SONANGOL EXPLORATION AND PRODUCTION BUSINESS UNIT

AN INTEGRATED APPROACH TO MATURE ASSET OPTIMIZATION

AFRICAN ENERGY WEEK

OCTOBER 2022

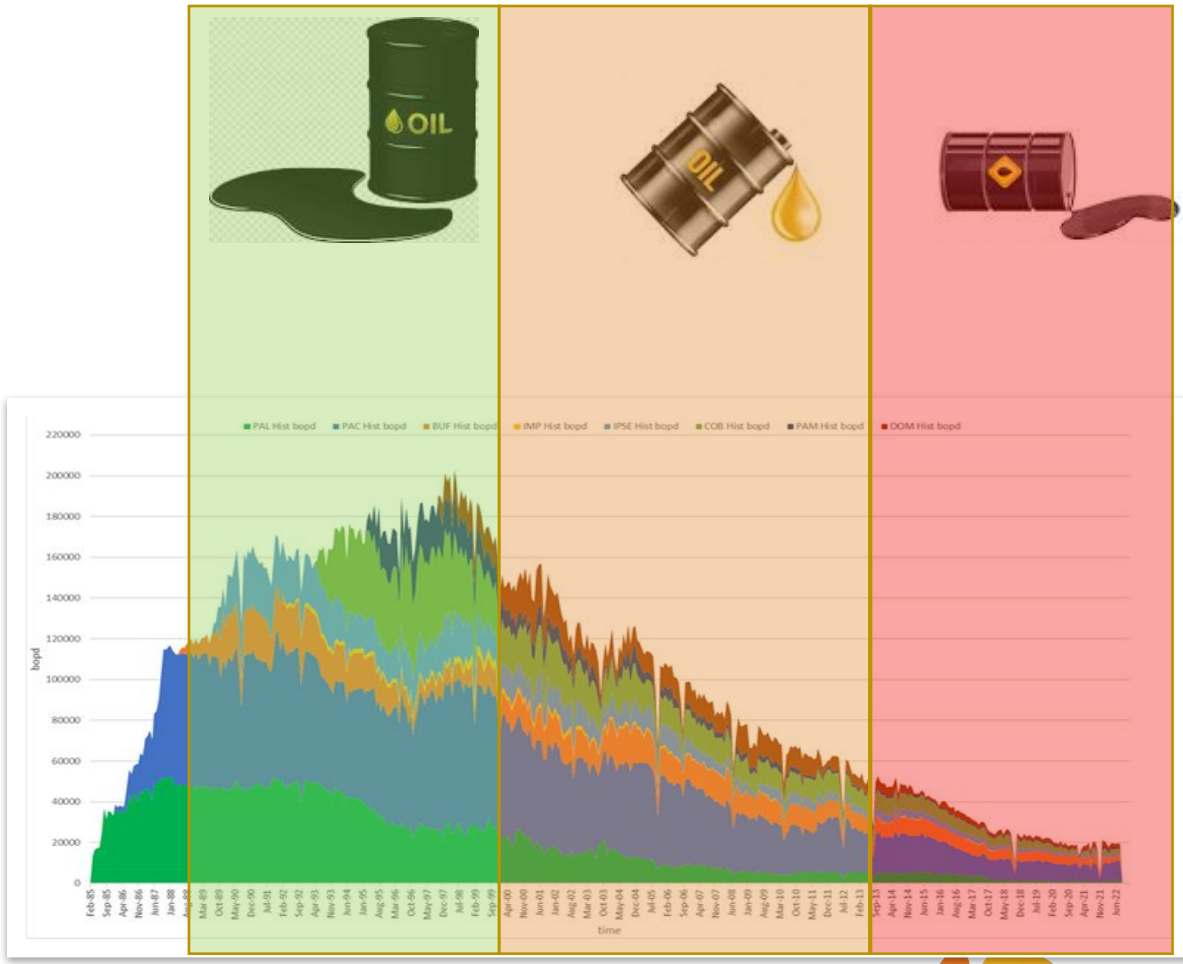
1 THE ASSET

2 THE CHALLENGE

3 THE PLAN

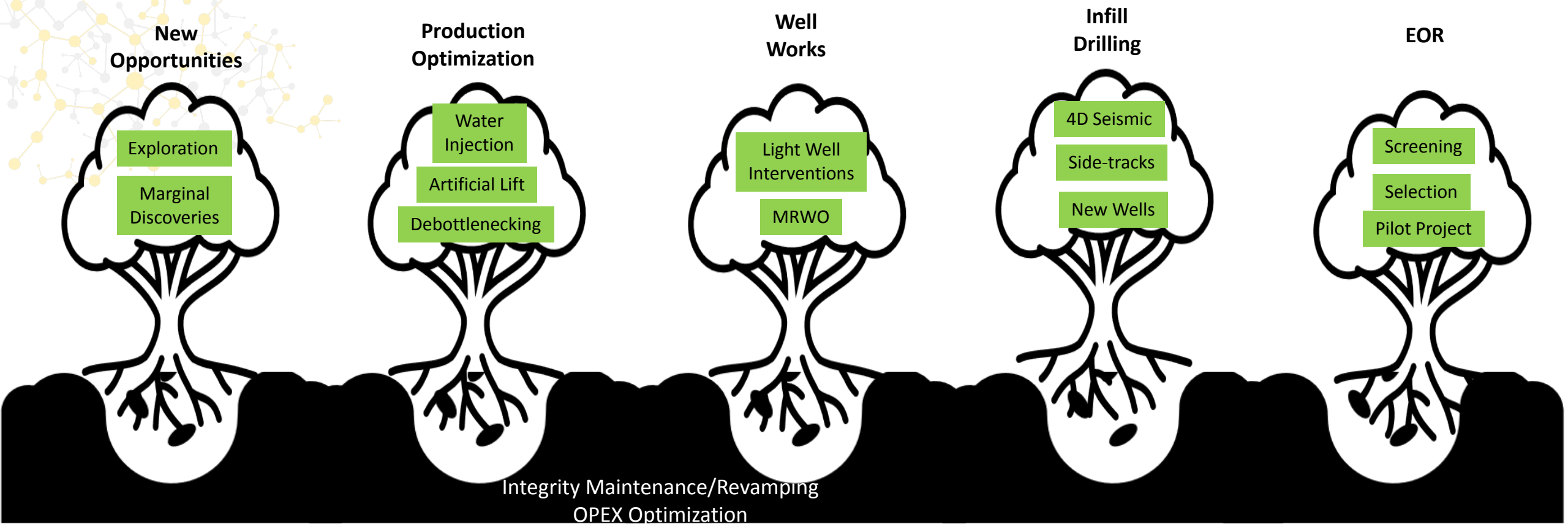
4 THE RESULT

- ✔ **Location –** Offshore Angola
- ✔ **Water Depth –** 100 meters
- ✔ **STOOIP** - 3,212 MMSTB
- ✔ **First Oil** – 1985 (37 Years)
- ✔ **Peak Production** – 200.000 BOPD
- ✔ **Reservoirs –** Carbonates and Clastics
- ✔ **Facilities** - 3 processing platforms and 13 well platforms
- ✔ **Drilled Wells**: 138
- ✔ **Active wells** - 47
- ✔ **Recovery Mechanism** - Water Injection with gas lift
- ✔ **Recovery Factor** - 41%



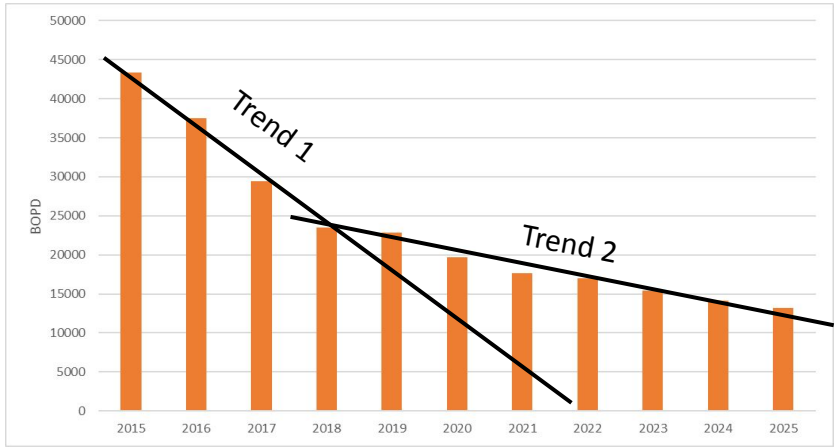
- The Barrel to Scrap:
  - Steep production decline
  - Rising Operational costs
  - Unplanned production losses
  - Integrity issues
  - Low reserves replacement ratio
  - Extend field life until 2040

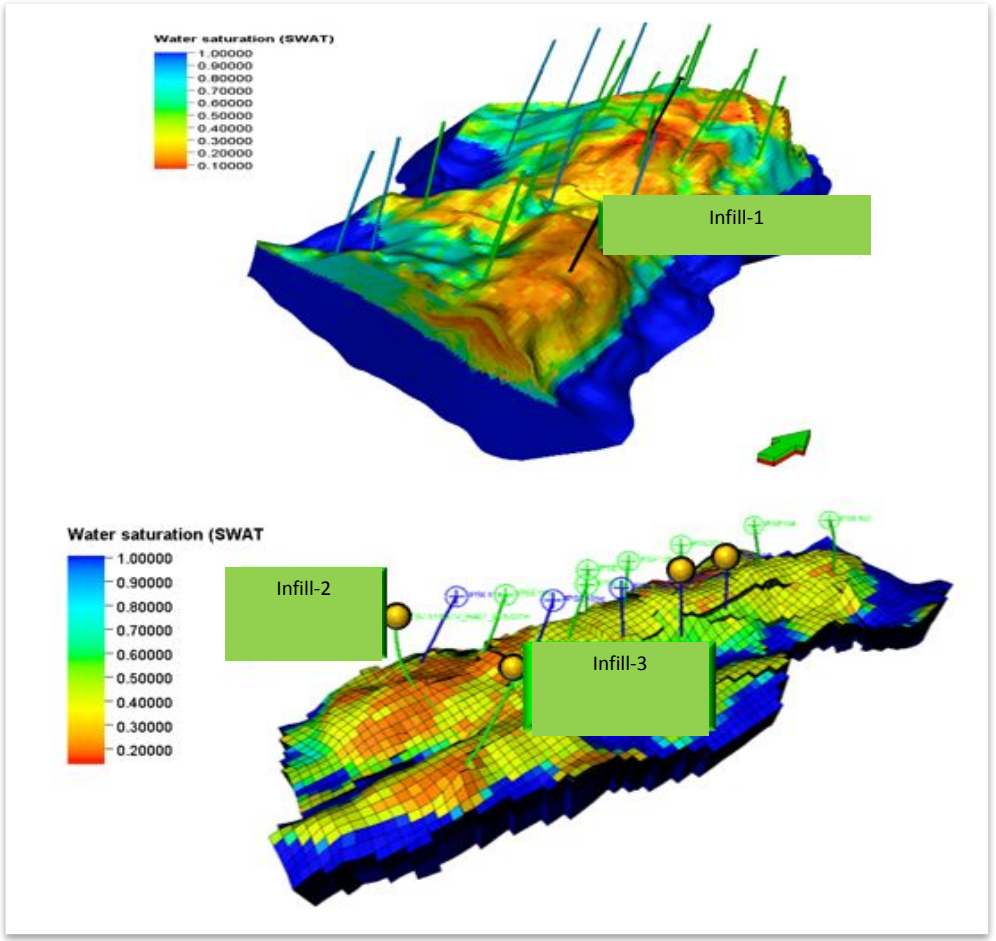
Sonangol | The Plan: The forest, not the tree



- A holistic approach to mature field revitalization: see the forest, not the tree
  - Maintain focus on safety and integrity
  - Integrates subsurface with surface
  - Replace reserves
  - Increase production
  - Reduce costs
  - Extend asset life

- Change from steep to moderate production decline
  - Water injection optimization
  - Gas lift optimization
  - Process optimization
  - Shut-in wells restart
- Reduction of unplanned production losses
- 40+ wells selected for light interventions (rigless)
  - Matrix stimulation
  - Additional perforations
  - Tubing punch
- 4 Infills locations identified
- 1 Exploration location
- 1 marginal development
- Major revamping program approved





THANK YOU