

ARCHAEOLOGICAL RESOURCES WITHIN
THE PROPOSED GAS WELL DRILLING
SITES IN KNOX COUNTY, OHIO

UGR FILE # 376



This archaeological resource **survey** report has been compiled by the Cleveland Museum of Natural History, Wade Oval, University Circle, Cleveland, Ohio 44106 under contract with Mitre Corporation, 1820 **Dolley** Madison Boulevard, McLean, Virginia, 22102 on behalf of the Department of Energy.

Project Director: **David R. Bush, Associate Curator of Archaeology**

Signature: _____

Date Submitted: _____

David R. Bush

March 6, 1979

PREFACE

This archaeological survey report is the second of four such reports being prepared for **Mitre** Corporation for five counties in Ohio. The first report **submitted** (January 17, 1979) detailed the archaeological investigations for ten proposed gas well drilling sites in **Lorain** and Trumbull Counties. This report details the archaeological investigations for the two proposed drill site in Knox County, Ohio.

In order to alleviate needless repetition, only four sections will be discussed for the **two** drill sites. These are the Introduction, Description of the Project Area (including a description of the environmental setting), Field Investigations, **and** Conclusions and Recommendations. Following these will be additional sources consulted and plates.

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INTRODUCTION

In early December, 1978, the Cleveland Museum of Natural History was contacted by Mitre Corporation regarding an archaeological survey of proposed gas well **drilling** sites in five counties in Ohio. Of these, one drill site was proposed for Knox County, Ohio.

On December 13, 1978, Mitre Corporation sent the authorization to proceed with the project. The field investigations were conducted for ten proposed sites in **Lorain** and Trumbull Counties. The final report was submitted January 17, 1979. At this time, the Museum was notified of the urgency to complete the investigations for the drill site in Knox County. The archaeological survey was conducted in late January and early February, 1979, under the direction of David R. Bush, Associate Curator of Archaeology. Research assistants and field crew for this portion of the work were Lucinda A. Bush, Russell **M. Weisman** and Keith Voll.

Following the completion of the investigations for the one drill site, the Museum was notified that **a** second drill site had to be investigated. These investigations were completed by the first of March, 1979.

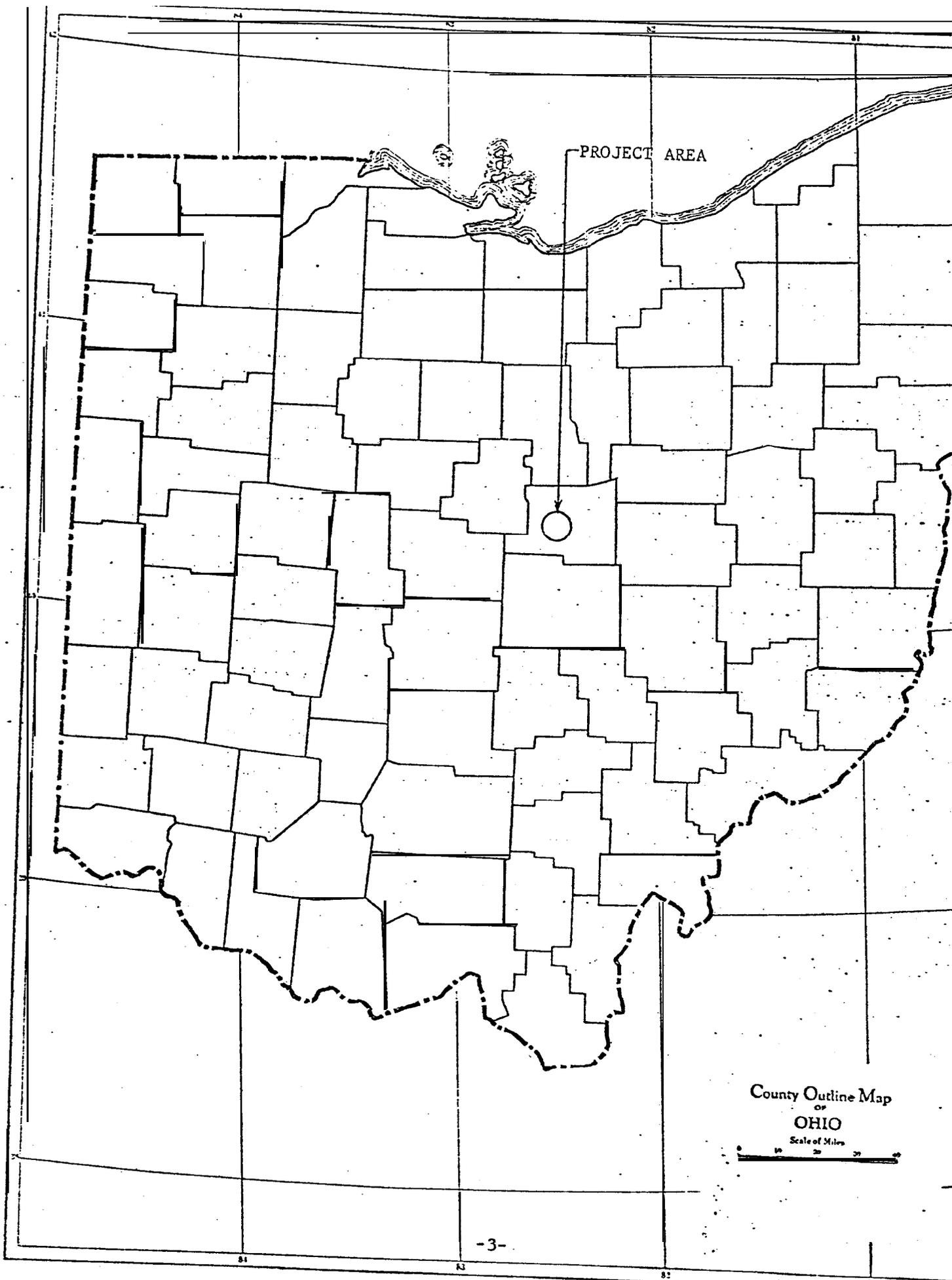
DESCRIPTION OF THE PROJECT AREA

There are two (2) drill sites in Knox County which require an archaeological survey. The two (2) sites are noted on the following maps.

The last glaciation left Knox County approximately 15,000 **years** ago. (Root et. al.: 1961) Soils in the project area were deposited by the retreat of the Wisconsin age glacier. For the most part, these deposits consist of sands and gravels, with some clay. Silt deposits occur in the Mt. Vernon area with accumulations of up to four (4') feet. However, the usual flood plain silts are thin or absent. (Root et. al.: **1961**)

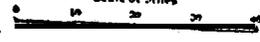
Drill site number **one** is approximately three hundred (300') feet west of the Kokosing River and two hundred (200') feet north of Armstrong Run. The second drill site is approximately five hundred (500') feet south of the first drill site. Since the retreat of the glacier, the area immediately surrounding the drill site has experienced some alluviation. With the drill site situated in the flood plain, it will be necessary to examine the substrata,

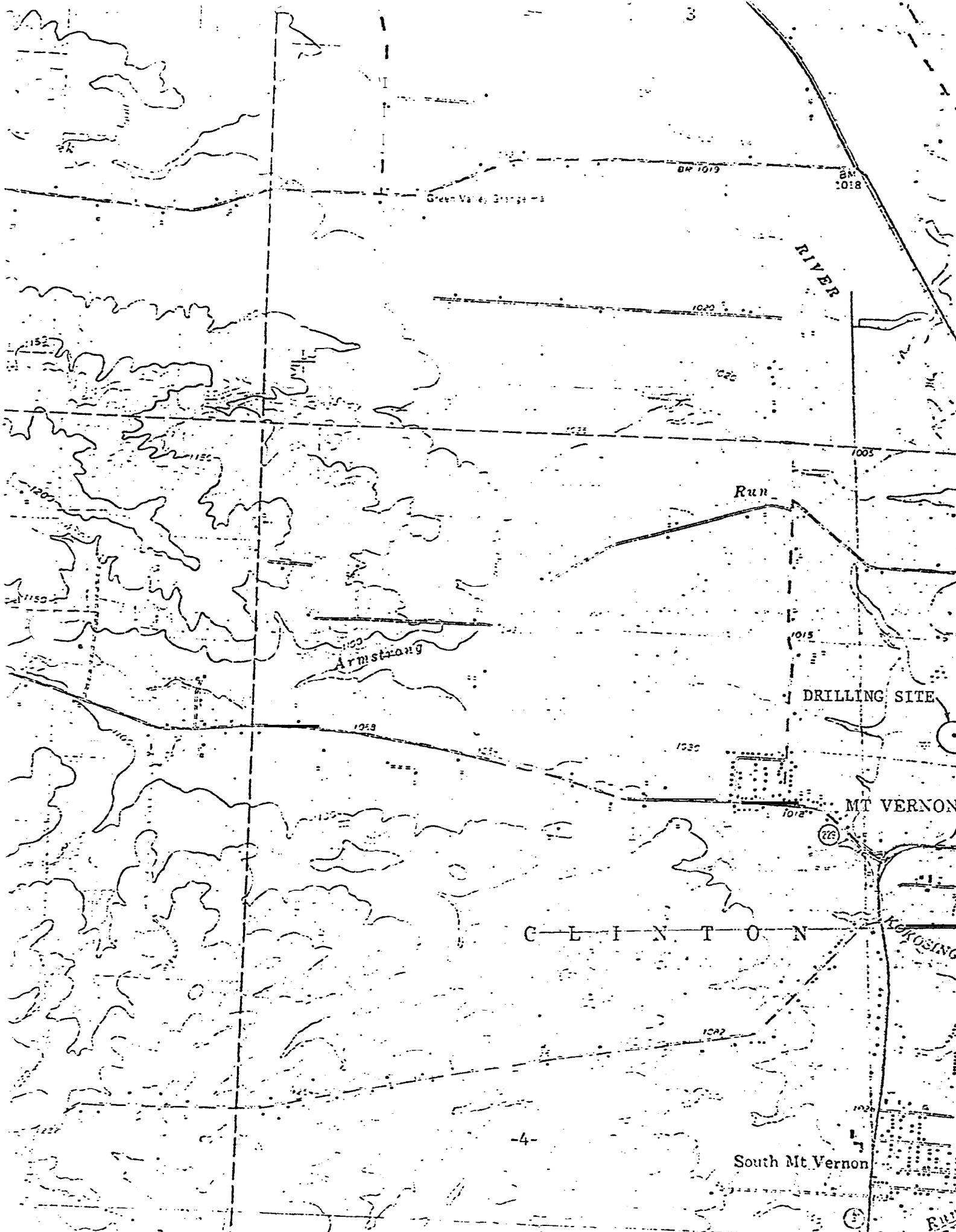
Presently, the area is being farmed. No other ground disturbing activities have taken place.



PROJECT AREA

County Outline Map
OF
OHIO
Scale of Miles





FIELD INVESTIGATIONS

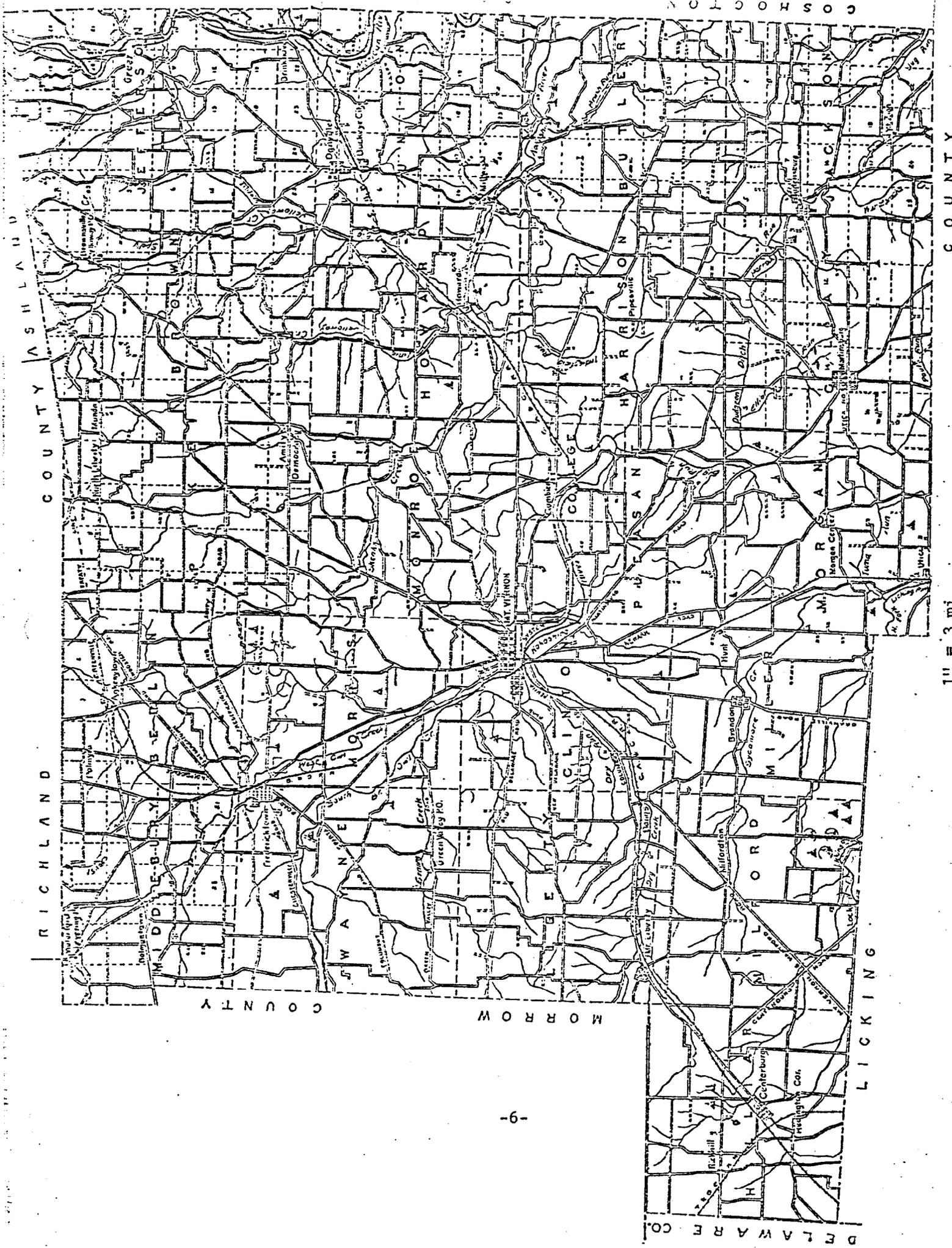
A review of available literature indicated that there was a substantial amount of evidence for prehistoric human habitation in the **general** area of Mt. Vernon. A copy of Mill's 1914 map (Figure 3) shows the concentrations of sites between Fredricktown 2nd Mt. Vernon. None of the literature, however, indicates that an archaeological survey was ever performed in the specific project area or that any prehistoric site has been recorded in the area.

During the month of **January**, 1979, the Museum was notified the field investigations had to be completed by the first week in February. Although the weather conditions were extremely poor, the field investigations commenced. The surface was snow covered and the soil was frozen approximately three to four inches.

The field investigations began with interviews with local landowners, collectors, and the Regional Archaeologist for the Ohio Historic Preservation Office.. Ken **Deaver**, Regional Archaeologist, stated that there were no sites noted in the Ohio Archaeological Inventory within or near the project area. He suggested contact be made with Paul Fant, a local collector of prehistoric Indian artifacts. Mr. Fant knew of no sites within the area of the project, but suggested contact be made with Mr. Bob Champion. Mr. Champion is reputed to have the largest collection and know of the most sites in the area. Mr. **Champion** had well over 10,000 artifacts in his collection. Of particular interest was his collection of **Plano** materials from Knox County. Mr. Champion was familiar with the project area and indicated that he could not remember ever finding a concentration of cultural materials there. Most of his collection came from sites south of Mt. Vernon.

Two landowners that were contacted did have collections from the surrounding area. Richard Wade had a collection of artifacts from his farm which is next to the property the drill site is located on. The collection (Plate 1) contains a variety of "types" of projectile points which represent occupations from the Archaic Period to the Late Woodland Period. The second collection located (Plate 2) belongs to Mrs. **Pearis**. The collection represents six years of surface finds. The collection contains four projectile points of Archaic to Early Woodland Period occupations and several bifacial tools. Although **gas** well site number 1 is located on the **Pearis'** property, Mrs. **Pearis** did not remember it **anything** had ever been found near the drill **site**.

Several of the landowners mentioned an archaeological survey which had recently been conducted for a proposed bridge replacement on Township Road 386. This bridge is north of the proposed drill site



C O S H O O T S O N

R I C H L A N D

A S H L A N D

C O U N T Y

M O R R O W

L I C K I N G

D E L A W A R E

C O U N T Y

C O U N T Y

M O R R O W

D E L A W A R E

R I C H L A N D

M I D D L E - B U T T L E

A

J W A N E

M O R A

M O N R O E

H A

H A R R I S O N

B U T T L E

P E L A S A N

H A R R I S O N

B U T T L E

S O W N

J U A C K S O N

C O U N T Y

C O U N T Y

C O U N T Y

C O U N T Y

1" = 3 mi

approximately seven hundred (700m.) meters. Wess Clark, Ohio Historical Society, was the investigator for this project. He stated his initial investigations revealed no evidence of any prehistoric habitation site. A slight scatter of flint was recovered. He did mention that some 1820's historic materials was located in what appeared to be a pit. All of this is well outside any proposed action connected with the drill site. The final report for this bridge replacement survey is to be completed soon.

The area to be disturbed for each **drill site** is approximately sixty (60'sq.) feet square. For area 1, four one-meter (1m.sq.) square test units were excavated in the pit area and actual drill site. The depths of the units were **95cm., 118cm., 95cm., and 136cm.** All units were excavated by natural levels and screened (1/4" mesh) until no undisturbed cultural materials were encountered. Four (4) flint flakes, one with secondary retouch, were recovered in the screens. (Plate 3) These flakes were recovered within the plow zone. To be assured that small evidence of prehistoric occupation had not passed through the screens, soil samples were taken from all layers within the test units. These were recovered for water screening. No cultural material appeared in the twenty samples run. In all phases of the field investigations there was no evidence the construction of this **gas** well would destroy an archaeological site.

In late February, 1979, the field investigations were undertaken for drill site number two (2). Weather conditions were extremely unfavorable. Snow cover prevented effective surface collection and frozen ground made excavation extremely difficult.

Drill site two (2) is owned by **Mrs. Beckholt**. Her family has farmed this land for the past fifty **years**. She informed the survey team that, unlike her neighbors, her family had never found any prehistoric cultural material in or around the project area.

The area to be disturbed is approximately sixty feet square (60'sq.). Within this area four (1m. sq.) test units were excavated by shovel shaving and troweling according to natural levels. Depths of **1.6m., 1.3m., and 1.4m.** were reached in three of the test units. Excavations were halted when layers of silty clay and gravel were encountered. Excavation in the fourth unit, which is located in a low spot in the area where one of the two "soup pits" will be constructed, was halted at a depth of **.8m** due to surface runoff flooding the unit.

No cultural material or features were encountered in any of the test units. To be assured that no cultural material was contained in the frozen portion of the plow zone, samples of frozen soil were taken from all of the test units for water screening. No cultural materials were recovered in the eight (8) samples run.

CONCLUSIONS AND RECOMMENDATIONS

A literary review, ~~interviews~~ and field investigations for the proposed gas well sites in Knox County were conducted by the Cleveland ~~Museum~~ of Natural History during January and February, 1979. The investigations recovered only four flint flakes in the immediate area of site 1. No evidence of any undisturbed cultural levels or occupation sites was encountered. It is not anticipated that the drilling of this gas well will in any way affect any archaeological site. However, because of the adverse conditions under which the field survey was conducted, it is suggested that an archaeologist be present during the initial drilling activities to recover any materials or data which may have gone undetected.

SOURCES CONSULTED

Articles and Books-(those not noted in the January 17, 1979 report)

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1970 The Ohio Archaic: A Study in Culture History, unpublished
Ph.D.dissertation, University of Mass., Amherst.

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1973 Indian Lore of the Muskingam Headwaters of Ohio,
Newspaper Articles

Root, **Samuel** I., Joaquin Rodriguez, and Jane L. Forsyth

1961 "Geology of Knox County," Ohio Division of Geological Survey
Bulletin No. 59.

Williams, Albert B.

1912 Past and Present of Knox County, Ohio, Indianapolis: B.F.
Bowen and Company, 2 vols.

Field Contacts

Ken Deaver, Regional Archaeologist, Ohio Historic Preservation Office

Wess Clark, Ohio Historical Society

Bob Champion, Local Collector

Paul Fant, Local Collector

Philip Henry

Tad Weed

Mrs. **Pearis**, Landowner

Mr. and Mrs. Richard Wade, Landowner

Mrs. Beckholt, Landowner

APPENDIX A - PLATES

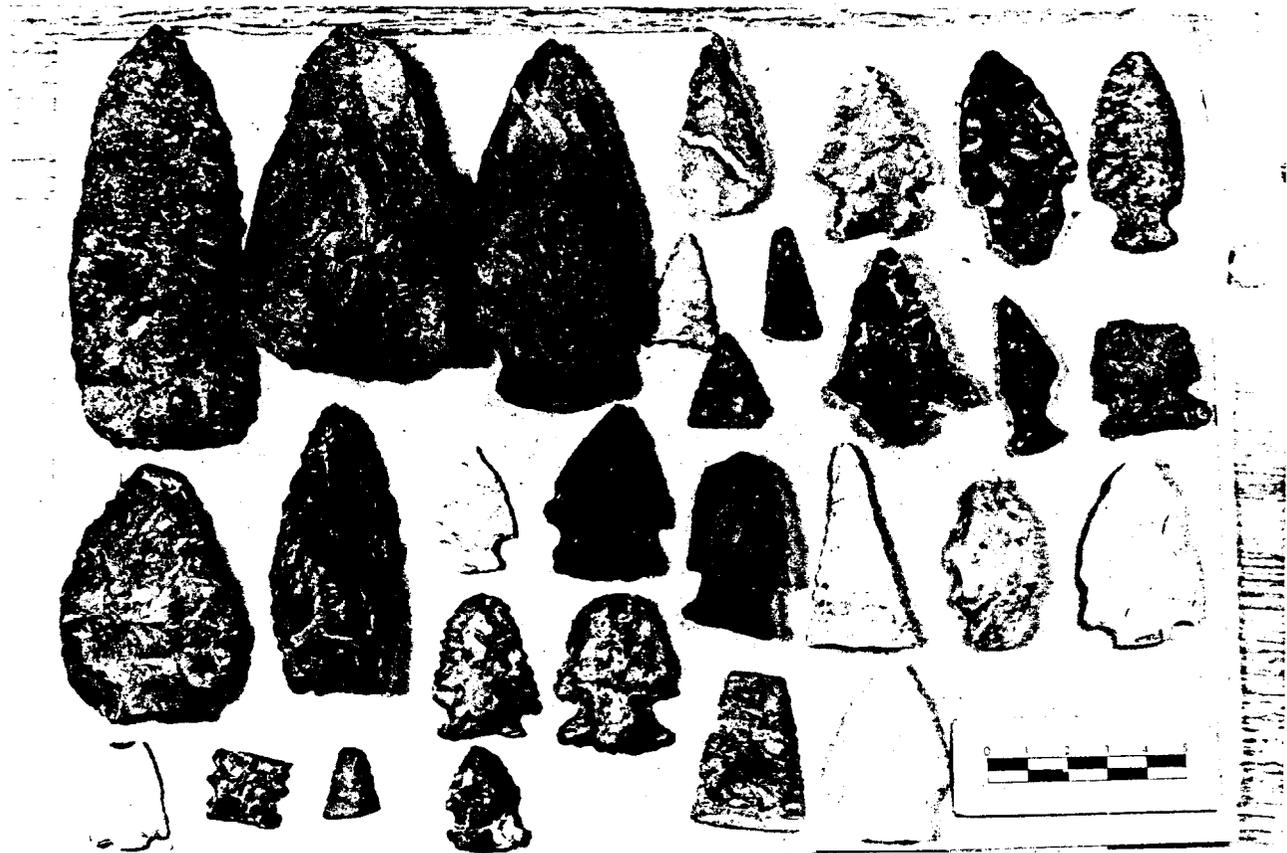


Plate 1, Richard Wade Collection

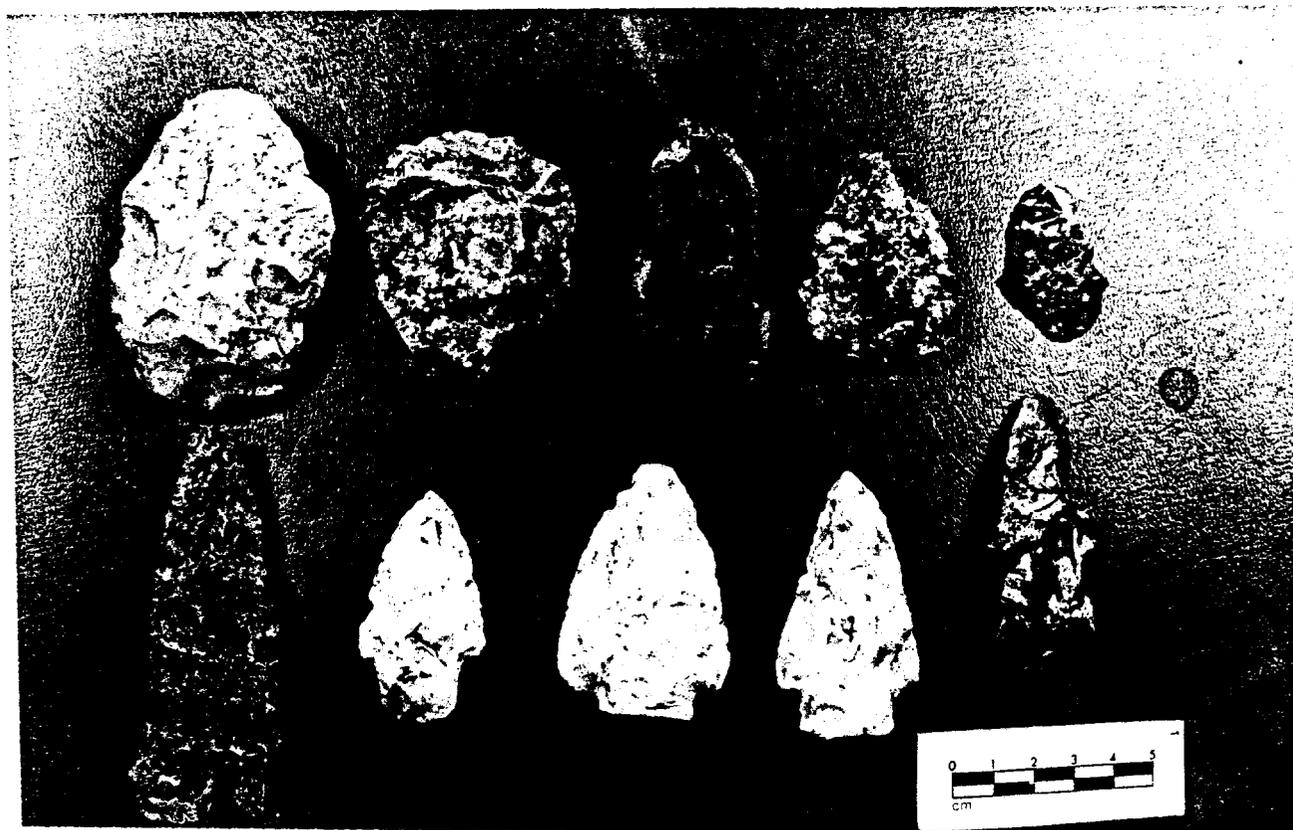


Plate 2. Mrs. Pearis Collection



Plate 3. Flakes recovered in the field investigations. Flake on the right shows evidence of secondary retouch.