



SPE Workshop: Managed Pressure Drilling (MPD) and Underbalanced Drilling (UBD)

8 – 9 JULY 2025 | KUALA LUMPUR, MALAYSIA



Unlocking Rig Optimization Transforming Multi-Well Pad Efficiency with Offline MPC

Fuoco Pablo Ezequiel

Weatherford



Weatherford®

Introduction

The offline MPC operations conducted in Argentina on multi-pad wells will be described, highlighting improvements in post-drilling activity efficiency, along with significant reductions in both operational time and overall costs.

Objectives

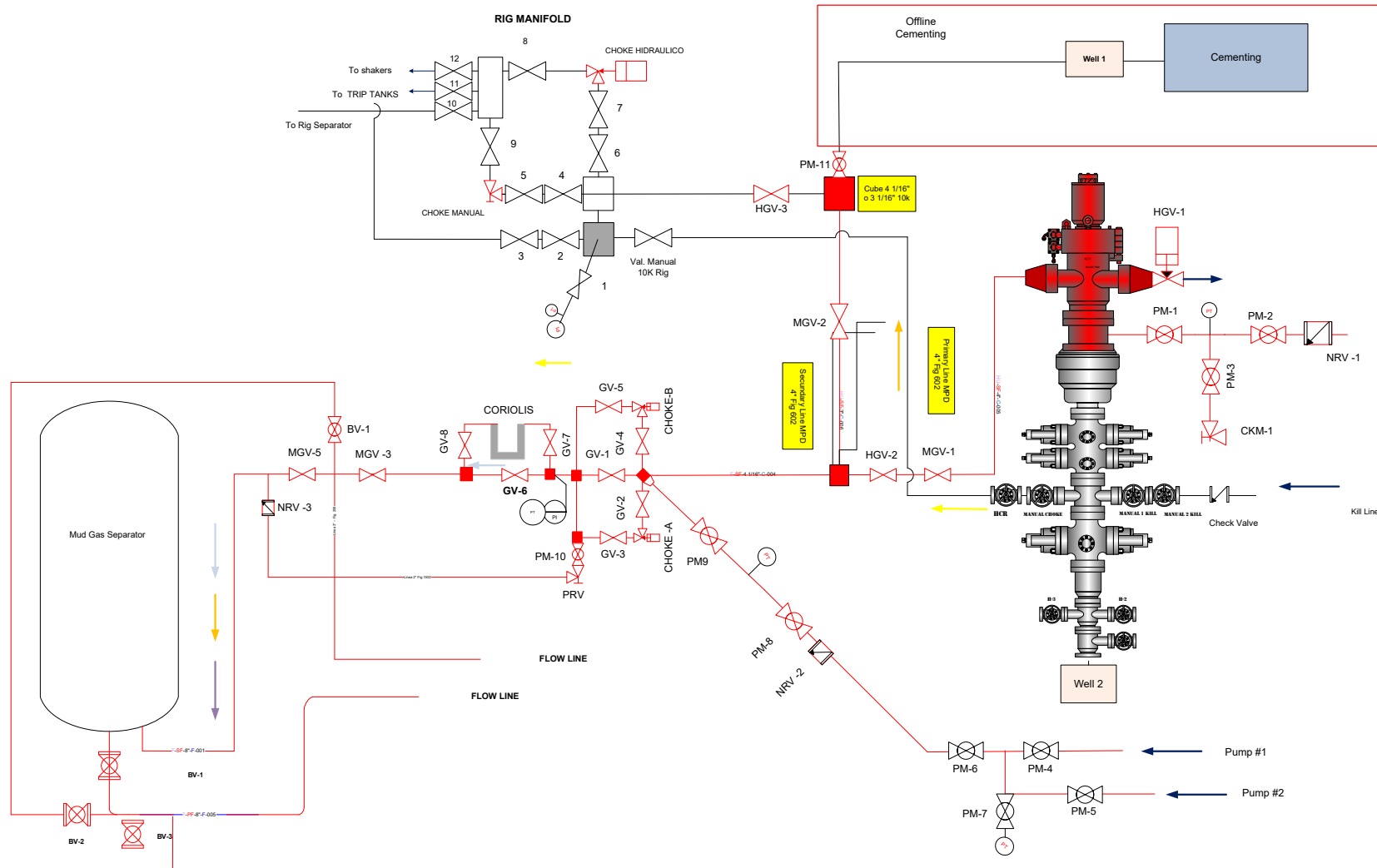
Enhance operational workflows during cementing operations.

- ✓ Modified MPD rig-up configurations by multiple operators.
- ✓ Reduce flat time and improve cost-effectiveness.
- ✓ Ensure well integrity and safety during high-pressure conditions.

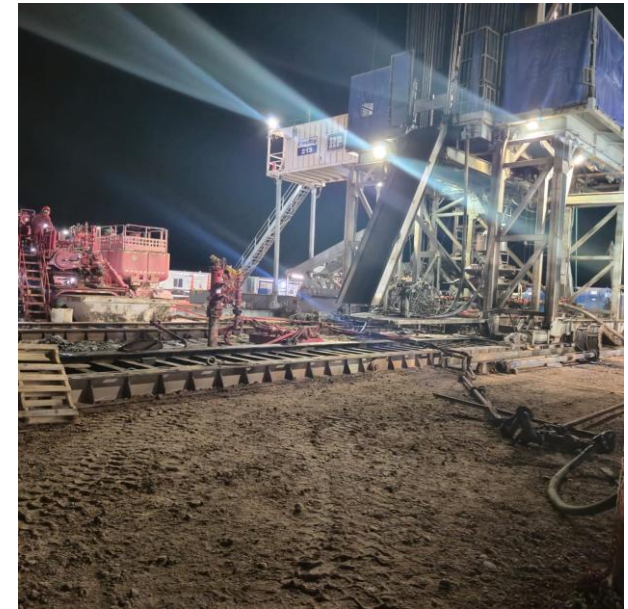
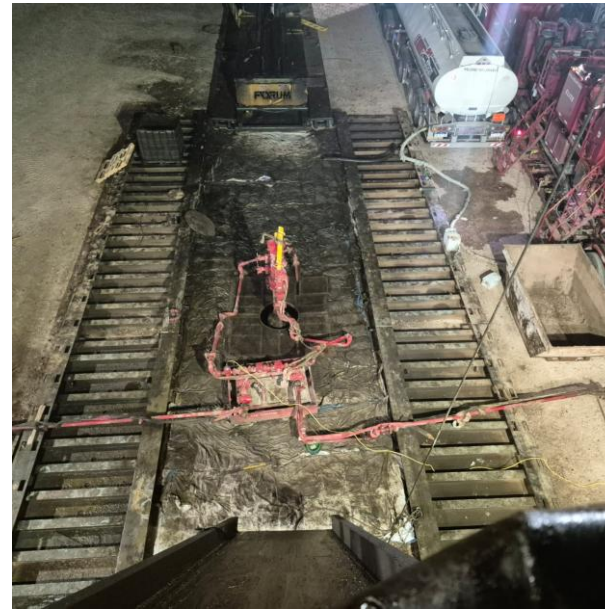
Offline MPC key points

- ✓ Cementing time used to prep next well in multi-well pad.
- ✓ Rig skidded after casing is run and hung.
- ✓ Simultaneous operations for faster transitions.

Rig Up – Offline MPC



Rig Up – Offline MPC



Simultaneous Operations

BOP installation, pressure testing, and MPD rig-up during cementing.

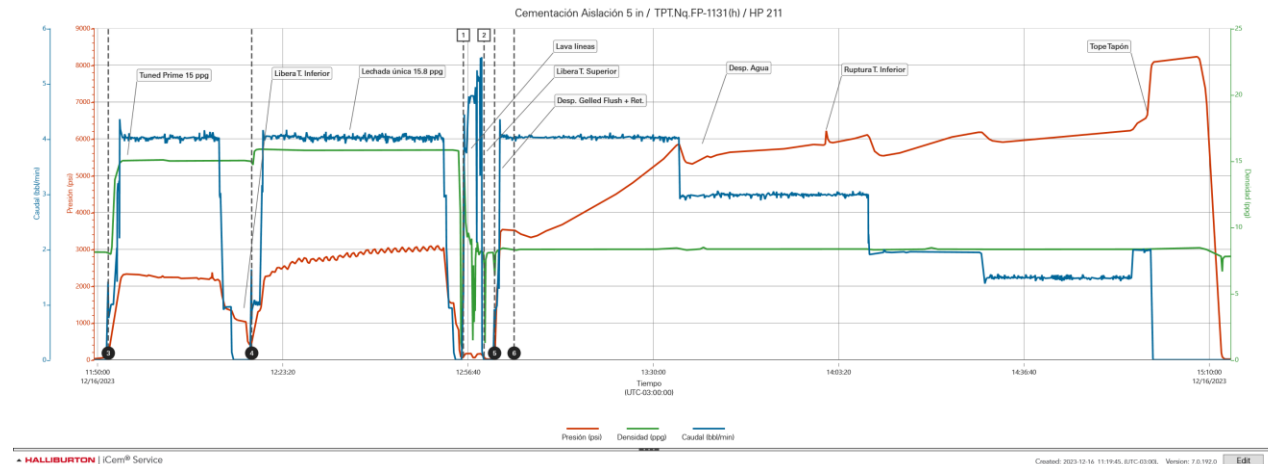
- ✓ Enables immediate BHA deployment and post-cement drilling.
- ✓ Minimizes overall rig downtime.

Normal Operational Sequence		Upgraded Operational Sequence	
Well 1	Well 2	Well 1	Well 2
RIH Casing	Waiting	RIH Casing	Waiting
Hang the casing and pack the well		Hang the casing and pack the well	
Rig Down - Tubular running services company		Rig Down - Tubular running services company	
Rig Up - Cementing Equipments		Walking/ Skidding to next Well	
Cementing Operation		Rig Up - Cementing Equipments	BOP installation and Pressure Test
Rig Down - Cementing Equipments		Cementing Operation	Rig Up and Pressure Test - MPD Equipments
Walking/ Skidding to next Well		Rig Down - Cementing Equipments	RIH BHA
Finished	BOP installation and Pressure Test	Finished	Star Drilling operation
	Rig Up and Pressure Test - MPD Equipments		
	RIH BHA		
	Star Drilling operation		

Managing ECD During Cementing

Well rolled back to light mud before cement pumping.

- ✓ Reduces risk of formation breakdown due to high ECD.
- ✓ Improves well integrity and reservoir performance.



Maintaining Pressure Control

MPC allows cementing at up to 3,750 psi of SBP.

- ✓ No transfer of pressure control to rig equipment needed.
- ✓ Enhances safety and operational control.

Operational Benefits

Reduces overall rig time on multi-well pads.

- ✓ Enables continuous operations with minimal delays.
- ✓ Improved efficiency and measurable cost savings.
 - 31 hours Time saving
 - USD 150K Cost saving

Conclusions

Offline MPC optimizes well construction efficiency.

- ✓ Minimizes downtime while improving safety and performance.
- ✓ Innovative integration of MPD and cementing operations.
- ✓ Significant reduction in operational time and costs during cementing operations.



Thank you

Questions?