FILE COPY
SURNAME:

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

H Lee
Lemmon

June 18, 1951

Mr. David F. Haddenham
Atlantic City, Wyoming

In reply please refer to
DMA- 1349-X

Dear Mr. Haddenham:

Your application for aid for an exploration project has been examined by our engineers and must be rejected.

This area was examined in 1947 and did not show mineralization of a promising character. It is more than doubtful if there has been any change in outlook since then.

Very truly yours,

Tom Lyon

Tom Lyon
Director, Supply Division

GBHolderer:ec

CC: Adm. Reading File
Mr. Strobel
Mr. Holderer
Files

6/18/51

Cooley - DMA 1349-x
Tungsten - Manganese.
Denial - For transmittal to Strobel.

1. 1 - Copy 1117 - 103

No known prospects for
manganese in this area

MDC

Prospects poor for other minerals,
August.

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 1247 x

Commodity Manganese Ore

Total Amount $45,115

Govt. Participation

1. Name and Address of Applicant [illegible]

2. Location of Property [illegible]

3. Mineral or metal [illegible] Is it listed in Section 9 of MO-5?

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor [illegible]

c) None Manganese [illegible]

d) Don't know—needs field examination

e) Is there an alternative and favorable project? (If so, attach an explanation)

Recommend Approval

5. Is the applicant's right to the property clearly stated? (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

15. In your judgment, can the proposed work be done in the proposed time? _____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? [illegible]

Reviewed by: Ritterude

D.M. Lemmon

Geo. Holden

Date June 12, 1951

97692

FILE COPY
SURNAME:

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

June 15, 1951

Mr. Robert Haddenham
Haddenham Mining & Milling Co.
Atlantic City, Wyoming

Subject: DMA-1349X
Re: Exploration Loan

My dear Mr. Haddenham:

Receipt is acknowledged of your application and attachments for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1349X and referred to Mr. P. R. Bradley, Chief, Manganese Branch on May 31, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1349X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
✓ File
Bradley
Lyon

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

Denial

Dear Sir:

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

Docket No. 1349-X

Commodity Tungsten - Manganese

Applicant Haddenham Mg. & Melling Co

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

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/18/57

Index - DMA 1349-x
Tungsten - Manganese.
Denial - For transmittal to Strobel.

1. 1 - Copy 1117-103

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Denial

Docket No. 1349 x

Commodity Manganese and Tungsten

Total Amount $25,615

Govt. Participation

1. Name and Address of Applicant Robert B, Richard D, David F, Hadden Rare, Atlantic City, Wyoming

2. Location of Property Sec 13 + 14, T. 29 N., R. 100 W.

3. Mineral or metal ~~Hulbnurite~~ Is it listed in Section 9 of MO-5?

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor Tungsten poor

c) None Manganese none

d) Don't know—needs field examination

e) Is there an alternative and favorable project? (If so, attach an explanation)

Recommend Rejection

5. Is the applicant's right to the property clearly stated? (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

15. In your judgment, can the proposed work be done in the proposed time?_____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? It is recommended that the attached proposal be rejected on the basis of the Geological Survey examination of the area in 1947. The applicant has not supplied evidence of promising mineralization

Reviewed by: Crittenden

D M Lemmon

Geo B Holdren

Date June 12, 1951

97692

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1349-t

Date received 5-29-51

Participation

Robert B. Haddenham
Richard D. Haddenham
David P. Haddenham
All of Atlantic City, Wyoming
Owners Haddenham Mining & Milling Co.,

Name and address of applicant

Date May 26, 1951

FILL IN THIS BLOCK

Date of application May 26, 1951

Estimated cost $25,615.00

Mineral or metal Manganese & Hubnerite

Percentage of Government participation 75%

Location of mine Atlantic City, Wyoming
& 1 mile South

Date of filing MF-100 None

DMA Docket Number, if available ~~None~~ 1349-t

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership
*2. If a partnership, state names and addresses of partners. Stated above as applicants
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. Refer to supplement
*5. Are you the owner or the lessee of the property? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. None

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Supplement
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5). Supplement

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—6409

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact tract, lot, or area upon which the exploration is to be conducted. Supplement

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. None

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. Supplement

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source. Supplement

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Supplement

15. State in detail how the ore could be shipped and how and where milled. Supplement

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information: None

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.) None

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. None

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Manganese Manganese Manganite

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Supplement

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. Supplement

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: Supplement

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Supplement

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Haddenham Mining & Milling Co — (Name of company)

By David F. Haddenham — (Signature of authorized official)

May 28-51 — (Date)

Manager — (Title)

[1] 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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

SUPPLEMENT SHEET # 1

Ques. # 4 - Form MF 103

Manager David F. Haddenham- Fifteen years experience in geology, mine management, hard rock mining, and milling operation in cyanide, flotation, and gravity concentration. Experience includes own private operation as well as experience with other companies.

Ques. # 8 - MF 103

FINANCIAL STATEMENT AS OF May 1, 1951

ASSETS - FIXED

Real Estate or Property-

1 Patented claim #167
4 Located claims - all contiguous comprising in all 280 acres with tunnel and water rights - - - - - - $5000.00

DEvelopment:-

300 ft. cross-cut tunnel @ $18.00 per. ft.	5400.00
90 ft. cross-cut tunnel @ 18.00 per. ft.	1620.00
110 ft. Air shaft @ $75.00 per. ft.	8250.00
TOTAL VALUATION OF PROPERTY AND DEVELOPMENT	$20,310.00

CURRENT ASSETS

Ore:-

100 tons ready for milling Assay value - - -	$3010.00	
200 tons ready for milling Assay value - - -	2030.00	
TOTAL VALUATION OF ORE		5,040.00

Equipment:-

1 - 1½ ton Ford truck	350.00
1 - Denver 3 pan jig	175.00
1 - 110 CFM Gardner Denver Air Comp.	900.00
1 - 22 x 72 Air Receiver	125.00
100 ft. Air Hose "Coupled"	40.00
1 Strake	75.00
1 - Cushman 2 HP Engine	60.00
3 tons rail	240.00
1 Cutting torch, gauges, and welding tips	75.00
1 - Heil Hydraulic dump box	300.00
1 - 300 gal. water storage tank	15.00
1 - small air R eceiver	15.00
1 - H. pressure water tank "30 gal"	10.00
1 - Truck Winch	102.50
1 - Power Winch	45.00
1 - Prospecting Hoist	90.00
1 - Chev. 4 Cylinder Stat. Engine	25. 00
1050 ft. 2" pipe @ .20	210.00
Misc. Pipe	77.50
Fittings & Valves	110.00
3 - Mine Cars	135.00
1 ton Mang. Steel Grinding Balls	90.00
1 - Baker Machinery Co., 30 X 48 Ball Mill - New	1250.00

Ques. #8 Form MF103 (Cont)
CURRENT ASSETS (Cont)

1 - slip Scraper	$ 10.00
1 - Drag scraper	15.00
Misc. Pullies, Belting, and Line Shafting	450.00
120 - ft. 4" Cable	20.00
600 - ft. 5/8 Cable	45.00
Drill Steel	35.00
120 ft. - 4" Galv. tuting	60.00
1 - frame ~~[illegible]~~ Building	175.00
1 - 28" Table Saw	75.00
Misc. Personal Tools	250.00
Lumber	50.00
1 - Truck Flat Bed	30.00
1 - Forge	10.00
1 - 4" Drill Column	60.00
1 - Worthington Pump	35.00
1 - 12 Foot Kennedy Spiral Classifier	250.00
1 - Bench Grinder	15.00
1 - 8" Bench Saw	40.00
1 - 200 Amp Arc Welder "Gas Driven"	250.00
2 - V8 Ford Power Plants	200.00
1 - Bendalari 18" Jig	325.00
1 - # 1A Toledo Pipe Stock & Dies	35.00
1 - Chev. Pick up Truck	100.00
1 - Water right (Cost) C.	125.00
100 Mine ties	20.00
1 - 12 x 14 Frame Dwelling	100.00
1 - Wincharger	50.00
1 - Challenge Feeder	75.00
1 - ¼ size Baker Wilfley Table	135.00
1 - 8 X 9 Chalmers Jaw Crusher	250.00
1 - 1½ Fairbanks Morse Cent. Pump	35.00
1 - Set 3/4" Comb. Stock & Dies	21.00
1 - Goulds 2" Cent. Pump	45.00
1 - 2½ X 8 Ft. Grizzley	60.00
1 - Mill Building	3000.00
1 - Shop Building	450.00
2 - Drill Arms & Saddles	100.00
1 - Drifter Bar	100.00
1 - Line Oiler	20.00
1 - JA 55 Ingersol Rand Jackhammer	100.00
1 - Sullivan Sinker	200.00
1 - Gardner Denver S45 Jackhammer	250.00
1 - Ingersol Rand Timber Drill	60.00
100 - Bits	30.00
1 - Lge. Mill Red. Gear	75.00
1 - Small " " " "	30.00
Cash in Bank	2500.00

TOTAL CURRENT & FIXED ASSETS 40,010.50

LIABILITIES None

Ques. # 8 Form MF 103 (Cont.)
FINANCIAL STATEMENT (CONt.)

NOTE ----
This financial statement pertains to present property developed by applicants, which property is adjacent to the property on which aid is being sought to explore the extent of an outcropping of Manganese and Hubnerite. Profit and Loss Statement cannot be furnished for reason that property now being operated is in the last stages of completing amill, so that values in Gold can be extracted from a considerable tonnage of ore already mined. If exploration on the adjacent property showing of Hubnerite and Mangenese justifies a conversion, the present mill will be converted to the milling of the lower grade ore, and the higher grades meeting theminimum standard will be placed at Government disposal.

Ques. # 9 Form MF 103
Services, use of Equipment, and some actual cash to match the 75% allowed by the government, based on .25 as operators share, and 75 cents as governments share for each dollars spent.

Ques. # 10 Form MF 103
A -
Sections 13 & 14 - Township 29 N. Range 100 West. For surface facilities refer to Financial Statement.

B -
Southest Quarter of section 14 - Township 29 - N.Range 100 West.

Ques. #12 Form MF 103
Located 37 miles from R.R. - within 2½ miles of year round oiled highway. Lander, Wyo. nearest R.R. being 37 miles North of property.

Ques. #13 Form MF103
Three sources of water numerically as follows:
1 - 1000 ft. distant from proposed exploratory project. Ample for all mining operation.
2 - Water right present mill property 1450 ft. distant, with pipe on ground to be laid.
3 - Water one half mile may be used to supplement present mill water if expanded operation demands.
No electric power to be used as seventeen miles is the nearest highline.

Ques. 14 Form MF103
There are no facilities on the location where actual exploration is proposed, but ample buildings and equipment for repair work are available on the site of the present mill and mining development.

Ques. 15 Form MF 103
We have not had time to go into thisg outside of considering our present milling equipment for a conversion to flotation to handle the lower grade, and ship the higrade to any outlet that is available.

Ques. #16 - Form MF 103

A 20 foot shaft is on the ground, exposing a 42" lead, which pitches 85 degrees, the direction of strike is roughly east and west. Aside from this small exposure, this Manganese outcrop is virgin ground. Manganese deposits so far, have had little appeal for private operators, due to the low price. Hence there has been a deplorable lack of exploration and development. From the standpoint of defense, this picture has now entirely changed. Outside of a small number of localities such Butte, Montana, I donot know of any Manganese properties that have been developed sufficiently so as to be able to supply the information in full as requested in this question. From my intrepretation of the exploration program, it seems to me that it has been advanced to enable operators to explore the possibilities of discovering new sources of strategic minerals. Therefore I belelve most of this question is out of line in keeping with the aims of the exploration program.

For answer to C. of this question refer to Supplement Ques. #21.

Outside of Identification analysis on metalargical existance of Manganese and Tungsten, no complete qualitative, and quantitative analysis have been undertaken. Manganese deposits are very similar to copper regarding deposition to lower depths, effecting a secondary enrichment down to a certain zone. Therefore quantitative analysis are very mis-leading until samples can be taken from this enrichment. From our mining operations here, we have found this zone commences at a depth of from 30 to fifty feet.

Ques. # 21 - Form MF 103

It is estimated that six months of actual hard rock mining will complete the exploration by the use of two shifts. It is estimated that about 75 feet of sinking; 40 feet of drift; and 40 feet of cross-cut should present the whole picture as to what may be expected by a mine development program. Six months additional will be required for erection of machinery, pipe lines, and shelter, not over twelve actual working months will be required.

Ques. # 22 - Form MF 103

The deposit occurs in a greatly shattered break, and shows a trend in all directions, as well as along the direction of the out-cropping strata. The surface ore occurs in the form of Pyrolusite mostly, with some Manganite and Hubnerite. The hanging wall is sand-stone, with a Diorite foot wall. The ore on the surface has been leached, and the original content undoubtedly redeposited at a lower depth. This enrichment can be expected at a depth of from 30 to 50 feet, based on our other underground exploration of the district. In spite of leaching, surface ore assays show from 10% to 30% Mn o2, with a very small amount of Tungsten (so far not commercial value) as reported by the University of Wyoming.

Ques. 23 - Form MF103

A - Miners - 2 shifts. 6 Months 4992.00
Muckers - 2 shifts. 6 Months 4368.00

(Note - No engineer wages figured as Supervisor will act in this capacity.)

B - 12 months @ $350.00 per month 4200.00

C - No existing buildings. Shop and other building facilities to be used on adjacent property.

D- Carpenter wages 1200.00
(Hoist bldg. and Gallows frame)
Carpenter helper 360.00

Cement	25.00	
Windows	34.00	
Hdwe.	100.00	
3000 ft. Lumber @ 75.00 per. M	225.00	
Delivery	-54.00	
----------Total Mat.		438.00

E - 1 - 1000 Watt Light plant 450.00
1 - Bit sharpener 35.00

F - 1 - Series W.B or equivalent Gardner-Denver gas driven Air compressor - 285 CFM
6 months actual use @ 240.00 per Mo. 1440.00
Delivery 240.00
1 - Cf79 Auto. Drifter drill
6 Months @ 60.00 per month 360.00
Caterpillar hire (Preliminary) work 125.00

G - 1 - pickup truck @ 50.00 per month 600.00
1 - 1½ ton truck
(Estimated hrs. of usage for duration of project) 100 hrs. 250.00
1 - Pumping plant installed with 1000feet of pipe @ 30.00 per month 180.00
Hoisting Equipment @90.00 per month 540.00
Air hose, pipe lines, 1 Sullivan sinker, 1 - Ingersol Rand Jackhammer, 1 - Gardner Denver Jackhammer, all complete with steel Drifter bars, stands, columns, saddles.
Rental @ 130.00 per month 780.00

H - Estimated as Misc. small items 300.00

Ques. 23 (Cont.) Form MF103

I - 12000 ft. Shaft timber @$65.00 per M.	$ 780.00
Delivery @ $18.00 per M.	216.00
720 Timber hangars @ .50 each	360.00
Timber Labor in shaft	350.00
Common Labor toinstall machinery, prepare surface, and place present 20 foot shaft in shape to continue down.	1250.00
20 cases blasting powder delivered	320.00
1000 ft. fuse	10.00
10 boxes blasting caps	35.00
fuel for Compressor power & light plant	850.00
Lubricating Oil	75.00
Fuel for heat	175.00
Assays(Bureau of Mines may take care of this)	75.00
5 sets 1-1/8 drill steel	127.00
300 - 1-1/8 Timken bits	135.00
Total Estimated cost	25,615.00

Ques. 24 Form MF103

If project is approved without undue delay, the first six months of this year will be utilized to place all materials on ground, install all equipment, build all surface improvement, and prepare present 20 foot shaft for shafting to a lower depth. With this accomplished the expenditure should be around $10,500.00. If weather conditions permit 60 days after the completion of the above could be utilized in employing a single shift to start sinking the shaft. Inclement weather conditions at the end of this time may force a shut down. When operations are again resumed in spring, the project will be completed in either four or six months, depending on amount of time that we are able to put in this year on actual shaft sinking.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 29 1951
LANDON F. STROBEL
Executive Secretary

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1349X

Date received 5-29-81

Participation

Robert B. Haddenham
Richard D. Haddenham
David F. Haddenham
All of Atlantic City, Wyoming
Owners Haddenham Mining & Milling Co.,

Name and address of applicant

Date May 26, 1951

FILL IN THIS BLOCK

Date of application May 26, 1951

Estimated cost $25,615.00

Mineral or metal Manganese & Hubnerite

Percentage of Government participation 75%

Location of mine Atlantic City, Wyoming
& 1 mile South

Date of filing MF-100 None

DMA Docket Number, if available ~~None~~ 1349X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership
*2. If a partnership, state names and addresses of partners Stated above as applicants
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe technical and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. Refer to Supplement
*5. Are you the owner or the lessee of the property? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property None
7. If lessee, attach a copy of the lease and state if it is in good standing None

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement Supplement
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5) Supplement

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Supplement Supp.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. None
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. Supplement
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source. Supplement
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Supplement
15. State in detail how the ore could be shipped and how and where milled. Supplement
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. Supplement
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information: None

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.) None
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. None

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Manganese
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Manganese Hubnerite Supplement

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. Supplement

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: Supplement
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Supplement

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Haddenham Mining & Milling Co. — (Name of company)
By David G. Haddenham — (Signature of authorized official)
May 28-51 — (Date)
Manager — (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Ques. # 4 - Form MP 103

Manager David F. Haldenham- Fifteen years experience in geology, mine management, hard rock mining, and milling operation in cyanide, flotation, and gravity concentration. Experience includes own private operation as well as experience with other companies.

Ques. # 8 - MP 103

FINANCIAL STATEMENT AS OF May 1, 1951

ASSETS - FIXED

Real Estate or Property-

1 Patented claim #167	
4 Located claims - all contiguous comprising in all 080 acres with tunnel and water rights - - - - - -	$5000.00
Development:-	
300 ft. cross-cut tunnel @ $18.00 per. ft.	5400.00
90 ft. cross-cut tunnel @ 18.00 per. ft.	1620.00
110 ft. Air shaft @ $75.00 per. ft.	8250.00
TOTAL VALUATION OF PROPERTY AND DEVELOPMENT	$20,310.00

CURRENT ASSETS

Ore:-

100 tons ready for milling Assay value - - -	$3010.00	
200 tons ready for milling Assay value - - -	2030.00	
TOTAL VALUATION OF ORE		5,040.00

Equipment:-

1 - 1½ ton Dore truck	850.00
1 - Denver 3 man jig	175.00
1 - 110 CFM Gardner Denver Air comp.	900.00
1 - 22 x 72 Air Receiver	135.00
100 ft. Air Hose "coupled"	40.00
1 Stroke	75.00
1 - Cushman 8 HP Engine	60.00
3 tons rail	240.00
1 cutting torch, gauges, and welding tips	75.00
1 - Hell Hydraulic dump box	300.00
1 - 300 gal. water storage tank	15.00
1 - small air receiver	15.00
1 - H. pressure water tank "30 gal"	10.00
1 - Truck Winch	102.50
1 - Power Winch	45.00
1 - Prospecting Hoist	90.00
1 - Chev. 4 cylinder Stat. Engine	25.00
1000 ft. 2" pipe @ .20	210.00
Misc. Pipe	77.50
Fittings & Valves	110.00
3 - Mine Cars	135.00
1 ton Hang. Steel Orinking Bells	90.00
1 - Baker Machinery Co., 30 x 40 Ball Mill - New	1200.00

Chem. 98 form Sylvs (Cont)
CURRENT ASSETS (Cont)

1 - slip Scraper	$ 10.00
1 - Drag scraper	15.00
Misc. Pulleys, Belting, and Line Shafting	450.00
120 - ft. 5" Cable	20.00
600 - ft. 5/8 Cable	45.00
Drill Steel	35.00
180 ft. - 4" univ. tubing	60.00
1 - Frame Shaping Building	175.00
1 - 20" Table Saw	75.00
Misc. Personal Tools	250.00
Lumber	50.00
1 - Truck Flat Bed	30.00
1 - Forge	10.00
1 - 4" Drill Column	60.00
1 - Worthington Pump	35.00
1 - 12 Foot Kennedy Spiral Classifier	250.00
1 - Bench Grinder	15.00
1 - 8" Bench Saw	40.00
1 - 200 Amp Arc Welder "Gas Driven"	250.00
2 - V8 Ford Power Plants	200.00
1 - Bendelari 18" Jig	325.00
1 - 3/8 1A Toledo Pipe Stock & Dies	35.00
1 - Chev. Pick up Truck	100.00
1 - Water right (Cont) C.	125.00
100 Mine ties	20.00
1 - 12 x 14 Frame Dwelling	100.00
1 - Winchester	50.00
1 - Challenge Feeder	75.00
1 - 2 size Baker Wilfley Table	135.00
1 - 6 X 9 Chalmers Jaw Crusher	250.00
1 - 1½ Fairbanks Morse Cent. Pump	35.00
1 - Set 3/4" Comb. Stock & Dies	21.00
1 - Goulds 2" Cent. Pump	46.00
1 - 2½ X 8 Ft. Grizzley	60.00
1 - Mill Building	3000.00
1 - Shop Building	450.00
2 - Drill Arms & Saddles	100.00
1 - Drifter Gear	100.00
1 - Line Filer	20.00
1 - JA 55 Ingersol Rand Jackhammer	100.00
1 - Sullivan Sinker	200.00
1 - Gardner Denver 245 Jackhammer	250.00
1 - Ingersol Rand Timber Drill	60.00
100 - Bits	50.00
1 - Lge. Mill Red. Gear	75.00
1 - Small " " " "	30.00
Cash in Bank	--2522.00--

40,010.50

TOTAL CURRENT & FIXED ASSETS
LIABILITIES

None

Ques. # 8 Form MF 103 (Cont.)
FINANCIAL STATEMENT (CONt.)

NOTE ----
This financial statement pertains to present property developed by applicants, which property is adjacent to the property on which aid is being sought to explore the extent of an outcropping of Manganese and Hubnerite. Profit and Loss Statement cannot be furnished for reason that property now being operated is in the last stages of completing amill, so that values in Gold can be extracted from a considerable tonnage of ore already mined. If exploration on the adjacent ~~property~~ showing of Hubnerite and Manganese justifies a conversion, the present mill will be converted to the milling of the lower grade ore, and the higher grades meeting theminimum standard will be placed at Government disposal.

Ques. # 9 Form MF 103
Services, use of Equipment, and some actual cash to match the 75% allowed by the government, based on .25 as operators share, and 75 cents as governments share for each dollars spent.

Ques. # 10 Form MF 103
A -
Sections 13 & 14 - Township 29 N. Range 100 West. For surface facilities refer to Financial Statement.

B -
Southest Quarter of section 14 - Township 29 - N.Range 100 West.

Ques. #12 Form MF 103
Located 37 miles from R.R. - within 2½ miles of year round oiled highway. Lander, Wyo. nearest R.R. being 37 miles North of property.

Ques. #13 Form MF103
Three sources of water numerically as follows:
1 - 1000 ft. distant from proposed exploratory project. Ample for all mining operation.
2 - Water right present mill property 1450 ft. distant, with pipe on ground to be laid.
3 - Water one half mile may be used to supplement present mill water if expanded operation demands.
No electric power to be used as seventeen miles is the nearest highline.

Ques. 14 Form MF103
There are no facilities on the location where actual exploration is proposed, but ample buildings and equipment for repair work are available on the site of the present mill and mining development.

Ques. 15 Form MF 103
We have not had time to go into this, outside of considering our present milling equipment for a conversion to flotation to handle the lower grade, and ship the higrade to any outlet that is available.

A 50 foot shaft is on the ground, exposing a 42" lead, which pitches 85 degrees, the direction of strike is roughly east and west. Aside from this small exposure, this Manganese outcrop is virgin ground. Manganese deposits so far, have had little appeal for private operators, due to the low price. Hence there has been a deplorable lack of exploration and development. From the standpoint of defense, this picture has now entirely changed. Besides of a small number of localities such Butte, Montana, I cannot know of any Manganese properties that have been developed sufficiently so as to be able to supply the information in full as requested in this question. From my interpretation of the exploration program, it seems to me that it has been advisable to push capable operators to explore the possibilities of discovering new sources of strategic minerals. Therefore I believe most of this question is not in line in keeping with the aims of the exploration program.

For answer to ques. of this question refer to supplement Ques. #21.

Methods of identification analysis on metallurgical existence of Manganese and Tungsten, no complete qualitative, and quantitative analysis have been undertaken. Manganese deposits are very similar to copper regarding deposition to lower depths, effecting a secondary enrichment down to a certain zone. Therefore quantitative analysis are very mis-leading until samples can be taken from this enrichment. From our mining operations here, we have found this zone commences at a depth of from 30 to fifty feet.

Ques. # 21 - Form MP 103

It is estimated that six months of actual hard rock mining will complete the exploration by the use of two shifts. It is estimated that about 75 feet of sinking; 40 feet of drift; and 40 feet of cross-cut should present the whole picture as to what may be expected by a mine development program. Six months additional will be required for erection of machinery, pipe lines, and shelter, not over twelve actual working months will be required.

Ques. # 22 - Form MP 103

The deposit occurs in a greatly shattered break, and shows S a trend in all directions, as well as along the direction of the out-cropping strata. The surface ore occurs in the form of Pyrolusite mostly, with some Manganite and Hubnerite. The hanging wall is sandstone, with a diorite foot wall. The ore on the surface has been leached, and the original content undoubtedly redeposited at a lower depth. This enrichment can be expected at a depth of from 30 to 50 feet, based on our other underground exploration of the district. In spite of leaching, surface ore assays show from 10% to 30% Mn O2, with a very small amount of Tungsten (so far not commercial value) as reported by the University of Wyoming.

Ques. 23 - Form MF103

A - Miners - 2 shifts. 6 Months @ 4992.00
Muckers - 2 shifts. 6 Months 4368.00

(Note - No engineer wages figured as Supervisor will act in this capacity.)

B - 12 months @ $350.00 per month ~~4479~~ 4200.00

C - No existing buildings. Shop and other building facilities to be used on adjacent property.

D- Carpenter wages 1200.00
(Hoist bldg. and Gallows frame)
Carpenter helper 360.00

Cement	25.00	
Windows	34.00	
Hdwe.	100.00	
3000 ft. Lumber @ 75.00 per. M	225.00	
Delivery	-54.00	
----------Total Mat.		438.00

E - 1 - 1000 Watt Light plant 450.00
1 - Bit sharpener 35.00

F - 1 - Series W.E or equivalent Gardner-Denver gas driven Air compressor - 285 CFM
6 months actual use @ 240.00 per Mo. 1440.00
Delivery 240.00
1 - CF79 Auto. drifter drill
6 Months @ 60.00 per month 360.00
Caterpillar hire (Preliminary) work 125.00

G - 1 - pickup truck @ 50.00 per month 600.00
1 - 1½ ton truck
(Estimated hrs. of usage for duration of project) 100 hrs. 250.00
1 - Pumping plant installed with 1000feet of pipe @ 30.00 per month 180.00
Hoisting Equipment @90.00 per month 540.00
Air hose, pipe lines, 1 Sullivan sinker, 1 - Ingersol Rand Jackhammer, 1 - Gardner Denver Jackhammer, all complete with steel drifter bars, stands, columns, saddles.
Rental @ 130.00 per month 780.00

H - Estimated as Misc. small items 300.00

Ques. 23 (Cont.) Form MF103

I -	12000 ft. Shaft timber @ $65.00 per M.	$ 780.00
	Delivery @ $18.00 per M.	216.00
	720 Timber hangers @ .50 each	360.00
	Timber Labor in shaft	350.00
	Common Labor toinstall machinery, prepare surface, and place present 20 foot shaft in shape to continue down.	1250.00
	20 cases blasting powder delivered	320.00
	1000 ft. fuse	19.00
	10 boxes blasting caps	35.00
	fuel for Compressor power & light plant	860.00
	Lubricating Oil	75.00
	Fuel for heat	175.00
	Assays(Bureau of Mines may take care of this)	75.00
	5 sets 1-1/8 drill steel	127.00
	300 - 1-1/8 Timken bits	135.00
	Total Estimated cost	25,615.00

Ques. 24 Form MF103

If project is approved without undue delay, the first six months of this year will be utilized to place all materials on ground, install all equipment, build all surface improvement, and prepare present 20 foot shaft for shafting to a lower depth. With this accomplished the expenditure should be around $10,500.00. If weather conditions permit 60 days after the completion of the above could be utilized in employing a single shift to start sinking the shaft. Inclement weather conditions at the end of this time may force a shut down. When operations are again resumed in spring, the project will be completed in either four or six months, depending on amount of time that we are able to put in this year on actual shaft sinking.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 29 1951
LANDON F. STROBEL
Executive Secretary

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 13497

Date received 5-29-51

Participation

Robert B. Haddenham
Richard D. Haddenham
David F. Haddenham
All of Atlantic City, Wyoming
Owners Haddenham Mining & Milling Co.,

Fremont County.

Name and address of applicant

Date May 26, 1951

FILL IN THIS BLOCK

Date of application May 26, 1951

Estimated cost $25,615.00

Mineral or metal Manganese & Hubnerite

Percentage of Government participation 75%

Location of mine Atlantic City, Wyoming

1 mile South

Date of filing MF-100 None

DMA Docket Number, if available ~~None~~ 13497

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership

*2. If a partnership, state names and addresses of partners. Stated above as applicants

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. refer to supplement

*5. Are you the owner or the lessee of the property? Owners

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. None

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Supplement

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? supplement

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Supplement

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Supp.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. None

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. Supplement

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source. Supplement

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. Supplement

15. State in detail how the ore could be shipped and how and where milled. Supplement

*16. History: Supplement

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production: None

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.) None

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. None

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Manganese Hausmanite

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Supplement

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. Supplement

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: Supplement

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Supplement

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Haddenham Mining & Milling Co. By David F. Haddenham
(Name of company) (Signature of authorized official)

May 25-51 Manager
(Date) (Title)

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.

*Same as footnote on page 1.

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SUPPLEMENT SHEET # 1

Ques. # 4 - Form LF 103

Manager David F. Haddenham- Fifteen years experience in geology, mine management, hard rock mining, and milling operation in cyanide, flotation, and gravity concentration. Experience includes own private operation as well as experience with other companies.

Ques. # 8 - MF 103

FINANCIAL STATEMENT AS OF May 1, 1951

ASSETS - FIXED

Real Estate or Property-

1 Patented claim #167	
4 Located claims - all contiguous comprising in all 280 acres with tunnel and water rights - - - - - -	$5000.00
DEvelopment:-	
300 ft. cross-cut tunnel @ $18.00 per. ft.	5400.00
90 ft. cross-cut tunnel @ 18.00 per. ft.	1620.00
110 ft. Air shaft @ $75.00 per. ft.	8250.00
TOTAL VALUATION OF PROPERTY AND DEVELOPMENT	$20,310.00

CURRENT ASSETS

Ore:-		
100 tons ready for milling Assay value - - -	$3010.00	
200 tons ready for milling Assay value - - -	2030.00	
TOTAL VALUATION OF ORE		5,040.00

Equipment:-	
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1 - Denver 3 pan jig	175.00
1 - 110 CFM Gardner Denver Air Comp.	900.00
1 - 22 x 72 Air Receiver	125.00
100 ft. Air Hose "Coupled"	40.00
1 Strake	75.00
1 - Cushman 2 HP Engine	60.00
3 tons rail	240.00
1 Cutting torch, gauges, and welding tips	75.00
1 - Heil Hydraulic dump box	300.00
1 - 300 gal. water storage tank	15.00
1 - small air R eceiver	15.00
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1 - Truck Winch	102.50
1 - Power Winch	45.00
1 - Prospecting Hoist	90.00
1 - Chev. 4 Cylinder Stat. Engine	25. 00
1050 ft. 2" pipe @ .20	210.00
Misc. Pipe	77.50
Fittings & Valves	110.00
3 - Mine Cars	135.00
1 ton Mang. Steel Grinding Balls	90.00
1 - Baker Machinery Co., 30 X 48 Ball Mill - New	1250.00

Ques. #8 Form Mr103 (Cont)
CURRENT ASSETS (Cont)

1 - slip Scraper	$ 10.00
1 - Drag scraper	15.00
Misc. Pullies, Belting, and Line Shafting	450.00
120 - ft. 3/8" Cable	20.00
600 - ft. 5/8 Cable	45.00
Drill Steel	35.00
120 ft. - 4" Galv. tubing	60.00
1 - frame Building	175.00
1 - 28" Table Saw	75.00
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1 - Drifter Bar	100.00
1 - Line Oiler	20.00
1 - JA 55 Ingersol Rand Jackhammer	100.00
1 - Sullivan Sinker	200.00
1 - Gardner Denver S45 Jackhammer	250.00
1 - Ingersol Rand Timber Drill	60.00
100 - Bits	30.00
1 - Lge. Mill Red. Gear	75.00
1 - Small " " " "	30.00
Cash in Bank	2500.00

TOTAL CURRENT & FIXED ASSETS 40,010.50

LIABILITIES None

Ques. # 8 Form MF 103 (Cont.)
FINANCIAL STATEMENT (CONt.)

NOTE ----
This financial statement pertains to present property developed by applicants, which property is adjacent to the property on which aid is being sought to explore the extent of an outcropping of Manganese and Hubnerite. Profit and Loss Statement cannot be furnished for reason that property now being operated is in the last stages of completing amill, so that values in Gold can be extracted from a considerable tonnage of ore already mined. If exploration on the adjacent ######## showing of Hubnerite and Manganese justifies a conversion, the present mill will be converted to the milling of the lower grade ore, and the higher grades meeting theminimum standard will be placed at Government disposal.

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A -
Sections 13 & 14 - Township 29 N. Range 100 West. For surface facilities refer to Financial Statement.

B -
Southest Quarter of section 14 - Township 29 - N.Range 100 West.

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Located 37 miles from R.R. - within 2½ miles of year round oiled highway. Lander, Wyo. nearest R.R. being 37 miles North of property.

Ques. #13 Form MF103
Three sources of water numerically as follows:
1 - 1000 ft. distant from proposed exploratory project. Ample for all mining operation.
2 - Water right present mill property 1450 ft. distant, with pipe on ground to be laid.
3 - Water one half mile may be used to supplement present mill water if expanded operation demands.
No electric power to be used as seventeen miles is the nearest highline.

Ques. 14 Form MF103
There are no facilities on the location where actual exploration is proposed, but ample buildings and equipment for repair work are available on the site of the present mill and mining development.

Ques. 15 Form MF 103
We have not had time to go into thisn outside of considering our present milling equipment for a conversion to flotation to handle the lower grade, and ship the higrade to any outlet that is available.

Ques. #16 - Form MF 103

A 20 foot shaft is on the ground, exposing a 42" lead, which pitches 85 degrees, the direction of strike is roughly east and west. Aside from this small exposure, this Manganese outcrop is virgin ground. Manganese deposits so far, have had little appeal for private operators, due to the low price. Hence there has been a deplorable lack of exploration and development. From the standpoint of defense, this picture has now entirely changed. Outside of a small number of localities such Butte, Montana, I donot know of any Manganese properties that have been developed sufficiently so as to be able to supply the information in full as requested in this question. From my intrepretation of the exploration program, it seems to me that it has been advanced to enable operators to explore the possibilities of discovering new sources of strategic minerals. Therefore I beleive most of this question is out of line in keeping with the aims of the exploration program.

For answer to C. of this question refer to Supplement Ques. #21.

Outside of Identification analysis on metalurgical existance of Manganese and Tungsten, no complete qualitative, and quantitative analysis have been undertaken. Manganese deposits are very similar to copper regarding deposition to lower depths, effecting a secondary enrichment down to a certain zone. Therefore quantitative analysis are very mis-leading until samples can be taken from this enrichment. From our mining operations here, we have found this zone commences at a depth of from 30 to fifty feet.

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It is estimated that six months of actual hard rock mining will complete the exploration by the use of two shifts. It is estimated that about 75 feet of sinking; 40 feet of drift; and 40 feet of cross-cut should present the whole picture as to what may be expected by a mine development program. Six months additional will be required for erection of machinery, pipe lines, and shelter, not over twelve actual working months will be required.

Ques. # 22 - Form MF 103

The deposit occurs in a greatly shattered break, and shows a trend in all directions, as well as along the direction of the out-cropping strata. The surface ore occurs in the form of Pyrolusite mostly, with some Manganite and Hubnerite. The hanging wall is sandstone, with a Diorite foot wall. The ore on the surface has been leached, and the original content undoubtedly redeposited at a lower depth. This enrichment can be expected at a depth of from 30 to 50 feet, based on our other underground exploration of the district. In spite of leaching, surface ore assays show from 10% to 30% Mn o2, with a very small amount of Tungsten (so far not commercial value) as reported by the University of Wyoming.

Ques. 23 - Form MF103

A -	Miners - 2 shifts.	6 Months	$ 4992.00
	Muckers - 2 shifts.	6 Months	4368.00

(Note - No engineer wages figured as Supervisor will act in this capacity.)

B -	12 months @ $350.00 per month	4200.00

C - No existing buildings. Shop and other building facilities to be used on adjacent property.

D-	Carpenter wages (Hoist bldg. and Gallows frame)		1200.00
	Carpenter helper		360.00
	Cement	25.00	
	Windows	34.00	
	Hdwe.	100.00	
	3000 ft. Lumber @ 75.00 per. M	225.00	
	Delivery	54.00	
	----------Total Mat.		438.00

E -	1 - 1000 Watt Light plant	450.00
	1 - Bit sharpener	35.00

F -	1 - Series W.B or equivalent Gardner-Denver gas driven Air compressor - 285 CFM 6 months actual use @ 240.00 per Mo.	1440.00
	Delivery	240.00
	1 - Cf79 Auto. Drifter drill 6 Months @ 60.00 per month	360.00
	Caterpillar hire (Preliminary) work	125.00

G -	1 - pickup truck @ 50.00 per month	600.00
	1 - 1½ ton truck (Estimated hrs. of usage for duration of project) 100 hrs.	250.00
	1 - Pumping plant installed with 1000feet of pipe @ 30.00 per month	180.00
	Hoisting Equipment $90.00 per month	540.00
	Air hose, pipe lines, 1 Sullivan sinker, 1 - Ingersol Rand Jackhammer, 1 - Gardner Denver Jackhammer, all complete with steel Drifter bars, stands, columns, saddles. Rental @ 130.00 per month	780.00
H -	Estimated as Misc. small items	300.00

Ques. 23 (Cont.) Form MF103

I - 12000 ft. Shaft timber @$65.00 per M.	$ 780.00
Delivery @ $18.00 per M.	216.00
720 Timber hangars @ .50 each	360.00
Timber Labor in shaft	350.00
Common Labor toinstall machinery, prepare surface, and place present 20 foot shaft in shape to continue down.	1250.00
20 cases blasting powder delivered	320.00
1000 ft. fuse	19.00
10 boxes blasting caps	35.00
fuel for Compressor power & light plant	850.00
Lubricating Oil	75.00
Fuel for heat	175.00
Assays(Bureau of Mines may take care of this)	75.00
5 sets 1-1/8 drill steel	127.00
300 - 1-1/8 Timken bits	135.00
Total Estimated cost	25,615.00

Ques. 24 Form MF103

If project is approved without undue delay, the first six months of this year will be utilized to place all materials on ground, install all equipment, build all surface improvement, and prepare present 20 foot shaft for shafting to a lower depth. With this accomplished the expenditure should be around $10,500.00. If weather conditions permit 60 days after the completion of the above could be utilized in employing a single shift to start sinking the shaft. Inclement weather conditions at the end of this time may force a shut down. When operations are again resumed in spring, the project will be completed in either four or six months, depending on amount of time that we are able to put in this year on actual shaft sinking.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 29 1951
LANDON F. STROBEL
Executive Secretary

April 6, 1951

Mr. R. T. Maddenburn
Maddenburn Mining & Milling Co.
Atlantic City, Wyoming

Dear Mr. Maddenburn:

We are answering your letter of March 5.

The General Services Administration purchases manganese ores of the specifications shown on the enclosed sheets. We judge from your letter that not all your ore will conform, but is off-grade.

So far there is no general program of purchase of off-grade ores. Arrangements are being made at one point in the southwest for their purchase, but this is a special case, and depends on the presence of significant quantities of low grade from which manganese can be readily recovered. Ready recoverability is not a characteristic of many of the low grade deposits of the country. However, we expect to utilize all we can as fast as the necessary geologic and metallurgical research can be completed. Data on your low grade will be appreciated.

Very truly yours,

R. R. Bradley

R. R. Bradley, Jr.
Chief, Manganese Branch

Enclosures

RRBradley:mem

cc: Adm. Section - File
Mr. Strobel
Mr. Bradley
Regional Field Term - Region IV
MILES

LANDON F. STROBEL

Atlantic City, Wyoming
3/5-5.

Defense Prod. Adm.
Washington D. C.

Gentlemen:-

We produce a considerable amount of manganese ore, as a by-product of our mining operation, and also have a very promising deposit of Heguide ore. In view of this fact, we would very much like to have the particulars of your stock piling program, so that we may formulate some development program to place this badly needed metal at the disposal of the present preparedness program.

Sincerely

Vaddenham Mining & Milling Co.

B. Haddenham

Atlantic City, Wyoming

1951 15 10 AM 11 31
WASHINGTON D.C.
BUREAU OF MINES

Bradley

MAR 14 1958

info

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 13497

Date received 5-29-31

Participation

Robert B. Haddenham
Richard D. Haddenham
David F. Haddenham
All of Atlantic City, Wyoming
Owners Haddenham Mining & Milling Co.

Name and address of applicant

Date May 26, 1951

FILL IN THIS BLOCK

Date of application May 26, 1951

Estimated cost $25,615.00

Mineral or metal Manganese & Hubnerite

Percentage of Government participation 75%

Location of mine Atlantic City, Wyoming
1 mile South

Date of filing MF-100 None

DMA Docket Number, if available 13497

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership
*2. If a partnership, state names and addresses of partners Stated above as applicants
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. Refer to supplement
*5. Are you the owner or the lessee of the property? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property None
7. If lessee, attach a copy of the lease and state if it is in good standing None

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Supplement
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? Supplement

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact lot, or area upon which the exploration is to be conducted. Supplement Supp.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. None

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. Supplement

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Supplement
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structures now on the property that will be devoted to the exploration work. Supplement

15. State in detail how the ore could be shipped and how and where milled. Supplement

*16. History: Supplement

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information: None

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.) None

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. None

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Manganese

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Manganese and Hubnerite Supplement

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. Supplement

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: Supplement

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. Supplement

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Haddenham Mining & Milling Co. — (Name of company)

By David G. Haddenham — (Signature of authorized official)

May 25-51 — (Date)

Manager — (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

SUPPLEMENT SHEET # 1

Ques. # 4 - Form MF 103

Manager David F. Haddenham- Fifteen years experience in geology, mine management, hard rock mining, and milling operation in cyanide, flotation, and gravity concentration. Experience includes own private operation as well as experience with other companies.

Ques. # 8 - MF 103

FINANCIAL STATEMENT AS OF May 1, 1951

ASSETS - FIXED

Real Estate or Property-

1 Patented claim #167

4 Located claims - all contiguous comprising in all 280 acres with tunnel and water rights - - - - - - $5000.00

Development:-

300 ft. cross-cut tunnel @ $18.00 per. ft.	5400.00
90 ft. cross-cut tunnel @ 18.00 per. ft.	1620.00
110 ft. Air shaft @ $75.00 per. ft.	8250.00
TOTAL VALUATION OF PROPERTY AND DEVELOPMENT	$20,310.00

CURRENT ASSETS

Ore:-

100 tons ready for milling Assay value - - -	$3010.00	
200 tons ready for milling Assay value - - -	2030.00	
TOTAL VALUATION OF ORE		5,040.00

Equipment:-

1 - 1½ ton Ford truck	350.00
1 - Denver 3 pan jig	175.00
1 - 110 CFM Gardner Denver Air Comp.	900.00
1 - 22 x 72 Air Receiver	125.00
100 ft. Air Hose "Coupled"	40.00
1 Strake	75.00
1 - Cushman 2 HP Engine	60.00
3 tons rail	240.00
1 Cutting torch, gauges, and welding tips	75.00
1 - Hell Hydraulic dump box	300.00
1 - 300 gal. water storage tank	15.00
1 - small air Receiver	15.00
1 - H. pressure water tank "30 gal"	10.00
1 - Truck Winch	102.50
1 - Power Winch	45.00
1 - Prospecting Hoist	60.00
1 - Chev. 4 cylinder Stat. Engine	25. 00
1050 ft. 2" pipe @ .20	210.00
Misc. Pipe	77.50
Fittings & Valves	110.00
3 - Mine Cars	135.00
1 ton Mang. Steel Grinding Balls	90.00
1 - Baker Machinery Co., 30 X 48 Ball Mill - New	1250.00

Ques. #8 Form MT103 (Cont)
CURRENT ASSETS (Cont)

1 - slip Scraper	$ 10.00
1 - Drag scraper	15.00
Misc. Pullies, Belting, and Line Shafting	450.00
120 - ft. 4" Cable	20.00
600 - ft. 5/8 Cable	45.00
Drill Steel	35.00
180 ft. - 4" galv. tubing	60.00
1 - Frame Dwelling Building	175.00
1 - 28" Table Saw	75.00
Misc. Personal Tools	250.00
Lumber	50.00
1 - Truck Flat Bed	30.00
1 - Forge	10.00
1 - 4" Drill Column	60.00
1 - Worthington Pump	55.00
1 - 12 Foot Kennedy Spiral Classifier	250.00
1 - Bench Grinder	15.00
1 - 8" Bench Saw	40.00
1 - 200 Amp Arc Welder "Gas Driven"	250.00
2 - V8 Ford Power Plants	200.00
1 - Bendalari 18" Jig	325.00
1 - 3/4 1A Toledo Pipe Stock & Dies	35.00
1 - Chev. Pick up Truck	100.00
1 - Water right (Cost) C.	125.00
100 Mine ties	20.00
1 - 12 x 14 Frame Dwelling	100.00
1 - Wincharger	50.00
1 - Challenge Feeder	75.00
1 - 2 size Baker Wilfley Table	135.00
1 - 8 X 9 Chalmers Jaw Crusher	250.00
1 - 1½ Fairbanks Morse Cent. Pump	35.00
1 - Set 3/4" Comb. Stock & Dies	21.00
1 - Goulds 2" Cent. Pump	45.00
1 - 2½ X 8 Ft. Grizzley	60.00
1 - Mill Building	3000.00
1 - Shop Building	450.00
2 - Drill Arms & Saddles	100.00
1 - Drifter Bar	100.00
1 - Line Oiler	20.00
1 - JA 55 Ingersol Hand Jackhammer	100.00
1 - Sullivan Sinker	200.00
1 - Gardner Denver S45 Jackhammer	250.00
1 - Ingersol Hand Timber Drill	60.00
100 - Bits	30.00
1 - Ige. Mill Red. Gear	75.00
1 - Small " " " "	30.00
Cash in Bank	--2500.00----------

40,010.50

TOTAL CURRENT & FIXED ASSETS

LIABILITIES None

Ques. # 8 Form MF 103 (Cont.)
FINANCIAL STATEMENT (CONT.)

NOTE ----
This financial statement pertains to present property developed by applicant, which property is adjacent to the property on which aid is being sought to explore the extent of an outcropping of Manganese and Hubnerite. Profit and loss statement cannot be furnished for reason that property now being operated is in the last stages of completing a mill, so that values in Gold can be extracted from a considerable tonnage of ore already mined. If exploration on the adjacent property showing of Hubnerite and Manganese justifies a conversion, the present mill will be converted to the milling of the lower grade ore, and the higher grades meeting the minimum standard will be placed at Government disposal.

Ques. # 9 Form MF 103
Services, use of Equipment, and some actual cash to match the 75% allowed by the government, based on .25 as operators share, and 75 cents as governments share for each dollars spent.

Ques. # 10 Form MF 103
A -
Sections 13 & 14 - Township 29 N. Range 100 West. For surface facilities refer to Financial Statement.

B -
Southest Quarter of section 14 - Township 29 - N.Range 100 West.

Ques. #12 Form MF 103
Located 37 miles from R.R. - within 2½ miles of your round oiled highway. Lander, Wyo. nearest R.R. being 37 miles North of property.

Ques. #13 Form MF103
Three sources of water numerically as follows:
1 - 1000 ft. distant from proposed exploratory project. Ample for all mining operation.
2 - Water right present mill property 1450 ft. distant, with pipe on ground to be laid.
3 - Water one half mile may be used to supplement present mill water if expanded operation demands.
No electric power to be used as seventeen miles is the nearest highline.

Ques. 14 Form MF103
There are no facilities on the location where actual exploration is proposed, but ample buildings and equipment for repair work are available on the site of the present mill and mining development.

Ques. 15 Form MF 103
We have not had time to go into this outside of considering our present milling equipment for a conversion to flotation to handle the lower grade, and ship the higrade to any outlet that is available.

Ques. #16 - Form MF 103

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(Hoist bldg. and Gallows frame)
Carpenter helper 360.00
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Windows 35.00
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5000 ft. Lumber
@ 75.00 per. M 325.00
Delivery -54.00
----------Total Mat. 450.00

E - 1 - 1000 watt Light plant 450.00
1 - Bit sharpener 35.00

F - 1 - Series W.B or equivalent Gardner-Denver Gas driven Air compressor - 285 CFM
6 months actual use @ 240.00 per No. 1440.00
Delivery 240.00
1 - C279 Auto. drifter drill
6 Months @ 60.00 per month 360.00
Caterpillar hire (Preliminary) work 125.00

G - 1 - pickup truck @ 50.00 per month 600.00
1 - 1½ ton truck
(Estimated hrs. of usage for duration of project) 100 hrs. 260.00
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Ques. 23 (Cont.) Form MF103

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