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PetroVisor Overview

MAY 2021

Proven History of Development & Execution

Deployment of first automated enterprise solution (workover candidate selection) performed on the PetroVisor™ platform.

2014

Started building ecosystem of partnerships & technology vendors. Established partnerships with Microsoft & Siemens
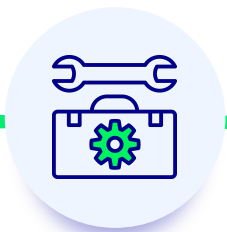
2019

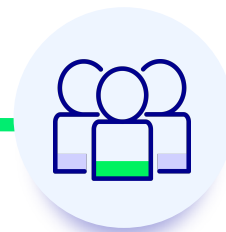**Datagration acquires Mosaic Petroleum Analytics to enhance unconventional resource workflows**
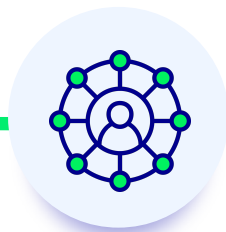
TODAY

2010

2017

2020
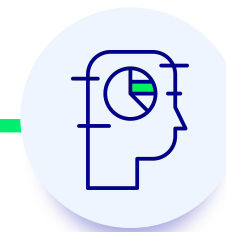
Completed Portfolio Management, Asset Development & Well Enhancement solutions.

Houston, Texas - myr:conn solutions & the PetroVisor platform acquired by Datagration. Investment led by Quantum Energy Partners & Global Reserve Group

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Technology That You Can Trust

260+

Fields on the PetroVisor™ platform today

20,000+

Wells evaluated for new opportunities

50+

Automated engineering workflows available in PetroVisor™

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Increasing Efficiency & Productivity
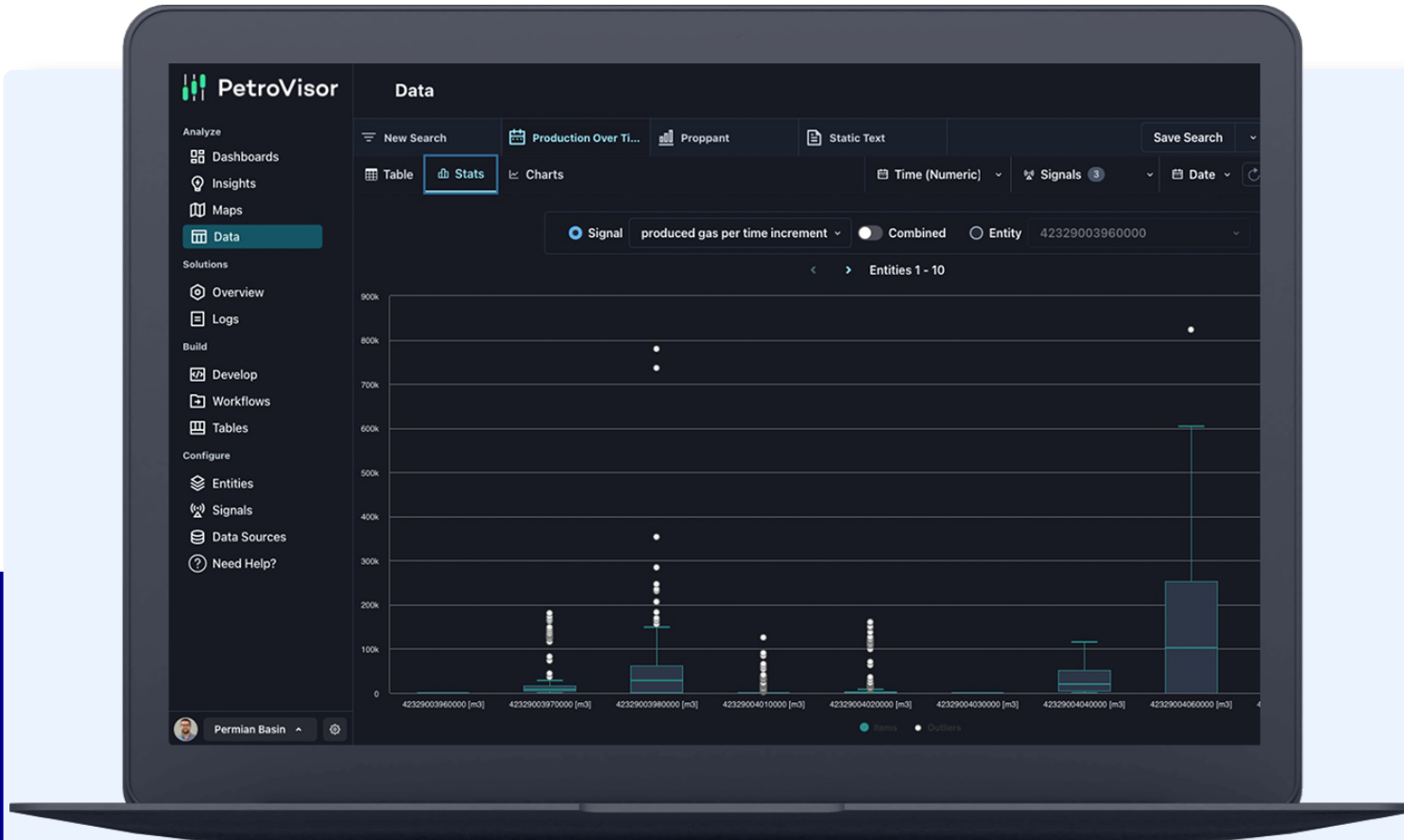
Increase Manpower Efficiencies

Reduce the cost by

80-90%

Of typical technology maintenance and expansion

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Decreasing Costs & Improving Data Utilization

**Reduce Data Management Costs
While Increasing Data Utilization**

Typical project implementation of

8 Weeks instead
of 6 Months

Reducing the industry norm and
saving hundreds thousands of dollars
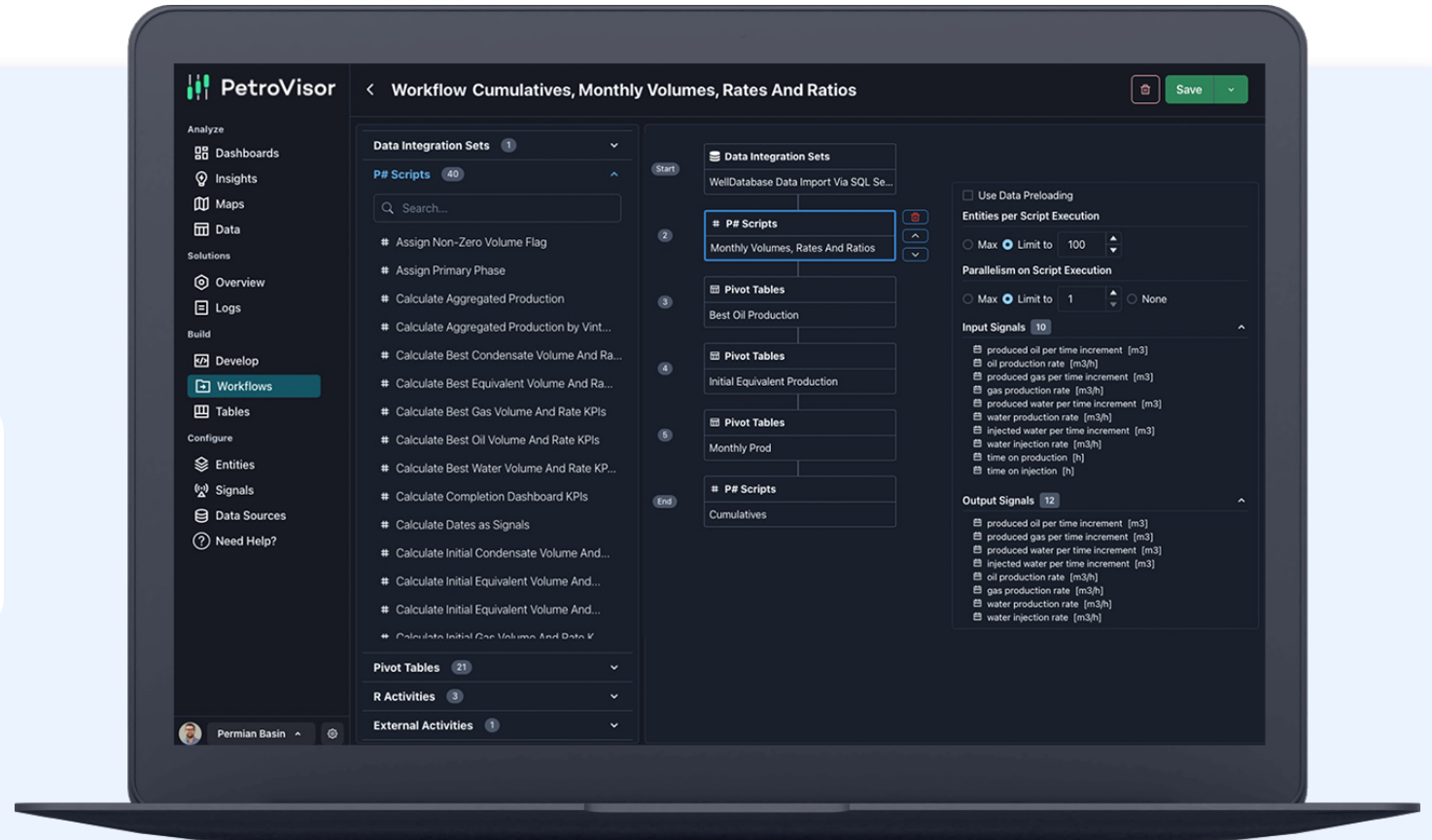
Current Industry Approach Is Complex and Costly

END USERS

TRADITIONAL DECISION MAKING

Aries
Teradata
IHS Kingdom
GeoGraphix
Openwells
Petrel
SQL
Historians
Excel
Oracle
ION
OSIsoft PI
Pipesim
DecisionSpace
Oasis

DATA SOURCES
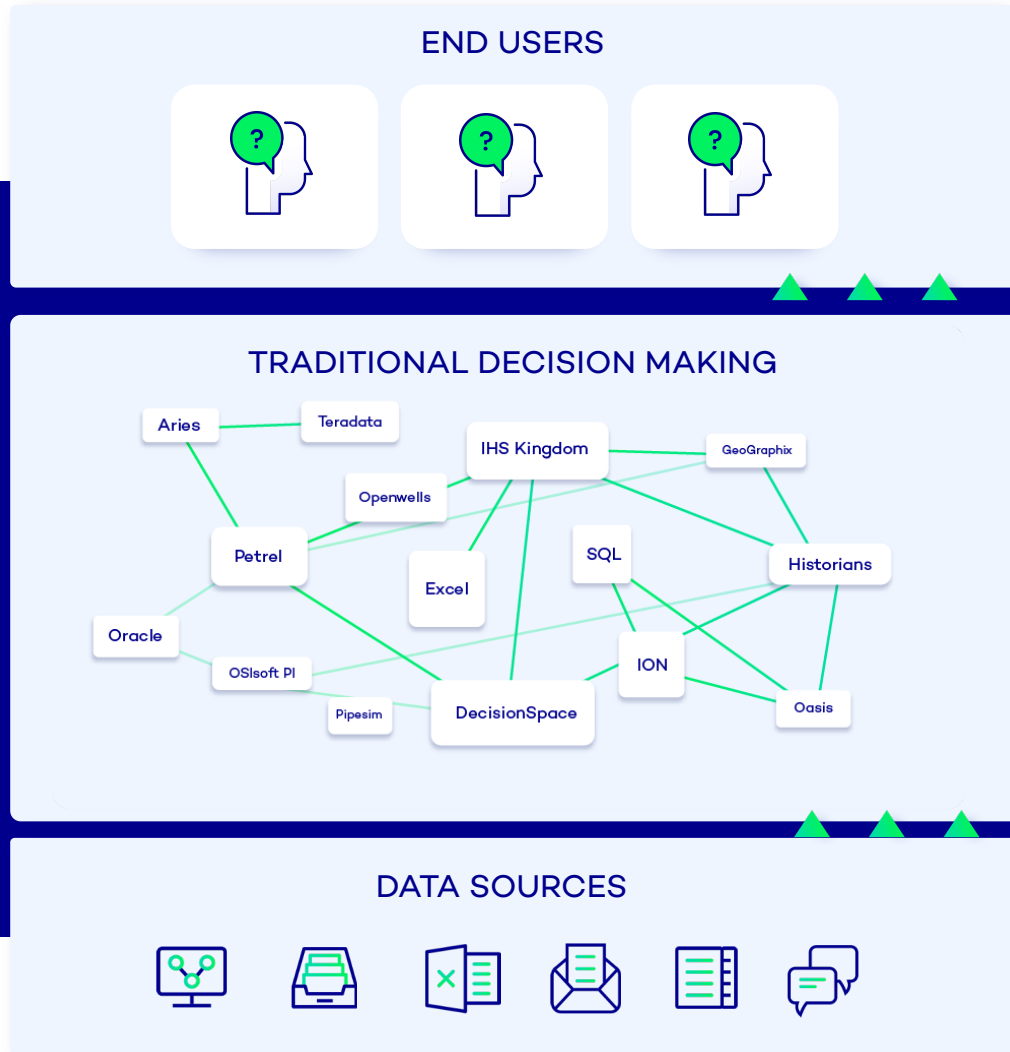
Resource intensive, slow to deploy, limits scalability

- High Operating Costs

- Technology Unable to Scale Beyond Single Use

- Disparate Data Remains Siloed

- Knowledge Capture Becomes Increasingly Complex

- Manually Engineered Connections Expensive to Maintain

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PetroVisor Approach is Simple and Efficient

Unified data model for the automated flow of data and knowledge for better decision making

Leave Source Data Intact

Link to Source Data

Characterize Data

Data Ready for Any Use

QC/Cleanse Data

Load Data

Design Solution

Develop Workflow

Deploy Automated Workflow on Demand or Scheduled

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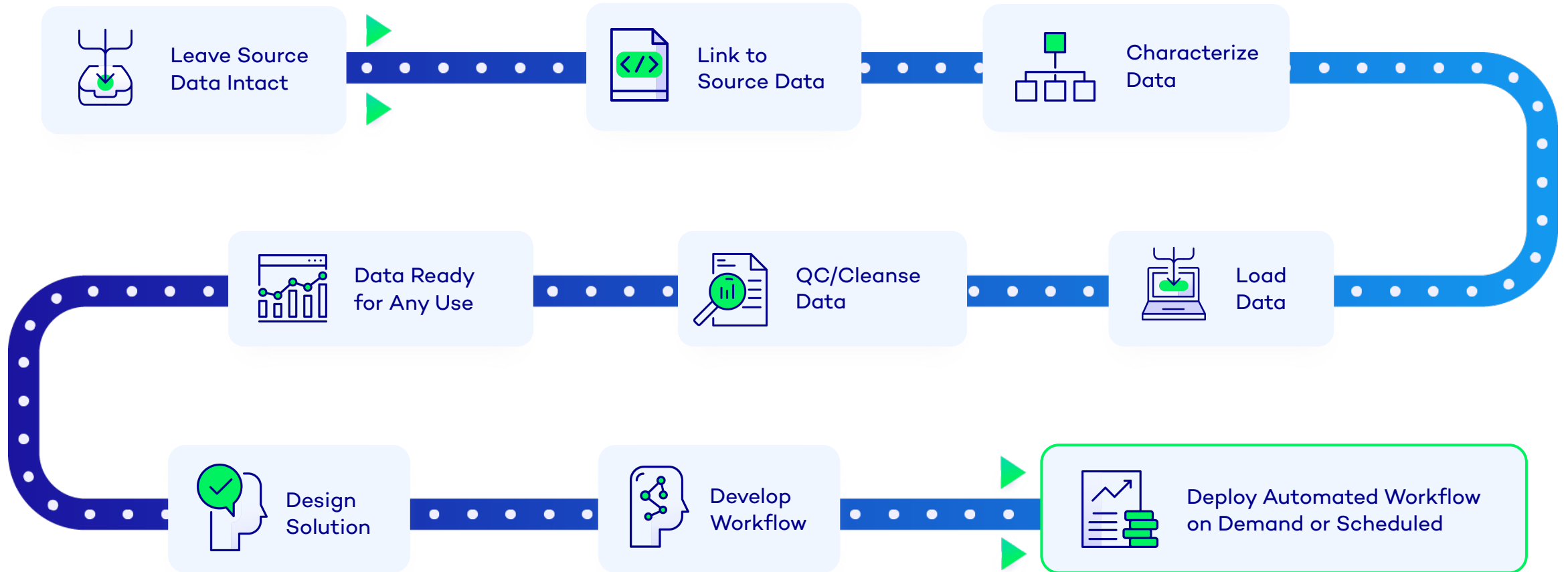
PetroVisor Platform Architecture

END USERS

Operations | Asset Managers | Finance Teams | Developers | Petroleum Engineers

TECHNICAL & ECONOMIC RECOMMENDATIONS

Delivered to the end user

Visualization Tools
- Spotfire
- Power BI
- tableau

Web Application
- PetroVisor

Collaborative Tools
- Microsoft Teams

OUR DIFFERENTIATION

INDUSTRY SOLUTIONS

Built on the PetroVisor Platform

- Artificial Lift Optimization
- Unconventional Asset Optimization
- Enhanced Oil Recovery Optimization
- Well Performance Optimization

WORKFLOW BUILDER

{ No Code / Low Code / Pro Code }

PETROVISOR PLATFORM

Knowledge Automation For Every Day Work

- One Platform
- One Model
- One Architecture

PetroVisor

- Developer Tools
- Knowledge Base
- Workflow Automation
- Anomaly Detection
- Predictive Modeling
- Peer Benchmarking
- Economic Forecasting
- On-Demand Analytics
- AI/ML/MVR

SEMANTIC DATA LAYER

Ingestion / Cleansing / Mapping

DATA SOURCES

Integrate with any system, data or infrastructure

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Platform Extensibility

We can connect to any data sources with an accessible API or any outputs

Data Sources We Connect To:

- SQL
- Oracle
- Teradata
- ODBC
- Historian
- Web APIs
- Spreadsheets, MS Excel
- ASCII Files
- SHP Files
- 3rd Party APIs
- Manual Data Entry
- Avocet, Azure Warehouse
- OpenWells, EDM, Energy Components
- Access DBs, OFM
- OSIsoft PI, Conduit
- Odata, RESTful API
- TIBCO Spotfire, Tableau
- CVS, LAS, CPS-3, Zmap
- Petrel, Petra, Kingdom, DecisionSpace, GeoGraphix
- Eclipse, CMG
- Propser, GAP, Pipesim
- Aries, PhDWin, ValNav
- SAP, Quorum
- Enverus, WellDB, IHS, Drilling Info, FracFocus, Oseberg
- FracPro, StimPlan
- Peloton, P2 Solutions
- And More…

Technology We Use:

- Kubernetes
- Docker
- R
- MSFT Azure ML
- MSFT ML.Net
- MSFT Sharepoint
- MSFT SQL
- MSFT PowerApps/Flow
- PetroVisor P# DSL
- MSFT Graph
- Azure IoT Hub
- Azure Stream Analytics
- Azure Data Lake Analytics
- Azure SQL
- Redis
- C#
- Typescript
- NodeJS
- .NET / .NET core
- PetroVisor Web API
- AWS RDS
- AWS S3
- AWS Kubernetes
- React
- Serverless Functions
- And More…

Scripts & Technology Components:

- Voronoi Grid
- Auto DCA
- Material Balance
- Data Cleansing
- Feature Extraction
- ESP Well & Pump Model
- Gas lift Well Model
- Rod Pump Model
- Bayesian Networks
- Knowledge Graph
- Cross Plot
- Ticketing System
- Feedback Loop
- Workflow Schedule
- Workflow Automation
- Petrel Maps Integration
- Eclipse Maps Integration
- PETEX Model Integration
- ML & AL
- Chart Builder
- Web-based Visualization
- P# IDE

Delivering Full Field Visibility

Activating organizational transformation on a single, unified platform.

Artificial Lift Optimization

- Rod Lift Optimization
- Gas Lift Optimization
- ESP Optimization

1

Well Performance Optimization

- Intervention & Workover
- New Candidate – Behind Casing
- New Candidate – Infill
- New Candidate – Sidetrack
- Constraint Management

2

Enhanced Oil Recovery Optimization

- SAGD Optimization
- Cyclic Steam Optimization
- Continuous Steam Optimization
- Surfactant Optimization
- Waterflooding Optimization

3

Unconventional Asset Optimization

- Project Scoping
- Completion Optimization
- Development Optimization
- Acquisition Analysis
- Uncertainty Analysis on Investor Returns

4

ESG Optimization

- Carbon Footprint & Neutrality Analysis
- Energy Usage Metrics
- GHG Emissions Forecasting
- Hydrocarbon Intensity Index
- Social Score Indexing
- LTIR Reporting & Analysis

5

Have Any
Questions?

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Thank you.

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