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File Copy
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Griswold
Lawder
Hedges
Selfridge
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

JUN 28 1954

Mr. E. B. Gibbs
Bonanza Lead
P. O. Box 111
Colville, Washington

Re: Docket No. DMEA-3300 (Lead)
Bonanza Lead
Bonanza Mine
Stevens County, Washington

Dear Mr. Gibbs:

Your application for aid for an exploration project and other reports available to us in Washington concerning the above-named property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, although noting the prior existence of ore on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

WRGriswold/bjl (6/24/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Gildersleeve
Region II (2)

R.C.G.

500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 24, 1954

Memorandum

To: Administrator

From: Chief, Base Metals Division

Subject: Denial of Application, Docket No. DMEA-3300 (Lead), Bonanza Lead, Bonanza Mine, Stevens County, Washington

Attached is a letter of denial covering the cited application.

The situation is covered by the following quote from Mr. Weissenborn's letter of June 7:

> "The Bonanza mine has an impressive production record, which suggests that further exploration might be profitable. Diamond drilling by the Anaconda Copper Mining Company, however, has thoroughly tested the area, which the applicant proposes to explore, with negative results. In the face of these drilling results, it must be concluded that the known ore bodies do not extend to depth, and that, consequently, the work proposed by the operator is unlikely to be successful in finding ore."

A field examination by Kiilsgaard and Puffett in April 1954, followed by another visit by Puffett and W. S. Anderson, could find little of promise. From their report and maps, it would appear that they had covered the subject in a thorough and professional manner.

Hence, the Field Team has recommended denial, in which the commodity members concur. Since the Base Metals Division is in possession of no evidence to the contrary, we likewise are in concurrence.

W R Griswold

W. R. Griswold

File Copy
Surname

500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 24, 1954

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W. R. Griswold

W. R. Griswold

WRGriswold/bjl

Copy to: Docket
Base Metals
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

June 22, 1954

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Concurrence with field team recommendation for denial of Docket No. DMEA-3300, the Bonanza Mine, Stevens County, Washington for a loan of $46,463

The report of the field team recommending denial of this application appears to be well founded.

The evidence presented by the field team indicates that the applicant's proposal for exploration offers only a very slight chance of success in view of the adverse findings from drilling to the level of the proposed work.

Previous exploration by the Anaconda Copper Mining Company to a depth lower than the applicant's proposal failed to show mineralization of note and supports the probability of the gradual thinning of the upper vein.

I concur with the field team conclusions and recommend that this application be denied.

for C. H. Johnson
O. M. Bishop

Copy to: Minerals Division
A. R. Kinkle
O. M. Bishop
Files

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

June 21, 1954

Memorandum

Re: DMEA-3300
Bonanza Mine
Stevens County, Washington
$46,463
Lead

To: Mr. W. R. Griswold, DMEA

From: E. L. Newcomb, USGS

Subject: Concurrence with field team recommendation for denial

The field team has presented a very thorough and convincing report in support of their recommendation for denial.

The applicant's proposal to explore down the rake of the East ore shoot cannot be justified geologically in light of the negative results obtained from diamond drilling to the depth of the proposed work.

Previous drilling and crosscutting by the Anaconda Copper Mining Company indicated quite conclusively that the known ore shoots probably terminated a short distance below the 700 level.

I concur with the field team conclusions and recommend this application be denied.

E. L. Newcomb
E. L. Newcomb
Geologist

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

June 21, 1954

Memorandum

Re: IMEA-3300
Bonanza Mine
Stevens County, Washington
46,463
Lead

To: Mr. W. R. Griswold, IMEA

From: E. L. Newcomb, USGS

Subject: Concurrence with field team recommendation for denial

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I concur with the field team conclusions and recommend this application be denied.

E. L. Newcomb
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

June 7, 1954

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 3300 (lead)
Bonanza Mine
Stevens County, Washington

Dear Mr. Selfridge:

Enclosed are four copies of an examination report dated June 3, 1954, by Willard P. Puffett, Geological Survey, and Webster S. Anderson, Bureau of Mines, on the above-cited property. The field examiners note that the applicant has requested assistance to deepen an inclined shaft 200 feet and to drift 400 feet from the shaft on the lower level.

"The Bonanza mine has an impressive production record, which suggests that further exploration might be profitable. Diamond drilling by the Anaconda Copper Mining Company, however, has thoroughly tested the area, which the applicant proposes to explore, with negative results. In the face of these drilling results, it must be concluded that the known ore bodies do not extend to depth, and that, consequently, the work proposed by the operator is unlikely to be successful in finding ore."

The examiners recognize two long range exploration possibilities. These possibilities would require a much greater expenditure than the applicant has requested and, although they might result in an important discovery, they involve a high degree of risk. For this reason, they have not been discussed with the applicant, as we believe it is not the place of the Field Team to originate and recommend to the operator a proposal which involves such hazards.

Reviewed by
DMEA OPERATING COMMITTEE
6-16-54
(date)

The examiners recommend that the application be denied. It is probable that the applicant may protest the denial with some vigor but the recommendation is based on a careful analysis of facts, and the Field Team concurs in the recommendation.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Puffet

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 11 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard St.
Spokane 4, Washington

June 3, 1954

GCL 6/25/54

MEMORANDUM

To: DMEA Field Team, Region II

From: W. P. Puffett, Geologist, U. S. Geological Survey, and W. S. Anderson, Engineer, U. S. Bureau of Mines

Subject: Docket No. DMEA-3300 (Lead), Report on Bonanza Mine, Stevens County, Washington.

APPLICANT

BONANZA LEAD, a Co-Partnership
P. O. Box 111
Colville, Washington

Reviewed by
DMEA OPERATING COMMITTEE
6-16-54
(date)

RECOMMENDATIONS

It is recommended that the application be denied. The ore at the mine is confined to very high-grade bands of intimately mixed galena and pyrite in light green chloritic phyllite, along and near an overlying contact with black, slaty argillite. Apparently, the ore is the richest and thickest near the crest of folds in the phyllite. The proposed work would explore the downward extension of the East oreshoot along one limb of an anticline. Previous work has shown that with depth the ore has thinned gradually along this limb of the anticline and at the lowest level in the mine, the 7 level, the vein is less than 1-foot thick. Diamond drilling has explored the projection of this ore to depths much lower than the proposed 9 level. No ore has been found in any of these diamond drill holes. Thus, there is no reason to believe that known ore extends in depth to the proposed 9 level, and there is also little possibility that heretofore unknown veins of minable ore will be found by the proposed work.

EXAMINATION

T. H. Kiilsgaard and W. P. Puffett examined the property on April 2 and 3, 1954. The geology on the 7 level was mapped and the 6 level and accessible portions of the 4 level were inspected.

On April 27 and 28, W. S. Anderson, Bureau of Mines, and W. P. Puffett, Geological Survey, revisited the property. The core

of eleven diamond drill holes was logged, and the shaft between the 6 and 7 levels was inspected. Mr. Evans, engineer for the applicant, accompanied the examiners on both inspections.

On both visits to the mine, discussions were had with Mr. Gibbs, partner, concerning past operations and the proposed exploration program. Mr. Gibbs very willingly supplied the examiners with all maps he had available. The majority of the maps had been compiled by the Anaconda Copper Mining Company.

PROPERTY

The Bonanza mine is on the patented lode mining claim, the Bonanza, Survey No. 319, and Lot 1, both in the NE¼, sec. 11, T. 37 N., R. 38 E., W.M., Stevens County, Washington. The portal of the main adit level is 17 miles by road northwest of Colville, Washington. All but the last half a mile of this road is black top and gravelled county and state road; the last half a mile is a private road in fair condition.

COMPETENCY OF APPLICANT

The applicant operated the Bonanza mine from 1945 to 1951. From 1951 to 1953, the operation of the mine was under the supervision of the Anaconda Copper Mining Company, who had a lease with option to buy. Mr. Gibbs, the partner with whom all negotiations have been made, has been actively associated with mining enterprises for the past 40 years. It is believed that he is competent to supervise his proposed project.

PROPERTY RIGHTS

The applicant owns the Bonanza lode mining claim, Lot 1, and the S½SE¼SW¼, sec. 2, T. 37 N., R. 38 E., W.M., Stevens County, Washington. Although he did not specify it in the application, he owns 1,800 acres surrounding the above-described property. There are no liens or encumbrances on this property. (See fig. 1.)

DESCRIPTION OF PROPERTY

The Bonanza mine is 2,420 feet above sea level on the south slope of a low, barren hill, approximately 400 feet above the level of the surrounding fields. The hill on which the mine is situated and most of the other land in the area is cultivated to some extent.

Near the portal of the main haulage level of Gibbs tunnel are a compressor house, dry, and timber shed. The compressor house and the dry are of concrete block construction and the timber shed is a frame

DOCKET No. DMEA 3300 (LEAD)

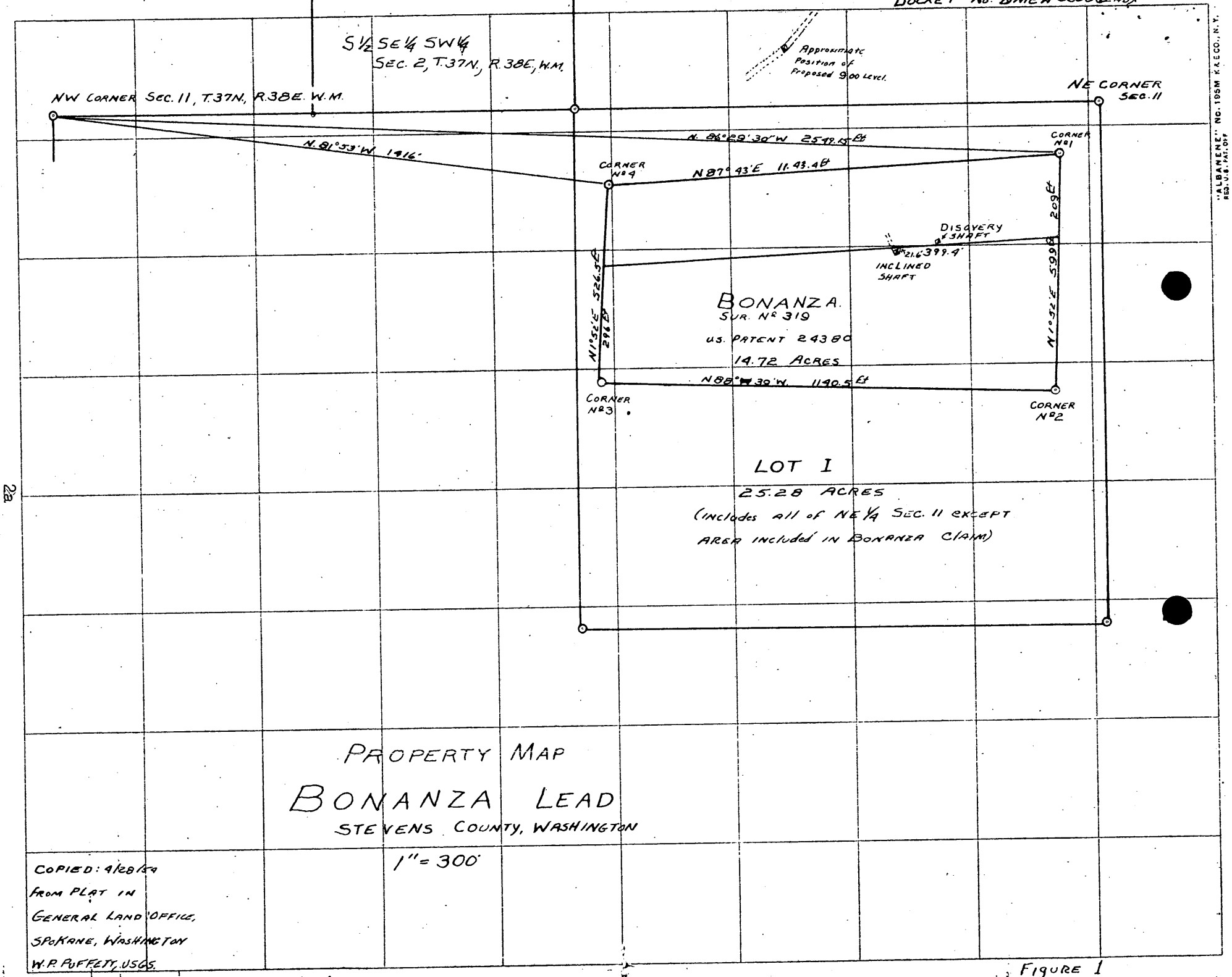


FIGURE 1

"ALBANENE" NO. 195M K&E CO., N.Y. REG. U.S. PAT. OFF.

building. There are three 315 cfm Chicago pneumatic compressors driven by 75 H.P. electric motors installed in the compressor house. The dry is completely equipped with modern facilities.

The applicant has a 250-ton capacity flotation mill which is located at Palmer, a siding of the Great Northern Railroad, about 2 miles north of Colville on U. S. Highway 395. Hunley and Gibbs built the mill in 1942 as a custom mill to serve the small mines of the surrounding area. It operated on this basis until December 1944 at which time production was started at the Bonanza mine. The mill operated entirely on Bonanza ore until October 1952. The ore was hauled a distance of 14 miles from the mine to the mill.

The mine has been developed by approximately 9,800 feet of drifts and crosscuts on seven levels which are accessible through two incline shafts and a main haulage level. The oldest or Main shaft is a 4- by 6-foot, one-compartment shaft, 565 feet deep, at an average inclination of 39 degrees. This shaft connects with all levels except the second level. The Parker shaft, about 20 feet east of the Main shaft, was driven on an incline of 46 degrees for a distance of 122 feet. This shaft connects with the first and second levels. The 4 level is accessible through the No. 2 shaft by a ventilation and emergency exit raise from a 4 level stope to the 2 level. In 1948 a 2,000-foot adit crosscut was started to intersect the mine workings on the east end of the 6 level. This adit is now used as the main haulage level and is shown on the plan map as Gibbs Tunnel.

Condition of Workings

The major portion of the old workings are either caved or too unsafe for entry. The Gibbs tunnel which was driven as a haulage level to the 6 level is now the main and only safe entry to the accessible workings. The 6 level is open to the Main shaft which provides access to the 7 level. The 7 level, which is usually flooded, was pumped out to permit access for examination and is in fair condition. That portion of the Main shaft between the 6 and 7 levels is in poor condition. All timber and lagging would have to be replaced if exploration on and below the 7 level were undertaken.

Exploration drifts and crosscuts driven by the Anaconda Copper Mining Company on the 6 level are in fair condition, but portions of the older workings are caved and inaccessible. Part of the southeast portion of the 4 level is accessible from the 6 level through the 611 raise.

Mining Methods

The ore bodies at the Bonanza Lead mine are inclined at low angles. An open-stope method of mining has been used at the property

with stulls used to support the back; ore is drawn from the stopes by slushers.

GEOLOGY

The Bonanza mine is underlain by members of the Mission argillite, a formation tentatively assigned to late Paleozoic age[1]. Weaver[2] describes the Mission argillite as consisting of argillite, calcareous argillite, argillaceous limestone, carbonaceous argillite, and quartz-mica schist. The prevailing strike of these strata is N. 60° W., with a dip of 35 to 45 degrees to the northeast. Glacial drift obscures nearly all bedrock in the mine area. (See fig. 2.)

Two distinct lithologic units are exposed in the mine workings. These are a light gray to green, chloritic phyllite, exposed in the major part of the mine workings, and black, locally carbonaceous, somewhat calcareous, argillite, exposed in the more northwestern mine workings. Locally there are discontinuous bands of the black argillite within the phyllite. A few narrow, altered intrusives of aplite and porphyry have been reported.

The contact between the argillite and phyllite is sinuous, striking northeast and dipping from 30 to 45 degrees to the northwest. The country rocks have been folded into shallow anticlines and synclines; the distance between anticlinal axes is of the order of 700 to 1,000 feet, and the amplitude of the folds is generally less than 200 feet.

Above the contact the argillite has been distorted and carbonized for a thickness in excess of 50 feet, but the foliation in the phyllite beneath the contact shows little distortion. It is believed the distortion in the argillite has resulted from thrust faulting of the argillite over the phyllite and that the argillite-phyllite contact is a fault contact. This contact is shown on the accompanying maps as the "C" fault.

The upper 20 to 50 feet of the phyllite has been strongly bleached to a light, creamy color, probably the result of hydrothermal solutions.

A number of strong faults, striking north to northwest and dipping from 45 to 60 degrees to the east, cut the phyllite and can be traced into the argillite. One of the most important of these is shown on the attached maps as the "E" fault. This fault is east of the adit on the 6 level. On the 4 and 5 levels it is believed this fault marks the eastern margin of the East oreshoot. Another fault zone, less strongly pronounced than the "E" fault, trends in a more northwest direction, and generally marks the western boundary of the East oreshoot. On the 6 level this fault contains some drag ore, indicating normal movement.

1/ Weaver, Charles E., The mineral resources of Stevens County, Washington: Washington Geol. Sur. Bull. 20, plate I, 1920.

2/ Idem. p. 175.

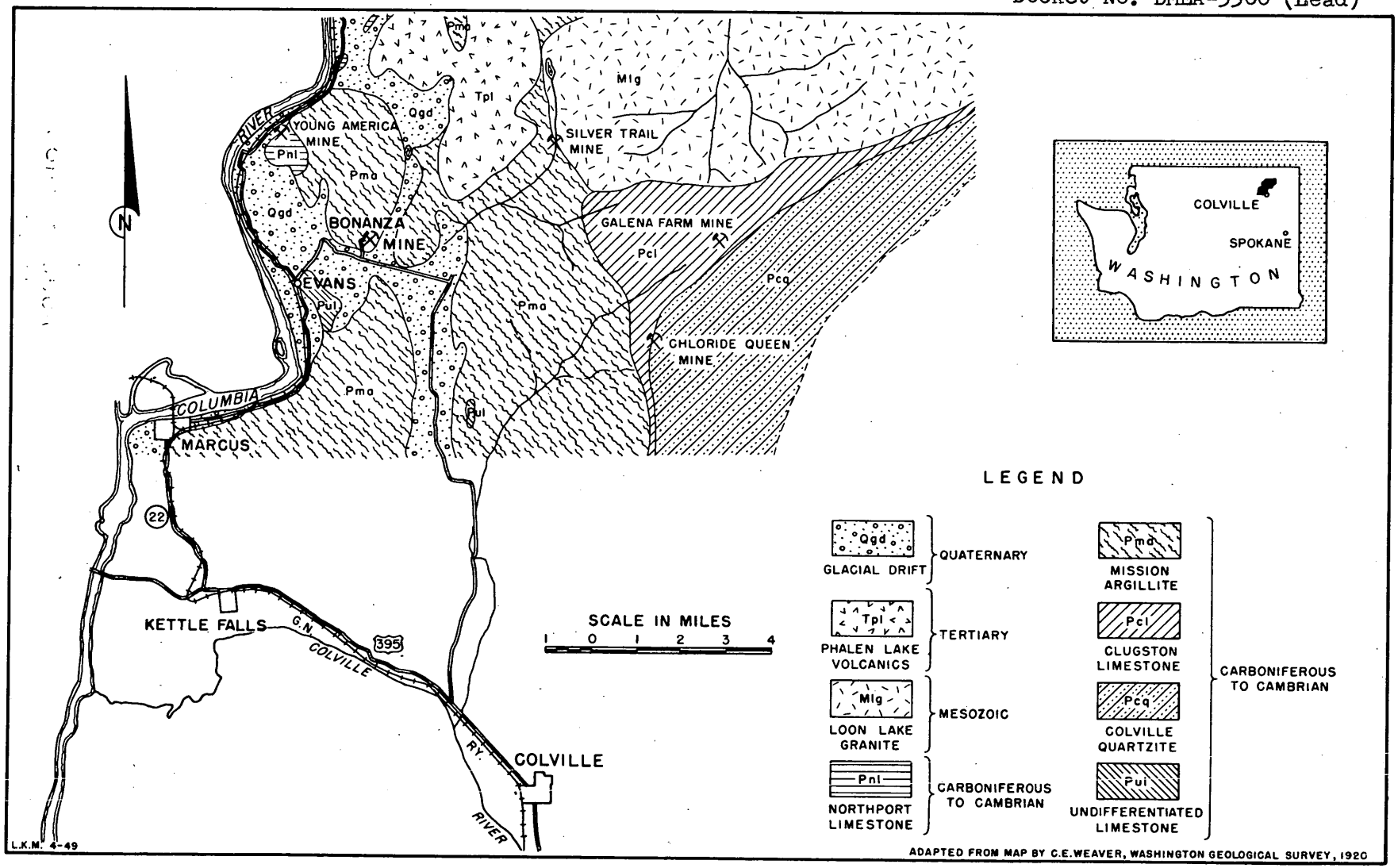


FIG. 1. INDEX AND GEOLOGY MAP, BONANZA MINE AREA, STEVENS COUNTY, WASH.

The ore is fine-grained steel galena intimately mixed in a fine-grained pyrite gangue. Very minor amounts of zinc and copper minerals are also present. The ore averages about 25 percent lead and 6 ounces per ton of silver.

The ore is confined to thin, discontinuous lenses along the argillite-phyllite contact and to veins within the phyllite. The veins strike nearly parallel to the foliation of the phyllite but dip at flatter angles. The veins contain scarcely any other mineral other than galena and pyrite and, thus, in the absence of these minerals nothing marks the extension of these veins. The phyllite bounding the veins shows scarcely any alteration.

Two oreshoots have been developed in the mine. These shoots occur near the crests of anticlinal folds in the phyllite. The west oreshoot was developed from the Parker shaft and the Main shaft on the 2, 3, and 5 levels. This oreshoot had a strike length of about 300 feet and extended down dip a maximum of 350 feet. It apparently terminated on or above the 5 level, as extensive drifting, crosscutting, and diamond drilling on the 6 level has failed to find its deeper extensions (see section B-B'). Little information can be obtained concerning this oreshoot, but it is reported to have assayed up to 100 ounces of silver per ton. Nothing is known concerning the structures limiting the horizontal extent of this oreshoot. The West oreshoot was the one on which the original discovery work was done and constituted the only source of ore of early production from the mine.

The East oreshoot has been stoped from its upper limit at the base of the glacial drift to the 7 level. Directly above the 4 level, it has been stoped in a general northwest direction for nearly 700 feet. Below this level the stopes extend down dip in a northwesterly direction, but they gradually shorten in horizontal extent on lower levels. On the 7 level, the oreshoot has been mined by only one stope which has a strike length of 40 feet. The accompanying section maps A-A', C-C', and D-D', show the extent of some of the stopes on this oreshoot and give some indication of the structures which faulted the vein above the 4 level.

The East oreshoot appears to have formed along the northwest limb and the crest of an anticline. On its deepest known extension, the 7 level, the vein is from 8 to 14 inches thick and can be traced along strike for a maximum distance of 40 feet. Along this distance, it is broken by faults, so that the longest continuous section of the vein is only 15 feet. On the 6 level the vein ranges up to 20 inches in thickness and can be traced along strike for nearly 250 feet. On the 5 level the vein attains a thickness of 4 feet. On and above the 4 level the vein is reported to have attained a thickness of more than 20 feet. Above the 4 level the vein pinches and swells along local

rolls in the phyllite and terminates on its eastern contact with the "E" fault. Many diamond drill holes have unsuccessfully explored for extensions of the ore to the east of this fault. The southwest limit of the oreshoot is marked by a sharp fault tending northwest.

During the time the Anaconda Copper Mining Company had control of the mine, they drilled 94 diamond drill holes, aggregating nearly 12,000 feet, from underground locations and drove hundreds of feet of drifts and crosscuts on the 600 level to search for extensions of both the East and the West oreshoots. This work failed to find more than a small ore body which was stoped near coordinates 10,500 N., 10,200 E.

HISTORY AND PRODUCTION

The Bonanza lead deposit was discovered in 1885. The original survey of the property (Survey No. 319) was made May 8, 1893. U. S. Patent #24380 was issued in 1894 to the Consolidated Bonanza Mining & Smelting Company. At the time the patent was issued the discovery shaft was at a depth of 80 feet, and the incline shaft was down 140 feet. In 1898 the Bonanza Lead Company filed as the owner and operator of the property.

There is no record of production for the years 1885-1902, but reports are that a large tonnage of high-grade lead-silver ore was mined from ore bodies near the surface. By 1912 the Main inclined shaft had been sunk to the 4 level by several successive lessees. At that time the mine was leased by a Mr. Slater who recovered ore from the mine dumps.

G. J. Vervaeke obtained a lease on the property in 1914 and purchased title in 1923. He maintained production from the mine until 1921, during which time he sank the Main shaft from the 4 level to the 7 level. The mine then remained idle until 1924. In 1925 a small gravity concentrator was built at the mine. The mine and mill operated for nearly 2 years, but the mill proved unsatisfactory. It was replaced in 1926 by a modern flotation mill which was destroyed by fire soon after completion.

The mine was leased in 1927 by Dence and Neil. They failed to make a profit from operating the mine and their lease was discontinued in 1929. The mine was not in operation again until leased to Ralph Pfaffer from 1934 to 1937. There was another period of inactivity at the property until 1941 when the property was leased to Russell Parker of Spokane, Washington. Mr. Parker received a $5,000 mine development loan from the Reconstruction Finance Corporation. This money was used to sink the Parker shaft 122 feet and to reopen some of the old workings. During this period 550 tons of selected ore, averaging 32 percent lead, was mined. On January 5, 1945, I. M. Hunley

of Spokane, Washington, purchased the Bonanza Lead mine from the estate of Mary Vorvacke through G. J. Vorvacke who was acting as executor of the estate. Mr. and Mrs. I. M. Hunley filed a quit claim deed May 31, 1949, in which half an interest was transferred to E. B. and Grace Gibbs, Colville, Washington. Gibbs and Hunley operated the mine until February 9, 1951, on which date the Anaconda Copper Mining Company acquired the property on a purchase option agreement. The Anaconda Copper Mining Company operated the mine until October 1952 and relinquished their option in March of 1953.

The following production statistics were obtained from the Bureau of Mines at Albany, Oregon.

The production from 1907 to 1952 was 23 ounces of gold, 262,345 ounces of silver, 34,242 pounds of copper, 475,219 pounds of zinc, and 27,654,561 pounds of lead. Total tonnage of ore was 91,508 tons. The yearly production is tabulated as follows:

Production statistics in terms of gross metal content of the Bonanza mine in Stevens County, Washington. - 1902-present

YEAR	TONS OF ORE MINED	GOLD (oz.)	SILVER (oz.)	COPPER (lbs.)	LEAD (lbs.)	ZINC (lbs.)
1902-1906	No production					
1907	837		3,848		167,372	
1908	651		3,032		285,780	
1909	600		3,000		264,000	
1910	720		3,497		314,579	
1911	1,397		5,861		552,548	
1912	152		850		60,469	
1913	569		2,161		173,250	
1914	82		423		32,304	
1915	589		2,414		214,665	
1916	781		3,191		233,150	
1917	599		2,178		177,481	
1918	902		4,419		19,348	
1919	42		87		6,495	
1920	160		711		66,871	
1921-1922	No production					
1923	98		830		36,378	
1924	8		21		1,453 (in crude ore)	
	186		258		23,974 (in concentrate)	
1925-1928	No production					
1929	3,000		1,806	458	194,555	
1930	1,350		1,235	250	100,500	
1931-1941	No production					
1942	100		582		54,954	
1943	232		1,057		102,612	4,219
1944	24		104		9,511	236
1945	1,800 1/	4 1/	3,000 1/	1,800 1/	330,000 1/	10,000 1/
1946	3,750	4	7,650	3,000	902,500	30,000
1947	7,764		20,000	7,000	2,150,000	60,000
1948	12,386	15	26,000	7,500	2,950,000	70,000
1949	14,163		42,000	6,000	4,285,000	72,000
1950	20,000		62,430	3,450	7,593,000	79,400
1951	13,672		35,520	1,000	3,752,964	50,577
1952	5,514		14,820	3,000	1,650,453	38,040
	10,636 (tailings)		9,781	1,084	926,949	64,747

The mine closed in October, 1952

1/ Estimated

LABOR, POWER, WATER, & SUPPLIES

At the present time there is a plentiful supply of mine labor in the Colville area as many mines have curtailed operations due to the depressed market on lead and zinc.

The average wage scale in the area is $1.87½ per hour.

A 33,000 volt Rural Electrification Administration line provides power to the mine where transformers step down the voltage for mine purposes.

Water is available at the property.

The dry near the portal of Gibbs tunnel has been equipped with modern facilities.

Supplies can be obtained at Colville, Washington. The mine is 17 miles northwest of Colville by county road.

APPLICANT'S PROPOSAL

The applicant has proposed to explore the downward extension of the East oreshoot by extending the Main shaft 200 feet and by driving 400 feet of drifts on the 9 level. Before beginning the shaft sinking, it will be necessary to rehabilitate the shaft between the 6 and 7 levels and dewater and retimber that portion of the shaft extending below the 7 level. It is estimated that the shaft extends about 40 feet below the 7 level. The applicant estimates that the total cost of this proposed exploration work will be $46,463.18.

In discussions with the applicant, he has expressed the desire to obtain assistance in drilling two diamond drill holes to search for faulted extensions of the East oreshoot beneath the 607 crosscut. He is of the opinion that perhaps the ore has down dropped on the east side of the "E" fault to a position somewhere beneath the 6 level.

On the accompanying composite plan map and section maps, the location of the proposed 9 level is shown. On the sections are shown locations of diamond drill holes that have explored near the location of this level. Section C-C', through the East oreshoot, shows that this oreshoot has been thinning with depth and that it appears to extend only a short distance beneath the 7 level. The Anaconda Copper Mining Company drilled numerous diamond drill holes to explore the area below the 6 level, and these drill holes penetrated to a greater depth than the proposed 9 level. These holes are shown on sections C-C', B-B', X-X' and on the vertical section through the shaft. No ore was found in any of these drill holes other than a thin band of ore found

in holes 64 and 67, which only supports the probability of the gradual thinning of the vein.

The area to the southwest of the proposed extension of the shaft has not been explored by diamond drilling. The 640 drift has explored an area on the 6 level, which would explore the upper extension of veins of any great vertical extent that may exist in this area. No ore was found in this drift or in the numerous diamond drill holes drilled from this drift and from the 624 drift. There remains the possibility of a flat-dipping vein lying beneath that portion of the 6 level explored by present workings, but this possibility is remote.

As the East oreshoot is decidedly thinning with depth, being only a few inches thick on the 7 level, and as diamond drilling for its downward extension has been totally unsuccessful in finding ore, it seems improbable that the proposed drifting on the 9 level will find ore.

There is some merit in the applicant's desire to drill two diamond drill holes downward from the 607 crosscut for the possible faulted eastern segment of the East oreshoot. A study of section D-D' and A-A' shows that some drilling has been done to test possible normal faulting along the "E" fault. None of this drilling has been successful. Diamond drill holes drilled eastward and northward from the 614 crosscut have been equally unsuccessful in finding ore. Unless there has been a down throw in excess of 200 feet on the east side of the "E" fault, it is believed that completed drilling would have obtained some evidence of the ore zone.

It is rather discouraging to consider that this mine, with its impressive record of production, does not have a feasible target for further exploration. The negative results obtained from the great amount of exploration work that has been completed there within the last few years, suggest that probably the known oreshoots have bottomed and the only hope for future production will be to find an entirely new oreshoot some distance from the present workings.

There are two long-range exploration possibilities to search for new oreshoots. One would be to continue the drift to the west on the 6 level to explore for another strong anticlinal structural feature in the argillite-phyllite contact under which an oreshoot may exist. The other possibility would be to extend the main shaft 400 to 500 feet deeper than the diamond drill holes have tested to find if the argillite-phyllite contact makes another roll. If such a change in dip in the contact would be found, it may be that an oreshoot would be localized there. Neither of these possibilities have been proposed

by the applicant, and it is, therefore, believed that the denial of this application should be based on an analysis of the possible results that may be expected from the work he has proposed.

Enclosures 7
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Puffett
Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

Defense Minerals Administration
JUN 11 1954

June 7, 1954

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 3300 (lead)
Bonanza Mine
Stevens County, Washington

Dear Mr. Selfridge:

Enclosed are four copies of an examination report dated June 3, 1954, by Willard P. Puffett, Geological Survey, and Webster S. Anderson, Bureau of Mines, on the above-cited property. The field examiners note that the applicant has requested assistance to deepen an inclined shaft 200 feet and to drift 400 feet from the shaft on the lower level.

The Bonanza mine has an impressive production record, which suggests that further exploration might be profitable. Diamond drilling by the Anaconda Copper Mining Company, however, has thoroughly tested the area, which the applicant proposes to explore, with negative results. In the face of these drilling results, it must be concluded that the known ore bodies do not extend to depth, and that, consequently, the work proposed by the operator is unlikely to be successful in finding ore.

The examiners recognize two long-range exploration possibilities. These possibilities would require a much greater expenditure than the applicant has requested and, although they might result in an important discovery, they involve a high degree of risk. For this reason, they have not been discussed with the applicant, as we believe it is not the place of the Field Team to originate and recommend to the operator a proposal which involves such hazards.

The examiners recommend that the application be denied. It is probable that the applicant may protest the denial with some vigor but the recommendation is based on a careful analysis of facts, and the Field Team concurs in the recommendation.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard St.
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 11 1954

June 3, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: W. P. Puffett, Geologist, U. S. Geological Survey, and
W. S. Anderson, Engineer, U. S. Bureau of Mines

Subject: Docket No. DMEA-3300 (Lead), Report on Bonanza Mine,
Stevens County, Washington.

APPLICANT

BONANZA LEAD, a Co-Partnership
P. O. Box 111
Colville, Washington

RECOMMENDATIONS

It is recommended that the application be denied. The ore at the mine is confined to very high-grade bands of intimately mixed galena and pyrite in light green chloritic phyllite, along and near an overlying contact with black, slaty argillite. Apparently, the ore is the richest and thickest near the crest of folds in the phyllite. The proposed work would explore the downward extension of the East oreshoot along one limb of an anticline. Previous work has shown that with depth the ore has thinned gradually along this limb of the anticline and at the lowest level in the mine, the 7 level, the vein is less than 1-foot thick. Diamond drilling has explored the projection of this ore to depths much lower than the proposed 9 level. No ore has been found in any of these diamond drill holes. Thus, there is no reason to believe that known ore extends in depth to the proposed 9 level, and there is also little possibility that heretofore unknown veins of minable ore will be found by the proposed work.

EXAMINATION

T. H. Kiilsgaard and W. P. Puffett examined the property on April 2 and 3, 1954. The geology on the 7 level was mapped and the 6 level and accessible portions of the 4 level were inspected.

On April 27 and 28, W. S. Anderson, Bureau of Mines, and W. P. Puffett, Geological Survey, revisited the property. The core

of eleven diamond drill holes was logged, and the shaft between the 6 and 7 levels was inspected. Mr. Evans, engineer for the applicant, accompanied the examiners on both inspections.

On both visits to the mine, discussions were had with Mr. Gibbs, partner, concerning past operations and the proposed exploration program. Mr. Gibbs very willingly supplied the examiners with all maps he had available. The majority of the maps had been compiled by the Anaconda Copper Mining Company.

PROPERTY

The Bonanza mine is on the patented lode mining claim, the Bonanza, Survey No. 319, and Lot 1, both in the NE¼, sec. 11, T. 37 N., R. 38 E., W.M., Stevens County, Washington. The portal of the main adit level is 17 miles by road northwest of Colville, Washington. All but the last half a mile of this road is black top and gravelled county and state road; the last half a mile is a private road in fair condition.

COMPETENCY OF APPLICANT

The applicant operated the Bonanza mine from 1945 to 1951. From 1951 to 1953, the operation of the mine was under the supervision of the Anaconda Copper Mining Company, who had a lease with option to buy. Mr. Gibbs, the partner with whom all negotiations have been made, has been actively associated with mining enterprises for the past 40 years. It is believed that he is competent to supervise his proposed project.

PROPERTY RIGHTS

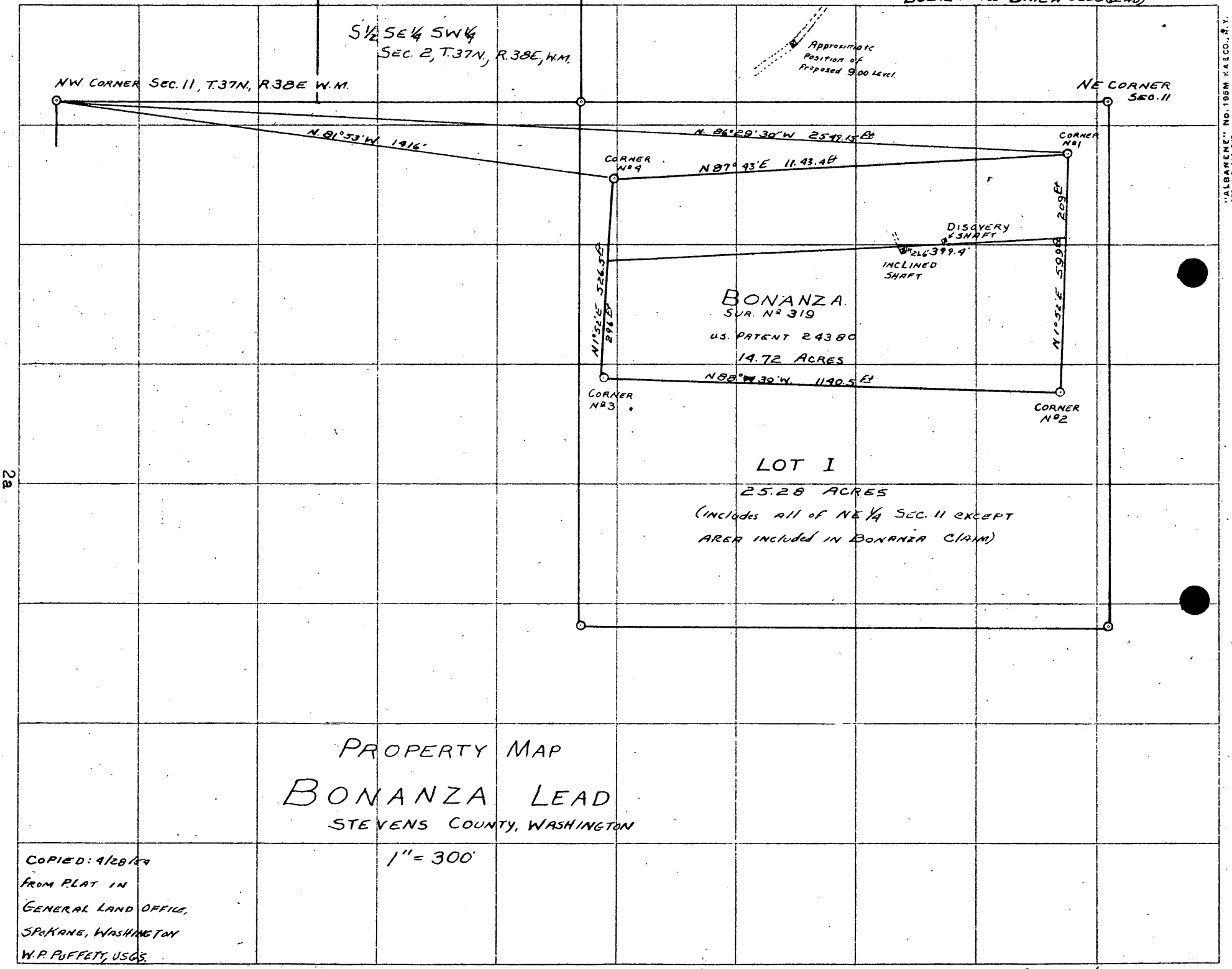
The applicant owns the Bonanza lode mining claim, Lot 1, and the S½SE¼SW¼, sec. 2, T. 37 N., R. 38 E., W.M., Stevens County, Washington. Although he did not specify it in the application, he owns 1,800 acres surrounding the above-described property. There are no liens or encumbrances on this property. (See fig. 1.)

DESCRIPTION OF PROPERTY

The Bonanza mine is 2,420 feet above sea level on the south slope of a low, barren hill, approximately 400 feet above the level of the surrounding fields. The hill on which the mine is situated and most of the other land in the area is cultivated to some extent.

Near the portal of the main haulage level of Gibbs tunnel are a compressor house, dry, and timber shed. The compressor house and the dry are of concrete block construction and the timber shed is a frame

DOCKET No. DMEA 3300 (LEAD)



PROPERTY MAP

BONANZA LEAD

STEVENS COUNTY, WASHINGTON

1" = 300'

COPIED: 4/28/59
FROM PLAT IN
GENERAL LAND OFFICE,
SPOKANE, WASHINGTON
W.P. PUFFETT, USGS.

FIGURE 1

"ALBANENE" No. 195M K.&E. CO., N.Y.
RED.VIS.FAL.OFF.

building. There are three 315 cfm Chicago pneumatic compressors driven by 75 H.P. electric motors installed in the compressor house. The dry is completely equipped with modern facilities.

The applicant has a 250-ton capacity flotation mill which is located at Palmer, a siding of the Great Northern Railroad, about 2 miles north of Colville on U. S. Highway 395. Hunley and Gibbs built the mill in 1942 as a custom mill to serve the small mines of the surrounding area. It operated on this basis until December 1944 at which time production was started at the Bonanza mine. The mill operated entirely on Bonanza ore until October 1952. The ore was hauled a distance of 14 miles from the mine to the mill.

The mine has been developed by approximately 9,800 feet of drifts and crosscuts on seven levels which are accessible through two incline shafts and a main haulage level. The oldest or Main shaft is a 4- by 6-foot, one-compartment shaft, 565 feet deep, at an average inclination of 39 degrees. This shaft connects with all levels except the second level. The Parker shaft, about 20 feet east of the Main shaft, was driven on an incline of 46 degrees for a distance of 122 feet. This shaft connects with the first and second levels. The 4 level is accessible through the No. 2 shaft by a ventilation and emergency exit raise from a 4 level stope to the 2 level. In 1948 a 2,000-foot adit crosscut was started to intersect the mine workings on the east end of the 6 level. This adit is now used as the main haulage level and is shown on the plan map as Gibbs Tunnel.

Condition of Workings

The major portion of the old workings are either caved or too unsafe for entry. The Gibbs tunnel which was driven as a haulage level to the 6 level is now the main and only safe entry to the accessible workings. The 6 level is open to the Main shaft which provides access to the 7 level. The 7 level, which is usually flooded, was pumped out to permit access for examination and is in fair condition. That portion of the Main shaft between the 6 and 7 levels is in poor condition. All timber and lagging would have to be replaced if exploration on and below the 7 level were undertaken.

Exploration drifts and crosscuts driven by the Anaconda Copper Mining Company on the 6 level are in fair condition, but portions of the older workings are caved and inaccessible. Part of the southeast portion of the 4 level is accessible from the 6 level through the 611 raise.

Mining Methods

The ore bodies at the Bonanza Lead mine are inclined at low angles. An open-stope method of mining has been used at the property

with stulls used to support the back; ore is drawn from the stopes by slushers.

GEOLOGY

The Bonanza mine is underlain by members of the Mission argillite, a formation tentatively assigned to late Paleozoic age[1]. Weaver[2] describes the Mission argillite as consisting of argillite, calcareous argillite, argillaceous limestone, carbonaceous argillite, and quartz-mica schist. The prevailing strike of these strata is N. 60° W., with a dip of 35 to 45 degrees to the northeast. Glacial drift obscures nearly all bedrock in the mine area. (See fig. 2.)

Two distinct lithologic units are exposed in the mine workings. These are a light gray to green, chloritic phyllite, exposed in the major part of the mine workings, and black, locally carbonaceous, somewhat calcareous, argillite, exposed in the more northwestern mine workings. Locally there are discontinuous bands of the black argillite within the phyllite. A few narrow, altered intrusives of aplite and porphyry have been reported.

The contact between the argillite and phyllite is sinuous, striking northeast and dipping from 30 to 45 degrees to the northwest. The country rocks have been folded into shallow anticlines and synclines; the distance between anticlinal axes is of the order of 700 to 1,000 feet, and the amplitude of the folds is generally less than 200 feet.

Above the contact the argillite has been distorted and carbonized for a thickness in excess of 50 feet, but the foliation in the phyllite beneath the contact shows little distortion. It is believed the distortion in the argillite has resulted from thrust faulting of the argillite over the phyllite and that the argillite-phyllite contact is a fault contact. This contact is shown on the accompanying maps as the "C" fault.

The upper 20 to 50 feet of the phyllite has been strongly bleached to a light, creamy color, probably the result of hydrothermal solutions.

A number of strong faults, striking north to northwest and dipping from 45 to 60 degrees to the east, cut the phyllite and can be traced into the argillite. One of the most important of these is shown on the attached maps as the "E" fault. This fault is east of the adit on the 6 level. On the 4 and 5 levels it is believed this fault marks the eastern margin of the East oreshoot. Another fault zone, less strongly pronounced than the "E" fault, trends in a more northwest direction, and generally marks the western boundary of the East oreshoot. On the 6 level this fault contains some drag ore, indicating normal movement.

1/ Weaver, Charles E., The mineral resources of Stevens County, Washington: Washington Geol. Sur. Bull. 20, plate I, 1920.

2/ Idem. p. 175.

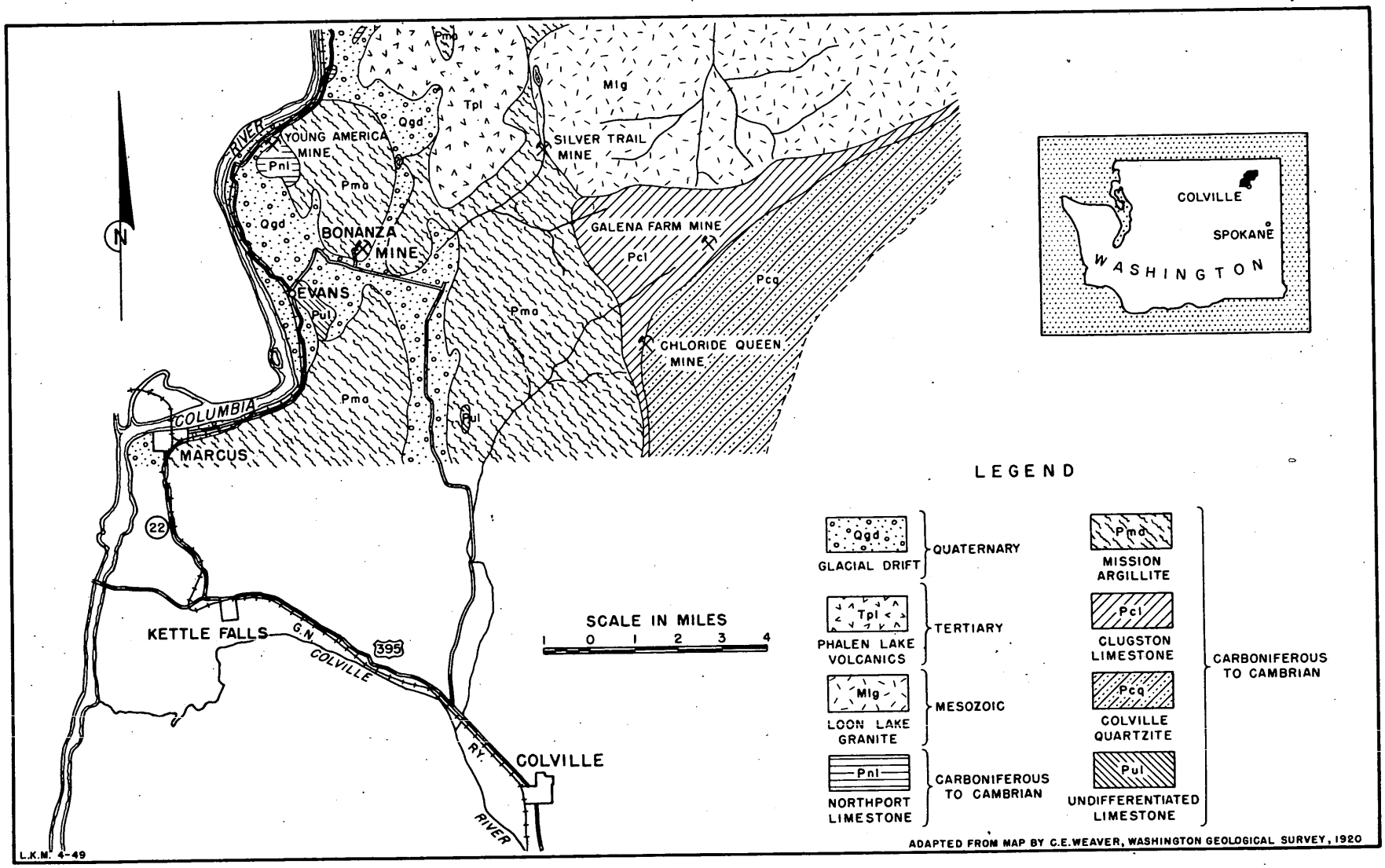


FIG. 2. INDEX AND GEOLOGY MAP, BONANZA MINE AREA, STEVENS COUNTY, WASH.

The ore is fine-grained steel galena intimately mixed in a fine-grained pyrite gangue. Very minor amounts of zinc and copper minerals are also present. The ore averages about 25 percent lead and 6 ounces per ton of silver.

The ore is confined to thin, discontinuous lenses along the argillite-phyllite contact and to veins within the phyllite. The veins strike nearly parallel to the foliation of the phyllite but dip at flatter angles. The veins contain scarcely any other mineral other than galena and pyrite and, thus, in the absence of these minerals nothing marks the extension of these veins. The phyllite bounding the veins shows scarcely any alteration.

Two oreshoots have been developed in the mine. These shoots occur near the crests of anticlinal folds in the phyllite. The west oreshoot was developed from the Parker shaft and the Main shaft on the 2, 3, and 5 levels. This oreshoot had a strike length of about 300 feet and extended down dip a maximum of 350 feet. It apparently terminated on or above the 5 level, as extensive drifting, crosscutting, and diamond drilling on the 6 level has failed to find its deeper extensions (see section B-B'). Little information can be obtained concerning this oreshoot, but it is reported to have assayed up to 100 ounces of silver per ton. Nothing is known concerning the structures limiting the horizontal extent of this oreshoot. The West oreshoot was the one on which the original discovery work was done and constituted the only source of ore of early production from the mine.

The East oreshoot has been stoped from its upper limit at the base of the glacial drift to the 7 level. Directly above the 4 level, it has been stoped in a general northwest direction for nearly 700 feet. Below this level the stopes extend down dip in a northwesterly direction, but they gradually shorten in horizontal extent on lower levels. On the 7 level, the oreshoot has been mined by only one stope which has a strike length of 40 feet. The accompanying section maps A-A', C-C', and D-D', show the extent of some of the stopes on this oreshoot and give some indication of the structures which faulted the vein above the 4 level.

The East oreshoot appears to have formed along the northwest limb and the crest of an anticline. On its deepest known extension, the 7 level, the vein is from 8 to 14 inches thick and can be traced along strike for a maximum distance of 40 feet. Along this distance, it is broken by faults, so that the longest continuous section of the vein is only 15 feet. On the 6 level the vein ranges up to 20 inches in thickness and can be traced along strike for nearly 250 feet. On the 5 level the vein attains a thickness of 4 feet. On and above the 4 level the vein is reported to have attained a thickness of more than 20 feet. Above the 4 level the vein pinches and swells along local

rolls in the phyllite and terminates on its eastern contact with the "E" fault. Many diamond drill holes have unsuccessfully explored for extensions of the ore to the east of this fault. The southwest limit of the oreshoot is marked by a sharp fault tending northwest.

During the time the Anaconda Copper Mining Company had control of the mine, they drilled 94 diamond drill holes, aggregating nearly 12,000 feet, from underground locations and drove hundreds of feet of drifts and crosscuts on the 600 level to search for extensions of both the East and the West oreshoots. This work failed to find more than a small ore body which was stoped near coordinates 10,500 N., 10,200 E.

HISTORY AND PRODUCTION

The Bonanza lead deposit was discovered in 1885. The original survey of the property (Survey No. 319) was made May 8, 1893. U. S. Patent #24380 was issued in 1894 to the Consolidated Bonanza Mining & Smelting Company. At the time the patent was issued the discovery shaft was at a depth of 80 feet, and the incline shaft was down 140 feet. In 1898 the Bonanza Lead Company filed as the owner and operator of the property.

There is no record of production for the years 1885-1902, but reports are that a large tonnage of high-grade lead-silver ore was mined from ore bodies near the surface. By 1912 the Main inclined shaft had been sunk to the 4 level by several successive lessees. At that time the mine was leased by a Mr. Slater who recovered ore from the mine dumps.

G. J. Vervaeke obtained a lease on the property in 1914 and purchased title in 1923. He maintained production from the mine until 1921, during which time he sank the Main shaft from the 4 level to the 7 level. The mine then remained idle until 1924. In 1925 a small gravity concentrator was built at the mine. The mine and mill operated for nearly 2 years, but the mill proved unsatisfactory. It was replaced in 1926 by a modern flotation mill which was destroyed by fire soon after completion.

The mine was leased in 1927 by Dence and Neil. They failed to make a profit from operating the mine and their lease was discontinued in 1929. The mine was not in operation again until leased to Ralph Pfeffer from 1934 to 1937. There was another period of inactivity at the property until 1941 when the property was leased to Russell Parker of Spokane, Washington. Mr. Parker received a $5,000 mine development loan from the Reconstruction Finance Corporation. This money was used to sink the Parker shaft 122 feet and to reopen some of the old workings. During this period 550 tons of selected ore, averaging 32 percent lead, was mined. On January 5, 1945, I. M. Hunley

of Spokane, Washington, purchased the Bonanza Lead mine from the estate of Mary Vervaeke through G. J. Vervaeke who was acting as executor of the estate. Mr. and Mrs. I. M. Hunley filed a quit claim deed May 31, 1949, in which half an interest was transferred to E. B. and Grace Gibbs, Colville, Washington. Gibbs and Hunley operated the mine until February 9, 1951, on which date the Anaconda Copper Mining Company acquired the property on a purchase option agreement. The Anaconda Copper Mining Company operated the mine until October 1952 and relinquished their option in March of 1953.

The following production statistics were obtained from the Bureau of Mines at Albany, Oregon.

The production from 1907 to 1952 was 23 ounces of gold, 262,345 ounces of silver, 34,242 pounds of copper, 475,219 pounds of zinc, and 27,654,561 pounds of lead. Total tonnage of ore was 91,508 tons. The yearly production is tabulated as follows:

Production statistics in terms of gross metal content of the Bonanza mine in Stevens County, Washington. - 1902-present

YEAR	TONS OF ORE MINED	GOLD (oz.)	SILVER (oz.)	COPPER (lbs.)	LEAD (lbs.)	ZINC (lbs.)
1902-1906	No production					
1907	837		3,348		167,372	
1908	651		3,032		285,786	
1909	600		3,000		264,000	
1910	720		3,497		314,579	
1911	1,397		5,861		552,548	
1912	152		850		60,469	
1913	569		2,161		173,850	
1914	82		423		32,304	
1915	569		2,414		214,665	
1916	781		3,191		233,150	
1917	599		2,178		177,481	
1918	902		4,419		19,348	
1919	42		67		6,495	
1920	100		711		66,871	
1921-1922	No production					
1923	98		829		36,378	
1924	8		21		1,453 (in crude ore)	
	186		258		23,974 (in concentrate)	
1925-1928	No production					
1929	3,000		1,696	458	194,555	
1930	1,350		1,235	250	109,500	
1931-1941	No production					
1942	100		582		54,994	
1943	232		1,057		102,612	4,219
1944	24		104		9,011	236
1945	1,800 1/	4 1/	3,000 1/	1,500 1/	330,000 1/	10,000 1/
1946	3,750	4	7,650	3,000	902,500	30,000
1947	7,764		20,000	7,000	2,150,000	60,000
1948	12,386	15	26,000	7,500	2,950,000	70,000
1949	14,163		42,000	6,000	4,285,000	72,000
1950	20,000		62,430	3,450	7,502,000	79,406
1951	13,672		35,520	1,000	3,752,964	56,577
1952	5,514		14,820	3,000	1,658,453	28,040
	10,636 (tailings)		9,781	1,084	926,949	64,747

The mine closed in October, 1952

1/ Estimated

LABOR, POWER, WATER, & SUPPLIES

At the present time there is a plentiful supply of mine labor in the Colville area as many mines have curtailed operations due to the depressed market on lead and zinc.

The average wage scale in the area is $1.87½ per hour.

A 33,000 volt Rural Electrification Administration line provides power to the mine where transformers step down the voltage for mine purposes.

Water is available at the property.

The dry near the portal of Gibbs tunnel has been equipped with modern facilities.

Supplies can be obtained at Colville, Washington. The mine is 17 miles northwest of Colville by county road.

APPLICANT'S PROPOSAL

The applicant has proposed to explore the downward extension of the East oreshoot by extending the Main shaft 200 feet and by driving 400 feet of drifts on the 9 level. Before beginning the shaft sinking, it will be necessary to rehabilitate the shaft between the 6 and 7 levels and dewater and retimber that portion of the shaft extending below the 7 level. It is estimated that the shaft extends about 40 feet below the 7 level. The applicant estimates that the total cost of this proposed exploration work will be $46,463.18.

In discussions with the applicant, he has expressed the desire to obtain assistance in drilling two diamond drill holes to search for faulted extensions of the East oreshoot beneath the 607 crosscut. He is of the opinion that perhaps the ore has down dropped on the east side of the "E" fault to a position somewhere beneath the 6 level.

On the accompanying composite plan map and section maps, the location of the proposed 9 level is shown. On the sections are shown locations of diamond drill holes that have explored near the location of this level. Section C-C', through the East oreshoot, shows that this oreshoot has been thinning with depth and that it appears to extend only a short distance beneath the 7 level. The Anaconda Copper Mining Company drilled numerous diamond drill holes to explore the area below the 6 level, and these drill holes penetrated to a greater depth than the proposed 9 level. These holes are shown on sections C-C', B-B', X-X' and on the vertical section through the shaft. No ore was found in any of these drill holes other than a thin band of ore found

in holes 64 and 67, which only supports the probability of the gradual thinning of the vein.

The area to the southwest of the proposed extension of the shaft has not been explored by diamond drilling. The 640 drift has explored an area on the 6 level, which would explore the upper extension of veins of any great vertical extent that may exist in this area. No ore was found in this drift or in the numerous diamond drill holes drilled from this drift and from the 624 drift. There remains the possibility of a flat-dipping vein lying beneath that portion of the 6 level explored by present workings, but this possibility is remote.

As the East oreshoot is decidedly thinning with depth, being only a few inches thick on the 7 level, and as diamond drilling for its downward extension has been totally unsuccessful in finding ore, it seems improbable that the proposed drifting on the 9 level will find ore.

There is some merit in the applicant's desire to drill two diamond drill holes downward from the 607 crosscut for the possible faulted eastern segment of the East oreshoot. A study of section D-D' and A-A' shows that some drilling has been done to test possible normal faulting along the "E" fault. None of this drilling has been successful. Diamond drill holes drilled eastward and northward from the 614 crosscut have been equally unsuccessful in finding ore. Unless there has been a down throw in excess of 200 feet on the east side of the "E" fault, it is believed that completed drilling would have obtained some evidence of the ore zone.

It is rather discouraging to consider that this mine, with its impressive record of production, does not have a feasible target for further exploration. The negative results obtained from the great amount of exploration work that has been completed there within the last few years, suggest that probably the known oreshoots have bottomed and the only hope for future production will be to find an entirely new oreshoot some distance from the present workings.

There are two long-range exploration possibilities to search for new oreshoots. One would be to continue the drift to the west on the 6 level to explore for another strong anticlinal structural feature in the argillite-phyllite contact under which an oreshoot may exist. The other possibility would be to extend the main shaft 400 to 500 feet deeper than the diamond drill holes have tested to find if the argillite-phyllite contact makes another roll. If such a change in dip in the contact would be found, it may be that an oreshoot would be localized there. Neither of these possibilities have been proposed

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Enclosures 7
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Puffett
Docket

EARLE B. GIBBS

IRA M. HUNLEY

BONANZA LEAD
(A CO-PARTNERSHIP)
P. O. BOX 111
COLVILLE, WASHINGTON

April 12, 1954

United States
Department of the Interior
Defense Minerals Administration
Washington 25, D.C.

Subject: DMEA-3300
Re: Exploration Assistance
Bonanza Mine

Gentlemen:

Your letter of April 6th acknowledging above application has been received.

It is noted we inadvertently used the date of December 29, 1954, as the date of Certification, however, this is in error and we wish to make a correction with the date of Certification reading March 29, 1954.

Your letter on above as well as your letter on DMEA-3296, Exploration Assistance on the Copper Mountain Mine refers to us as Bonanza Lead Company. Will you kindly change this to read "Bonanza Lead" as it is a co-partnership.

Thanking you, we remain,

Very truly yours,

BONANZA LEAD

Clifford L. Holstine
Clifford L. Holstine
Office Manager

CLH

Gibbs-Hunley

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

April 8, 1954

Re: IMEA-3300
Bonanza Mine
Stevens County, Washington
$46,463
Lead

Memorandum

To: Mr. W. R. Griswold, IMEA

From: E. L. Newcomb, USGS

Subject: Review of application

The transmittal memorandum from the field team states that an examination will be made in the near future.

We are returning our copy of the application to your office. Further consideration of the applicant's proposal will be made after we receive the field team examination report.

E. L. Newcomb
E. L. Newcomb
Geologist

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

April 8, 1954

Re: DMA-3300
Bonanza Mine
Stevens County, Washington
$46,463
Lead

Memorandum

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From: E. L. Newcomb, USGS

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E. L. Newcomb
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

April 6, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region II.

DMEA - 3300 Bonanza Lead ~~Co.~~ (Bonanza Mine)

Robert E. Adams
Chief, Operation's Control
and Statistics Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Bonanza Lead Co.
P. O. Box 111
Colville, Washington

April 6, 1954
Subject: DMEA-3300
Re: Exploration Assistance
Bonanza Mine

Gentlemen:

The receipt of your application dated ~~December~~ March 29, 1954 ~~(?)~~ for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3300 and referred to the Base Metals Division.

Kindly refer to DMEA-3300 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams
Chief, Operation's Control
and Statistics Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

March 31, 1954

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Application for exploration
assistance (copper)
Bonanza Lead Company
Stevens County, Washington

Dear Mr. Selfridge:

I am enclosing the original and two copies each of applications submitted by the Bonanza Lead Company of Colville, Washington, for the exploration of the Bonanza mine and the Copper Mountain mine. These are separate unrelated properties--except that both are in Stevens County, Washington, and both are controlled by Bonanza Lead. The properties will be examined as soon as we can arrange it.

The Bonanza examination will be a rather complicated one as the Anaconda Copper Mining Company had the property under lease and option for a period of about two years and finally gave it up. The program proposed by Mr. Gibbs, the operator, will have to be analyzed in the light of the exploration that was done by Anaconda to be certain that there exists a reasonable objective which has not been tested by the Anaconda work. The property has produced several million dollars worth of ore and there are extensive workings so the examination will not be an easy one, nor can the possibility of finding further ore be summarily dismissed, even though Anaconda failed to find any.

We have almost no information on the Copper Mountain property. The operator has brought in some high-grade chalcopyrite ore but his maps do not tell us much.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: DMEA (2)
Puffett

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
MAR 29 1954
U. S. G. S.
SPOKANE, WASH.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3300
Metal or Mineral Lead
Date Received
Estimated Cost $46,463
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Domenico Acord
P.O. Box 111
Colville, Washington

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized. (See Schedule 1 (1. (b))

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.
See Schedule 1 (1. (d))

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract (See Schedule 1 (3. (a))

(*b*) State any mine name by which the property is known. Domenico Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
Owner

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.
(See Schedule 2 for Item 4.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore (See Schedule 2).

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. Immediately

(*c*) The work will start within ..... days and be completed within 6 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. (See Schedule 2)

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). NONE

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper. See Schedule 2 - 6. (d)

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated December 29th, 195[illegible]

Bonanza Lead
P.O. Box 111
Colville, Washington
(Applicant)

By [signature]
Partner

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Schedule 1

1. (b) CO-Partnership

(d) Earle E. Gibbs
P.O. Box 111
Colville, Washington

Ira M. Hunley
W. 1220 Sixth Avenue
Spokane, Washington

3. (a) The Bonanza lode mine, survey No. 319, in section 11, and lot 1 of section 11; the South half (S½) of the Southeast quarter (SE¼) of the Southwest quarter (SW¼ of Section 2, Township 37, North, Range 38, E.W.M., of Stevens County, Washington

In Township 36N, Range 39, E.W.M., we own Lot 2, Section 31, lying North of the Nelson Bridge road (Gold Creek Road), and lying South and West of the Great Northern Railway Company, a 225 to 250 ton floatation concentrator with the latest type equipment for handling lead, copper, or lead-zinc ores is available.

Schedule 2

4. (a) See Maps on Shaft, Drifts, Raises and Stopes. Applicant is the owner of the operations. All Mine workings are accessible for examination purposes.

(b) From 1925 to 1935, inclusive, approximately 170,000 tons of ore have been mined. Lead averaged 21 to 23%; Silver 1 oz. to 4% Lead.

(c) The ore occurs in an argillite schist similar to the Manito vein system. (see maps)

(d) Mine is accessible to road, 10½ miles good State & County road, ½ mile private road. Distance to shipping, supply & residence points 11 miles.

(e) Manpower available, materials available, supplies available, equipment good and available, water available & power (electricity) available.

5. (a) Lead.

(b) Deepen the present inclined shaft from 7 level to 9 level (200 ft.) and drift 400 ft. from deepened section of shaft. Rejuvenate 100 ft. of shaft from 6 to 7 level.

(d) Applicant has been in the Mining Industry and has explored, developed and mined for the past 40 years.

6. (b) Deepen the present inclined shaft:

2 Compressor men @ $16.00 ea. per day for 55 days	$ 1,760.00
2 Hoistmen @ $15.00 ea. per day for 55 days	1,650.00
2 Trammermen @ $14.00 ea. per day for 55 days	1,540.00
2 Timbermen @ $15.00 ea. per day for 55 days	1,650.00
2 Muckers @ $20.00 ea. per day for 55 days	2,200.00
2 Miners @ $30.00 ea. per day for 55 days	3,300.00
Supervision for 2 months @ $600.00 per month	1,200.00
	$ 13,300.00

Schedule 2 (Continued)

6. (b) Drifting 400 ft. from deepened section of shaft:

2 Compressormen @ $16.00 ea. per day for 43 days	$ 1,376.00
2 Hoistmen @ $15.00 ea. per day for 43 days	1,290.00
2 Trammermen @ $14.00 ea. per day for 43 days	1,204.00
2 Timbermen @ $15.00 ea. per day for 43 days	1,290.00
2 Muckers @ $15.00 ea. per day for 43 days	1,290.00
2 Miners @ $20.00 ea. per day for 43 days	1,720.00
Supervision for 1½ months @ $600.00 per month	900.00
	$ 9,070.00

6. (c) Operating Materials & Supplies:

Drill Steel & Bits	$ 1,500.00
Explosives	1,800.00
Lamp Rental	276.08
Power (Electricity)	9,200.00
Fuel (Dry Room)	400.00
Timber	3,150.00
	$16,326.08

6. (d) No operating equipment to be rented. Owner will furnish all mining equipment as listed below for a suggested use allowance of $5,000.00 per month totaling $40,000.00 for 8 months:

3 Compressors
1 Storage Battery Locomotive
4 27 cubic ft. side dump cars
1 Mucking Machine
1 Skip
1 Sump Pump
1 Hoist, 30 H.P. Electric
2 Drifters
Gardner-Denver Sinkers & Jack Hammers and all Mine Buildings, Dry Room & Facilities
Two-Stage Centrifugal Pump, 50 H.P. Electric Motor

Schedule 2 (Continued)

6. (e) Rejuvenating 100 ft. of Shaft from 6 to 7 level:

1 Timberman @ $15.00 per day for 20 days	$ 300.00
1 Timberman's Helper @ $14.00 per day for 20 days	280.00
1 Compressorman @ $16.00 per day for 20 days	320.00
	$ 900.00

6. (f) None

6. (g)

Analytical work @ $50.00 per month for 8 months	$ 400.00
Bookkeeping & Accounting @ $375.00 per month for 8 Months	3,000.00
Payroll Taxes for State & Federal Unemployment, F.I.C.A. Taxes, State Industrial Insurance & Medical Aid- Previous operations indicate that it now costs us 13% of Gross Wages- 13% of $26,670.00 -	3,467.10
	$ 6,867.10

6. (h) None known at present time.

GRAND TOTAL $ 46,403.18

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
MAR 29 1954
U. S. G. S.
SPOKANE, WASH.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3200
Metal or Mineral Lead
Date Received
Estimated Cost $46,463
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Bonanza Lead
P.O. Box 111
Colville, Washington

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized. (See Schedule 1 (1. (b)

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.
See Schedule 1 (1. (d)

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract (See Schedule 1 (3. (a)

(*b*) State any mine name by which the property is known. Bonanza Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
Owner

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.
(See Schedule 2 for Item 4.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(a) State the mineral or minerals for which you wish to explore (See Schedule 2)

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. Immediately

(*c*) The work will start within ..... days and be completed within 8 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. (See Schedule 2)

(Item 6. See Schedule 2)

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). NONE

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper. See Schedule 2 - 6. (d)

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated December 29th, 1954

Bonanza Lead
P.O. Box 111
Colville, Washington
(Applicant)

By E. B. Tilley
Partner

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

EARLE B. GIBBS

IRA M. HUNLEY

BONANZA LEAD

(A CO-PARTNERSHIP)
P. O. BOX 111
COLVILLE, WASHINGTON

Schedule 1

1. (b) CO-Partnership

   (d) Earle B. Gibbs
   P.O. Box 111
   Colville, Washington

   Ira M. Hunley
   W. 1220 Sixth Avenue
   Spokane, Washington

3. (a) The Bonanza lode mine, survey No. 319, in section 11, and lot 1 of section 11; the South half (S½) of the Southeast quarter (SE¼) of the Southwest quarter (SW¼ of Section 2, Township 37, North, Range 38, E.W.M., of Stevens County, Washington

   In Township 36N, Range 39, E.W.M., we own Lot 2, Section 31, lying North of the Nelson Bridge road (Gold Creek Road), and lying South and West of the Great Northern Railway Company, a 225 to 250 ton floatation concentrator with the latest type equipment for handling lead, copper, or lead-zinc ores is available.

EARLE B. GIBBS

IRA M. HUNLEY

BONANZA LEAD
(A CO-PARTNERSHIP)
P. O. BOX 111
COLVILLE, WASHINGTON

Schedule 2

4. (a) See Maps on Shaft, Drifts, Raises and Stopes. Applicant is the owner of the operations. All Mine workings are accessible for examination purposes.

(b) From 1945 to 1953, inclusive, approximately 170,000 tons of ore have been mined. Lead averaged 21 to 23%; Silver 1 oz. to 4% Lead.

(c) The ore occurs in an argallite, schist similar to the Manito vein system. (see maps)

(d) Mine is accessible to road, 10½ miles good State & County road, ½ mile private road. Distance to shipping, supply & residence points 11 miles.

(e) Manpower available, materials available, supplies available, equipment good and available, water available & power (electricity) available.

5. (a) Lead.

(b) Deepen the present inclined shaft from 7 level to 9 level (200 ft.) and drift 400 ft. from deepened section of shaft. Rejuvenate 100 ft. of shaft from 6 to 7 level.

(d) Applicant has been in the Mining Industry and has explored, developed and mined for the past 40 years.

6. (b) Deepen the present inclined shaft:

2 Compressor men @ $16.00 ea. per day for 55 days	$ 1,760.00
2 Hoistmen @ $15.00 ea. per day for 55 days	1,650.00
2 Trammermen @ $14.00 ea. per day for 55 days	1,540.00
2 Timbermen @ $15.00 ea. per day for 55 days	1,650.00
2 Muckers @ $20.00 ea. per day for 55 days	2,200.00
2 Miners @ $30.00 ea. per day for 55 days	3,300.00
Supervision for 2 months @ $600.00 per month	1,200.00
	$ 13,300.00

EARLE B. GIBBS

IRA M. HUNLEY

BONANZA LEAD
(A CO-PARTNERSHIP)
P. O. BOX 111
COLVILLE, WASHINGTON

Schedule 2 (Continued)

6. (b) Drifting 400 ft. from deepened section of shaft:

2 Compressormen @ $16.00 ea. per day for 43 days	$ 1,376.00
2 Hoistmen @ $15.00 ea. per day for 43 days	1,290.00
2 Trammermen @ $14.00 ea. per day for 43 days	1,204.00
2 Timbermen @ $15.00 ea. per day for 43 days	1,290.00
2 Muckers @ $15.00 ea. per day for 43 days	1,290.00
2 Miners @ $20.00 ea. per day for 43 days	1,720.00
Supervision for 1½ months @ $600.00 per month	900.00
	$ 9,070.00

6. (c) Operating Materials & Supplies:

Drill Steel & Bits	$ 1,500.00
Explosives	1,800.00
Lamp Rental	276.08
Power (Electricity)	9,200.00
Fuel (Dry Room)	400.00
Timber	3,150.00
	$16,326.08

6. (d) No operating equipment to be rented. Owner will furnish all mining equipment as listed below for a suggested use allowance of $5,000.00 per month totaling $40,000.00 for 8 months:

3 Compressors
1 Storage Battery Locomotive
4 27 cubic ft. side dump cars
1 Mucking Machine
1 Skip
1 Sump Pump
1 Hoist, 30 H.P. Electric
2 Drifters
Gardner-Denver Sinkers & Jack Hammers and all Mine Buildings, Dry Room & facilities
Two-Stage Centrifugal Pump, 30 H.P. Electric Motor

EARLE B. GIBBS

IRA M. HUNLEY

BONANZA LEAD
(A CO-PARTNERSHIP)
P. O. BOX 111
COLVILLE, WASHINGTON

Schedule 2 (Continued)

6. (e)	Rejuvenating 100 ft. of Shaft from 6 to 7 level:	
	1 Timberman @ $15.00 per day for 20 days	$ 300.00
	1 Timberman's Helper @ $14.00 per day for 20 days	280.00
	1 Compressorman @ $16.00 per day for 20 days	320.00
		$ 900.00
6. (f)	None	
6. (g)	Analytical work @ $50.00 per month for 8 months	$ 400.00
	Bookkeeping & Accounting @ $375.00 per month for 8 Months	3,000.00
	Payroll Taxes for State & Federal Unemployment, F.I.C.A. Taxes, State Industrial Insurance & Medical Aid- Previous operations indicate that it now costs us 13% of Gross Wages- 13% of $26,670.00 -	3,467.10
		$ 6,867.10
6. (h)	None known at present time.	
	GRAND TOTAL	$ 46,463.18

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS
EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR
PAYMENT

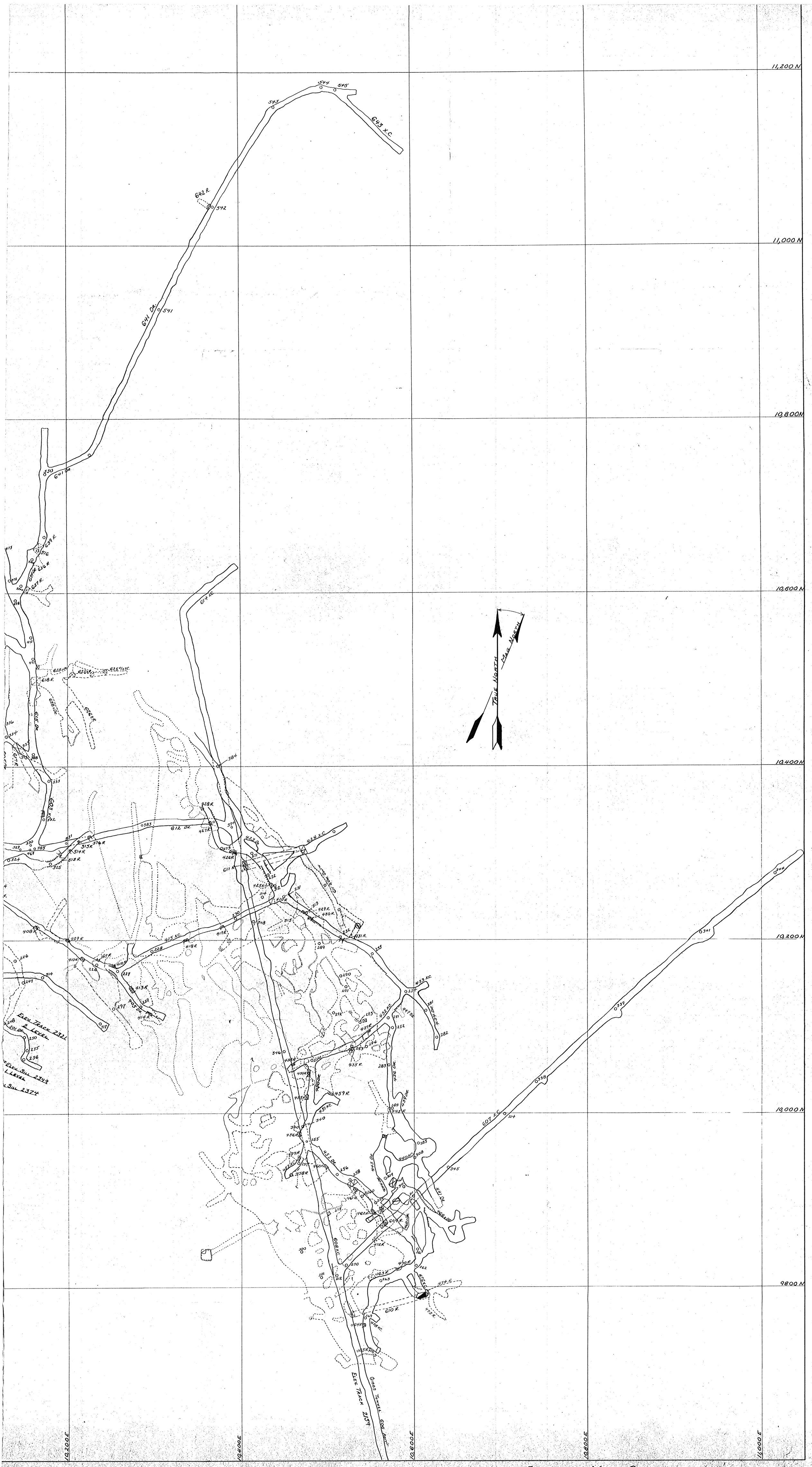
SPOKANE
APR 1
630PM
1954
WASH.

Mr. George C. Selfridge, Chairman
Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

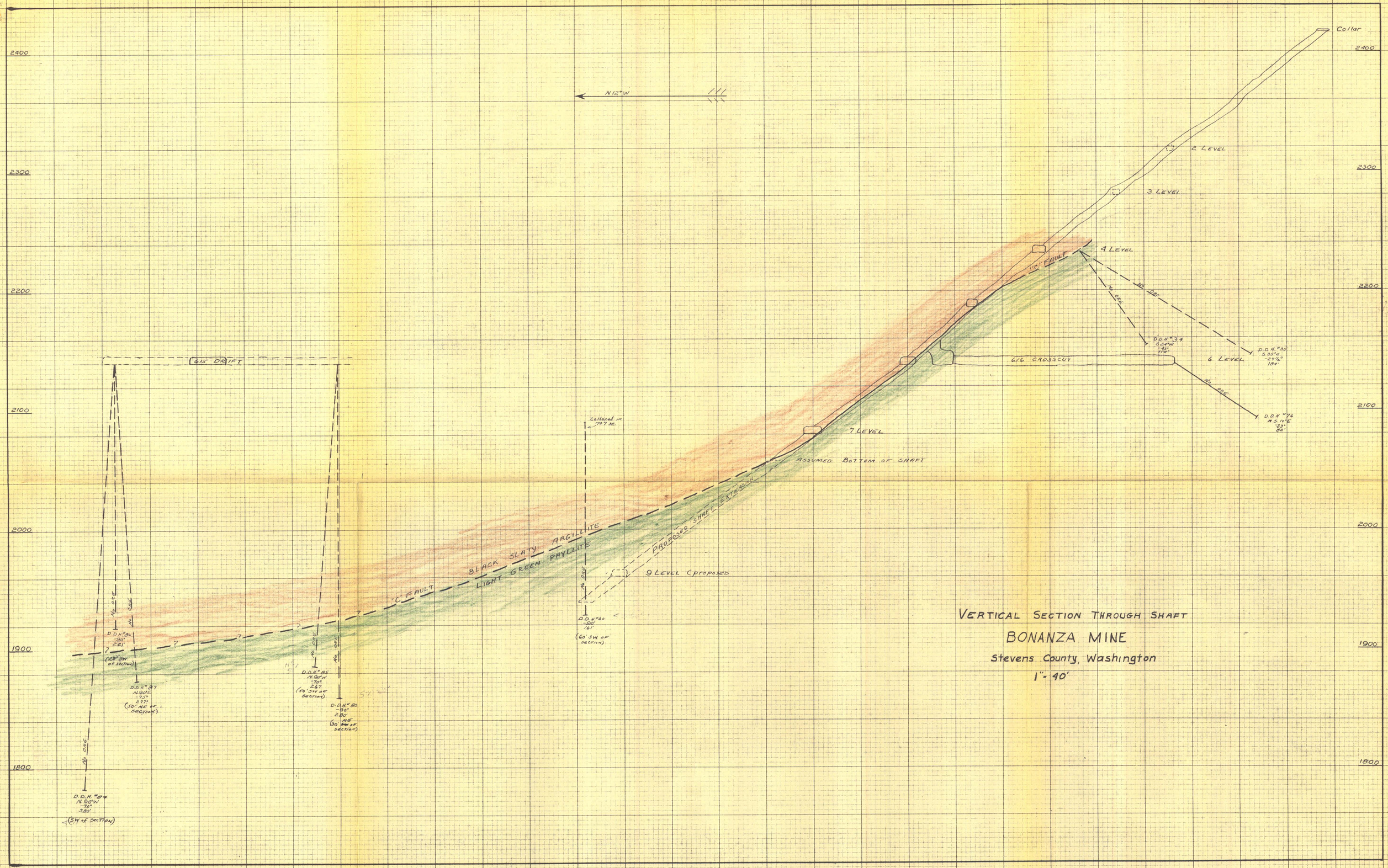
11,200 N
11,000 N
10,800 N
10,600 N
10,400 N
10,200 N
10,000 N
9800 N
9400 E
9600 E
9800 E
10,000 E
615 Dr.
ELEV TRACK 2080
701 Dr.
7 LEVEL
704 Dr.
707 X.C.
632 Dr.
703 R.
702 R.
701 R.
ELEV TRACK 2138
601 Dr.
6 LEVEL
602 Dr.
ELEV TRACK 2185
501 Dr.
502 Dr.
5 LEVEL
616 X.C.
503 Dr.
ELEV TRACK 2232
403 Dr.
402 Dr.
401 Dr.
404 R.
405 Dr.
406 R.
407 R.
4 LEVEL
621 Dr.
629 Dr.
630 Dr.
624 Dr.
645 X.C.
646 X.C.
647 R.
648 R.
627 R.
ELEV TRACK 2281
3 LEVEL
302 R.
303 R.
304 R.
631 R.
640 Dr.
106 Dr.
105 Dr.
104 X.C.
103 X.C.
202 Dr.
201 R.
203 R.
101 Dr.
107 Dr.
638 R.
MAIN SHAFT
ELEV. 2420'
PARKER SHAFT
ELEV. 2401.7'

BONANZA MINE COMPOSITE SCALE 1"=40'

11,200 N
11,000 N
10,800 N
10,600 N
10,400 N
10,200 N
10,000 N
9800 N
9400 E
9600 E
9800 E
10,000 E
615 Dr.
531
528
526
525
474
707 X.C.
520
509
510
522
511
508
507
500
495
703 R.
494
702 R.
632 Dr.
Elev Track 2080
701 Dr.
7 Level
701 R.
479
704 Dr.
504
496
506
505
Elev Track 2138
316
478
410
327
601 Dr.
6 Level
503 Dr.
328
602 Dr.
471
Elev Track 2185
501 Dr.
502 Dr.
298
299
319
320
321
5 Level
323
318
317
618 X.C.
222
223
405 Dr.
406 R.
407 R.
403 Dr.
221
404 R.
Elev Track 2232
401 Dr.
402 Dr.
217
219
220
4 Level
482
476
245
645 X.C.
647 R.
624 Dr.
646 X.C.
555
648 R.
621 Dr.
489
629 Dr.
490
491
Elev Track 2281
627 R.
487
509
3 Level
239
240
241
216
630 Dr.
638 R.
105 Dr.
106 Dr.
512
277
104 X.C.
492
502
202 Dr.
201 R.
203 R.
302 R.
242
243
631 R.
209
303 R.
244
301 R.
633 R.
102 Dr.
513
515
640 Dr.
518
519
523
101 Dr.
103 X.C.
265
266
267
279
280
264
237
Main Shaft
Elev. 2420'
Parker Shaft
Elev. 2401.7'


11,200 N
11,000 N
10,800 N
10,600 N
10,400 N
10,200 N
10,000 N
9800 N
10,200 E
10,400 E
10,600 E
10,800 E
11,000 E
True North
Mag North
643 X.C.
642 R.
641 Dr.
614 XC
603 XC
612 Dr.
608 XC
607 X.C.
Elev. Track 2321
2 Level
Elev. Sill 2342
1 Level
Sill 2374
Elev. Track 2159
Gibbs Tunnel 606 Dept.
610 R.
BONANZA MINE COMPOSITE
Scale 1"=40'

DOCKET No. DMEA 3300 (LEAD)



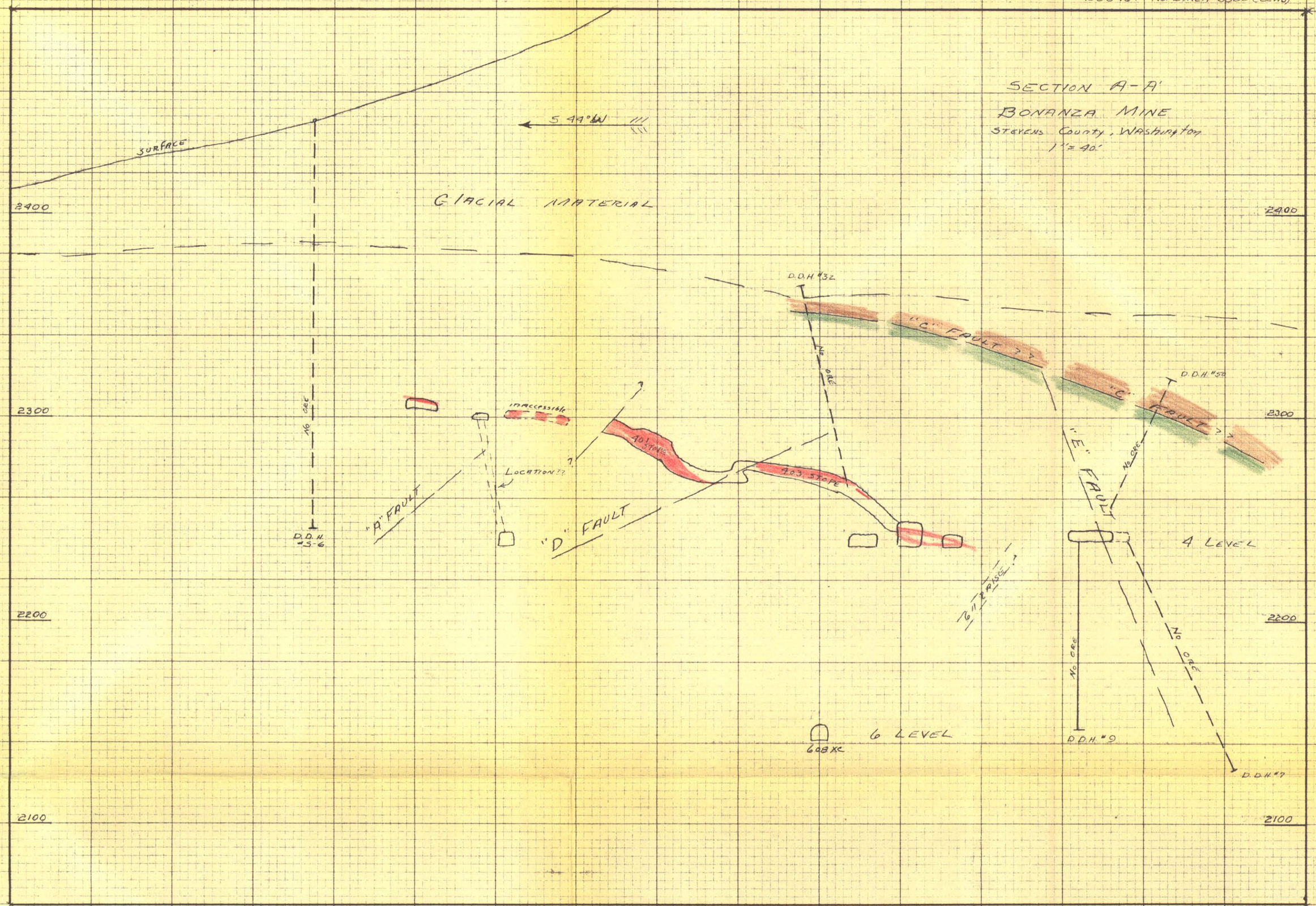
VERTICAL SECTION THROUGH SHAFT

BONANZA MINE

Stevens County, Washington

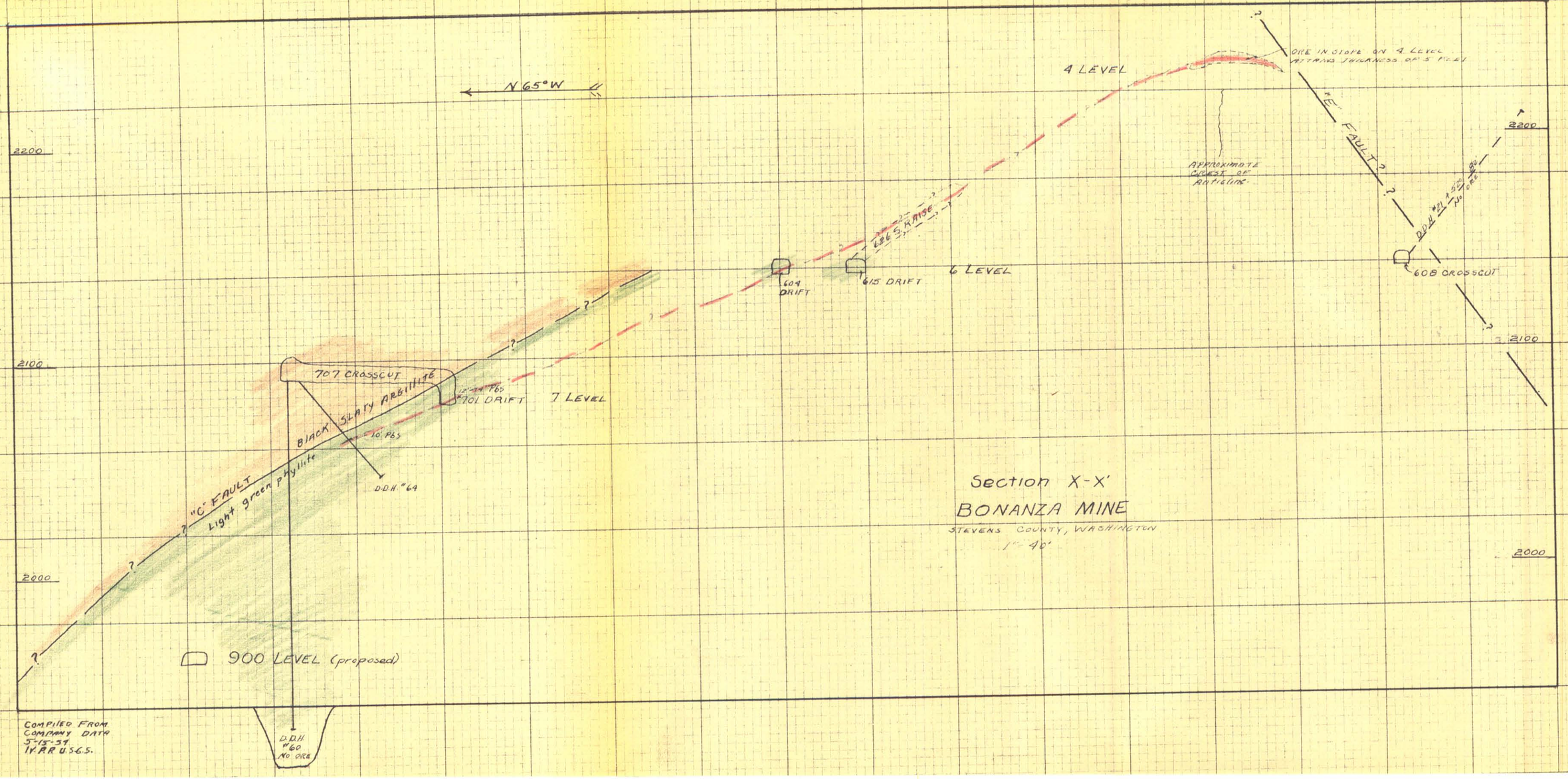
1" = 40'

COMPILED FROM COMPANY DATA
5/27/59
W.P. PUFFETT, USGS



Copied from Company Map
5-18-54 by W.P. Puffett, USGS

DOCKET No DMEA 3300 (Copper)



Section X-X'

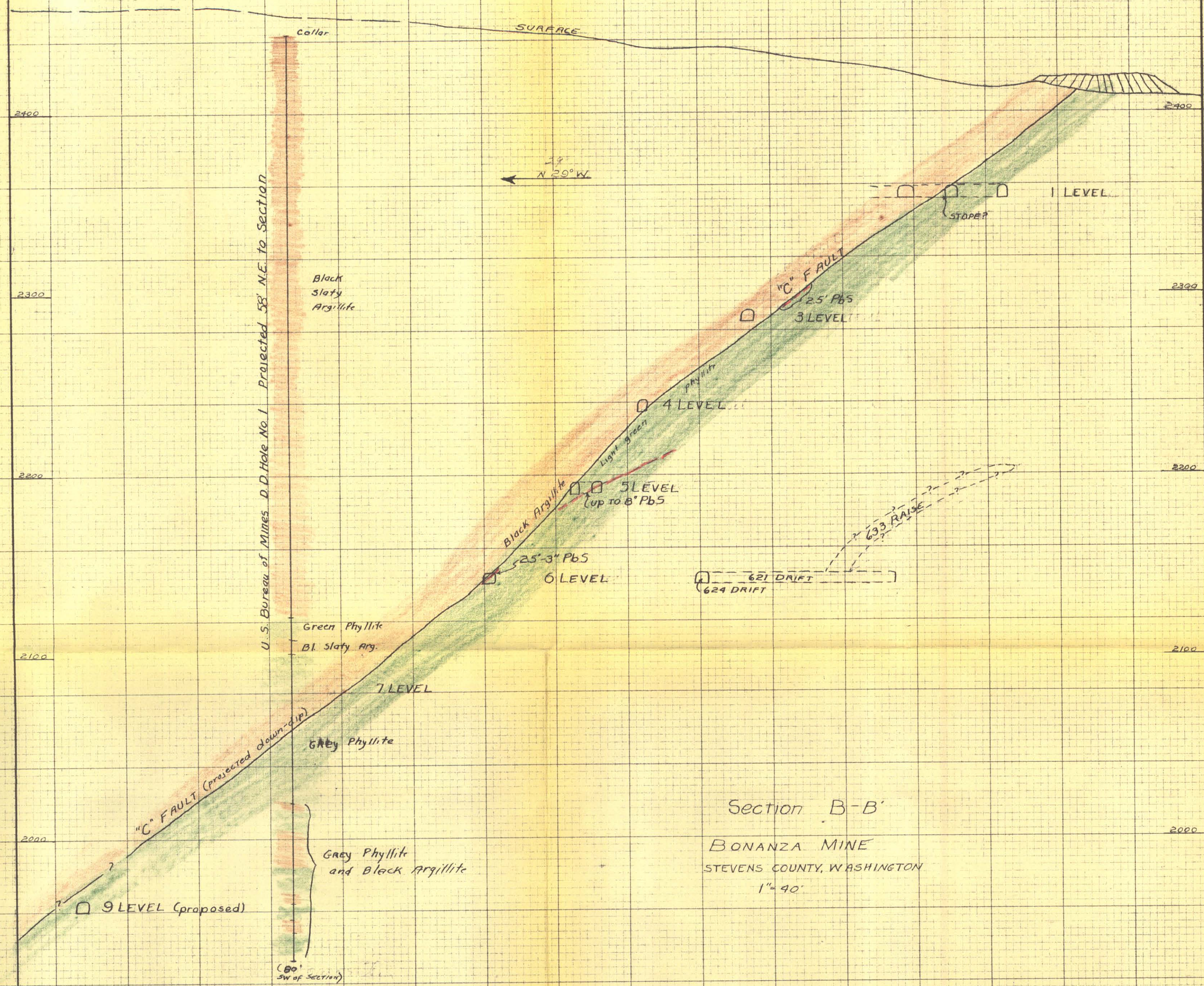
BONANZA MINE

STEVENS COUNTY, WASHINGTON

1" = 40'

COMPILED FROM COMPANY DATA 5-15-37 IVAR U.S.G.S.

Docket No. DMEA 3300 (Lead)



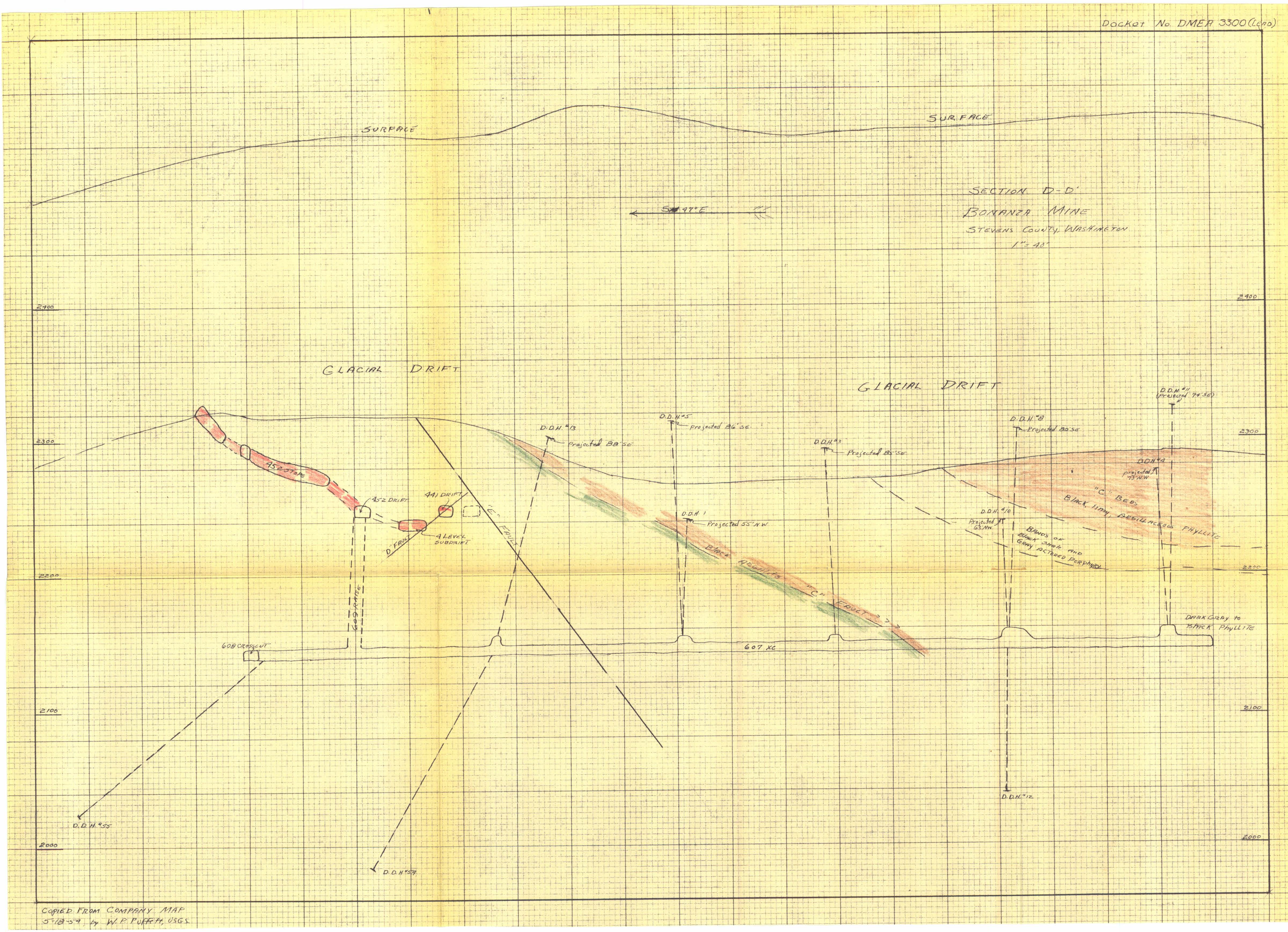
Section B-B'

BONANZA MINE

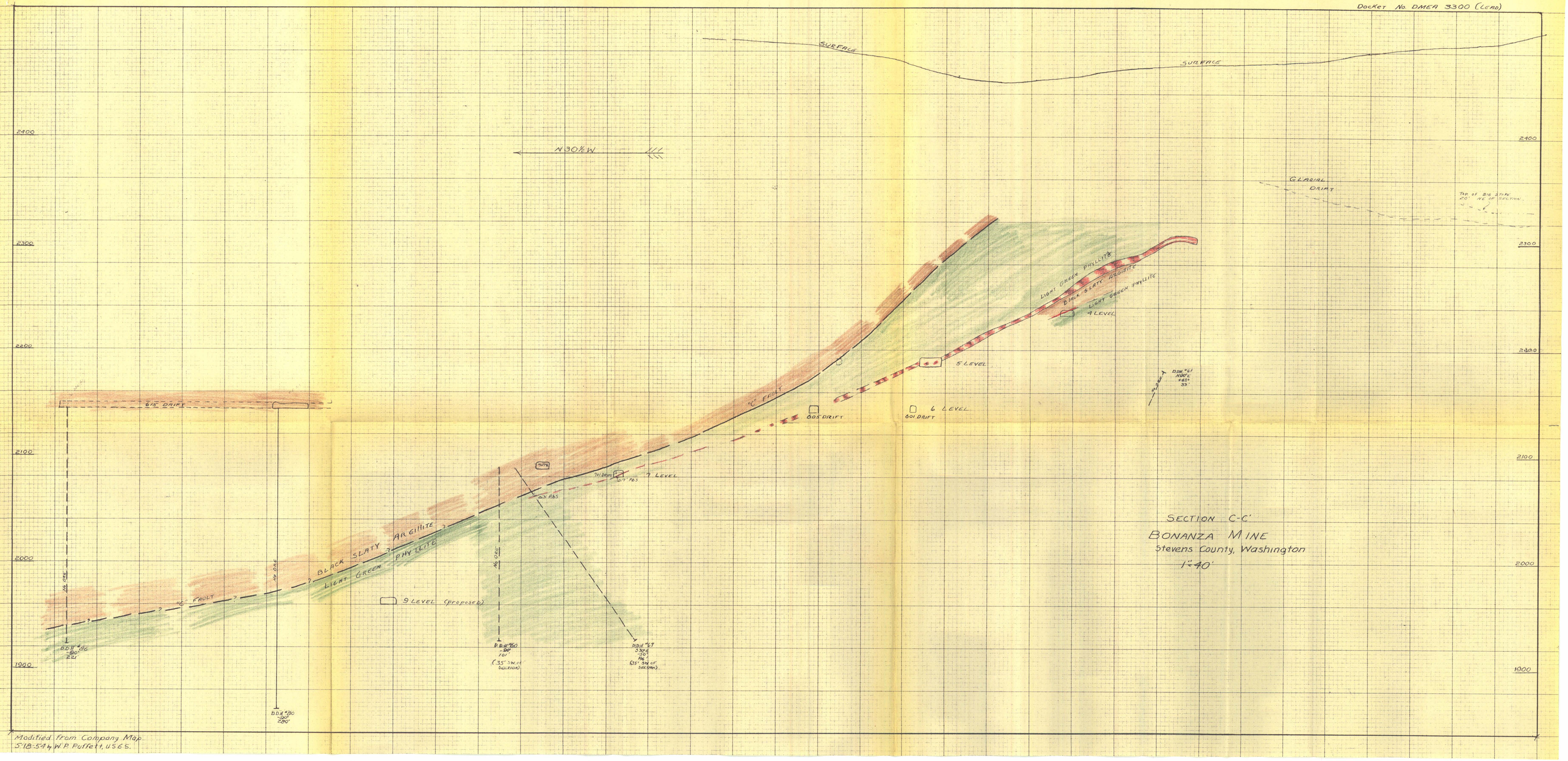
STEVENS COUNTY, WASHINGTON

1" = 40'

Modified from company maps 5/15/59
W.P. Pufferf, USGS



COPIED FROM COMPANY MAP
5-18-59 by W. P. PUFFETT, USGS

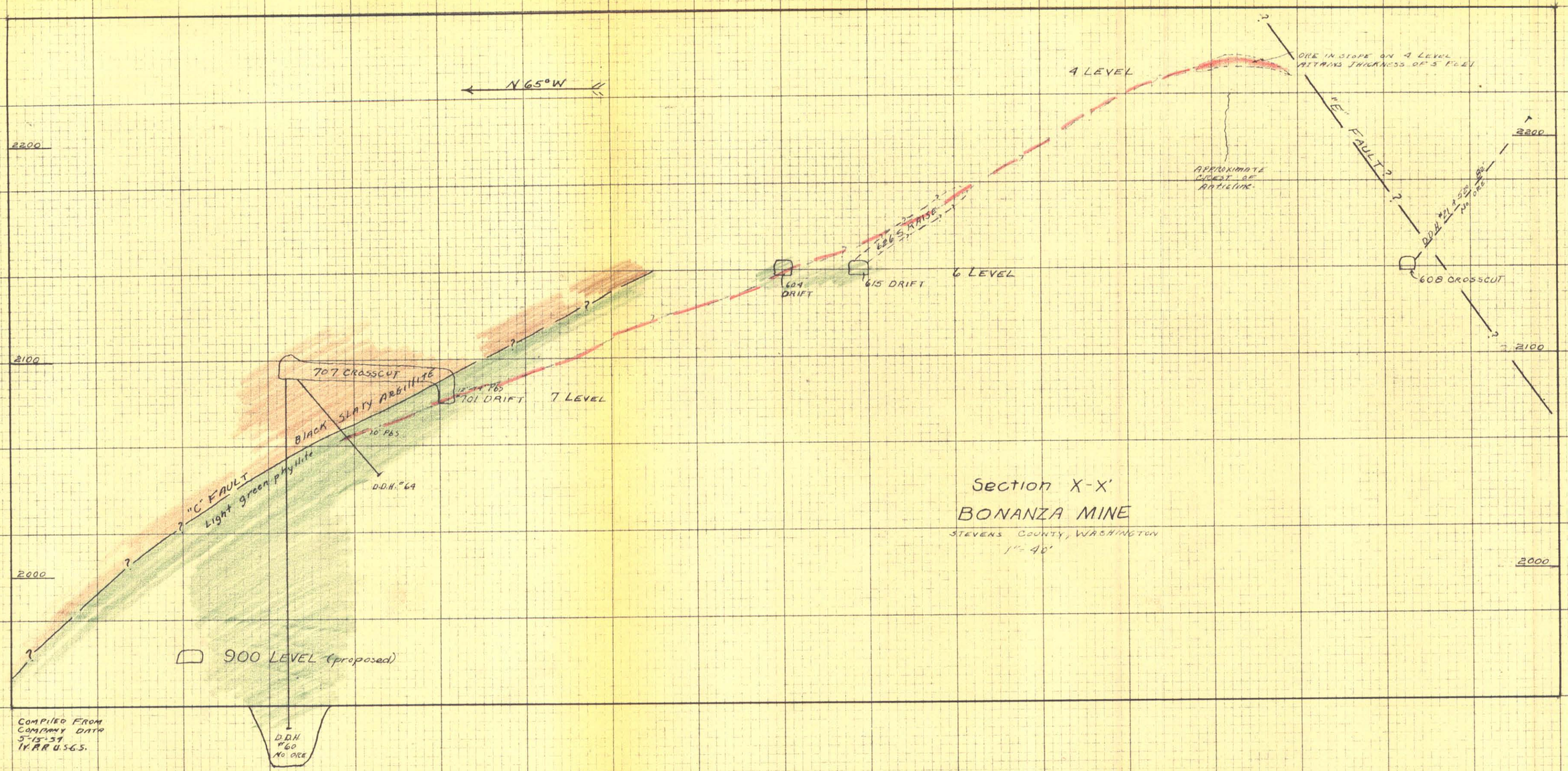


Modified from Company Map
5-18-54 W.P. Puffett, USGS.

11,200 N
11,000 N
10,800 N
10,600 N
10,400 N
10,200 N
10,000 N
9800 N
9400 E
9600 E
9800 E
10,000 E
C
DDH 84 -70° 380'
DDH 82° -45° 286'
DDH 87 -75° 277'
DDH 80 -90 280'
DDH 85 -70° 267'
DDH 83 -45° 203'
615 Dr
DDH 58 +02° 193'
DDH 40° -80, 180'
DDH 39 -44½° 180'
DDH 57° +39½° 124'
DDH 60 -90° 161'
DDH 72 -50° 51'
PROJECTED LOCATION of "C" FAULT on 9 LEVEL
PROPOSED 9 LEVEL DRIFT
PROPOSED 9 LEVEL DRIFT
Elev. 1960'
PROPOSED SHAFT EXTENSION
X
B
Vein on 7 Level
Vein on 6 Level
703 R
701 R
ELEV TRACK 2080
701 Dr
7 LEVEL
704 Dr
"C" FAULT ON 7 LEVEL
"C" FAULT ON 6 LEVEL
DDH 28 58'
ELEV TRACK 2138
601 Dr
6 LEVEL
602 Dr
ELEV TRACK 2185
501 Dr
5 LEVEL
502 Dr
DDH 27 +03° 95'
ELEV TRACK 2232
403 Dr
402 Dr
405 Dr
"C" FAULT ON 4 LEVEL
4 LEVEL
"C" FAULT
621 Dr
ELEV TRACK 2281
3 LEVEL
624 Dr
630 Dr
DDH 35 -27½° 184'
DDH 76 -33° 82'
631 R
633 R
DDH 5-14
DDH 90 -90 32'
DDH 92 -45 23'
DDH 93 -90 50'
DDH 94 -45 35'
648 R
DDH 47° +60° 77'
DDH 49 +90 59'
DDH 48 -53° 79'
DDH 5-5 -45°
DDH 78 +28° 179'
DDH 71 +52° 131'
DDH 79 +54° 126'
DDH 81 +41° 169'
DDH 73 +36° 186'
DDH 75 -19° 24'
DDH 74 -90° 27'
DDH 70 +90 128'
640 Dr
DDH 5-1 -68°
DDH 5-4 -45°
DDH 5-2 -68°
B'
PARKER SHAFT ELEV. 2401.7
MAIN SHAFT ELEV. 2420

BONANZA MINE COMPOSITE Scale 1"=40'

DOCKET No. DMLA 3300 (Copper)



Section X-X'

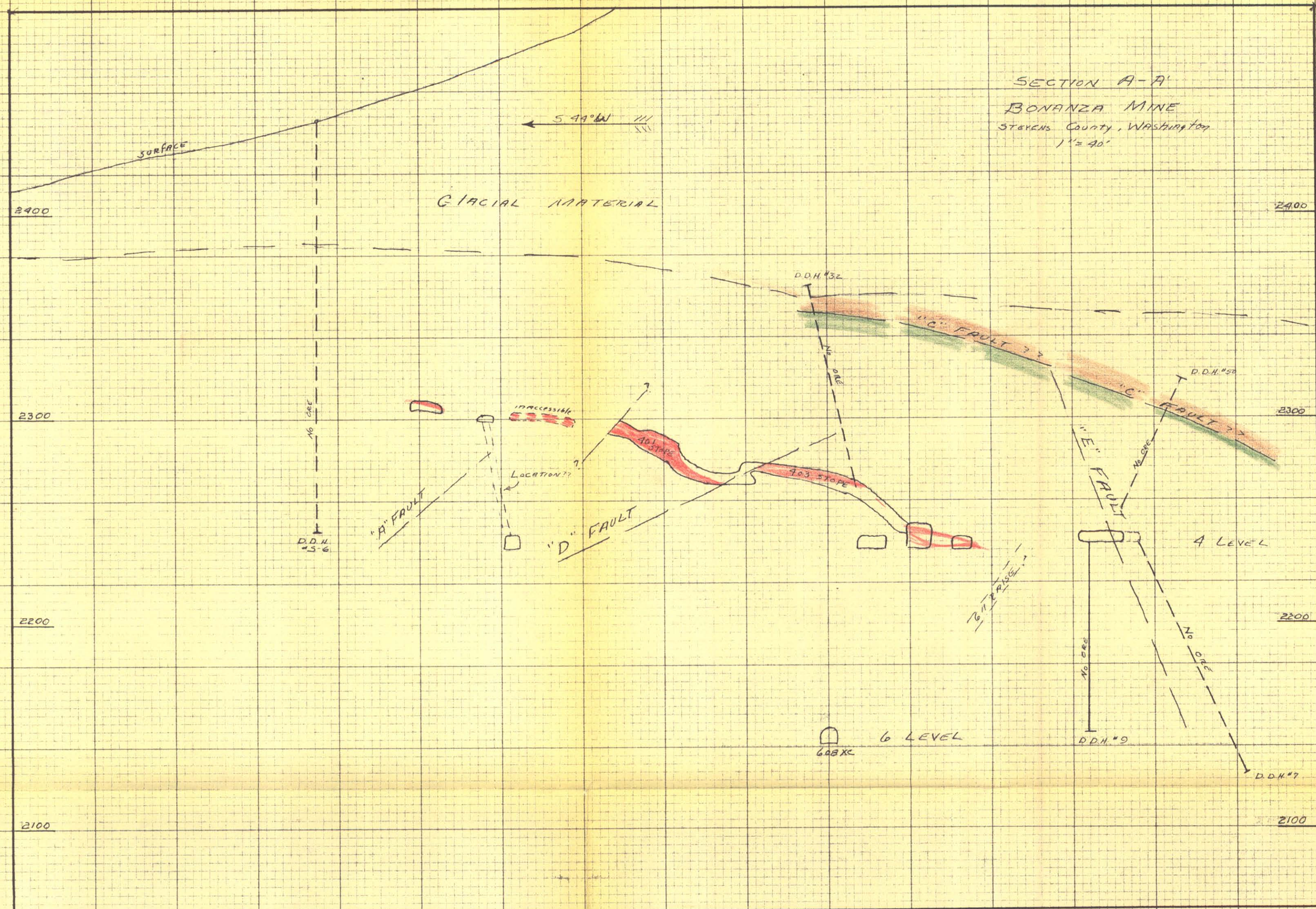
BONANZA MINE

STEVENS COUNTY, WASHINGTON

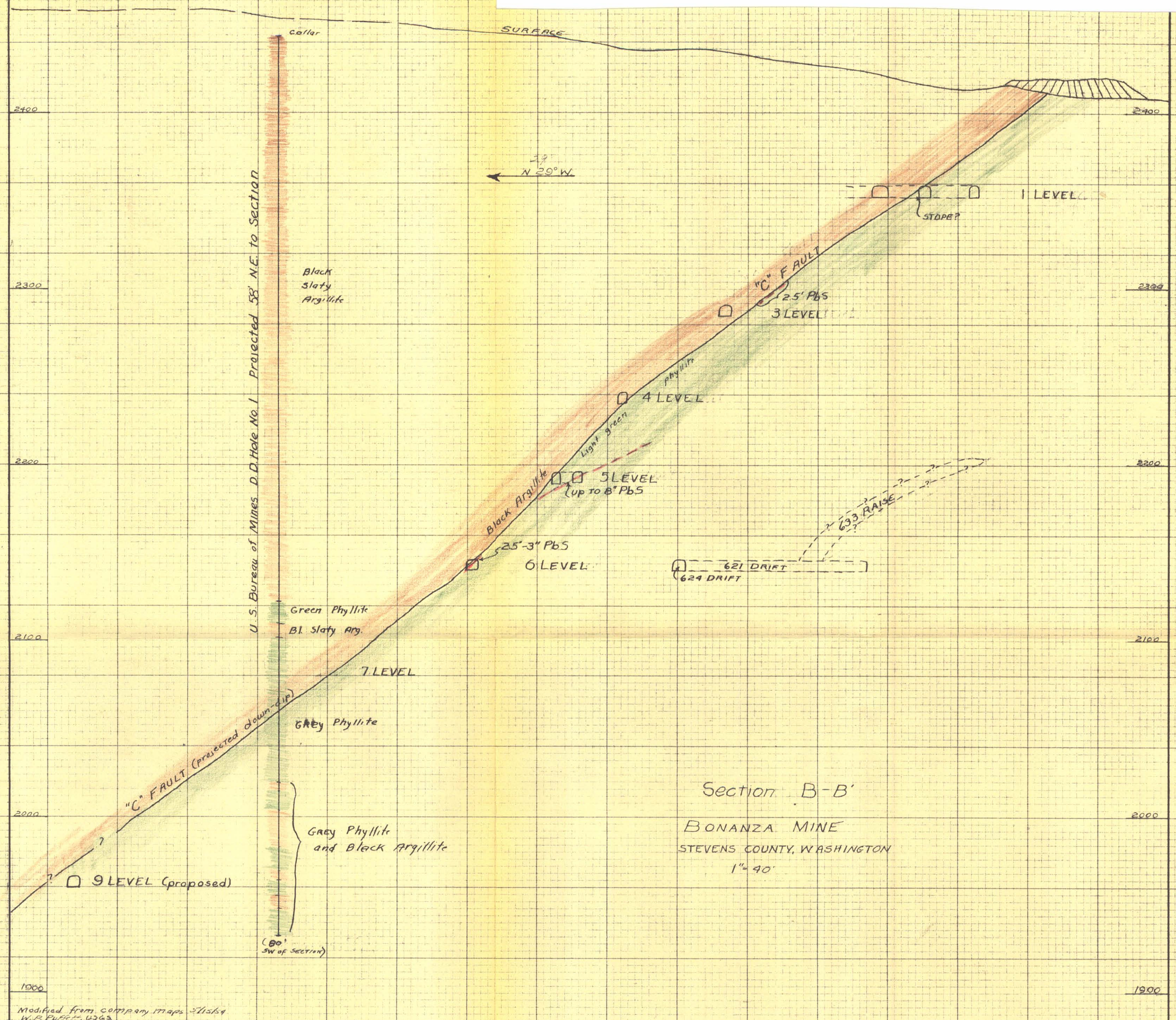
1" = 40'

COMPILED FROM COMPANY DATA 5-15-59 W.A.R. U.S.G.S.

Docket No. DMEA 3300 (LEAD)



Copied from Company MAP
5-18-54 by W.P. Puffett, USGS.

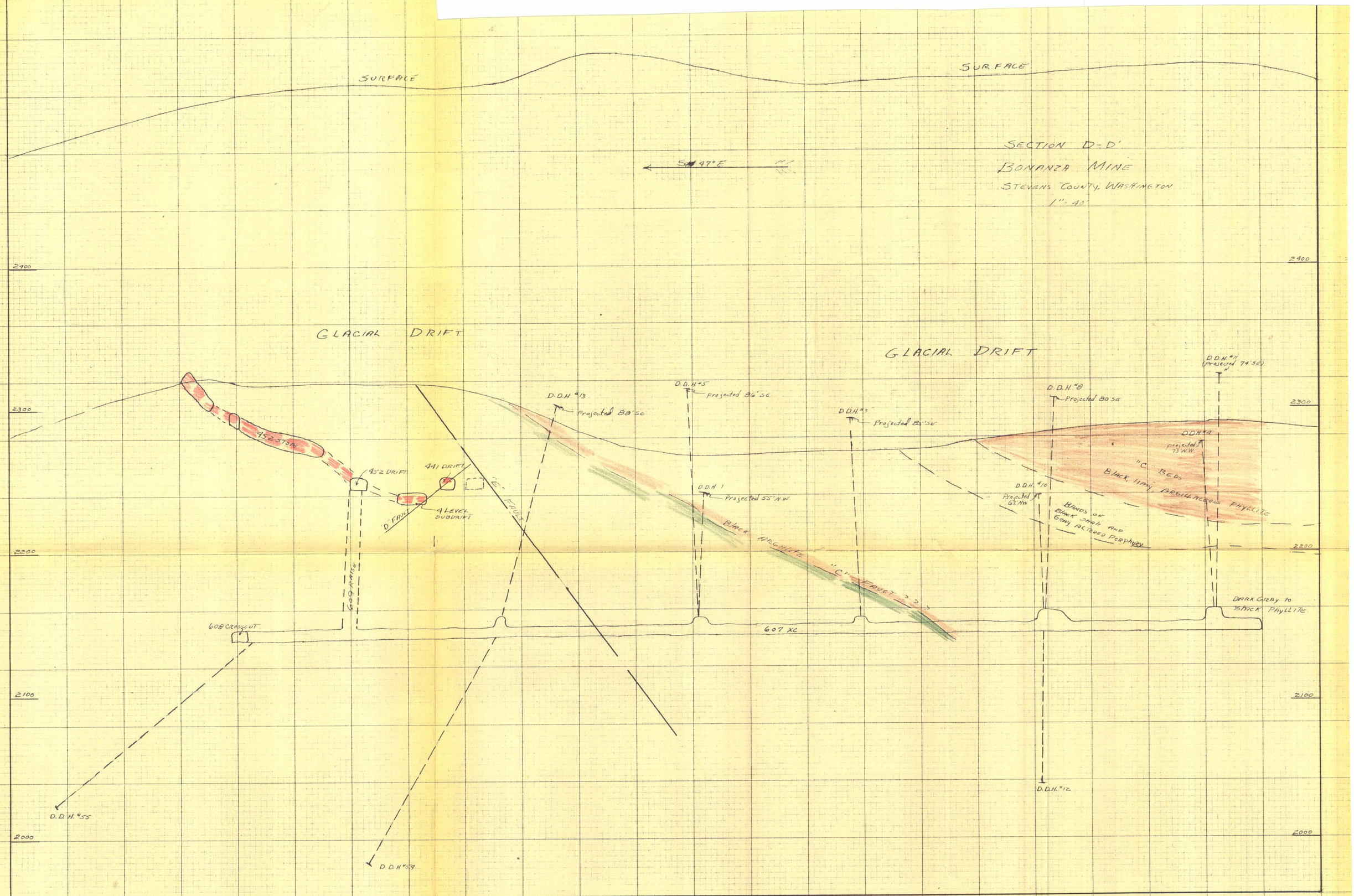


Section B-B'

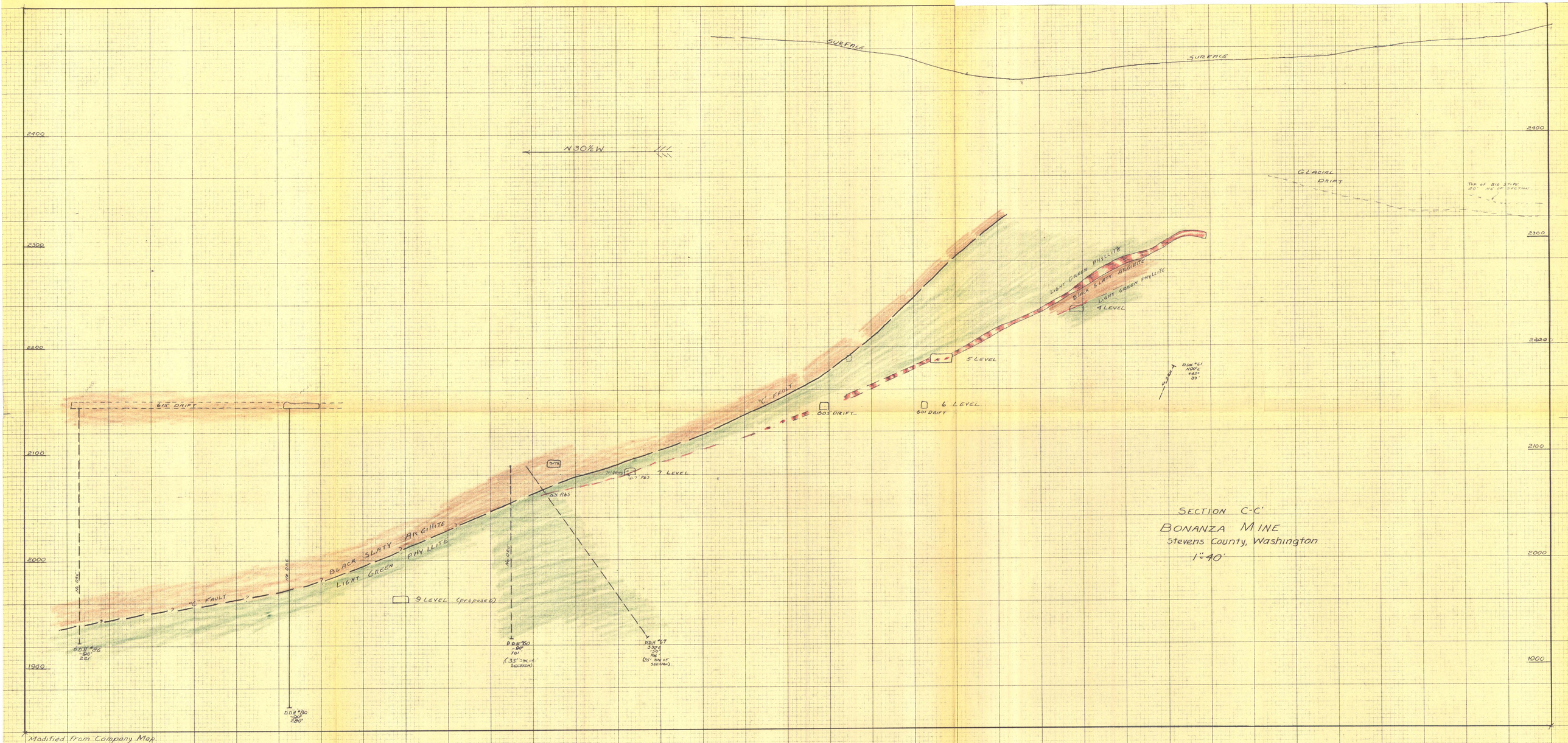
BONANZA MINE

STEVENS COUNTY, WASHINGTON

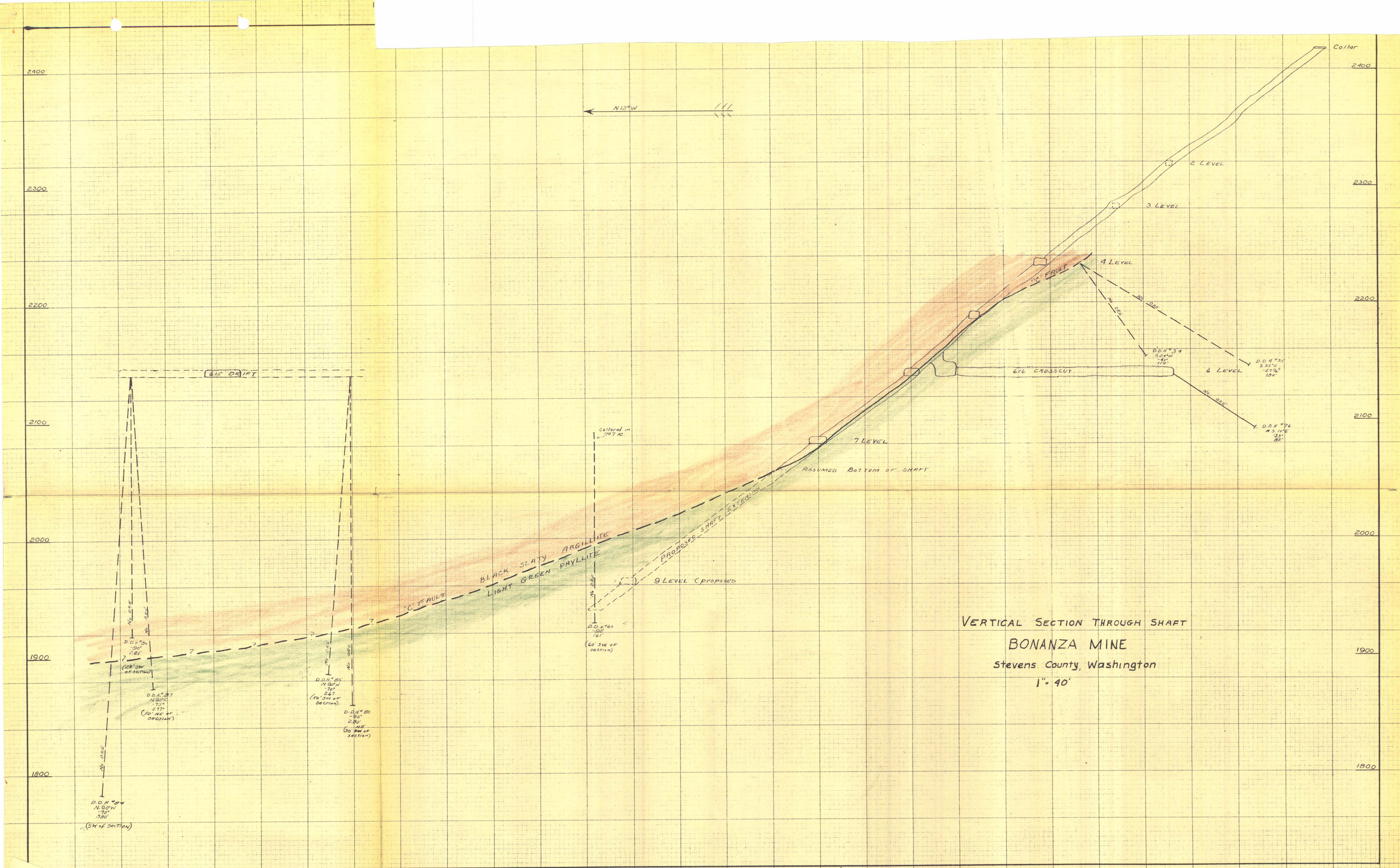
1" = 40'



COPIED FROM COMPANY MAP
5-18-54 by W. P. Puffett, USGS.



Modified from Company Map
5-18-54 by W.P. Puffett, USGS.



VERTICAL SECTION THROUGH SHAFT

BONANZA MINE

Stevens County, Washington

1" = 40'

FROM COMPANY DATA