

# Securing Surface Rights for Oil and Gas Field Development Using State-of-the-Art GIS Technology

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## SUMMARY

Securing and providing embedded access to surface rights is one of the key successes for onshore oil and gas field development. It is important to reach optimal subsurface targets and later extract hydrocarbons and transport them to a company's pipeline distribution network without impacting inhabitants on the ground. Saudi Aramco leverages Geographical Information System (GIS) technology from data acquisition, management, integration and analyzing land and surface rights to protect the Company's field development projects within the Kingdom. While the current process has always led to successfully securing surface rights in line with state-of-the-art practices, the ongoing process improvements are expected to decrease manual interventions analyzing surface rights in relation to expansion of a company's operations and urban growth within the Kingdom. The paper will provide an overview of challenges to securing surface rights and how Saudi Aramco uses GIS technology to secure the company's land and rights for oil and gas field development.

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