

4D Passive and Aggressive Monitoring of Air Injection at Telephone Lake, Alberta

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Abstract

Simultaneous acquisition of borehole and surface seismic data is shown to be an effective way of monitoring air injection within a top water zone. The air was injected in an effort to dewater the zone just above the targeted bitumen zone and improve the oil recovery process. Mapping the air injection results is a key component to enhancing the production process. The seismic acquisition was done repeatedly over several days to map the extent of the dewatering effect and water movement in time.