

***Evaluation of Geochemical Properties Garau Formation Using Rock-Eval Pyrolysis Data in West regions of Khorramabad and North-west of Kermanshah***

***Sh. Mori<sup>\*1</sup>, I. Maghfouri Moghaddam<sup>2</sup>, B. Rafiei<sup>3</sup> and M. Sedaghatnia<sup>4</sup>***

*1, 2-Dept., of Geology, Faculty of Sciences, University of Lorestan , Khorram Abad*

*3, 4- Dept., of Geology, Faculty of Science, Bu-Ali Sina University, Hamedan*

*\* Geologist1232@gmail.com*

***Recieved: 2019/6/13 Accepted: 2019/9/21***

***Abstract***

*In this research, the geochemical characteristics of the Garau Formation in two sections of the ground surface (west of Khorramabad and North-west of Kermanshah) were done by Rock-eval method. Based on the available data analysis, Most samples of the Garau Formation in the study areas have Type III kerogen. However , samples of the Garau Formation in North-West Kermanshah also contain lower amounts of type I and II kerogen. The TOC of samples from West Khorramabad and North-west of Kermanshah are about 0.24-1.28 and 0.05-1.96%wt. The Tmax values of the samples vary between 416-444 and 441-480°C, respectively. The kerogen of the studied samples in West of Khorramabad are in immature to maximum maturity stage, However, The kerogen of samples of the Garau Formation in the North-west of Kermanshah are in maximum maturity (oil window) to wet and dry gas production stage.*

***Keywords:*** *Garau Formation, West of Khorramabad, Rock-eval pyrolysis, Source rock, North-west of Kermanshah*