THE CHALLENGE

A Field Development Plan (FDP) provides the best technical solution and guide for optimizing the development and production of an oil or gas field.

FDP studies outline the necessary information for operators to assess all the economic decisions required to make a positive economic return from working a field.

Central as they are to field investment and operation, FDPs can be complicated by factors such as reservoir structure uncertainty, petrophysics, the potential for well anti-collision, and fluid flow dynamics. This range of possibilities requires inputs from multiple disciplines, currently working in silos.

Poor initial characterization of reservoirs, and not fully integrating available development technologies can adversely affect evaluating the amount of recoverable reserves from an Asset.

This can lead to an inaccurate estimation of recovery.

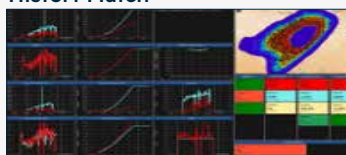| SUBSURFACE & SURFACE		PRODUCTIVITY	INTEGRATION
Large number of inactive strings	Challenging reservoir water dynamics	Large model size with long runtimes	Lack of integration leads to fallback in production guidance
Challenging recovery due to reservoir complexity	Well placement in complex reservoirs	Time-consuming model review & opportunity generation	Rapidly outdating models requiring frequent updates
Complex reservoir fluids types			

THE SOLUTION

AR360 (Advanced Reservoir 360) is an intelligent reservoir management and short-term production optimization solution offering a comprehensive 360° view of your reservoir by integrating various workflows. It consists of 3 key modules:
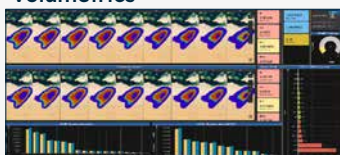
1 Digital Reservoir Model Reviewer (DRM)
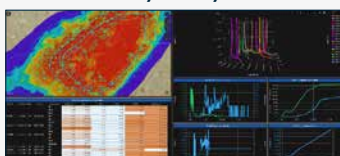
Histort Match

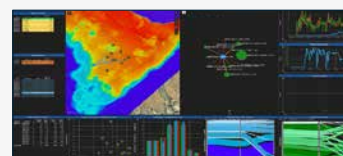**Volumetrics**

Perm. Multipliers

Pressure/RFT/MDT

Connections / VFP / SCAL

Streamlines

- Automated Assessment of Reservoir Model Quality and predictive capability
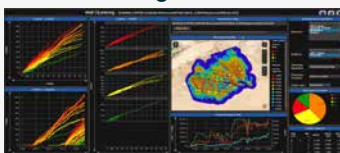- Advisory system to enhance future model generation

2 Reservoir Performance Advisor (RPA)

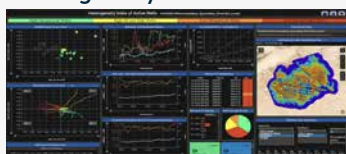**Type Well Analysis**
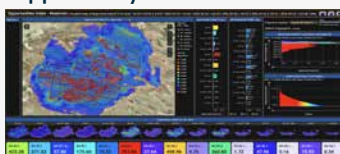

Well Clustering

Chan Analysis

Heterogeneity Index

Opportunity Index

Sweep Efficiency

- Automated assessment of Production Performance and a recommendation system for workover candidates selection
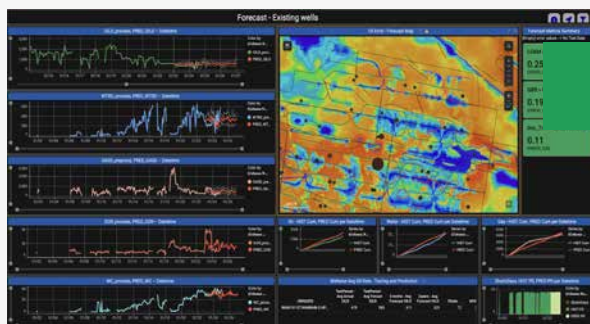- Identify opportunities to maximize recovery factor

THE SOLUTION

AIQ logo top right.

3 AI-Assisted Prodution Forecast (AI-PF)

Existing Wells – Intelligent Production Forecast

Short-term Production Planning

- AI-Assisted Production forecast leveraging ML and Physics (Mins vs Days)
- Generate Multi-Scenario data driven production profiles to optimize in-fill well placement

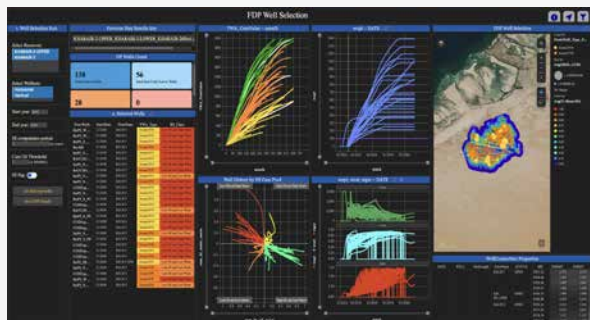## 4 Integrated Workflows
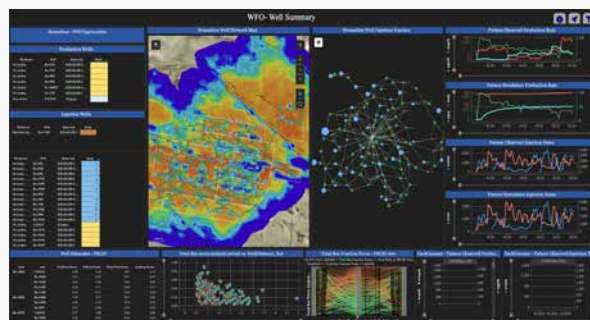
Well Workover Candidate Selection

Injectors Workover Candidate Selection

Agile Field Development Planning (AFDP)

Streamlines Based Waterflood Optimization

- Identify poor-performing wells and recommend workovers
- Optimize new well plans through FDP quality assessment
- Enhance waterflood efficiency via streamline pattern analysis

AIQ

AR360
PERFORM WITH **AIQ**

"An intelligent reservoir management and short-term production optimization solution offering a comprehensive 360° view of your reservoir by integrating various workflows."

Up to 10%
Enhance oil recovery from water flooding operations

100X
acceleration of reservoir understanding

75%
Efficiency gain in reservoir model reviews

10X
10X faster decision making

Up to 20%
Extension in life of active wells

Up to 10%
Cost reduction in drilling new wells

POWERING A **SUSTAINABLE** TOMORROW

DISCLAIMER

This booklet contains numerical data that has been sourced from our esteemed clients. It is important to note that these figures are provided in the context of their respective business operations and have been shared with us for the purpose of this booklet.

Please be aware that client-sourced data can be subject to various factors that may influence its interpretation.