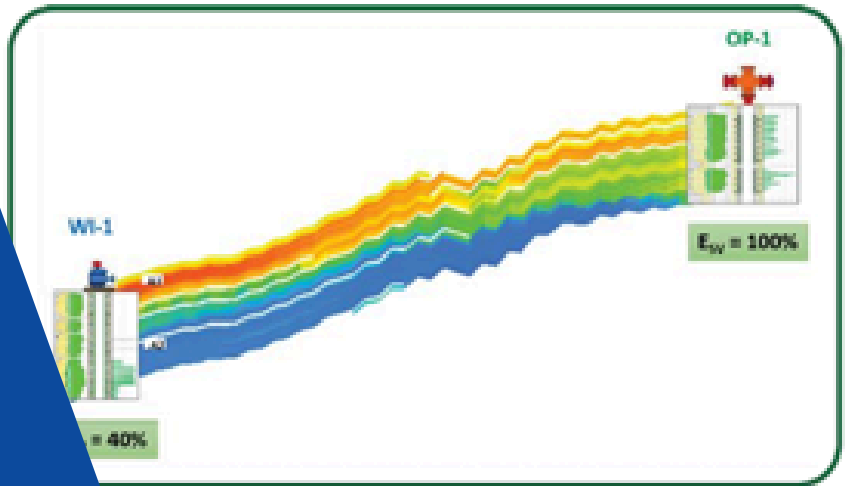


SUBSURFACE EVALUATION



PRODUCT ANALYSIS-PRIME

- Identifies underperforming wells and production issues using historical production, pressure and well data to select improvement opportunities.

PRESSURE ANALYSIS – MRT

- Performs pressure interference testing to estimate reservoir properties without significant production interruption.

CROSS-WELL SURVEILLANCE – PCT

- Evaluates drainage volume, reservoir boundaries, transmissibility and well connectivity through multi-well pressure analysis.

PRESSURE MODELLING – XPM

- Provides cross-field pressure modelling to define drainage, faults, barriers and reservoir properties for simulation.

RESERVOIR MODELLING – GFM

- Builds 2D/3D reservoir models to match production history and improve reservoir performance understanding

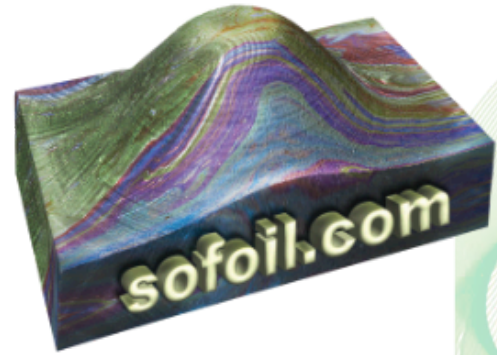
FIELD DEVELOPMENT PLANNING – MSDP

- Assesses multiple development scenarios including drilling, workover and surveillance plans with production and economic evaluation

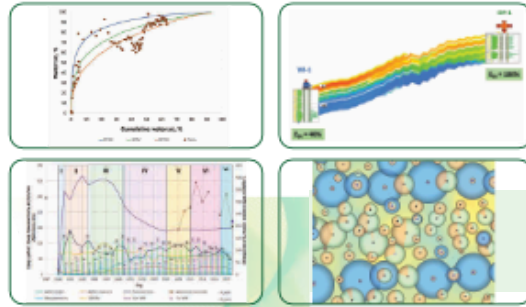
More Information please contact :

Bala : 012 522 2484/nurbaizura@neudimension.com.my

Services & Technologies



PRODUCTION ANALYSIS

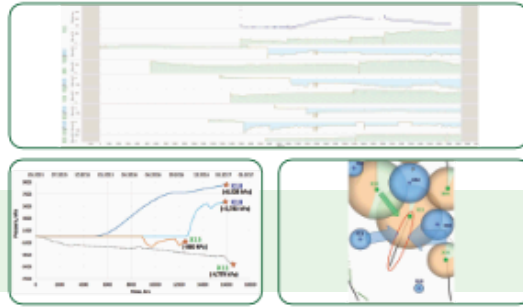


PRIME

PRIME is a set of Production Performance Indicators in **PolyPrime** software based on primary production history data (such as flow rates, formation and bottom-hole pressure, pressure tests, production logs) with zoom on wells and field areas which are dragging behind the expected recovery or pressure support targets due to integrity issues, poor connectivity or inaccurate understanding of the reservoir around these wells. This is a primary tool to select the candidates for additional data acquisition.



PRESSURE ANALYSIS

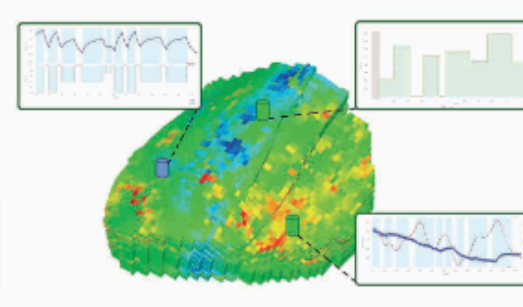


MRT

Multiwell Retrospective Testing is a **PolyGon** software aided workflow based on the correlation between bottomhole pressure and flowrates history. It uses a multi-well pressure deconvolution technique to estimate the potential drainage volumes, boundary types and their proximity, reservoir transmissibility and cross-well connectivity. It reconstructs the history of formation pressure and productivity index. It provides a lot of constraints for future reservoir modelling. It also helps to identify wells with suboptimal performance and propose a relevant surveillance.



CROSS-WELL SURVEILLANCE

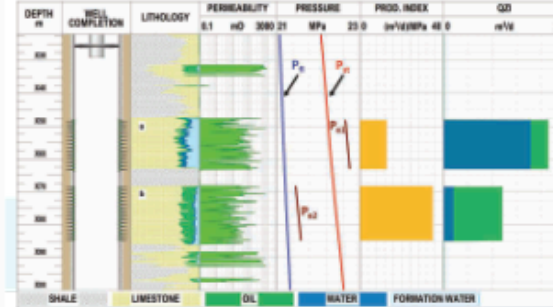


PCT

Pulse Code Testing is a specific implementation of pressure interference testing based on the **PolyGon** software and bottomhole pressure/rate readings which can be executed in working wells without punishing production delays caused by responding wells shut-down. It provides estimation of reservoir permeability and thickness separately. In case of contrast fluids mobilities, it shows a fair sensitivity to displacement efficiency. Although PCT can be performed over the existing PDG and surface flowrate data, the scanning accuracy can be substantially improved when using the zFlux downhole pressure/rate measuring facility.



FLOW PROFILE SURVEILLANCE

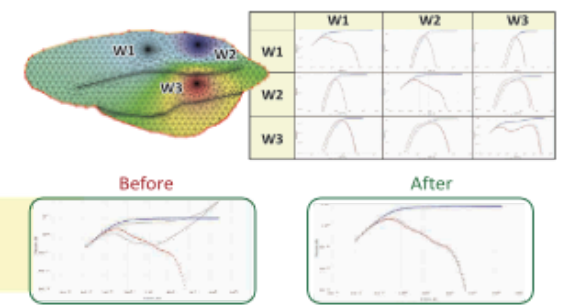


PROLOG

Productivity Logging is a combination of multi-rate production logging and bottom-hole pressure deconvolution both processed in **PolyGon** software which translates the bottomhole flowrate and pressure readings into formation pressure and productivity index values across each flow zone of multizone well completion. The values of formation pressure and Productivity Index provide a deeper insight into well performance comparing to conventional PLT profile and can be efficiently used both in well performance predictions and in full-field simulations.



PRESSURE MODELLING

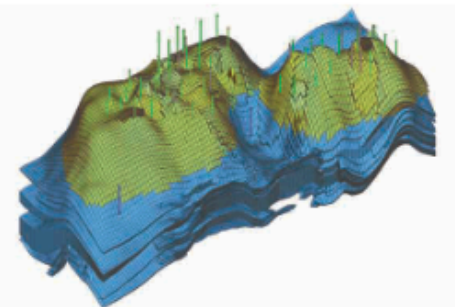


XPM

Cross-field pressure modelling is a **PolyGon** software aided numerical simulation workflow and a primary step of full-field reservoir simulations with a focus on few large-scale model properties (such as drainage volumes, boundaries, barriers, baffles, faults, lateral permeabilities and effective thickness). These properties play a dominant role in reservoir pressure dynamics.



RESERVOIR MODELING

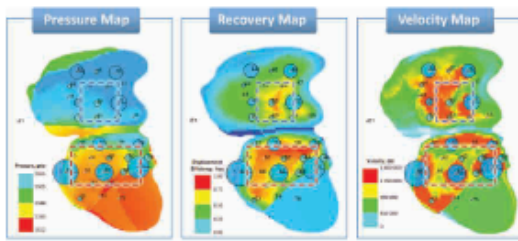


GFM

Geology and Flow Modelling is a conventional 2D/3D full-field modelling workflow. In case the results of XPM exercises are available the **XPM** takes the latter as input and the rest of the process simplifies to adjusting the facies distribution and their permeability/displacement properties to achieve a well-by-well match to the oil/gas/water cut history and available OH/CH saturation profiles.



FIELD DEVELOPMENT PLANNING



MSDP

Multi-Scenario Field Development Planning is a specific workflow based on multiple iterations performed by professional asset teams or corporate individuals via the **PolyPlan** web-facility which automatically translates the field activities (like drilling, workover, conversions, surveillance) into the model runs and reverts back with production/surveillance results in conventional report formats and financial statements including NPV. This exposes a newly built models to a wider range of corporate specialists and improves the chances of finding the best field development solution.



INTEGRATED PROJECTS



DOM

Development Opportunities Management is a type of Integrated Project Management of a complex workflow consisting of field data analyses, acquiring the new data, field modelling, building production forecasts, designing and evaluating the results of execution of new field development activities. It involves both Sofoil and non-Sofoil services based on their feasibility within a given project and sets the major focus to achieve the ultimate goal – improve production performance. This service is usually required for the fields with particular corporate importance or those which are dragging far behind the production targets.



DOWNHOLE GAUGE



zPas

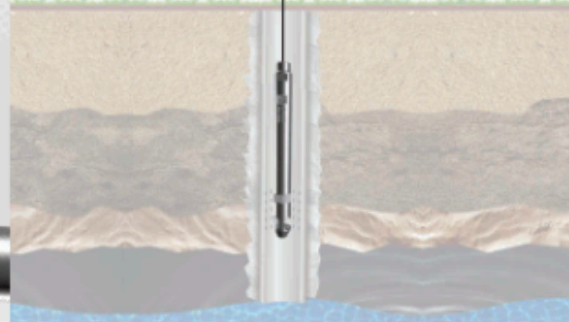
The Downhole Memory Pressure-Temperature Gauge **zPas-20M** is based on a quartz resonator and high accuracy electronics achieving a stable and highly resolving pressure (20 Pa) and temperature (0.001 C) measurements which are normally required for long-term cross-well pressure interference tests or low drawdown pressure tests in gas wells.



ZetScan



DOWNHOLE FLOWMETER



zFlux

The Downhole Memory Flowmeter **zFlux-1M** features advanced noise suppression and calibration methodology and provides long-term (up to 3 months) flow recording which is normally required for cross-well pressure interference tests.



ZetScan



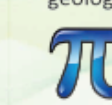
MODELLING SOFTWARE

PolyGon

PolyGon is a pressure-rate modelling software facility for:

- ✓ Pressure Transient Analysis
- ✓ Rate Transient Analysis
- ✓ Numerical Pressure Modelling
- ✓ Pressure Deconvolution
- ✓ Pressure Interference
- ✓ Decomposition

It provides the facility for uploading, processing and fitting of pressure and rate data with various geological and production scenarios.



PolyKod

