NATIONAL DEFENSE STOCKPILE OFFICE
APR 28 1951

April 17, 1951

Re: Docket DMA-248

Mr. Elton Clark
Grand View Mining Company
San Lorenzo, New Mexico

Dear Mr. Clark:

With reference to Mr. Milliston's letter to you of February 20:

The information and forms concerning the exploration program recently approved by the Defense Minerals Administration have just been printed for public release. Enclosed is a set for your information, in case you should be interested in requesting Federal aid under this exploration program.

If I can be of further assistance, please feel free to call upon me.

Very truly yours,

Otto Herrs

[illegible], Chief
Lead-Zinc Branch

Enclosures
E. T. McKnight:emp
G 4/16/51
Copies to: J. H. East, Jr. Region IV
Chief Lead-Zinc Br.
E. T. McKnight
L. B. Moon
R. H. Mote
L. F. Strobel
C. O. Mittendorf Files

Executive Field Officer, Region IV

DMA

February [illegible], 1951

Re: Docket [illegible]-248

Mr. Allen Clark
Grand View Mining Company
San Lorenzo, New Mexico

Dear Mr. Clark:

Your application for a Government loan of $30,000 to reopen and mine lead-zinc ore from the Grand View Mine has been reviewed by the Lead Zinc Branch of the Defense Minerals Administration.

Federal aid to expand productive capacity and supply of strategic and critical minerals, as provided in the Defense Production Act of 1950, is taking the following forms:

1. Purchase contracts made by the General Services Administration on projects certified by the Defense Minerals Administration.

2. Accelerated amortization of equipment allowed under the tax laws to operators having certificates of necessity issued by the National Security Resources Board.

3. Encouragement of exploration and development.

In your application you state that a market price of 20 cents per pound for lead and 25 cents per pound for zinc is necessary in order to mine the 13,500 tons of ore reserve at a profit and repay the $30,000 loan that you request for mining this ore. The Defense Minerals Administration has a purchase program for zinc at the current market price. Over-the-at prices are not being offered because it is now believed that a supply ample for defense needs can be assured at the current market price. Because the supply of lead that will be mined in the next few years is believed to be ample for defense needs, there is no corresponding program for purchase of lead through procurement contracts.

If you would be interested in a purchase contract for zinc at the present market price, please let me know, and your

MTE

Copy to Quarles Stone 3/13

application will be given further attention.

Procedures for encouragement of exploration and development should be worked out within a very short time and will be given wide publicity. If you should care to propose a program for your mine under this procedure when it is announced, we will be glad to consider such a proposal under your current Doc et No. DMA-248.

We wish to thank you for bringing this property to our attention.

Very truly yours,

[illegible] Williston, Director
Supply Division
Defense Materials Administration

ELBrockaway:DCoughlin:jehsemp
G-2/20/51
Copies to: Chief, Lead-Zinc Branch
Geological Survey - Wanight
J. H. Hedges
W. H. Rote
Strobel
Mittendorf
2 copies to Executive Officer,
Regional Field Team, Region IV
Files

November 1, 1950

Mining

Check
48

Elton Clark
Landview Mining Company
P. O. Box 211
Vanadium, New Mexico

Dear Mr. Clark:

The letter dated October 21 to W. D. McMillan from you and D. Bruce Leake has been submitted to me for further reply.

Enclosed please find a form letter which gives the pertinent information that will be needed in order to determine whether or not your claim will qualify for a loan.

Further information will be sent you as it is received from Washington.

Sincerely yours,

Paul T. Allsman, Chief
Mining Division

Enclosure

PTA:vmt

cc: W. D. McMillan
W. R. Storms
Chron File
Subj File

Mining Division
Date Rec'd.
OCT 30 1950
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

October 26, 1950

Memorandum

To: Paul T. Allsman, Chief, Mining Division, Region IV, Denver, Colorado

From: Supervising Engineer, New Mexico Field Office, Silver City, New Mexico

Subject: Exploration, Development and Exploitation of the Grandview Lead-Zinc Group, Swartz District, Grant County, N. Mex., under the Defense Production Act.

Attached in duplicate are copies of a letter received from Mr. Elton Clark, Grandview Mining Company, Box 211, Vanadium, New Mexico, for your reply. They are going after some high grade zinc ore found in Bureau of Mines drilling.

W. D. McMillan

W. D. McMillan

cc Storms, Tucson
reader
15068

P. S. Refer to footnote 8 of memorandum of 10/19/50 to R. H. Mote.

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

New Mexico Field Office
P. O. Box 1060
Silver City, New Mexico

October 26, 1950

Mr. Elton Clark
Grandview Mining Company
P. O. Box 211
Vanadium, New Mexico

Re: Grandview Lead-Zinc Group,
Swartz District, Grant
County, New Mexico

Dear Mr. Clark:

Reference is made to your letter of October 21, relating to the exploration and development of the Grandview group of mining claims.

The procedures involved in our certifying loans to the Reconstruction Finance Corporation and purchase contracts to the General Services Administration have not as yet been worked out, but we expect to receive these in the near future.

Your letter is being forwarded to Mr. Paul T. Allsman, Chief of the Mining Division, Region IV, Bureau of Mines, Denver, Colorado, for reply.

Sincerely yours,

W. D. McMillan
Supervising Engineer

cc Allsman, Denver
Storms, Tucson
reader
15068

COPY COPY

Elton Clark
Box 211
Vanadium, New Mexico

October 21, 1950

Mr. W. D. McMillan, Supervising Engineer
New Mexico Field Office
Mining Division
Region IV. Bureau of Mines
Silver City, New Mexico.

Dear Sir:

The partnership of D. Bruce Leake of San Lorenzo, New Mexico and Elton Clark of Vanadium, New Mexico to be known as the Grandview Mining Co. wishes to make application for Federal funds when they become available. The funds are to be used to equip the group of claims known as the Grandview group and for the purpose of developing and producing lead-zinc mineral bearing ores.

The following group of claims:- Grandview, Last Chance, Dwyer, White Pine, Tip Top, Yellow Pine, Alma, Old John, Lindy, Confidence, Williams, Grand Central, Daisy, Wedge, Log Cabin, Last Chance millsite and Yellow Pine millsite are recorded in the office of the County Clerk of Grant County, New Mexico. This group is under lease by Mr. Leake from the owners. The group is located in the Carpenter (Swartz) Mining District, County of Grant, State of New Mexico. Accessibility and general features are described in U. S. Bureau of Mines R. I. 3904, September 1946.

General Plan of Procedure:-

Repair two cabins and domestic water supply.

Repair lower adit portal, clean up lower adit level and repair track and pipe lines.

Install equipment.

Repair surface bin, buildings and waste track.

Start exploration on promising showings on lower adit level and develop ore for mining and shipment as fast as possible.

Drill for lower extensions of ore below stopes off the lower adit level.

Contingent on this drilling start a level off the 100 ft. winze at the level and in the direction indicated by the above drilling.

Continue to open up and develop all promising showings by diamond drilling and driving.

The size of the crew will probably be 4 to 6 men at the start and if conditions warrant will increase to 10 to 12 men. Additional dwellings would be necessary if the crew were built up to 10 or 12 men.

Application:

The sum of $30,000.00 is being asked for. Below is a rough break down.

Repairs to two cabins on Log Cabin claim and repair to domestic water supply, also additional dwellings, etc.	$ 2,000.00
Mining equipment - compressor, receiver, machine drills, air hoist, slusher hoist, mine cars, scrapers, mine lamps and charger, etc.	12,000.00
Supplies - timber, explosives, pipe, hose, steel, bits, hand tools, fuel, etc.	5,000.00
Diamond drilling plus or minus 1000 ft.	5,000.00
Working capital	6,000.00
TOTAL	$30,000.00

The above expenditures are lumped together to achieve brevity in this initial correspondence in regard to this application for Federal funds. Plans in greater detail are being prepared and will be available as you need them.

Yours very truly,

/s/ D. Bruce Leake
D. Bruce Leake

/s/ Elton Clark
Elton Clark

GRANDVIEW MINING COMPANY

COPY

Form 6-98

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

U. S. GOVERNMENT PRINTING OFFICE 16—53493-2

Grand View Mining Company
Carpenter (Swartz) Mining District
County of Grant
State of New Mexico

December 1, 1950

Reply to November 1, 1950 Information Questionaire from Mr. Paul T. Allsman, Chief of Mining Division, Bureau of Mines, Region IV, Denver, Colorado.

1. Question: Name of mine, and present operating company name and address. Also state name of previous operators and any other name under which this mine was operated.

Answer: (a) Grand View group of claims, also has been called the Teel group.

(b) Grand View Mining Company, post office address- San Lorenzo, New Mexico.

(c) Operated by D.B.Leake of San Lorenzo, N.M. in 1937 and the first shipment of ore made by him at that time. Later operated by the Black Range Development Company of Silver City, N.M. till 1945 when lease was dropped. 1947 to end of 1949 leased by Strong and Harris of Vanadium, N.M. who made a few small shipments.

2. Question: Past production, present rate of production and history of property if available.

Answer: (a) Past production "reprinted from Bureau of Mines Report of Investigations 3904" 1938 to 1944:- 18,949 tons with a metal content of 15.34 oz. Gold; 13,963 oz. Silver; 92,999 lbs. Copper; 1,758,490 lbs. Lead; 3,254,085 lbs. Zinc; Since 1944 production has been intermittent but was probably close to 2,000 tons of a similar grade. We are confident that future mining will be able to maintain this grade. There is no geologic evidence that ore or grade will be cut off.

(b) No production at present.

(c) Previous to 1937 a showing of galena was prospected by Mitch Gray and at his death the claims were left to his grub-stakers.

3. Question: State clearly in detail, the proposed work for which the loan is requested, giving estimated cost. The following data should be included:

(a) Maps showing proposed new work (where applicable).

Answer: See maps and detail of development program for proposed work on "A" level and proposed 100 level.

Question: (b) List of major equipment and other facilities available.

Answer:

1- Large log cabin 18'x22'. Empty and in need of repair. We are in the process of repairing it now.

1- Small log cabin 12' x 14'. Empty and in need or repair. We are in the process of repairing it now.

1- Tool shed 16' x 18' plus a 10' x 10' lean to.

1- Ore bin at "A" adit. Capacity 50 tons. It needs considerable work done on the underpinnings.

1- Ore bin at "B" adit. Capacity 50 tons. It needs some repairing.

Question (c): List of major new equipment and facilities required.

Answer:

Equipment	
1- 365 cfm. Diesel Compressor, used.	$4000.00
1- Receiver tank, used.	200.00
1- Water tank, used.	100.00
4- 15 cu. ft. End dump mine cars, used	600.00
2- Jackhammers with jacklegs	1000.00
1- Stoper.	500.00
1- Flusher hoist (air) 7hp and 500 cable	1000.00
1- Scraper.	200.00
1- Air powered hoist for winze, air powered, 15hp and 300 ft. ½in. cable. Used.	1000.00
1- Mine water pump.	300.00
1- Electric light plant, 1500kw, 120 volt, wire, switches and outlets for mine surface plant and dwellings.	1000.00
1- Pickup truck, used.	1000.00
1- Welding torch and accessories.	100.00
Pipe threader and dies, pipe cutter, blow torch, vise, anvil, emery wheel, hand tools, etc.	500.00
Miscellaneous.	500.00
Total	$12000.00

Facilities

Future dwellings will be needed	$2,000.00

Supplies

2000'-	2" Pipe	$800.00
	2" Pipe fittings.	100.00
2000'-	1" Pipe	400.00
	1" Pipe fittings	50.00
2000'-	16# Rail	800.00
	Track accessories	100.00
1 ton-	1"20 & 7/8 Hex steel, made up	600.00
25 -	Tungsten carbide bits	350.00
10BM -	Mine timber	750.00
	Timber supplies	25.00
6 -	¾" x 50' Air hose	300.00
6 -	¾" x 50' Water hose	150.00
1000# -	Dynamite	200.00
5000 -	#6 Caps	10.00

5000 -	Fuse	$ 75.00
6 -	Picks	18.00
6 -	Shovels	24.00
6 -	Axes	21.00
3 -	Saws	15.00
Misc: single jacks, double jacks, wrenches, etc.		50.00
Fuel		162.00
	Total	$5,000.00

Question (d): Present average number of employees by classification; i.e. miners, unskilled labor, mechanics, etc.

Answer: At present 2 miners are employed repairing cabins, retimbering the portal to "A" adit and starting to clean up underground workings.

Question (e): List estimated additional employees required for the proposed work. State availability of labor for this work.

Answer: When the 100 level has been opened up and production is up to expectations the payroll should have the following:

8 Miners
2 Utility men, used as timberman, hoistmen, and trammers, etc.
1 Mechanic used as compressor man, part time hoistman, general repairman and maintenance.
1 Working foreman
12 Total

Labor is available at present but the supply is getting tight as time goes on. There is some off season farm labor that is experienced in mining and available in the district.

Question (f): If ore must be milled, state name and location of mill where the ore will be treated.

Answer : The ore will be milled at the Deming, New Mexico mill of the American Smelting and Refining Co.
Truck haul 35 miles to Cobre siding on the Santa Fe RR.
Rail haul 50 miles to the American Smelting & Refining mill at Deming, N.M.

Question:(g) When proposed work is completed, state rate of production that reasonably may be expected.

Answer: 600 tons per month.

Question (h): State estimated time required to complete work for which loan is requested; and state estimated time required to reach the production in item "g".

Answer: It is estimated that one year from the time the loan is granted the development program will be fully expanded and production will have been built up to the 600 tons per month rate. A limited production will start soon after the loan is granted and will be built up as the months and program progresses.

Question (i): Make statement regarding accessibility of mine, giving present condition of roads.

Answer: The mine is serviced by a gravel road which is maintained by Grant County. This road passes through the claims and spurs go to the ore bins. Refer to Bureau of Mines Report of Investigations 3904. The roads at present are good mountain truck roads.

Question (j): Estimate the price of metals required so that th this mine can operate on the grade of ore expected.

Answer: Assuming that we can develop and mine ore of a grade equal to the 4.65% Lead and 8.58% Zinc reported produced during the 1938-44 period in the U.S. Bureau of Mines RI 3904, then if Lead sold for 20¢ per lb. and Zinc for 25¢ per lb. or a combination that yielded an equal net smelter return, we estimate that we can operate at a profit and pay off the $30,000.00 loan with the 13,320 tons estimated under Indicated and Inferred ore in the Estimate of Ore Reserves. Cost of labor and supplies would have to stay proportionally in line.

4. Question: Give estimate of Ore Reserves.
a. Measured ore _____ tons and grade
b. Indicated ore _____ tons and grade.
c. Inferred ore _____ tons and grade.

The estimate of ore reserves should be supported by maps and assays available. Copies of all available maps of the property should be forwarded, including topographic, geologic, assay, and mine maps.

See attached sheets, Estimates of Ore Reserves.

5. Question: Any reports by engineers or geologists concerning the property should be forwarded.

Answer: Enclosed please find "Bureau pf Mines Report of Investigation 3904" the only availabl report we have at hand.

6. Question: A statement should be made showing experience of the mine management.

Answer: D. Bruce Leake has been Deputy Mine Inspector for the State of New Mexico since 1948. He resigned as of Dec. 1, 1950. Previous to this he has had extensive underground experience in mining, holding positions of responsibility as foreman and superintendent. Also experience in erecting mills and in charge of operating mills. Also as independent contractor in underground work. He has been in mining since he startedin the zinc mines in Tennessee in 1919 to the present, most of the time in Arizona and New Mexico.

Elton Clark is Mine Supt. at the Bayard Department of the United States Smelting Refining and Mining Co. and has held various positions from shift boss for the company in Utah in 1944 to his present position. Previous to this he hadengineering, geologic and operating experience in Nevada, California, Ontario and Quebec. Started mining during summer of 1932 while attending Harvard College.

7. Question: Any other data that may be of assistance in evaluating your proposal.

Answer: Among the claims covered by the lease is a claim called the Last Chance which is contiguous to the Grand View claim. On the Last Chance claim is a strong fault running roughly parallel to the Grand View fault and some 1000 feet in the footwall. This has been prospected with a 50 foot shaft dipping 55 degrees to the east. In the shaft and in pits along the surface outcrop for 150 feet ore estimated at 10 to 15% combined Pb-Zn. over widths of 3 to 4 feet have been found.
An adit started years ago is in 199 feet and has 150 feet to go to get under the ore. Stoping above the adit would be 150 feet. This could be an important source or ore and we plan to prospect, map and sample the workings soon. We mention this because it is a possible additional source from which to increase our production, after the workings on the Grand View claim are in production.

8. Question: Have you attempted to secure finances required for this work from any source other than the Government.

Answer: Between us we are financing preliminary cabin repairs, portal repairs, and reground clean up and limited mining. All examination expenses have been borne by us. We have made attempts locally to raise finances but have not been able to arrive at terms which we feel are satisfactory or to the best interests of production for the Grand View Mining Company. In the past and up to the present metal prices have not been any where near high enough to assure an investor of a return on his investment. We feel that if we wait until prices go up high enough to interest the local investor labor and material will be very difficult to get and production of metals will suffer.

Yours truly,

Elton Clark

Elton Clark
Partner-Grand View Mining Company

PROPOSED DEVELOPMENT PROGRAM

General

Clean out "A" adit level and repair track and pipe that is in place and replace where needed.

A. Favorable places to explore for ore on "A" level:- Refer to map.

1. At 5170N-5250E long hole drill the back and west rib of drift where mineralization shows. The south wall of the winze station and raise is sheared and mineralized strongly. There is ore along this wall above the level. If the long hole drilling is encouraging start a raise up along shear and leave a pillar to protect winze station.

2. At 5070N-5250E the 6 foot winze has ore going south along fault at track level. The winze has ore across the bottom 16 feet wide and across south end. A few rounds should be driven south along this fault to see if it will continue in ore to the face of ore reserve 5. This showing should be opened up on "A" level even if it isn't all in good ore to better direct the drilling and development below. With a little encouragement this 100 feet to 5. should be drifted out. Drifting from 5. to 2. could be done if conditions turned out to indicate that to be the better policy.

3. At 4830N-5210E there is 100 feet of gouge and brecciated ground along a fault system. For 20 feet of this the gouge is strongly mineralized with galena and sphalerite. Blocks of solid ore in the gouge, one piece 10 feet long by 1 foot wide assayed 5.40% Pb. and 21.90% Zn. The back had sloughed out up as much as 6 to 7 feet exposing this mineralization. At the drift level evidently there was gouge but no mineralization. The drift was driven slightly in the footwall of the fault hence the reason for the previous operators missing the ore. There is so much evidence that there is an ore body above at this point that we propose to stull the back and test drill to the hanging-wall and the foot-wall under the fault to determine where to raise. After this we will clean out 500 or more tons of waste gouge in the drift and retimber it for raising and stoping.

4. At 4980N-5290E U.S. Bureau of Mines D.D. hole #2 passes close to the drift and raise (See core Log). The 30 foot raise at this point has a 50 degree dip to the west. After carrying a transit survey from the collar of the drill hole into the mine at this point further exploration by cross-cutting may be indicated on this level. The walls of the raise and the back of the drift west of the raise should be explored where ore is showing.

5. At 4940N-5240E explore on ore going into the east and west ribs of raise and the back. The vein is narrow ± 1 foot but strong.

The above program on "A" level has as its object to start shipping ore as soon as possible. As an additional source of early shipping ore we expect to find a few hundred tons up on "B" level and around the old stopes between the levels. This would be in the nature of gouge mining and there hasn't been time to make any detailed estimates. The showings at some spots are very encouraging.

E. Diamond Drilling:- Drill below the "A" level with the object of locating the downward extensions of ore shoots from "A" level and to facilitate the laying out of the drifting program on the future 100 level. The exact location, bearing and dips of holes will be laid out before drilling.

I. At approximately 5175N-5150E drill a __ 150 foot hole bearing N80E, dip -55. The object is to intercept the main north-south faults just west of the bottom of the winze 100 feet below the "A" level. The winze was mined down on ore for 40 feet on a 60 degree west dip. Later the winze was realigned and sunk 100 feet as a vertical winze. There is mineralization reported as coming in again on the bottom. If this hole should find ore the 100 level would be driven west to the fault system and drifting would follow what is apparently the main north-south fault system.

II. At approximately 5050N-5210E drill a __ 150 foot hole, bearing N55E, dip -55. This is to intercept the downward extension of 2. orebody __ 50 feet below and 6. orebody __ 100 feet below. This information will direct the development program on the 100 level.

III. At approximately 5000N-5210E drill a __ 125 foot hole, bearing East, dip -55. This is to cut ore showing at bottom of raises along a fault in foot-wall of drift at this point also the eastward extension of 5. orebody at -40 to -50 feet below level and 4. orebody at -100 feet.

V. From the bottom of the winze, after examining the mineralization reported in the bottom, lay out 150 feet of drilling to the best advantage. Check for depth of mineralization to help establishing the right elevation of the proposed 100 level.

IV. At 5230N-5290E drill a ± 150 foot hole bearing S45E, dip horizontal, to cut the northward extensions of the main faults.

VI. At 5050N-5000E on surface (Tee surface Exp) drill 2 or 3 holes totalling 275 feet to test the top of the limestone and under the Percha shale. Test between the 2 strands of the Grandview fault and in the hanging-wall of the hanging-wall strand. On "A" level at 5100N-4995E the fault gouge of the shale-limestone contact is mineralized with galena and sphalerite. An assay of the gouge ran 1.95% Pb. and 4.50% Zn. over a 1 foot width of gouge. Limestone fragments appeared to be mineralized.

Total diamond drilling comes to 1000 feet at $5.00 per foot equals $5,000.00. This should be done in the approximate order as laid out, and started as soon as "A" level work is underway.

F. 100 Level Program:- As soon as the diamond drilling program is underway, rehabilitation of the winze, headframe, winze timbering, and pumping out should start. Diamond drill item V. plus the intercepts in other holes will determine where the 100 level will be established. If the mineralization in the bottom should go down for a material distance due consideration would be given to deepening the winze at that time or later depending on the rate of production from "A" level and other circumstances at the time.

Drifting and cross-cutting will be determined by findings in the proposed drill campaign, plus the 4.7 foot intercept of 21.2% Pb.-Zn. and 4.27 oz. Ag. in U.S. Bureau of Mines D.D. Hole #4, and other data collected. A probable plan would be:- A total of 500 to 600 feet of drifting and cross-cutting as much in ore as possible along the main north-south fault zone and down dip on the projected position. 300 to 400 feet of raising probably all in ore, followed by stoping.

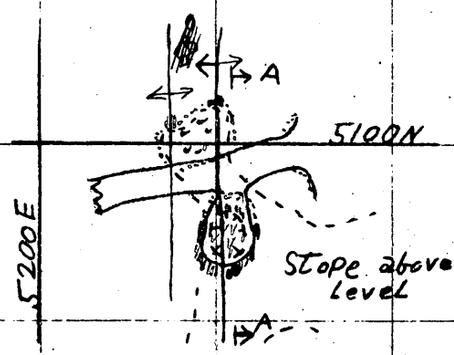
One year from the time the loan is granted stoping should be started on the 100 level. If the program works out as well as we estimate we should be able to carry on in succeeding years a production and development schedule that will maintain production and justify their assistance loan.

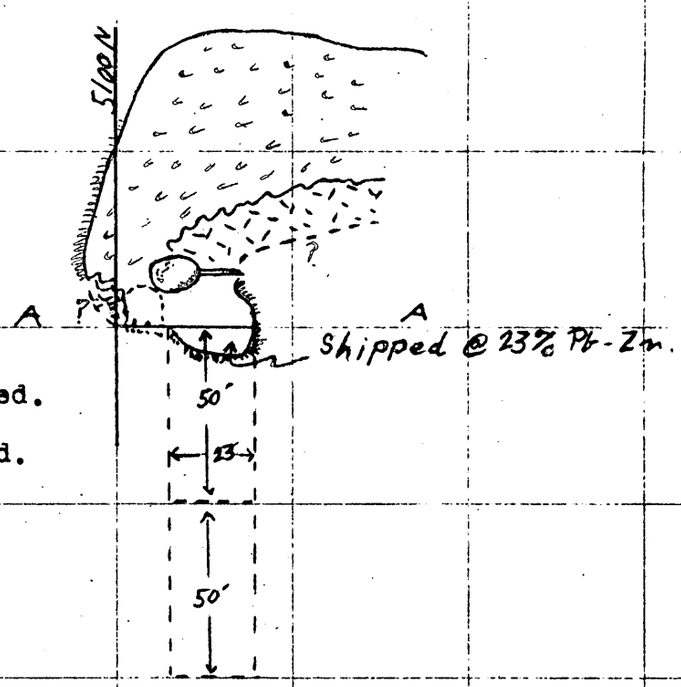
ESTIMATE OF ORE RESERVES

a. Measured ore None Estimated tons and grade.
b. Indicated ore 7160 tons at 4.65% Pb. and 8.58% Zn.
c. Inferred ore 6160 tons at 4.65% Pb. and 8.58% Zn.

Below are detailed diagrams showing estimates of tonnage. Underlined numbers titling each diagram correspond to numbers on underground map of "A" level.

2

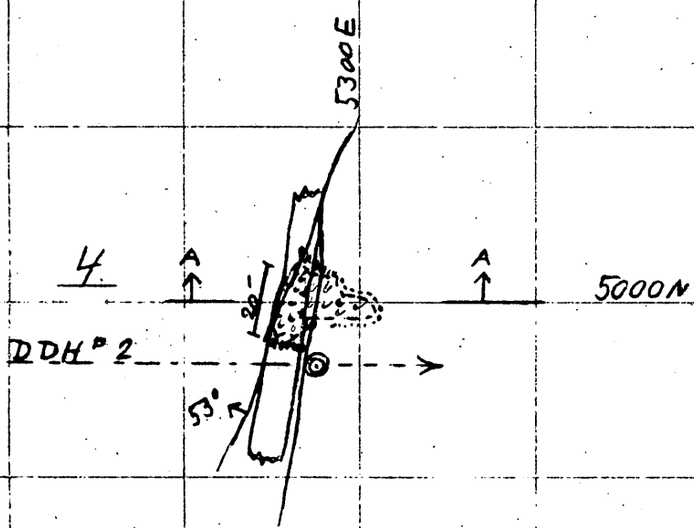


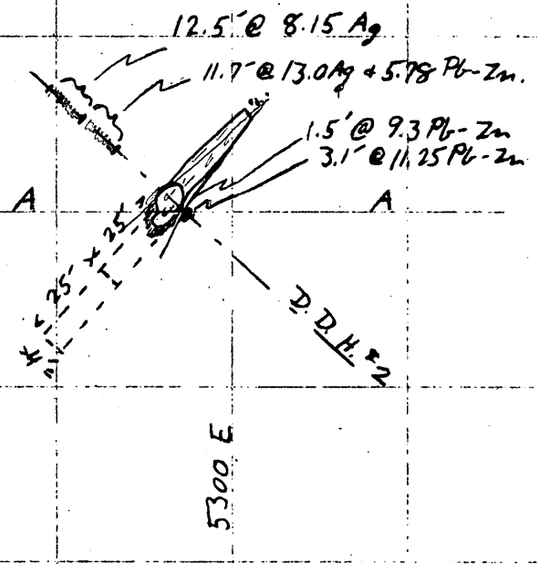


$\frac{16' \times 23' \times 50'}{10'}$ = 1840 Tons Indicated.

$\frac{16' \times 23' \times 50'}{10'}$ = 1840 Tons Inferred.

4

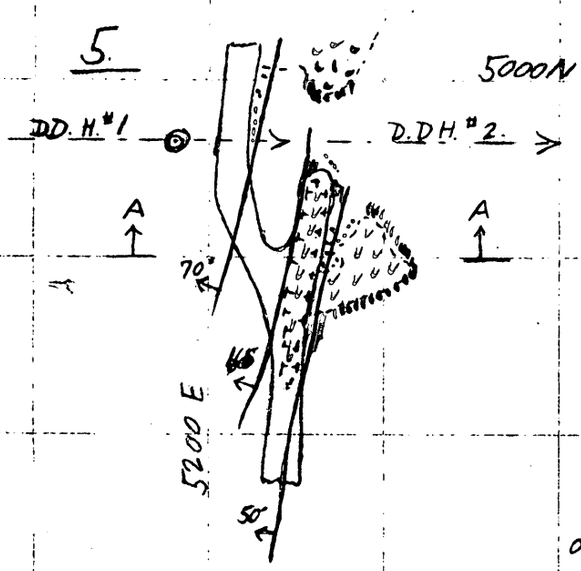


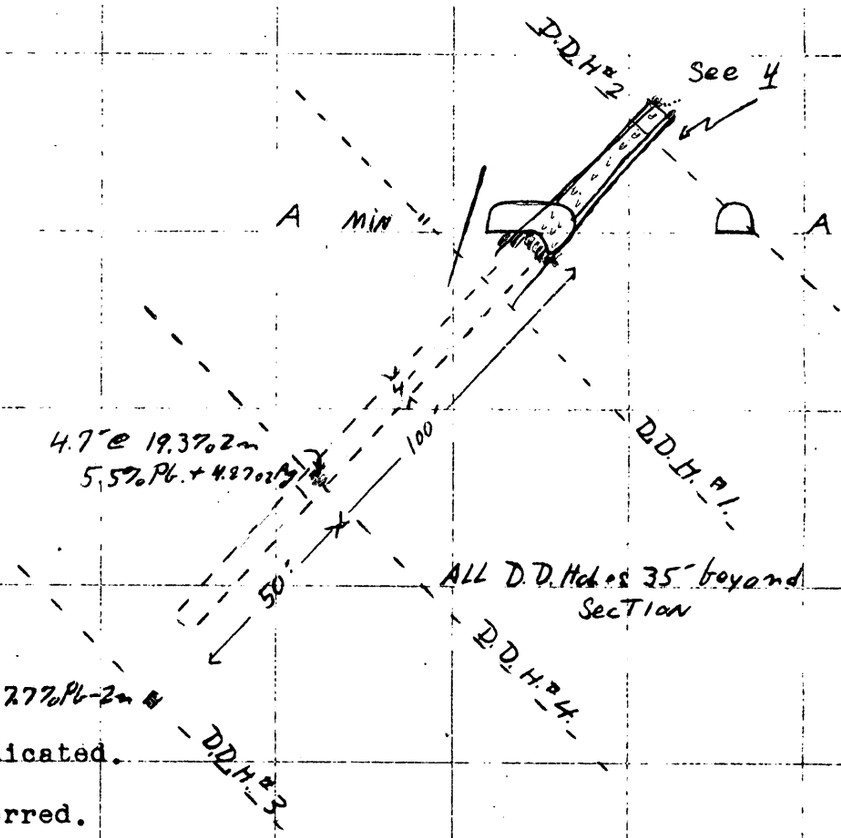


$\frac{20' \times 4' \times 25'}{10'}$ - 200 Tons Indicated.

$\frac{20' \times 4' \times 25'}{10'}$ - 200 Tons Inferred.

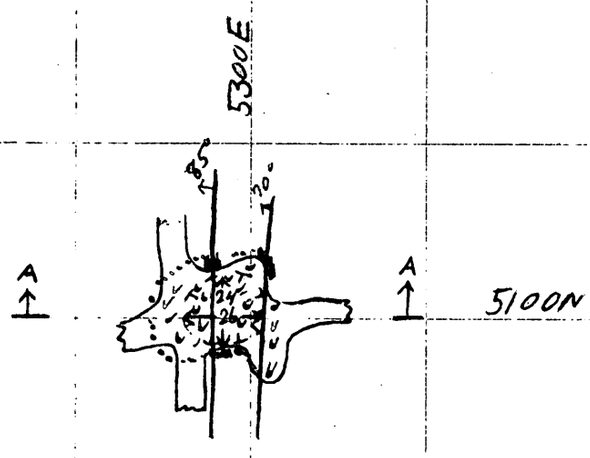
5.

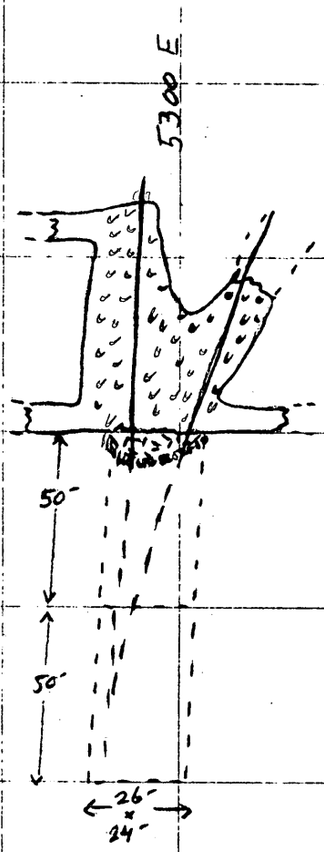




$\frac{4' \times 50' \times 100'}{10}$ - 2000 Tons Indicated.

$\frac{4' \times 50' \times 50'}{10}$ - 1000 Tons Inferred.





$\frac{24' \times 26' \times 50'}{10}$ - 3120 Tons Indicated.

$\frac{24' \times 26' \times 50'}{10}$ - 3120 Tons Inferred.

In addition to this estimated tonnage of 13,320 tons there are numerous showings in the old stoped areas above "A" level and "B" level on strong structures that will be prospected. We feel that an important quantity of ore will be recovered but to make estimates will entail more detailed surveying and sampling which time does not allow at present.

6-303
(March 1947)

cc: P. T. Allsman
W. M. Traver, Jr.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

No. 3

Salt Lake City, Utah

Report to Mr. Scott W. Hazen, Jr.

Chemical Laboratory Report

Date received May 17, 1951

Date reported May 23, 1951

Serial No.	DESCRIPTION	Lot No.	Cu	WO_3
	Grand View			
96219	Dump	SWH-8	0.45	1.10

248

Mining Division
Denver Office
Denver, Colorado

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed H. E. Peterson

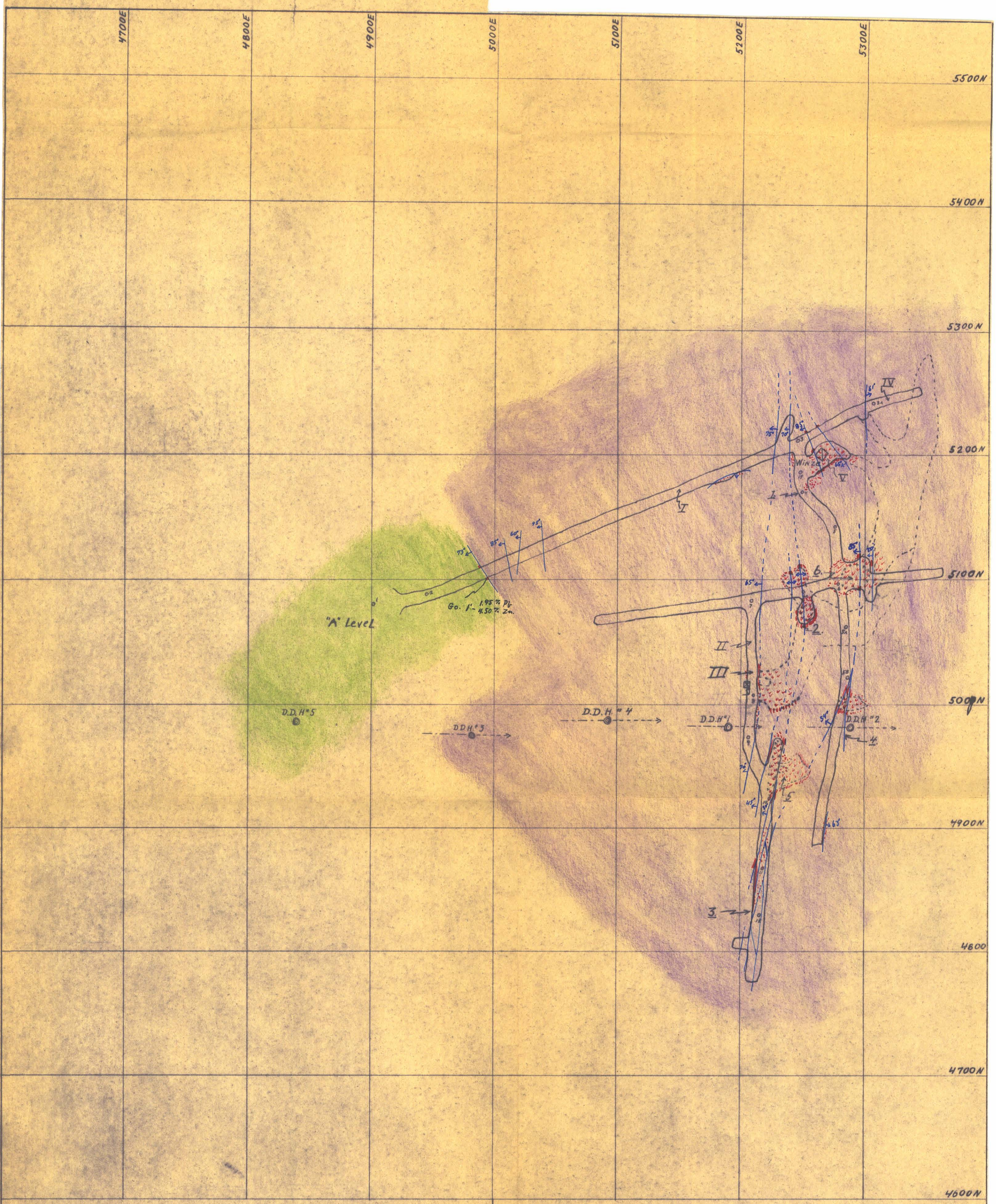
GRAND VIEW MINING COMPANY

CARPENTER (SWARTZ) MINING DISTRICT GRANT CO. N. M.

GRAND VIEW MINE - SURFACE TOPOGRAPHY

SCALE 1" = 50'

"REPRINTED FROM BUREAU OF MINES REPORT OF INVESTIGATION 3904" ADDITIONS BY E. CLARK NOVEMBER 1950.



EXPLANATION

SURFACE GRAVELS

PERCHA SHALE

FUSSELMAN-MONTOYA LIMESTONE

ORE & MINERALIZATION

GRAND VIEW MINING COMPANY

CARPENTER (SWARTZ) MINING DISTRICT, GRANT CO. N. M.

GRAND VIEW MINE - "A" LEVEL

SCALE 1" = 50'

BRUNTON & TAPE SURVEY & GEOLOGY BY E. CLARK NOV. 1950.