The TOC varied from 0.19 to 5.53% IH ranged from 278 to very low values of 16 mg HC / g TOC, while the S2 peak ranged from 0.18 to 7.74 mg HC / g rock. The maximum temperature reached by Organic Matter (Tmax) was the maximum values of 433 °C, which allows us to infer that all samples are below the hydrocarbon generation window are therefore immature.

By evaluating the Van Krevelen diagram expressing the function in the IO IH (Figure 1) can be classified in general the kerogen of samples studied as primarily type II and III.

In 90% of the of the samples the Amorphous Organic Matter (AOM) predominates getting to in some samples occupy above 90% of the total components. The palynomorphs are second in the overall percentage, among which there is a predominance of group achritarcs. The phytoclasts smallest percentage are in most samples.

Figure 2 illustrates a ternary diagram containing the three basic constituents of organic matter percentage in the samples. According to palynofacies defined by Tyson (1995), also for percentage values for the three principal groups of organic matter, most of the samples is situated in palynofacies VII and VIII, indicating that deposition environments distal platform anoxic disoxic and a distal platform disoxic-oxic, respectively. Only 4 samples would be classified as palinofacies V, corresponding to the platform oxic environments, dominated by mud (distal platform) and 2 classified as XIX (suboxic-anoxic distal basin).
The AOM presented florescence in almost all samples, being less intense in some (medium brown) and very intense in other (yellow-green). The Palynomorphs showed intense fluorescence almost always varied from green to yellow.

Conclusions
Considering the geochemical results can infer the presence of a predominantly Kerogen Type II, III and type IV a few samples. As for the content of palynofacies can be said that overall the organic matter is well preserved; very rich, including the presence of many organisms with well preserved structures, and fluorescence. The intense fluorescence of algae and Tmax indicates immaturity of the organic matter.

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