Hydrocarbon Potential of the Al-Qassim Region, Central Arabia

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ABSTRACT Gas shows have been observed for many years in many water wells in the northeastern part of Al Qassim region. The author since the early eighties has been visiting and collecting data about gas shows in the area. He outlined the "Gas Zone" and located a seeping gas in the Buraidah-Tarafiyah road cut in the Khuff limestone. Gas samples were collected from two wells. The gas samples were analyzed and gas analysis showed that the gas is composed of methane and traces of ethane. The analysis indicates that the presence of methane is probably due to over maturation of other gas components, ethane and propane to methane. Associated ethane, though traces, indicate the possibility of natural gas accumulation in the Al-Qassim region. The water wells with gas shows are shallow. It is more likely that the gas is seeping from the deeper reservoirs to shallower aquifers.