

# Case studies (with multiphase flow)

Country	Objective	Problem statement	Impact
MEXICO	Monitoring flow on wellheads.	<ul style="list-style-type: none"> <li>- Decrease the lifting cost through opex reduction and make decisions for well maneuvers</li> <li>- Daily reports based on real measured data.</li> <li>- Identification of deferred production.</li> </ul>	Lifting cost reduction:0.8 to 1.5 USD/bbl.
MEXICO	Balance of liquids on surface.	Online well's production volume, spot flows and flow behavior, along with the tank variation inventory from the Oil terminal that gets different pipes from different offshore platforms.	
USA	Flowback monitoring	Production Optimization and increase stimulation efficiency.	Improvement on Water management (4-7%)
CANADA	Operating Costs reduction	Well production monitoring to reduce logistics costs on remote areas during winter.	Logistics for remote places (5-8%)
MEXICO	Offshore: Integrate Flow monitoring for pre and post stimulation process.	To provide the final client flow values, volumes and flow behavior to analyze the stimulation success process.	<ul style="list-style-type: none"> <li>- Stimulation efficiency for the OFS company (4-12%)</li> <li>- Production improvement for final customer (3-7%)</li> </ul>
MEXICO	Pipeline leak detections.	Leaks quantification and localization of different midstream pipelines through flow monitoring and the provision of a customized analytics dashboard.	Identification of approximately 350 leaks.
COLOMBIA	Balance of liquids on surface	Monitoring the balance of liquids coming from pipelines from different Assets and/or third party companies.	Cost reduction related to inventory management and personnel (3-10%)

*Note: Impact values are estimations*