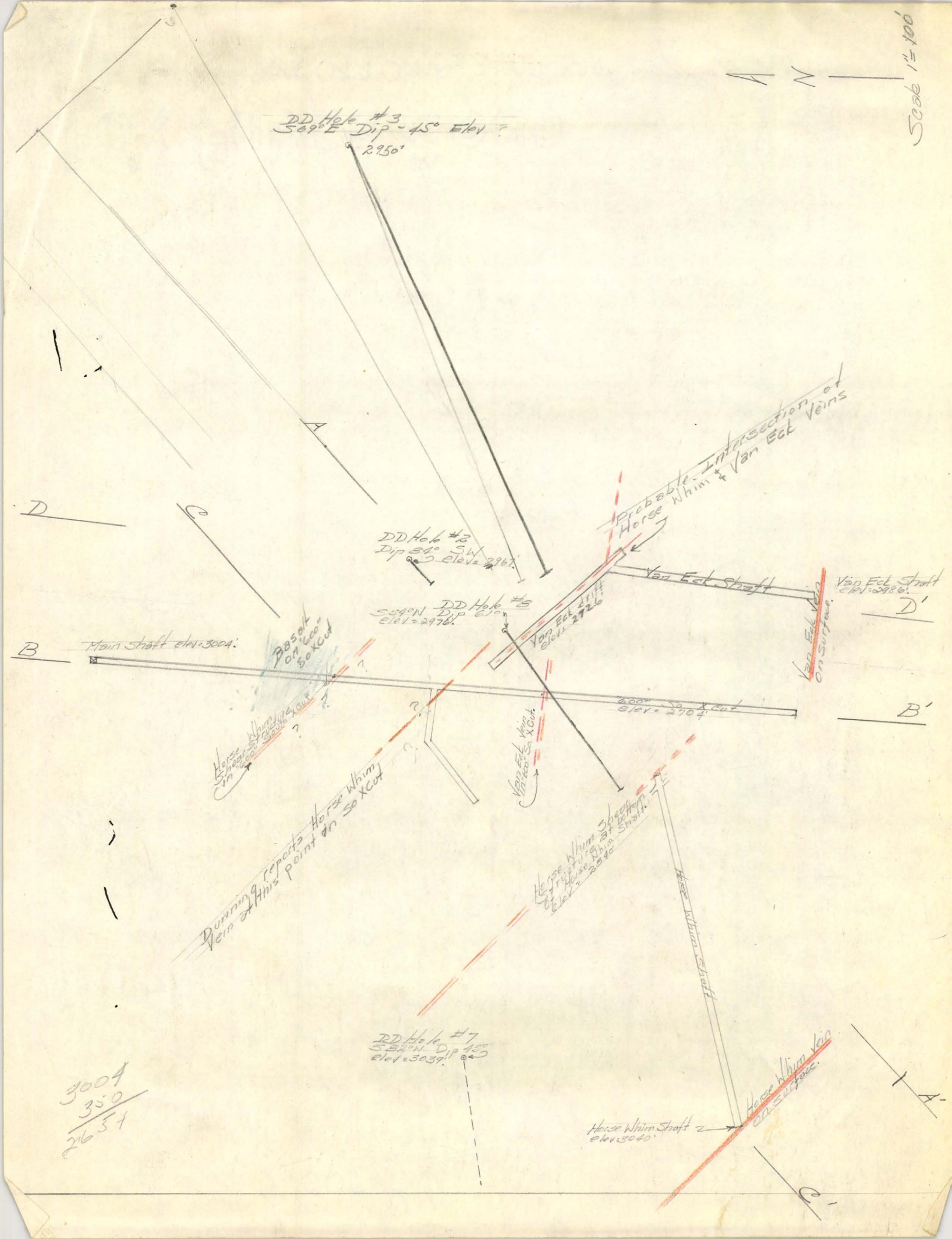
Centroid
Sec A-A'
Scale: 1"=100'

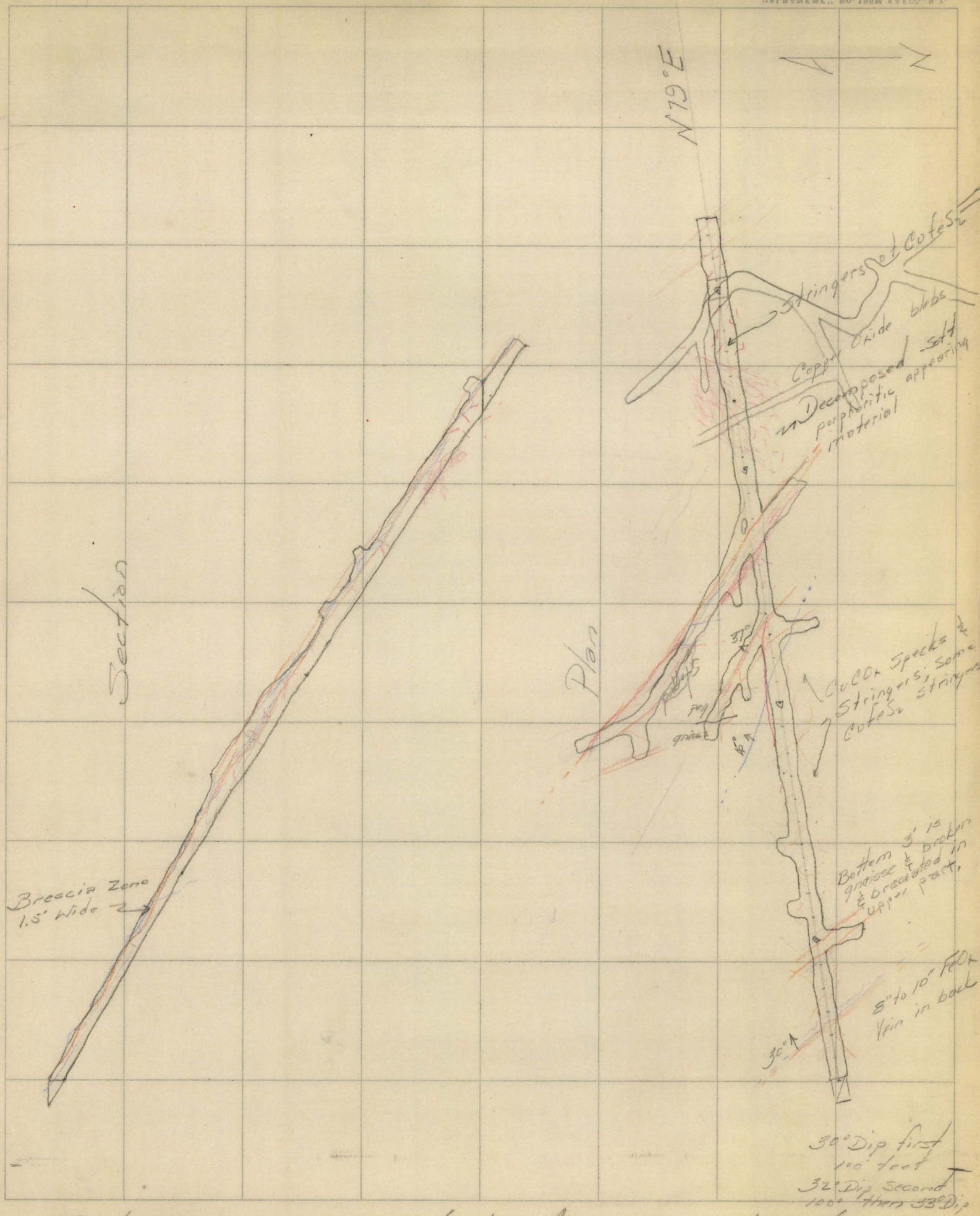
July

Scale
1"=100'


DD Hole #7 projected
DD Hole #8 projected
Van Eck vein
elev 2986
D
D'
Horse Whim
Vein projected
"Zero" Sec. X-Cut
projected

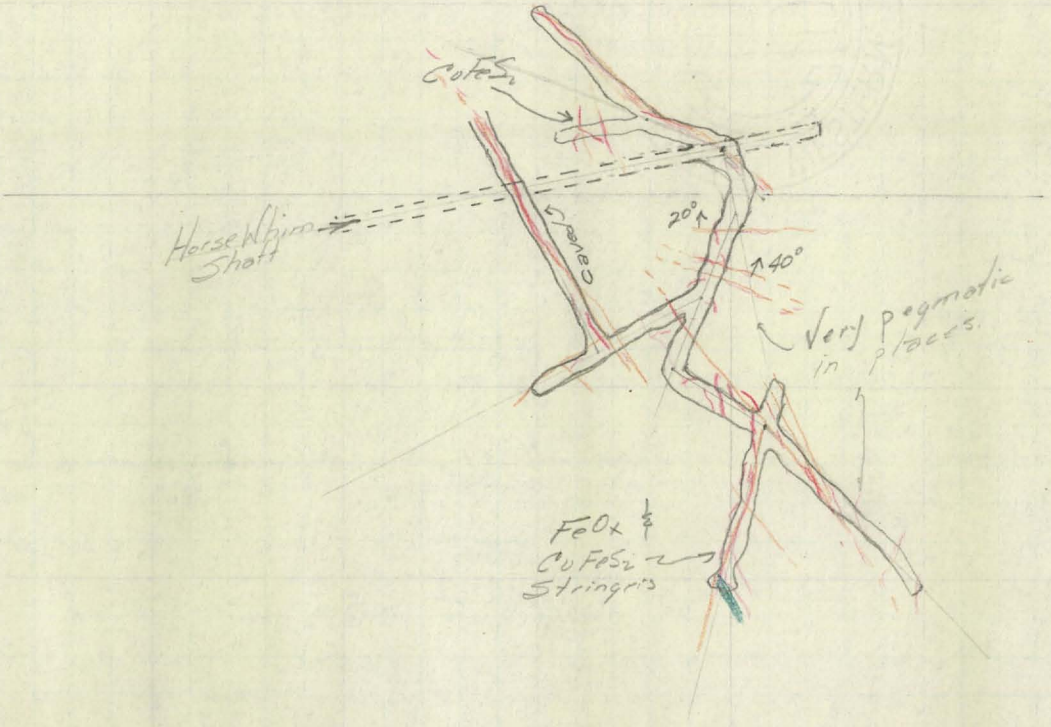
Scale
1" = 100'


Scale 1" = 100'
N
DD Hole #3
S69°E Dip -45° Elev ?
2950'
A
A'
D
C
DD Hole #2
Dip 84° SW
elev = 2961'
Probable Intersection of
Horse Whim & Van Ect Veins
Van Ect Shaft
Van Ect Shaft
elev = 2986'
D'
Van Ect Vein
on Surface.
S89°W DD Hole #5
elev = 2976'
Van Ect drift
elev = 2726
Main Shaft elev = 3004'
B
B'
Basalt
on 600'
50 XCut
600' 50 XCut
elev = 2704'
Horse Whim
Shaft 600' 50 XCut
Van Ect Vein
on 600' 50 XCut
Dumm reports Horse Whim
Vein at this point on 50 XCut
Horse Whim Shaft
at Surface
Elev = 3040'
Horse Whim Shaft
DD Hole #7
S 32°W Dip 45°
elev = 3039'
Horse Whim Vein
on surface.
Horse Whim Shaft
elev = 3040'
C'
A'
3004
350
2651



MINE Centroid LOCATION Hendon Arizona LEVEL House Winze Shaft

GEOLOGY BY H.E.P. SURVEY H.E.P. SCALE 5'-0"=1" DATE 6-18-52



N

"300" Level of Horsewhim Shaft
no Scale

Footage. Rec	Remarks
347-355' = 6'	pegmatic gneissic granite
355'-363' = 8'	Slightly ~~gneiss~~ Pegmatic gneissic granite
363 373 = 10'	"
373 - 391 = 11'	"
391 397 = 4'	"
397 401 = 4'	Very peg gneissic granite
401 - 410 = 7'	"
410 -419 = 9'	"
419 - 426 = 7'	pegmatic gneissic gr.
426 - 436' = 10'	3 FeO x Stringers at 432.0 to

432.5.

436 - 446 - 10' Very pegmatic gneissic grd.

446' 456' 10' Very peg to 453 then turns to gneissic grd,

456' 466 10' Very pegmatic gneissic grd. to 462.0' then turns

466' - 476' 10' ~~[illegible]~~ to pegmatite

Pegmatite

476' - 486' 10' pegmatite to 477.0 then turns pegmatic gneissic grd.

486' to 499 10' Very pegmatic gneiss

499-510	-10'	gneissic granite with some pegmatite bands
510-521	10'	" "
521-534	10'	" " Pegmatite Dike from 523 to 529.
534-544	10'	Very pegmatic gneiss with FeOx Stringers at: 535 540.5 541.0 541.2 542.0
544.5-549	~~10'~~ 5'	" " " FeOx ½ CuFeS$_2$ at 543.0, 543.5

554-564	4'	Altered pegmatic gneiss & CuFeS2 FeOx at 554.5-560.0 563.5
564-568	1.3'	Altered pegmatic gneiss few FeOx & CuFeS2 Stringers
568-571	1.5'	Altered peg gneiss. No Stringers.
571-587(0')		Fresh Very pegmatic gneissic grd.
587-599	10'	Very pegmatic gneiss - 3 FeOx Stringers at 588 to 589.0.

S-99-618 10' Slightly altered pegmatic gneiss.

618 - 627 10' Very pegmatic gneiss to 618 then diorite to 624.0 Last 3' Pegmatite

627- 634' 10 Diorite from 627 to 633.0 then Very pegmatic gneiss FeOx & CuFeS2 at:

632.00
633.00
633.5

638.6 49 - 10 Slightly pegmatic gneiss

649 - 559 - 8' Very pegmatic gneiss. Stringers of Felsic at: 649.0 649.5 -

659-670 10' Very Pegmatic gneiss.

670 - 680 10 " " "

Diorite 676.3 to 677.3

680-709

709-722-10 Slightly pog gneissic grd. Feox stringer at 721.8 1/2" wide

722-733 10' " " "

733-744 10' " " "

744 750 7' " " "

Adit Above Horseshim
Shaft
50 Scale

HET

Richard E. Mieritz
MINING CONSULTANT

April 29, 1957

Centroid Consolidated

Mr. President,
Members of the Board,
Stock Holders.

I deeply regret my absence from this special meeting but other business requires my presence elsewhere.

I have been consulted by your Board to advise them as well as each of you what, in my opinion, would be the best route to follow in order to continue the existance of your Company to your advantage.

I advised you at your last annual meeting that we were endeavoring to contact some finnancially sound and exploratory minded organizations whom we might interest in our property. A spark of interest has been shown but is soon "dead" because our ammunition, existing files, reports, etc do not contain the necessary "punch" to influence and maintain an increasing interest of those to whom the property has been submitted. We must therefore supplement or better still, replace this information with a sound geological and engineering report and necessary maps, bringing up to date all the available information and incorporating same in one fine report. This prerequisite is a "must" in order to better the condition of Centroid.

In its present condition, Centroid has two exits of escape and each can be traveled individually but simultaneously. They are(1)-interest a finnancially sound and exploratory minded organization who would provide the necessary capital and professional staff to adequately explore the property in a fashion common to the profession and backed up with sound geological reasoning and (2) to prepare a new prospectus and allow a new stock issue to obtain funds to further our exploratory endeavor to prove the existance of commercialmineralization which is thought to exist because of surface-wise indications locally and regionally.

In either case we do need ammunition-- an engineering and geological report. Without it, we cannot progress to your advantage.

The geologic and engineering report of which I speak must include a complete geologic suffece map, accurately surveyed, complete logging of drill holes drilled to date, some sampling of the cores where necessary, correlation of such geologic conditions encountered, correlation of the surface geology with that found in the drill holes and other underground workings where accessible along with the usual but necessary information common to this type of report.

I strongly urge you as stockholders to requisition your board to enact on some means by which sufficient funds can be obtained to finance this important work.

Respectfully submitted

cc. R. E. Mieritz, Engineer

P. O. Box 511
Balboa, California

April 20, 1957

Mr. C. J. Lunenschloss, President
Centroid Consolidated Mines
650 North 1st Avenue
Phoenix, Arizona

Gentlemen:

I wish to submit the following suggestions regarding the possible sale of the Centroid group of claims for your approval.

I shall place your property in the hands of financially strong companies that now have active exploration departments.

The terms will be from 12 to 15 % of all stock issued or some other method of payment such as lease and bond with sliding scale royality, subject to negotiation. This type of deal usually is 5% on one below $25.00 per ton and 10% on $25.00 and better.

If exclusive sales rights are given, I shall upon completion of Mr. Mieritz' work start organizing your material, reports, etc.

Respectfully submitted,

Jerry Bell

cc.

Richard E. Mieritz
MINING CONSULTANT

March 18, 1957

Board of Directors,
Centroid Consolidated Mines
650 N. 1st Ave.
Phoenix, Arizona

Gentlemen:

Acting on the request of your President, I, along with two members of the Board, Messrs. Haigler and Kostolnik, visited the Critic Mine, Sarah Mine and the Bullard Mine, all in the Cunningham Pass area, Mohave County, Arizona. These mines lie northwesterly of your Centroid Group.

The purpose of the visit was to examine these mines as best as possible in the time alloted as a basis for rendering or providing the Board with an opinion, based on sound geologic and engineering considerations, which fundamentally could provide a decision of whether to accept or reject the "deal" offered by Mr. D. Garrick, presently, majority interest holder in these properties.

By acquisition of these properties, Centroid could provide itself a saviour and an agent for inducing increased interest from outsiders and very likely a treasurey builder along with its own livelyhood.

Considerable production in dollars and cents has been produced from these mines and on the basis of geologic structures and mineralization, there is no apparent reason why future production could not be duplicated. It is my opinion that mineralization should continue latterály and vertically downward beyond the present workings of these mines because of the strong structural features on which the past work had been done.

Had Mr. Garrick been present we would have tried to get down the one shaft on the Critic property and that of the Bullard property. I personally respect Mr. Garricks talk and thinking and therefore would accept his word with respect to his previous inspections. Regardless, I feel sure there is ore of good shipping grade available on these properties which certainly is a strong inducement for acquisition.

The media through which Centroid enters into the "deal" and the matter of providing the required funds to

complete the "deal" is a matter of the Board to decide.

Since the deal is a 50-50 proposition, there should be the same representation on the new Board of the company. This Board should include technical and/or professional members and some representative of the legal profession, and as an added protection for all concerned, should also include a person with a broad knowledge and experience in the business world. A Board composition such as this could diligently and sensibly solve any major or minor problem which could arise.

For me to describe in detail all the advantages and geologic conditions of each property under consideration would be time consuming and of minor importance since we have entertained the "district" idea and it is on such idea that we should therefore concentrate upon.

It is my untiased opinion that Centroid should do all in its power to acquire, combine with or associate with the group who now holds acquisition rights to the three properties of concern.

Very truly yours,

R. E. Mieritz

Job: Centroid Consolidated

JOB TIME SHEET

Date	Report Draft Type	Letter Draft Type	Map Draft Color	Logging Study	Field	Prints	Hotel	Meals	Calls	Travel
1/4									1 hr.	
1-7-					conf. 1 hr.				1/4	
1-11					8 hrs				1/2	
1-23	2 hrs	1 hr.	Fold 2 hrs.		~~8 hrs~~.			45¢ postage		
1-27										

Richard E. Mieritz
MINING CONSULTANT

January 23, 1957

Mr. Jerry Y. Bell
P. O. Box 511
Balboa, California

Dear Mr. Bell:

Enclosed please find three copies and maps of the Centroid Consolidated Mining Companys' reports which you requested.

You also requested information as to the type of deal the Company would want and what money we would be talking about on this property. Although, in my opinon, the property has good possibilities, I cannot forward an opinion as to what ore reserve and grade is existant or what could be developed. An outright purchase price would be a non-realistic figure at this time. Our interest in the property is to obtain some group to accomplish such exploration as is necessary whether it be underground work and drilling or surface drilling, through which work would indicate a continued exploratory program in the advanced stage or disprove the thoughts of its possibilities. It therefore appears that a reasonable examination, lease and option to purchase agreement would be the simplest and most beneficial arrangement possible,--for all concerned. Centroid feels, as I do, that the financial terms of any arrangement should favor the interested group. We feel therefore that a $10,000 down payment is not beyond the limits of the property concerned nor would a $2,000 a month minimum non-operating royalty be excessive. For this consideration, Centroid would permit the interested to conduct any typeand amount of exploration to their liking to arrive at a decision of acceptance or rejection of the option. The minimum non-operating royalty includes use of the existing housing facilities, appliances within the structures, electric generating plant and mine equipment such as mine hoist, rail, pipe, water pump, jack hammers, drill steel and miscellaneous small tools. Reasonable wear and tear would be acceptable. Incoming and outgoing inventories would be required. We believe the minimum royalty is justified since a considerable investment saving could result for the interested group were these facilities not available.

The tenure in terms of months for any arrangement should be determined and guided by the extent of a planned program of exploration. Any arrangement beyond a six month program, examination and exploration, would require an increase in the minimum royalty payment to $3,000 per month. All payments however would be credited to an agreed purchase price.

I as well as Centroid are of the opinion that a purchase price would best be figured on a unit price per ton of developed ore. I feel sure Centroid would accept something less than 10% of a gross dollar value but certainly with a minimum rider to any purchase price. It ofcourse depends on whether we speak in terms of large tonnage low grade or small tonnage and high grade.

Naturally a consideration is due you if a deal is consumated by your intermediary efforts. Would you therefore submit to us through me your thoughts on this consideration. Centroid is willing compensate on reasonable terms, since your position is that of a "broker".

I wish you luck in all your efforts.

Very truly yours,

R. E. Mieritz

ccCentroid Cons.

Richard E. Mieritz
MINING CONSULTANT

January 17, 1957

Mr. Jerry Y. Bell
P. O. Box 511
Balboa, California

Dear Jerry:

Thanks much for your two notes and also for leaving the reports of the Blue Bell and DeSoto at the desk of the Adams Hotel. Both have been received.

With respect to the required or requested reports on the Centroid, we are in the process of preparing additional reports and I will send them to you as soon as possible. As to the terms on which these people might deal, I have asked the Board of Directors to give me that information as soon as possible, in which case I shall advise you immediately.

Hope you had a good trip to Mexico.

Will see you at some future date.

Sincerely yours,

R. E. Mieritz

P. O. Box 511
Balboa, California
Jan. 12, 1957

Mr. Richard Meiritz
306 East Indian School Road
Phoenix, Arizona

Dear Dick:

I am sorry I didn't get down to return the reports to your office but I left them at the Adams Hotel as I advised you.

Can you tell me what Centroid desires or will the asking price be subject to negotiation later. Generally, as you know, the economics of the proposal needs to be carried in mind when the examination is made. The people to whom I am sending the report will want to know exactly as to terms and conditions.

Sincerely,

Jerry Y. Bell

Jerry Y. Bell

JYB/as

Richard E. Mieritz
MINING CONSULTANT

December 26, 1956

Mr. Manning W. Cox
222 A Oak Court
Palo Alto, California

Dear Bill:

Sure hope you will pardon my taridness is forwarding to you the information on the Centroid Consolidated mining property. The near holidays and pressure for a report prevented my sending earlier.

For your convenience I am enclosing several reports and a map, all of which I know do not constitue adequate equipment and material to work with to form an opinion of the property but it may serve to give you a moderate idea as to whether you may have an interest in the area. For the present, this is all we have.

The contents of this envelope are as follows:
1-Wayne E. Kartchner Report
2-W. Tovote Report
3A. E. Place Letter to Virgina Harris
4-Charles H. Dunning Report
5-Edwin W. Mills letter to W. B. Harris-3/8/37
6- " " " " " " 10/14/51
7-R. Burton Rose letter to Centroid, 4/8/52
8-Dept of Mineral Resources Report-1/10/40
9-Claim Map, J. W. Waara, Mineral Surveyor,1950

You will recall I mentioned we had sampled to smme extent the Horse Whim Shaft from the collar down. As a matter of interest, the following weighted averages were obtained. Collar to -90 ft.@ 1.79%cu, -90 to -250 ft. @ 0.58%cu, -250 to -340 ft. @ 1.10%cu. The overall average being 1.05 % cu from the collar to 340 ft. The copper assay is that of total copper only. Several composites will be made to determine the oxide copper.

When you have arrived at a positive or negative decision of interest, we would appreciate if you return the enclosed information to us, that Centroid Consolidated Mining Co. 650 No. 1st Ave., Phoenix.

Sure wish you and the family had a very nice Christmas and will enjoy a good New Year.

Sincerely yours,

CC. Centroid Cons. R. E. Mieritz

Richard E. Mieritz
MINING CONSULTANT

November 27, 1956

Mr. J. C. Kostolnik, Sec-Treas.
Centroid Consolidated Copper Co.
650 North 1st Ave.
Phoenix, Arizona

Dear Joe:

As mentioned in a previous conversation I would provide you with a brief outline of inexpensive exploration which should be done to (1) check early general and rumored information and (2) to provide additional positive or negative information as a guide to planning future exploration.

The current problem confronting the organization is the limited financial assets available for an elaborate program. Present drilling of hole will, if carried to completion of some 300 to 325 feet, consume much of the reserve. As previously mentioned, little would be gained by drilling below this maximum depth. Thus a small reserve would be available to obtaine limited but essential information.

A general knowledge of the organization, the board interest in the project and the financialstatus and contemplated future plans have all been given consideration in formulating the program herewith outlined as a guide for your organization, to accept or reject as the group sees fit.

SAMPLING

The Horse Whim Shaft should be sampled at 10 foot intervals alternately on each side such that there is a 20 foot spacing between samples on each side. Samples should be cut normal to the dip of the shaft and as long a cut as possible; adequately identified by sample number, location as 10 ft., 20 ft., etc. written description as to character of sample, that is, type of rock and mineralization, mark each sample on wall with cartide lamp-beginning and end, sample number.

Sample levels at ten foot intervals alternately on each side employing same proceedure as described above.

All samples should be throughly mixed and quartered to a maximum of two pounds, assayed for copper only with a request to the assayer to save the pulps from

which composites can be prepared to determine the gold and silver values.

DEWATERING

Dewater the Main Shaft and its workings along with the Van Eck Shaft and its workings to provide entrance to, examination of, mapping and sampling where needed. Since you have advised that Mr. Farrin might cooperate on this matter, the expenditure should not be too great. The program appears feasible since little moisture was noticed in the Horse Whim Shaft bottom. Consequently, the rate of water production is negligible unless the underground workings penetrated or encountered a water bearing structue. If the latter be the case, the source should be determined.

SURVEYING

The organization does not have ample survey information to adequately and accurately locate coordinate and elevation wise the positions of the past diamond drilling and underground workings. In my opinion, this is a"must".

EXPENDITURES

The primary expense involved for the outlined program would be reflected by the necessary labor involved. Since all members of the "board" are extremely interested in the project, are young and energetic in mind and body and for the most part luxurious in leisure time, it is suggested the members combine in equal terms their physical abilities to make the program successful and financially conservative. All I am sure like to"get away from it all" for a short time.

Surveying and examination assistance can be provided by myself when time permits on an actual expense plus equipment rental(instruments, etc.) basis plus a reimbursement along the lines suggested by Mr. Haigler .

Dollar wise, the expenditures should approximate the following figures.

Assaying 120 samples	$180.00
Pumping-sup, equip etc.	$300.00
Cut of posket expenses, Board members, Eng. etc.	$250.00
Equipment rental	$ 40.00
10% Contingencies	$ 80.00
Total	$850.00

Sincerely,

R. E. Mieritz