R. E. Adams, Administrative Officer, DMEA Sept. 4, 1952

Iron and Ferro-Alloy Division, DMEA

Removal of application from the active files
Docket No. DMA Z186 - Iron
Ryde Construction Company
Selvidge Property
Webster County, Mississippi

By letter of August 6, 1952, we advised the applicant that his application would be removed from the active file on September 1, 1952, provided that we did not receive the data previously requested.

To date, this information has not been received, therefore, we are transmitting herewith the above referenced docket to be placed in the inactive files.

Signed

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Attachment

McClure
9/4/52

cc: Admn. Reading File
Docket
J. M. Forbes, USBM
Martha Carr
W. S. Martin

Kilmichael Mining Co., Inc.

Kilmichael, Miss.

BOARD OF DIRECTORS
J. K. FLOWERS, CHAIRMAN
L. L. MCCHAREN
R. B. FLOWERS
H. L. FLOWERS
C. H. MCDILL, SEC.

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L. L. MCCHAREN, V.-PRES.
R. B. FLOWERS, V.-PRES.
H. L. FLOWERS, V.-PRES.
C. H. MCDILL, V.-P., SEC.-TREAS

7 Oct. 1952

United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

Re: Docket No.DMA 2186 - Iron
Hyde Construction Co.
Selvidge Property
Webster County, Mississippi

Gentlemen:

In your letter of 23 Sept. 1952 you suggested we complete in detail Form MF-103 which were attached. This form was not attached to the letter and we again request these forms so we may proceed with our application. No forms received.

Very truly yours,
C.H. McDill
C.H. McDill

Sent under separate cover
L.S. 10/10/52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 9 1952

SEP 23 1952

Mr. C. H. McDill
Kilmichael Mining Co., Inc.
Kilmichael, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

This will acknowledge receipt of your letter of September 8 1952, advising us that the contract between the Hyde Construction Company and the Kilmichael Mining Company, Inc., has been cancelled. You also ask whether it would be possible to transfer the subject application to the Kilmichael Mining Company, Inc.

As you are already familiar, the Hyde Construction Company's application for exploration aid has now been removed from our active file because that company failed to provide the information required in order to determine whether that application should be approved.

Inasmuch as the necessary data have not yet been furnished, it would not be to your advantage to have the former application transferred. Instead, it is suggested that you complete in detail and return to us four of the attached copies of Form MF-103 giving particular attention to the following comments.

Please answer "1. Name of applicant" with respect to parts (a) and (b) and either (c) or (d), whichever may apply.

In answering "3. Applicant's property rights," you should be guided by our letter of May 12, 1952, (copy attached) which enclosed a memorandum from our Chief Counsel (copy attached) in regard to the leases, assignments, and subordination agreements needed. For your convenience we attach copies of Form MF-203, "Owner's Consent to Lien," to be used for the subordination agreements. The amount of the Government's contribution (Form MF-203, Ro tnote 4) should be left blank to be filled in by us only when the contract for the project shall have been executed. Furthermore, it should be noted that where husband and wife are lessors, both husband and wife should sign the "Owner's Consent to Lien." If any of the leases previously sent to us form part of your chain of title, it will not be necessary to send us further copies.

"4. Physical description" need not be answered this time; it will be sufficient to write, "See Docket No. DMA 2186 - Hyde Construction Company."

"5. The exploration project" can be described in detail by submitting a working scale map as requested in 5(b), showing in plan the location and nature of the proposed exploration work. We should also be informed whether you have in mind some individual, preferably with experience in brown iron ore exploration and mining in Alabama and Georgia, who might be qualified to supervise the proposed operations, and if so, who he is and what his record shows.

"6. Estimate of Costs" should be completed on a separate sheet, giving details under each applicable heading [(a), (b), (c), and (d)] for the same program that is submitted on your map covering 5(b) above.

Your answers to 7(a) and (b) will also be necessary.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Administrator

Enclosures

WSMartin:ls
9/18/52

Copy to: Docket
Admn. Reading File
W. S. Martin
Mrs. Martha Carr, USGS
J. M. Forbes, USBM
Field Team, Region 7

AUG 6 1952

Mr. O. H. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

A reply to my letter of July 3, 1952, inquiring as to whether or not you expect to proceed with your application, has not been received.

We wish to cooperate in the matter of allowing ample time for you to secure the necessary legal papers to accompany your application, but if the necessary data have not been received by September 1, we will assume that you are no longer interested in exploration aid and will remove the application from our active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

GC: Docket
Admn. Read. File
G. C. Selfridge
Field Team, Reg. 7
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

LScott

8/5/52

EXPLORATION

JUL 3 1952

Mr. C. N. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

Almost two months have passed since we sent you the information regarding the legal documents that should accompany your application for exploration assistance. To date we have not heard from you. Will you please inform us whether or not you intend to proceed with your application? We would appreciate hearing from you at your earliest convenience.

Sincerely yours,

G. C. Selfridge

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

GCSelfridge:ls
7/2/52

CC: Docket
Admn. Reading File
G. C. Selfridge
Field Team, Region 7
J. M. Forbes, USBM
Mrs. Martha Carr, USGS
J. L. Hefflund- Legal

MAY 12 1952

Mr. C. E. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 7186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

With reference to our recent discussion, I am attaching a memorandum from the Chief Counsel in regard to the leases, assignments, and subordination agreements needed to process your application. When the legal chain of documents is complete, the Legal Division will then be able to decide from just what parties it will be necessary to obtain subordination agreements.

At your earliest convenience we would appreciate receiving the necessary information, or clarification of that already submitted, in keeping with the request of the Legal Division.

Sincerely yours,

G. C. Selfridge

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

GCSelfridge:ls
5/9/52

Enclosure

CC: Admn. Reading File
Docket
Field Team, Reg. 7
G. C. Selfridge
J. L. Hofflund - Code 140
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

140

400 5 6

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

May 7, 1952

Memorandum

To: Mr. G. C. Selfridge

From: Chief Counsel

Subject: Hyde Construction Company, DMEA-2186

You submitted to me this day the file in the above matter requesting that I determine what subordination agreements or owner's consent to lien agreements are necessary in view of the various assignments of the lease or leases under which the applicant proposes to operate.

Various leases and parcels of ground are referred to in the file. I am unable to determine from the file just what property is to be the subject of the exploration project contract or what lease, assignment of lease, or other document is relied upon to give the applicant an interest in the property.

The latest document in the file appears to be an "Assignment and Agreement" dated January 25, 1952, between Kilmichael Mining Company, Inc., and "R. W. Hyde, Jr., doing business as Hyde Construction Company." If this document is relied upon as giving the applicant rights in the land which is the subject of the application, I am unable to determine what the land is, or how Kilmichael Mining Company, Inc., acquired any interest in it.

I think that you should require the applicant to describe exactly the land which is to be made the subject of the exploration project contract, and then set forth a chain of title showing how he acquired any interest in the land, with copies of all documents involved, including assignments.

No doubt some of the copies of documents now in the file will be sufficient, but they will have to be supplemented by copies of other documents to fill in the gaps in the chain of title. With these matters in hand, I can determine what consents to lien will be required.

The foregoing is not to be taken as requiring the applicant to furnish us with a formal abstract of title, although this would, of course, be most satisfactory. The applicant surely knows what land he has in mind, and can furnish us with a simple statement of how he derives his interest in it, together with copies of documents which establish this interest.

If the applicant's interest depends upon a lease, or assignments of lease, or a sublease, it will be necessary to have the Owner's Consent to Lien signed by the original lessor. It will be necessary also to have Owner's Consent to Lien forms signed by any assignors or sublessors, if the assignments or subleases fix any sort of claim on production or on the leasehold, or prohibit the removal of any fixtures or other items in the cost of which the Government will participate.

There is in the file copies of a lease dated July 27, 1949, J. H. and Maggie M. Selvidge to Henry Pope and J. E. Patridge. This lease appears to have been signed by the lessors but not by the lessees. It would not serve to give the lessees any interest in the land which could be relied upon for the purposes of an exploration project contract.

I suggest that you furnish a copy of this memorandum to the applicant.

J. L. Hoffiund
Chief Counsel

Attachment

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

May 7, 1952

Memorandum

To: Mr. G. C. Selfridge

From: Chief Counsel

Subject: Hyde Construction Company, DMEA-2186

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I think that you should require the applicant to describe exactly the land which is to be made the subject of the exploration project contract, and then set forth a chain of title showing how he acquired any interest in the land, with copies of all documents involved, including assignments.

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I suggest that you furnish a copy of this memorandum to the applicant.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

400

7 10 ASIGN

APR 3 0 1952

Hyde Construction Company
P. O. Box 285
Jackson, Mississippi

Re: Docket No. MM-2186 - Iron
Selvidge Property
Webster County, Mississippi

Gentlemen:

Review of the subject docket shows that we have not received an acknowledgment of our letter to you dated February 8, 1952, requesting a copy of the assignment of lease between the present lessees and the Hyde Construction Company.

Our file further shows that additional data were requested from you by Mr. R. A. Laurence, Executive Officer, DMEA Field Team, Region 7, on March 18, 1952.

Will you please advise us of the progress that has been made with regard to obtaining the requested information. May we hear from you at your earliest convenience.

Sincerely yours,

George C. Selfridge

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

GCSelfridge:le
4/29/52

cc: Docket
Admn. Reading File
Field Team, Region 7
G. C. Selfridge
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

FEB 29 1952

Mr. Robert A. Lawrence
Executive Officer, Region VII
Room 13
Post Office Building
Knoxville 1, Tennessee

Re: Docket No. DMSA 2186X - Iron Ore
Selvidge Property
Webster County, Mississippi

Dear Mr. Lawrence:

The Hyde Construction Company, represented by Mr. E. W. Hyde, Jr., P.O. Box 365, Jackson, Mississippi, has submitted an application in the amount of $32,300.00 for Government assistance in exploring a tract of land designated as the Selvidge property, situated in Webster County, Mississippi.

The applicant believes that a significant discovery of iron ore may be made on this property and/or additional land in the same general area.

In order to give this application further consideration, we would appreciate having your opinion regarding the possibilities of the proposed project and whether or not you think it might be a worthwhile exploration.

We understand that your office is familiar with the area covered by the subject docket. If so, we would like to have a brief description of the attitude of the iron-bearing beds. A pencil sketch of the beds would help.

We should also like to have your opinion on the economic phase of the proposed mining operations and your opinion on the advisability of exploring by means of bulldozer trenches and diamond drilling or churn drilling.

We do not believe that an examination by the field team is necessary at this time as we are waiting for some additional information from the applicant.

Enclosed herewith, please find various documents relative to the application which may be of assistance to you. Will you please return these with your reply.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures

Approved:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

GOGentry'lm
2/25/52

cc: Admn. Reading File
Docket
N. B. Melcher, UH DM
T. P. Thayer, USGS
Field Team Reg. VII
O. C. Selfridge
G. G. Gentry

IN REPLY REFER TO:

file

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 18, 1952

To: George E. Selfridge, DMA

From: Martha Carr, USGS

Subject: Exploration application $16,170 DMA 2166 (Revision of DMA 2186) Iron ore
Hyde Construction Company
R. N. Hyde, Jr.,
Box 385
Jackson, Miss.

Property: The Selvidge property, which is 9½ miles northwest of Tomnolen, in Webster County, Miss., is described as follows: S½NW¼ and NW¼SW¼ and N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E., 160 acres more or less; SW¼ except N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E.; also NE¼ and NW¼NE¼ and 4 acres in SW corner NW¼ sec. 8, T. 20 N., R. 8 E., 204 acres more or less

Proposal: Applicant plans to explore by digging channels and pits and by core drilling. He believes that, after the exploratory work determines the extent of the deposits, they can be developed economically on a large scale, provided sufficient mining and prospecting equipment is made available. The materials to be produced are iron ore, and slag and clay products. The project would require two months and could be started within 10 days after the approval of the loan.

Geology: The ore occurs as large concretions of limonite and siderite within a silty clay formation (Wilcox). The limonite concretions were originally siderite but, in the zone of surface weathering, oxidation has changed them to limonite. Below this zone they are principally siderite. The oxidized concretions contain 45-55 percent Fe as compared to 40-50 percent Fe in the unoxidized ones. The grade of the limonite compares favorably with the brown ores being used in Birmingham. The layers or beds of ore, which occur at various stratigraphic levels, consist of more or less widely separated concretions which roughly parallel the strata. A reconnaissance report on Webster County iron ores, by F. E. Vestal, published as Bulletin 73 of the Mississippi State Geological Survey, 1951 (copy herewith), describes as follows that part of the Alva field which includes the Selvidge Property (pp. 32-34):

"Along the Alva-Tomnolen road, a little less than 2.5 miles southeast of Alva, on the Selvidge property are outcrops of one of the greatest accumulations of iron ore in Mississippi. The most prominent outcrops observed (SE cor. Sec. 5, or NE cor. Sec. 8, T. 20 S., R. 8E) are in the slopes at the head of a valley on the southwest side of the road. The number of ore intervals here has not been determined with certainty, but is at least four, and probably five or six. Before any excavation had been done, rounded masses of oxide and carbonate ore projected from the slope at several different levels, within a vertical interval of 40 feet or more. Later, strip-mining on a small scale, and prospecting by means of removing overburden with a bulldozer, exposed much more ore. Fifty to 60 tons were shipped out, and heaps of ore masses of various shapes and sizes were left scattered over the area, especially along the road. Many of the individual lumps were of relatively large size: one measured 6.5 feet long, 4.4 feet wide, and 1.8 feet thick. The total thickness of the ore beds at this place has been estimated at 8.0 feet. The estimate probably is not too great. Furthermore, the dividing ridge which contains the Selvidge property ore extends far northwards, northwestwards, and southwards, and reconnaissance northwards has found many outcrops of ore half a mile to a mile from the public road. In fact, the showings are sufficiently numerous and the beds are of positions and thicknesses sufficiently in conformity with the positions and thicknesses of the beds at the large outcrop, to warrant the conclusion that the ore layers are continuous except for breaks made by erosion, even where they can not be traced with certainty. Almost certainly, then, the same beds appear in different fields, especially along the strike."

The author estimates nearly 3 million tons of ore under the two square miles in that part of the Alva Field easily accessible from the two main roads. Part of this estimate could be assigned to the Selvidge property, but it is not possible to estimate the percentage. The property described by the applicant has been outlined on Plate 1 of Mississippi Bulletin 73 in order to show its location with respect to the main roads.

Recommendation: The area indicated would appear to be one of the more promising fields in north-central Mississippi. With modern large-scale earth moving machinery, the deposits could possibly be mined successfully if exploration proved them to contain a significant tonnage of limonite. Their economic development would also depend upon the abundance of the limonite concretions

in the clay in the individual areas to be mined and their iron content, the number of layers of concretions in the oxidized zone and the continuity of the layers, the relative amounts of limonite and carbonate concretions, the depth to which the oxidized zone extends, and the thickness of the overburden, as well as upon the economics of mining, washing, and hauling. A topographic map of the area would be helpful in determining the altitude of the various ore beds and correlating them. The U. S. Geological Survey has done no topographic mapping in the area, but the Mississippi River Commission has been working there. It has been learned through Mr. McCrea of that Commission (Code 131, Ext. 53425) that all they have so far is control; aerial photos are due in about a week; and the blueline compilation will be available possibly in September.

The analyses submitted by the applicant indicate that the ore of low-iron content is of no value to Sloss-Sheffield in Birmingham. This fact points out the necessity for selective mining for limonite only. The carbonate ores would not be acceptable, and where they occur near the surface, therefore, the deposits would not be worth mining. The phosphorus content is low enough so that it is not considered deleterious.

The applicant should be asked to furnish a large-scale map of the property showing the specific areas in which he plans to dig channels and test pits and to drill. Although diamond drilling would be essential to some extent in determining the depths of the overburden and the oxidized zone—and the number of ore beds within the latter, this type of prospecting would be limited in achievement because of the fact that the iron concretions are more or less widely spaced within the ore beds and a core drill could pass through a bed without encountering ore.

In the applicant's itemized schedule of labor and supervisors, the item of one geologist, 8 weeks at $250 per week, is questioned, as it is believed that one could be employed at considerably less than that figure.

Attachments.

cc: Director's Reading File (4212)
Branch
DMEA File (3)
Ferrous Metals File
Martha Carr (2)

Martha Carr:bbk
G 2/18/52

IN REPLY REFER TO:

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 18, 1952

To: George E. Selfridge, DMEA

From: Martha Carr, DSGS

Subject: Exploration application $16,170 DMEA 2166 (Revision of DMEA 2186) Iron ore
Hyde Construction Company
R. E. Hyde, Jr.,
Box 385
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Attachments.

cc: Director's Reading File (4212)
Branch
DMEA File (3)
Ferrous Metals File
Martha Carr (2)

Martha Carr:bbk
G 2/18/52

file

FEB 8 1952

Mr. D. Stockton
Hyde Construction Company
P.O. Box 385
Jackson, Mississippi

Re: Docket No. IMM 2186X - Iron Ore
80A Acres Salvige Place Area
Webster County, Mississippi

Dear Mr. Stockton:

Your application dated January 19, 1952, pertaining to the subject docket is presently being reviewed by this office. In studying the lease agreement between J. W. Salvidge and Maggie M. Salvidge, lessors, and Henry Pope and J. M. Patridge, lessees, we do not find an assignment of said lease from the lessees to the Hyde Construction Company, who are designated in form MM-103 as the applicants for Government assistance.

It will be necessary that you furnish us with copies of the assignment of lease between the present lessees and the Hyde Construction Company before we can proceed with your application.

May we hear from you at your earliest convenience?

Sincerely yours,

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division
Defense Minerals Exploration
Administration

GCGentry'lm
2/6/52

cc: Admn. Reading File
Docket
N. B. Melcher, USBM
T. P. Thayer, USGS
Field Team Reg. VII
G. C. Selfridge
G. C. Gentry

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Iron Ore

CONTROLLED DOCUMENT

DMA Docket No. 2186

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 PROJECT

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

Routing Slip

To:	~~Code 360~~ ~~Iron Ores~~ Br.	Date	~~10/30/51~~
To:	Iron + Ferro	Date	
To:	[illegible]	Date	11/16/57
To:	P.E. Div.	Date	11/16/57
To:	Operating Com.	Date	2-27-52
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

Selfridge
Martin
Rubin
Hoffman

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

SEP 23 1952

Mr. C. H. McDill
Kilmichael Mining Co., Inc.
Kilmichael, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

This will acknowledge receipt of your letter of September 8 1952, advising us that the contract between the Hyde Construction Company and the Kilmichael Mining Company, Inc., has been cancelled. You also ask whether it would be possible to transfer the subject application to the Kilmichael Mining Company, Inc.

As you are already familiar, the Hyde Construction Company's application for exploration aid has now been removed from our active file because that company failed to provide the information required in order to determine whether that application should be approved.

Inasmuch as the necessary data have not yet been furnished, it would not be to your advantage to have the former application transferred. Instead, it is suggested that you complete in detail and return to us four of the attached copies of Form MF-103 giving particular attention to the following comments.

Please answer "1. Name of applicant" with respect to parts (a) and (b) and either (c) or (d), whichever may apply.

In answering "3. Applicant's property rights," you should be guided by our letter of May 12, 1952, (copy attached) which enclosed a memorandum from our Chief Counsel (copy attached) in regard to the leases, assignments, and subordination agreements needed. For your convenience we attach copies of Form MF-203, "Owner's Consent to Lien," to be used for the subordination agreements. The amount of the Government's contribution (Form MF-203, Footnote 4) should be left blank to be filled in by us only when the contract for the project shall have been executed. Furthermore, it should be noted that where husband and wife are lessors, both husband and wife should sign the "Owner's Consent to Lien." If any of the leases previously sent to us form part of your chain of title, it will not be necessary to send us further copies.

"4. Physical description" need not be answered this time; it will be sufficient to write, "See Docket No. DMA 2186 - Hyde Construction Company."

"5. The exploration project" can be described in detail by submitting a working scale map as requested in 5(b), showing in plan the location and nature of the proposed exploration work. We should also be informed whether you have in mind some individual, preferably with experience in brown iron ore exploration and mining in Alabama and Georgia, who might be qualified to supervise the proposed operations, and if so, who he is and what his record shows.

"6. Estimate of Costs" should be completed on a separate sheet, giving details under each applicable heading [(a), (b), (c), and (d)] for the same program that is submitted on your map covering 5(b) above.

Your answers to 7(a) and (b) will also be necessary.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Administrator

S.N.
9-23-52

Enclosures

WSMartin:ls
9/18/52

Copy to: Docket
Admn. Reading File
W. S. Martin
Mrs. Martha Carr, USGS
J. M. Forbes, USBM
Field Team, Region 7

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 9-12-52

REFERRED TO:

1. Code 400
2.
3.
4.

FOR:

---------- Action	---------- Recommendation
---------- Approval	---------- Record of ----------
---------- Comment	---------- Referring to ----------
---------- Conference	---------- Reply for signature of ----------
---------- Consideration	---------- Rewriting
---------- Filing	---------- Signature
---------- Instructions	---------- Suggestions
---------- Investigation	---------- Your information
---------- Initials	
---------- Mailing	
---------- Previous correspondence	

REMARKS: ----------

Check (X) before the items needing attention.

R. E. ADAMS

Initials of sender.

GPO 16—63815-1

See

Kilmichael Mining Co., Inc.

Kilmichael, Miss.

BOARD OF DIRECTORS
J. K. FLOWERS, CHAIRMAN
L. L. MCCHAREN
R. B. FLOWERS
H. L. FLOWERS
C. H. MCDILL, SEC.

OFFICERS
J. K. FLOWERS, PRES.
L. L. MCCHAREN, V.-PRES.
R. B. FLOWERS, V.-PRES.
H. L. FLOWERS, V.-PRES.
C. H. MCDILL, V.-P., SEC.-TREAS

September 8,1952

Docket removed 9/49. Put to Adams since Hyde has answered the attorneys reply by 9/1

United States
Department Of The Interior
Defense Minerals Exploration Administration
Washington 25, D.C.

Re: DocketNo. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Mr. C. O. Mittendorf
Acting Administrator

Gentlemen:

Your letters of July 3,1952 and August 6, 1952 were turned over to the Hyde Construction Co., and the writer has just learned that neither was answered.

We wish to apologise for this gross neglect, and tb thank you for all that you have done with the matter.

Due to failure to carry out his commitments as agreed, the contract between the Hyde Construction Company and the Kilmichael Mining Co., Inc., has been canceled. In view of this fact we are wondering if it will be possible for this application to be transferred to the Kilmichael Mining Company Inc., and if so what will be the neccessary steps for us to take other than to submit the neccessary legal papers etc., that have been requested ?

We will appreciate your kind consideration in this matter, and will endeavor to reply promptly to any request you may make.

Yours very truly,
Kilmichael Mining Co., Inc.

C. H. McDill

C. H. McDill

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 12 1952

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : R. E. Adams, Administrative Officer, DMEA DATE: Sept. 4, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Removal of application from the active files
Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

By letter of August 6, 1952, we advised the applicant that his application would be removed from the active file on September 1, 1952, provided that we did not receive the data previously requested.

To date, this information has not been received, therefore, we are transmitting herewith the above referenced docket to be placed in the inactive files.

W. S. Martin
W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Attachment

FILE COPY 400
SURNAME:

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

R. E. Adams, Administrative Officer, DPA Sept. 4, 1952
Iron and Ferro-Alloy Division, DMEA

Martin

Removal of application from the active files
Docket No. DMA 2186 - Iron
Ryde Construction Company
Selvidge Property
Webster County, Mississippi

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To date, this information has not been received, therefore, we are transmitting herewith the above referenced docket to be placed in the inactive files.

Signed

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Attachment

McClure
9/4/52

cc: Admn. Reading File
Docket
J. M. Forbes, USBM
Martha Carr
W. S. Martin

FILE COPY
SURNAME:

Selfridge

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

AUG 6 1952

Mr. C. H. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

A reply to my letter of July 3, 1952, inquiring as to whether or not you expect to proceed with your application, has not been received.

We wish to cooperate in the matter of allowing ample time for you to secure the necessary legal papers to accompany your application, but if the necessary data have not been received by September 1, we will assume that you are no longer interested in exploration aid and will remove the application from our active file and consider the matter closed.

Sincerely yours,

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

GC: Docket
Admn. Read.File
G. C. Selfridge
Field Team, Reg. 7
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

LScott
8/5/52

8.6.52

400

FILE COPY
SURNAME:

Selfridge
Dust

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

JUL 3 1952

Mr. C. H. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

Almost two months have passed since we sent you the information regarding the legal documents that should accompany your application for exploration assistance. To date we have not heard from you. Will you please inform us whether or not you intend to proceed with your application? We would appreciate hearing from you at your earliest convenience.

Sincerely yours,

George C. Selfridge

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

J.N.
7-3-52

GCSelfridge:ls
7/2/52

CC: Docket
Admn. Reading File
G. C. Selfridge
Field Team, Region 7
J. M. Forbes, USBM
Mrs. Martha Carr, USGS
J. L. Hofflund- Legal

June 12, 1952

Mr. Selfridge:

A month has passed since we wrote to McDill that title to this property must be straightened out. McDill has not acknowledged our letter, so we have no indication whether he intends to try to untangle the legal technicalities.

Do you wish to write McDill a follow-up asking what progress he has made and whether there appears any likelihood that ultimately he will obtain a valid interest in the property?

LS -

Wait until 26 June.

400

FILE COPY
SURNAME:

Selfridge
McDill

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

MAY 12 1952

Mr. C. H. McDill
117 Riverside Drive
Greenwood, Mississippi

Re: Docket No. DMA 2186 - Iron
Hyde Construction Company
Selvidge Property
Webster County, Mississippi

Dear Mr. McDill:

With reference to our recent discussion, I am attaching a memorandum from the Chief Counsel in regard to the leases, assignments, and subordination agreements needed to process your application. When the legal chain of documents is complete, the Legal Division will then be able to decide from just what position it will be necessary to obtain subordination agreements.

At your earliest convenience we would appreciate receiving the necessary information, or clarification of that already submitted, in keeping with the request of the Legal Division.

Sincerely yours,

George C. Selfridge

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

S.N.
5-12-52

GCSelfridge:ls
5/9/52

Enclosure

CC: Admn. Reading File
Docket
Field Team, Reg. 7
G. C. Selfridge
J. L. Hofflund - Code 140
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

140

FILE COPY
SURNAME:

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

May 7, 1952

Memorandum

To: Mr. G. C. Selfridge

From: Chief Counsel

Subject: Hyde Construction Company, DMEA-2186

You submitted to me this day the file in the above matter requesting that I determine what subordination agreements or owner's consent to lien agreements are necessary in view of the various assignments of the lease or leases under which the applicant proposes to operate.

Various leases and parcels of ground are referred to in the file. I am unable to determine from the file just what property is to be the subject of the exploration project contract or what lease, assignment of lease, or other document is relied upon to give the applicant an interest in the property.

The latest document in the file appears to be an "Assignment and Agreement" dated January 25, 1952, between Kilmichael Mining Company, Inc., and "R. W. Hyde, Jr., doing business as Hyde Construction Company." If this document is relied upon as giving the applicant rights in the land which is the subject of the application, I am unable to determine what the land is, or how Kilmichael Mining Company, Inc., acquired any interest in it.

I think that you should require the applicant to describe exactly the land which is to be made the subject of the exploration project contract, and then set forth a chain of title showing how he acquired any interest in the land, with copies of all documents involved, including assignments.

No doubt some of the copies of documents now in the file will be sufficient, but they will have to be supplemented by copies of other documents to fill in the gaps in the chain of title. With these matters in hand, I can determine what consents to lien will be required.

The foregoing is not to be taken as requiring the applicant to furnish us with a formal abstract of title, although this would, of course, be most satisfactory. The applicant surely knows what land he has in mind, and can furnish us with a simple statement of how he derives his interest in it, together with copies of documents which establish this interest.

If the applicant's interest depends upon a lease, or assignments of lease, or a sublease, it will be necessary to have the Owner's Consent to Lien signed by the original lessor. It will be necessary also to have Owner's Consent to Lien forms signed by any assignors or sublessors, if the assignments or subleases fix any sort of claim on production or on the leasehold, or prohibit the removal of any fixtures or other items in the cost of which the Government will participate.

There is in the file copies of a lease dated July 27, 1949, J. H. and Maggie M. Selvidge to Henry Pope and J. E. Patridge. This lease appears to have been signed by the lessors but not by the lessees. It would not serve to give the lessees any interest in the land which could be relied upon for the purposes of an exploration project contract.

I suggest that you furnish a copy of this memorandum to the applicant.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

JLHofflund/em

Copy to: Mails and Files
J. L. Hofflund
chron.

C. H. McDill
117 RIVERSIDE DR.
GREENWOOD, MISS.

Selvidge — Lessor

lease

↓

Pope & Palmedge

partners agreement.

↓

Kilmichael Mining Co, Partnership

agreement

↓

drop out — Kilmichael ✓ ✓ Corporation

assignment

↓

Idyde Construction Company.

ASSIGNMENT AND AGREEMENT

THIS ASSIGNMENT AND AGREEMENT entered into this the 25th day of January, 1952, by and between KILMICHAEL MINING COMPANY, INC. of Kilmichael, Mississippi, hereinafter referred to as the "Owner", and R. W. Hyde, Jr., doing business as HYDE CONSTRUCTION COMPANY, hereinafter referred to as the "Contractor",

WITNESSETH:

Owners are the Lessees of certain mineral leases in Montgomery County, Mississippi, and other Counties, which leases cover iron ore, manganese, gravel, clay, sulphur, and other minerals, excluding oil and gas, as therein set forth, and for the consideration hereinafter mentioned, said Owner hereby transfers, conveys, and delivers each and all of said leases to R. W. Hyde, Jr. for the purpose of producing, contracting for and sale of all minerals as set forth. All of the leases held by the Contractor shall convert back to the Owner should production be completely abandoned. All of the leases held by Owner at this time in the State of Mississippi are hereby assigned, conveyed, and delivered, whether herein particularly referred to or described or not. Owner and contractor further agree that all other mineral leases covering ore and minerals of the same kind and character as that covered by the leases hereinabove assigned which may be acquired by Owner in the State of Mississippi in the future will be immediately assigned to Contractor

for the same consideration and under the same conditions and agreements herein contained.

In consideration of the foregoing assignment, Contractor agrees to mine and produce all of the iron ore, manganese, and other minerals found within the confines of said leases areas if in merchantable quantities, and for its services in so mining and producing, it shall receive the actual cost of such production, plus ten per cent (10%) thereof. The actual production costs shall include the following items, but shall not exclude other similar items which are a part of the actual cost of production, to-wit:

1. The cost of moving or shipping in and out to the several locations all machinery and equipment.
2. Rental on all machinery and equipment, based on present AOC rental schedules.
3. All taxes and all insurance necessarily and customarily paid and carried.
4. All royalties and rentals paid out to land owners under said leases.
5. All payrolls of employees on any job, not including any employees in the Jackson Office.
6. Necessary office rent at any job.
7. Freight when paid by Contractor.
8. The cost of auditing of Contractor's books in the manner hereinafter set out.

9. Necessary transportation, telephone and telegraph amounts attributable to any job and bookkeeping expense.

It is the intention of the parties that all costs, plus ten per cent (10%) thereof, incurred in connection with the mining and production of the ore shall be refunded to Contractor out of proceeds of sales, whether such costs are hereinabove specifically mentioned or not.

An audit of Contractor's books shall be made at the end of each calendar month by a Certified Public Accountant approved by both Owner and Contractor. The books pertaining to any of the jobs covered by this agreement shall be open to any ~~member~~ OFFICIAL of the ~~Owner's partnership~~ KILMICHAEL MINING CO, INC. at all reasonable times.

CAH
RWH

The Contractor agrees to furnish all money to carry on an economical and as near as possible a profitable business in the production of all materials which are covered by the above mentioned leases.

When the ore is mined and produced, it is agreed that Contractor shall contact purchasers and make sales of the ore mined and produced and shall collect from the Purchaser or Purchasers the purchase price for such sales made. All sales and contacts relating to sales shall be handled by mutual agreement, but when such sales are made and collections for the purchase money are in hand, Contractor shall account to and pay over to Owner one-half of the net profits arising from the operations herein referred to. Such net profits shall be the difference between

the cost of mining and production, plus ten per cent (10%) thereof, and the sale price, and it is the intention of the parties that this difference shall be split one-half to Owner and one-half to Contractor.

It is further agreed that if there is any cost in connection with the making of said sales and contacts concerning such sales, such cost shall be considered a part of the cost of production hereinabove mentioned and retained by Contractor, plus ten per cent (10%) thereof.

It is further the intention of the Contractor to place the necessary machinery and personnel to mine and produce all materials found in merchantable quantities as soon as practical, but there shall be no obligation on the Contractor to produce or perform under this agreement due to conditions beyond his control.

WITNESS the signatures of the parties hereto this the 25 day of January, 1952.

KILMICHAEL MINING COMPANY, INC.

By J. K. Flowers
J. K. Flowers, President

By C. H. McDill
C. H. McDill, Secretary-Treasurer

HYDE CONSTRUCTION COMPANY

By R. W. Hyde
R. W. Hyde, Jr. Owner
Doing business as Hyde Construction Company

STATE OF MISSISSIPPI

COUNTY OF _____

THIS DAY personally appeared before me, the undersigned authority, the above named J. K. Flowers, who acknowledged that he signed and delivered the foregoing instrument on the day and year first above mentioned.

WITNESS my signature and official seal this the _____ day of _____, 1952.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES:

_____

STATE OF MISSISSIPPI

COUNTY OF _____

THIS DAY personally appeared before me, the undersigned authority, the above named G. H. McDill, who acknowledged that he signed and delivered the foregoing instrument on the day and year first above mentioned.

WITNESS my signature and official seal this the _____ day of _____, 1952.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES:

_____

STATE OF MISSISSIPPI

COUNTY OF _____

THIS DAY personally appeared before me, the undersigned authority, the above named R. W. Hyde, Jr., who acknowledged that he signed and delivered the foregoing instrument on the day and year first above mentioned.

WITNESS my signature and official seal this the _____ day of _____, 1952.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES:

_____

FILE COPY
SURNAME:

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

APR 30 1952

Selfridge
Mitt

Hyde Construction Company
P. O. Box 385
Jackson, Mississippi

Re: Docket No. DMA 2186 - Iron
Selvidge Property
Webster County, Mississippi

Gentlemen:

Review of the subject docket shows that we have not received an acknowledgment of our letter to you dated February 8, 1952, requesting a copy of the assignment of lease between the present lessees and the Hyde Construction Company.

Our file further shows that additional data were requested from you by Mr. R. A. Laurence, Executive Officer, DMEA Field Team, Region 7, on March 18, 1952.

Will you please advise us of the progress that has been made with regard to obtaining the requested information? May we hear from you at your earliest convenience?

Sincerely yours,

George C. Selfridge

P.N. 4-30-52

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

GCSelfridge:ls
4/29/52

cc: Docket
Admn. Reading File
Field Team, Region 7
G. C. Selfridge
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

4/7 - waiting for app to send in data, as noted in letter from Reg III - mm 27 B

QB

4/28 [illegible]

Mr. Selfridge:

A whole month has passed since the FT wrote that the applicant had been advised to send us certain maps, etc., but none have been received. Since the Washington Office of DMEA has not written the applicant since our letter of 2/8/52 asking for copies of assignment of lease--which haven't been furnished--perhaps a letter or follow-up ultimatum is in order???

ls

2/28/52

IF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 4/1

REFERRED TO:

1. ~~Frank Johnson~~
2. MW Selfridge R3538
3.
4.

FOR:

For Boerner.

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

Go ahead

REMARKS:

Check (X) before the items needing attention.

Frank Johnson
(JB) *Initials of sender.*

GPO 16—63815-1

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

Room 13, Post Office Building
Knoxville 02, Tennessee

MAR 27 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee

From: Executive Officer, DMEA - Region VII

Subject: DMEA-2186, Hyde Construction Co., Selvidge Property (Iron Ore), Webster County, Mississippi

On March 18, 1952, R. A. Laurence of the Geological Survey, and J. F. O'Neill of the Bureau of Mines, met with R. W. Hyde, Jr., of the applicant company, and C. H. McDill of Kilmichael Mining Co.

This was pursuant to your letter of February 29, and we are not submitting a formal field examination report at this time, as the request stated one is not needed.

We advised the applicant that the following additional data are needed:

(1) Large-scale map, showing location and extent of work to done on this 504-acre tract.

(2) Description of types of work (e.g. trenching, pitting, drilling) and amounts of each.

(3) Necessary legal papers to support title, and subordination agreements. It is our understanding that Selvidge leased to Pope and Patridge, who assigned the lease to Kilmichael Mining Co., in which they were formerly partners, and that Kilmichael assigned the lease to Hyde Construction Company on a 50-50 basis.

Following are replies to the specific questions in your letter of February 29 :

(1) The project appears to be a worthwhile exploration, as will be discussed below.

(2) The iron-bearing "beds" are essentially horizontal. However, "beds" is a misnomer; the ore occurs as discrete concretionary masses which, in any given area at least, occur at certain stratigraphic levels. At the Selvidge place, at least 4 such zones occur in about 35 feet of silty and sandy clay.

A section measured at the Hart property in September 1950, by R. A. Laurence shows:

2 ft. roots, soil, etc.
5 ft. gray silty-sandy clay
1½ ft. zone of large concretions
1 ft. gray clay, as above, to bottom of pit

A sketch showing approximate position of the ore zone is attached, as requested. The concretions range in size up to 3' x 4' x 18", the largest seen by the writer, but Vestal (Miss. G. S. Bull.73) reports even larger ones.

(3) Exploration by surface methods should precede any drilling. Mr. O'Neill has suggested the use of a backhoe for trenching, with which the rest of us agreed.

Because the concretions are not continuous (F. E. Vestal, Geologist, Miss. State Geol. Survey estimates they occupy from 20 to 40 percent of the area of the bed in which they occur) drill holes may easily show no ore in a fairly good area. As there is no doubt that the concretions extend under considerable cover, the only reason for drilling is to determine the depth to which oxidation has occurred. Beyond that depth, the unweathered concretions are siderite and are apparently not acceptable to the Birmingham furnaces.

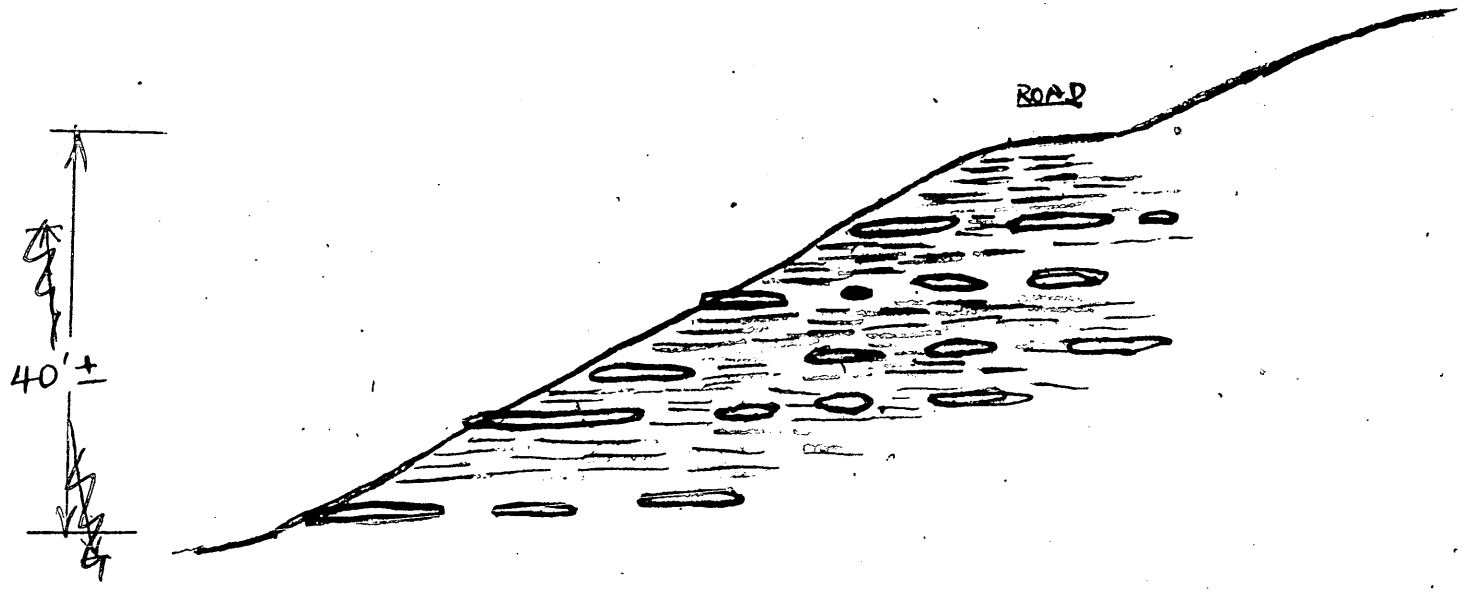
Because the concretions are hard, sold masses as much as 2 feet thick, churn drilling is not likely to give satisfactory results.

Other pertinent data observed during our visit follows:

Due to failure to properly wash the ore from the Hart place, the company had 12 cars of ore rejected at Birmingham. Although they had been advised to install a log-washer, they attempted to wash the ore on a vibrating screen, with no success. We think their proposal to hire a geologist for 8 weeks at $250 per week, could profitably be changed to hire someone familar with brown ore exploration and mining in Alabama and Georgia.

It may be noted that producers in East Tennessee are currently selling, to Tennessee Products and Chemical Co., Rockwood, Tenn., ore of similar or inferior grade to much of that from Webster County which was rejected by Sloss-Sheffield.

Robert A. Laurence
R. A. Laurence



TOTAL ORE THICKNESS, approx 8 ft.

Diagrammatic sketch of iron-ore occurrence on Selvidge property, Webster Co., Miss.

DMEA-2186

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 18, 1952

Defense Minerals Administration
RECEIVED
MAR 3 1 1952

To: George E. Selfridge, DMEA

From: Martha Carr, USGS

Subject: Exploration application $16,170 DMEA 2186 (Revision of DMEA 2186) Iron ore
Hyde Construction Company
R. W. Hyde, Jr.,
Box 385
Jackson, Miss.

Property: The Selvidge property, which is 9½ miles northwest of Tomnolen, in Webster County, Miss., is described as follows: S½NW¼ and NW¼SE¼ and N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E., 160 acres more or less; SW¼ except N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E.; also NE¼ and N½NE¼ and 4 acres in SW corner NE¼ sec. 8, T. 20 N., R. 8 E., 204 acres more or less

Proposal: Applicant plans to explore by digging channels and pits and by core drilling. He believes that, after the exploratory work determines the extent of the deposits, they can be developed economically on a large scale, provided sufficient mining and prospecting equipment is made available. The materials to be produced are iron ore, and slag and clay products. The project would require two months and could be started within 10 days after the approval of the loan.

Geology: The ore occurs as large concretions of limonite and siderite within a silty clay formation (Wilcox). The limonite concretions were originally siderite but, in the zone of surface weathering, oxidation has changed them to limonite. Below this zone they are principally siderite. The oxidized concretions contain 45-55 percent Fe as compared to 40-50 percent Fe in the unoxidized ones. The grade of the limonite compares favorably with the brown ores being used in Birmingham. The layers or beds of ore, which occur at various stratigraphic levels, consist of more or less widely separated concretions which roughly parallel the strata. A reconnaissance report on Webster County iron ores, by F. E. Vestal, published as Bulletin 73 of the Mississippi State Geological Survey, 1951 (copy herewith), describes as follows that part of the Alva field which includes the Selvidge Property (pp. 32-34):

"Along the Alva-Tomnolen road, a little less than 2.5 miles southeast of Alva, on the Selvidge property are outcrops of one of the greatest accumulations of iron ore in Mississippi. The most prominent outcrops observed (SE cor. Sec. 5, or NE cor. Sec. 8, T. 20 N., R. 8E) are in the slopes at the head of a valley on the southwest side of the road. The number of ore intervals here has not been determined with certainty, but is at least four, and probably five or six. Before any excavation had been done, rounded masses of oxide and carbonate ore projected from the slope at several different levels, within a vertical interval of 40 feet or more. Later, strip-mining on a small scale, and prospecting by means of removing overburden with a bulldozer, exposed much more ore. Fifty to 60 tons were shipped out, and heaps of ore masses of various shapes and sizes were left scattered over the area, especially along the road. Many of the individual lumps were of relatively large size: one measured 6.5 feet long, 4.4 feet wide, and 1.8 feet thick. The total thickness of the ore beds at this place has been estimated at 8.0 feet. The estimate probably is not too great. Furthermore, the dividing ridge which contains the Selvidge property ore extends far northwards, northwestwards, and southwards, and reconnaissance northwards has found many outcrops of ore half a mile to a mile from the public road. In fact, the showings are sufficiently numerous and the beds are of positions and thicknesses sufficiently in conformity with the positions and thicknesses of the beds at the large outcrop, to warrant the conclusion that the ore layers are continuous except for breaks made by erosion, even where they can not be traced with certainty. Almost certainly, then, the same beds appear in different fields, especially along the strike."

The author estimates nearly 3 million tons of ore under the two square miles in that part of the Alva Field easily accessible from the two main roads. Part of this estimate could be assigned to the Selvidge property, but it is not possible to estimate the percentage. The property described by the applicant has been outlined on Plate 1 of Mississippi Bulletin 73 in order to show its location with respect to the main roads.

Recommendation: The area indicated would appear to be one of the more promising fields in north-central Mississippi. With modern large-scale earth moving machinery, the deposits could possibly be mined successfully if exploration proved them to contain a significant tonnage of limonite. Their economic development would also depend upon the abundance of the limonite concretions

in the clay in the individual areas to be mined and their iron content, the number of layers of concretions in the oxidized zone and the continuity of the layers, the relative amounts of limonite and carbonate concretions, the depth to which the oxidized zone extends, and the thickness of the overburden, as well as upon the economics of mining, washing, and hauling. A topographic map of the area would be helpful in determining the altitude of the various ore beds and correlating them. The U. S. Geological Survey has done no topographic mapping in the area, but the Mississippi River Commission has been working there. It has been learned through Mr. McCrea of that Commission (Code 131, Ext. 53425) that all they have so far is control; aerial photos are due in about a week; and the blueline compilation will be available possibly in September.

The analyses submitted by the applicant indicate that the ore of low-iron content is of no value to Sloss-Sheffield in Birmingham. This fact points out the necessity for selective mining for limonite only. The carbonate ores would not be acceptable, and where they occur near the surface, therefore, the deposits would not be worth mining. The phosphorus content is low enough so that it is not considered deleterious.

The applicant should be asked to furnish a large-scale map of the property showing the specific areas in which he plans to dig channels and test pits and to drill. Although diamond drilling would be essential to some extent in determining the depths of the overburden and the oxidized zone--and the number of ore beds within the latter, this type of prospecting would be limited in achievement because of the fact that the iron concretions are more or less widely spaced within the ore beds and a core drill could pass through a bed without encountering ore.

In the applicant's itemized schedule of labor and supervisors, the item of one geologist, 8 weeks at $250 per week, is questioned, as it is believed that one could be employed at considerably less than that figure.

Attachments.

cc: Director's Reading File (4212)
Branch
DMEA File (3) ✓
Ferrous Metals File
Martha Carr (2)

Martha Carr:bbk
O 2/18/52

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

Room 13 Post Office Building
Knoxville 2, Tennessee

March 5, 1952

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

Re: DMEA-2186 (Iron Ore)
Hyde Construction Co.
Webster County, Miss.

Dear Mr. Johnson:

This will acknowledge receipt of your letter of February 29, and the various documents relative to the subject application.

I made a brief examination of this area in September 1950, and recommended a limited amount of prospecting. I believe much of this has already been done by the operator.

It happens that I am to be in Oxford, Mississippi, on March 17, to give a lecture at the University of Mississippi. Thus I could visit the area on March 18 with very little extra travel, and I would prefer to withhold my answer to your questions until after that visit. As you are awaiting additional information from the applicant, this will cause no undue delay.

Sincerely yours,

Robert A. Laurence

Robert A. Laurence
Executive Officer, DMEA
Field Team, Region VII

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 7 1952

Docket 400
FILE COPY
SURNAME:

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

FEB 29 1952

Geology
Selfridge
Hyde
Forbes

Mr. Robert A. Laurence
Executive Officer, Region VII
Room 13
Post Office Building
Knoxville 1, Tennessee

Re: Docket No. DMEA 2186X - Iron Ore
Selvidge Property
Webster County, Mississippi

Dear Mr. Laurence:

The Hyde Construction Company, represented by Mr. R. W. Hyde, Jr., P.O. Box 385, Jackson, Mississippi, has submitted an application in the amount of $32,340.00 for Government assistance in exploring a tract of land designated as the Selvidge property, situated in Webster County, Mississippi.

The applicant believes that a significant discovery of iron ore may be made on this property and/or additional land in the same general area.

In order to give this application further consideration, we would appreciate having your opinion regarding the possibilities of the proposed project and whether or not you think it might be a worthwhile exploration.

We understand that your office is familiar with the area covered by the subject docket. If so, we would like to have a brief description of the attitude of the iron-bearing beds. A pencil sketch of the beds would help.

We should also like to have your opinion on the economic phase of the proposed mining operations and your opinion on the advisability of exploring by means of bulldozer trenches and diamond drilling or churn drilling.

We do not believe that an examination by the field team is necessary at this time as we are waiting for some additional information from the applicant.

Enclosed herewith, please find various documents relative to the application which may be of assistance to you. Will you please return these with your reply.

Sincerely yours,

2/29

(Signed) FRANK E. JOHNSON (HB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures

Approved:

E. H. Hedges (HB)

Member, Bureau of Mines

T. P. Thayer (HB)

Member, Geological Survey

GGGentry'lm
2/25/52

cc: Admn. Reading File
Docket
N. B. Melcher, US BM
T. P. Thayer, USGS
Field Team Reg. VII
G. C. Selfridge
G. G. Gentry

Memo to: G.C. Selfridge
From: Glenn G. Gentry

Re: Docket No. DMEA 2186-Iron
Webster County, Mississippi

Application For: $32340.00

Mississippi Geological Survey - Bulletin 73

Page 33: Along the Alva-Tomnolen Road, a little less than 2.5 miles S E of Alva, on the Selvidge property are outcrops of one of the greatest accumulations of iron ore in Mississippi.

The number of ore intervals here has not been determined with certainty, but at least 4, and probably 5 are.

Before any excavation had been done, rounded masses of oxide and carbonate are projected from the slope at several different levels, within a vertical interval of 40 ft or more. Later strip mining on a small scale, and prospecting by means of removing overburden with a bulldozer exposed much more ore. Fifty to 60 tons were shipped out, and heaps of ore masses of various shapes and sizes were left scattered over the area, especially along the road. The total thickness of the ore beds at this place is estimated at 8 feet. The estimate is probably not too great. Furthermore, the dividing ridge which contains the Selvidge property ore extends far northwards, northwestwards and southwards.

The showings are sufficiently numerous and the beds are of positions and thickness in conformity with the positions and thickness of the beds of the large outcrop, to warrant the conclusion that the ore layers are continuous except for breaks made by erosion, even where they can not be traced with certainty. Almost certainly, then, the same beds appear in different fields, especially along the strike.

Sept. 11-19-1951

12 RR Cars shipped to Sloss-Sheffield - No Value - Avg. 40.982% Fe.
1 " " " Net Value $107.44 - 45.20% Fe.
13 Cars = 515.956 dry Tons.

Sept. 5-7-1951

2. RR Cars -
39.520 Tons Net Value $132.48 - 48.88% Fe.
46.110 " " $205.65 - 51.01% Fe.

Totals = 601.586 dry tons (15 Cars) " $445.57 -

The Area indicated would appear to be one of the more promising fields in north-central Mississippi. Overburden probably to depth of 25 ft.

Shipments of ore, suggest that selective mining would be necessary to produce ore of acceptable grade.

Applicant has not submitted detailed maps to show where the Bulldozer Cuts will be made and/or the D.D work done. Applicants are apparently mining ore from an adjacent tract of land.

Mississippi Geological Survey seem to be favorably impressed with the possibility of producing a large tonnage of Commercial ore in this Area.

Suggest Referral to Field Team Provided Applicant answers our Letter of Feb. 8, 52, Requesting Copies of Assignment of Lease to Hyde Construction Co.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 18, 1952

To: George E. Selfridge, DMEA

From: Martha Carr, USGS

Subject: Exploration application $16,170 DMEA 2186 (Revision of DMA 2186) Iron ore
Hyde Construction Company
R. W. Hyde, Jr.,
Box 385
Jackson, Miss.

Property: The Selvidge property, which is 9½ miles northwest of Tomnolen, in Webster County, Miss., is described as follows: S½NW¼ and NW¼SE¼ and N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E., 160 acres more or less; SW¼ except N½NW¼SW¼ sec. 7, T. 20 N., R. 8 E.; also NW¼ and NW¼NE¼ and 4 acres in SW corner NE¼ sec. 8, T. 20 N., R. 8 E., 204 acres more or less.

Proposal: Applicant plans to explore by digging channels and pits and by core drilling. He believes that, after the exploratory work determines the extent of the deposits, they can be developed economically on a large scale, provided sufficient mining and prospecting equipment is made available. The materials to be produced are iron ore, and slag and clay products. The project would require two months and could be started within 10 days after the approval of the loan.

Geology: The ore occurs as large concretions of limonite and siderite within a silty clay formation (Wilcox). The limonite concretions were originally siderite but, in the zone of surface weathering, oxidation has changed them to limonite. Below this zone they are principally siderite. The oxidized concretions contain 45-55 percent Fe as compared to 40-50 percent Fe in the unoxidized ones. The grade of the limonite compares favorably with the brown ores being used in Birmingham. The layers or beds of ore, which occur at various stratigraphic levels, consist of more or less widely separated concretions which roughly parallel the strata. A reconnaissance report on Webster County iron ores, by F. E. Vestal, published as Bulletin 73 of the Mississippi State Geological Survey, 1951 (copy herewith), describes as follows that part of the Alva field which includes the Selvidge Property (pp. 32-34):

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The author estimates nearly 3 million tons of ore under the two square miles in that part of the Alva Field easily accessible from the two main roads. Part of this estimate could be assigned to the Selvidge property, but it is not possible to estimate the percentage. The property described by the applicant has been outlined on Plate 1 of Mississippi Bulletin 73 in order to show its location with respect to the main roads.

Recommendation: The area indicated would appear to be one of the more promising fields in north-central Mississippi. With modern large-scale earth moving machinery, the deposits could possibly be mined successfully if exploration proved them to contain a significant tonnage of limonite. Their economic development would also depend upon the abundance of the limonite concretions

in the clay in the individual areas to be mined and their iron content, the number of layers of concretions in the oxidized zone and the continuity of the layers, the relative amounts of limonite and carbonate concretions, the depth to which the oxidized zone extends, and the thickness of the overburden, as well as upon the economics of mining, washing, and hauling. A topographic map of the area would be helpful in determining the altitude of the various ore beds and correlating them. The U. S. Geological Survey has done no topographic mapping in the area, but the Mississippi River Commission has been working there. It has been learned through Mr. McCrea of that Commission (Code 131, Ext. 53425) that all they have so far is control; aerial photos are due in about a week; and the blueline compilation will be available possibly in September.

The analyses submitted by the applicant indicate that the ore of low-iron content is of no value to Sloss-Sheffield in Birmingham. This fact points out the necessity for selective mining for limonite only. The carbonate ores would not be acceptable, and where they occur near the surface, therefore, the deposits would not be worth mining. The phosphorus content is low enough so that it is not considered deleterious.

The applicant should be asked to furnish a large-scale map of the property showing the specific areas in which he plans to dig channels and test pits and to drill. Although diamond drilling would be essential to some extent in determining the depths of the overburden and the oxidized zone--and the number of ore beds within the latter, this type of prospecting would be limited in achievement because of the fact that the iron concretions are more or less widely spaced within the ore beds and a core drill could pass through a bed without encountering ore.

In the applicant's itemized schedule of labor and supervisors, the item of one geologist, 8 weeks at $250 per week, is questioned, as it is believed that one could be employed at considerably less than that figure.

Martha Carr

Attachments.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
OCT 25 1 39 PM '51

Form approved.
Budget Bureau No. 42-R1026.

Original Application

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 2186

Date received 10-25-51

Hyde Construction Company
P. O. Box 305
Jackson, Mississippi

Name and address of applicant

Date

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any? See Attached Sheet No. 1
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts. See Attached Sheet No. 1
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range. See Attached Sheet No. 1
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☐ Lessee.
   ☐ Contractor. See Attached Sheet No. 1
5. Number of years in production See Attached Sheet No. 1
   If not in production or operation, estimated date when production will begin
6. Experience of operators: See Attached Sheet No. 1.
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: See Attached Sheet .
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
R. W. Hyde, Jr. 703 Seneca Avenue Jackson, Mississippi	Owner	0 211,341.07					
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Iron Ore	None	None	None	5,000 Short Tons
2. Quantity of product processed (specify unit of measure and type of process)	Iron Ore	None	None Crushed and washed	None	10 Cars 900 Long ~~Short~~ Tons
3. Quantity and grade of product sold or shipped (specify units of measure)	See Attached Sheet.				10 Cars 900 Tons

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Yes - Production could be raised to 500 - 1000 tons daily if adequate plant for crushing and washing ore is provided.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

See Attached Sheet.

Sheet No. 1 - Form MF-100 Hyde Construction Co.

1. Material Produced:

   (a) Iron Ore
   (b) Slag and Clay Products.

2. (a) None
   (b) None
   (c) None
   (d) Open pit mine on Hart Place, Patridge Place and Selvidge Place.
   Hart Place, consisting of approximately 360 Acres, is located in Sections 25 and 26, Township 20 North, Range 7 East, Montgomery County, Mississippi. Mine is not flooded (open drain), 1500 Tons of Iron Ore have been mined. Productive capacity is approximately 3,000 Tons Per Acre.

   Patridge Place, consisting of approximately 640 acres, is located in Sections 3, 10, and 25, Township 20 North, Range 7 East, in Montgomery County. Mine is not flooded (open drain).50 Tons have been mined and shipped to Birmingham. Productive capacity is approximately 3,000 Tons per acre.

   Selvidge Place, consisting of approximately 504 Acres, is located in Sections 7 and 8, Township 20 North, Range 8 East, in Webster County, Mississippi. Mine is not flooded (open drain). Fifty Tons have been mined and shipped to Birmingham. Productive capacity is approximately 6,000 Tons per acre.

3. (a) Hart Place and Patridge Place are located 9 miles Northeast of Kilmichael, Mississippi.

   (b) No Mining District Exists.
   (c) Township 20 North, Sections 25, 26, 3 and 10, Range 7 East.
   (d) Montgomery County, Mississippi.

   (a) Selvidge Place located 9½ Miles Northwest of Tomnolen, Miss.
   (b) No Mining District Exists.
   (c) Township 20 North, Sections 7 and 8, Range 8 East.
   (d) Webster County, Mississippi.

4. (a) Hart and Patridge Places are in operation by Hyde Construction Company. Selvidge Place is ready for operation.
   (b) Hyde Construction Company operating as Contractor and Lessee.

5. Testing for 3 months.

6. (a) Hyde Construction Company is a general contracting firm owned by R. W. Hyde, Jr. and engaged in the construction of highways, airports, Power Plants, Pumping Stations, and Pipe Lines.

7. (a) Stratigraphic surveys made in Spring of 1950 by Dr. Charles Morgan (Deceased) of Bessemer, Alabama, who advised quantity and quality of the iron ore and extent of same was unlimited.
   1. Exploration by digging 120 test pits with bulldozers over an area of approximately 2,000 acres showed from 2 to 4 layers of iron ore within 12 feet from the surface, Samples of which

analyzed from 36% to 59% iron and manganese content. All samples were submitted to Pittsburg Testing Laboratory, Tennessee Coal & Iron Company, Woodward Steel Company, Sloss-Sheffield Steel & Iron, and Mississippi State Chemist in their natural state as mined (not cleaned).

Further exploration was done by stripping and mining with bulldozers and dragline and small processing plant. Operations were suspended temporarily due to inadequate plant to process the iron ore, namely crushers, washers and screens, which are necessary to clean the ore sufficiently for acceptance by Birmingham Steel Mills.

(b) None.
(c) See Attached copies of analysis, reports of Sloss-Sheffield Steel and Iron Company of actual shipments of iron ore received by them and press release by Mississippi State Geologist, Dr. W. H. Morse.

8. Hyde Construction Company, owned by R. W. Hyde, Jr., Box 385, Jackson, Mississippi.

9. Inapplicable.

10. 3. 18 cars (approx. 900 Long Tons) were processed by crushing and washing to some extent and shipped to Sloss-Sheffield Steel and Iron Company at Birmingham, Alabama, from whom we have an order for a maximum of 4,000 Tons of ore per day at a premium price. The ore shipped analyzed from 36% to 53% iron.

11. Change is contemplated in average monthly production. The production could be raised to 500 - 1000 tons per day from each area mined by providing adequate processing plants and mining equipment.

12. Ore or mineral Reserves (a) See attached reports referring to Item 7(c). Actual reserves of ore unknown. Applicant, Hyde Construction Company, now applying for loan to be used in further exploration of additional areas in Montgomery, Webster and other Counties of Mississippi.

(13 to 16) See printed form for answers

17. Equipment and Facilities:

Equipment AVailable

No Buildings located on Property.
(2 Crushers
(1 Dual Screen Vibrating Screen
(1 6" Pump
(1 10 Cu. Yd. Set of Bins
(2 Conveyors
(1 D 13000 Cat. Diesel Power Unit.
(1 D-8 Cat. Bulldozers
(1 1-Yd. Dragline
(1 D-6 Bulldozer.

18. Hyde Construction Company has determined that the iron ore deposits described herein can be produced on a large scale economically, provided sufficient mining and processing equipment is made available; however, before any large processing or mining operation is started, we think it advisable to do additional exploratory work to determine the extent of iron ore deposits in Montgomery, Webster and adjoining Counties of Mississippi.

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

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

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

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved) 150 Acres	L.T. 4,000,000	36%-55%	$3.00	.115-.145	$2.75
Indicated (probable) Unknown					

(*c*) If placer: Not applicable

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

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

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

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

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

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

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. 9 to 9½ Miles Gravel Roads - Good Condition.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Mouse Creek Calabrella Creek and numerous other branches would supply sufficient water for all seasons.

15. Power:

State amount of power used, rate per hour, and source thereof. No power used at present. Source is 113,000 Volt transmission line owned by Mississippi Power & Light Co. located at Winona, Mississippi

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. 5 Heavy Equip. operators, 7 truck drivers, 5 laborers, 1 Foreman.

17. Equipment and Facilities:

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

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

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.

Hyde Construction Company (Name of company)

By R. W. Hyde (Signature of authorized official)

10/22/51 (Date)

Owner (Title)

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

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

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MISSISSIPPI STATE GEOLOGICAL SURVEY

University, Mississippi

Immediate Release
July 20, 1951

Memorandum for the Press

IRON ORE

Field study during the last several months, of the iron ore deposits of Webster, Choctaw, Montgomery, and Lafayette Counties, Mississippi, by the Mississippi State Geological Survey and other interested people, has resulted in the discovery of many outcrops not heretofore seen, and a much greater quantity of ore than has heretofore been known to exist. Although the presence in Mississippi of considerable deposits of carbonate and oxide ore has been known for perhaps a century or more, no detailed exploration of the deposits has been attempted until recently. Some forty years ago a little ore was mined in Marshall and Benton Counties and efforts made to establish an industry; but the venture failed, not because of insufficient quantity of ore or poor quality, but chiefly because of lack of mining machinery capable of doing the job economically. However, the present revival of interest in Mississippi iron ore comes at a time when adequate equipment is available. Furthermore, not only has it been found that the total quantity of mineable ore of excellent quality is much greater than it has been believed to be, but that the ore is aggregated locally in larger deposits. The estimates herein, of the quantity in Webster County, including part of northern Choctaw and eastern Montgomery, is based on field work by F. E. Vestal, Geologist, who does not pretend to have reached every acre of the territory or to have found every outcrop. Necessarily the estimates are based on probabilities, as suggested by surface exposures of ore, and may be far from accurate; but a determined effort has been made to keep

the error on the conservative side - that is, the estimates are more likely to be too small than too large.

The estimate, 16,379,826 long tons of mineable ore for the territory specified, two-thirds or more of which is in the western part of the County, should be considered only as suggesting the total tonnage present. "Mineable ore", for the purpose of the estimate, means ore under 25 feet or less overburden. Although representing twenty ore "fields" only 25 square miles of actual ore terrane entered into the calculations. Thus it will be seen that 1,024 long tons to the acre is the average for the territory. Some areas will produce much more than that; others much less.

The Mississippi State Geological Survey will in the next few months publish a report on the geology and mineral resources of Webster County - a report which will contain a detailed description of the iron ore deposits, including the locations of all the major outcrops.

(Detailed estimates on file at the State Geological Survey Office.)

Form 247

LYDE CONSTRUCTION COMPANY
BOX 385
JACKSON, MISSISSIPPI

Date September 20, 1951

Order No.

Sold to: SLOSS-SHEFFIELD STEEL & IRON COMPANY,
BIRMINGHAM, ALABAMA.

Commodity Kilmichael Ore Received at No. B'ham Ices. From September 11 To September 19 1951

DATE	CAR NUMBER	WEIGHT	GROSS TONS	MOIST.	DRY TONS	RATE	AMOUNT	FREIGHT	NET AMOUNT	ANALYSIS MANG.	IRON	COMB.	MOIST.	INSOL.	PHOS.	UNIT RATE
9/	GAC 32021	1104	49 286	5 766	43 520		NO VALUE	SLOSS PAY	FREIGHT	.32	39 70	40 02	11 70	30 30	.08	
	IC 74682	1010	45 089	5 321	39 768		" "	" "	"	.38	42 60	42 98	11 80	27 10	.10	
	LN 185873	1069	47 723	5 584	42 139		" "	" "	"	.40	41 90	42 30	11 70	27 50	.08	
	" 183297	1011	45 134	5 326	39 808		" "	" "	"	.38	38 90	39 28	11 80	32 00	.07	
	RDG 66870	1122	50 099	5 911	44 178		" "	" "	"	.39	43 50	43 89	11 00	24 60	.08	
	LN 81600	1048	46 786	5 521	41 265		" "	" "	"	.40	41 70	42 10	11 80	27 90	.07	
9/19	ECO 90605	1162	51 875	6 433	45 442		" "	" "	"	.35	42 02	42 37	12 40	26 30	.07	
	" 86434	903	40 312	4 999	35 313		" "	" "	"	.30	39 19	39 49	12 40	30 68	.06	
	LN 185238	746	33 304	4 130	29 174		" "	" "	"	.34	37 77	38 11	12 40	34 56	.07	
	" 62399	809	36 116	4 478	31 638		" "	" "	"	.33	36 16	36 49	12 40	35 37	.08	
	IC 82333	998	44 554	5 569	38 985		" "	" "	"	.34	42 60	42 94	12 50	28 00	.08	
	SOU 320374	1111	49 598	6 200	43 398	5 257	228 14	120 70	107 44	.51	45 20	45 71	12 50	23 04	.09	.1150
	IM 1276	1058	47 232	5 904	41 328		NO VALUE	SLOSS PAY	FREIGHT	.42	41 40	41 82	12 50	29 00	.10	
		13151	587 098	71 142	515 956		228 14	120 70	107 44							

Form 247

[illegible]

Date [illegible], 19[illegible]

Order No. [illegible]

Sold to: SLOSS-SHEFFIELD STEEL & IRON COMPANY,
BIRMINGHAM, ALABAMA.

Commodity [illegible] Received at [illegible] From [illegible] To [illegible] 19[illegible]

DATE	CAR NUMBER	WEIGHT	GROSS TONS	MOIST.	DRY TONS	RATE	AMOUNT	FREIGHT	NET AMOUNT	ANALYSIS MANG.	IRON	COMB.	MOIST.	INSOL.	PHOS.	UNIT RATE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]							

2/6/52

Memo from Ferrous-Alloy Division

To: Mr. Dwight Lemmon, USGS.
Room 5216, GSA Bldg.

Ref DMEA-2186-Iron Ore
Webster County-Mass.

Mr. Lemmon:

May we please have your opinion on the Subject Docket

Gentry

Recd 2-6-52
mc.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

Revised

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2186
Metal or Mineral
Date Received 2-4-52
Amount $
Participation (Government %)

Name and address of applicant

Hyde Construction Company
Box 385
Jackson, Mississippi

Date January 19, 1952

If you have already filed MF-100, give date filed October 17, 1951, type of assistance requested Loan,

DMA Docket Number (if available) DMA 2186X

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C. FEB 4 3 11 PM '52

INSTRUCTIONS

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

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

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find? Iron Ore (nodular layers separated by layers of clay).

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.
   See Form MF-100, Paragraphs 12, 18 and 7c.

16—64067-2

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

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

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

   (*b*) State the time required to start the project and to complete it. Two Months (Start within ten days after approval of loan).

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

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. None contemplated.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. Laboratory and field office - $3,000.00

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

   (*a*) Rented

   (*b*) Purchased Attached.

   (*c*) Furnished by you

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

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

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. Attached

10. (*a*) How much are you prepared to invest in the proposed project? Attached.

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

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

    See Form MF-100, Paragraph 18.

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.

Hyde Construction Company
(Name of company)

By R. W. Hyde Jr.
(Signature of authorized official)

January 19, 1952
(Date)

Owner
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Sheet No. 1
To Accompany Form MF-103.

1. (a) S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 more or less &SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County, Mississippi, 204 Acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, said lands are estimated to contain 484 acres.

1. (c) Same as 1 (a).

3. (a) General exploration by digging channels and pits and by core drilling for a period of 8 weeks.

7.	(a)	Three Diamond Core Drills @ $60.00 Per day, 5 days Per Week - 8 Weeks	$ 7,200.00
7.	(b)	Laboratory equipment	2,500.00
7.	(c)	1½ C.Y. Dragline @ $2,000.00 Mo. - 2 Mo.	4,000.00
		1 D-8 Bulldozer @ $1800.00 Mo. - 2 Mo.	3,600.00
		1 D-6 Bulldozer @ $1000.00 Mo. - 2 Mo.	2,000.00
8.		1 Superintendent @ $150.00 Week - 8 Weeks	1,200.00
		1 Drilling Foreman @ $125.00 Week - 8 Weeks	1,000.00
		1 Stripping Foreman @ $ 125.00 Week - 8 Weeks	1,000.00
		3 Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		3 Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,200.00
		3 Heavy Equipment Operators @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		Miscl. Labor - 4 Laborers @ $1.00 Hr. - 40 Hours Week (160 Hrs.) - 8 Weeks	1,280.00
		1 Geologist - 8 Weeks @ $250.00	2,000.00
9.		Bits, Small Tools, etc.	1,500.00
		Power	500.00

10. (a) 50% or approx. $16,170.00

(b) Applicant's investment is sufficient according to Defense Minerals Adm. Form MO-5.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Webster, State of Mississippi, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 27, 1949 _____, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 14th day of January, 1952.

J H Sekurdger

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

I certify that Lease was filed for record at 11o'clock A. M. December 10, 1949 and was duly recorded the 10th day of Dec.A. D. 1949 in Book 41 at page 459 of the records in my office.

/s/ Joe K. Wood, Clerk

J. H. Selvidge et ux

To Lease

Henry Pope et al

MINERAL LEASE

This agreement, made and entered into on this the Twenty Seventh day of July, 1949, between J. H. Selvidge and Maggie M. Selvidge, Lessor and Henry Pope and J. E. Patridge Lessee

Witnesseth, in consideration of the sum of one dollar cash in hand paid and the further consideration of the sum of the royaltie herein stipulated and provided, does hereby grant, lease, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives for the purpose of investigating, exploring, mining and producing from and on said lands, the minerals exclusive of oil & gas which is not contained herein, with the right and privilege of the said lessee, their heirs, assigns or legal representatives to erect and construct all necessary structures as are found essential and necessary for the mining, production and transportation of said minerals on the following lands located in Webster County, Mississippi, to-wit:

S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 acres more or less & SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NW¼ Section 8, Township 20, Range 8, located in Webster County Mississippi, 204 acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, Said lands are estimated to contain 484 acres.

2. Subject to other provisions herein, this lease is for a term of ten (10) years from this date or primary term and as long thereafter as ore or minerals, other than oil are mined from said lands or produced therefrom or thereon.

3. The royalties to be paid by the Lessee are the sum of 25 cents per ton or ore mined from said lands and from thereon the same being estimated as one-tenth of the value thereof at the mine.

If operations are not commenced on said lands within one year from this date, this lease shall thereupon, terminate and be null and void, thereafter unless on or before the anniversay date of the lease, lessee shall pay or tender to lessor to the credit of lessor in the Bank of Duck Hill, Duck Hill Mississippi, its successor or legal representatives, the sum of 25/100 per Dollar being herein called rental, which shall cover the privilege of deferring the commencement of mining operation for a period of twelve (12) months and in like manner, and upon like payments or tenders annually, the commencement of operations

for production may be further deferred for a successive period of twelve (12) months, during said primary term, if during the primary term the payment or tender of rental may be made by check or draft of lessee, mailed or delivered to lessor or to said bank on or before such date of payment, or should said bank fail or liquidate or be succeeded by another bank, or for any other reason fail or refuse to accept said rental, the lessee shall not be held in default or failure to make such payment or tender of rental until thirty (30) days after lessor shall deliver to lessee a proper recordable instrument naming another bank as agent to receive such payment and tender. The down cash payment is consideration for this lease according to its terms and shall not be allocated as more rental for a period. The lessee, its heirs, assigns or legal representatives, may at any time or times, executed and deliver to lessor or to the depository above named, or place a record a lease or leases covering any portion or portions of the above described premises and thereby surrender this lease as to such portion or portions and be relived by all obligations as to the acreage surrender and thereafter the rentals payable hereunder shall as to the acreage surrender and thereafter the rentals payable hereunder shall be reduced in the proportions to the acreage covered hereby is reduced by said release or releases, thereof.

The lessee shall have the right to use any of the surface of said premises to the extent that may be necessary to mine or carry away the ore mined therefrom or desire to be mined therefrom, as is provided in this contract and may remove any trees that may be in the way of mining said ore by strippin or tunneling, and pay a reasonable sum thereof and the said lessee or assigns or legal representatives, shall have the right to build and construct roads over and across said land for use in the removal of said ore from on or under said land and they shall have the further right to errect tram roads or railroads under and across said lands with all necessary rights of egress and ingress from said purposes.

The said lessee, its heirs or assigns shall have the right to errect shop buildings and other erections on said premises as found necessary or desirable for use in said mining operation. The lessee binds itself to keep an accurate set of books, open for inspection by the lessor at all reasonable time and may demand a separate account at any time upon 30 days notice.

The said lessees binds themselves that they will mine and transport said ore from said land in a practical and uniform manner as may be directed by the engineer in charge of the interest of the parties of the last part therein authorized.

It is further agreed that the lessees will not remove from said property any structures until all rents and royalties have been fully paid.

In the event of the distruction of any improvements on said premises, the lessee binds itself to compensate therefor. All royalties hereon to be payable on the first day of each month unless otherwise agreed.

The lessees will place and dump all refuse material to the least disadvantage of the lessor as can be practically done that it will use

care and caution to protect the property of the lessor from injury or damage.

The word "ton" whenever used in this contract, should mean two thousand (2000) pounds.

Witness our hands this the 27th day of July, 1949.

J. H. Selvidge

Witness: E. L. Salley

Maggie Selvidge

STATE OF MISSISSIPPI
COUNTY OF MONTGOMERY

PERSONALLY APPEARED before me, the undersigned authority of law in and for said county and State the within named E. L. Salley, one of the subscribing witness to the within and foregoing instrument who being first duly sworn deposeth and saith that he saw the within named J. H. Selvidge and his wife Maggie Selvidge whose names are subscribing thereto sign and deliver the same to said Henry Pope and J. E. Patridge and that he this affiant subscribed his name as a witness thereto in the presences of the said J. H. Selvidge and Maggie Selvidge and that he saw the other subscribing witness sign the same in the presences of the said J. H. Selvidge and Maggie Selvidge that the witness signed in the presences of each other on the day and year therein named.

E. L. Salley

Sworn to and subscribed this 3rd day of August, 1949.

Witness my hand and seal of office this 3rd day of August, 1949.

Geo. H. Flowers, Clerk Chancery Court

SEAL

State of Mississippi
Webster County

I, Joe K. Wood, Clerk of the Chancery Court, in and for the State and County aforesaid, do hereby certify that the foregoing is a true and correct copy of the original of said instrument, as fully and completely as the same appears of record in my office.

Given under my hand and seal this the 16 day of Oct. 1951

/s/ Joe K. Wood
Chancery Clerk

Hyde Construction Company

To Accompany Form MF-103

A Map and Description of Land known as Selvidge Property, located in Webster County, Mississippi, described as follows: S½ NW¼ & NW¼ of SE¼ & N½ of NW¼ of SW¼, Sec. 7, T. 20N, Range 8 E., 160 acres, more or less, and SW¼ except N½ of NW¼ of SW¼, Sec. 7, T. 20N, R. 8 E., Also NW¼ and NW¼ of NE¼ and 4 acres in SW Corner NE¼ Section 8, T. 20, Range 8 East.

Township 20 North Range 8 East

N

S

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

W E

T 20 N

S

R 8 East

R

FILE COPY
SURNAME:

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

FEB 8 1952

Mr. D. Stockton
Hyde Construction Company
P.O. Box 385
Jackson, Mississippi

Re: Docket No. DMA 2186X - Iron Ore
484 Acres Selvige Place Area
Webster County, Mississippi

Dear Mr. Stockton:

Your application dated January 19, 1952, pertaining to the subject docket is presently being reviewed by this office. In studying the lease agreement between J. H. Selvidge and Maggie H. Selvidge, lessors, and Henry Pope and J. E. Patridge, lessees, we do not find an assignment of said lease from the lessees to the Hyde Construction Company, who are designated in form MF-103 as the applicants for Government assistance.

It will be necessary that you furnish us with copies of the assignment of lease between the present lessees and the Hyde Construction Company before we can proceed with your application.

May we hear from you at your earliest convenience?

Sincerely yours,

G. C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division
Defense Minerals Exploration
Administration

GGGentry'lm
2/6/52

cc: Admn. Reading File
Docket
N. B. Meleher, USBM
T. P. Thayer, USGS
Field Team Reg. VII
G. C. Selfridge
G. G. Gentry

S.J. 2-8-52

DMEA-2186

PHONE 3-6872

P. O. BOX 385

HYDE CONSTRUCTION COMPANY

General Contractors

HIGHWAY 80 WEST

JACKSON, MISSISSIPPI

January 28, 1952

ADDRESS REPLY TO:

Mr. G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Re: DMA Docket No. 2186X - Iron
Montgomery and Webster Counties,
Mississippi

Dear Sir:

Attached is a revised MF-103 Form in quadruplicate for the Selvidge Place Area located in Webster County, Mississippi.

Yours very truly,

HYDE CONSTRUCTION COMPANY

BY Jno. D. Stockton
J. D. STOCKTON

JDS/jj

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
FEB 4 3 11 PM '52

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2186
Metal or Mineral
Date Received 2-4-52
Amount $
Participation (Government %)

Name and address of applicant

Hyde Construction Company
Box 305
Jackson, Mississippi

Date January 19, 1952

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C. FEB 4 3 12 PM '52

If you have already filed MF-100, give date filed October 17, 1951, type of assistance requested Loan,

DMA Docket Number (if available) DMA 21864

INSTRUCTIONS

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

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

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find? Iron Ore (nodular layers separated by layers of clay).

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.
See Form MF-100, Paragraphs 12, 13 and 7c.

16—64067-2

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

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

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

   (*b*) State the time required to start the project and to complete it. **Two Months** (Start within ten days after approval of loan)

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

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. **None contemplated.**

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. **Laboratory and field office - $3,000.00**

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

   (*a*) Rented

   (*b*) Purchased **Attached.**

   (*c*) Furnished by you

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

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

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. **Attached**

10. (*a*) How much are you prepared to invest in the proposed project? **Attached.**

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

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

    See Form MF-100, Paragraph 18.

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.

Hyde Construction Company
(Name of company)

By R. W. Hyde Jr.
(Signature of authorized official)

January 19, 1952
(Date)

Owner
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Sheet No. 1
To Accompany Form MF-103.

1. (a) S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 more or less &SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County, Mississippi, 204 Acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, said lands are estimated to contain 484 acres.

1. (c) Same as 1 (a).

3. (a) General exploration by digging channels and pits and by core drilling for a period of 8 weeks.

7.	(a)	Three Diamond Core Drills @ $60.00 Per day, 5 days Per Week - 8 Weeks	$ 7,200.00
7.	(b)	Laboratory equipment	2,500.00
7.	(c)	1¼ C.Y. Dragline @ $2,000.00 Mo. - 2 Mo.	4,000.00
		1 D-8 Bulldozer @ $1800.00 Mo. - 2 Mo.	3,600.00
		1 D-6 Bulldozer @ $1000.00 Mo. - 2 Mo.	2,000.00
8.		1 Superintendent @ $150.00 Week - 8 Weeks	1,200.00
		1 Drilling Foreman @ $125.00 Week - 8 Weeks	1,000.00
		1 Stripping Foreman @ $ 125.00 Week - 8 Weeks	1,000.00
		3 Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		3 Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,200.00
		3 Heavy Equipment Operators @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		Miscl. Labor - 4 Laborers @ $1.00 Hr. - 40 Hours Week (160 Hrs.) - 8 Weeks	1,280.00
		1 Geologist - 8 Weeks @ $250.00	2,000.00
9.		Bits, Small Tools, etc.	1,500.00
		Power	500.00

10. (a) 50% or approx. $16,170.00

(b) Applicant's investment is sufficient according to Defense Minerals Adm. Form MO-5.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Webster, State of Mississippi, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 27, 1949 _____, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 14th day of January, 195_

J H Selvidge

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

I certify that Lease was filed for record at 11o'clock A. M. December 10, 1949 and was duly recorded the 10th day of Dec.A. D. 1949 in Book 41 at page 459 of the records in my office.

/s/ Joe K. Wood, Clerk

J. H. Selvidge et ux

To Lease

Henry Pope et al

MINERAL LEASE

This agreement, made and entered into on this the Twenty Seventh day of July, 1949, between J. H. Selvidge and Maggie M. Selvidge, Lessor and Henry Pope and J. E. Patridge Lessee

Witnesseth, in consideration of the sum of one dollar cash in hand paid and the further consideration of the sum of the royaltie herein stipulated and provided, does hereby grant, lease, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives for the purpose of investigating, exploring, mining and producing from and on said lands, the minerals exclusive of oil & gas which is not contained herein, with the right and privilege of the said lessee, their heirs, assigns or legal representatives to erect and construct all necessary structures as are found essential and necessary for the mining, production and transportation of said minerals on the following lands located in Webster County, Mississippi, to-wit:

S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 acres more or less & SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County Mississippi, 204 acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, Said lands are estimated to contain 484 acres.

2. Subject to other provisions herein, this lease is for a term of ten (10) years from this date or primary term and as long thereafter as ore or minerals, other than oil are mined from said lands or produced therefrom or thereon.

3. The royalties to be paid by the Lessee are the sum of 25 cents per ton or ore mined from said lands and from thereon the same being estimated as one-tenth of the value thereof at the mine.

If operations are not commenced on said lands within one year from this date, this lease shall thereupon, terminate and be null and void, thereafter unless on or before the anniversay date of the lease, lessee shall pay or tender to lessor to the credit of lessor in the Bank of Duck Hill, Duck Hill Mississippi, its successor or legal representatives, the sum of 25/100 per Dollar being herein called rental, which shall cover the privilege of deferring the commencement of mining operation for a period of twelve (12) months and in like manner, and upon like payments or tenders annually, the commencement of operations

for production may be further deferred for a successive period of twelve (12) months, during said primary term, if during the primary term the payment or tender of rental may be made by check or draft of lessee, mailed or delivered to lessor or to said bank on or before such date of payment, or should said bank fail or liquidate or be succeeded by another bank, or for any other reason fail or refuse to accept said rental, the lessee shall not be held in default or failure to make such payment or tender of rental until thirty (30) days after lessor shall deliver to lessee a proper recordable instrument naming another bank as agent to receive such payment and tender. The down cash payment is consideration for this lease according to its terms and shall not be allocated as more rental for a period. The lessee, its heirs, assigns or legal representatives, may at any time or times, executed and deliver to lessor or to the depository above named, or place a record a lease or leases covering any portion or portions of the above described premises and thereby surrender this lease as to such portion or portions and be relived by all obligations as to the acreage surrender and thereafter the rentals payable hereunder shall as to the acreage surrender and thereafter the rentals payable hereunder shall be reduced in the proportions to the acreage covered hereby is reduced by said release or releases, thereof.

The lessee shall have the right to use any of the surface of said premises to the extent that may be necessary to mine or carry away the ore mined therefrom or desire to be mined therefrom, as is provided in this contract and may remove any trees that may be in the way of mining said ore by strippin or tunneling, and pay a reasonable sum thereof and the said lessee or assigns or legal representatives, shall have the right to build and construct roads over and across said land for use in the removal of said ore from on or under said land and they shall have the further right to errect tram roads or railroads under and across said lands with all necessary rights of egress and ingress from said purposes.

The said lessee, its heirs or assigns shall have the right to errect shop buildings and other erections on said premises as found necessary or desirable for use in said mining operation. The lessee binds itself to keep an accurate set of books, open for inspection by the lessor at all reasonable time and may demand a separate account at any time upon 30 days notice.

The said lessees binds themselves that they will mine and transport said ore from said land in a practical and uniform manner as may be directed by the engineer in charge of the interest of the parties of the last part therein authorized.

It is further agreed that the lessees will not remove from said property any structures until all rents and royalties have been fully paid.

In the event of the distruction of any improvements on said premises, the lessee binds itself to compensate therefor. All royalties hereon to be payable on the first day of each month unless otherwise agreed.

The lessees will place and dump all refuse material to the least disadvantage of the lessor as can be practically done that it will use

care and caution to protect the property of the lessor from injury or damage.

The word "ton" whenever used in this contract, should mean two thousand (2000) pounds.

Witness our hands this the 27th day of July, 1949.

J. H. Selvidge

Witness: E. L. Salley

Maggie Selvidge

STATE OF MISSISSIPPI
COUNTY OF MONTGOMERY

PERSONALLY APPEARED before me, the undersigned authority of law in and for said county and State the within named E. L. Salley, one of the subscribing witness to the within and foregoing instrument who being first duly sworn deposeth and saith that he saw the within named J. H. Selvidge and his wife Maggie Selvidge whose names are subscribing thereto sign and deliver the same to said Henry Pope and J. E. Patridge and that he this affiant subscribed his name as a witness thereto in the presences of the said J. H. Selvidge and Maggie Selvidge and that he saw the other subscribing witness sign the same in the presences of the said J. H. Selvidge and Maggie Selvidge that the witness signed in the presences of each other on the day and year therein named.

E. L. Salley

Sworn to and subscribed this 3rd day of August, 1949.

Witness my hand and seal of office this 3rd day of August, 1949.

Geo. H. Flowers, Clerk Chancery Court

SEAL

State of Mississippi
Webster County

I, Joe K. Wood, Clerk of the Chancery Court, in and for the State and County aforesaid, do hereby certify that the foregoing is a trudeand correct copy of the original of said instrument, as fully and completely as the same appears of record in my office.

Given under my hand and seal this the 16 day of Oct. 1951

/s/ Joe K. Wood
Chancery Clerk

Hyde Constructio Company

To Accompany Form MF-103

A Map and Description of Land known as Selvidge Property, located in Webster County, Mississippi, described as follows: S½ NW¼ & NW¼ of SE¼ & N½ of NW¼ of SW¼, Sec. 7, T. 20, Range 8 E., 160 acres, more or less, and SW¼ except N½ of NW¼ of SW¼, Sec. 7, T. 20, R. 8 E., Also NW¼ and NW¼ of NE¼ and 4 acres in SW Corner NE¼ Section 8, T. 20, Range 8 East.

Township 20 North Range 8 East

N

S

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

W E

T 20 N

S

R 8 East

R

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2186
Metal or Mineral
Date Received 2-4-52
Amount $
Participation (Government %)

Hyde Construction Company
Box 385
Jackson, Mississippi

Name and address of applicant

Date January 19, 1952

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C. FEB 4 3 12 PM '52

If you have already filed MF-100, give date filed October 17, 1951, type of assistance requested Loan,

DMA Docket Number (if available) DMA 21864

INSTRUCTIONS

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

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

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find Iron Ore (nodular layers separated by layers of clay).

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

See Form MF-100, Paragraphs 12, 18 and 7c.

16—64067-2

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

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

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

   (*b*) State the time required to start the project and to complete it. Two months (Start within ten days after approval of loan).

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

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. None contemplated.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. Laboratory and field office - $3,000.00

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

   (*a*) Rented

   (*b*) Purchased Attached.

   (*c*) Furnished by you

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

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

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. Attached

10. (*a*) How much are you prepared to invest in the proposed project? Attached.

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

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

See Data attached, Paragraph 10.

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.

Hyde Construction Company
(Name of company)

By R. W. Hyde Jr.
(Signature of authorized official)

January 19, 1958
(Date)

Owner
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Hyde Construction Company

Sheet No. 1 - Form MF-103

Sheet No. 1
To Accompany Form MF-103.

1. (a) S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 more or less &SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & ¼ A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County, Mississippi, 204 Acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, said lands are estimated to contain 484 acres.

1. (c) Same as 1 (a).

3. (a) General exploration by digging channels and pits and by core drilling for a period of 8 weeks.

7.	(a)	Three Diamond Core Drills @ $60.00 Per day, 5 days Per Week - 8 Weeks	$ 7,200.00
7.	(b)	Laboratory equipment	2,500.00
7.	(c)	1½ C.Y. Dragline @ $2,000.00 Mo. - 2 Mo.	4,000.00
		1 D-8 Bulldozer @ $1800.00 Mo. - 2 Mo.	3,600.00
		1 D-6 Bulldozer @ $1000.00 Mo. - 2 Mo.	2,000.00
8.		1 Superintendent @ $150.00 Week - 8 Weeks	1,200.00
		1 Drilling Foreman @ $125.00 Week - 8 Weeks	1,000.00
		1 Stripping Foreman @ $ 125.00 Week - 8 Weeks	1,000.00
		3 Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		3 Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,200.00
		3 Heavy Equipment Operators @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		Miscl. Labor - 4 Laborers @ $1.00 Hr. - 40 Hours Week (160 Hrs.) - 8 Weeks	1,280.00
		1 Geologist - 8 Weeks @ $250.00	2,000.00
9.		Bits, Small Tools, etc.	1,500.00
		Power	500.00

10. (a) 50% or approx. $16,170.00

(b) Applicant's investment is sufficient according to Defense Minerals Adm. Form MO-5.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Webster, State of Mississippi, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 27, 1949 _____, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 14th day of January, 192__

J H Selvidge

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

Rent Paid by Check Dated Dec. 10, 1951

I certify that Lease was filed for record at 11 o'clock A. M. December 10, 1949 and was duly recorded the 10th day of Dec. A. D. 1949 in Book 41 at page 459 of the records in my office.

JoeK. Wood Clerk

J.H. Selvidge et ux
To Lease
Henry Pope et al

MINERAL LEASE

This agreement, made and entered into on this the Twenty Seventh day of July, 1949, between J. H. Selvidge and Maggie M. Selvidge, Lessor and Henry Pope and J. E. Patridge Lessee

Witnesseth, in consideration of the sum of one dollar cash in hand paid and the further consideration of the sum of the royaltie here herein stipulated and provided, does hereby grant, lease, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives for the purpose of investigating, exploring, mining and producing from and on said lands, the minerals exclusive of oil & gas which is not contained herein, with the right and privilege of the said lessee, their heris, assigns or legal representatives to erect and construct all necessary structures as are found essential and necessary for the mining, production and transportation of said minerals on the following lands located in Webster County, Miss issippi, to-wit:

S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 more or less & SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Rang 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Section 8, Township 20, Range 8, Located in Webster County Mississippi, 204 acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, Said lands are estimated to contain 484 acres.

2. Subject to other provisions herein, this lease is for a term of ten (10) years from this date or primary term and as long

thereafter as ore or minerals, other than oil are mined from said lands or produced therefrom or thereon.

3. The royalties to be paid by the lessee are the sum of 25 cents per ton or ore mined from said lands and from thereon the same being estimated as one-tenth of the value thereofat the mine.

If operations are not commenced on said lands within one year from this date, this lease shall thereupon, terminate and be null and void, thereafter unless on or before the anniversary date of this lease, lessee shall pay or tender to lessor to the credit of lessor in Bank of Duck Hill, Duck Hill Mississippi, its successor or legal representatives, the sum of 25/100 per Dollar being herein called rental, which shall cover the privilege of deferring the commencement of mining operation for a period of twelve (12) months and in like manner, and upon like payments or tenders annually, the commencement of operations for production may be further deferred for a successive period of twelve (12) months, during said primary term, if during the primary term the payment or tender of rental may be made by check or draft of lessee, mailed or delivered to lessor or to said bank on or before such date of payment, or should said bank fail or liquidate or be succeeded by another bank, or for any other reason fail or refuse to accept said rental, the lessee shall not be held in default or failure to make such payment or tender of rental until thirty (30) days after lessor shall deliver to lessee a proper recordable instrument naming another bank as agent to receive such payment and tender. The down cash payment is consideration for this lease according to its terms and shall not be allocated as more rental for a period. The lessee, its heirs, assigns or legal representatives, may at any time or times, executed and deliver to lessor or to the depository above named, or place a record a lease or leases covering any portion or portions of the above described premises and thereby surrender this lease as to such portion or portions and be relived by all obligations as to the acreage surrender and thereafter the rentals payable hereunder shall

as to the acreage surrender and thereafter the rentals payable hereunder shall be reduced in the proportions to the acreage covered hereby is reduced by said release or releases, thereof.

The lessee shall have the right to use any of the surface of said premises to the extent that may be necessary to mine or carry away the ore mined therefrom or desire to be mined therefrom, as is provided in this contract and may remove any trees that may be in t the way of mining said ore by strippin or tunneling, and pay a reasonable sum thereof and the said lessee or assigns or legal representatives, shall have the right to build and construct roads over and across said land for use in the removal of said ore from on or under said land and they shall have the further right to errect tram roads or railroads under and across said lands with all necessary rights of egress and ingress from said purposes.

The said lessee, its heirs or assigns shall have the right to errect shop buildings and other erections on said premises as found necessary or desirable for use in said mining operation. The lessee binds itself to keep an accurate set of books, open for inspection by the lessor at all reasonable time and may demand a separate account at any time upon 30 days notice.

The said lessees binds themselves that they will mine and transport said ore from said land in a practical and uniform manner as may be directed by the engineer in charge of the interest of the parties of the last part therein authorized.

It is further agreed that the lessees will not remove from said property any structures until all rents and royalties have been fully paid.

In the event of the distruction of any improvements on said premises, the lessee binds itself to compensate therefor. All royalties hereon to be payable on the first day of each month unless otherwise agreed.

The lessees will place and dump all refuse material to the least disadvantage of the lessor as can be practically done thatit will

use care and caution to protect the property of the lessor from injury or damage.

The word "ton" whenever used in this contract, should mean two thousand (2000) pounds.

Witness our hands this the 27th day of July, 1949.

J. H. Selvidge

Maggie Selvidge

Witness: E. L. Salley

STATE OF MISSISSIPPI

COUNTY OF MONTGOMERY

PERSONALL APPEARED before me, the undersigned authority of law in and for said county and State the within named E. L. Salley, one of the subscribing witness to the within and foregoing instrument who who being first duly sworn deposeth and saith that he saw the within named J. H. Selvidge and his wife Maggie Selvidge whos names are subscribing thereto sign and deliver the same to said Henry Pope and J. E. Patridge and that he this affiant subscribed his name as a witness thereto in the presences of the said J. H. Selvidge and Maggie Selvidge and that he saw the other subscribing witness sign the same in the presences of the said J. H. Selvidge and Maggie Selvidge that the witness signed in the presences of each other on the day and year therein named.

E. L. Salley

Sworn to and subscribed this 3rd day of August, 1949.

Witness my hand and seal of office this 3rd day of August, 1949.

Geo. H. Flowers, Clerk Chancery Court

SEAL

STATE OF MISSISSIPPI
WEBSTER COUNTY

I, Joe K. Wood, Clerk of the Chancery Court, in and for the State and County aforesaid, do hereby certify that the foregoing is a true and correct copy of the original of said instrument, as fully and completely as the same appears of record in my office.

Given under my hand and seal, this the 16 day of Oct, 1951

Joe K. Wood
Chancery Clerk

Hyde Constructi[illegible] Company

To Accompany Form MF-103

A Map and Description of Land known as Belvidere Property, located in Webster County, Mississippi, described as follows: S½ NW¼ & NW¼ of SE¼ & N½ of NW¼ of SW¼, Sec. 7, T. 20, Range 8 E., 100 acres, more or less, and SW¼ except N½ of NW¼ of SW¼, Sec. 7, T. 20, R. 8 E., Also NW¼ and NW¼ of NE¼ and 4 acres in SW Corner NE¼ Section 8, T. 20, Range 8 East.

Township 20 North Range 8 East

N

S

36	31	32	33	34	35	36	31
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13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

W E

T 20 N

S

R 8 East

R

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2186
Metal or Mineral
Date Received 2-4-52
Amount $
Participation (Government %)

Name and address of applicant

Hyde Construction Company
Box 305
Jackson, Mississippi

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
FEB 4 3 12 PM '52

Date January 19, 1952

If you have already filed MF-100, give date filed October 17, 1951, type of assistance requested Loan,

DMA Docket Number (if available) DMA 21864

INSTRUCTIONS

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

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

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

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

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find? Iron Ore (nodular layers separated by layers of clay).

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

See Form MF-100, Paragraphs 12, 18 and 7c.

16—64067-2

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

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

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

   (*b*) State the time required to start the project and to complete it. Two Months (Start within ten days after approval of loan)

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

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition. **None contemplated.**

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item. **Laboratory and field office - $3,000.00**

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

   (*a*) Rented

   (*b*) Purchased **Attached.**

   (*c*) Furnished by you

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

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

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above. **Attached**

10. (*a*) How much are you prepared to invest in the proposed project? **Attached.**

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

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

    See Form MF-100, Paragraph 18.

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.

Hyde Construction Company
(Name of company)

By R. W. Hyde Jr.
(Signature of authorized official)

January 19, 1952
(Date)

Owner
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Hyde Construction Company

Sheet No. 1 - Form MF-103

Sheet No. 1
To Accompany Form MF-103.

1. (a) S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 more or less &SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & ¼ A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County, Mississippi, 204 Acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, said lands are estimated to contain 484 acres.

1. (c) Same as 1 (a).

3. (a) General exploration by digging channels and pits and by core drilling for a period of 8 weeks.

7.	(a)	Three Diamond Core Drills @ $60.00 Per day, 5 days Per Week - 8 Weeks	$ 7,200.00
7.	(b)	Laboratory equipment	2,500.00
7.	(c)	1¼ C.Y. Dragline @ $2,000.00 Mo. - 2 Mo.	4,000.00
		1 D-8 Bulldozer @ $1800.00 Mo. - 2 Mo.	3,600.00
		1 D-6 Bulldozer @ $1000.00 Mo. - 2 Mo.	2,000.00
8.		1 Superintendent @ $150.00 Week - 8 Weeks	1,200.00
		1 Drilling Foreman @ $125.00 Week - 8 Weeks	1,000.00
		1 Stripping Foreman @ $ 125.00 Week - 8 Weeks	1,000.00
		3 Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		3 Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,200.00
		3 Heavy Equipment Operators @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 8 Weeks	1,680.00
		Miscl. Labor - 4 Laborers @ $1.00 Hr. - 40 Hours Week (160 Hrs.) - 8 Weeks	1,280.00
		1 Geologist - 8 Weeks @ $250.00	2,000.00
9.		Bits, Small Tools, etc.	1,500.00
		Power	500.00

10. (a) 50% or approx. $16,170.00

(b) Applicant's investment is sufficient according to Defense Minerals Adm. Form MO-5.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Webster, State of Mississippi, described in a certain Exploration Project Contract dated _____, 195__, between _____, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 27, 1949 _____, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 24th day of January, 1952

J H Selvidge

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

I certify that Lease was filed for record at 11o'clock A. M. December 10, 1949 and was duly recorded the 10th day of Dec.A. D. 1949 in Book 41 at page 459 of the records in my office.

/s/ Joe K. Wood, Clerk

J. H. Selvidge et ux

To Lease

Henry Pope et al

MINERAL LEASE

This agreement, made and entered into on this the Twenty Seventh day of July, 1949, between J. H. Selvidge and Maggie M. Selvidge, Lessor and Henry Pope and J. E. Patridge Lessee

Witnesseth, in consideration of the sum of one dollar cash in hand paid and the further consideration of the sum of the royaltie herein stipulated and provided, does hereby grant, lease, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives for the purpose of investigating, exploring, mining and producing from and on said lands, the minerals exclusive of oil & gas which is not contained herein, with the right and privilege of the said lessee, their heirs, assigns or legal representatives to erect and construct all necessary structures as are found essential and necessary for the mining, production and transportation of said minerals on the following lands located in Webster County, Mississippi, to-wit:

S½ NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East 160 acres more or less & SW¼ Ex. N½ NW¼ SW¼ Sec. 7, Township 20, Range 8 East. NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Section 8, Township 20, Range 8, located in Webster County Mississippi, 204 acres more or less, together with all other lands adjacent to, owned or claimed by lessor in said tract of land whether correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated, Said lands are estimated to contain 484 acres.

2. Subject to other provisions herein, this lease is for a term of ten (10) years from this date or primary term and as long thereafter as ore or minerals, other than oil are mined from said lands or produced therefrom or thereon.

3. The royalties to be paid by the Lessee are the sum of 25 cents per ton or ore mined from said lands and from thereon the same being estimated as one-tenth of the value thereof at the mine.

If operations are not commenced on said lands within one year from this date, this lease shall thereupon, terminate and be null and void, thereafter unless on or before the anniversay date of the lease, lessee shall pay or tender to lessor to the credit of lessor in the Bank of Duck Hill, Duck Hill Mississippi, its successor or legal representatives, the sum of 25/100 per Dollar being herein called rental, which shall cover the privilege of deferring the commencement of mining operation for a period of twelve (12) months and in like manner, and upon like payments or tenders annually, the commencement of operations

for production may be further deferred for a successive period of twelve (12) months, during said primary term, if during the primary term the payment or tender of rental may be made by check or draft of lessee, mailed or delivered to lessor or to said bank on or before such date of payment, or should said bank fail or liquidate or be succeeded by another bank, or for any other reason fail or refuse to accept said rental, the lessee shall not be held in default or failure to make such payment or tender of rental until thirty (30) days after lessor shall deliver to lessee a proper recordable instrument naming another bank as agent to receive such payment and tender. The down cash payment is consideration for this lease according to its terms and shall not be allocated as more rental for a period. The lessee, its heirs, assigns or legal representatives, may at any time or times, executed and deliver to lessor or to the depository above named, or place a record a lease or leases covering any portion or portions of the above described premises and thereby surrender this lease as to such portion or portions and be relived by all obligations as to the acreage surrender and thereafter the rentals payable hereunder shall as to the acreage surrender and thereafter the rentals payable hereunder shall be reduced in the proportions to the acreage covered hereby is reduced by said release or releases, thereof.

The lessee shall have the right to use any of the surface of said premises to the extent that may be necessary to mine or carry away the ore mined therefrom or desire to be mined therefrom, as is provided in this contract and may remove any trees that may be in the way of mining said ore by strippin or tunneling, and pay a reasonable sum thereof and the said lessee or assigns or legal representatives, shall have the right to build and construct roads over and across said land for use in the removal of said ore from on or under said land and they shall have the further right to errect tram roads or railroads under and across said lands with all necessary rights of egress and ingress from said purposes.

The said lessee, its heirs or assigns shall have the right to errect shop buildings and other erections on said premises as found necessary or desirable for use in said mining operation. The lessee binds itself to keep an accurate set of books, open for inspection by the lessor at all reasonable time and may demand a separate account at any time upon 30 days notice.

The said lessees binds themselves that they will mine and transport said ore from said land in a practical and uniform manner as may be directed by the engineer in charge of the interest of the parties of the last part therein authorized.

It is further agreed that the lessees will not remove from said property any structures until all rents and royalties have been fully paid.

In the event of the distruction of any improvements on said premises, the lessee binds itself to compensate therefor. All royalties hereon to be payable on the first day of each month unless otherwise agreed.

The lessees will place and dump all refuse material to the least disadvantage of the lessor as can be practically done that it will use

care and caution to protect the property of the lessor from injury or damage.

The word "ton" whenever used in this contract, should mean two thousand (2000) pounds.

Witness our hands this the 27th day of July, 1949.

J. H. Selvidge

Witness: E. L. Salley

Maggie Selvidge

STATE OF MISSISSIPPI
COUNTY OF MONTGOMERY

PERSONALLY APPEARED before me, the undersigned authority of law in and for said county and State the within named E. L. Salley, one of the subscribing witness to the within and foregoing instrument who being first duly sworn deposeth and saith that he saw the within named J. H. Selvidge and his wife Maggie Selvidge whose names are subscribing thereto sign and deliver the same to said Henry Pope and J. E. Patridge and that he this affiant subscribed his name as a witness thereto in the presences of the said J. H. Selvidge and Maggie Selvidge and that he saw the other subscribing witness sign the same in the presences of the said J. H. Selvidge and Maggie Selvidge that the witness signed in the presences of each other on the day and year therein named.

E. L. Salley

Sworn to and subscribed this 3rd day of August, 1949.

Witness my hand and seal of office this 3rd day of August, 1949.

Geo. H. Flowers, Clerk Chancery Court

SEAL

State of Mississippi
Webster County

I, Joe K. Wood, Clerk of the Chancery Court, in and for the State and County aforesaid, do hereby certify that the foregoing is a trudeand correct copy of the original of said instrument, as fully and completely as the same appears of record in my office.

Given under my hand and seal this the 16 day of Oct. 1951

/s/ Joe K. Wood
Chancery Clerk

Hyde Construction [redacted]pany [redacted]

To Accompany Form MF-103

A Map and Description of Land known as Selvidge Property, located in Webster County, Mississippi, described as follows: S½ NE¼ & NW¼ of SE¼ & N½ of NW¼ of SW¼, Sec. 7, T. 20, Range 3 E., 150 acres, more or less, and SE¼ except N½ of NW¼ of SW¼, Sec. 7, T. 20, R. 8 E., Also NW¼ and W½ of NE¼ and 4 acres in SE Corner NE¼ Section 8, T. 20, Range 8 East.

Township 20 North Range 8 East

N

S

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
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36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

W E

T 20 N

S

R 8 East

R

(2186)

DEC 26 1951

Hyde Construction Company
R. W. Hyde, Jr.
P.O. Box 385
Jackson, Mississippi

Re: MMA Docket No. 21[illegible] - Iron
[illegible] County, Mississippi

Dear Mr. Hyde:

In reviewing the above noted application for an exploration loan, it is apparent that considerable information is lacking, and that a re-forming of your application will be necessary.

I am enclosing the following information and forms:

1 copy of Questions and Answers on the Mineral Exploration Program dated May 24, 1951.

1 copy of MD-5 as amended.

5 copies of MF-103, revised June, 1951, Application for AIA.

7 copies of MF-282, Landlord's Subordination Agreement.

1 copy of MF-200, Exploration Project Contract.

The information that we now have shows that you have two areas ready for production, namely the "Hart Place" and the "Partridge Place", and one area, the "Selvidge Place", is partly ready for exploration. Also, that you desire to explore adjacent areas located in "Montgomery, Webster and other counties".

In filling out your application, there are several facts to which your attention is particularly directed, viz:

1. The application should apply only to a single area.

2. The applicant must be in possession, as owner, optionee, or lessee.

3. The applicant must outline specifically the geology, the existing workings and/or other data upon which you

base your expectations of encountering commercial ore occurrences.

4. The applicant must describe how he proposes to explore the area, noting where the work will be done.

5. The applicant must list the equipment required, noting whether it is to be purchased, rented or furnished by the applicant.

6. If the applicant is a lessee, or optionee, the landowner must subordinate his interest to the Government's interest, on form [illegible]-202, enclosed herewith.

7. If the ore sought must be concentrated to make "commercial" ore, the applicant should make a brief general statement as to the method of concentration, the percentage of recovery, and grade of concentrates.

A plan or sketch of the specific area, noting present excavations and present knowledge of geology, plus the lay-out of the proposed exploratory program is virtually indispensable.

Under item 3a, form MP-103, the total cost of the project should be given on a time basis, preferably monthly, noting what work will be done, where it will be done, listing the labor force with its cost, the supplies used and their cost, and the rental, maintenance and/or depreciation of equipment used. This will give the expected progress and cost of the project on a regular time basis, the total figure being the estimated cost of the project.

Regarding the use of equipment owned by the applicant, it is customary to allow 1/60 of the stated present value thereof as a monthly depreciation allowance.

If you desire a loan to assist you in making alterations or additions to your beneficiating plant, it will be necessary to take this up with the Defense Materials Procurement Agency.

Your present Docket No. 2136X will suffice for an exploration loan on a single area only, consequently, additional applications will receive new docket numbers.

The MP-10[illegible] forms, leases and maps now in the files may be referred to in your future applications.

Sincerely yours,

SIGNED

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

Enclosures as indicated

GLBrewer'lm
12/10/51

cc: Admn. Reading File
Mails and Files Br.
C. O. Mattendorf
E. B. Melcher, DTEH
T. P. Thayer, DTEH
Field Team, Reg. VII
Docket
S. C. Selfridge
G. L. Brewer

2186

lease run Hart to Patridge + Pope

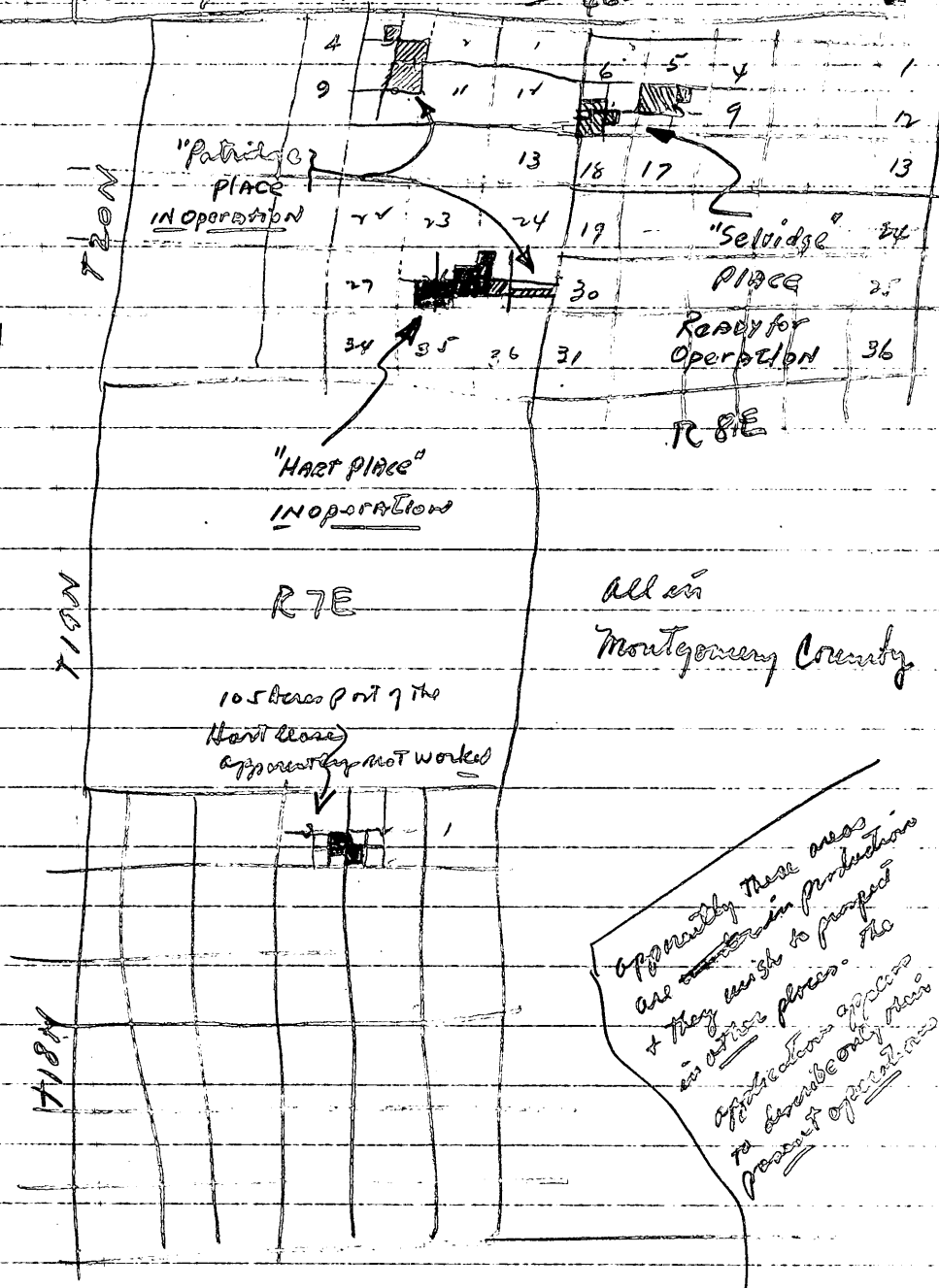
160
45
60
465 acre - solid block

Du Patridge to
J E " leases
marked
440 acres

Selvidge to
Pope + Patridge

80 + 40 + 160 = 280
Acres 20/8 = 204
484

Total acres
under lease
465
440
484
1389



opportunity these areas are ~~[illegible]~~ in production + they wish to prospect in other places. The applications appear to describe only their possible operations

wants to prospect in Montgomery counties + other counties in Mississippi

Love

DMA 2186 =
Hyde Construction Co

(2186)

66.3
12.5
23.
101.8

Abstract of Data in M 7100 - (Delta)

see item 130 "now applying for leases to be made in further exploration of additional areas in Montgomery, Webster & other Counties in Mississippi

Note - ore cosshipped to Alexander & Sheffield! → from Kilmichael 9/11 to 9/19 No pay on less than 48% Fe + mn. & 11½¢ unit on 45.71

M 2 shipped 9/5 - Kilmichael ore
49.28 Fe + mn pd 12½¢
51.60 " " " 13½¢

XX

From M 103

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
OCT 25 1 39 PM '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 2186

Date received 10-25-51

Participation

Hyde Construction Company
Box 385
Jackson, Mississippi

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application

Estimated cost $ 111,200.00

Mineral or metal Iron Ore

Percentage of Government participation 50%

Location of mine Montgomery County
Mississippi

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? See Form MF-100

*2. If a partnership, state names and addresses of partners. See Form MF-100

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. See Form MF-100

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. See Form MF-100

*5. Are you the owner or the lessee of the property? See Form MF-100

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. Not applicable

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached Leases are 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. Attached

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)? Applicant will invest $55,600.00 in proposed project. Applicant's investment is sufficient according to defense Minerals Adm.

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application. Form MD-5

16-67067-1

See Attached Sheet #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. See Form MF-100.

*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. See Form MF-100.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. See Form MF-100. 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. See Form MF-100

15. State in detail how the ore could be shipped and how and where milled. See Attached Sheet #1.

*16. History: See Form MF-100

(*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: See Form MF-100

(*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.) See Form MF-100

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

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

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

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

See Form MF-100 - Paragraph 18

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? See Attached Sheet # 1.

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

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

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Form MF-100, Paragraphs 12, 18 and 7c.

THE REQUIREMENTS AND COSTS

See Attached Sheet #1.

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. See Attached Sheet #1.

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.

Hyde Construction Co. (Name of company)

By R. W. Hyde Jr. (Signature of authorized official)

October 22, 1951 (Date)

Owner (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

Sheet # 1
To accompany Form MF-103.

10.(a) Exploration is proposed in Townships 19 North, 20 North, 21 North, Range 7 East, in Montgomery County, Mississippi, and Townships 19 North, 20 North, 21 North, Ranges 8 East, 9 East and 10 East in Webster County, Mississippi.

(b) Areas are the same.

15. Ore to be shipped via Columbus & Greenville Railroad to Birmingham, Alabama.

19. See Paragraph 18, Form MF-100.

20. Iron Ore (nodular layers separated by layers of clay).

21. General exploration by digging channels and pits and by core drilling for a period of six months.

23.(a) Labor

1 - Superintendent @ $150.00 Week - 24 Weeks	$	3,600.00
1 - Drilling Foreman @ $125.00 Week - 24 Weeks		3,000.00
1 - Stripping Foreman @ $125.00 Week - 24 Weeks		3,000.00
3 - Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs) - 24 Weeks		5,040.00
3 - Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks		3,600.00
3 - Heavy Equipment Opr. @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks		5,040.00
Misc. Labor - 4 Laborers @ $1.00 Hr. - 40 Hrs. Week (160 Hrs.) - 24 Weeks		3,840.00
(b) 1 - Geologist - 24 Weeks @ $250.00		9,000.00
(c) None Contemplated.		
(d) Laboratory and Field Office		3,000.00
(e) Laboratory Equipment		2,500.00
(f) (3) Diamond Core Drills @ $60.00 Day, 5 Days Week 24 Weeks		21,600.00
(g) 1-1/4 C. Y. Dragline @ $2,200.00 Mo. - 6 Mo.		13,200.00
1 D-8 Bulldozer @ $1,800.00 Mo. - 6 Mo.		10,800.00
1 D-6 Bulldozer @ $1,000.00 Mo. - 6 Mo.		6,000.00
Miscl. Pickups and Service Trks. @ $2,000.00 Mo.		12,000.00
(h) Bits, Small Tools, etc.		5,000.00
(i) Power, etc.		1,000.00
		$ 111,200.00

24.

	Accomplished	Expenditure
1st Month	8%	10,000.00
2nd Month	29%	23,300.00
3rd Month	49%	23,300.00
4th Month	69%	23,300.00
5th Month	89%	23,300.00
6th Month	100%	8,000.00

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 18th day of August, 1951, by and between Mrs. Henry Hart as lessor, and J. E. Patridge and Henry Pope, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Oil and Gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

1. Pt. NW¼ SW¼, 6 acres; Pt. SW¼ NW¼, 1 acre and SW¼ SW¼, less 2 acres, total 45 acres, in Sec. 2, Town. 18, Range 7; and,
2. N½ SE¼ of SE¼ and NE¼ SE¼, 60 acres in Sec. 3, Town. 18, Range 7, and
3. E½ SW¼ and W½ SE¼ and NE¼ SE¼ and SE¼ NE¼, 240 acres in Sec. 26, Town. 20, Range 7; and,
4. W½ NW¼ and NW¼ SW¼, 120 acres in Sec. 25, Town. 20, Range 7.

Said property being known as the Hart Place.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of $0.25 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 18th day of August, 1950.

Mrs. Henry Hart
Lessor

_____
Lessor

_____
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named Mrs. Henry Hart, who acknowledged that she signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 18th day of August, 1950.

Geo. H. Flowers
Notary Public

My Commission Expires: Jan. 1, 1952.

(SEAL)

To accompany Form MF 103
Item 7

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 4th day of September, 1950 ~~1951~~, by and between D. V. Patridge as lessor, and J. E. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only oil and gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

Northeast Quarterof Southwest Quarter and South Half of North Half of Southeast Quarter of Section 25, and Southeast Quarter of Northwest Quarter and Southeast Quarter of Section 3, and Northeast Quarter of Section 10, all in Township 20 North, Range 7 East, and containing in all 440 acres, more or less.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of $0.15 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 4th day of September, ~~1951~~ 1950.

/x/ D. V. Patridge
Lessor

_____
Lessor

/s/ J. E. Patridge
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named D. V. Patridge, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 5th day of Sept., ~~1951~~. 1950.

Lloyd K. Moore
Notary Public

My Commission Expires: July 22, 1952 (SEAL)

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 27 day of July, 1949 by and between J.H. and Maggie M. Selvidge as lessor, and Henry Pope and J.E. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Gas and Oil, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Webster County, Mississippi, to-wit:
S1/2 NW¼ & NW¼ SE¼&N½ NW¼ SW¼ Section 7, Township 20, Range 8 East & SW¼ EX.N½ NW¼ SW¼ Sec. 7 Township 20 Range 8 East.

NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Sec. 8, Township 20, Range 8, Located in Webster County Mississippi, 204 Acres more or less, to-gether with all other lands adjacent to, owned or claimed by lessor in said tract of lan wheather correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated. Estimated at 484 A

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of .25 cents per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 27 day of July, 1949 ~~XXXX~~.

This Lease is recorded in Deed Book 41, at Page 459 Chancery Clerk Office Webster County State Of Mississippi.

J.H. Selvidge
Lessor

Maggie Selvidge
Lessor

_____
Lessee

STATE OF MISSISSIPPI

COUNTY OF_____

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named_____, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the_____day of_____, 1951.

_____
Notary Public

My Commission Expires:_____

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE AUG 6 1952

REFERRED TO:

1. Code 400
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	
..... Conference	..... Referring to .....
..... Consideration	
..... Filing	..... Reply for signature of .....
..... Instructions	
..... Investigation	..... Rewriting
..... Initials	..... Signature
..... Mailing	..... Suggestions
..... Previous correspondence	..... Your information

REMARKS:

Letha: Please put this in your docket file

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

400
FILE COPY
SURNAME:

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

Brewer
Selfridge
Utt

DEC 26 1951

Hyde Construction Company
R. W. Hyde, Jr.
P.O. Box 385
Jackson, Mississippi

Re: DMA Docket No. 2186X - Iron
Montgomery County, Mississippi

Dear Mr. Hyde:

In reviewing the above noted application for an exploration loan, it is apparent that considerable information is lacking, and that a re-forming of your application will be necessary.

I am enclosing the following information and forms:

1 copy of Questions and Answers on the Mineral Exploration Program dated May 14, 1951.

1 copy of NO-5 as amended.

5 copies of MF-103, revised June, 1951, Application for Aid.

7 copies of MF-202, Landlord's Subordination Agreement.

1 copy of MF-200, Exploration Project Contract.

The information that we now have shows that you have two areas ready for production, namely the "Hart Place" and the "Patridge Place", and one area, the "Selvidge Place", is partly ready for exploration. Also, that you desire to explore adjacent areas located in "Montgomery, Webster and other counties".

In filling out your application, there are several facts to which your attention is particularly directed, viz:

1. The application should apply only to a single area.

2. The applicant must be in possession, as owner, optionee, or lessee.

3. The applicant must outline specifically the geology, the existing workings and/or other data upon which you

BL

base your expectations of encountering commercial ore occurrences.

4. The applicant must describe how he proposes to explore the area, noting where the work will be done.

5. The applicant must list the equipment required, noting whether it is to be purchased, rented or furnished by the applicant.

6. If the applicant is a lessee, or optionee, the land-owner must subordinate his interest to the Government's interest, on form MF-202, enclosed herewith.

7. If the ore sought must be concentrated to make "commercial" ore, the applicant should make a brief general statement as to the method of concentration, the percentage of recovery, and grade of concentrates.

A plan or sketch of the specific area, noting present excavations and present knowledge of geology, plus the lay-out of the proposed exploratory program is virtually indispensable.

Under item 3a, form MF-103, the total cost of the project should be given on a time basis, preferably monthly, noting what work will be done, where it will be done, listing the labor force with its cost, the supplies used and their cost, and the rental, maintenance and/or depreciation of equipment used. This will give the expected progress and cost of the project on a regular time basis, the total figure being the estimated cost of the project.

Regarding the use of equipment owned by the applicant, it is customary to allow 1/60 of the stated present value thereof as a monthly depreciation allowance.

If you desire a loan to assist you in making alterations or additions to your beneficiating plant, it will be necessary to take this up with the Defense Materials Procurement Agency.

Your present Docket No. 2186X will suffice for an exploration loan on a single area only, consequently, additional applications will receive new docket numbers.

The MF-100 forms, leases and maps now in the files may be referred to in your future applications.

Sincerely yours,

SIGNED

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

Enclosures as indicated

QLBrewer'lm
12/18/51

cc: Admn. Reading File
Mails and Files Br.
C. O. Mettendorf
N. B. Melcher, USBM
T. P. Thayer, USGS
Field Team, Reg. VII
Docket
G. C. Selfridge
Q. L. Brewer

Mr. H. W. Hyde, Jr. Owner
Hyde Construction Company
Box 385
Jackson, Mississippi

Subject: DMA-2186
Re: Exploration Loan
Hart Place*

My dear Mr. Hyde:

This will acknowledge receipt of your application dated October 22, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2186 and referred to the Iron Ores Branch.

Kindly refer to DMA-2186 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

2463

ONE 3-6872

P. O. BOX 385

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
OCT 25 1 38 PM '51

dma-2186

HYDE CONSTRUCTION COMPANY

General Contractors

HIGHWAY 80 WEST

JACKSON, MISSISSIPPI

October 17, 1951

ADDRESS REPLY TO:

Mr. C. O. Mittendorf
Acting Director
Defense Minerals Administration
Department of Interior
Washington, D. C.

Dear Mr. Mittendorf:

Attached are Defense Minerals Administration Forms MF-100, MF-101, and MR-103, all in quadruplicate.

In the event that additional information is required, please contact our Jackson, Mississippi, office as we do not have representatives located in Washington.

Your early consideration of the attached applications will be appreciated, as our working season in Mississippi is limited due to Winter rains.

Yours very truly,

HYDE CONSTRUCTION COMPANY

BY R. W. Hyde Jr.
R. W. HYDE, JR.

RWH,Jr/jj

Encls.

10/30/51: The following material was removed for transmittal to R.F.C.- By Mr. Adams
Four copies of MF-101 and three copies of MF-100.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
OCT 25 1 35 PM '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 2186

Date received 10-25-51

Participation

Hydo Construction Company
Box 385
Jackson, Mississippi

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application

Estimated cost $111,200.00

Mineral or metal Iron Ore

Percentage of Government participation 50%

Location of mine Montgomery County

Mississippi

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? See Form MF-100

*2. If a partnership, state names and addresses of partners. See Form MF-100

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. See Form MF-100

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. See Form MF-100

*5. Are you the owner of the lessee of the property? See Form MF-100

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. Not applicable

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached leases are 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. Attached

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)? Applicant will invest $55,600.00 in proposed project. Applicant's investment is sufficient according to defense Minerals Adm. Form MD-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) See Attached Sheet #1. 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. See Form MP-100.
*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. See Form MP-100.
*13. State source and quantity of water available for operations and its sufficiency at all seasons. See Form MP-100.
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. See Form MP-100
15. State in detail how the ore could be shipped and how and where milled. See Attached Sheet #1.
*16. History: See Form MP-100
    (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: See Form MP-100
    (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.) See Form MP-100
    (a) Describe the ore or mineral deposits briefly.
    (b) Submit available maps and assay data.
    (c) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

See Form MP-100 - Paragraph 18

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? See Attached Sheet #1.
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Form MP-100, Paragraph 12, 18 and 7c.

THE REQUIREMENTS AND COSTS

23. See Attached Sheet #1. 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. See Attached Sheet #1.

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.

Hyde Construction Company (Name of company) By R. W. Hyde Jr. (Signature of authorized official)

October 22, 1951 (Date) Owner (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

Sheet # 1
To accompany Form MF-103.

10.(a) Exploration is proposed in Townships 19 North, 20 North, 21 North, Range 7 East, in Montgomery County, Mississippi, and Townships 19 North, 20 North, 21 North, Ranges 8 East, 9 East and 10 East in Webster County, Mississippi.

(b) Areas are the same.

15. Ore to be shipped via Columbus & Greenville Railroad to Birmingham, Alabama.

19. See Paragraph 18, Form MF-100.

20. Iron Ore (nodular layers separated by layers of clay).

21. General exploration by digging channels and pits and by core drilling for a period of six months.

23.(a) Labor

1 - Superintendent @ $150.00 Week - 24 Weeks	$	3,600.00
1 - Drilling Foreman @ $125.00 Week - 24 Weeks		3,000.00
1 - Stripping Foreman @ $125.00 Week - 24 Weeks		3,000.00
3 - Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs) - 24 Weeks		5,040.00
3 - Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks		3,600.00
3 - Heavy Equipment Opr. @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks		5,040.00
Misc. Labor - 4 Laborers @ $1.00 Hr. - 40 Hrs. Week (160 Hrs.) - 24 Weeks		3,840.00
(b) 1 - Geologist - 24 Weeks @ $250.00		9,000.00
(c) None Contemplated.		
(d) Laboratory and Field Office		3,000.00
(e) Laboratory Equipment		2,500.00
(f) (3) Diamond Core Drills @ $60.00 Day, 5 Days Week 24 Weeks		21,600.00
(g) 1-1/4 C. Y. Dragline @ $2,200.00 Mo. - 6 Mo.		13,200.00
1 D-8 Bulldozer @ $1,800.00 Mo. - 6 Mo.		10,800.00
1 D-6 Bulldozer @ $1,000.00 Mo. - 6 Mo.		6,000.00
Miscl. Pickups and Service Trks. @ $2,000.00 Mo.		12,000.00
(h) Bits, Small Tools, etc.		5,000.00
(i) Power, etc.		1,000.00
	$	111,200.00

24.

	Accomplished	Expenditure
1st Month	8%	10,000.00
2nd Month	29%	23,300.00
3rd Month	49%	23,300.00
4th Month	69%	23,300.00
5th Month	89%	23,300.00
6th Month	100%	8,000.00

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 18th day of August, 1951, by and between Mrs. Henry Hart as lessor, and J. E. Patridge and Henry Pope, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Oil and Gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

1. Pt. NE¼ SW¼, 6 acres; Pt. SE¼ SW¼, 1 acre and SW¼ SW¼, less 2 acres, total 45 acres, in Sec. 2, Town. 18, Range 7; and,
2. NW¼ SW¼ of SE¼ and NE¼ SE¼, 60 acres in Sec. 3, Town. 18, Range 7; and
3. E½ SW¼ and W½ SE¼ and NE¼ SW¼ and SE¼ NE¼, 240 acres in Sec. 25, Town. 20, Range 7; and,
4. W½ NE¼ and NW¼ SW¼, 120 acres in Sec. 25, Town. 20, Range 7.

Said property being known as Mrs. Hart Place.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of $0.25 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 18th day of August, 1950 ~~1950~~.

Mrs. Henry Hart
Lessor

_____
Lessor

_____
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named Mrs. Henry Hart, who acknowledged that she signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 18th day of August, ~~1950~~ 1950.

Geo. H. Flowers
Notary Public

My Commission Expires: Jan. 1, 1952.

(SEAL)

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 4th day of September, 1950, by and between D. V. Patridge as lessor, and J. E. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only oil and gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

Northeast Quarter of Southwest Quarter and South Half of North Half of Southeast Quarter of Section 25, and Southeast Quarter of Northwest Quarter and Southeast Quarter of Section 3, and Northeast Quarter of Section 10, all in Township 20 North, Range 7 East, and containing in all 440 acres, more or less.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of $0.15 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 4th day of September, ~~1951~~ 1950.

/s/ D. V. Patridge
Lessor

Lessor

/s/ J. E. Patridge
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named D. V. Patridge, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 5th day of Sept., ~~1951~~ 1950.

Lloyd K. Moore
Notary Public
(SEAL)

My Commission Expires: July 22, 1952

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 27 day of July, 1949 by and between J.H. and Maggie M. Selvidge as lessor, and Henry Pope and J.E. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Gas and Oil, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Webster County, Mississippi, to-wit:

S1/2 NW¼ & NW¼ SE¼&N½ NW¼ SW¼ Section 7, Township 20, Range 8 East & SW¼ EX.N½ NW¼ SW¼ Sec. 7 Township 20 Range 8 East.

NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Sec. 8, Township 20, Range 8, Located in Webster County Mississippi, 204 Acres more or less, to-gether with all other lands adjacent to, owned or claimed by lessor in said tract of land wheather correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated. Estimated at 484 A

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of .25 cents per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 27 day of July, 1949.

This Lease is recorded in
Deed Book 41, at Page 459
Chancery Clerk Office
Webster County
State Of Mississippi.

J.H. Selvidge
Lessor

Maggie Selvidge
Lessor

Lessee

STATE OF MISSISSIPPI

COUNTY OF_____

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named_____, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the_____day of_____, 1951.

Notary Public

My Commission Expires:_____

Form MF-103 / (April 1951)

U. S. DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

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

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C. OCT 25 1 40 PM '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 2186

Date received 10-25-51

Participation

Hydo Construction Company
Box 305
Jackson, Mississippi

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application

Estimated cost $111,200.00

Mineral or metal Iron Ore

Percentage of Government participation 50%

Location of mine Montgomery County
Mississippi

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? See Form MF-100

*2. If a partnership, state names and addresses of partners. See Form MF-100

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders See Form MF-100

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. See Form MF-100

*5. Are you the owner or the lessee of the property? See Form MF-100

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. Not applicable

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached Leases are 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. Attached

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)? Applicant will invest $55,600.00 in proposed project. Applicant's investment is sufficient according to defense Minerals Adm. Form MD-5

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

64067-1

THE PROPERTY

10. See Attached Sheet #1.
(a) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
(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. See Form MP-100.

*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. See Form MP-100.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. See Form MP-100.
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. See Form MP-100

15. State in detail how the ore could be shipped and how and where milled. See Attached Sheet #1.

*16. History: See Form MP-100
(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: See Form MP-100
(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.) See Form MP-100
(a) Describe the ore or mineral deposits briefly.
(b) Submit available maps and assay data.
(c) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.
See Form MP-100 - Paragraph 18

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Sheet #1.

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

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

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Form MP-100, Paragraphs 12, 18 and 7c.

THE REQUIREMENTS AND COSTS

23. See Attached Sheet #1.
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. See Attached Sheet #1.

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.

Hyde Construction Co. (Name of company)

By R. W. Hyde Jr. (Signature of authorized official)

October 22, 1951 (Date)

Owner (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

Sheet # 1
To accompany Form MF-103.

10.(a) Exploration is proposed in Townships 19 North, 20 North, 21 North, Range 7 East, in Montgomery County, Mississippi, and Townships 19 North, 20 North, 21 North, Ranges 8 East, 9 East and 10 East in Webster County, Mississippi.

(b) Areas are the same.

15. Ore to be shipped via Columbus & Greenville Railroad to Birmingham, Alabama.

19. See Paragraph 18, Form MF-100.

20. Iron Ore (nodular layers separated by layers of clay).

21. General exploration by digging channels and pits and by core drilling for a period of six months.

23.(a) Labor

1 - Superintendent @ $150.00 Week - 24 Weeks	$ 3,600.00
1 - Drilling Foreman @ $125.00 Week - 24 Weeks	3,000.00
1 - Stripping Foreman @ $125.00 Week - 24 Weeks	3,000.00
3 - Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs) - 24 Weeks	5,040.00
3 - Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks	3,600.00
3 - Heavy Equipment Opr. @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks	5,040.00
Misc. Labor - 4 Laborers @ $1.00 Hr. - 40 Hrs. Week (160 Hrs.) - 24 Weeks	3,840.00
(b) 1 - Geologist - 24 Weeks @ $250.00	9,000.00
(c) None Contemplated.	
(d) Laboratory and Field Office	3,000.00
(e) Laboratory Equipment	2,500.00
(f) (3) Diamond Core Drills @ $60.00 Day, 5 Days Week 24 Weeks	21,600.00
(g) 1-1/4 C. Y. Dragline @ $2,200.00 Mo. - 6 Mo.	13,200.00
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Miscl. Pickups and Service Trks. @ $2,000.00 Mo.	12,000.00
(h) Bits, Small Tools, etc.	5,000.00
(i) Power, etc.	1,000.00
	$ 111,200.00

24.

	Accomplished	Expenditure
1st Month	8%	10,000.00
2nd Month	29%	23,300.00
3rd Month	49%	23,300.00
4th Month	69%	23,300.00
5th Month	89%	23,300.00
6th Month	100%	8,000.00

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 10th day of August, 1951, by and between Mrs. Henry Hart as lessor, and J. E. Patridge and Henry Jones, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Oil and Gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

1. Pt. [illegible], 6 acres; Pt. [illegible], 1 acre and [illegible], 1ots 2 acres, total 15 acres, in Sec. 2, Tsp. 18, Range 7; and,
2. [illegible] and [illegible], 60 acres in Sec. 3, Tsp. 18, Range 7; and
3. [illegible] and [illegible] and [illegible] and [illegible], 40 acres in Sec. 20, Tsp. 20, Range 7; and,
4. [illegible] and [illegible], 100 acres in Sec. 25, Tsp. 20, Range 7.

Said property being known as the Hart Place.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of 00.25 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 10th day of August, 1950.

Ora. Henry Hart
Lessor

_____
Lessor

_____
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named Ora. Henry Hart, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 10th day of August, 1950.

Geo. B. Flowers
Notary Public

My Commission Expires: Jan. 1, 1952.

(SEAL)

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 4th day of September, 1960, by and between D. V. Patridge as lessor, and J. D. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only oil and gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

Northeast Quarter of Southeast Quarter and South Half of North Half of Southeast Quarter of Section 25, and Southeast Quarter of Northeast Quarter and Southeast Quarter of Section 3, and Northeast Quarter of Section 10, all in Township 20 North, Range 7 East, and containing in all 440 acres, more or less.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of 0.25 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 4th day of September, 1950.

/s/ D. V. Patricco
Lessor

Lessor

/s/ S. E. Patricco
Lessee

STATE OF MISSISSIPPI

COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named D. V. Patricco, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 5th day of Sept., 1950.

Lloyd E. Moore
Notary Public

My Commission Expires: July 22, 1952

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 27 day of July, 1949 by and between J.M. and Maggie M. Selvidge as lessor, and Henry Pope and J.E. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Gas and Oil, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Webster County, Mississippi, to-wit:

S1/2 NW¼ & NW¼ SE¼ & N½ NW¼ SW¼ Section 7, Township 20, Range 8 East & SW¼ EX.N½ NW¼ SW¼ Sec. 7 Township 20 Range 8 East.

NW¼ & NW¼ NE¼ & 4 A in SW Corner NE¼ Sec. 8, Township 20, Range 8, Located in Webster County Mississippi, 204 Acres more or less, to-gether with all other lands adjacent to, owned or claimed by lessor in said tract of land wheather correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated. Estimated at 484 A

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of .25 cents per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 27 day of July, 1949.

This Lease is recorded in
Deed Book 41, at Page 459
Chancery Clerk Office
Webster County
State Of Mississippi.

J.H. Selvidge
Lessor

Maggie Selvidge
Lessor

_____
Lessee

STATE OF MISSISSIPPI

COUNTY OF_____

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named_____, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the_____day of_____, 1951.

_____
Notary Public

My Commission Expires:_____

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.

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

OCT 25 1951

DO NOT FILL IN THIS BLOCK

Docket No. dma 2186

Date received 10-25-51

Participation

Hyde Construction Company
Box 385
Jackson, Mississippi

Name and address of applicant

Date

FILL IN THIS BLOCK

Date of application

Estimated cost $111,200.00

Mineral or metal Iron Ore

Percentage of Government participation 50%

Location of mine Montgomery County
Mississippi

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? See Form MF-100

*2. If a partnership, state names and addresses of partners. See Form MF-100

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. See Form MF-100

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. See Form MF-100

*5. Are you the owner or the lessee of the property? See Form MF-100

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. Not applicable

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached leases are 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. Attached

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)? Applicant will invest $55,600.00 in proposed project. Applicant's investment is sufficient according to defense minerals adm. Form MF-100

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

360
401
59
104

THE PROPERTY

See Attached Sheet #1.

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. See Form MF-100.

*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. See Form MF-100.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. See Form MF-100. 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. See Form MF-100

15. State in detail how the ore could be shipped and how and where milled. See Attached Sheet #1.

*16. History: See Form MF-100

(*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: See Form MF-100

(*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.) See Form MF-100

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

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

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

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

See Form MF-100 - Paragraph 18

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? See Attached/ Sheet # 1.

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

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

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Form MF-100, Paragraphs 12, 18 and 7c.

THE REQUIREMENTS AND COSTS

See Attached Sheet #1.

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. See Attached Sheet #1.

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.

Hyde Construction Company (Name of company) By R. W. Hyde Jr. (Signature of authorized official)

October 22, 1951 (Date) Owner (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

Sheet # 1
To accompany Form MF-103.

10.(a) Exploration is proposed in Townships 19 North, 20 North, 21 North, Range 7 East, in Montgomery County, Mississippi, and Townships 19 North, 20 North, 21 North, Ranges 8 East, 9 East and 10 East in Webster County, Mississippi.

(b) Areas are the same.

15. Ore to be shipped via Columbus & Greenville Railroad to Birmingham, Alabama.

19. See Paragraph 18, Form MF-100.

20. Iron Ore (nodular layers separated by layers of clay).

21. General exploration by digging channels and pits and by core drilling for a period of six months.

23.(a) Labor

1 - Superintendent @ $150.00 Week - 24 Weeks	$ 3,600.00
1 - Drilling Foreman @ $125.00 Week - 24 Weeks	3,000.00
1 - Stripping Foreman @ $125.00 Week - 24 Weeks	3,000.00
3 - Drillers @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs) - 24 Weeks	5,040.00
3 - Driller Helpers @ $1.25 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks	3,600.00
3 - Heavy Equipment Opr. @ $1.75 Hr. - 40 Hrs. Per Week (120 Hrs.) - 24 Weeks	5,040.00
Misc. Labor - 4 Laborers @ $1.00 Hr. - 40 Hrs. Week (160 Hrs.) - 24 Weeks	3,840.00
(b) 1 - Geologist - 24 Weeks @ $250.00	9,000.00
(c) None Contemplated.	
(d) Laboratory and Field Office	3,000.00
(e) Laboratory Equipment	2,500.00
(f) (3) Diamond Core Drills @ $60.00 Day, 5 Days Week 24 Weeks	21,600.00
(g) 1-1/4 C. Y. Dragline @ $2,200.00 Mo. - 6 Mo.	13,200.00
1 D-8 Bulldozer @ $1,800.00 Mo. - 6 Mo.	10,800.00
1 D-6 Bulldozer @ $1,000.00 Mo. - 6 Mo.	6,000.00
Miscl. Pickups and Service Trks. @ $2,000.00 Mo.	12,000.00
(h) Bits, Small Tools, etc.	5,000.00
(i) Power, etc.	1,000.00
	$ 111,200.00

24.

	Accomplished	Expenditure
1st Month	8%	10,000.00
2nd Month	29%	23,300.00
3rd Month	49%	23,300.00
4th Month	69%	23,300.00
5th Month	89%	23,300.00
6th Month	100%	8,000.00

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 13th day of August, 1951, by and between Mrs. Lucy Cart as lessor, and J. L. [illegible] and [illegible] Cage, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Oil and Gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

1. [illegible] 6 acres, [illegible] 1 acre and [illegible], less [illegible] acre, total [illegible] acres, [illegible] 2, Sec. 1, Range 7; [illegible],
2. [illegible] 3, Sec. 1, Range 7, [illegible]
3. [illegible] Sec. 2, Range 7; [illegible],
4. [illegible] 1[illegible] acre [illegible], Sec. [illegible], Range 7.

This lease for a primary term of Twelve [illegible] and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of 0.25 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 10th day of August, 1950.

Dr. Terry Hart
Lessor

_____
Lessor

_____
Lessee

STATE OF MISSISSIPPI
COUNTY OF Montgomery

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named Dr. Terry Hart, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 10th day of August, 1950.

Geo. L. Flowers
Notary Public

My Commission Expires: Jan. 1, 1952.

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 6th day of September, 1951, by and between D. V. Patrick as lessor, and D. C. Patrick, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only oil and gas, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Montgomery County, Mississippi, to-wit:

Northeast Quarter, Northwest Quarter and South Half of South Half of Southeast Quarter of Section 8, and South Half Quarter of Northeast Quarter and Southeast Quarter of Section 9, and Northwest Quarter of Section 10, all in Township 20 North, Range 7 East, and containing in all 440 acres, more or less.

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of 0.1 per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 6th day of [illegible], 1951.

/s/ D. V. [illegible]
Lessor

Lessor

/s/ D. V. [illegible]
Lessee

STATE OF MISSISSIPPI
COUNTY OF [illegible]

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named D. V. [illegible], who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the 26 day of [illegible], 1951.

[illegible]
Notary Public

My Commission Expires: [illegible]

ROCK AND MINERAL LEASE

STATE OF MISSISSIPPI)
)
COUNTY OF MONTGOMERY)

This agreement, made and entered into this 27 day of July, 1949 by and between J.M. and Maggie M. Selvidge as lessor, and Henry Pope and J.B. Patridge, of Kilmichael, Mississippi, as lessee witnesseth:

That in consideration of the sum of one Dollar ($1.00), cash in hand paid, and other valuable consideration, lessor does hereby grant, lease, transfer and assign, and let exclusively unto the lessee herein named, his heirs, assigns or legal representatives, for the purpose of investigating, exploring, mining and producing from and on said lands the "ROCK", and/or any other minerals, excepting only Gas and Oil, which are not covered hereby, with the rights and privilege of the said lessee, his heirs, assigns and/or legal representatives, to erect and construct all necessary structures as are found necessary and essential to, and for the mining, production, transportation, etc., of the said rock and/or other minerals on the following described land, located in Webster County, Mississippi, to-wit:

S1/2 NW¼ & NW¼ SE¼ & NE¼ NW¼ SW¼ Section 7, Township 20, Range 8 East & SW¼ SE¼ NE¼ NW¼ SW¼ Sec. 7 Township 20 Range 8 East.

NE¼ & SW¼ NE¼ & 4 A in SW Corner NE¼ Sec. 8, Township 20, Range 8, Located in Webster County Mississippi, 204 Acres more or less, to-gether with all other lands adjacent to, owned or claimed by lessor in said tract of land wheather correctly described or not, which said additional lands are expressly included herein unless otherwise stipulated. Estimated at 444 A

This lease is for the primary term of Ten Years and/or as long as such rock and/or other minerals are produced from said land or unit. In the event that operations as prescribed above are not begun within one year from the date of this lease, same shall terminate as to both parties, unless the lessee, on or before the above date, shall pay or tender to the lessor's credit at the Bank of Winona, Winona, Mississippi, the sum of .25 cents per acre on the above described lands. This payment shall be the agreed rental payment, and shall cover the deferment and commencement of said operations, as described above, for an additional twelve months from the anniversary date of this lease for the primary term hereof.

The lessee shall have the right to use any of the surface of said land to the extent that may be necessary to mine and/or carry away the rock and/or other minerals mined and/or desired to be mined from said lands, and may remove any trees that may be in the way of said operations, by stripping and/or tunneling, and that the said lessee and/or his legal representative shall have the right to

build and construct roads, railroads or any other manner of transportation facilities over, across or under said lands, for use in removal of said rock and/or other minerals from, on, or under said lands with all necessary rights of egress or ingress for said purpose; provided however, that the said lessee, his assigns, heirs, and/or legal representatives shall be liable for and shall pay lessor for any and all damages done to any crops, timber, buildings and/or other improvements on said lands, the true and reasonable value and payment, in event of damage to same, to be determined and agreed on same in writing, prior to commencement of operation of mining, etc., on said lands. In the event of disagreement as to values, same shall be determined by a party of three, one member to be selected by each the lessee and the lessor and the third to be chosen by the two selected parties by mutual agreement, and their decision shall be binding.

Any provisions herein to the contrary notwithstanding the payments to be made by the lessee, his heirs, assigns, and/or legal representatives to the lessor for the rock, and/or other minerals covered by this lease, and removed from said lands, shall be one-eighth royalty, which is one-eighth of the value of the said rock and/or other minerals, at the mine. Payments for same shall be made on a monthly basis to the credit of the lessor at the Winona Bank, Winona, Mississippi.

Witness our signature, on this 27 day of July, 1949

This Lease is recorded in
Deed Book 41, at Page 459
Chancery Clerk Office
Webster County
State Of Mississippi.

J.D. Selvidge
Lessor

Maggie Selvidge
Lessor

Lessee

STATE OF MISSISSIPPI

COUNTY OF_____

Personally appeared before me, the undersigned authority of the law, in and for said county and state, the within named_____, who acknowledged that he signed and delivered the above and foregoing instrument on the day and year and for the purpose therein mentioned.

Given under my hand and official seal, this the_____day of_____, 1951.

Notary Public

My Commission Expires:_____

PHONE 3-6872

P. O. BOX 385

HYDE CONSTRUCTION COMPANY

General Contractors

HIGHWAY 80 WEST

JACKSON, MISSISSIPPI

October 23, 1951

ADDRESS REPLY TO:

Mr. C. O. Mittendorf
Acting Director
Defense Minerals Administration
Department of Interior
Washington, D. C.

Dear Mr. Mittendorf:

Attached are two copies of Montgomery County and Webster County maps showing the areas to be explored and the location of our leases.

These maps should accompany Forms MF-103, which were mailed to you today, but through an oversight, the attached maps were omitted. Should you require any additional information, please contact our Jackson, Mississippi, office.

Yours very truly,

HYDE CONSTRUCTION COMPANY

BY R. W. Hyde Jr
R. W. HYDE, JR.

RWH,Jr/jj

Encls.

Oct 25 1 37 PM '51

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.

ore have an estimated area of 1.25 square miles and a tonnage of 950,168.

H. THE WALTHALL FIELD

The Walthall Field may be considered as consisting of an area of 31 square miles, more or less, chiefly east, south, and west of Walthall. Its northern boundary may be roughly defined as the southern limits of the Bellefontaine and Montevista fields; its eastern, as Spring Creek; its southern, as the part of the Mathiston-Walthall road which trends west by north from Spring Creek to a road junction a mile or so southeast of Walthall, and the roads which lead thence southwest and west to a junction 2.5 miles west of Highway 9; and its western boundary, a road trending in general north from that junction. Iron ore is at the surface in several places in the territory thus defined.

a) At Walthall, along Highway 9 both north and south of the intersection of the highway and an east-west road, and on both sides of the highway south of the intersection, are discoidal or ellipsoidal concretions of iron oxide embedded in a laminated very silty and sandy tan and light-gray clay, or a clayey and silty fine sand, streaked and spotted with rust. The ore masses, exposed by the highway cut and the gullies on both sides, are, roughly, in two layers some three feet apart vertically, although the layers may converge beneath the surface, because lying along diagonal or otherwise irregular bedding. Individual concretions vary in size, those at the surface ranging from a few inches to 1.5 feet in diameter and 0.3 to 0.8-foot in thickness. These "bowlders" of oxide ore can be traced 250 yards along the west side of the highway. Also, they crop out east of the highway on both sides of the local road mentioned, leading into Walthall. Many of these masses are of considerable size—the largest observed measured 3.0 by 2.5 by 1.0 feet. It appears that the village is standing on discontinuous layers of iron oxide concretions. And in the walls of the Highway 9 cut at the top of the first hill 0.2-mile north of the intersection, masses of oxide ore are strung along the diagonal bedding 25 to 30 feet stratigraphically above the beds near the intersection. The parallel orientation of the ore and the strata which enclose it, at this cut and in other places where the bedding is very irregular, suggests that the ore masses in such chaotic terrane have been moved by violent currents or by gravity from their original positions, and redeposited.

The location of this ore deposit, along a pavement highway and only five miles from a railroad, is favorable for mining operations, as is the lightness of the overburden; but of course the presence of the village of Walthall makes such operations impossible, at least on the east side of the highway. Possibly the deposit could be worked for some distance west of the highway.

b) Along the road which leads west from Walthall considerable ferruginous debris and a few larger pieces of ore are scattered about, especially half a mile or so west of Highway 9. Probably they belong to the same beds as the ore masses at Walthall. The relief is slight, although the road is on a divide.

c) At the intersection (on the line between Secs. 19 and 20, T. 20 N., R. 10 E.) of Highway 9 and a local road two miles south from the iron ore at Walthall, the gray clay just under a sharp clay-sand contact contains thin ore; and 0.35-mile west from the intersection, lignitic and light-gray clay and 0.5-foot concretionary masses of oxide ore crop out along the local road almost in front of a farmhouse. Relief is low, and over several acres the overburden is not more than 8 to 10 feet.

d) Ore outcrops are few in the part of the Walthall Field east of Highway 9. At a road junction (SW 1/4, Sec. 2, T. 20 N., R. 10 E.) iron ore debris and a few larger concretions are lying about on the surface, and insignificant showings were noted elsewhere.

The mineable ore of the Walthall Field is estimated at 170,768 long tons from 320 acres.

I. THE TOMNOLEN FIELD

The territory north of Tomnolen, between Salt Creek on the east and Calabrella Creek on the west, extending northwards to a little beyond the Grady road and southwards to the Big Black River, is designated the Tomnolen Field. Although the total area of the field is approximately 16 square miles, the ore outcrops are limited to parts of the strip along the Grady road, which extends east-west some two miles north of Tomnolen. Specifically,

a) Both east and west of the junction (about the middle of the line between Secs. 10 and 15, T. 19 N., R. 9 E.) thin iron ore is included in the sections exposed by road cuts. East of the junction two seams show, the lower one some 30 feet below the top of the rise, the upper one 3 feet above the lower. The combined thickness of the two is not more than 0.5-foot. However, in the down slope west of the junction, three layers of discoidal masses of iron carbonate and iron oxide are interbedded with gray and lignitic and bluish clay and clay-shale. A "bowlder" from the uppermost layer was 0.5-foot thick. The layers may not be continuous, inasmuch as some of the masses appear to have developed along cross-bedding. A 25-foot section is exposed. A quarter of a mile south of the road junction mentioned, pieces of ore, presumably from the same beds, were found on the slope.

b) A quarter of a mile west of the road junction, in front of a church and cemetery, gray clay and two beds of oxide ore are at the surface on the north side of the road. The discoidal concretions here are 0.3-foot to 0.4-foot thick, and the layers separated by three to four feet of clay. These ore seams probably are correlative with the upper two in the west slope from the junction. Much of the surface immediately south of the road is lower than the outcrop, but at some distance farther south low hills are of elevation sufficient to include the ore. Overburden is slight north of the road, but perhaps two to three acres are occupied by the church and cemetery. The same ore can be traced some 200 yards down slope to the west from the outcrop in front of the cemetery.

Iron ore shows here and there along this east-west road for perhaps three-quarters of a mile.

Some thin ore crops out in the hills of Choctaw County, across the valley of the Big Black River south of Tomnolen.

The estimates for the Tomnolen Field are: area of mineable ore, 160 acres; ore available 118,224 long tons.

J. THE SALT CREEK FIELD

The area here named the Salt Creek Field comprises some six square miles in the headwater territory of Salt Creek north of and contiguous to the Tomnolen Field. The only ore outcrops

d) Along this same road almost 3.0 miles from Highway 9, and roughly 15 to 20 feet below the top of a gentle south slope half a mile long, ore from two levels is exposed (NE 1/4, Sec. 29, T. 21 N., R. 10 E.). Individual masses are 0.9-foot to 1.0 foot thick. At the very top of the rise additional ore is in sight. The locality appears to be very favorable for strip-mining operations—large areas of low rises and low slopes, where the overburden of clay, sand, and silt averages less than 15.0 feet, and in few places is more than 25.0 feet.

The right-of-way of this road being sub-parallel with the regional strike of the strata, the inference is warranted that two of the same beds are exposed at all the several places noted. Relative thicknesses, elevations, and associated strata support the inference. Furthermore, probably at least one or two of the ore beds in the "mountain" southwest of Montevista can be correctly correlated with the layers north of Walthall. In short, it seems reasonable to believe that some ore beds are extensive.

e) Two beds of 0.25-foot to 0.3-foot ore four feet apart, show along a local road about half a mile north of Bellefontaine, and 0.4-mile from the road junction with Highway 9.

f) Ore is at the surface in four or five places along the road leading south from a junction with the Bellefontaine-Embry road 1.65 miles west from Highway 9 at Bellefontaine. Some thin concretions (up to 0.3-foot thick) are bedded with sand and clay-shale strata, about half a mile south of the junction, and approximately 0.4-mile farther south similar thin ore is part of the section in the south wall of a valley. The road bed at the top of this valley wall, 1.3 miles south of the Embry road, is 112 feet above the valley bottom, and here large discoidal masses of iron ore a foot thick crop out a little below the clay-sand contact.

g) The strata exposed in the vicinity of American Legion Lake include some thin ore, and at a place or two (NW ¼, Sec. 6, T. 20 N., R. 10 E.) in the hills north of the lake are oxide masses 0.5 to 0.7-foot thick, in gray clay. The main outcrop here is difficultly accessible, and although the slope is relatively low, the ore is 40 to 50 feet below the ridge top a few rods away.

The parts of the Bellefontaine Field which are reasonably favorable for strip mining and contain mineable quantities of

Shutispear Creek drainage basins; south to the junction of Highway 9 and a local road less than a mile north of Walthall; and west to the west headwater fork of Sabougla Creek half a mile east of Embry. The total area of the field is approximately 21 square miles. Iron ore is exposed in many places.

a) Along the road which trends almost north from its junction with Highway 9 a mile or so north of Walthall, are several outcrops of iron ore. The showing nearest the highway is three quarters of a mile or a little less from the junction. At this place, laminated silt and clay enclose ore 0.7-foot thick, and a little farther north two layers of ore separated by a few inches have a total thickness of 1.5 feet. Some 250 yards still farther north a solid layer 0.5-foot thick shows for a distance of several feet, 5.0 feet below the thicker bed. The same layers crop out in an old road 50 yards to the east, and iron ore debris, scattered over the surface here and there along this low west-east ridge to a distance of approximately 150 yards suggests that the layers extend at least to the wide valley a quarter of a mile east of the main road.

b) The section of a south slope a mile and a half from the highway contains three ore beds. The lowermost, 0.8-foot thick, is exposed near the base of the slope under 26.0 feet of overburden to the road-level top of the rise, but east of the road the overburden lessens by several feet in a short distance, and the ore bed can be traced by fragments for 300 to 400 yards. In an area of possibly 10 acres here the average thickness of clay and sand overburden (which in places includes higher layers of ore) is not greater than 15.0 feet. About 8.6 feet above the lowermost ore in the road section is a bed of undetermined thickness (0.3-foot visible), and a foot or two above it is a 0.5-foot bed. The north slope of this same hill exposes three or four layers of ore, one of which is 0.75-foot thick, the others of the order of 0.3-foot.

c) Some ore is at the surface 0.5-mile to 0.6-mile farther north, and 2.0 miles from Highway 9; and some 260 yards still farther north, at the top of a low rise almost in front of a farmhouse, large ellipsoidal masses of ore are lying on the west side of the road. One of these concretions measured 2.0 feet in length and a foot in thickness. Mining conditions are not so good at this place, because of the hill west of the road and the moderately steep slope to the valley on the east.

observed are along an east-west road two miles north of the Grady road.

a) The west wall of the valley of the east headwater tributary of Salt Creek shows a good section (SW 1/4, Sec. 35, T. 20 N., R. 9 E.) of sand and clay, including weathered masses of iron ore 0.7-foot to 0.8-foot thick and as much as 2.0 feet long. The presence also of concretions 0.25-foot to 0.3-foot thick suggests that two ore beds are here, although not observed in place. The valley wall is a low, broad, level-topped ridge, of which only a slight thickness overlies the iron ore.

b) In the low sloping west wall of the valley of the main Salt Creek, blocks of oxide ore 0.5-foot to 0.7-foot thick crop out in road cuts and roadside gullies. Weathering has split some of them into thin slabs.

The mineable territory of the Salt Creek Field may be as much as 320 acres. If so, the ore which can be economically recovered should be at least 288, 992 long tons.

K. THE SAND CREEK FIELD

Included in the Sand Creek Field is the territory drained by the southern part of the upper reaches of Sand Creek, an area of approximately sixteen square miles north and northwest of the Salt Creek Field. Ore is at the surface in four or five places.

a) A 0.5-foot seam of oxide ore projects from the north wall of a road cut (NW 1/4, Sec. 32, T. 20 N. R. 9 E.) some 0.4-mile west by north from the bridge over Sand Creek, at the contact between gray iron-stained clay below, and red sand above. The same bed shows a few rods farther east, in front of a farmhouse.

b) A little below the middle of the slope of the southeast wall of the valley of Sand Creek, 0.5-foot ellipsoidal masses of oxide ore are exposed by a roadside gully (NE cor., Sec. 28, T. 20 N., R. 9 E.). The rusty laminated shale which in many places contains ore crops out here and there southwards along the valley wall and along a north-south road. Relief is slight over a large area.

c) A ravine section (NW 1/4, Sec. 19, T. 20 N., R. 9 E.) of the west wall of the valley of a tributary of Sand Creek, includes

three layers of concretionary oxide ore. The lowermost, 0.2-foot thick, is separated from the next higher, some masses of which are 0.3-foot thick and more than a foot long, by 7.5 feet of bluish and greenish silt and silty clay, and the uppermost, 0.5-foot thick, is 7.0 feet still higher, almost at the very top of the rise here, although it is under greater overburden a little farther east.

d) Some three quarters of a mile north by east of c), cuts along a quarter of a mile of road (SW 1/4 of NE 1/4, Sec. 18, T. 20 N., R. 9 E.) up the gentle slope of the east wall of the same valley have uncovered a sand, silt, and clay section which contains discoidal masses of oxide ore from four beds, the lowermost (?) of which is a foot thick. Large ore masses, probably from the same 1-foot bed, crop out a little northwest of the road junction at the top of the slope.

e) A quarter of a mile or less southeast of d), road cuts (SE 1/4, Sec. 18, T. 20 N., R. 9 E.) in the same valley wall expose flattish masses of iron ore 0.4-foot to 0.5-foot thick. Almost certainly they are from one of the beds which show in the d) section and probably in the c) section also.

It seems highly probable that the ore of outcrops c), d), and e) belongs to the same beds, which at one time were continuous through this region.

It is estimated that at least a square mile of the Sand Creek Field contains mineable ore, and that the tonnage can be very conservatively placed at 264,674.

L. THE EMBRY FIELD

The territory around Embry, most of it south, southwest, and west of the village, is herein designated the Embry Field. It extends northwards to the northern boundary line of the southern half of Township 21 North; eastwards to the west headwater fork of Sabougla Creek, or to the western boundary of the Bellefontaine Field; southwards to the northern boundary of the Sand Creek Field, and westwards to a short distance west of the south-north roads which are sub-parallel to the line between Ranges 8 and 9 East. The area thus delimited, is approximately 19.5 square miles, in which four main outcrop tracts were noted:

a) A quarter of a mile or less southeast of a road junction (NE cor., Sec. 8, T. 20 N., R. 9 E.) clay and iron ore are exposed

Creek. More specifically, it extends north of Montevista to the Webster-Calhoun County line, east to the line between Ranges 10 East and 11 East, south to the line between Townships 20 and 21 North, and west and southwest to the divide between the basin of Shutispear Creek and that of Sabougla Creek. Iron ore is at the surface in many places within this area of some 26 square miles.

a) Three miles northeast from Montevista, road cuts (eastern edge, Sec. 1, T. 21 N., R. 10 E.) in the west wall of the valley mentioned under E, j), have uncovered two intervals of 0.25-foot to 0.3-foot ore in a well-bedded section of clay and sand. As in the east wall of the valley, many of the concretions contain greenish sandy material.

b) One of the most conspicuous outcrops (NE 1/4, Sec. 17, T. 21 N., R. 10 E.) some 2.7 miles southwest from Montevista, exposes ore belonging to six, possibly seven, distinct beds, all within a 35-40-foot interval that is 106 feet below the summit of the small "Mountain" up which the road trends at this place. The two lowermost of the ore beds, only 0.25-foot to 0.3-foot thick, are separated by 8.0 feet of clay; the next higher, about 1.0 foot thick, is only a foot or so above the upper of the thin beds; the next higher, 1.0 foot thick, is separated from the one below it by 5.0 feet of sandy light-gray clay, and the fifth in ascending order, also 1.0 foot thick, is 2.5 feet above the fourth, in gray clay. Some 17.5 feet higher is a sixth bed, 0.5-foot to 0.7-foot thick. All these "beds" are composed of sub-spherical or ellipsoidal or discoidal concretions in a clay matrix.

c) On the Walthall-Montevista road, some 3.0 miles northeast from Walthall, in the walls of a cut (SE 1/4 Sec. 33, T. 21 N., R. 10 E.) concretionary masses of oxide ore crop out near the top of a rise, and 15.0 feet below them a 0.7-foot to 0.8-foot bed of iron-cemented silt. The ore shows also along an old road west of the main road. The estimates for the Montevista Field are 220,028 long tons of mineable ore from 360 acres.

G. THE BELLEFONTAINE FIELD

The Bellefontaine Field comprises the territory around Bellefontaine within a radius of 2.5 to 3.0 miles. Roughly, it extends north to the east-west road 2.0 miles north of the center of the village; east to the divide between the Sabougla Creek and the

the valley at least three beds crop out, the two lowermost showing masses a foot in diameter (Figure 3). One of these 1.0-foot layers probably is identical with the layer of the same thickness at f), a mile north of h) along the same valley.

i) In Hohenlinden and vicinity rough layers of ore, chiefly oxide, project from the clay shale and sand walls of the road cuts (Figure 4).

Figure 4.—Outcrop of iron ore (NE. ¼, Sec. 35, T. 15 S., R. 1 E.) near top of valley wall in northern edge of Hohenlinden.

j) On the Hohenlinden-Montevista road, southwestward for a quarter of a mile or more from a road junction (NW1/4, Sec. 6, T. 21 N., R. 11 E.) road cuts in the southeast wall of a valley expose a clay and sand section which includes two intervals of iron oxide concretions, 0.25-foot to 0.3-foot in diameter. Many of these concretionary masses are hollow except for some greenish material.

The mineable area within the Hohenlinden Field is estimated to be 1.5 square miles; and the recoverable ore, 584,552 long tons.

F. THE MONTEVISTA FIELD

The Montevista Field may be thought of as the region around the village of Montevista and south to the headwaters of Spring

on the northwest slope of a low hill, by roadside gullies; and an iron ore layer in the contiguous southeast slope a little farther north, 15 feet above the culvert between, consists of pillow-shaped or ellipsoidal masses two of which measured 1.3 to 1.5 feet long and 0.7-foot to 0.8-foot thick. The same layer (?) crops out in the slope a few rods southeast of the junction, 35 to 40 feet above the culvert; individual masses 2.0 feet long project from the walls of the road cut.

b) Oxide ore shows in several places along the almost abandoned road eastwards from the junction mentioned under a). No doubt it belongs to the beds which are exposed near the junction. Relief along here is slight; considerable ore at the surface seems to indicate a sizeable tonnage under light overburden.

c) About 0.8-mile north from the road junction referred to in the descriptions of outcrops a) and b) ore from a 0.3-foot layer has been uncovered along a road extending north by east to Embry, and 0.2-mile farther north at approximately the same elevation, the same thickness of ore is at the surface. The location of these two small outcrops with relation to a) and b) seems to indicate that the ore is from the same beds.

d) Two and a half to three miles southwest of Embry and approximately 1.5 miles north of a road junction, road cuts (western part, NE 1/4, Sec. 1, T. 20 N., R. 8 E.) in a steep hill slope have exposed two layers of oxide ore. The lower layer, 25 to 30 feet below the top of the slope, is 0.4-foot to 0.5-foot thick; the upper, a few feet above the lower, is only about 0.25-foot thick.

It is believed that mineable ore underlies at least 0.75 square mile of the Embry Field, and that a tonnage estimate of 229,880 is very conservative.

M. THE CADARETTA FIELD

For the purposes of this report, territory on both sides of the wide valley of Sabougla and Lindsay Creeks, in the northern part of the county, is included in the Cadaretta Field. The northern boundary is the Webster County-Calhoun County line; the eastern boundary may be considered as along the divide between the drainage basins of Sabougla Creek and Shutispear Creek; the southern boundary is the line which marks the southern limit of

the northernmost three rows of sections of Township 21 North; and the western boundary, a line parallel to the Embry-Cadaretta road a little west of it. The total area is 30 square miles, but except for one or two isolated showings, ore outcrops have been noted only along Highway 9 and along the Embry-Cadaretta road.

a) Along Highway 9 at the Webster County-Calhoun County line is an outcrop of light-gray shaly clay containing 0.3-foot iron oxide concretions, near the top of a gentle rise.

b) Two miles southeast from the county line, a Highway 9 cut through sand for the most part has brought some ore to the surface; and 0.2-mile to 0.3-mile farther southeast another cut, at a lower elevation, has been made through shale which contains a little ore.

Such scattered outcrops along the highway are evidence of the presence of at least thin beds of iron ore in the clay and shale strata of this region, but no very considerable deposit was observed.

c) Approximately two miles southeast from Cadaretta, in front of the C. H. Woods home, iron oxide ore shows in both walls of a road cut (NE 1/4, Sec. 11, T. 21 N., R. 8 E.) and along a short ridge south of the road. A tenth of a mile farther northwest another road cut has uncovered additional ore. Along this 250 yards or less of road, three beds of concretionary oxide ore crop out. The thickest is 0.8-foot thick, the other two 0.4-foot to 0.5-foot thick, average. Individual masses are ellipsoidal or pillow-shaped. The terrane is hilly, but the deepest ore seen is not more than a maximum of 25 feet below the tops of the ridges. Probably the ore beds extend north-south through the ridges for a considerable distance.

The mineable terrane of the Cadaretta Field is believed to have a minimum area of 0.75 square mile and to contain at least 394,080 long tons of ore.

N. THE MIDDLETON FIELD

The Middleton Field comprises 15 to 16 square miles in the northwestern corner of the county, in the area of the headwaters of a tributary of Sabougla Creek south and southwest of Cadaretta. Almost all the outcrops observed are along or near the

to above, and almost in Hohenlinden. All in all, outcrops in this district seem to indicate a considerable tonnage of ore.

f) Approximately 0.65-mile southwest from the road junction (SW 1/4, Sec. 9, T. 21 N., R. 11 E.), in the northeast wall of a valley, oxide ore a foot thick is exposed (SE cor., Sec. 8, or NE cor., Sec. 17, T. 21 N., R. 11 E.) by road cuts.

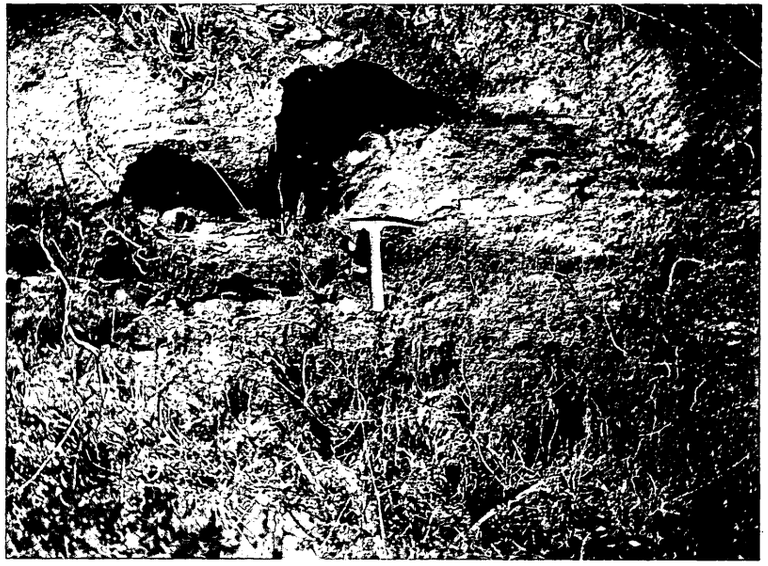

Figure 3.—Outcrop of iron ore (SE. ¼, Sec. 17, T. 21 N., R. 11 E.) in west wall of valley three miles north of Clarkson.

g) Three quarters of a mile west by south from f), ore is present in a Naheola section uncovered by erosion along an old road a quarter of a mile or less north of the main road.

h) Two excellent Naheola sections (SW 1/4, Sec. 16, and SE 1/4, Sec. 17, T. 21 N., R. 11 E.) are exposed by cuts in the east and west walls of a small valley three miles north of Clarkson, along a short road which trends a little north of west. The section of the east wall includes two main beds of ore, the lower bed 0.5-foot thick and the upper 0.7-foot thick separated by 8.7 feet of sandy shale which contains thin ore. The upper bed is subjacent to 10 feet of shaly fine gray sand in which is thin ore. All the ore exposed here is iron carbonate cased in oxide. In the west wall of

c) Ore is at the surface in other places along the same road, farther west.

The deposits of mineable ore probably cover an area of not more than 0.25 square miles, and contain 105,088 tons more or less.

E. THE HOHENLINDEN FIELD

The Hohenlinden Field comprises the territory south and southeast of Hohenlinden and north of the Clarkson Field. Its arbitrary northern limit is the Webster County-Chickasaw County line (although probably some ore in Chickasaw County properly might be included in the same field); its eastern limit the rather indefinite western boundary of the Dancy Field; its southern border line, the section line extending east-west from the northern tip of Savannah Lake; and its western boundary, the line between Ranges 11 East (1 East north of the latitude of the Calhoun County line) and 10 East. The Hohenlinden Field as thus delimited has an area of a little more than 22 square miles. Within this territory iron ore crops out in many places, most of which are in Township 21 North, Range 11 East. Very little was seen in the northeastern corner of Webster County, although at the second road junction southwest from Mantee is a small outcrop.

a) In the eastern part of Section 4, Township 21 North, Range 11 East, a mile and a half southeast of Hohenlinden, a 0.5-foot layer of oxide ore in greenish very micaceous sandy clay of the Naheola, has been exposed by a road cut.

b) A mile west from a) and a little east of the junction of the east-west road with a road leading north to Hohenlinden, two intervals of ore crop out in the west wall of a valley, along with shale and green clay.

c) On the north-south road, some 0.4-mile south from the junction, a cut exposes abundant ore and shaly sand, probably at the same stratigraphic position as the beds of the b) location. The road is on a low, almost level divide.

d) Not more than 0.1-mile north of the junction is another outcrop of ore, in gray and red sandy clay.

e) A few other cuts for this north-south road have uncovered iron ore. One of the best is 0.7-mile north of the junction referred

Embry-Alva road, from the road junction (NE cor., Sec. 22, T. 21 N., R. 8 E.) southwest to the road junction near the center of Section 29 some two miles northeast of Alva.

a) Roadside gullies in the up slope northeast of the junction (NE cor., Sec. 22, T. 21 N., R. 8 E.) have exhumed iron ore concretions from two layers, the lower of which, a few feet above the base of the slope, is 0.7-foot to 0.8-foot thick, and the upper, near the top of the slope, 0.3-foot to 0.5-foot thick. The upper of these beds crops out also near the top of the next rise, 0.2-mile southwest of the junction.

b) A little less than half a mile northwest of the junction referred to, iron oxide ore and gray clay have been exposed by roadside gullies in both slopes of a low ridge, the top of which is approximately 45 feet above the junction. The ore appears also in the south slope of a low rise 0.2-mile farther northwest, and in a third place a quarter of a mile or more still farther northwest (maximum thickness 0.5-foot).

c) Another showing of iron ore is 0.3-mile northeast of a road forks (SE 1/4, NW 1/4, Sec. 17, T. 21 N., R. 8 E.), 20 feet more or less below the top of a valley wall. It can be traced southwestwards almost to the junction.

d) A layer of 0.75-foot to 0.8-foot sandy ore crops out in the walls of a road cut approximately a mile and a quarter north of the road junction (near the center, Sec. 29, T. 21 N., R. 8 E.) which marks the southwest corner of the Middleton Field.

e) The part of the Embry-Alva road southwest of the junction (NE cor., Sec. 22, T. 21 N., R. 8 E.) is across a series of low rounded ridges, of approximately the same elevation, separated by narrow valleys. None of these ridges has its crest more than 20 to 25 feet above the adjacent valleys. In front of the Middleton home, 0.8-mile southwest of the road forks in Section 22, ellipsoidal masses of oxide ore, 0.8-foot thick from two layers separated by 5 to 6 feet of gray clay, are exposed in the northwest wall of the road cut. Slightly lower in the section a solid tabular bed, 0.8-foot to 1.0 foot thick, of weathered grainy ore, projects from the gray clay walls of a roadside gully. It may be identical with beds of the same character observed in Fields K and R and elsewhere. If it is, such correlation would indicate that this bed at least is per-

sistent over considerable areas. That the ore at the Middleton home extends to some distance northwest of the road is proved by outcrops in the back yard of the dwelling and in the hill slope farther northwest.

f) Along the road 0.3-mile more or less southwest of the Middleton home, is a second outcrop of one of the ore beds. It is in a low rise, under not more than 5 to 6 feet overburden.

g) A quarter of a mile southwest of f) about 15 feet below the top of a rise somewhat higher than others along this road, a 0.7-foot to 0.8-foot bed of sandy ore is exposed, and the same layer shows near the top of another hill a quarter of a mile still farther southwest.

h) Thick iron ore is at the surface a mile southwest of the Middleton home, in a gully across the road northwest from a small white frame house (SE 1/4 Sec. 21, T. 21 N., R. 8 E.). It appears to be from two beds separated by only a foot or two of gray clay. One mass of ore here measured 3.0 feet long, 2.0 feet wide, and 1.0 foot thick. The ore is in a low ridge, under 5.0 to 10.0 feet overburden.

i) Approximately 0.65-mile southwest from h) near the top of the west wall of a valley, two layers of sandy iron ore are interbedded with laminated sand and clay. The ore beds are some 3.0 feet apart, and the lower one is 10.0 feet below the abandoned house which stands on the top of the ridge. The individual masses are pancake-shaped; one measured about 2.0 feet in diameter and 0.4-foot to 0.5-foot in thickness.

The ore of the several outcrops along the western half of the Embry-Alva road, described in the foregoing paragraphs, almost certainly belongs to three or four beds. The road trends roughly down dip, the relief is small, and the general slope of the surface is westwards.

It is estimated that two square miles of the Middleton Field are underlain by ore within easy reach, in quantity conservatively expressed by the figure 1,274,192 long tons.

O. THE ALVA FIELD

The Alva Field, which may contain more iron ore than does any other terrane of equal extent in Mississippi, comprises the re-

c) A quarter of a mile north of the intersection referred to above, bowlder-like concretionary ore of the same interval has been uncovered by a ravine on the east side of the road.

d) Half a mile east of the intersection is a small showing, but along most of this Cumberland-Spring Creek road the low relief does not admit of any outcrop of consequence. Thin ore crops out (a little east of the center of Sec. 1, T. 20 N., R. 10 E.) southwest of Spring Creek.

e) Northeast of Clarkson about a mile, and a few rods southwest of a road junction, some oxide ore is exposed by a road cut.

f) Another surface showing (about on the line between Secs. 26 and 35, T. 21 N., R. 11 E.) is the northeasternmost outcrop of the field.

The part of the Clarkson Field northwest of the village that is, the Savannah Lake region, is chiefly sand, and has no showings of ore.

The total area underlain by mineable ore probably does not exceed 320 acres, and the tonnage recoverable may not be more than 78,816 long tons.

D. THE DANCY FIELD

The Dancy Field might be thought of as the region surrounding Dancy, particularly the territory directly west of Dancy, where iron ore is at the surface here and there along the Dancy-Clarkson road. The field extends northwards to near Mantee, eastwards to Highway 15 and the Gulf, Mobile and Ohio Railroad, southwards to the double township line a mile or so north of Cumberland, and westwards to the old Choctaw-Chickasaw Boundary. The area thus defined contains about 18 square miles.

a) The section of the steep east wall of a valley a mile and a half west from Highway 15 on the Dancy-Clarkson road, contains rounded, flattish concretions of ore.

b) Also, a layer of flattish masses of oxide ore crops out 30 to 35 feet below the top of the west wall of the same valley, and at the very top, iron ore debris scattered over the surface, and disintegrating ore masses which still retain their ellipsoidal shapes, suggest the presence of much ore beneath.

elsewhere; here it includes carbonate and oxide concretions a foot or more in diameter.

d) Half a mile still farther west, at a lower level, broken masses of oxide ore show as rough layers in road cut walls and roadside gullies. This place is half a mile or so north of the contact section (approximately on the line between Secs. 13 and 14, T. 20 N., R. 11 E.) which includes a layer of 0.5-foot to 1.0-foot iron oxide concretions, possibly correlative with the upper bed farther north.

e) Other surface iron ore may be seen along the road which leads north by west from Cumberland some 2.5 miles to Old Cumberland Baptist Church, thence west to the Dancy-Clarkson road: At the sharp bend 0.3-mile east by south of the church; some 0.65-mile west of the church (rounded masses); and in the walls of cuts a quarter of a mile to 0.55-mile farther west.

The mineable ore terrain of the Cumberland field is not more than 1.0 square mile, and the tonnage recoverable perhaps 314,364 long tons.

C. THE CLARKSON FIELD

The Clarkson Field includes the territory surrounding Clarkson within a radius of two to three miles. Roughly, it extends north as far as the north end of Savannah Lake, northeast to the old Choctaw-Chickasaw boundary, east to Big Black River, south to a little south of the Cumberland-Spring Creek road, and southwest and west to Spring Creek. The total area of the field thus limited is approximately fifteen square miles. Iron ore crops out at several places in this area, especially northeast and south of Clarkson:

a) A short distance west of the intersection (NE 1/4, Sec. 16, T. 20 N., R. 11 E.) which is two miles south of Clarkson, a shallow cut has exposed part of a discontinuous bed of 0.25-foot to 0.3-foot oxide ore in light-gray red-mottled clay and brown weathered material.

b) Three-quarters of a mile west from a) is another outcrop of probably the same bed, and about the same distance south of b) on another road , is a third exposure, of 0.25-foot to 0.3-foot ore.

gion surrounding Alva, Montgomery County. By far the greater part of it is in Webster County, east, southeast, and south of Alva. Specifically, the field may be thought of as extending northwards to the east-west road a mile and a quarter north of Alva, or to the valley a mile north of Alva; eastwards, to the western boundary of the Embry Field; southwards, to the southern boundary-line of the northern half of Township 20 North, Range 8 East; and westwards, to or a little beyond the Lodi-Alva road in Montgomery County. In this area of approximately 24 square miles are many outcrops of ore, the more important of which may be noted.

a) The 100-foot stratigraphic section of the south wall of the valley of the south headwater branch of the East Fork of Butupan Bogue, along the north-south road one-half to three-quarters of a mile north by east of Alva, includes a 0.7-foot to 0.8-foot layer of iron oxide concretions some 30 feet above the base of the section, and two thin beds of sandy ore 33.5 to 35.0 feet higher. The sandy ore may be correlative with the flattish, roughly circular masses referred to under i) of the Middleton Field. A few rods east of this road section ore crops out at a farmhouse.

b) Along the Alva-Tomnolen road, a little less than 2.5 miles southeast of Alva, on the Selvidge property are outcrops of one of the greatest accumulations of iron ore in Mississippi. The most prominent outcrops observed (SE cor. Sec. 5, or NE cor. Sec. 8, T. 20 N., R. 8 E.) are in the slopes at the head of a valley on the southwest side of the road. The number of ore intervals here has not been determined with certainty, but is at least four, and probably five or six. Before any excavation had been done, rounded masses of oxide and carbonate ore projected from the slope at several different levels, within a vertical interval of 40 feet or more. Later, strip-mining on a small scale, and prospecting by means of removing overburden with a bulldozer, exposed much more ore. Fifty to 60 tons were shipped out, and heaps of ore masses of various shapes and sizes were left scattered over the area, especially along the road. Many of the individual lumps were of relatively large size: one measured 6.5 feet long, 4.4 feet wide, and 1.8 feet thick. The total thickness of the ore beds at this place has been estimated at 8.0 feet. The estimate probably is not too great. Furthermore, the dividing ridge which contains the Selvidge property ore extends far northwards, northwestwards,

and southwards, and reconnaissance northwards has found many outcrops of ore half a mile to a mile or more from the public road. In fact, the showings are sufficiently numerous and the beds are of positions and thicknesses sufficiently in conformity with the positions and thicknesses of the beds at the large outcrop, to warrant the conclusion that the ore layers are continuous except for breaks made by erosion, even where they can not be traced with certainty. Almost certainly, then, the same beds appear in different fields, especially along the strike.

c) Along the Alva-Lodi road, eastern Montgomery County, from a hilltop 1.3 miles south from Alva to a quarter of a mile farther south, oxide ore crops out here and there. Farthest north the 0.4-foot to 0.5-foot concretions are at slight depth, but some 0.2-mile farther south, in the walls of a road cut (NE 1/4, Sec. 12, T. 20 N., R. 7 E.), in front of a farmhouse, where the best outcrop is, the ore is thicker (0.8-foot) and under an overburden of less than 5.0 feet up to 15.0 feet. Two beds can be identified at the house, and the material north of there may be from a higher bed.

The part of the Alva Field where ore is close enough to the surface to mine, probably is several square miles in extent; but the estimate given herein, two square miles, applies only to the area easily accessible from the two main roads. The total mineable ore under the two square miles is believed to be at least 2,889,920 long tons.

P. THE SWEATMAN FIELD

The Sweatman Field is in the vicinity of Sweatman, northeastern Montgomery County. It comprises a large part of the territory of the middle and upper reaches of Mouse Creek and Little Mouse Creek, tributaries of the East Fork of Batupan Bogue, which can be considered the northern boundary of the field. The eastern boundary is the divide a little west of the Alva-Lodi road; the southern limit, the southern boundary-line of the northern half of Township 20 North, Range 7 East; and the western boundary, the line between Range 6 East and Range 7 East. The total area thus delimited is approximately 23 square miles,

The largest outcrops are at and near old Sweatman (common corner, Secs. 5 and 6, T. 20 N., R. 7 E. and Secs. 31 and 32, T. 21 N., R. 7 E.) 0.7-mile to 1.0 mile west of the road junction. At the old

layers of oxide ore concretions, the upper some 0.5 to 0.7-foot thick, and the lower, 15 to 20 feet lower stratigraphically, a foot thick. A mile or a little more farther west by road, the same ore crops out and at a place a mile east of LaGrange, two beds of oxide concretions of an average thickness of 0.5 to 0.7-foot are exposed. A 0.4-foot layer shows a little farther west. The evidence appears conclusive, then, that at least three beds, each 0.5-foot or more thick, and two or three thinner layers of ore, are at or close to the surface here and there along this 5-mile length of road, and both north and south of it to varying distances—north perhaps to the valley of the Big Black, and south to the south slope of the divide between the Big Black and the Big Bywy basins.

The total area of the Maben-Mathiston Field which appears favorable for strip mining operations may be as much as four square miles, and the total tonnage which might be recovered could be some 2,500 000 long tons.

B. THE CUMBERLAND FIELD

The Cumberland Field includes a territory of approximately 10.5 square miles, south by east and south by west of Cumberland, both east and west of the Gulf, Mobile and Ohio Railroad, and west of Highway 15. The boundaries are indicated by the heavy lines on the map. Iron ore is at the surface at several places in this field.

a) Approximately 0.5-mile south by east of Cumberland, a local road cut (a little east of the center, Sec. 7, T. 20 N., R. 12 E.) has exposed a stringer of ellipsoidal masses of iron oxide 0.5-foot to 0.7-foot thick.

b) Along the road which leads south by west from Cumberland for a mile, more or less, thence west across Spring Creek, are at least three outcrops. Some three quarters of a mile southwest from the railroad crossing at Cumberland, well up towards the top of a valley wall, a chain of rounded masses of oxide ore 0.8-foot thick is bedded in the Naheola thin shale, sand, and silt beds only a relatively few feet below the top of the formation.

c) A mile farther west, and 0.4-mile west of a sand pit is an exposure of the mixture of nodular iron ore and ferruginous sandstone which was observed also at the Midway-Wilcox contact

over all region are deposits of mineable ore, as indicated by the outcrops herein described.

a) Approximately 0.65-mile north from the northern limits of Maben, a layer of ore 0.7 to 0.8 of a foot thick is conspicuous in Naheola beds of the east wall of a Highway 15 cut.

b) A stratigraphic section along a local road at a place (SW 1/4, Sec. 34, T.19 N., R.11 E.) where the road leads down the east wall of the valley of Big Black River, includes ellipsoidal masses of iron oxide several inches thick.

c) Along the Wood Junior College road which extends due north from Mathiston, some small nodular ore and larger pillow-shaped concretions may be seen in the wall of a cut a mile north from U.S. Highway 82.

d) At the crossing of the Gulf, Mobile and Ohio Railroad and a southeast-northwest road in the northern part of Maben, a few rods west of the northwestern corner of Oktibbeha County, oxide ore, some of it 0.5 to 0.7 of a foot thick, crops out in the walls of the road cut.

e) Along the same road, half a mile northwest from the railroad crossing is another exposure of ore, probably the same bed.

f) Almost on the northern boundary of the corporate area of Maben, and hardly 0.2-mile west of Mississippi Highway 15, thin discoidal and platy masses of oxide ore have been exposed by a north-south road cut.

g) Other surface ore is along a road which leads northeast and north from Highway 82 in the eastern edge of Mathiston; and also at a street junction in Maben at the end of the pavement along a northeast-southwest road which parallels the railroad.

h) In Choctaw County, along the LaGrange road west from its junction with Highway 15, which junction is 1.6 miles via the highway from Highway 82 in Mathiston, iron ore crops out in several places. Oxide concretions 0.5-foot thick are at the surface 0.8-mile west of Highway 15, and thinner ore within 0.1-mile of the highway. Other beds appear from a mile to a mile and a half west of the highway, and shallow road cuts and roadside ditches approximately 2.5 to 3.0 miles west from Highway 15 expose two

Sweatman road junction (NE cor., Sec. 6, T. 20 N., R. 7 E.) numerous ellipsoidal, sub-spherical, and pillow-shaped concretions of oxide ore are scattered over the surface of a small flat-topped nose between Mouse Creek and a tributary; and similar masses project from the walls of road cuts northwest and east of the junction. The ore belongs to two layers, individual masses of which are a foot or more in thickness.

Southeast from the old Sweatman deposit the ore can be traced for a short distance, and farther southeast the ore level is well below the tops of the ridges. However, in much of the region overburden is excessive. The deposit at old Sweatman is only about eight miles by a fairly good graveled road from U. S. Highway 51 at Duck Hill.

The mineable area is estimated as 320 acres and the ore obtainable as 472,896 long tons.

Q. THE LODI FIELD

The Lodi Field includes a little of eastern Montgomery County and more of western Webster County. Roughly, its northern limit may be thought of as marked in Montgomery County by the east-west road which joins the Lodi-Alva road in the western part of Section 13, Township 20 North, Range 7 East, and in Webster County by the same road and a line east along the same general course almost to Calabrella Creek; its eastern boundary line could coincide with the line between the eastern and western halves of Township 20 North, Range 8 East; its southern limit could be the line between Townships 19 and 20 North, and its western boundary the Lodi-Alva road. The total area within the limits thus fixed is approximately 14 square miles.

a) The most prominent ore exposure of the Lodi Field is the result of strip mining and prospecting by the Kilmichael Mining Company on the Hart property (SW 1/4, Sec. 25, T. 20 N., R. 7 E., Montgomery County) 1.3 miles north of Lodi and 0.2-mile northeast of the junction of the Lodi-Alva road and a local road. Excavations have been made both north and south of the local road in the low west wall of the valley of a headwater tributary of Wolf Creek. Before mining began, a few concretionary ore masses 0.7-foot to 0.8-foot thick projecting from the walls of a road cut and roadside gullies in the slope at two or three levels,

and ferruginous debris scattered over the surface here and there, were the only evidences of the presence of iron ore; but in the first period of mining, drag-line and bulldozer brought up several hundred tons of oxide ore from the three quarters of an acre or less worked over. Most of the mining was on the north side of the road. Two layers of ore were discovered, the upper of which was in most places four to five feet below the surface, and the lower layer seven to eight feet deeper. In few places were the excavations more than 15 feet deep. Some of the individual masses were of considerable size; one of the largest measured 5 feet long, 2.8 feet wide, and 0.8-foot thick. The mining 200 yards or so south of the road, in a "nose" of the lower part of the valley wall, uncovered a greater tonnage per unit area, and larger individual "bowlders" than did the work north of the road. However, a smaller area is under relatively light overburden than on the north side.

The second period of mining, which began in July, 1951, is on a much larger scale than the first. By the end of July an area of perhaps two or three acres on the south side of the road had been stripped down to the ore level by bulldozer and drag-line. The overburden removed ranged in thickness from almost nothing to 15 to 20 feet or more as the excavation was carried farther westwards into higher ground. After removal of the overburden, the ore is dug out by drag-line and trucked to a stock-pile on the steeper slope west of the Lodi-Alva road, from where, after washing it will be hauled to the shipping point. Before the end of July the stock-pile contained an estimated 3,600 tons of ore, which, the operators stated, had been mined from an acre of ground. Obviously, if the tonnage from this small block of terrane is an index to that of every mineable acre in the Lodi Field, the estimate of total tonnage given in this report—985,200 long tons for 1.25 square miles—is much too low; but, for reasons hereinbefore given, uniformity of deposits through a wide territory is unlikely. However, it seems to have been discovered that in the terrane now being mined, the irregularity of structure has caused a greater concentration of ore. Masses developed along diagonal and otherwise irregular bedding and possibly around clay balls, have filled space in an interval which might have been barren of ore if the structure had been regular. This may be due to the disturbed or mixed up ground affording freer circulation of the iron-bearing

the factors named could tip the balance as well one way as the other, two of the others are more likely to lead to too high an estimate, and the other two to too small a figure. It would appear, then, that the magnitude and direction of the error should not be attributed to any single one of the factors listed.

The estimates are restricted to the ore under not more than 25 feet overburden. Of course it is understood that under exceptionably favorable conditions, such as an unusual concentration of ore under a relatively small area, overburden of a greater thickness than 25 feet might be moved economically; but the estimates are designed to apply to average conditions, insofar as they have been determined from a study of the geology and the surface features of the region and the number, thicknesses, stratigraphic positions, and relative areas of the ore beds, as ascertained or inferred from outcrops and from such mining as has been done. More specifically stated, the method of arriving at an estimate has been: The areas of the localities where ore is present under 25 feet or less of overburden were estimated, severally; the number of ore beds and their thicknesses and extent were noted for each locality; the number of cubic feet of ore was computed for each bed, a liberal allowance being made for space between ore masses and for variation of size and shape; the tonnage of each layer, so restricted, was computed at 237.5 pounds a cubic foot,* some allowance being made for hollows in the concretions, porosity, and external irregularities; and, finally, the results were added to obtain the total for the area.

A. THE MABEN-MATHISTON FIELD

The total area of the Maben-Mathiston Field, as defined herein, is about 25 square miles, of which 16 square miles are in Webster County and 9 in Choctaw. The arbitrary boundaries of the field are: On the north, a west-flowing tributary of Big Black River west of Highway 15, about the latitude of Mississippi Highway 10; on the east, Highway 15, in both Webster and Choctaw Counties; on the south, the southern slope of the Big Black-Big Bywy divide west to Phillips Creek, a little east of LaGrange; and on the west and northwest, the Big Black River. Within this

*Specific gravity of limonite, 3.6 to 4.0 (Moses & Parsons); 1 cubic foot of water at 4 degrees C. 62.5 lbs.; Sp.gr. of ore used, 3.8.

from several feet in length and width to only a few inches. The greatest thickness observed was about two feet.

4) A "bed" as a whole may not be of uniform thickness for any notable distance.

5) Much of the ore has been removed by erosion, not alone during the most recent period, when the present topography was fashioned, but during the long time represented by the unconformity between the Midway and the Wilcox sub-series, by that at the top of the Fearn Springs formation, and by that between the Wilcox and the Claiborne sub-series.

6) The size of the "bowlders" at the outcrop may not be any index to the size of those back from the surface. In fact, mining has shown that in some places at least the masses taken from underground are larger than those which crop out. This may be due to weathering, especially exfoliation, of the outcrop ore; or it may be entirely accidental.

7) Because the typical ore "bed" in Mississippi is composed of unconnected units, a bed may be present in a certain area and yet fail to show at the surface. Furthermore, in many places where ore crops out, the relief is too slight to bring to the surface all the beds even those which are not too deep for mining.

8) Because of the want of topographic maps, only a few relative elevations were available. Although the hand-level could be used locally, use of it to compare elevations separated by long distances was, of course, impracticable.

In view of the conditions stated and others, obviously an estimate based almost entirely on outcrops, as this estimate must be, is sure to involve considerable error. The first factor named might lead to either an overestimate or an underestimate; the second would be likely to lead to an overestimate; the third could induce error either up or down, but probably would be more likely to suggest too great a figure; the fourth could lead to error in either direction; the fifth would, no doubt, tend to encourage overestimate; the sixth could very well lead to too conservative a figure, as could the seventh; the eighth would be as likely to influence an estimate one way as another, through the imposition of a serious obstacle to correlation. In short, four of

sub-surface water. Where such a condition obtains, outcrops will not be a reliable guide to the quantity of ore present.

b) Northeast of the workings some 0.45-mile, in the east wall of the valley, ore crops out along the same local road (NE 1/4, Sec. 25, T. 20 N., R. 7 E., Montgomery County) at an elevation slightly greater than that of the pits.

c) On the Pyron property (NW 1/4, Sec. 20, T. 20 N., R. 8 E., Webster County) 0.85-mile east of a road junction, are evidences of a large tonnage of oxide ore. Two beds of ore underlie low ridges, on one of which the Pyron farmhouse stands, and the beds can be traced by surface "bowlders" a considerable distance eastward. Ore crops out also in the road cut 0.4-mile to 0.5 mile west of the house, and at the road junction 0.85-mile west of the house. The mineable area in this immediate vicinity may be 15 to 20 acres.

d) In the east wall of the valley of a tributary of Wolf Creek, east of Lodi, and almost on the Montgomery County-Webster County line, two beds of ore are present, as indicated by outcrops in road cuts and gullies. A mile or a little less east by north from the road junction at Lodi, on the north side of the road, pillow-shaped concretions of oxide ore show at two levels, 14.0 feet and 21.5 feet above the creek flat. Similar masses crop out in the nearby road cut, and the ore intervals can be traced a quarter of a mile along the valley wall southward, by fragments of ore. The greatest thickness observed was 0.8-foot.

e) Approximately half a mile south of the road forks 1.3 miles east of Lodi at the top of the east wall of the valley referred to in d), two beds of oxide ore crop out in the road and in the slope north of it, almost in front of a farmhouse (on the line between Sec. 6, T. 19 N., and Sec. 31, T. 20 N., R. 8 E.). The beds, 0.5-foot to 0.8-foot thick, are near the top of the west wall of the valley of Wolf Creek, under 10 to 15 feet of overburden.

R. CALABRELLA CREEK FIELD

The strip of territory which includes Calabrella Creek Valley and the country on both sides to varying distances has been named the Calabrella Creek Field, for the purposes of this report. It extends northwards to within two miles of the line between Townships 20 North and 21 North, Range 8 East; eastwards, to the west-

ern boundaries of the Sand Creek, Salt Creek, and Tomnolen Fields; and westwards, to the Lodi and Stewart Fields. The total area is 25 to 26 square miles. Iron ore is at the surface in several localities:

a) The most prominent series of outcrops (SE 1/4, Sec. 11, SW 1/4, Sec. 12, NE 1/4, Sec. 14, T. 19 N., R. 8 E.) is along a northeast-southwest road and short branch roads north of it four to four and a half miles north of Stewart and a mile west by south from Calabrella Creek. Ore shows here and there for a mile along the main road and for an equal distance along the two branch roads. The showing farthest northeast, at the road junction (NW 1/4, Sec. 13), consists of only a few pieces of thin siliceous oxide ore. Some 0.4-mile west by north from the junction, along the old branch ridge road, iron ore debris is scattered about, and only 0.15-mile east of the west end of the branch road, iron ore masses 0.5-foot to 0.6-foot thick crop out. At the junction the flat-topped ridge is underlain by 0.5-foot ore, and the overburden is only 5.0 to 8.0 feet. Probably the entire ridge between the junctions, almost a mile long, is underlain by at least one layer of 0.5-foot ore at mineable depth. The topography is of low relief for half a mile northwest of the west junction mentioned (about middle point of line between Secs. 11 and 14, T. 19 N., R. 8 E.) and gray clay is exposed; iron ore is probably present at slight depth.

b) In front of the Boatman store (NW 1/4, Sec. 13) on the northeast-southwest road, a few concretions of 0.3-foot ore are exposed in the low east wall of a small valley, and 0.2-mile farther southwest, near the base of the west wall of the same valley, other concretions show in the shale sides of the road cut.

c) Approximately 0.45-mile farther southwest, is the base of a long section exposed by road cuts and roadside gullies in the southwest wall of a valley, adjacent to the Sheppard and Richardson properties. The total section includes 130 feet of strata, almost all clay shale or clay, but several beds of iron ore. The lowest ore, stratigraphically, is a 0.3-foot bed only 5.0 feet above the base of the section; a 1.0 foot blocky layer of sandy ore is 38.0 feet higher, and another 5.0 feet still higher. At about 55.0 feet above the base of the section is a 1.3-foot interval of ellipsoidal masses of ore which are strung 100 feet along the face of the cut. A layer of 0.5-foot concretions is in the section 5.0 feet higher, and at the

geological boundaries, the positions of which are determined by the locations of the outcrops. Some of them coincide with natural features; the positions of others are somewhat arbitrary. Both on the map and in the text the fields are designated by capital letters, which on the map are arranged in roughly east-west order; the outcrops in each field are designated by lower case letters. The approximate extent of the mineable ground at and in the vicinity of each outcrop, insofar as it could be ascertained by a more or less rapid survey, is marked on the map by closed lines. Areas of both fields and mineable territory can be determined approximately by comparing the map space enclosed by lines with the square-mile sections of the map.

The tonnage estimates are, of course, very general. It is extremely difficult, if not impossible, to estimate accurately the mineable tonnage of ore in even a small part of the region, because of the many variable factors which must be considered; and the difficulty necessarily becomes greater if an attempt at an estimate for the entire territory is made. The more important factors involved in the problem of tonnage estimates may be named:

1) As already stated, the so-called "beds" of ore are for the most part not solid beds, but discrete concretionary masses. The term "bed" or "layer" or "stratum" is, therefore, applicable only in a general way to a kind of irregular floor or pavement or interval of such separate masses. A cross-section of this kind of "bed" appears as a chain of these more or less widely separated concretions roughly parallel with the stratification planes of the enclosing terrane.

2) Not every "bed" of ore maintains its identity for a considerable distance, although commonly the beds in undisturbed strata are fairly persistent. However, where the containing strata are cross-bedded or otherwise irregular, the ore layers may be short; two may unite, or one divide, so that an estimate of the quantity of ore in such irregular strata can be little better than a guess.

3) The individual masses are as a rule pillow-shaped, discoidal, ellipsoidal, or sub-spherical, and of dimensions ranging

thinner at lower stratigraphic levels, where less sand and silt is present.

West of Highway 15 in Webster County the presence of at least a little iron ore at almost every Porters Creek or Naheola outcrop suggests strongly that the ore is an omnipresent component of these two formations. As farther east, most of the units are thin and probably not extensive; but in many places good ore 0.5-foot to a foot thick crops out under overburden of 15 feet or less. Commonly, two beds are exposed, separated by only a few feet of clay.

The Fearn Springs strata, as do the Porters Creek and Naheola beds, include much iron ore, in the form of separate rounded and flattish masses and some short solid layers. Commonly the discrete unit masses of each series are on the same general level, resembling in the outcrop links of a chain or beads of a string, and where uncovered looking like an irregular pavement of smooth bowlders of various sizes. Good showings of ore are relatively few in the Fearn Springs area of the southern part of the county, because of the deep weathering and generally low relief; but farther north, where the relief is greater, exposures are more numerous. Along the Montevista-Bellefontaine road especially, and also along the road which swings in a large arc around Bellefontaine northeast of it and joins Mississippi Highway 9 a mile or so north of Walthall, iron ore is at the surface in many places.

Most of the ore is in the Ackerman formation, and the greatest concentration in the upper part of the Ackerman, so far as can be judged by outcrops. Its general features are the same as in older strata, but the outcrops indicate a greater number of ore beds or intervals, and larger individual masses. Notable examples are the Selvidge property in the Alva field, and the Hart property in the Lodi field.

ORE FIELDS AND TONNAGE ESTIMATES

For the purposes of this report the region may be discussed as twenty distinct "fields," each containing its outcrops of ore. The boundaries of the fields, represented on the map by heavy lines, are not designed to indicate the distribution of ore by geologic units; in fact, ore belonging to one and the same formation may appear in two or more fields. They are areal rather than

top of the rise reached by the road, only a few feet below the clay-sand contact, are other iron ore "bowlders." Thus in the 117-foot stratigraphic section along the 0.4-mile length of road, six beds of iron ore crop out. Although the thicker ore is under heavy overburden at this particular spot, much of it could be won by contour mining, and the same beds are much nearer the surface a little farther north along the strike. Farther southwest, the gentle slope of the Richardson property hill shows only two or three thin seams of ore.

d) In the southeast corner of Section 3, Township 19 North, Range 8 East, 0.2-mile southeast of a road junction, iron oxide concretions from one layer crop out in the walls of a road cut. One such "bowlder" measured 1.5 feet long and 0.4-foot to 0.5-foot thick. The bed dips southwest at a rather high angle, the overburden is heavy; and the length of outcrop, only 50 to 60 feet.

e) Ore is at the surface along the same road half a mile farther northeast, and 0.15-mile yet farther northeast, several large masses, one of which measured 2.5 feet long, 1.5 feet wide, and 0.8-foot thick, are exposed a few rods southwest of a road forks. Ore crops out also northeast of the junction, and at places a quarter of a mile and 0.6-mile southeast of it.

f) In the lower part of the west wall of the valley of Calabrella Creek, a few rods north of a road junction (SW 1/4, NW 1/4 Sec. 26, T. 20 N., R. 8 E.) "bowlders" of oxide ore 0.5-foot to 0.8-foot thick have been exposed by a cut through a low ridge. A quarter of a mile or less farther north and at a lower level two more layers show, the upper of which is approximately the same thickness as that nearer the junction, and the lower, thinner and sandier.

Some smaller fragments, and other evidences of the presence of iron ore can be seen here and there along the road for a quarter of a mile at least south by east of the junction. The region is the gently sloping west wall of Calabrella Creek Valley, consisting in part of low rounded ridges where overburden is relatively light. It is only half a mile or so west of the main Alva-Tomnolen road.

g) At and near the junction (a little south of the center, Sec. 15, T. 20 N., R. 8 E.) of the Alva-Tomnolen road with a road from

the northeast, road cuts and gullies have exposed a section of 105 feet of strata, including three iron ore intervals. The section extends from the bridge, a quarter of a mile northwest of the junction, to the top of the ridge 0.2-mile northeast of the junction. The lowermost ore, 10.0 feet above the base of the section, is 0.5-foot thick; the middle layer, 34 feet higher stratigraphically, has the same thickness, and the upper bed, 6.5 to 7.0 feet above the middle bed, is 0.6-foot thick. Very little of the ore near the road junction is mineable, because of excessive overburden; but in the northwest wall of the valley ore from two layers, the upper of which is 1.0 foot thick, crops out, where the overburden is medium to heavy.

h) South by west from g) some three quarters of a mile and 0.6-mile southwest of a road junction a cut (NW 1/4, Sec. 22, T. 20 N., R. 8 E.) through a low ridge west of Calabrella Creek Valley has uncovered iron oxide concretions 0.5-foot thick.

The mineable area of the Calabrella Creek Field is estimated as 1.5 square miles and the quantity of ore as 570,912 long tons.

S. THE STEWART FIELD

The Stewart Field comprises approximately 30 square miles in the southwestern corner of Webster County north of Stewart, and 13 square miles in western Choctaw County, south of Stewart. The Webster County part of it is bounded on the north by the Lodi Field, on the east by the Calabrella Creek and Tomnolen Fields, and on the south and west by Montgomery County. The Choctaw County part extends from the Big Black River on the north to the line between Townships 18 North and 17 North on the south, and from the line between Range 9 East and Range 8 East on the east to Montgomery County on the west. Iron ore is at the surface in many places. Some of the outcrops, chiefly those of Webster County, are described briefly herein.

a) Approximately three and a quarter miles north from U. S. Highway 82 at Stewart and a little northwest of a road junction at a negro school (SE 1/4, Sec. 22, T. 19 N., R. 8 E.) is an outcrop of the thickest single bed of iron ore seen in Webster County. This solid bed of ore, 1.5 feet to 2.0 feet thick, projects from the low northeast wall of a shallow road cut (Figure 1). The main outcrop is several yards long, and the bed can be traced southeast-

Iron ore is present here and there through the whole length and width of Webster County, at stratigraphic levels ranging from within the Porters Creek formation to the top of the Ackerman. In the eastern part of the county Mississippi Highway 15 cuts and nearby gullies and ravines have exposed several sections of Porters Creek and Naheola strata. These outcrops show that the thin-bedded Naheola especially includes many stringers of iron ore, some of which are 0.5-foot to a foot thick. More notably

Figure 2.—Creek at foot of bluff of Porters Creek shale (NW. ¼, Sec. 25, T. 16 S., R. 2 E.) a mile southeast of Dancy. Creek floor almost paved with iron carbonate concretions.

south of Cumberland Highway 15 cuts have uncovered iron ore which is, obviously, part of broken seams, thin in general but of irregular thickness, or of "beds" of thinly scattered bowlder-like masses. Fragments of ore are strewn over all these outcrops. Furthermore, considerable iron ore is included in typical Porters Creek strata, as attested not only by thin seams and discoidal concretions exposed at the outcrops, but by hundreds of dislodged iron carbonate discs lying on the floors of the creek channels in the Porters Creek area. The writer has seen the floor of one of these creek channels (western part, Sec. 25, T. 16 S., R.2 E., Figure 2) all but paved with these small discs. However, it appears that in general the ore seams and layers of discrete masses are fewer and

by flat surfaces. In size it may range from several feet in length and breadth and a foot to two feet in thickness down to less than an inch in any one of its dimensions. One of these masses measured 6.5 by 4.4 by 1.8 feet. The iron minerals represented are siderite ($FeCO_3$) and the oxides hematite (Fe_2O_3) and limonite ($2Fe_2O_3 \cdot 3H_2O$). Very commonly an individual mass of ore consists of a core of siderite inside concentric shells of hematite or

Figure 1.—Outcrop of bed of iron ore (SW. ¼, Sec. 22, T. 19 N., R. 8 E.) three miles north from Stewart.

limonite, or both hematite and limonite; or, less commonly, of a gradation of the carbonate into the oxide. In fact, evidence is abundant and conclusive that the oxide ore came into existence through oxidation and hydration and dehydration of the carbonate, which was the original ore formed under the conditions prevailing in this region during Midway and Wilcox time. The color of most of the ore is brown, but cherry red and brick red, yellow, and even black, are not uncommon. In a few places continuous beds of ore crop out, but such beds are in general thin and probably not extensive; the maximum thickness observed in Webster County was less than two feet (Figure 1).

wards a hundred yards or so along the road, by two or three smaller outcrops. Also, float ore presumably from the same layer, is lying in a ravine a few rods northeast of the road. However, the ore bed at the outcrop is only three to four feet under the surface, and is in a low narrow ridge or "nose" which merges with much higher ground at and near the road junction. Only a few yards from the road on both sides, the surface is lower than the ore. Furthermore, reconnaissance at the same level along the slopes of the hills east and northeast of the outcrop, between two roads, failed to find any ore except a showing of a 0.25-foot to 0.3-foot layer at two places in an old farm road half a mile northeast of the main exposure. In much of the region explored, the overburden is too great for profitable mining, even if the ore bed is present and maintains the thickness it has at the road outcrop.

b) Patches of both float ore and ore in place in two or three localities near the main Stewart road farther south seem from their positions to be remnants of the a) bed, or at least of the same general ore interval. A quarter of a mile south by east of the outcrop of thick ore, concretions of oxide ore 0.5-foot or more thick are lying in the roadside gully and are scattered over the ridge west of the road. A little west of the road junction half a mile or more south of a), one layer of ellipsoidal concretions 0.6-foot thick is included in the shale-sand section, at a level 12 feet below the top of the ridge. The almost level ridge top extends north for 200 to 300 yards, and west along the road 0.2-mile to a junction, and beyond. South from the junction for a considerable distance the surface is above the level of the ore bed. The bed is under light cover, then, over an area of probably 80 acres.

c) A little ore crops out in an abandoned northeast-southwest road near the eastern edge of the Stewart Field, and in the walls of the road cuts (NW cor., Sec. 23, T. 19 N., R. 8 E.) half a mile or so southwest of the Richardson hill, Calabrella Creek Field. The small ellipsoidal concretions, in much broken up and tilted shale, probably belong to one of the thin beds of the Richardson property.

d) Along and near a northeast-southwest road a mile, more or less, west by south of a), concretionary oxide ore is at the surface in two or three places. Approximately 0.8-mile southwest of the junction of this road with the main Stewart road, erosion of

the slope south of the road and east of an abandoned farmhouse (NW 1/4, Sec. 28, T. 19 N., R. 8 E.) has exposed many masses of ore, some in place in ravine walls, others float scattered on the surface of a terrace of several acres extent. Overburden here is light, but unfortunately the ore, seemingly from two beds, is only 0.25-foot to 0.3-foot thick.

e) Less than 200 yards west of the short road which leads to the abandoned house, ore masses from two layers in 20 to 25 feet of gray clay are exposed by a road cut and a ravine in the lower part of a long slope. The ore beds may be the same as those in the slope east of the house.

f) Another outcrop of oxide ore along the same northeast-southwest road is near a farmhouse, a quarter of a mile to 0.3-mile northeast of the road junction in the southeast quarter of the northeast quarter of Section 29, Township 19 North, Range 8 East. Two beds of ore are present, and the concretions have a maximum thickness of some 0.7-foot. Relief is low and overburden light all along here. A short distance farther southwest, the same two beds of ore crop out in the southwest wall of a small valley.

g) East from the junction referred to in f) about 0.55 mile, concretions of oxide ore 0.5-foot to 0.7-foot thick have been exposed by a road cut through the upper part of the west wall of the main southward-trending valley for 0.1 mile, and show also in the slope north of the road. Almost certainly they belong to the same beds as the ore at f) and probably that at d) and e).

h) North from the road intersection (center, Sec. 29, T. 19 N., R. 8 E.) 0.6-mile, 0.3-foot to 0.4-foot "bowlders" of oxide ore crop out in a low ridge where overburden is only 8 to 10 feet thick; and 0.6-mile farther north, 0.4-foot to 0.5-foot masses of ore are enclosed in lignitic and light-gray clay in a low rise. Only one ore layer shows along this road, so far as observed, but the overburden is thin almost everywhere.

i) Several outcrops in Sections 29 and 30, Township 19 North, Range 8 East, suggest that this entire region is underlain by two or three beds of ore. South of the intersection in the center of Section 29, in the face of the clay hill, two layers of 0.5-foot to 0.7-foot concretions are at the surface; east of the intersection, at

WEBSTER COUNTY IRON ORES*

FRANKLIN EARL VESTAL, M.S.

INTRODUCTION

This report is based on a reconnaissance survey of Webster County, northern Choctaw, and eastern Montgomery, from late November, 1950, to June, 1951. The over all purpose of the survey was the study of the geology and mineral resources and the surface features of Webster County; but even before field work was begun, a considerable interest was being shown in various quarters in the iron ore deposits of Mississippi and more particularly in the iron ore of the Webster-Montgomery-Choctaw County region, largely because of mining operations begun near Lodi, eastern Montgomery County, by a few enterprising Mississippians.

It is believed that all ore outcrops of consequence which are along or near public roads in Webster County are described in this paper and their locations indicated on the map. Also a few outcrops which are not so readily accessible are referred to. However, as stated in the Memorandum for the Press of July 20, 1951, no claim of a thorough examination of the territory is made, and no doubt other places where iron ore is at the surface will be found. Nonetheless, the Mississippi Geological Survey hopes that the present report will be of assistance and value to all people who are interested in Mississippi iron ore.

DESCRIPTION AND GEOLOGIC DISTRIBUTION

Scattered through the Tertiary strata of Mississippi are immense numbers of discrete masses and a few discontinuous beds of iron ore. The individual mass has, commonly, a shape defined by a curved surface—pillow shape, or sub-spherical, or discoidal, or ellipsoidal, or even roughly spherical—but it may have a tabular or platy, a crudely oblong, or almost any other shape defined

*Includes deposits of adjoining borders of Montgomery and Choctaw Counties.

ILLUSTRATIONS

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Figure 1.—Outcrop of bed of iron ore—three miles north from Stewart 8

Figure 2.—Creek at foot of bluff of Porters Creek shale a mile southeast of Dancy 9

Figure 3.—Outcrop of iron ore—in west wall of valley three miles north of Clarkson 19

Figure 4.—Outcrop of iron ore—near top of valley wall in northern edge of Hohenlinden 20

Plate 1.—Map Webster County Iron Ores Back

a lower level, are other ore "bowlders"; west of the intersection 0.2-mile to 0.3-mile, in some 20 feet of gray iron-stained clay, ellipsoidal masses of oxide ore 0.8-foot thick from two intervals, are exposed. In the walls of a shallow road cut (SW 1/4, Sec. 29, T. 19 N., R. 8 E.) 0.15-mile northwest of a road junction 0.4-foot to 0.5-foot concretions of ore are bedded in gray and red clay. Another outcrop is a short distance west of the road junction in the eastern part of Section 30, Township 19 North, Range 8 East, and another 0.2-mile north of the junction in the center of Section 30, in the face of a clay terrace. All the surface showings mentioned under i) are in the divide which extends southwest and west through Sections 28, 29, and 30. Overburden is relatively light in most places.

j) In the extreme southwestern corner of Webster County and in contiguous parts of Montgomery County are several iron ore outcrops, specifically south, west, and north of the intersection (NW 1/4, Sec. 31, T. 19 N., R. 8 E.). At A. C. May's home, half a mile or less south from the intersection, and about the same distance north from a junction in Montgomery County, ellipsoidal concretions of 0.5-foot to 0.6-foot oxide ore are exposed in the walls of a road cut. A quarter of a mile south of the May outcrop, in a wooded ridge almost on the county line, ore is more abundant. West of the Section 31 intersection, and at a lower elevation, 0.5-foot "bowlders" from at least two ore layers are embedded in the clay along a small tributary of Wolf Creek, and north of the intersection similar masses appear in a road cut. A little ferruginous debris, probably from the same beds, is scattered over the surface in Montgomery County west of Wolf Creek and east of the Lodi road.

k) Iron ore, chiefly oxide, is at the surface in many places in western Choctaw County, notably in the region south of Stewart. At the Free Will Baptist Church (southern part, Sec. 22, T. 18 N., R. 8 E.) ore a foot thick crops out along the north-south road, and is at slight depth under a considerable area. Also, west of the intersection (Sec. 27, T. 18 N., R. 8 E.) here and there along the road are other outcrops of 0.5-foot to 0.8-foot ore masses. In front of the school (western part, Sec. 26), ore concretions are lying at the foot of the low slope; and road cuts and gullies southeast and south of the school have exposed the iron oxide "bowl-

ders" in several places. At one place, at least two or three feet of the uppermost part of a ridge for a distance of 200 yards or more appeared to be iron ore. All in all, the numerous outcrops, the relatively considerable thickness of the beds, and the extensive area which shows evidences of the presence of ore, suggest strongly that the region contains a very large quantity of ore—enough to warrant the estimate, 1,050,880 long tons, published for this part of the Stewart Field. The estimate for the mineable area (3.5 square miles) of the entire Stewart Field is 2,758,560 long tons.

T. THE EUPORA FIELD

The Eupora Field comprises the part of Webster County around Eupora bounded by Field A on the east, Field H on the north, and Fields I, J, and K on the west; also the northern part of Choctaw County west of Phillips Creek to the line between Range 9 East and Range 10 East. The total area is approximately 45 square miles. No territory south of the Big Black-Big Byway divide is considered part of the Eupora Field. Iron ore, almost all oxide, is conspicuous along the Choctaw County road which trends west by south, a little south of the valley of Big Black River and subparallel to it.

a) The farthest east of the outcrops is a mile or so east of the road junction at La Grange, in the east wall of the valley of Phillips Creek. The one layer at this place, up to a foot thick, is part of the ore of the Maben-Mathiston Field. Half a mile farther west is another exposure.

b) Approximately 0.15-mile west from the intersection (SW 1/4, Sec. 15, T. 19 N., R. 10 E.) of Highway 9 and the local road referred to, iron ore 0.9-foot thick crops out 8.0 feet below the top of a low rounded ridge which extends at essentially the same elevation perhaps half a mile on each side of the road, north and south. A few rods farther southwest, along a southwest slope, the ore is exposed to a thickness of two feet, in places as one bed, and elsewhere apparently as two beds very close together. The width of the ore belt in the ridge is 330 feet.

c) A quarter of a mile farther southwest, in the lower part of the east side of a flat-topped ridge of roughly the same elevation, large slabs of red micaceous ore, 0.6-foot to 0.8-foot thick,

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project from the walls of a roadside ravine and form a slight ridge across the road. The maximum overburden is 16.0 feet of gray clay. A little thin ore of a higher bed, is exposed 0.3-mile farther on.

d) Southwest of c) 0.6-mile to 0.8-mile, ellipsoidal masses 0.8-foot thick from two layers show at the surface. The overburden of gray, lignitic, and bluish clay is very light. West of this outcrop thin ore shows here and there, but no bed of consequence in a little less than three miles.

e) Two layers of ore (SE cor., Sec. 24, T. 19 N., R. 9 E.), each about a foot thick, project their rounded "bowlders" from the surface a little below the top of a low rise. One mass from the lower layer was a foot thick and 2.5 feet long. The overburden of several acres is only 15 to 20 feet even for the lower bed. However, the irregular bedding of the containing strata might lead to an overestimate of the quantity of ore at this place.

f) Along Highway 9, south of the intersection with the LaGrange road 1.35 miles, oxide ore 0.8-foot or more thick crops out in the walls of a highway cut and in a nearby abandoned road (northern part, Sec. 27, T. 19 N., R. 10 E.). It is typical of many showings scattered over northern Choctaw County near but outside the territory included in Fields A, S, and T. The county as a whole contains an immense tonnage of ore, but a description of it must be reserved for another paper.

The estimates for the Eupora Field are: mineable area, 1 square mile in Choctaw County; ore obtainable, 1,208,512 long tons.

SUMMARY

Estimates of iron ore tonnage by fields—Webster County and adjoining borders of Montgomery and Choctaw Counties.

	Long tons
A. The Mathiston and Maben Field	2,500,000
B. The Cumberland Field	314,364
C. The Clarkson Field	78,816
D. The Dancy Field	105,088
E. The Hohenlinden Field	584,552
F. The Montevista Field	220,028
G. The Bellefontaine Field	950,168
H. The Walthall Field	170,768
I. The Tomnolen Field	118,224
J. The Salt Creek Field	288,992
K. The Sand Creek Field	264,674
L. The Embry Field	229,880
M. The Cadaretta Field	394,080
N. The Middleton Field	1,274,192
O. The Alva Field	2,889,920
P. The Sweatman Field	472,896
Q. The Lodi Field	985,200
R. The Calabrella Creek Field	570,912
S. The Stewart Field	2 758,560
T. The Eupora Field	1,208,512
Total	16,379,826

LETTER OF TRANSMITTAL

Office of the Mississippi Geological Survey
University, Missisippi
August 4, 1951

To His Excellency,
Governor Fielding Lewis Wright, Chairman, and
Members of the Geological Commission

Gentlemen:

Herewith is Bulletin 73, Webster County Iron Ores, which, because of the present demand for information on these deposits in Mississippi, is being printed in advance of the complete bulletin on Webster County Geology, now being prepared.

Although these iron ores have long been known in Mississippi, the present survey has revealed many deposits heretofore unknown—resulting in the present estimate of 16,379, 826 long tons for Webster County and the adjoining borders of Montgomery and Choctaw.

Very sincerely yours,

William Clifford Morse,
Director and State Geologist

MISSISSIPPI GEOLOGICAL SURVEY

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*Resigned

Immediate Release
July 20, 1951

MEMORANDUM FOR THE PRESS

IRON ORE

Field study during the last several months, of the iron ore deposits of Webster, Choctaw, Montgomery, and Lafayette Counties, Mississippi, by the Mississippi State Geological Survey and other interested people, has resulted in the discovery of many outcrops not heretofore seen, and a much greater quantity of ore than has heretofore been known to exist. Although the presence in Mississippi of considerable deposits of carbonate and oxide ore has been known for perhaps a century or more, no detailed exploration of the deposits has been attempted until recently. Some forty years ago a little ore was mined in Marshall and Benton Counties and efforts made to establish an industry; but the venture failed, not because of insufficient quantity of ore or poor quality, but chiefly because of lack of mining machinery capable of doing the job economically. However, the present revival of interest in Mississippi iron ore comes at a time when adequate equipment is available. Furthermore, not only has it been found that the total quantity of mineable ore of excellent quality is much greater than it has been believed to be, but that the ore is aggregated locally in larger deposits. The estimates herein, of the quantity in Webster County, including part of northern Choctaw and eastern Montgomery, are based on field work by F. E. Vestal, Geologist, who does not pretend to have reached every acre of the territory or to have found every outcrop. Necessarily the estimates are based on probabilities, as suggested by surface exposures of ore, and may be far from accurate; but a determined effort has been made to keep the error on the conservative side—that is, the estimates are more likely to be too small than too large.

The estimate, 16,379,826 long tons of mineable ore for the territory specified, two-thirds or more of which is in the western part of the County, should be considered only as suggesting the total tonnage present. "Mineable ore", for the purpose of the estimate, means ore under 25 feet or less overburden. Although representing twenty ore "fields" only 25 square miles of actual ore terrane entered into the calculations. Thus it will be seen that

1,024 long tons to the acre is the average for the territory. Some areas will produce much more than that; others much less.

The Mississippi State Geological Survey will in the next few months publish a report on the geology and mineral resources of Webster County—a report which will contain a detailed description of the iron ore deposits, including the locations of all the major outcrops.

(Detailed estimates on file at the State Geological Survey Office.)

[Later, it was decided to print the Webster County Iron Ores as a separate Bulletin (73).]

MISSISSIPPI
STATE GEOLOGICAL SURVEY

WILLIAM CLIFFORD MORSE, PhD.
Director

BULLETIN 73

WEBSTER COUNTY IRON ORES*

By
FRANKLIN EARL VESTAL, M.S.

UNIVERSITY, MISSISSIPPI
1951

*Includes deposits of adjoining borders of Montgomery and Choctaw Counties

MISSISSIPPI
STATE GEOLOGICAL SURVEY

WILLIAM CLIFFORD MORSE, PhD.
Director

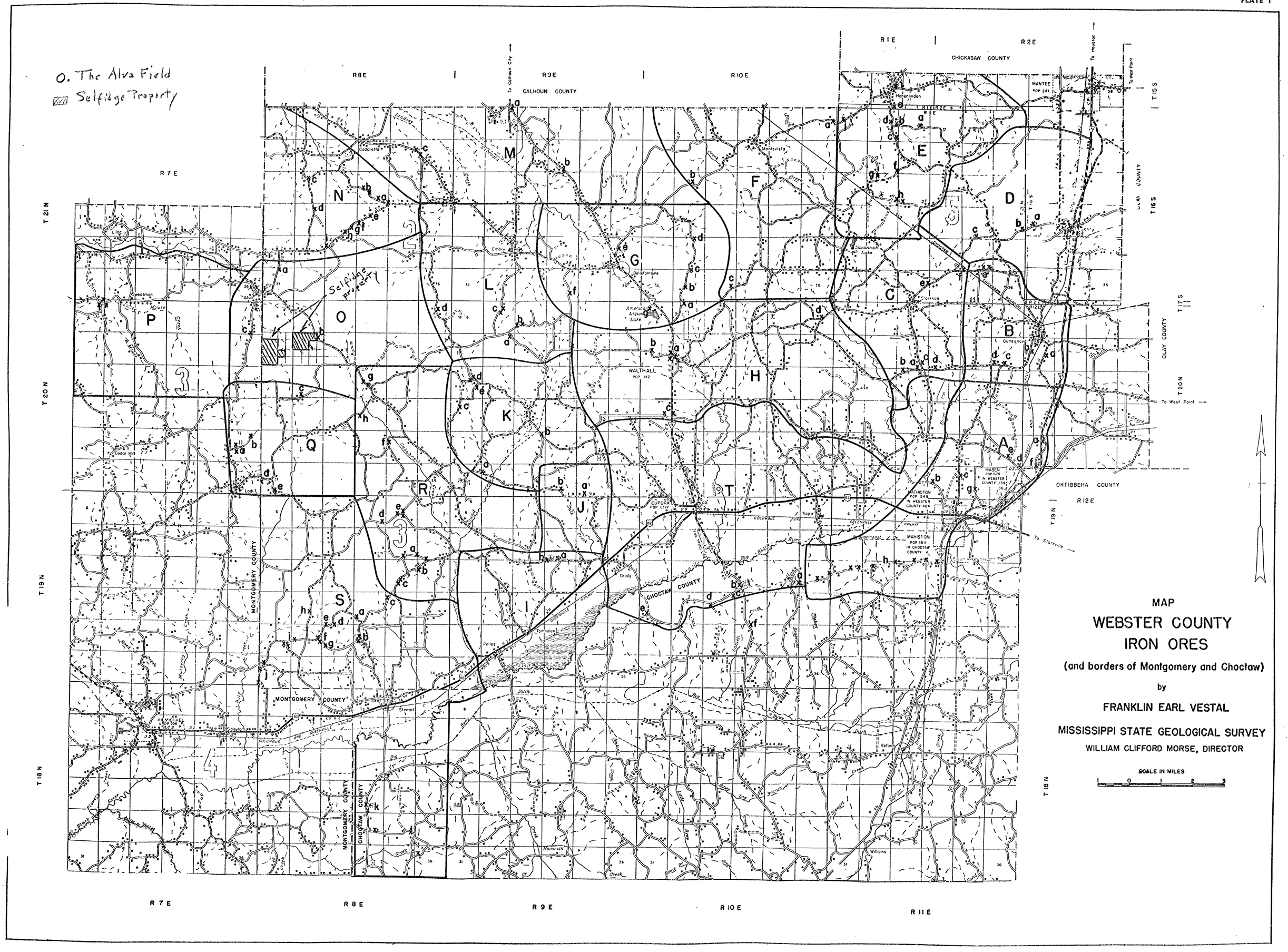
BULLETIN 73

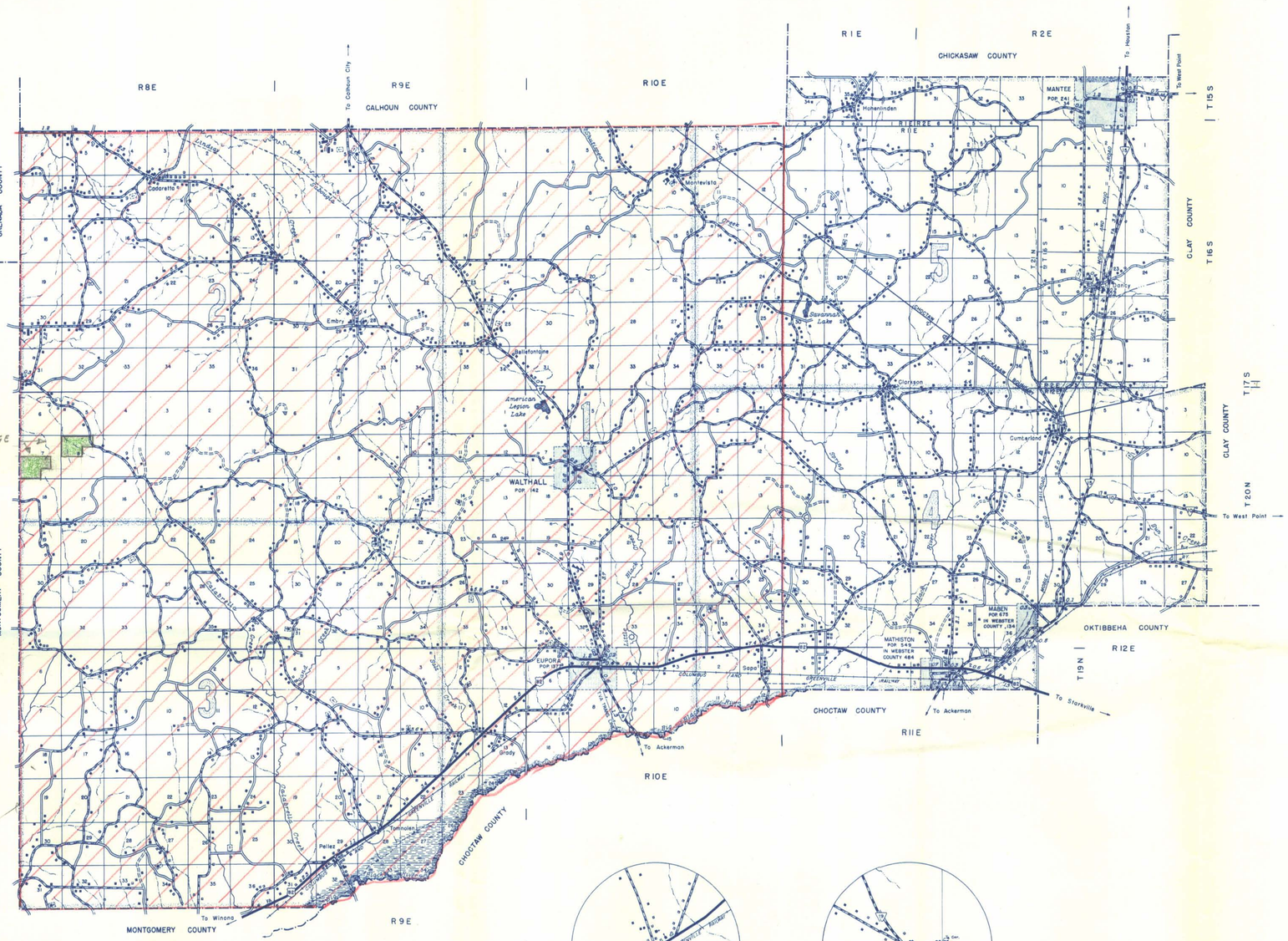
WEBSTER COUNTY IRON ORES

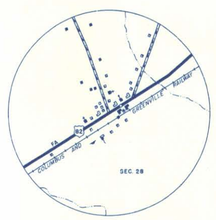
By
FRANKLIN EARL VESTAL, M.S.

UNIVERSITY, MISSISSIPPI
1951

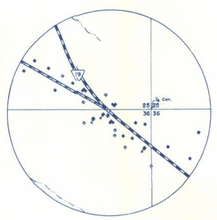
Please do not destroy this report; rather return it to the Mississippi Geological Survey, University, Mississippi, and receive postage refund.


O. The Alva Field
Selfridge Property
MAP
WEBSTER COUNTY
IRON ORES
(and borders of Montgomery and Choctaw)
by
FRANKLIN EARL VESTAL
MISSISSIPPI STATE GEOLOGICAL SURVEY
WILLIAM CLIFFORD MORSE, DIRECTOR
SCALE IN MILES
CALHOUN COUNTY
CHICKASAW COUNTY
CLAY COUNTY
OKTIBBEHA COUNTY
MONTGOMERY COUNTY
CHOCTAW COUNTY
WALTHALL
EUPORA
MAHISTON
R7E
R8E
R9E
R10E
R11E
R12E
T21N
T20N
T19N
T18N
T17S
T16S
T15S





Tomnolen
SEC. 28 T19N R9E



Bellefontaine
SEC. 25 & 36 T21N R9E

Scale for Enlargements
0 ¼ ½
In Miles

LEGEND

- SELVIDGE PLACE
- AREA TO BE EXPLORED

LEGEND

- PUBLIC ROAD, PRIMITIVE
- PUBLIC ROAD, UNIMPROVED
- GRADED AND DRAINED ROAD
- SOIL SURFACED ROAD
- GRAVEL OR STONE ROAD (NOT GRADED OR DRAINED)
- GRAVEL OR STONE ROAD (GRADED AND DRAINED)
- BITUMINOUS ROAD, LOW TYPE
- PAVED ROAD
- MILEAGE BETWEEN POINTS
- FEDERAL AID HIGHWAY SYSTEM
- FEDERAL AID SECONDARY HIGHWAY SYSTEM
- U.S. HIGHWAY SYSTEM
- STATE HIGHWAY SYSTEM
- UNNUMBERED STATE HIGHWAY
- END OF STATE HIGHWAY CONTROL
- STATE BOUNDARY
- COUNTY BOUNDARY
- CONGRESSIONAL TOWNSHIP
- BEAT LINE
- SECTION LINE
- PARK OR RESERVATION
- NATIONAL FOREST PURCHASE UNIT
- LAND ACQUISITION UNIT
- MAIN DRAINAGE DITCH
- NAVIGABLE STREAM
- HEAD OF NAVIGATION (YEAR ROUND / SEASONAL)
- OPERATED SHIP OR BARGE LINE ON NATURAL STREAM
- DOCK, PIER, OR LANDING
- FERRY (OFFINE, TY-FULL)
- BRIDGE, GENERAL
- DRAWBRIDGE
- TRUSS (W-WOOD, S-STEEL, C-CONCR.)
- FARM UNIT
- DWELLING, OTHER THAN FARM
- ROWS OR GROUPS OF DWELLINGS
- STORE OR SMALL BUSINESS
- COMBINED DWELLING AND STORE
- CHURCH OR OTHER RELIGIOUS INSTITUTION
- SCHOOLHOUSE
- LARGE OR CONSOLIDATED SCHOOL
- FACTORY OR INDUSTRIAL PLANT
- SAWMILL (STATIONARY)
- SEASONAL INDUSTRY (CANNERY, GIN, ETC.)
- CAMP OR LODGE
- TOURIST CAMP
- SEASONAL DWELLINGS, CLOSELY SPACED
- POST OFFICE
- COUNTY SEAT
- OTHER CITIES AND VILLAGES
- FOREST SERVICE LOOKOUT STATION
- TRIANGULATION STATION
- GRAVEL PIT
- CEMETERY
- CEMETERY AND CHURCH (ADJACENT)
- COMMERCIAL OR MUNICIPAL AIRPORT
- AIRWAY BEACON LIGHT
- AIR ROUTE
- RAILROAD STATION
- RAILROAD GRADE CROSSING
- RAILROAD ABOVE
- RAILROAD BELOW
- LEVEE
- MARSH OR SWAMPY AREA

GENERAL HIGHWAY MAP
WEBSTER COUNTY
MISSISSIPPI

PREPARED BY

MISSISSIPPI STATE HIGHWAY DEPARTMENT
HIGHWAY PLANNING DIVISION

IN COOPERATION WITH

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DATA OBTAINED FROM

HIGHWAY PLANNING SURVEY
AND
AERIAL PHOTOGRAPHS

TRANSVERSE MERCATOR PROJECTION

SCALE IN MILES
1 0 1 2 3

REVISIONS:
INFORMATION CONCERNING FEDERAL AID PRIMARY ROADS, FEDERAL AID SECONDARY ROADS, STATE MAINTAINED ROADS, RAILROADS, MUNICIPALITIES, POST OFFICES, AND AIRPORTS REVISED AS OF JANUARY 1, 1950. BASIC INFORMATION AS OF JANUARY 1, 1939. POPULATION FIGURES WERE TAKEN FROM THE 1940 CENSUS.

Hyde Construction Co.
This sheet to accompany Form MF-103

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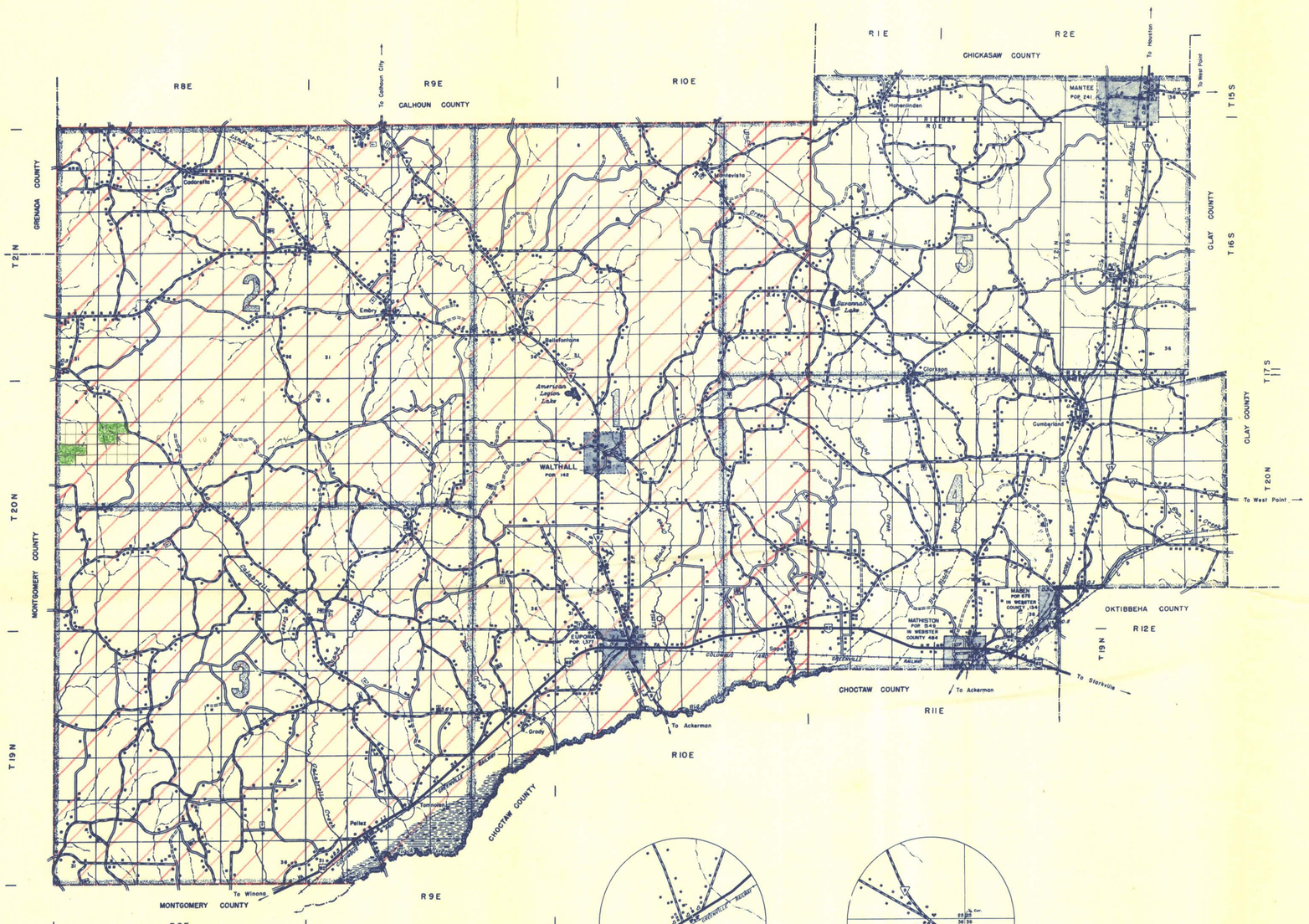
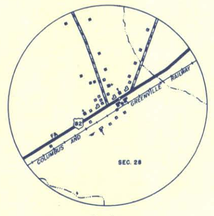
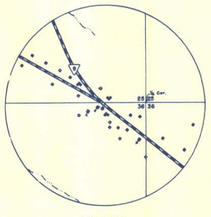




Tomnolen

SEC. 28 T19N R9E



Bellefontaine

SEC. 25 & 36 T21N R9E

Scale for Enlargements

0 1/4 1/2

In Miles

LEGEND

SELVIDGE PLACE

AREA TO BE EXPLORED

LEGEND

PUBLIC ROAD, PRIMITIVE
PUBLIC ROAD, UNIMPROVED
GRADED AND DRAINED ROAD
SOIL SURFACED ROAD
GRAVEL OR STONE ROAD (NOT GRADED OR DRAINED)
GRAVEL OR STONE ROAD (GRADED AND DRAINED)
BITUMINOUS ROAD, LOW TYPE
PAVED ROAD
MILEAGE BETWEEN POINTS
FEDERAL AID HIGHWAY SYSTEM — FA
FEDERAL AID SECONDARY HIGHWAY SYSTEM — FAS
U.S. HIGHWAY SYSTEM — 31
STATE HIGHWAY SYSTEM — 31
UNNUMBERED STATE HIGHWAY
END OF STATE HIGHWAY CONTROL
STATE BOUNDARY
COUNTY BOUNDARY
CONGRESSIONAL TOWNSHIP
BEAT LINE
SECTION LINE
PARK OR RESERVATION
NATIONAL FOREST PURCHASE UNIT
LAND ACQUISITION UNIT
MAIN DRAINAGE DITCH
NAVIGABLE STREAM — 1 YEAR ROUND; 2 SEASONAL
HEAD OF NAVIGATION
OPERATED SHIP OR BARGE LINE ON NATURAL STREAM
DOCK, PIER, OR LANDING
FERRY (FF-FREE, TF-TOLL)
BRIDGE, GENERAL
DRAWBRIDGE
TRUSS (W-WOOD, S-STEEL, C-CONCRETE)
FARM UNIT
DWELLING, OTHER THAN FARM
ROWS OR GROUPS OF DWELLINGS
STORE OR SMALL BUSINESS
COMBINED DWELLING AND STORE
CHURCH OR OTHER RELIGIOUS INSTITUTION
SCHOOLHOUSE
LARGE OR CONSOLIDATED SCHOOL
FACTORY OR INDUSTRIAL PLANT
SAWMILL (STATIONARY)
SEASONAL INDUSTRY (CANNERY, GIN, ETC.)
CAMP OR LODGE
TOURIST CAMP
SEASONAL DWELLINGS, GLOBELY SPACED
POST OFFICE
COUNTY SEAT
OTHER CITIES AND VILLAGES
FOREST SERVICE LOOKOUT STATION
TRIANGULATION STATION
GRAVEL PIT
CEMETERY
CEMETERY AND CHURCH (ADJACENT)
COMMERCIAL OR MUNICIPAL AIRPORT
AIRWAY BEACON LIGHT
AIR ROUTE
RAILROAD STATION
RAILROAD GRADE CROSSING
RAILROAD ABOVE
RAILROAD BELOW
LEVEE
MARSH OR SWAMPY AREA

GENERAL HIGHWAY MAP
WEBSTER COUNTY
MISSISSIPPI

PREPARED BY

MISSISSIPPI STATE HIGHWAY DEPARTMENT
HIGHWAY PLANNING DIVISION

IN COOPERATION WITH

PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

DATA OBTAINED FROM

HIGHWAY PLANNING SURVEY
AND
AERIAL PHOTOGRAPHS

TRANSVERSE MERCATOR PROJECTION

SCALE IN MILES

0 1 2 3

BASIC DRAWING AS OF
JANUARY 1, 1939

CHANGES:
INFORMATION CONCERNING STATE HIGHWAYS, MUNICIPALITIES, RAILROADS, AIRPORTS, AND POST OFFICES REVISED AS OF JANUARY 1, 1947.
POPULATION AS OF 1940.

Hyde Construction Co.
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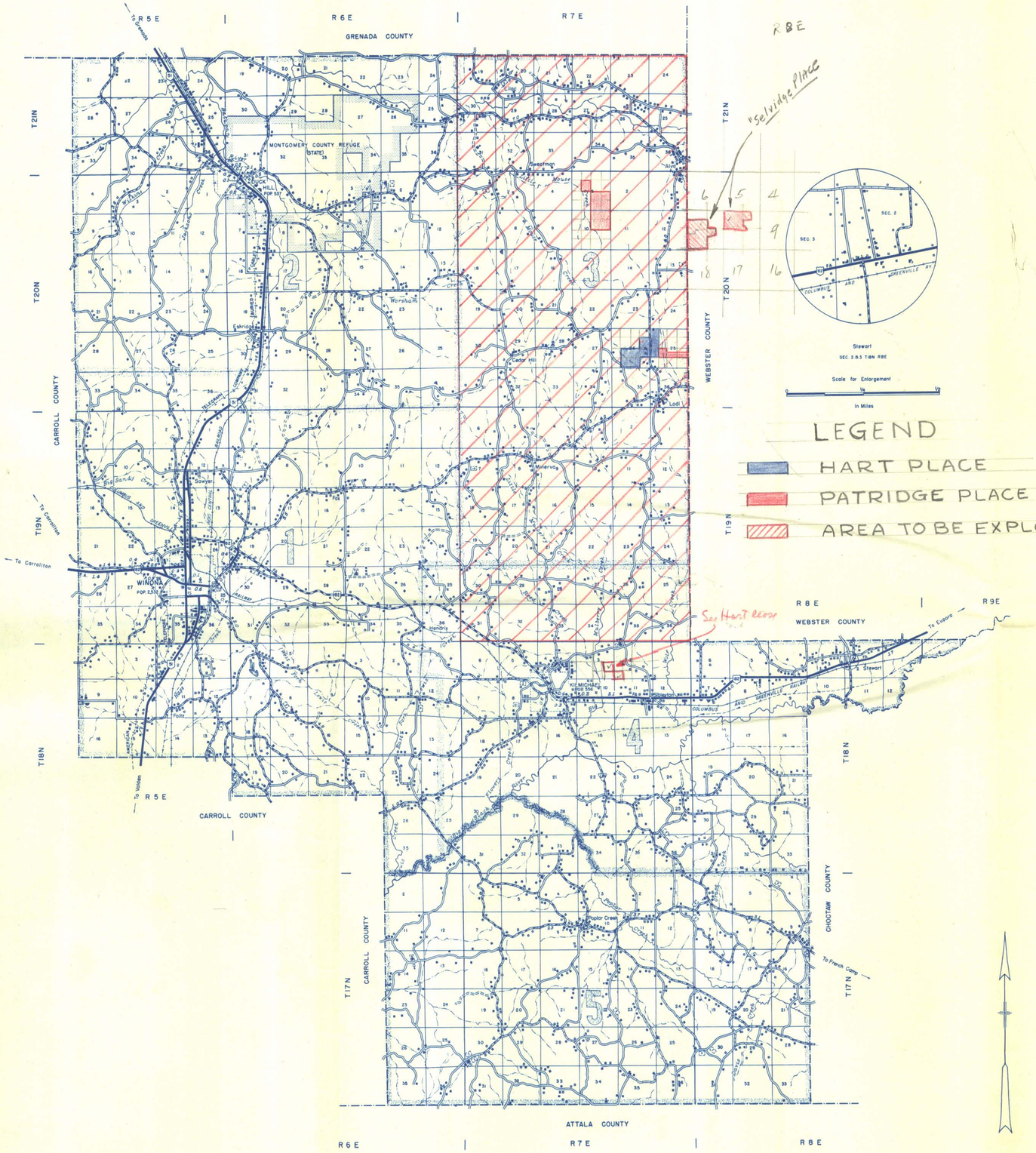
DMA 2186



LEGEND

HART PLACE

PATRIDGE PLACE

AREA TO BE EXPLORED

LEGEND

PUBLIC ROAD, PRIMITIVE	
PUBLIC ROAD, UNIMPROVED	
GRADED AND DRAINED ROAD	
SOIL SURFACED ROAD	
GRAVEL OR STONE ROAD (NOT GRADED OR DRAINED)	
GRAVEL OR STONE ROAD (GRADED AND DRAINED)	
BITUMINOUS ROAD, LOW TYPE	
PAVED ROAD	
MILEAGE BETWEEN POINTS	
FEDERAL AID HIGHWAY SYSTEM	FA
FEDERAL AID SECONDARY HIGHWAY SYSTEM	FAS
U.S. HIGHWAY SYSTEM	82
STATE HIGHWAY SYSTEM	9
UNNUMBERED STATE HIGHWAY	
END OF STATE HIGHWAY CONTROL	
STATE BOUNDARY	
COUNTY BOUNDARY	
CONGRESSIONAL TOWNSHIP	
BEAT LINE	
SECTION LINE	
PARK OR RESERVATION	
NATIONAL FOREST PURCHASE UNIT	
LAND ACQUISITION UNIT	
MAIN DRAINAGE DITCH	
NAVIGABLE STREAM	
HEAD OF NAVIGATION 4 YEAR ROUND / S SEASONAL	
OPERATED SHIP OR BARGE LINE ON NATURAL STREAM	
DOCK, PIER, OR LANDING	
FERRY (FF-FREE, TF-TOLL)	FF
BRIDGE, GENERAL	
DRAWBRIDGE	
TRUSS (W-WOOD, S-STEEL, G-GIRDER)	W S G
FARM UNIT	
DWELLING, OTHER THAN FARM	
ROWS OR GROUPS OF DWELLINGS	
STORE OR SMALL BUSINESS	
COMBINED DWELLING AND STORE	
CHURCH OR OTHER RELIGIOUS INSTITUTION	
SCHOOLHOUSE	
LARGE OR CONSOLIDATED SCHOOL	
FACTORY OR INDUSTRIAL PLANT	
SAWMILL (STATIONARY)	
SEASONAL INDUSTRY (CANNERY, GIN, ETC.)	
CAMP OR LODGE	
TOURIST CAMP	
SEASONAL DWELLINGS, CLOSELY SPACED	
POST OFFICE	
COUNTY SEAT	
OTHER CITIES AND VILLAGES	
FOREST SERVICE LOOKOUT STATION	
TRIANGULATION STATION	
GRAVEL PIT	
CEMETERY	
CEMETERY AND CHURCH (ADJACENT)	
COMMERCIAL OR MUNICIPAL AIRPORT	
AIRWAY BEACON, LIGHT	
AIR ROUTE	
RAILROAD STATION	
RAILROAD GRADE CROSSING	
RAILROAD ABOVE	
RAILROAD BELOW	
LEVEE	
MARSH OR SWAMPY AREA	

GENERAL HIGHWAY MAP
MONTGOMERY COUNTY
MISSISSIPPI

PREPARED BY

MISSISSIPPI STATE HIGHWAY DEPARTMENT
HIGHWAY PLANNING DIVISION

IN COOPERATION WITH

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DATA OBTAINED FROM

HIGHWAY PLANNING SURVEY
AND
AERIAL PHOTOGRAPHS

TRANSVERSE MERCATOR PROJECTION

SCALE IN MILES

REVISIONS:
INFORMATION CONCERNING FEDERAL AID PRIMARY ROADS, FEDERAL AID SECONDARY ROADS, STATE MAINTAINED ROADS, RAILROADS, MUNICIPALITIES, POST OFFICES, AND AIRPORTS REVISED AS OF JANUARY 1, 1950. BASIC INFORMATION AS OF JANUARY 1, 1939. POPULATION FIGURES WERE TAKEN FROM THE 1940 CENSUS.

HYDE CONSTRUCTION CO.

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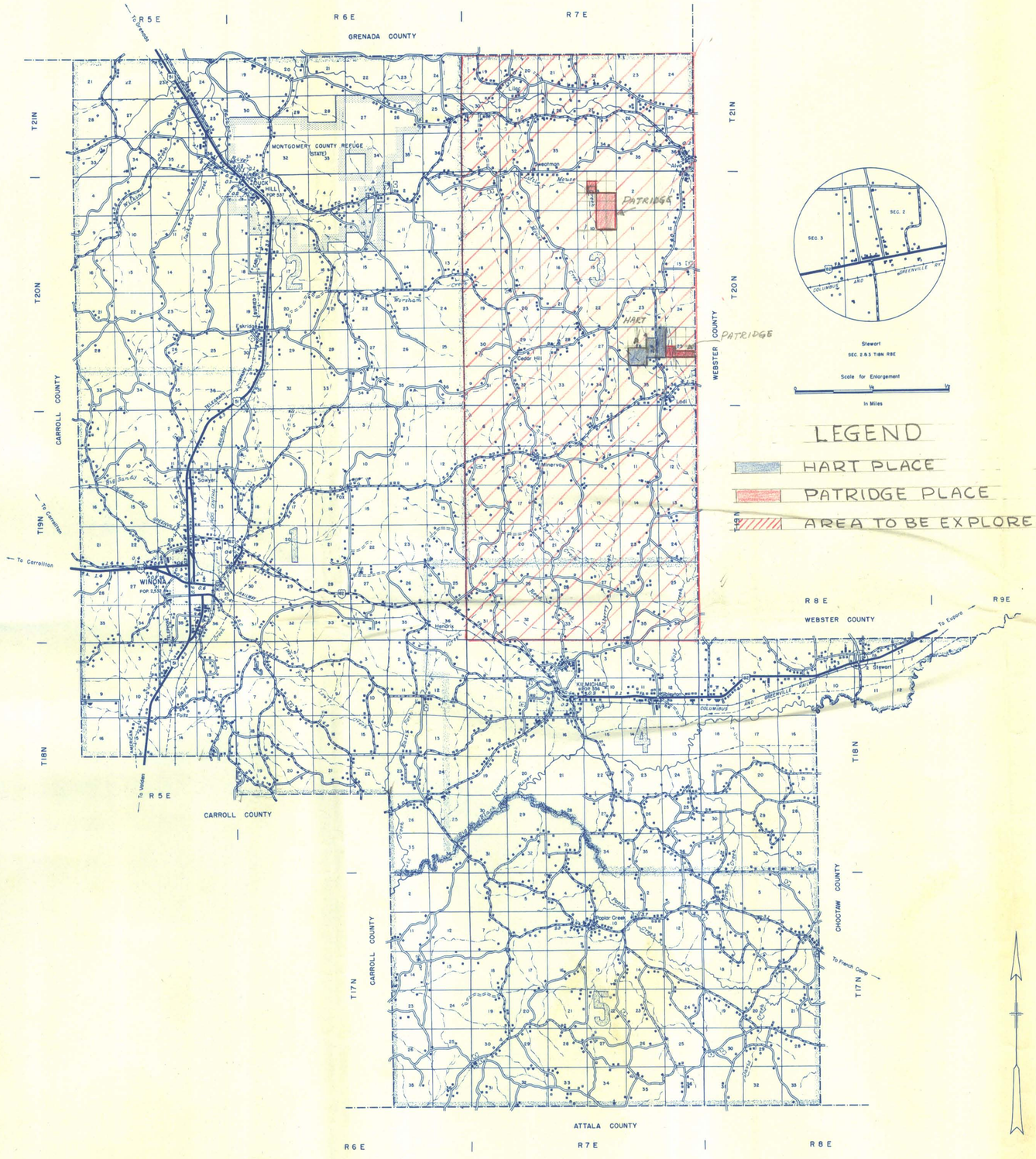

Stewart
SEC. 2 & 3 T18N R8E

Scale for Enlargement
½ 1
In Miles

LEGEND

HART PLACE

PATRIDGE PLACE

AREA TO BE EXPLORED

LEGEND

PUBLIC ROAD, PRIMITIVE
PUBLIC ROAD, UNIMPROVED
GRADED AND DRAINED ROAD
SOIL SURFACED ROAD
GRAVEL OR STONE ROAD (NOT GRADED OR DRAINED)
GRAVEL OR STONE ROAD (GRADED AND DRAINED)
BITUMINOUS ROAD, LOW TYPE
PAVED ROAD
MILEAGE BETWEEN POINTS
FEDERAL AID HIGHWAY SYSTEM — FA
FEDERAL AID SECONDARY HIGHWAY SYSTEM — FAS
U.S. HIGHWAY SYSTEM — 61
STATE HIGHWAY SYSTEM — 12
UNNUMBERED STATE HIGHWAY — 4
END OF STATE HIGHWAY CONTROL
STATE BOUNDARY
COUNTY BOUNDARY
CONGRESSIONAL TOWNSHIP
BEAT LINE
SECTION LINE
PARK OR RESERVATION
NATIONAL FOREST PURCHASE UNIT
LAND ACQUISITION UNIT
MAIN DRAINAGE DITCH
NAVIGABLE STREAM
HEAD OF NAVIGATION — 8 YEAR ROUND; S SEASONAL
OPERATED SHIP OR BARGE LINE ON NATURAL STREAM
DOCK, PIER, OR LANDING
FERRY (F-FREE, T-TOLL) — F T
BRIDGE, GENERAL
DRAWBRIDGE
TRUSS (W-WOOD, S-STEEL, G-GIRDER) — W S G
FARM UNIT
DWELLING, OTHER THAN FARM
ROWS OR GROUPS OF DWELLINGS
STORE OR SMALL BUSINESS
COMBINED DWELLING AND STORE
CHURCH OR OTHER RELIGIOUS INSTITUTION
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SEASONAL DWELLINGS, CLOSELY SPACED
POST OFFICE
COUNTY SEAT
OTHER CITIES AND VILLAGES
FOREST SERVICE LOOKOUT STATION
TRIANGULATION STATION
GRAVEL PIT
CEMETERY
CEMETERY AND CHURCH (ADJACENT)
COMMERCIAL OR MUNICIPAL AIRPORT
AIRWAY BEACON LIGHT
AIR ROUTE
RAILROAD STATION
RAILROAD GRADE CROSSING
RAILROAD ABOVE
RAILROAD BELOW
LEVEE
MARSH OR SWAMPY AREA

GENERAL HIGHWAY MAP
MONTGOMERY COUNTY
MISSISSIPPI

PREPARED BY

MISSISSIPPI STATE HIGHWAY DEPARTMENT
HIGHWAY PLANNING DIVISION

IN COOPERATION WITH

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DATA OBTAINED FROM

HIGHWAY PLANNING SURVEY
AND
AERIAL PHOTOGRAPHS

TRANSVERSE MERCATOR PROJECTION

SCALE IN MILES

REVISIONS.

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