700

FILE COPY

Surname:

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

Mr. W. E. Fraley
Fraley Brothers Exploration Company
Box 1501
Abilene, Texas

Re: Docket No. DMEA-4368 (Uranium)
Lucy M Claims
San Juan County, Utah

Dear Mr. Fraley:

Your application for aid in an exploration project and other information 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 some uranium mineralization on your property, indicates to us that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

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

Sincerely yours,

G. O. Mittendorf

Administrator

FMMurphy/izm 11-16-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

Docket

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-4368

Commodity: Uranium

Applicant: Fraley Brothers Exploration Company
Box 1501, Abilene, Texas

Property: Lessee of Lucy M nos. 1 through 4 claims. The claims are situated in sec. 8, T. 37 S., R. 16 E., S.L.B,M., San Juan County, Utah.

Amount of Application: $22,450.00

Date of Application: June 25, 1956

More information requested: July 16, 1956

Referred to Region III Field Team: July 26, 1956

Field Examination made: August 22, 1956

Field Team Report received: October 29, 1956.

Work Proposed and Costs:

9,000 ft. of non-core drilling @ $1.75/ft.	$15,750.00	
1,000 ft. of core drilling @ $4.00/ft.	4,000.00	
100 hrs. bulldozer work @ $12.00/hr.	1,200.00	
Supervision	1,500.00	
TOTAL		$22,450.00

No specific drilling locations were stated in the original proposal. However in answer to DMEA requests, the Applicant submitted a proposal to drill eleven offset holes, on about 25-foot centers, around three holes previously drilled which showed ore-grade material, also, other holes to follow out the Shinarump channel. Two copies of the letter and map submitted by the Applicant were forwarded to the Field Team when the application was referred to Region III. However, in the report of examination, the field men state (page 11) that the examining team did not receive a copy of the map.

Excerpts from Field Team Report:

The subject claims are in the Red Canyon area in which a number of ore-bearing Shinarump channels have been discovered. The principal channel in T. 37 S., R. 16 E., is the Cairns channel. The subject claims are located on an indicated tributary to the Cairns.

On the main Cairns channel, small ore deposits have been found at the Uranium King mine (DMEA-3625), the Bulls Eye mine, and the Spook mine. Ore reserves in the Spook mine according to AEC estimates are 17,000 tons averaging 0.25% U_3O_8. The Shinarump is about 15 feet thick outside the Cairns channel, but is about 35 feet deep in the center of the channel.

A small ore body (1,085 tons averaging 0.18% U_3O_8), drilled out by the AEC, lies in the small southwest trending tributary channel that enters the Cairns channel just south of the Spook mine. Apparently the Lucy M claims are situated on this same tributary, the claims starting at a point about 1,200 feet upstream from the AEC discovery.

The Applicant has drilled 24 holes, at an average depth of some 500 feet, on the Lucy M group of claims. With the exception of 3 holes, the drilling was concentrated in the south half of the Lucy M No. 4. Radiometric probing indicated that three of the holes on Lucy M No. 4 penetrated ore, and may indicate an ore body of about 700 tons containing 0.27% U_3O_8 and averaging 1.3 feet in thickness.

The maximum scour of the channel is not known, but is probably lessthan 15 feet. Drilling so far performed indicates the channel has a scour of about 10 feet and is about 200 feet wide. It is about one-half as large as the Cairns channel.

The field examiners recommended that the application be denied without prejudice because:

1. The two ore bodies discovered to date are in the 1,000 ton class, and their thickness and grade is not sufficient to carry the height of a drift;

2. The best possibilities for ore deposits appears to be down channel from the small deposit found on Lucy M No. 4. However, the subject claims extend up river, the south boundary being about 170 feet south of the indicated deposit;

3. The average drilling depth to explore for the channel, 500 feet, is believed excessive and costly in relation to the value of any ore body that might be found; and

4. It is questionable that small, thin ore deposits could be mined economically at a depth of 500 feet.

The Field Team recommends an outright denial of the application.

Commodity Member's Comments:

USBM, J. E. Crawford, November 14, 1956:

Mr. Crawford concurs in the Field Team's recommendation of denial.

USGS, W. P. Williams, November 15, 1956:

Mr. Williams summarizes the unfavorable geologic characteristics of the property and concludes that the possible small ore bodies scattered along the small erratic channel would not present good targets for a drilling project. Moreover, an inclined adit-drift, intended to follow the narrow channel would most certainly be a hit or miss proposition. Even the large, well developed channels, like the Cairns channel, are difficult to follow underground.

Because of the many adverse factors relating to the subject property, Mr. Williams agrees with the field examiners and Field Team that the application should be denied.

Rare and Miscellaneous Metals Div., F. M. Murphy, November 16, 1956:

The Applicant's drilling has indicated that an ore-bearing Shinarump channel occurs on the subject claims. However, the possible small ore bodies, and their thin minable widths do not appear to be commensurate in value with the cost of exploration and possible latter exploitation because of their depth, 500 feet, from the surface.

Conclusion and Recommendation:

This Division concurs in the Field Team's recommendation to deny the subject application.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

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

IN REPLY REFER TO:

RECEIVED
NOV 15 1956
D.M.E.A.

November 15, 1956

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Field examination report, DMEA 4368, Fraley Bros. Exploration Company, Lucy M claims, San Juan County, Utah, (uranium).

The examining team report that a relatively small channel, tributary to the large, well developed Cairns channel, trends onto the subject property.

The examining team lists several characteristics that make the property unsuitable for DMEA participation. Among these are: 1) of 24 drill holes completed by the applicant only three gave anomalous radiometric readings that, in the examining team's opinion, would not be of ore grade, 2) the channel on the property is small--with only about 10 feet of scour, 3) the potential ore zone lies at a depth of about 500 feet, 4) known ore bodies in the Cairns channel are not large, so that ore bodies in the small channel could not be expected to exceed 1,000 tons in size. Moreover, the ore, if present, is expected to be thin, 5) the most favorable part of the small channel lies to the southwest of the applicant's property in an area now ineligible for DMEA participation.

The possible small ore bodies scattered along the small erratic channel would not present good targets for a drilling project. An inclined adit-drift, intended to follow the narrow channel would most certainly be a hit or miss proposition. Even the large, well developed channels, like the Cairns channel, are difficult to follow underground (DMEA 3625).

There appear to be too many adverse factors about the subject property where DMEA is concerned. The chances that even enough ore could be found to repay exploration costs are not good. Under the circumstances I find myself in agreement with the field examiners' and Field Team's recommendations for denial of the application.

W. P. Williams

W. P. Williams

11-15-56

RECEIVED NOV 15 1956 D.M.E.A.

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

Date 11/14/56

DMEA Docket No. 4368
DMEA Contract No.
Commodity Uranium
Name of applicant Fraley Bros. Exploration Co.
Name of property Lucy M group
Location of property San Juan County, Utah
Estimated cost of project $22,450

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: Oct. '56. 2. Date received by reviewer: 11/2.

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location ☐
   b. Ownership ☐
   c. Evidence of mineralization ☐
   d. Geology ☐
   e. Proposed exploration method ☐
   f. Alternate exploration method ☐
   g. Costs ☐
   h. _____ ☐

9. Action advised:
   a. Obtain information from applicant ☐
   b. Refer to Field Team ☐
   c. Denial [x]
   d. Agree with Field Team [x]
      i. Consult with Mr. _____ at _____ AEC office.
   e. Disagree with Field Team ☐
   f. Suggest alternate plan ☐
   g. Request another examination ☐
   h. Approval ☐

10. Remarks: (Use back of page if necessary)

Mr. J. O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

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

RECEIVED
OCT 31 1956

224 New Customhouse
Denver 2, Colorado

October 29, 1956

Mr. W. E. Fraley
Fraley Brothers Exploration Company
P. O. Box 1501
Abilene, Texas

Re: Docket DMEA 4368
(Uranium) Lucy "M" Claims
San Juan County, Utah

Dear Mr. Fraley:

This is to advise that the Report of Examination on the captioned property was forwarded the Washington Office, DMEA on October 26, 1956. They will advise you at an early date, concerning their action in this matter.

Yours very truly,

Original signed by
W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

HMC:ytl
cc
Sec. Op. Comm. (2)
Harshman
Docket 4368
Chron.

11/5/56 gla

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

RECEIVED
OCT 29 1956

224 New Customhouse
Denver 2, Colorado

October 26, 1956

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region III

Subject: Joint Report of Examination Docket DMEA 4368 (Uranium)
Fraley Brothers Exploration Company (Lucy M group)
San Juan County, Utah

Enclosed are the original and three copies of a joint engineering and geologic report of examination on the subject property.

The field examiners concur in the belief that further exploration of the property is not warranged. They recommend that the application be denied without prejudice.

We recommend that the application be denied.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Reviewed by
DMEA OPERATING COMMITTEE
11/2/56
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
OCT 26 1956
REGION III
DENVER, COLORADO

TRANSMITTED
OCT 26 1956

October 25, 1956

Memorandum

RECEIVED
OCT 29 1956

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw
E. N. Harshman

Subject: DMEA Docket 4368 (Uranium), Fraley Brothers Exploration Company (Lucy M group) San Juan County, Utah

Enclosed are the original and nine copies of a joint examination report by F. M. Byers, Jr., U. S. Geological Survey, and J. F. Robertson, U. S. Bureau of Mines, in which denial of the application for exploration assistance without prejudice is recommended.

It is our opinion that an outright denial of the application is proper. This recommendation is based on the depth of possible ore bodies (about 500 feet), their probable size (1,000 tons or less), their probable grade (0.15 to 0.20 percent U_3O_8) and the character of the small channel in which they may be found.

The report contains considerable data on the probable character of the ore bodies that might be found on the property by additional exploration. These data lead us to conclude that the significance of such ore bodies is not commensurate with the cost of exploring for them.

A Kousehu au for
John F. Shaw
Supervising Mining Engineer

E. N. Harshman
E. N. Harshman
Member, Field Team

Enclosures (10)

Reviewed by
DMEA OPERATING COMMITTEE
11/2/56
(date)

MINERALS
IN REPLY REFER TO:
DMEA
RECEIVED
OCT 23 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

RECEIVED
OCT 29 1956
DMEA
DEPARTMENT OF THE INTERIOR
OCT 26 1956
REGION III
DENVER, COLORADO

TRANSMITTED
OCT 26 1956

October 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
J. F. Shaw

From: F. M. Byers, Jr.

Subject: DMEA 4368, Fraley Brothers Exploration Company (Uranium)
Lucy M Group, San Juan County, Utah

Fraley Brothers Exploration Company, P. O. Box 1501, Abilene, Texas, have applied for DMEA assistance to explore the Lucy M group of claims, in the Red Canyon area, San Juan County, Utah. They have requested approximately 9,000 feet of noncore drilling and 1,000 feet of core drilling to test the Shinarump member of the Chinle formation for uranium-bearing channels. Total estimated cost of the program would be $22,450 with Government participation at $16,837.50.

The property was examined on August 22, 1956, by F. M. Byers, Jr., Geological Survey, and H. F. Robertson, Bureau of Mines. The development work by applicant consists of 24 noncore drill holes, most of which are on the two westerly claims of the four claims included in the application. Three of the holes were logged by Radiogeophysical Corporation and were found to contain 1.0 to 1.5 feet of 0.19 to 0.27 percent eU_3O_8. In the opinion of the examining team these radiometric assays are probably somewhat high. The three reported ore-bearing holes penetrated the ore-bearing zone at or near the bottom of a small Shinarump channel with about 10 feet of scour. Average drilling depths to insure penetration of the ore zone are about 500 feet on the property.

The small ore-bearing channel discovered by the private drilling on the Lucy M claims probably connects with another similar small channel near the Spook Mine, one-half mile to the southwest. This small channel is probably a tributary to the much larger Cairns channel which has 20 feet of scour and has localized an ore body of about 20,000 tons at the Spook Mine. A small ore body of about 1,000 tons has been indicated by A.E.C. drilling in the smaller channel, tributary to the Cairns. Likewise, the private drilling by Fraley Brothers has indicated about 1,000 tons of marginal ore, which would not carry a full face of working drift in ore.

Reviewed by
DMEA OPERATING COMMITTEE
11/2/56
(date)

DMEA 4368 10/22/56

In view of the association of small marginal ore bodies with a small Shinarump channel, and also in view of the average drilling depth of 500 feet, the examining team recommends that the application of Fraley Brothers Exploration Company, under docket 4368, be denied without prejudice. However, the examining team has included costs of ~~for~~ a possible exploration program in the event the Field Team considers that the property warrants exploration under DMEA. I concur with the recommendations of the examining team.

Enclosed are the required number of reports, including maps, and the applicant's brochure.

F. M. Byers, Jr.
For J. William Hasler,
Geologist

JWH/mlr

Enclosures

FOR UNITED STATES GOVERNMENT USE ONLY

TRANSMITTED
OCT 26 1956

RECEIVED
OCT 29 1956

UNITED STATES
DEPARTMENT OF INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

DMEA 4368

Fraley Brothers Exploration Company

Lucy M Group

San Juan County, Utah

Uranium

Joint Engineering and Geologic Report

By

H. F. Robertson
Bureau of Mines

F. M. Byers, Jr.
Geological Survey

October 1956

Reviewed by
DMEA OPERATING COMMITTEE
11/2/56
(date)

DMEA 4368

FRALEY BROTHERS EXPLORATION COMPANY

RECEIVED
OCT 29 1956

INTRODUCTION

Fraley Brothers Exploration Company, P. O. Box 1501, Abilene, Texas, made application on June 25, 1956, for DMEA participation in an exploration program on the Lucy M group of claims in the Red Canyon area. The application requested aid in approximately 9,000 feet of non-core drilling and 1,000 feet of core drilling designed to test the Shinarump member of the Chinle formation for significant bodies of uranium ore. The total estimated cost of the proposed program is $22,450 with Government participation at 75 percent or $16,837.50.

The claims were examined on August 22, 1956 by H. F. Robertson, Bureau of Mines and F. M. Byers, Geological Survey.

The property consists of four contiguous lode mining claims, totaling about 65 acres, and located in Section 8, T. 37 S., R. 16 E., Salt Lake Principal Meridian, Red Canyon area, San Juan County, Utah. Development work by the applicant consists of an access road and 24 non-core drill holes. Three of the holes drilled are reported as ore holes (1.0 to 1.5 feet of 0.19 to 0.27 percent eU_3O_8). There has been no production from the subject property.

Ore deposits on the property, if they exist, would be found in the lower part of the Shinarump conglomerate and would be localized by channel scours into the underlying Moenkopi formation.

The examining team recommends denial without prejudice of the application by Fraley Brothers Exploration Company. All available information indicates that the possibilities of discovering significant ore bodies on the subject property are too remote to justify exploration by drilling holes averaging 500 feet in depth.

However, a possible exploration program is submitted for the Field Team's use in the event that an exploration contract is judged feasible.

ACKNOWLEDGEMENTS

The examining team was accompanied by W. E. Fraley who represented the Fraley Brothers Exploration Company, a partnership.

Information concerning the Cairns channel and possible occurrences of significant bodies of uranium ore on the subject property was obtained from Robert L. Akright, R. J. Cronk, and Eugene W. Oertell, Atomic Energy Commission personnel at the AEC camp in White Canyon, Utah. Ross Seaton, Chief Geologist and Daryl Spencer, geologist, of COG (Colorado Oil and Gas) Minerals Corporation (organized in 1956) conducted the DMEA geologist through the Spook Mine, half a mile southwest of the subject property.

Memoranda from James Paone, USBM, and W. P. Williams, USGS, were noted and given due consideration.

LOCATION, TOPOGRAPHY, AND CLIMATE

The property consists of 4 unpatented lode mining claims, contiguous, and covering an area of about 726 acres. The claim group is located in Section 8, T. 37 S., R. 16 E., SLM, Red Canyon area, San Juan County, Utah (figs. 1 and 2). The applicant places the claims in Section 8, T. 37 S.,

R. 15 E. whereas they are actually located in Section 8, T. 37 S., R. 16 E. This error was not discovered until the examining team attempted to plot the claims on a topographic map and correlate them with the known position of the Uranium King mine (DMEA 3625). The applicant has not been notified of the error in location.

The altitude of the area ranges from 5,800 feet to 6,800 feet, averaging about 6,000 feet along the bench on which the proposed exploration would be performed. Steep slopes and benches of the Chinle formation, covered by landslide debris at the base of vertical cliffs of the Wingate formation, and cut by narrow steep-walled gulches, comprise the rugged terrain on the property.

The climate is arid, hot in summer, and moderate in winter, with low total precipitation, but subject to severe storms of short duration in any season. Year round operations are carried on both underground and on the surface. Water and vegetation are sparse.

The property is 10 miles by good access road from the Frey Canyon store, and 61 miles further from Blanding, Utah, over State Highway 95, a graveled road. Blanding is 200 miles over surfaced highways from Grand Junction, Colorado, where complete stocks of mining supplies are maintained. Repair services, limited supply stocks, and the uranium ore buying station and treatment plant of the National Lead Company are located at Monticello, Utah, 22 miles north of Blanding. The White Canyon ore buying station is 26 miles from the subject property.

Power for a mining operation must be furnished by the individual operator, using gasoline or diesel-powered equipment. Water for domestic and mining use is obtained from springs in Frey Canyon. Run-off is also caught in retaining ponds when possible. In dry seasons, water for exploration needs on the Lucy M claims would have to be hauled about 10 miles.

HISTORY, PRODUCTION, AND ORE RESERVES

The White Canyon and Red Canyon districts date from 1951 with the discovery of minable ore in channel outcrops of the Shinarump formation on the slopes above the main canyons. The Atomic Energy Commission has carried on an extensive drilling project which has resulted in the discovery of a number of ore bodies in Shinarump channels. A number of mining operations have been carried on with substantial production.

The production and ore reserves of two mines on the portion of the Cairns Channel shown in figure 2 is given in table 1. The reserves of the Spook Mine indicate that it has one of the larger ore bodies in Red Canyon.

Table 1.--Production and Reserves from mines shown on figure 2.

		Production		Reserves: Indicated & Inferred	
DATE	CLAIM	TONS	$\%U_3O_8$	Tons	$\%U_3O_8$
2nd Quarter '56	Bullseye No. 6[1]	323	0.11	10,700	0.67
1954-55	Spook	2,011	0.18	(4,900	0.30)[2]
1st Quarter '56	do.	1,280	0.33	(8,000	0.20)[2]
2nd Quarter '56	do.	1,538	0.23[3]	6,460	0.19
Total, Spook Mine		5,152	0.25	17,160	0.50

Table 1.--Production and Reserves from mines shown on figure 2 (cont'd.)

		Production		Reserves: Indicated & Inferred	
DATE	CLAIM	TONS	$\%U_3O_8$	TONS	$\%U_3O_8$
3rd Quarter '55	Cove	37	0.06	(1,100	0.20)2/
4th Quarter '55	do.	138	0.15		
1st Quarter '56	do.	733	0.20	(1,500	0.27)2/
2nd Quarter '56	do.	1,112	0.30	390	0.25
Total, Uranium King Mine		2,020	0.25	390	0.25

1/ Claim worked from Spook Mine, not from Bullseye Mine, from which there has been no production to date.

2/ Not included in total; upward revision of reserves was necessitated by recent mining development

3/ Ore also contained 1.62 percent copper

OWNERSHIP AND EXTENT

The four Lucy M claims were originally owned by B. K. Hess and wife, Jesse McAlister and wife, and R. D. McAlister and wife (figure 2). The claims are recorded at the San Juan County Courthouse at Monticello, Utah, as follows:

CLAIM NAME	BOOK	PAGE
Lucy M no. 1	315	387
Lucy M no. 2	315	387
Lucy M no. 3	315	388
Lucy M no. 4	315	389

The claim group consists of four unpatented lode mining claims covering an area of about 65 acres on the southeastern side of a mesa known as Moss Back.

On December 16, 1955, the owners of the claims entered into an agreement with Fraley Brothers, a partnership. By this agreement, Fraley Brothers was obligated to do 20,000 feet of exploration drilling. In the event that Fraley Brothers discovered a commercial ore body, drilling could be terminated and a mining operation commenced. When the ore body is reached, Fraley Brothers becomes one-half owner of the property and the mining operation becomes a joint operation between Fraley Brothers and the owners.

By mutual agreement (apparently oral) the owners and Fraley Brothers decided to suspend operations after performing about 11,000 feet of drilling (as stated in a letter from the applicant to E. W. Ellis, dated July 21, 1956) and apply for DMEA assistance.

The applicant appears to have a valid interest in the subject property.

The usual consents to lien from the various owners would be required in the event of a project approval.

PRESENT STATUS

EXPLORATION AND DEVELOPMENT

The applicant has drilled 24 holes on the Lucy M group of claims as shown on figure 3. With the exception of hole Nos. 2, 3, and 4, the exploration was concentrated in the south half of the Lucy M No. 4. Three of the holes (figure 3 and Table 2) are reported to have penetrated ore as shown on probing records by Radio Geophysical Corporation and may indicate a small ore body of about 700 tons containing 0.27 percent eU_3O_8 and averaging 1.3 feet in thickness.

The 24 holes and the necessary access roads constitute the total exploration and development performed on the claim group as of the date of examination.

MINING EQUIPMENT AND OTHER FACILITIES

There was no mining or exploration equipment on the property at the time of the examination.

Exploration and mining personnel would live in housetrailers, probably in Frey Canyon near domestic water supplies.

A fair access road connecting the property with the main graveled road into Red Canyon, has been constructed by the operator.

GEOLOGY

The Lucy M claims in the Red Canyon district are on the gently southwest-dipping flank of the Monument upwarp. No adequate geologic base of the area is available, other than A. F. Trites' unpublished map, which is at too small a scale. Therefore, the topographic map of White Canyon 4 SW Quadrangle at 1:24,000 is used as the base map for figure 2.

The broad topographic bench in the southern quarter of figure 2 is underlain by the Shinarump member and overlying mudstones of the Upper Triassic Chinle formation. The deeply incised gullies through this bench have cut through the Shinarump into the underlying Moenkopi formation. The slopes above the bench at about 5600 feet up to about the 6400-foot contour is underlain by the Chinle formation. The steep cliffs above the 6400-foot contour and the top of Moss Back are composed of the Wingate and Kayenta sandstones.

The Shinarump conglomeratic sandstone contains the well-known Cairns channel, which turns through an arc of more than 90 degrees in the south and west parts of the area shown in figure 2. The Shinarump is about 15 feet thick outside the Cairns channel, but is about 35 feet deep in the center of the Cairns Channel. A tributary of the Cairns channel apparently extends 0.4 mile northeasterly onto the Lucy M Claims of the applicant (fig. 2). The Cairns channel is inferred by Trites and AEC geologists for at least another 3 miles east of the area shown in figure 2. The Cairns Channel at its northerly end may possibly branch into 2 parts at the Uranium King Mine according to AEC geologists.

ORE DEPOSITS

The Cairns channel within the area of figure 2 contains three mines in order northwestward: The Spook, The Bullseye, and the Uranium King, on which DMEA contract Idm E879, docket 3625, was recently completed. The Bullseye Mine shown on figure 2 should not be confused with the Bullseye No. 6 claim adjacent to the Spook mine. Actually, many claims bearing the name, Bullseye, lie between the Uranium King and Spook Mines but are not shown on Figure 2.

The Spook Mine, which lies closest to the applicant's Lucy M claims, has produced from the ore-bearing Cairns channel. About 5,000 tons (see production and reserves) containing 0.25 percent U_3O_8 has been produced to July 1, 1956, and the AEC estimates 17,000 tons indicated and inferred ore as of that date.

A small ore body, drilled out by the AEC, lies in the small tributary channel that enters the Cairns channel near the Spook Mine (fig. 2.) The reserves of this ore body, as computed by the AEC, are 1085 tons containing 0.18 percent U_3O_8. The average thickness of ore, based on three drill holes, is 2 feet.

Three drill holes on Lucy M No. 4 (fig. 3) are reported to have penetrated ore (see table 2) as probed by Radio Geophysical Corporation. These three ore holes are in a structural low, probably a channel at the base of the Shinarump. Mineralized holes, reported verbally by Mr. W. E. Fraley, also tend to occur in the low part of the channel. One of the ore holes, No. 24, penetrated ore on two horizons 10 feet apart. Assuming that the ore is continuous between the line of holes and extends for 25 feet on either side of the line of holes, about 700 tons of ore containing 0.27 percent eU_3O_8 and averaging 1.33 feet in thickness might be present. In the experience of the examining team, the radiometric grade, as probd by a company is generally nearly double the grade as determined by chemical analysis of core. More likely the grade is between 0.15 and 0.20 percent U_3O_8.

The maximum scour of the channel is not known, but is probably less than 15 feet. In the part of the channel where both parts are exposed, the channel has a scour of about 10 feet and is about 200 feet wide. It is about one half as large as the Cairns channel. The two known ore bodies in the channel are small--in the 1000-ton class--thin, and not too high grade. The thickness and grade would not carry the height of a drift, so that such ore could only be mined by shooting ore and waste separately as a drift is advanced.

Table 2.--Drill Hole Data, Lucy M claims (ore holes)

HOLE NO.	COLLAR ELEVATION (feet)	TOTAL DEPTH	TOP OF MOENKOPI (altitude in feet)	ORE ZONE (altitude in feet)	THICKNESS (feet)	% eU_3O_8
22	6063.4	475	5594	5602	1.5	0.27
23	6056.7	470	5590.7	5594	1.5	0.27
24	6047.8	468	5590.0	5610 5600	1.5 1.0	0.19 0.27

PROPOSED EXPLORATION

No map showing locations of drill holes proposed by the applicant has been received by the examining team. A letter from W. E. Fraley, representing the partnership of Fraley Brothers Exploration Company, to Ernest W. Ellis, DMEA, Washington, D. C. indicates that such a map was submitted and that close-spaced drill holes in the vicinity of the 3 ore holes were proposed. In the Grand Junction DMEA office and later in the field the examining team discussed the exploration program shown on figure 3 with Mr. Fraley. It was intended to drill one more drill hole about 85 feet from drill holes 24, 10, and the SW corner of Lucy M No. 4 claim. Six holes on the Lucy M 3 and 4 claims were intended to test the north-easterly extension of the channel. Average total depth of the holes would be about 500 feet including 60 feet to core the Shinarump and not to exceed 10 feet of the underlying Moenkopi.

Mr. Fraley was informed that discussion of an exploration program did not necessarily imply that his loan application would be approved for a contract.

A second stage, 8 additional holes on two fences, 200 feet apart, was further discussed with Mr. Fraley. These holes would further test the extension of the channel northeasterly and would not constitute offsets to Stage I holes.

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DMEA 4368

ESTIMATED COST OF POSSIBLE EXPLORATION PROGRAM

STAGE I

Estimated time for completion - 1 month
Basis - 1 drill rig - 1 shift per day
25 days per month - 150 feet per day

1. Independent Contracts

Bulldozing for drillsites and access roads (40 hours at $12 per hour)	$ 480.00	
Drilling - 7 holes averaging 500 feet in depth Non-core (average 440 feet per hole) (3,080 feet at $2 per foot)	6,160.00	
Core (average 60 feet per hole) (420 feet at $6 per foot	2,520.00	
Total independent contracts		$9,160.00

2. Labor, Supervision, and Technical Services

1 Engineer-Geologist, full-time (1 month at $600 per month	$ 600.00	
Total labor, supervision, and technical services		$ 600.00

3. Operating Materials and Supplies

Gasoline, oil, and repairs on pickup for engineer-geologist (1 month at $50 per month)	$ 50.00	
50 core-boxes at $1.25 each	62.50	
Drill log forms, surveying and office supplies (1 month at $50 per month)	50.00	
Total operating materials and supplies		$ 162.50

ESTIMATED COST OF POSSIBLE EXPLORATION PROGRAM (cont'd.)

STAGE I

4. Operating Equipment

Rental		none	
Purchase		none	
Depreciation			
1 pickup valued at	$1,800.00		
1 counter & probe valued at	800.00		
	$2,600.00		
Depreciation on 60 month basis			
$\frac{2600}{60}$ = $43.33 per month			
Depreciation for one month		$ 43.33	
Total operating equipment			$ 43.33

5 and 6. No initial rehabilitation, repairs, new building or equipment

7. Miscellaneous

Accounting (1 month at $50 per month)	$ 50.00	
Sampling and analyses, 15 samples assayed for U_3O_8 content at $3.50 each	52.50	
Compensation insurance, payroll taxes, etc. or engineer-geologist's salary at 6% of $600.00	36.00	
Total miscellaneous		$ 138.00
Total estimated cost of Stage I		$10,103.83
Estimated cost per foor (less chemical analyses) $\frac{10,051.33}{3,500}$		$ 2.87
Incidental allowance (less independent contracts and chemical analyses) $\frac{891.33}{3,500}$		$ 0.26

STAGE II

Stage II drilling will be similar to Stage I drilling and costs will be about the same. The estimated time for completion of Stage II is also 1 month.

RECAPITULATION

STAGE I

3,080 feet of non-core drilling at $2 per foot	$6,160.00
420 feet of core drilling at $6.00 per fot	2,520.00
40 hours bulldozing at $12 per hour	480.00
Incidental allowance - 3,500 feet at $0.26 per foot	910.00
Total Stage I Drilling	$10,070.00
15 assays for U_3O_8 at $3.50 each	52.50
Total Stage I estimated costs	$10,122.50

STAGE II

3,520 feet of non-core drilling at $2 per foot	$ 7,040.00
480 feet of core drilling at $6 per foot	2,880.00
40 hours bulldozing at $12 per hour	480.00
Incidental allowance - 4,000 feet at $0.26 per foot	1,040.00
Total Stage II drilling	$11,440.00
15 assays for U_3O_8 at $3.50 each	52.50
Total Stage II estimated costs	$11,492.50
TOTAL ESTIMATED COST OF PROJECT	$21,615.00
Government participation - 75 percent or	$16,211.25
Time for completion - 2 months	

CONCLUSIONS AND RECOMMENDATIONS

The channel outlined to date on the Lucy M claims is only half as large as the Cairns channel and appears to be tributary to it. The two ore bodies discovered to date are in the 1,000-ton class, and their thickness and grade is not sufficient to carry the height of a drift. The three ore holes are

clustered near the southwest corner of the property, and it would be more desirable to test the extension of the channel southwesterly, where the channel may be deeper and may contain ore. However, the first fence of drill holes in such a program of exploration would have to be essentially on the property line and succeeding fences would be off the property. There is, therefore, no room on the property to explore the channel to the southwest where an ore discovery is more likely to be made.

Finally, the average drilling depth, 500 feet, is believed excessive and costly in relation to the value of any ore body that might be found. It is therefore recommended that the application of Fraley Brothers Exploration Company under DMEA docket 4368 be denied without prejudice.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
OCTOBER 1956
DOCKET 4368

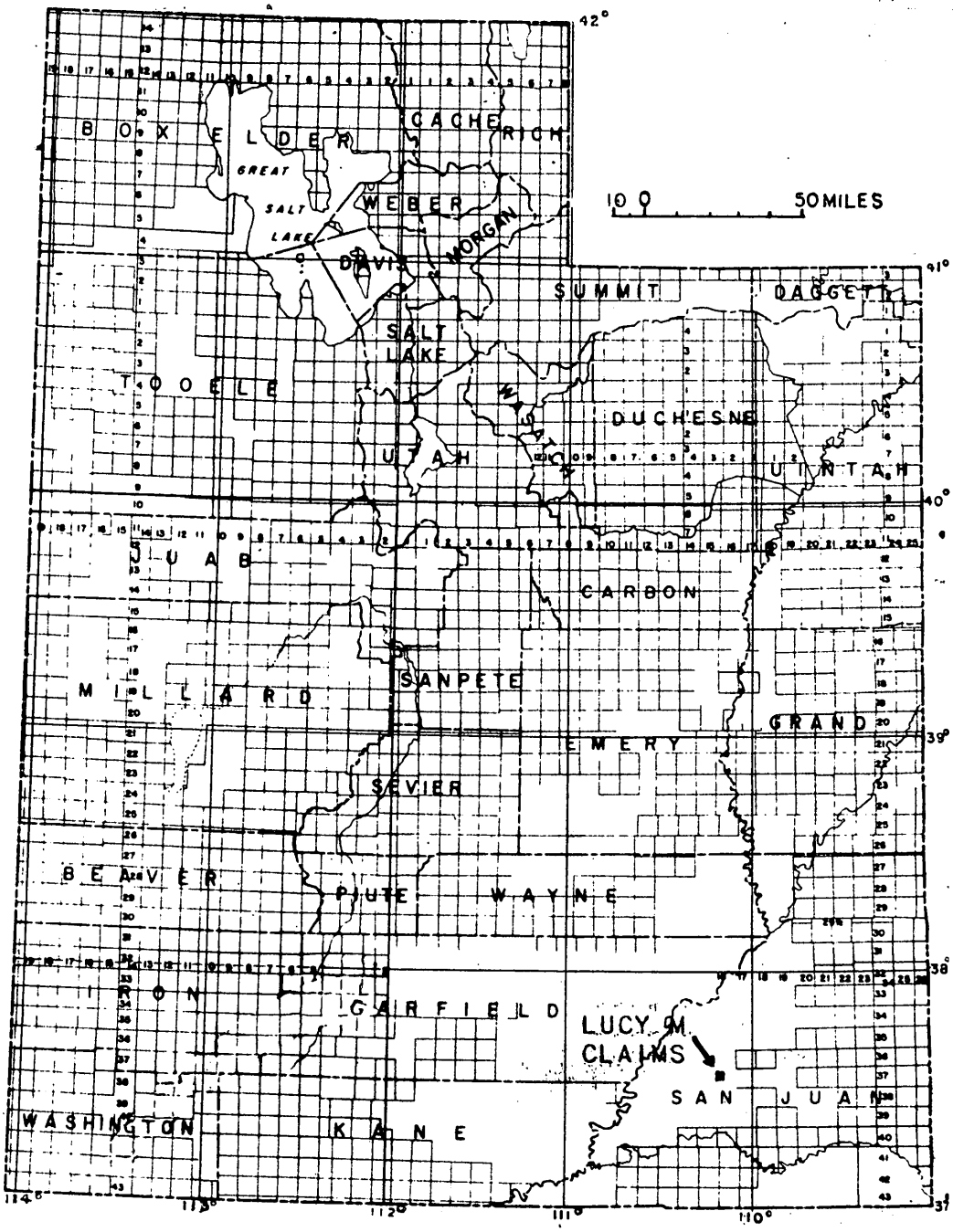
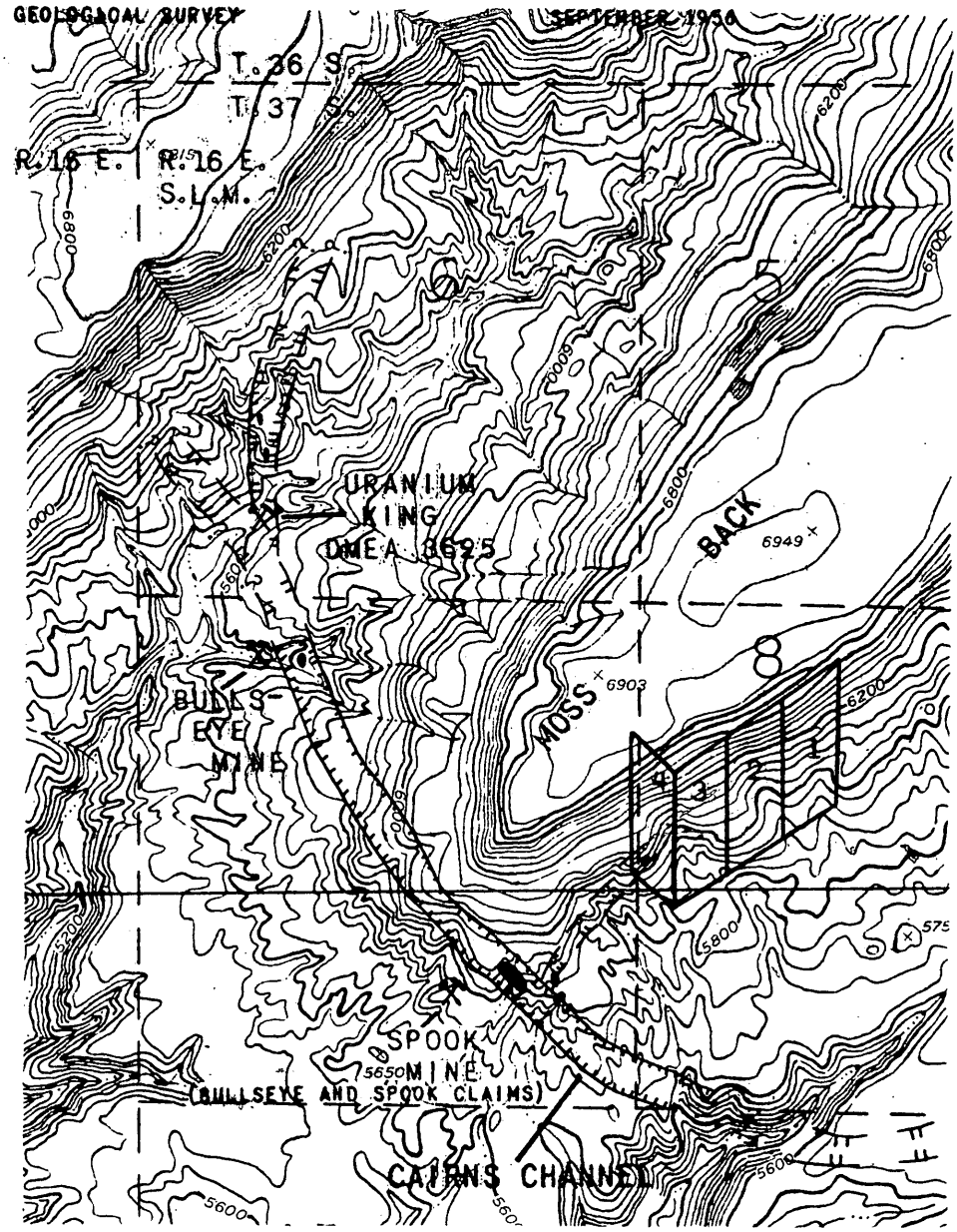


FIGURE 1.--INDEX MAP OF UTAH SHOWING LOCATION OF THE LUCY M CLAIMS, FRALEY BROS. EXPLORATION COMPANY, RED CANYON, SAN JUAN COUNTY, UTAH.



1000 0 2000 FEET

CONTOUR INTERVAL 40 FEET.
DATUM IS MEAN SEA LEVEL.

EXPLANATION

SHINARUMP CHANNEL.
DASHED WHERE INFERRED
DOTTED WHERE REMOVED

ORE BODIES

MINE

Note: BASE FROM U.S. GEOLOGICAL SURVEY QUADRANGLE MAP WHITE CANYON 4 SW.
LAND LINES PROJECTED FROM ADJOINING TOWNSHIP.
GEOLOGY MODIFIED FROM ATOMIC ENERGY COMMISSION.

FIGURE 2.--TOPOGRAPHIC MAP SHOWING LOCATION OF LUCY M NOS. 1-4 CLAIMS WITH RESPECT TO CAIRNS CHANNEL, FRALEY BROTHERS URANIUM, RED CANYON, SAN JUAN COUNTY, UTAH.

RECEIVED
OCT 29 1956

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
SEPTEMBER 1956 DOCKET #368

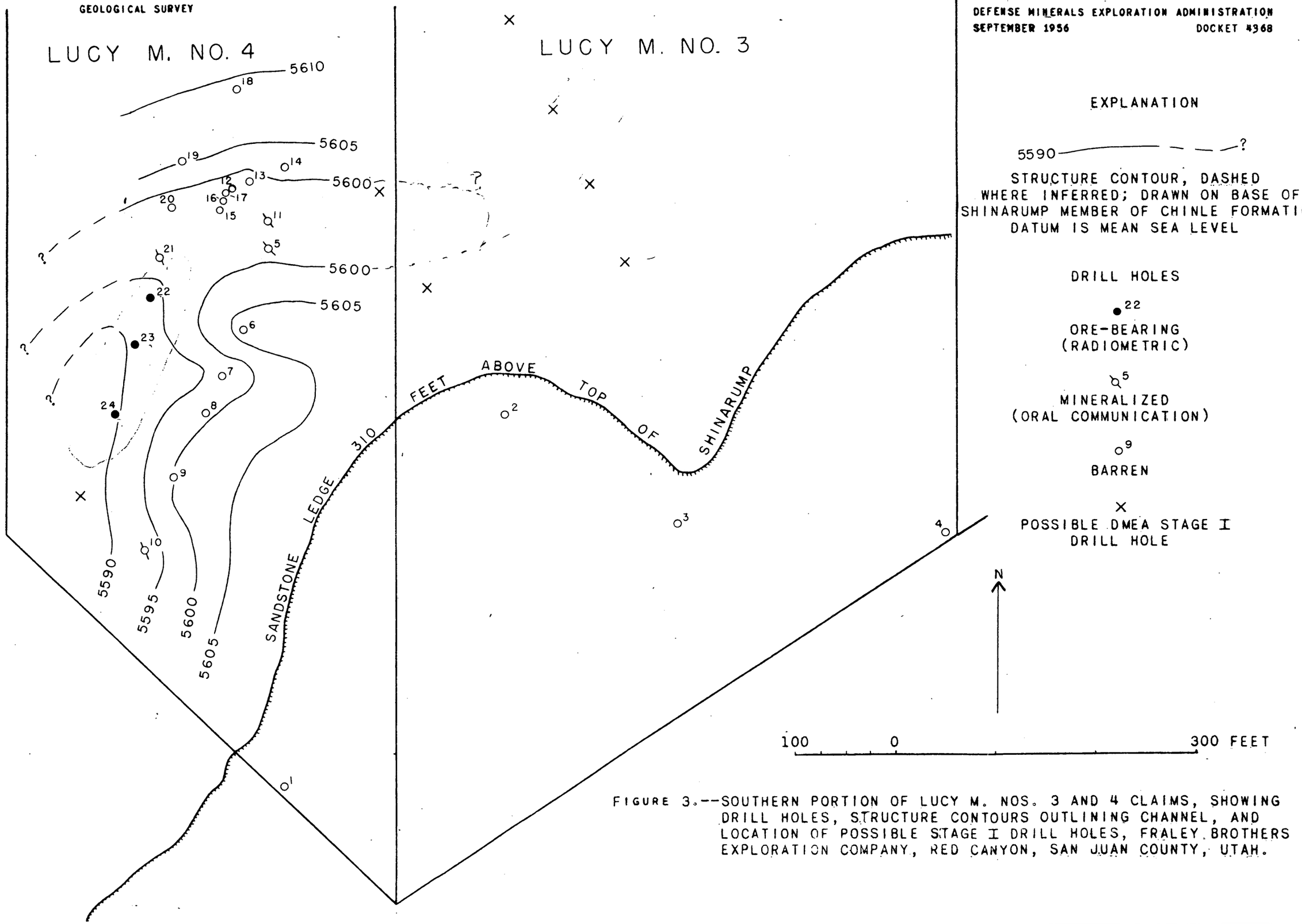


FIGURE 3.--SOUTHERN PORTION OF LUCY M. NOS. 3 AND 4 CLAIMS, SHOWING DRILL HOLES, STRUCTURE CONTOURS OUTLINING CHANNEL, AND LOCATION OF POSSIBLE STAGE I DRILL HOLES, FRALEY BROTHERS EXPLORATION COMPANY, RED CANYON, SAN JUAN COUNTY, UTAH.

RECEIVED
OCT 2 9 1956

RECEIVED
AUG - 6 1956

August 1, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4368 (Uranium) Fraley Brothers Exploration Company (Lucy M. Claims) San Juan County, Utah

The application for Fraley Brothers Exploration Company, DMEA 4368 in the amount of $22,450.00 was received in this office on August 1, 1956.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

JOHN F. SHAW

John F. Shaw

cc: W. M. Traver (2)
E. N. Marshman
J. W. Hasler
M. E. Salsbury
J. F. Shaw
Sec. Op. Com. (2)

8/3/56

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

RECEIVED
AUG - 3 1956

July 31, 1956

22d New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
J. W. Ensler (With enclosures)

From: Field Team, Region III

Subject: Docket DMEA 4368 (Uranium) Fraley Brothers Exploration Company (Lucy M Claims) San Juan County, Utah

Enclosed is the subject application in the amount of $22,450.00. A field examination and suitable report are requested.

Enclosed for your information is a copy of a letter from the Chairman of the Operating Committee, dated July 26, 1956, with attached memorandum of review of the application by W. P. Williams and James Paone.

The enclosures mentioned in the third paragraph of the Chairman's letter are attached hereto.

Will you please return the brochure with the Report of Examination.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

WMT:ab

cc: Exec. Op. Comm. (2)
Berchman
Docket 4368
Chron.

700

Murphy

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

July 26, 1956

Memorandum

To: File

From: Grace L. Ault, Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4368 (Uranium)
Fraley Brothers Exploration Co.
c/o W. E. Fraley
Box 1501
Abilene, Texas
(Property in San Juan County, Utah)

Mrs. Slann (spelling questionable) phoned regarding a communication from Mr. Fraley to the office of Congressman Omar *Burleson, of Texas, advising he had supplied the information requested by DMEA on the above-numbered application. Mrs. Slann had previously talked with Mr. Ellis, and he had informed her at that time that we were waiting for information from the Applicant. She asked the status of this application.

In Mr. Ellis' and Mr. Murphy's absence from the office at the time, I told her it was in the process of being referred to the Field Team, Region III, and Mr. Fraley would receive a letter so advising him.

Mrs. Slann requested that Congressman Burleson be advised of the final action on this application.

Grace L. Ault

Grace L. Ault

* extension 405
Capitol - Dial line 191

Place in docket after denial is approved and congress advised

Surname copy

700

Murphy
F. L. Hoover
Selfridge
Johnson
Wollenhorf

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

Mr. [illegible] M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

JUL 26 1956

Re: Docket No. DME-4368 (Uranium)
Fraley Brothers Exploration Company
Lucy H Claims
San Juan County, Utah

Dear Mr. Traver:

The captioned application is referred to Region III Field Team for a field examination and recommendation.

Enclosed are copies of memoranda, dated July 11, 1956, by James Paone, U.B.M., and V. P. Williams, U.G.S., relating to the application.

Also, enclosed are two copies of a self-explanatory letter, dated July 21, 1956, addressed to Mr. Ellis, two copies of the map mentioned in the letter, and two copies of an operating agreement between the owners of the claims and the Applicant.

In the event the Field Team considers a project to explore the subject claims appears to be warranted, it should advise the applicant that we will require six copies of the Owners' Consent to Lien duly executed with the addresses of the signers indicated. The Applicant should also be requested to submit bids from three independent contractors on the drilling proposed.

Sincerely yours,

George C. Selfridge
(by ef)
Chairman, Operating Committee

Enclosures

APPROVED:

P. F. Yopes
(by ef)
Member, Bureau of Mines

N. E. Nelson
(by ef)
Member, Geological Survey

FMMurphy/ai 7-25-566 (7-23-56)
cc to: Docket
Admr.'s Reading File
Operating Committee
Code 700
Mr. Murphy
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5220
JOHosted, Rm. 3210, GSA

R.C.S.

700

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

Murphy
F Kudson
Yoss
Nelson
F Johnson

JUL 26 1956

Mr. H. H. Fraley
Fraley Brothers Exploration Company
Box 1501
Abilene, Texas

Re: Docket No. DMEA-4368 (Uranium)
Lucy M Claims
San Juan County, Utah

Dear Mr. Fraley:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado.

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/ai 7-23-56
cc to: Admr. Reading File
Docket
Code 700
Mr. Murphy
DMEA Field Team, Region III (2)

R.C.S.

7/23/56

Box 1501,
Abilene, Texas.
July 21, 1956.

Mr. Ernest Wm. Ellis, Chief,
Rare & Misc. Metals Division,
U.S. Department of the Interior,
Defense Minerals Exploration Administration,
Washington 25, D. C.

Dear Mr. Ellis:

In Re: Docket No. DMEA-4368 (Uranium)
Lucy M Claims
San Juan County, Utah.

As per your request of July 16th, I am enclosing herewith the maps which you requested for proposed drilling locations and a copy of the contract which we have with the original owners ot the Lucy M Claims.

On December 16, 1955 we entered into this contract with Mr. B. K.Hess, Mr. Jesse McAlister and Mr. R. D. McAlister to do a specified amount of drilling as set forth in this agreement for which we were to receive in return a one-half interest in this property at the termination of the specified amount of drilling. As our maps will indicate, we did something like 11,000 feet of drilling and in our estimate and the geologist's estimation, we got some good showing of uranium.

At such time the original owners, Mr. Hess and both Mr. McAlisters together with our firm decided to suspend further drilling and to make application for the DMEA Loan for further exploration.

Mr. Hess and both of the Mr. McAlisters have agreed to sign with us any mortgage and contractual agreement which is necessary for us to make with your department. Title to the Claims have been examined by competent attorneys and found to be in good order.

Therefore with all interested parties signing any and all contracts and or mortgages, if such loan is approved, there will be no question as to the legality of such mortgage.

We have just been advised that the Spook Mines which adjoin the Lucy M Claims are mining at the rate of 150 tons per day at this time.

With regard to the proposed drill holes, since our best indication of ore was in holes #22; 23; 24, we thought it best that we should do some close drilling in the immediate vicinity of these holes and we have so set forth on the accompanying maps approximate proposed

locations for immediate drilling and coring.

Before staking further locations it is my intentions to have our geologist to prepare an Isopach on top of the Moenkopi formation immediately under the Shinarump ore bearing formation in this particular area.

Hoping that this will give you the information you needed,
I am,

Very truly yours,

W. E. Fraley.

FRALEY BROTHERS EXPLORATION COMPANY,
BOX 1501,
ABILENE, TEXAS.

WEF:MI

Agreement

Agreement made this 16th day of December, 1955, between B. K. Hess and Imogene R. Hess, his wife, Jesse McAlister and Beverly C. McAlister, his wife, R. D. McAlister and Vivian McAlister, his wife, hereinafter referred to as Owners, and ~~B raley~~ FRALEY B ros., a partnership of B landing, Utah, Earl Cotton and Silas Camp, hereinafter referred to as Drillers; Witnesseth:

BKH. IM. NBH EC S.C.

1. In consideration of $1.00, each party to the other party paid, and of the mutual covenants and obligations herein contained, it is agreed as follows:

2. Owners have possessory title and ownership of the following named unpatented mining claims in San Juan County, Utah: Lucy M. nos. 1 to 4, inclusive, being a total of four mining claims; and such claims are hereinafter referred to as "mining claims".

3. Upon the signing of this agreement, drillers will pay to owners the sum of $304.00, the same being for surveying costs heretofore incurred and paid by owners.

4. On or before March 1, 1956 (1955) drillers are to commence core drilling operations on said mining claims, and, except for acts of G od or any other cause beyond the reasonable control of the drillers, are to continuously carry on such drilling operations until at least 20,000 feet of drilling has been done, subject to paragraph #5. All drilling costs shall be the sole expense of the drillers.

5. In the event driller discovers a commercial body of ore prior to the completion of the drilling called for in paragraph #4, and it is agreeable to all of the parties hereto, drilling operations can be terminated, and the driller will be released from the duty to perform additional drilling from such time henceforward, and a mining operation to remove such ore will be commenced.

6. Should there be a joint decision to commence mining operations, as described in paragraph #5, the drillers will submit to the owners, within 15 days after such joint decision, a budget enumerating what work is necessary to reach the ore body and the costs of such work, and drillers guarantee that they will do such work for the costs so listed.

7. Should the owners approve the budget called for in paragraph #6, they will so notify the drillers by written notice of such approval; and within 90 days after such written notice has been given to the drillers, the drillers will commence such mining operations, and will work at such mining operations for at least 20 actual days out of each month until the ore body is encountered. All expenses incurred in such mining operations shall be the sole obligation of the drillers. When the ore body is encountered, as provided in this paragraph, the drillers will then become owners of an undivided 1/2 of said claims, and owners agree to execute a deed to that effect at that time.

8. Should the owners not approve the budget called for in paragraph #6, they will so notify the drillers within 30 days after such budget has been submitted to the owners, and with such notice the owners shall include a lower bid for such work, either to be done by the owners or by a third party, but in either event the owners hereby guarantee that the work shall be done for such lower cost; and the owners will be obligated to see that such mining operations shall be carried on for at least 20 actual days out of each month until the ore body is encountered, and that such work will be done in a good miner-like manner.

9. Should the owners submit a lower bid, as is described in paragraph #8, the drillers will, within 30 days after such lower bid has been presented to them, place in escrow with the Monticello Branch of the First National Bank of Moab, Utah, a sum of money equal to the amount of said lower bid, with instructions that the same be paid over to the owners or a third party who has done such work upon its completion. However, should the parties hereto

be able to so mutually agree, a schedule can be presented to such bank calling for periodic payments as such work is done. At such time as said money is placed in escrow as herein called for, the drillers will then become owners of an undivided one half of said mining claims, and owners hereby agree to execute a mining deed conveying such interest to the drillers at that time.

10. After an ore body has been encountered as a result of mining operations as described in this agreement, then and thereafter all mining operations shall be a joint operation between the owners and drillers.

11. Proceeds from the sale of ores from said claims shall be used in the following order:

a. to pay current mining costs.
b. To reimburse drillers for all costs and expenses they have reasonably and necessarily incurred as a result of this agreement, including but not limited to: drilling, surveying, mining operations to encounter ore body, engineering, geological.
c. As decided by all of the then owners.

12. Drillers agree to get the elevation of all drill holes by a qualified surveyor or engineer at the time of such drilling, and upon request by the owners, to furnish to the owners such elevations and copies of all drill logs, assay reports, engineer or geological reports, plats, maps, and all other written instruments pertaining to such mining claims.

13. Should the drillers do the 20,000 feet of core drilling called for in paragraph #4, and not make an apparent discovery of commercial ore, they will then have the right up until May 1, 1959 to do additional drilling and other work in attempting to discover an ore body, provided that the drillers do the annual assessment work for such claims and duly post and record notices thereof prior to May 1st of each year until May 1, 1959. Upon failure to do such annual assessment work, and post and record notices thereof as provided in this paragraph, this agreement will cease and determine, and the drillers will have no further rights hereunder.

14. If after the said 20,000 feet of drilling has been done, and prior to May 1, 1959 the drillers discover a commercial body of ore, then mining operations will be commenced as described in paragraphs 7, 8 and 9, insofar as they are applicable, and drillers will become the owners of an undivided one-half of said mining claims as provided in paragraphs 7 and 9; and all other provisions of this agreement will be effective insofar as they are applicable.

15. Notwithstanding anything contained in this agreement, if operations for the removal of ore are not commenced prior to May 1, 1959, this agreement will cease and determine and the drillers will have no rights whatsoever hereunder.

16. Drillers agree as follows:

a. To comply with all laws and regulations pertaining to any work or operations they may perform under this agreement.
b. To keep said mining claims free and clear of all liens or encumbrances of whatsoever kind or nature, and to care for said property in a good workmanlike manner.
c. To perform all work and services called for herein in a good and minerlike manner.
d. To permit the owners and their agents to enter upon said premises or any part thereof, at any reasonable time to inspect the same.

17. Time is of the essence of this contract.

18. No waiver of a breach of any of the covenants, agreements, restrictions and/or conditions of the agreement by a party shall be construed to be a waiver of any succeeding breach of the same or any other covenants, restrictions and stipulations of this agreement.

19. This agreement shall inure to the benefit of and bind the heirs, executors, administrators, successors and assigns of the respective parties hereto.

20. Any article of this agreement may be modified or altered by mutual agreement in writing.

Witness the hands of the parties and the day and year first above given.

B. K. Hess
B. K. Hess

Imogene R. Hess
Imogene R. Hess

Jesse McAlister
Jesse McAlister

Beverly C. McAlister
Beverly C. McAlister

R. D. McAlister
R. D. McAlister

Vivian McAlister
Vivian McAlister

FRAILEY BROS., a partnership

By H. C. Frailey
General Partner

Earl Cotton
Earl Cotton

Silas Camp
Silas Camp

State of Utah)
) ss
County of San Juan)

On the 16th day of December, 1955 personally appeared before me B. K. Hess, Imogene R. Hess, Jesse McAlister, Beverly C. McAlister, R. D. McAlister, Vivian McAlister and Earl Cotton, signer of the foregoing instrument, who duly acknowledged to me that they executed the same.

F. Benson Redd
Notary public, residing at
Monticello, Utah

My Commission expires: 6-14-59

State of Utah)
) ss
County of San Juan)

On the 16 day of December, 1955, personally appeared before me Silas Camp, a signer of the foregoing instrument, who duly acknowledged to me that he executed the same.

6 F. Benson Redd
Notary public, residing at
Monticello, Utah

My Commission expires: 6-14-59

State of Utah)
) ss
County of San Juan)

On the ____ day of December, 1955, personally appeared before me _____, who did duly acknowledge to me that he is a general partner of Fraley Bros., a partnership, and that the foregoing instrument was duly signed by him for and on behalf of said partnership and as a partnership act in the due course of business, and that said partnership did execute the same.

_____
Notary public, residing
at:

My Commission expires:

Box 1501,
Abilene, Texas.
July 21, 1956.

Mr. Ernest Wm. Ellis, Chief,
Rare & Misc. Metals Division,
U.S. Department of the Interior,
Defense Minerals Exploration Administration,
Washington 25, D. C.

Dear Mr. Ellis:

In Re: Docket No. DMEA-1368 (Uranium)
Lucy M Claims
San Juan County, Utah.

As per your request of July 16th, I am enclosing herewith the maps which you requested for proposed drilling locations and a copy of the contract which we have with the original owners of the Lucy M Claims.

On December 16, 1955 we entered into this contract with Mr. E. E. Hess, Mr. Jesse McAlister and Mr. R. D. McAlister to do a specified amount of drilling as set forth in this agreement for which we were to receive in return a one-half interest in this property at the termination of the specified amount of drilling. As our maps will indicate, we did something like 11,000 feet of drilling and in our estimate and the geologist's estimation, we got some good showing of uranium.

At such time the original owners, Mr. Hess and both Mr. McAlisters together with our firm decided to suspend further drilling and to make application for the DMEA Loan for further exploration.

Mr. Hess and both of the Mr. McAlisters have agreed to sign with us any mortgage and contractual agreement which is necessary for us to make with your department. Title to the Claims have been examined by competent attorneys and found to be in good order.

Therefore with all interested parties signing any and all contracts and or mortgages, if such loan is approved, there will be no question as to the legality of such mortgage.

We have just been advised that the Spook Mines which adjoin the Lucy M Claims are mining at the rate of 150 tons per day at this time.

With regard to the proposed drill holes, since our best indication of ore was in holes #22; 23; 24, we thought it best that we should do some close drilling in the immediate vicinity of these holes and we have so set forth on the accompanying maps approximate proposed

locations for immediate drilling and testing.

Before staking further locations it is my intentions to have our geologist to prepare an Isopach on top of the Nacatoch formation immediately under the Edwards we testing formation in this particular area.

Hoping that this will give you the information you needed, I am,

Very truly yours,

[illegible]

[illegible]

BALLY MORGAN EXPLORATION COMPANY,
SUE 1908,
ABILENE, TEXAS.

[illegible]

Agreement

Agreement made this 28th day of December, [illegible], between R. E. [illegible] and [illegible] E. [illegible], his wife, James Hollister and Beverly G. Hollister, his wife, R. E. Hollister and [illegible] Hollister, his wife, hereinafter referred to as Owners, and [illegible], a partnership of [illegible], hereinafter referred to as Drillers.

[illegible]

[illegible]

3. Upon the signing of this agreement, drillers will pay to [illegible] the sum of [illegible], the same being for [illegible] hereinafter [illegible] by owners.

4. On or before March 1, 1954, drillers are to commence core drilling operations on said mining claims, and, except for acts of God or any other cause beyond the reasonable control of the drillers, are to continuously carry on such drilling operations until at least 20,000 feet of drilling has been done, subject to paragraph #5. All drilling costs shall be the sole expense of the drillers.

5. In the event driller discovers a commercial body of ore prior to the completion of the drilling called for in paragraph #4, and it is agreeable to all of the parties hereto, drilling operations can be terminated, and the driller will be released from the duty to perform additional drilling from such time henceforward, and a mining operation to remove such ore will be commenced.

6. Should there be a joint decision to commence mining operations, as described in paragraph 5b, the drillers will submit to the owners, within 14 days after such joint decision, a budget concerning that work as necessary to reach the ore body and the costs of such work, and drillers guarantee that they will do such work for the costs as listed.

7. Should the owners approve the budget called for in paragraph 6, they will so notify the drillers by written notice of such approval and within 30 days after such written notice has been given to the drillers, the drillers will commence such mining operations, and will work on such mining operations for at least 20 actual days out of each month until the ore body is encountered. All expenses incurred in such mining operations shall be the sole obligation of the drillers. When the ore body is encountered, as provided in this paragraph, the drillers will then begin payment of an additional 1/8 of total mining and expense operating payments a month to that amount as that will.

8. Should the owners not approve the budget called for in paragraph 6, they will so notify the drillers within 30 days after such budget has been submitted to the owners, and with such notice the owners shall include a lump bid for such work, either to be done by the owners or by a third party, and in either event the owners hereby guarantee that the work shall be done for such lump sum and the drillers shall be obligated to use that lump mining operations should be started on the ore body within 30 days of such notice, and the ore body be encountered and that work shall continue on a good [illegible]

9. Should the owners submit a lump bid, as described in paragraph 8, the drillers shall, within 30 days after such lump bid has been provided to them, place the owners with the additional budget of the above mentioned work [illegible]

be able to so mutually agree, a schedule may be presented to each bank calling for periodic payments as such work is done. At such time as said money is placed in escrow as herein called for, the drillers will then become owners of undivided one half of said mining claims; and owners hereby agree to execute a mining deed conveying such interest to the drillers at that time.

12. After an ore body has been encountered as a result of mining operations as described in this agreement, then and thereafter all mining operations shall be a joint operation between the owners and drillers.

13. Proceeds from the sale of ores from said claims shall be used in the following manner:

a. To pay current mining costs.
b. To reimburse drillers for all costs and expenses they have reasonably and necessarily incurred as a result of this agreement, including but not limited to: drilling, surveying, mining operations to establish ore body, engineering, geological.
c. As divided by all of the then owners.

14. Drillers agree to get the elevation of all drill holes by a qualified surveyor or engineer at the time of such drilling, and upon request by the owners to furnish to the owners such elevations and copies of all drill logs, assay reports, engineer or geological reports, plats, maps and all other written instruments pertaining to such mining claims.

15. Should the drillers do the 20,000 feet of ore drilling called for in paragraph 14, and not make an apparent discovery of commercial ore, they will then have the right up until May 1, 1959 to do additional drilling and other work in attempting to discover an ore body, provided that the drillers do the annual assessment work for such claims and duly post and record notices thereof prior to May 1st of each year until May 1, 1959. Upon failure to do so such annual assessment work, and post and record notices thereof as provided in this paragraph, this agreement will cease and determine, and the drillers will have no further rights hereunder.

14. If after the said 20,000 feet of drilling has been done, and prior to May 1, 1959 the drillers discover a commercial body of ore, then mining operations will be commenced as described in paragraphs 7, 8 and 9, insofar as they are applicable and drillers will become the owners of an undivided one-half of said mining claims as provided in paragraphs 7 and 9; and all other provisions of this agreement will be effective insofar as they are applicable.

[illegible]

[illegible]

___l Sutton

Elias Camp

State of Utah } ss
County of San Juan }

On this 16th day of December, 1955 personally appeared before me E. T. [illegible] Jesse McAlister, Beverly O. McAlister, N. D. McAlister, Vivian McAlister and Earl Cotton, signer of the foregoing instrument, who duly acknowledged to me that they executed the same.

Notary public, residing at
Monticello, Utah

My Commission expires:

State of } ss
County of }

On the ____ day of December, 1955, personally appeared before me Silas Camp, signer of the foregoing instrument, who duly acknowledged to me that he executed the same.

Notary public, residing at
.....

My Commission expires:

State of Utah } ss
County of San Juan }

On the ____ day of December, 1955, personally appeared before me _____, who did duly acknowledge to me that he is a general partner of Fraley Bros., a partnership, and that the foregoing instrument was duly signed by him for and on behalf of said partnership and as a partnership act in the due course of business, and that said partnership did execute the same.

Notary public, residing
at:

My Commission expires:

700

Surname copy

Murphy
Ellis
Mittendorf

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

JUL 16 1956

Mr. W. E. Fraley
Fraley Brothers Exploration Company
Box 1501
Abilene, Texas

Re: Docket No. DMEA-4368 (Uranium)
Lucy M Claims
San Juan County, Utah

Dear Mr. Fraley:

The above-docketed application for aid in an exploration project has been reviewed by this Division.

Before we can take further action in processing the application we require the following additional information:

1. A map or sketch in quadruplicate, showing the location of the proposed drill holes, i. e., at least the first stage holes.

2. Documentary proof that your company has the right of possession of the four Lucy M claims for the purpose of a contract.

Upon receipt of this information we will immediately continue the processing of the application.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

FMMurphy/ai
7-16-56
cc to: Admr. Reading File
Docket
Code 700
Mr. Murphy
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

RCJ.

7-13-56

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

RECEIVED
JUL 13 1956

July 11, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee

Subject: Application for Assistance, DMEA Docket 4368 (Uranium)
Fraley Brothers Exploration Company, (Lucy M Claims),
San Juan County, Utah

I have reviewed the attached application, DMEA Docket 4368, Fraley Brothers Exploration Company, (Lucy M Claims), San Juan County, Utah, dated June 25 and received in this office July 10, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant has requested Federal assistance to explore for uranium on four unpatented mining claims located in Section 8, T. 37 S., R. 15 E., in the White Canyon mining district, San Juan County, Utah. The proposed exploration includes 9,000 feet of non-core and 1,000 feet of core drilling at a unit cost of $1.75 and $4.00 respectively, and 100 hours of bulldozing at a unit cost of $12. The total estimated cost of the project is $22,450.

The claims appear to lie on a uranium-bearing channel which has had some production in the White Canyon area.

The field team recommend that a field examination be made and that the applicant outline a program of drilling prior to the date of examination.

We concur in the recommendations.

James Paone

James Paone

Attachment

7-11-56

IN REPLY REFER TO:

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

July 11, 1956

RECEIVED
JUL 11 1956

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4368 (Uranium) Fraley Brothers Exploration Company, Lucy M. claims, Red Canyon area, San Juan County, Utah.

In an incomplete application the applicant proposes to perform 10,000 feet of drilling on four unpatented mining claims at an estimated total cost of $22,450. The applicant states that 10,000 feet of drilling had previously been completed on the claims. The applicant further states that the completed drilling, "encountered considerable mineralization and ore bearing Shinarump conglomerate." No assays were submitted with the application.

The application probably warrants favorable action inasmuch as the Atomic Energy Commission has found a Shinarump channel on the property; and the claims are close to known ore.

It appears that the applicant should be asked to present a more definite proposal for exploration. The application should also be documented with any assays that might be available.

After the above have been submitted the Field Team may wish to assign personnel to make a field examination of the property.

W P Williams

W. P. Williams

7/9/56 gla

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

July 5, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA Docket 4368 (Uranium) Fraley Brothers Exploration Company, (Lucy M Claims), San Juan County, Utah

Enclosed are four copies of a review of the subject application by M. H. Salsbury, USBM, and J. W. Hasler, USGS, recommending that a field examination be made.

We concur in this recommendation.

Two copies of the application for aid in the amount of $22,450.00 were forwarded to you on June 28, 1956.

Your particular attention is called to the last paragraph of the reviewers' memorandum in which they recommend that the Applicant outline a program of drilling and at least furnish the examining team with an outlay of proposed Stage I holes prior to the date of examination.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

RECEIVED
JUL 9 - 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

DMEA
Date Rec'd
JUL 5 1956
BUREAU OF MINES
Denver, Colorado

July 3, 1956

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Region III

From: J. William Hasler, Region III
M. H. Salsbury

Through E. N. Harshman

Subject: Application for DMEA Aid (Uranium) Fraley Brothers Exploration Company (Lucy M claims), San Juan County, Utah

The Fraley Brothers Exploration Company has applied to the Defense Minerals Exploration Administration for aid to explore for uranium on the Lucy M claims in section 8, T. 37 S., R. 15 E., San Juan County, Utah.

A cursory review of the application and a conversation with Robert Cronk, AEC geologist in the White Canyon area, shows the property to lie on a tributary to the Cairns Channel, a uranium-bearing channel in the White Canyon area which has had some production and is presently being explored under DMEA docket 3625 (Uranium), Idm-3879, Uranium King Corporation, (Cove claims), San Juan County, Utah.

In view of the nearness of the Lucy M claims to the producing Cairns Channel coupled with the fact that the Commission reports a small Shinarump channel scour on the property it is recommended that a field examination be made.

It is requested also that the applicant outline a program of drilling and at least furnish the examining team with a layout of proposed stage I holes prior to the date of examination.

J. William Hasler
J. William Hasler,
Geologist

M. H. Salsbury
M. H. Salsbury,
Mining Engineer

JWH/dm

cc: Harshman
DMEA file
Chron.

JUL 9 - 1956

July 3, 1956

Fraley Brothers Exploration Co.
c/o W. E. Fraley
Box 1501
Abilene, Texas

Subject: DMEA 4368
Re: Exploration Assistance
Lucy M Claims

Dear Mr. Fraley

The receipt of your application dated June 25, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 4368 and referred to the Rare & Misc. Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

July 3, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

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 III.

DMEA
-4368 Fraley Brothers Exploration Co.

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

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

RECEIVED
JUL 2 - 1956

June 28, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Fraley Brothers Exploration Company (Lucy M claims), San Juan County, Utah

Enclosed are two copies of the subject application in the amount of $22,450.00. The Applicant has failed to state a definite program of exploration.

One copy of the Application contains radiometric logs on three drill holes. These copies of radiometric logs are being forwarded the Grand Junction office, DMEA, with their copy of the application for possible assistance to them in evaluating the application.

One copy of the application is being retained in our file.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

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

June 28, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
JUL 2 - 1956

Memorandum

To: J. W. Mazler

From: Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Fraley Brothers Exploration Company (Lucy M claims), San Juan County, Utah

Enclosed is the subject application in the amount of $22,450.00.

Please discuss this application with the Bureau of Mines representative in the Grand Junction office and the AEC and forward this office nine copies of your recommendations concerning the advisability of making a field examination.

The only copy of radiometric logs on three drill holes submitted by the Applicant is attached to your copy of the brochure.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

MMC:ab

cc: Docket
Sec. Op. Comm. (2)
Harshman
Shaw (2)
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUL 2 - 1956
DMEA
Date Rec'd.

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

JUN 27 1956
BUREAU OF MINES
Denver, Colorado

Not to be filled in by applicant

Docket No. 4368.
Metal or Mineral Uranium
Date Received 7/2/56
Estimated Cost $22,450.00
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: Praley Brothers Exploration Company - a partnership.
W. E. Praley, Box 1501, Abilene, Texas
G. D. Praley, Box 1272, Sweetwater, Texas
Coy Praley, Box 586, Pecos, Texas

(*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.

(*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.

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 Four unpatented mining claims located in Section 8; T. 37 S - R15 E San Juan County, Utah, in the White Canyon Mining District as shown by map.

(*b*) State any mine name by which the property is known. Lucy M Claims.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise 1/2 ownership and operating agreement by our company.

(*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. Lucy M # 1, Book 315 Page 387; Lucy M # 2, Book 315, Page 387; Lucy M # 3, Book 315, Page 388; Lucy M # 4, Book 315, Page 389.

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. None - See map.

(*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. None. See separate report.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. Roads to property are complete. 26 miles from White Canyon Buying Station.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.
All above available and to be furnished by contractors who will do work.

16—66551-1

5. *The exploration project.*—(a) State the mineral or minerals for which you wish to explore U-308.

(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. Separate sheet attached.

(c) The work will start within 30 days and be completed within 4 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 separate sheet.

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.). See separate sheet.

(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. See separate sheet.

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

(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. None.

(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. None

(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. None

(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. To be done by private contractor.

(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. None

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?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

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 June 25, 1956, 195__

Fraley Brothers Exploration Company
(Applicant)

By W. E. Fraley
W. E. Fraley - Partner.
Box 1501,
Abilene, Texas

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

RECEIVED
JUL 2 - 1956

5. (b) We propose to do an approximate additional 10,000 feet of additional drilling and coring. Our map will indicate that approximately 10,000 feet of drilling has already been done by us. Since we encountered considerable mineralization and ore bearing shinarump conglomerate in the drilling which we have already done, we feel that this additional drilling is an absolute necessity and there is every reason to believe there is a channel running thru this property. (Refer to map and hole probe logs accompanying this application).

5. (d) I have personally had several years of various drilling experience and feel that I am competent to supervise any drilling operations with the assistance of a competent geologist.

6. (a) After checking generally in this area for an estimate on drilling, we find that drilling costs are about as scheduled below, however if this application is approved, we will accept bids for this work by three or more independent contractors.

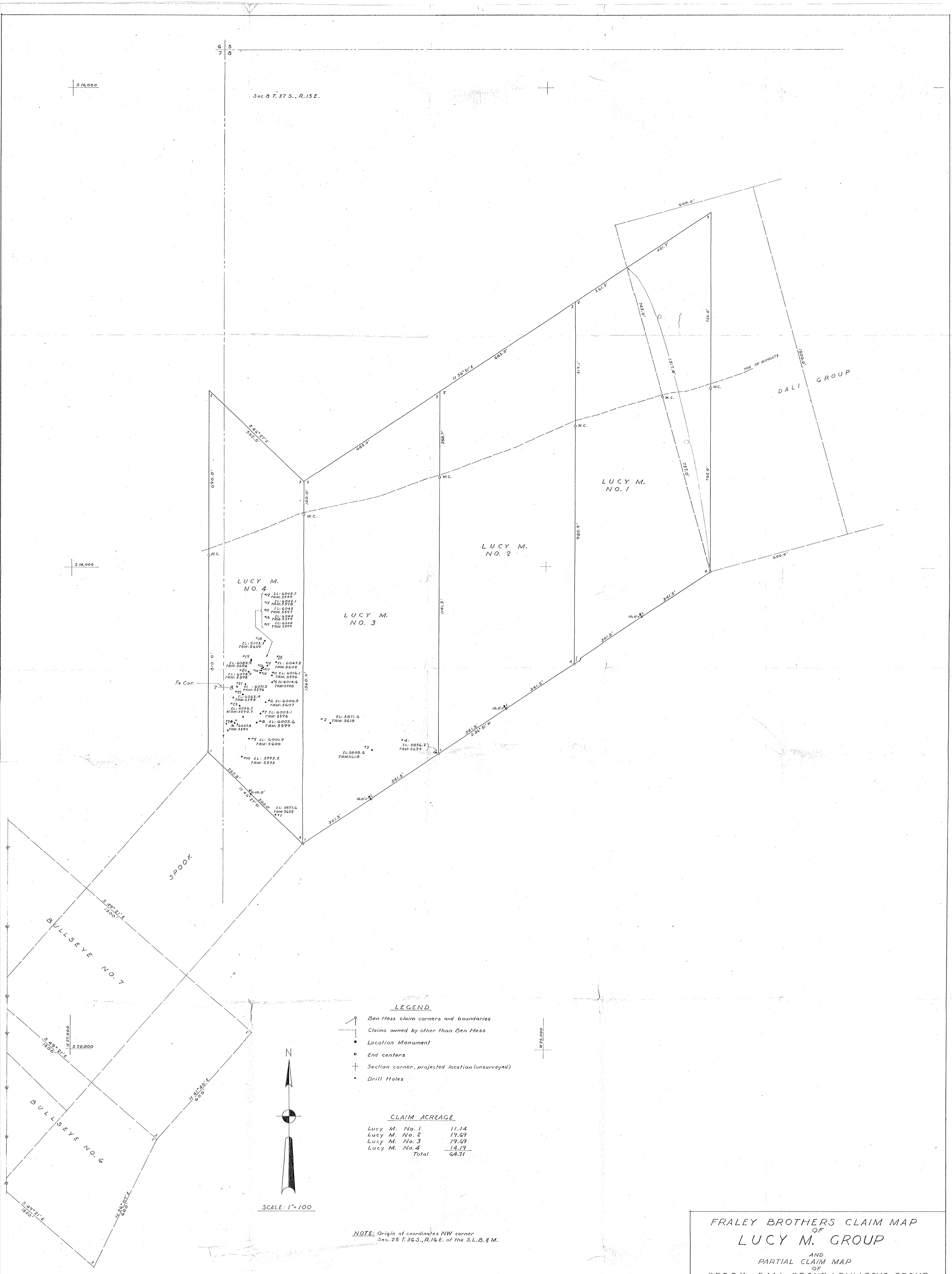
9,000 feet of drilling @ 1.75 per foot	$ 15,750.00.
1,000 feet of coring @ 4.00 per foot	4,000.00
100 hours bull dozer work for making drill locations @ $ 12.00 per hour	1,200.00
	$ 20,950.00.
# 6. (b) Geological supervision - approximately	1,500.00
	$ 22,450.00.

June 25, 1956.

FRALEY BROTHERS EXPLORATION COMPANY.

BY W. E. Fraley

W. E. Fraley,
Box 1501,
Abilene, Texas.


Sec. 8 T. 37 S., R. 15 E.
S 18,000
S 20,000
W 27,000
W 25,000
LUCY M. NO. 1
LUCY M. NO. 2
LUCY M. NO. 3
LUCY M. NO. 4
DALI GROUP
SPOOK
BULLSEYE NO. 7
BULLSEYE NO. 6
TOE OF WINGATE
W.C.
1/4 Cor.
N 56° 51' E 683.0'
S 46° 27' E 592.5'
S 49° 21' E 1500'
N 41° 40' E 600'
N 26° 07' E 600'
N 42° 27' W 300.0'
S 56° 51' W 341.5'
LEGEND
Ben Hess claim corners and boundaries
Claims owned by other than Ben Hess
Location Monument
End centers
Section corner, projected location (unsurveyed)
Drill Holes
N
SCALE: 1" = 100
CLAIM ACREAGE
Lucy M. No. 1 11.14
Lucy M. No. 2 19.69
Lucy M. No. 3 19.69
Lucy M. No. 4 14.19
Total 64.71
NOTE: Origin of coordinates NW corner Sec. 25 T. 36 S., R. 16 E. of the S.L.B. & M.
FRALEY BROTHERS CLAIM MAP OF
LUCY M. GROUP
AND
PARTIAL CLAIM MAP OF
SPOOK, DALI GROUP & BULLSEYE GROUP
WHITE CANYON DISTRICT
SAN JUAN COUNTY, UTAH