JAPEX’s 60 Years’ Experience Exploring Volcanic Reservoirs in Japan

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**ABSTRACT**

Japan and New Zealand have many similarities in their geological settings; both are situated on subduction zones of the Pacific Plate, and both countries have a long history of volcanic activity and earthquakes. Japan presently has 110 active volcanoes; during the Miocene period, there was very active submarine volcanic activity in the back-arc basin of the Japan island arc associated with the spreading of the Japan Sea. As a result of the volcanism, many types of volcanic rock were widely deposited in the back-arc basin. JAPEX (Japan Petroleum Exploration Company Limited) has been mainly exploring the hydrocarbon potential of domestic fields since its establishment over 60 years ago. Back-arc basins are our important targets, and many of our fields have volcanic reservoirs. Whereas worldwide, sandstones and carbonates comprise the main reservoirs, in our domestic fields, volcanic rock is the predominant reservoir. Therefore, the evaluation of volcanic reservoirs is an important task for JAPEX.