1. ADAMS COUNTY

A. A summary of sand and gravel deposits

B. Memorandum Report: Yost Construction Company, Inc. Pit

C. Yost Construction Company Pit: Resampling

D. Bedrock Topography

E. Geologic Map

F. Memorandum Report: Lybarger Gravel Company

G. Memorandum Report: CLY Gravel Company

H. Drift Thickness RP7

I. Memorandum Report: CLY Gravel Co.

ADAMS COUNTY

A summary of sand and gravel deposits.

Date of field examination: June 18, 20, 1949

Geologist: Donald R. Coates

Number of sand and gravel pits:
2 active
6 abandoned

Size of operations: The Yost pit, 1½ miles northwest of Decatur (NW¼ of sec 28, 28 N, 14 E) is the largest pit in the county and the only concern equipped with a washing, screen, and crushing plant. Production is at a capacity of 150 tons daily, and 40,000 tons yearly. The Lybarger Gravel Company pit at Geneva is small, producing 8,000 tons of screened gravel yearly.

Origin of deposits and pit characteristics: Two pits at Geneva are developments of outwash in the "Lob Ditch", an outwash area developed by drainage from the Wabash Moraine. These pits are very sandy and the material of poor quality. The Lybarger pit covers several acres and reaches a maximum depth of 60'. The deposits ~~is~~ are extremely cherty and shaly. With the exception of this area pits in the remainder of the county are found in valley train terraces along the St. Marys and Wabash Rivers. The pits are located where the streams have stripped off part of the excessive overburden. The Yost pit is a fine example of a deposit being worked with much overburden. Here 20' of till are being removed to obtain the gravel that averages 50' thick. This is the largest amount of overburden encountered in an active pit in the entire northeastern part of the state. The material is of poor quality, being somewhat dirty and containing excessive amounts of black shale with much chert present. All pits in the county are wet. Most of the abandoned pits are thoroughly abandoned, being in

part filled in, and some being used as city dumps.

Future Possibilities: The sand and gravel future for Adams County is very dim. Limestone is much more accessible and plentiful and will continue to be used in the future. It is doubtful whether the materials of the gravel pits could pass a rigorous state specification test. The material is generally poor and very "soft", with deleterious shale and chert. The deposits are restricted to the river areas and any future sources must come from deposits along the St. Marys and Wabash rivers. The overburden is generally prohibitive for successful operations. Therefore, the county is poor for gravel in both quantity and quality.

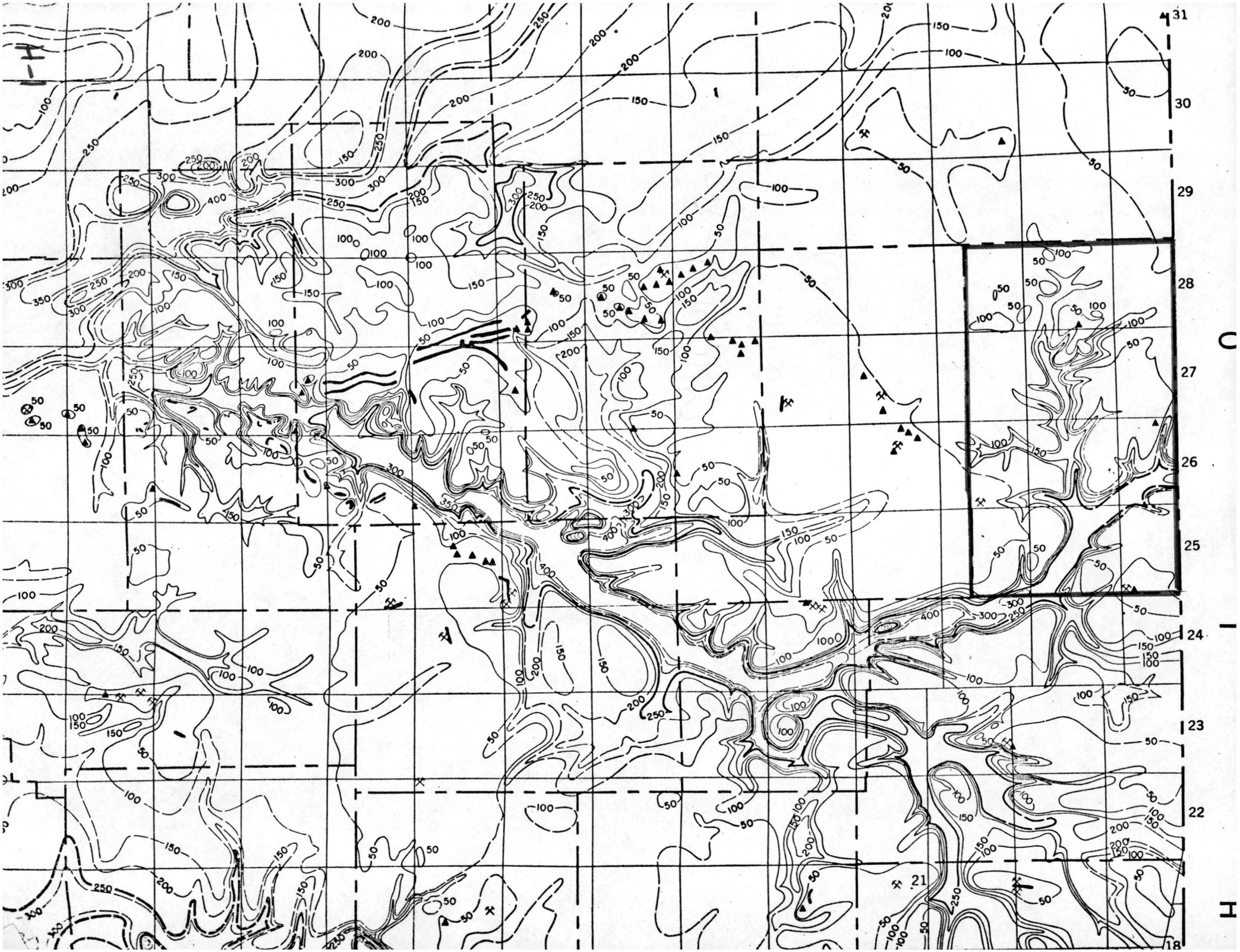
Glacial geology: Adams County is largely a till plain traversed in the northeast by the Fort Wayne moraine and in the south by the Wabash moraine The St. Marys and Wabash Rivers have developed minor sluiceways and the Lob Ditch drainage of glacial outwash in the south completes the picture. All features were formed during the Wisconsin glaciation of the Pleistocene Epoch.

References: Leverett and Taylor, The Pleistocene of Indiana and Michigan, USGS Monograph 53, 1915
30th Annual Report, Indiana Dept. of Geology and Natural Resources, 1905
Jones, G.B., Soil Survey of Adams County, U.S. Dept. of Agri., 1923

Memorandum Report
by
Michael C. Moore
July 21, 1976

County: Adams
Company: C L Y Gravel Company
Mailing Address: Box 470, Decatur, IN 46733
Phone: 219-724-7361
Date of field Visit: June 24, 1976
Informant: Bill Johnson, Plant Mgr.

This site was revisited and it was learned that 5 people are employed to produce 70 to 80,000 tons of washed sand and gravel per year. Mr. Yost owns 38 acres which are worked to a depth of 60 feet by slackline and payloaders. Gravel is shipped 5-10 mi. in two company-owned trucks and in customer-owned trucks. The charge is $1/ton for 5 mi. and 10¢/mi/ton after that. Mr. Johnson reports that Sam Yost, a nephew who is associated with the Yost Companies, Inc. producers of pre-cast concrete, has opened a small pit along route 27 north of Decatur. (SW¼ SW¼ sec. 16, T. 28 N., R. 14 E., Hoagland 7½' quad.).


31
30
29
28
27
26
25
24
23
22
21
18
C
I
H

Memorandum Report

by

Michael C. Moore
May 17, 1973

County: Adams
Company: C L Y Gravel Company
Location: R.R. 1, Decatur, Indiana 46733; In St. Marys River Valley, off Winchester Road 1½ miles northwest of the intersection with U.S. 27 & 33 in Decatur. NW¼ NW¼ NW¼ Sec. 28, T. 28N., R. 14E. Decatur 7½' quadrangle.
Date of field examination: May 16, 1973
Informant: Mr. Dale Hunt, office manager; C L Y Gravel; Mr. Alexander, Yost Cos. The company's phone number is (219)724-7361.

In 1969 the Yost companies closed down their gravel operation because it was more economical to use crushed stone for aggregate for the pre-cast concrete pieces they fabricate. Pop-outs were also a problem. Mr. Calvin L. Yost, chairman of the board and patriarch, decided that the gravel operation was still viable and bought it from the corporation. He now operates it as a separate company, C L Y Gravel.

Yost now uses crushed stone from Meshberger's quarry and for about 10% of their products they are able to use Haydite from Morgan Co. The lightweight aggregate reduces shipping costs when the finished product must be hauled more than about 60 miles. Sand for the concrete products is still obtained from C L Y Gravel.

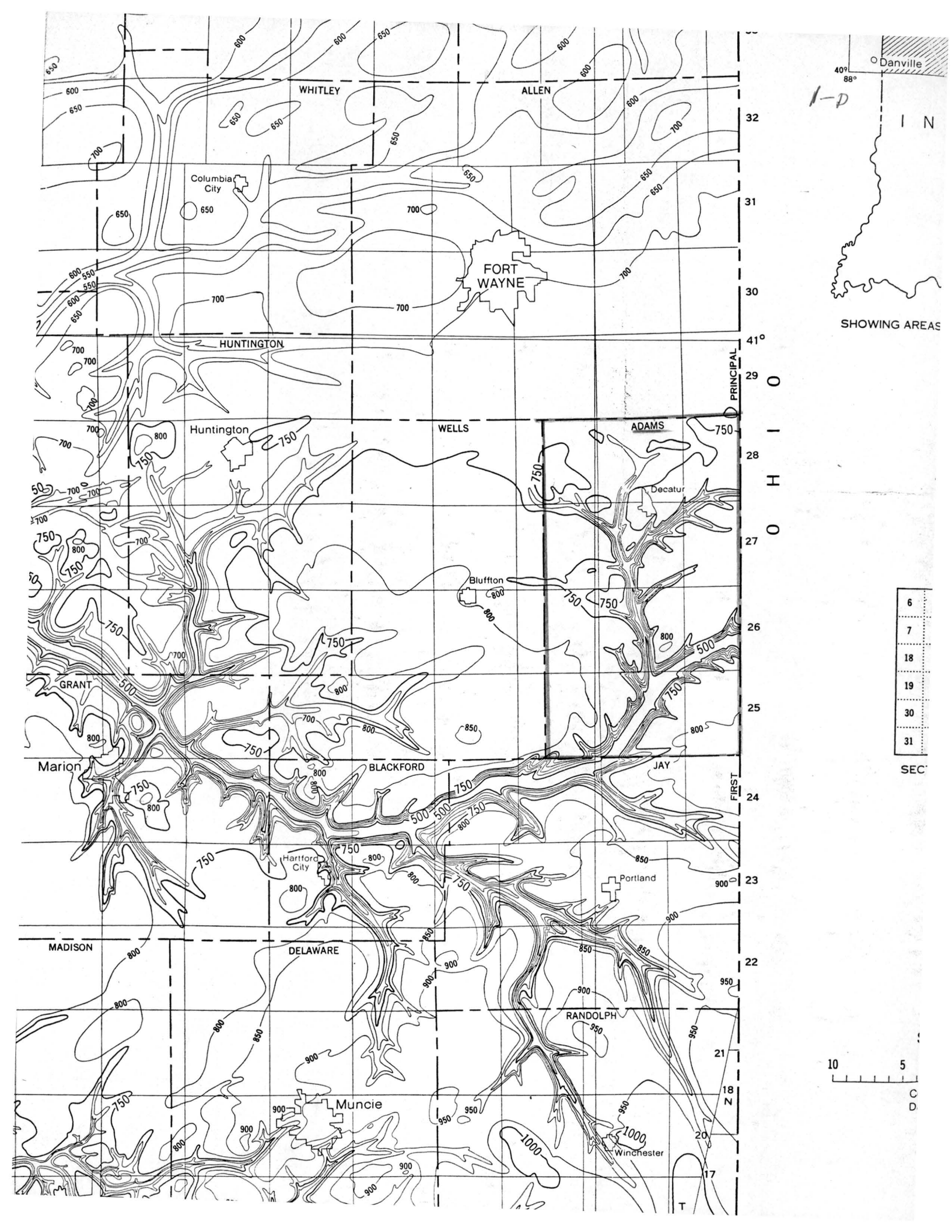
Calvin Yost is president of C L Y Gravel Co. which produced about 80,000 tons last year after reopening in December of 1970. This year they hope to produce over 100,000 tons. About 6 persons are employed at the plant. Eight acres have been utilized and over 30 remain to be worked. The area is rural and the pit long-established, so zoning is no problem. Mr. Yost plans to make a housing development and fishing lake when the mining is terminated.

Present mining reaches to a depth of 70 feet, but past operations have gone as deep as 90 feet. The deposit is in the valley train of the St. Marys River but has a thick overburden, of from 12 to 20 feet of soil and till. At 80 to 90 feet a layer of "blue clay" is encountered which effectively halts further mining. Dredge pumping was halted at a depth of 28 feet due to a high concentration of boulders (the water level is at about 765 feet). Mr. Hunt reports that several large boulders up to 5 feet in diameter are found and sold each year. The ration of sand to gravel is about 30/70, and about 50% of the final product is made from crushed gravel.

The company presently uses a 2 yard Saureman dragline, and a jaw crusher followed by a roll crusher. A payloader is used to fill the company's own trucks. The plant can make specification materials.

Pea gravel	$1.75/ton
Pit run	1.60
73	1.95
14	2.20
17	2.35

A basic hauling charge of $7.50 for a 10 ton load is made, and beyond 5 miles a surcharge of $ .10/ton/mile is made.


WHITLEY
ALLEN
Columbia City
FORT WAYNE
HUNTINGTON
Huntington
WELLS
ADAMS
PRINCIPAL
Decatur
Bluffton
GRANT
Marion
BLACKFORD
JAY
FIRST
Hartford City
Portland
MADISON
DELAWARE
RANDOLPH
Muncie
Winchester
OHIO
Danville
SHOWING AREAS
SEC
1-D
40°
88°
41°
32
31
30
29
28
27
26
25
24
23
22
21
20
18
17
N
T
10
5

1-F

Memorandum Report

by

Michael C. Moore
May 17, 1973

County: Adams
Company: Lybarger Gravel Co.
NW¼ SW¼ SE¼ Sec. 28, T. 25N., R. 14E., Geneva 7½' quadrangle
1 mile SE of Geneva, of SR 116

Informant: Mr. Lybarger, owner

This small gravel operation is run on a part-time basis by Mr. Lybarger. He owns about 20 acres of gravel, about 5 of which have been worked. Presently he is dipping from a depth of about 25-30 feet. He has worked as deep as 45 feet. In addition to the crane, he has an end loader, screening plant and scales, and a dump truck.

Mr. Lybarger sells pit run gravel to local farmers and also has a ready-mix business. He estimates the pit produces 6,000 to 10,000 cubic yards per year. He sells only a little screened gravels, and prefers not to. He will haul within about a 10 mile radius, and of course also allows others to load gravel.

He gets $1.50/ton for pit run delivered in the vicinity of the plant and at his maximum range charges up to $1.75/ton. He does not plan any expansion and may sell or lease the business to someone else in a few years.

Most of the deposit is under water, only about 5 feet were showing above at the time of the visit on May 16. There is not much overburden, only a few feet of soil. The pit is located in the lowland area at the junction of the Loblolly, a broad, flat area formerly the site of a minor outwash channel from the marginal position of the Wabash Moraine, and the Wabash River. There are many hundreds of acres of similar terrain to the southwest along the Loblolly and north and west in the Wabash floodplain and terraces.

Gravel reserves in and near the Lybarger pit appear to be adequate to serve the surrounding rural communities for the foreseeable future. Beyond Mr. Lybarger's hauling radius there are other, larger gravel pits, and there are stone quarries nearby as well.

Adams County, Indiana: WELL DATA SHEET

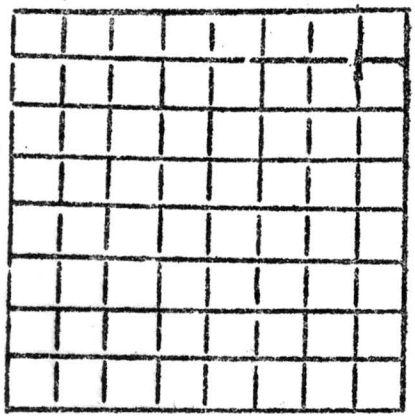
T. 28N ; R. 15E ; Section 10

___ ¼, ___ ¼, ___ ¼, SE ¼

___ NL, ___ EL, ___ SL, ___ WL

Well Name NW Cor. Rd 1000 + State line

Oil ___, Water ___, Eng. boring ___, Seismic ___, Strat. Sect. ___;
Gas ___, Abandoned ___. Date ___



Surface elevation ___:

Bedrock elevation ___:

Depth to Bedrock ___:

Bedrock formation ___:

___:

Bedrock Lithology ___:
___:
___:
___:
___:

Bedrock Log • Top

Total Depth ___:

Logs available ___:

Unconsolidated Log:

0 to 20 ft: yellow cly

54 ft: Blue cly

58 ft: Sd + Gv

61 ft: Limestn.

Adams County, Indiana: WELL DATA SHEET

T. 28N ; R. 15E ; Section 5

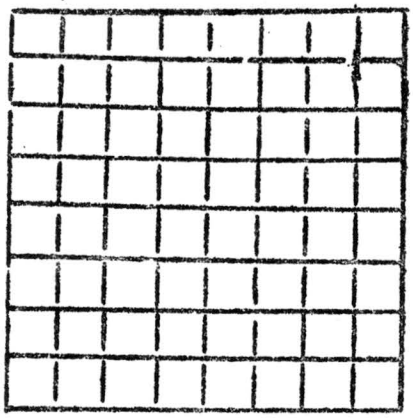
___ ¼, SE ¼, SW ¼, SE ¼

___ NL, 1450 EL, 300 SL, ___ WL

Well Name ___

Oil ___, Water ✓, Eng. boring ___, Seismic ___, Strat. Sect. ___;
Gas ___, Abandoned ___.

Date ___



Surface elevation 825 :

Bedrock elevation 760 :

Depth to Bedrock 65 :

Bedrock formation ___ :

___ :

Bedrock Lithology LS :

___ :

___ :

___ :

___ :

Bedrock Log • Top

Total Depth ___ :

Logs available ___ :

Unconsolidated Log:

ϕ to 52	ft:	Clay
57	ft:	Sand
64	ft:	Gravel
65	ft:	Cavesegu + mud
131	ft:	Brn lime + Grey lime
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	
___	ft:	

MEMORANDUM REPORT

of the

YOST CONSTRUCTION COMPANY, INC. PIT

Date of field examination: June 18, 1949

Geologist: Donald R. Coates

Location: Adams County, 2 miles northwest of Decatur. The pit is located in T. 28 N, R. 14 E, NW ¼ of the NW ¼ of section 28.

Management and ownership: C.L. Yost is president of the Yost Construction Company, Inc. Other officials of the company include R.L. Yost, Sec-Treas., and Herman Bittner, plant superintendant. The company owns the land the pit is situated on, and in all 20 acres are owned . Information for this report was given by C.L. Yost and by Herman Bittner.

Equipment: At present the plant consists of the following equipment: trucks, loaders (Haiss), rig and slack line with 3/4 yard bucket, jaw crusher (crushes up to 8"), washing plant and facilities, vibrating screens.

Products and production: Washed sand and gravel screened to all sizes and specifications, crushed stone, and ready-mix concrete are produced. The plant is operating at capacity production which is 150 tons a day. In 1948 40,000 tons of combined products were produced.

Transportation: All products of the pit are hauled by truck. The nearest railroad siding is the Pennsylvania RR at Decatur a distance of 2 miles.

Size of pit and Characteristics: The pit is ellipsoidal in shape, 1000' x 500'. The northern part of the pit is now inactive. Its 10-20' cliffs rise out of 25' of water. The southeastern part of the pit is now in use. Here cliffs average 20', all overburden, and the water is 45' deep. The unusual thickness of overburden, 20', is one of the most outstanding features of the pit. There is a ready market for the fill dirt in surrounding towns, and some of the fill is being used as fill dirt on the property so that the plant can be moved in the future to a new location, to the northwest of its present

YOST CONSTRUCTION COMPANY REPORT

position. The soil map, see reference list, indicates the pit is located in Genesseesoil. It should be noted that most of the soil was actually till, indicating a readvance of the ice after the gravel vein had been deposited by the glacial waters of the ST. Marys River sluiceway. A rather extensive lens of nearly pure sand is found at the top of the gravel-sand vein in the middle part of the pit. The total vein reaches a maximum thickness of 50'. In some parts of the pit hardpan has already been reached. The hardpan is capped by a boulder seam, many of the boulders exceeding 4' in length and are predominantly limestone with some crystalline rocks of equal size.

Geology: The pit is on the south side of the St. Marys River and is a valley train terrace developed in the sluiceway of the river, during the later stages of the Wisconsin glaciation in the Pleistocene Epoch. As mentioned above, the gravel was covered by a thick till sheet by a readvance of the glacier.

Samples: The samples of the pit were obtained by slackline at a depth of 60'. The total weight of the sample was 1275 pounds. This sample was coned, quartered and then halved so that the working sample was 1/8th the original. The working sample was then screened and weighed. The sampling procedure was done with wet material. The following is a breakdown of the various sizes:

1 limestone boulder	-- 25%
3 cobbles, limestone, dolomites	-- 2
2" material, mostly limestone, some dolomite, 1 chert, 1 quartzite, 1 syenite, scattered miscellany with pyrite. Rounded to sub-rounded shapes	-- 4
1.05" same as above with some shale	-- 5
.525"	--15
.185"	--49
	100 %, total weight 159.5 pounds.

Respectfully,

Donald R. Coates

Donald R. Coates

References: Leverett and Taylor, The Pleistocene of Indiana and Michigan, Monograph 53, 1915

1-C

August 11, 1950

YOST CONSTRUCTION COMPANY PIT, ~~DELAWARE~~ ADAMS CO.

RESAMPLING

Date of resampling -- July 6, 1950.

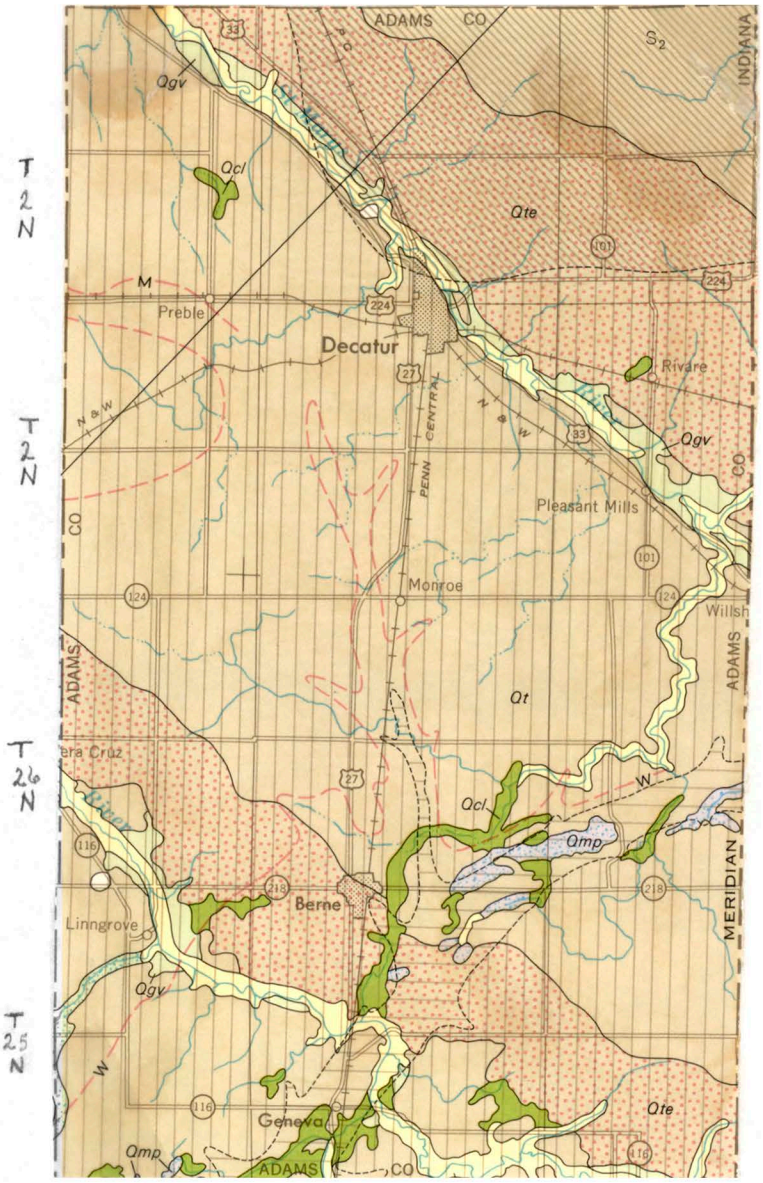
Resampling procedure -- Since the entire gravel deposit is below the water level of thepit, sample S5017 was taken from a pile of pit run material dropped due to mechanical defects in the cableway system. This sample is probably not as representative as would be desired.

Respectfully submitted,

Robert E. Sargent

Robert E. Sargent
Party Chief

1-E



Scale 1:250,000

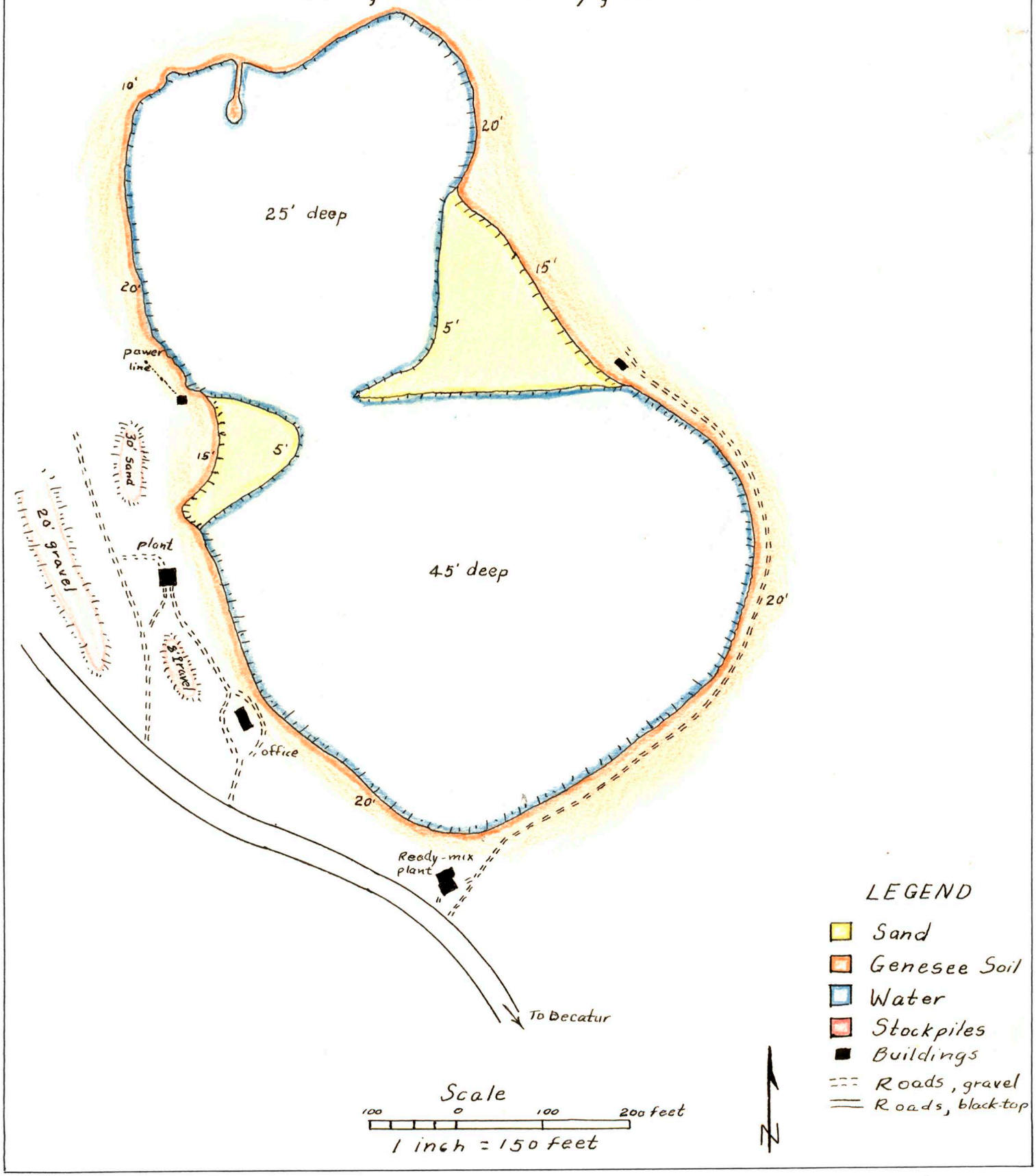
5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 Nautical Miles

YOST SAND and GRAVEL PIT

Decatur, Adams County, Indiana



Control: Brunton Compass
Open-Sight Alidade

Mapped by Donald R. Coates
June 18, 1949