TECH REPORT

SOUTHERN MEXICO



An operator was challenged to reduce costs for lost drilling fluid, cuttings transportation, and waste disposal by minimizing the amount of drilling fluid lost on cuttings going over the shakers. M-I SWACO, a Schlumberger company, installed the SCREEN PULSE fluid and cuttings separator on three MONGOOSE PRO dynamic dual-motion shale shakers to achieve operator goals and also operational NPT and HSE risks associated with the traditional vertical dryer. The well was drilled in four sections to 1,890 ft [6,200 m] to a total drilling depth of 16,404 ft [5,000 m].

Technology

- SCREEN PULSE* fluid and cuttings separator
- MONGOOSE PRO* dynamic dual-motion shale shaker



SCREEN PULSE Separator Reduces Mud on Cuttings by 36% and Improves Drilling Fluid Returns

Adding the efficient separator to MONGOOSE PRO shakers minimized costs related to cuttings transportation, fluid loss, and disposal

Hole Size, in	Casing, in	Mud System	Mud Weight, g/cc	Interval, m
26	20	HydraGlyde	1.14–1.27	1,000
17½	13¾	MEGADRIL	1.27-1.60	2,177
121/4	9%	MEGADRIL	1.75–1.88	1,987
81/2	7	MEGADRIL	1.95	1,010



Compared to similar wells with conventional vertical dryers, the SCREEN PULSE separator reduced mud on cuttings by 36% and returned a significant amount of drilling fluid to the active system. This saved more than USD 237,000. Waste was reduced by 420 tUS.