PETROPHYSICAL ANALYSIS AND STRATIGRAPHIC CORRELATION OF ZAMZAMA 03 AND ZAMZAMA 05 WELLS, SOUTHERN INDUS BASIN, PAKISTAN



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ABSTRACT

The main objective of the study area is to determine the geological setting and perform the petrophysical analysis to evaluate hydrocarbon potential of Zamzama 03 and Zamzama 05. The purpose has been achieved by utilizing the complete suite of wire line logs. The methodology adopted to accomplish the petrophysical interpretation of Zamzama 03 and Zamzama 05 included measurement of shale volume by employing gamma ray log, estimation of porosity using density and neutron log, estimation of effective porosity, calculation of resistivity of water utilizing spontaneous potential log, evaluation of saturation of water and hydrocarbon saturation using Archie equation. The thickness, depth and formation lateral continuity of both the wells is determined by well correlation of lithology between Zamzama 03 and Zamzama 05.

ACKNOWLEDGEMENTS

All praises and glory are only for Almighty Allah Who is the ultimate Creature of this universe. Who blessed us with the ability to think and a vision to explore this whole universe. Countless salutations upon the Holy Prophet Muhammad (S.A.W), the source of knowledge and blessings for entire mankind.

We would like to express our deep and sincere gratitude, appreciation and thanks to our Parents who have always been a source of prayers for our success. May Allah bless them with sound health and Iman, Ameen. We are thankful to them for trusting and having hopes in us.

We are highly thankful to our supervisor Mr. Muhammad Raiees Amjad, for encouraging us considering us and helping us. We would like to great fully acknowledge his help and guidance. He is like a role model and source of inspiration to us and we cannot express the gratitude and thankfulness in mere words and along the way we had some serious hurdles but throughout our journey we have been supported by the teachers who helped us in our way to get enlightened with the world of Geology and we are greatly thankful to them for making this journey a learning experience of life time and we also pay our heartiest thanks to our friends for helping us and for being supportive during our work and giving us the moral support.

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