UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICE OF
REGIONAL DIRECTOR

REGION IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

Air Mail

August 28, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1731X, Spider Uranium Company, Fish Springs Mining District, Juab County, Utah

Enclosed are original and two copies of the above report.

The geologists recommend denial of the exploration grant until further exploration work reveals more promising showings.

We concur with this recommendation.

J. H. East, Jr.

J. H. East, Jr.

Ogden Tweto

for A. H. Koschmann

enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Administration
200 New Customhouse
Denver 2, Colorado

August 22, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1731X, Spider Uranium Company, Fish Springs Mining District, Juab County, Utah

Enclosed are 8 copies of a geologic report by D. C. Arnold and G. C. Simmons of the U. S. Geological Survey covering the above docket.

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 307, 320 South Main
Salt Lake City 1, Utah
14 August 1951

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA 1731X, Spider Uranium Company, Fish Springs Mining District, Juab County, Utah

Please find enclosed 8 copies of a report on the Spider Uranium Mining Company Docket, DMA-1731X, Fish Springs Mining District, Juab County, Utah.

In response to a request from the Field Team, Region IV dated July 20, 1951, the property was examined July 26-27, 1951 by D. C. Arnold and G. C. Simmons, of the U. S. Geological Survey.

The uranium mineralization in the Honeycomb Hills occurs as fillings and coatings on fractures in rhyolite and rhyolite breccia. The uranium mineralization thus far discovered is discontinuous and of low grade; it is concluded that the property does not warrant an exploration loan at this time, and it is recommended that the loan for exploration be denied. The applicant proposes to do further exploratory work; if this work is successful, it is suggested that the property be re-examined.

I concur with the examining geologists conclusions and recommendations that the application for an exploration loan be denied until further exploratory work reveals more promising showings.

Ralph J. Roberts

AUG 1951
RECEIVED

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA-1731X, Spider Uranium Mining Company

Juab County, Utah

(Uranium)

D. C. Arnold and G. C. Simmons, Geologists
U. S. Geological Survey

August 13, 1951

CONTENTS

	Page
Introduction	1
Geology	2
Uranium deposits	3
Ore reserves	4
Proposed Exploration	4
Conclusions and Recommendations	5

ILLUSTRATIONS

Figure 1. Index map

Figure 2. Geologic Sketch Map of the Spider No. 1 Claim

Figure 3. Map of Inclined Adit

Figure 4. Section Along Inclined Adit

Docket DMA 1731X, Spider Uranium Mining Company

Fish Springs Mining District

Juab County, Utah

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Spider Uranium Mining Company, Docket DMA 1731X, Fish Springs Mining District, Juab County, Utah made application for an exploration loan of $68,800.00 for further exploration of Uranium.

In response to a request by the Field Team, Region IV, the property was examined by D. C. Arnold and G. C. Simmons of the U. S. Geological Survey July 26-27, 1951. The property has previously been examined by Mr. M. H. Staatz and H. L. Bauer as part of the Trace Elements program of the U. S. Geological Survey.

The property is approximately 15 miles southeast of the town of Callao in the Honeycomb Hills. The Honeycomb Hills are composed of rhyolite and rhyolite breccia. The rocks dip away from the workings on both the northeast and the southwest sides. This dip appears to be primary flow structure rather than the result of later folding. No faults of large displacement were observed, but numerous faults of small displacement occur in the first 250 feet of the incline.

The Uranium minerals at the Spider Uranium Claims occur as yellow-green flakes filling fractures and as coatings on fracture surfaces in both the rhyolite and rhyolite breccia. The minerals have been identified by the U. S. Geological Survey as being sklodowskite and soddyite (uranium silicates). The association of fluorite and hydrothermal (?) montmorillonite with the uranium mineralization suggests that the uranium minerals have not been transported far from the place of primary deposition.

Exploratory work to date has not revealed any concentration of uranium of minable size. As the uranium minerals form thin fillings and coatings in widely spaced fractures, calculation of ore reserves is impracticable.

The applicant has proposed two exploration projects: (1) to extend the incline adit 1,000 feet, and (2) to explore promising areas by 4,000 feet of diamond drilling.

Because the uranium mineralization thus far discovered is discontinuous and of low grade, it is concluded that the property does not at this time warrant an exploration loan.

The applicant plans to continue exploratory work, and it is recommended that the property be re-examined after the tunnel has been extended 300 feet. If the uranium mineralization then shows an increase in size or grade, the property should be reconsidered for an exploration loan.

Docket DMA 1731X, Spider Uranium Mining Company

Fish Springs Mining District

Juab County, Utah

INTRODUCTION

Docket DMA 1731X is an application outlining a $68,300.00 exploration at the Spider Uranium Mine, in the Honeycomb Hills, Juab County, Utah. The program proposes 1,000 feet of incline and 4,000 feet of diamond drilling to explore the downward extension of uranium mineralization exposed by surface workings.

In response to a request by the Field Team, Region IV, the property was examined by David C. Arnold and George C. Simmons of the U. S. Geological Survey July 26-27, 1951. M. H. Staatz, of the Survey, accompanied these men on the first day of the examination. Mr. O. F. Baur, Secretary-Treasurer, and Mr. J. W. McAffee, President of the Spider Uranium Company, were at the property during the examination.

The property had previously been examined in October 1950, as part of the Trace Elements program, by M. H. Staatz and H. L. Bauer of the Geological Survey, who prepared a memorandum report[1].

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[1] Staatz, M. H. and Bauer, H. L., Jr., Preliminary examination of the Uranium Prospect at the Spider No. 1 claim, Honeycomb Hills, Juab County, Utah: Trace Elements Memorandum Report 165, Oct. 1950.

Uranium mineralization was first discovered on the northwestern side of the Honeycomb Hills, a group of hills that rise about 500 feet above the valley floor, in May, 1950, by H. P. Bertelsen of Marysvale, Utah. Since then the deposit has been prospected by three open pit cuts and a 560-foot inclined

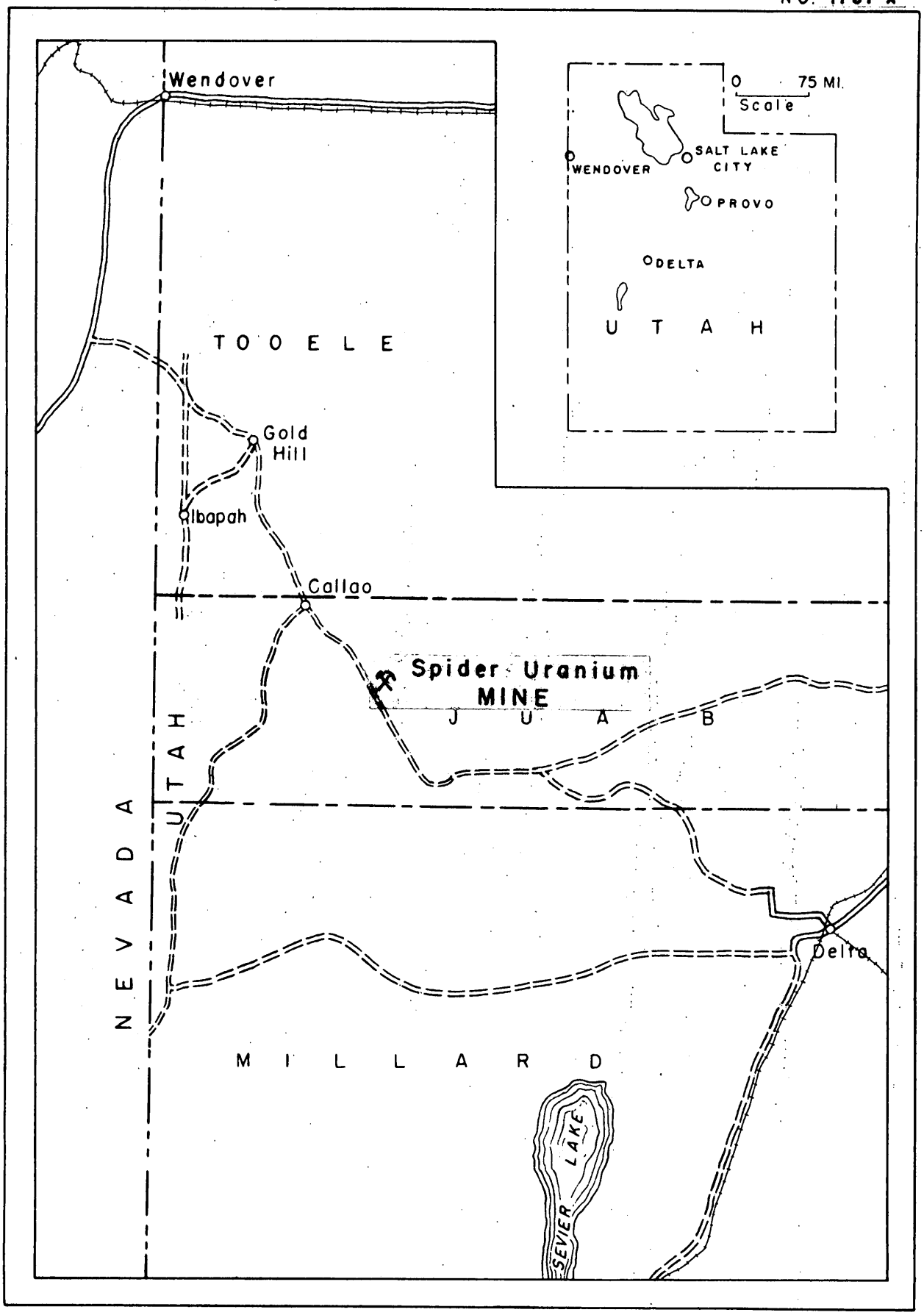

FIG. I

INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

adit (see fig. 2). The workings are on the northwestern side of the Honeycomb Hills.

The property consists of six unpatented claims in the Fish Springs Mining District, Juab County, Utah, approximately 15 miles southeast of the town of Callao. It is accessible by a secondary all-weather dirt road, which extends northwestward from Delta through Callao and Gold Hill and connects with U. S. Highway 50 about 27 miles south of Wendover, Utah. The Honeycomb Hills are near this road, 15 miles southeast of Callao and 76 miles northwest of Delta (see fig. 1).

GEOLOGY

The Honeycomb Hills are composed of rhyolite and rhyolite breccia. The rhyolite is a light-gray rock containing phenocrysts of quartz, sanadine, topaz, and biotite in an aphanitic matrix. It is underlain by a rhyolite breccia of about the same composition, but the breccia contains blocks and fragments of gray rhyolite and a dark, fine-grained rock that appears to be basalt. About 30 feet below the contact of the rhyolite and the rhyolite breccia is a 70-foot zone in which the basalt fragments have been oxidized and have stained the matrix orange, thus giving the rhyolite breccia the appearance of consisting of at least two distinct units.

The portal of the adit is on the northwest side of Honeycomb Hill. The adit passed through the orange-stained zone 140 feet vertically below the portal, where it entered a unit closely resembling the unstained upper rhyolite breccia zone; this bottom zone, however, is less consolidated.

The structure of the rocks in the mine area is simple. The rocks dip away from the portal on both the northeast and the southwest sides. This dip appears to be primary flow structure rather than a result of later folding.

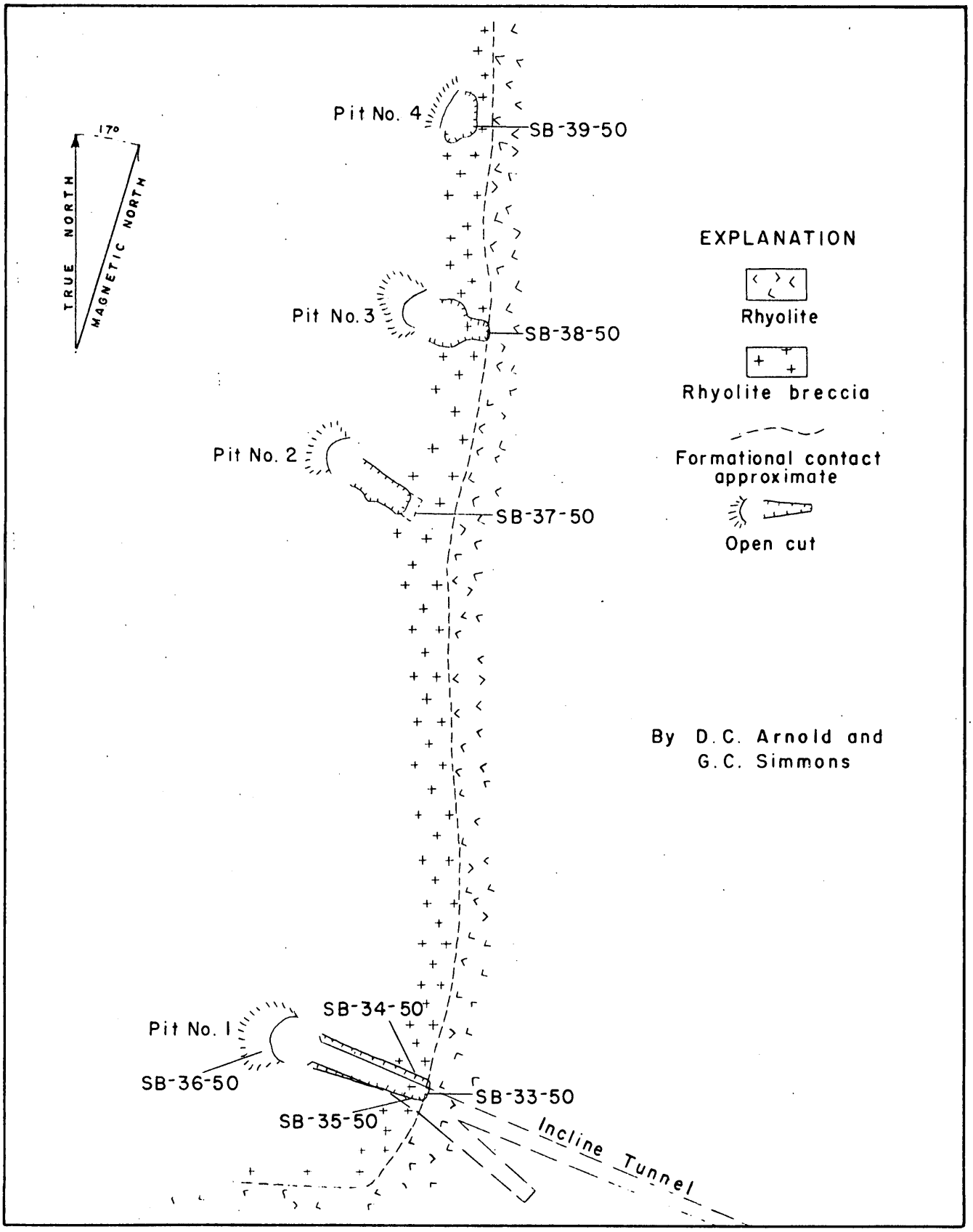

FIG. 2 GEOLOGIC MAP OF THE SPIDER NO. 1 CLAIM, FISH SPRINGS MINING DISTRICT, JUAB COUNTY, UTAH

0 40 80 FEET
Scale

No faults of large displacement were observed, but numerous faults of small displacement occur in the first 250 feet of the incline (see figs. 3 and 4).

Uranium Deposits

The uranium minerals at the Spider Uranium Claims occur as yellow-green flakes filling fractures and as coatings on fracture surfaces in both the rhyolite and rhyolite breccia. Fluorescent opal is present in small nodules and veins. The rhyolite breccia has been altered to montmorillonite along fractures. Fluorite was noted in a small vein that crops out in the rhyolite about 1,000 feet south of the portal.

Mr. Staatz reported that the uranium minerals have been identified by the U. S. Geological Survey as sklodowskite and soddyite (uranium silicates). The montmorillonite forms seams up to a quarter of an inch in width. A zone of alteration extends a few inches away from the seams into the fresh country rock, suggesting that the fractures were channelways for hydrothermal solutions.

The association of fluorite and hydrothermal (?) montmorillonite with the uranium mineralization suggests that the uranium minerals have not been transported very far from the place of primary deposition.

Ore Reserves

Samples taken from Spider No. 1 Claim[/] (see fig. 2).

Sample Number	Location	Percent Uranium
SB-33-50	Face; pit No. 1	0.034
34-50	East wall, pit No. 1	0.059
35-50	West wall, pit No. 1	0.060
36-50	Dump, pit No. 1	0.022
37-50	Face, pit No. 2	0.004
38-50	Face, pit No. 3	0.014
39-50	Face, pit No. 4	0.024

Exploration work to date has not revealed any concentration of uranium of minable size. As the uranium minerals form thin fillings and coatings in widely spaced fractures, calculation of ore reserves is impracticable.

[/]Chemical analysis by U. S. Department of Interior, Geological Survey, Denver, Colorado.

PROPOSED EXPLORATION

The applicant has proposed two exploration projects: (1) to extend the incline adit 1,000 feet, and (2) to explore promising areas by 4,000 feet of diamond drilling.

Project No. 1.

Project No. 1, the extension of the inclined adit, has as its objective the exploration of the ground below the uranium mineralization discovered in the rhyolite 1,000 feet southwest of the portal. The incline would have a total length of 1560 feet, and would attain a vertical depth of approximately 550 feet below the tunnel when the objective is reached.

Although exploration of the uranium showings near the portal and 1,000 feet southwest of the portal is desirable, the outlook for the discovery of ore bodies of minable grade is not good. The company will probably continue its exploration program regardless of the action taken on this application, and it is suggested that the project be reviewed after more exploratory work has been done.

The examining geologists feel that the project as proposed by the company is unnecessarily costly; instead of continuing the incline another 1,000 feet to a point below the southwest showings, it is suggested that a new incline be put down on the southwest showings. Possibly this suggestion should be mentioned to the applicant in future correspondence.

Project No. 2.

Project No. 2 as outlined in the application, consisted of 4,000 feet of diamond drilling in promising areas. As the rhyolite breccia below the orange-stained zone is in places almost unconsolidated, and the uranium minerals occur as coating and fillings on fractures, it is believed that a drilling program would give poor results.

Discussion of the problem with Mr. Baur and Mr. McAffee disclosed that they would prefer to abandon the drilling program in favor of more drifting. It is therefore suggested that this project not be considered at this time.

CONCLUSIONS AND RECOMMENDATIONS

The uranium mineralization in the Honeycomb Hills occurs as fillings and coatings on fractures in rhyolite and rhyolite breccia. The occurrence of fluorite and hydrothermal alteration in the area of uranium mineralization indicates that the uranium minerals have not been transported very far from the place of primary deposition.

Because the uranium mineralization thus far discovered is discontinuous and of low grade, it is concluded that the property does not at this time warrant an exploration loan.

In view of the fact that the applicant plans to continue exploration work, it is recommended that the property be re-examined after the tunnel has been extended 300 feet. If the uranium mineralization then shows an increase in size or grade, the property can be reconsidered for an exploration loan.

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
SEP 17 1951
BUREAU OF MINES
DENVER, COLORADO

Mr. James F. Baer, Sec. Treas.
Spider Uranium Mining Company
16 North State Street
Preston, Idaho

SEP 12 1951

Re: Spider Uranium Co.
Juab County, Utah
Uranium - DMA-1731x

Dear Mr. Baer:

Your application dated May 28, 1951, DMA docket 1731x, for an exploration project in the sum of $65,800, has been carefully reviewed by the Minor and Rare Metals Branch of the Supply Division.

We regret to advise that it has been decided to deny your application at this time, basing this action on the present lack of evidence to indicate the geologic probability of making a significant discovery.

Should future work on your property bring to light evidence of a more encouraging nature we would be glad to consider a new application.

Yours very truly,

Tom Lyon

Tom Lyon, Director
Supply Division

Ellerson/mb 9-6-51
cc: Adm. Read. File
Lyon
Keiser-Nested, Utah
Field Team IV
Bourret
DMA docket file

J78

gME

Denver 330

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

SEP 1 2 1951

REGIONAL DIRECTOR'S OFFICE
REGION IV
SEP 17 1951
BUREAU OF MINES
DENVER, COLORADO

Memorandum

To: Administrative Management Division

Through: Director, Supply Division

From: Minor and Rare Metals Branch

Subject: Spider Uranium Company
Juab County, Utah
Uranium - DMA docket 1731x

Under date of May 28, 1951, Mr. James F. Barr, Spider Uranium Mining Company, 16 North State Street, Preston, Idaho, submitted the subject application, DMA docket 1731x, for an loan in the amount of $60,000.

Attached hereto find letter of even date addressed to applicant advising that the application must be denied, basing this action on the field team's recommendation, the reviewers for Defense, A.E.C. and U.S.G.S. concurring in same.

Complete docket is attached comprised of the following:

(a) Three copies of form MF-103 with exhibits.
(b) 4 copies of balance sheet.
(c) 1 copy of certificate of assay.
(d) 2 copies of recommendation to field team.
(e) 5 copies of letter from Mr. Page to Mr. Sheldon dated January 30, 1951.
(f) 2 copies of letter from Mr. Lyon to Mr. Barr
(g) 1 copy of field team report.

Weston Bourret
Weston Bourret, Chief
Minor and Rare Metals

Enclosure

Approved:

Tom Lyon
Director, Supply Division

WGordon/mh 9-6-51
cc: Adm. Mead. File
Bourret
Keiser-Hosted, USGS
Field Team IV
DMA docket file

gnte
J.F.L.

Air Mail

August 28, 1952

Memorandum

To: Honorable Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Contract 17XLX, Spider Uranium Company, Fish Springs Mining District, Juab County, Utah

Enclosed are original and two copies of the above report.

The geological reconnaissance denial of the exploration grant until further exploration work reveals more promising showings.

No answer with this recommendation.

J. H. Hoh, Jr.

for Ogden Jeweth
A. M. Mathews

Enclosures

JHE:oj

cc: DMA files
Subject
Chron.

224 New Customhouse
Denver 2, Colorado

July 16, 1951

Memorandum

To: Ralph Roberts (with brochure)
S. R. Wilson
(Through Chief, Mining Division)

From: DMA Field Team, Region IV

Subject: DMA 1731X, Owens F. Baur, Juab County, Utah

We are forwarding you Docket DMA-1731X for uranium property in Juab County, Utah. The brochure is being forwarded to Mr. Roberts. Please furnish a report, paying particular attention to information required in Exhibits A, B, C, D and E.

J. H. East, Jr.

A. H. Koschmann

Attachment

JHE:oj
cc: Koschmann - 2
DMA Files

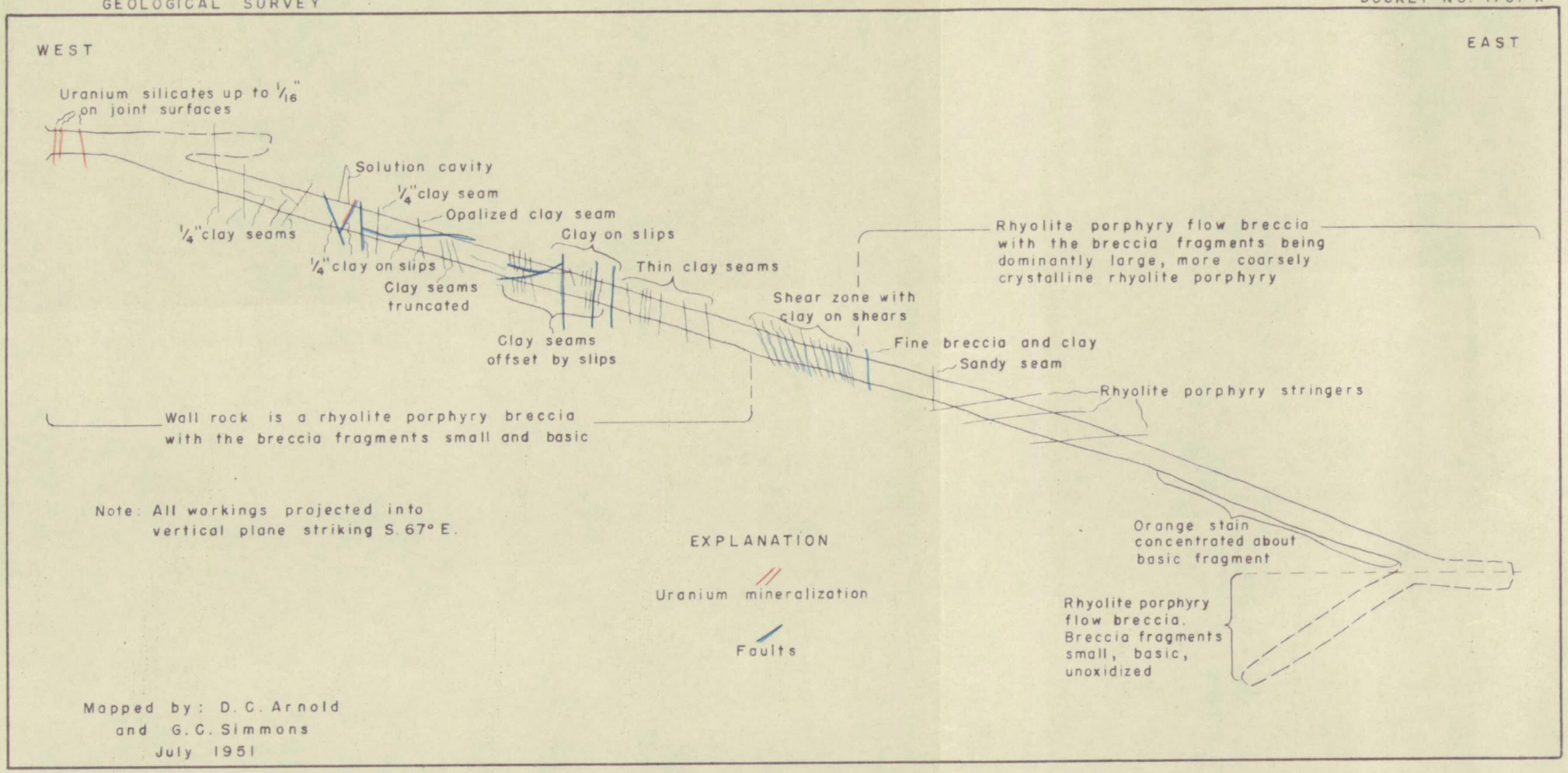

FIG. 4

SECTION ALONG DRIFT

SPIDER URANIUM MINE - FISH SPRINGS MINING DISTRICT, JUAB COUNTY, UTAH

0 40 80 FEET
Scale

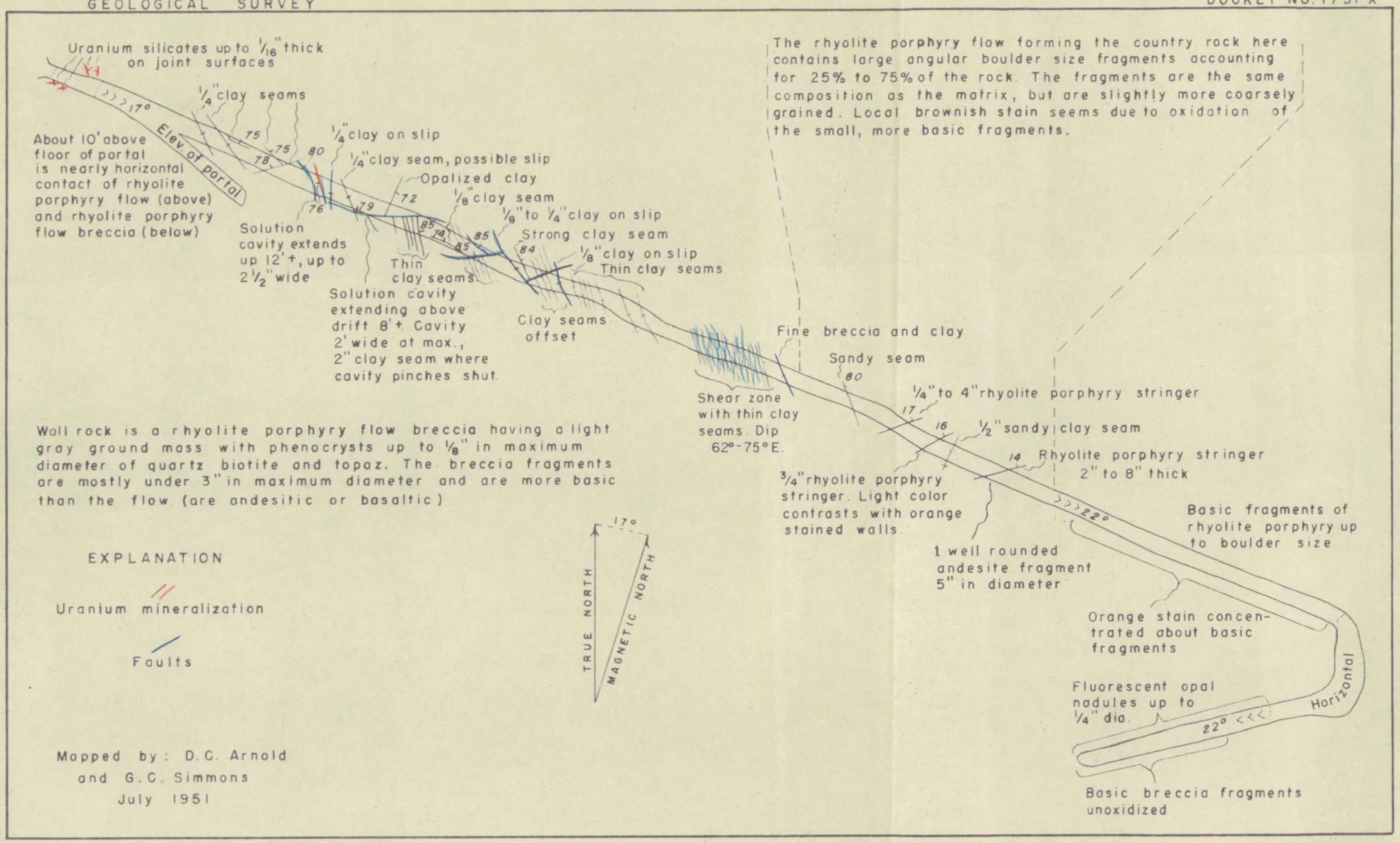

FIG. 3 SPIDER URANIUM MINE - FISH SPRINGS MINING DISTRICT, JUAB COUNTY, UTAH