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

224 New Customhouse
Denver 2, Colorado

December 13, 1951

Steele Brothers
882 North 2nd East
Nephi, Utah
c/o Mr. Dell Steele

Dear Mr. Steele:

Your application for government assistance in exploration work on the Ace Manganese Prospects at an estimated cost of $12,000.00, DMA Docket 127hI, has been reviewed by the Defense Minerals Administration and a field examination completed.

From a study of exposures and geologic data, the inference is that little possibility exists for the discovery of manganese deposits large enough to warrant the expense of exploration. Therefore, your application for the exploration loan is denied.

We wish to thank you for bringing this property to the attention of the Government.

Very truly yours,

Paul T. Allsman

Paul T. Allsman for
J. H. East, Jr.
Executive Officer
DMA Field Team, Region IV

JWT:oc
cc: DMA subject, chron.
Koschmann
Executive Secretary, DMA

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

224 New Customhouse
Denver 2, Colorado

December 13, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 1274X, Ace Manganese Prospects, Utah County, Utah - Applicants, Steele Brothers, 882 North 2nd East, Nephi, Utah

Enclosed herewith are the original and two copies of the report on the subject docket, and a copy of the letter of denial to the applicant.

We consur with the conclusions and recommendations of the examining team that the exploration loan of $12,000.00 be denied.

for J. H. East, Jr.

A. H. Koschmann

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 . 1951

Mining Division
Region IV

December 13, 1951

Operating Committee
12/21/51

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 1274X, Ace Manganese Prospects, Utah County, Utah - Applicants, Steele Brothers, 882 North 2nd East, Nephi, Utah

The application of the subject docket is for an exploration loan of $12,000.00.

The examining team reports that manganese in the form of pyrolusite and psilomelane occur in scattered, irregular small deposits along the contact between shale and limestone, chiefly in fractures and bedding plane faults. There is no production from the property.

Inferred ore reserves are estimated at 40 tons at one small outcrop on the Manganese Ace No. 3 claim.

The examining team feel that little possibility exists for discovery of deposits of any consequence and recommend that the application for exploration loan be denied.

We concur with the recommendation of the examining team.

Paul T. Allsman

Paul T. Allsman

Mining Division
Date Rec'd.

DEC 10 1951

BUREAU OF MINES
Denver, Colorado

December 7, 1951

Memorandum

To: Paul T. Allsman, Chief, Mining Division, Region IV

From: Chief, Utah-Wyoming Branch, Mining Division

Subject: DMA 1274-X, Ace Manganese property, Utah County, Utah

Enclosed are the original and 7 copies of the subject engineering report with a section on Summary, Conclusions and Recommendations. The geologic report was transmitted by the Survey October 22, 1951.

The examiners report that the method of exploration proposed by the applicant does not appear to be the most suitable. Bulldozer stripping, with possible shaft sinking, is believed to be the best method of exploration. However, because little possibility exists that a significant discovery will be made by exploration, it is recommended that the loan be denied.

I concur with the examiners' recommendations.

The brochure is attached.

Stephen R. Wilson

Stephen R. Wilson.

Enclosures - 3

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

200 New Customhouse
Denver 2, Colorado

October 24, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1274X, Steele Brothers, Ace Manganese Prospects, Utah County, Utah

Enclosed are 8 copies of the geologic report by R. M. Smith of the U. S. Geological Survey, covering the above docket. It has been recommended that the loan be denied.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

Room 307, 320 South Main
Salt Lake City 1, Utah
22 October 1951

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA 1274X, Steele Brothers, Ace Manganese Prospects, Utah County, Utah.

Enclosed are 8 copies of a geologic report on Docket DMA 1274X, Steele Brothers, Ace Manganese Prospects, Utah County, Utah.

The manganese occurs in veins and on beds, interbedded limestones, sandstones and shales of Pennsylvanian age. The ore minerals are psilomelane and pyrolusite which occur without accompanying gangue minerals and average about 30 percent Mn. Ore reserves are inferred for one ore shoot on the Manganese Ace No. 3 Claim and are estimated to be 40 tons of material containing 30 percent Mn. There is no production from the property. The probability of finding any significant quantity of commercial grade ore, as a result of applicants proposed projects, is not good. It is, therefore, recommended that the application for a loan be denied.

An Engineering report by the U. S. Bureau of Mines is to accompany the Geologic report. Please hold in Denver pending its arrival.

I concur with the recommendations of the examining geologist and engineer.

for - Ralph J. Roberts

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA 1274X, Steele Brothers, Ace Manganese Prospects

Utah County, Utah

E. M. Smith, Geologist
U. S. Geological Survey

October 22, 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By R. M. Smith and
M. H. Howes

The Ace Manganese property was examined by the Geological Survey and Bureau of Mines during August and September, 1951. A DMA loan of $12,000 was requested by the property owner for underground exploration. The examination was made at the request of the Field Team, Region IV, to determine the feasibility of the proposed project.

The rocks in the area are interbedded limestone, sandstone and shale of Pennsylvanian age which strike northwest and dip approximately 40° to the northeast. Bedding faults of small displacement have cut the sediments. Pyrolusite and psilomelane occur in scattered, irregular, small deposits along the contact between shale and limestone, chiefly in fractures and bedding-plane faults.

The applicant has proposed a 240-foot adit on the Manganeese Ace claim and a 200-foot adit on the Manganeese Ace No. 3 claim, at a total estimated cost of $12,000. It is believed that bulldozer stripping, with possible shaft sinking, is a more suitable method of exploring the deposits. However, because little possibility exists that deposits of sufficient size will be found to warrant the expenditure, it is recommended that the loan application be denied.

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ILLUSTRATIONS

Figure 1. Index Map of Central Utah

Docket DMA 1274X, Steele Brothers

Ace Manganese Prospects, Utah County, Utah

GEOLOGY

The Manganese Ace Claims, Utah County, Utah are on the east flank of Lake Mountain. The rocks are sedimentary and form a northward plunging syncline. In the mine area, interbedded limestones, sandstones and shales of Pennsylvanian age[1] strike northwest and dip 40° NE.

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[1] Bullock, Kenneth C., Geology of Lake Mountain, Utah: Utah Geol. and Mineralogical Survey Bull. 41, June, 1951.

A porphyritic, silicic igneous rock crops out in a wash on the north end of the Manganese Ace Claim. Because this rock is highly weathered, it has few outcrops, and its relation to the sedimentary rocks was not determined. No faults of large displacement were observed in the area, although there are many small bedding-plane faults, especially in the shale beds.

ORE DEPOSITS

Manganese crops out in shallow pits in an area about 100 feet in diameter on the Manganese Ace Claim. The attitude and nature of the mineralized rock cannot be seen because the pits have sloughed. Small amounts of psilomelane occur on the dumps.

At the Manganese Ace No. 3 Claim, south of the Manganese Ace Claim, hard slaggy masses of manganese oxides, without accompanying gangue minerals, occur along bedding faults in a shale member 20 to 50 feet thick. At the largest exposure psilomelane and pyrolusite occur in a vein about 10 feet long and from 1 to 6 inches thick striking north 50 degrees west and dipping 40° NE. A smaller parallel vein occurs a few feet in the footwall, and a third vein

may occur about 10 feet in the hanging wall of the first exposure. Mineralization is essentially confined to the shale members or to limestone beds within the shale. Locallization of ore in shoots 10 feet or less in length may be the result of thin, competent limestone beds having been cut and brecciated by irregular bedding faults. The shale is locally altered to clay and is brownish where it is mineralized, as opposed to its normal gray color. The ore deposits are epigenetic and are believed to have been deposited from ascending solutions.

The grade of ore ranges from 29 percent to 33 percent Mn for the vein material.

The adjoining Wildcat Mine[1] has yielded about 350 tons of high grade

---

[1] Crittenden, Max D., Manganese deposits of western Utah: U. S. Geol. Survey Bull. 979 (in publication).

---

manganese ore from the same stratigraphic horizon and from an occurrence similar to the Ace prospect. A pipe-like ore shoot was mined to a depth of 196 feet. It is reported that the grade of ore increased from about 30 percent manganese near the surface to 50 percent manganese for ore mined at depths greater than 20 feet.

No other deposits are reported in the district.

ORE RESERVES

Inferred ore reserves at the Manganese Ace No. 3 claim, assuming a depth of 100 feet, a length of 10 feet, and a thickness of 6 inches, are 40 tons. No tonnage is inferred for other possible shoots in parallel veins or for the Manganese Ace Claim.

PROPOSED EXPLORATION

The applicant has proposed two exploration projects:

Project No. 1. Manganese Ace Claim.- A 240-foot adit is proposed to explore the downward extension of surface showings.

Project No. 2. Manganese Ace No. 3 Claim.- A 200 foot adit under the surface showings is proposed.

The vein dips 40° NE, and the hillside slopes 10° to 15° in the same direction. A short crosscut adit is thus indicated by the physiography. As the ore shoot is narrow and its rake is not known, an adit might easily miss the ore shoot and would have to be supplemented by some amount of drifting.

The proposal, made by the Operating Committee, to sink an incline shaft is in line with the adage "follow the ore" and is believed to be a better method of exploration.

SUMMARY AND CONCLUSIONS

The rocks in the mine area are interbedded limestone, sandstone, and shale of Pennsylvanian age which strike northwest and dip 40° NE. They have been cut by bedding faults of small displacement.

Manganese oxides occur as veins up to 6 inches thick and 10 feet long in bedding-plane faults in a shale member 20 to 50 feet thick. The ore minerals are psilomelane and pyrolusite which occur without accompanying gangue minerals and average about 30 percent Mn.

Ore reserves are inferred for one ore shoot on the Manganese Ace No. 3 Claim and are estimated to be 40 tons of material containing 30 percent Mn.

There is no production from the property but the deposits are similar to the nearby Wildcat mine which has yielded about 350 tons of ore averaging about 50 percent Mn. There are no other deposits reported in the district.

The applicant has proposed two exploration projects, one on the Manganese Ace Claim and one on the Manganese Ace No. 3 Claim. Ore in place is not exposed on the Manganese Ace Claim; consequently no recommendation for this claim is made. At the Manganese Ace No. 3 claim, the ore is in such narrow shoots that the exploration will probably extract most of the ore body. Because of the lack of geologic information from which to make reliable projections, an inclined shaft, as proposed by the Coordinating Committee in its request for a field examination, is believed to be the proper method of exploring the deposit. It is recommended, however, that the application be denied, as the possibility of revealing a significant tonnage is very small.

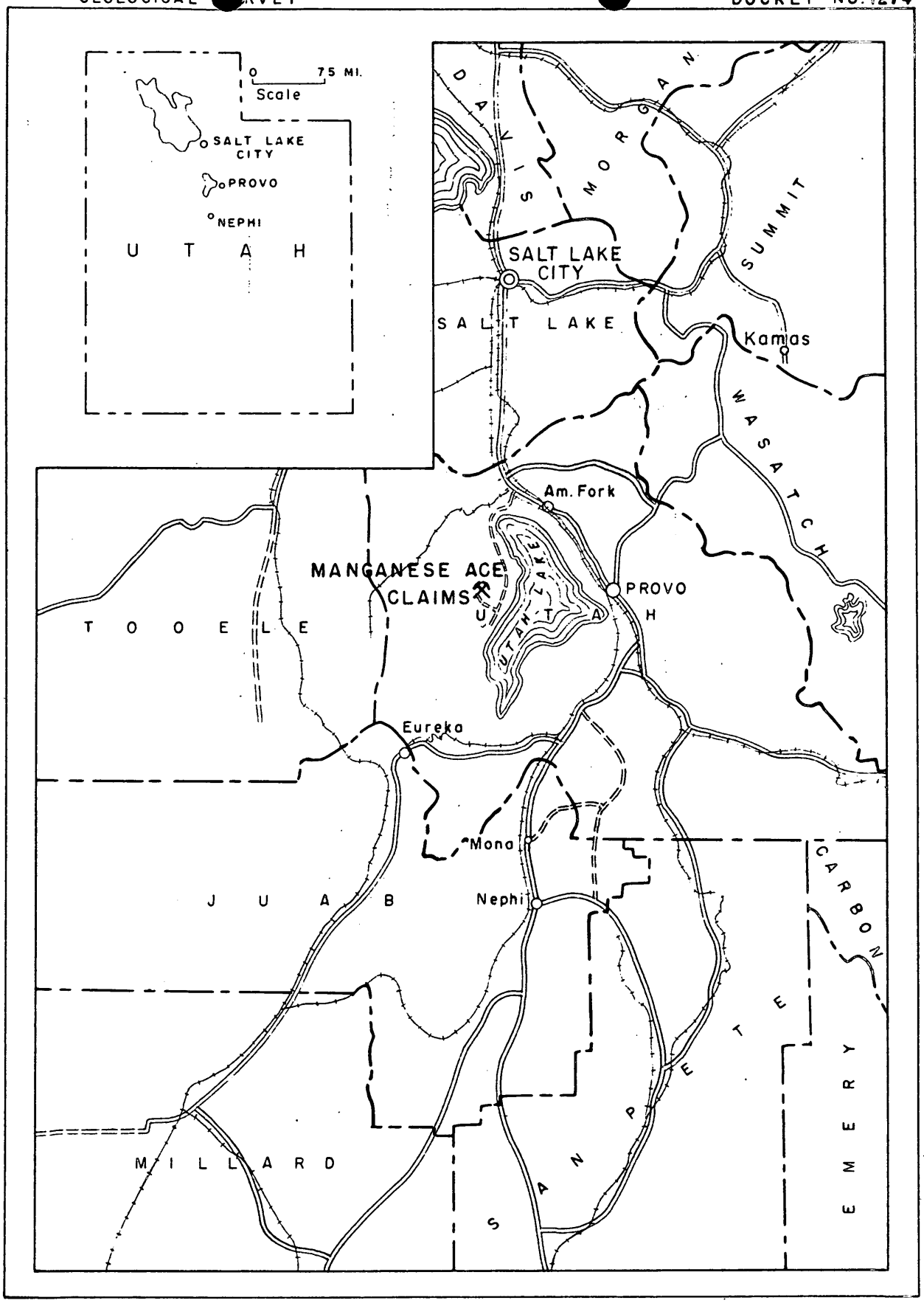

FIG. 1 INDEX MAP OF CENTRAL UTAH

0 5 10 15 20 MILES
Scale

ACE MANGANESE PROPERTY
UTAH COUNTY, UTAH
DMA-1274X
Manganese

Engineering Report

By M. H. Howes
Mining engineer
U. S. Bureau of Mines

ACE MANGANESE PROPERTY
UTAH COUNTY, UTAH

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ILLUSTRATIONS

Fig. 1 Location map, Ace Manganese property, Utah County, Utah

INTRODUCTION

Application for a DMA exploratory loan was made by Dell and George Steele to aid in driving two adits, one 240 feet in length, and the other 200 feet, to explore manganese deposits on the Ace Manganese property, Utah County, Utah. The estimated cost of the project is $12,000. Because the chance of liquidating such a loan from production did not appear promising to the DMA Coordinating Committee, a field examination was requested to determine whether or not a reduction to a maximum loan of $2,500 is warranted and if an inclined shaft on the outcrop, as a better means of exploration, is feasible. A field examination was made by M. H. Howes, mining engineer, Bureau of Mines, on August 23, 1951, and again by M. H. Howes and R. M. Smith, geologist, Geological Survey, on September 12, 1951.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property is in Sec. 21, T. 7 S., R. 1 W., S.L.B.M., on the west slope of the Lake Mountains, approximately 9 miles southeasterly from Fairfield, Utah, the nearest railroad shipping point. Ores are trucked to the Geneva Steel Company, a distance of 25 miles, 10 miles of which is fair country road and the other hard surfaced. A Utah Power and Light Company transmission line passes within 2-1/2 miles of the property, and Utah Lake, the nearest known source of water, is about 3 miles to the east. The climate is semiarid. Summers are hot and dry, and winters are cold with moderate snowfall.

HISTORY AND PRODUCTION

Ace Manganese property was recently located, and no production has been recorded. Several years ago pits were excavated along a zone of mineralization, and small piles of manganese ores remain.

The Wildcat mine, adjoining the Ace Manganese property on the north, was operated about 1935, and is reported to have produced eight carloads of ore assaying from 35 to 55 percent manganese.

OWNERSHIP AND EXTENT

Four lode mining claims, Manganeese Ace, and Manganeese Ace Nos. 1, 2, and 3, were recently located, and are owned by a partnership of Dell Steele, 882 North 2nd East Street, Nephi, Utah, and George Steele, Goshen, Utah.

DESCRIPTION OF THE DEPOSITS

Scattered, irregular deposits of manganese oxides, chiefly pyrolusite and psilomelane, occur along a narrow mineralized contact zone between limestone and shale. This zone is over 3 miles long, starting with a strike of N. 45° W. at the south end and gradually swinging northerly for about 1/2 mile until it reaches and retains a strike of north for the remainder of its course. The four Manganeese Ace claims are located end to end along the south part of this zone. The contact has an easterly dip of 40° to 45°. The footwall limestone is light bluish-gray, fine grained, very soluble, and contains scattered chert nodules. The hanging wall shale is soft, yellow-brown, laminated, and is altered to

clay in places. Irregular lenses and pipes of ores occur as replacements and as filling in fractures and bedding planes near the contact. A pipe 196 feet long, 2 to 12 feet wide, and 1 to 6 feet thick (averaging about 2 feet) was mined down dip in a crooked inclined shaft on the Wildcat property. It was reported that ore 2 feet thick in the shaft bottom continues downward. Although thin seams of manganese mineralization extend outward along the sides of this pipe, almost the total distance in the shaft, little or no exploration was done laterally.

Tests made on a 2-ton sample from the Wildcat mine by the Salt Lake Experiment Station, Metallurgical Division, Bureau of Mines, published in R.I. 4466, show that the ore is readily amenable to concentration by simple ore-dressing methods, and that a high-grade product comparatively free of impurities can be made, with good recovery.

Meager deposits of ore exposed in several pits along the contact on the Ace Manganese property are similar in character to the deposits on the Wildcat. Grab samples were taken of ore piles at three pits: one at the south end, one about at the middle, and one at the north end of the property, with the following results:

Sample	Analysis, percent					
	Mn	Fe	SiO_2	P	S	Zn
MA No. 1 (south end)	31.1	1.1	7.2	0.08	0.16	<0.05
MA No. 2 (middle)	32.5	3.9	26.6	.15	.12	< .05
MA No. 3 (north end)	29.5	3.4	13.8	<.01	.09	< .05

MINABLE ORE RESERVES

There are no measurable ore reserves.

PRESENT STATUS

No work is being done on the property at present.

There are no items of equipment or other facilities on the ground. The Steele brothers report that they own a small compressor, jackhammer, drill steel, hoses, small tools, etc.

PROJECT PROPOSALS

The work proposed by the applicant to explore the Ace Manganese deposits, at an estimated cost of $12,000, is not believed to be the most feasible method for discovering ores on this property.

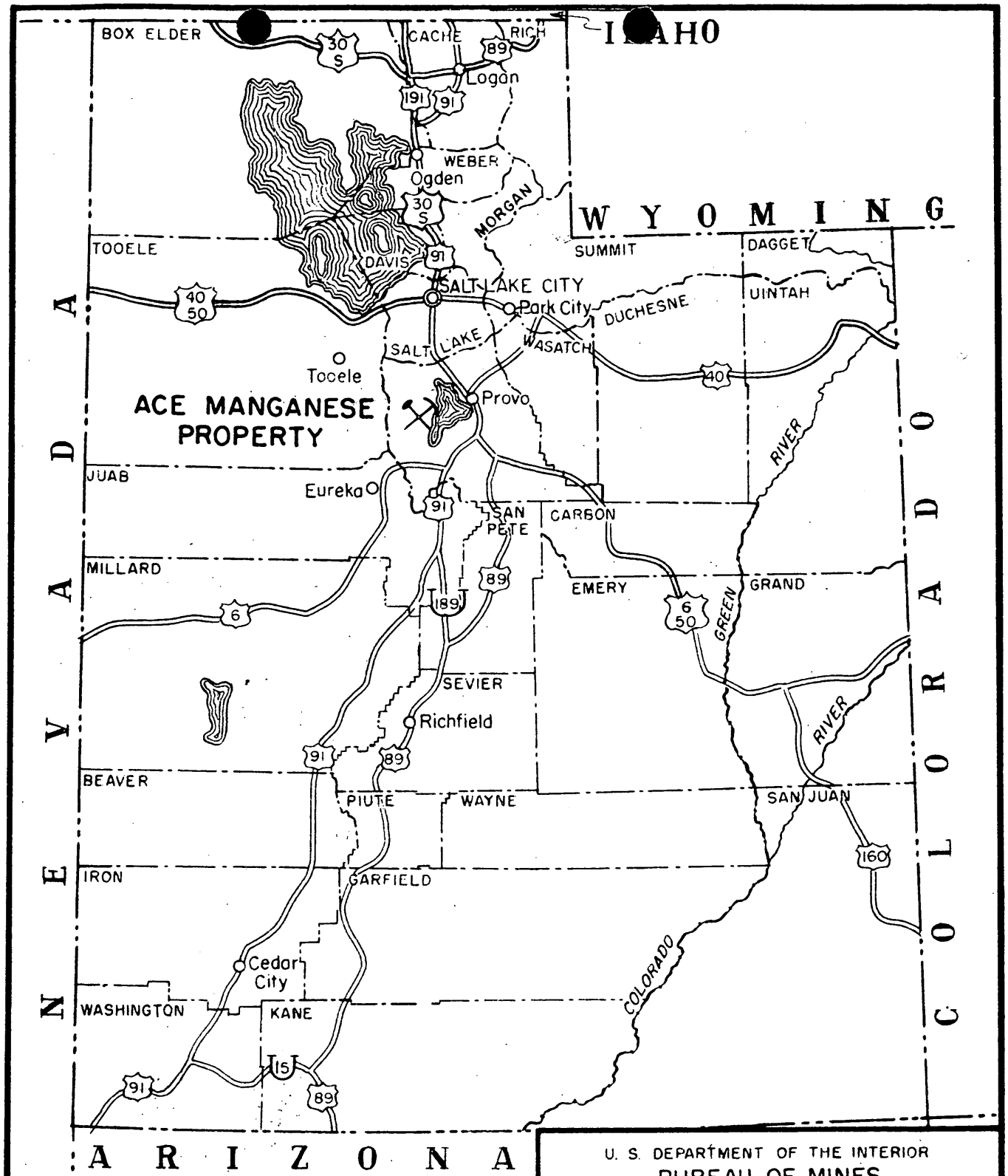
Most of the length of the 240-foot adit proposed for the Manganese Ace claim would be required to crosscut to the mineralized zone. The chances of cutting minable pipes or lenses of ore in the short remaining distance along the zone are not promising. It is questionable that sufficient ore would be found to pay the cost of exploration. It appears that a more suitable plan for exploring this deposit is to first strip the overburden by means of a bulldozer along the zone of mineralization, and then, if satisfactory results are obtained, to sink an inclined shaft on the most favorable showing.

On the Manganese Ace No. 3 claim, where the applicant proposes to drive a 200-foot adit, it is believed that bulldozer stripping will uncover the mineralization along the strike and for at least some distance down dip, as the deposit dips only slightly greater than the slope of the hill.

CONCLUSIONS AND RECOMMENDATIONS

The thin, erratic deposition of the manganese oxide ores on the Wildcat property indicates that while the quality of the ore can be expected to be good, the reserves on the Ace Manganese deposits will probably be small.

It is recommended that a DMA loan for exploration be denied.



0 50 100

SCALE OF MILES

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 1 Proj. No.

Location Map

ACE MANGANESE PROPERTY

UTAH COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: OCT. 25, 1951
TRACED: OCT., 1951; A.P.T.S.	300 - 97 - E
CHECKED:	

FILE COPY

JUL 18 1951

FILE COPY
SURNAME:

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

Holderer
Selfridge
Ridgway
Cullinan/H

Mr. J. H. East, Jr., Executive Officer
DMA Field Team, Region IV
2 4 New Customhouse Bldg.
Denver 2, Colorado

In reply please refer to:
DMA-127b — Manganese

Dear Mr. East:

It is requested that you arrange for a field examination of the Manganese ice group of claims located in Section 31, T. 7S., R. 1 W, Salt Lake Meridian, 15 miles from Lehi, Utah. Dell and George Cheele, a partnership, applied for an exploration loan for a project costing $12,000. They propose driving two adits, one 240 feet in length and the other 200 feet. Although the chances of limited time such a loan from production appear to be quite slim it is thought that the property might merit a maximum loan of $2,500 to sink an inclined shaft on the outcrop as a better means of exploration. Will you please inform us whether or not the reduced loan is warranted and whether or not the inclined shaft is a feasible project.

Two copies each of forms DF 100 and DF 103 are enclosed.

Very truly yours,

Tom Lyon
Chairman, Coordinating Committee

Enclosures

Approved:

Lowell B. Moon
For the Bureau of Mines

Olaf N. Rove
For the Geological Survey

GCSelfridgeAWJ

cc:File
Adm. Reading File
Records & Reports Unit
Mr. Holderer

FILE COPY
SURNAME:

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

JUL 18 1951

Selfridge
Holderer
Kirgwax
Dittenhoffer
Moore

July 13, 1951

Mr. Dell Steele

Nephi, Utah

In reply please refer to:
DMA-127A-X -- Manganese

Dear Mr. Steele:

A field examination of your Manganese Ace group of claims has been requested. It will be arranged by Mr. J. H. West, Jr., Executive Officer, DMA Field Team, Region IV, 227 New Customhouse Building, Denver 2, Colorado. Your cooperation aiding the field man during the examination will be appreciated.

Very truly yours,

Tom Lyon

Tom Lyon
Director, Supply Division

GCSelfridge:awj

cc:File
Adm. Reading File
Reports & Records Unit
Mr. Holderer
Field Team IV

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George B. Holderer DATE: July 6, 1951

FROM : M. D. Crittenden

SUBJECT: DMA-127~~9~~A X

The applicants propose to explore a group of claims known as the Manganese Ace. The adjoining Wildcat mine was operated by the same applicants, and shipped about 230 tons of ore averaging 45% Mn. Applicants wish to do work costing $12,000 of which the Government's share will be $9,000. If ore of the same grade as the Wildcat is found, the mine would need to produce at least 3,000 tons to repay the loan at the maximum rate of 5%. The chances of such production appear very slim.

Nevertheless, some exploration of this property may be warranted, and it is suggested that the application be approved tentatively for $2500 maximum and referred to the field to determine if (1) the property warrants that much, (2) if a single inclined shaft sunk on the outcrop would not be a better means of exploration.

M. D. Crittenden Jr.

George B. Holderer July 6, 1951

M. D. Crittenden

DMA-1279 X

The applicants propose to explore a group of claims known as the Manganese Ace. The adjoining Wildcat mine was operated by the same applicants, and shipped about 230 tons of ore averaging 45% Mn. Applicants wish to do work costing $12,000 of which the Government's share will be $9,000. If ore of the same grade as the Wildcat is found, the mine would need to produce at least 3,000 tons to repay the loan at the maximum rate of 5%. The chances of such production appear very slim.

Nevertheless, some exploration of this property may be warranted, and it is suggested that the application be approved tentatively for $2500 maximum and referred to the field to determine if (1) the property warrants that much, (2) if a single inclined shaft sunk on the outcrop would not be a better means of exploration.

MDCrittenden:gt

FILE COPY
SURNAME:

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

June 21, 1951

Mr. Dell Steele
882 N. 2nd E. Street
Nephi, Utah

Subject: DMA-1274X
Re: Exploration Loan

My dear Mr. Steele:

Receipt is acknowledged of your application and attachments of June 5, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1274X and referred to Mr. George Holderer, Chief, Manganese Branch on June 18, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1274X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

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

~~SANDON P. STE~~
Fulderer
Nephi Utah
June 17, 1951

Dr. James Boyd
Minerals Administrator
Washington D.C.

Dear Mr. Boyd.

Am sending you some material I neglected to send with my aplication for government assistance. The D.M.A no 1274X was assigned me recently.

Hoping the crude map and the settlement sheet will help to give a clearer picture of the nature of the ore and the meagre extent of the Development done on the Wild cat claims.

These claims are being reclaimed by my brother

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
JUN 21 1951

LANDON F. STROBEL
Executive Secretary

and myself, and we are hopeful of reopening this prospect.

Hoping this material will assist you with information and that a loan can be obtained for development on the Manganese Ace group of claims. I remain,

Yours Respectfully
Bell Steele.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 21 1951
LANDON F. STROBEL
Executive Secretary

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERI
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-1274 X

Date received 6/13/51

Participation

Steele Brothers
833 North 2nd West
Nephi, Utah

Name and address of applicant

Date June 5, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $12,000.00

Mineral or metal Manganese

Percentage of Government participation 75 %

Location of mine Section 21, Township 7 South, Range 1 West, Salt Lake Meridian.

Date of filing MF-100 May 10, 1951

DMA Docket Number, if available 1274X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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

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

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

16—64067-1

See answers to questions on attached sheet.

THE PROPERTY

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

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

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

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

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

THE REQUIREMENTS AND COSTS

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

CERTIFICATION

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

Steele Bros
(Name of company)

By Dell Steele
(Signature of authorized official)

June 5, 1951
(Date)

Partner
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

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

dma - 1274 X

ANSWERS TO QUESTIONS ON FORM RF-103

1. Partnership.
2. Dell Steele and George Steele, Nephi, Utah.
3. ---
4. Fifteen years experience in the Tintic Mining District.
5. Owners.
6. None.
7. ---
8. None.
9. $300.00 Cash, compressor, Jackhammer, hose, steel, and our labor. Yes.
10. This is new claim and the property is barren. The claim is located in Section 21, Township 7 South, Range 1 West, Salt Lake Meridian. Exploration to be done on Manganese Ace and Manganese Ace No. 3. Both areas are the same.
11. Manganese Ace and Manganese Ace 1, 2, 3. Former names were Blackhawk 1, 2, 3.
12. Nine miles to Fairfield, Utah, and 12 miles to Lehi, Utah. Good roads. Nine miles to shipping point on railroad.
13. Utah Lake--one and one-half miles distance.
14. None.
15. Can be shipped by truck to Geneva Steel Company 25 miles distance.
16. No history. a. Grass root showings on all four claims. b. The adjoining
17. claims (The Wildcat Group) produced 8 carloads of high-grade ore. c. See attached letter.
17. None.
18. Has not been operating.
19. None.
20. Manganese.
21. We propose to run two tunnels. One on the Manganese Ace--240 feet. Also one 200 feet on the Manganese Ace No. 3. This work is to be done where our best showings are and where we can obtain depth with shortest distance of tunnels.
22. The conditions are exactly the same as on the Wildcat Claims 1 mile north where considerable ore has been mined. The ore found at the outcrops is almost identical with that found on Wildcat Claims. The engineers report for that district is very favorable and optomistic about its future. The ore is very high grade pyrolusite manganese. Assays running from 35 % to 60 %.
23. a. Salaries for three laborers @ $40.00 per day.....$6,000.00
    b. We will supervise our own project...
    c. We will need only a small shack to shelter machinery.
    d. We plan to use bulldozer to improve roads and open up and clean away entrance to proposed tunnels..... 500.00
    e. We would like to buy a small slusher..... 700.00
    f. Cost of rentals, powder, gasoline, oil, caps, fuses carbide and other miscellaneous items..... 2,800.00
    g. We realize various other expenses will come up but we hope to be producing long before this amount has been depleted.

24. Total amount of loan..... $12,000.00

24. We will furnish you each month an itimized statement of expenditures and also a statement of footage and developments. We expect to complete our explorations in one year.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. Oma — 1274X

Date received 6/12/51

Participation

Steele Brothers
882 N. 2nd East
Nephi, Utah

Name and address of applicant

Date 6/5/51

FILL IN THIS BLOCK

Date of application June 5th 1951 Estimated cost $12000

Mineral or metal Manganese Percentage of Government participation 75

Location of mine Section 24 T 7 R 14 W S.L.B.M
Lake Mining district known as Jones Canyon

Date of filing MF-100 May 28, 1951 DMA Docket Number, if available 1274X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Partnership
*2. If a partnership, state names and addresses of partners. Dellard George Steele
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. None
*4. Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who will manage the project. 15 years mining
*5. Are you the owner or the lessee of the property? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. None

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. None
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? We only have $500. but will furnish labor Compressor and [illegible] Hammers [illegible]

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

16—64067-1

MF-200
(April 1951)

Section 21 — T. 7 R 1 W.

Docket No. DMA 1274 X
Commodity Manganese

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 5th day of June, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Dell Steele, Nephi, Utah
George Steele Goshen, Utah
or
Steele Brothers, Nephi, Utah
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 Utah, County of Utah described as follows: [3] Lots 1 & 2 in Block 1 South and Lots in Long Canyon and Section 21, Township 7 S, R. 1 W. S. L. B. & M. Uncontested
with respect to which the Operator represents and undertakes: [4]

(*a*) That ~~he is~~ we the sole owner(s) 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: (None)
Dell Steele, and George Steele are the Owners

(*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 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] 1 year 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. Attached hereto, marked "Exhibit 'B'," is a detailed list of 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 its agreed pro-rata share of the cost. 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.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. 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.

UNITED STATES DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

TITLE 32A—NATIONAL DEFENSE, APPENDIX

Chapter XII—Defense Minerals Administration, Department of the Interior

[MO-5]

MO-5—Regulations Governing Government Aid in Defense Exploration Projects

This regulation is found to be necessary and appropriate to carry out the provisions of the Defense Production Act of 1950 with reference to the encouragement of exploration, development, and mining of critical and strategic minerals and metals pursuant to section 303 (a) (2) of the act. In the formulation of this regulation there has been consultation with industry representatives, including trade association representatives, and consideration has been given to their recommendations.

EXPLANATORY PROVISIONS

Sec.
1. What this regulation does.
2. Government aid.

APPLICATIONS AND CONTRACTS

3. Forms and filing.
4. Scope of application.
5. Action on applications.
6. Form and term of contracts.
7. Criteria.
8. Definitions.

GOVERNMENT PARTICIPATION

9. Ratio of contributions.
10. Fixtures and improvements.
11. Operating equipment.
12. Title to and disposition of property.
13. Allowable costs of the project.
14. Repayment by Operator.

Authority: Sections 1 to 14 issued under sec. 704, Pub. Law 774, 81st Cong.; E. O. 10161, Sept. 9, 1950, 15 F. R. 6105; E. O. 10200, Jan. 3, 1951, 16 F. R. 61; Order of the Secretary of the Interior No. 2605, Dec. 4, 1950, as amended; delegation of the Defense Production Administrator to the Secretary of the Interior, Feb. 28, 1951. Interpret or apply sec. 303 (a) (2), Pub. Law 774, 81st Cong.

EXPLANATORY PROVISIONS

Section 1. *What this regulation does.* This regulation sets forth procedures under which Government aid may be obtained in financing the cost of projects for exploration for unknown or undeveloped sources of strategic or critical metals and minerals.

Sec. 2. *Government aid.* The Government, in suitable cases, will aid in an exploration project for strategic or critical metals and minerals by providing some part of the costs of the project, the Government's contribution to be repayable from the net returns from any ore, concentrates, or metal produced as a result of the exploration project.

APPLICATIONS AND CONTRACTS

Sec. 3. *Forms and filing.* Application for Government aid in any specified exploration project shall be submitted in quadruplicate on Form No. MF-103, either to

The Defense Minerals Administration,
Department of the Interior,
Washington 25, D. C.

or to the nearest Defense Minerals Administration field executive officer as indicated by the following addresses:

Region	Area served	Address
I	Alaska	Federal Bldg., P. O. Box 2990, Juneau, Alaska.
II	Washington, Oregon, Idaho, and Montana.	South 157 Howard St., Spokane, Wash.
III	California and Nevada	1415 Appraisers Bldg., San Francisco, Calif.
IV	Arizona, New Mexico, Colorado, Utah, and Wyoming.	224 New Customhouse Bldg., Denver 2, Colo.
V	North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Wisconsin, and Michigan.	426 Plymouth Bldg., Minneapolis, Minn.
VI	Kansas, Louisiana, Oklahoma, Texas, Arkansas, and Missouri.	P. O. Box 431, Joplin, Mo.
VII	Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi.	Room 13, Post Office Bldg., Knoxville, Tenn.
VIII	Illinois, Indiana, Ohio, Kentucky, Virginia, West Virginia, Maryland, New York, Vermont, Maine, New Hampshire, Connecticut, Rhode Island, New Jersey, Delaware, and Pennsylvania.	Eastern Experiment Station, College Park, Md.

Applications filed prior to the effective date of this regulation, if sufficient, will be treated as though filed on the prescribed form. Applications must be filed at least 30 days prior to the expiration of the authority granted by the Defense Production Act of 1950, which at the time of issuing these regulations, is June 30, 1951.

Sec. 4. *Scope of application.* Each application shall relate to a single exploration project which shall be fully described and justified by detailed substantiating data as called for by the application form. The Administrator may require the filing of additional information, reports, and exhibits, in connection with the application, and may, at his discretion, require such physical examination of the project as he deems necessary.

Sec. 5. *Action on applications.* The Administrator, after considering the application and all matters relating thereto, shall either approve or disapprove the application. If the Administrator approves the application, he shall certify it as presenting a suitable project for an exploration project contract.

Sec. 6. *Form and term of contracts.* If the application is approved and certified for a contract, the Government, acting through the Administrator, will enter into an exploration project contract with the applicant on Form MF-200. No exploration project that will take more than two years to perform shall be approved for an exploration project contract.

Sec. 7. *Criteria.* The following factors will be considered and weighed in passing upon applications:

(a) Strategic importance of the mineral involved.

(b) The geologic probability of making a significant discovery.

(c) The availability of manpower.

(d) The availability of equipment and supplies.

(e) The accessibility of the project.

(f) The availability of water and power.

(g) The operating experience and background of the applicant.

Sec. 8. *Definitions.* As used in these regulations:

(a) "Exploration project" means the search for unknown or undeveloped sources of strategic or critical metals or minerals within a specified area or parcel of ground in the United States, its territories or possessions, whether conducted from the surface or underground, including recognized and sound procedures for obtaining pertinent geological, geophysical, and geochemical information. The work shall not go beyond a reasonable delineation and sampling of the ore, and shall not include work prosecuted primarily for mining or preparation for mining.

(b) "Operator" means a person, firm, partnership, corporation, association, or other legal entity by whom or for whose account and interest an exploration project is to be carried out.

(c) "Administrator" means the Administrator of Defense Minerals Administration or his representative authorized in writing.

(d) "Government" means The United States of America.

GOVERNMENT PARTICIPATION

Sec. 9. *Ratio of contributions.* The Government will contribute to the exploration project, upon the terms specified in the contract, a certain percentage of the total cost of the project, depending upon the mineral which is the subject of exploration, as follows:

(a) In the case of chromium, copper, fluorspar, graphite (crucible flake), iron ore, lead, molybdenum, sulfur, and zinc (and cadmium)—50 percent.

(b) In the case of antimony, manganese, mercury, tungsten—75 percent.

(c) In the case of asbestos (spinning grade), beryl, cobalt, columbium-tantalum, corundum, cryolite, industrial diamonds, kyanite (strategic), mica (strategic), monazite, uranium, and rare earth ores, nickel, platinum group metals, quartz crystals (piezo-electric), talc (steatite), and tin—90 percent.

SEC. 10. *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. With the written approval in advance by the Administrator, necessary additional facilities, buildings, and fixtures may be purchased, installed and erected by the Operator, and the Government will contribute its agreed pro-rata share of the cost thereof. 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.

SEC. 11. *Operating equipment.* With the written approval in advance by the Administrator, necessary operating equipment may be rented, purchased, or otherwise furnished by the Operator. Rentals paid for equipment rented and the rental value of equipment owned and furnished by the Operator shall be allowed as costs of the project. 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.

SEC. 12. *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.

SEC. 13. *Allowable costs of the project.* The allowable costs of the project in which the Government will participate shall include the following:

(a) The necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, labor, direct supervision, engineering, power, water, and utilities.

(b) The reasonable, necessary cost of rehabilitating and putting into useful and operable condition existing facilities, buildings, installations, and fixtures, and of maintaining them in that condition.

(c) If the purchase, installation, or erection was approved in advance by the Administrator, as provided in section 10 of this regulation, the depreciation on fixtures and improvements computed as provided in section 10 of this regulation.

(d) If the rental or purchase of operating equipment was approved in advance by the Administrator, as provided in section 11, of this regulation, the rental, rental value, or depreciation, on operating equipment, computed as provided in section 11 of this regulation.

No items of general overhead, corporate management, interest, or any other indirect costs not expressly allowed by these regulations, or work performed or costs incurred before the date of the contract, shall be allowed as costs of the project in which the Government will participate.

SEC. 14. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Administrator considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Administrator, within six months thereafter shall so certify to the Operator, particularly describing and delimiting his estimate of the discovery of the development. Thereafter, if and when 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 ten 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 ($8.00) per ton of ore: one and one-half (1½) percent, plus one-half (½) percent additional for each full fifty cents ($.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 property 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 ten-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 section 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.

This regulation shall become effective upon publication in the FEDERAL REGISTER.

JAMES BOYD,
Administrator,
Defense Minerals Administration.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-1274X

Date received 6/13/51

Participation

Steele Brothers
882 North 2nd East
Nephi, Utah

Name and address of applicant

Date June 5, 1951

FILL IN THIS BLOCK

Date of application June 5, 1951

Estimated cost $12,000.00

Mineral or metal Manganeese

Percentage of Government participation 75 %

Location of mine Section 21, Township 7 South, Range 1 West, Salt Lake Meridian.

Date of filing MF-100 May 18, 1951

DMA Docket Number, if available 1274X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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

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

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

16—64067-1

See answers to questions on attached sheet.

THE PROPERTY

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

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

*11. State the present and former names of the property, if any.

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

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

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

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

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

Steele Brothers
(Name of company)

By Dell Steele
(Signature of authorized official)

June 5, 1951
(Date)

Partner
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

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

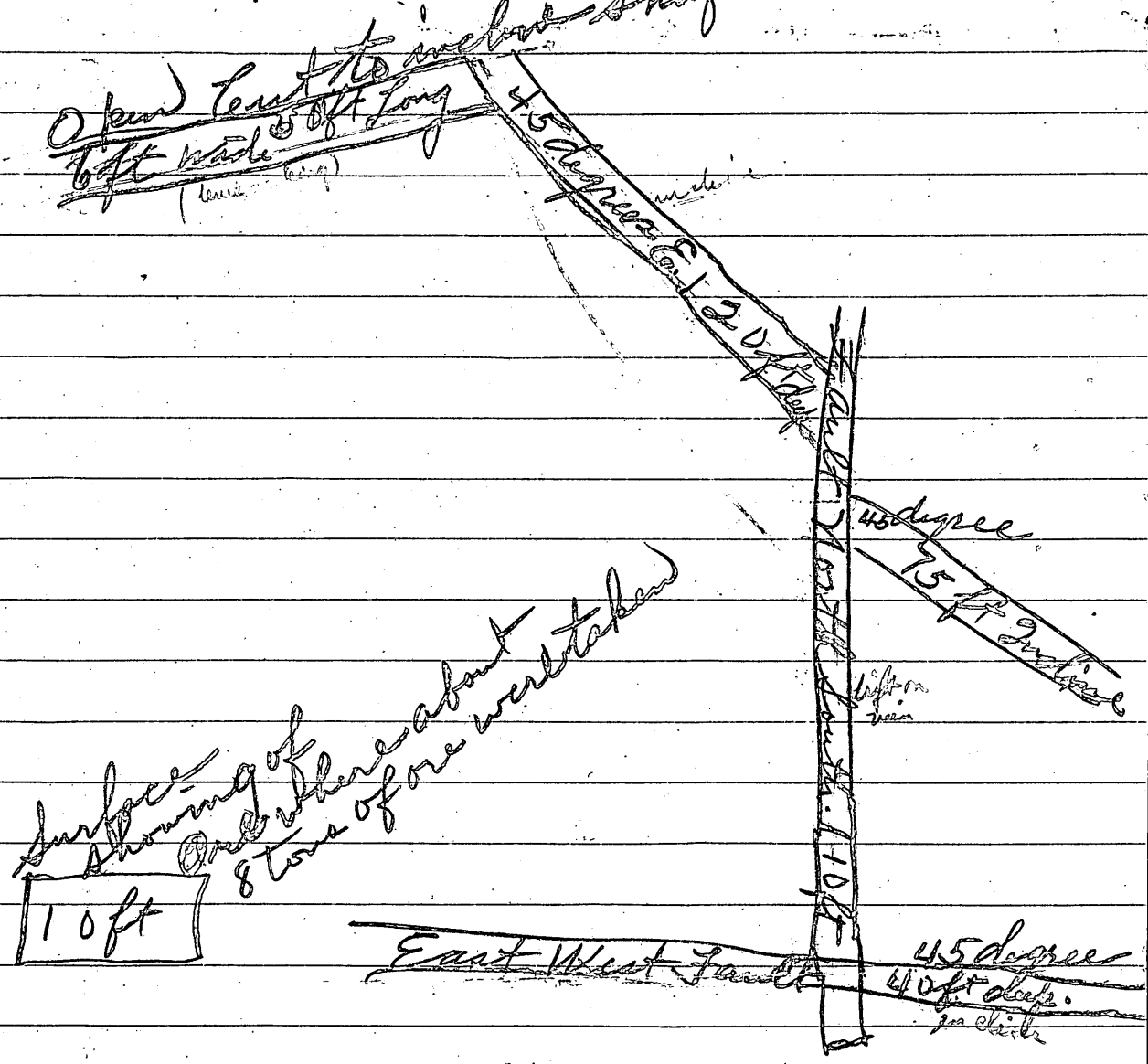
ANSWERS TO QUESTIONS ON FORM MF-103

1. Partnership.
2. Dell Steele and George Steele, Nephi, Utah.
3. ---
4. Fifteen years experience in the Tintic Mining District.
5. Owners.
6. None.
7. ---
8. None.
9. $500.00 Cash, compressor, Jackhammer, hose, steel, and our labor. Yes.
10. This is new claim and the property is barren. The claim is located in Section 21, Township 7 South, Range 1 West, Salt Lake Meridian. Exploration to be done on Manganeese Ace and Manganeese Ace No. 3. Both areas are the same.
11. Manganeese Ace and Manganeese Ace 1, 2, 3. Former names were Blackhawk 1, 2, 3,
12. Nine miles to Fairfield, Utah, and 12 miles to Lehi, Utah. Good roads. Nine miles to shipping point on railroad.
13. Utah Lake--one and one-half miles distance.
14. None.
15. Can be shipped by truck to Geneva Steel Company 25 miles distance.
16. No history. a. Grass root showings on all four claims. b. The adjoining
17. claims (The Wildcat Group) produced 8 carloads of highgrade ore. c. See attached letter.
17. None.
18. Has not been operating.
19. None.
20. Manganeese.
21. We propose to run two tunnels. One on the Manganeese Ace--240 feet. Also one 200 feet on the Manganeese Ace No. 3. This work is to be done where our best showings are and where we can obtain depth with shortest distance of tunnels.
22. The conditions are exactly the same as on the Wildcat Claims 1 mile north where considerable ore has been mined. The ore found at the outcrops is almost identical with that found on Wildcat Claims. The engineers report for that district is very favorable and optomistic about its future. The ore is very high grade pyrolusite manganeese. Assays running from 35 % to 60 %.
23. a. Salaries for three laborers @ $40.00 per day.....$8,800.00
    b. We will supervise our own project...
    c. We will need only a small shack to shelter machinery.
    d. We plan to use bulldozer to improve roads and open up and clean away enterance to proposed tunnels..... 500.00
    e. We would like to buy a small slusher..... 700.00
    f. Cost of rentals, powder, gasoline, oil, caps, fuses carbide and other miscellaneous items..... 2,000.00
    g. We realize various other expenses will come up but we hope to be producing long before this amount has been depleted.

    Total amount of loan..... $12.000.00
24. We will furnish you each month an itimised statement of expenditures and also a statement of footage and developments. We expent to complete our explorations in one year.

Wild Cat Development.

This is a crude map of the work done on the wild cat where app. 8 carloads of ore were mined. Ore continues downward on both East and west breaks but is small



M. R. Form No. 19
(Rev. 5-15-43)

METALS RESERVE COMPANY

Settlement Sheet for Manganese Ore and Concentrates

Purchase Depot: Delta, Utah **Lot No.** D-19-0 **Date** December 16, 1943.

Seller: George Steel **Name of Property** Wildcat

Address: Goshen, Utah **Mining District** North Tintic

County Utah **State** Utah

WT. CERT. NO.	GROSS LBS.	TARE LBS.	NET LBS.	% MOISTURE	NET DRY LBS.
36730	21400	6475	14925		
36732	19100	6560	12540		
			27,465	2.90	

Total 26,669

Net Dry Tons of 2240 lbs. 11.9058

ASSAYS

Manganese	43.41 %
Iron	1.61 %
Silica	10.82 %
Alumina	2.59 %
Phosphorus	%
Zinc	%
Thru 20 mesh	%

VALUE PER DRY LONG TON

Base Price per unit $1.0000

Add Premiums: $0. .022 $1. .022

Deduct Penalties: $0. .073 $1. .073

43.41% manganese @ $ .9490 or

Value per Dry Long Ton $ 41.20

PREMIUMS PER DRY LONG TON UNIT OF MANGANESE

%	Manganese above 48.0% @ $0.005	$0.
4.39 %	Iron below 6.0% @ $0.005	$0. .022
	Total	$0. .022

PENALTIES PER DRY LONG TON UNIT OF MANGANESE

%	Manganese below 48.0% to and incl. 44.0% @ $0.01	$0.
.59 %	Manganese below 44.0% to and incl. 40.0% @ $0.015, plus $0.04	$0. .049
%	Manganese below 40.0% to and incl. 35.0% @ $0.02, plus $0.10	$0.
%	Iron above 6.0% to and incl. 8.0% @ $0.01	$0.
%	Iron above 8.0% @ $0.0075, plus $0.02	$0.
2.41 %	Silica plus alumina above 11.0% to and incl. 15.0% @ $0.01	$0. .024
%	Silica plus alumina above 15.0% @ $0.0075, plus $0.04	$0.
	Total	$0. .073

SETTLEMENT

11.9058 long tons @ 41.20 $ 490.52

Charges: $

Check No. Amount Due $ 490.52

Checked by [signature] Approved by /s/ Marvin J. Wallway METALS RESERVE COMPANY

By: [signature]

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

a.e.c.

May 31, 1951

AIR MAIL

Steele Brothers
882 North 2nd East Street
Nephi, Utah

In reply please refer to
MM-1274-X

Gentlemen:

We have received your typed answers to the technical information requested on form MF-100; however, since you included no covering letter of application, we are unable to tell what type or amount of loan you want.

In order to obtain a loan for operating, development or equipment, it is necessary to submit satisfactory evidence that the deposit contains sufficient ore to have a reasonable chance of liquidating the loan.

We are enclosing five copies of the exploration loan application MF-103 and a copy of the explanation sheet MO-5. If you wish to apply for an exploration loan, you should file form MF-103 in quadruplicate with Dr. James Boyd, Administrator, Defense Minerals Administration, Department of Interior, Washington 25, D. C.

Very truly yours,

P. R. Bradley

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

Enclosure

TJBallard:ec

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

METALS RESERVE COMPANY

504 Dooly Building
Salt Lake City 1, Utah

December 24, 1943

Mr. George Steel
Goshen
Utah

Re: Stockpile at Delta, Utah

Dear Mr. Steel:

In connection with the purchase of manganese ores delivered to the Metals Reserve Company Stockpile at Delta, Utah, we are pleased to enclose the following Treasury Warrant, payable to your order:

Number	Amount
2,009,912	$ 490.52

The check agrees with the amount shown on the Settlement Sheet dated December 16, 1943, covering Lot No. D-19-0, enclosed for your records.

Please acknowledge receipt of the Treasury Warrant by signing and returning to us the attached copy of this letter. For your convenience, we enclose a self-addressed envelope which requires no postage.

Yours very truly,

Radcliffe L Cannon
Examiner

Enclosures

Dma-1274

May 18, 1951

STEELE BROS.

Dell Steele 882 N. 2nd. E. St. Nephi, Utah
George Steele
C. C. Steele

1. Materials produced:
   (a) Wha t are the chief mine, mill, or smelter prdducts? Manganeese
   (b) What are the byproducts, if any? None
2. Names (S) and type (s) of Mine (s), Smelter (s), Refinery (ies), Pit (s), Quarry (ies) drilling operation (s). Include old names or property, if any. Show extent of workings including the following:
   (a) Linear feet of shafts. 190 Ft. shaft incline about 45 degrees
   (b) Linear feet of drifts and crosscuts. 75 Ft. of cross cut.
   (c) Linear feet of tunnels or adits. 40 Ft. of tunnel.
   (d) Linear feet of other mine openings (explain briefly) several small out crops/ surface.
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (a) Distance and direction from nearest town and shipping point. 8 miles to Fairfield.
   (b) Mining District. Unorganized.
   (c) Township, Section, Range.
   (d) County, Sta te. Utah County, Utah.
4. (a) State whether or not property is now in operation, and if in operation, by whom operated. No.
   (b) Are you operating this property as:
   Owner's
5. Number of years in production about 6 months.
   If not in production or operation, estimated date when production will begin. As soon as a loan is obtained.
6. Experience of operators: A bout 12 years of mining experience.
   Describe the mining and general business experience of (a) the applicant, and (b) the Person or persons who manage the project. The same as stated above.
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. The ore pinched to about 3 Ft.
   (b) State briefly the known history and production of adjoining and neighboring properties.

History of Mine and other Locations.

The Wild Cat 1, 2, and 3 Claims are located in Township 7, Range 1 West S.L.M. in Section 4 and section 9. The work done these claims consists of an incline shaft 190 ft. deep, the ore still continuing downward in a very small vein around 2 ft. thick and 6 ft. wide. A fault plane was cut with incline at 120 ft. and followed on a very gentle dip of about 20 degrees downward to the south. This was followed for about 60 ft. where another fault crossed the N. S. and the ore followed the downward course on the fault plane. This was followed to a depth of about 30 ft. with the ore continuing downward approximately the size of the before mentioned vein. About 6 fifty ton cars of ore were taken from this workings. Some was taken to a stock pile at Delta, Utah and some was stock piled there. A tunnel about 40 ft. was run on another out crop Northerly of the shaft about 600 ft. where about 1 car load of ore was shipped.

The ore inclines at about 40% to the East and is a high grade Pyrolusite Manganeese runnint about 40% to 55%. We had the Utah Publicity and development Co. Geologists look over the said claims and their report is on record in the files of that organization.

The other claims the Manganeese Ace was previously located about 1935 as the Black Hawk and since then we have located as the Manganeese Ace, Manganeese Ace No. 1, No. 2, and No. 3. These all have surface showings and is similar ore to that mined from the Wild Cat. They are grass root showings which need to be exphored.

STEELE BROS. Continued.

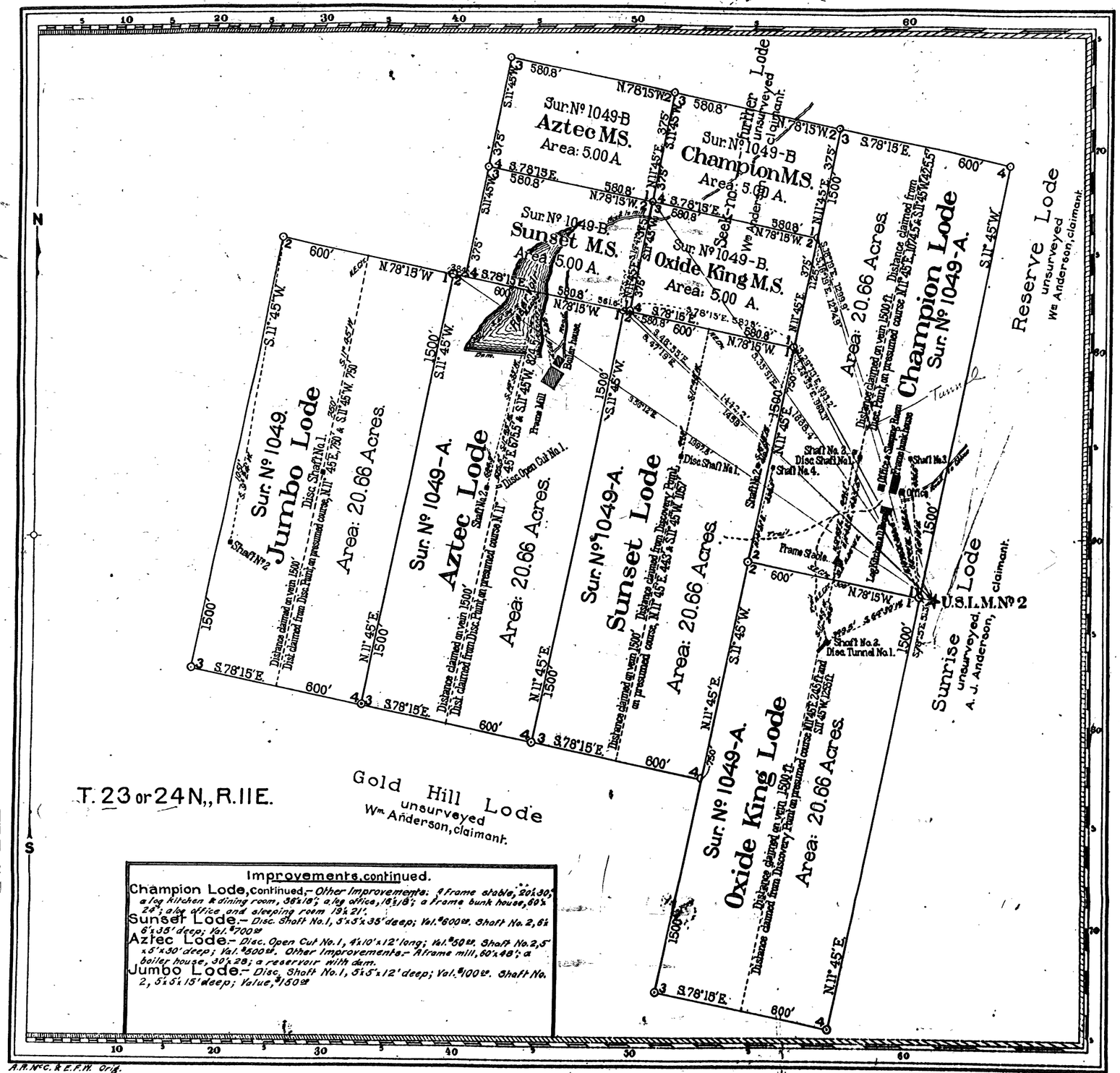
EQUIPMENT:

We Now own our own mining equipment, jack hammer, compressor and we have access to a bull dozer. The work previously done was all done by hand and crude methods. That is the reason for so little exploration on said claims.

Signed for Steele Bros.

(4-675)

PAT. - DEC. 3, 1900



Oxide King loc. Feb. 20, '88; Champion, loc. April 21, '79; Sunset loc. Dec. 10, '99; Aztec, loc. Jan. 1, '98, Jumbo, loc. May 13, '99; amd. Oct. 1899 Oxide King, M.S., Champion M.S., Sunset M.S., & Aztec M.S., located February 18th, 1899.

Mineral Survey No. 1049 A & B

Lot No.

Santa Fe' Land District.

PLAT

OF THE CLAIM OF

Copper Hill Mining Co.

KNOWN AS THE

AZTEC GROUP

IN Copper Mountain MINING DISTRICT, Taos COUNTY, N.M.

Containing an Area of 123.30 Acres.

Scale of 300 feet to the inch.

Variation 13°24' E.

SURVEYED October 21-26, 1899 BY Geo. P. Miller, U.S. Deputy Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of Copper Hill Mining Co. known as the Oxide King, Champion, Sunset, Aztec, and Jumbo Lodes, and Oxide King, Champion, Sunset and Aztec Mill Sites.

from which this plat has been made under my direction & have been examined and approved, and are on file in this Office, and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate, and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimant or its grantors, and that said improvements consist of Oxide King Lode.- Disc. Tunnel No. 1, 4x6x40' long; Value, $200. Shaft No. 2, 4x6x42' deep; Val. $900 with drift 4x6, 246' long; Value, $600. Champion Lode.- Disc. Shaft No. 1 5x5x30' deep; Val. $500. Shaft No. 2, 4x6x68' deep; Val. $1500 with drift, 4x5, 117.5' long; Val. $300. Shaft No. 3, 5x5x30' deep; Val. $60. Shaft No. 4, 6x6x30' deep; Value, $80

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office, Santa Fe', N.M. November 28th, 1899

Surveyor General for New Mexico.

1049 A & B