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**Energy - Oil and Gas Research; New Oil and Gas Research Study Findings Have Been Reported from Saudi Aramco (Mineralogical Composition and Total Organic Carbon Quantification Using X-ray Fluorescence Data From the Upper Cretaceous Eagle Ford Group In Southern Texas)**

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2020 JAN 17 (VerticalNews) -- By a News Reporter-Staff News Editor at Energy Weekly News -- New research on Energy - Oil and Gas Research is the subject of a report. According to news reporting originating in Dhahran, Saudi Arabia, by VerticalNews journalists, research stated, "Six southern Texas Eagle Ford cores were investigated to quantify mineralogical composition and total organic carbon (TOC). Machine learning of the x-ray fluorescence (XRF) data set was conducted using neural network analysis to predict mineralogies for L1, L2, and L3 and TOC for L1, L2, L3, Iona-1, Innes-1, and well 'X.' Inees-1 and well 'X' were used as blind tests to check the quality of the developed models."

Funders for this research include Saudi Aramco, State of Texas Advanced Resource Recovery program at the Bureau of Economic Geology, The University of Texas at Austin, Mudrock Systems Research Laboratory program at the Bureau of Economic Geology, The University of Texas at Austin.

The news reporters obtained a quote from the research from Saudi Aramco, "The online Neural Designer software was used to perform the training process and develop models. Quantitative laboratory-measured x-ray diffraction (XRD) mineralogies and TOC were used to conduct the training and develop high-resolution semiquantitative models, and the derived mineralogic and organic matter models were found to be promising. The modeled mineralogy and TOC represent continuous relative abundances, which are far more significant than scattered individual XRD and TOC point measurements. The significance of this study is that it allows for the use of relatively inexpensive and nondestructive XRF analysis that requires minimal sample preparation to construct high-resolution mineral abundances and TOC content."

According to the news reporters, the research concluded: "With modern advances in technology, XRF can now be measured on drill cuttings in real time while drilling is occurring, allowing operators to use the proposed method to construct semiquantitative mineralogical and TOC models for evaluating placement of laterals in prospective intervals and designing completion techniques accordingly."

For more information on this research see: Mineralogical Composition and Total Organic Carbon Quantification Using X-ray Fluorescence Data From the Upper Cretaceous Eagle Ford Group In Southern Texas. AAPG Bulletin, 2019;103(12):2891-2907. AAPG Bulletin can be contacted at: Amer Assoc Petroleum Geologist, 1444 S Boulder Ave, PO Box 979, Tulsa, OK 74119-3604, USA.

Our news correspondents report that additional information may be obtained by contacting A. Alnahwi, Saudi Aramco, Emerging Unconvent Assets Dept, Dhahran, Saudi Arabia.

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