

47.

LAWRENCE COUNTY

- A. A summary of sand and gravel deposits
- B. Memorandum Report: C.E. Flynn Sand Pit
- C. Geologic Map

Sand and Gravel Deposits of Indiana

SUMMARY REPORT OF LAWRENCE COUNTY

Date of field examination: A reconnaissance survey of the county was completed on September 3, 1949.

Activity: There are three active and more than one abandoned operations in the county.

Geology: Pleistocene and Recent material in and adjacent to the streams are the ^{principal} ~~main~~ sources of sand and gravel. The East Fork of White River is the main stream and both the Pleistocene and Recent materials are characterized by a sand ratio of 15 ^{or} to 20 ^{to} 1. A Pleistocene terrace deposit in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34, T. 5 N, R. 1 W, which is along the River, is ^{all} ~~completely~~ sand. There may be other terrace localities in the county, but none were investigated. The Recent material from the bed of the River is about 95% sand except along the channel bars, ^{which} ~~and these~~ are composed of fragments of limestone and shale. The other streams have Recent material which consists of limestone and shale fragments, ^{and} ~~with~~ great quantities of geodes and chert fragments. This material can only be used for filling and as a base for more suitable materials.

West of Williams, several small abandoned quarries occur in the basal Mansfield, of Lower Pennsylvanian age. The material is a conglomerate consisting of well-rounded quartz pebbles, loosely consolidated, and cemented by ferruginous material. The well-rounded pebbles are undesirable for road material, according to present standards, and the conglomerate has not been used for many years.

Reserves: The Pleistocene and Recent materials along the streams comprise the ^{county's} ~~very small~~ reserve ^{of sand and gravel,} and only sand ~~can be considered as~~ occurring in sizable deposits. The Mansfield conglomerate offers ^a ~~very~~ ^{small} ~~little in the~~ ^{of aggregate} reserve resources.

"Lawrence County", pp. 912-922 in

Bibliography: Blatchley, W. S. (1906), The Roads and Road Materials
of a Portion of Central Southern Indiana, Indiana Dept. Geol. and Nat.
 Res., 30th Ann. Rept., pp. ⁸⁷³⁻⁹³⁹~~912-922~~.

Tharp, W. E., Bushnell, T. M. and Adams, J. E. (1928),
Soil Survey of Lawrence County, Indiana, *U.S. Dept. of Agriculture,*
Bureau of Soils

Respectfully submitted,

Harry W. Kugler

Harry W. Kugler,
 Geologist

September 27, 1949.

June 30, 1950

MEMORANDUM REPORT BY ROBERT E. SARGENT

C. E. FLYNN SAND PIT, LAWRENCE COUNTY

Date of field examination. -- June 29, 1950.

Location. -- The Flynn sand pit is located 2 miles south of Bedford, in Lawrence county, in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T.5N. R.1W..

Ownership. -- The Flynn sand pit is owned and operated by Charles E. Flynn. Mr. Flynn also owns the land on which the pit is located.

Geology. -- The pit is located in a Pleistocene terrace along the East Fork of the White River, adjacent to the White River sluiceway (See Leverett and Taylor, 1915, Pl. 6). The excavation has exposed approximately 33 $\frac{1}{2}$ feet of fine sand. The section described below may be considered typical of the entire deposit. This section was measured by hand leveling and with a steel tape.

Unit	Description	Thickness in feet
5.	Soil:- Dark brown, very silty, rich in organic material.	0.9
4.	Sand:- Red-brown in color, quite silty. Cross bedding and stratification are not apparent.	12.6
3.	Sand:- Very fine, pale yellow-brown. Stratification and cross bedding striking.	16.4
2.	Clay:- Upper 0.2 feet blue and finely straticulate. Lower 0.5 feet dark brown and earthy.	0.7
1.	Sand:- Very fine, pale yellow-brown. Stratification and cross bedding apparrent.	3.0
Total thickness of measured section		33.6

Below this measured section are slabs of Salem and Harrodsburg limestones. The slabs of Salem limestone seem quite definitely not in place, The Harrodsburg may be in place, although it could not be accurately determined, as it outcrops due west along Indiana Route 37.

Samples. -- Sample S5011 was taken from Units 1 and 3 of the measured section described on page 1, and it could be considered quite representative of those units. Sample S5012 was taken from Unit 4 of the above section, and may also be considered representative of that unit.

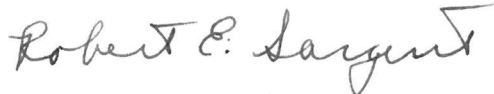
Operations. -- The Flynn sand pit is owned and operated by Charles E. Flynn. Mr. Flynn estimates that the pit was opened in 1920.

At the present time sand is removed with a truck loader, although a power shovel has been utilized. Mr. Flynn does none of the removal, all removal being done by the purchaser.

Production. -- Production of the Flynn Sand Pit varies with demand. According to Mr. Flynn 14,000 tons were produced in 1949.

Reserves. -- The present pit area is approximately 3 acres, and Mr. Flynn estimates that there are 5 or 6 more acres which will prove to be workable. The sand has averaged 35 feet in thickness in the present pit, but no prediction can be made as to its constancy of thickness upon expansion of the pit.

Respectfully submitted,



Robert E. Sargent
Party Chief

Leverett, F. and Taylor, F. B. (1915) The Pleistocene of Indiana and Michigan and the history of the Great Lakes, U. S. Geol. Sur. Monograph, vol. 53, 529 pp., 32 Pls., 11 figs.

