DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4797

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

Note- Exhibits 2, 3, 7 and 8, attached to application, are to be returned to applicant. See letter of July 25, 1957, by Sidney Specter.

17963

Form MF-103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

Ura - Lang Corporation
1700 K Street, N.W.
Washington 6, D. C.

Field Address: Bonnie Kate Building
Elizabethton, Tennessee

RECEIVED JUL 25 1957 DMEA

APPLICANT NOT TO USE THIS BLOCK

Docket Number: 4797
Date Received: 7/25/57
Government Participation %:
Region: V
Division Code: 400

BUSINESS ORGANIZATION (Check one)

- Individual [ ]
- Corporation [X]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized: Tennessee

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
Harry Wender	Washington, D. C.	President
Sidney Spector	Washington, D. C.	Exec. Vice-Pres.
Troy N. Beaver	Johnson City, Tenn.	Vice-President
Clarence A. Levine	Washington, D. C.	Secretary
David Goldberg	Washington, D. C.	Treasurer

Mineral(s) for which you wish to explore: Manganese

Estimated Cost of Project: $ 10,000.00

LOCATION OF PROPERTY

Name	County	State
Burbage Lease	Washington	Tennessee
Sabin Lease	Washington	Tennessee

Known as Horse Cove Prospect

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Amended, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

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.

July 25, 1957
Dated

Sidney Spector
BY (Signature)

Executive Vice-President
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property, giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Amended.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 15539

URANIUM CORPORATION

EXPLORATION AND DEVELOPMENT OF MINERAL RESOURCES

FIELD OFFICE
Bonnie Kate Bldg
Elizabethton, Tenn.
Phone: 2-7111

EXECUTIVE OFFICE
1700 K Street, N.W.
Washington 6, D.C.
ME. 8-6532

ESTIMATE OF COSTS

DRILLING: 8 inch auger holes, twenty six (26) in number, averaging fifty (50) feet in depth, contract cost estimated at $2.50 per foot	$ 3,250.00
TRENCHING: An estimated 1,200 feet of 15 foot depth trenches with backhoe at $3.00 per foot	3,600.00
BULLDOZING: For drill and backhoe access roads, an estimated 80 hours at $10.00 per hour	800.00
CHEMICAL ANALYSES: Estimated twenty (20) samples at $18.00 ea.	360.00
GEOLOGIC CONSULTING & REPORT: Estimated six (6) days at $75.00, expenses $50.00	500.00
ENGINEER SUPERVISION: Estimated forty five (45) days at $25.00, expenses $100.00	1,225.00
MISCELLANEOUS EXPENSES: Payroll taxes, compensation insurance, etc.	265.00
Total Cost Estimate	$10,000.00

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DATE	INITIALS	CODE

URANIUM CORPORATION

EXPLORATION AND DEVELOPMENT OF MINERAL RESOURCES

FIELD OFFICE
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Phone: 2-7111

EXECUTIVE OFFICE
1700 K Street, N.W.
Washington 6, D.C.
ME. 8-6532

PERSONNEL & EQUIPMENT MADE AVAILABLE BY COMPANY

PERSONNEL:

1	Executive Officer for General Supervision	@ $30. per Day
1	Vice President in charge of Earth Moving	@ $30. per Day
1	Engineering Consultant	@ $2.50 per hour
1	Equipment Operator	@ $1.50 per hour
1	Ground Worker	@ $1.50 per hour
1	Mechanic	@ $1.50 per hour
1	Truck Driver	@ $1.50 per hour
2	Laborers	@ $1.00 per hour

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DATE	INITIALS	CODE

EQUIPMENT:

1	Tractor Shovel, HD11, ~~Allis-Chalmers~~	@ $1,000. per month
1	Caterpillar Dozer	@ $10.00 per hour
1	Dump Truck	@ $4.00 per hour

Note: The above personnel and equipment are available for work as per Cost Estimate, except that the drilling will be done under seperate contract.

Tenn. Geol. Survey Bull. 52

ore body uncovered had no great extent beyond the limits of the underground workings.

Prospecting for manganese is being carried on by the Tennessee Zinc Co., Inc., on the northwest side of the cove to the west of the Lick Log shafts. A large area has been cleared of vegetation and churn drill holes are being drilled. Some of the holes higher on the mountain side have encountered manganese ore close to the surface. Lower on the mountain side and close to the valley floor, rich bodies of ore have been found under 60 to 70 feet of overburden and at even greater depths. When the shape of these bodies of ore is known, the company plans to install new stripping machinery and remove the overburden.

OUTLYING AREAS

Horse Cove prospect.—The Horse Cove prospect is in Horse Cove in the northeast part of the Embreeville district, about 5 miles south of Johnson City (pl. 1). The prospect is on a bench north of the west end of the cove at an altitude of 2,540 feet. Mineral rights of much of the cove, including the tract prospected, are owned by A. S. Sabin of Jonesboro. The surrounding mountains are in the Cherokee National Forest.

The occurrence of manganese ore in Horse Cove was reported in 1918 (Stose and Schrader, 1923, p. 86), but apparently no work was done at that time. The Horse Cove prospect was opened in 1942 by W. M. Moody of Johnson City, who mined a small quantity of ore and sold 1.7 long tons of concentrates containing over 35 percent manganese.

Horse Cove is underlain by a small remnant of Shady dolomite, lying between the southeast-dipping Erwin formation of Cherokee Mountain, and the thrust fault on the northwest side of Buffalo Mountain (section D D′, p. 1.). The geologic setting of Horse Cove is much like that of Bumpass Cove but the area underlain by Shady is only 1½ miles long and less than half a mile wide. Throughout the cove, the dolomite has weathered to residual clay, which contains quartz dolocasts and jasperoid. The prospect lies at the edge of the cove on a bench which is probably a remnant of an old valley floor. West of the prospect this is covered by quartzite cobbles.

The largest openings are two pits on the top of the bench, each about 10 feet square and 6 feet deep. These expose waddy clay which contains many small nodules of earthy and dull-lustered hard manganese oxides showing many spots of a white clay mineral. There are also a few larger nodules and masses of manganese oxides, some of high grade, but others containing

much iron. One of the nodules was identified by J. M. Axelrod as psilomelane. In the clay of the pits, the ratio of recoverable concentrates to ore may be 1 to 10 or higher.

Down the slope to the east and southeast are about 12 smaller pits, most of which expose only red soil. In some, the soil contains pellets and small nodules of manganese oxides. Some of the deeper pits reach an iron cap, but none of them have tested the residual clay beneath.

The ore taken from the Horse Cove prospect was trucked to a washer on Sinking Creek north of Horse Cove. The washer was home made, and consisted of a long revolving cylinder made by bolting steel oil drums end to end. Inside the cylinder were baffles, attached to a stationary axis which sloped at a low angle. Ore and water were introduced at the upper end. The clay, agitated by the baffles, was carried off in suspension in the water through holes in the side of the cylinder. The nodules of manganese oxides moved by gravity to the lower end of the cylinder where the washer product was removed.

On the next spur northeast of the Horse Cove prospect, at an altitude of 2,350 feet, a single pit has been dug which entered weathered shale of the Helenmode member of the Erwin formation. No residual clay of the Shady was seen on this spur. Manganese oxides are reported to occur in the east end of Horse Cove, in Basil Hollow.[33]

In July 1943, the Metals Reserve Co. dug five trenches at the Horse Cove prospect. These trenches are 50 feet to 80 feet long and trend north and south across the area where the old workings are located. The first two trenches on the east encountered only barren waddy clay. The third exposes nodules of manganese oxides in the dark-brown to black surface soil but none in the brown residual clay beneath. The fourth trench exposes a small pocket of ore in brown residual clay. The fifth trench exposes brown laminated manganese-stained clay. The amount of ore found by this prospecting is small and no further work has been done.

Warm Cove.—Warm Cove is about 3½ miles northeast of Embreeville, halfway between Bumpass Cove and Horse Cove (pl. 1). Like Bumpass and Horse Coves, Warm Cove is a limestone valley, mantled by residual clay and soil, but no outcrops were observed in it during the present investigation and no manganese deposits have been reported. The valley has been interpreted as a window in the Bald Mountain thrust sheet, underlain by Knox dolomite rather than Shady dolomite (Keith, 1907, p. 8).

[33]The name Brasil Hollow is used by local residents, but the locality is called Basil Hollow on published maps.

Docket 4791

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Geologic Report on the

Horse Cove Manganese Prospect

Washington County, Tennessee

by George D. Swingle

Introduction

This report is submitted at the request of Mr. Troy Beaver of the URA-MANG Corporation, 1700 K Srteet N. W. Washington 6, D. C. The writer spent August 22nd and 24th, 1956 in field examination of thes prospect.

Location and accessibility

The Horse Cove prospect is in Washington County, Tennessee approximately 4 miles south of Johnson City. The site is in the extreme northwest corner of the T. V. A. 7 and one-half minute quadrangle Unicoi, 199-NE. The workings are at an elevation of about 2540 feet, being on a east-west trending ridge along the northwestern border of Horse Cove.

The prospect is accessible by a county road, locally called the Buffalo Mountain road, from Johnson City. As indicated on plate 1 an access road extends from this county road to the workings. Rail shipping sites are at Johnson City.

Property description

Figure 5 is a tracing made from a property map supplied by the Ores Development Corporation. This map indicates the Sabin and Burlage tracts containing some 5200 acres more or less. This acreage includes Horse Cove as well as lands in the surrounding mountains.

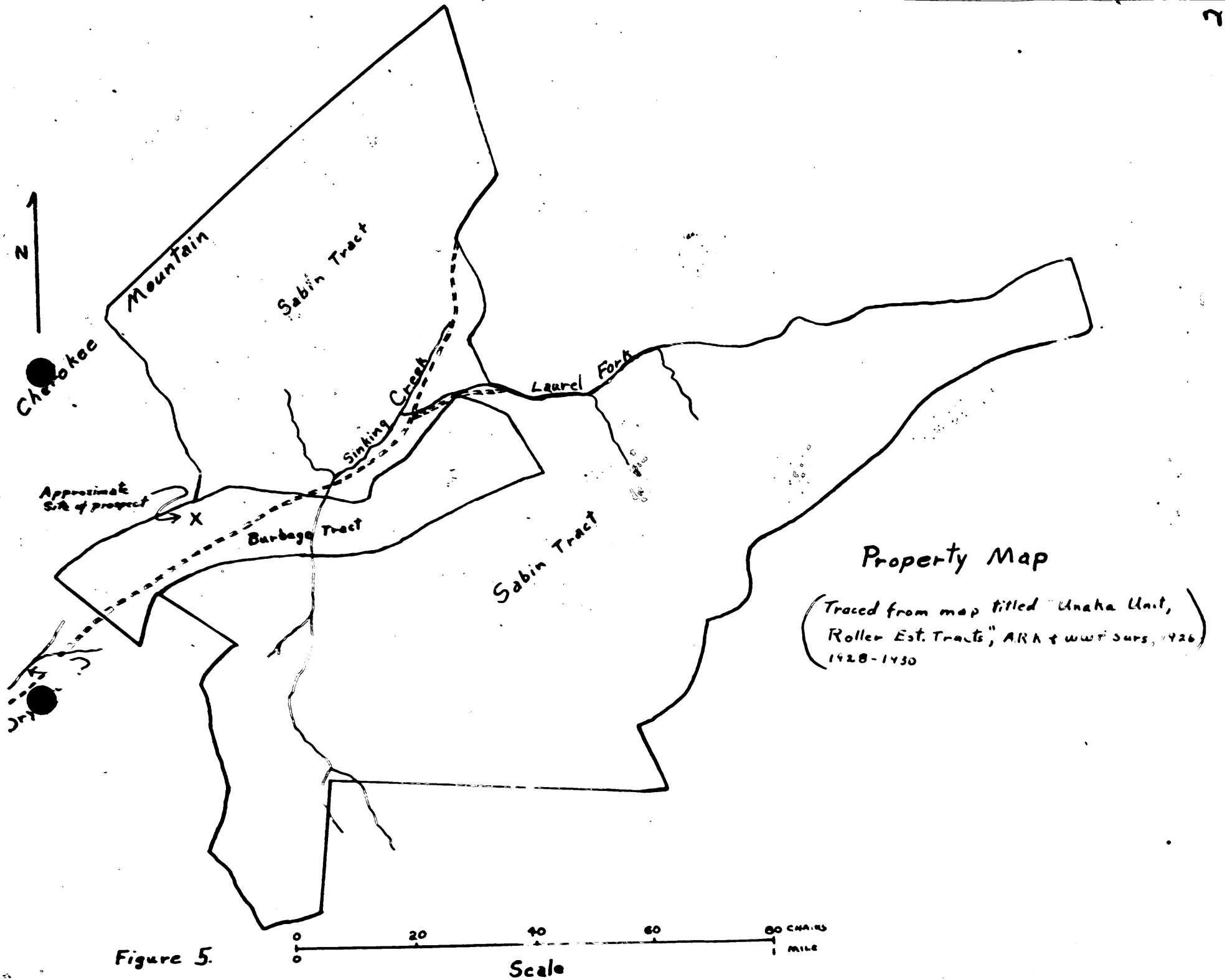

N
Cherokee
Mountain
Sabin Tract
Sinking Creek
Laurel Fork
Approximate site of prospect
X
Burbage Tract
Sabin Tract
Property Map
(Traced from map titled "Unaka Unit, Roller Est. Tracts", ARA & WWT Surs, 1926 1428-1430)
0
20
40
60
80 CHAINS
0
1 MILE
Scale

Figure 5.

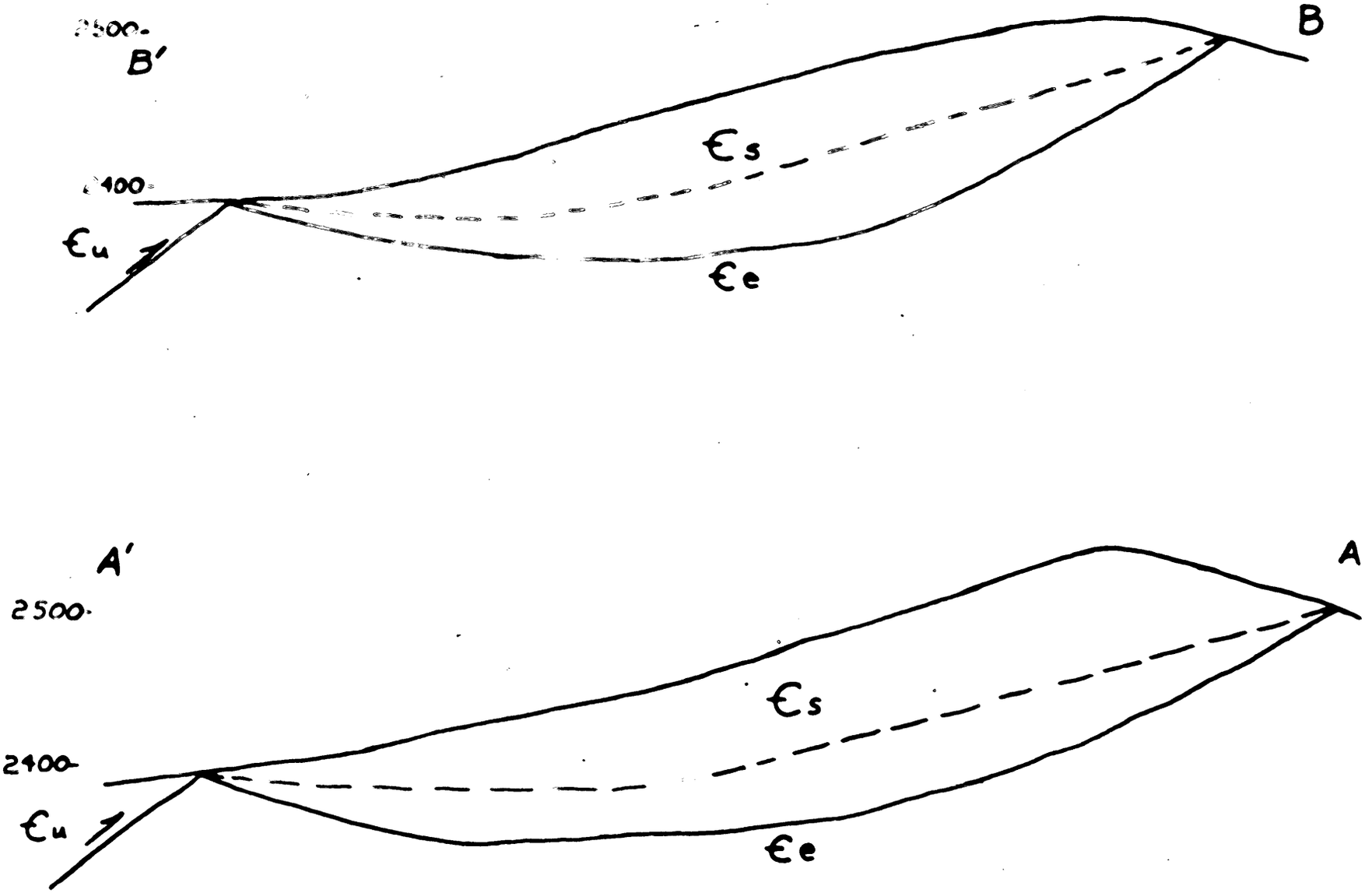


Figure 1. Diagramatic cross sections along lines A-A', B-B' on geologic map-
indicating possible thicknesses of Shady residuum
(Erwin (Ce) Shady (Cs) contact as a solid line assuming 30° dip - dashed line
if 15° dip [illegible]

History of the prospect

Bulletin No. 52 of the Tennessee Division of Geology describes the prospect and gives an account of its development until 1943. The following quotation is from pages 269 and 270 of this bulletin.

"Horse Cove prospect.—The Horse Cove prospect is in Horse Cove in the northeast part of the Greeneville district, about 5 miles south of Johnson City, Tenn. The prospect is on a bench north of the west end of the cove at an altitude of [illegible] feet. Mineral rights of much of the cove, including the tract [illegible], are owned by A. S. Sabin of Jonesboro. The surrounding mountains are in the Cherokee National Forest.

The occurrence of manganese ore in Horse Cove was reported in 1918 (Stose and Schrader, 1923, p. 96), but apparently no work was done at that time. The Horse Cove prospect was opened in 1942 by W. M. Moody of Johnson City, who mined a small quantity of ore and sold 1.7 long tons of concentrates containing over 35 percent manganese.

Horse Cove is underlain by a small remnant of Shady dolomite, [illegible] and northwest-dipping Erwin formation of Cherokee Mountain, and the [illegible] fault on the northwest side of Buffalo Mountain (section D D', p. 1.). The dolomite rolling of Horse Cove is much like that of Bumpass Cove but the area underlain by Shady is only 1 1/2 miles long and less than half a mile wide. In places in the cove, the dolomite has weathered to residual clay, which contains quartz dolomite and manganese. The prospect lies at the edge of the cove on a [illegible] which is probably a remnant of an old valley floor. West of the prospect [illegible] covered by quartzite cobbles.

The largest openings are two pits on the top of the bench, each [illegible] 6 feet deep. These expose waddy clay which contains many [illegible] and brecciated hard manganese oxides showing many spots of [illegible]. There are also a few larger nodules and masses of manganese [illegible], some of high grade, but others containing much iron. One of the [illegible] is psilomelane. In the clay of the pits, the ratio of recoverable concentrates to ore may be 1 to 10 or higher.

Down the slope to the east and southeast are about 12 smaller pits, most of which expose only red soil. In some, the soil contains pellets and small nodules of manganese oxides. Some of the deeper pits reach an iron cap, but most of them have bottomed in residual clay beneath.

The ore taken from the Horse Cove prospect was trucked to a washer on Sinking Creek east of Horse Cove. The washer was home made, and consisted of a long revolving cylinder made by bolting steel oild drums end to end. Inside the cylinder were baffles, attached to a stationary axis which sloped at a low angle. Ore and water were introduced at the upper end. The clay, agitated by the baffles, was carried off in suspension in the water through holes in the side of the cylinder. The nodules of manganese oxides moved by gravity to the lower end of the

cylinder where the washer product was removed.

On the next spur northeast of the Horse Cove prospect, at an altitude of 2,350 feet, a single pit has been dug which entered weathered shale of the Helenmede member of the Erwin formation. No residual clay of the Shady was seen on this spur. Manganese oxides are reported to occur in the east end of Horse Cove, in Basil Hollow.

In July 1943, the Metals Reserve Co. dug five trenches at the Horse Cove prospect. These trenches are 50 feet to 80 feet long and trend north and south across the area where the old workings are located. The first two trenches on the east encountered only barren waddy clay. The third exposes nodules of manganese oxides in the dark-brown to black surface soil but none in the brown residual clay beneath. The fourth trench exposes a small pocket of ore in brown residual clay. The fifth trench exposes brown laminated manganese-stained clay. The amount of ore found by this prospecting is small and no further work has been done.

Mr. Troy Beaver states that some 4 months prior to the date of this report the Tennessee Manganese Co. further explored this prospect. The trenches mentioned in the above quotation from bulletin 52, were cleaned out and several [illegible] auger holes were put down. The location of these trenches and auger holes are shown on plate 1.

Geology

The geology of the Horse Cove area was mapped in detail by [illegible] in 19[illegible]. The results of his mapping are incorporated in Bulletin [illegible], [illegible] of the Tennessee Division of Geology. The geologic maps in [illegible] of Horse Cove is underlain by generally southward dipping [illegible]. The Shady outcrop area is bounded to the north by the underlying [illegible] of the Erwin formation, and is overridden to the south by the clastic [illegible] along the Unicoi Mountain fault.

The writer is in general agreement with the structural and stratigraphic [illegible] outlined above. However, it appears that the Erwin formation is present south of the Shady dolomite as indicated on plate 1. If this interpretation is correct then the structure in the prospect area is synclinal, as sketched in figure 1, rather than anticlinal. Since the thickness of Shady residuum, in which

the manganese occurs, is largely dependant upon the amount of the formation preserved in this area the structure of the prospect area should be determined early in the drilling program as outlined in a later section of this report.

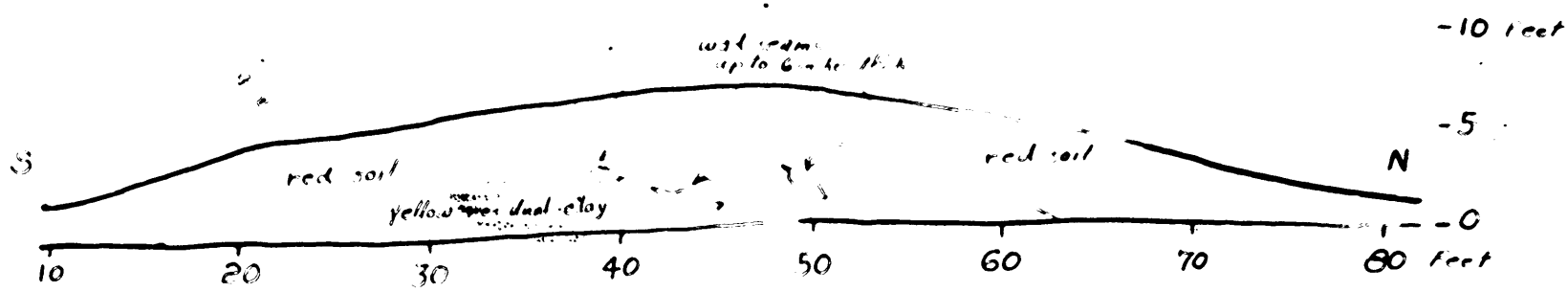
Outcrops are sparse in the area covered by plate 1. No outcrops of the Shady dolomite were noted in this area and only a few exposures of Erwin and Unicoi were observed. The outcrop area of Shady as shown on plate 1 is based solely on the presence of yellow to red soils typical of that formation. The thickness of Shady residuum is unknown and can be determined only by drilling or trenching. About 200 feet west and southwest of trench 1 near the trail and [illegible] shown on plate 1 sandstone float is abundant. It is not known if this float is from the and area of Erwin or if it is colluvium from the ridge to the [illegible].

Few scattered water worn cobbles were observed near the workings [illegible] possibly an old terrace level.

Workings

[illegible] trenches, as indicated on plate 1, are present. These [illegible] feet in width. Trench No. 1 on the west is 100 feet in length [illegible] the northern end. Trench No. 2 is 90 feet long and has a [illegible] feet. Trench No. 3 is 70 feet in length with a maximum [illegible] trench No. 4 is 80 feet long with a maximum depth of 8 feet. [illegible] feet in length and is 2 feet deep along the western wall.

[illegible] of several old test pits, as shown on platel, These [illegible] months ago by the Tennessee Manganese Co. The one [illegible] of the trenches and near the county road contains 11 holes. [illegible] with debris or caved. The deepest hole in this area is 9 [illegible] abandoned hole indicated 60 feet southwest of hole No. 5.



Trench #2 Sketch of west wall (barren unless otherwise indicated)

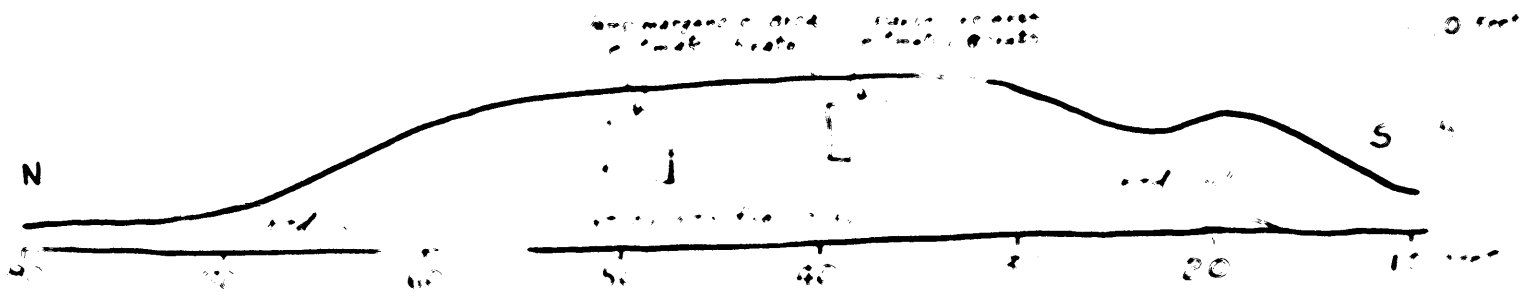
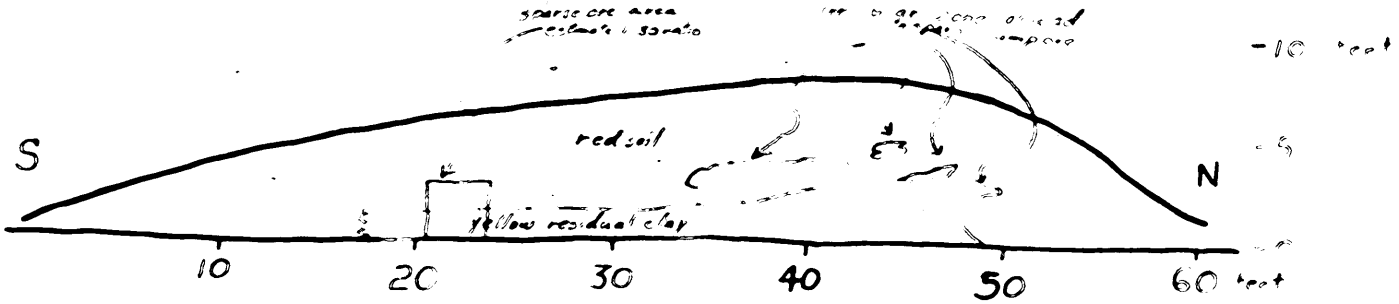


Figure 2. Trench #2 Sketch of east wall barren unless otherwise indicated



Trench #3 Sketch of west wall (barren unless otherwise indicated)

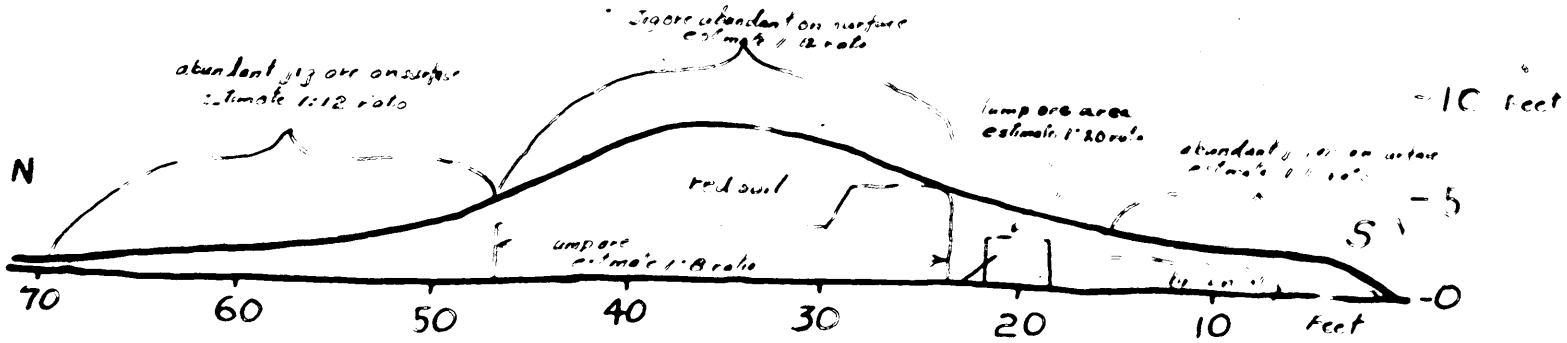
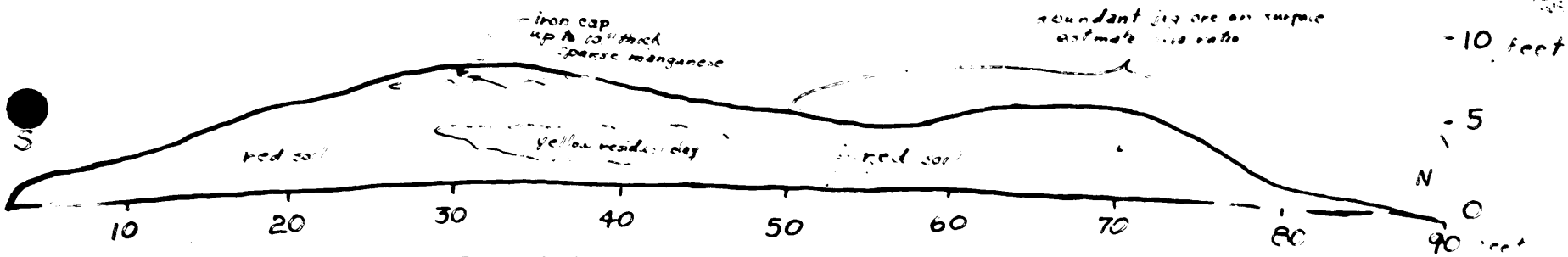


Figure 3. Trench #3 Sketch of east wall (barren unless otherwise indicated)



Trench #4 Sketch of west wall (barren unless otherwise indicated)

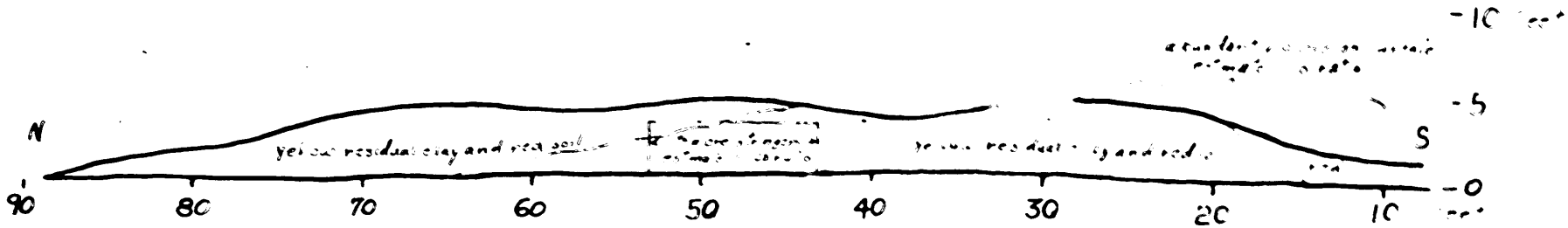


Figure 4. Trench #4 Sketch of east wall (barren unless otherwise indicated)

on plate 1 are proposed. In order to secure adequate and representative cuttings an 8 inch auger is recommended. It is estimated that the 26 holes will average 50 feet in depth. In the event ore of commercial interest is encountered in the preliminary drilling this ore should be delineated by closer spaced holes.

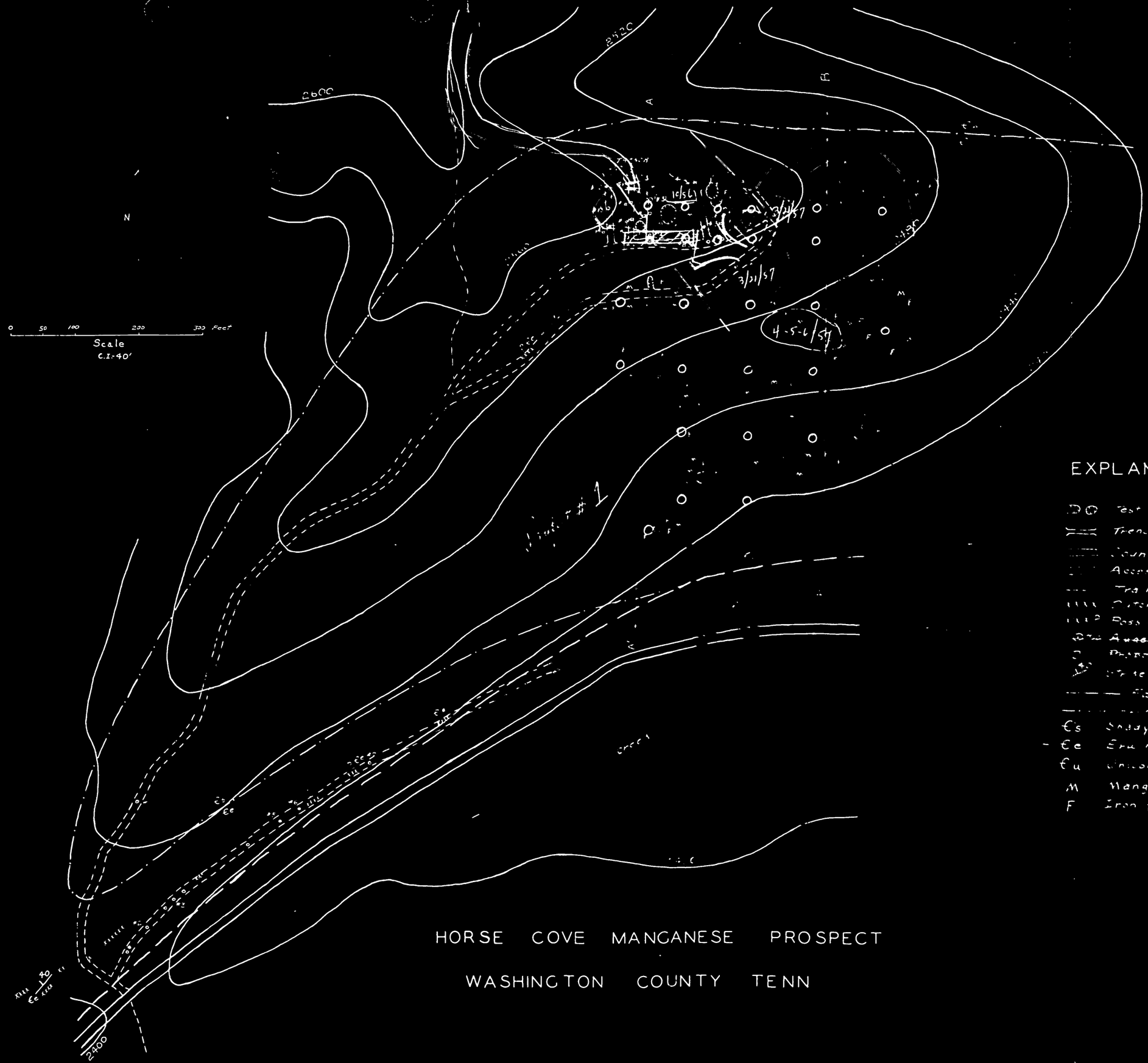
In order to secure reasonably accurate and representative samples of the ore encountered by drilling the mineralized area or areas should be traversed by backhoe trenches. The amount of trenching required is of course unknown at present, however, a maximum estimate of 1200 linear feet of 15 feet depth trenches is proposed.

It is suggested that in the preliminary drilling stage that the roughly north-south line of seven proposed drill holes which lie some 60 feet east of line A-A' on plate 1 be drilled first. These holes, which lie athwart the structure, should be carried to bedrock in order to determine the thickness of Shady residuum and the structure of the underlying rocks as inferred in fugure 1.

Signed George D. Swingle

George D. Swingle
Ass't. Prof. Geology
University of Tennessee

Submitted Aug. 31, 1956



EXPLANATION

- Test pit
- Trench
- County road
- Access road
- Trail
- Ditch
- Possible outcrop
- Auger hole
- Prospected auger hole
- Strike and dip of beds
- Fault
- Approximate contact of Sandy dolomite outcrop
- Ꞓs Sandy dolomite
- Ꞓe Erwin formation
- Ꞓu Unicoi formation
- M Manganese float
- F Iron float

HORSE COVE MANGANESE PROSPECT

WASHINGTON COUNTY TENN

U. S. Government Messenger Envelope

andard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
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nr. W. N. Chamberlain D. M. E. A.	RUN STOP		RUN STOP
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DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-16	Holt	400
9-16	Martin	400
9/18	GCS	130
9/18	Hopes	130
9/18	Wilson	130
		~~110~~
		100
9/19	C	220
		225

SEP 18 1957

Ura-Mang Corporation
1700 K Street, N.W.
Washington 6, D.C.

Re: Docket No. DMEA 4797 - Manganese
Horse Cove Prospect
Washington 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 our information, although noting manganese mineralization on the Horse Cove Prospect area, indicates to us that the probability of disclosing minable manganese ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

As your letter of July 25, 1957, requested that they be returned, the following exhibits submitted with your application are enclosed:

Exhibit 2. Geological Report by George D. Swingle, University of Tennessee.
" 3. Plate 1 of Geological Report.
" 7. Copy, Mineral Lease, Burbage Property.
" 8. Copy, Mineral Lease, Sabin Property.

8623

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

Sincerely yours,

Frank E. Johnson (by esy)

Enclosure

Acting Administrator

SPHolt/dlm 9-16-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. V.
Messrs. Gilbert DeHuff, Jr. USBM
T. H. Kiilsgaard, USGS

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-16	Holt	400
9-16	Martin	400
		140

September 16, 1957

MEMORANDUM

To: Administrator

From: Division of Iron and Ferro-Alloys, DMEA

Subject: Denial of request for exploration assistance in the amount of $10,000.00
Docket No. DMEA 4797 - Manganese
Horse Cove Prospect
Washington County, Tennessee

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

(1) The Applicant, Ura-Mang Corporation, 1700 K Street, N.W., Washington 6, D.C., requested exploration assistance in the amount of $10,000.00 for bulldozing access roads, auger drilling and trenching.

(2) The Applicant controls, by lease from the owners, Beverly S. Burbage et al., and Maud R. Sabin et al., respectively, two tracts of land, known as the Burbage tract and the Sabin tract, both situated in the Horse Cove district, Washington County, Tennessee, about six miles south of Johnson City, Tennessee.

(3) The proposed program is to explore the manganese deposits of the Horse Cove Prospect area by bulldozing 80 hours to prepare access roads, 1,500 feet of trenching with backhoe, and 1,300 feet of auger drilling in 26 holes.

(4) In the Horse Cove Prospect area manganese occurs as nodules and masses of manganese and iron oxides in the Shady dolomite, overlying the Helenmode member of the Erwin sandstone. The remnants of the Shady dolomite, as exposed by the Applicant's stripping and drilling operations between October 1956, and June 1957, are small, and the area to the east and southeast, proposed to be explored, is surrounded on three sides by work which proved unsuccessful, and is not expected by the Field Team examiners to be better than that already explored. No reserves of measured or indicated ore are present.

(5) The Field Team concurs with the conclusions of its field examiners, and recommends that the application be denied. The Commodity Divisions of the Geological Survey and the Bureau of Mines also concur in this recommendation.

W S Martin
W. S. Martin, Director
Division of Iron and Ferro-Alloys

8623

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DMEA
RECEIVED SEP 12 1957

DATE	INITIALS	CODE
9/12	Q	220
9/13	WSM	400

[illegible]

Date September 11, 1957

[illegible] No. 4797
[illegible] No.
Commodity Mn
Name of applicant Ura- Manganese Corp.
Name of property Horse Cove Prospect
Location of property Washington County, Tenn.
Estimated cost of project $10,000

To: W. S. Martin, DMEA

[illegible]

G. L. DeHuff, Jr., Commodity Specialist
Branch of Ferrous Metals and Ferroalloys
Field Team Report

[illegible] Application, Field Team Report, [illegible]

1. Date of project assignment: 8/29/57 2. Date received by [illegible]: 9/3 or 4/57

3. Data on [illegible] on the property known to reviewer: Yes [X] No [ ]

4. Data on [illegible] in nearby properties known to reviewer: Yes [X] No [ ]

5. Information available on past production: Yes [X] No [ ]

6. Other pertinent factors known to reviewer: Yes [ ] No [ ]

7. Explain items marked yes above:

Please see my August 7, 1957 memo.

8. Factors meeting special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Reject [X]
   d. Agree with Field Team [X]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)

G L DeHuff Jr.

4024

Dated Sept. 11

De Huff Mexico --

8/27/57 Gro Transmittal 4797

Mr. Sheets called and advised that F.T. has examined his property. Wants us to call him ME-8-6532, make an income Report.

T. L. Chapman

Docket 4797

Called Mr. Sparks at phone: ME 8-6532. His office said he was out of town, would return about Wednesday (Sept. 11), and they would have him call me.

S. P. Holt
9.9.57

IN REPLY REFER TO:

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

September 5, 1957
Re: DMEA 4797
Ura-Mang Corporation
Horse Cove Prospect
Washington County, Tennessee
$10,000.00 - 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 applicant requested assistance in exploring, by auger drilling, trenching and bulldozing, a piece of unexplored ground adjoining an open pit operation from which 18 carload shipments of manganese ore had been made.

The Field Team found conditions somewhat less favorable than might be inferred from the application. Part of the area to be tested has been drilled. No data are available concerning the results, but, by inference, they were unfavorable and by inference the small area not tested probably contains no ore. Of the 18 carloads shipped, only 7 were of ore grade, 40% Mn, and they, in part at least, had been "sweetened" by the addition of concentrate.

In view of the probable lack of shipping grade material and the lack of a treatment plant, and the incompetence of the applicant, the Field Team recommends that the application be denied.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

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DMEA
RECEIVED SEP 6 1957

DATE	INITIALS	CODE
9/6	O	220
9/6	WSM	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

August 29, 1957

Memorandum

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

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

Subject: Field Examination Report, DMEA-4797 (Manganese)
Ura-Mang Corporation, Washington, D. C.
Horse Cove Prospect, Washington County, Tennessee

Enclosed are the original and two copies of the subject examination report. Denial of the application is recommended.

Also enclosed are three copies of a letter from GSA, concerning the 18 lots of manganese concentrate tendered to GSA by Ura-Mang Corporation. The analytical data for the 18 lots are summarized in Table 1 of the examination report. Most of the copies of GSA's analyses are so faint that we could not make legible copies here; however, we are enclosing one copy of the analysis and invoice on Lot No. 3, which is the one you requested us to obtain to replace the copy submitted by the Applicant.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

Enclosures 8

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DMEA
RECEIVED SEP 3 1957

DATE	INITIALS	CODE
9/3	Q	220
		130
9/6	Q	220
	WSM	400

Reviewed by
DMEA OPERATING COMMITTEE
9-6-57
(date)

UNITED STATES

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXAMINATION REPORT, FIELD TEAM

REGION V

OFFICIAL FILE COPY
DMEA
RECEIVED 3 1957
DATE
9/9 NSM 130 220 400

DMEA-4797, HORSE COVE PROSPECT (Manganese)
Washington County, Tennessee

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

and

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
9-6-57
(date)

August 22, 1957

EXAMINATION REPORT

DMEA-4797, HORSE COVE PROSPECT (Manganese)

Applicant: Ura-Mang Corp., 1700 K Street NW, Washington 6, D. C.

SUMMARY

A small deeply weathered synclinal remnant of Shady dolomite contains residual clay with nodules of manganese and iron oxides and waddy clay. Previous exploration and mining has shown that the area has little possibility of containing a significant amount of manganese ore. The Applicant lacks experience in exploration and mining, and appears to be financially irresponsible. Denial is recommended.

INTRODUCTION

Examination

The prospect was examined on August 22, 1957. The examiners were accompanied by Mr. Tony Lucas, a licensed civil engineer representing the Applicant and Mr. Jack Brettler, whose connection with the Applicant was never made clear to us. Mr. Stuart Maher, Principal Geologist, Tennessee Division of Geology, also accompanied the examiners, by invitation of the Field Team and with permission of the Applicant.

Approximately three hours were spent on the property. In addition, parts of August 22 and 23 were spent in examination of other properties of the Applicant and in interviews with the local GSA representative and various mining people in the district.

Location

The Horse Cove prospect area, in Washington County, Tennessee, is six miles south of Johnson City, Tennessee, and can be reached by an all-weather county road, either from Johnson City, or from Embreeville, about eight miles to the south. The prospect area is on the south slope

of Cherokee Mountain, at 2200 to 2450 feet altitude. The prospect area is shown on Figure 1 which is an enlargement of four quadrangles (Johnson City, Jonesboro, Erwin, and Unicoi). Most of the prospects are on the Unicoi quadrangle.

PREVIOUS EXPLORATION AND MINING

As reported in Tennessee Division of Geology Bulletin 52, the area was explored in both World Wars I and II, and a small amount of concentrate was shipped. In 1955, the Tennessee Manganese Company, under the direction of T. K. Li, explored the Horse Cove area with test pits and drill holes, but no evidence of these is visible and we have so far been unable to obtain any records of the work. Tennessee Manganese Company surrendered its lease after completion of this work.

Between October 1956 and June 1957, the present Applicant did both exploration and mining on the Burbage lease. They have shown some of the stripping on the Swingle map. Three bulldozer trenches and two irregularly-shaped pits were dug at the "Prospect No. 2" area, east of the Swingle map, at about 2280 to 2350 altitude, between the county road and the branch. Some nodules of manganese and iron oxides can be seen here, and apparently most of the ore hauled to the washer by the Applicant came from these pits.

In addition, the Applicant drilled at least 33 eight-inch churn drill holes 20 to 50 feet deep in the area south and southwest of the stripped areas. The stripping and drilling have explored about 75 per cent of the area suggested by Swingle. No records were kept of this drilling, but the samples were piled, in 5-foot sections, on the surface near the holes.

Nothing was found in any of these holes which the Applicant considered worth assaying. We examined what is left of these samples and agree with that conclusion. (Incidentally, when we asked Mr. Lucas why no logs or sections of these drill holes were prepared, he said that by the time the drilling was completed he was getting tired of working without getting paid so he did not do any more. He says the Applicant owes him approximately $6000 for services rendered over the past two years.)

During 1957, the Applicant operated a log washer and jigs on Briar Creek (Erwin quadrangle), about three miles southwest of Horse Cove Gap. At the same time, they were prospecting or mining in at least five other localities in three neighboring counties and trucking the ore to the Briar Creek washer, so that it is impossible to determine just what was produced from any one mine or prospect. Table 1 is a list of all deliveries to General Services Administration by Ura-Mang Corporation. Only 7 of the 18 carload lots were acceptable, and these were brought up to 40% grade only by the addition of high-grade (+50% Mn) concentrates bought from other producers. We examined three of these carloads (Lots 15, 17, and 18) in the freight yards at Erwin, Tennessee. About one-fourth of Lot No. 18 is +50% concentrate bought from Victor Mining Company, yet the entire carload contains only 40.18% manganese.

The Briar Creek mill is being dismantled, and as far as we could ascertain, the Applicant now has no active mines or mills. There is no equipment on the Horse Cove property.

Table 1.--Record of deliveries by Ura-Mang Company to GSA during 1957

Lot No.	Date	Long Tons	Partial analysis (dry basis) % Mn	% Fe	% SiO_2	% P	Status (3)
1	4/3	*	37.15	11.25	7.51	0.32	R
2	4/19	*	39.40	8.57	8.91	0.17	R
3	4/23	48.9	40.77	5.51	9.76 12.35	0.14	A
4	4/25	43.2	42.73	5.30	9.85	0.15	A
5	5/9	*	36.34	11.08	10.72	0.11	R
6	5/13	39.8	41.05	7.47	10.51	0.12	A
7	5/15	*	39.53	8.08	11.43	0.10	R
8	5/20	*	37.98	10.77	10.49	0.12	R
9	5/27	38.2	40.51	7.74	11.41	0.08	A
10	5/27	*	38.60	7.70	12.71	0.10	R
11	{6/28}	(1)	40.23	5.83	10.36	0.08	A
11			37.18	11.50	>15.0	0.10	R
12	7/2	*	34.60	4.22	10.34	0.12	R
13	7/1	*	36.38	3.11	8.12	0.11	R
14	7/15	*	31.96	5.70	13.87	0.15	R
15	7/15	*	35.98	10.61	10.40	0.18	R
16	7/23	(2)	40.27	6.45	7.68	0.23	A
17	7/29	*	37.75	9.13	9.79	0.11	R
18	8/8	(2)	40.18	6.76	9.72	0.21	A

*Approximately 50 tons; actual weight of rejected lots unknown.
(1) Approximately 50 tons. Second analysis is a check at destination and indicates lot is unacceptable.
(2) Approximately 50 tons.
(3) A = Accepted; R = Rejected.

GEOLOGY AND ORE RESERVES

The geology is adequately and correctly described in Tennessee Division of Geology Bulletin 52, and in the report of George D. Swingle which accompanies the application. On the basis of stripping, trenching, and drilling done by the Applicant between October 1956 and June 1957, we would modify Mr. Swingle's cross-sections (Figure 1 of his report) by showing a steeper dip on the Shady-Erwin contact and therefore a thinner mantle of Shady residuum. We discussed this with Mr. Swingle, but he has not seen this later work.

In the large area indicated on Plate 1 of the Swingle report as being stripped in October 1956, the readily identifiable residuum of the Helenmode member of the Erwin is now exposed everywhere in the floor of this shallow cut. This definitely eliminates this area, as commercial manganese ores do not occur in the Helenmode or older beds. Further, the Applicant's drill holes to the south and southwest of that excavation showed that the Helenmode is present at only 10 to 25 feet depth throughout most of that area.

Shady residuum is present along the slope from the prospect area eastward to about the junction of the small branch and Sinking Creek, just west of bench mark RFG 166 (Fig. 1). The rest of the Burbage and Sabin leases are underlain by Erwin and older rocks and are not favorable for the occurrence of manganese ores.

No measured or indicated reserves are present.

PROPOSED EXPLORATION

According to Mr. Lucas, the Applicant's proposal is to drill and trench the area to the east and southeast from the stripped area, from about 2440 feet altitude down to the lower cuts of Prospect No. 2 at about 2350, a horizontal distance of about 300 feet. This is the only remaining untested area. However, it has already been surrounded on three sides by work which proved unsuccessful and there is no reason to expect this untouched remnant to be better than the surrounding area.

Several items in the Applicant's cost estimates (e.g. $30 per day for a Vice President in charge of earth moving) would not be acceptable, but as we cannot possibly recommend approval of this application, we are not submitting an alternate estimate of costs.

No proposal was made by the Applicant for any work on the Sabin lease area, either in the application or during the field examination.

COMPETENCE OF THE APPLICANT

So far as we can learn, this Applicant is not experienced in mining. Some of the officers, along with other associates who may or may not be in the Ura-Mang venture have been dabbling in uranium, manganese, lithium, barite and other minerals in this area for the past three or four years but we do not know of a single successful operation in which they have been engaged. The haphazard way in which the Horse Creek prospect and the Briar Creek mill were operated is typical of these operations.

When we asked Mr. Lucas how the Applicant expected to pay its 25% of the proposed exploration cost if it was unable to pay him for supervising the recent drilling, he replied "Probably by the sale of additional stock."

The most recent shipment from the Briar Creek washer (lot #18) is still in the Erwin freight yards, with a court order tacked on the car indicating that it was attached because of court action against Ura-Mang Corporation by Victor Mining Company. We were told that the suit was brought by the latter company because they had not been paid for the high-grade concentrates which "sweetened" this carload to acceptable grade.

We also learned (not from the Applicant's representative) that the Briar Creek mill is being dismantled because a creditor foreclosed. The mill was sold by the creditor to a barite mining company and is being removed to Greene County, Tennessee.

CONCLUSIONS AND RECOMMENDATIONS

We recommend denial of this application for the following reasons:

(1) The deposit shows no promise of containing a significant deposit of manganese ore.

(2) What manganese ore there is is largely contaminated with iron and silica, so that it is difficult to make a 40% Mn concentrate.

(3) The Applicant appears to be unable to conduct a satisfactory exploration or mining operation, and appears unlikely to be able to hire competent supervision.

(4) The Applicant is probably financially unable to conduct the proposed work and to furnish its 25 per cent of the costs. It appears to us that the principal value of the contract to the Applicant would be as basis of selling additional stock.

August 22, 1957.

R. A. Laurence, Geologist, USGS

V. J. Lynch, Mining Engineer, USBM

g

LAW & COMPANY
CONSULTING AND ANALYTICAL CHEMISTS
ATLANTA, GA.
MONTGOMERY, ALA. WILMINGTON, N. C.

ATLANTA, GA. April 25, 1957

Chemical Report

Number 8BK 958 Sample of Manganese Ore Received 4/23

For General Services Administration
Federal Supply Service, Atlanta, Ga.

Marks Sample No. 3, Lot 3, Approx. 50 LT, Type II, Cert. No. 4-111-1, 47X4401 from Ura-Mang. Corp. Elizabethton, Tenn. sampled 4/22/57 by A. Mancusi-Ungaro, Car CRR-16022.

Description

		Dry Basis
Moisture	3.00%	
Manganese (Mn)	39.55%	40.77%
Silica (SiO_2)	9.47%	9.76%
Aluminum Oxide (Al_2O_3)	2.51%	2.59%
Iron (Fe)	5.34%	5.51%
Lead (Pb)	less than 0.01%	less than 0.01%
Copper (Cu)	less than 0.01%	less than 0.01%
Zinc (Zn)	less than 0.01%	less than 0.01%
Phosphorus	0.138%	0.142%
	Passes	**Retained**
U. S. Standard Sieve, 20 mesh	1.9%	98.1%

This sample meets Specifications, Sec. 5(a) Chemical Requirements, Chapter XIV--General Services Administration, Manganese Regulations.

Respectfully submitted,

LAW & COMPANY

By Sonner Henry

Orig. & 5 cc: A. Mancusi-Ungaro

cc: Ura-Mang. Corp. Elizabethton, Tenn.

GENER[illegible] SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

ACCEPTANCE [illegible]

TO [illegible]

LOT 5
[illegible]-16022

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER

CERT NO. 4-211-1

Subject to [illegible] and [illegible] of the Manganese Regulation establishing the Government's Purchase Program for [illegible] Manganese Ore or Concentrates in carload lots, the Government accepts [illegible] long tons [illegible] Manganese Ore ☐ Concentrates delivered f.o.b. by you at Erwin, [illegible] addressed to [illegible] Manganese Storage Site, Bimerville, Virginia on B/L No. [illegible]. Such material has a moisture content of [illegible] % and analyses in a dry basis as follows:

[illegible]	BASIS	ANALYSES	
[illegible]	[illegible]	MANGANESE (Mn)	40.77 %
[illegible]	[illegible]	IRON (Fe)	5.51 %
[illegible]	[illegible]	SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	13.35 %
[illegible]	[illegible]	PHOSPHORUS (P)	0.142
[illegible]	[illegible]	COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	less / 0.05 %

[illegible] AND SETTLEMENT DATA

							DOLLARS
[illegible]						BASE PRICE - PER L.D.T. UNIT	[illegible]
[illegible]	DIFFERENCE		DOLLARS		DOLLARS		
[illegible]	[illegible]	x	.005	=	[illegible]		
[illegible]	[illegible]	x	.005	=	[illegible]		
						DOLLARS	
						NET INCREASE	[illegible]
[illegible] ALTIS[illegible]	DIFFERENCE		DOLLARS		DOLLARS		
[illegible]	[illegible]	x	.02	=	[illegible]		
[illegible]	[illegible]	x	.015	=	[illegible]		
[illegible]	[illegible]	x	.01	=	[illegible]		
[illegible]	[illegible]	x	.0075	=	[illegible]		
[illegible]	[illegible]	x	.01	=	[illegible]		
[illegible]	[illegible]	x	.0033	=	[illegible]		
[illegible] (up to and including 0.30 percent)					NET DECREASE	[illegible]	
						NET AMOUNT OF ADJUSTMENT PLUS	[illegible]
						MINUS	[illegible]
						ADJUSTED BASE PRICE - PER L.D.T. UNIT	[illegible]

[illegible]		LONG DRY TONS		% MN.		L.D.T. UNITS		ADJUSTED BASE PRICE		AMOUNT
[illegible]	=	[illegible]	x	40.77	=	[illegible]	x	[illegible]	=	[illegible]

AMOUNT PREVIOUSLY PAID	
BALANCE DUE	

ACCEPTANCE

[illegible] AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT Johnson City, Tennessee

[illegible]	SIGNATURE	TITLE
[illegible]	[illegible]	Resident Inspector

FOR USE OF PRODUCER ONLY

INVOICE

[illegible] General Services Administration	REGION NUMBER [illegible]	CITY AND STATE Allamby Co.
[illegible] MANGANESE ORE / CONCENTRATES delivered as indicated above		$4,378.63

[illegible]ify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name) [illegible] Corp.	DATE April 28, 1967
[illegible]	TITLE Supt.

GSA WASH DC 55-2490

GSA FORM 1037

GENERAL SERVICES ADMINISTRATION

Region 4
Atlanta 23, Georgia

August 22, 1957

IN REPLY REFER TO

Mr. Robert A. Lawrence
Defense Minerals Exploration
Administration
Room 13 - Post Office Building
Knoxville 2, Tennessee

Dear Mr. Lawrence:

Enclosed are copies of laboratory reports requested from Mr. A. H. Mancusi-Ungaro, GSA Inspector, Johnson City, Tennessee, for tenders by Ura-Mang Corporation. Where material was acceptable and payment has been made copies of Acceptance and Invoice, GSA Form 1037, are also attached.

Further explanation is necessary for three lots - Nos. 11, 16 and 18.

Lot 11 was sampled and tested at source in the usual manner. Check samples were taken at destination. Lab reports - Law and Company for the origin sample and A. S. McCreath and Sons for destination, were substantially different. Apparent errors were noticed in the reports of both labs. Corrected report from Law is attached. Settlement is delayed pending receipt of A. S. McCreath's corrected results.

The invoice for Lot 16 contained an error in calculation. In addition, it was incorrectly assigned to a bank. Mr. Mancusi-Ungaro was unable to locate an official of the firm to sign the corrected invoice until today. Copies are not yet available in this office.

Lot 18 was sampled and tested. Producer prevented from shipping by liens. He has now sold the material to Victor Mining Company, Elizabethton, Tennessee.

An investigation with respect to Lot 11 has been initiated by Compliance Division, GSA. Results are not available here.

Please advise if you require further information.

Sincerely yours

JOHN F. GOTAUTAS
Acting Chief, DMS Staff

Enclosures

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-9	Holt	400
8-9	Martin	400
8/12	GCS	130
"	Johnson	110
"	Gottschalk	100
8/13	G.	220
		400

AUG 12 1957

Mr. Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: ~~Application for Exploration Assistance~~ out
Docket No. DMEA 4797 - Manganese
Ura-Mang Corporation
Horse Cove Prospect
Washington County, Tennessee

Dear Mr. Laurence:

Supplementing our reply of August 5, 1957, to your letter of July 29, the following items are enclosed for attachment to your copy of the subject application.

1. Report by George D. Swingle, with map, Plate 1. 1 photo copy
2. Tennessee Geological Survey Bulletin 52, pages 269-270. 1 photo copy
3. Letter from Ura-Mang Corporation, July 25, 1957, transmitting application. 1 Verifax copy.

Also enclosed are copies of memoranda dated July 29 and August 7, 1957, by N. R. Nelson, Geological Survey, and G. L. DeHuff, Jr., Bureau of Mines, respectively, relating to the application, and an extra copy of the application, with attachments, for the use of the Field Team.

The Verifax copy of a settlement sheet from GSA, referred to in our letter of August 5, was accidentally destroyed while being duplicated, so it will be appreciated if, when you ask GSA at Johnson City for data on shipments from Ura-Mang, you will secure for us a copy of this April, 1957, settlement.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

FT. REG. V
Messrs. Gilbert DeHuff, Jr. USBM
T. H. Kiilsgaard, USGS

SPHolt/dlm 8-9-57
cc to: Code 400
Admr. R. File
Oper. Comm.

8623

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE
8/9	G.K.	220
		400

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

Date August 7, 1957

DMEA Docket No. 4797
DMEA Contract No.
Commodity Manganese
Name of applicant Ura-Mang Corporation
Name of property Horse Cove Prospect
Location of property Washington Co., Tenn.
Estimated cost of project $10,000

To: W. S. Martin, DMEA

Through: Chief, Br. of Ferrous Metals and Ferroalloys

From: G. L. DeHuff, Jr., Commodity Specialist, Br. of Ferrous Metals & Ferroalloys

Subject: Review of Application

(Evaluation, Field Team Report, etc.)

1. Date of project statement: 7/25/57 2. Date received by reviewer: 8/6/57

3. Information on this property known to reviewer: Yes [X] No [ ]

4. Information on nearby properties known to reviewer: Yes [X] No [ ]

5. Information available on past production: Yes [X] No [ ]

6. Other pertinent factors known to reviewer: Yes [ ] No [ ]

7. Explain items marked yes above: Bureau of Mines records through June 1957 show that Ura-Mang Corp. shipped 95 long tons of manganese ore in April and 78 long tons in May of this year. The property was examined by a Bureau engineer in October 1942. It is also described in Bull. 52, Tenn. Geological Survey.

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization
   d. Geology [ ]
   e. Proposed exploration method [X]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [X]
   c. Denial [ ]
   d. Agree with Field Team [ ]
   e. Consult with Mr. _____ at _____ AEC office.
   f. Disagree with Field Team [ ]
   g. Suggest alternate plan [ ]
   h. Request another examination [ ]
   i. Approval [ ]

10. Remarks: (Use back of page if necessary)

It is recommended that this application be referred to the Field Team for its consideration.

G. L. DeHuff

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-5	Holt	400
8-5	Martin	400
8/5	Martin	130
8/5	Lopez	130
8/5	Kellogg	130
8/5	Glass	110
"	Mittendorf	100
8/6	P.K.	210
		400

AUG - 5 1957

Ura-Mang Corporation
1700 K Street, N.W.
Washington 6, D.C.

Re: Docket No. DMEA 4797 - Manganese
Horse Cove Prospect
Washington County, Tennessee

Gentlemen:

The above-docketed application for exploration assistance for manganese ores has been reviewed by the Division of Iron and Ferro-Alloys of the Defense Minerals Exploration Administration and is being referred to Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee, for review and a possible field examination of the property.

If a field examination is to be made, you will hear from the Field Team.

Sincerely yours,

C. O. Mittendorf

Administrator

SPHolt/dlm 8-5-57
cc to: Code 400
Admr. R. File
FT. REG. V
Oper. Comm.
Messrs. Gilbert DeHuff, Jr. USBM
T. H. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/2	Holt	400
8/2	Martin	400
8/2	Martin	130
8/5	Johnson	110
		100
		225

AUG - 5 1957

Mr. Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Application for Exploration Assistance
Docket No. DMEA 4797 - Manganese
Ura-Mang Corporation
Horse Cove Prospect
Washington County, Tennessee

Dear Mr. Laurence:

Reference is made to your letter of July 29, 1957, concerning the above-subject application which the Washington representative of the Ura-Mang Corporation personally delivered to this office. As the application contained only a single copy of the Swingle report and other necessary attachments, we are having photostats made and will send them to you under separate cover. After such data are received and reviewed please make a field examination if you do not have sufficient information on the property.

The Applicant included with its application a settlement sheet showing one lot of manganese ore sold to GSA. The lot weighed 48.98 long tons, dry, assayed 40.77 percent Mn, with 5.51 percent Fe, and was valued at $4,379.63. A copy of this sheet will be included in the exhibits sent you with the Field referral. Also, as you suggest, it will be appreciated if you will ask GSA at Johnson City, Tennessee, for information on lots rejected because of grade, below 40 percent Mn.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

APPROVED:

P. F. Yopes
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

SPHolt/esf - 8/2/57
cc to: Docket
Admr. R. File
Code 400
Oper. Comm.
Messrs. GDeHuff, USBM
THKiilsgaard, USGS
FT REG V

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 31 1957

DATE	INITIALS	CODE
7/31	P.K.	220
7/31	WSM	400

July 29, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region V

Subject: DMEA-4797 (Manganese)
Ura-Mang Corporation, Washington, D. C.
Horse Cove Prospect, Washington County, Tennessee

This Applicant should be requested to submit additional data concerning its recent prospecting and exploration activities. I visited this prospect briefly on June 12, 1957, and at that time a truck-mounted drill was in operation. At least 20 holes had been drilled and at least two acres of ground had been stripped by bulldozing. This is not even mentioned in the report. A map showing work done to date and location of proposed work should be requested.

I have been informed that this Company retained George D. Swingle, of the University of Tennessee, several months ago, to make an examination and report. No mention of this is made in the application.

I have also been informed that this Applicant produced two carloads of washer concentrates for sale to GSA, but that they were rejected because they contained less than 40% Mn. I suggest that GSA be requested to furnish data on any sales or proposed sales of concentrates by this Company.

My impression, gained from the brief visit on June 12, is that most of the Horse Cove area is too low stratigraphically to offer much promise. Much of the activity to date has been in the Helenmode member, and there is not much Shady residuum present in the Cove. Furthermore, all the openings I saw contained about as much iron as manganese, making it seem unlikely that a 40% Mn concentrate can be made. For further discussion of this prospect, see Tennessee Division of Geology Bulletin 52, pages 269-270.

On March 30, 1957 this prospect was visited by Philip Guild and Louis Pavlides of the Geological Survey, and a brief discussion of their visit is available in the Survey's Washington files.

Robert A. Laurence

Robert A. Laurence

IN REPLY REFER TO:

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 30 1957

DATE	INITIALS	CODE
7/30	P.K.	220
7/30	WSM	400

July 29, 1957
Re: DMEA 4797
Ura-Mang Corporation
Burbage and Sabin Leases
Washington County, Tenn.
$10,000 - Manganese

Memorandum

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

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

Subject: Review of application

The applicant requests assistance in doing auger drilling, 1300 feet, trenching, 1200 feet, and bulldozing, 80 hours, as exploratory work on a tract of land, believed to be underlain by manganese-bearing clayey residuum after the breakdown of Shady dolomite.

The deposit was explored by trenches by the Metals Reserve Company in July, 1943. "The amount of ore found by this prospecting is small and no further work has been done". Bull. 52 Tenn. Geol. Survey - 1943. Later auger holes were drilled from the trenches.

In April 1957 a shipment of 48.98 dry tons of concentrate was made to G.S.A. - D.M.S. The concentrate assayed 40.77% Mn per ton, and the carload returned $4,379.63.

The proposed work will test an area south of the 'mine' area roughly 400 x 500 feet. Probably most of the test area has not been drilled but it contains the 'mine' area with its old trenches and auger drill holes.

In the opinion of the consulting geologist, George D. Swingle, the remnant of altered Shady dolomite occupies a synclinal basin and the proposed drilling will tend to determine the area and depth of the inferred manganese-bearing residuum of dolomite.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

URA-MANG CORPORATION

EXPLORATION AND DEVELOPMENT OF MINERAL RESOURCES

FIELD OFFICE
Bonnie Kate Bldg
Elizabethton, Tenn.
Phone: 2-7111

EXECUTIVE OFFICE
1700 K Street, N.W.
Washington 6, D.C.
ME. 8-6532

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 25 1957

DATE	INITIALS	CODE

July 25, 1957

Defense Materials Exploration Administration
Department of Interior
Washington, D. C.

Attention: Mr. W. S. Martin

Dear Sir,

Enclosed please find four (4) copies of Form MF103, Application for Aid in an Exploration Project. Also enclosed are the following Exhibits:

1.- Extracts of pages 269 and 270 of Bulletin 52, Tennessee Department of Geology.
2.- Geological Report by George D. Swingle, University of Tennessee.
3.- Plate 1 of Geological Report
4.- Copy of G.S.A. Acceptance dated April 28, 1957, on ore shipped from the Burbage Lease.
5.- Estimate of Costs
6.- List of Personnel and Equipment Available by the Company.
7.- Copy, Mineral Lease, Burbage Property.
8.- Copy, Mineral Lease, Sabin Property.

Ura - Mang Corporation has been mining and milling manganese ore since April 1, 1957 and has, to date, shipped a total of six (6) carloads of acceptable ore to the G.S.A. stockpile from our various leases. The proposed exploration work, we feel, is most adaptable to the two leases enclosed, since they are in a known manganese area and are contiguous. The enclosed Estimate is only for work to be done on the Burbage Lease at this time. After consultation with the DMEA Field Engineers, we will submit an estimate for work on the Sabin Lease.

Form MF205, Consent to Lien, has been forwarded to the lessors on both of these leases for their approval. Field contact can be made with Mr. Troy Beaver, Vice-President, at the Beverly Courts Motel, Johnson City, Tennessee, Telephone 3988, or by letter to him at the Bonnie Kate Building, Elizabethton, Tennessee.

Your earnest and expeditious handling of this Application will be greatly appreciated.

Note - To be returned

Note: Exhibits 2, 3, 7 & 8 are the only copies available. If they can be duplicated we would appreciate having the originals returned.

Very truly yours,

Sidney Spector

Sidney Spector
Exec. Vice-President.

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

July 26, 1957

Ura-Hang Corporation
1700 K Street, N. W.
Washington 6, D. C.

Subject: DMEA 4797

Gentlemen:

Your application for exploration assistance, dated July 25, 1957 submitted to our office at Washington, D.C. has been assigned Docket Number 4797 and referred to the Division of Iron & Ferro Alloys in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:
Region V

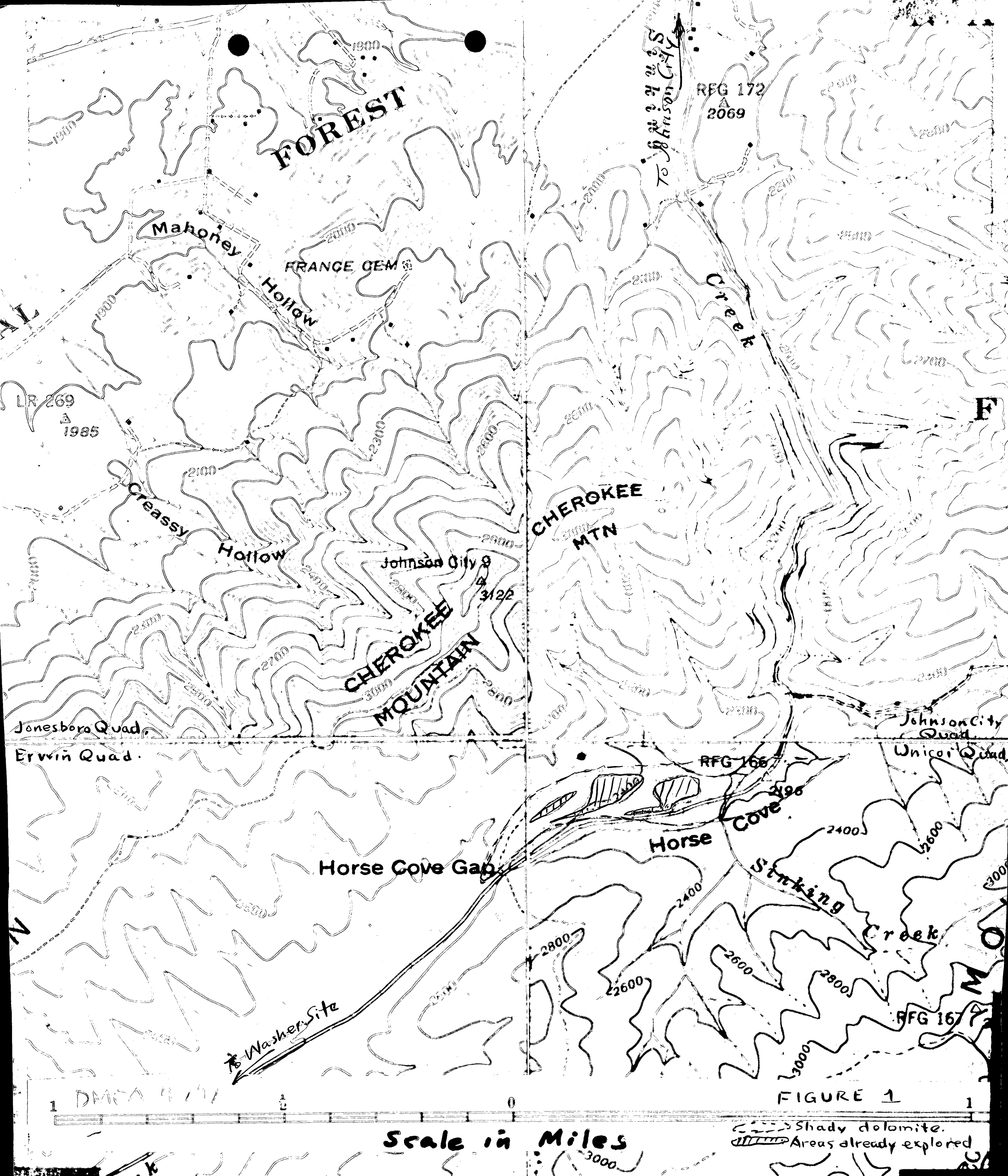
FOREST
Mahoney Hollow
FRANCE GEM
LR 269
1985
Creassy Hollow
CHEROKEE MOUNTAIN
Johnson City 8
3122
CHEROKEE MTN
To Johnson City
RFG 172
2069
Creek
Jonesboro Quad.
Erwin Quad.
Johnson City Quad.
Unicoi Quad.
RFG 166
Horse Cove
Horse Cove Gap
Sinking Creek
RFG 167
To Washer Site
Scale in Miles
Shady dolomite.
Areas already explored

FIGURE 1