FILE COPY
SURNAME:

Holderer
Jacoby

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

SEP 27 1951

G. E. C.

Mr. Alvin W. Hale, President
Leader Manganese Mining Corp.
506 West 2nd South
Logan, Utah

In reply please refer
to DMA-15517

Dear Mr. Hale:

Having received no answer to our letter of July 2, 1951, requesting additional information, we assume that you intend to withdraw your application. Therefore we are marking your docket "Withdrawn."

Very truly yours,

George B. Holderer

George B. Holderer
Chief, Manganese Branch

CHJacoby:ec
9/26/51

CC: Adm. Reading File
DMA Docket File
Mr. Holderer

FILE COPY
SURNAME:

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

Holderer
Crittenden

July 2, 1951

Leader Manganese Mining Corp.
Alvin W. Hale, President and General Mgr.
306 West 2nd So.
Logan, Utah

In reply please refer to:
DMA-1551X Manganese

Dear Mr. Hale:

Your request for an exploration loan totaling $6,000 for exploration of the Leader claims in Franklin County, Idaho has been reviewed by Defense Minerals Administration. The information you have submitted gives a reasonably clear picture of your intent but is not sufficient to determine the possible value of the property or to enable us to approve your application. You mention that assays and maps are being made, and it is suggested that you submit those at your convenience to further support your proposal. If possible, the map should show location of the assays and their relationship to existing and proposed development. If your proposal should be approved, it will be necessary to have 8 copies of such a map showing the location of proposed drill holes and underground workings.

Very truly yours,

George B. Holderer

George B. Holderer
Chief Manganese Branch

MDCrittenden:bl

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

FILE COPY
SURNAME:

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

June 19, 1951

Mr. Alvin W. Hale
President
Leader Manganese Mining Corporation
506 West 2nd South
Logan, Utah

Subject: DMA-1551X
Re: Exploration loan

My dear Mr. Hale:

Receipt is acknowledged of your application and attachments of May 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1551X and was referred to Mr. George Holderer, Chief, Manganese Branch on June 8, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1551X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:Jeb
cc: Strobel-2
Files
Holderer
Lyon

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. George Holderer **DATE:** June 19, 1951

FROM : H. D. Crittenden, Jr.

SUBJECT: DMM 1551 X Leader Manganese Mining Corporation

The following is a suggested draft of a letter regarding the above property.

Dear Mr. Hale:

Your request for an exploration loan totaling $6,000 for exploration of the Leader claims in Franklin County, Idaho has been reviewed by DMM. write out. The information you have submitted gives a reasonably clear picture of your intent but is not sufficient to determine the possible value of the property or to enable us to approve your application. You mention that assays and maps are being made, and it is suggested that you submit those at your convenience to further support your proposal. If possible, the map should show location of the assays and their relationship to existing and proposed development. If your proposal ~~is~~ should be approved, it will be necessary to have 3 copies of such a map showing the location of proposed drill holes and underground workings.

~~Sincerely~~ yours,

Mr. George Holderer June 19, 1951

M. D. Crittenden, Jr.

DMA 1551 X Leader Manganese Mining Corporation

The following is a suggested draft of a letter regarding the above property.

Dear Mr. Hale:

Your request for an exploration loan totaling $6,000 for exploration of the Leader claims in Franklin County, Idaho has been reviewed by DMA. The information you have submitted gives a reasonably clear picture of your intent but is not sufficient to determine the possible value of the property or to enable us to approve your application. You mention that assays and maps are being made, and it is suggested that you submit those at your convenience to further support your proposal. If possible, the map should show location of the assays and their relationship to existing and proposed development. If your proposal is approved, it will be necessary to have 8 copies of such a map showing the location of proposed drill holes and underground workings.

Sincerely yours,

MDCrittenden:gt

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 1551 X

Date received 6-4-51

Participation

Leader Manganese Mining Corp
Alvin V. Hale, President and General Mgr.
506 West 2nd So.
Logan, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $6000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Township 12 South Range 41 East

Section 31 & 32 Boise Meridian Franklin Co. Idaho

Date of filing MF-100 May 28, 1951

DMA Docket Number, if available

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?
*2. If a partnership, state names and addresses of partners.
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. See Supp. Sheets
7. If lessee, attach a copy of the lease and state if it is in good standing. See Supp. Sheets

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. See Supp. Sheet
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)? See Supp. Sheets

*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. See Supp. Sheets

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

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.

*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.

*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.

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

15. State in detail how the ore could be shipped and how and where milled. See Supp. Sheets

*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:

	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.)

(*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.
See Supp. Sheets

THE EXPLORATION

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

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

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. See Supp. Sheets

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: See Supp Sheets

(*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. See Supp Sheet.

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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

6. None

7. Corporation owned.

8. Cash expended for exploration, living expences during exploration at mine. The Corporation is in control of two exploration developments, however, this application is being made to cover one - the Leader Claims.
Total cash receipts received from the sale of stock for both claims totals $14,021.00 of which approximately 50% has been expended on the claim for which this application is made.

9. $1500.00
Yes, it is sufficient to pay our part of the cost.

10. (a) Listed under question 17 of MF-100
(b) Three claims located in Section 31 and 32 Township 12 South Range 41 East, Boise Meridian, Franklin Co. State of Idaho. Unsurveyed to date for determination of exact legal description.

15. Shipped by truck to rail and thence to nearest milling point - Magna or Garfield, Utah.

19. All conditions and circumstances covered in previous statements.

20. Manganese. By-products not determined as yet.

21. Run two (2) core drills to adequate depth and extend existing tunnel approximately 100 Ft.
Time 150 working days dependant upon weather.

22. Refer to 7 (c) and 12 (a) of form MF-100.

23. (a) Informal contract proposal for driving tunnel in the distance estimated as sufficient for $15.00 per ft.
This crew would consist of the following:
One miner at approximately $20.00 per day
One mucker at approximately 12.00 per day
Total cost estimated $1500.00
Informal contract proposal for drilling two core drills to estimated 300 ft. for an estimated $4.50 to $6.00 per ft. The crew for the drilling would consist of the following:
One driller at approximately $25.00 per day
One Helper at approximately 18.00 per day
Total cost estimated $3000.00
(b) Supervisors, two, furnished by Corporation at no cost.
(c) Estimated cost to repair existing equipment, pipes, track, drills, etc.
Total estimated cost $ 500.00
(d) None required except that stated in 23 (a), (b), and (c).
(e) Provide a compressor adequate to provide air and power to continue tunnel operations. Cost of compressor $1000.00
Total estimated cost of exploration $6000.00

(f) None
(g) None

(h) Included in above informal contract proposal.

(i) None required.

24. $6000.00 total cost of proposed explorations. 150 working days. $4500.00 will be expended in the first 45 days for repairs to equipment and new equipment necessary and for all drilling operations. The remaining $1500.00 will be expended over the remaining 105 days for tunneling etc.

If this project can be approved in time to complete the 150 days before November 30, 1951, project will then be to a point where work can continue through winter.

Alvin W. Hale
President and General Manager
Leader Manganese Mining Corp.
506 West 2nd So.
Logan, Utah

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 1551X

Date received 6-4-51

Leader Manganese Mining Corp.
Alvin W. Hale, President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary
Date May 28, 1951

Name and address of applicant

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124–A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s); refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Alvin W. Hale Logan 506 West 2nd So. Utah D	President & General Mgr.	None	$40,000.	100,000	None	None	None
Edgar D. Hale Pocotello, Idaho	Director	None	6,000.	100,000	None	None	None
Arthur W. Hale Logan, Utah	VicePresident Director	None	8,000.	100,000	None	None	None
Aroet C. Hale Logan, Utah	Director	None	9,000.	100,000	None	None	None
Sylvia Hale Logan, Utah	Director	None	1,000.	100,000	None	None	None
Alzina H. Barton Centerville, Utah	Sec. & Treas. Director	None	10,000.	100,000	None	None	None
	Total	None	x x x x x	600,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$40,000.00	$20,000.00	$ .10	200,000	None
Preferred stock	$ None	$	$		

*Indicate period covered.

10. Production: Not under production

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. (Not in production)

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Claimed by Geologist to be a body of high grade manganese ore from which several Blow Cuts have occurred. The property described in 7 above is one of these Blow Cuts.

16—63792-1

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

8. Five largest Stockholders are the Officers and Directors of the Corp. However, following are five of the largest stockholders other than officers and directors.

James E. Chapman	Logan, Utah	4500 shares
Walace or Edna Hunt	Logan, Utah	5000 shares
Oscar Sjoberg	Logan, Utah	3500 shares
Amon Vail	Hyde Park, Utah	3000 shares
Mrs. George Q. Rich	Logan, Utah	3000 shares

12. (b) 1. Assays not presently available but can be provided - claims in process of being maped to determine probable extent of exploration and reserve.

2. Not yet determined.

(c) Not Placer.

13. Road distance to shipping - 18 miles to railroad.
Supply - minor supplies-4 miles, major supplies 24 miles
Residence - Locally
Roads - Oiled surface, State maintained road within ½ mile of claims.

14. Present supply from surface intermitant streams which can be enlarged at small expence. A permanent adequate supply can be obtained from wells not to exceed 250 ft in depth.

15. To date power furnished by auxiliary gasoline power driven units - adequate power available within one-half (½) mile, from Utah Idaho Power and Light Co. at standard rates.

16. Four (4) miners and muckers doing exploration work.

17. Compressor - actual size not known but capable of handeling 2 drills.
Track - 200 ft. on site. 400 ft. available.
Car - one standard guage ore car.

18. Exploration of this property has been extremely slow, due to lack of financial backing and the desire of the Corporation to keep out of debt.

Signed Alvin W Hale

Alvin W. Hale
President and General Manager
506 West 2nd South
Logan, Utah

General Technical Data

1. (a) Manganese
   (b) Not determined

2. Name: Leader Manganese Mining Corp.
   A Corporation
   A tunnel mine No mill, smelter, refinery, pit, quarry, drilling operations nor has it had any other name.

   (a) None
   (b) None
   (c) 600 ft.
   (d) None Mine is not flooded. The tunnel runs at .2 % grade to provide drainage if necessary.
   Size of productive capacity - 4 ft. X 7 ft.

3. (a) By rail - Grace Idaho - 18 miles South
   By truck - 1 mile to oiled road - State Highway.

   (b) Unnamed Mining District
   (c) Township 12 South Range 41 East Section 31 and 32 Boise Meridian.
   (d) Franklin County, Idaho

4. (a) Property is under exploration by the Leader Manganese Corp. Assesments made to date.

   (b) Operating property as Owner.

5. None Exploration only to date. Date when production will begin - unknown

6. Experience of operators:

   (a) 20 yrs experience exploration under Technical advisement.
   (b) Alvin W. Hale, President and General Manager - 20 years. 30 years as prominent and successful Doctor in Logan, Utah
   Lucius M. Hale - B S Degree in Engineering. 14 years varied experience in Professional Engineering. Now employed by United States Atomic Enerby Comm.

7. (a) Corporation on exploration basis - no production to date.

   (b) Adjoining property approximately one half ($\frac{1}{2}$) mile away shipped between 5 and tenthousand tons.

8. (c) Noted Geologist - Dr. of Geology from the Utah State Agricultur College has examined the site and urgently recommended exploration and development. Numerous assays have shown very favorable reports. Assay reports not now available but could be furnished.

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 1551

Date received 6-4-51

Participation

Leader Manganese Mining Corp.
Alvin W. Hale, President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $6000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Franklin Co. Idaho

T 12 South Range 41 East Sec 31 & 32 Boise Meridian

Date of filing MF-100 May 28, 1951

DMA Docket Number, if available

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?
*2. If a partnership, state names and addresses of partners.
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. See Supp Sheet.
7. If lessee, attach a copy of the lease and state if it is in good standing. " " "

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. See Supp. Sheet
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)? See Supp Sheet.

*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. See Supp. Sheet

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

    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.

*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.

*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.

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

15. State in detail how the ore could be shipped and how and where milled. See Supp. Sheet

*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:

	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.)

    (*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. See Supp Sheet

THE EXPLORATION

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

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

    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. See Supp. Sheet

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: See Supp. Sheet

    (*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. See Supp Sheet.

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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

6. None

7. Corporation Owned

8. Cash expended for exploration, living expences during exploration at mine. The Corporation is in control of two exploration developments, however, this application is being made to cover one - the Leader Claims.
Total cash receipts received from the sale of stock for both claims totals $14,021.00 of which approximately 50% has been expended on the claim for which this application is made.

9. $1500.00
Yes, it is sufficient to pay our part of the cost.

10. (a) Listed under question 17 of MF-100
(b) Three claims located in Section 31 and 32 Township 12 South Range 41 East, Boise Meridian, Franklin Co. State of Idaho. Unsurveyed to date for determination of exact legal description.

15. Shipped by truck to rail and thense to nearest milling point - Magna or Garfield, Utah.

19. All conditions and circumstances covered in previous statements.

20. Manganese. By-products not determined as yet.

21. Run two (2) core drills to adequate depth and extend existing tunnel approximately 100 ft.
Time: 150 working days dependant upon weather.

22. Refer to 7 (c) and 12 (a) of form MF-100

23. (a) Informal contract proposal for driving tunnel in the distance estimated as sufficient for $15.00 per ft.
This crew would consist of the following:
One miner at approximately $20.00 per day
One mucker at approximately 12.00 per day
Total cost estimated $1500.00
Informal contract proposal for drilling two core drills to estimated 300 ft. for an estimated $4.50 to $6.00 per ft. The crew for the drilling would consist of the following:
One driller at approximately $25.00 per day
One Helper at approximately 18.00 per day
Total cost estimated 3000.00
(b) Supervisors, Engineers, two, furnished by Corporation at no cost.
(c) Estimated cost to repair existing equipment, pipes, track, drills, etc.
Total estimated cost 500.00
(d) None required except that stated in 23 (a), (b) and (c).
(e) Provide a compressor adequate to provide air and power to continue tunnel operations.
Cost of compressor 1000.00
Total Estimated cost of exploration $6000.00

(f) None
(g) None

(h) Included in above informal contract proposal.

(i) None required.

24. $6000.00 total cost of proposed explorations. 150 working days. $4500.00 will be expended in the first 45 days for repairs to equipment and new equipment necessary and for all drilling operations. The remaining $1500.00 will be expended over t the remaining 105 days for tunneling etc.

If this project can be approved in time to complete the 150 days before November 30, 1951, project will then be to a point where work can continue through winter.

Alvin W. Hale
President and General Manager
Leader Manganese Mining Corp.
506 West 2nd So.
Logan, Utah

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 1551X

Date received 6-4-51

Participation

Leader Manganese Mining Corp.
Alvin W. Hale, President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $6,000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Franklin Co. Idaho

Township 12 South Range 41 East Sec 31 & 32 Boise Meridian

Date of filing MF-100 May 28, 1951

DMA Docket Number, if available

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? See Supp. Sheet
*2. If a partnership, state names and addresses of partners. "
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. See Supp Sheet
7. If lessee, attach a copy of the lease and state if it is in good standing. " " "

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. See Supp. Sheet
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)? See Supp. Sheet

*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. See Supp Sheet

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

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.

*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.

*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.

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

15. State in detail how the ore could be shipped and how and where milled. See Supp Sheet

*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:

	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.)

(*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.
See Supp. Sheet

THE EXPLORATION

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

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

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. See Supp. Sheet

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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: See Supp Sheet

(*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. See Supp Sheet

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and Gen. Mgr.
(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

6. None

7. Corporation Owned

8. Cash expended for exploration& living expences during exploration at mine. The Corporation is in control of two exploration developments, however, this application is being made to cover one - the Leader Claims.
Total cash receipts received from the sale of stock for both claims totals $14,021.00 of which approximately 50% has been expended on the claim for which this application is made.

9. $1500.00
Yes, it is sufficient to pay our part of the cost.

10. (a) Listed under question 17 of MF-100.
(b) Three claims located in Section 31 and 32 Township 12 South Range 41 East, Boise Meridian, Franklin Co. State of Idaho. Unsurveyed to date for determination of exact legal description.

15. Shipped by truck to rail and thense to nearest milling point - Magna or Garfield, Utah.

19. All conditions and circumstances covered in previous statements.

20. Manganese. By-products not determined as yet.

21. Run two (2) core drills to adequate depth and extend existing tunnel approximately 100 ft.
Time: 150 working days dependant upon weather.

22. Refer to 7 (c) and 12 (a) of form MF-100

23. (a) Informal contract proposal for driving tunnel in the distance estimated as sufficient for $15.00 per ft.
This crew would consist of the following:
One miner at approximately $20.00 per day
One mucker at approximately 12.00 per day
Total Cost estimated $1500.00
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One driller at approximately $25.00 per day
One Helper at approximately 18.00 per day
Total Cost estimated 3000.00
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(c) Estimated cost to repair existing equipment, pipes, track, drills, etc.
Total estimated cost 500.00
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(e) Provide a compressor adequate to provide air and power to continue tunnel operations.
Cost of compressor 1000.00
Total Estimated cost of exploration $6000.00
(f) None
(g) None

(h) Included in above informal contract proposal
(i) None required.

24. $6000.00 total cost of proposed explorations. 150 working days. $4500.00 will be expended in the first 45 days for repairs to equipment and new equipment necessary and for all drilling operations. The remaining $1500.00 will be expended over the remaining 105 day for tunneling etc.

If this project can be approved in time to complete the 150 days before Nov. 30, 1951, Project will then be to a point where work can continue through winter.

Alvin W. Hale
President and General Manager
Leader Manganese Mining Corp.
506 West 2nd So.
Logan, Utah

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. lmm 1551 X

Date received 6-4-51

Leader Manganese Mining Corp.
Alvin W. Hale President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary
Date May 28, 1951

Name and address of applicant

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Alvin W. Hale 506 West 2 So Logan, Utah	President & Gen Mgr. D	None	$40,000.	100,000	None	None	None
Edgar D. Hale Pocotello, Idaho	Director	None	6,000.	100,000	None	None	None
Arthur W. Hale Logan, Utah	Vice President Director	None	8,000.	100,000	None	None	None
Aroet C. Hale Logan, Utah	Director	None	9,000.	100,000	None	None	None
Sylvia Hale Logan, Utah	Director	None	1,000.	100,000	None	None	None
Alzina H. Barton Centerville, Utah	Secretary TreasurerDir.	None	10,000.	100,000	None	None	None
	Total	None	x x x x x	600,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 40,000.00	$ 20,000.00	$ .10	200,000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not under production

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not in production

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Claimed by Geologist to be a body of high grade manganese ore from which several Blow Outs have occurred. The property described in 7 above is one of these blow outs.

16—63792-1

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Leader Manganese Mining Corp
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

General Technical Data

1. (a) Manganese
   (b) Not determined

2. Name: Leader Manganese Mining Corp.
   A Corporation
   A tunnel Mine No mill, smelter, refinery, pit, quarry, drilling operation. nor has it had any other name.

   (a) None
   (b) None
   (c) 600 ft.
   (d) None Mine is not flooded. The tunnel runs at .2% grade to provide drainage if drainage is necessary.
   Size of productive capacity - 4 ft. X 7 ft.

3. (a) By rail - Grace Idaho - 18 miles South
   By truck - 1 mile to oiled road - State Highway.
   (b) Unnamed Mining District
   (c) Township 12 South Range 41 East Section 31 and 32 Boise Meridian.
   (d) County- Franklin State - Idaho

4. (a) Property is under exploration by the Leader Manganese Corp. Assesments made to date.
   (b) Operating property as Owner.

5. None Exploration only to date. Date when production will begin - unknown.

6. Experience of operators:
   (a) 20 Yrs. Experience exploration under Technical advisement.
   (b) Alvin W. Hale, President and Gen. Manager - 20 years. 30 years as prominent and successful Doctor in Logan, Utah
   Lucius M. Hale - B S Degree in Engineering. 14 yrs. varied experience in professional Engineering. Now employed by United States Atomic Energy Comm.

7. (a) Corporation on exploration basis - no production to date.
   (b) Adjoining property approximately one half ($\frac{1}{2}$) mile away shipped between 5 and 10 thousand tons.
   (c) Noted Geologist - Dr. of Geology from the Utah State Agricultur College has examined the site and urgently recommended exploration and development. Numerous assays have shown very favorable reports. Assay reports not now available but could be furnished.

8. Five largest Stockholders:
   The Officers and Directors are the largest Stockholders, however, following are five of the largest stockholders other than officers and directors.

James E. Chapman,	Logan, Utah	4500 shares
Walace or Edna Hunt	Logan, Utah	5000 shares
Oscar Sjoberg, Logan, Utah		3500 shares
Amon Vail, Hyde Park,	Utah	3000 shares
Mrs. George Q. Rich	Logan, Utah	3000 shares

12. (b) 1. Assays not presently available but can be provided - claims in process of being maped to determine probable extent of exploration and reserve.

2. Not yet determined.

(c) Not Placer.

13. Road distance to shipping - 18 miles to railroad
Supply - Minor supplies 4 miles, major supplies 24 miles.
Residence - Locally
Roads - oiled surface, State maintained road within ½ mile of claims.

14. Present supply from surface intermitant streams which can be enlarged at small expence. A permanent adequate supply can be obtained from wells not to exceed 250 ft. in depth.

15. To date power furnished by auxiliary gasoline power-driven units = adequate power available within one-half (½) mile from Utah Idaho Power and Light Co. at standard rates.

16. Four (4) Miners and muckers doing exploration work.

17. Compressor - actual size not known but capable of handeling 2 drills.
Track - 200 ft. on site. 400 ft. available.
Car - one standard guage ore car.

18. Exploration of this property has been extremely slow, due to lack of financial backing and the desire of the Corporation to keep out of debt.

Signed Alvin W. Hale

Alvin W. Hale
President and General Manager
506 West 2nd So.
Logan, Utah

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 1551X

Date received 6-4-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Leader Manganese Mining Corp.
Alvin W. Hale President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124–A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Alvin W. Hale 506 W. 2nd So Logan, Utah	President & Gen.Mgr. D	None	$40,000.	100,000	None	None	None
Edgar D. Hale Pocotello, Idaho	Director	None	6,000.	100,000	None	None	None
Arthur W. Hale Logan, Utah	Vice President Director	None	8,000.	100,000	None	None	None
Aroet C. Hale Logan, Utah	Director	None	9,000.	100,000	None	None	None
Sylvia Hale Logan, Utah	Director	None	1,000	100,000	None	None	None
Alzina H. Barton Centerville, Utah	Secretary Treasurer D	None	10,000	100,000	None	None	None
	Total	None	x x x x x	600,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 40,000.00	$ 20,000.00	$ .10	200,000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Not under production

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not in production

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Claim[illegible] by Geoligist to be a body of hi[illegible] grade manganese ore from which [illegible] several Blow Outs have occurred. The property described in 7 above is one [illegible] these blow outs.

16-63792-1

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

General Technical Data

1. (a) Manganese
   (b) Not determined

2. Name: Leader Manganese Mining Corp.
   A Corporation
   A tunnel mine No mill, smelter, refinery, pit, quarry, drilling operation, nor has it had any other name.

   (a) None
   (b) None
   (c) 600 ft.
   (d) None Mine is not flooded. The tunnel runs at .2 % grade to provide drainage if necessary.
   Size of productive capacity - 4 ft. X 7 ft.

3. (a) By rail - Grace Idaho - 18 miles South
   (b) By truck - 1 mile to oiled road - State Highway.

   (b) Unnamed Mining District
   (c) Township 12 South Range 41 East Section 31 and 32 Boise Meridian.
   (d) Franklin County, Idaho.

4. (a) Property is under exploration by the Leader Manganese Corp. Assesments made to date.

   (b) Operating property as Owner.

5. None Exploration only to date. Date when production will begin - unknown.

6. Experience of operators:
   (a) 20 yrs. experience exploration under Technical advisement.
   (b) Alvin W. Hale, President and Gen. Manager - 20 yrs. 30 years as prominent and successful Doctor in Logan, Utah
   Lucius M. Hale - B S Degree in Engineering. 14 years varied experience in Professional Engineering. Now employed by United States Atomic Energy Comm.

7. (a) Corporation on exploration basis - no production to date.

   (b) Adjoining property approximately one half ($\frac{1}{2}$) mile away shipped between 5 and 10 thousand tons.

   (c) Noted Geologist - Dr. of Geology from the Utah State Agricultur College has examined the site and urgently recommended exploration and development. Numerous assays have shown very favorable reports. Assay reports not now available but could be furnished.

8. Five largest Stockholders:
The Officers and Directors are the largest Stockholders, however, following are five of the largest stockholders other than officers and directors.

James E. Chapman,	Logan, Utah	4500 shares
Walace or Edna Hunt	Logan, Utah	5000 shares
Oscar Sjoberg.	Logan, Utah	3500 shares
Amon Vail	Hyde Park, Utah	3000 shares
Mrs. George Q. Rich	Logan, Utah	3000 shares

12. (b) 1. Assays not presently available but can be provided - claims in process of being maped to determine probable extent of exploration and reserve.

2. Not yet determined.

(c) Not Placer.

13. Road distance to shipping - 18 miles to railroad.
Supply - Minor supplies 4 miles, major supplies 24 miles.
Residence - Locally
Roads - Oiled surface, State maintained road within ½ mile of claims.

14. Present supply from surface intermitant streams which can be enlarged at small expence. A permanent adequate supply can be obtained from wells not to exceed 250 ft. in depth.

15. To date power furnished by auxiliary gasoline power driven units - adequate power available within one-half (½) mile from Utah Idaho Power and Light Co. at standard rates.

16. Four (4) miners and muckers doing exploration work.

17. Compressor - actual size not known but capable of handeling 2 drills.
Track - 200 ft. on site. 400 ft. available.
Car - one standard guage ore car.

18. Exploration of this property has been extremely slow, due to lack of financial backing and the desire of the Corporation to keep out of debt.

Signed Alvin W Hale

Alvin W. Hale
President and General Manager
506 West 2nd South
Logan, Utah

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 1551X

Date received 6-4-51

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Leader Manganese Mining Corp.
Alvin W. Hale, President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $6000.00

Mineral or metal Manganese

Percentage of Government participation 75%

Location of mine Township 12 South Range 41 East

Section 31 & 32 Boise Meridian Franklin Co. Idaho

Date of filing MF-100 May 28, 1951

DMA Docket Number, if available

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?
*2. If a partnership, state names and addresses of partners.
*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.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. See Supp. Sheet
7. If lessee, attach a copy of the lease and state if it is in good standing. See Supp. Sheet

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. See Sup. Sheet
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)? See Supp. Sheet

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

    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.

*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.

*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.

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

15. State in detail how the ore could be shipped and how and where milled. See Supp. Sheet

*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:

	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.)
    (*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.
See Supp. Sheet

THE EXPLORATION

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

    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. See Supp. Sheet

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:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. See Supp. Sheet.
    (*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. " " "

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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

6. None

7. Corporation owned.

8. Cash expended for exploration, living expences during exploration at mine. The Corporation is in control of two exploration developments, however, this application is being made to cover one - the Leader Claims.
Total cash receipts received from the sale of stock for both claims totals $14,021.00 of which approximately 50% has been expended on the claim for which this application is made.

9. $1500.00
Yes it is sufficient to pay our part of the cost.

10. (a) Listed under question 17 of IF-100
(b) Three claims located in Section 31 and 32 Township 12 South Range 41 East, Boise Meridian, Franklin Co. State of Idaho. Unsurveyed to date for determination of exact legal description.

15. Shipped by truck to rail and thense to nearest milling point - Magna or Garfield, Utah.

19. All conditions and circumstances covered in previous statements.

20. Manganese. By-products not determined as yet.

21. Run two (2) core drills to adequate depth and extend existing tunnel approximately 100 ft.
Time 150 working days dependant upon weather.

22. Refer to 7 (c) and 12 (a) of form IF-100

23. (a) Informal contract proposal for driving tunnel in the distance estimated as sufficient for $15.00 per ft.
This crew would consist of the following:
One miner at approximately $20.00 per day
One Lucker at approximately 12.00 per day
Total cost estimated $1500.00
Informal contract proposal for drilling two core drills to estimated 300 ft. for and estimated $4.50 to $6.00 per ft. The crew for the drilling would consist of the following:
One driller at approximately $25.00 per day
One Helper at approximately 18.00 per day
Total cost estimated $3000.00
(b) Supervisors, two, furnished by Corporation at no cost.
(c) Estimated cost to repair existing equipment, pipes, track, drills, etc.
Total estimated cost $ 500.00
(d) None required except that stated in 23 (a), (b), and (c).
(e) Provide a compressor adequate to provide air and power to continue tunnel operations. Cost of compressor $1000.00
Total estimated cost of exploration $6000.00
(f) None
(g) None

((h) Included in above informal contract proposal.

(i) None required.

24. $6000.00 total cost of proposed explorations. 150 working days. $4500.00 will be expended in the first 45 days for repairs to equipment and new equipment necessary and for all drilling operations. The remaining $1500.00 will be expended over the remaining 105 days for tunneling etc.

If this project can be approved in time to complete the 150 days before November 30, 1951, project will then be to a point where work can continue through winter.

Alvin W. Hale
President and General Manager
Leader Manganese Mining Corp.
506 West 2nd So.
Logan, Utah

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dmd 1551X

Date received 6-4-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

Leader Manganese Mining Corp.
Alvin W. Hale President and Gen. Mgr.
506 West 2nd So.
Logan, Utah

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

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   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Alvin W. Hale 506 W 2nd So Logan, Utah	President and Gen.Mgr. D	None	$40,000.	100,000	None	None	None
Edgar D. Hale Pocotello, Idaho	Director	None	6,000.	100,000	None	None	None
Arthur W. Hale Logan, Utah	Vice Pres. Director	None	8,000.	100,000	None	None	None
Aroet C. Hale Logan, Utah	Director	None	9,000.	100,000	None	None	None
Sylvia Hale Logan, Utah	Director	None	1,000.	100,000	None	None	None
Alzina H. Barton Centerville, Utah	Secretary Treasurer D	None	10,000.	100,000	None	None	None
	Total	None	x x x x x	600,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 40,000.00	$ 20,000.00	$ .10	200,000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Not under production

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not in production

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Claimed by geologist to be a body of high grade manganese ore from which several Blow Outs have occurred. The property described in 7 above is one of these blow outs.

16—63792-1

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Leader Manganese Mining Corp.
(Name of company)

By Alvin W. Hale
(Signature of authorized official)

May 28, 1951
(Date)

President and General 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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

General Technical Data

1. (a) Manganese
   (b) Not determined

2. Name: Leader Manganese Mining Corp.
   A Corporation
   A Tunnel Mine. No mill, smelter, refinery, pit, quarry, drilling operation. Nor has it had any other name.

   (a) None
   (b) None
   (c) 600 Ft.
   (d) None Mine is not flooded. The Tunnell runs at .2% grade to provide drainage if drainage is necessary.
   Size of productive capacity - 4 ft. X 7 ft.

3. (a) By rail - Grace Idaho - 18 Miles South
   By truck - 1 mi. to oiled road - State Highway.
   (b) Unnamed Mining District
   (c) Township 12 South Range 41 East Section 31 and 32 Boise Meridian.
   (d) County - Franklin State - Idaho

4. (a) Property is under exploration by the Leader Manganese Corp. Assessments made to date.
   (b) Operating property as Owner.

5. None Exploration only to date. Date when production will begin - unknown.

6. Experience of operators:
   (a) 20 Yrs. Experience exploration under Technical advisement.
   (b) Alvin W. Hale, President and Gen. Manager - 20 years. 30 yrs as prominent and successful Doctor in Logan, Utah
   Lucius M. Hale - B S Degree in Engineering. 14 yrs. varied experience in professional Engineering. Now employed by United States Atomic Energy Comm.

7. (a) Corporation on exploration basis - no production to date.
   (b) Adjoining property approximately one half ($\frac{1}{2}$) mile away shipped between 5 and 10 thousand tons.
   (c) Noted Geologist - Dr. of Geology from the Utah State Agricultural College has examined the site and urgently recommended exploration and development. Numerous assays have shown very favorable reports. Assay reports not now available but could be furnished.

8. Five largest Stockholders:
   The Officers and Directors are the largest Stockholders, however, following are five of the largest stockholders other than officers and directors.

James E. Chapman,	Logan, Utah	4500 shares
Walace or Edna Hunt,	Logan, Utah	5000 shares
Oscar Sjoberg,	Logan, Utah	3500 shares
Amon Vail,	Hyde Park, Utah	3000 shares
Mrs. George Q. Rich	Logan, Utah	3000 shares

12. (b) 1. Assays not presently available but can be provided - claims in process of being maped to determine probable extent of exploration and reserve.

12. (b) 2. Not yet determined.

(c) Not Placer.

13. Road distance to shipping - 18 miles to railroad
supply - Minor supplies 4 miles, major supplies 24 miles.
residence - Locally
roads - oiled surface, State maintained road within ½ mile of claims.

14. Present supply from surface intermitant streams which can be enlarged at small expence. A permanent adequate supply can be obtained from wells not to exceed 250 ft. in depth.

15. To date power furnished by auxiliary gasoline power driven units - adequate power available within one-half (½) mile from Utah-Idaho Power and Light Co. at standard rates.

16. Four (4) Miners and muckers doing exploration work.

17. Compressor - actual size not known but capable of handeling 2 drills.
Track - 200 ft. on site. 400 ft. available.
Car - one standard guage ore car.

18. Exploration of this property has been extremely slow due to lack of financial backing and the desire of the corporation to keep out of debt.

Signed Alvin W Hale

Alvin W. Hale
President and Gen. Manager
506 West 2nd So.
Logan, Utah