STANDARD FORM NO. 64

Broughton's copy

Office Memorandum • UNITED STATES GOVERNMENT

Platteville, Wisconsin
DATE: May 22, 1953

TO : Carl Dutton

FROM : W. A. Broughton

SUBJECT: Final report, Dodgeville Mining Company Jenkin Lease, D.M.E.A. Docket No. 1351x.

Enclosed herewith are two copies of the above report.

W. A. Broughton

WAB:mcw

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

[redacted]
Region V
2906 Colfax Avenue South
Minneapolis 8, Minnesota

May 19, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: A. B. Needham, Executive Officer, Field Team, Region V

Subject: Docket DMEA-1351x, Contract Idn E-154, Dodgeville Mining Co., Jenkins Lease

Here are the original and three copies of the Government's Final Geological and Engineering Report on the subject project, which does not recommend certification.

The operator's final report had previously been transmitted.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments - 4

CC - W. A. Broughton

MA[illegible] 1953

CONFIDENTIAL

CONTROLLED

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINAL GEOLOGICAL-ENGINEERING REPORT BY FIELD TEAM REGION V

DOCKET NO. D.M.E.A. 1351x
CONTRACT NO.: Idm-E154
COMMODITY: Zinc-Lead

Dodgeville Mining Company
M. Jenkin Lease
Iowa County, Wisconsin

H. J. Schroeder, Mining Engineer
U. S. Bureau of Mines
W. A. Broughton, Geologist
U. S. Geological Survey

May 14, 1953

CONTENTS

	Page
U. S. Bureau of Mines Report	
Location	1
Contract Provisions and Amendments	1
Summary	2
Possible Exploitation - Certification	2
Description of the Work	2
Expenditures	4
Technical Control - Supervision	4
U. S. Geological Survey Report	
Location of property	6
Exploration	6
Occurrence of ore	
Ore-bearing beds	7
Geologic structure	8
Results of exploration	8
Recommendations	8
Appendix A - Drill Hole Logs and Estimated Assays	1a

Illustrations

	Follows Page
Fig. 1. Index maps showing the location of the Margaret Jenkin property, Iowa County, Wisconsin	8
Fig. 2. Stratigraphic section of the Margaret Jenkin property, Iowa County, Wisconsin	8
Plate 1. Map of the Margaret Jenkin property showing drill holes and structure contours - Porter's Grove Area, Iowa County, Wisconsin	8

Location:

The exploration program was conducted on land about 5 miles East of the city of Dodgeville, Wisconsin. Approximately 210 acres of land contained in the Margaret Jenkin property was leased to the operator for inclusion under the contract. A detailed land description is as follows: The NE¼ of Section 21. That part of the NW¼ of Section 22 that lies Northwesterly of Highway No. 18, also a strip along the northern edge of the NE¼ of the SE¼ of Section 21 containing 6.13 acres; all in T 6 N, R 4 E, Iowa County, Wisconsin.

Most of the land was gently rolling terrain devoted to farming, and presented no difficulties in moving the drilling machines.

Contract Provisions and Amendments:

The U. S. Government and Dodgeville Mining Company of 924 Gay Building, Madison 3, Wisconsin entered into contract agreement DMSA Docket 1351x, Idm-E 154, dated October 2, 1951 for purposes of exploring for zinc and lead ores. The contract amount was for $7,500 with an estimated 5640 feet of churn drilling to be done at a contract price of $1.00 per foot. Other estimated expense was $160 for assaying, and $1500.00 for supervision, engineering, sample preparation, and miscellaneous. Government participation in the expenses was 50 percent. The Landlord's Subordination Agreement could not be obtained and in lieu thereof the government accepted the company's guaranty of repayment.

Prior to the company's signing the contract, an amendment dated December 5, 1951 was attached to the contract. This amendment provided for deviation from the drilling pattern specified on the contract map,

should ore of a mineable grade be found in any of the holes prior to completion of the initial pattern. The starting and completion dates were extended to nine months and fifteen months, respectively. Allowable cost per feet of drilling was increased to $1.25. Permission was granted to have surveying done by a civil engineer and supervision of the exploration by other qualified personnel, if a mining engineer was not available.

Summary:

Work was terminated by mutual agreement before completion of the proposed initial drill hole pattern. The limited drilling that was accomplished did not succeed in indicating the existence of an ore body. However, the geologic probabilities of ore existing in the unexplored portions of the lease are not necessarily decreased by virtue of the negative results encountered in the area that was drilled under the contract.

Possible Exploitation - Certification:

The drilling accomplished did not disclose mineralization having significant economic value. Since no ore reserves are indicated, possible exploitation is not considered. Certification of the property is not recommended.

Description of the Work:

Drilling under the contract began on June 4, 1952 and the last hole completed was on June 10, 1952. Three holes with an average depth of 50 feet or a total of 149 feet were accomplished.

Equipment used consisted of two 22-W Bucyrus-Erie churn drills using a six-inch chisel type bit. Normally only the upper unconsolidated weathered zone required casing. Usual procedure is to drill five feet and then bail out the sludge with a flap-type valve bailer. This sludge is dumped into a tub, and when well mixed, a representative sample is placed in a pile on the ground for logging and assay samples. When an ore zone is encountered, the sample interval is usually reduced to two feet.

Initial drilling designated by the contract consisted of fourteen holes diagonally crossing an old lead range. The three southernmost holes in this pattern were completed under the program. Negative results of this early work, indicated poor ground for mining, and probably the adverse effects the declining zinc market had upon the company's operating mine, led to the decision for curtailing exploration in the contract area. A request was made and granted on October 29, 1952 for termination of the contract before completion of the work.

Holes B-4 and B-5 were drilled by the operator during the same period as the contract holes described above and were submitted for payment. However, it was necessary to disallow payment for these holes as they did not conform to contract stipulations for location.

Plate 1 accompanying this report shows the location of the holes drilled during the contract. There is also included a complete set of the logs showing formations and estimated metallic values. Because the disallowed holes drilled during the contract period are pertinent to the work accomplished, copies of these logs are also included.

The operator's final geologic-engineering report has been previously forwarded.

Expenditures:

The following tabulation shows the essential items in regard to the expenditures incurred under this contract:

Contract amount	$ 7,500.00
Total approved expenditures	255.54
Government's share of the cost	122.77
Government's share unexpended	3,627.23

Items of Expense	Approved Expense	Cost per Foot
Contract Drilling	$ 186.25	$ 1.250
Supervision	35.42	.238
Technical services	27.50	.184
Transportation	6.37	.043
Total	$ 255.54	$ 1.715

Monthly MF-104 reports had partial supporting evidence of costs incurred and bills paid. A review of the completed project was made by a DMEA auditor at Minneapolis on February 19, 1953. The auditor certified the approved expenses as being valid and proper.

Technical Control - Supervision:

Direct supervision of the project was a company responsibility. Locations of fourteen initial holes were shown on a map attached to and made a part of the contract. Only five of these initial holes were completed, therefore no decision was required for any additional hole locations.

The company employed Dixon and Ottensmann, local engineering consultants, to furnish the required surveying and mapping.

Driller's logs were supplied by the company for use in monthly reports. Samples of each cut were furnished the U. S. Geological Survey for use in preparing a more detailed log of the formations and estimated values contained. It is this latter log which has been filed in the Wisconsin District Atlas, copies of which are submitted with this report.

The visual estimates showed that none of the cuts contained enough values to warrant an assay.

Final geologic report and results of drilling by Dodgeville Mining Company in the Margaret Jenkin property, Iowa County, Wisconsin

W. A. Broughton

U. S. Geological Survey

Docket no.: DMEA 1351

Contract no.: Idm-X154

Commodity: zinc-lead

Location of property

The Margaret Jenkin property is in the Porter's Grove area about 5½ miles east of Dodgeville, Wis. (fig. 1). Boundaries are shown on plate 1. The property includes the NE¼ sec. 21, the north 6.13 acres of the NE¼SE¼ sec. 21, and that part of the NW¼ sec. 22 west of U. S. Highway 18, all in T. 6 N., R. 4 E.

Exploration

In 1952 the Dodgeville Mining Co., with DMEA assistance, drilled 5 holes in the Margaret Jenkin property as an exploration for zinc and lead ore down to the top beds of the "Trenton" (fig. 2). According to the DMEA exploration contract, a series of holes was to have been drilled in a zigzag fashion on a prominent "lead range" that extends in a general northward direction from an old shaft (pl. 1) whose dump contains a small amount of smithsonite. Prior to the DMEA drilling, Dodgeville Mining Co. drilled two holes (R1 and R2) near this shaft without discovering zinc ore.

The Dodgeville Mining Company drilled holes B1 through B5 before notifying the DMFA field team that they were beginning exploration. Holes B1 through B3 were allowed for payment because they roughly corresponded in position to one of the lines of drilling as specified by the contract. Holes B4 and B5 were disallowed for payment because they were not located according to the exploration contract even though they explored part of the range. The company refused to continue exploration under the contract terms. Thus, by mutual consent of the government and the company, the contract was terminated.

Occurrence of ore

Ore-bearing beds

Zinc and lead minerals of the Porter's Grove area occur in the Galena, Decorah, and Platteville formations, all of Ordovician age (fig.2). Early lead production was largely from the lower part of the Galena formation. Zinc sulfide ore is not known to have been produced in this area although it is reported that some smithsonite was mined from shallow diggings. Miners' terms subdividing the formations into members are used in this report.

The recent drilling in the Jenkin property by the Dodgeville Mining Company failed to discover zinc or lead minerals (app. A, logs). The five drill holes showed small amounts of iron sulfide from the lower part of the "drab" into the top beds of the "Trenton".

Geologic structure

Owing to a lack of sufficient information, detailed structure has not been mapped in the Porter's Grove area. Based on the meager available information, the Ordovician formations of the Jenkin property appear to be dipping gently to the southwest (pl. 1). Structural data in this area are wholly insufficient to indicate the possibility of folds, which are so common in southwestern Wisconsin.

Elongate areas of old surface lead diggings (pl. 1) and shallow shafts indicate the presence of lead "crevices" and "ranges" trending from a few degrees to 50° west of north.

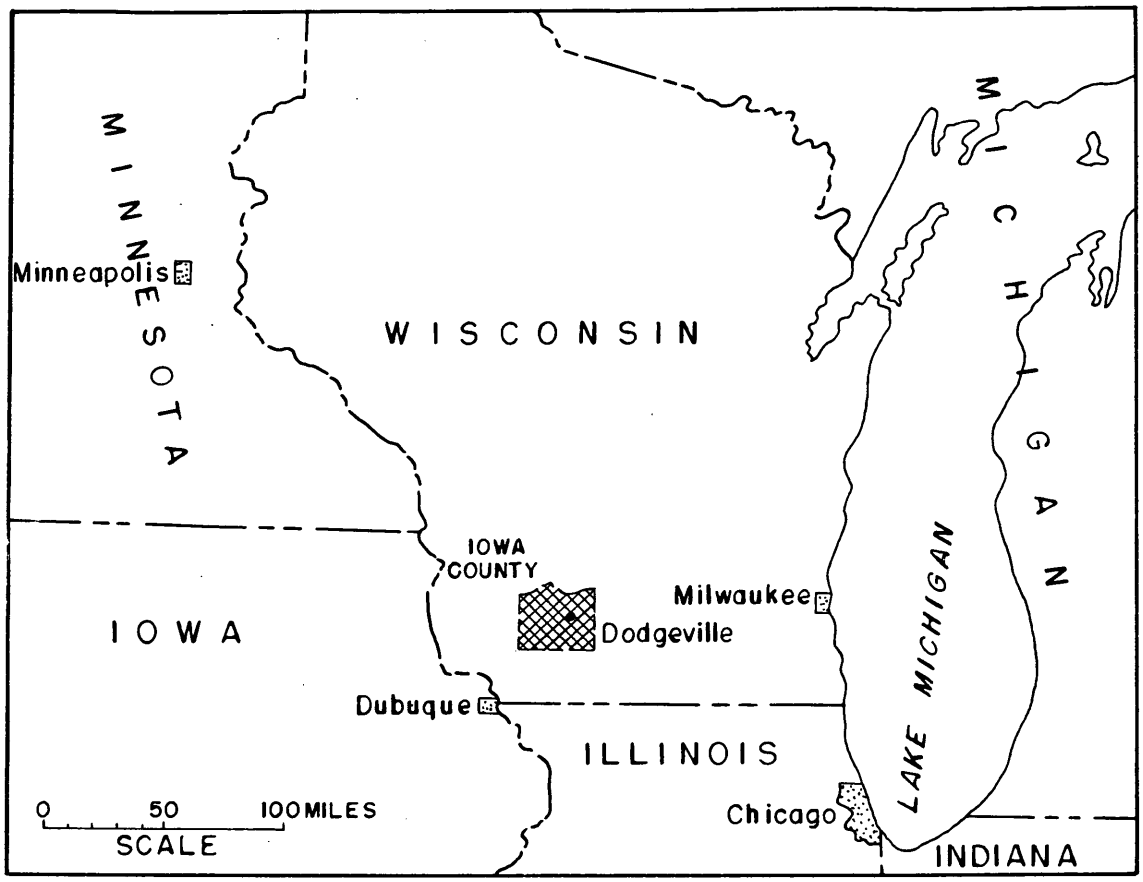
Results of exploration

None of the five DMEA drill holes in the Jenkin property show zinc or lead minerals, although they all show small amounts of iron sulfide indicating a possible nearness to ore. The drilling was insufficient to disclose possible ore structures.

Recommendations

It is the opinion of the reporting geologist that drilling by the Dodgeville Mining Co., with DMEA assistance, failed to discover zinc or lead ore in the Margaret Jenkin property. Therefore it is recommended that the exploration not be certified as a discovery.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



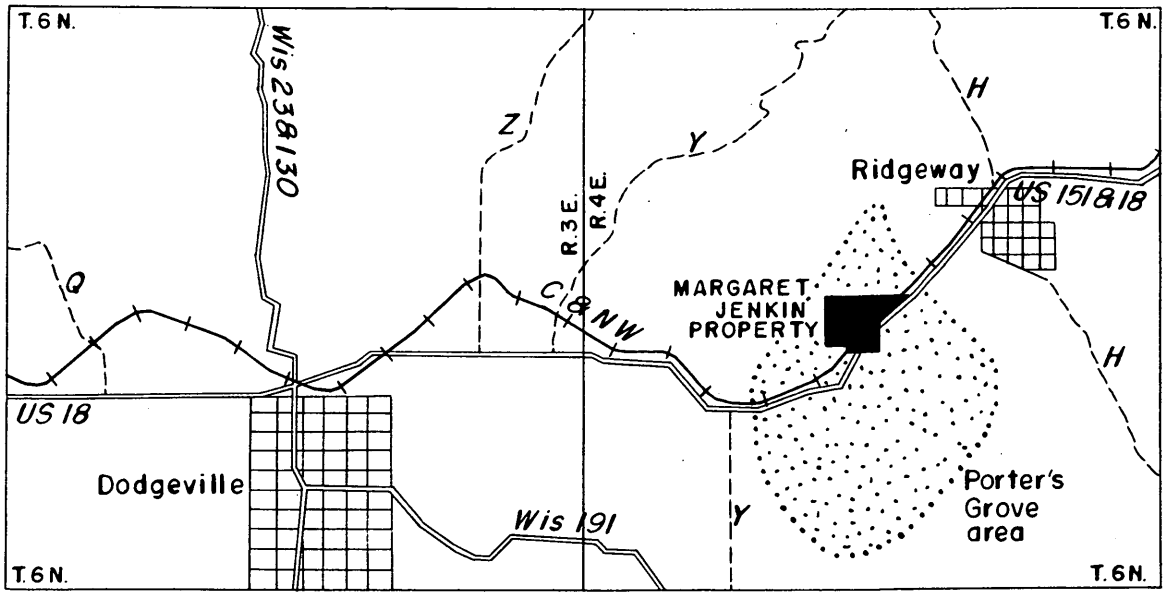
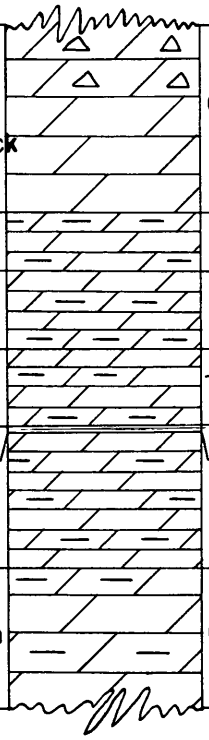


Figure I. Index maps showing the location of the Margaret Jenkin property, Iowa County, Wisconsin.



Formation	Miners' terminology	Thickness	Lithology
Galena	Drab or sandrock	0'-19'	*Dolomite, grayish-buff, medium-to thick-bedded, vuggy, cherty*
Decorah	Gray	0'-6'	*Dolomite, grayish, thin-bedded, shaly*
	Blue	8'	*Dolomite, bluish, thin-bedded, shaly*
	Brown rock	7-8'	*Dolomite, brown, thin-bedded, fine-grained, dense, with brown shale partings*
	Claybed	3"	*Shale, greenish, dolomitic with dolomite lenses*
Platteville	Glass rock	9'-14'	*Dolomite, purplish-brown, thin-bedded, fine-grained, shaly*
	Trenton	60'±	*Dolomite, grayish, thin-to medium-bedded, shaly*

Figure 2. Stratigraphic section of the Margaret Jenkin property, Iowa County, Wisconsin.

Appendix A

Drill Hole Logs and Estimated Assays

Io County
~~Sec. Ref. 351~~

~~Serial No. 39~~
Hole No. B-1
Collar Elevation: 1159.1'
Depth of Hole: 67'
Location: Jenkins

Date completed: June 5, 1952
Drilled by: Dodgeville Mn.Co.,DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay and Drab
10	19	Drab
19	25	Gray
25	33	Blue
33	40	Brown
40	51	Glassrock
51	67	Trenton

Water table:

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
10	40		Shine	
40	48		1.	
48	67		Shine	

Entire hole oxidized.

~~Serial No. 40~~
Hole No. B-2
Collar Elevation: 1144.6'
Depth of Hole: 42'
Location: Jenkins

Date completed: June 5, 1952
Drilled by: Dodgeville Mn.Co.,DMA
Logged by: Broughton, U.S.G.S.
Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay, gray, blue
10	17	Blue
17	25	Brown
25	39	Glassrock
39	42	Entire hole oxidized

Water table:

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
10	42		Shine	

Entire hole oxidized

Iowa County

~~Sec. Ref. 351~~

~~Serial No. 41~~

Hole No. B-3

Collar Elevation: 1147.5'

Depth of Hole: 40'

Location: Jenkins

Date completed: June 6, 1952

Drilled by: Dodgeville Mn.Co.,DMA

Logged by: Broughton, U.S.G.S.

Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay, gray
10	18	Blue
18	25	Brown
25	38	Glassrock
38	40	Trenton

Water table: 38' Medium

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	25		Shine	
25	35		1.	
35	40		Shine	

Entire hole oxidized

~~Serial No. 42~~

Hole No. B-4

Collar Elevation: 1148.3'

Depth of Hole: 45'

Location: Jenkins

Date completed: June 9, 1952

Drilled by: Dodgeville Mn.Co.,DMA

Logged by: Broughton, U.S.G.S.

Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay, drab, gray
10	15	Gray
15	23	Blue
23	31	Brown
31	44	Glass
44	45	Trenton

Water table:

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	45		Shine	

Oxidized to 38'

~~Serial No. 43~~

Hole No. B-5

Collar Elevation: 1135.3'

Depth of Hole: 35'

Location: Jenkins

Date completed: June 10, 1952

Drilled by: Dodgeville Mn.Co.,DMA

Logged by: Broughton, U.S.G.S.

Type of Drilling: Churn

Depth From	Depth To	Lithology
0	10	Clay and Blue
10	14	Blue
14	21	Brown
21	34	Glass
34	35	Trenton

Water table:

Depth From	Depth To	Remarks and Estimated Analyses Zn	Fe	Pb
0	35		Shine	

Entire hole oxidized.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : W. A. Broughton DATE: May 8, 1953

FROM : Carl E. Dutton

SUBJECT: Final report DMEA 1351, Idm-E154

Enclosed is your report with the customary number of copies.

CED

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Carl E. Dutton DATE: 5-1-53

FROM : W. A. Broughton

SUBJECT: Final report Margaret Jenkin property, DMEA 1351

Inclosed are two copies of the final report on the Margaret Jenkin property and three illustrations. Will you please process this as usual?

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

March 6, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket [illegible]-1351, Contract Idn E-154, Dodgeville Mining Co., Jenkins Lease

Here are the original and three copies of the operator's final Geological and Engineering Report on the subject docket project.

The Government field team's Final Report has not been completed, but it will be transmitted to you as soon as it is received.

A. E. Needham
Executive Officer, Field Team
Region V

CC -Broughton

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

March 2, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-1351, Contract Idm 2154, Dodgeville Mining Co., Jenkins Lease

The following is pertinent information on the above contract, which has been completed:

Total amount of contract	$7,500.00
Government share	3,750.00
Total amount spent	255.54
Government share	122.77
Balance	3,627.23

A. E. Needham
Executive Officer, Field Team
Region V

CC - Broughton

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 6, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-1351, Contract Idm-E154
Docket DMEA-1352, Contract Idm-E153
Dodgeville Mining Company

Here are the original and three copies of the form terminating each of the subject contracts by mutual consent.

No work has been done on either project since June, and we have received the operator's final report on both. The Government report, however, is not ready yet.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

/BNeedham:dg
cc Dutton
Grosh (Att.)
Broughton
Region V
files
df

Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

October 30, 1952

Mr. James McDonald
Dodgeville Mining Company
924 Gay Building
Madison 3, Wisconsin

Dear Mr.McDonald:

Reference is made to your Defense Minerals Exploration contracts Idm-E154 and E183 for exploring on the Jenkins and Thomas leases respectively.

We are in the process of auditing for payment the amended cost reports for June and have been advised by our Platteville office that you have decided not to continue exploration on these leases in view of the lack of mineralization and your mining outlook account of the metal markets.

In view of this, the contracts should be terminated via mutual consent. Accordingly, the necessary forms for this mutual termination are enclosed. Please sign all copies of each set, retain one of each marked Operator and return all the rest to this office for further distribution.

Very truly yours,

A. B. Needham
Executive Officer
Field Team, Region V

Enclosures

ABNeedham:vb
cc Dutton
Grosh
Broughton
Region V
files
df

CONFIDENTIAL
COMPANY
RELEASED

Geologic report on the Margaret Jenkins lease near Dodgeville, Wisconsin

by

W. A. Broughton

Location of property

The Margaret Jenkins property is in the Porter's Grove area about 5½ miles east of Dodgeville, Wisconsin (fig. 1). This lease includes the NE¼ sec. 21 and a small part of the NW¼ sec. 22, T. 6 N., R. 4 E. (pl. 1).

Occurrence of ore

Ore-bearing beds

Zinc and lead mineralization of the Porter's Grove area occurs in the Galena, Decorah, and Platteville formations, all of Ordovician age (fig. 2). Early lead-ore production was largely from the lower part of the Galena formation. Zinc sulfide ore is not known to have been produced in this area although smithsonite has been accumulated from shallow diggings. Miners' terms, subdividing the formations into members, are used in this report.

The oldest member of the Galena formation is the "drab" or "sand rock". The maximum thickness of the "drab" is about 110 feet, but much of the member has been eroded in the Porter's Grove area. The Decorah formation is divided, from top to bottom, into the "gray", "blue", "brown rock", and "clay bed". "Glass rock" is the upper member of the Platteville formation, and "Trenton" is the lower member.

Geologic structure

Detailed structure has not been mapped in the Porter's Grove area. However, it is assumed to be similar to structure in the Dodgeville area, about 5 miles to the west, where gently folded east-west anticlines and synclines are crossed by less perceptible north-south folds. Zinc and lead ore bodies occur in the Dodgeville area as narrow bedding-plane veins, called "flats", at or near the "glass rock"-"Trenton" contact. The veins are on the limbs of the east-west synclines and bend around the noses of the interfingering folds. These flats of ore are in some places connected by similar flats where the north-south anticlines cross the east-west synclines. The small amount of drilling in the Porter's Grove area (on the Benjamin Thomas property in the SE¼ sec. 21. T. 6 N., R. 4 E.) indicates the existence of gentle folds, but not enough information is available to determine definite trends and the location of axes.

Elongate areas of old surface lead diggings in the Porter's Grove area indicate the presence of lead "crevices" and "ranges" similar to those in other parts of the district. The crevices are nearly vertical mineralized fractures striking east-west, north-south, northwest, and northeast. Two or more closely spaced and parallel crevices constitute a range. The crevices are normally a fraction of an inch to several inches wide, and at definite stratigraphic horizons in the Galena formation they widen into ore shoots called "openings". Known lead ranges on the Margaret Jenkins ~~lease~~ property are shown on plate 1.

Character of the ore

The lead crevices contain coarse- to fine-grained galena, some smithsonite, and ocherous clay above the water table; and coarse- to fine-grained galena, pyrite, marcasite, calcite, and a small amount of sphalerite below the water table.

Drilling in the Porter's Grove area indicates that zinc and lead mineralization occurs in the "brown rock" and at the base of the "glass rock". These mineralized zones are not exposed in the area, but it is believed that the "brown rock" mineralization consists of fine- to medium-grained disseminations of sphalerite, galena, pyrite, marcasite, and calcite. The basal "glass rock" mineralization is probably a flat of coarse-grained sphalerite, galena, pyrite, marcasite, and calcite.

Exploration

Exploration for ore in this district is customarily by churn drilling. Although wildcat prospecting for vertical lead crevices by vertical drilling is likely to be unsuccessful, drilling for lead crevices in areas of old surface diggings may be feasible because these areas commonly mark the sites of lead ranges. Churn drilling for the lower flats and disseminated deposits of zinc-lead ore has more possibilities because of the greater horizontal extent of the flats.

In the Porter's Grove area no satisfactory system has been established to prospect for the lower zinc-lead flats and disseminations, except to drill in areas of old surface diggings or along their trends because large lead ranges indicate rather intense mineralization and, in areas adjacent to the Porter's Grove area, lower flats of zinc-lead ore have been found under some of the ranges. Plate 1 shows lead ranges on the Margaret Jenkins property.

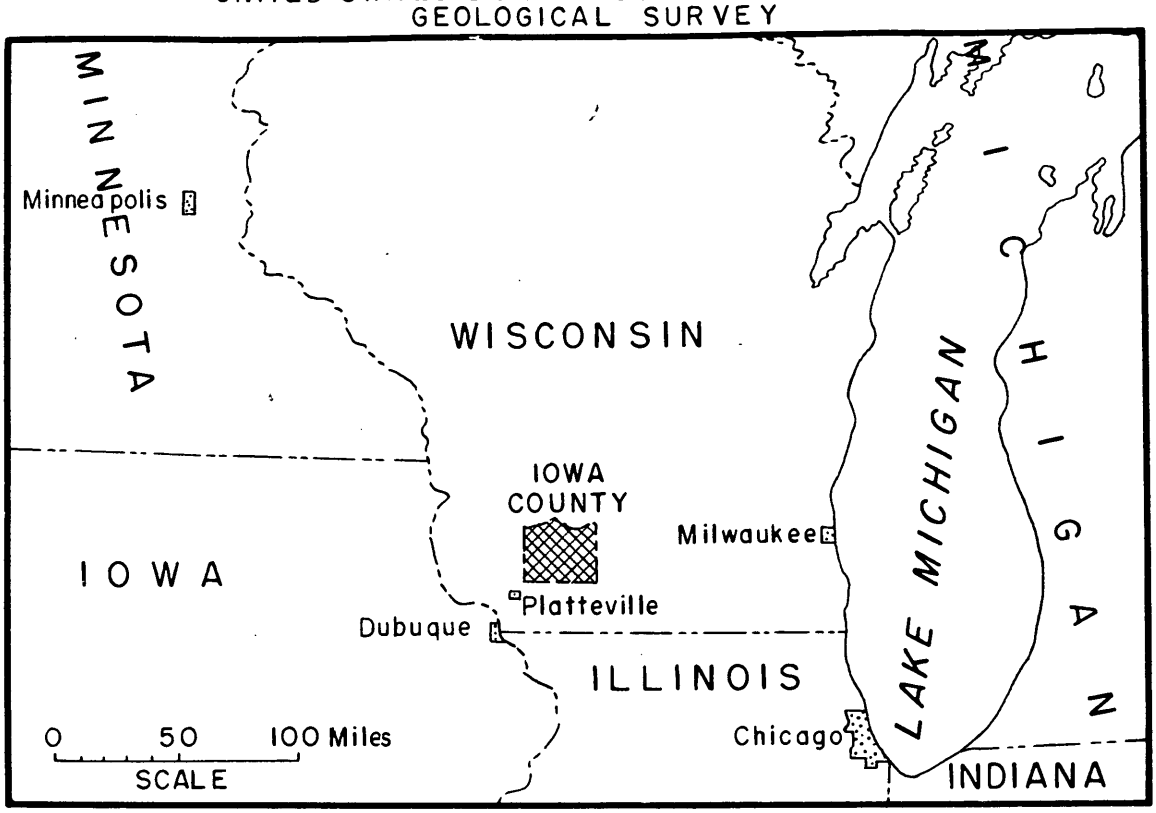
No drilling has been done on the Margaret Jenkins property. Except for the lead ranges and the caved shaft (SE¼NE¼ sec. 21) there is very little evidence of mineralization. The applicant reports finding a small amount of smithsonite near the old shaft on a large lead range. Soil samples collected and analyzed by the U. S. Geological Survey from a traverse across a lead range in the NE¼ sec. 21 show a decided increase in both lead and zinc in soil over the range as compared to that adjacent to the range.

The applicant proposes to drill a series of holes along northeast and northwest lines, across the prominent lead range north of the shaft, presumably as an attempt to locate a sulfide source of the smithsonite found on the surface. It is recommended that the first northeast string of holes north of the shaft be extended beyond the eastern edge of the range, and from that point a northwest string of holes be drilled across the range. Also a short string could be drilled southeastward from the vicinity of the shaft (pl. 1). This recommended pattern would give a better cross sectional picture of the range and more information near the shaft.

This property probably contains enough evidence of mineralization to justify some exploration. However, it would be largely of wildcat nature and if the first few holes do not show interesting mineralization the project should be discontinued.

1351X

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



INDEX MAP SHOWING LOCATION OF IOWA COUNTY, WISCONSIN

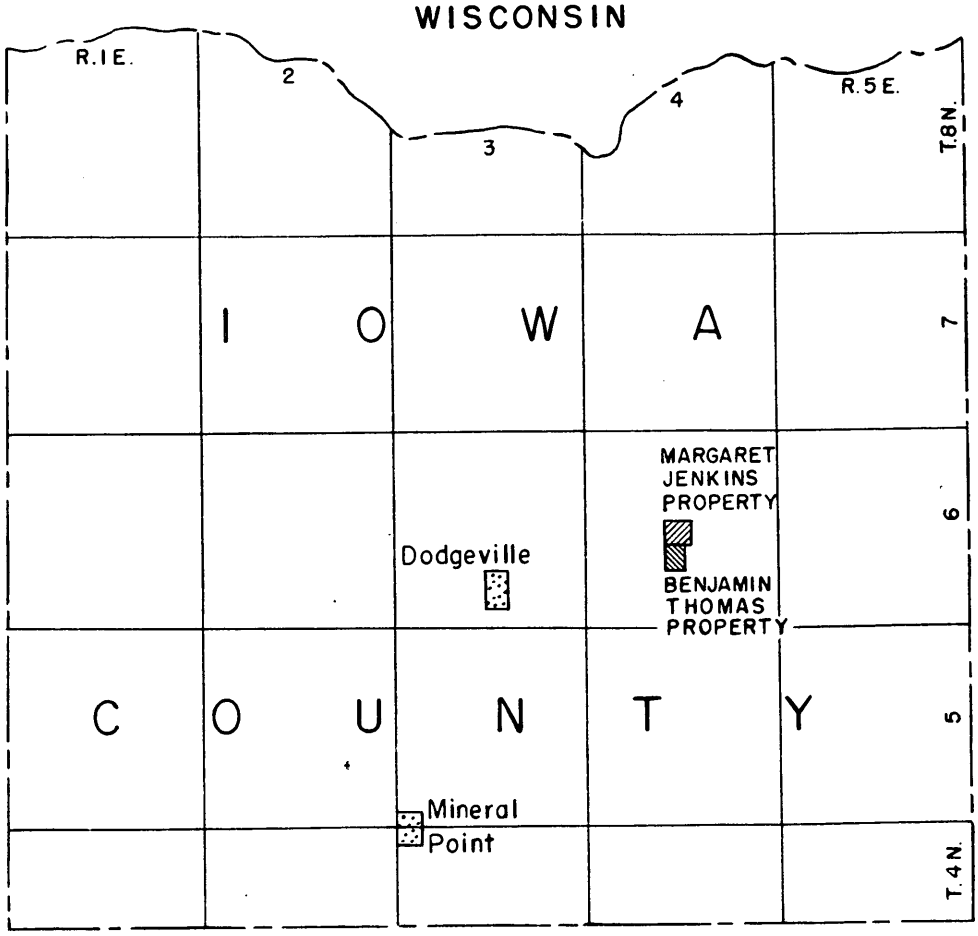


Figure 1. INDEX MAP OF IOWA COUNTY, WISCONSIN SHOWING LOCATION OF THE JENKINS AND THOMAS PROPERTIES

CONFIDENTIAL
COMPANY
RELEASED

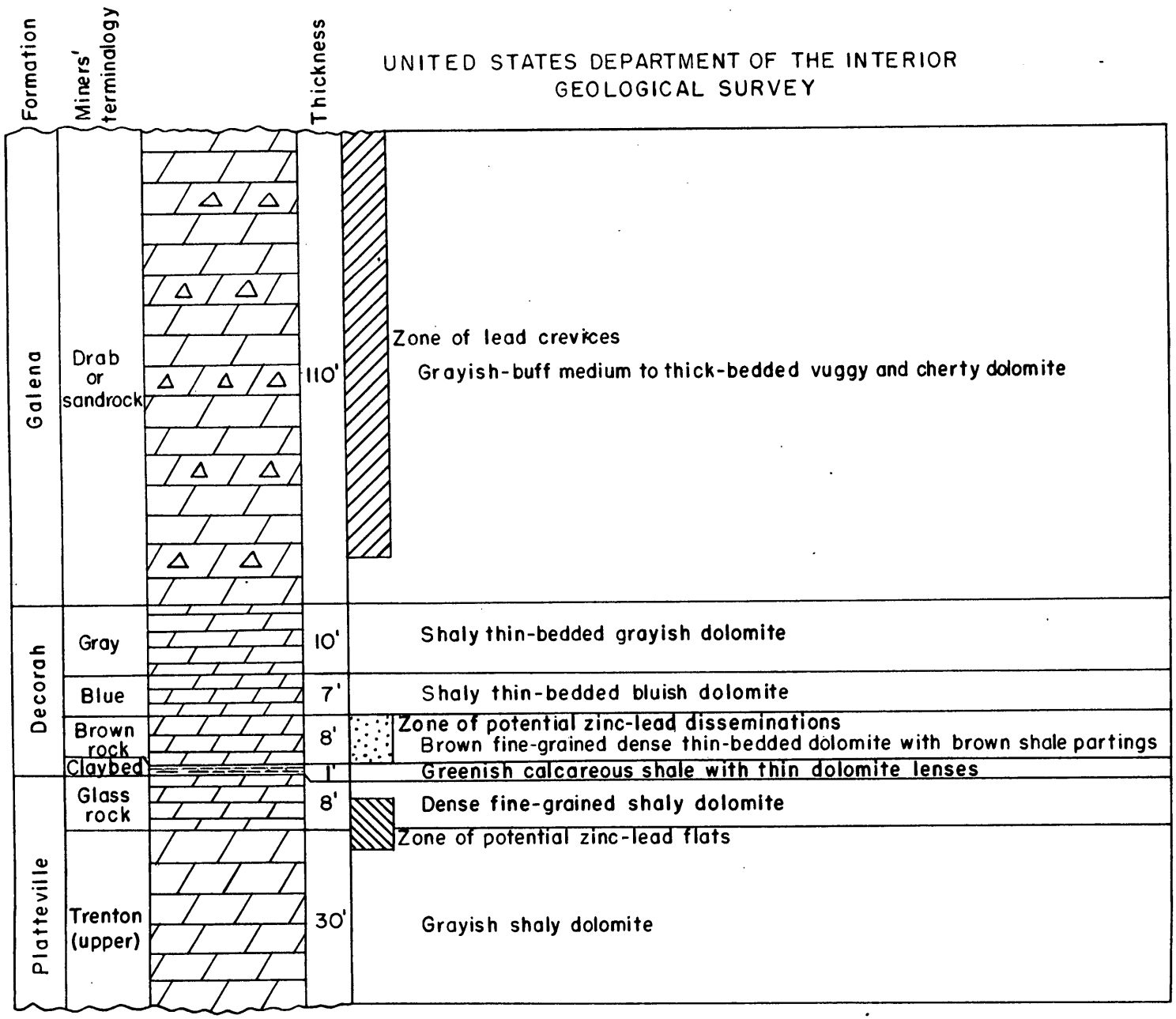
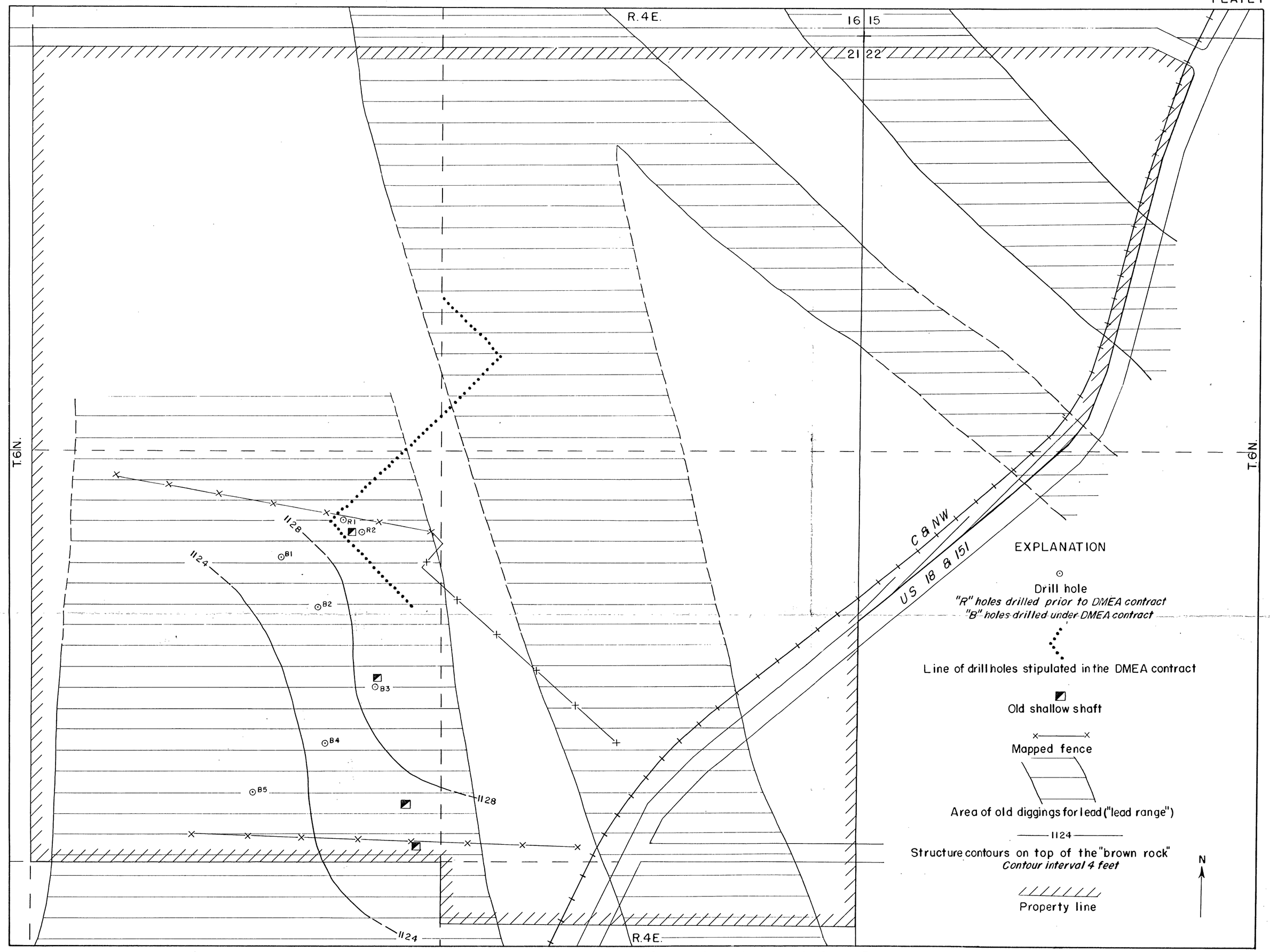


Figure 2. Stratigraphic section of the Porter's Grove, Wisconsin area showing productive zone of lead crevices and zones of potential zinc-lead flats and disseminations.

CONFIDENTIAL
COMPANY
RELEASED

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PLATE I



MAP OF THE MARGARET JENKIN PROPERTY
SHOWING DRILL HOLES AND STRUCTURE CONTOURS
PORTER'S GROVE AREA, IOWA COUNTY, WISCONSIN

0 200 400 600 Feet
SCALE