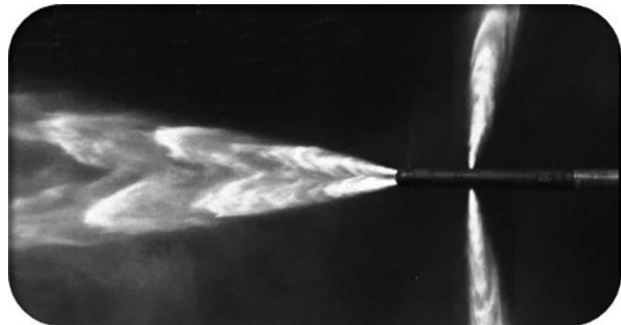
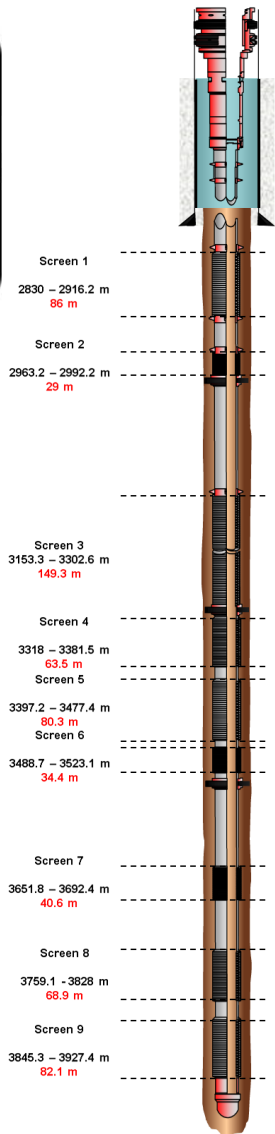


# Case Study: Near Wellbore Damage Removal with Customized Fluid System and Pulsonix® TFA Technology



Equipment Layout



## Challenge

- Near Wellbore Damage in a deepwater (1000m) offshore development
- Well completed with long stand alone screen section up to 635m
- High formation heterogeneity varying from 200 to 2,000 mD
- High mud losses experienced during drilling of the reservoir section
- Long suspension time, no cake breaker applied, already treated by competition

## Solution

- Provision of full fluid package engineering solution including:
  - ✓ Preflush of N-Ver-Sperse O™ Dispersant,
  - ✓ Main treatment with Paragon Acid Dispersion™ (PAD) service combined with Guidon AGS<sup>SM</sup> Service as diverter
- Deployment of Pulsonix TFA Technology to further improve the treatment

## Results

- 2 wells treated showing significant improvement to contributing length of production interval

Well	Initial IP m <sup>3</sup> /bar/d	Initial IP m <sup>3</sup> /bar/d	Initial Skin	Final Skin	Initial contributing Length %	Final Contributing Length %	Production increase BOPD
Well A	43	63	9	7	25	60	10,000 (+3000 BOPD)
Well B	20	38	2	5	20	55	9,000 (+2000 BOPD with - 25 bar Drawdown)