DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2047

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.

This document has been recorded as

EXPLORATION LOAN

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

To:	CODE 340 ~~Ferro Alloys Br.~~	Date	9-7-51
To:	Fld. Jeom Reg. VI	Date	9/31/57
To:	CODE 400-RM 3538	Date	2-11-52
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DO NOT DETACH

CONTROLLED DOCUMENT

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. R. E. Adams, Administrative Officer, DMEA
Attention: Docket and Control Branch

DATE: June 16, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Removal of application from active file
Docket No. DMA 2047 - Manganese
Stephenson Manganese Mine
Brewster County, Texas

On May 8, 1952, we wrote to the above-referenced applicant advising him that his application would be removed from the active file on June 15, 1952, unless we received the information from him that we had previously requested.

To date, we have not received a reply to our letter; therefore, we are transmitting herewith the docket for your files.

G. C. Selfridge

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

Attachment

FILE COPY 408
SURNAME:

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

Selfridge.

Mr. R. N. Adams, Administrative Officer, DMEA
Attention: Docket and Control Branch

June 16, 1952

Iron and Ferro-Alloy Division, DMEA

Removal of application from active file
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George C. Selfridge 6/17

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

Attachment

McClure
6/16/52

cc: Admn. Reading File
Docket
H. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. VI
G. C. Selfridge

FILE COPY
SURNAME:

Selfridge

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

MAY 8 1952

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 2047 - Manganese
Stephenson Manganese Mine
Brewster County, Texas

Dear Mr. Stephenson:

On February 11, 1952, we wrote you requesting further information with regard to your application for assistance in exploring the Stephenson Manganese Mine. To date we have not had an answer to our letter and we assume that you no longer desire to proceed with the application.

We wish to cooperate with you in the matter of allowing ample time but if the needed data have not been received by June 15, 1952, we will then remove the application from our active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf (for)

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
5/6/52

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

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 5047 - Manganese
Stephenson Manganese Mine
Brewster County, Texas

Dear Mr. Stephenson:

On February 11, 1952, we wrote you requesting further information with regard to your application for assistance in exploring the Stephenson Manganese Mine. To date we have not had an answer to our letter and we assume that you no longer desire to proceed with the application.

We wish to cooperate with you in the matter of allowing ample time but if the needed data have not been received by June 15, 1952, we will then remove the application from our active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
5/6/52

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

UNITED STATES 13771
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

REFERENCE SLIP

DATE 4-3-52

REFERRED TO:

1. CODE 400-Am/3538
2.
3.
4.

FOR:

.....Action	.....Recommendation
.....Approval	.....Record
.....Comment	of.....
.....Conference	.....Referring
.....Consideration	to.....
.....Filing	.....Ready for signa-
.....Instructions	ture of.....
.....Investigation	.....Rewriting
.....Initials	.....Signature
.....Mailing	.....Suggestions
.....Previous correspondence	.....Your informtion

REMARKS:.....

Check (X) before the items needing attention.

Adams (AL)
Initial of sender

INT.-DUP. SEC., WASH., D.C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

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

March 31, 1952

Memorandum

To: George Selfridge, DMEA

From: Norwood B. Melcher, Acting Chief, Ferrous Metals & Alloys Branch

Subject: DMEA 2047 - Stephenson Manganese Mines, Brewster County, Texas - Manganese

On the basis of a sample taken by the Bureau of Mines in 1951, the analysis of which is given below, Mr. R. C. Knickerbocker stated it was likely that beneficiation to ferro-grade by ore dressing methods would be possible.

	Sample	Munitions Board Specifications P-30, 1947
Manganese	35.7%	40.0% min.
Iron	2.9%	14.0% max.
Mn:Fe ratio	12.3	3.5
Silica + Alumina	31.9%	15.0% max.
Phosphorus	0.077%	.30% max.
Copper + lead + zinc	--	.50% max.

It is noted that the applicant has been requested to furnish more information and that a trenching program not to exceed $2,000 has been suggested instead of the $25,000 requested for exploration purposes. It is agreed that this is a desirable procedure.

Norwood B. Melcher

Case where on 2/11 we asked applicant for maps, etc. & proposed limited program. No reply to date. 3/27 we sent reply by 5/10 we remove docket.

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 2047X - Manganese
Stephenson Mine
Brewster County, Texas

Dear Mr. Stephenson:

On February 11, 1952, we wrote you with regard to your application for assistance in exploring the Stephenson Manganese Mine. To date we have not had an answer to our letter and we assume that you no longer desire to proceed with the application.

We wish to cooperate with you in the matter of allowing ample time but if the needed data have not been received by May 1, 1952, we will then remove the application from the active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
3/26/52

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

FEB 11 1952

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 2047 - Manganese
Stephenson Manganese Mine
Brewster County, Texas

Dear Mr. Stephenson:

Your application for assistance in exploring the Stephenson Manganese Mine in Brewster County, Texas, Docket No. DMA 2047, is presently being reviewed.

It is noted that you have not submitted sufficient and detailed information as to the location of the proposed exploration work and details of the costs. We would also like to know the grade of ore encountered in the 25-foot shaft and whether or not the bottom of the shaft is in ore.

It is suggested that you might wish to consider a moderate program of trenching across the vein and sampling and assaying in order to secure large bulk samples and an average grade for the deposit. This work might consist of from 10 to 15 trenches at a cost of not to exceed $2,000.

If you would care to consider such a limited program as the first step in determining the grade and extent of the surface exposures along the ore zone and will furnish the necessary maps and details of the costs, we shall be pleased to give your application our further consideration.

Sincerely yours,

George C. Selfridge

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

GCSentry:lm
2/8/52

Copy to: Admn. Reading File
Docket
Field Team, RegionVI
W. B. Melcher, USBM
M. D. Crittenden, USGS

Copy to: W. G. Gentry
G. C. Selfridge

40's file

2047

George C. Selfridge

January 22, 1952

M. D. Crittenden

DMEA 2047

From the long, but none too informative field report regarding the Stephenson property, and from the published description, I infer that the deposit consists of a mineralized zone 14 to 38 inches thick at the very top of the Caballos novaculite. The following analysis is given:

35.7% Mn
2.9% Fe
30.3% SiO_2
1.6% Al_2O_3
0.077% P

The high silica and low alumina suggest that the ore occurs in brecciated novaculite, rather than shale. The grade of this material is much higher than the average for millions of tons that probably exist in the novaculite in western Arkansas. Material of this grade can be shipped directly to Deming, New Mexico, a distance of 250 miles, where the present price schedule would bring about $48.00 per ton without any beneficiation. On a vein as small as that described, mining could begin immediately.

The present report gives so little factual information that it is impossible to determine what the future prospects may be. There is no indication of the consistency of the grade on the surface or of the thickness and grade in the shaft from which to deduce its persistence at depth. The information already available from those sources is more than might be obtained by the prospecting proposed. Moreover, with the present market and the cheap labor available in that area, it should be possible to begin shipments immediately, if the sample taken by Knox is representative.

On this basis, I believe the proposition should be denied, or else the ~~Field team~~ owners should be asked to submit an adequate report, ~~and then~~ on which to ~~reach agreement on their~~ base a recommendation.

MDCrittenden:gt

Copies to: Director's read. file

Branch read. file

George C. Selfridge

January 22, 1952

M. D. Crittenden

DMEA 2047

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MDCrittenden:gt

Copies to: Director's read. file

Branch read. file

Mr Melcher

1/25
~~1/27~~
GSB

Mr. Melcher 3513 new Int
~~Crittenden 2 BIE GSA~~

Herewith DMCA 2047 with Field Team

Report, and Crittenden memo.

This is a new MN discovery in texas, similar in occurrence to the Arkansas Novaculite ones.

I like the idea of exploring further —

Your analysis in this instance will be appreciated

Geo Selfridge
By GSB

340
FILE COPY
SURNAME:

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

Holderer
Jacoby/H
Kuhlen
Thayer

Air Mail

OCT 2 1951

Mr. W. H. Stephenson
Box 65
Alpine, Texas

In reply please refer to
DMA-2047

Dear Mr. Stephenson:

We have your application and find that much additional information is required. The definition of exploration as stated in MO-5 is, "Exploration project means a search for unknown or undeveloped sources of strategic or critical metals or minerals within a specific 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 primarily for mining or preparation for mining."

Some of the work which you have outlined in your proposal obviously does not come under the heading of exploration work. For this reason and the previously mentioned lack of information, your application has been referred to the field for further study. We suggest that you contact Mr. David Gallagher, P. O. Box 431, Joplin, Missouri, and offer him whatever assistance he may require.

Very truly yours,

SIGNED

Tom Lyon, Director
Supply Division

CHJacoby:ll 9/29/51
CC: DMA Docket File
Adm. Reading File
Mr. Crittenden
Mr. Melcher
Mr. Holderer
Field Team, Region VI

340 FILE COPY
SURNAME:

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

Holderer
Jacoby/H
Nephling
Thayer

OCT 2 1951

Mr. David Gallagher, Executive Officer
DMA Field Team, Region VI
P. O. Box 431
Joplin, Missouri

Subject: DMA-2047, Manganese
Section E. Black G Brewster County
Mr. W. H. Stephenson
Box 65
Alpine, Texas

Dear Mr. Gallagher:

We are referring the application of Mr. W. H. Stephenson to you for further study. There is no information in the files of the Bureau of Mines or the Geological Survey on this property. We would like a report on its merits.

As is evidenced by the enclosed docket, the application has been very poorly prepared. A portion of the amount requested is not for exploration work. We doubt that the property, as described, warrants the expenditure of $25,000.

The applicant has failed to give a clear cut picture of the proposed project. He has not submitted an adequate breakdown of costs and other pertinent data. There are no assays, geological maps, cross sections, or private reports available.

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

CHAcoby :ll 9/30-51
CC: DMA Docket File
Adm. Reading File
Mr. Crittenden
Mr. Melcher
Mr. Holderer

Enclosure

Bureau Of Mines

Geological Survey

OCT 2 1951

Mr. David Gallagher, Executive Officer
DMA Field Team, Region VI
P. O. Box 431
Joplin, Missouri

Subject: DMA-2147, Manganese
Section E. Block G Brewster County
Mr. W. H. Stephenson
Box 65
Alpine, Texas

Dear Mr. Gallagher:

We are referring the application of Mr. W. H. Stephenson to you for further study. There is no information in the files of the Bureau of Mines or the Geological Survey on this property. We would like a report on its merits.

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Very truly yours,

CHAcoby :ll 9/30/51
CC: DMA Docket File
Adm. Reading File
Mr. Crittenden
Mr. Melcher
Mr. Holderer

Tom Lyon, Chairman
Coordinating Committee

Enclosure

Lowell B. Moon

Bureau Of Mines

Geological Survey

Index of File to Field Team
DMA 2047 Manganese

1 copy letter to DMA from Stephenson
4 copies forms MF-103 with attached sheets

9/~~31~~29/51

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 2047

Date received 9-7-51

Participation

Box 65
Alpine, Texas

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application Sept 4-1951

Estimated cost $75000.00

Mineral or metal Manganese

Percentage of Government participation

Location of mine Brewster Co Tex
Burney 121 Black G

Date of filing MF-100

DMA Docket Number, if available 2047

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.

SEP 7 8 47 AM '51
DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

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

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.

Stephenson & Burdett
(Name of company)

By W. H. Stephenson
(Signature of authorized official)

(Date)

(Title)

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

*Same as footnote on page 1.

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

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

Reviewed by
DMEA OPERATING COMMITTEE
1/15/52
(date) JHB

January 7, 1952

Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket DMA-2047 - Manganese
Mr. W. H. Stephenson
Box 65, Alpine, Texas

Dear Sirs:

Clinton C. Knox is in California on vacation but I received this morning the report by him on Mr. Stephenson's manganese prospect in Brewster County, Texas, and I am forwarding the original and three copies to you herewith.

On my recent trip to Alpine with Knox we called upon Mr. Stephenson and chatted with him for an hour or so on December 18, 1951.

In early October Mr. Stephenson was advised by a letter from Tom Lyon that his application had been referred to the field, and advising him to contact me. He has not done so. Knox and I are of the opinion that he feels confused or frustrated by all this Government stuff.

Judging from the enclosed report by Knox the deposit is not large, the grade is only moderate, and the ore closely resembles the manganese "ore" in the novaculite of western Arkansas, much of which is difficult or impossible to beneficiate. Briefly, I am not enthusiastic.

Mr. Stephenson told me that one or two iron company men had visited the deposit and said nice things about it, but they never came back. If the iron companies are no more interested than that, why should we be?

I believe that this is a case wherein the most important consideration is evaluating the technical competence of the operator. Mr. Stephenson impressed me as an honest, kindly, and elderly gentleman of the old time, semi-pro, part time prospector type. I have no good reason to feel that he could put up any substantial sum of money as his part of an exploration program. I would strongly urge that a competent manager be engaged as a most essential part of any program to be undertaken in this case.

May I recommend that the application be denied by one of those letters of the type that says your application was inadequate, we asked you for more information, we have not heard from you, we therefore consider the case closed, but we will be glad to receive an adequate application if you care to submit one in the future.

Sincerely yours,

David Gallagher

Enclosures

DG/lh

Department of the Interior
U. S. Bureau of Mines
Memorandum Report
Stephenson Manganese Prospect
by Clinton C. Spaw

Reviewed by
DMEA OPERATING COMMITTEE

(date)

SUMMARY

Although the Big Bend country of southeastern Texas has produced much mercury and silver along with lesser amounts of copper, lead, zinc, and fluorspar, its mineral potentialities never have been adequately explored. This province would appear to offer a fertile field for exploration for "hidden" deposits of almost every mineral considered critical under present day demands. At least all the known mineral occurrences in that vast region should be carefully re-examined under the present urgency.

Mr. W. R. Stephenson did discover a manganese deposit on a contact between the soft, green Tesnus (Pennsylvanian) shale, and the underlying hard, black-stained Caballos (Devonian?) novaculite where they have been compressed into a close-folded anticline on Rough Creek 7 miles south of Tesnus station on the Southern-Pacific railroad. Here the Caballos novaculite crops out in a "dike-like" ridge surrounded by a parabola-shaped contact. The nose of the ridge is broken by a fault which has a slight lateral displacement, and approximately parallels Rough Creek. This southern nose is the final outcrop of the Caballos before it disappears beneath the Tesnus of the plunging anticline. The manganese "ore" mantles the novaculite at the contact with the overlying shale.

Mr. Stephenson has acquired a mining lease on the property, and did the preliminary exploration work early in 1951. He trenched 60 feet of the hard manganese "vein", and sunk a prospect shaft to a depth of 25 feet after he had built an access road, and stripped the overburden from the manganese-mineralized area. He also has hand-sorted several tons of manganese "ore" which is in piles around the excavations.

Because the preliminary sample of the vein contained 35.7 percent manganese, 2.9 percent iron along with only 30.3 percent SiO_2, 1.6 percent Al_2O_3, and 0.077 percent phosphorous from which a ferro-grade manganese product might be beneficiated, exploration is recommended which evidently may justify mining development.

INTRODUCTION AND HISTORY

The Stephenson manganese prospect on the north bank of Rough Creek is located near the eastern edge of the Marathon dome region, in the southeastern quarter of section 121, Block G, Brewster County, Texas. After turning east from state highway No. 227, at a point 7 miles south of the town of Marathon, the Stephenson prospect is 26 miles east on a tortuous road through the old Cage ranch. A new access road could be built over the typical desert terrain, without undue difficulties, however, because the deposit is only 7 miles south of the Teanus Station on the Southern-Pacific railroad.

At the request of W. H. Stephenson, Clinton C. Knox, mining engineer, U. S. Bureau of Mines, accompanied by W. H. McAnulty, Department of Geology, Sul Ross, State College, Alpine, Texas, visited

the deposit on the afternoon of July 10, 1951. Mr. Stephenson's previous verbal description, which included a statement that an engineer from the Sheffield Steel Mills in Houston, Texas, had taken a sample of the hand-sorted ore that contained over 50% manganese, seemed to justify the hurried trip. The available time, though, was limited because this visit culminated a 3-week investigation of the Big Bend mercury mining districts, 100 miles farther to the southwest.

Only preliminary reconnaissance observations in the immediate area of the prospect were made. A diagrammatic sketch was drawn of the most obvious geological features at the deposit and a composite sample was taken of the "vein" which appeared to be mostly manganese oxide "ore".

Mr. Stephenson had discovered the deposit 20 years ago while digging in the "contact" along a black "dike-like" outcrop. Rough Creek flows easterly across this outcrop as shown on the Location Sketch Map No. 1.

The deposit was located on the vast 700,000-acre Gage Ranch, and to negotiate a suitable mining lease from the landowner was impossible at the time of the discovery. Since that time, the ranch has been divided and sold to smaller-scale ranchers. In March 1949, Mr. Stephenson was granted the desired mining lease by Mr. Lee Martin, the present owner of that part of the old ranch on which the manganese deposit is located.

Early in 1951, George Burdet, of Alpine, Texas, became a partner with Stephenson, and furnished the capital to begin actual exploration. The preliminary work has revealed the first tangible encouragement that the deposit might be developed into a small, commercial, manganese mining enterprise.

That work consisted of 1) a 1½ mile temporary access road bulldozed up the valley along Mouth Creek from the existing old Gage ranch road; 2) temporary living quarters built; 3) a 100-foot segment of the manganese bearing zone stripped by a bulldozer; 4) about 60 feet of the hard, manganese "vein" trenched with the aid of a portable compressor, jack hammer, and other tools recently acquired for the prospecting; 5) a prospect shaft sunk, about 25 feet in depth, at the north end of the trench; and, 6) several tons of hand-sorted manganese ore piled out around the excavations.

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This memorandum is being prepared after it was learned that no previous information on Marathon manganese deposits was in the files of the U. S. Bureau of Mines of the U. S. Geological Survey.

The Stephenson Deposit

The exploratory work on the Stephenson prospect has disclosed a segment of an apparently favorable manganese "vein", or mantle. That exposed segment of the "vein" is on the west limb of a southerly plunging

anticline on the contact between the manganese-bearing Devonian (?) Caballos novaculite, and the thick overlying Pennsylvanian Tesnus shale formation. Further exploration, therefore, might demonstrate that the manganese zone of mineralization having been derived from meteoric leaching the overlying shale, is a redeposition concentrated in a mantle on the top of the novaculite formation. A fault, however, with an apparent lateral displacement of several feet, runs along Rough Creek normal to, and near the south end of the trench where the "vein" is exposed. This fault might have assisted the adjacent high-grade manganese "vein" deposition.

The prominent ridge which reflects the novaculite anticlinal fold is mostly covered by overburden which obscures the postulated extension of the "vein" along the inferred parabola-shaped areal pattern of the contact between the Caballos and overlying Tesnus. The southwesterly plunging anticline, which is truncated by erosion, is believed to pitch in such a way that the dip of the east limb will be flatter than that of the west as shown in Sketch Map No. 2. Float in the overburden indicates that the manganese mineralization occurs throughout much of the upper member of this novaculite formation. Only the previously-mentioned short segment of the contact has been stripped, however, to show the manganese "vein".

The only published geological data pertaining to this Marathon locality is Professional Paper 187, "Geology of the Marathon Region, Texas", by Philip B. King, U. S. Geological Survey, 1937. Casual mention is made of some insignificant manganese mineralization in the Marathon Dome Region, associated with some of the numerous,

widely-scattered novaculite folds which crop out there. Iron and manganese oxides have impregnated, and to some extent, replaced the novaculite along joints and bedding planes. Manganese deposits of this nature resemble those more familiar deposits in the same novaculite formation in the Ouachita Mountains in Arkansas, and are likewise economically unattractive. Unfortunately, King's Paper did not mention investigations of the contact-type "vein" discovered by Mr. Stephenson, or of similar deposits which might be found elsewhere in the Marathon Region. He did indicate, however, on his "General Geologic Map of Marathon Uplift" (Sketch Map No. 1), the location of that particular novaculite outcrop identified with Stevenson's prospect on Rough Creek.

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Every known Big Bend indication of mineralization considered critical under present-day demands, again should be investigated carefully. Besides those mining districts from which the large mercury and silver production has come, deposits of lead, zinc, copper, fluorspar, manganese, molybdenum, tungsten, and several other minerals are known in the Big Bend

Bush-work

province of southwest Texas. Under the unique geological conditions existing in this region, it seems reasonable to expect that economically important mineral deposits, now hidden, can be found with modern prospecting methods.

Consequently, the greatest possible number of preliminary samples of as many exposures as could be found which showed mineralization of any kind were taken by this writer during the summer reconnaissance investigation of 1951. At the Stephenson manganese prospect, under discussion here, all the samples were cut across the 14 to 38 inch width of manganese "ore" at 10-foot intervals along the trenched "vein", and combined for a general determination. From that composite sample, the characteristics of the high-grade manganese ore were expected to be learned. The low-grade impregnations, and possible replacement pockets in the seemingly broad novaculite "footwall deposit" were ignored at least for the time being.

This sample was submitted for analysis to R. U. Knickerbocker, Chief, Minerals Technology Division, Rolla Station, U. S. Bureau of Mines, Rolla, Missouri. The following report was received from Mr. Knickerbocker on September 19, 1951:

"Sample KTT-47 might have possibilities as manganese ore. It analyzed 35.7 percent Mn, 2.9 percent Fe, 30.3 percent SiO_2, 1.6 percent Al_2O_3, and 0.077 percent P. Judging from the mineral content of this material, it is likely that beneficiation to ferro-grade, by ore dressing methods, would be possible."

RECOMMENDATIONS

Based only on the little obtainable data pertaining to the Stephenson manganese prospect, it appears likely that a competent consulting engineer should be employed to conduct a thorough examination of the prospect. That examination should include studying the aerial photographs; mapping the geology of the area under lease; systematically sampling the exposures of the "vein", and a large representative amount of the hand-sorted "ore"; and then, if justified, outlining a comprehensive exploration and development program.

It appears very likely that such an investigation would lead to the following recommendations:

1) Starting at the existing, recent exploratory workings, the "parabola-shaped" contact should be exposed at 100-foot intervals as far as the ore can be extended. This could be done by cross-cut trenches probably dug with a power shovel-loader. Starting in the soft, topographically lower Tesnus shale, each trench should be blasted through the "vein" to a high face against the prominent, hard novaculite of which the bedrock in the higher, central ridge is composed.

2) The "vein" below each of the trenches where the most promising ore may be exposed could then be diamond-drilled with holes probably not exceeding 50 to 100 feet in depth. The holes, dipping about 45° below the horizontal, can be collared in the soft Tesnus shale downhill from the mouth of the trenches. Thusly, they would surround, and point toward (possibly almost be normal to) the limbs

of the anticlinal novaculite strata. Drilling of each hole should be stopped upon encountering solid novaculite. These holes quite likely would investigate adequately the "vein" on the most attractive horizon, below the water table -- well below the bed of Rough Creek. Provision probably should be made for two to four deeper, more steeply dipping holes to investigate the rake of the most favorable ore deposit farther below the water table at a depth of 100 to 200 feet for each hole.

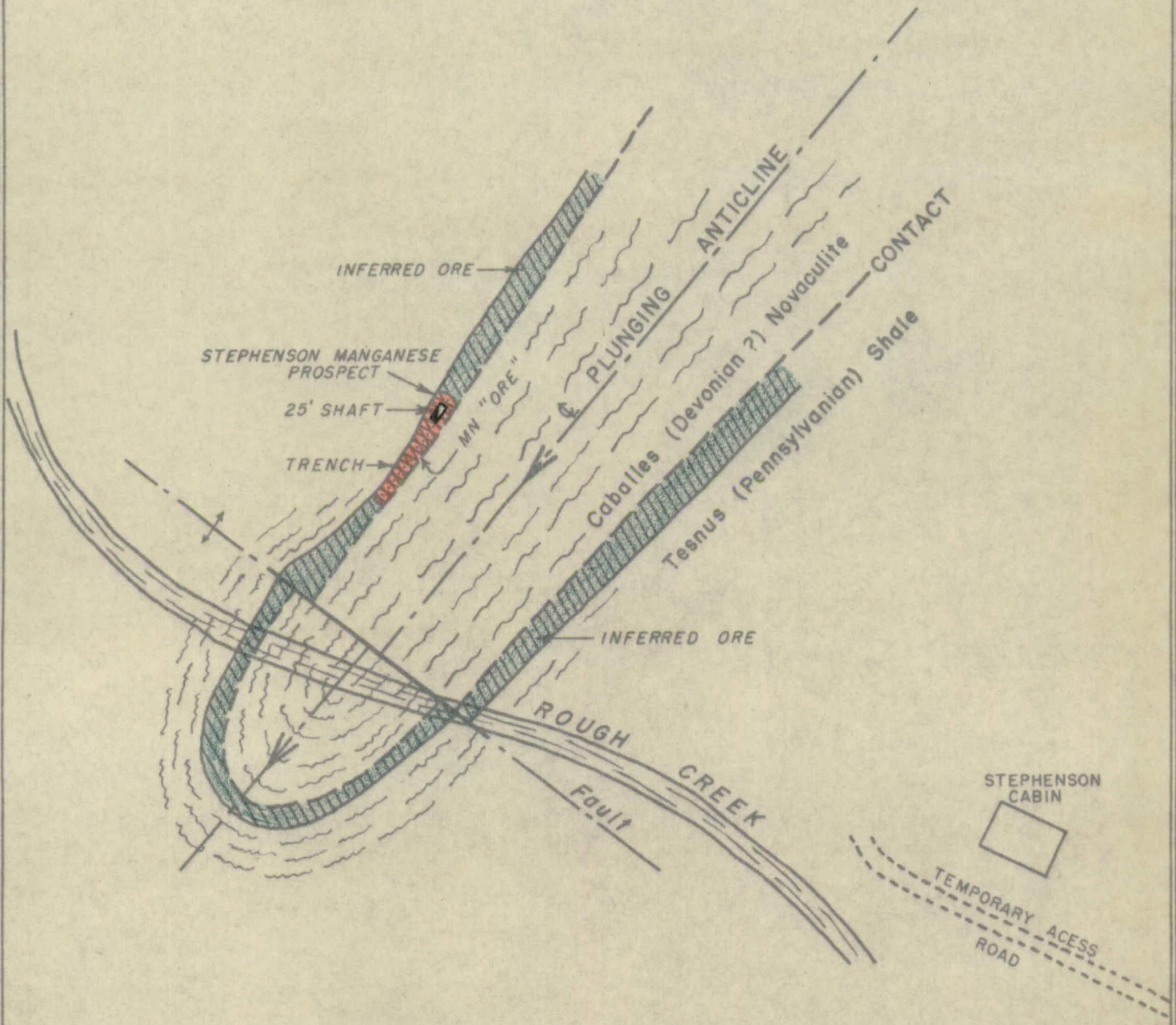
3) The decision to build the previously-mentioned new access road, and develop and equip the deposit for a commercial mining operation should be deferred until exploration points to definite success.

Estimated Exploration Costs.

Assuming that the extension of the manganese "vein" warrants continuation to completion of the proposed trench-cutting, and diamond-drilling exploration work, the total project costs might be estimated to be on the order of $6,000 distributed roughly as follows:

Excavating 10 trenches	$1,000
14 diamond-drill holes averaging 70 feet in depth totalling 980 feet @ $4 per foot	3,920
Supplies, tools, equipment and additional housing	1,080
Total	$6,000

Clinton C. Knox



DIAGRAMATIC SKETCH No. 1

STEPHENSON MANGANESE PROSPECT

Section 121, Block 'G'

BREWSTER COUNTY, TEXAS

Approximate Scale 1" = 100'

12-21-51 JOE CRAIG - USBM - JOPLIN, MO

400

FILE COPY
SURNAME:

Selfridge

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

MAR 27 1952

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 2047X - Manganese
Stephenson Mine
Brewster County, Texas

Dear Mr. Stephenson:

On February 11, 1952, we wrote you with regard to your application for assistance in exploring the Stephenson Manganese Mine. To date we have not had an answer to our letter and we assume that you no longer desire to proceed with the application.

We wish to cooperate with you in the matter of allowing ample time but if the needed data have not been received by May 1, 1952, we will then remove the application from the active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf 3/27

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
3/26/52

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

3/25

Mr. Selfridge:

Probably time for a routine follow-up to this applicant, asking whether he intends to furnish data we requested on 2/11/52 or whether we shall remove docket from active files????

ls

3/25/52

400
FILE COPY
SURNAME:

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

Gentry
Selfridge
Elliott

FEB 11 1952

Mr. W. H. Stephenson
Box 65
Alpine, Texas

Re: Docket No. DMA 2047 - Manganese
Stephenson Manganese Mine
Brewster County, Texas

Dear Mr. Stephenson:

Your application for assistance in exploring the Stephenson Manganese Mine in Brewster County, Texas, Docket No. DMA 2047, is presently being reviewed.

It is noted that you have not submitted sufficient and detailed information as to the location of the proposed exploration work and details of the costs. We would also like to know the grade of ore encountered in the 25-foot shaft and whether or not the bottom of the shaft is in ore.

It is suggested that you might wish to consider a moderate program of trenching across the vein and sampling and assaying in order to secure large bulk samples and an average grade for the deposit. This work might consist of from 10 to 15 trenches at a cost of not to exceed $2,000.

If you would care to consider such a limited program as the first step in determining the grade and extent of the surface exposures along the ore zone and will furnish the necessary maps and details of the costs, we shall be pleased to give your application our further consideration.

Sincerely yours,

George C. Selfridge

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

G.C.S. 2-11-52

GGGentry:ls
2/8/52

Copy to: Admn. Reading File
Docket
Field Team, RegionVI
N. B. Melcher, USBM
M. D. Crittenden, USGS

Copy to: G. G. Gentry
G. C. Selfridge

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George C. Selfridge

DATE: January 22, 1952

FROM : M. D. Crittenden

SUBJECT: DMEA 2047

From the long, but none too informative field report regarding the Stephenson property, and from the published description, I infer that the deposit consists of a mineralized zone 14 to 38 inches thick at the very top of the Caballos novaculite. The following analysis is given:

35.7% Mn
2.9% Fe
30.3% SiO_2
1.6% Al_2O_3
0.077% P

The high silica and low alumina suggest that the ore occurs in brecciated novaculite, rather than shale. The grade of this material is much higher than the average for millions of tons that probably exist in the novaculite in western Arkansas. Material of this grade can be shipped directly to Deming, New Mexico, a distance of 250 miles, where the present price schedule would bring about $48.00 per ton without any beneficiation. On a vein as small as that described, mining could begin immediately.

The present report gives so little factual information that it is impossible to determine what the future prospects may be. There is no indication of the consistency of the grade on the surface or of the thickness and grade in the shaft from which to deduce its persistence at depth. The information already available from those sources is more than might be obtained by the prospecting proposed. Moreover, with the present market and the cheap labor available in that area, it should be possible to begin shipments immediately, if the sample taken by Knox is representative.

On this basis, I believe the proposition should be denied, or else the ~~field team~~ operator should be asked to submit an adequate report, ~~and then~~ on which to ~~reach~~ base a ~~agreement on their~~ recommendation.

Mark Crittenden Jr

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1952

copy on file

To Melcher
1/25

George C. Selfridge January 22, 1952

M. D. Crittenden

DMEA 2047

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MDCrittenden:gt

Copies to: Director's read. file

Branch read. file

To Melcher
1/25

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 9 1952
Reviewed by
DMEA OPERATING COMMITTEE
1/15/52
(date) 2443

January 7, 1952

Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket DMA-2047 - Manganese
Mr. W. H. Stephenson
Box 65, Alpine, Texas

Dear Sirs:

Clinton C. Knox is in California on vacation but I received this morning the report by him on Mr. Stephenson's manganese prospect in Brewster County, Texas, and I am forwarding the original and three copies to you herewith.

On my recent trip to Alpine with Knox we called upon Mr. Stephenson and chatted with him for an hour or so on December 18, 1951.

In early October Mr. Stephenson was advised by a letter from Tom Lyon that his application had been referred to the field, and advising him to contact me. He has not done so. Knox and I are of the opinion that he feels confused or frustrated by all this Government stuff.

Judging from the enclosed report by Knox the deposit is not large, the grade is only moderate, and the ore closely resembles the manganese "ore" in the novaculite of western Arkansas, much of which is difficult or impossible to beneficiate. Briefly, I am not enthusiastic.

Mr. Stephenson told me that one or two iron company men had visited the deposit and said nice things about it, but they never came back. If the iron companies are no more interested than that, why should we be?

I believe that this is a case wherein the most important consideration is evaluating the technical competence of the operator. Mr. Stephenson impressed me as an honest, kindly, and elderly gentleman of the old time, semi-pro, part-time prospector type. I have no good reason to feel that he could put up any substantial sum of money as his part of an exploration program. I would strongly urge that a competent manager be engaged as a most essential part of any program to be undertaken in this case.

May I recommend that the application be denied by one of those letters of the type that says your application was inadequate, we asked you for more information, we have not heard from you, we therefore consider the case closed, but we will be glad to receive an adequate application if you care to submit one in the future.

Sincerely yours,

David Gallagher

David Gallagher

Enclosures

DG/lh

OCT 2 1951

Mr. David Gallagher, Executive Officer
DMA Field Team, Region VI
P. O. Box 431
Joplin, Missouri

Subject: DMA-2047, Manganese
Section E, Block G Brewster County
Mr. W. H. Stephenson
Box 65
Alpine, Texas

Dear Mr. Gallagher:

We are referring the application of Mr. W. H. Stephenson to you for further study. There is no information in the files of the Bureau of Mines or the Geological Survey on this property. We would like a report on its merits.

As is evidenced by the enclosed docket, the application has been very poorly prepared. A portion of the amount requested is not for exploration work. We doubt that the property, as described, warrants the expenditure of $25,000.

The applicant has failed to give a clear cut picture of the proposed project. He has not submitted an adequate breakdown of costs and other pertinent data. There are no assays, geological maps, cross sections, or private reports available.

Very truly yours,

SIGNED

Tom Lyon, Chairman
Coordinating Committee

Enclosure

Bureau of Mines

Geological Survey

Department of the Interior
U. S. Bureau of Mines
Memorandum Report
Stephenson Manganese Prospect
by Clinton C. Knox

Reviewed by
DMEA OPERATING COMMITTEE

(date)

SUMMARY

Although the Big Bend country of southwestern Texas has produced much mercury and silver along with lesser amounts of copper, lead, zinc, and flourspar, its mineral potentialities never have been adequately explored. This province would appear to offer a fertile field for exploration for "hidden" deposits of almost every mineral considered critical under present day demands. At least all the known mineral exposures in that vast region should be carefully re-examined under the present urgency.

Mr. W. H. Stephenson did discover a manganese deposit on a contact between the soft, green Tesnus (Pennsylvanian) shale, and the underlying hard, black-stained Caballos (Devonian?) novaculite where they have been compressed into a close-folded anticline on Rough Creek 7 miles south of Tesnus station on the Southern-Pacific railroad. Here the Caballos novaculite crops out in a "dike-like" ridge surrounded by a parabola-shaped contact. The nose of the ridge is broken by a fault which has a slight lateral displacement, and approximately parallels Rough Creek. This southern nose is the final outcrop of the Caballos before it disappears beneath the Tesnus of the plunging anticline. The manganese "ore" mantles the novaculite at the contact with the overlying shale.

Mr. Stephenson has acquired a mining lease on the property, and did the preliminary exploration work early in 1951. He trenched 60 feet of the hard manganese "vein", and sunk a prospect shaft to a depth of 25 feet after he had built an access road, and stripped the overburden from the manganese-mineralized area. He also has handsorted several tons of manganese "ore" which is in piles around the excavations.

Because the preliminary sample of the vein contained 35.7 percent manganese, 2.9 percent iron along with only 30.3 percent SiO_2, 1.6 percent Al_2O_3, and 0.077 percent phosphorous from which a ferro-grade manganese product might be beneficiated, exploration is recommended which evidently may justify mining development.

INTRODUCTION AND HISTORY

The Stephenson manganese prospect on the north bank of Rough Creek is located near the eastern edge of the Marathon dome region, in the southeastern quarter of section 121, Block G, Brewster County, Texas. After turning east from state highway No. 227, at a point 7 miles south of the town of Marathon, the Stephenson prospect is 28 miles east on a torturous road through the old Gage ranch. A new access road could be built over the typical desert terrain, without undue difficulties, however, because the deposit is only 7 miles south of the Tesnus Station on the Southern-Pacific railroad.

At the request of W. H. Stephenson, Clinton C. Knox, mining engineer, U. S. Bureau of Mines, accompanied by W. N. McAnulty, Department of Geology, Sol Ross, State College, Alpine, Texas, visited

the deposit on the afternoon of July 10, 1951. Mr. Stephenson's previous verbal description, which included a statement that an engineer from the Sheffield Steel Mills in Houston, Texas, had taken a sample of the hand-sorted ore that contained over 50% manganese, seemed to justify the hurried trip. The available time, though, was limited because this visit culminated a 3-week investigation of the Big Bend mercury mining districts, 100 miles farther to the southwest.

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This sample was submitted for analysis to R. G. Knickerbocker, Chief, Minerals Technology Division, Rolla Station, U. S. Bureau of Mines, Rolla, Missouri. The following report wasreceived from Mr. Knickerbocker on September 19, 1951:

"Sample KTT-27 might have possibilities as manganese ore. It analyzed 35.7 percent Mn, 2.9 percent Fe, 30.3 percent SiO_2, 1.6 percent Al_2O_3, and 0.077 percent P. Judging from the mineral content of this material, it is likely that beneficiation to ferro-grade, by ore dressing methods, would be possible."

RECOMMENDATIONS

Based only on the little obtainable data pertaining to the Stephenson manganese prospect, it appears likely that a competent consulting engineer should be employed to conduct a thorough examination of the prospect. That examination should include studying the aerial photographs; mapping the geology of the area under lease; systematically sampling the exposures of the "vein", and a large representative amount of the hand-sorted "ore"; and then, if justified, outlining a comprehensive exploration and development program.

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1) Starting at the existing, recent exploratory workings, the "parabola-shaped" contact should be exposed at 100-foot intervals as far as the ore can be extended. This could be done by cross-cut trenches probably dug with a power shovel-loader. Starting in the soft, topographically lower Tesnus shale, each trench should be blasted through the "vein" to a high face against the prominent, hard novaculite of which the bedrock in the higher, central ridge is composed.

2) The "vein" below each of the trenches where the most promising ore may be exposed could then be diamond-drilled with holes probably not exceeding 50 to 100 feet in depth. The holes, dipping about 45° below the horizontal, can be collared in the soft Tesnus shale downhill from the mouth of the trenches. Thusly, they would surround, and point toward (possibly almost be normal to) the limbs

of the anticlinal novaculite strata. Drilling of each hole should be stopped upon encountering solid novaculite. Those holes quite likely would investigate adequately the "vein" on the most attractive horizon, below the water table -- well below the bed of Rough Creek. Provision probably should be made for two to four deeper, more steeply dipping holes to investigate the rake of the most favorable ore deposit farther below the water table at a depth of 100 to 200 feet for each hole.

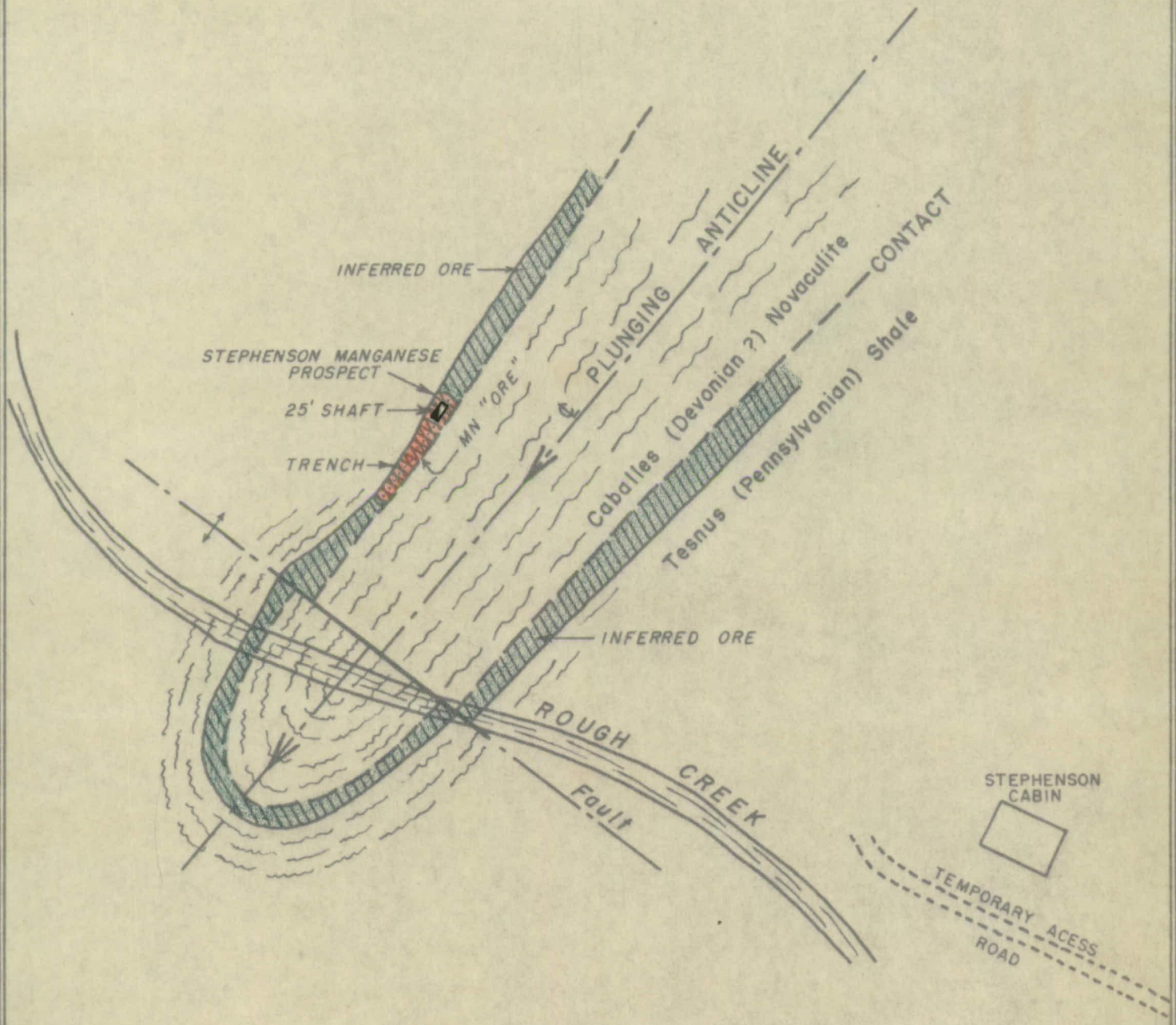
3) The decision to build the previously-mentioned new access road, and develop and equip the deposit for a commercial mining operation should be deferred until exploration points to definite success.

Estimated Exploration Costs.

Assuming that the extension of the manganese "vein" warrants continuation to completion of the proposed trench-cutting, and diamond-drilling exploration work, the total project costs might be estimated to be on the order of $6,000 distributed roughly as follows:

Excavating 10 trenches	$1,000
14 diamond-drill holes averaging 70 feet in depth totalling 980 feet @ $4 per foot.	3,920
Supplies, tools, equipment and additional housing	1,080
Total	$6,000

Clinton C. Knox



DIAGRAMATIC SKETCH No. 1

STEPHENSON MANGANESE PROSPECT

Section 121, Block 'G'

BREWSTER COUNTY, TEXAS

Approximate Scale 1" = 100'

12-21-51 JOE CRAIG - USBM - JOPLIN, MO.

Please return to 36 2

Air Mail

Mr. W. H. Stephenson
Box 65
Alpine, Texas

OCT 2 1951

In reply please refer to
DMA-2047

Dear Mr. Stephenson:

We have your application and find that much additional information is required. The definition of exploration as stated in MO-5 is, "Exploration project means a search for unknown or undeveloped sources of strategic or critical metals or minerals within a specific 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 primarily for mining or preparation for mining."

Some of the work which you have outlined in your proposal obviously does not come under the heading of exploration work. For this reason and the previously mentioned lack of information, your application has been referred to the field for further study. We suggest that you contact Mr. David Gallagher, P. O. Box 431, Joplin, Missouri, and offer him whatever assistance he may require.

Very truly yours,

SIGNED

Tom Lyon, Director
Supply Division

CHJacoby:ll 9/29/51
CC: DMA Docket File
Adm. Reading File
Mr. Crittenden
Mr. Melcher
Mr. Holderer
Field Team, Region VI

Subject: DMA-2047
Re: Exploration Loan

Mr. W. H. Stephenson
Stephenson & Burdett
Box 65
Alpine, Texas

My dear Mr. Stephenson:

This will acknowledge receipt of your application dated September 5, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2047 and referred to the Ferro Alloys Branch.

Kindly refer to DMA-2047 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

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-2047

Date received 9-7-51

Participation

Box 65
Alpine, Texas

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application Sept 4-1951

Estimated cost $25 000.00

Mineral or metal Manganese

Percentage of Government participation

Location of mine Brewster Co Tex
Survey 171 Block G

Date of filing MF-100

DMA Docket Number, if available 2047

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.

SEP 7 8 47 AM '51
DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

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

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.
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    (*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.
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    (*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.

Stephenson & Beadle — By W. T. Stephenson
(Name of company) — (Signature of authorized official)

(Date) — (Title)

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

*Same as footnote on page 1.

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

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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Date

FILL IN THIS BLOCK

Date of application Sept 4-1951

Estimated cost

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Percentage of Government participation

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Survey 121 Block G-

Date of filing MF-100

DMA Docket Number, if available 2047

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SEP 7 8 47 AM '51
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WASHINGTON, D.C.

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Stephenson & Burdett By W. L. Stephenson
(Name of company) (Signature of authorized official)

(Date) (Title)

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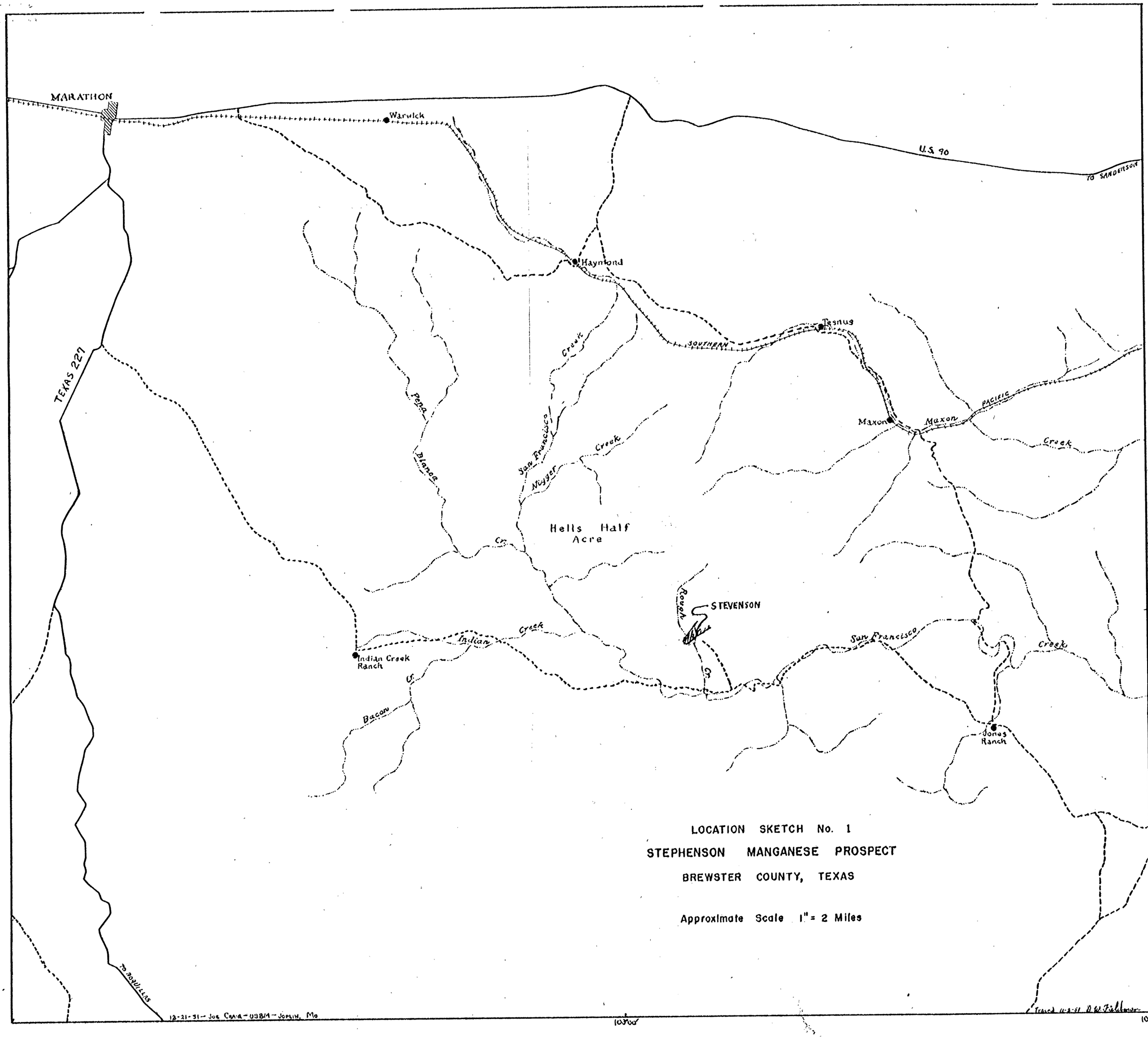
*Same as footnote on page 1.

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

2047

at Thayer's

9/26



LOCATION SKETCH No. 1

STEPHENSON MANGANESE PROSPECT

BREWSTER COUNTY, TEXAS

Approximate Scale 1" = 2 Miles