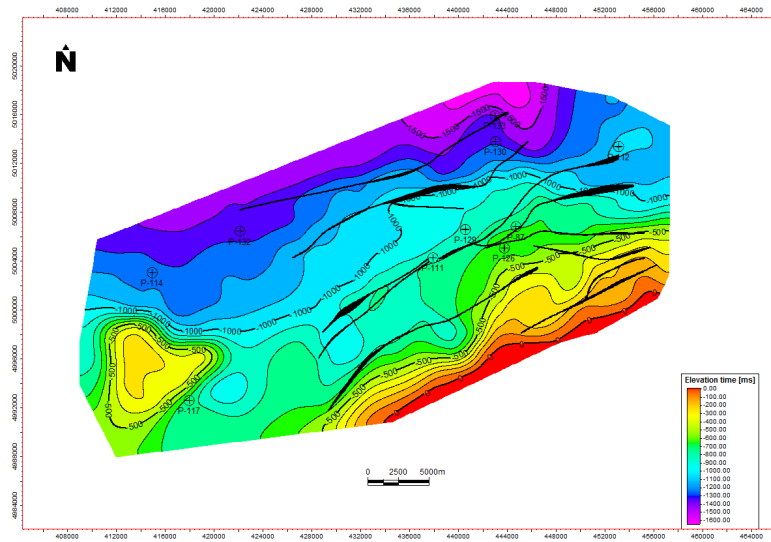
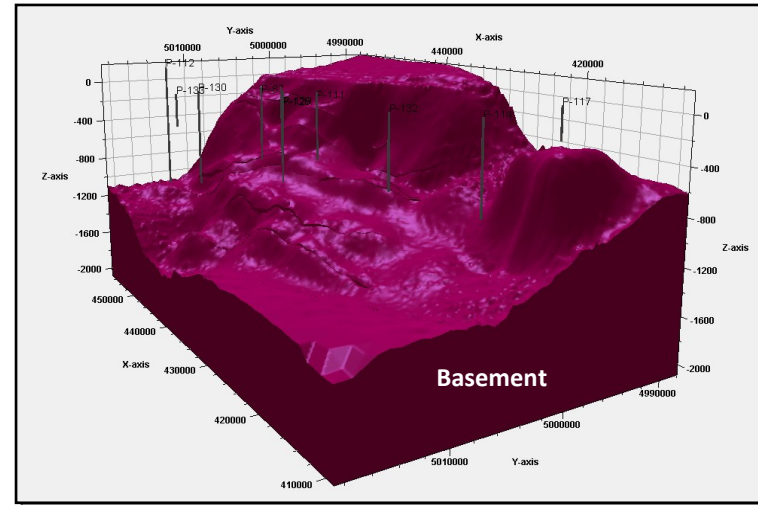


## **Maps (Time and Depth) & Models in the Windsor Basin**

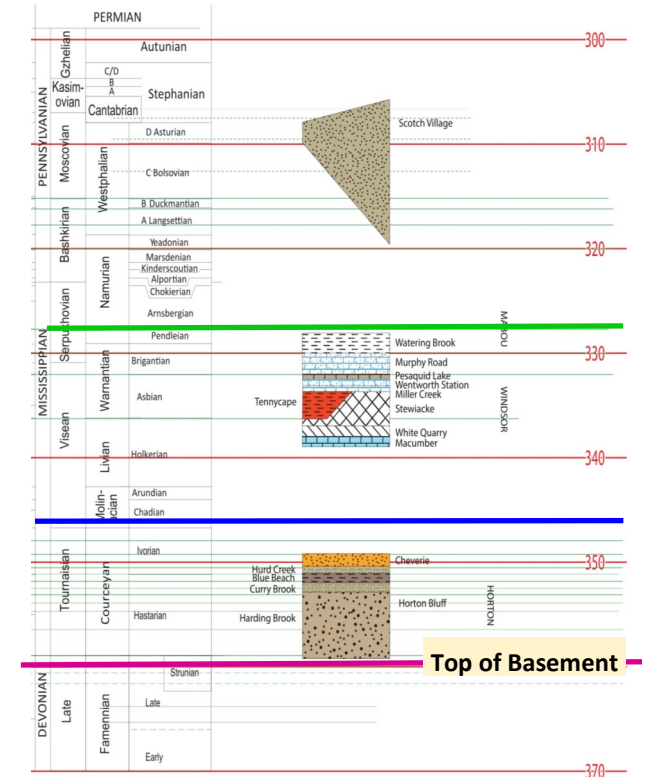
Created by: Helen Cen (Department of Energy, Nova Scotia)



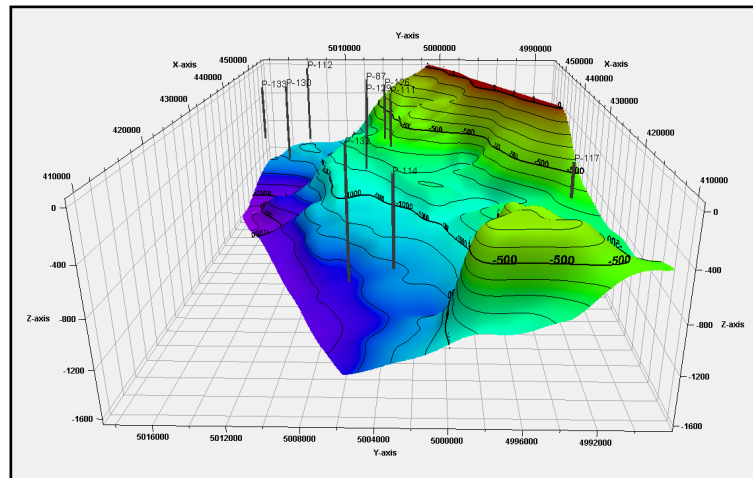
Top of Basement of the Windsor Basin with 2D View (Time)



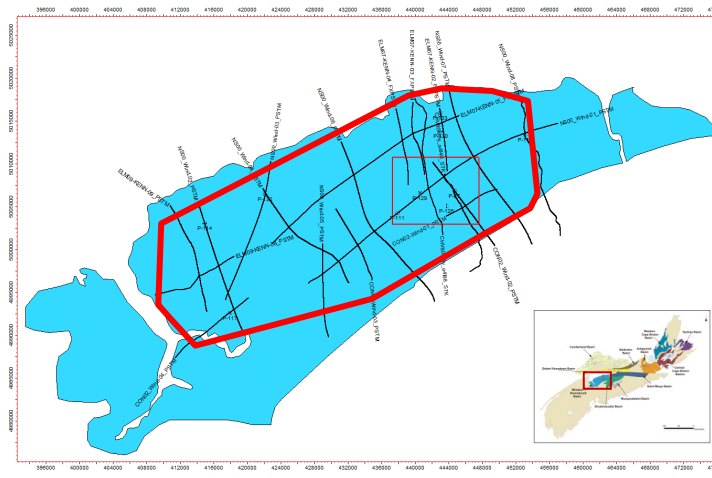
Windsor Basin Model on the Top of Basement (Time)



Stratigraphic Column of the Windsor Basin

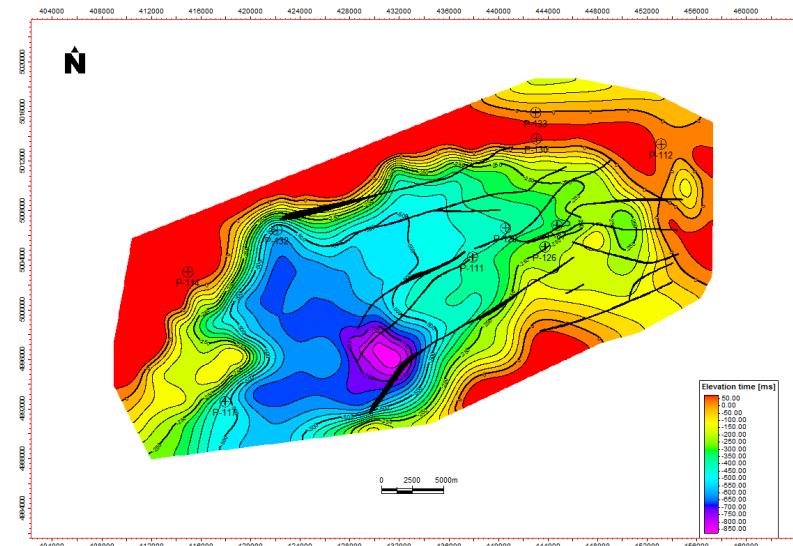


Top of Basement of the Windsor Basin with 3D View (Time)

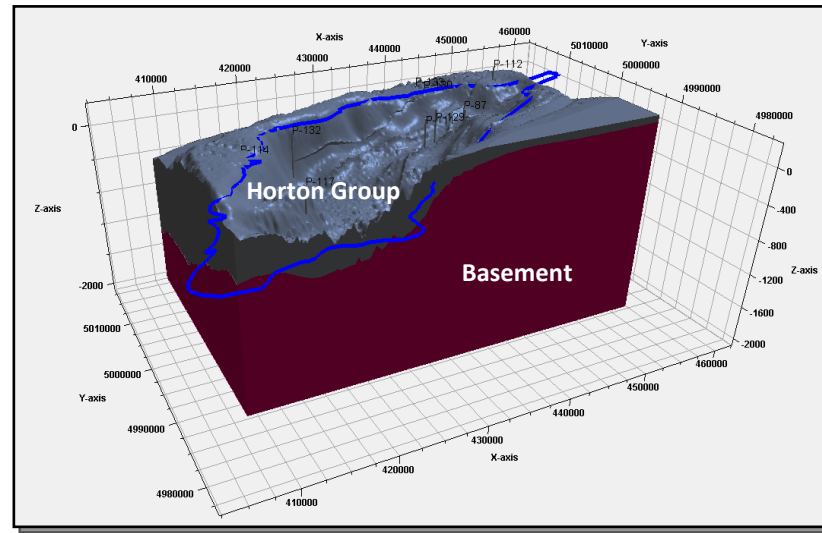


Location Map of Study Area in the Windsor Basin

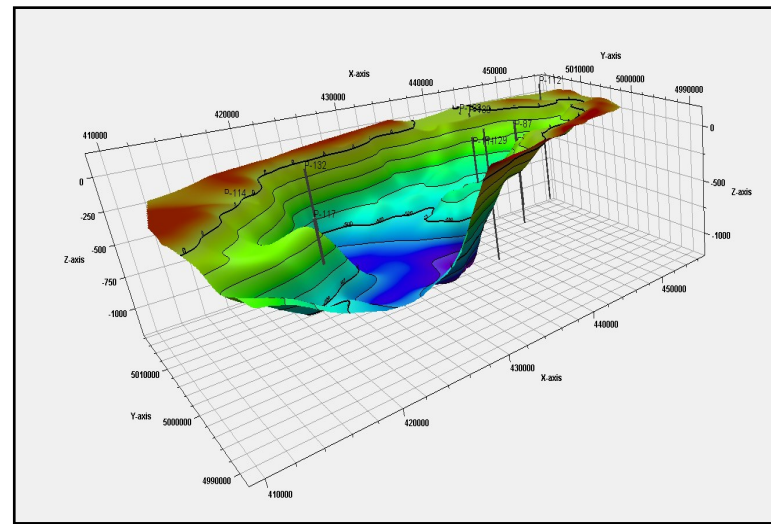
Figure shows the TWT structural map on the top of Basement of Windsor Basin with different views (2D and 3D). The map displayed the basement was deepening (blue color) down to the north and north-eastern. Four major basement-related faults controlled the geometry of basin. The Whole basin was dominated by graben/half graben with major moderately to steeply dipping basement-related normal faults. These rift basin structures were well observed seismically. At the very southwest corner of the Windsor Basin, there was a basement high (yellow) (NSDOE, 2016).



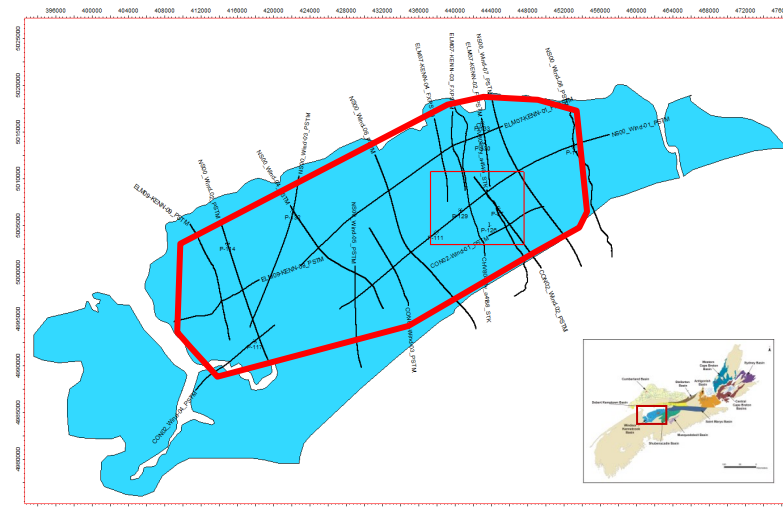
Top of Horton Group of the Windsor Basin with 2D View (Time)



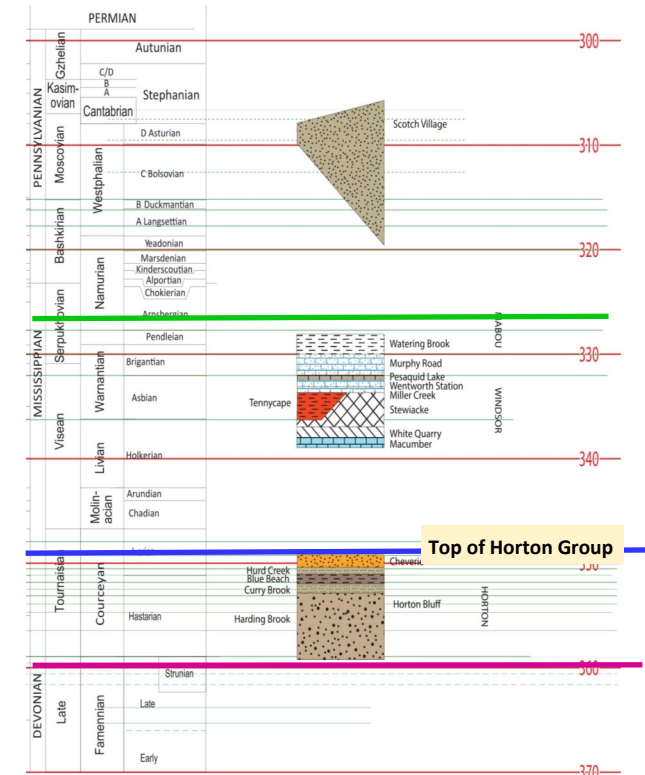
Windsor Basin Model on the Top of Horton Group (Time) (blue line represent the top of Horton Group outline on the geological map)



Top of Horton Group of the Windsor Basin with 3D View (Time)

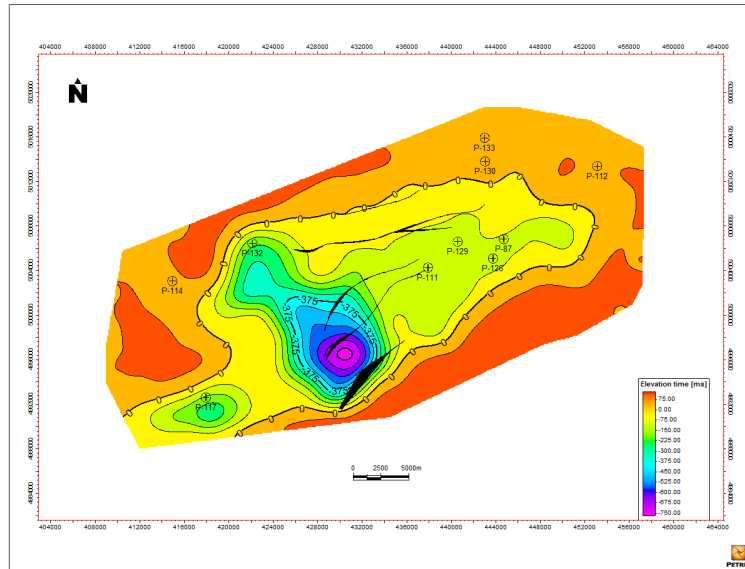


Location Map of Study Area in the Windsor Basin

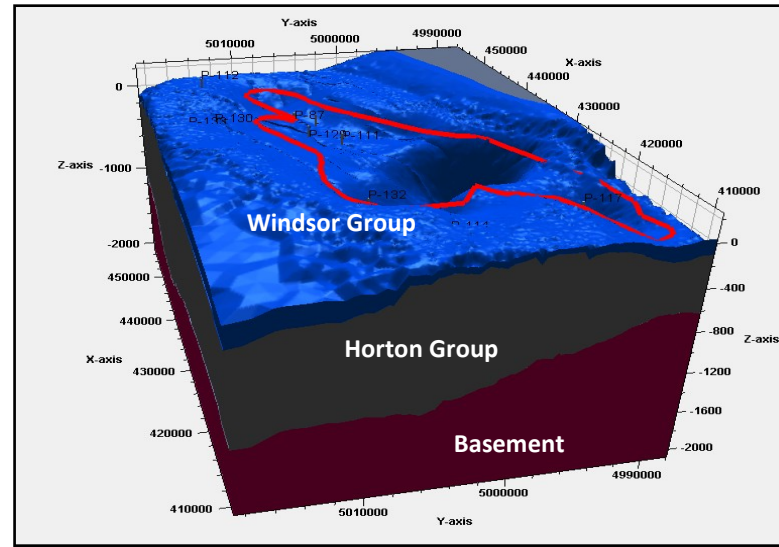


Stratigraphic Column of the Windsor Basin

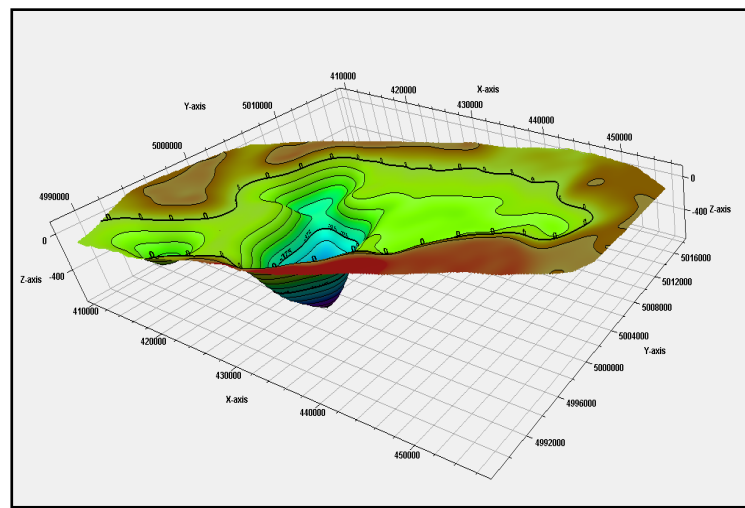
Figure shows the TWT structural map on the top of the Horton Group of the Windsor Basin with different views (2D and 3D). The Map displayed a structural low (blue area) in the central area and structural highs at West, East and South (red and yellow area) (NSDOE, 2016).



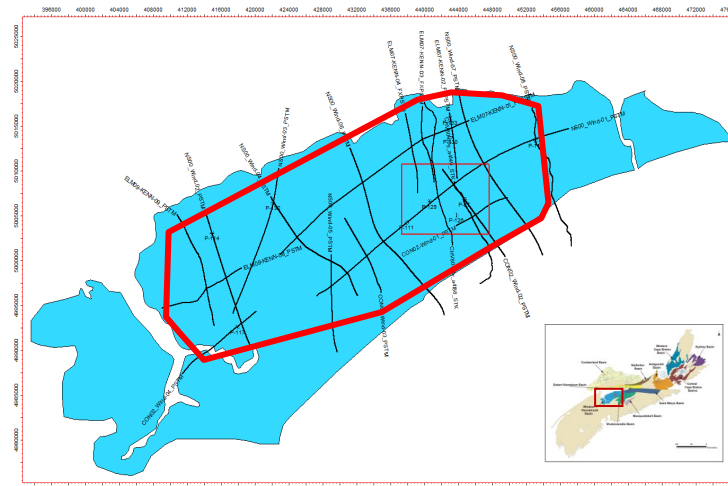
Top of Windsor Group of the Windsor Basin with 2D View (Time)



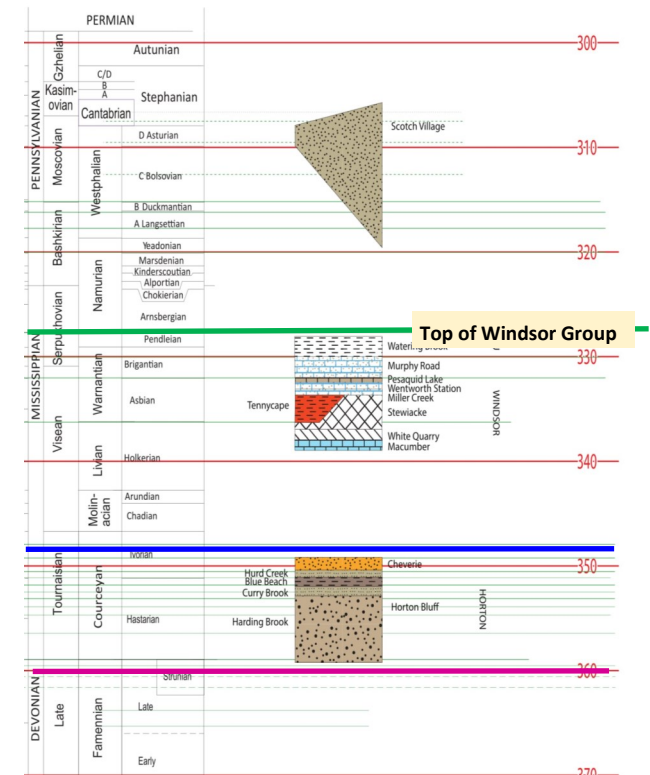
Windsor Basin Model on the Top of Windsor Group (Time)



Top of Windsor Group of the Windsor Basin with 3D View (Time)



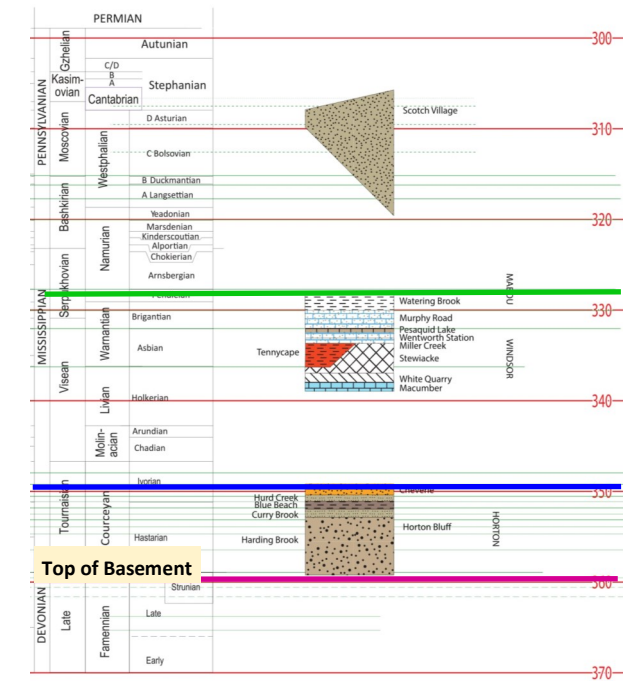
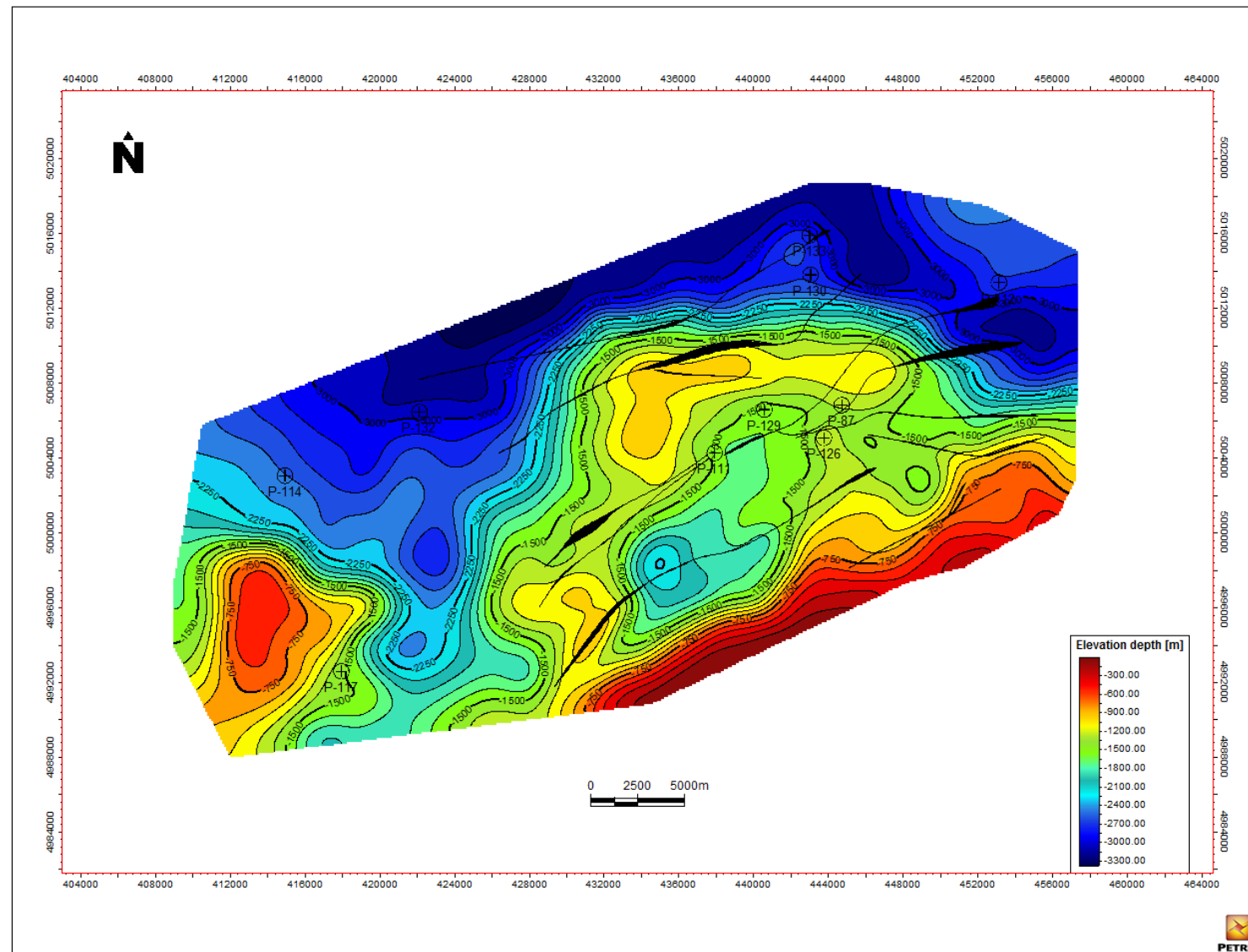
Location Map of Study Area in the Windsor Basin



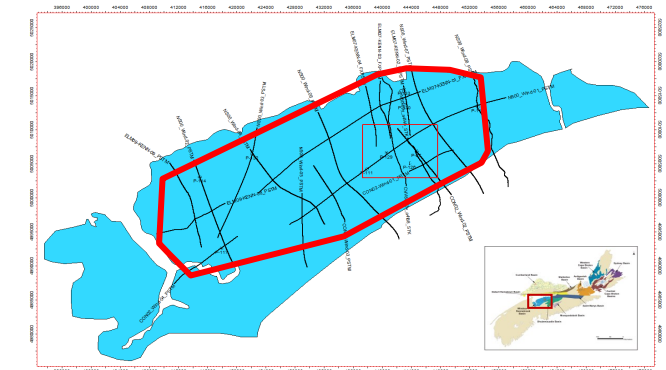
Stratigraphic Column of the Windsor Basin

Figure shows the TWT structural map on the top of the Windsor Group of the Windsor Basin with different views (2D and 3D). The Map displayed a structural low (blue area) in the central area and structural highs at West, East and South (red and yellow area). The structural trend of the top of the Windsor Group was as same as that mapped at the top of Horton Group, however the structural low on the top of Windsor Group is smaller (NSDOE, 2016).





Stratigraphic Column of the Windsor Basin



Location Map of Study Area in the Windsor Basin

Figure shows the structural map on the top of Basement of the Windsor Basin (Depth), Four major basement-related normal faults with high angle were identified on the top of basement. These major faults were oriented in a SW-NE direction. A structural high oriented in a SW-NE direction was located at the central area of the basin. Two depositional centers were observed. The major depositional center was up to  $-3300\text{m}$  in depth and located at the north area of the basin. There was a basement high at the SW corner of the basin (NSDOE, 2016).

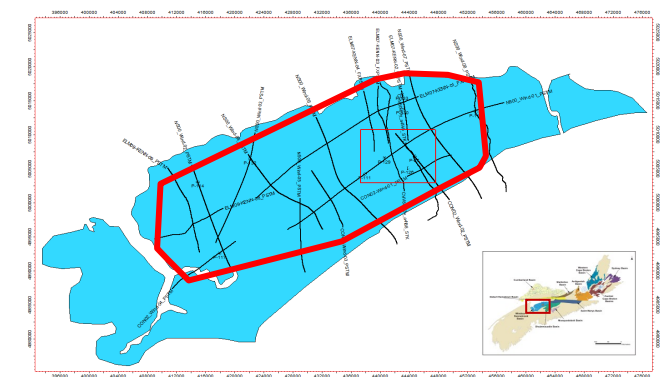
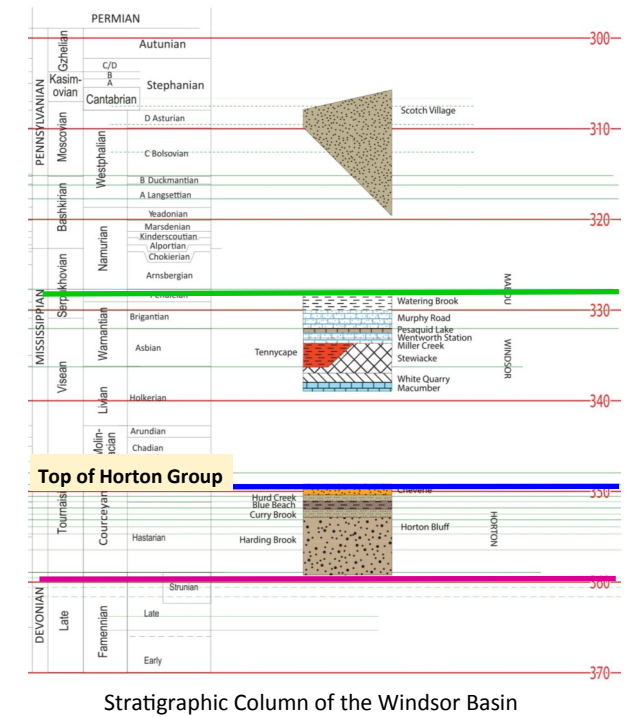
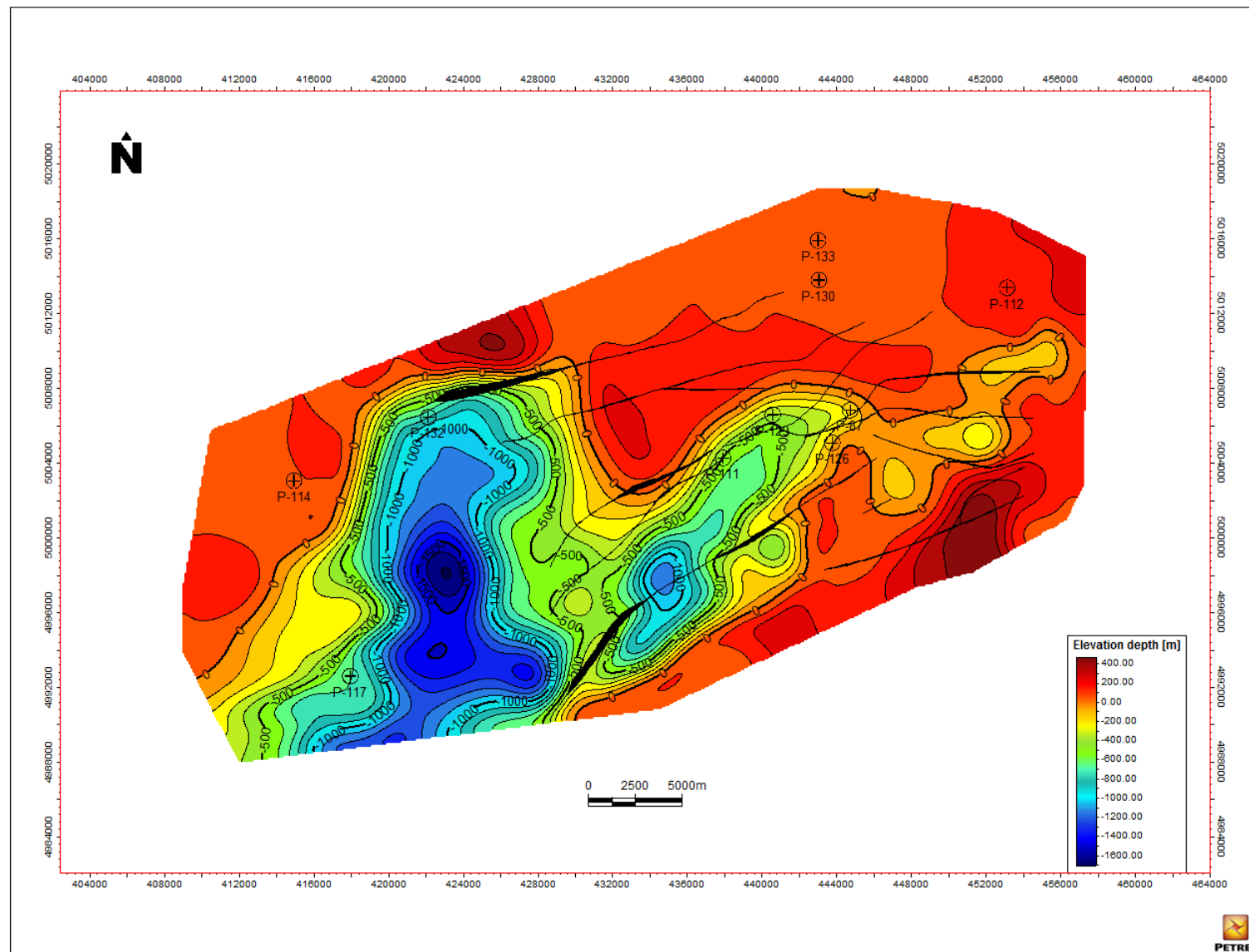


Figure shows the structural map on the top of Horton Group of the Windsor Basin (Depth), the basin area became smaller comparison with the area mapped at the top of basement. Two depositional centers were identified on the top of Horton Group. The major depositional center was up to  $-1700\text{m}$  in depth (NSDOE, 2016).

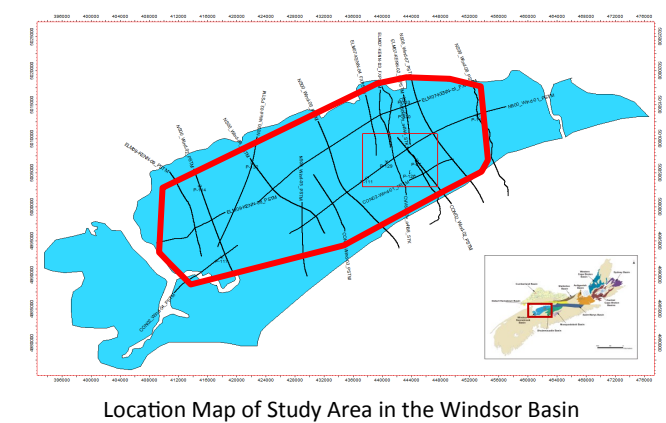
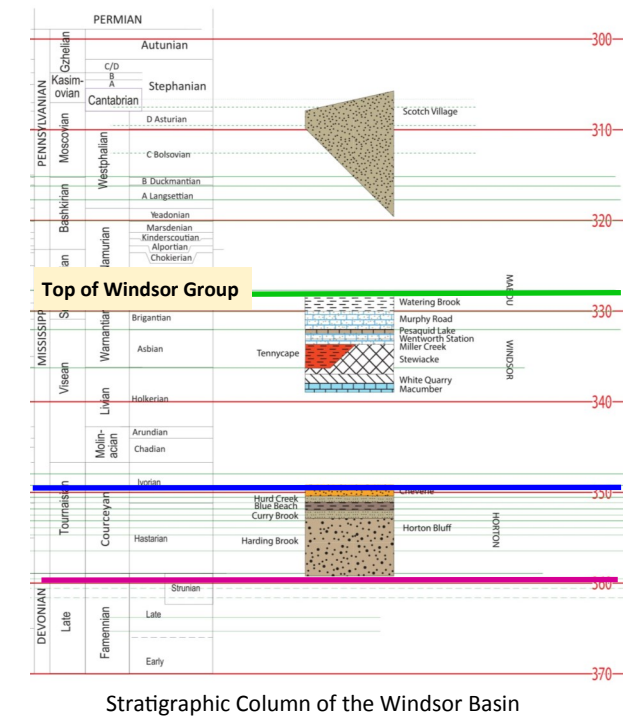
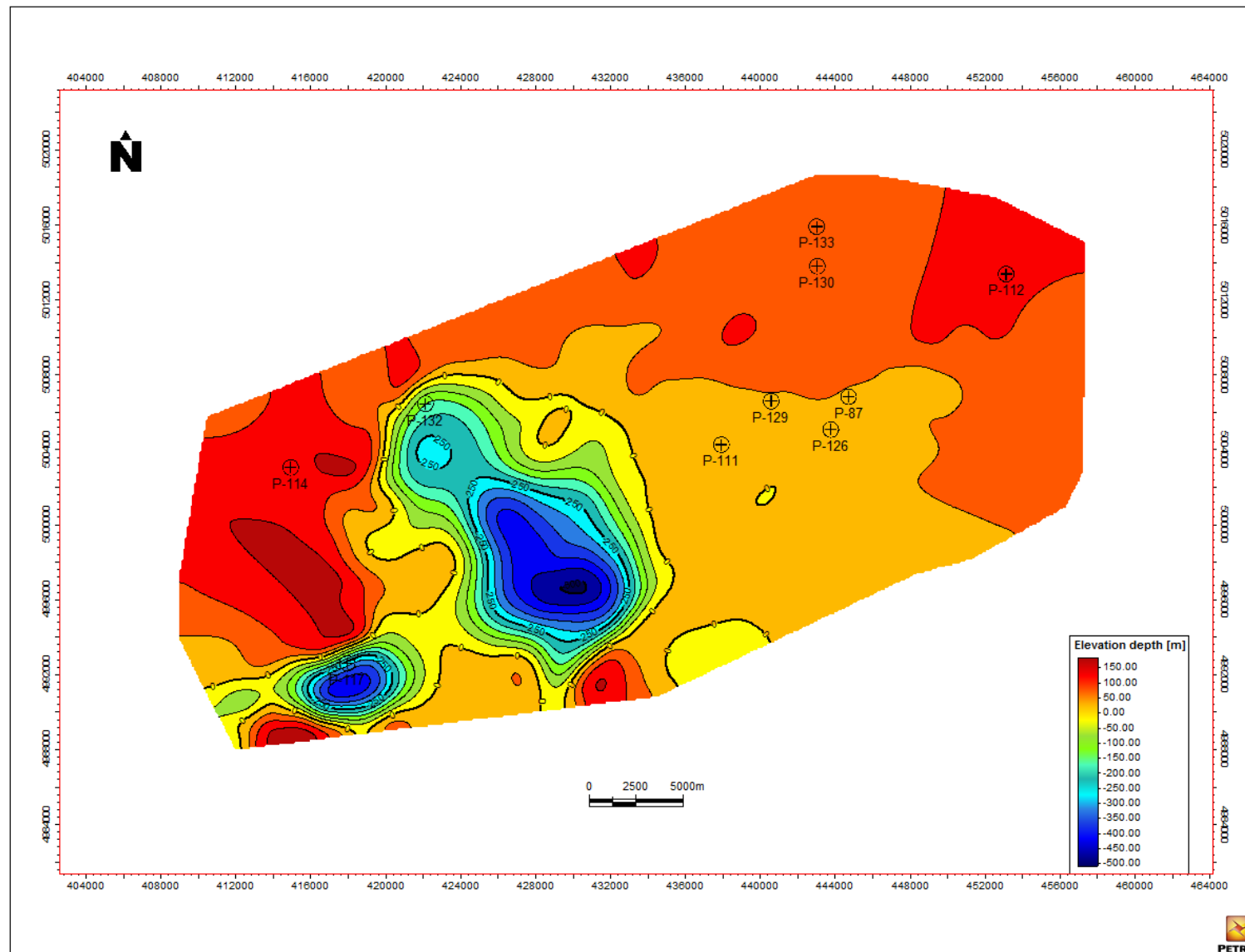


Figure shows the structural map on the top of Windsor Group of the Windsor Basin (Depth), The structural trend of the top of the Windsor Group was as same as that mapped at the top of Horton Group, two depositional center were identified at the top of Windsor Group, the major one was up to -300m in depth (NSDOE, 2016).





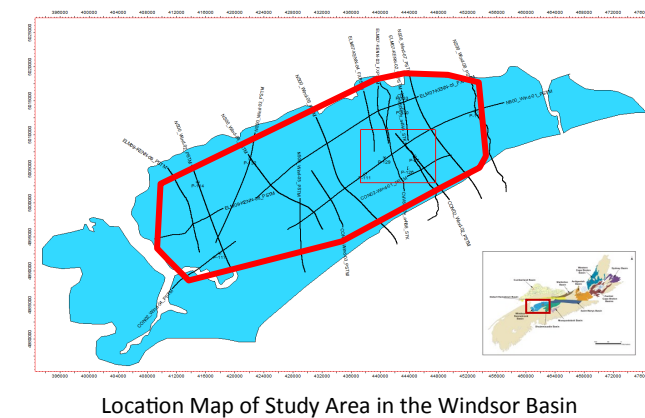
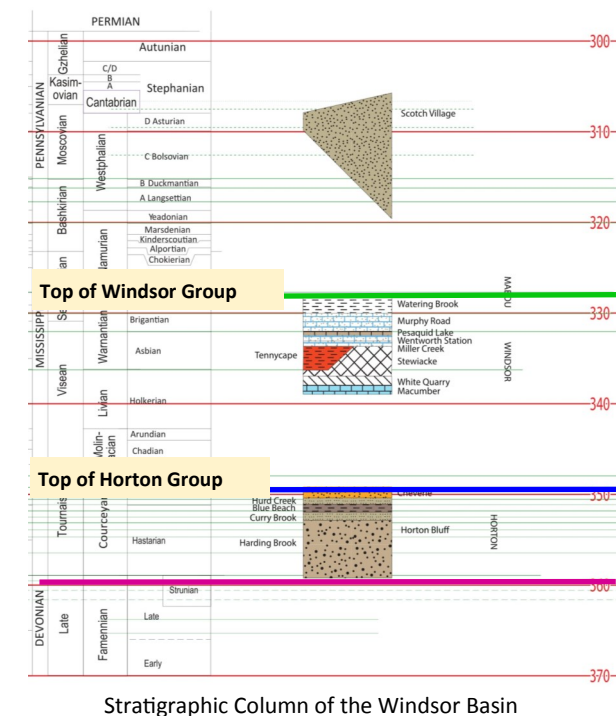
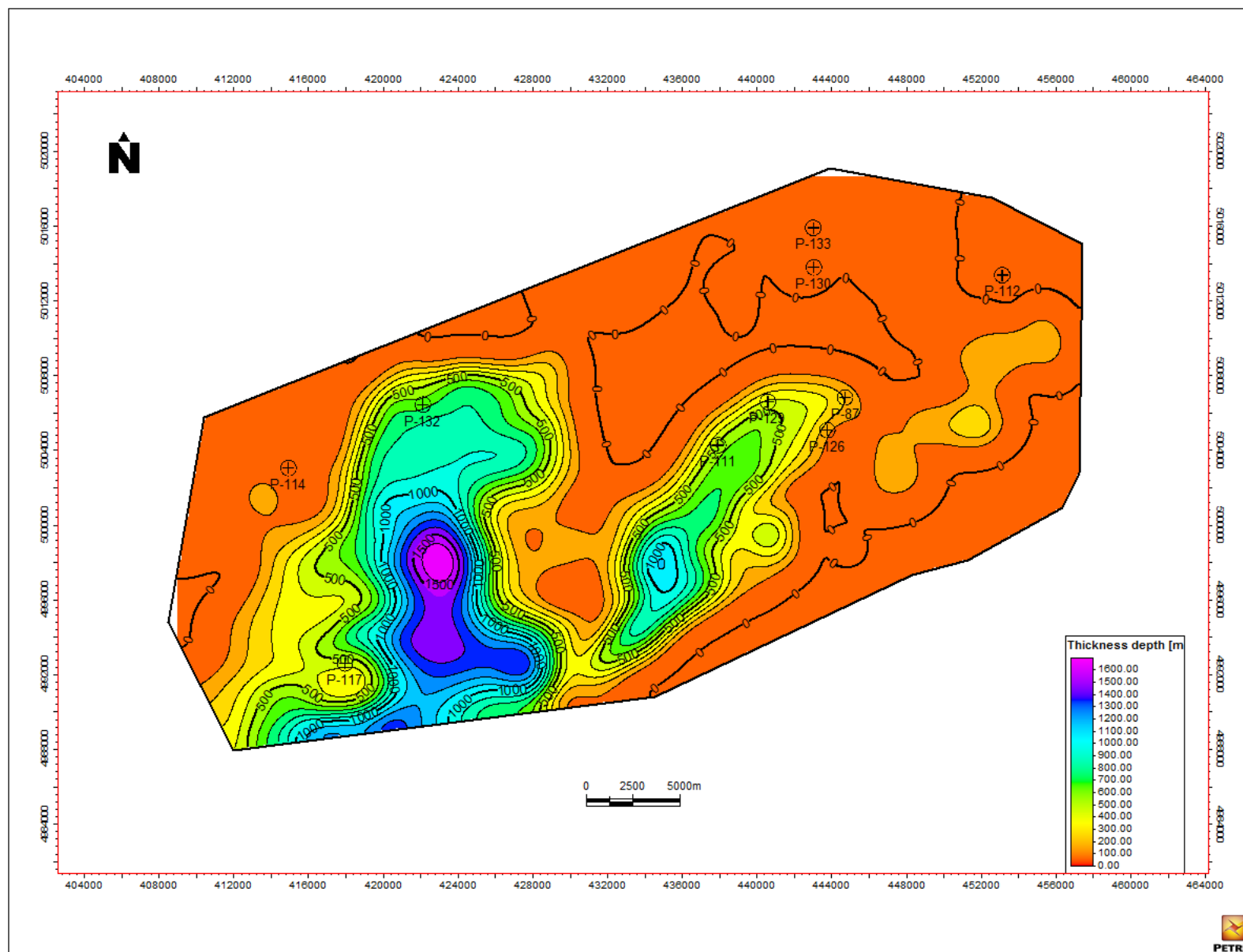


Figure shows the thickness map between Top of Horton Group and Top of Windsor Group (Depth), the thickest area of the Windsor Group was located at the central of basin up to 1600m (NSDOE, 2016).