## A Geologic Play Book for **Utica Shale Appalachian Basin Exploration**

## **Abstract**

## Lithostratigraphy

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The geologic section analyzed in this Study includes Upper Ordovician strata from the Mohawkian and Cincinnatian Series across parts of Kentucky, Ohio, West Virginia, Pennsylvania and New York. While the local names for these units differ across the Study area, the stratigraphic nomenclature used herein corresponds to those used in southwestern Ohio, as well as adjacent parts of Kentucky where these units have been mapped at the surface. These units, in descending order, are the siltstone-rich Kope Formation, the more organic-rich Utica Shale, the Point Pleasant Formation of alternating limestone and shale beds and the Lexington Limestone/Trenton Formation. The Lexington Limestone/Trenton Formation interval is further subdivided into the informal "upper Trenton," the Logana Member and the Curdsville Member.

SERIES	STAGE	CENTRAL AND EASTERN KENTUCKY	NORTHERN KENTUCKY AND SOUTH- WESTERN OHIO	WEST- CENTRAL OHIO	EASTERN OHIO	NORTHERN AND CENTRAL WEST VIRGINIA	WESTERN AND NORTH- CENTRAL PENNSYLVANIA	WESTERN AND CENTRAL NEW YORK	THIS STUDY
CINCINNATIAN	EDENIAN	Calloway Creek Limestone (in part)	Kope Fm.	Kope Formation	Kope Formation	Reedsville Shale (in part)	Reedsville Shale (in part)	Lorraine Group (in part)	Kope Formation
MOHAWKIAN CIN	E.	Girard Siltstone Clays Ferry Fm.	Point Pleasant Formation	Utica Shale	Utica Shale Point Pleasant Formation	Utica Shale	Utica Shale Point Pleasant Fm.	Upper Indian Castle Sh. Lower Indian Castle	Utica Shale Point Pleasant Fm.
	CHATFIELDIAN	Logan Logan	Millersburg Member stone Member a Member mestone Member	Point Pleasant Fm Trenton Limestone	Lexington undifferentiated member Logana Member Curdsville Member	Trenton Limestone	Trenton Limestone	Trenton Group British	Upper Lexington/ Trenton member Logana Member Curdsville Member
Siltstone Cray shale Dark gray to black shale Limestone Hiatus									

Correlation chart for early Late Ordovician strata evaluated by the Utica Shale Play Book Study

## Citation

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