Mr. A. B. Needham
Region V

EJM

350

OCT 15 1951

Re: DMA-1633
P & A Galena Lode
Custer District
Custer County, S. Dakota
Exploration loan, $20,000
Lead, tungsten

Memorandum

To: Reports and Records Unit
Administrative Management Div.

From: Chief, Lead-Zinc Branch

Subject: Denial of exploration loan

The subject docket was referred to the field for additional information. The field team report has recommended a denial of an exploration loan. Their conclusions are as follows:

1) Before the proposed work of diamond drilling is done, the mine should be unwatered and a survey and geologic map of underground workings should be completed.

2) At the present time, however, the applicants do not have title to claims containing the mine shafts and the vein.

3) The proposed work, because of the lack of clear title (lease or option) to the entire property, is excessive and subject to possible litigation.

4) The applicants have not cooperated to their fullest extent and have been misleading in regard to their title to the property and the work they proposed to do.

I concur with the field team in recommending that this application should be denied.

Returned herewith are:

1 Field team report
4 Forms MF-103

F. F. Billings, Chief
Lead-Zinc Branch

Approved:
Tom Lyon
Director, Supply Division

ELNewcomb:emp G 10-10-51
Copies to: A. B. Needham Region V (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
O. M. Bishop
Administrators File Directors r. files 4214 GSA
DMA docket files Br. r. files 4214 GSA

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OCT 13
1989

OCT 15 1951

Re: DMA-1683

Mr. Carl R. Amundson
Mr. W. O. Fillmore
Box 332
Spearfish, South Dakota

Dear Messrs. Amundson and Fillmore:

Your application for an exploration loan on property in Custer County, South Dakota, has been reviewed by the Defense Minerals Administration. We have a field team report which was made on the F and A Galena Lode property at our request. From this information, we conclude that you do not have a clear title (lease or option) to all the property required to accomplish your proposed exploration work. For this reason, we must deny your application for Government assistance.

However, if you obtain a clear title in the near future, we suggest that you reapply and submit a new proposal. Any future proposal should include the unwatering of the mine so that a survey and geologic maps can be made of the underground workings.

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

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

ELNewcomb:emp
G 10-10-51
Copies to: A. B. Needham Region V (2)
Chief, Lead-Zinc Branch
E. T. McKnight 4204 GSA
O. M. Bishop
Directors r. files 4214 GSA
Br. r. files 4214 GSA
Administrators r.file
DMA docket files

RECEIVED
OCT 18
DEPT. OF INTERIOR
BUREAU OF MINES
PITTSBURGH, PENN.
A. PROCTOR

xxxxxxxxxxxxxxx
2908 Colfax Avenue South
Minneapolis 8, Minnesota
Region V

October 4, 1951

Memorandum

To: D. H. Mullen, Supervising Engineer - U. S. Bureau of Mines - School of Mines Campus - Rapid City, South Dakota

From: Executive Officer - DMA Field Team, Region V

Subject: DMA Docket 1683-X - Amundson and Fillmore

Pursuant to your letter of September 27, 1951 and the note attached to prints, enclosed are two copies of each print and the originals of each.

Four copies of each were transmitted with the four copies of the report to Washington.

A. B. Needham

Enclosures:
ABNeedham:mlc
Reg.Dir-Reg.V
df
Files

File

[redacted]
2000 Walnut Avenue South
Minneapolis 8, Minnesota
Region V

October 2, 1951

Memorandum

To: Tom Lynn, Chairman, Coordinating Committee - Defense Minerals Administration - Interior Building - Washington 25, D. C.

From: Executive Officer - DMA Field Team, Region V

Subject: DMA Docket 1603-X - Aberdeen and Fillmore
Map 332
Springfield, South Dakota

Attached are four copies of the Field Team report on the subject application to explore the F and A Gilson Lake Fan Lock.

The application is denied, primarily because the applicants do not have clear title (lease or option) to the portion of the property that is most desirable for exploration. Originally it was intended to explore the area in general, but because of legal difficulties in obtaining title to it, exploration was then limited to only an adjacent portion not too feasible.

On the basis of the present application the prospects are not feasible, but should ownership clear up applicants should submit a new proposal and have it on more realistic and reasonable premises for determining area.

Returned are the application, supporting data, and review.

Enclosures
ABHeschmeyer:mlc

A. B. Peschen

cc: Dutton
Muller
Redden
Zinner
df
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

OCT 1 1951

September 27, 1951

Memorandum

To: A. B. Needham, Executive Officer, DMA Field Team, Region V

From: Supervising Engineer, Rapid City Field Office

Subject: DMA Docket 1683X, F and A Galena Lode, E. R. Amundson and W. O. Fillmore

Enclosed are six copies of the examination report on the subject exploration application, together with the application and accompanying papers.

The application has been denied on the basis of ownership and lack of cooperation on the part of the applicants in providing any definite program. It might be interesting to note that a request to Fillmore to provide more definite information than was secured from Amundson did not produce as much as an acknowledgement.

I presume you have in Minneapolis originals of the prints desired. The two copies are for file copies of that report for our office and that of the Survey. The enclosed prints will be returned to the reports from which they came.

D. H. Mullen

D. H. Mullen

Attachments

cc: Reg. Director, Reg. V
files
Dutton
Lyon } 10-2-51 ABN:mlc

RECEIVED
OCT 1 1951
DEPT. OF INTER
BUREAU OF
MINNEAPOLIS, MIN
REGION V

2908 Colfax Avenue South
Minneapolis 8, Minnesota
Region V

September 18, 1951

Memorandum

To: D. H. Mullen, Supervising Engineer, U. S. Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer - DMA Field Team, Region V

Subject: DMA Docket 1282X - E. C. Rogers
Hot Springs, South Dakota
DMA Docket 1236X - White Top Pegmatite (Campbell & Ventling)
Custer, South Dakota

In checking our files we find that DMA Docket 1282X - E. C. Rogers, was sent to you for a field investigation and you reported that Rogers was ill and in the hospital, therefore, no report was made.

We also find that DMA Docket 1236X - White Top Pegmatite, was sent you, but to date no report has been received in this office.

In order to clear all pending applications, willyou please review these two cases and advise us as to their disposition?

In addition to those two, our records indicate that you have recently been sent DMA Docket 1683X - Amundson and Fillmore, for exploration at the Spokane Mine. We presume you have that on the agenda for early consideration.

A. B. Needham
Executive Officer - DMA Field Team,
Region V

ABNeedham:mlc
cc: Reg.Dir-Reg.V
df
Files

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

September 17, 1951

Mr. W. O. Fillmore
P. O. Box 352
Spearfish, S. Dak.

Dear Mr. Fillmore:

Some indefinite information has come to the attention of the DMA field team in the examination of the Spokane lead prospect.

Before further progress can be made in processing your application for government exploration assistance on this property, certain facts must be clarified. In this regard it is suggested you call at this office at your earliest convenience.

Very truly yours,

Glen Walker
Mining Engineer

GW:as

cc: Reg. Director, Reg. V
Needham
files

RECEIVED
SEP 19 1951

Bureau of Mines
DEPARTMENT OF THE INTERIOR
RECEIVED
SEP 10 1951
Minneapolis
Mining

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

September 7, 1951

Mr. W. O. Fillmore
Spearfish, S. Dak.

Dear Mr. Fillmore:

This office has been requested to conduct a field examination of the Spokane lead prospect relative to your application for government exploration assistance.

An examination of surface excavations near the Spokane shaft was made yesterday, but specific information is needed as to locations and depths of the core holes proposed in your exploration application.

Should you and Mr. Amundsen find it convenient, it is suggested you call at this office for a discussion of this matter.

Very truly yours,

Glen Walker
Mining Engineer

GW:ac

cc: Reg. Director, Reg. V
Needham
files

RECEIVED
SEP 10 1965

Defense Minerals Administration
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

August 30, 1951

Memorandum

To: Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer, Field Team, Region V

Subject: Docket DMA 1683-X

Here is the application and supporting dataon the subject docket by Earl R. Amundson and W. O. Fillmore, Box 332, Spearfish, S. Dak., for an exploratory loan on a 50 percent matching basis to explore by core drilling a lead-zinc vein at the Spokane mine south of Keystone.

Please arrange to have the proposed project investigated by the Bureau-Survey team to determine its feasibility and submit the resulting report in 6 copies.

Also return the attached papers when you have completed your investigation and report.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

ABNeedham:dt

cc G. E. Dutton
Region V
files
df

File

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

AUG 29 1951

Mr. A. B. Needham
Executive Officer, DMA Field Team
Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1683X

Commodity Lead

Applicant Earl R. Amundson and W. O. Fillmore, Box 332
Spearfish, South Dakota

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Tom Lyon
Chairman
Coordinating Committee

For Bureau of Mines

T. P. Thayer
For Geological Survey

Bureau of Mines
DEPARTMENT OF THE INTERIOR
RECEIVED
AUG 30 1951
Minneapolis
Mining

Re: Docket DMA-1683X

AUG 29 1951

Messrs. Earl R. Amundsen and
W. O. Fillmore
Box 332
Spearfish, South Dakota

Gentlemen:

Your application (Docket 1683X) for an exploration loan has been reviewed by the Lead-Zinc Branch of the Defense Minerals Administration. Before final decision can be taken on your request it will be necessary to obtain additional information on your property. Your application, therefore, has been referred to Mr. A. B. Needham, Executive Officer, DMA Field Team, 2900 Colfax Avenue, South, Minneapolis 8, Minnesota, for further information and advice.

Very truly yours,

SIGNED

Tom Lyon, Director
Supply Division

ETMcKnight:emp
G 8-27-51
Copies to: A. B. Needham Region V (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R. H. Mote
Reports & Records
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION V

DMA - 1085X

F and A Calena Lode, Custer District

Custer County, South Dakota

Glen Walker, Mining Engineer
U. S. Bureau of Mines

J. A. Redden, Geologist
U. S. Geological Survey

September 25, 1951

DEFENSE MINERALS ADMINISTRATION
Report of Field Examination

by

Glen Walker, Mining Engineer
U. S. Bureau of Mines

J. A. Hedden, Geologist
U. S. Geological Survey

Docket No.: DMA-1688X
Property: F and A Salem Lode
Applicants: W. [illegible] Fillmore, Earl W. Amundson
Commodity: Lead, tungsten

Conclusions and Recommendations

It is recommended that this application be denied. The applicants were requested to furnish specific information regarding the location and depth of the proposed core holes. Amundson called at the Bureau of Mines office, and after considerable insistence, he stated three holes would be drilled from each of eight drill set-ups, making a total of about 5,600 feet. The first drill set-up proposed by Amundson was to be 50 feet east of the shaft. The three remaining set-ups east of the shaft were to be spaced at intervals of 150 feet along the general strike of the vein. At each set-up the holes were to intersect the deposit at 100-, 200-, and 300-foot depths. A procedure identical to that outlined was to be pursued west of the shaft, according to Amundson's statement.

The feasibility of dewatering the mine workings, followed by sampling, geologic examination and surveying to determine ore shoots before core drilling, were pointed out to Amundson. He concurred and stated that had been contemplated, but he was not sure that it would be accepted as part of exploration. He has little conception of the underground status of the property.

Since it is stated in the application that the F and A Galena claim is a relocation of ground contained in the Spokane Lead and Silver claim claimed by the Iron Mountain Development Co., records in the Custer County Court House were examined to determine, if possible, the rightful owner. The records indicate that for the past two years the Iron Mountain Development Co. filed "intention to hold" on all the claims in the Spokane group, including the one in question, which contains the shaft, power house and mill. No record was found of an affidavit that the assessment work had been done on this group by the Iron Mountain Development Co. A "to whom it may concern" is recorded stating that assessment work is in progress on a group of claims, including the F and A Galena, by E. O. Fillmore and Earl Swanson. The record search appeared to be inconclusive in establishing the ownership of the ground in question; therefore, an interview with Fillmore was arranged by one of the field team through the Custer County State's Attorney. In the discussion Fillmore stated he has no intention of including the ground in question in the application for exploration. Questioning of the State's Attorney revealed that in her opinion ownership of the property would have to be established through court action.

Denial of this application is recommended because at present the applicant's right to a part of the property is questionable and the proposed exploration is excessive and haphazard. The field team feels this property is worthy of some exploration, in view of the Lincoln report, but cannot recommend it under the existing circumstances.

Geologic Report

The F and A Helena Lode, formerly the Spokane Silver-Lead Claims, is located at Spokane, Custer County, South Dakota, in secs. 26, 27, 34, and 35, T. 2 S., R. 6 E. It is about 7 miles southeast of Keystone, South Dakota, and is easily accessible by gravel roads.

A visit was made to the mine by the field team, but very little geologic data could be obtained since the mine is filled with water at present and surface outcrops are few. The following brief description is based largely on a filed War Minerals Report, "The Spokane Lead-Zinc Mine" by F. C. Lincoln of the U. S. Bureau of Mines. This War Minerals Report is dated April 1943, and is based mainly on an examination made by Lincoln in 1940 for the Spokane Silver and Lead Company.

The mine was originally located in the late 1800's and was developed in the early 1900's. The most extensive work was carried on in 1927-28 when over 8,000 tons of ore was mined and milled. A fire destroyed the power plant in 1928 and the mine was shut down. The last active work was in 1940 when 81 tons of previously broken ore was shipped to the Helena smelter without previous milling. The penalties were too great and no additional broken ore was shipped.

The mine has been opened by an inclined shaft to the 300-foot level. The attached maps from Lincoln's report show the underground workings. The proposed drift on the 500-foot level was never completed.

The ore deposit is reported to be a fissure vein trending east-southeast and dipping about 72° north-northeast. Measurements on projections of the mine workings indicate that the vein is flattening somewhat with depth.

The country rock is a quartz-mica schist, locally very rich in mica. Surface outcrops indicate that folding is present, but the intensity of the folding, or whether or not the vein is concordant, is not known. Several pegmatites crop out in the area and the vein has cut pegmatite on the 200-foot level.

The principal ore minerals are galena and ferruginous sphalerite, but minor amounts of gold and chalcopyrite are present. Considerable silver was recovered and is presumably associated with the galena. The principal gangue minerals are quartz and pyrite, but some minor arsenopyrite and tourmaline are present. Considerable graphite is also present and apparently indicates the trend of the mineralization.

The vein ranges in thickness from 0.5 feet to over 10 feet. Lincoln reports that three ore shoots are present: a western ore shoot exposed on the surface west of the shaft, a shaft ore shoot located on both sides of the shaft, and an eastern ore shoot that was encountered on the 200- and 250-foot levels. The eastern ore shoot is at least 30 feet long and the shaft ore shoot is about 200 feet long. The length of the western ore shoot is not known.

Reserves and recommendations

Lincoln has computed reserves of ore which are given in the War Minerals Report. These are based on 124 samples, mostly channel, which were taken at the close of active operations in 1930. His figures on reserves and grade of the ore are attractive, and include 4,400 tons of broken ore in the stopes. Lincoln's assays are weighted for sample width but are not weighted for length of influence of each sample or corrected for minimum stoping width. The proper weighting of the samples for

minimum steping width and for the length of influence of each sample gives values which are considerably lower than those obtained by Lincoln. In addition, the width of the mirable ore is considerably less than the figure given by Lincoln. It is impossible to substantiate Lincoln's results and it appears that the shaft ore shoot can be eliminated as possible ore unless the tenor of the ore increases with depth. Also, Lincoln's hypothesis of a western ore shoot is based on one sample and cannot be regarded as proved.

The eastern ore shoot was apparently encountered near its crest. The 200-foot level has an 80-foot length of ore with an average width of 4.5 feet and the following weighted values: 0.027 oz. Au, 1.23 oz. Ag, 2.82 percent Pb, and 0.55 percent Zn. The 250-foot level of this ore shoot has the same length, an average width of 5.4 feet, and values of 0.008 oz. Au, 3.97 oz. Ag, 9.86 percent Pb, and 5.14 percent Zn. A raise from the 200-foot level along this ore shoot apparently goes out of ore at about 50 feet. This richer ore shoot is located where the vein crosses pegmatite and the increase in grade of the ore may be directly related to this feature.

It is not known whether or not the southeast end of the eastern ore shoot was reached in the drift. Samples from near the ends of the drifts on both the 200- and 250-foot levels are still in rich ore.

On the basis of the information in the shaft ore shoot, the application could be denied. The east ore shoot has indications of having sufficient values to warrant exploration for its continuation to the east and at depth. In addition, the possibility of a western ore shoot should be examined.

There are sufficient possibilities for discovery of ore reserves to warrant exploration. It is believed that modern milling developments would be able to treat the ore more efficiently. A 54 percent mill recovery on lead and no recovery on zinc was a contributing factor leading to the abandonment of the mine.

Because of the inaccessibility of the mine workings and the fact that an accurate survey of the mine workings, and hence the vein, is not available (Lincoln's map and the company map differ by 15° - the magnetic declination - and it is impossible to learn which map is correct), it is believed that the following would be the most feasible exploration procedure.

> The mine should be unwatered and a survey and geologic map of the underground workings and vein should be completed. Check samples should then be taken to test Lincoln's sampling. The last phase of the exploration, depending on favorable results of previous work, would consist of diamond drilling the eastern ore shoot to test for extension to the east and at depth, and possible drilling at the anticipated west ore shoot.

It would require approximately 2,000 feet of diamond drilling to check for extension of the ore shoot to the east and at depth to the 450-foot level. This should permit the drilling of approximately 5 holes. These would in no way prove the ore body, but might indicate sufficient extension of the deposit as to warrant rehabilitation of the 100-ton mill and active mining. The spacing of the drill holes would have to await the surveying and sampling of the vein.

Addendum

The most recent discussion with the applicants indicates that they do not have a quit claim title on the claims which include the shaft and much of the vein. Previous discussions with the applicants had given the false impression that the application was to cover the entire mine. The reversal of the applicants' stand apparently resulted from their learning the possible legal complications from their actions.

Since the applicants desire to explore only the adjoining claims and do not have a clear title on the shaft claims, the application should be denied as it now stands. It is too great a risk to diamond drill any of the claims without first doing the above proposed work. It is not known exactly where the vein lies because of the 15° discrepancy in the maps.

It is further recommended that if the applicants obtain a quit claim title on the shaft claims, and can then carry on an exploration proposal similar to the above-outlined proposal, that the applicants be encouraged to re-submit an exploration loan for the entire property.

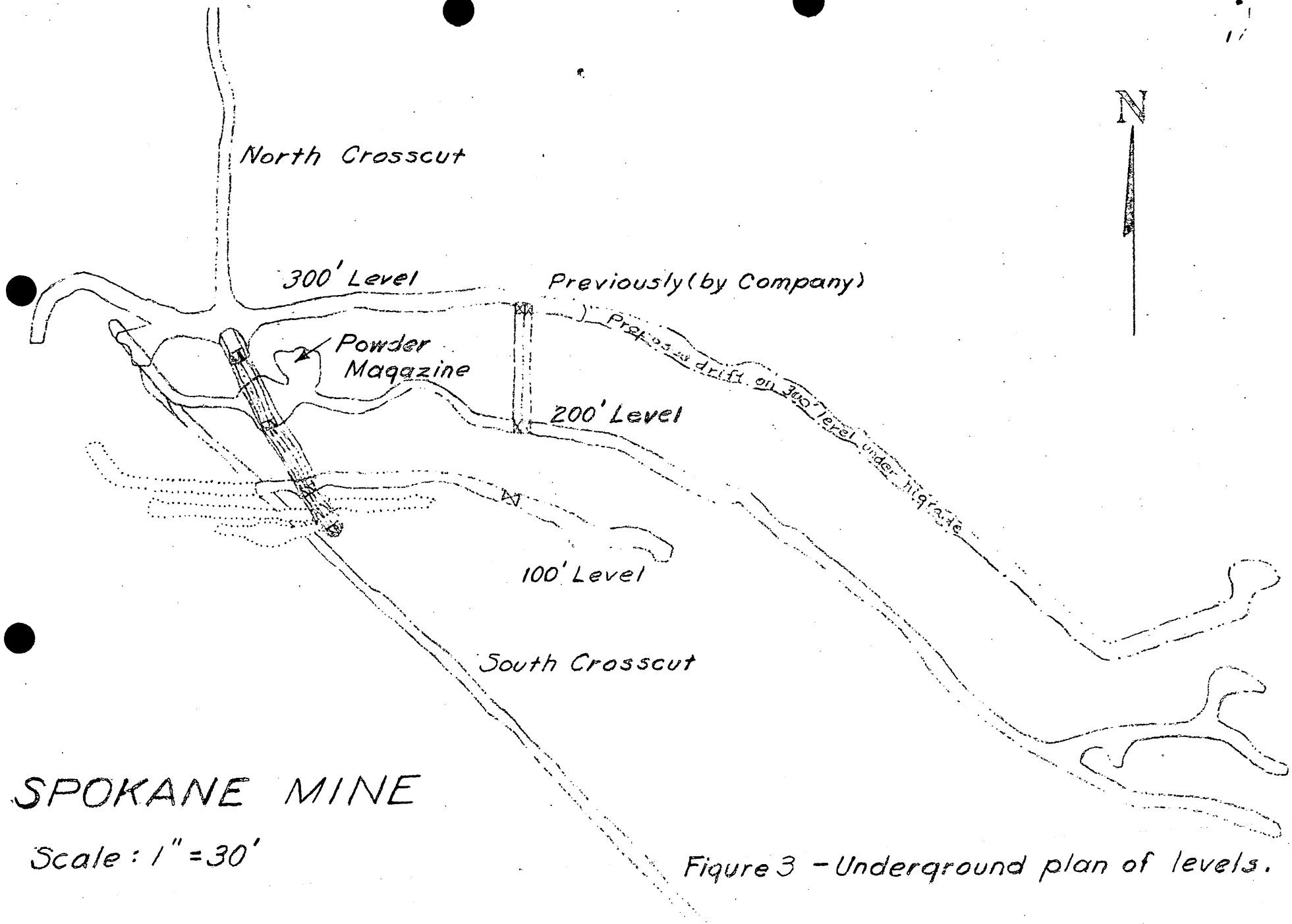

Figure 3 - Underground plan of levels.

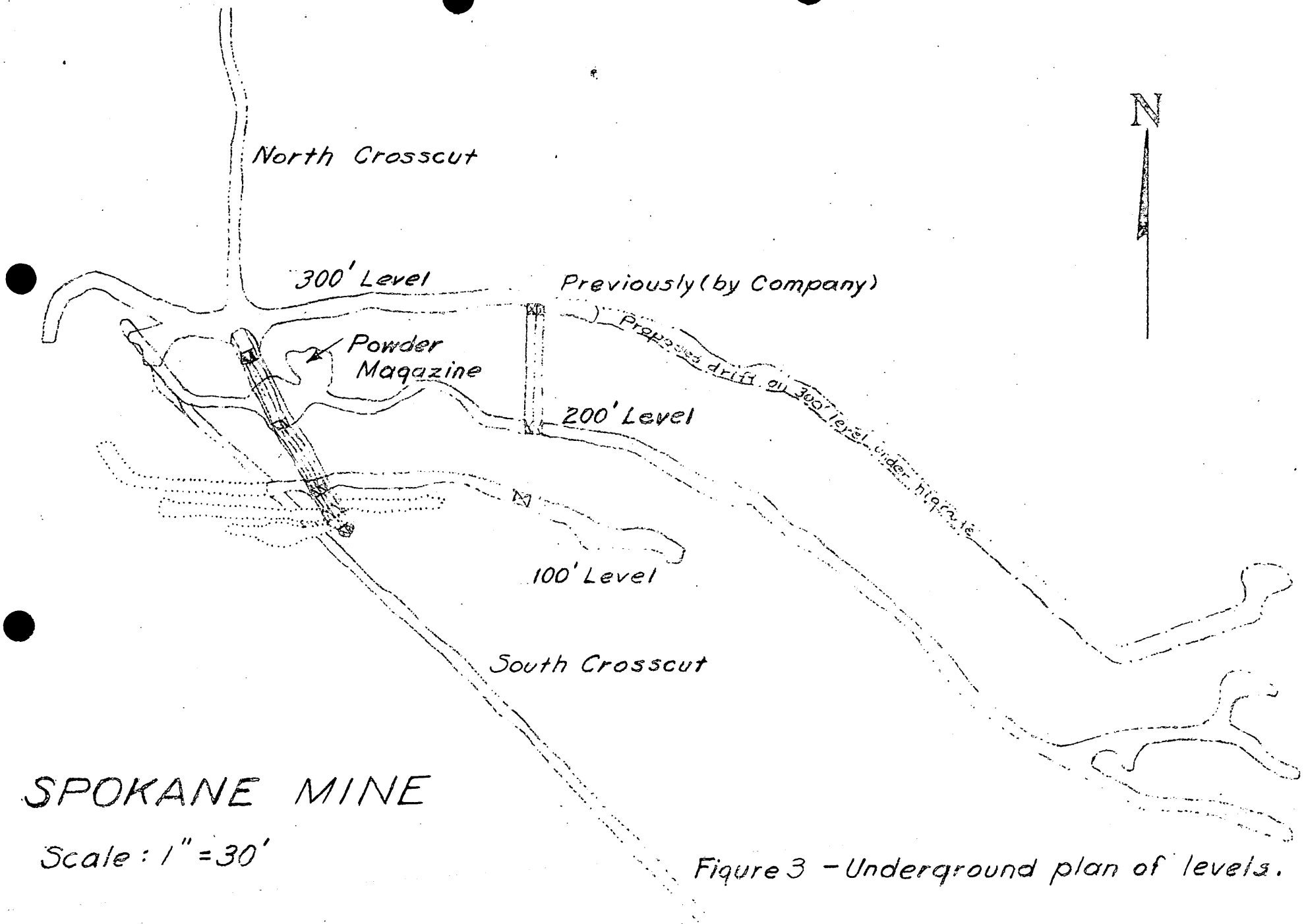

Figure 3 - Underground plan of levels.

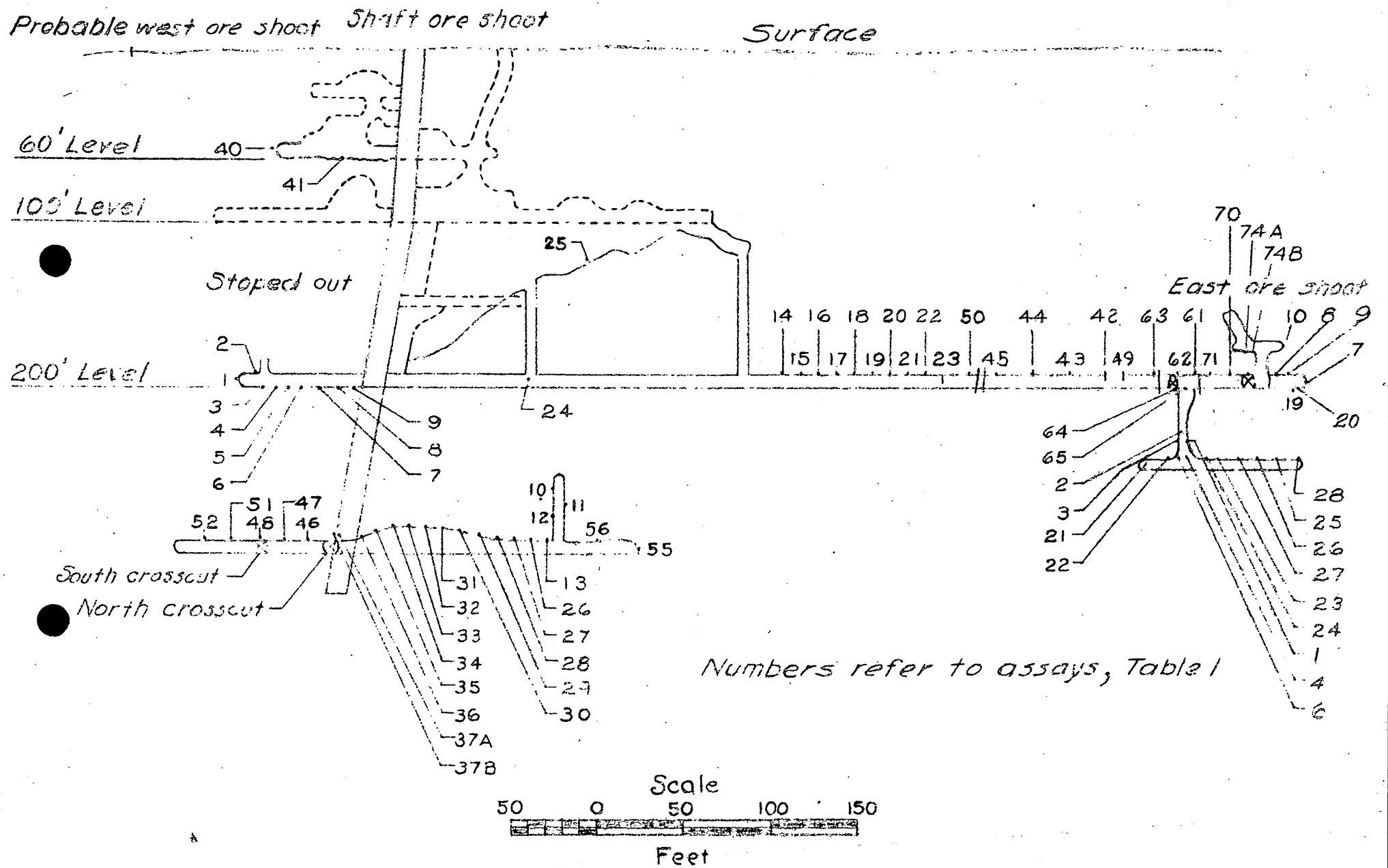

Figure 5 - Assay and elevation map of Spokane Mine

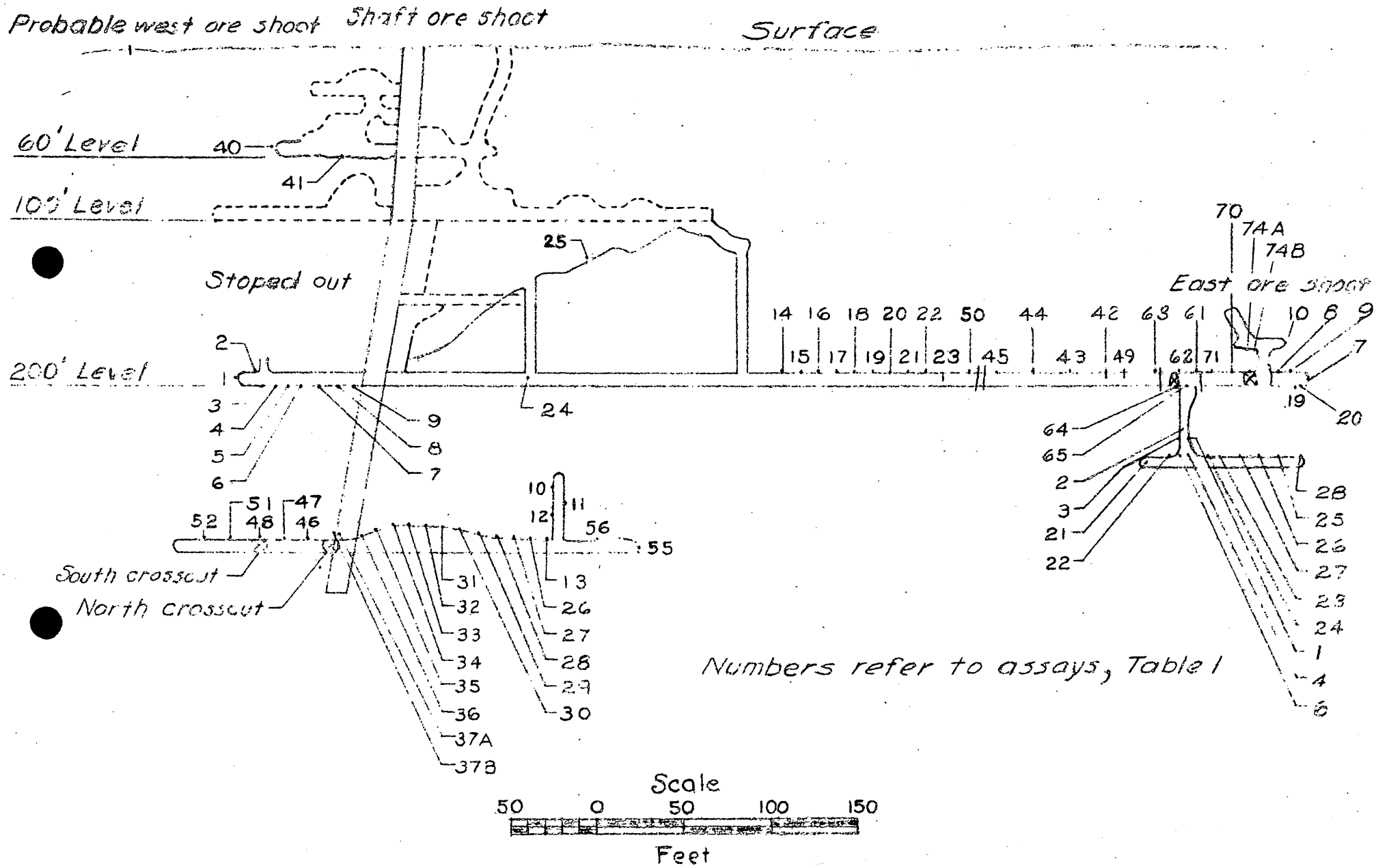

Figure 5 – Assay and elevation map of Spokane Mine