

UNDERSTANDING

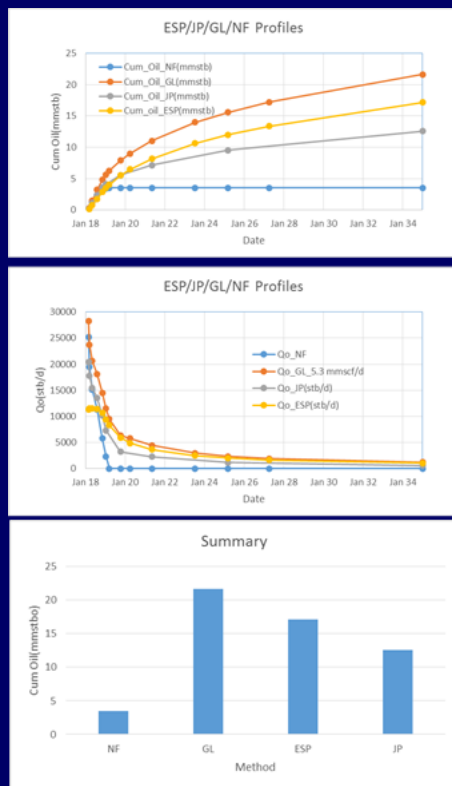
Knowing the potential of a well and getting close to its technical production limit is key in making intervention and investment decisions on wells.

The process has added value in various assets and can contribute significantly at all stages of field life.

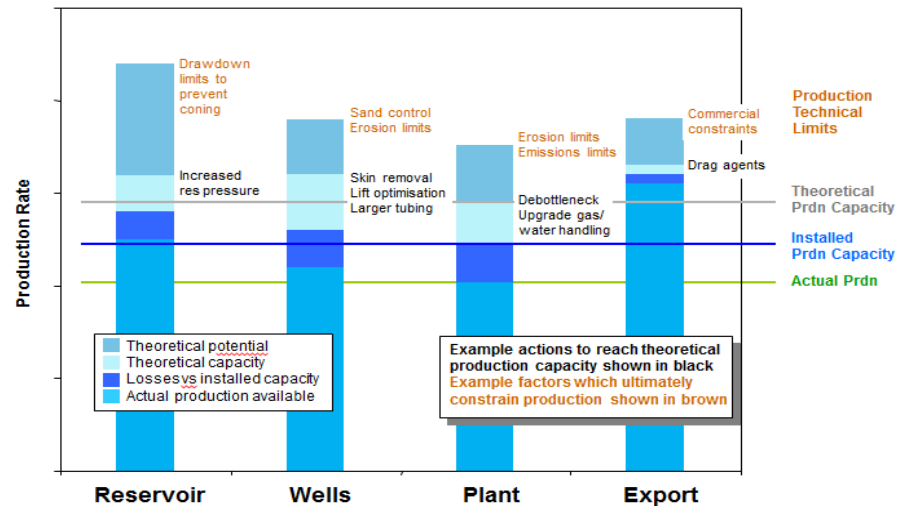
SCREENING

Screen well potentials with different artificial lift options fully optimised

- ESPs
- Gas lift
- Jet pumps



TECHNICAL LIMITS FOR ARTIFICIAL LIFT



DESCRIPTION

Technical limit workflows are applied in drilling, production and processing operations. They identify where investments are most cost effective. The workflows are applied to identify the highest value process improvements and technologies that maximize oil and gas well production. Sapella's ILUM 2.0 allows the operator to quickly identify the limits.

A particular area in implementing the workflow is to select the most effective artificial lift method for a particular well or field. The value of using the optimal artificial lift system can significantly vary from asset to asset or within the well stock of a field. The service is of value to asset teams and production leaders who want to exceed their goals for HSE, volume and cost.

WHAT IS UNIQUE?

- Automated workflows for artificial lift screening
- ILUM 2.0 screens life of well conditions to optimise gas lift, jet pumps, ESPs or other artificial lift types
- Several wells can be screened in one run
- Extensive experience in production optimisation, debottlenecking and technical potential

ILUM 2.0 TOOL

The artificial lift optimisation tool ILUM 2.0 computes production at the production potential of the artificial lift method screened.

The tool uses the life of well operating conditions (reservoir performance curve) or an attached MBAL tank. The tool will feed the reservoir conditions to the artificial lift simulator and optimise the artificial lift technique for the particular reservoir conditions. ILUM 2.0 selects the optimal equipment for the most common artificial lift techniques. Artificial lift techniques covered for most studies are Gas Lift, ESPs and JPs. Each profile generated is run through an economic model, thus taking key economic factors into account, the optimal artificial lift technique for a field/ well is determined.

The final economic evaluation includes: production profile, failure rate, work over times, downtime, lifting cost, plant capacity/ availability and export system.

Sapella Technologies Germany

Hoher Wall 15, D-44137 Dortmund, Germany
Inquiries: hm@sapella.eu
Tel: +49 (0) 2324 6864874

Sapella Technologies UK

London Representative, UK
Inquiries: info@sapella.eu

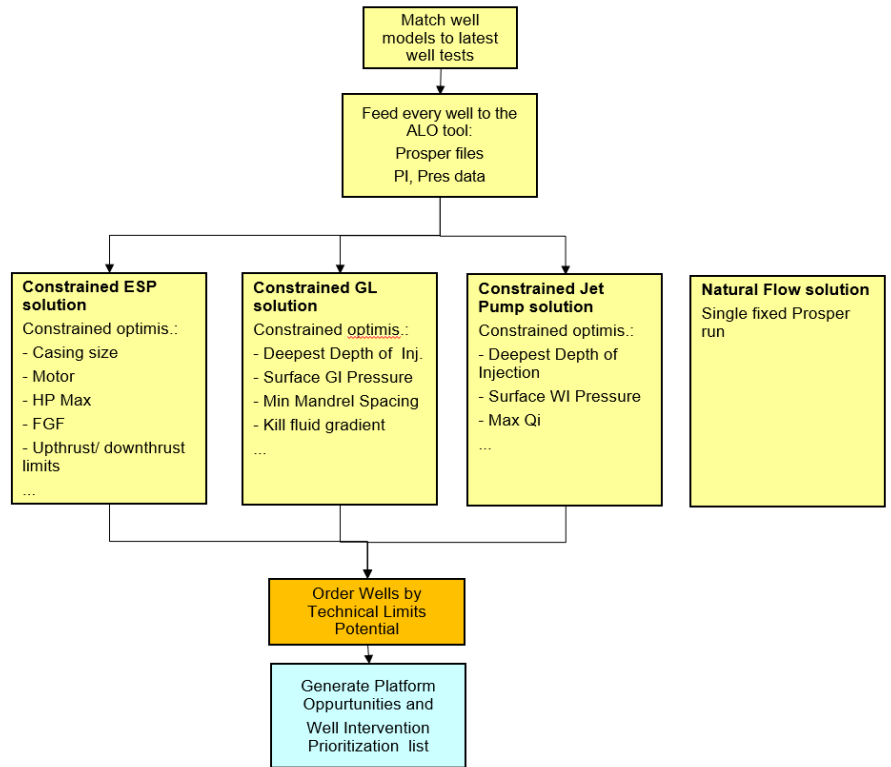
Sapella Technologies Sdn Bhd

A-21-1 Hampshire Park#6 –8 Persiaran Hampshire,
50490 Kuala Lumpur, Malaysia
Inquiries: dc@sapella.eu
Tel: + 60 (0)17 6933649

Web : www.sapella.eu

WORKFLOW

- The tool provides quality checked workflows. The tool uses Prosper if well models are already built.
- The different artificial lift methods and their associated workflows have been converted to codes to optimize production.



ESP Example

- Flow diagram showing an ESP workflow.
- Worked closely with vendor companies.

