IN REPLY REFER TO:

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

July 18, 1955

Re: DMEA 3818
Tennessee Mang. Co.
Clark Creek Area
Unicoi Co., Tenn.
$8,500 - Manganese

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report

The conclusions of the examiners appear to fit the geologic conditions.

I concur with the recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-7/18/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
G. DeRuff, 3521

IN REPLY REFER TO:

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

July 18, 1955

Re: DMEA 3618
Tennessee Mang. Co.
Clark Creek Area
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N. E. Nelson

NENelson:iml
G-7/18/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
G. DeHuff, 3521

400

JUL 21 1955

Tennessee Manganese Company
Embreeville, Tennessee

Re: Docket No. DMEA 3818 - Manganese
Clark Creek area
Unicoi County, Tennessee

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-referenced property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, although noting the occurrence of a small amount of manganese mineralization on your property, indicates to us that the probability of disclosing minable manganese ore reserves by your proposed program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Code 400
Oper. Committee
Adm. Read. File
T. Kiilsgaard, USGS
G. DeHuff, USBM
Field Team, Region 5

FARutledge/ls
7/18/55

100

July 19, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project in the amount of $8,500.00
Docket No. DMEA 3818 - Manganese
Tennessee Manganese Company
Clark Creek area
Unicoi County, Tennessee

The denial of the subject application is recommended by this Division based on the following information:

(1) The applicant proposed to explore by drilling an area approximately 3000 feet northwest of the West Ore Bank mine in the Bumpass Cove district of Northeastern Tennessee. Manganese deposits of economic value in the Bumpass Cove district are apparently mainly confined to the residual clays of the Shady dolomite. Few deposits of any consequence have been found in the overlying Rome shale or the underlying Erwin formation anywhere in the Appalachians. The manganese oxides in the project area occur as thin veinlets in shattered and brecciated quartzites of the upper part of the Erwin formation. A geologic map of the area, Plat 1, Bulletin 54, Geology and Mineral Deposits of Bumpass Cove, Unicoi and Washington Counties, Tennessee, by John Rodgers, shows a group of closely-spaced normal faults which are doubtless responsible for the brecciation of the quartzite. Manganese-bearing waters coming downward from the now removed Shady dolomite have precipitated the oxides in the brecciated quartzites. However, there is no residual clay blanket and therefore no probability of commercial tonnage.

(2) During the examination, the examining field team discussed the area with the applicant. Local prospectors had described the manganese showings as "blossom" over an ore deposit. However, it was pointed out to the

applicant that the showings may well be the very bottom of an ore deposit, which, if ever present, has long since been removed by erosion. The applicant agreed that this is the more logical explanation. Areas of Shady dolomite residuum, as shown on the geologic map, between Madcap Branch and Licklog Hollows, and at several localities to the east, were suggested to the applicant as more promising for exploration. The applicant plans to test some of these localities with a power auger; if showings are favorable, another application could be considered.

(3) The examining field team recommends denial of the subject application.

(4) The Field Team concurs with the denial.

(5) The Commodity Division of the U. S. Geological Survey and the Commodity Division of the Bureau of Mines concur in the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

cc: Docket
Adm. Reading File
Code 400
Operating Committee

FARutledge/ls
7/19/55

400

IN REPLY REFER TO:

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

July 18, 1955

Re: DMEA 3818
Tennessee Mang. Co.
Clark Creek Area
Unicoi Co., Tenn.
$8,500 - Manganese

Copy Exhibit 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report

The conclusions of the examiners appear to fit the geologic conditions.

I concur with the recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-7/18/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
G. DeMuff, 3521

400

JUN - 1 1955

Tennessee Manganese Company
Embreeville, Tennessee

Re: Docket No. DMEA 3818 - Manganese
Clark Creek area
Unicoi County, Tennessee

Gentlemen:

The above-docketed application for exploration assistance for manganese ores has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville, Tennessee, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

E. O. Mittendorf

Administrator

cc: Docket
Adm. Read. File
FT, Reg. V
Oper. Comm.
Code 400
T. Kiilsgaard, USGS
G. DeHuff, USBM

TLChapman/ls
5/31/55

400

JUN - 1 1955

400

Mr. Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville, Tennessee

Re: Docket No. DMEA 3818-Manganese
Tennessee Manganese Company
Clark Creek area
Unicoi County, Tennessee

Dear Mr. Laurence:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Two copies of a relevant memorandum dated May 25, 1955, by T. H. Kiilsgaard, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

cc: Docket
Adm. Read. File
FT, Reg. V
Code 400
Oper. Committee
Mr. T. Kiilsgaard, USGS
Mr. G. DeHuff, USBM

TLChapman/ls
5/31/55

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
MAY 27 1955

Copy retained 200

May 26, 1955

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of application, DMEA Docket 3618 (Manganese), Tennessee Manganese Company, Unicoi County, Tennessee

The applicant proposes to explore an area on Clark Creek, in the Cherokee National Forest, by 40 hours of bulldozing and 2,000 feet of churn drilling. Total cost of the project is estimated at $8,500.00.

The area to be explored is reported to be one mile northwest of Bumpass Cove and approximately 3,000 feet northwest (mistakenly stated southwest in the application) of the West Ore Bank mine. Bumpass Cove has an extensive production record of manganese oxide ore. The geology of the cove and surrounding areas is well described in the State of Tennessee Department of Conservation, Division of Geology, Bulletin 52, Geology and Manganese Deposits of Northeastern Tennessee. That publication describes the manganese deposits as being superficial features that have accumulated during the process of weathering, the ore occurring as oxide nodules in the residuum. Most of the ore deposits in that part of Tennessee are in the Cambrian Shady dolomite. Areas of the Shady dolomite containing ore are small, for the most part, being limited by the size of the outcrop in which they occur, the extent and thickness of the residual clay, and by the rock structure. In Bumpass Cove, the Shady forms the floor, occurring as a shallow, plunging syncline.

The Erwin quartzite underlies the Shady dolomite, and in places it contains manganese, although usually of a poorer quality and in smaller deposits than those found in the Shady. Some Erwin outcrops occur as sandstone cemented by manganese oxides, others, in areas near faults, as brecciated quartzite cemented by manganese and iron oxides. Manganese in these deposits is commonly of fair quality but intimately mixed with silica and of shallow depths.

By plotting the location of the applicant's property on Plate 8 of the afore-mentioned Bulletin 52, it is found that the deposit is in Erwin quartzite and roughly along the northwest projection of a fault pattern mapped as crossing Shady-Erwin contact. This may account

for the breccia cemented by manganese described in the application. If such is the occurrence, the deposits will probably be shallow and not worth mining, much less churn drilling. However, as the applicant has a mill in Bungess Cove and is probably familiar with the area, it is recommended that the application be referred to the field for field examination. Further processing of the application will meet with less opposition from the applicant if he knows his proposed project was reviewed by field examiners.

T. H. Kiilsgaard

THKiilsgaard:hlm
G-5/26/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
Gilbert DeNuff, 3523 Interior

402

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1-07 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

July 7, 1955

RECEIVED
JUL 11 1955

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Field Examination Report, DMEA-3818 (Mn) Tennessee Manganese Co. Embreeville, Tenn. Clark Creek Area, Unicoi, County, Tenn.

Enclosed are four copies of the subject examination report.

We agree with the recommendation for denial of the application.

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

V. J. Lynch, Member
DMEA Field Team
Region V

2M.
cc:
Lynch
Files

In Memo please make the usual summary and also mention the information given in paragraphs on page 2 marked A & B

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT BY FIELD TEAM

REGION V

On

DMEA-3018 (Manganese) CLAMPS CREEK AREA
Unicoi County, Tennessee

By

Robert A. Laurence, Geologist
U. S. Geological Survey

and

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

July 7, 1955

FIELD TEAM EXAMINATION REPORT
On
DMEA-3311 (Manganese)

Tennessee Manganese Company, Embreeville, Tennessee

Clarks Creek Area, Unicoi County, Tennessee

Reported by: R. A. Lawrence, Geologist, U. S. G. S.
and
Wm. A. Beck, Mining Engineer, U. S. B. M.
July 7, 1955

Examination of the Clarks Creek Area, just across Embreeville Mountain from Dumpass Cove, has led us to the conclusion that manganese oxide minerals are not present there in commercial quantity. We recommend denial of the application.

The wooded area, referred to in the application as the Clarks Creek area, and shown in outline on the geologic map which accompanies this report, was examined on June 28, 1955. The examiners were accompanied by Mr. T. K. Li, President, Mr. Richard Marsten, Mine Superintendent, Mr. Peter Bjellos, Office Manager, Tennessee Manganese Company and Mr. S. W. Maher, Senior Geologist, Tennessee Division of Geology, Mr. W. J. Lynch, U. S. Bureau of Mines and Mr. Louis Pavlides, U. S. Geological Survey. The examination required about 4 hours.

The property is part of the Cherokee National Forest, and the applicant has a prospecting permit. It is about a mile by an old logging road from the applicant's mill in Dumpass Cove, which is, in turn, about 3 miles by good roads from Embreeville. Access for drilling equipment is good.

The applicant is now engaged in exploration, mining and milling of manganese oxides ores and is currently shipping three to five cars of concentrates per week to the Government carload purchase program. Although none of the applicant's personnel is very familiar with local geology, the company is competent and financially able to carry out the proposed work. Tennessee Manganese Company is a subsidiary of Wah Chang Corporation, of New York.

The geology of the Dumpass Cove district is well described in Bulletin 54 of the Tennessee Division of Geology. The map accompanying this report is an enlargement of a portion of Plate 1 of that bulletin. The ores of Dumpass Cove, as well as most of the rest of East Tennessee, are in the residual clays of the Shady dolomite. Few deposits of any consequence have been found in the overlying Rome shale or the underlying

Erwin formation anywhere in the Appalachians.

The manganese oxides in the area of this application occur as thin veinlets in shattered and brecciated quartzites of the upper part of the Erwin formation. The geologic map shows that a group of closely-spaced normal faults crosses the area, and doubtless they are responsible for the brecciated condition of the quartzites. Manganese-bearing waters coming downward from the now-removed Shady dolomite have precipitated the oxides in the brecciated quartzites. However, there is no residual clay blanket and therefore no probability of commercial tonnage.

The applicant has bulldozed three short roads which expose mostly a colluvial mixture of coarse quartzite wash. They have dug six test pits, in this colluvium and in weathered shales of the upper part of the middle Erwin, and have drilled six shallow holes (35 feet or less) with a power auger. A little manganese may be seen here and there, but the occurrences are spotty and mostly low grade.

Local prospectors had described these showings as "blossom" over an ore deposit. We consider the showings to be just the very bottom of an ore deposit which, if it ever was present, has long since been removed by erosion. Mr. M agreed that this is the more logical explanation. A

We suggested that areas of Shady dolomite residuum, as shown on the geologic map, between Hedcap Branch and Licklog Hollows, and at several localities to the east are more promising for exploration. The applicant plans to test some of these localities with their own power auger; if showings are favorable another application could be considered. B

In summary, it is our opinion that the applicant has already spent more money than is justified by the showings in the area. We recommend denial of the application.

Date of Inspection: June 28, 1955.

Robert A. Laurence, Geologist
U. S. Geological Survey

Wm. A. Deck, Mining Engineer
U. S. Bureau of Mines

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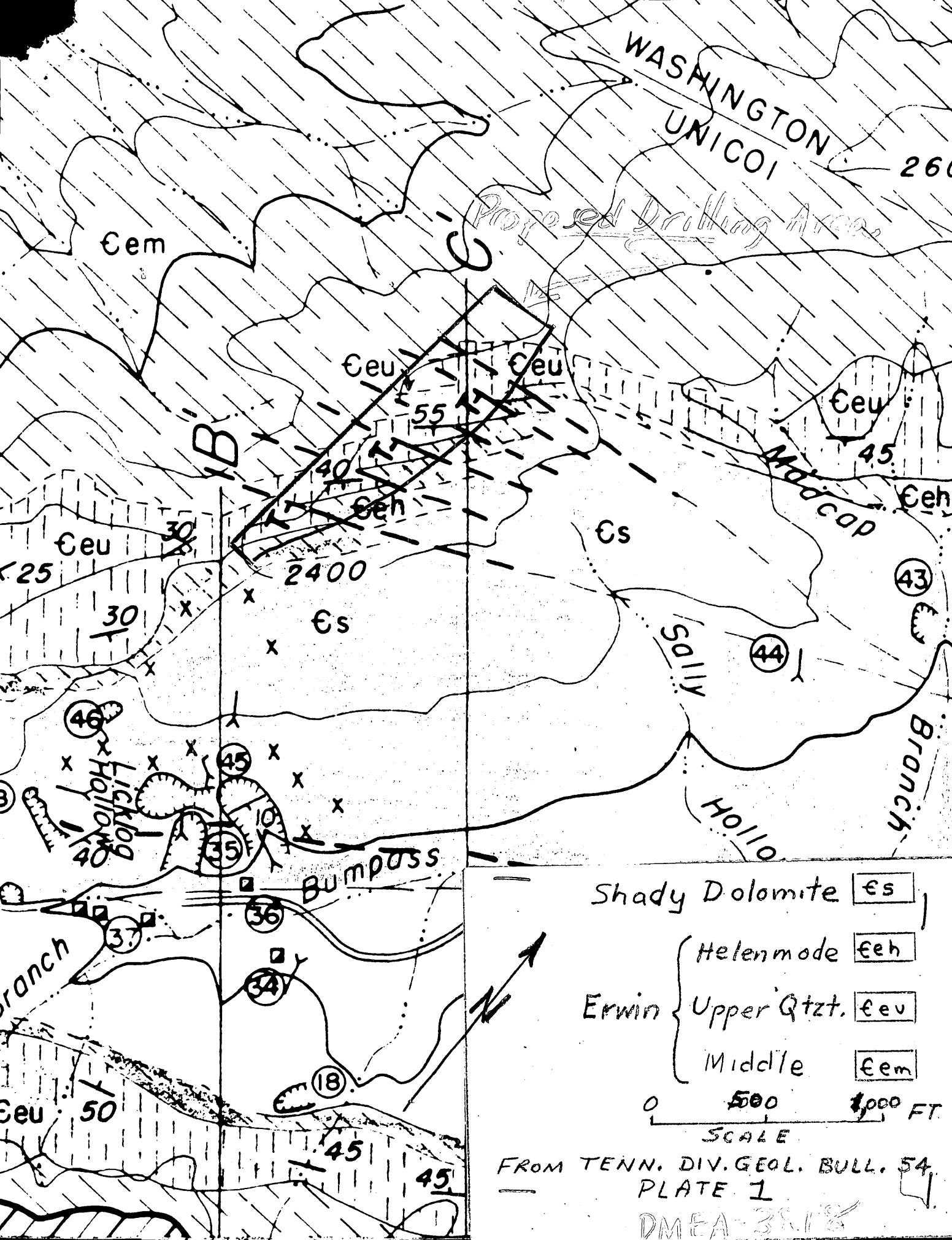

FROM TENN. DIV. GEOL. BULL. 54
PLATE 1

DOCKET
Surname:
Martin
DeHuff
Nelson
Geehan
Kiilsgaard
Yelverton

400

JUL 21 1955

Tennessee Manganese Company
Embreeville, Tennessee

Re: Docket No. DMEA 3818 - Manganese
Clark Creek area
Unicoi County, Tennessee

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-referenced property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, although noting the occurrence of a small amount of manganese mineralization on your property, indicates to us that the probability of disclosing minable manganese ore reserves by your proposed program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

cc: Docket
Code 400
Oper. Committee
Adm. Read. File
T. Kiilsgaard, USGS
G. DeHuff, USBM
Field Team, Region 5

FARutledge/ls
7/18/55

R.C.Y.

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

July 19, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project in the amount of $8,500.00
Docket No. DMEA 3818 - Manganese
Tennessee Manganese Company
Clark Creek area
Unicoi County, Tennessee

The denial of the subject application is recommended by this Division based on the following information:

(1) The applicant proposed to explore by drilling an area approximately 3000 feet northwest of the West Ore Bank mine in the Bumpass Cove district of Northeastern Tennessee. Manganese deposits of economic value in the Bumpass Cove district are apparently mainly confined to the residual clays of the Shady dolomite. Few deposits of any consequence have been found in the overlying Rome shale or the underlying Erwin formation anywhere in the Appalachians. The manganese oxides in the project area occur as thin veinlets in shattered and brecciated quartzites of the upper part of the Erwin formation. A geologic map of the area, Plat 1, Bulletin 54, Geology and Mineral Deposits of Bumpass Cove, Unicoi and Washington Counties, Tennessee, by John Rodgers, shows a group of closely-spaced normal faults which are doubtless responsible for the brecciation of the quartzite. Manganese-bearing waters coming downward from the now removed Shady dolomite have precipitated the oxides in the brecciated quartzites. However, there is no residual clay blanket and therefore no probability of commercial tonnage.

(2) During the examination, the examining field team discussed the area with the applicant. Local prospectors had described the manganese showings as "blossom" over an ore deposit. However, it was pointed out to the

applicant that the showings may well be the very bottom of an ore deposit, which, if ever present, has long since been removed by erosion. The applicant agreed that this is the more logical explanation. Areas of Shady dolomite residuum, as shown on the geologic map, between Madcap Branch and Licklog Hollows, and at several localities to the east, were suggested to the applicant as more promising for exploration. The applicant plans to test some of these localities with a power auger; if showings are favorable, another application could be considered.

(3) The examining field team recommends denial of the subject application.

(4) The Field Team concurs with the denial.

(5) The Commodity Division of the U. S. Geological Survey and the Commodity Division of the Bureau of Mines concur in the denial.

W S Martin

W. S. Martin, Chief
Iron and Ferro-Alloys Division

DOCKET

400

Martin
Deckelbaum
Zelsdorf

July 19, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project in the amount of $8,500.00
Docket No. DMEA 3818 - Manganese
Tennessee Manganese Company
Clark Creek area
Unicoi County, Tennessee

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(3) The examining field team recommends denial of the subject application.

(4) The Field Team concurs with the denial.

(5) The Commodity Division of the U. S. Geological Survey and the Commodity Division of the Bureau of Mines concur in the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

cc: Docket
Adm. Reading File
Code 400
Operating Committee

FARutledge/ls
7/19/55

Docket

IN REPLY REFER TO:

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

RECEIVED
JUL 1 9 1955

July 18, 1955

Re: DMEA 3818
Tennessee Mang. Co.
Clark Creek Area
Unicoi Co., Tenn.
$8,500 - Manganese

Copy retained 400

WSM

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report

The conclusions of the examiners appear to fit the geologic conditions.

I concur with the recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

July 7, 1955

RECEIVED
JUL 11 1955

Memorandum

WSM

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Field Examination Report, DMEA-3818 (Mn) Tennessee Manganese Co. Embreeville, Tenn. Clark Creek Area, Unicoi, County, Tenn.

Enclosed are four copies of the subject examination report.

We agree with the recommendation for denial of the application.

Robert A. Laurence
Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

V. J. Lynch
V. J. Lynch, Member
DMEA Field Team
Region V

Reviewed by
DMEA OPERATING COMMITTEE
7-15-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
JUL 11 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT BY FIELD TEAM

REGION V

On

DMEA-3818 (Manganese) CLARKS CREEK AREA
Unicoi County, Tennessee

By

Robert A. Laurence, Geologist
U. S. Geological Survey

and

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

July 7, 1955

Reviewed by
DMEA CLASSIFYING COMMITTEE
7-15-55
(date)

FIELD TEAM EXAMINATION REPORT
On
DMEA-3818 (Manganese)

Tennessee Manganese Company, Embreeville, Tennessee

RECEIVED
JUL 11 1955

Clarks Creek Area, Unicoi County, Tennessee

Reported by: R. A. Laurence, Geologist, U. S. G. S.
and
Wm. A. Beck, Mining Engineer, U. S. B. M.
July 7, 1955

Examination of the Clarks Creek Area, just across Embreeville Mountain from Bumpass Cove, has led us to the conclusion that manganese oxide minerals are not present there in commercial quantity. We recommend denial of the application.

The wooded area, referred to in the application as the Clarks Creek area, and shown in outline on the geologic map which accompanies this report, was examined on June 28, 1955. The examiners were accompanied by Mr. T. K. Li, President, Mr. Richard Marsten, Mine Superintendent, Mr. Peter Bjellos, Office Manager, Tennessee Manganese Company and Mr. S. W. Maher, Senior Geologist, Tennessee Division of Geology, Mr. V. J. Lynch, U. S. Bureau of Mines and Mr. Louis Pavlides, U. S. Geological Survey. The examination required about 4 hours.

The property is part of the Cherokee National Forest, and the applicant has a prospecting permit. It is about a mile by an old logging road from the applicant's mill in Bumpass Cove, which is, in turn, about 3 miles by good roads from Embreeville. Access for drilling equipment is good.

The applicant is now engaged in exploration, mining and milling of manganese oxide ores and is currently shipping three to five cars of concentrates per week to the Government carload purchase program. Although none of the applicant's personnel is very familiar with local geology, the company is competent and financially able to carry out the proposed work. Tennessee Manganese Company is a subsidiary of Wah Chang Corporation, of New York.

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The applicant has bulldozed three short roads which expose mostly a colluvial mixture of coarse quartzite wash. They have dug six test pits, in this colluvium and in weathered shales of the upper part of the middle Erwin, and have drilled six shallow holes (35 feet or less) with a power auger. A little manganese may be seen here and there, but the occurrences are spotty and mostly low grade.

Local prospectors had described these showings as "blossom" over an ore deposit. We consider the showings to be just the very bottom of an ore deposit which, if it ever was present, has long since been removed by erosion. Mr. Li agreed that this is the more logical explanation.

We suggested that areas of Shady dolomite residuum, as shown on the geologic map, between Madcap Branch and Licklog Hollows, and at several localities to the east are more promising for exploration. The applicant plans to test some of these localities with their own power auger; if showings are favorable another application could be considered.

In summary, it is our opinion that the applicant has already spent more money then is justified by the showings in the area. We recommend denial of the application.

Date of Inspection; June 28, 1955.

RECEIVED
JUL 11 1955

Robert A. Laurence

Robert A. Laurence, Geologist
U. S. Geological Survey

Wm A Beck

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

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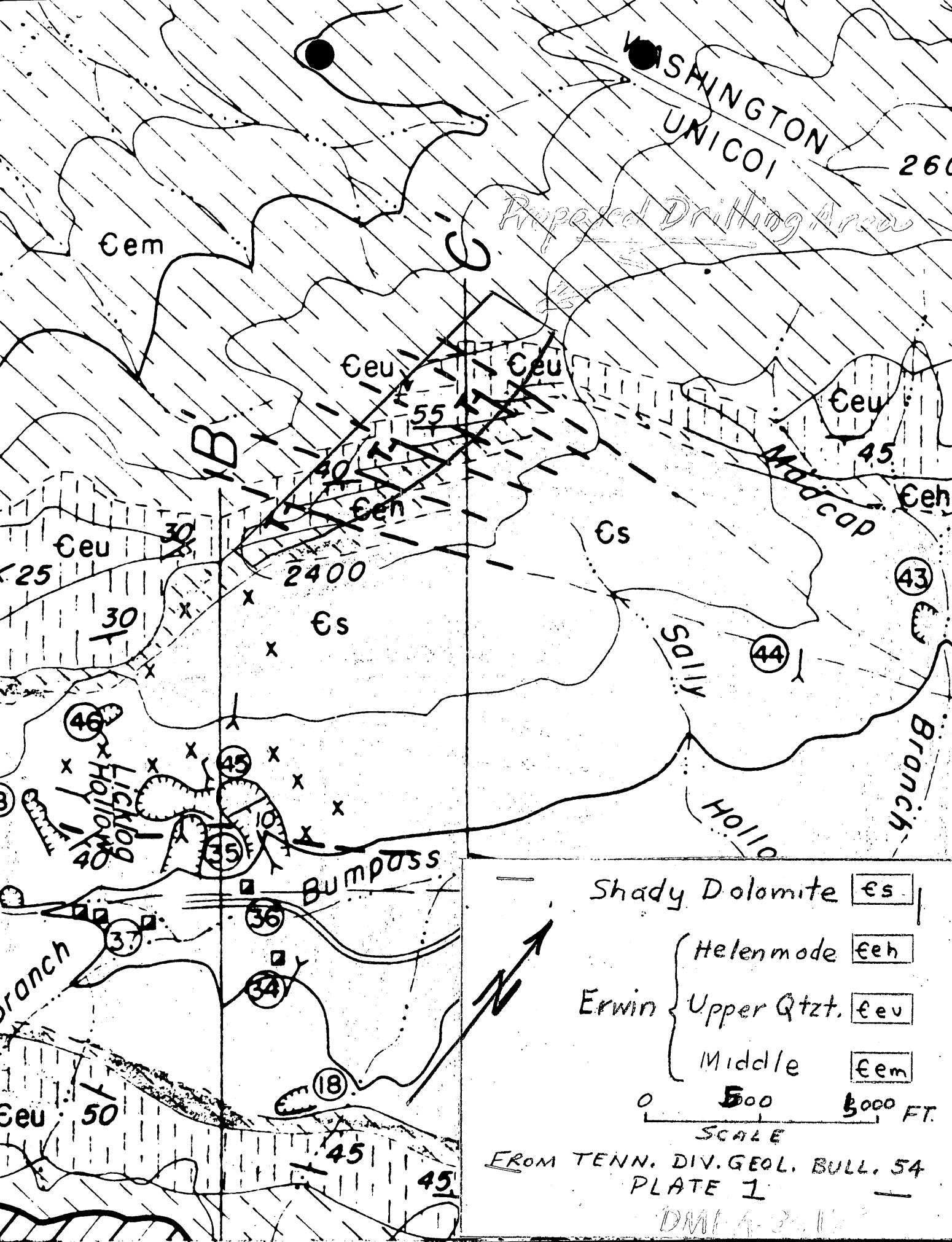
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SCALE
FROM TENN. DIV. GEOL. BULL. 54
PLATE 1

DOCKET
Surname:

Martin
DeHuff
Selfridge
Hedges

JUN - 1 1955

Mr. Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville, Tennessee

Re: Docket No. DMEA 3818-Manganese
Tennessee Manganese Company
Clark Creek area
Unicoi County, Tennessee

Dear Mr. Laurence:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Two copies of a relevant memorandum dated May 25, 1955, by T. H. Kiilsgaard, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

J. H. Hedges (JHH)
Member, Bureau of Mines

Thor H. Kiilsgaard (THK)
Member, Geological Survey

cc: Docket
Adm. Read. File
FT, Reg. V
Code 400
Oper. Committee
Mr. T. Kiilsgaard, USGS
Mr. G. DeHuff, USBM

TLChapman/ls
5/31/55

R.C.S.

DOCKET
Surname:

400

Martin
DeHuff
Killegaard
Hedges
Selbridge
Johnson

JUN - 1 1955

Tennessee Manganese Company
Embreeville, Tennessee

Re: Docket No. DMEA 3818 - Manganese
Clark Creek area
Unicoi County, Tennessee

Gentlemen:

The above-docketed application for exploration assistance for manganese area has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville, Tennessee, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Adm. Read. File
FT, Reg. V
Oper. Comm.
Code 400
T. Killegaard, USGS
G. DeHuff, USBM

RCL

Docket

IN REPLY REFER TO:

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

Defense Minerals Administration
RECEIVED
MAY 27 1955

May 26, 1955

Copy retained 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

WSM

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of application, DMEA Docket 3818 (Manganese), Tennessee Manganese Company, Unicoi County, Tennessee

The applicant proposes to explore an area on Clark Creek, in the Cherokee National Forest, by 40 hours of bulldozing and 2,000 feet of churn drilling. Total cost of the project is estimated at $8,500.00.

The area to be explored is reported to be one mile northwest of Bumpass Cove and approximately 3,000 feet northwest (mistakenly stated southwest in the application) of the West Ore Bank mine. Bumpass Cove has an extensive production record of manganese oxide ore. The geology of the cove and surrounding areas is well described in the State of Tennessee Department of Conservation, Division of Geology, Bulletin 52, Geology and Manganese Deposits of Northeastern Tennessee. That publication describes the manganese deposits as being superficial features that have accumulated during the process of weathering, the ore occurring as oxide nodules in the residuum. Most of the ore deposits in that part of Tennessee are in the Cambrian Shady dolomite. Areas of the Shady dolomite containing ore are small, for the most part, being limited by the size of the outcrop in which they occur, the extent and thickness of the residual clay, and by the rock structure. In Bumpass Cove, the Shady forms the floor, occurring as a shallow, plunging syncline.

The Erwin quartzite underlies the Shady dolomite, and in places it contains manganese, although usually of a poorer quality and in smaller deposits than those found in the Shady. Some Erwin outcrops occur as sandstone cemented by manganese oxides, others, in areas near faults, as brecciated quartzite cemented by manganese and iron oxides. Manganese in these deposits is commonly of fair quality but intimately mixed with silica and of shallow depths.

By plotting the location of the applicant's property on Plate 8 of the afore-mentioned Bulletin 52, it is found that the deposit is in Erwin quartzite and roughly along the northwest projection of a fault pattern mapped as crossing Shady-Erwin contact. This may account

for the breccia cemented by manganese described in the application. If such is the occurrence, the deposits will probably be shallow and not worth mining, much less churn drilling. However, as the applicant has a mill in Bumpass Cove and is probably familiar with the area, it is recommended that the application be referred to the field for field examination. Further processing of the application will meet with less opposition from the applicant if he knows his proposed project was reviewed by field examiners.

Thor H. Kiilsgaard

T. H. Kiilsgaard

May 19, 1955

Subject: DMEA-3818
Re: Exploration Assistance

Tennessee Manganese Co.,
Embreeville, Tennessee

Gentlemen:

The receipt of your application dated May 18, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3818 and referred to the Iron and Ferro Alloys Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

Defense Minerals Administration
RECEIVED
MAY 19 1955

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3818
Metal or Mineral Manganese
Date Received 5-19-55
Estimated Cost 8,500.00
Participation (Government %) 75

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: TENNESSEE MANGANESE COMPANY --- Embreeville, Tennessee

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized. A Delaware Corporation

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. See Accompanying Sheet

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Clark Creek area, April 7, 1954, acquired lands mineral comprises 700 acres within the Cherokee National Forest, Unaka District, Tenn. Serialized as BLM - A - 037053, issued by Mr. C. R. Drexilius, Supervisor Eastern States Office, Bureau of Land Management, Dept. of Interior, Washington 25, D. C. Feb. 9, 1955

(*b*) State any mine name by which the property is known. None

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Rented from U. S. Government at .25¢ per acre. We have prospector rights for 2 years.

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. See Accompanying sheet

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. None

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. See Accompanying Sheet.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. See Accompanying Sheet.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. All plentiful.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Manganese Ore

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See Accompanying Sheet.

(*c*) The work will start within 30 days and be completed within 3 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. See Accompanying Sheet.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). See Accompanying Sheet.

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants. See Accompanying Sheet.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. None.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be. See Accompanying Sheet.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. None.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project. None.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes. See Accompanying Sheet.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above. See Accompanying Sheet.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes.

(*b*) How do you propose to furnish your share of the costs?

[ ] Money [X] Use of equipment owned by you [X] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated May 18, 1955

Tennessee Manganese Company
(Applicant)

By C. A. Logan Vice President

1346 Connecticut Ave., N. W.

Washington 6, D. C.

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—66551-1

Phone: De 2-2033

Accompanying Sheet To
Form MF-103 (Dated 5/18/55)
Tennessee Manganese Company
Embreeville, Tennessee

1.(c). President & Treasurer - Mr. T. K. Li, Port Washington, New York, N. Y.
Vice President - Mr. Charles A. Ragan, Dupont Circle Bldg., Wash., D. C.
Secretary - Mrs. Rita L. Ragan, Dupont Circle Building, Washington, D.C.

3.(d) Lease from Bureau of Land Manggement, Eastern States Office, Washington, D. C. (Mr. C.R. Drexilius) No. BLM-A 037053.

4.(a) Our geologist has done some prospecting on this land and recommends drilling

4.(c) The area known as Clark Creek is located in Unicoi County in the Cherokee National Forest in N. E. Tennessee, approximately five miles N. W. of Erwin, Tennessee, and one mile N. W. of Bumpass Cove. It is drained to the northwest by Clark Creek which is a tributary of the Nolachucky River. The elevation of Clark Creek valley is about 1600 feet above sea level, and rises to an altitude of about 2400 feet to the ridge. Clark Creek road is an old logging road, rocky but in passable condition. The area is not too steep or heavily wooded. It is covered with hardwoods, particularly hickory and oak, some mountain shrubs and a small scattering of pines mostly along the ridge. West Ore Bank lies approximately 3,000 feet to the southwest and has been a good producer of manganese ore. There are several characteristic sumpages in the area that appear to have deep alternate light and dark clay beds. Some medium/heavy loose gravel and boulder material is scattered over the area which is principally recrystalized quartzite, some shale and heavily weathered dolomite. There is considerable breccia which has been heavily cemented with manganese throughout the area. This manganese is good quality psylomelane. From the above description there is good reason to believe that manganese ore can be found in that area. Further more, the area is located within about one and one half miles from our present operating mill which makes any good discovery very suitable for mining. Exploration by drilling is warranted.

4.(d) New roads on this property can easily be extended to join up with existing roads. This area is about seven miles from Erwin, Tennessee, our shipping point, and about two and one half miles from the town of Embreeville, Tennessee.

5.(b) Refer to 4(c) sketch map. Proposed exploration work, churn drilling is to be done along roadways as shown on map.

5.(d) Tennessee Manganese Co., Embreeville, Tennessee, has been producing manganese ore for the Government stockpile for over a year and is still in operation. We are continuously looking for new reserves of manganese ore. Our geologist will supervise this operation.

6.(a)	Independent contracts - 2,000 ft. churn drilling @ $2.50 per ft.	$5000.00
(b)	Supervision and Engineering	1000.00
(c)	None	
(d)	Operator furnish 40 hours of road dozing @ $20.00 per hr.	800.00
(e)	None	
(f)	None	
(g)	Analytical chemical work, etc., estimated	1000.00
(h)	10% of above ($7,500.00)	750.00
	Total this Project	$8500.00

$8,500.00 for 2,000 feet of drilling = $4.25 per foot.

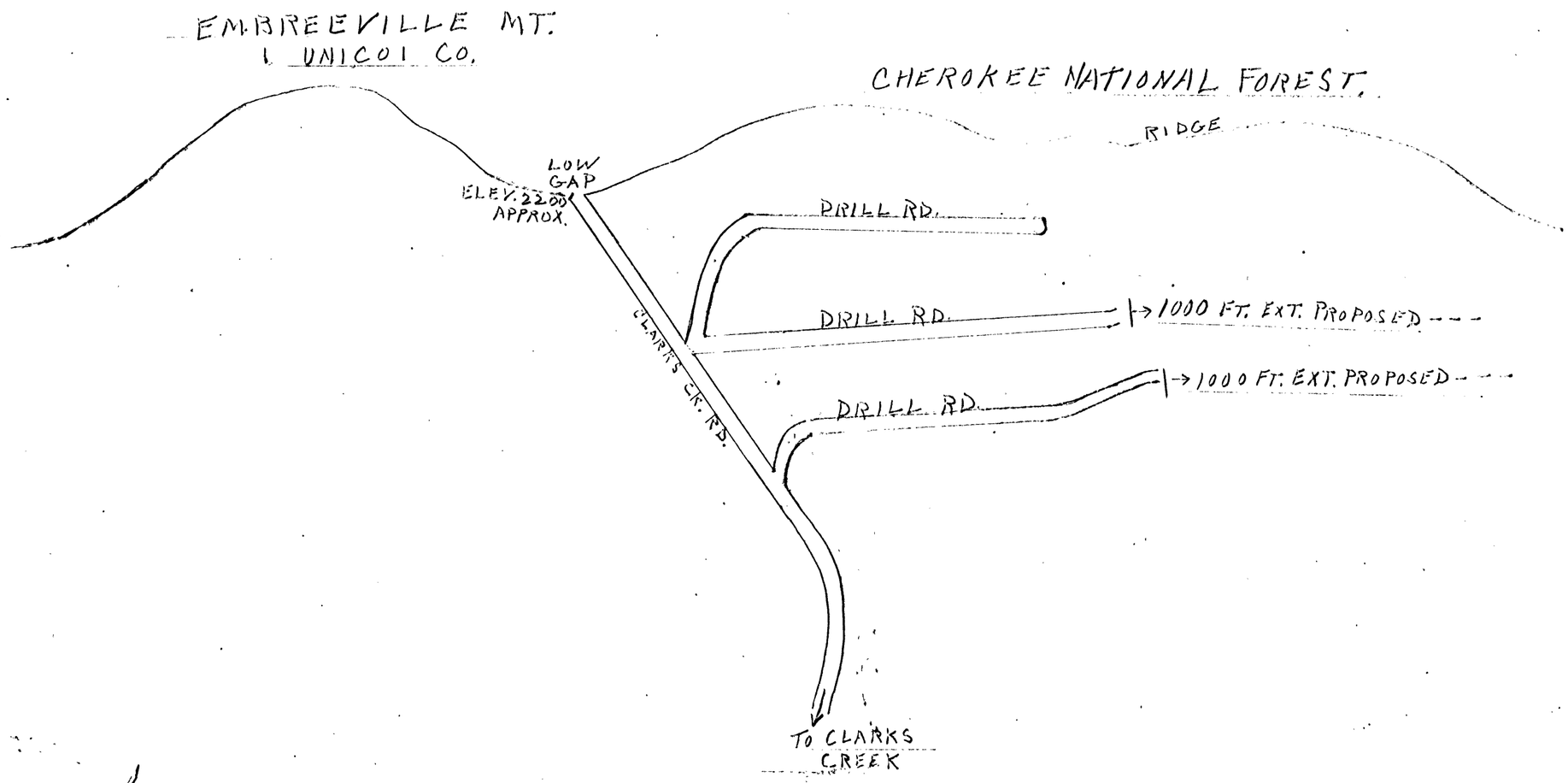
7.(b) Government (DMEA) 75% of $8,500.00 = $6,375.00
Tenn. Manganese Co. 25% 2,125.00
8,500.00

Tennessee Manganese Company will furnish their share of the costs as shown above as follows:

Supervision and Engineering	$1,000.00
40 hours dozing @ $20.00 per hr.	800.00
Analytical Chemical work, etc.	325.00
TOTAL Tennessee Manganese Co. share - - - - - -	$2,125.00

4(C)

PROPOSED MANGANESE PROSPECT AREA
CLARK CREEK SECTION



Tennessee Manganese Co.
Embreeville, Tennessee.

N

SCALE
ON ROADS
1" = 200' APPROX.

Sketch:
J. A. Chapman
Geologist.