

Nannofossil biostratigraphy of the Neogene in the offshore A1-89 well, NE Libya

Ali A. El Mehaghag

Arabian Gulf Oil Company, Exploration Division, Geological Laboratory, Benghazi, Libya; ali.elmehaghag@agoco.ly

Ahmed M. Muftah

University of Benghazi, Department of Earth Sciences, Benghazi, Libya; ahmed59muftah@gmail.com

Khalifa A. Ashahomi

Arabian Gulf Oil Company, as above; k.ashahomi@agoco.com.ly

In a biostratigraphic study of the A1-89 well (offshore NE Libya), 60 species of Miocene to Pliocene (Zones NN10–NN15) calcareous nannofossil species were identified in samples with common to abundant occurrences and good to moderate preservation. During the Late Miocene, there was a gradual decrease in the diversity of nannofossils in the Tortonian to Messenian. The position of the Miocene–Pliocene boundary could not be accurately determined due to a caving problem, but could be placed within the interval of 1440 to 1560 ft. Three definite calcareous nannofossil biozones were recognized – NN10 (*Discoaster calcaris*), NN11 (*D. quinqueramus*) and NN12 (*Amaurolithus tricorniculatus*).