Title: Cross Plains West

Location: Quarry south of County Highway KP, .7 km southwest of Cross Plains, Wisconsin in the NW¹/₂, NW¹/₂, SE¹/₂, Sec. 4, T.7N., R.7E., Dane County (Cross Plains 7.5 minute topographic quadrangle, 1962).



Author: I. E. Odom

<u>Description</u>: This exposure is significant because the disconformable contact between the Jordan (Van Oser Member) and the St. Lawrence Formations is well exposed. The Lodi Siltstone and underlying Black Earth Dolostone are both reddish, a local coloration developed along the axis of the Wisconsin Arch. At this location, the Black Earth is very silty, and both it and the Lodi are intensely bioturbated. At the type section of the Black Earth Member located 4.5 km west on U.S. 14, there is a thick sequence of dolostone containing algal structures. Algal structures are common in the Black Earth Dolostone only in the vicinity of the Wisconsin Arch and around the Baraboo Syncline.

CROSS PLAINS (WEST), WIS.



U.S. 14 near Festge Park



R.H. Dott, Jr.

Paleocurrent directional data for the Van Oser Member.

Neither the Coon Valley Member nor its contact with the overlying Oneota Formation are well exposed. Baraboo Quartzite lithoclasts are moderately abundant in the Van Oser Sandstone. The upper part of the Van Oser Sandstone is cemented by calcite (popcorn concretions).

<u>Interpretations</u>: What is the age of the oxidation of iron in the St. Lawrence? Is it due to pre-Van Oser subaerial weathering? Is there evidence in the Van Oser that suggests the oxidation might be recent in age? See description accompanying Outcrop 7 for further discussion of the sedimentology of the St. Lawrence Formation. For additional information on the regional lithology of the St. Lawrence Formation see Ph.D. thesis by McGannon (1960) and Nelson (1956).

Note: Permission must be obtained to enter this quarry. The present owner lives in the first house on the north side of Highway KP toward Cross Plains