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Report of [illegible]

[illegible] County, Idaho

by

Robert L. [illegible]

April [illegible], 1953

[illegible]

[illegible]

The [illegible] mine is situated along the South Fork of [illegible] Creek, [illegible] miles by road [illegible] of Kellogg, Idaho. The mine has been intermittently worked since about 1915. There has been no production from the property.

The mill camp elevation is [illegible] feet above sea level. Snowfall is relatively heavy in this area. [illegible] in the immediate vicinity of the mine during the winters of [illegible] and [illegible].

The deposits in this area of the Coeur d'Alene Mining District [illegible] quartzite, [illegible], and on the south limb of the Big Creek anticline. The [illegible] developed in the [illegible] workings, is believed to be the most important mineralized structure that has been developed on the south limb of the Big Creek anticline. The [illegible] and lateral extension of this [illegible] are [illegible] of importance.

The mineralized structure [illegible] the [illegible] warrants [illegible] deeper development. [illegible] of the high cost of [illegible] an exploration shaft [illegible], it is recommended that the [illegible] company make a [illegible] and participation development of the [illegible] with [illegible] Mining Company. The [illegible]

the Metropolitan cross cut on the 3100 level of the Hercules Mine. The work to be carried out by the [illegible] Mining Company.

Plan 3 shows outline of [illegible] the target area. Plan 1 [illegible] plan would prospect more favorable area than proposed plan No. 2, however, it would require a little more drifting and cross cutting to reach the target area under plan No. 1. To adequately explore the channel and lateral extensions of mineralized structure in the Hercules Mine it will require approximately the following drifting and cross cutting.

[illegible] feet of cross cutting @ $[illegible].50 per foot		$[illegible],500.00
[illegible] feet of drifting	@ $[illegible].50 per foot	[illegible],[illegible].00
5000 feet of diamond drilling @ $6.00 per ft.		[illegible],000.00
	Total estimated cost	$[illegible]

The above cost per foot is based on the cost of $42.00 per foot for untimbered drift or cross cut and $47.00 per foot for timbered drift or cross cut. The cost includes all [illegible] overhead and [illegible].

If the above work should prove [illegible], however, it would probably mean the beginning of development of a new mineralized zone on the [illegible] side of [illegible] the Canyon Creek [illegible], between the Hercules and the [illegible] Mine.

Recommendation

The writer examined and [illegible] development of the Hercules Mine from July 1948 to December 1951. This report [illegible] the data obtained from the surface examinations and [illegible] following the development. Included is an estimated cost of exploring the downward extension of the mineral-[illegible] from the Metropolitan cross cut, 3100 Level, Hercules Mine. Data on neighboring mines are included where necessary.

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History

The Blanrock claim No. 1 and 3 and the New York No. 1 were first located about 1910. The Blanrock Company was incorporated Jan. 15, 1924 and capitalized at 1,500,000 shares of par value of five cents. All the treasury stock was subsequently issued. The stock at this time was principally owned by Dutch interests in Holland. This company drove the present adit cross cut tunnel about 1350 feet.

In 1944 and 1947 the Dutch interests in the Blanrock was purchased by Spokane, Washington interests. In April 1946, the company located 23 claims that are contiguous of the New York No. 1 patented claim.

Active development of the Blanrock Mine was started December 1948. On January 6, 1949 a snowslide damaged the compressor building and did considerable damage to equipment. A new compressor site was excavated and equipment repaired by April 27, 1949.

From December 1948 to December 1951, the Blanrock Company completed 2638 feet of drifting, 955 feet of cross cutting, 3400 feet of slabbing drift, enlarging the old tunnel for 1300 feet.

In December 1951, the writer recommended that development be suspended because it was believed that sufficient mineralized structure was developed to warrant deeper development from some of the Sunshine Mining Company's workings.

Physical Features and Surroundings

The Blanrock Mine is situated along the West Fork of Big Creek eight miles southeast of Kellogg, Idaho. The topography is similar to the rough sections of the Coeur d'Alene Mining District. The hills are characteristically steep and are covered with thin to heavy patches of timber and brush. The relief ranges from about 2000 feet above sea level at the mine portal to 4300 feet along the north side of the Blanrock claim No. 1 and 3

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Crude ore or concentrates can be hauled by truck from the Sunshine Mine, six miles over paved roads to the Bunker Hill Smelter at Kellogg, Idaho.

Labor and Living Conditions

Base wages at the Sunshine Mine for Miners in May 1952 were as follows: Drift Miners and Timbermen $14.34 plus 8 1/3 for overtime equals $15.50 per day of 8 hours. The usual contract price for drifting and cross cutting is $10.00 per foot. Room and board are available at the Sunshine boarding house and at Kellogg or Wallace.

Property and Ownership

The Bismarck property consists of 3 patented lode claims and 23 claims held by location. The property is owned by the Bismarck Mining Company, 209 Peyton Building, Spokane, Wash. The officers of the company are; Chas. A. Powers, President, Robert M. Gammell, Vice President and Gen. Manager, E. K. Barnes, Treasurer, and Melven Swartly, Secretary.

Mine Workings

The principal workings of the Bismarck Mine is shown in Fig. 3. The principal workings of the Sunshine Mine, from which the proposed underground work is to start, is shown in Fig. 1 and 3.

Description of the Deposits

General Geology:

The Bismarck property is along the south limb of the Big Creek anticline. The property is more or less surronded by the Sunshine Consolidated Mining Company property. The Sunshine Mining Company has a perpetual 50-50 working agreement with the Sunshine Consolidated Company. It is a 50-50 profit sharing basis.

The geology of this area has been studied in considerable detail

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by Joseph D. Ubelby and E. L. Jones U.S.G.S. Bulletin 732, also Philip J. Shenon formerly with the U.S.G.S. The general geology is shown in Fig. 1.

The country rock in the Blanchet workings is principally lavett quartzite. Data gathered may occur at greater depth. The ore bodies in the productive areas in this district occur in the Lavett, Dorie, and St. Regis formations. The Blanchet workings are near the east end of an intensely fractured area that has been highly productive in lead, silver and zinc. The Parker Hill mine is near the west end of this fractured area. The Crescent mine is near the east end of the fractured area, in the hanging wall of the Alhambra Fault, near where the fault turns toward the Big Creek Fault. The east end of the Blanchet property is in the hanging wall of the Big Creek Fault near where the Fault turns toward the Alhambra Fault, Fig. 1.

The mineralized structures as developed in the Blanchet underground workings, strike from east to northeast. The dip ranges from 60 degrees south to 85 degrees south.

The Ore Deposits

The ore deposits in this district occur as replacement lodes and as fracture fillings along a broad zone of fracturing. The Blanchet workings show several recognizable fractures. The A structure is about 650 feet from the adit portal. The strike of the structure is about west and dips 60 to 85 degrees south. The structure is one to three feet wide. The assay map shows sampling results of sections along the structure.

The -B- structure is about 1350 feet from the adit portal. The strike is north 60 degrees east. The dip is 60 to 85 degrees south east. The structure is 3 to 6 feet wide. Seven places along this structure contained a high grade concentration of lead and silver. The structure

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1 to 7

No -4- structure, 2 to 3 feet wide, strikes east and dips 70 degrees south. Section 6 shows sampling results at a point 12 feet east of the cross cut.

No -5- structure, 3 to 6 feet wide, strikes north 70 degrees east and dips 70 to 80 degrees southeast. This structure shows considerable galena associated with lead and silver. Section 7 shows the sample results from one portion of the structure. Pits 2 and 3 show the location of the structure and portions.

Ore Pod

The ore consists of galena, and galena in a gangue of siderite quartz and altered rhyolite.

Potential Ore Tonnage

The possible or potential of ore from this area could be important but until more exploration has been completed, there is no factual data on which to base an estimate.

Company Operations

The Diamond Company has proposed to explore the continued extension of the Diamond structure from the Metropolitan cross cut on the Sunshine Mining Company 3100 level (Sec 3). The Diamond Company has proposed to do this work on a 50-50 participation with the Sunshine Mining Company.

Conclusion

1. The data included in the Diamond holdings appears to offer favorable conditions for the occurrence of deposits of lead, silver and zinc ore. The structure developed on the Diamond 2010 level where the cross cut passes there seems to be a high grade concentration of lead, silver and

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ay ft. This structure may project into ore deposits of [illegible].

2. Between the Mother Hill and Sullivan Mine and the east end of the Bismarck property there is about 25,000 feet of unexplored faulted quartzite that is similar to the highly productive Mother Hill Mine. If the proposed development of the easterly extension of the Bismarck structure proves positive and paying, it will probably be the beginning of major development of the area between the Bismarck Mine and the Mother Hill Mine.

[illegible]

The [illegible] staff of the [illegible] Mining Company has been the means of developing a number of properties in the vicinity of the Bismarck property. The development is done on a profit sharing basis. In as much as the Bismarck Company has spent considerable money in the development of the Bismarck property and has proved that there is unexploited [illegible] within the property boundaries, the following is recommended:

It is recommended that the Bismarck Company enter into a 50-50 profit sharing agreement with the [illegible] Mining Company in the development of the easterly extension of the structure developed in the Bismarck workings. It is suggested that the Bismarck apply for a government loan sufficient to cover one half of the estimated expenditures. The [illegible] Mining Company would be responsible for one half of the total expenditures.

Estimated Costs

The [illegible] Mining Company has a wide area of operations. The costs are based on the over all operations. The following is an estimated cost of the proposed development of the easterly extension of the structure developed in the Bismarck mine workings from the [illegible] cross cut on the [illegible] level.

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At 5.0 advance per shift bare drift

Indirect cost per day	$75.06
Contract labor @ ($10.00) per foot	$50.00
Material cost @ $6.05	$30.25
	$155.31

At five foot advance per shift 155.31/5.0 equals $31.06 per foot.

At 3.0 foot advance per shift timbered drift

Indirect cost	$75.06
Contract labor timbering @ $13.00 per ft.	$39.00
Material cost @ $6.05	$18.15
	$132.21

At 3.0 foot advance per shift 132.21/3.0 equals $44.07 per foot.

In estimating the total cost of a project that will possibly take over two years to complete and not being sure what type of formation we would be drifting or cross cutting in, it is recommended that a figure of $44.50 per foot be used.

7000 feet of cross cutting and drifting @$44.50 per ft.	$311,500.00
5000 feet of diamond drilling @$8.00 per ft.	40,000.00
Estimated cost of project	$351,500.00

Robert W. Connell
Registered Mining Engineer

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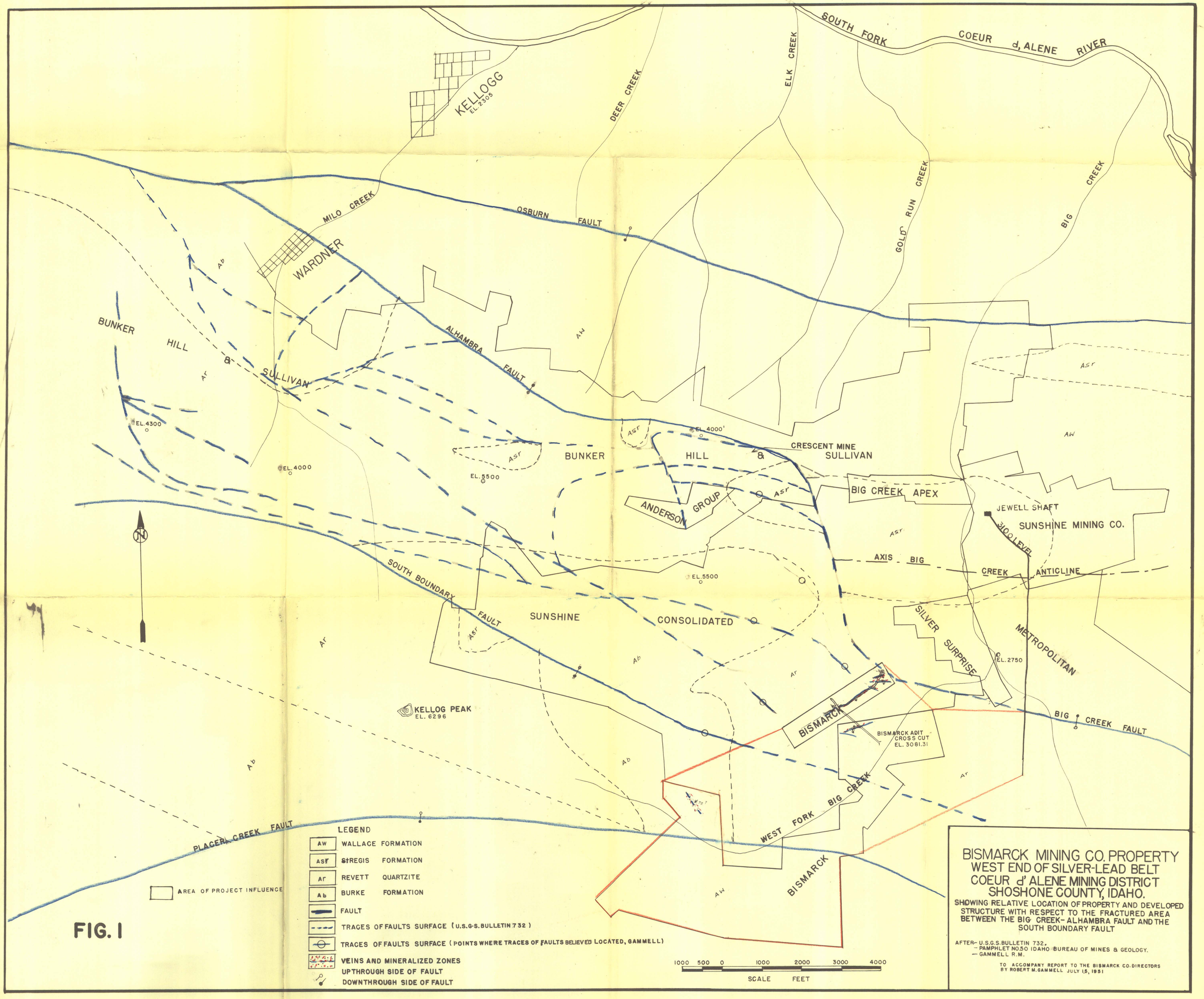
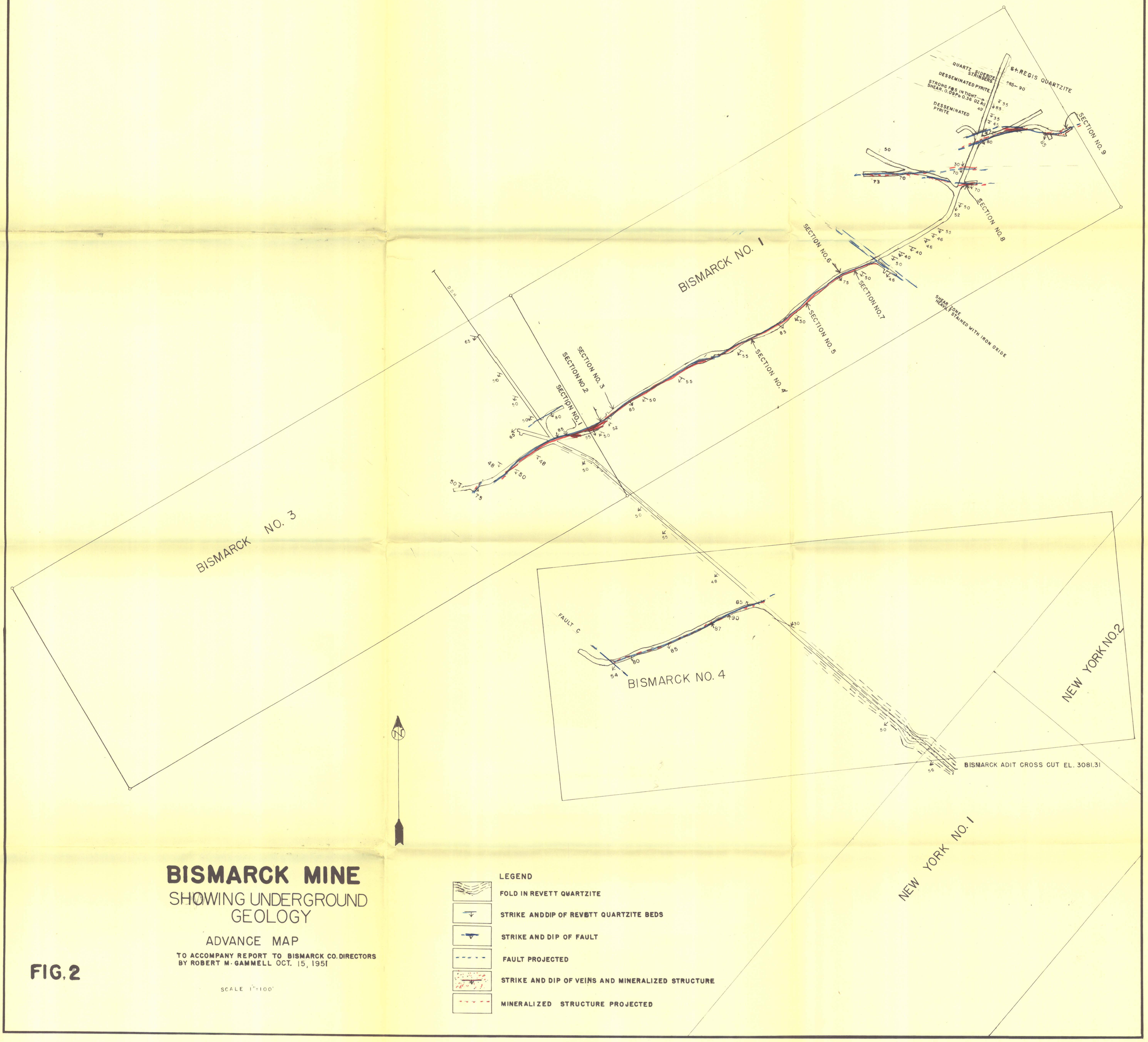

SOUTH FORK COEUR d'ALENE RIVER
KELLOGG
EL. 2305
DEER CREEK
ELK CREEK
GOLD RUN CREEK
BIG CREEK
MILO CREEK
WARDNER
OSBURN FAULT
ALHAMBRA FAULT
BUNKER HILL & SULLIVAN
EL. 4300
EL. 4000
EL. 5500
EL. 4000'
CRESCENT MINE
BIG CREEK APEX
JEWELL SHAFT
3100 LEVEL
SUNSHINE MINING CO.
ANDERSON GROUP
AXIS BIG CREEK ANTICLINE
SOUTH BOUNDARY FAULT
SUNSHINE CONSOLIDATED
SILVER SURPRISE
METROPOLITAN
EL. 2750
KELLOG PEAK
EL. 6296
BISMARCK
BISMARCK ADIT
CROSS CUT
EL. 3081.31
BIG CREEK FAULT
WEST FORK BIG CREEK
PLACER CREEK FAULT
AREA OF PROJECT INFLUENCE
LEGEND
AW WALLACE FORMATION
Asr STREGIS FORMATION
Ar REVETT QUARTZITE
Ab BURKE FORMATION
FAULT
TRACES OF FAULTS SURFACE (U.S.G.S. BULLETIN 732)
TRACES OF FAULTS SURFACE (POINTS WHERE TRACES OF FAULTS BELIEVED LOCATED, GAMMELL)
VEINS AND MINERALIZED ZONES
UPTHROUGH SIDE OF FAULT
DOWNTHROUGH SIDE OF FAULT
1000 500 0 1000 2000 3000 4000
SCALE FEET
BISMARCK MINING CO. PROPERTY
WEST END OF SILVER-LEAD BELT
COEUR d'ALENE MINING DISTRICT
SHOSHONE COUNTY, IDAHO.
SHOWING RELATIVE LOCATION OF PROPERTY AND DEVELOPED STRUCTURE WITH RESPECT TO THE FRACTURED AREA BETWEEN THE BIG CREEK-ALHAMBRA FAULT AND THE SOUTH BOUNDARY FAULT
AFTER- U.S.G.S. BULLETIN 732.
- PAMPHLET NO.50 IDAHO BUREAU OF MINES & GEOLOGY.
- GAMMELL R.M.
TO ACCOMPANY REPORT TO THE BISMARCK CO. DIRECTORS
BY ROBERT M. GAMMELL JULY 18, 1951

FIG. 1



BISMARCK MINE

SHOWING UNDERGROUND GEOLOGY

ADVANCE MAP

TO ACCOMPANY REPORT TO BISMARCK CO. DIRECTORS
BY ROBERT M. GAMMELL OCT. 15, 1951

SCALE 1"=100'

FIG. 2

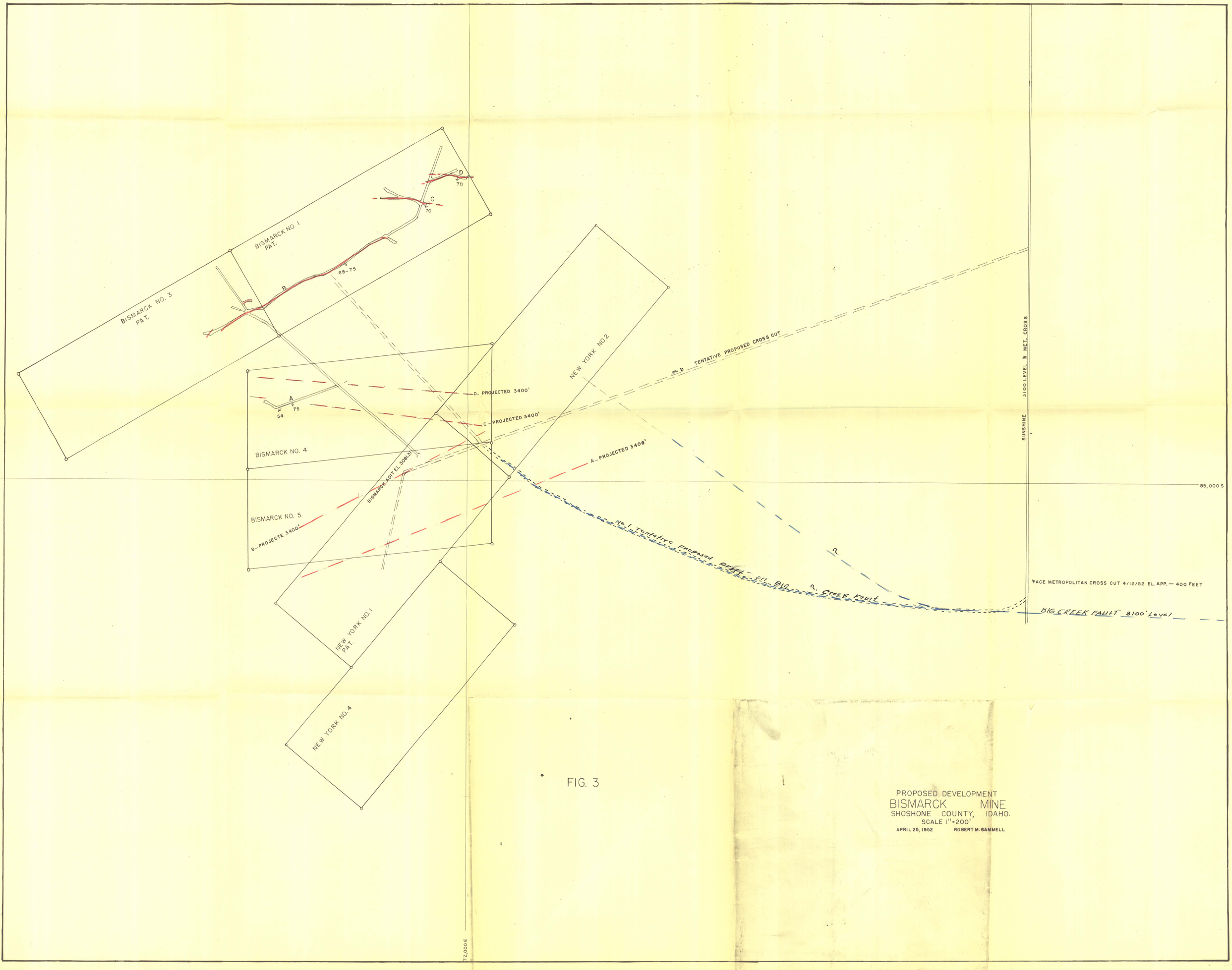


FIG. 3

PROPOSED DEVELOPMENT
BISMARCK MINE
SHOSHONE COUNTY, IDAHO.
SCALE 1"=200'
APRIL 25, 1952 ROBERT M. GAMMELL