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

RECEIVED
SEP - 7 1956

September 4, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4278 (Uranium) Amsden Mining and Exploration Company (Amsden and Hellbroth groups of claims) Big Horn County, Wyoming

Reference is made to the letter to the Applicant Company from F. L. Knouse, Acting Chief, Rare and Miscellaneous Metals Division dated July 23, 1956. This letter advised the Applicant that if the needed data have not been received within 30 days, the docket would be closed.

Will you please advise the present status of the subject docket.

DMEA Field Team, Region III

By J. W. Townsend
Acting Executive Officer

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

RECEIVED
SEP - 7 1956

September 4, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4278 (Uranium) Amsden Mining and Exploration Company (Amsden and Hellbroth groups of claims) Big Horn County, Wyoming

Reference is made to the letter to the Applicant Company from F. L. Knouse, Acting Chief, Rare and Miscellaneous Metals Division dated July 23, 1956. This letter advised the Applicant that if the needed data have not been received within 30 days, the docket would be closed.

Will you please advise the present status of the subject docket.

DMEA Field Team, Region III

J. W. Townsend

By J. W. Townsend
Acting Executive Officer

Surname copy

F. Knouse
Ellis

700

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

SEP - 4 1956

Mr. Philip W. Peter
Amsden Mining and Exploration Company
Post Office Box 193
Gillette, Wyoming

Re: Docket No. DMEA-4278 (Uranium)
Amsden and Hellbreth Groups of Claims
Big Horn County, Wyoming

Dear Mr. Peter:

This is with reference to our letters of May 11, June 19, and July 23, 1956, requesting additional information needed to process the subject application.

As we have not received any reply to our letters, we are considering your application as having been withdrawn and are placing it in our inactive files.

We regret the necessity of taking such action, however, it is taken without prejudice to your proposed project. If at some future time you desire to reopen this case, you may do so by filing a new application, referring to the subject application by the DMEA docket number, and furnishing the information previously requested, together with any other information that you think might be helpful.

Sincerely yours,

Frank E. Johnson
(by EST)
ACTING Administrator

FLKnouse/gla
8-31-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700, Mr. Knouse
DMEA Field Team, Region III (2)

R.C.S.

Surname copy

F I Knouse 700
H Jefferson

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

JUL 23 1956

Mr. Philip W. Peter
Amsden Mining and Exploration Company
Post Office Box 193
Gillette, Wyoming

Re: Docket No. DMEA-4278 (Uranium)
Amsden and Hellbroth Groups of Claims
Big Horn County, Wyoming

Dear Mr. Peter:

Reference is made to our letters, dated May 11 and June 19, 1956, relating to the captioned docket.

Inasmuch as we have received no reply, we assume that you no longer desire to proceed with the application. We wish to cooperate with you in the matter of allowing ample time, but if the needed data have not been received within thirty days from the date of this letter, we will then consider the docket closed.

Sincerely yours,

F. L. Knouse, Acting Chief
Rare and Miscellaneous
Metals Division

FLKnouse/gla
7-23-56
cc to: Admr.'s Reading File
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700, Mr. Knouse
DMEA Field Team, Region III (2)

R.C.S.

Surname copy

F.L. Knouse
Ellis

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

JUN 19 1956

Mr. Philip W. Peter
Amsden Mining and Exploration Company
Post Office Box 193
Gillette, Wyoming

Re: Docket No. DMEA-4278 (Uranium)
Amsden and Hellbroth Groups of Claims
Big Horn County, Wyoming

Dear Mr. Peter:

Reference is made to our letter dated May 11, 1956, relating to the captioned docket.

Action on your application is pending receipt of the information requested in above-mentioned letter. If you are no longer interested in the processing of this application, please advise us.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

FLKnouse/ai
6-19-56
cc to: Docket
Admr. Reading File
Code 700
Mr. Knouse
Messrs. THKiilsgaard, Rm. 5224
JECrawford, Rm. 3643
JOHosted, Rm. 3210, GSA
DMEA Field Team, Region III (2)

R.C.K.

709

FILE COPY
Surname:
[redacted]

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

MAY 11 1956

Mr. Philip W. Peter
Amsden Mining and Exploration Company
Post Office Box 193
Gillette, Wyoming

Re: Docket No. DMEA-4278 (Uranium)
Amsden and Hellbroth Groups of Claims
Big Horn County, Wyoming

Dear Mr. Peter:

This is with reference to your application for Government aid to explore the subject property.

In order that we may continue to process your application, please clarify and furnish the following:

(1) Your application states the Applicant is the owner of the claims. However, there is an encumbrance of a 15 percent assigned overriding royalty. In this connection, we will require two copies of the document that assigned the overriding royalty to the party or parties concerned.

(2) There were submitted with your application, a map entitled "Amsden Mining and Exploration Co. Amsden and Hellbroth Claims Big Horn County, Wyoming," and a "Radioactive Log" of Landes No. 10 well, dated February 8, 1950. The map shows the locations of the claims listed in your application, the proposed drill holes, and holes that have been drilled i e., shown as "Producing Wells," (including Landes No. 10), "Dry Holes," and "Show of Oil." Since these holes were probably logged for radioactivity at about the same time the Landes No. 10 hole was logged, it would be helpful if the drill logs could be obtained and submitted.

(3) Your proposed exploration program includes plug and core drilling by "Independent Contracts." In this connection, you should submit bids from three contractors which sets forth the diameter of the holes and the unit cost for plug and core drilling for the depth you propose to drill the holes.

You should furnish four copies of the information required under Items (2) and (3) above to enable us to continue processing your application with a minimum of delay.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

FLKnouse/izm 5-11-56
cc to: Docket Admr.'s Reading File
Code 700 Operating Committee
Mr. Knouse DMEA Field Team, Reg. III (2)
Messrs. JECrawford, Rm. 3643
THKillsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

5-11-56

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

RECEIVED
MAY 11 1956

May 10, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4278, Amsden Mining & Exploration Co., Big Horn County, Wyo.

I have reviewed the attached application for assistance, DMEA Docket 4278, Amsden Mining & Exploration Co., Big Horn County, Wyo., dated April 28, and received in this office May 8, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant requests Federal assistance to explore 56 claims for uranium. The project includes 19,750 feet of plug-bit drilling at a unit cost of $7. The total estimated cost of the project is $153,410.00.

The applicant bases the justification of the exploration on the results encountered in the radiometric logging of an oil well hole on the property and on the fact that uranium is being produced only 10 miles away. It is doubtful that such reasons are sufficient to warrant the expenditure of funds of the magnitude proposed.

The costs listed in the application are excessive and irregular.

Unless the applicant can submit logs of holes drilled on the subject claims, it appears that denial without prejudice would be in order as little supporting evidence is presented on which an exploration program could be based or could be justified.

John E Crawford
John E. Crawford

Attachment

RECEIVED
MAY 11 1956

May 10, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4278, Amaden Mining & Exploration Co., Big Horn County, Wyo.

I have reviewed the attached application for assistance, DMEA Docket 4278, Amaden Mining & Exploration Co., Big Horn County, Wyo., dated April 28, and received in this office May 8, 1956. I have also discussed it with Joseph O. Hested, Washington representative of the Atomic Energy Commission.

The applicant requests Federal assistance to explore 56 claims for uranium. The project includes 19,750 feet of plug-bit drilling at a unit cost of $7. The total estimated cost of the project is $153,410.00.

The applicant bases the justification of the exploration on the results encountered in the radiometric logging of an oil well hole on the property and on the fact that uranium is being produced only 10 miles away. It is doubtful that such reasons are sufficient to warrant the expenditure of funds of the magnitude proposed.

The costs listed in the application are excessive and irregular.

Unless the applicant can submit logs of holes drilled on the subject claims, it appears that denial without prejudice would be in order as little supporting evidence is presented on which an exploration program could be based or could be justified.

John E. Crawford

Attachment

RECEIVED
MAY 11 1956

May 10, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application for Assistance, DMEA Docket 4278, Amsden Mining & Exploration Co., Big Horn County, Wyo.

I have reviewed the attached application for assistance, DMEA Docket 4278, Amsden Mining & Exploration Co., Big Horn County, Wyo., dated April 28, and received in this office May 8, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant requests Federal assistance to explore 56 claims for uranium. The project includes 19,750 feet of plug-bit drilling at a unit cost of $7. The total estimated cost of the project is $153,410.00.

The applicant bases the justification of the exploration on the results encountered in the radiometric logging of an oil well hole on the property and on the fact that uranium is being produced only 10 miles away. It is doubtful that such reasons are sufficient to warrant the expenditure of funds of the magnitude proposed.

The costs listed in the application are excessive and irregular.

Unless the applicant can submit logs of holes drilled on the subject claims, it appears that denial without prejudice would be in order as little supporting evidence is presented on which an exploration program could be based or could be justified.

John E. Crawford

Attachment

May 7,1956

Memorandum

To: Executive Officer, DMEA Field Team, Region

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 4278 **Amsden Mining & Exploration Company**

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

Amsden Mining and Exploration Company
P.O. Box 193
Gillette, Wyoming

Subject: DMEA 4278
Re: Amsden & Hellbroth claims

The receipt of your application dated April 28, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number 4278 and referred to the Rare and Miscellaneous 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

00933

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

May 1, 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) Amsden Mining and Exploration Company (Amsden and Hellbroth claims), Big Horn County, Wyoming

Enclosed are three copies of the subject application in the amount of $153,410.00. One copy of the application is being retained in our file.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

RECEIVED
MAY 3 - 1956

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

May 1, 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) Amsden Mining and Exploration Company (Amsden and Hellbroth claims), Big Horn County, Wyoming

Enclosed are three copies of the subject application in the amount of $153,410.00. One copy of the application is being retained in our file.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

RECEIVED
MAY 3 - 1956

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd
APR 30 1956

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

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 4278
Metal or Mineral Uranium
Date Received May 3, 1956
Estimated Cost $153,410.00
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: Amsden Mining & Exploration Co.: Partnership Philip W. Peter;Gillette, Wyo.
P. O. Box 193 R. G. Martin; Gillette, Wyo.
Gillette, Wyoming F. B. Thomas; Newcastle, Wyo.

(*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 Claims known as Amsden Nos. 1-24 and Hellbroth Nos. 1 thru 32. Situate in Sections 4, 5, 6, 8, 9 T 54 N, R 94 W Big Horn County, Wyoming.

(*b*) State any mine name by which the property is known. Amsden Property

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

(*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 assignment of overriding royalties of 15%.

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

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

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

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

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

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

RECEIVED
MAY 3 - 1956

16—66551-1

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

(*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.

(*c*) The work will start within 30 days and be completed within 10 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.

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.).

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

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

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

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

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

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

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

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

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

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

[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.

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Dated APR 28 1956, 195

Amsden Mining & Exploration Company
(Applicant)

By Philip W. Peter

PHILIP W. PETER, E. M.
CONSULTING Mining Civil ENGINEERS

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

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Name of Claim	Book No.	Page No.
3-F		
Amsden No. 1	154	13
Amsden No. 2	154	14
Amsden No. 3	154	15
Amsden No. 4	154	16
Amsden No. 5	154	17
Amsden No. 6	154	18
Amsden No. 7	154	19
Amsden No. 8	154	20
Amsden No. 9	154	21
Amsden No. 10	154	22
Amsden No. 11	154	23
Amsden No. 12	154	24
Amsden No. 13	154	25
Amsden No. 14	154	26
Amsden No. 15	154	27
Amsden No. 16	154	28
Amsden No. 17	154	29
Amsden No. 18	154	30
Amsden No. 19	154	31
Amsden No. 20	154	32
Amsden No. 21	154	33
Amsden No. 22	154	34
Amsden No. 23	154	35
Amsden No. 24	154	36
Hellbroth No. 1	154	37
Hellbroth No. 2	154	38
Hellbroth No. 3	154	39
Hellbroth No. 4	154	40
Hellbroth No. 5	154	41
Hellbroth No. 6	154	42
Hellbroth No. 7	154	43
Hellbroth No. 8	154	44
Hellbroth No. 9	154	45
Hellbroth No. 10	154	46

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Name of Claim	Book No.	Page No.
3-F		
Hellbroth No. 11	154	47
Hellbroth No. 12	154	48
Hellbroth No. 13	154	49
Hellbroth No. 14	154	50
Hellbroth No. 15	154	51
Hellbroth No. 16	154	52
Hellbroth No. 17	154	53
Hellbroth No. 18	154	54
Hellbroth No. 19	154	55
Hellbroth No. 20	154	56
Hellbroth No. 21	154	1
Hellbroth No. 22	154	2
Hellbroth No. 23	154	3
Hellbroth No. 24	154	4
Hellbroth No. 25	154	5
Hellbroth No. 26	154	6
Hellbroth No. 27	154	7
Hellbroth No. 28	154	8
Hellbroth No. 29	154	9
Hellbroth No. 30	154	10
Hellbroth No. 31	154	11
Hellbroth No. 32	154	12

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

4. Physical Description

(a) No mining operations are now in progress on this land. However producing oil wells exist on some of the claims.

(b) None

(c) Geological features show these claims to lie on an asymmetrical anticline known as "Spence Dome" situated in the Big Horn Basin of Wyoming. Surface geology shows Triassic Red beds of the Chugwater formation. Drill logs from oil wells, both producing and dry holes, on Spence Dome indicate the Amber, "Tensleep formation", "Amsden formation", and "Madison formation" in the same order from top to bottom. With some knowledge of the structural deposition of Uranium and a look at the enclosed gamma ray log of the Landes #10 oil well hole, it is apparent that exploration for uranium is quite feasable in this area.

Uranium is being mined from outcrops of the Madison limestone in the Pryor Mountain area of the Big Horn Basin. These producing areas lie roughly 10 miles northeast of our properties on Spence Dome. The extremely high radio-active zone, as seen on the enclosed log, is in the Madison formation. This radio-activity produces a deflection of 8½ inches on the log and is some 29 times background. It should be pointed out here that the log was made through two thicknesses of casing and thus quite a dampening effect is caused. Our calculations, from two separate sources, indicate uranium mineral of 0.9% U_3O_8.

Reference is here made to a paper presented at the National Western Mining Conference of the Colorado Mining Association, Denver, Colorado, February 4, 1956. This paper, presented by Thomas Latta of the Denver Exploration Branch, U. S. Atomic Energy Commission, was entitled "Gamma Ray Drill Hole Logging For Uranium" and the following is quoted from a portion of this paper.

Quote "Casing and drilling muds have an absorptive effect on radiation. It has been demonstrated recently that a double string of casing may absorb as much as 35 percent of the radiation. This is much higher absorption than most people anticipated and is well worth taking into consideration."

"Grade is usually picked from the point of maximum needle deflection. Ore grade material will usually show up as an anomalous zone increasing 5 to 10 times above background on a Geiger probe. On a scintillation probe, a reading of 3 to 7 times background may be ore grade." Unquote.

It is also significant to point out that oil from this area is a heavy asphalt type and has a ratio of water to oil of 90 to 10.

(con't page 2)

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

These factors, which are listed below, indicate the advisability of further exploring this area.

1) High radio-activity (29 times background).
2) Ore grade uranium is usually indicated by 4 times background.
3) Uranium ore is being produced from the Madison formation some 10 miles northeast of our properties.
4) Anticlinal structure points to structural control of deposition.
5) Heavy asphalt type oil is indicative of uraninite as seen in the Temple Mountain area of Utah, and Ambrosia Lake, New Mexico.
6) The structural picture of Spence Dome (map enclosed) would indicate a suitable structural flattening beneficial to uranium deposition.

(d) Access is gained from the paved Greybull-Lovell, Wyoming highway by 5 miles of dirt and oil company graded roads. The unsurfaced road is met by the highway some 17 miles north of Greybull, Wyoming. The Chicago, Burlington & Quincy Railroad lies roughly one mile east of the properties and a siding known as Spence is established within one mile of the properties.

Shipping points (A.E.C. buying station at Riverton, Wyoming) can be gained either by rail or by truck. With further production of uranium in the area it is quite likely a buying station will be established in the Greybull-Lovell area. However at present the nearest Government ore buying station is at Riverton, Wyoming, 140 miles by road (highway 20 to Shoshoni and highway 26 to Riverton).

Supply of operations will be by truck or rail from Greybull, Wyoming. Heavy material, if needed, could be obtained in Billings, Montana and shipped by truck or rail.

Residence at present is at Gillette, Wyoming. However with commencement of operations residence would be established at Greybull, Wyoming.

(e) Availability of Manpower--can be obtained from surrounding communities of Greybull, Lovell, Powell, Basin, Worland, Cody and ranches in the area.

Materials--from the above towns or from Billings, Montana. Billings being the largest city in the area.

Supplies, Equipment--see materials.

Water is available from the Big Horn River about two miles away.

(con't page 3)

4. e. continued.

Power is available from power lines serving the producing oil wells on the property.

5.

(b) Refer to structural map of area showing claims and proposed drill holes.

The proposed work will entail drilling on a grid system on 500 foot centers on the area shown on the map. There are proposed 25 holes each to be drilled 900 feet deep. (Refer to enclosed gamma ray log which indicates possible ore horizons to 880 feet.) The proposed grid system surrounds the hole known as the Landes # 10, refer gamma ray log enclosed. Drilling will be started near hole Landes #10 and proceed outward uniformily in all directions. Samples of cuttings will be taken every two feet through known radio-active high areas such as 170-200 feet (refer gamma ray log enclosed showing radio-active zone from 170-200 feet). Where high count indicates, cores will be brought up for examination and assaying. Cores will be brought up between 680 feet and 760 feet as well as 810 to 830 feet. The usual log of each hole will be kept and geological correlation of information will be plotted on suitable maps. Needless to say core depths will vary in accordance to topographical elevations of collars. Thus a complete survey of collars will be accomplished in order to determine depths of ore bearing horizons beneath the surface.

(d) Applicants, Amsden Mining and Exploration Co., a partnership consisting of Philip W. Peter, Richard G. Martin, & Wyoming State Senator F. B. Thomas, are well acquainted with the Uranium business. Mr. Peter was President and General Manager of the Mal Pais Mining and Engineering Company in Grand Junction, Colorado before the Uranium boom in 1953. That company was drilling and mining uranium in 1952. Since leaving the Mal Pais Company, Mr. Peter has been closely associated with uranium throughout the Colorado Plateau, Wyoming, Black Hills of South Dakota and Wyoming, and the lignite areas of North and South Dakota, as a consulting mining engineer. Mr. Peter has written two well established booklets on uranium prospecting and structural deposition of uranium, as well as several articles which have appeared in the Uranium Information Digest. Mr. Peter is a graduate Mining Engineer from the Colorado School of Mines; Golden, Colorado.

Mr. Richard G. Martin has recently joined Mr. Peter in his consulting business and has 10 or more years of experience in geological and geophysical work. Mr. Martin's knowledge of this type of work is felt to be of great value in determining structural controls favorable for uranium deposition. Reference is made to an article appearing in the Uranium Information Digest, April issue, titled "Application of the Reflection Seismograph to Determine Uranium Structural Controls" written by Mr. Martin and Mr. Peter.

(con't page 4)

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

5. d. continued.

Mr. Martin is a graduate Geological Engineer, Colorado School of Mines; Golden, Colorado.

Senator F. B. Thomas has been interested in the uranium industry for several years. Senator Thomas and Mr. Peter have been in partnership on several uranium ventures and it is felt that Senator Thomas' knowledge of Wyoming, the oil industry, as well as its financial aspects, go well to make the Senator a valuable asset to this request.

Supervision of the operations will be under Mr. Peter and Mr. Martin. Both are registered Professional Engineers in the State of Wyoming and well qualified to handle such an operation.

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

(a)	Independent Contracts.	
	Bulldozing drill sites, access trails etc.	
	100 hrs. at $12.50/ hr.	$ 1,250.00
	Drilling-Plugging at $5.00/ft. core at $7.00/ft.	
(5 mo. time)	19,750 ft. of Plugging @ $5.00/ft.	98,750.00
(3 mo. time)	2,750 ft. of core @ $7.00/ft.	19,250.00
	Total Contract Costs	$119,250.00
(b)	Engineering & Supervision	
	One Consulting Mining Engr. 10 mos. @ $1000.00/mo.	$ 10,000.00
	One Consulting Geologist 10 mos. @ $1000.00/mo.	10,000.00
	Labor estimated for small unit work and construction of office facilities	5,000.00
		$ 25,000.00
(c)(d)	Operating Materials & Supplies	
	2 drafting boards @ $75.00 each	$ 150.00
	Plain table & alidade	550.00
	Stadia rods, chains, tapes	200.00
	Desk & chairs	300.00
	2 bunk beds	250.00
	2 pickup trucks @ 10¢/mi. estimate 2500 mi./mo. for 10 mos.	2,500.00
	core boxes 100 @ $5.00 each	500.00
	Gieger counter w/ reel & probe	750.00
	Power estimate $20.00/mo. for 10 mo.	200.00
	Water haul or pump estimate $20.00/mo. for 10 mos.	200.00
	Fuel estimate tank & fuel for 3 mo. (Tank at 150 fuel $20.00/mo. for 3 mo.)	210.00
	TOTAL	$ 5,810.00
(f)	One office Building w/sleeping quarters	$ 2,000.00
	One core house storage	300.00
	TOTAL	$ 2,300.00

6.

(g)	Miscellaneous	
	Anatytical work assays 100 @ $3.00 each	$ 300.00
	Accounting Fee	500.00
	Workmens Compensation 2% of Payroll	100.00
	Payroll Tax 3% of Payroll	150.00
		$ 1,050.00

Costs:

(a)	Independant Contracts	$ 119,250.00
(b)	Engineering & Supervision	25,000.00
(c)(d)	Operating Materials & Supplies	5,810.00
(f)	Operating Equipment	2,300.00
(g)	Miscellaneous	1,050.00
	TOTAL COST	$ 153,410.00

Cost to Amsden Mining & Exploration Company	$ 38,352.50
Cost to D. M. E. A.	$ 115,057.50
TOTAL COST	$ 153,410.00

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

DMEA
Date Rec'd
APR 30 1956
BUREAU OF MINES
Denver, Colorado

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

Not to be filled in by applicant

Docket No. 4278
Metal or Mineral Uranium
Date Received May 3, '56
Estimated Cost $153,410.00
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: Amsden Mining & Exploration Co.: Partnership Philip W. Peter; Gillette, Wyo.
P. O. Box 193 R. G. Martin; Gillette, Wyo.
Gillette, Wyoming F. B. Thomas; Newcastle, Wyo.

(*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 Claims known as Amsden Nos. 1-24 and Hellbroth Nos. 1 thru 32. Situate in Sections 4, 5, 6, 8, 9 T 54 N, R 94 W Big Horn County, Wyoming.

(*b*) State any mine name by which the property is known. Amsden Property

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

(*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 assignment of overriding royalties of 15%.

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

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

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

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

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

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

RECEIVED 66551-1
MAY 3 - 1956

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

(*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.

(*c*) The work will start within 30 days and be completed within 10 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.

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.).

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

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

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

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

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

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

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

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

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

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

[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 APR 28 1956, 195__

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Amsden Mining & Exploration Company
(Applicant)

By Philip W. Peter

PHILIP W. PETER, E. M.
CONSULTING Mining Civil ENGINEERS

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

AMSDEN MINING & EXPLORATION CO.
Box 1[illegible]3
GILLETTE, WYOMING

Name of Claim	Book No.	Page No.
3-F		
Amsden No. 1	154	13
Amsden No. 2	154	14
Amsden No. 3	154	15
Amsden No. 4	154	16
Amsden No. 5	154	17
Amsden No. 6	154	18
Amsden No. 7	154	19
Amsden No. 8	154	20
Amsden No. 9	154	21
Amsden No. 10	154	22
Amsden No. 11	154	23
Amsden No. 12	154	24
Amsden No. 13	154	25
Amsden No. 14	154	26
Amsden No. 15	154	27
Amsden No. 16	154	28
Amsden No. 17	154	29
Amsden No. 18	154	30
Amsden No. 19	154	31
Amsden No. 20	154	32
Amsden No. 21	154	33
Amsden No. 22	154	34
Amsden No. 23	154	35
Amsden No. 24	154	36
Hellbroth No. 1	154	37
Hellbroth No. 2	154	38
Hellbroth No. 3	154	39
Hellbroth No. 4	154	40
Hellbroth No. 5	154	41
Hellbroth No. 6	154	42
Hellbroth No. 7	154	43
Hellbroth No. 8	154	44
Hellbroth No. 9	154	45
Hellbroth No. 10	154	46

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Name of Claim	Book No.	Page No.
3-F		
Hellbroth No. 11	154	47
Hellbroth No. 12	154	48
Hellbroth No. 13	154	49
Hellbroth No. 14	154	50
Hellbroth No. 15	154	51
Hellbroth No. 16	154	52
Hellbroth No. 17	154	53
Hellbroth No. 18	154	54
Hellbroth No. 19	154	55
Hellbroth No. 20	154	56
Hellbroth No. 21	154	1
Hellbroth No. 22	154	2
Hellbroth No. 23	154	3
Hellbroth No. 24	154	4
Hellbroth No. 25	154	5
Hellbroth No. 26	154	6
Hellbroth No. 27	154	7
Hellbroth No. 28	154	8
Hellbroth No. 29	154	9
Hellbroth No. 30	154	10
Hellbroth No. 31	154	11
Hellbroth No. 32	154	12

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

4. Physical Description

(a) No mining operations are now in progress on this land. However producing oil wells exist on some of the claims.

(b) None

(c) Geological features show these claims to lie on an asymmetrical anticline known as "Spence Dome" situated in the Big Horn Basin of Wyoming. Surface geology shows Triassic Red beds of the Chugwater formation. Drill logs from oil wells, both producing and dry holes, on Spence Dome indicate the Ember, "Tensleep formation", "Amsden formation", and "Madison formation" in the same order from top to bottom. With some knowledge of the structural deposition of Uranium and a look at the enclosed gamma ray log of the Landes #10 oil well hole, it is apparent that exploration for uranium is quite feasable in this area.

Uranium is being mined from outcrops of the Madison limestone in the Pryor Mountain area of the Big Horn Basin. These producing areas lie roughly 10 miles northeast of our properties on Spence Dome. The extremely high radio-active zone, as seen on the enclosed log, is in the Madison formation. This radio-activity produces a deflection of 8½ inches on the log and is some 29 times background. It should be pointed out here that the log was made through two thicknesses of casing and thus quite a dampening effect is caused. Our calculations, from two separate sources, indicate uranium mineral of 0.9% U_3O_8.

Reference is here made to a paper presented at the National Western Mining Conference of the Colorado Mining Association, Denver, Colorado, February 4, 1956. This paper, presented by Thomas Latta of the Denver Exploration Branch, U. S. Atomic Energy Commission, was entitled "Gamma Ray Drill Hole Logging For Uranium" and the following is quoted from a portion of this paper.

Quote "Casing and drilling muds have an absorptive effect on radiation. It has been demonstrated recently that a double string of casing may absorb as much as 35 percent of the radiation. This is much higher absorption than most people anticipated and is well worth taking into consideration."

"Grade is usually picked from the point of maximum needle deflection. Ore grade material will usually show up as an anomalous zone increasing 5 to 10 times above background on a Geiger probe. On a scintillation probe, a reading of 3 to 7 times background may be ore grade." Unquote.

It is also significant to point out that oil from this area is a heavy asphalt type and has a ratio of water to oil of 90 to 10.

(con't page 2)

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

These factors, which are listed below, indicate the advisability of further exploring this area.

1) High radio-activity (29 times background).
2) Ore grade uranium is usually indicated by 4 times background.
3) Uranium ore is being produced from the Madison formation some 10 miles northeast of our properties.
4) Anticlinal structure points to structural control of deposition.
5) Heavy asphalt type oil is indicative of uraninite as seen in the Temple Mountain area of Utah, and Ambrosia Lake, New Mexico.
6) The structural picture of Spence Dome (map enclosed) would indicate a suitable structural flattening beneficial to uranium deposition.

(d) Access is gained from the paved Greybull-Lovell, Wyoming highway by 5 miles of dirt and oil company graded roads. The unsurfaced road is met by the highway some 17 miles north of Greybull, Wyoming. The Chicago, Burlington & Quincy Railroad lies roughly one mile east of the properties and a siding known as Spence is established within one mile of the properties.

Shipping points (A.E.C. buying station at Riverton, Wyoming) can be gained either by rail or by truck. With further production of uranium in the area it is quite likely a buying station will be established in the Greybull-Lovell area. However at present the nearest Government ore buying station is at Riverton, Wyoming, 140 miles by road (highway 20 to Shoshoni and highway 26 to Riverton).

Supply of operations will be by truck or rail from Greybull, Wyoming. Heavy material, if needed, could be obtained in Billings, Montana and shipped by truck or rail.

Residence at present is at Gillette, Wyoming. However with commencement of operations residence would be established at Greybull, Wyoming.

(e) Availability of Manpower--can be obtained from surrounding communities of Greybull, Lovell, Powell, Basin, Worland, Cody and ranches in the area.

Materials--from the above towns or from Billings, Montana. Billings being the largest city in the area.

Supplies, Equipment--see materials.

Water is available from the Big Horn River about two miles away.

(con't page 3)

AMSDEN MINING & EXPLORATION CO.
Box 193
GILLETTE, WYOMING

Power is available from power lines serving the producing oil wells on the property.

5.

(b) Refer to structural map of area showing claims and proposed drill holes.

The proposed work will entail drilling on a grid system on 500 foot centers on the area shown on the map. There are proposed 25 holes each to be drilled 900 feet deep. (Refer to enclosed gamma ray log which indicates possible ore horizons to 880 feet.) The proposed grid system surrounds the hole known as the Landes # 10, refer gamma ray log enclosed. Drilling will be started near hole Landes #10 and proceed outward uniformily in all directions. Samples of cuttings will be taken every two feet through known radio-active high areas such as 170-200 feet (refer gamma ray log enclosed showing radio-active zone from 170-200 feet). Where high count indicates, cores will be brought up for examination and assaying. Cores will be brought up between 680 feet and 760 feet as well as 810 to 830 feet. The usual log of each hole will be kept and geological correlation of information will be plotted on suitable maps. Needless to say core depths will vary in accordance to topographical elevations of collars. Thus a complete survey of collars will be accomplished in order to determine depths of ore bearing horizons beneath the surface.

(d) Applicants, Amsden Mining and Exploration Co., a partnership consisting of Philip W. Peter, Richard G. Martin, & Wyoming State Senator F. B. Thomas, are well acquainted with the uranium business. Mr. Peter was President and General Manager of the Mal Pais Mining and Engineering Company in Grand Junction, Colorado before the Uranium boom in 1953. That company was drilling and mining uranium in 1952. Since leaving the Mal Pais Company, Mr. Peter has been closely associated with uranium throughout the Colorado Plateau, Wyoming, Black Hills of South Dakota and Wyoming, and the lignite areas of North and South Dakota, as a consulting mining engineer. Mr. Peter has written two well established booklets on uranium prospecting and structural deposition of uranium, as well as several articles which have appeared in the Uranium Information Digest. Mr. Peter is a graduate Mining Engineer from the Colorado School of Mines; Golden, Colorado.

Mr. Richard G. Martin has recently joined Mr. Peter in his consulting business and has 10 or more years of experience in geological and geophysical work. Mr. Martin's knowledge of this type of work is felt to be of great value in determining structural controls favorable for uranium deposition. Reference is made to an article appearing in the Uranium Information Digest, April issue, titled "Application of the Reflection Seismograph to Determine Uranium Structural Controls" written by Mr. Martin and Mr. Peter.

(con't page 4)

AMSDEN MINING & EXPLORATION CO.
Box 153
GILLETTE, WYOMING

5. d. continued.

Mr. Martin is a graduate Geological Engineer, Colorado School of Mines; Golden, Colorado.

Senator F. B. Thomas has been interested in the uranium industry for several years. Senator Thomas and Mr. Peter have been in partnership on several uranium ventures and it is felt that Senator Thomas' knowledge of Wyoming, the oil industry, as well as its financial aspects, go well to make the Senator a valuable asset to this request.

Supervision of the operations will be under Mr. Peter and Mr. Martin. Both are registered Professional Engineers in the State of Wyoming and well qualified to handle such an operation.

AMSDEN MINING & EXPLORATION CO.
Box 133
GILLETTE, WYOMING

(a)	Independent Contracts.	
	Bulldozing drill sites, access trails etc.	
	100 hrs. at $12.50/ hr.	$ 1,250.00
	Drilling-Plugging at $5.00/ft. core at $7.00/ft.	
(5 mo. time)	19,750 ft. of Plugging @ $5.00/ft.	98,750.00
(3 mo. time)	2,750 ft. of core @ $7.00/ft.	19,250.00
	Total Contract Costs	$119,250.00
(b)	Engineering & Supervision	
	One Consulting Mining Engr.	$ 10,000.00
	10 mos. @ $1000.00/mo.	
	One Consulting Geologist	
	10 mos. @ $1000.00/mo.	10,000.00
	Labor estimated for small unit work	
	and construction of office facilities	5,000.00
		$ 25,000.00
(c)(d)	Operating Materials & Supplies	
	2 drafting boards @ $75.00 each	$ 150.00
	Plain table & alidade	550.00
	Stadia rods, chains, tapes	200.00
	Desk & chairs	300.00
	2 bunk beds	250.00
	2 pickup trucks @ 10¢/mi. estimate 2500 mi./mo.	
	for 10 mos.	2,500.00
	core boxes 100 @ $5.00 each	500.00
	Gieger counter w/ reel & probe	750.00
	Power estimate $20.00/mo. for 10 mo.	200.00
	Water haul or pump estimate $20.00/mo. for	
	10 mos.	200.00
	Fuel estimate tank & fuel for 3 mo.	210.00
	(Tank at 150 fuel $20.00/mo. for 3 mo.)	
	TOTAL	$ 5,810.00
(f)	One office Building w/sleeping quarters	$ 2,000.00
	One core house storage	300.00
	TOTAL	$ 2,300.00

(g) Miscellaneous

Anatytical work assays 100 @ $3.00 each	$	300.00
Accounting Fee		500.00
Workmens Compensation 2% of Payroll		100.00
Payroll Tax 3% of Payroll		150.00
	$	1,050.00

Costs:

(a)	Independant Contracts	$ 119,250.00
(b)	Engineering & Supervision	25,000.00
(c)(d)	Operating Materials & Supplies	5,810.00
(f)	Operating Equipment	2,300.00
(g)	Miscellaneous	1,050.00
	TOTAL COST	$ 153,410.00

Cost to Amsden Mining & Exploration Company	$ 38,352.50
Cost to D. M. E. A.	$ 115,057.50
TOTAL COST	$ 153,410.00