400

MAR 13 1952

Mr. I. G. Irving
84 Hirbour Building
Butte, Montana

Re: Docket No. DMEA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

Dear Mr. Irving:

Thank you for your letter of March 3, 1952, in which you advise us of your inability to either secure landlord subordination agreements or purchase the Anaconda interest. As you suggested, we are removing the application from our active files and thereby consider the matter closed.

A quick check with Defense Materials Procurement Agency concerning the eligibility of the property for a production loan after drilling, suggests that the Agency would still consider the property in the exploration stage and, therefore, not eligible for a production loan. However, to be absolutely sure of the matter, we suggest that you write direct to DMPA and get a first-hand answer.

Sincerely yours,

C. O. Mittenderf

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
3/11/52

cc: Admn. Reading File
Docket
G. C. Selfridge
Field Team, Region 2
N. B. Melcher, USBM
M. D. Crittenden, USGS

140 & 400

EXPLORATION

FEB 29 1952

Mr. I. G. Irving
84 Hirbour Building
Butte, Montana

Re: Docket No. DMSA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

Dear Mr. Irving:

This is in reply to your letter of February 6, which relates to previous correspondence concerning your inability to procure an owner's consent to lien (subordination agreement) and your unwillingness to enter into the form of undertaking suggested in lieu thereof.

As long as the Government pursues the policy of requiring repayment from production of its contributions to exploration projects, it is plain that the applicant for such aid must have a sufficient interest in the property to be explored to assure the Government of repayment in the event of a discovery. In the case of a lessee, the only practicable ways to accomplish this are those that have been previously suggested. Of course, an applicant might, if he saw fit, purchase the property which is the subject of the proposed exploration and thus obviate the necessity for any agreement with the landlord.

We have had many applications from lessees, and have entered into a great many exploration agreements with them on the strength of subordination agreements signed by the landlords. Most landlords are glad to have their property improved to the fullest possible extent, and so are willing to enter into any necessary agreements to procure Government aid for this purpose.

It would not be fair or reasonable to permit some lessee-applicants to dispense with the required subordination agreement of the landlord while the vast majority of them are willing to supply it or to enter into a suitable undertaking in lieu of it. I regret that under the circumstances it appears that this agency will not be able to enter into an exploration project contract with you.

If after receipt of this letter you are still unable to arrange for subordination or ownership, will you please advise us and we shall remove your application from our active file and consider the docket closed.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

JLHofflund:GCSelfridge:em/ls
2/28/52

Copy to: Docket
Admn. Reading File
J. L. Hofflund
G. C. Selfridge
Field Team, Reg. 2

cc: N.B.Melcher, USBM
M.D.Critten, USGS

February 15, 1952

Memorandum

To: Chief Counsel, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Subordination agreement and guarantee
Docket No. DMA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

The applicant, Mr. I. G. Irving, was not able to secure a landlord's subordination agreement and sent us a copy of his personal guarantee, in lieu of the former, which covered only a 5-year period. This was reviewed by your Division and found not acceptable. This information was transmitted to the applicant on January 5.

Will you please review Mr. Irving's letter of February 6 and inform us whether or not there is any legal method by which he could come in under the program.

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/15/52

cc: Admn. Read. File
Docket
G. C. Selfridge

177D

Reviewed by
DMEA OPERATING COMMITTEE
1-23-52
(date) 243

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 0 1952

1201 N. Division St.
Spokane 2, Wash.
January 10, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Garibaldi mine, Silver Bow County, Mont.
Docket DMA 2177
Commodity: Manganese

The Field Team recommends that an exploratory project contract in the amount of $23,665 be approved for a program at the subject property as proposed in attached memoranda. This recommendation is contingent upon submission of a proper landlord's subordination agreement or guarantee in lieu thereof.

The proposed project is based entirely on geological considerations described in the attached report by H. T. Remo, mining engineer of the Bureau of Mines. The project seems to have a good chance of being successful, and it can be quickly followed up by production of manganese ore with a relatively small capital investment. It is considered that a significant output of manganese ore very likely can be made from the property provided the proposed exploration is successfully concluded.

The following supporting data are enclosed for review:

Memorandum report by H. T. Remo (4 copies)
MF-200, Exploration project contract (6 copies)
MF-100, (1 copy)
MF-103, with lease attached (1 copy), together with Annex I signed by applicant in lieu of Landlord's Subordination Agreement

Three copies each of Forms MF-100 and MF-103 in connection with this application were forwarded to Washington, D. C., on November 26, 1951.

The applicant has informed the Field Team that the required Landlord's Subordination Agreement cannot be obtained. He has stated that he will submit an acceptable guarantee in lieu of the Subordination Agreement. It is the opinion of the Field Team that the attached Annex I does not constitute an acceptable guarantee.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: USGS, Spokane

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 1952
Reviewed by
DMEA OPERATING COMMITTEE
(date)

1201 N. Division St.
Spokane 2, Wash.
December 18, 1951

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: H. T. Rene, Mining Engineer, U. S. Bureau of Mines

Subject: Garibaldi Mine, Silver Bow County, Montana
Docket DMA 2177
Commodity: Manganese

RECOMMENDATIONS

It is recommended that the DMEA enter into an exploration contract with Irving G. Irving in the amount of $23,665. He is prepared to furnish one-fourth of this amount. This recommendation does not include approval of applicant's Guarantee in lieu of Landlord's Subordination Agreement. As the property was examined during a heavy snowstorm the applicant's geologic mapping is used in this report with only the rough check possible at that time.

APPLICANT

The applicant is Irving G. Irving, lessee of the property.

LOCATION AND ACCESSIBILITY OF DEPOSIT

The deposit is on the Garibaldi patented lode claim No. 1288 in sec. 15, T. 3 N., R. 8 W., Butte mining district, Silver Bow County, Mont. The applicant proposes to build a bulldozer access road from the mine 2,000 feet south to connect with State Highway 108, two miles west of Butte.

OWNERSHIP

The Garibaldi claim is owned by the following: Anaconda Copper Mining Co., a Montana corporation, one-fourth interest; George B. Curtis, Butte, Mont., one-fourth interest; Arthur and Alice Mirbeau, Montreal, Canada, one-sixth interest; Paul and Stella Lerigne, Nice, A.M., France, one-sixth interest; and Mrs. Louise Langlois, Montreal, Canada, one-sixth interest. The applicant may be able to obtain subordination agreements from three-fourths of the owners but certainly will not be able to get one from the Anaconda Copper Co.

HISTORY

The history and production of the Butte mining district is well known. A 600-foot shaft was sunk and silver mined on the Garibaldi claim 35 to 40 years ago, but there has been no recent activity on the claim. The productive workings of the Minnie June mine, which produced 54,000 tons of rhodochrosite manganese ore during World War II, are 500 feet east of the east line of the Garibaldi claim. However, the vein which the applicant proposes to explore is not an extension of either the Minnie June nor the first Garibaldi vein. The applicant leased the Garibaldi on October 1, 1951, and has done no work on the property.

DESCRIPTION OF PROPOSAL

The applicant proposes to sink an inclined shaft 110 feet in the larger of two veins (vein "C") outcropping on the east part of the claim and then drift 75 feet each way in the vein at this depth. The attached sketch shows the proposed workings and the relative position of the geologic structures.

TECHNICAL FEASIBILITY

Geologic Setting

The property is in the peripheral zone of the Butte mining district, characterized by the presence of manganese minerals in the veins. The country rock is granitic rock of the Boulder batholith which has been cut by a number of major faults, many of which are mineralized. In the immediate vicinity of the vein to be explored are two structures, the Minnie June vein to the east and vein "A" (see applicant's map) to the north, that have produced manganese ore.

Vein "C", which the applicant wishes to explore, strikes N. 80° W. and dips 45° S. and can be traced for about 220 feet. It lies in a fault block bounded on the west by the hanging wall side of the Whiskey Gulch fault and to the east by the footwall side of the same fault. Vein "C" cannot be correlated with any of the major structures outside the fault block.

The structure of the area (see applicant's map) is such that this segment of vein "C" cannot be expected to continue much more than 250 feet down the dip from the proposed shaft location, and the maximum strike length cannot be much more than 300 feet.

The outcrop of vein "C", which averages 5 feet in width, is composed mainly of quartz and manganese oxides. No samples were taken. By visual inspection, the assays on the applicant's map are believed to be of the correct order of magnitude; they also checked closely with assay data on an Anaconda Copper Co. map in the applicant's possession.

Vein "B", which outcrops about 50 feet north of vein "C", averages 3 feet in width and strikes N. 80° W. and dips 25° - 30° S. It will intersect vein "C" about 70 feet down the dip of vein "C".

It is expected that manganese oxides will be present down to between 40 and 60 feet from the surface and that rhodochrosite will be the important manganese mineral below that depth. This expectation is based on experience in the adjacent Minnie Jane vein.

Mining Method

As adjacent properties are mined by square set stoping there is no reason to believe that ore can be mined on this property by a cheaper method. The cost of mining is estimated at $11 a ton.

Milling Method and Marketing Facilities

The ore will be sold to the Government purchasing depot in Butte. It is estimated that the ore can be trucked from the mine to the depot for $1 a ton.

Rate of Production

The applicant expects to produce 50 tons of ore per day.

Time Schedule to Attain Objective

The applicant intends to start work within thirty days after the contract is signed and to complete the project within seven months thereafter. Mining will begin immediately if ore is discovered.

EQUIPMENT AND FACILITIES

The applicant proposes to buy $4,110 worth of new and used equipment and to rent used equipment for $270 per month. In addition to the above, the following equipment will be required:

To be purchased	Estimated cost
1 skip (used)	$200
250 lin. ft. vent tube	150
120 lin. ft. 3-in. pipe (used)	60
100 lin. ft. pump cable (used)	75
Total	$485

To be rented	
1 blower	$ 10/mo.

LABOR SUPPLY

There is a shortage of labor at the Anaconda mines in Butte, but independent operators have no trouble getting men from among those who will not work in the Anaconda mines or those who Anaconda will not hire. The union base labor scale in the Butte mines is $12.31 a day, but independent operators pay $15 a day for good men. All mines are working six days a week.

POWER

Power can be purchased from the Montana Light and Power Co. which serves the district. They have lines to the Orphan Girl mine approximately 3,500 feet from the proposed Garibaldi shaft, and they estimate that a line can be built to the shaft for $1,800. The power company will not pay the cost of the line but usually purchases such lines from the customer by discounting the monthly power bill 20 percent until the line is paid for.

ADEQUACY OF FUNDS

Estimated cost of the project is as follows:

2,000 lin. ft. of access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on the 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

It is believed that the above cost of $23,665 is adequate to complete the proposed exploration project. The applicant has agreed to the revision of his estimate.

COMPETENCE OF APPLICANT

The applicant, a graduate mining engineer, has had 7-1/2 years experience as a geologist with the Anaconda Copper Mining Co. and approximately 12 years experience as a consulting geologist, mining engineer, and small mine operator. He is primarily a promoter but is considered entirely competent to carry out the proposed exploration project.

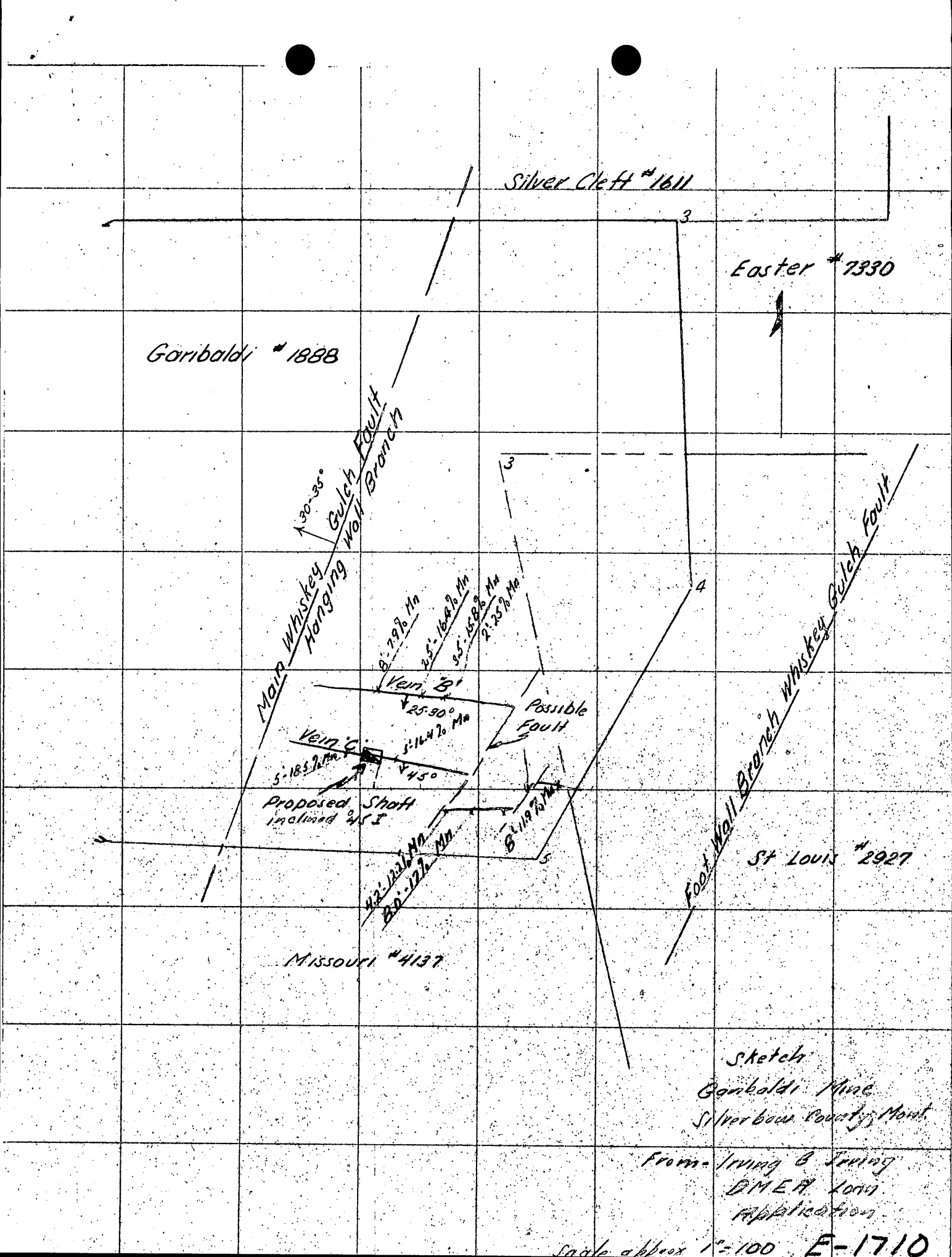
DISCUSSION OF PROPOSAL

The surface exposure, the close proximity of manganese-producing mines, and the fact that easterly-striking veins in the district usually provide a good environment for metallization make it seem likely that manganese ore is present.

The inclined shaft and the short drifts from the bottom of the shaft will determine whether a sufficient grade of rhodochrosite ore is present in the vein below the oxide capping and whether the width of the vein at depth is suitable for mining. In addition, it is possible that about 4,000 tons of carbonate ore, above the drift level, will be partially blocked out by this work.

The total tonnage believed to be in veins "B" and "C", down to the intersection of vein "C" with the footwall of the Whiskey Gulch fault, is about 95,700 tons, assuming 5 feet of width, of which only a part is expected to be ore.

Exploration by underground openings is preferred because diamond drilling was found by the Bureau of Mines to be unsatisfactory in similar ground during the course of the investigation of the adjoining Minnie Jane deposit.



Sketch
Garibaldi Mine
Silverbow County, Mont.

From - Irving & Irving
DMEA Loan
Application

Scale approx 1" = 100

E-1710

147A

George C. Selfridge December 20, 1951

Max D. Crittenden, Jr.

DMA 2177 Manganese, Garibaldi mine, Butte district, Montana.

The applicant proposes to spend a total of $22,000 in exploration of the Garibaldi mine, in the Butte district, Montana. This applicant also has an interest in the Norwich mine, but the two have no close relationship.

The Garibaldi property is in the western part of the Butte district just west of the Minnie Jane mine, and a mile or more south of the Norwich. The underground workings are entirely caved, hence all that can be observed now is a series of pits aligned along the vein. The principal workings are on an east-striking vein reported to be 4 to 5 feet wide. The applicant reports, but does not show on a map, 10 samples of which four are said to average 16.8 percent Mn, and three are said to average 11.4 percent Mn. The remaining three are not reported, and presumably were still lower in grade. These assays serve to demonstrate the existence of manganese in the Garibaldi mine, and there is every reason to believe that the oxides are derived from rhodochrosite. However, the size and grade of the orebodies to be expected are conjectural. Some inference may be drawn from the relationship between oxides and the underlying carbonate ores in the Tzarena mine, where oxide ore developed above the 100 level averaged 15 to 18% Mn. On the deeper levels the average grade of the carbonate ore was only 11 to 12% Mn.

This suggests that the grade of carbonate ore in the deeper parts of the vein may not be as high ~~in grade~~ as the oxides exposed at the surface. Nevertheless, the chances for development of minable ore are believed to be good enough to warrant the expenditure of the amount involved, possibly in two stages, so that work can be stopped if the grade of ore encountered in the shaft is hopelessly low.

The area is complicated geologically, and the results of diamond drilling may prove difficult to interpret. Under these circumstances, the method proposed is regarded as the most satisfactory means of exploring the deposit.

MDCrittenden:gt

UNITED STATES 140
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

147A

December 27, 1951

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Application of Irving G. Irving for Exploration Project Contract Docket No. DMA-2177

The applicant in this case has advised that he is unable to obtain the requisite Landlord's Subordination Agreement, and in lieu thereof the applicant has prepared, executed and submitted a "special subordination agreement". The special subordination agreement cannot be accepted under the provisions of Mineral Order 5.

As you are aware, it is now proposed to modify our present form of Landlord's Subordination Agreement. The modification will have the effect of requiring only the consent of the landlord to the attachment of the Government's lien to the mineral deposit. It will not require the subordination of the landlord's right to royalties as under existing conditions. Perhaps the applicant's landlord will find the proposed modification to be without objection, and we suggest that a copy of the new form be made available to the applicant for the purpose of determining whether the landlord will be willing to execute it. A copy of the proposed revision is attached.

Your file in this case is returned.

J. L. Hofflund
J. L. Hofflund
Chief Counsel

Attachment

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

W. 157 Howard Street
Spokane 4, Washington

I + 7 P

December 13, 1950

MEMORANDUM

To: Chairman, Operating Committee, DMEA

From: A.E. Weissenborn, Exec. Officer, DMEA, Field Team, Region II

Subject: Application for exploration assistance

Reference is made to an application for exploration assistance presented by I. G. Irving for the Garibaldi mine, Silver Bow County, Montana. The original application consisted of Form MF-103 only. Mr. Irving has since supplied Form MF-100 at our request. Three copies of this form are transmitted herewith for forwarding to Washington. The fourth copy is being retained at this office until the examination report has been completed.

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

Form MF-100
(May 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. _____

Date received _____

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana

DMA
#3177
Received
MF-103

Name and address of applicant

Date November 30, 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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) 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: Manganese
   (*a*) What are the chief mine, mill, or smelter products? Manganese ore (rhodochrosite)
   (*b*) What are the byproducts, if any? zinc and silver
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: Garibaldi Lode Claim
   (*a*) Linear feet of shafts. Old shaft reported 600' deep
   (*b*) Linear feet of drifts and crosscuts. several levels of unknown extent
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). (All inacessible)

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. Dont know
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. Two miles from Butte, Montana
   (*b*) Mining district. Butte
   (*c*) Township, Section, Range. Section ~~k~~ 15, T. 3 N; R 8 W.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not operating
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee. Applicant is lessee
   - ☐ Contractor.
5. Number of years in production no recent production

   If not in production or operation, estimated date when production will begin ~~9 mos. after start~~ of dev. wk.
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. See addendum attached
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. Some previous development, of unknown results
   (*b*) State briefly the known history and production of adjoining and neighboring properties. See below
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

   accompanying MF-103 on file. Adjoining Innie [See report and maps-2
   Jane mine produced 54,000 tons manganese ore for stockpile in War II
   Other producers nearby also.

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)
Not a corporation							
Irving G. Irving	Lessee	none	$12,000.00	none		none	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

not applicable

*Indicate period covered.

10. 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.)	none	none	none	none	none
2. Quantity of product processed (specify unit of measure and type of process)	no current production				
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. no current 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. See repor[illegible] and maps accompanying MF[illegible]3 on file. 16—63792-1

No developed ore reserve. Intend to sink on ore and prospective ore possibilities are attractive and large.

To accompany application of Irving G. Irving, on WF-100

Addendum substituting for Question 6.

MINING AND GENERAL BUSINESS EXPERIENCE OF APPLICANT

The applicant who will supervise and manage the project has the following mining and business experience:

The applicant is a professional mining engineer and geologist and has been for twenty-four years. He is a graduate of Coulmbia University, in New York City, and spent six years at this institution, receiving in the course of this work, three degrees---B.A. 1924, B.S. 1926 and Engineer of Mines, or E.M., degree in 1927. Subsequently, after being out of school eleven years the applicant spent two years at Harvard University, devoted exclusively to an intensive study of Mining Geology, under Professors Graton, McLaughlin and other prominent teachers and received in 1940 a Masters Degree in Economic Geology. At Harvard he also was given an Honary Fellowship for grades received and work done.

The applicant has the following mining, geological and business background:

a. Seven and a half years with the Anaconda Copper Mining Company, and the International Smelting Co., as geologist, supervising development work in the Butte mines and doing extensive field work and outside examination work, involving the valuation of mines and prospects. (1927 to 1932 and 1936--1938)

b. Four years as sales manager of the Defiance Oil Company, at Glen Cove, New York--a retail fuel oil distribution campnay, with a bulk plant. ('32-'36)

c. Five years as independent geologist and small mine operator, involving the development work at the Quartz Hill Mine, at Divide, Montana. 1940-1945)

d. One and a half years with the War Production Board, in Washington, D.C. as engineer analyzst for the Copper Division, during which times he served as alternate member of the Quota Committee. (1945-46)

e. Mine operator and independent geologist, during which time he was manager of the Quartz Hill Development Co. and president of the Pyrenees Development Company and supervised development at both properties and managed the operations. ('46-'50)

f. Mining engineer and geologist for The Galigher Co., of Salt Lake City, Utah. (1950 to date)

COPY

I G Irving

(*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 above, and show how computed. Tabulated total ore reserve as follows: See map accompanying WE-103

TOTAL ORE OR MINERAL RESERVES No developed ore reserve

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)	no proved ore				
Indicated (probable)	There is indicated and probable ore, based on surface exposures and vein projections, but of unknown extent				

(*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. Approx 2 miles from Butte, Mont., with 2000' of dirt road to be built, rest is on main highway

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Will have to haul drilling water, at start, in barrels.

15. Power:

State amount of power used, rate per hour, and source thereof. Montana Power Co. is source.

16. Labor: Will have to build 3500' of line. See rate schedule attached.

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

17. Equipment and Facilities: No recent employment at property

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. No equipment present or owned, equipment to be rented or bought.

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

None in particular.

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.

Not a company (Name of company)

By Irving G. Irving (Signature of authorized official)

November 30, 1951 (Date)

Irving G. Irving (Title) Lessee

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

Schedule GS-44—General Service

Available for: All electric service required when supplied through one meter at one point of delivery. Not available for standby, breakdown, supplementary, resale or shared service.

Type of Service: Sixty cycle alternating current at such phase and voltage as Company may have available.

Rate: Net monthly bill.

75c for the first 12 kwh, or less.
3.5c per kwh for the next 288 kwh.
2.5c per kwh for the next 1,500 kwh.
1.5c per kwh for the next 3,200 kwh.
0.9c per kwh for the next 15,000 kwh.
0.7c per kwh for the next 200 kwh per kilowatt.
0.5c per kwh for all additional kwh.

Plus

First 10 kilowatts —No charge.
Next 20 kilowatts —95c per kilowatt.
All additional kilowatts—75c per kilowatt.

Minimum Bill: 75c per month.

Tax Adjustment: The Company may increase the bill for electric service supplied under this Schedule by an amount equal to the proportionate part of any taxes in excess of those in effect on December 31, 1940.

Payment: The net monthly bill is due and payable when rendered and becomes delinquent 10 days thereafter.

Determination of Kilowatts: The average kilowatts supplied during the 15-minute period of maximum use during the month, as determined by permanently installed indicating type meter.

Special Terms and Conditions: Customer may be required to pay the cost of installing and removing all of the facilities required to supply seasonal and short term service. Customer must pay the cost of installing and removing all of the facilities required for rendering temporary service.

Issued September 22, 1944
Approved September 22, 1944 Public Service Commission
Effective October 1, 1944 of Montana
(Supersedes Schedules GS-41)

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. D.M.E.A. 2177
Metal or Mineral
Date Received 11-30-51
Amount $
Participation (Government %)

GARIBALDI MINE

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 26 1951

Name and address of applicant

Date October 16, 1951

If you have already filed MF-100, give date filed not operating none filed, type of assistance requested Exploration loan,

DMA Docket Number (if available) DMA-2177

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
NOV 30 2 02 PM '51

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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. Property is the Garibaldi Lode Claim. Seecopy of of lease attached for legal description (pg. 5 supplement)

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. See copy lease attached

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.
   Garibaldi Claim. See description in lease attached

   NOTE: (1) 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 (*c*) 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. Areas both same

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. Owners will not sigh subordination agreement. See statement of lessee attached. No liens known of.

2. (*a*) What metals or minerals do you expect to find? Manganese

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.
   See supplement attached; also maps accompanying

16—64067-2

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project. See supplement attached

   (*b*) State the time required to start the project and to complete it. Approximately 6½ months

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.
   See maps attached

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. No existing facilities

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. See supplement attached and lists contained in answer to Question # 7

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased — See supplement attached.

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each. See supplement attached

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. All items of cost considered are contained in cost analysis set forth in Question # 7

10. (*a*) How much are you prepared to invest in the proposed project? $5,500.00

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)? Yes

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

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.

Garbaldi Mine
(~~Name of company~~)
Not a company
an individual

By Irving G. Irving
(~~Signature of authorized official~~)
An individual

October 16, 1957
(Date)

Lessee
(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—64067-2

SUPPLEMENT TO MF-103

Irving G. Irving
24 Firbour B'ldg.
Butte, Montana

Material requested in Question
2 b, page 1, form MF-103

Geologic Features of Property

The Garibaldi Claim is located in the western part of the Butte District, at Butte, Montana. Geologically, it falls into the peripheral zone, as classified by Geo H. Sales, in "Ore Deposits at Butte, Montana". Butte has a total production of over three billion dollars, in copper, zinc, lead, manganese, silver gold and other metals, and this has come from a complex vein system, but the bulk of it has been mined on the great and persistent east-west veins that go to depth in strength and productivity. The Garibaldi is on one of Butte Major east-west veins.

The peripheral zone, at Butte, borders on the intermediate zone (which is characterized by a predominatly copper mineralization) and displays a vein filling that is mesothermal in type and consists of quartz, rhodochrosite, sphalerite and pyrite. Some lead occurs in shoots that have been important.

The Garibaldi claim lies about 250' west of the Minnie Jane claim which produced over fifty thousand tons of pink, rhodochrosite ore during World War II and has unmined reserves. The Minnie Jane Mine lies less than 200' west of the Anaconda's famous Orphan Girl Mine, which has been developed to depths of 3000' or more. A study of the surface indicates that the Minnie Jane vein is the westerly extension of one of the major veins in the Orphan Girl Mine. The Minnie Jane vein runs into the Garibaldi claim.

On the Garibaldi Claim itself, two veins are exposed on the surface. Two other veins, including the main Minnie Jane vein project into the claim and are undoubtedly present in a sub-apex relationship, underneath the Whiskey Gulch Fault. (See map attached)

On the surface, the two manganese veins exposed show manganese ore in oxide form. Rhodochrosite is expected--based on the history of this part of the camp--at somewhere between fifty and sixty feet in depth. Good manganese ore is also a reasonable expectation on the two veins that project into the property.

Ten samples were taken by the applicant on the manganese veins outcropping. Four of these showed ore, in oxide form, and averaged 16.8% Mn, over good mining widths. Three others averaged 11.4%Mn. Two samples previously taken by others showed material that assayed from 17.0% Mn to 25.0% Mn. Since manganese is soluble, it is expected that the rhodochrosite ore directly below the samples taken, should average higher.

It is obvious that the property harbors manganese ore in commercial quantities and has the potentialities of a property of importance. See sample locations on the attached map.

COPY

I. G. Irving

Irving G. Irving
Garibaldi Mine
84 Hirbour Bldg.
Butte, Montana
DMA-2177

Supplement to Form MF-103

Material requested in answering Questio 3. a& b.

a.
The work proposed involves a program consisting of acquiring, erecting and placing into position all construction to commence, and thereafter, to sink an inclined shaft 110 feet from the surface, cutting a station andthen drifting 150 feet on the vein indicated on the surface. The total cost of this work is estimated to be $22,000.00.

b.
The time required to complete this work, working one shift, is estimate d to be six and one-quarter months.

Material requestedin answering Question # 6.

The additional facilities, building and fixtures and installations to be purchased, installed or erected by applicant and the estimated cost or rental thereof are set forth in detail in the supplement that purports to answer Question # 7. Please refer to this.

Material requested in answering Question # 7.

a. Additional buildings, equipment andfacilities to be installed and estimated cost thereof:

Construction to be done:

Headframe complete, supplies and timber--	$750.00
One storage bin	250.00
Dry house	250.00
Engine room	300.00
	$1550.00
Constructin g headframe and collar set	750.00
Total construction	$2,300.00

b. Equipment to be rented:

	$
Panel box and transformers (rental per month)	50.00
Compressor and receiver fittings	150.00
Hoist and controls	50.00
Pump	25.00
Total monthly cost of equipment rented	$270.00
Hauling & installation of above	730.00

Irving G. Irving
Garibaldi Mine
84 Hirbour BLDg.
Butte, Montana

Question # 7 (continued)

c.
Equipment to be purchased

Powerline complete	$1,500.00
Receiver	50.00
Track	260.00
Spikes	25.00
2" pipe (300' at 50¢ a foot)	150.00
1" pipe (300' at 25¢ a foot)	75.00
2 stoves	50.00
Two jackhammers and accessory fittings & hose	1,050.00
Nine pieces of steel	20.00
One stoper	550.00
Nine pieces of steel	20.00
Supply of bits	50.00
Two mine cars	100.00
Miscellaneous tools	$ 200.00
	$4110.00

d. Shaft sinking cost analysis

To sink shaft average of 2' a day:	Per Day	Per Foot
Labor (miners)	$30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
Total	$60.00	$30.00
Power ($300.00 per month)	15.00	
(plus extras etc)		7.50
Timber framed		6.00
Powder, track, spikes and pipe placed		10.00
		$53.50
Plus 15% for contingencies		6.75
SHAFT SINKING COST		61.65
Rental cost, based on 40' per month allowing for delays and usual trouble		6.75
DIRECT SHAFT SINKING COST PER foot		$68.40

e. Drifting cost analysis

To plan to pull 3½' per day		
Labor (miners)	30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
	$60.00	$17.15
Powder @ $300.00)	15.00	4.25
Timber, powder, tools etc placed		16.00
Drifting		$37.40
Based on 70'/mo; drifting rental cost		3.90
DIRECT DRIFTING COST/Ft.		$41.30

COPY

Irving G. Irving
Garibaldi Mine
84 Hirbour Bldg.
Butte, Montana

SUPPLEMENT TO MF-103

Question # 7 (continued)

Recapitulation of cost of project

Equipment purchases	$4,110.00
Surface construction	2,300.00
Hauling and installation	730.00
Station cutting at 100 level	1,000.00
Shaft sinking --110' @ $68.40 per ft.	7.524.00
Drifting--150' @ $41.30 per ft.	6,195.00
Abaondonment cost	1,200.00
Total cost of project	$23,059.00
Lessestimated salvage	1,059.00
TOTAL LOAN Including applicant's contribution	22,000.00
Loan requested	16,500.00
Applicant's contribution	-5,500.00
	$22,000.00

Answers to Question # 8

Two shaft men taking contract at $15.00 per foot
One hoistman at $15.00 per day
One supervisor at $15.00 a day

Note: Schedules may have to be revised to meet changes in Union scale or other changes

Answers to material requested in Question # 9

Applicant thinks that all items of cost, except very small ones and those estimated with difficulty , are cosnsidered in cost analysis set forth in answer to Question # 7.

Question # 10

Applicant isprepared to furnish (in the form of cash) $5,500.00

COPY

ANNEX I

WHEREAS, the subordination agreement of the lessor, required by paragraph number 2-B of the annexed contract has not been obtained, covering the Garibaldi Quartz Lode Mining Claim, Survey No. 1880, located in Silver Bow County, Montana, and held by the undersigned under a mining lease with an option agreement covering three quarters of the interests in said claim; and

WHEREAS, the United States of America has agreed to waive requirement of the lessor's subordination agreement;

NOW THEREFORE, in consideration of said exploration project contract and of the foregoing, the operator hereby undertakes and agrees that during his operation of said property under said lease or any extension thereof he will pay to the government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrate, or metal produced as a result of such discovery or development under said exploration project contract until the total amount contributed by the government, without interest, is fully repaid, or ten years shall have elapsed, or the undersigned no longer has a lease covering said property, whichever occurs first, as follows:

> Of the net smelter returns or other proceeds not in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1½%) per cent;
>
> Of net smelter returns or other net proceeds in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1½%) per cent, plus one-half (1/2%) per cent for each additional full Fifty Cents ($0.50) in excess of Eight Dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5%) per cent.

This obligation to pay from net returns or proceeds shall be and remain a claim and lien upon the net smelter returns or other proceeds due to the undersigned, from any production resulting from such discovery or development, in favor of the government, until fully paid, or until said ten-year period has elapsed or until the undersigned has no lease or other right to operate said property; and this claim and lien and the government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the operator to produce ore from any such discovery or development.

Dated October 16, 1951.

Signed Jerry McCarney

Title Lessee

Irving G. Irving
Garibaldi Mine
84 Hirbour Bldg
Butte, Mont.

QUARTZ MINING LEASE

THIS AGREEMENT, Made and entered into this 1st day of October, 1951, by and between ANACONDA COPPER MINING COMPANY, a Montana corporation, owning a one-quarter interest; GEORGE D. CURTIS, residing at 35 West Granite Street, Butte, Montana, owning a one-quarter interest; ARTHUR HIRBOUR and ALICE HIRBOUR, his wife, residing at 806 Cherrier Street, Montreal, Canada, owning a one-sixth interest; PAUL LEVIGNE and STELLA LEVIGNE, his wife, residing at No. 7 Avenue des Fleurs, Nice A.M. France, owning a one-sixth interest; and MRS. LOUISE LANGLOIS, residing at 406 Pine Avenue West, Montreal, Canada, owning a one-sixth interest (hereinafter called "Lessors"), parties of the first part, and IRVING G. IRVING, whose office address is 84 Hirbour Building, Butte, Silver Bow County, Montana (hereinafter called "Lessee"), party of the second part, WITNESSETH:

It is mutually agreed by and between the parties hereto as follows:

1. RIGHTS GRANTED TO LESSEE: The Lessors, for and in consideration of the rent and royalty to be paid, and the covenants and agreements to be observed, kept and performed by the Lessee for the term hereinafter stated, and upon the terms and conditions hereinafter set forth, do hereby lease, demise and let unto the Lessee the following described property situated in the County of Silver Bow, State of Montana, to wit:

The Garibaldi Quartz Lode Claim, Survey No. 1888.

2. EFFECTIVE DATE - TERM: This agreement shall take effect on the day and year first above written and shall continue in full force and effect for a period of three (3) years immediately following said date, unless sooner terminated as hereinafter provided; provided, however, that the Lessee shall have the right, if not in default hereunder, to renew this agreement for an additional period of two (2) years by giving written notice of the exercise of such

right to the Lessors at least sixty (60) days before the expiration of the original term hereof.

3. ROYALTY: For ores of copper, zinc, lead, silver, gold or other metals which are shipped from the demised premises to a custom mill or smelter, the Lessee shall pay to the Lessors a royalty based upon the net mill or smelter returns of the ores mined he reunder according to the following schedule;

On ores having a value of $15.00 or less per ton, 10% royalty.

On ores having a value of over $15.00 and not more than $24.99 per ton, 15% royalty.

On ores having a value of $25.00 and not more than $34.99 per ton, 20% royalty.

On ores having a value of $35.00 and not more than $49.99 per ton, 25% royalty.

On ores having a value of $50.00 or over per ton, 30% royalty.

By "net mill or smelter returns" is meant the amount received for such ores after deducting therefrom the cost of milling, smelting and freight or haulage charges from the mine to the mill or smelter .

In case the Lessee shall receive any other amounts from the sale of such ores over and above the settlement made by the mill or smelter, the Lessee shall pay to the Lessors the same percentage of such additional receipts as specified in the above scale of royalties for the lots for which settlement is made. With the payment of such additional royalty the Lessee shall submit to the Lessors a statement showing the lot for which the additional payment was received, together with proof of the amount of such additional payment.

For ores of manganese which are sold as such to any agent, the royalty to be paid to the Lessors under this Lease shall be 10% of the amount received by the Lessee, delivered at the stockpile or plant of such agent, or delivered f.o.b. railroad cars at the most convenient loading place, after deducting therefrom the cost

of freight or haulage from the mine to said stockpile, plant or loading place.

With the payment of said royalty, the Lessee shall submit to the Lessors a copy of his settlement sheet showing the number of wet tons sold, the moisture content and the percent of manganese in each lot for which settlement is made.

The payment of all royalties under this lease shall be made directly to the Anaconda Copper Mining Company as trustee for the Lessors at its General Office, 304 North Main Street, Butte, Montana, and said Anaconda Copper Mining Company agrees to distribute said royalty quarterly to the other Lessors in proportion to their interests.

4. LESSEE TO PAY TAXES AND ASSESSMENTS: The Lessee, in addition to paying the royalty herein stipulated, shall pay before the same become delinquent all taxes and all assessments which during the term hereof may be lawfully levied or assessed upon all structures and improvements, equipment and other property erected, constructed, installed and/or used by the Lessee in connection with the exercise of the rights herein granted, and shall also pay when due all net proceeds, occupation, license and output taxes lawfully levied upon all ores or minerals extracted from said premises hereunder. The Lessee, upon the payment of such taxes and assessments shall promptly furnish the Lessors with satisfactory evidence of such payment.

5. DEMISED PREMISES TO BE WORKED SEPARATELY: The demised premises shall be worked separately from all other lands, and all ore mined and removed therefrom shall be kept segregated from all other ore mined by the Lessee until the weight and value thereof shall be fully determined.

6. INSPECTION OF MINE: The Lessors, through their authorized representatives, shall at all times during the term of this Lease have the right to enter upon and inspect the mine or mines and

all the workings thereof on the demised premises and to make any survey that they may deem necessary, either for the purpose of checking the amount of ores mined or for an examination of the physical condition of the property and workings.

7. CONDUCT OF MINING OPERATIONS: The Lessee shall enter upon said mine or premises within ninety (90) days from the day and year first above written and shall work the same in a manner necessary to development and to good and economical mining so as to take out the greatest possible amount of commercial ore free from waste, having due regard to the safety, development and preservation of said premises as a workable mine, and shall thereafter during the period of this lease work said mine and premises as aforesaid continuously and steadily, and in the prosecution of said work shall keep at least two (2) persons employed in the above described type of work for a space of twenty-two (22) days in each thirty (30) day period, except during such times as said Lessee may be actually prevented from prosecuting said work by any cause or causes beyond his control.

In consideration of said Lease the Lessee does hereby covenant and agree with the Lessors that he will well and sufficiently timber said mine at all points where proper and repair all old timbering whenever it may become necessary in order to preserve the mine in a workable condition.

That he will occupy and hold all cross and parallel veins, leads, dips, spurs, feeders, crevices or mineral deposits of any kind which may be discovered in working under this Lease, or in any development work connected with the working of said Lease by said Lessee, or by any person or persons under him, in any manner and will not dueing the term of this Lease locate or attempt to locate or record the same, or allow the same to be located or recorded except in the names of the Lessors.

That he will keep all shafts, drifts, tunnels and workings in good condition of repair, and will keep the same drained and

clear of loose rock and debris of all kinds.

That he will adequately fence, cover or otherwise protect all shafts, cuts or other surface openings made or used by him under this Lease.

8. BOOKS AND ACCOUNTS: The Lessee shall keep books and accounts showing the amount of ores extracted from said mine, the amount of ores shipped, sold or treated, and the amount of money received from said ore, or the value extracted therefrom, and the Lessors shall have free and full access to said books, accounts and records of the Lessee at all reasonable times.

9. DISPOSAL OF WASTE, REFUSE AND MINE WATER: The Lessee shall make such provision for the disposal of waste, refuse and mine water from the mine or mines on the demised premises that the same shall not be a nuisance nor injure the property of the Lessors, or of others, nor obstruct or contaminate any stream, or obstruct any right of way or other means of transportation or travel on the lands of the Lessors or others.

10. LABOR AND MATERIAL TO BE FURNISHED BY LESSEE: The Lessee shall, at his own cost and expense, furnish all labor, material and supplies necessary for the proper operation of the demised premises under this Lease.

11. LIENS: The Lessee shall, when due, fully pay for all machinery, equipment and materials joined or affixed to the premises herein described, and shall, when due, pay in full all persons who perform labor upon said premises, and shall not permit or suffer any liens of any kind or nature to be enforced against said premises for any work done or machinery, equipment or materials furnished thereon at the instance or request or on behalf of the Lessee.

12. STATE AND FEDERAL ENACTMENTS AND CITY ORDINANCES: The Lessee, in the operation and development of said premises, shall observe and comply with all applicable Federal and State laws, safety regulations and city ordinances, and shall comply with the

laws of the State of Montana in reference to Workmen's Compensation, and shall insure and keep insured during the term hereof all persons employed by Lessee under the provisions of said Workmen's Compensation Law.

13. ASSUMPTION OF RISK - INDEMNITY: (a) The Lessee assumes all risk of personal injury to the servants and employees of the Lessee and persons with whom he may be transacting business while on the demised premises, and all risk of loss or damage to buildings or contents, and also to any other property brought upon, or in proximity to, said premises by the Lessee, or by others with the knowledge or consent of the Lessee.

(b) The Lessee agrees to, and does hereby, indemnify and hold harmless the Lessors against any and all damages, liability, liens, claims, demands, costs, causes of action, suits at law or in equity in any way growing out of this agreement, or because of the operation or the carrying on of the work contemplated hereunder.

14. LESSORS TO BE GIVEN NOTICE OF LITIGATION: The Lessee shall promptly notify the Lessors in writing of the institution of any litigation involving the rights granted by this agreement, and in the event the Lessors are, in their judgment, in any way interested therein, they may, at their option, enter into the conduct and defense of such litigation to the extent they may deem advisable.

15. DEFAULT BY LESSEE: Time is of the essence of this agreement and in case the Lessee shall fail to keep and perform all, or any one of the covenants and agreements herein written and contained to be by him on his part performed in the manner, form or at the time as herein agreed, then the Lessors may, at their option, and upon thirty (30) days notice in writing to Lessee, declare this agreement terminated and at an end, and all the rights of the Lessee shall cease and be wholly terminated and at an end.

A waiver by the Lessors of a particular breach of any covenant or agreement shall not be deemed or held to be a waiver of or affect any other breach or impair its rights resulting therefrom.

16. SURRENDER OF PROPERTY: Upon the termination of this agreement for any cause, the Lessee shall immediately surrender unto the Lessors all of the premises herein demised without delay or hindrance and the Lessors shall have the right immediately upon the expiration or termination howsoever of this agreement to ente r upon the premises aforesaid and to take immediate possession thereof without declaration of forfeiture , act of re-entry or process of law.

17. REMOVAL OF EQUIPMENT: As long as the Lessee is not in default in any of the terms and conditions herein provided for to be kept and performed by the Lessee, he shall have the right to remove from the demised premises all machinery, tools and other equipment placed thereon by him within a period of sixty (60) days from the termination hereof, and unless so removed within said period the same shall immediately become the property of the Lessors, but he shall not remove or impair any supports, mine props or mine timbers which may be necessary for the protection of any openings of such mine or mines.

18. HOW NOTICES TO BE GIVEN: All notices given or required to be given under the terms of this agreement shall be in writing, sent by United States mail postage prepaid and shall be addressed as follows:

Notices to the Lessors shall be addressed to Mr. F. A. Linforth, Assistant to the Vice President, Anaconda Copper Mining Company, Hennessy Building, Butte, Montana, and notices to the Lessee shall be addressed to the Lessee at 84 Hirbour Building, Butte, Montana, provided further that in lieu of mailing, such notices may be served upon either of such parties personally.

19. SUCCESSORS AND ASSIGNS: This agreement shall be binding

upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, provided, however , that the Lessee shall not transfer or assign this agreement or any interest therein or any right granted hereunder without the written consent of the Lessors.

IN WITNESS WHEREOF, the corporate Lessor has caused these presents to be executed by its officers thereunto duly authorized, and its corporate seal to be hereunto affixed, and the individual Lessors and the Lessee have hereunto set their hands, the day and year in this instrument first above written.

ANACONDA COPPER MINING COMPANY,

By_____
As its Vice President.

ATTEST:

J. D. MURPHY
As its Assistant Secretary.

_____
George D. Curtis

_____
Arthur Hirbour

_____
Alice Hirbour

_____
Paul Levigne

_____
Stella Levigne

_____
Mrs. Louise Langlois

LESSORS.

_____
Irving G. Irving

LESSEE.

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

Manganese.

CONTROLLED DOCUMENT

DMA Docket No. 2177

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

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EXPLORATION PROJECT

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

	Code 340		
To:	Ferro-Alloys Br.	Date	10/23/51
To:	P.E. Div.	Date	12/4/51
To:		Date	
To:		Date	
To:		Date	
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To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

DMCA 2177
MN
Butte, Mont.

Mr Crittenden —

Please favor us with a summary of your data in regard to the area noted in the attached Application

Geo Selfridge
by GFB

Apparently someone has some money. I dont know whether you wrote any memo or not on this 5-28 GSA Hdq before. I doubt we have any of the old Docket. EEC

FILE COPY
SURNAME:

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

MAR 13 1952

Mr. I. G. Irving
84 Hirbour Building
Butte, Montana

Re: Docket No. DMEA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

Dear Mr. Irving:

Thank you for your letter of March 3, 1952, in which you advise us of your inability to either secure landlord subordination agreements or purchase the Anaconda interest. As you suggested, we are removing the application from our active files and thereby consider the matter closed.

A quick check with Defense Materials Procurement Agency concerning the eligibility of the property for a production loan after drilling, suggests that the Agency would still consider the property in the exploration stage and, therefore, not eligible for a production loan. However, to be absolutely sure of the matter, we suggest that you write direct to DMPA and get a first-hand answer.

Sincerely yours,

C. O. Mittenderf

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
3/11/52

cc: Admn. Reading File
Docket
G. C. Selfridge
Field Team, Region 2
N. B. Melcher, USBM
M. D. Crittenden, USGS

IRVING G. IRVING : : : ~~2016 ELIZABETH WARREN AVENUE~~ : : : BUTTE, MONTANA
84 Hirbour Bldg

March 3, 1952

S.D.

Mr. C. O. Mittendorf,
Acting Administrator,
Defense Minerals Exploration
Administration,
Interior Building,
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 7 1952

Re: Docket No. DMEA 2177x -Manganese
Garibaldi Mine,
Silver Bow County, Montana.

Dear Mr. Mittendorf:

I have your letter of February 29th, in which you point out that the subject property can not qualify for an exploration loan, because of my inability to get the subordination agreement signed by the landlords. As mentioned before one of the landlords is the Anaconda Copper Mining Company and they have apparently set the pace for the others. At any rate none of them will sign.

Also the Anaconda interest is not for sale, so it appears that I can do nothing on that score. I realize that undoubtedly other lessees, have been able to supply this agreement, and despite the fact that I have tried all of the methods of selling described in any book on the subject, I just cant get it.

I agree with you that it would be unfair to allow me to by-pass this requirement, when others can not do that, but are required to conform. There seems to be nothing to do at this point, but to remove the application from your files and close the case. I want to thank you and the engineers who have worked on this case, and I know that they have done all they can, and fully cooperated. I think your lawyers are the main stumbling block to the whole campaign, but that's the way it is set up.

Dont lose the application, because things might change. Incidentally we may be able to drill it this spring, on our own resources. In this case, and if we disclose commercial ore, would the property be eligible for a production loan? Could you take time out to reply to this one.

Sincerely yours,

I. G. Irving
84 Hirbour Bldg. Butte,

140 & 400

FILE COPY
SURNAME:

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

Selfridge
Hofflund

FEB 29 1952

Mr. I. G. Irving
84 Hirbour Building
Butte, Montana

Re: Docket No. DMEA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

Dear Mr. Irving:

This is in reply to your letter of February 6, which relates to previous correspondence concerning your inability to procure an owner's consent to lien (subordination agreement) and your unwillingness to enter into the form of undertaking suggested in lieu thereof.

As long as the Government pursues the policy of requiring repayment from production of its contributions to exploration projects, it is plain that the applicant for such aid must have a sufficient interest in the property to be explored to assure the Government of repayment in the event of a discovery. In the case of a lessee, the only practicable ways to accomplish this are those that have been previously suggested. Of course, an applicant might, if he saw fit, purchase the property which is the subject of the proposed exploration and thus obviate the necessity for any agreement with the landlord.

We have had many applications from lessees, and have entered into a great many exploration agreements with them on the strength of subordination agreements signed by the landlords. Most landlords are glad to have their property improved to the fullest possible extent, and so are willing to enter into any necessary agreements to procure Government aid for this purpose.

It would not be fair or reasonable to permit some lessee-applicants to dispense with the required subordination agreement of the landlord while the vast majority of them are willing to supply it or to enter into a suitable undertaking in lieu of it. I regret that under the circumstances it appears that this agency will not be able to enter into an exploration project contract with you.

If after receipt of this letter you are still unable to arrange for subordination or ownership, will you please advise us and we shall remove your application from our active file and consider the docket closed.

Sincerely yours,

C. D. Mitender

Acting Administrator
Defense Minerals Exploration
Administration

JLHofflund:GCSelfridge:em/ls
2/28/52

Copy to: Docket
Admn. Reading File
J. L. Hofflund
G. C. Selfridge
Field Team, Reg. 2

cc: N.B.Melcher, USBM
M.D.Critten, USGS

S.N. 2-29-52

400

FILE COPY
SURNAME:

Selfridge

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

February 15, 1952

Memorandum

To: Chief Counsel, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Subordination agreement and guarantee
Docket No. DMA 2177X - Manganese
Garibaldi Mine
Silver Bow County, Montana

The applicant, Mr. I. G. Irving, was not able to secure a landlord's subordination agreement and sent us a copy of his personal guarantee, in lieu of the former, which covered only a 5-year period. This was reviewed by your Division and found not acceptable. This information was transmitted to the applicant on January 5.

Will you please review Mr. Irving's letter of February 6 and inform us whether or not there is any legal method by which he could come in under the program.

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/15/52

cc: Admn. Read. File
Docket
G. C. Selfridge

G. IRVING : : : ~~XXXX

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

File — FEJ

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 7 1952

February 4, 1952

Dmea
2177

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Through: Operating Committee

Dear Mr. Mittendorf:

Enclosed is a copy of a letter from Mr. Irving G. Irving of Butte to Glenn Reed of the U. S. Bureau of Mines, which was transmitted to me for an answer. A copy of my reply to Mr. Irving is also attached.

Mr. Irving's letter brings up the subject of what constitutes a discovery and what is to be considered as ore for repayment of a loan should a discovery be certified. This matter is of considerable interest to the Field Team as it seems likely that the certification of a discovery will have to be made largely upon the recommendations of the Field Team. It appears we are now reaching a point in the exploration program where some policy concerning criteria for the certification of a discovery should be given to the Field Team to guide them in their recommendations.

In answering Mr. Irving's letter, I have made more or less my own interpretations of what is going to be certified as a discovery and would like your comments upon them.

You may have noted that I have indicated in my letter to Mr. Irving that submarginal ores may be certified as a discovery, if for various reasons at some future date they may become commercial and be mined within the 10 year period. The phrase, "commercial ore from which production may be made," as used in the contract, is not clear. Is a discovery going to be certified only if commercial ore exists at the termination of the contract? If this is the case, how are diamond drilling projects going to be appraised as in many cases a positive discovery will only be determined by further underground exploration. Similarly, a bulldozing program may result in the discovery of a vein with a favorable structure and an oxidized zone from which commercial ore can only be geologically inferred. Likewise, long adits and deep

See Circ. 26, Supplement No. 1.
FEJ

shafts may penetrate favorable structures which might geologically be inferred to contain commercial ore. Will such discoveries be certified to the operator? What limits are going to be put laterally and vertically upon the discoveries? Are the discoveries going to be limited to the actual underground exposures or are property boundaries going to be the limiting factors in determining the ore to be obligated for repayment of the loan? These are some of the many questions which have come up.

Each project will be a special problem all its own and probably no set rules can be made to cover all possibilities. There is a need, however, for a general statement of policy which can be used by the Field Team as a guide in making recommendations as to discoveries.

Sincerely yours,

A E Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

February 4, 1952

Mr. Irving G. Irving
Mining Geologist
84 Hirbour Building
Butte, Montana

Dear Mr. Irving:

Your letter of January 16, 1952, to Mr. Glenn Reed of the U. S. Bureau of Mines has been referred to this office for an answer.

Your question concerning what the government is going to consider a discovery is certainly pertinent. To date no definite criteria for what constitutes a discovery has been formulated. At least we have not received any instructions on this matter at this office. As you have probably realized, the nature of a discovery will depend largely upon recommendations of the Field Team.

In the hypothetical case which you have set up in your letter, as you have indicated, block "A" would be certified as a discovery. We also believe block "B" would be certified as a discovery and probably any lateral or vertical extensions of block "A" or "B". If both block "A" and "B" turned out to be marginal ore, but have a good chance of becoming economic within a 10 year period, it now seems possible that such an ore body might also be certified as a discovery. There is no certainty that marginal discoveries will be certified, but in considering signing a guarantee in lieu of a subordination agreement you may wish to give such a possibility some consideration.

I hope this information will help you better appraise your possible obligations in signing a "guarantee". Inasmuch as we have not received any definite instructions concerning what is to be considered a discovery, I am forwarding a copy of your letter to Mr. Mittendorf for his comments. Should he disagree with my interpretation of what might be certified as a discovery, I will advise you.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: C.O. Mittendorf

C O P Y

IRVING G. IRVING
Mining Geologist
84 Hirbour Bldg.
Butte, Montana

January 16, 1952

Mr. Glenn C. Reed
Mining Engineer
Bureau of Mines
Spokane, Wash.

Re: Guarantee in lieu of Landlord's Subordination Agreement

Dear Glenn:

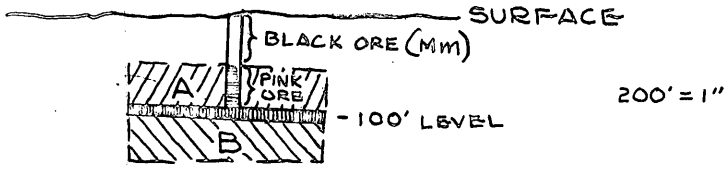
I have your letter of January 7th, in which you advise on the proper form of the landlord's subordination agreement substitute. You also send an approved guarantee for my guidance.

I also got a letter from Mr. Mittendorf, in which he states that the substitute I sent in with my DMA 2177 application, on the Garibaldi Mine, was inadequate. He also sent me a newer form, but this one they won't sign either.

So, I am considering signing one similar to the one you sent me, that was used in connection with another contract currently active in your Region. Before I do, however, I wish to have some further clarification, on just how and according to what rules, you determine the amount of ore that is exposed by the contract, and spending of government money.

Let us take the case of the proposed Garibaldi development, and using this as a specific case, explaining just exactly the extent of the material, that would be considered by the government engineers to be ore exposed by the work.

In simplest form, the Garibaldi development work proposes to sink a shaft 100 feet and to do several hundred --(150' +) feet of drifting off the bottom. A sketch of this work follows:



Suppose that the shaft, after passing thru about 50 feet of black ore, not being bought, then finally got into the pink and then all of the drifting was in ore. Block A would undoubtedly be considered ore developed, by this work, and subject to repayment schedule, but would Block B, under the sill. This particular distinction is important to me, if I sign, "in lieu of". If Block B is also considered ore that would be subject to repayment of loan, how deep would they carry it. Please advise.

Irving G. Irving/s/ Joe

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. Division St.
Spokane 2, Wash.
January 10, 1952

J.a.
Reviewed by
DMEA OPERATING COMMITTEE
1-23-52
(date) JAD

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Garibaldi mine, Silver Bow County, Mont.
Docket DMA 2177
Commodity: Manganese

The Field Team recommends that an exploratory project contract in the amount of $23,665 be approved for a program at the subject property as proposed in attached memoranda. This recommendation is contingent upon submission of a proper landlord's subordination agreement or guarantee in lieu thereof.

The proposed project is based entirely on geological considerations described in the attached report by H. T. Reno, mining engineer of the Bureau of Mines. The project seems to have a good chance of being successful, and it can be quickly followed up by production of manganese ore with a relatively small capital investment. It is considered that a significant output of manganese ore very likely can be made from the property provided the proposed exploration is successfully concluded.

The following supporting data are enclosed for review:

Memorandum report by H. T. Reno (4 copies)
MF-200, Exploration project contract (6 copies)
MF-100, (1 copy)
MF-103, with lease attached (1 copy), together with Annex I signed by applicant in lieu of Landlord's Subordination Agreement

Three copies each of Forms MF-100 and MF-103 in connection with this application were forwarded to Washington, D. C., on November 21, 1951.

The applicant has informed the Field Team that the required Landlord's Subordination Agreement cannot be obtained. He has stated that he will submit an acceptable guarantee in lieu of the Subordination Agreement. It is the opinion of the Field Team that the attached Annex I does not constitute an acceptable guarantee.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: USGS, Spokane

FILE COPY
SURNAME:

Selfridge.

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

JAN 5 1952

Mr. Irving G. Irving
84 Hirbour Building
Butte, Montana

Re: Docket No. DMA 2177 - Manganese
Garibaldi Mine
Silver Bow County, Montana

Dear Mr. Irving:

Please refer to your letters of December 14, 15, and 23, 1951 in which you discussed subordination agreements and personal guarantee in lieu of the former as applied to the subject property.

Our legal department now has advised us that the "special agreement" drawn up by you is not acceptable. It is proposed to modify the present form of the Landlord's Subordination Agreement. The modification will have the effect of requiring only the consent of the landlord to the attachment of the Government's lien to the mineral deposit. It will not require the subordination of the landlord's right to royalties as under existing conditions.

We are enclosing two copies of the proposed modified agreement and suggest you determine whether the landlords will be willing to execute it and advise us accordingly.

Sincerely yours,

C. O. Mittendorf (for) 1-5-52

Acting Administrator
Defense Minerals Exploration
Administration

Enclosures - 2

GCSelffidge'lm
1/4/52

cc: Admn. Reading File
Mails and Files Br.
C. O. Mittendorf
N. B. Melcher, USBM
M. D. Crittenden
Field Team Reg. II
Docket
G. C. Selfridge

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

December 27, 1951

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Application of Irving G. Irving for Exploration Project Contract Docket No. DMA-2177

The applicant in this case has advised that he is unable to obtain the requisite Landlord's Subordination Agreement, and in lieu thereof the applicant has prepared, executed and submitted a "special subordination agreement". The special subordination agreement cannot be accepted under the provisions of Mineral Order 5.

As you are aware, it is now proposed to modify our present form of Landlord's Subordination Agreement. The modification will have the effect of requiring only the consent of the landlord to the attachment of the Government's lien to the mineral deposit. It will not require the subordination of the landlord's right to royalties as under existing conditions. Perhaps the applicant's landlord will find the proposed modification to be without objection, and we suggest that a copy of the new form be made available to the applicant for the purpose of determining whether the landlord will be willing to execute it. A copy of the proposed revision is attached.

Your file in this case is returned.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

ANNEX I

WHEREAS, the subordination agreement of the lessor, required by paragraph number 2-B of the annexed contract has not been obtained, covering the Garibaldi Quartz Lode Mining Claim, Survey No. 1888, located in Silver Bow County, Montana, and held by the undersigned under a mining lease with an option agreement covering three quarters of the interests in said claim; and

WHEREAS, the United States of America has agreed to waive requirement of the lessor's subordination agreement;

NOW THEREFORE, in consideration of said exploration project contract and of the foregoing, the operator hereby undertakes and agrees that during his operation of said property under said lease or any extension thereof he will pay to the government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrate, or metal produced as a result of such discovery or development under said exploration project contract until the total amount contributed by the government, without interest, is fully repaid, or ten years shall have elapsed, or the undersigned no longer has a lease covering said property, whichever occurs first, as follows:

> Of the net smelter returns or other proceeds not in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1½%) per cent;
>
> Of net smelter returns or other net proceeds in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1½%) per cent, plus one-half (1/2%) per cent for each additional full Fifty Cents ($0.50) in excess of Eight Dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5%) per cent.

This obligation to pay from net returns or proceeds shall be and remain a claim and lien upon the net smelter returns or other proceeds due to the undersigned, from any production resulting from such discovery or development, in favor of the government, until fully paid, or until said ten-year period has elapsed or until the undersigned has no lease or other right to operate said property; and this claim and lien and the government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the operator to produce ore from any such discovery or development.

Dated October 16, 1951.

Signed Irving G. Irving

Title Lessee -

140

FILE COPY
SURNAME:

Hoffl

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

December 27, 1951

Memorandum

To: Acting Administrator

not stripped in R. R.

From: Chief Counsel

Subject: Application of Irving G. Irving for Exploration Project Contract Docket No. DMA-2177

The applicant in this case has advised that he is unable to obtain the requisite Landlord's Subordination Agreement, and in lieu thereof the applicant has prepared, executed and submitted a "special subordination agreement". The special subordination agreement cannot be accepted under the provisions of Mineral Order 5.

As you are aware, it is now proposed to modify our present form of Landlord's Subordination Agreement. The modification will have the effect of requiring only the consent of the landlord to the attachment of the Government's lien to the mineral deposit. It will not require the subordination of the landlord's right to royalties as under existing conditions. Perhaps the applicant's landlord will find the proposed modification to be without objection, and we suggest that a copy of the new form be made available to the applicant for the purpose of determining whether the landlord will be willing to execute it. A copy of the proposed revision is attached.

Your file in this case is returned.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment
CJKoontz/bjl

Copy to: Repts. & Records
J. L. Hofflund
C. J. Koontz
Chron.

D.A.

IRVING G. IRVING
MINING GEOLOGIST
84 Hirsour Bldg.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 26 1951

December 23, 1951

Mr. C. O. Mittendorf,
Acting Director,
Defense Minerals Exploration Administration,
Washington, D. C.

Re: Garibaldi Mine
(Manganese)
DMA-2177

Dear Mitt:

You will note from the enclosed copy of a reply I sent Mr. Volin that the subordination agreement, I sent in with reference to the subject property (for ~~any~~ exploration loan) is apparently not adequate. I am enclosing a copy of Mr. Volin's letter to me also, so that you will have the whole picture.

Enclosed also is a copy of the guarantee I submitted in lieu of the Landlord's Subordination Agreement, which is absolutely not obtainable. The A. C. M. Co has refused to sign it, for their interest, and the other owners have refused likewise.

You will note that I have only a five-year lease on this property and the guarantee I submitted pledges me only for the term of my lease. I dont see how I can do otherwise, as it does not make sense to attempt to guarantee something for ten years, when one may be in control of the property for only five years, or the length of time he may have the lease.

This looks like a knotty problem, Mitt, and anything you can suggest will be helpful. In this particular property we have manganese ore showing on the surface, and in this particular case I have a backer who is willing to put up the 25% necessary for this particular property. I dont know how we are going to get production from this property unless the government relaxes its requirement on the Landlord's Subordination Agreement. I will guarantee it, as the enclosed form shows, but only can for the period of my lease.

Very truly yours,

Joe

I. G. Irving.

I

[illegible], the exploration agreement of the lessor, referred by [illegible] number [illegible] of the [illegible] contract has not been obtained, covering the Caribaldi [illegible] Mine [illegible], survey [illegible], located in Silver [illegible] County, [illegible], and held by the [illegible] under [illegible] lease with [illegible] exploration agreement covering the same [illegible] the interests in said claim; and

[illegible], the United States of America has [illegible] to have the [illegible] of the lessor's [illegible] exploration agreement;

[illegible], in consideration of said exploration project contract and of the rights of [illegible], the operator [illegible] Certificate [illegible] agrees that during the operation of said property under said lease or any extension thereof he will pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrate, or metal produced as a result of such discovery or development under said exploration project contract until the total amount contributed by the Government, without interest, is fully repaid, or ten years shall have elapsed, or the underlying [illegible] no longer has a lease covering said property, whichever occurs first, as follows:

> If the net smelter returns or other proceeds not in excess of [illegible] dollars ([illegible]) per ton of ore: [illegible] and one-half ([illegible]) per cent;
>
> If net smelter returns or other net proceeds in excess of [illegible] dollars ([illegible]) per ton of ore: [illegible] and one-half ([illegible]) per cent, plus one-half ([illegible]) per cent for each additional full dollar ([illegible]) in excess of [illegible] dollars ([illegible]) per ton of ore, but not in excess of a maximum of five ([illegible]) per cent.

This obligation to pay from net returns or proceeds shall be [illegible] a claim and lien upon the net smelter returns or other proceeds due to the underlessee, from any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said ten-year period has elapsed or until the underlying [illegible] no lease or other right to operate said property; and this claim and lien of the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as limiting any obligation on the operator to produce ore from any such discovery or development.

Dated October 16, 1951.

Lessee [signature]

Title [illegible]

COPY OF LETTER

United States Dept. of Interior
Bureau of Mines
1201 N. Division St.
Spokane 2, Washington

Mr. Irving G. Irving
84 Hirbour Building,
Butte, Montana.

Subject: Garibaldi Mine, Silver Bow, County, Mont.

Dear Joe:

A letter from the Field Team, along with memorandum report by H. T. Rene, Exploration Contract, and other supporting data relative to subject application today went forward to the Executive Officer, Field Team, Region 11, to be forwarded after his signature to Washington, D. C. office DMEA.

The Field Team recommends thatthe exploration project be approved contingent upon your submission of an acceptable guarantee in lieu of the Landlord's Subordination Agreement.

It willfacilitate approval of your application to submit this guarahtee as soon as possible either to this office, to the Executive Officer, Field Team, Region 11, or to the Acting Administrator, DMEA, Washington, D. C.

Yours very truly,

M. E. Volin, Chief,
Mining Division, Region 11

December 23, 1951

Mr. W. E. Volin, Chief,
Mining Division, Region 11
DMEA--Bureau of Mines,
1201 N. Division St.,
Spokane 2, Washington.

Re: Garibaldi Mine
(Manganese)
DMA 2177

Dear Earl:

Thanks for your letter telling of The Field Teams recommendation of the exploration contract, on subject property, contingent upon my submission of an acceptable guarantee in lieu of the Landlord's Subordianation Agreement. You say that the application went forward, on the 21st to the Executive Officer, Field Team, Region 11, to be forwarded after his signature, to the Washington, D. C. office of DMEA.

As you know I did submit (attached to the MF-103) a guarantee, in lieu of the Subordimatien Agreement of the Landlord, which is not obtainable. I realize that this guarantee that I submitted would probably not measure up completely to the governments's requirements, but it seemed like the only one I could submit. I imagine the main obstacle was the fact that I could only guarantee for the period of my lease, which in effect (with the option to renew) is for only five years, whereas the government requires a ten-year guarantee.

I am willing to do anything that is reasonable. Could you, therefore, tell me exactly the form of guarantee that would be required from me, that would be acceptable? If there has been a precedent, could you send me a typewritten form of the type that has been accepted from the lessee, when he can not get one from the landlord. Would appreciate any help you may extend.

Yours very truly,

I. G. Irving.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George C. Selfridge DATE: December 20, 1951

FROM : Max D. Crittenden, Jr.

SUBJECT: DMA 2177 Manganese, Garibaldi mine, Butte district, Montana.

The applicant proposes to spend a total of $22,000 in exploration of the Garibaldi mine, in the Butte district, Montana. This applicant also has an interest in the Norwich mine, but the two have no close relationship.

The Garibaldi property is in the western part of the Butte district just west of the Minnie Jane mine, and a mile or more south of the Norwich. The underground workings are entirely caved, hence all that can be observed now is a series of pits aligned along the vein. The principal workings are on an east-striking vein reported to be 4 to 5 feet wide. The applicant reports, but does not show on a map, 10 samples of which four are said to average 16.8 percent Mn, and three are said to average 11.4 percent Mn. The remaining three are not reported, and presumably were still lower in grade. These assays serve to demonstrate the existence of manganese in the Garibaldi mine, and there is every reason to believe that the oxides are derived from rhodochrosite. However, the size and grade of the orebodies to be expected are conjectural. Some inference may be drawn from the relationship between oxides and the underlying carbonate ores in the Tzarena mine, where oxide ore developed above the 100 level averaged 15 to 18% Mn. On the deeper levels the average grade of the carbonate ore was only 11 to 12% Mn.

This suggests that the grade of carbonate ore in the deeper parts of the vein may not be as high in grade as the oxides exposed at the surface. Nevertheless, the chances for development of minable ore are believed to be good enough to warrant the expenditure of the amount involved, possibly in two stages, so that work can be stopped if the grade of ore encountered in the shaft is hopelessly low.

The area is complicated geologically, and the results of diamond drilling may prove difficult to interpret. Under these circumstances, the method proposed is regarded as the most satisfactory means of exploring the deposit.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 20 1951

Max D. Crittenden Jr.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. Division St.
Spokane 2, Wash.
December 18, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 16 1952
Reviewed by
DMEA OPERATING COMMITTEE
(date)

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: H. T. Reno, Mining Engineer, U. S. Bureau of Mines

Subject: Garibaldi Mine, Silver Bow County, Montana
Docket DMA 2177
Commodity: Manganese

RECOMMENDATIONS

It is recommended that the DMEA enter into an exploration contract with Irving G. Irving in the amount of $23,665. He is prepared to furnish one-fourth of this amount. This recommendation does not include approval of applicant's Guarantee in lieu of Landlord's Subordination Agreement. As the property was examined during a heavy snowstorm the applicant's geologic mapping is used in this report with only the rough check possible at that time.

APPLICANT

The applicant is Irving G. Irving, lessee of the property.

LOCATION AND ACCESSIBILITY OF DEPOSIT

The deposit is on the Garibaldi patented lode claim No. 1888 in sec. 15, T. 3 N., R. 8 W., Butte mining district, Silver Bow County, Mont. The applicant proposes to build a bulldozer access road from the mine 2,000 feet south to connect with State Highway 10S, two miles west of Butte.

OWNERSHIP

The Garibaldi claim is owned by the following: Anaconda Copper Mining Co., a Montana corporation, one-fourth interest; George D. Curtis, Butte, Mont., one-fourth interest; Arthur and Alice Hirbour, Montreal, Canada, one-sixth interest; Paul and Stella Lerigne, Nice, A.M., France, one-sixth interest; and Mrs. Louise Langlois, Montreal, Canada, one-sixth interest. The applicant may be able to obtain subordination agreements from three-fourths of the owners but certainly will not be able to get one from the Anaconda Copper Co.

HISTORY

The history and production of the Butte mining district is well known. A 600-foot shaft was sunk and silver mined on the Garibaldi claim 35 to 40 years ago, but there has been no recent activity on the claim. The productive workings of the Minnie Jane mine, which produced 54,000 tons of rhodochrosite manganese ore during World War II, are 500 feet east of the east line of the Garibaldi claim. However, the vein which the applicant proposes to explore is not an extension of either the Minnie Jane nor the first Garibaldi vein. The applicant leased the Garibaldi on October 1, 1951, and has done no work on the property.

DESCRIPTION OF PROPOSAL

The applicant proposes to sink an inclined shaft 110 feet in the larger of two veins (vein "C") outcropping on the east part of the claim and then drift 75 feet each way in the vein at this depth. The attached sketch shows the proposed workings and the relative position of the geologic structures.

TECHNICAL FEASIBILITY

Geologic Setting

The property is in the peripheral zone of the Butte mining district, characterized by the presence of manganese minerals in the veins. The country rock is granitic rock of the Boulder batholith which has been cut by a number of major faults, many of which are mineralized. In the immediate vicinity of the vein to be explored are two structures, the Minnie Jane vein to the east and vein "A" (see applicant's map) to the north, that have produced manganese ore.

Vein "C", which the applicant wishes to explore, strikes N. 80° W. and dips 45° S. and can be traced for about 220 feet. It lies in a fault block bounded on the west by the hanging wall side of the Whiskey Gulch fault and to the east by the footwall side of the same fault. Vein "C" cannot be correlated with any of the major structures outside the fault block.

The structure of the area (see applicant's map) is such that this segment of vein "C" cannot be expected to continue much more than 250 feet down the dip from the proposed shaft location, and the maximum strike length cannot be much more than 380 feet.

The outcrop of vein "C", which averages 5 feet in width, is composed mainly of quartz and manganese oxides. No samples were taken. By visual inspection, the assays on the applicant's map are believed to be of the correct order of magnitude; they also checked closely with assay data on an Anaconda Copper Co. map in the applicant's possession.

Vein "B", which outcrops about 50 feet north of vein "C", averages 3 feet in width and strikes N. 80° W. and dips 25° - 30° S. It will intersect vein "C" about 70 feet down the dip of vein "C".

It is expected that manganese oxides will be present down to between 40 and 60 feet from the surface and that rhodochrosite will be the important manganese mineral below that depth. This expectation is based on experience in the adjacent Minnie Jane vein.

Mining Method

As adjacent properties are mined by square set stoping there is no reason to believe that ore can be mined on this property by a cheaper method. The cost of mining is estimated at $11 a ton.

Milling Method and Marketing Facilities

The ore will be sold to the Government purchasing depot in Butte. It is estimated that the ore can be trucked from the mine to the depot for $1 a ton.

Rate of Production

The applicant expects to produce 50 tons of ore per day.

Time Schedule to Attain Objective

The applicant intends to start work within thirty days after the contract is signed and to complete the project within seven months thereafter. Mining will begin immediately if ore is discovered.

EQUIPMENT AND FACILITIES

The applicant proposes to buy $4,110 worth of new and used equipment and to rent used equipment for $270 per month. In addition to the above, the following equipment will be required:

To be purchased	Estimated cost
1 skip (used)	$200
250 lin. ft. vent tube	150
120 lin. ft. 3-in. pipe (used)	60
100 lin. ft. pump cable (used)	75
Total	$485
To be rented	
1 blower	$ 10/mo.

LABOR SUPPLY

There is a shortage of labor at the Anaconda mines in Butte, but independent operators have no trouble getting men from among those who will not work in the Anaconda mines or those who Anaconda will not hire. The union base labor scale in the Butte mines is $12.31 a day, but independent operators pay $15 a day for good men. All mines are working six days a week.

POWER

Power can be purchased from the Montana Light and Power Co. which serves the district. They have lines to the Orphan Girl mine approximately 3,500 feet from the proposed Garibaldi shaft, and they estimate that a line can be built to the shaft for $1,800. The power company will not pay the cost of the line but usually purchases such lines from the customer by discounting the monthly power bill 20 percent until the line is paid for.

ADEQUACY OF FUNDS

Estimated cost of the project is as follows:

2,000 lin. ft. of access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on the 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

It is believed that the above cost of $23,665 is adequate to complete the proposed exploration project. The applicant has agreed to the revision of his estimate.

COMPETENCE OF APPLICANT

The applicant, a graduate mining engineer, has had 7-1/2 years experience as a geologist with the Anaconda Copper Mining Co. and approximately 12 years experience as a consulting geologist, mining engineer, and small mine operator. He is primarily a promoter but is considered entirely competent to carry out the proposed exploration project.

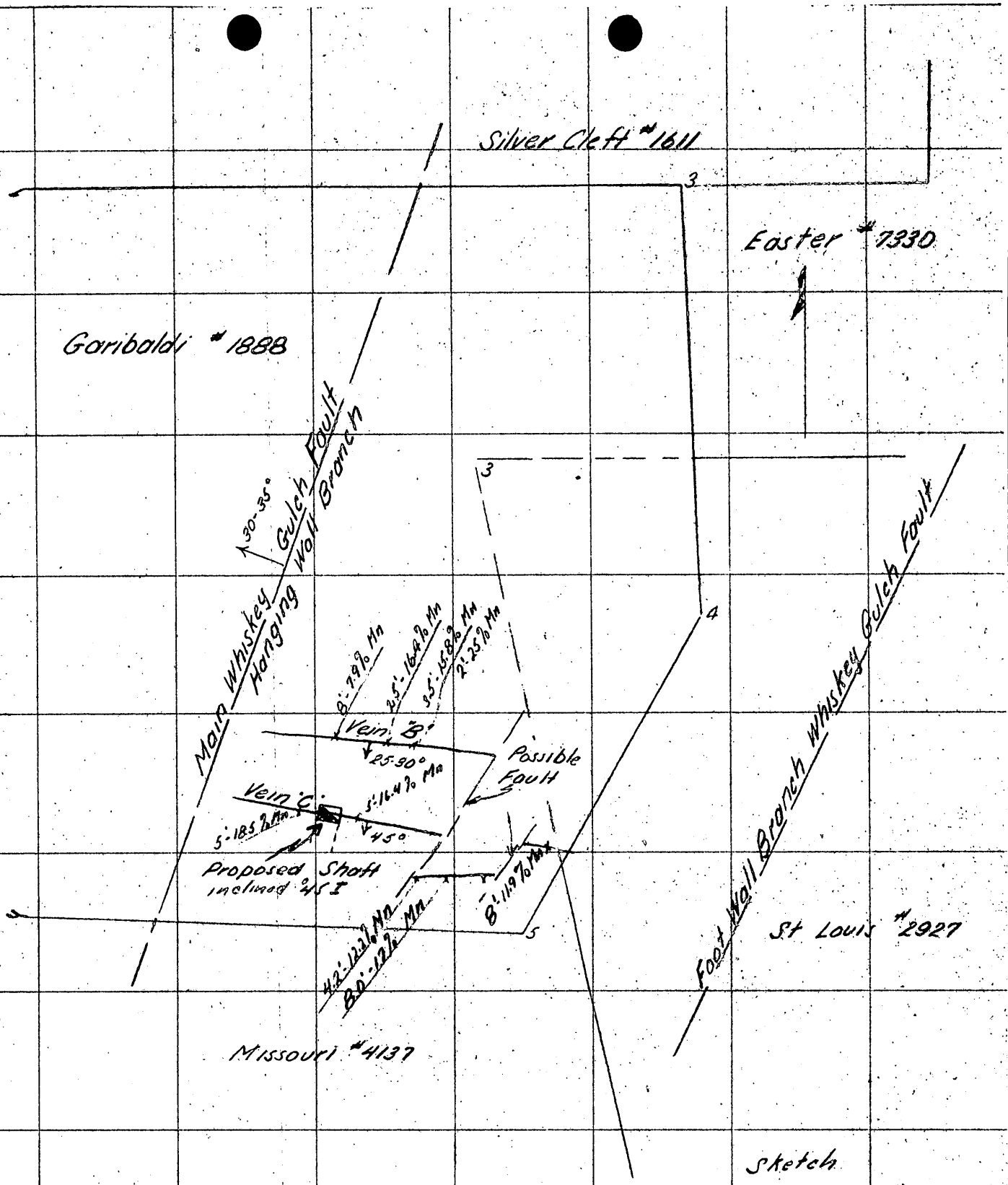
DISCUSSION OF PROPOSAL

The surface exposure, the close proximity of manganese-producing mines, and the fact that easterly-striking veins in the district usually provide a good environment for metallization make it seem likely that manganese ore is present.

The inclined shaft and the short drifts from the bottom of the shaft will determine whether a sufficient grade of rhodochrosite ore is present in the vein below the oxide capping and whether the width of the vein at depth is suitable for mining. In addition, it is possible that about 4,000 tons of carbonate ore, above the drift level, will be partially blocked out by this work.

The total tonnage believed to be in veins "B" and "C", down to the intersection of vein "C" with the footwall of the Whiskey Gulch fault, is about 95,700 tons, assuming 5 feet of width, of which only a part is expected to be ore.

Exploration by underground openings is preferred because diamond drilling was found by the Bureau of Mines to be unsatisfactory in similar ground during the course of the investigation of the adjoining Minnie Jane deposit.



Sketch
Garibaldi Mine
Silverbow County, Mont.

From - Irving B Irving
DMEA Loan
Application

Scale approx 1" = 100

E-1710

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 18 1951

IRVING G. IRVING
MINING GEOLOGIST
84 HIBBOUR BLDG.
BUTTE, MONTANA

RECEIVED
DEC 19 1951
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

December 15, 1951

Mr. C. O. Mittendorf,
Acting Director,
Defense Minerals Exploration Administration,
New Interior Building,
Washington, D. C..

Dear Mitt:

Re: Garibaldi Mine
DMA-2177

I believe the above application is in your shop now, as it was sent to you from Spokane, with contract ten or twelve days ago.. Would like to ask a question about it..

You might remember that I discussed with you the difficulty of getting a subordination agreement on this case from the owners, and you pointed out that a new form was coming and that you would send me some. However, I dont think that is going to solve the problem either, as the Anaconda Copper Mining Company has absolutely refused to sign the old one, and I am quite certain that their legal department is not going to change attitude on the new form. The ACM Co owns a quarter interest in the property that I lease and I have a lease for only five years.. The other owners told me yesterday that since the ACM Co. will not sign they saw no reason why they should either and I really have a problem.. Now here is what I want to ask you..

I am perfectly willing to sign myself, in lieu of the owners, if I can do so without serious risk to myself or my family, in incurring an obligation that I may not be able to handle within the ten-year period. While I have the lease, ofcourse I am in control and will see to it that the government is repaid according to schedule. But I only have a five year lease, and it is, ofcourse, conceivable that the lease might not be renewed. For that reason, I made up a special subordination agreement, which accompanys my application and which takes care of this situation. Please read this and give me some advice. If my special subordination agreement will not pass your legal department, can you get your lawyers to suggest something else that I might sign, in lieu of the owners, that will. Let me know just what I can sign, as lessee (with only a five year lease) that will be acceptable.

Would greatly appreciate your attention to this difficult problem, in my case, and hope that something may be worked out.

Sincerely yours,
Joe —
I. G. Irving.

IRVING G. IRVING
MINING GEOLOGIST
84 Hibbour Bldg.
Butte, Montana

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 1 8 1951
Defense Minerals Administration,
Production Expansion Division.

December 14, 1951

Mr. C. O. Mittendorf,
Acting Director,
Defense Minerals Exploration Administration,
New Interior Building,
Washington, D. C.

Dear Mitt:

Trust that your trip back was comfortable and without too much delay. I also hope that you enjoyed your first visit to Butte. We enjoyed you too, and hope to see you out here again, and more often.

You mentioned the new and more simple subordination form for landlords in connection with exploration loans and contracts. Could I have some. I feel that I am going to have an awful time getting anyone to sign anything in connection with my Garibaldi application (DMA # 2177) which should be in your shop now. However, I did get up something which my attorney tells me was alright for me to sign. See if it will pass.

Sincerely yours,

Joe

I. G. Irving

P.S. Any word on the Norwich Mine production loan application DMA # ~~1799~~ 1790 will be appreicated also. Thanks.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 18 1951

Geo:
Can't make this out.
Did he submit a draft?
Com

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1951

December 13, 1951

MEMORANDUM

To: Chairman, Operating Committee, DMEA

From: A.E. Weissenborn, Exec. Officer, DMEA, Field Team, Region II

Subject: Application for exploration assistance

Reference is made to an application for exploration assistance presented by I. G. Irving for the Garibaldi mine, Silver Bow County, Montana. The original application consisted of Form MF-103 only. Mr. Irving has since supplied Form MF-100 at our request. Three copies of this form are transmitted herewith for forwarding to Washington. The fourth copy is being retained at this office until the examination report has been completed.

A. E. Weissenborn, AC

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

[illegible] Howard Street
Spokane 4, Washington

[illegible]

MEMORANDUM

To: Chairman, Operating Committee, DMA

From: A. F. Weissenborn, Exec. Officer, DMA, Field Team, Region II

Subject: Application for exploration assistance

Reference is made to an application for exploration assistance presented by I. C. Irving for the Garibaldi mine, Silver Bow County, Montana. The original application consisted of Form MF-105 only. Mr. Irving has since supplied Form MF-100 at our request. Three copies of this form are transmitted herewith for forwarding to Washington. The fourth copy is being retained at this office until the exploration report has been completed.

A. F. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: DMA, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

[illegible]
[illegible]

[illegible]

[illegible]

To: Chairman, Operating Committee, DMA

From: A. J. Weissenborn, Exec. Officer, DMA, Field Team, Region II

Subject: Application for exploration assistance

Reference is made to an application for exploration assistance presented by I. O. Irving, for the Northwest mine, Silver Bow County, Montana. The original application consisted of Form MF-[illegible] only. Mr. Irving has since supplied Form MF-[illegible] on our request. Three copies of this former [illegible] are being forwarded to Washington. The fourth copy is being retained at this office until the examination report has been completed.

A. J. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

cc: DMA, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

2177
D.M.E.A. ~~2216~~

November 27, 1951

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 3 1951
Defense Minerals Administration,
Production Expansion Division.

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by Mr. I. G. Irving on the Garibaldi mine, Silver Bow County, Montana, DMA docket 2177.

A fourth copy of the application is being retained in this office pending an early examination.

Yours very truly,

A. E. Weissenborn KG
A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: U.S.B.M.

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.
Nov 30 2 02 PM '51

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 157 Howard Street
Spokane 4, Washington

November 27, 1951

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by Mr. I. O. Irving on the Garibaldi mine, Silver Bow County, Montana, DMA docket #177.

A fourth copy of the application is being retained in this office pending an early examination.

Yours very truly,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: U.S.B.M.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Rm. 1,7 Howard Street
Spokane 4, Washington

November 27, 1951

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by Mr. I. C. Irving on the Garibaldi mine, Silver Bow County, Montana, DMEA docket 21,7.

A fourth copy of the application is being retained in this office pending an early examination.

Yours very truly,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: U.S.B.M.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

November 27, 1951

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by Mr. I. G. Irving on the Garibaldi mine, Silver Bow County, Montana, DMA docket 2177.

A fourth copy of the application is being retained in this office pending an early examination.

Yours very truly,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: U.S.B.M.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

November 27, 1951

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by Mr. I. G. Irving on the Garibaldi mine, Silver Bow County, Montana, DMA docket 2177.

A fourth copy of the application is being retained in this office pending an early examination.

Yours very truly,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: U.S.B.M.

IRVING G. IRVING
MINING GEOLOGIST
84 Hibbour Bldg.
Butte, Montana

File

November 17, 1951

Mr. Robert E. Adams, Chief,
Reports and Records Unit,
Defense Minerals Administration,
Washington 25, D. C.

MANGANESE
Re: DMA-2177
Exploration Loan,
Garibaldi Mine

Dear Mr. Roberts:

Thank you for your letter acknowledging receipt of my application (incomplete) on the Garibaldi Mine, for a loan under the Defense Production Act of 1950.

In your letter you misspelled the name of the property. It is the Garibaldi and not the Caribaldi. I mention this now so as to avoid confusion later and trust that you will have the records corrected.

The finished application is being sent to the Spokane Office and undoubtedly copies will be forwarded your office in the near future.

Very truly yours,

I. G. Irving

I. G. Irving

Records corrected
as per —

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.
NOV 21 8 48 AM '51

Mr. Irving G. Irving
84 Hirbour Building
Butte, Montana

Subject: DMA-2177
Re: Exploration Loan
Caribaldi Mine

My dear Mr. Irving:

This will acknowledge receipt of your application dated October 16, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2177 and referred to the Ferro-Alloys Branch.

Kindly refer to DMA- 2177in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

Please Note:

One copy of MF-103 was received in this office. When the completed Forms MF-103 and technical data are furnished this office, this application will be considered.

2463

IRVING G. IRVING
MINING GEOLOGIST
84 HIRSOUR BLDG.
BUTTE, MONTANA

October 17, 1951

Mr. Landon Strobel, Exec. Sec.
Defense Minerals Administration,
New Interior Building,
Washington 25, D. C.

Re: Garibaldi Mine
Butte, Montana
(Manganese)

Dear Landon:

I hear rumors of a deadline in connection with the dates of applications for a exploration, or production loan.

We have been working furiously to get all the data and fill out the proper forms on the Garibaldi Manganese Mine, situated in Butte, Montana. But I am being called away on a mine examination trip and I wont be able to submit it in a completed form for about another week or two.

I am working with the field team of Region 11, and when complete will submit the Form MF-103, complete (four copies) and bolstered up with all the technical data required.

In the meantime, however, I am submitting the enclosed form (one copy only and incomplete) for the purpose of getting it in in case there is a deadline on the date received of the application, and to get a docket number.

Trusting that this is in order and that I will receive a docket number, pending the arrival of the complete information, I remain,

Sincerely yours,

Joe

I. G. Irving

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
OCT 19 9 15 AM '51

MF-590
(June 1951)

Docket No. DMA 2177
Commodity manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2]

Irving G. Irving, 84 Hirbour Bldg., Butte, Mont.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Silver Bow described as follows: [3]

Garibaldi patented lode claim No. 1888 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] manganese; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] seven months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of prope* All facilities, buildings, fixtures, equipmen other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $17,748.75, which is 75 percent of the agreed estimated total cost of this project, $23,665.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-foot inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

Estimated cost of project

The estimated cost of the project is as follows:

2,000 lin. ft. access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

Fixtures and Improvements

	Estimated cost
Headframe	$ 1,100.
Storage bin	450.
Dry house	350.
Engine room	400.
Total	$ 2,300.

Operating equipment

To be purchased

Power line (complete)	$ 1,800.
Air receiver	50.
Two jackhammers and accessories	1,050.
Stoper	550.
2 mine cars @ $50/ea.	100.
Skip	200.
250 lin. ft. vent tube	150.
100 lin. ft. pump cable	75.
Rail, pipe, and steel	460.
Total	$ 4,435.

Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
Panel box and transformers	$ 50.
Compressor and fittings	150.
Hoist and controls	50.
Pump	25.
Blower	10.
Total	$285.

Labor and supervision

Shaft labor contract at $15/lin. ft.
Hoist man $15/day
2 miners in drift $15/day/ea.
Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

MF-200
(June 1951)

Docket No. DMA 2177
Commodity manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____

Irving G. Irving, 84 Hirbour Bldg., Butte, Mont.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Silver Bow described as follows: [3]

Garibaldi patented lode claim No. 1888 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] manganese; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] seven months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $17,748.75, which is 75 percent of the agreed estimated total cost of this project, $23,665.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-foot inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

Estimated cost of project

The estimated cost of the project is as follows:

2,000 lin. ft. access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

Fixtures and Improvements

	Estimated cost
Headframe	$ 1,100.
Storage bin	450.
Dry house	350.
Engine room	400.
Total	$ 2,300.

Operating equipment

To be purchased

Power line (complete)	$ 1,800.
Air receiver	50.
Two jackhammers and accessories	1,050.
Stoper	550.
2 mine cars @ $50/ea.	100.
Skip	800.
250 lin. ft. vent tube	150.
100 lin. ft. pump cable	75.
Rail, pipe, and steel	460.
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Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
Panel box and transformers	$ 50.
Compressor and fittings	150.
Hoist and controls	50.
Pump	25.
Blower	10.
Total	$285.

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Shaft labor contract at $15/lin. ft.
Hoist man $15/day
2 miners in drift $15/day/ea.
Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

MF-260
(June 1951)

Docket No. DMA 2177
Commodity manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2]

Irving G. Irving, 84 Hirbour Bldg., Butte, Mont.

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2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Silver Bow described as follows: [3]

Garibaldi patented lode claim No. 1883 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] manganese; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] seven months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

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[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment and other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-foot inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

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To be purchased

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Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
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Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

F-[illegible]
(June 1951)

Docket No. DMA 2177
Commodity Manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____

Irving C. Irving, 64 Hirbour Bldg., Butte, Mont.

hereinafter called the "Operator," as follows:

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Garibaldi patented lode claim No. 1888 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

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4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment and other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $17,748.75, which is 75 percent of the agreed estimated total cost of this project, $23,665.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-foot inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

Estimated cost of project

The estimated cost of the project is as follows:

2,000 lin. ft. access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

Fixtures and Improvements

	Estimated cost
Headframe	$ 1,100.
Storage bin	450.
Dry house	350.
Engine room	400.
Total	$ 2,300.

Operating equipment

To be purchased

Power line (complete)	$ 1,800.
Air receiver	90.
Two jackhammers and accessories	1,050.
Steper	550.
2 mine cars @ $50/ea.	100.
Skip	200.
250 lin. ft. vent tube	150.
100 lin. ft. pump cable	75.
Rail, pipe, and steel	460.
Total	$ 4,435.

Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
Panel box and transformers	$ 50.
Compressor and fittings	150.
Hoist and controls	50.
Pump	25.
Blower	10.
Total	$285.

Labor and supervision

Shaft labor contract at $15/lin. ft.
Hoist man $15/day
2 miners in drift $15/day/ea.
Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

F-205
(June 1951)

Docket No. DMA 2177
Commodity [illegible]

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] _____

Irving C. Irving, 24 Harbour Bldg., Butte, Mont.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Silver Bow described as follows: [3]

Cardinal patented lode claim No. 1823 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: _____

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 1,095 (90) days from the date of this contract shall commence work on a project of exploration for [5] Manganese; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] seven months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of propert*[illegible] All facilities, buildings, fixtures, equipment[illegible] other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $17,[illegible].75, which is 75 percent of the agreed estimated total cost of this project, $23,665.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-foot inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

Estimated cost of project

The estimated cost of the project is as follows:

2,000 lin. ft. access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

Fixtures and Improvements

	Estimated cost
Headframe	$ 1,100.
Storage bin	450.
Dry house	350.
Engine room	400.
Total	$ 2,300.

Operating equipment

To be purchased

Power line (complete)	$ 1,800.
Air receiver	50.
Two jackhammers and accessories	1,050.
Stoper	550.
2 mine cars @ $50/ea.	100.
Skip	200.
250 lin. ft. vent tube	150.
100 lin. ft. pump cable	75.
Rail, pipe, and steel	460.
Total	$ 4,435.

Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
Panel box and transformers	$ 50.
Compressor and fittings	150.
Hoist and controls	50.
Pump	25.
Blower	10.
Total	$285.

Labor and supervision

Shaft labor contract at $15/lin. ft.
Hoist man $15/day
2 miners in drift $15/day/ea.
Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

MF-210
(June 1951)

Docket No. DMA 2177
Commodity Manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1952

EXPLORATION PROJECT CONTRACT [1]

It is agreed this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] .....

Irving G. Irving, 84 Hirbour Bldg., Butte, Mont.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Silver Bow described as follows: [3] .....

Garibaldi patented lode claim No. 1688 in sec. 15, T. 3 N., R. 8 W.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] Manganese; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] seven months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment and other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $17,748.75, which is 75 percent of the agreed estimated total cost of this project, $23,665.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Irving G. Irving
Exploration Project Contract
Docket 2177

EXHIBIT "A"

Exploration project

The work shall consist of driving a 110-feet inclined shaft, cutting a station at the 100 level, and drifting 150 feet on the vein.

Estimated cost of project

The estimated cost of the project is as follows:

2,000 lin. ft. access road	$ 200.
110 lin. ft. of shaft @ $75/ft.	8,250.
150 lin. ft. of drift @ $45/ft.	6,750.
Station on 100 level	1,000.
Headframe, dry house, engine room, and ore bin	2,300.
Equipment purchase	4,435.
Freight and installation of equipment	730.
Total	$23,665.

Fixtures and Improvements

	Estimated cost
Headframe	$ 1,100.
Storage bin	450.
Dry house	350.
Engine room	400.
Total	$ 2,300.

Operating equipment

To be purchased

Power line (complete)	$ 1,800.
Air receiver	50.
Two jackhammers and accessories	1,050.
Steper	550.
2 mine cars @ $50/ea.	100.
Skip	200.
250 lin. ft. vent tube	150.
100 lin. ft. pump cable	75.
Rail, pipe, and steel	460.
Total	$ 4,435.

Irving G. Irving
Docket 2177

EXHIBIT "A" cont.

Operating equipment

To be rented

	Cost per month
Panel box and transformers	$ 50.
Compressor and fittings	150.
Hoist and controls	50.
Pump	25.
Blower	10.
Total	$285.

Labor and supervision

Shaft labor contract at $15/lin. ft.
Hoist man $15/day
2 miners in drift $15/day/ea.
Supervision, engineering, mapping, bookkeeping, and sampling - $325/mo.

Note: Labor rates are for 8 hrs. per day, 5 days per week. The work week may be 6 days with pay in excess of 40 hours at the legal rate.

Rehabilitation and repairs

None

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA ~~[illegible]~~ 2177
Metal or Mineral
Date Received 11-30-51
Amount $
Participation (Government %)

Garibaldi Mine

Name and address of applicant

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.,
Butte, Montana.

Date October 16, 1951

If you have already filed MF-100, give date filed Not operating none filed, type of assistance requested Exploration loan,

DMA Docket Number (if available) DMA-2177

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C. NOV 30 2 03 PM '51

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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. Property is Garibaldi Lode Claim. See copy of lease attached for legal description. (Pages 5-12 of supplement)

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. See copy of lease attached

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Garibaldi Claim. See copy of lease attached

   NOTE: (1) 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 (*c*) 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. Areas both same

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. No liens known of. Owners will not sign subordination agreement. See statement of lessee attached.

2. (*a*) What metals or minerals do you expect to find? Manganese Pg. 13-supplement

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

16—64067-2

See supplement attached.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project. See supplement attached

   (*b*) State the time required to start the project and to complete it. Approximately 6¼ months

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.
   See maps attached.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. No existing facilities

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. See supplement attached and lists contained in answers to Question # 7.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased — See supplement attached

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each. See supplement attached

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. All items of cost considered are contained in cost analysis set forth in Question # 7.

10. (*a*) How much are you prepared to invest in the proposed project? $5,500.00

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)? Yes

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

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.

Garibaldi Mine
(Name of company)
~~XXXXXXXXX~~
Not a company;
an individual

By Irving G. Irving
(Signature of authorized official)
~~XXXXXXXXXXXXXXX~~
an individual

October 1951
(Date)

Lessee
(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—64067-2

SUPPLEMENT TO MF-103

Irving G. Irving
84 Hirbour B'ldg.
Butte, Montana

Material requested in Question
2 b, page 1, form MF-103

Geologic Features of Property

The Garibaldi Claim is located in the western part of the Butte District, at Butte, Montana. Geologically, it falls into the peripheral zone, as classified by Reno H. Sales, in "Ore Deposits at Butte, Montana". Butte has a total production of over three billion dollars, in copper, zinc, lead, manganese, silver gold and other metals, and this has come from a complex vein system, but the bulk of it has been mined on the great and persistent east-west veins that go to depth in strength and productivity. The Garibaldi is on one of Butte Major east-west veins.

The peripheral zone, at Butte, borders on the intermediate zone (which is characterized by a predominatly copper mineralization) and displays a vein filling that is mesothermal in type and consists of quartz, rhodochrosite, sphalerite and pyrite. Some lead occurs in shoots that have been important.

The Garibaldi claim lies about 250' west of the Minnie Jane claim which produced over fifty thousand tons of pink, rhodochrosite ore during World War II and has unmined reserves. The Minnie Jane Mine lies less than 200' west of the Anaconda's famous Orphan Girl Mine, which has been developed to depths of 3000' or more. A study of the surface indicates that the Minnie Jane vein is the westerly extension of one of the major veins in the Orphan Girl Mine. The Minnie Jane vein runs into the Garibaldi claim.

On the Garibaldi Claim itself, two veins are exposed on the surface. Two other veins, including the main Minnie Jane vein project into the claim and are undoubtedly present in a sub-apex relationship, underneath the Whiskey Gulch Fault. (See map attached)

On the surface, the two manganese veins exposed show manganese ore in oxide form. Rhodochrosite is expected--based on the history of this part of the camp--at somewhere between fifty and sixty feet in depth. Good manganese ore is also a reasonable expectation on the two veins that project into the property.

Ten samples were taken by the applicant on the manganese veins outcropping. Four of these showed ore, in oxide form, and averaged 16.8% Mn, over good mining widths. Three others averaged 11.4%Mn. Two samples previously taken by others showed material that assayed from 17.0% Mn to 25.0% Mn. Since manganese is soluble, it is expected that the rhodochrosite ore directly below the samples taken, should average higher.

It is obvious that the property harbors manganese ore in commercial quantities and has the potentialities of a property of importance. See sample locations on the attached map.

I. G. Irving

Irving G. Irving
Garibaldi Mine
84 Hirbour Bldg.
Butte, Montana
DMA-2177

Supplement to Form MF-103

Material requested in answering Questio 3, a& b.

a.
The work proposed involves a program consisting of acquiring, erecting and placing into position all construction to commence, and thereafter, to sink an inclined shaft 110 feet from the surface, cutting a station and then drifting 150 feet on the vein indicated on the surface. The total cost of this work is estimated to be $22,000.00.

b.
The time required to complete this work, working one shift, is estimate d to be six and one-quarter months.

Material requestedin answering Question # 6.

The additional facilities, building and fixtures and installations to be purchased, installed or erected by applicant and the estimated cost or rental thereof are set forth in detail in the supplement that purports to answer Question # 7. Please refer to this.

Material requested in answering Question # 7.

a. Additional buildings, equipment andfacilities to be installed and estimated cost thereof:

Construction to be done:

Headframe complete, supplies and timber--	$750.00
One storage bin	250.00
Dry house	250.00
Engine room	300.00
	$1550.00
Constructin g headframe and collar set	750.00
Total construction	$2,300.00

b. Equipment to be rented:

Panel box and transformers (rental per month)	$50.00
Compressor and receiver fittings	150.00
Hoist and controls	50.00
Pump	25.00
Total monthly cost of equipment rented	$270.00
Hauling & installation of above	730.00

Irving G. Irving
Garibaldi Mine
84 Hirbour BLDG.
Butte, Montana

Question # 7 (continued)

c.

Equipment to be purchased

Powerline complete	$1,500.00
Receiver	50.00
Track	260.00
Spikes	25.00
2" pipe (300' at 50¢ a foot)	150.00
1" pipe (300' at 25¢ a foot)	75.00
2 stoves	50.00
Two jackhammers and accessory fittings & hose	1,050.00
Nine pieces of steel	20.00
One stoper	550.00
Nine pieces of steel	20.00
Supply of bits	50.00
Two mine cars	100.00
Miscellaneous tools	$ 200.00
	$4110.00

d. Shaft sinking cost analysis

To sink shaft average of 2' a day:	Per Day	Per Foot
Labor (miners)	$30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
Total	$60.00	$30.00
Power ($300.00 per month)	15.00	
(plus extras etc)		7.50
Timber framed		6.00
Powder, track, spikes and pipe placed		10.00
		$53.50
Plus 15% for contingencies		6.75
SHAFT SINKING PER FOOT		61.65
Rental cost, based on 40' per month allowing for delays and usual trouble		6.75
DIRECT SHAFT SINKING COST PER foot		$68.40

e. Drifting cost analysis

To plan to pull 3½' per day		
Labor (miners)	30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
	$60.00	$17.15
Powder @ $300.00)	15.00	4.25
Timber, powder, tools etc placed		16.00
Drifting		$37.40
Based on 70'/mo; drifting rental cost		3.90
DIRECT DRIFTING COST/Ft.		$41.30

Irving G. Irving
Garibaldi Mine
84 Hirbour Bldg.
Butte, Montana

SUPPLEMENT TO MF-103

Question # 7 (continued)

Recapitulation of cost of project

Equipment purchases	$4,110.00
Surface construction	2,300.00
Hauling and installation	730.00
Station cutting at 100 level	1,000.00
Shaft sinking --110' @ $68.40 per ft.	7.524.00
Drifting--150' @ $41.30 per ft.	6,195.00
Abaondonment cost	1,200.00
Total cost of project	$23,059.00
Lessestimated salvage	1,059.00
TOTAL LOAN Including applicant's contribution	22,000.00
Loan requested	16,500.00
Applicant's contribution	5,500.00
	$22,000.00

Answers to Question # 8

Two shaft men taking contract at $15.00 per foot
One hoistman at $15.00 per day
One supervisor at $15.00 a day

Note: Schedules may have to be revised to meet changes in Union scale or other changes

Answers to material requested in Question # 9

Applicant thinks that all items of cost, except very small ones and those extimated with difficulty , are cosnsidered in cost analysis set forth in answer to Question # 7.

Question # 10

Applicant isprepared to furnish (in the form of cash) $5,500.00

Note 1 copy retained by Spokane
Office pending orders for Dill
Exam - Bulletin herewith

QUARTZ MINING LEASE

THIS AGREEMENT, Made and entered into this 1st day of October, 1951, by and between ANACONDA COPPER MINING COMPANY, a Montana corporation, owning a one-quarter interest; GEORGE D. CURTIS, residing at 35 West Granite Street, Butte, Montana, owning a one-quarter interest; ARTHUR HIRBOUR and ALICE HIRBOUR, his wife, residing at 806 Cherrier Street, Montreal, Canada, owning a one-sixth interest; PAUL LEVIGNE and STELLA LEVIGNE, his wife, residing at No. 7 Avenue des Fleurs, Nice A.M. France, owning a one-sixth interest; and MRS. LOUISE LANGLOIS, residing at 406 Pine Avenue West, Montreal, Canada, owning a one-sixth interest (hereinafter called "Lessors"), parties of the first part, and IRVING G. IRVING, whose office address is 84 Hirbour Building, Butte, Silver Bow County, Montana (hereinafter called "Lessee"), party of the second part, WITNESSETH:

It is mutually agreed by and between the parties hereto as follows:

1. RIGHTS GRANTED TO LESSEE: The Lessors, for and in consideration of the rent and royalty to be paid, and the covenants and agreements to be observed, kept and performed by the Lessee for the term hereinafter stated, and upon the terms and conditions hereinafter set forth, do hereby lease, demise, and let unto the Lessee the following described property situated in the County of Silver Bow, State of Montana, to wit:

The Garibaldi Quartz Lode Claim, Survey No. 1888.

2. EFFECTIVE DATE - TERM: This agreement shall take effect on the day and year first above written and shall continue in full force and effect for a period of three (3) years immediately following said date, unless sooner terminated as hereinafter provided; provided, however, that the Lessee shall have the right, if not in default hereunder, to renew this agreement for an additional period of two (2) years by giving written notice of the exercise of such

right to the Lessors at least sixty (60) days before the expiration of the original term hereof.

3. ROYALTY: For ores of copper, zinc, lead, silver, gold or other metals which are shipped from the demised premises to a custom mill or smelter, the Lessee shall pay to the Lessors a royalty based upon the net mill or smelter returns of the ores mined he reunder according to the following schedule;

On ores having a value of $15.00 or less per ton, 10% royalty.

On ores having a value of over $15.00 and not more than $24.99 per ton, 15% royalty.

On ores having a value of $25.00 and not more than $34.99 per ton, 20% royalty.

On ores having a value of $35.00 and not more than $49.99 per ton, 25% royalty.

On ores having a value of $50.00 or over per ton, 30% royalty.

By "net mill or smelter returns" is meant the amount received for such ores after deducting therefrom the cost of milling, smelting and freight or haulage charges from the mine to the mill or smelter .

In case the Lessee shall receive any other amounts from the sale of such ores over and above the settlement made by the mill or smelter, the Lessee shall pay to the Lessors the same percentage of such additional receipts as specified in the above scale of royalties for the lots for which settlement is made. With the payment of such additional royalty the Lessee shall submit to the Lessors a statement showing the lot for which the additional payment was received, together with proof of the amount of such additional payment.

For ores of manganese which are sold as such to any agent, the royalty to be paid to the Lessors under this Lease shall be 10% of the amount received by the Lessee, delivered at the stockpile or plant of such agent, or delivered f.o.b. railroad cars at the most convenient loading place, after deducting therefrom the cost

of freight or haulage from the mine to said stockpile, plant or loading place.

With the payment of said royalty, the Lessee shall submit to the Lessors a copy of his settlement sheet showing the number of wet tons sold, the moisture content and the percent of manganese in each lot for which settlement is made.

The payment of all royalties under this lease shall be made directly to the Anaconda Copper Mining Company as trustee for the Lessors at its General Office, 304 North Main Street, Butte, Montana, and said Anaconda Copper Mining Company agrees to distribute said royalty quarterly to the other Lessors in proportion to their interests.

4. LESSEE TO PAY TAXES AND ASSESSMENTS: The Lessee, in addition to paying the royalty herein stipulated, shall pay before the same become delinquent all taxes and all assessments which during the term hereof may be lawfully levied or assessed upon all structures and improvements, equipment and other property erected, constructed, installed and/or used by the Lessee in connection with the exercise of the rights herein granted, and shall also pay when due all net proceeds, occupation, license and output taxes lawfully levied upon all ores or minerals extracted from said premises hereunder. The Lessee, upon the payment of such taxes and assessments shall promptly furnish the Lessors with satisfactory evidence of such payment.

5. DEMISED PREMISES TO BE WORKED SEPARATELY: The demised premises shall be worked separately from all other lands, and all ore mined and removed therefrom shall be kept segregated from all other ore mined by the Lessee until the weight and value thereof shall be fully determined.

6. INSPECTION OF MINE: The Lessors, through their authorized representatives, shall at all times during the term of this Lease have the right to enter upon and inspect the mine or mines and

all the workings thereof on the demised premises and to make any survey that they may deem necessary, either for the purpose of checking the amount of ores mined or for an examination of the physical condition of the property and workings.

7. CONDUCT OF MINING OPERATIONS: The Lessee shall enter upon said mine or premises within ninety (90) days from the day and year first above written and shall work the same in a manner necessary to development and to good and economical mining so as to take out the greatest possible amount of commercial ore free from waste, having due regard to the safety, development and preservation of said premises as a workable mine, and shall thereafter during the period of this lease work said mine and premises as aforesaid continuously and steadily, and in the prosecution of said work shall keep at least two (2) persons employed in the above described type of work for a space of twenty-two (22) days in each thirty (30) day period, except during such times as said Lessee may be actually prevented from prosecuting said work by any cause or causes beyond his control.

In consideration of said Lease the Lessee does hereby covenant and agree with the Lessors that he will well and sufficiently timber said mine at all points where proper and repair all old timbering whenever it may become necessary in order to preserve the mine in a workable condition.

That he will occupy and hold all cross and parallel veins, leads, dips, spurs, feeders, crevices or mineral deposits of any kind which may be discovered in working under this Lease, or in any development work connected with the working of said Lease by said Lessee, or by any person or persons under him, in any manner and will not dueing the term of this Lease locate or attempt to locate or record the same, or allow the same to be located or recorded except in the names of the Lessors.

That he will keep all shafts, drifts, tunnels and workings in good condition of repair, and will keep the same drained and

clear of loose rock and debris of all kinds.

That he will adequately fence, cover or otherwise protect all shafts, cuts or other surface openings made or used by him under this Lease.

8. BOOKS AND ACCOUNTS: The Lessee shall keep books and accounts showing the amount of ores extracted from said mine, the amount of ores shipped, sold or treated, and the amount of money received from said ore, or the value extracted therefrom, and the Lessors shall have free and full access to said books, accounts and records of the Lessee at all reasonable times.

9. DISPOSAL OF WASTE, REFUSE AND MINE WATER: The Lessee shall make such provision for the disposal of waste, refuse and mine water from the mine or mines on the demised premises that the same shall not be a nuisance nor injure the property of the Lessors, or of others, nor obstruct or contaminate any stream, or obstruct any right of way or other means of transportation or travel on the lands of the Lessors or others.

10. LABOR AND MATERIAL TO BE FURNISHED BY LESSEE: The Lessee shall, at his own cost and expense, furnish all labor, material and supplies necessary for the proper operation of the demised premises under this Lease.

11. LIENS: The Lessee shall, when due, fully pay for all machinery, equipment and materials joined or affixed to the premises herein described, and shall, when due, pay in full all persons who perform labor upon said premises, and shall not permit or suffer any liens of any kind or nature to be enforced against said premises for any work done or machinery, equipment or materials furnished thereon at the instance or request or on behalf of the Lessee.

12. STATE AND FEDERAL ENACTMENTS AND CITY ORDINANCES: The Lessee, in the operation and development of said premises, shall observe and comply with all applicable Federal and State laws, safety regulations and city ordinances, and shall comply with the

laws of the State of Montana in reference to Workmen's Compensation, and shall insure and keep insured during the term hereof all persons employed by Lessee under the provisions of said Workmen's Compensation Law.

13. ASSUMPTION OF RISK - INDEMNITY: (a) The Lessee assumes all risk of personal injury to the servants and employees of the Lessee and persons with whom he may be transacting business while on the demised premises, and all risk of loss or damage to buildings or contents, and also to any other property brought upon, or in proximity to, said premises by the Lessee, or by others with the knowledge or consent of the Lessee.

(b) The Lessee agrees to, and does hereby, indemnify and hold harmless the Lessors against any and all damages, liability, liens, claims, demands, costs, causes of action, suits at law or in equity in any way growing out of this agreement, or because of the operation or the carrying on of the work contemplated hereunder.

14. LESSORS TO BE GIVEN NOTICE OF LITIGATION: The Lessee shall promptly notify the Lessors in writing of the institution of any litigation involving the rights granted by this agreement, and in the event the Lessors are, in their judgment, in any way interested therein, they may, at their option, enter into the conduct and defense of such litigation to the extent they may deem advisable.

15. DEFAULT BY LESSEE: Time is of the essence of this agreement and in case the Lessee shall fail to keep and perform all, or any one of the covenants and agreements herein written and contained to be by him on his part performed in the manner, form or at the time as herein agreed, then the Lessors may, at their option, and upon thirty (30) days notice in writing to Lessee, declare this agreement terminated and at an end, and all the rights of the Lessee shall cease and be wholly terminated and at an end.

A waiver by the Lessors of a particular breach of any covenant or agreement shall not be deemed or held to be a waiver of or affect any other breach or impair its rights resulting therefrom.

16. SURRENDER OF PROPERTY: Upon the termination of this agreement for any cause, the Lessee shall immediately surrender unto the Lessors all of the premises herein demised without delay or hindrance and the Lessors shall have the right immediately upon the expiration or termination howsoever of this agreement to ente r upon the premises aforesaid and to take immediate possession thereof without declaration of forfeiture , act of re-entry or process of law.

17. REMOVAL OF EQUIPMENT: As long as the Lessee is not in default in any of the terms and conditions herein provided for to be kept and performed by the Lessee, he shall have the right to remove from the demised premises all machinery, tools and other equipment placed thereon by him within a period of sixty (60) days from the termination hereof, and unless so removed within said period the same shall immediately become the property of the Lessors, but he shall not remove or impair any supports, mine props or mine timbers which may be necessary for the protection of any openings of such mine or mines.

18. HOW NOTICES TO BE GIVEN: All notices given or required to be given under the terms of this agreement shall be in writing, sent by United States mail postage prepaid and shall be addressed as follows:

Notices to the Lessors shall be addressed to Mr. F. A. Linforth, Assistant to the Vice President, Anaconda Copper Mining Company, Hennessy Building, Butte, Montana, and notices to the Lessee shall be addressed to the Lessee at 84 Hirbour Building, Butte, Montana, provided further that in lieu of mailing, such notices may be served upon either of such parties personally.

19. SUCCESSORS AND ASSIGNS: This agreement shall be binding

upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, provided, however , that the Lessee shall not transfer or assign this agreement or any interest therein or any right granted hereunder without the written consent of the Lessors.

IN WITNESS WHEREOF, the corporate Lessor has caused these presents to be executed by its officers thereunto duly authorized, and its corporate seal to be hereunto affixed, and the individual Lessors and the Lessee have hereunto set their hands, the day and year in this instrument first above written.

ANACONDA COPPER MINING COMPANY,

By_____
As its Vice President.

ATTEST:

J. D. MURPHY
As its Assistant Secretary.

_____
George D. Curtis

_____
Arthur Hirbour

_____
Alice Hirbour

_____
Paul Levigne

_____
Stella Levigne

_____
Mrs. Louise Langlois

LESSORS.

_____
Irving G. Irving

LESSEE.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %) .....

Name and address of applicant

GARIBALDI MINE
Irving G. Irving
(The Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana.

Date October 16, 1951

If you have already filed MF-100, give date filed not operating not filed, type of assistance requested Exploration Loan,

DMA Docket Number (if available) DMA-2177

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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. Property is the Garibaldi Lode Claim. See copy of lease attached for legal description

(*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. see copy of lease

(*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.
On Garibaldi claim; see description in lease attached

NOTE: (1) 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 (*c*) 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. Areas same

(2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. No liens known of. Owners will not sign subordination agreement. Se statement of lessee attached.

2. (*a*) What metals or minerals do you expect to find? Manganese

(*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.
See supplement attached

16—64067-2

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project. See supplement attached

   (*b*) State the time required to start the project and to complete it. Approximately 6¼ months

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.
   See maps attached

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. No existing facilities

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. See supplement attached and lists contained in answer to Question # 7.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented See supplement attached

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each. See supplement attached

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. All items of cost considered are contained in answers to question # 7.

10. (*a*) How much are you prepared to invest in the proposed project? $5,500.00

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO-5)? Yes

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

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.

Garibaldi Mine
(Name of company)
an individual
not a company

By Irving G. Young
(Signature of authorized official)
an individual

October 16 - 1951
(Date)

Lessee
(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—64067-2

SUPPLEMENT TO MF-103

Irving B. Irving
54 Harbour Bldg.
Butte, Montana

Material requested in Question
2 b, page 1, form MF-103

Geologic Features of Property

The Garibaldi Claim is located in the western part of the Butte District, at Butte, Montana. Geologically, it falls into the peripheral zone, as classified by Reno H. Sales, in "Ore Deposits at Butte, Montana". Butte has a total production of over three billion dollars, in copper, zinc, lead, manganese, silver gold and other metals, and this has come from a complex vein system, but the bulk of it has been mined on the great and persistent east-west veins that go to depth in strength and productivity. The Garibaldi is on one of Butte major east-west veins.

The peripheral zone, at Butte, borders on the intermediate zone (which is characterized by a predominatly copper mineralization) and displays a vein filling that is mesothermal in type and consists of quartz, rhodochrosite, sphalerite and pyrite. Some lead occurs in shoots that have been important.

The Garibaldi claim lies about 250' west of the Minnie Jane claim which produced over fifty thousand tons of pink, rhodochrosite ore during World War II and has unmined reserves. The Minnie Jane Mine lies less than 200' west of the Anaconda's famous Orphan Girl Mine, which has been developed to depths of 3000' or more. A study of the surface indicates that the Minnie Jane vein is the westerly extension of one of the major veins in the Orphan Girl Mine. The Minnie Jane vein runs into the Garibaldi claim.

On the Garibaldi Claim itself, two veins are exposed on the surface. Two other veins, including the main Minnie Jane vein project into the claim and are undoubtedly present in a subapex relationship, underneath the Whiskey Gulch Fault. (See map attached)

On the surface, the two manganese veins exposed show manganese ore in oxide form. Rhodochrosite is expected--based on the history of this part of the camp--at somewhere between fifty and sixty feet in depth. Good manganese ore is also a reasonable expectation on the two veins that project into the property.

Ten samples were taken by the applicant on the manganese veins outcropping. Four of these showed ore, in oxide form, and averaged 16.8% Mn, over good mining widths. Three others averaged 11.4% Mn. Two samples previously taken by others showed material that assayed from 17.0% Mn to 25.0% Mn. Since manganese is soluble, it is expected that the rhodochrosite ore directly below the samples taken, should average higher.

It is obvious that the property harbors manganese ore in commercial quantities and has the potentialities of a property of importance. See sample locations on the attached map.

COPY

I. B. Irving

Irving G. Irving
Garibaldi Mine
84 Harbour Bldg.
Butte, Montana
DMA-2177

Supplement to Form MF-103

Material requested in answering
Question 3. a & b.

a.
The work proposed involves a program consisting of acquiring, erecting andplacing into position all construction to commence, and thereafter, to sink an inclined shaft 110 feet from the surface, cutting a station andthen drifting 150 feet on the vein indicated on the surface. The total cost of this work is estimated to be $22,000.00.

b.
The time required to complete this work, working one shift, is estimated to be six andone-quarter months.

Material requestedin answering
Question # 6.

The additional facilities, building and fixtures and installations to be purchased, installed or erected by applicant and the estimated cost or rental thereof are set forth in detail in the supplement that purports to answer Question # 7. Please refer to this.

Material requested in answering
Question # 7.

a. Additional buildings, equipment andfacilities to be installed and estimated cost thereof:

Construction to be done:

Headframe complete, supplies and timber--	$750.00
One storage bin	250.00
Dry house	250.00
Engine room	300.00
	$1550.00
Constructin g headframe and collar set	750.00
Total construction	$2,300.00

b. Equipment to be rented:

Panel box and transformers (rental per month)	$50.00
Compressor and receiver fittings	150.00
Hoist and controls	50.00
Pump	25.00
Total monthly cost of equipment rented	$270.00
Hauling & installation of above	730.00

COPY

Irving G. Irving
Garibaldi Mine
84 Harbour Bldg.
Butte, Montana

Question # 7 (continued)

c.
Equipment to be purchased

Powerline complete	$1,500.00
Receiver	50.00
Track	260.00
Spikes	25.00
2" pipe (300' at 50¢ a foot)	150.00
1" pipe (300' at 25¢ a foot)	75.00
2 stoves	50.00
Two jackhammers and accessory fittings & hose	1,050.00
Nine pieces of steel	20.00
One stoper	550.00
Nine pieces of steel	20.00
Supply of bits	50.00
Two mine cars	100.00
Miscellaneous tools	200.00
	$4110.00

d. Shaft sinking cost analysis

To sink shaft average of 2' a day:	Per Day	Per Foot
Labor (miners)	$30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
Total	$60.00	$30.00
Power ($300.00 per month) (plus extras etc)	15.00	
Timber framed		7.50
Powder, track, spikes and pipe placed		6.00
		10.00
		53.50
Plus 15% for contingencies		6.75
SHAFT SINKING		61.65
Rental cost, based on 40' per month allowing for delays and usual trouble		6.75
DIRECT SHAFT SINKING COST PER foot		$68.40

e. Drifting cost analysis

To plan to pull 3½' per day		
Labor (miners)	30.00	
Hoistman	15.00	
Supervision (including books)	15.00	
	$60.00	$17.15
Power ($300.00)	15.00	4.25
Timber, powder, tools etc placed		16.00
Drifting		37.40
Based on 70'/mo; drifting rental cost		3.90
DIRECT DRIFTING COST/ft.		$41.30

Irving E. Irving
Garibaldi Mine
54 Hirbour Bldg.
Butte, Montana

SUPPLEMENT TO MF-103

Question # 7 (continued)

Recapitulation of cost of project

Equipment purchases	$4,110.00
Surface construction	2,300.00
Hauling and installation	730.00
Station cutting at 100 level	1,000.00
Shaft sinking --110' @ $68.40 per ft.	7.524.00
Drifting--150' @ $41.30 per ft.	6,195.00
Abaondonment cost	1,200.00
Total cost of project	$23,059.00
Lessestimated salvage	1,059.00
TOTAL LOAN Including applicant's contribution	22,000.00
Loan requested	16,500.00
Applicant's contribution	5,500.00
	$22,000.00

Answers to Question # 8

Two shaft men taking contract at $15.00 per foot
One hoistman at $15.00 per day
One supervisor at $15.00 a day

Note: Schedules may have to be revised to meet changes in union scale or other changes

Answers to material requested in Question # 9

Applicant thinks that all items of cost, except very small ones and t ose estimated with difficulty , are cosnsidered in cost analysis set forth in answer to Question # 7.

Question # 10

Applicant isprepared to furnish (in the form of cash) $5,500.00

COPY

ARTICLE I

[illegible], the subordination agreement of the lessor, required by paragraph number 2-[illegible] of the annexed contract has not been obtained, covering the Garibaldi Quartz Lode Mining Claim, Survey No. [illegible], located in Silver Bow County, Montana, and held by the undersigned under a mining lease with an option agreement covering three quarters of the interests in said claim; and

[illegible], the United States of America has agreed to waive requirement of the lessor's subordination agreement;

NOW, THEREFORE, in consideration of said exploration project contract and of the foregoing, the operator hereby undertakes and agrees that during his operation of said property under said lease or any extension thereof he will pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrate, or metal produced as a result of such discovery or development under said exploration project contract until the total amount contributed by the Government, without interest, is fully repaid, or ten years shall have elapsed, or the undersigned no longer has a lease covering said property, whichever occurs first, as follows:

> Of the net smelter returns or other proceeds not in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1[illegible]) per cent;
>
> Of net smelter returns or other net proceeds in excess of Eight Dollars ($8.00) per ton of ore: One and one-half (1[illegible]) per cent, plus one-half (1/2) per cent for each additional full fifty cents ($0.50) in excess of Eight Dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5[illegible]) per cent.

This obligation to pay from net returns or proceeds shall be and remain a claim and lien upon the net smelter returns or other proceeds due to the undersigned, from any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said ten-year period has elapsed or until the undersigned has no lease or other right to operate said property; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the operator to produce ore from any such discovery or development.

Dated October 16, 1951.

Signed Irving G. Irving

Title Lessee

Pages 5-12
of supplement

Supplement to MF-103

Irving G. Irving
Caribaldi Mine
84 Hirbour Bldg.
Butte, Mont.

QUARTZ MINING LEASE

THIS AGREEMENT, Made and entered into this 1st day of October, 1951, by and between ANACONDA COPPER MINING COMPANY, a Montana corporation, owning a one-quarter interest; GEORGE D. CURTIS, residing at 35 West Granite Street, Butte, Montana, owning a one-quarter interest; ARTHUR HIRBOUR and ALICE HIRBOUR, his wife, residing at 806 Cherrier Street, Montreal, Canada, owning a one-sixth interest; PAUL LEVIGNE and STELLA LEVIGNE, his wife, residing at No. 7 Avenue des Fleurs, Nice A.M. France, owning a one-sixth interest; and MRS. LOUISE LANGLOIS, residing at 406 Pine Avenue West, Montreal, Canada, owning a one-sixth interest (hereinafter called "Lessors"), parties of the first part, and IRVING G. IRVING, whose office address is 84 Hirbour Building, Butte, Silver Bow County, Montana (hereinafter called "Lessee"), party of the second part, WITNESSETH:

It is mutually agreed by and between the parties hereto as follows:

1. RIGHTS GRANTED TO LESSEE: The Lessors, for and in consideration of the rent and royalty to be paid, and the covenants and agreements to be observed, kept and performed by the Lessee for the term hereinafter stated, and upon the terms and conditions hereinafter set forth, do hereby lease, demise and let unto the Lessee the following described property situated in the County of Silver Bow, State of Montana, to wit:

The Garibaldi Quartz Lode Claim, Survey No. 1888.

2. EFFECTIVE DATE - TERM: This agreement shall take effect on the day and year first above written and shall continue in full force and effect for a period of three (3) years immediately following said date, unless sooner terminated as hereinafter provided; provided, however, that the Lessee shall have the right, if not [illegible] default hereunder, to renew this agreement for an addition[illegible] of two (2) years by giving written notice of the exercise o[illegible]

right to the Lessors at least sixty (60) days before expiration of the original term hereof.

3. ROYALTY: For ores of copper, zinc, lead, silver or other metals which are shipped from the demised premises to custom mill or smelter, the Lessee shall pay to the Lessors royalty based upon the net mill or smelter returns of the ores mined he reunder according to the following schedule;

On ores having a value of $15.00 or less per ton, 10% royalty.

On ores having a value of over $15.00 and not more than $24.99 per ton, 15% royalty.

On ores having a value of $25.00 and not more than $34.99 per ton, 20% royalty.

On ores having a value of $35.00 and not more than $49.99 per ton, 25% royalty.

On ores having a value of $50.00 or over per ton, 30% royalty.

By "net mill or smelter returns" is meant the amount received for such ores after deducting therefrom the cost of milling, smelting and freight or haulage charges from the mine to the mill or smelter .

In case the Lessee shall receive any other amounts from the sale of such ores over and above the settlement made by the mill or smelter, the Lessee shall pay to the Lessors the same percentage of such additional receipts as specified in the above scale of royalties for the lots for which settlement is made. With the payment of such additional royalty the Lessee shall submit to the Lessors a statement showing the lot for which the additional payment was received, together with proof of the amount of such additional payment.

For ores of manganese which are sold as such to any agent, the royalty to be paid to the Lessors under this Lease shall be 10% of the amount received by the Lessee, delivered at the stockpile or plant of such agent, or delivered f.o.b. railroad cars at the most convenient loading place, after deducting therefrom the cost

of freight or haulage from the mine to said stockpile, plant or loading place.

With the payment of said royalty, the Lessee shall submit to the Lessors a copy of his settlement sheet showing the number of wet tons sold, the moisture content and the percent of manganese in each lot for which settlement is made.

The payment of all royalties under this lease shall be made directly to the Anaconda Copper Mining Company as trustee for the Lessors at its General Office, 304 North Main Street, Butte, Montana, and said Anaconda Copper Mining Company agrees to distribute said royalty quarterly to the other Lessors in proportion to their interests.

4. LESSEE TO PAY TAXES AND ASSESSMENTS: The Lessee, in addition to paying the royalty herein stipulated, shall pay before the same become delinquent all taxes and all assessments which during the term hereof may be lawfully levied or assessed upon all structures and improvements, equipment and other property erected, constructed, installed and/or used by the Lessee in connection with the exercise of the rights herein granted, and shall also pay when due all net proceeds, occupation, license and output taxes lawfully levied upon all ores or minerals extracted from said premises hereunder. The Lessee, upon the payment of such taxes and assessments shall promptly furnish the Lessors with satisfactory evidence of such payment.

5. DEMISED PREMISES TO BE WORKED SEPARATELY: The demised premises shall be worked separately from all other Lands, and all ore mined and removed therefrom shall be kept segregated from all other ore mined by the Lessee until the weight and value thereof shall be fully determined.

6. INSPECTION OF MINE: The Lessors, through their authorized representatives, shall at all times during the term of this Lease have the right to enter upon and inspect the mine or mines and

all the workings thereof on the demised premises and to make any survey that they may deem necessary, either for the purpose of checking the amount of ores mined or for an examination of the physical condition of the property and workings.

7. CONDUCT OF MINING OPERATIONS: The Lessee shall enter upon said mine or premises within ninety (90) days from the day and year first above written and shall work the same in a manner necessary to development and to good and economical mining so as to take out the greatest possible amount of commercial ore free from waste, having due regard to the safety, development and preservation of said premises as a workable mine, and shall thereafter during the period of this lease work said mine and premises as aforesaid continuously and steadily, and in the prosecution of said work shall keep at least two (2) persons employed in the above described type of work for a space of twenty-two (22) days in each thirty (30) day period, except during such times as said Lessee may be actually prevented from prosecuting said work by any cause or causes beyond his control.

In consideration of said Lease the Lessee does hereby covenant and agree with the Lessors that he will well and sufficiently timber said mine at all points where proper and repair all old timbering whenever it may become necessary in order to preserve the mine in a workable condition.

That he will occupy and hold all cross and parallel veins, leads, dips, spurs, feeders, crevices or mineral deposits of any kind which may be discovered in working under this Lease, or in any development work connected with the working of said Lease by said Lessee, or by any person or persons under him, in any manner and will not dueing the term of this Lease locate or attempt to locate or record the same, or allow the same to be located or recorded except in the names of the Lessors.

That he will keep all shafts, drifts, tunnels and workings in good condition of repair, and will keep the same drained and

clear of loose rock and debris of all kinds.

That he will adequately fence, cover or otherwise protect all shafts, cuts or other surface openings made or used by him under this Lease.

8. BOOKS AND ACCOUNTS: The Lessee shall keep books and accounts showing the amount of ores extracted from said mine, the amount of ores shipped, sold or treated, and the amount of money received from said ore, or the value extracted therefrom, and the Lessors shall have free and full access to said books, accounts and records of the Lessee at all reasonable times.

9. DISPOSAL OF WASTE, REFUSE AND MINE WATER: The Lessee shall make such provision for the disposal of waste, refuse and mine water from the mine or mines on the demised premises that the same shall not be a nuisance nor injure the property of the Lessors, or of others, nor obstruct or contaminate any stream, or obstruct any right of way or other means of transportation or travel on the lands of the Lessors or others.

10. LABOR AND MATERIAL TO BE FURNISHED BY LESSEE: The Lessee shall, at his own cost and expense, furnish all labor, material and supplies necessary for the proper operation of the demised premises under this Lease.

11. LIENS: The Lessee shall, when due, fully pay for all machinery, equipment and materials joined or affixed to the premises herein described, and shall, when due, pay in full all persons who perform labor upon said premises, and shall not permit or suffer any liens of any kind or nature to be enforced against said premises for any work done or machinery, equipment or materials furnished thereon at the instance or request or on behalf of the Lessee.

12. STATE AND FEDERAL ENACTMENTS AND CITY ORDINANCES: The Lessee, in the operation and development of said premises, shall observe and comply with all applicable Federal and State laws, safety regulations and city ordinances, and shall comply with the

laws of the State of Montana in reference to Workmen's Compensation, and shall insure and keep insured during the term hereof all persons employed by Lessee under the provisions of said Workmen's Compensation Law.

13. ASSUMPTION OF RISK - INDEMNITY: (a) The Lessee assumes all risk of personal injury to the servants and employees of the Lessee and persons with whom he may be transacting business while on the demised premises, and all risk of loss or damage to buildings or contents, and also to any other property brought upon, or in proximity to, said premises by the Lessee, or by others with the knowledge or consent of the Lessee.

(b) The Lessee agrees to, and does hereby, indemnify and hold harmless the Lessors against any and all damages, liability, liens, claims, demands, costs, causes of action, suits at law or in equity in any way growing out of this agreement, or because of the operation or the carrying on of the work contemplated hereunder.

14. LESSORS TO BE GIVEN NOTICE OF LITIGATION: The Lessee shall promptly notify the Lessors in writing of the institution of any litigation involving the rights granted by this agreement, and in the event the Lessors are, in their judgment, in any way interested therein, they may, at their option, enter into the conduct and defense of such litigation to the extent they may deem advisable.

15. DEFAULT BY LESSEE: Time is of the essence of this agreement and in case the Lessee shall fail to keep and perform all, or any one of the covenants and agreements herein written and contained to be by him on his part performed in the manner, form or at the time as herein agreed, then the Lessors may, at their option, and upon thirty (30) days notice in writing to Lessee, declare this agreement terminated and at an end, and all the rights of the Lessee shall cease and be wholly terminated and at an end.

A waiver by the Lessors of a particular breach of any covenant or agreement shall not be deemed or held to be a waiver of or affect any other breach or impair its rights resulting therefrom.

16. SURRENDER OF PROPERTY: Upon the termination of this agreement for any cause, the Lessee shall immediately surrender unto the Lessors all of the premises herein demised without delay or hindrance and the Lessors shall have the right immediately upon the expiration or termination howsoever of this agreement to ente r upon the premises aforesaid and to take immediate possession thereof without declaration of forfeiture , act of re-entry or process of law.

17. REMOVAL OF EQUIPMENT: As long as the Lessee is not in default in any of the terms and conditions herein provided for to be kept and performed by the Lessee, he shall have the right to remove from the demised premises all machinery, tools and other equipment placed thereon by him within a period of sixty (60) days from the termination hereof, and unless so removed within said period the same shall immediately become the property of the Lessors, but he shall not remove or impair any supports, mine props or mine timbers which may be necessary for the protection of any openings of such mine or mines.

18. HOW NOTICES TO BE GIVEN: All notices given or required to be given under the terms of this agreement shall be in writing, sent by United States mail postage prepaid and shall be addressed as follows:

Notices to the Lessors shall be addressed to Mr. F. A. Linforth, Assistant to the Vice President, Anaconda Copper Mining Company, Hennessy Building, Butte, Montana, and notices to the Lessee shall be addressed to the Lessee at 84 Hirbour Building, Butte, Montana, provided further that in lieu of mailing, such notices may be served upon either of such parties personally.

19. SUCCESSORS AND ASSIGNS: This agreement shall be binding

upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, provided, however , that the Lessee shall not transfer or assign this agreement or any interest therein or any right granted hereunder without the written consent of the Lessors.

IN WITNESS WHEREOF, the corporate Lessor has caused these presents to be executed by its officers thereunto duly authorised, and its corporate seal to be hereunto affixed, and the individual Lessors and the Lessee have hereunto set their hands, the day and year in this instrument first above written.

ANACONDA COPPER MINING COMPANY,

By_____
As its Vice President.

ATTEST:

J. D. MURPHY
As its Assistant Secretary.

_____
George D. Curtis

_____
Arthur Hirbour

_____
Alice Hirbour

_____
Paul Levigne

_____
Stella Levigne

_____
Mrs. Louise Langlois

LESSORS.

_____
Irving G. Irving

LESSEE.

Form MF-100
(May 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. dpaa 2177

Date received 12-17-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1951

DMA-
#2177
received
on 12-17-51

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana

Name and address of applicant

Date November 30, 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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) 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? Manganese ore (rhodochrosite)
   (*b*) What are the byproducts, if any? zinc and silver
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: Garibaldi Lode Claim
   (*a*) Linear feet of shafts. Old shaft reported 600' deep.
   (*b*) Linear feet of drifts and crosscuts. several levels, of unknown extent
   (*c*) Linear feet of tunnels or adits. (all inaccessible)
   (*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. Dont know
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. Two miles from Butte, Mont.
   (*b*) Mining district. Butte
   (*c*) Township, Section, Range. Section 15, T. 3N; R. 8 W.
   (*d*) County, State. Silver Bow County, Montana
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not operating
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee. Applicant is lessee
   - ☐ Contractor.
5. Number of years in production no recent production

   If not in production or operation, estimated date when production will begin 9 mos. after start of dev. wk.
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. See addendum attached
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. Some previous development, of unknown results
   (*b*) State briefly the known history and production of adjoining and neighboring properties. see below
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

   Adjoining Minnie Jane Mine produced 54,000 tons manganese ore for govt stockpile during Warll. Other producers nearby.

   For (c) See report maps accompanying MF-103 on file.

16—63792-2

For (C) see letter accompanying WE-103 on file

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)
Not a corporation							
Irving G. Irving (lessee)		none	$12,000.00	none		none	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

not applicable

*Indicate period covered.

10. 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.)		none	none	none	none
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)	no current production at all				

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. no current 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. See report and maps accompanying WE-103 on file

16—63792-1

No developed ore reserve. Intend to sink on ore and prospective

To accompany application of Irving J. Irving, on MF-100

Addendum substituting for Question 6.

MINING AND GENERAL BUSINESS EXPERIENCE OF APPLICANT

The applicant who will supervise and manage the project has the following mining and business experience:

The applicant is a professional mining engineer and geologist and has been for twenty-four years. He is a graduate of Columbia University, in New York City, and spent six years at this institution, receiving in the course of this work, three degrees---B.A. 1924, B.S. 1926 and Engineer of Mines, or E.M., degree in 1927. Subsequently, after being out of school eleven years the applicant spent two years at Harvard University, devoted exclusively to an intensive study of Mining Geology, under Professors Graton, McLaughlin and other prominent teachers and received in 1940 a Masters Degree in Economic Geology. At Harvard he also was given an Honary Fellowship for grades received and work done.

The applicant has the following mining, geological and business background:

a. Seven and a half years with the Anaconda Copper Mining Company, and the International Smelting Co., as geologist, supervising development work in the Butte mines and doing extensive field work and outside examination work, involving the valuation of mines and prospects. (1927 to 1932 and 1936--1938)

b. Four years as sales manager of the Defiance Oil Company, at Glen Cove, New York--a retail fuel oil distribution company, with a bulk plant. ('32-'36)

c. Five years as independent geologist and small mine operator, involving the development work at the Quartz Hill Mine, at Divide, Montana. 1940-45

d. One and a half years with the War Production Board, in Washington, D.C. as engineer analyzst for the Copper Division, during which times he served as alternate member of the Quota Committee. (1945-46)

e. Mine operator and independent geologist, during which time he was manager of the Quartz Hill Development Co. and president of the Pyrenees Development Company and supervised development at both properties and managed the operations. ('46-'50)

f. Mining engineer and geologist for The Galigher Co., of Salt Lake City, Utah. (1950 to date)

COPY

I J Irving

ore possibilities are attractive and large.

(*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: See maps accompanying MT-103 on file

TOTAL ORE OR MINERAL RESERVES No developed ore reserve

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)	No proved ore				
Indicated (probable)	There is indicated and probable ore, based on surface exposures and vein projections, but of unknown extent.				

(*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.

Approx 2 miles from Butte, Mont, with about 2000' of dirt road to be built, rest is on main highway

14. Water Supply:

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

Will have to haul drilling water, at start, in barrels

15. Power:

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

Mont. Power Co is source. Will have to build 3500' of line. See rate schedule attached.

16. Labor:

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

no recent employment at property

17. Equipment and Facilities:

No equipment present, or owned. Equip to be rented or bought.

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.

None in aprticular.

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.

Not a company (Name of company)

By Irving G. Irving (Signature of authorized official)

November 30, 1951 (Date)

Irving G. Irving (Title) Lessee

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

Schedule GS-44—General Service

Available for: All electric service required when supplied through one meter at one point of delivery. Not available for standby, breakdown, supplementary, resale or shared service.

Type of Service: Sixty cycle alternating current at such phase and voltage as Company may have available.

Rate: Net monthly bill.

75c for the first 12 kwh, or less.
3.5c per kwh for the next 288 kwh.
2.5c per kwh for the next 1,500 kwh.
1.5c per kwh for the next 3,200 kwh.
0.9c per kwh for the next 15,000 kwh.
0.7c per kwh for the next 200 kwh per kilowatt.
0.5c per kwh for all additional kwh.

Plus

First 10 kilowatts —No charge.
Next 20 kilowatts —95c per kilowatt.
All additional kilowatts—75c per kilowatt.

Minimum Bill: 75c per month.

Tax Adjustment: The Company may increase the bill for electric service supplied under this Schedule by an amount equal to the proportionate part of any taxes in excess of those in effect on December 31, 1940.

Payment: The net monthly bill is due and payable when rendered and becomes delinquent 10 days thereafter.

Determination of Kilowatts: The average kilowatts supplied during the 15-minute period of maximum use during the month, as determined by permanently installed indicating type meter.

Special Terms and Conditions: Customer may be required to pay the cost of installing and removing all of the facilities required to supply seasonal and short term service. Customer must pay the cost of installing and removing all of the facilities required for rendering temporary service.

Issued September 22, 1944
Approved September 22, 1944 Public Service Commission
Effective October 1, 1944 of Montana
(Supersedes Schedules GS-41)

Form MF-100
(May 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. dmea 2177

Date received 12-17-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1951

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana

DMA
A 2177
Recorded
MF-103

Name and address of applicant

Date November 30, 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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) 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: Manganese
   (a) What are the chief mine, mill, or smelter products? Manganese ore (rhodochrosite)
   (b) What are the byproducts, if any? zinc and silver
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: Garibaldi Lode Claim
   (a) Linear feet of shafts. Old shaft reported 600' deep
   (b) Linear feet of drifts and crosscuts. several levels of unknown extent
   (c) Linear feet of tunnels or adits. (All inacessible)
   (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. Dont know
3. For each operation listed above supply the following:
   (a) Distance and direction from nearest town and shipping point. Two miles from Butte, Montana
   (b) Mining district. Butte
   (c) Township, Section, Range. Section ~~k~~ 15, T. 3 N; R 8 W.
   (d) County, State.
4. (a) State whether or not property is now in operation, and if in operation, by whom operated. Not operating
   (b) Are you operating this property as:
   ☐ Owner.
   ☐ Lessee. Applicant is lessee
   ☐ Contractor.
5. Number of years in production no recent production
   If not in production or operation, estimated date when production will begin 9 mos. after start of dev. wk.
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. See addendum attached
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. Some previous development, of unknown results
   (b) State briefly the known history and production of adjoining and neighboring properties. see below
   (c) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. See report and maps accompanying MF-103 on file. Adjoining Minnie Jane mine produced 54,000 tons manganese ore for stockpile in War II Other producers nearby also..

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)
Not a corporation							
Irving G. Irving	Lessee	none	$12,000.00	none		none	
	Total		x x x x x			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	$	$	$		
not applicable					
Preferred stock	$	$	$		

*Indicate period covered.

10. 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.)	none	none	none	none	none
2. Quantity of product processed (specify unit of measure and type of process)	no current production				
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. no current 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. See reports and maps accompanying M-103 on file. No developed ore reserve. Intend to sink on ore and prospective ore possibilities are attractive and large.

16—63792-1

To accompany application of Irving G. Irving, on MF-100

Addendum substituting for Question 6.

MINING AND GENERAL BUSINESS EXPERIENCE OF APPLICANT

The applicant who will supervise and manage the project has the following mining and business experience:

The applicant is a professional mining engineer and geologist and has been for twenty-four years. He is a graduate of Coulmbia University, in New York City, and spent six years at this institution, receiving in the course of this work, three degrees---B.A. 1924, B.S. 1926 and Engineer of Mines, or E.M., degree in 1927. Subsequently, after being out of school eleven years the applicant spent two years at Harvard University, devoted exclusively to an intensive study of Mining Geology, under Professors Graton, McLaughlin and other prominent teachers and received in 1940 a Masters Degree in Economic Geology. At Harvard he also was given an Honary Fellowship for grades received and work done.

The applicant has the following mining, geological and business background:

a. Seven and a half years with the Anaconda Copper Mining Company, and the International Smelting Co., as geologist, supervising development work in the Butte mines and doing extensive field work and outside examination work, involving the valuation of mines and prospects. (1927 to 1932 and 1936--1938)

b. Four years as sales manager of the Defiance Oil Company, at Glen Cove, New York--a retail fuel oil distribution campnay, with a bulk plant. ('32-'36)

c. Five years as independent geologist and small mine operator, involving the development work at the Quartz Hill Mine, at Divide, Montana. (1940-1945)

d. One and a half years with the War Production Board, in Washington, D.C. as engineer analyzst for the Copper Division, during which times he served as alternate member of the Quota Committee. (1945-46)

e. Mine operator and independent geologist, during which time he was manager of the Quartz Hill Development Co. and president of the Pyrenees Development Company and supervised development at both properties and managed the operations. ('46-'50)

f. Mining engineer and geologist for The Galigher Co., of Salt Lake City, Utah. (1950 to date)

I. G. Irving

(*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. See maps accompanying MF-103

(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: No developed ore reserve

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)	no proved ore				
Indicated (probable)	There is indicated and probable ore, based on surface exposures and vein projections, but of unknown extent				

(*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. Approx 2 miles from Butte, Mont., with 2000' of dirt road to be built, rest is on main highway

14. Water Supply:

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

Will have to haul drilling water, at start, in barrels.

15. Power:

State amount of power used, rate per hour, and source thereof. Montana Power Co. is source. Will have to build 3500' of line. See rate schedule attached.

16. Labor:

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

No recent employment at property

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. No equipment present or owned. Equipment to be rented or bought.

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

None in particular.

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.

Not a company
(Name of company)

By Irving G. Irving
(Signature of authorized official)

November 30, 1951
(Date)

Irving G. Irving
Lessee
(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

Schedule GS-44—General Service

Available for: All electric service required when supplied through one meter at one point of delivery. Not available for standby, breakdown, supplementary, resale or shared service.

Type of Service: Sixty cycle alternating current at such phase and voltage as Company may have available.

Rate: Net monthly bill.

75c for the first 12 kwh, or less.
3.5c per kwh for the next 288 kwh.
2.5c per kwh for the next 1,500 kwh.
1.5c per kwh for the next 3,200 kwh.
0.9c per kwh for the next 15,000 kwh.
0.7c per kwh for the next 200 kwh per kilowatt.
0.5c per kwh for all additional kwh.

Plus

First 10 kilowatts —No charge.
Next 20 kilowatts —95c per kilowatt.
All additional kilowatts—75c per kilowatt.

Minimum Bill: 75c per month.

Tax Adjustment: The Company may increase the bill for electric service supplied under this Schedule by an amount equal to the proportionate part of any taxes in excess of those in effect on December 31, 1940.

Payment: The net monthly bill is due and payable when rendered and becomes delinquent 10 days thereafter.

Determination of Kilowatts: The average kilowatts supplied during the 15-minute period of maximum use during the month, as determined by permanently installed indicating type meter.

Special Terms and Conditions: Customer may be required to pay the cost of installing and removing all of the facilities required to supply seasonal and short term service. Customer must pay the cost of installing and removing all of the facilities required for rendering temporary service.

Issued September 22, 1944
Approved September 22, 1944 Public Service Commission
Effective October 1, 1944 of Montana
(Supersedes Schedules GS-41)

Form MF-100
(May 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. dmea 2177

Date received 12-17-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1951

Irving G. Irving
(Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana

DMA
A2177
Received
on pap. 103

Name and address of applicant

Date November 30, 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) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) 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: Manganese
   (*a*) What are the chief mine, mill, or smelter products? Manganese ore (rhodochrosite)
   (*b*) What are the byproducts, if any? zinc and silver
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: Garibaldi Lode Claim
   (*a*) Linear feet of shafts. Old shaft reported 600' deep
   (*b*) Linear feet of drifts and crosscuts. several levels of unknown extent
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). (All inacessible)

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. Dont know
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. Two miles from Butte, Montana
   (*b*) Mining district. Butte
   (*c*) Township, Section, Range. Section ~~x~~ 15, T. 3 N; R 8 W.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not operating
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee. Applicant is lessee
   - ☐ Contractor.
5. Number of years in production no recent production

   If not in production or operation, estimated date when production will begin 9 mos. after start of dev. wk.
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. See addendum attached
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. Some previous development, of unknown results
   (*b*) State briefly the known history and production of adjoining and neighboring properties. See below
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, accompanying recommended exploration and development, and metallurgical investigations. See report and map on file. Adjoining Minnie Jane mine produced 54,000 tons manganese ore for stockpile in War II Other producers nearby also.

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)
not a corporation							
Irving Q. Irving	Lessee	none	$12,000.00	none		none	
	Total		x x x x x			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	$	$	$		
Preferred stock	not applicable $	$	$		

*Indicate period covered.

10. 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.)	none	none	none	none	none
2. Quantity of product processed (specify unit of measure and type of process)	no current production				
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. no current 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. See reports and maps accompanying W[illegible]03 on file. No developed ore reserve. Intend to sink on ore and prospective ore possibilities are attractive and large.

16—63792-1

To accompany application of Irving G. Irving, on MF-100

Addendum substituting for Question 6.

MINING AND GENERAL BUSINESS EXPERIENCE OF APPLICANT

The applicant who will supervise and manage the project has the following mining and business experience:

The applicant is a professional mining engineer and geologist and has been for twenty-four years. He is a graduate of Coulmbia University, in New York City, and spent six years at this institution, receiving in the course of this work, three degrees---B.A. 1924, B.S. 1926 and Engineer of Mines, or E.M., degree in 1927. Subsequently, after being out of school eleven years the applicant spent two years at Harvard University, devoted exclusively to an intensive study of Mining Geology, under Professors Graton, McLaughlin and other prominent teachers and received in 1940 a Masters Degree in Economic Geology. At Harvard he also was given an Honary Fellowship for grades received and work done.

The applicant has the following mining, geological and business background:

a. Seven and a half years with the Anaconda Copper Mining Company, and the International Smelting Co., as geologist, supervising development work in the Butte mines and doing extensive field work and outside examination work, involving the valuation of mines and prospects. (1927 to 1932 and 1936--1938)

b. Four years as sales manager of the Defiance Oil Company, at Glen Cove, New York--a retail fuel oil distribution campnay, with a bulk plant. ('32-'36)

c. Five years as independent geologist and small mine operator, involving the development work at the Quartz Hill Mine, at Divide, Montana. (1940-1945)

d. One and a half years with the War Production Board, in Washington, D.C. as engineer analyst for the Copper Division, during which times he served as alternate member of the Quota Committee. (1945-46)

e. Mine operator and independent geologist, during which time he was manager of the Quartz Hill Development Co. and president of the Pyrenees Development Company and supervised development at both properties and managed the operations. ('46-'50)

f. Mining engineer and geologist for The Galigher Co., of Salt Lake City, Utah. (1950 to date)

COPY

I. G. Irving

(*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 reserves as above, and show how computed. Tabulated total ore reserve as follows: See maps accompanying F-109

TOTAL ORE OR MINERAL RESERVES No developed ore reserve

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)	no proved ore				
Indicated (probable)	There is indicated and probable ore, based on surface exposures and vein projections, but of unknown extent				

(*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. Approx 2 miles from Butte, Mont., with 2000' of dirt road to be built, rest is on main highway

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Will have to haul drilling water, at start, in barrels.

15. Power:

State amount of power used, rate per hour, and source thereof. Montana Power Co. is source. Will have to build 3500' of line. See rate schedule attached.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. No recent employment at property

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. No equipment present or owned. Equipment to be rented or bought.

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

None in particular.

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.

Not a company
(Name of company)

By Irving G. Irving
(Signature of authorized official)

November 30, 1951
(Date)

Irving G. Irving
(Title) Lessee

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

Schedule GS-44—General Service

Available for: All electric service required when supplied through one meter at one point of delivery. Not available for standby, breakdown, supplementary, resale or shared service.

Type of Service: Sixty cycle alternating current at such phase and voltage as Company may have available.

Rate: Net monthly bill.

7.5c for the first 12 kwh, or less.
3.5c per kwh for the next 288 kwh.
2.5c per kwh for the next 1,500 kwh.
1.5c per kwh for the next 3,200 kwh.
0.9c per kwh for the next 15,000 kwh.
0.7c per kwh for the next 200 kwh per kilowatt.
0.5c per kwh for all additional kwh.

Plus

First 10 kilowatts —No charge.
Next 20 kilowatts —95c per kilowatt.
All additional kilowatts—75c per kilowatt.

Minimum Bill: 75c per month.

Tax Adjustment: The Company may increase the bill for electric service supplied under this Schedule by an amount equal to the proportionate part of any taxes in excess of those in effect on December 31, 1940.

Payment: The net monthly bill is due and payable when rendered and becomes delinquent 10 days thereafter.

Determination of Kilowatts: The average kilowatts supplied during the 15-minute period of maximum use during the month, as determined by permanently installed indicating type meter.

Special Terms and Conditions: Customer may be required to pay the cost of installing and removing all of the facilities required to supply seasonal and short term service. Customer must pay the cost of installing and removing all of the facilities required for rendering temporary service.

Issued September 22, 1944
Approved September 22, 1944 Public Service Commission
Effective October 1, 1944 of Montana
(Supersedes Schedules GS-41)

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. dma 2177
Metal or Mineral
Date Received 10-19-51
Amount $
Participation (Government %)

Name and address of applicant

Irving G. Irving
(The Garibaldi Mine)
84 Hirbour B'ldg.
Butte, Montana.

Date October 16, 1951

If you have already filed MF-100, give date filed not operating, type of assistance requested Exploration loan,

DMA Docket Number (if available)

DEFENSE MINERALS ADMINISTRATION WASH. D.C. OCT 19 '51 AM

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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. The property involved is the Garibaldi Quartz Lode claim, described in attached lease.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. See copy of lease attached.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. See legal description of Garibaldi claim in attached lease

   NOTE: (1) 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 (*c*) 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. Areas are the same

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract. Know of no liens against property. Owners will not sign the subordination agreement. (See statement of lessee on this point.)

2. (*a*) What metals or minerals do you expect to find? manganese

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

   See attached statement. Also attached map-giving geologic features and assays.

16—64067-2

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project. See supplement attached
   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.
   see map attached

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. no existing ewuipmentor facilities

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.
   see supplement attached

7. Furnish a detailed list of operating equipment, separated into items to be— see supplement attached
   (*a*) Rented
   (*b*) Purchased
   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.
   see supplement attached

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.
   see supplement attached

10. (*a*) How much are you prepared to invest in the proposed project? 25% of the estimated cost. Funds are being obtained from backer for this specific project.
    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?
    yes

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

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.

(Name of company) XXXXXXXXX Not a company	By (Signature of authorized official) XXXXXXXXXXXXXX an individual
October 16-1951 — (Date)	Lessee (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—64067-2

SUPPLEMENT TO MF-103

Irving G. Irving
84 Hirbour B'ldg.
Butte, Montana

Material requested in Questeion
2 b, page 1, form MF-103

Geologic Features of Property

The Garibaldi Claim is located in the western part of the Butte District, at Butte, Montana. Geologically, it falls into the peripheral zone, as classified by Reno H. Sales, in "Ore Deposits at Butte, Montana". Butte has a total production of over three billion dollars, in copper, zinc, lead, manganese, silver gold and other metals, and this has come from a complex vein system, but the bulk of it has been mined on the great and persistent east-west veins that go to depth in strength and productivity. The Garibaldi is on one of Butte Major east-west veins.

The peripheral zone, at Butte, borders on the intermediate zone (which is characterized by a predominatly copper mineralization) and displays a vein filling that is mesothermal in type and consists of quartz, rhodochrosite, sphalerite and pyrite. Some lead occurs in shoots that have been important.

The Garibaldi claim lies about 250' west of the Minnie Jane claim which produced over fifty thousand tons of pink, rhodochrosite ore during World War II and has unmined reserves. The Minnie Jane Mine lies less than 200' west of the Anaconda's famous Orphan Girl Mine, which has been developed to depths of 3000' or more. A study of the surface indicates that the Minnie Jane vein is the westerly extension of one of the major veins in the Orphan Girl Mine. The Minnie Jane vein runs into the Garibaldi claim.

On the Garibaldi Claim itself, two veins are exposed on the surface. Two other veins, including the main Minnie Jane vein project into the claim and are undoubtedly present in a sub-apex relationship, underneath the Whiskey Gulch Fault. (See map attached)

On the surface, the two manganese veins exposed show manganese ore in oxide form. Rhodochrosite is expected--based on the history of this part of the camp--at somewhere between fifty and sixty feet in depth. Good manganese ore is also a reasonable expectation on the two veins that project into the property.

Ten samples were taken by the applicant on the manganese veins outcropping. Four of these showed ore, in oxide form, and averaged 16.8% Mn, over good mining widths. Three others averaged 11.4%Mn. Two samples previously taken by others showed material that assayed from 17.0% Mn to 25.0% Mn. Since manganese is soluble, it is expected that the rhodochrosite ore directly below the samples taken, should average higher.

It is obvious that the property harbors manganese ore in commercial quantities and has the potentialities of a property of importance. See sample locations on the attached map.

I. G. Irving