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POSTER ABSTRACT

PARULA FIELD, COLUMBUS BASIN, TRINIDAD AND TOBAGO

Steve Hertig¹ Craig Zempel² and Lugard Layne¹

¹ EOG Resources Trinidad Limited, Port of Spain, Trinidad and Tobago ² EOG Resources, Inc. Houston Texas, USA

Parula field is a giant gas field located 43 km from the east coast of Trinidad in the Columbus basin. It was discovered in 2002 and was the 5th field discovered in the SECC block and the first major discovery in more than 15 years. Source rocks are the offshore equivalent, of the Cretaceous Naparima Hills, the source rock for nearly all onshore and offshore hydrocarbons found in Trinidad. Reservoir rocks are a nearly 200 meter thick succession of shelfal Pliocene age sandstones. This thick reservoir package is interpreted to be the result significant accommodation in response to growth movements along a major North-northeast trending normal fault to the west. The Parula trap, holding a gas column as much as 200 meters, has two key components (1) a southward culmination of two faults, one a down-tonortheast normal fault and one a down to southwest normal fault and (2) north dip. Top and bottom seal to the Parula field gas are provided by interbedded Pliocene shales up to several 10's of meters thick and lateral seals are formed by fault-gauge smear and/or juxtaposition of shales against gas-bearing reservoir rocks. Hydrocarbons trapped in place at Parula field are estimated to be in excess of 700 BCF. Gas can be produced from three wells at a cumulative, average daily rate 200 MMCF per day of gas with associated condensate.