
# AI Smart Well
# &
# Maxxwell Production

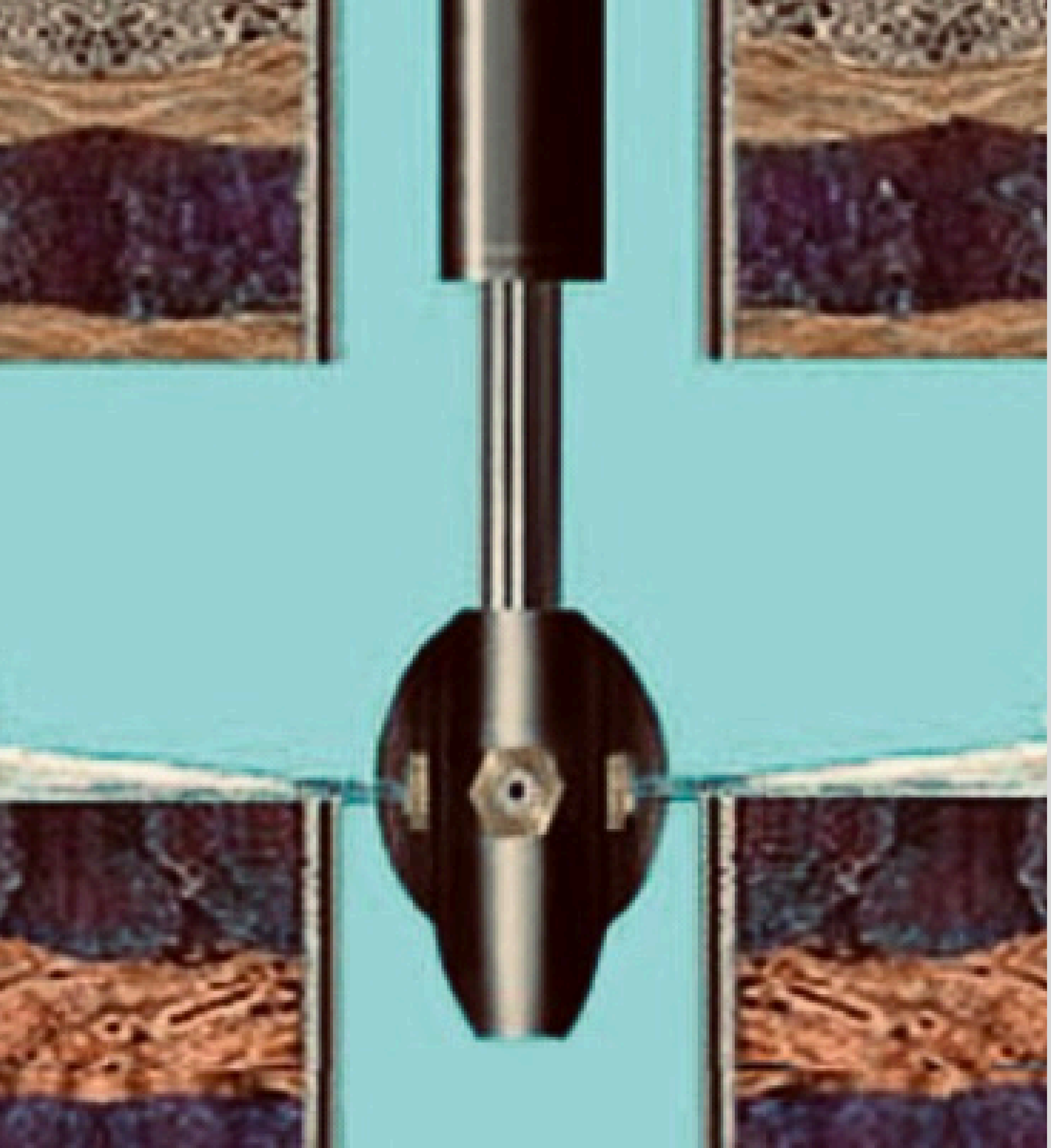

**Maxxwell Production specializes in the restoration of unproductive wells in USA and Canada with our environmentally friendly Slot Perforation Technology**

AI Smart Well and Maxxwell Production are introducing a project using artificial intelligence: "A new method to optimize the processing and analysis of geological and geophysical data to accelerate the search for promising wells." We are looking for business partners to implement our projects.


**Potential Areas of Application:**

- **Geological Exploration: Improved accuracy and speed of data analysis.**
- **Extraction: Optimization of processes and cost reduction.**
- **Strategic Planning: Forecasting and planning based on big data.**
- **Maxwell Production: Using AI to restore low-producing oil and gas wells, leading to a significant increase in production.**


Reuters a global news agency, reports over 29 million abandoned wells worldwide. These wells waste millions of barrels of oil daily, leading to lost revenue in the billions of US dollars. They are also major greenhouse gas emitters, contributing to climate change



Maxxwell Production solve this problem with slot perforation technology. Our geophysicists very carefully select wells for subsequent recompletion by SPT, their excellent work is confirmed by our contracting partners such as Chevron, Baker Hughes, Schlumberger, Halliburton and others.

**The process of selecting a promising well for restoration is complex and time-consuming. In today's oil and gas industry, fast and accurate solutions are required to increase efficiency and reduce costs.**

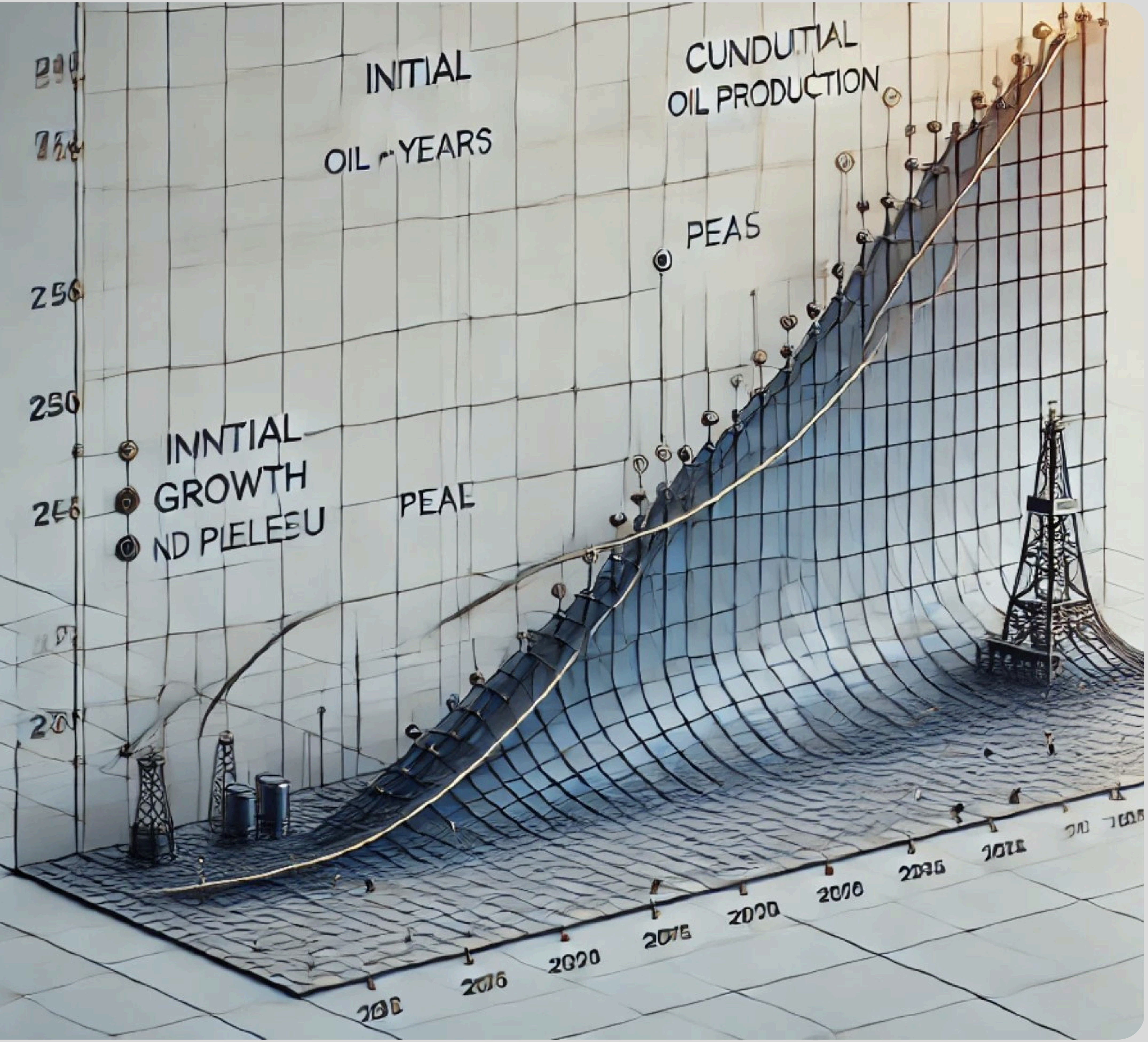
**Our "Innovative Method for Optimizing Geological and Geophysical Data Processing and Analysis to Accelerate the Search for Promising Wells" is a self-learning geological model that contains a large volume of geological and geophysical data about deposits. It helps reduce data analysis time, lower costs, and improve forecast accuracy in identifying new areas with potential oil deposits that were previously missed, leading to increased oil and gas production.**


## Program description:

**According to a pre-set schedule, for example once a week, using possible interactive Internet maps of fields, the program collects information about oil and gas wells located in pre-set squares. The schedule and search area can be changed at any time.**

The program selects operating low-productive wells. If, in comparison with the previous request, the well is closed in the new search, the program automatically removes such well from subsequent selections. From each well our program downloads and classifies the following information (if any): a tabular history of monthly well operation for oil, gas and water, initial production, casing and tubing pressure, notes on accidents, tests, and transitions to other productive intervals

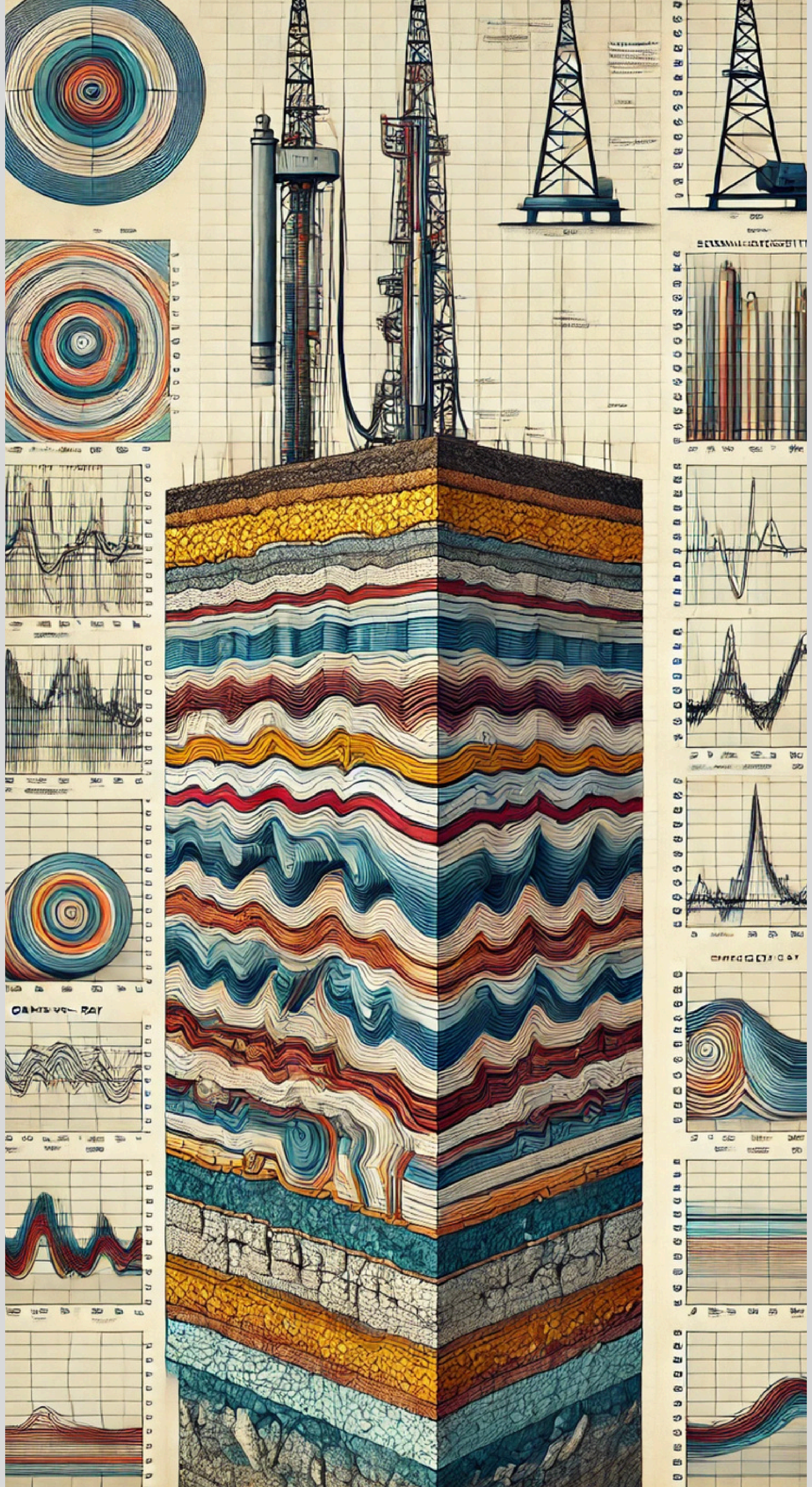
The obtained information is then analyzed and processed using the mathematical-graphical method of cumulative production.
A mathematical-graphical method of cumulative production is a technique used in the analysis of the performance of oil, gas, or other resource wells over time. This method combines both mathematical calculations and graphical representations to assess and predict the cumulative production of a well, reservoir, or field.




**Graphical Representation:** The method involves plotting the cumulative production data on a graph to visually track the well's performance. The graph allows operators to assess trends and identify changes in production behavior, such as early-stage depletion or improved output due to operational changes.

The program outputs results for the initial well reserves, these already produced, and the remaining oil, gas, and water reserves. Based on average statistical data from the results of slot perforation technology (an average of 25-35 barrels per day), the program calculates useful oil and gas reserves, and the number of years required to fully develop the well under study, taking into account the above-mentioned inflow.

Using information on the current price of oil and gas, the program also determines the payback period, annual gross and net profit, and profit for the entire remaining period of the well's operation.



Thus, the intelligent program maintains a fresh database of prospect wells for redevelopment at various fields, updated weekly.
When any well is further approved for redevelopment, the well logs from the intelligent database are studied by geophysicists.

**Financial Analysis. Current Costs: Assessment of current costs for tasks that are planned to be automated using AI:**

| Selection and Analysis Cost Breakdown | Project cost ($) | Number of working hours per day | Number of working days per year | Number of working hours per year | Hourly rate ($/H) |
|---|---|---|---|---|---|
| Search/selecting potential for EOR wells | 102,050.16 | 8 | 249 | 1992 | 51.23 |
| Geological/geophysical analysis, program | 223,104.00 | 8 | 249 | 1992 | 112 |
| TOTAL | **325,154.16** | | | | |

**Assessment of current costs that have been automated using AI:**

| Selection and Analysis Cost Breakdown | Project cost ($) | Number of working hours per day | Number of working days per year | Number of working hours per year | Hourly rate ($/H) |
|---|---|---|---|---|---|
| Search/selecting potential for EOR wells | 51,025.08 | 4 | 249 | 996 | 51.23 |
| Geological/geophysical analysis, program | 111,552.00 | 4 | 249 | 996 | 112 |
| TOTAL | **162,577.08** | | | | |

## Data Analysis

| Working Days | W/H per day | Number of workers | Current time to analyze one well/H |
|---|---|---|---|
| 15 | 8 | 3 | 360 |

## Reduction of data analysis time using AI

| Working Days | Current time to analyze one well/H | Expected reduction in time using AI | New time for analyzing one well (Days) | New time for analyzing one well (Hours) |
|---|---|---|---|---|
| 15 | 360 | 65% | 5.25 | 126 |

## Well data processing

| Working Days | W/H per day | Number of workers | Current time for processing data from one well/H |
|---|---|---|---|
| 10 | 8 | 3 | 240 |

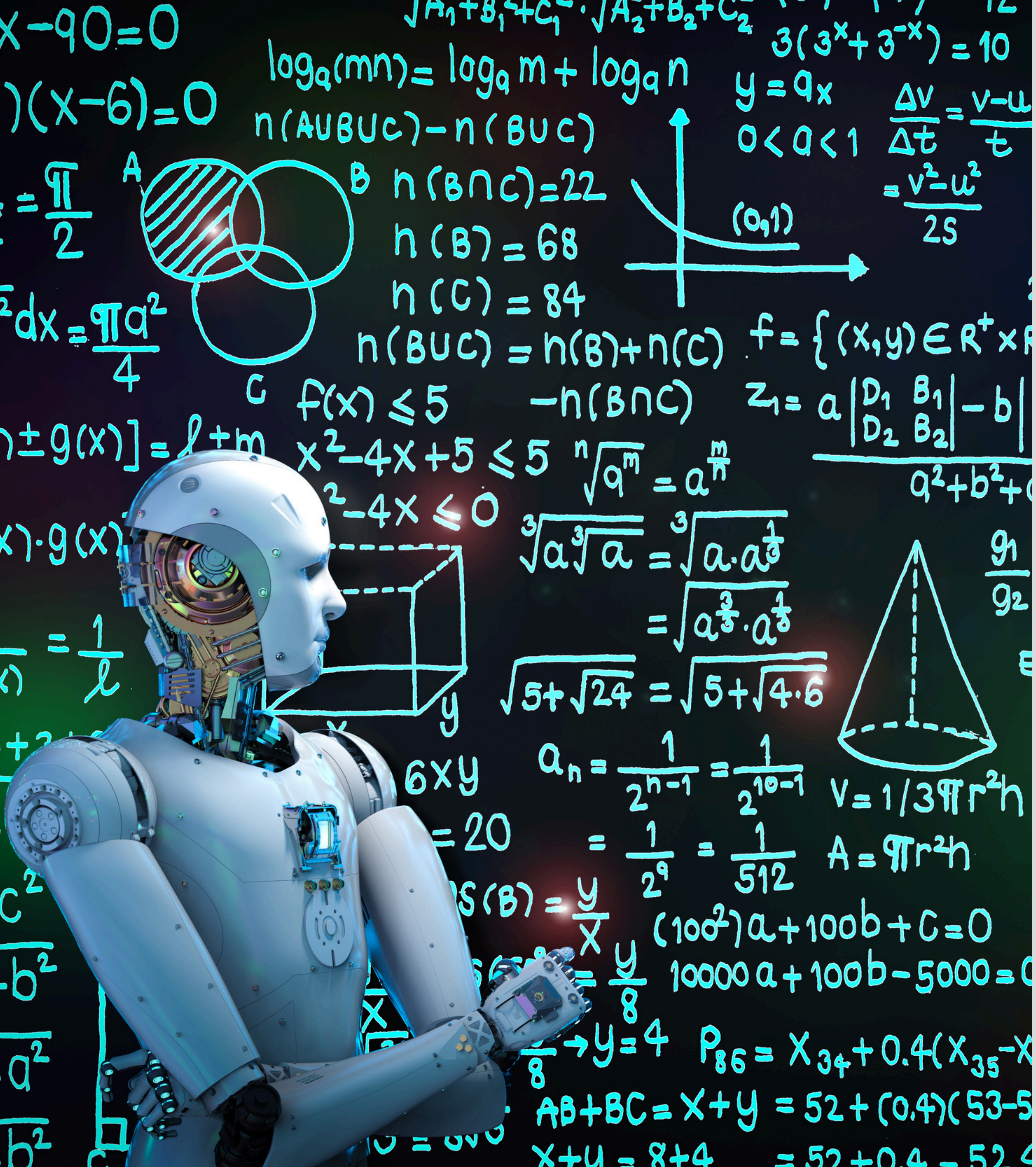
## Reduction of data processing time using AI

| Working Days | Current time for processing data from one well/H | Expected decrease in AI usage time | New time for processing one well (Days) | New time for processing one well (Hours) |
|---|---|---|---|---|
| 10 | 240 | 65% | 3.5 | 84 |

## Reduction of costs on data analysis on manual labor and the use of traditional analysis methods

- 100 wells

| | Search/selecting potential for EOR | Geological/geophysical analysis,program | Cost ($) |
|---|---|---|---|
| Current data analysis costs for one well | 8,600.00 | 3,500.00 | 12,100.00 |
| Expected cost reduction - 50% | | | 6,050.00 |
| Number of wells per year | | | 100 |
| Savings | | | 605,000.00 |

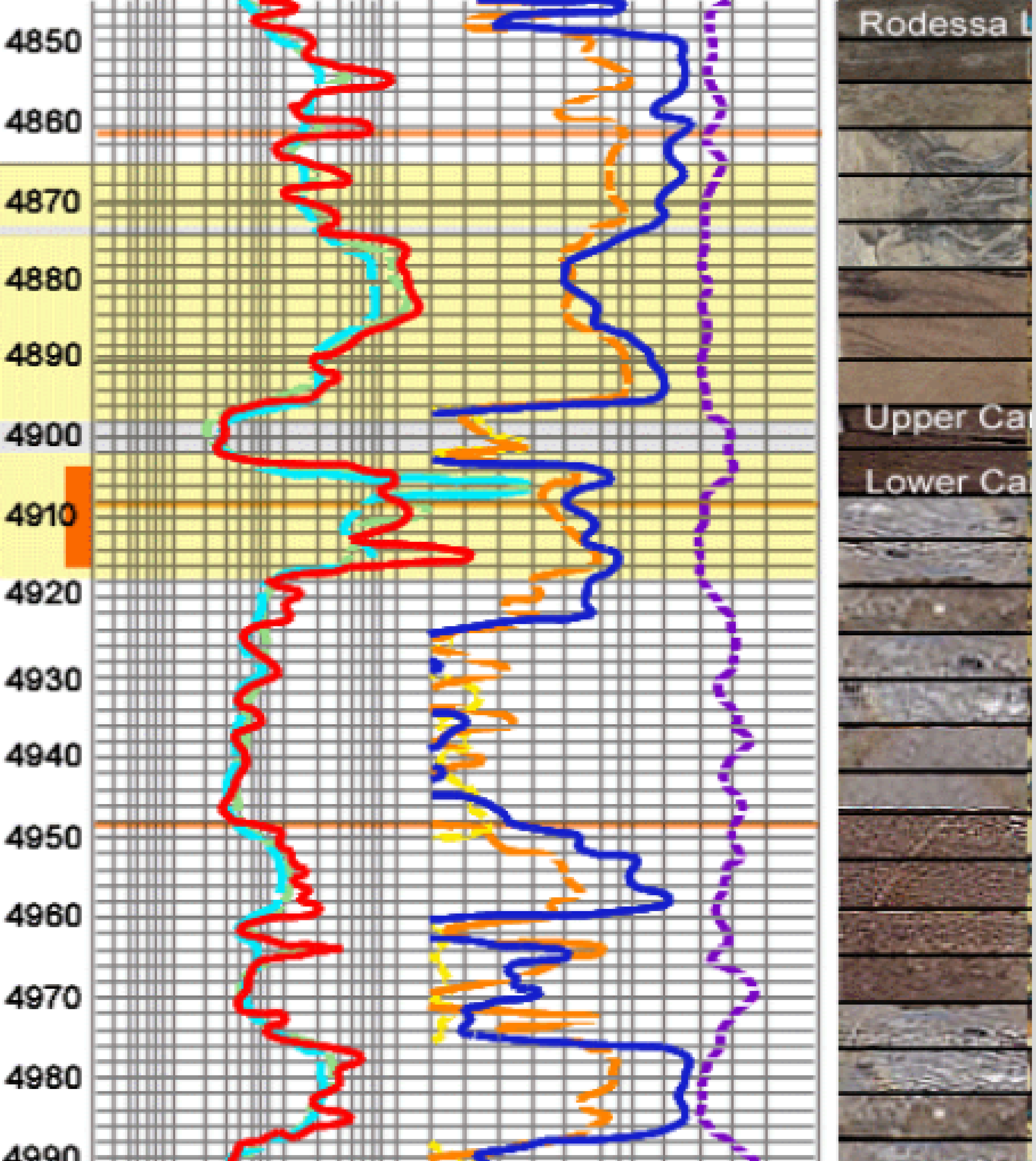



**Advantages AI SMART WELL:**

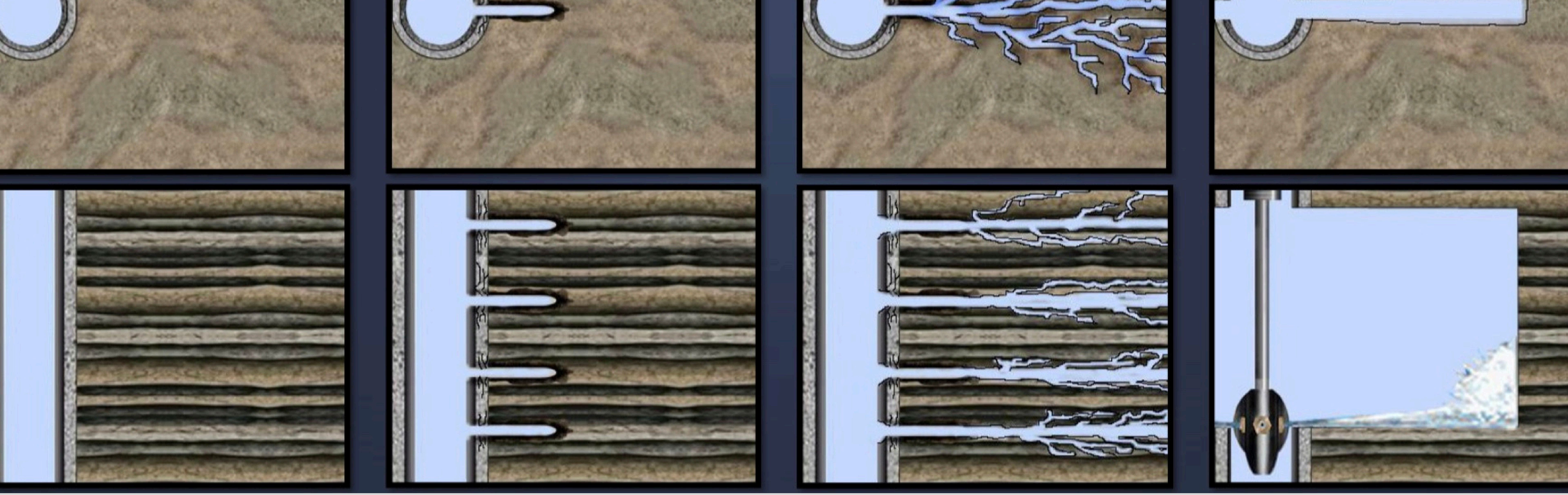
**Data optimization: AI is capable of analyzing a large volume of geophysical and geological data with high speed and accuracy, which helps to more efficiently identifying new areas with potential oil deposits . This reduces the number of required tests and drillings, lowering environmental risks and costs**


**Reduced need for field testing: The use of AI decreases the need for physically demanding and costly on-site studies. Algorithms can predict reservoir characteristics and well behavior based on historical well data, reducing the number of drillings and minimizing environmental impact.**

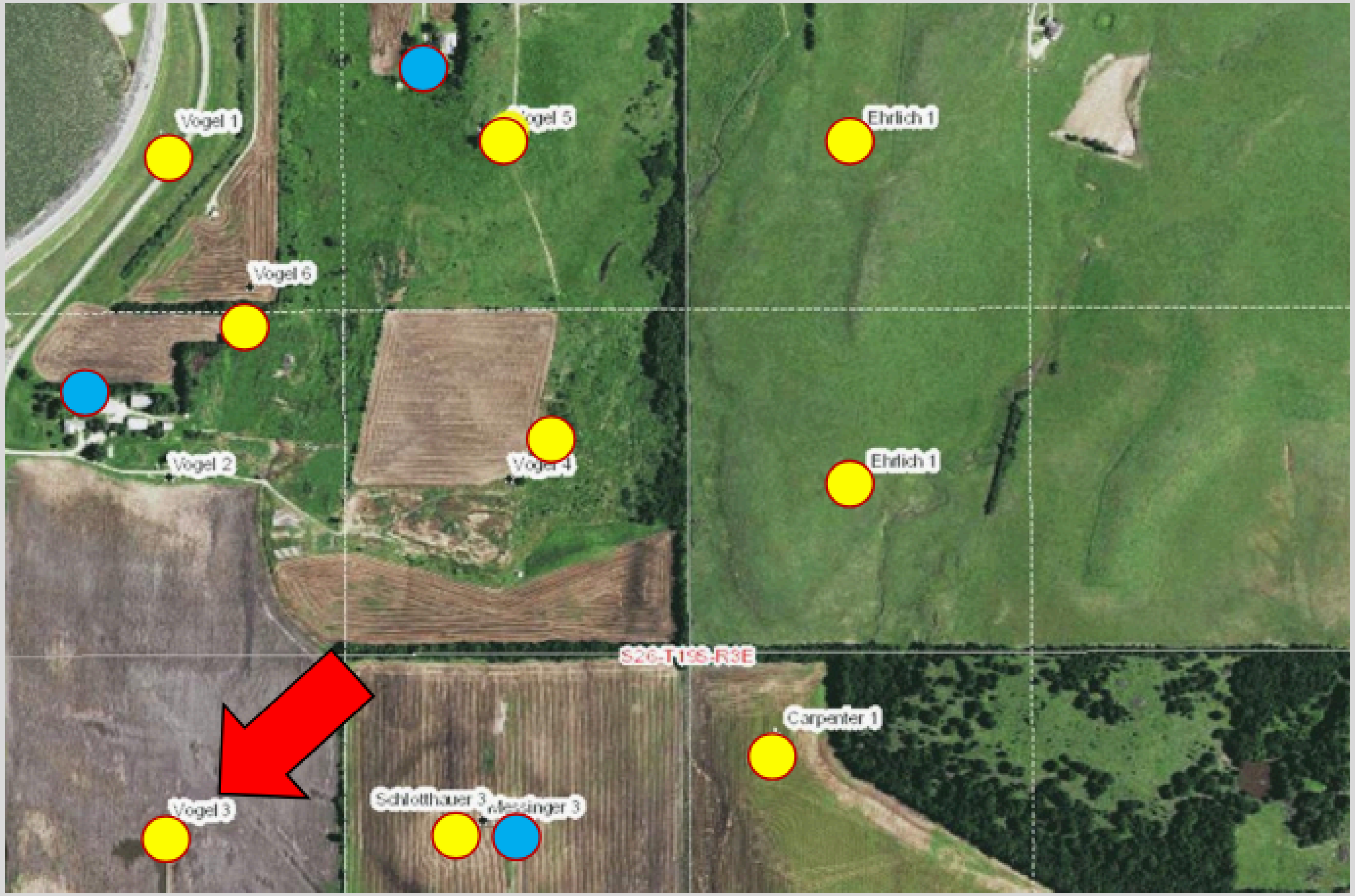
Risk Reduction Measures:
Blend AI with the skills of geologists and geophysicists.
Establish backup protocols to confirm AI outcomes with alternative methods.
Protect data and ensure confidentiality with advanced security technologies.




**Data integration: AI can process data from various sources (historical well data) and integrate them into a single model. This allows for more accurate predictions of reservoir behavior without the need for additional drilling and analysis.**



**Increasing production efficiency: AI helps improve forecast accuracy in identifying new areas with potential oil deposits that were previously missed, leading to increased oil and gas production and helps optimize well operations, leading to more efficient resource use and reducing the need for additional infrastructure or energy costs. This lowers the carbon footprint of oil extraction.**




**The environmentally friendly method of artificial intelligence in geological and geophysical analysis of oil wells aims to minimize negative environmental impact, optimize processes, and ensure efficient resource use. These approaches can contribute to the sustainable development of the oil industry and the conservation of natural resources.**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