



The contact between the Lebo Shale Member of the Fort Union Formation and the underlying Tullock and overlying Tongue River Members is gradational. Irregular thinning and thickening of the Lebo Shale Member is mainly due to interfingering with the Tongue River Member (Law, Barnum, and Galyardt, 1975), although some interfingering with the Tullock Member also occurs.

Isopach lines were drawn by correlating rock units between adjacent well logs and projecting the units into a network of cross sections. The change from shale to sandstone, as interpreted from mechanical log responses, was used to choose the upper and lower contact of the Lebo Shale. However, where shale and sandstone interfinger, some sandstone beds were included in the Lebo Shale.

Reference

Law, B. E., Barnum, B. E., and Galyardt, G. L., 1975, Tectonic Implications of the Fort Union Formation, northwestern Powder River Basin, Wyoming and Montana: Geol. Soc. America Abs. with Programs, v. 7, p. 1163.

ISOPACH MAP OF THE LEBO SHALE MEMBER, FORT UNION FORMATION,
NORTHWESTERN POWDER RIVER BASIN, WYOMING AND MONTANA
Isopach Interval 200 Feet (60.96 M)

B. E. Law
1975