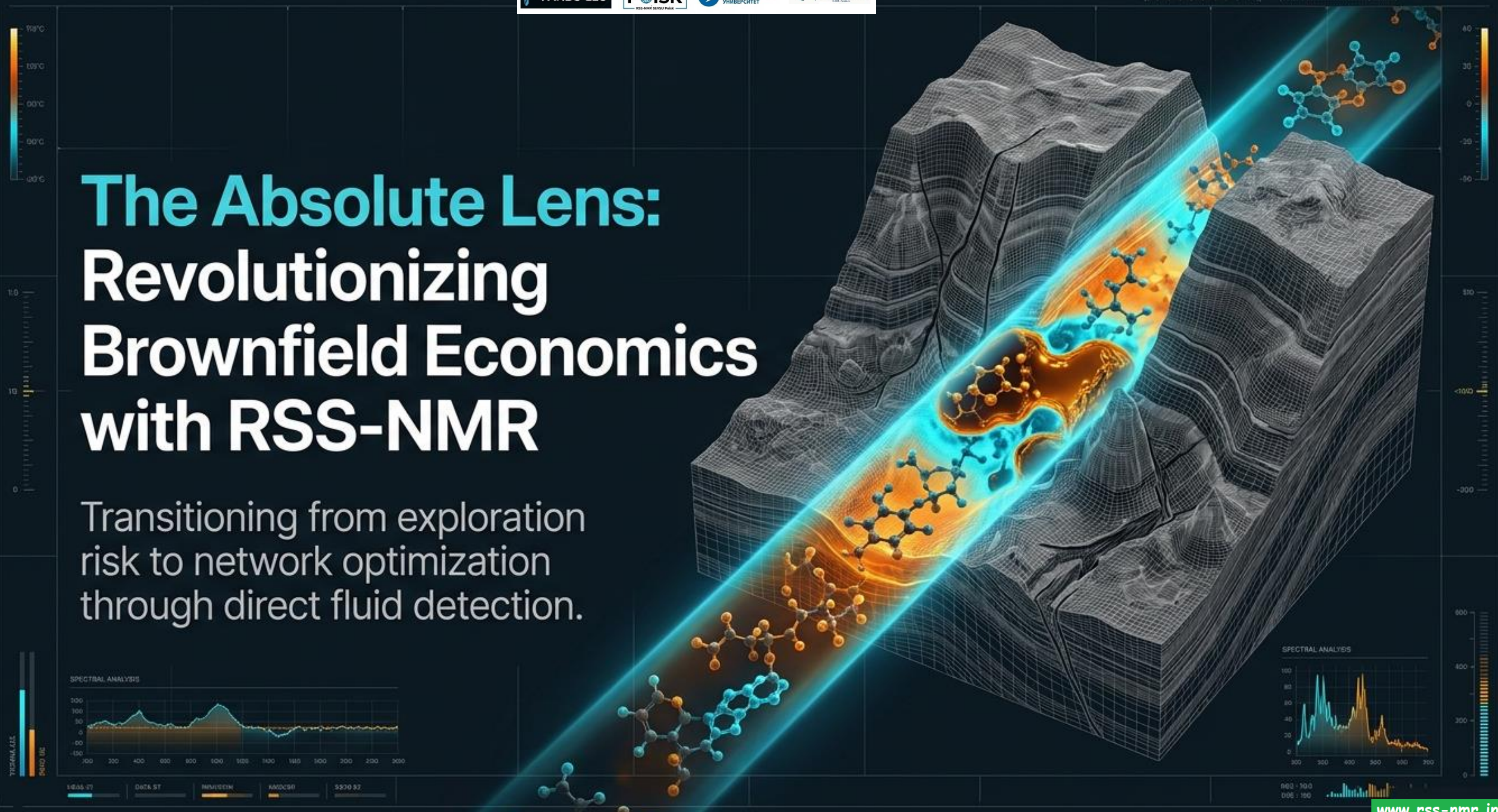


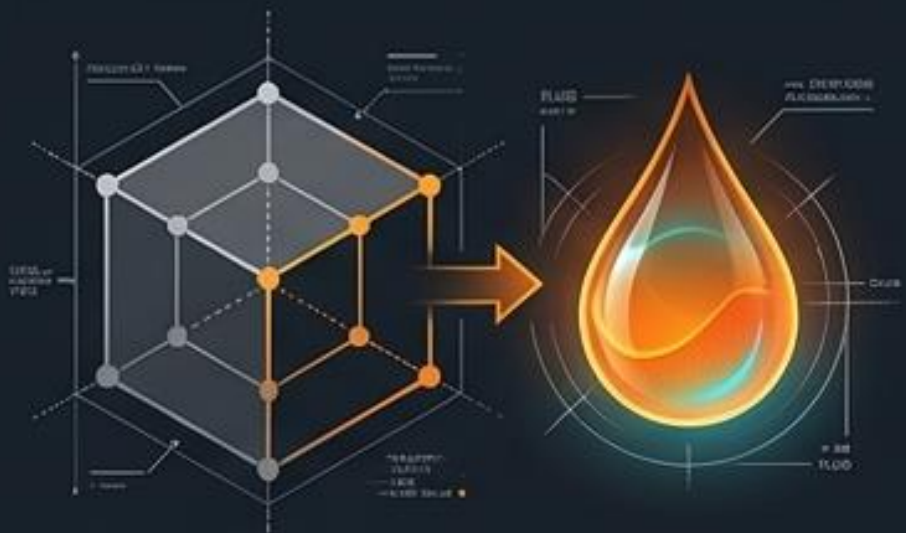
# The Absolute Lens: Revolutionizing Brownfield Economics with RSS-NMR

Transitioning from exploration risk to network optimization through direct fluid detection.



# The Brownfield Optimization Playbook

## The Scientific Paradigm Shift



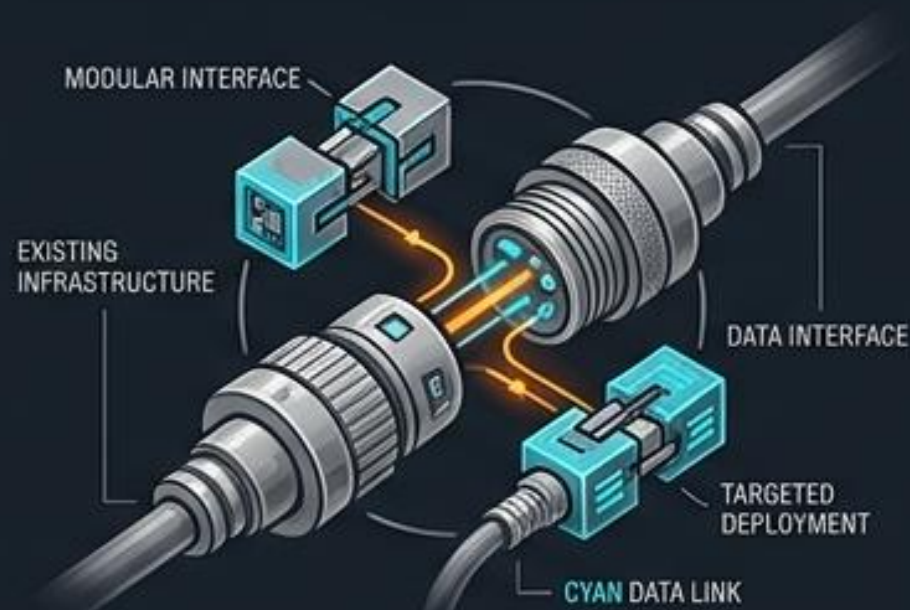
RESOLUTION: SUB-ATOMIC  
FLUID ID: DIRECT

STRUCTURE: WIREFRAME (OBSOLETE)  
RESONANCE: ACTIVE (DETECTED)

Moving from mapping geometric containers to directly detecting fluid signatures via atomic resonance.



## The Operational Reality



Zero-risk deployment utilizing existing field documentation and infrastructure for targeted sidetracks and recompletions.



- ✓ FIELD DOCS: VERIFIED
- ✓ INFRASTRUCTURE: COMPATIBLE
- ✓ DEPLOYMENT: ZERO-RISK
- ✓ SIDETRACKS: PRECISION GUIDED

## The Financial Impact



EXTRACTION: CLASSICAL + SMART EOR  
LIFECYCLE: EXTENDED

GUIDANCE: ATOMIC PRECISION  
EOR EFFICIENCY: BOOSTED

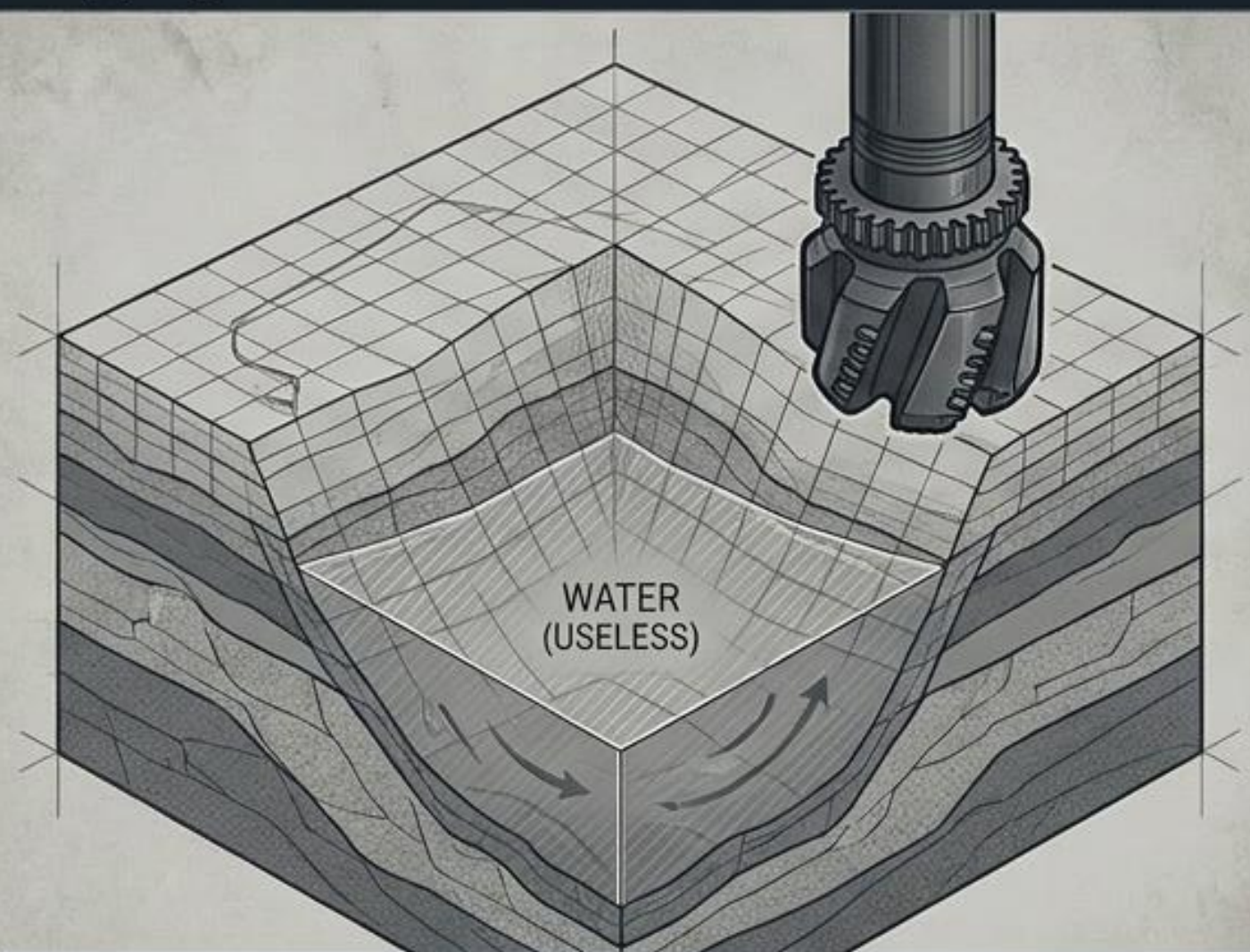
Maximizing asset lifecycle value by precision-guiding both classical extraction and Smart EOR (Enhanced Oil Recovery).



VALUE: +40% CAGR    RISK: MINIMIZED    EFFICIENCY: PEAK

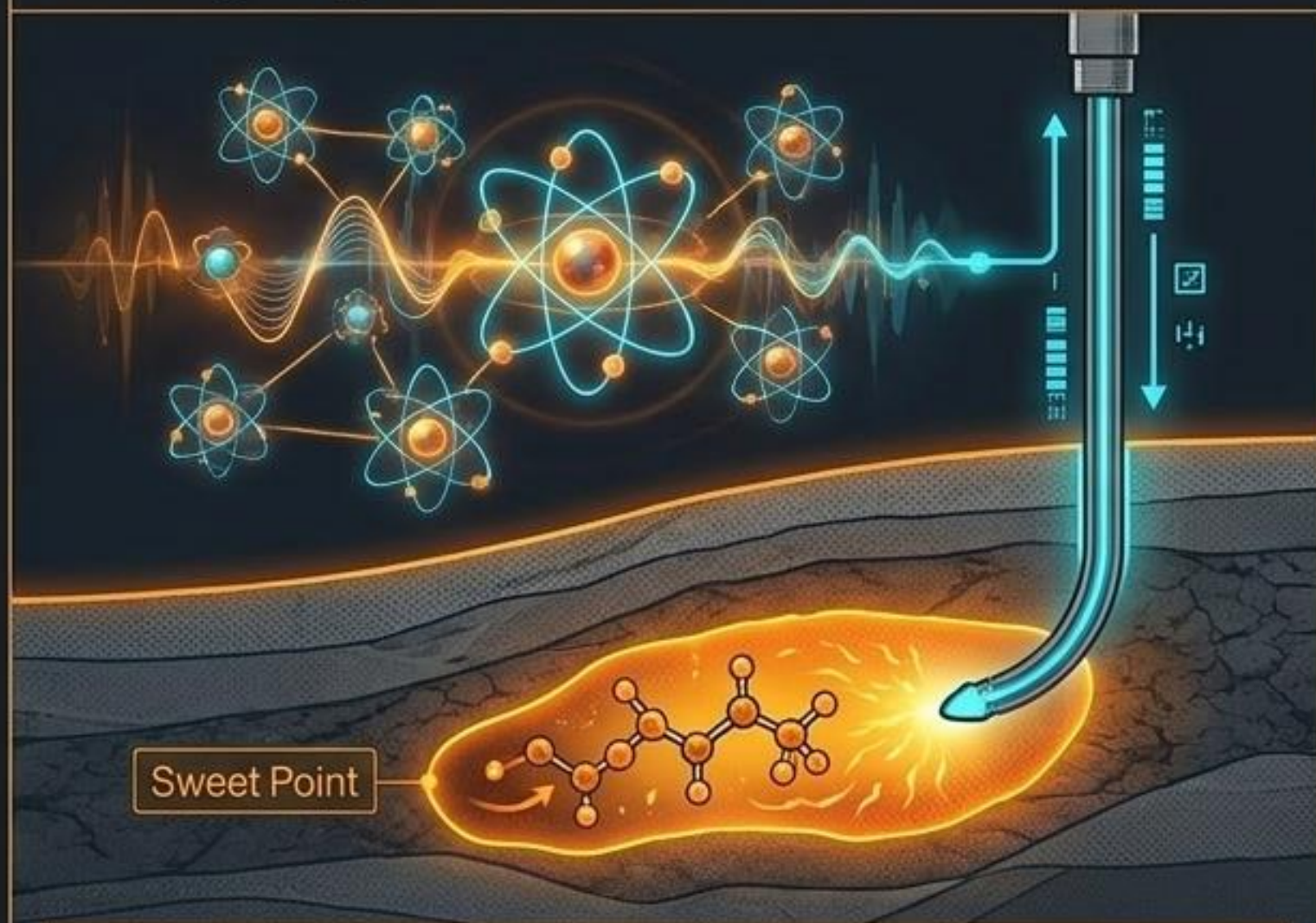
# Eliminating the 'Pay to See' Economy

## Mapping the Container



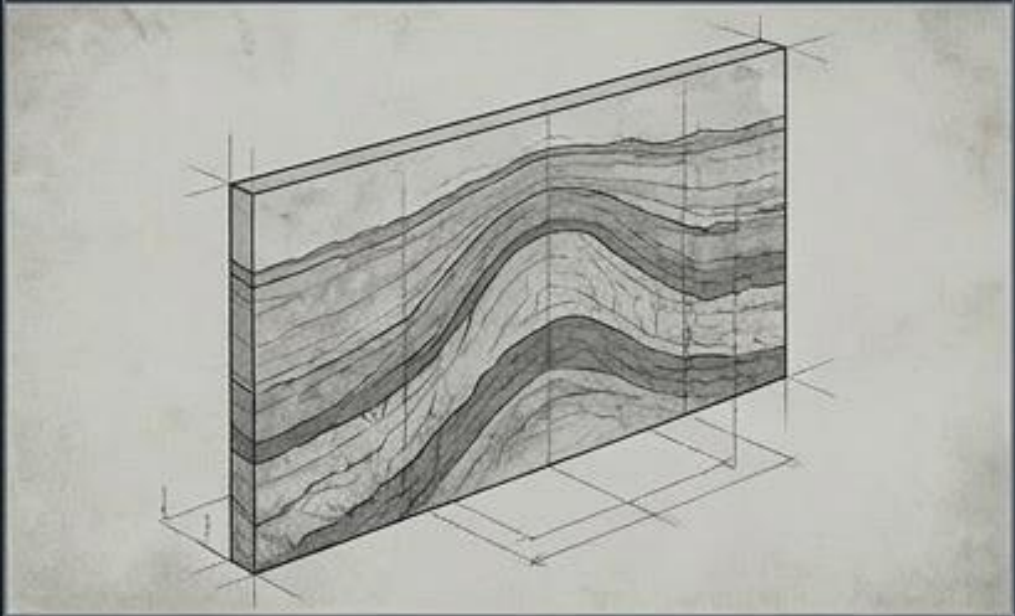
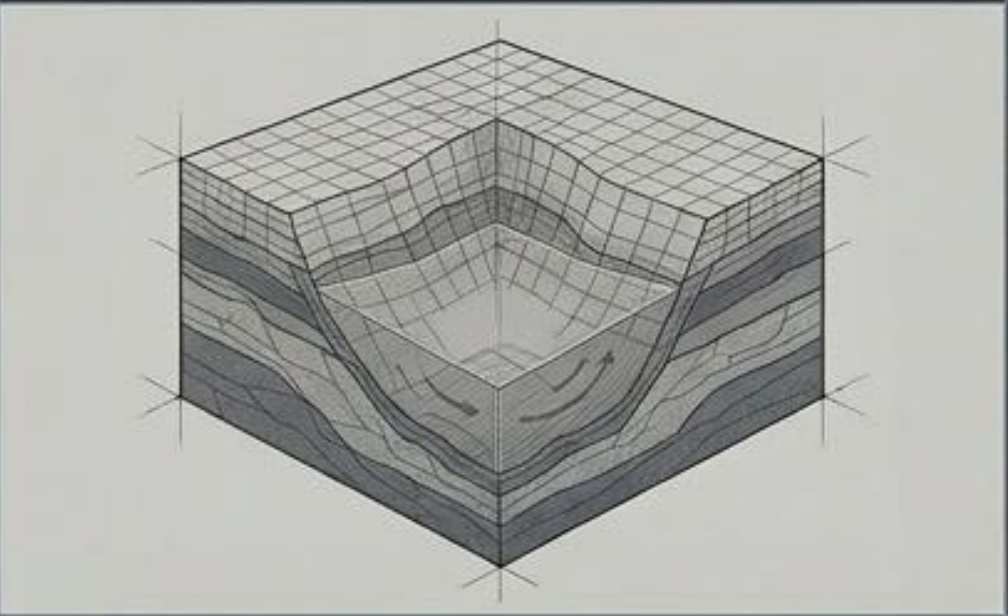
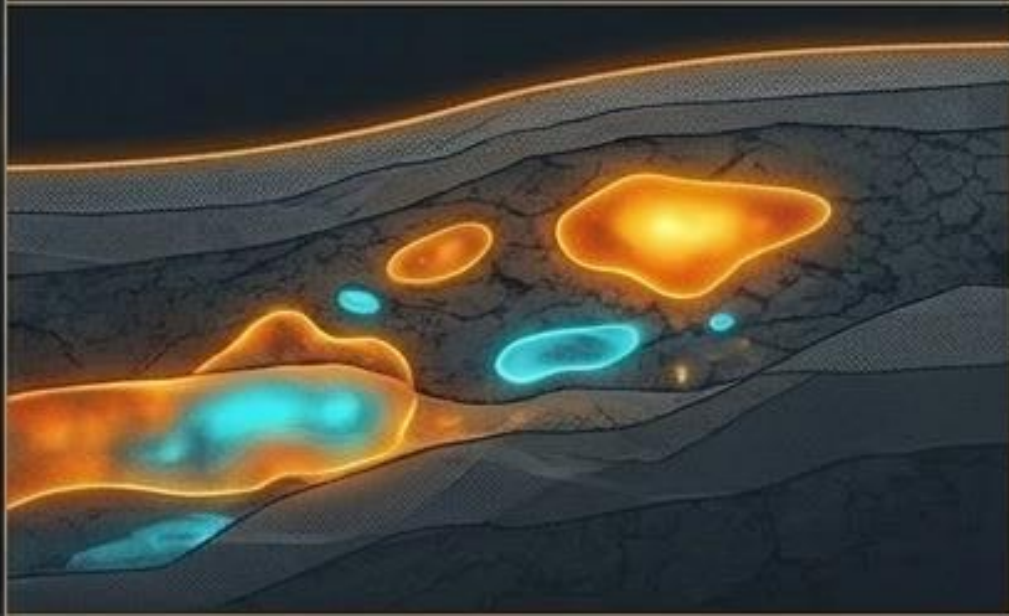
Legacy 2D/3D seismic forces a gamble. It maps geometric traps and structural containers, but cannot guarantee the contents.

## Interrogating the Contents

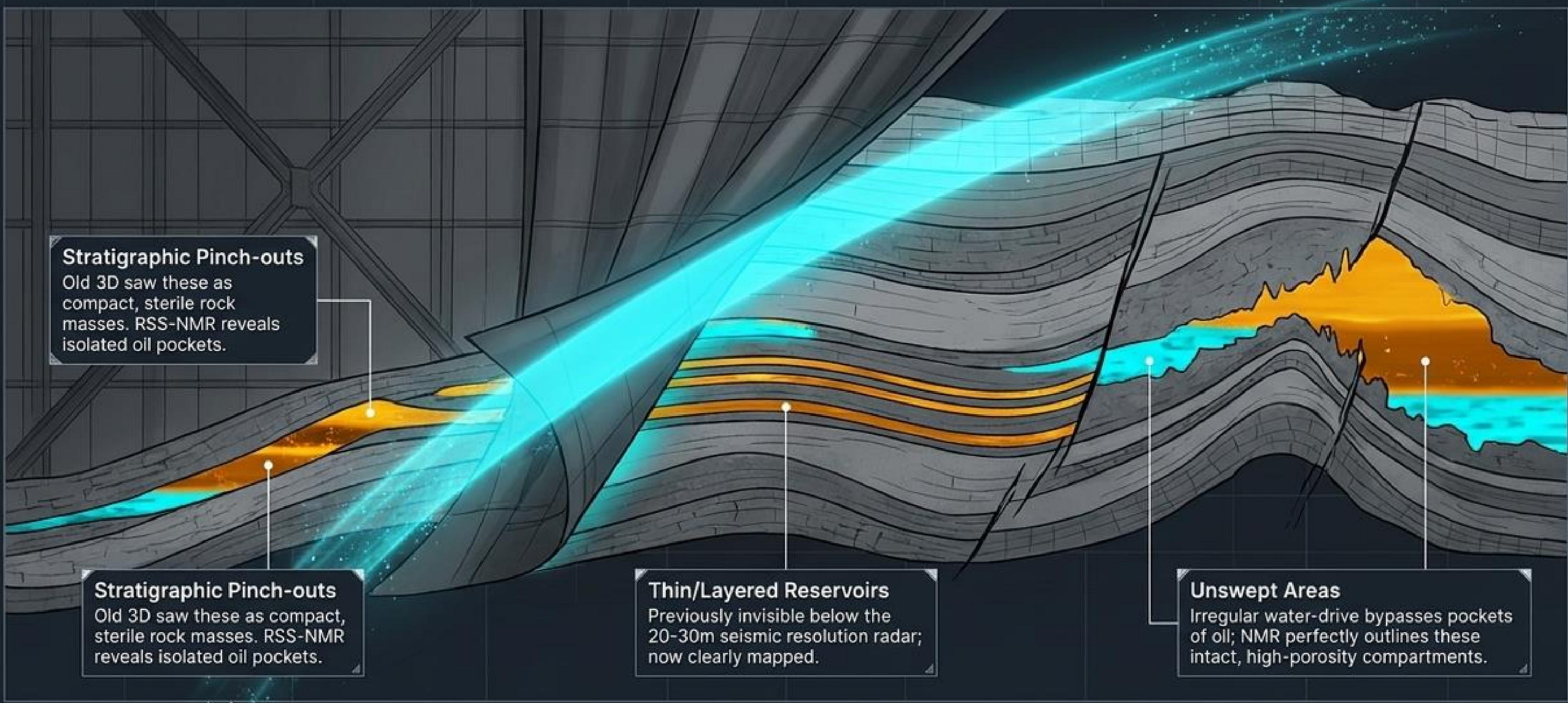


RSS-NMR provides scientific certainty before drilling by directly interrogating the atomic signature of mobile hydrocarbons.

# The Evolution of Subsurface Vision

1960s: 2D Seismic	1980s: 3D Seismic	2020s: RSS-NMR
		
<p><b>Era:</b> The Blind Pioneers</p>	<p><b>Era:</b> The Revolution of Shapes</p>	<p><b>Era:</b> The Absolute Lens</p>
<p><b>Paradigm:</b> Vertical Slices</p>	<p><b>Paradigm:</b> Structural Volumes</p>	<p><b>Paradigm:</b> Direct Atomic Interrogation</p>
<p><b>Reliability:</b> ~20-30% geometric certainty</p>	<p><b>Reliability:</b> ~50-60% structural certainty</p>	<p><b>Reliability:</b> Absolute fluid certainty</p>
<p><b>The Critical Flaw:</b> Massive blind spots; only giant anticline domes visible; subtle traps ignored.</p>	<p><b>The Critical Flaw:</b> Low resolution for thin reservoirs (&lt;20m); inability to distinguish water from oil.</p>	<p><b>The Advantage:</b> Pierces legacy blind spots to reveal exact fluid composition and mobility.</p>

# Illuminating the Historical Blind Spots



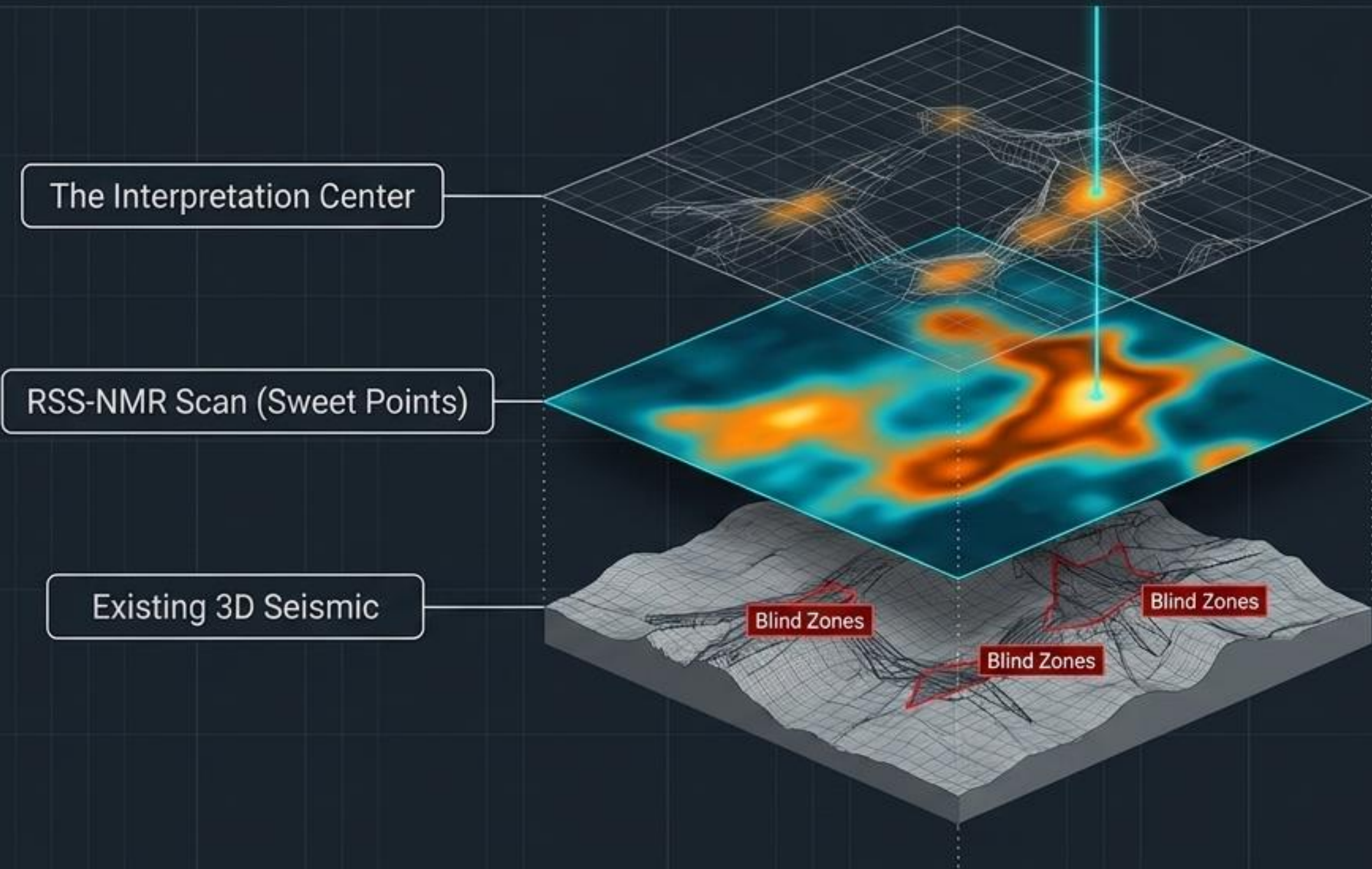
**Stratigraphic Pinch-outs**  
 Old 3D saw these as compact, sterile rock masses. RSS-NMR reveals isolated oil pockets.

**Stratigraphic Pinch-outs**  
 Old 3D saw these as compact, sterile rock masses. RSS-NMR reveals isolated oil pockets.

**Thin/Layered Reservoirs**  
 Previously invisible below the 20-30m seismic resolution radar; now clearly mapped.

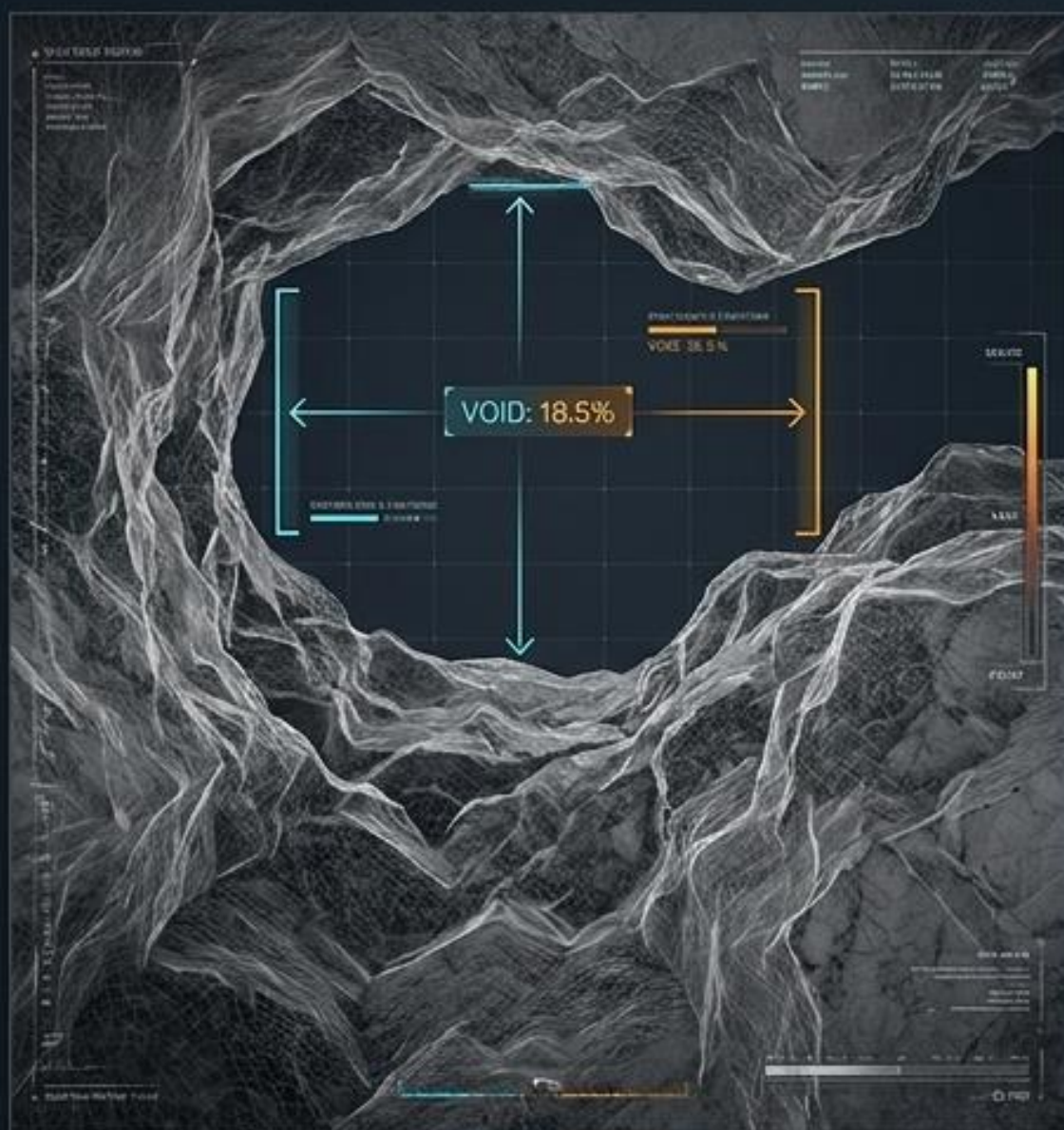
**Unswep Areas**  
 Irregular water-drive bypasses pockets of oil; NMR perfectly outlines these intact, high-porosity compartments.

# The Integration Protocol



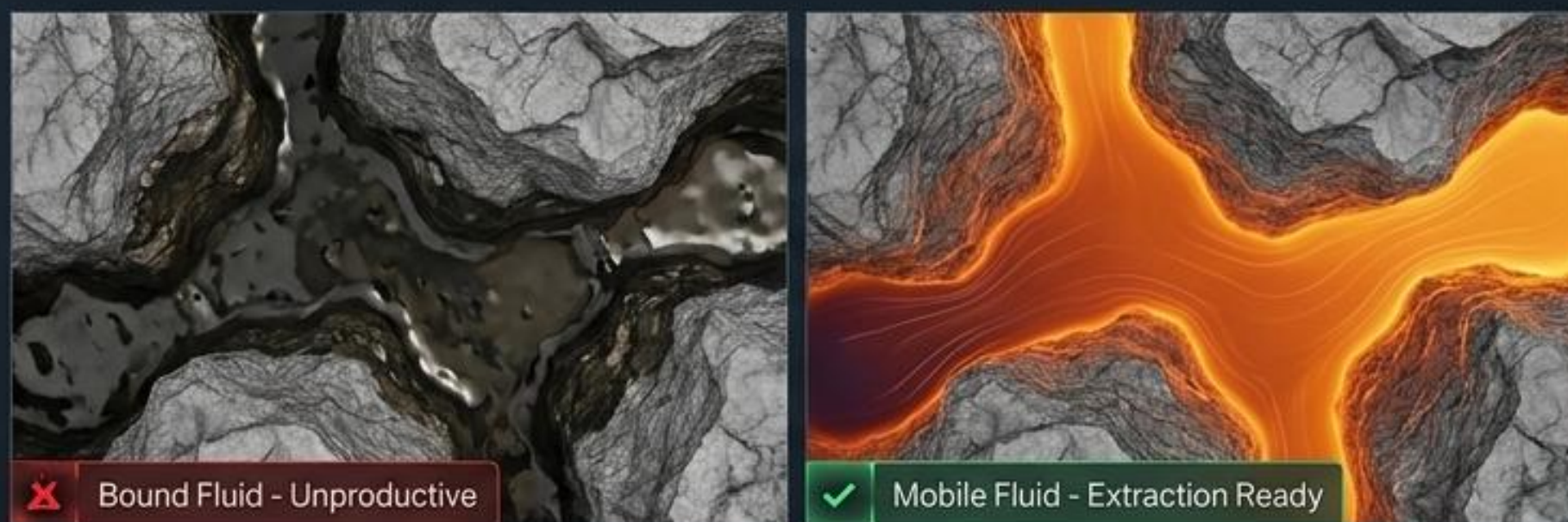
# Defining 'Absolute' Proof at the Pore Level

## Effective Porosity



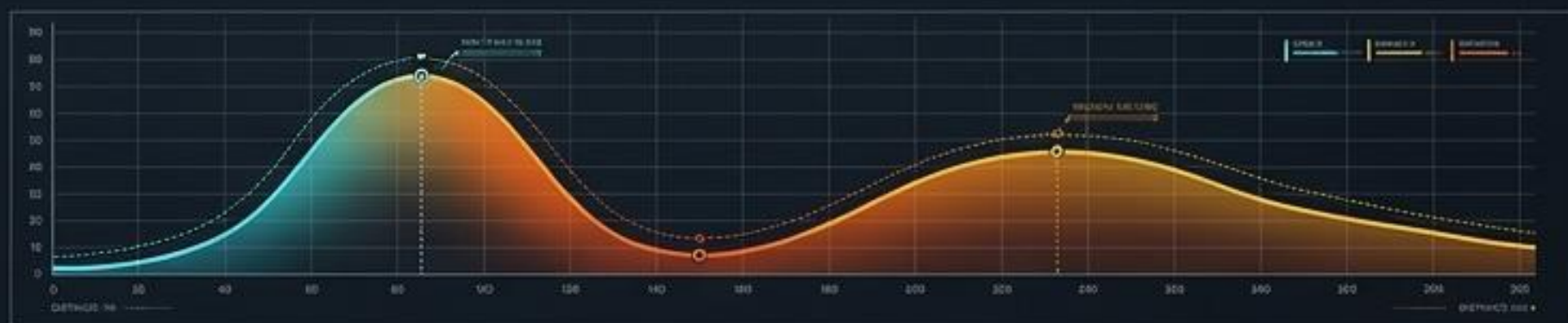
Proving the rock has sufficient void space to store commercial quantities of fluid.

## Saturation & Mobility



Distinguishing extractable oil from dead-end bound fluids.

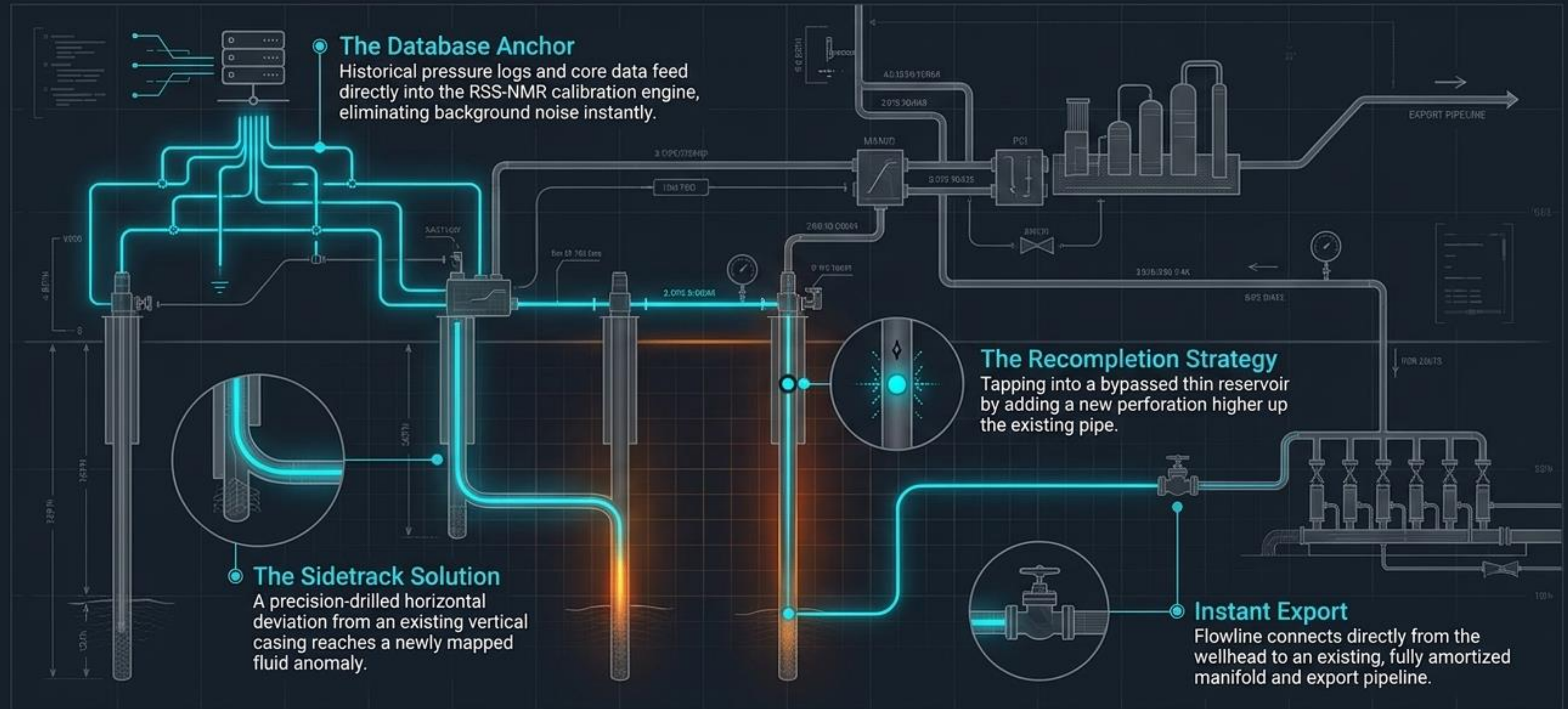
## Reservoir Continuity



Guaranteeing volumetric scale to ensure the target is a continuous field, not an isolated, unprofitable pocket.

# The 'Plug & Play' Brownfield Advantage

Modify the network, don't build a new plant.



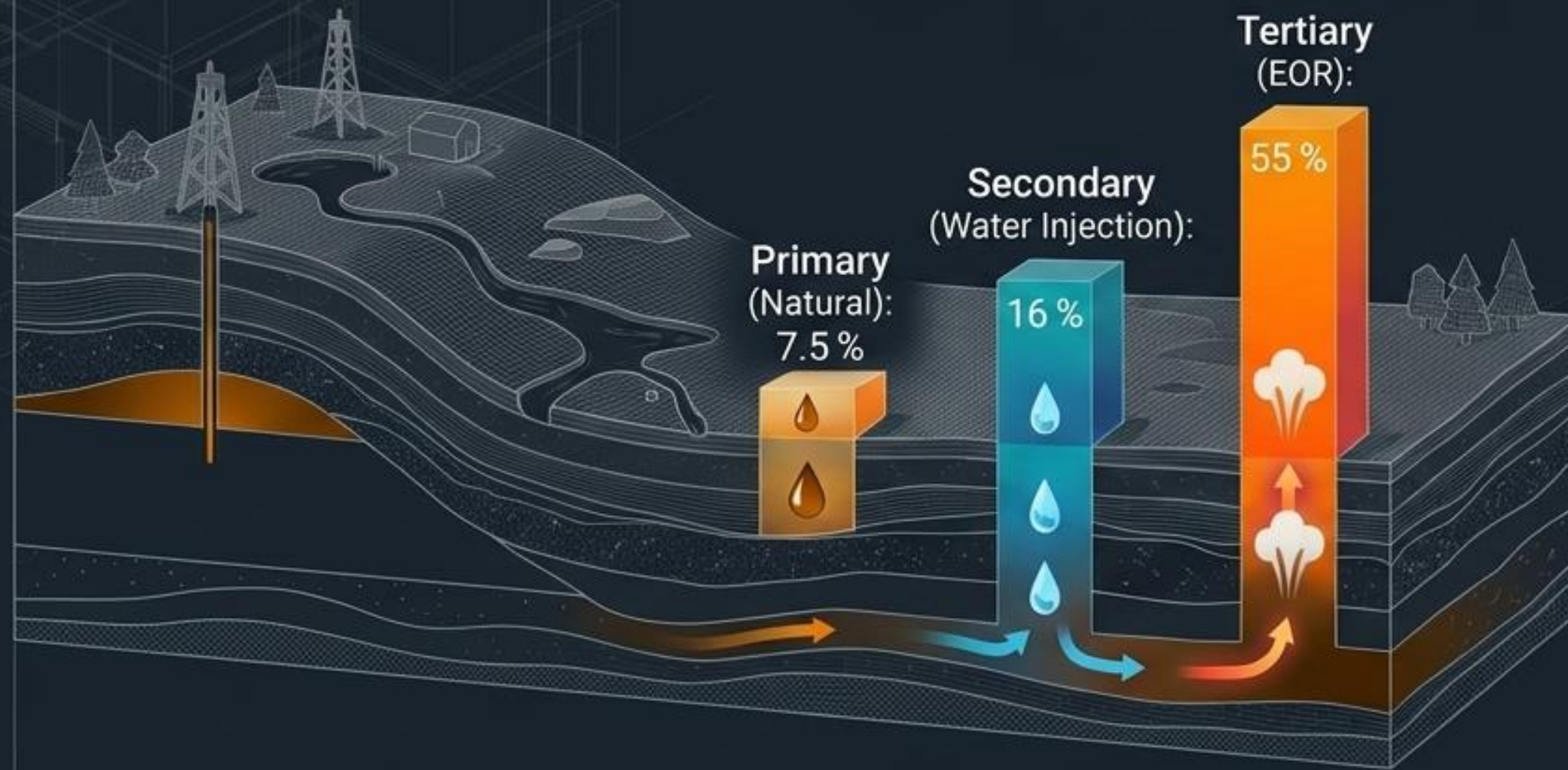
# The Economic Paradigm: Greenfield vs. RSS-NMR Brownfield

	Greenfield	RSS-NMR Brownfield
Permitting & Admin	Extremely High (Years of negotiation, licenses, PSCs)	<b>Zero</b> (Executed within existing operational concessions)
Time-to-First-Barrel	5 to 10 years	<b>Months</b> (The duration of a sidetrack/recompletion)
Infrastructure CAPEX	Colossal (New platforms, roads, pipelines)	<b>Minimal</b> (Utilizes fully amortized existing network)
Geological Certainty	Speculative (Basin-scale systemic risk)	<b>Absolute</b> (Direct fluid verification calibrated to historical field data)

**ROI Profile:** Greenfield = Long-term, high-risk capital lockup. **RSS-NMR** = Ultra-fast, de-risked margin capture.

# Maximizing the Existing: The Recovery Rate Mandate

**+1% Recovery Rate = 2 Years of Global Consumption**



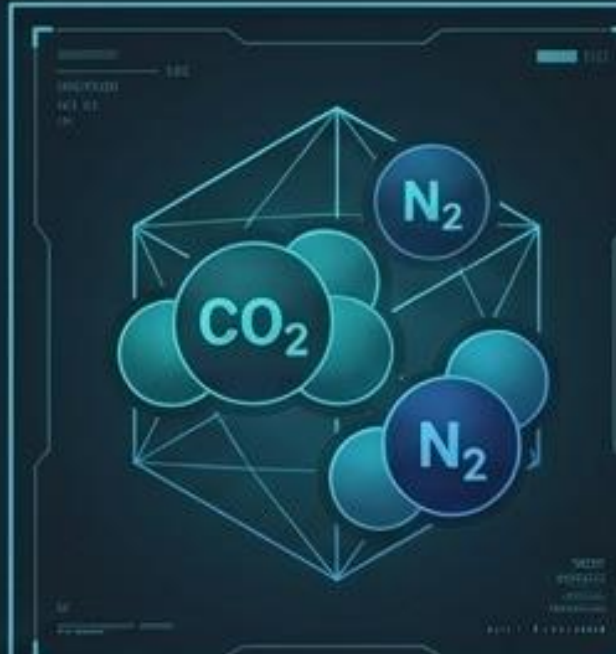
Shifting the global average recovery rate from 35% to 50% constitutes the largest "new" oil discovery on the planet.

# The EOR Arsenal: Tertiary Recovery Mechanisms



## Thermal Methods

**Mechanism:** Reduces heavy oil viscosity via heat and in-situ combustion.



## Gas Injection

**Mechanism:** Swells oil and restores reservoir pressure. CO2-EOR acts as a bridge to industrial Carbon Capture and Storage (CCS).



## Chemical Methods

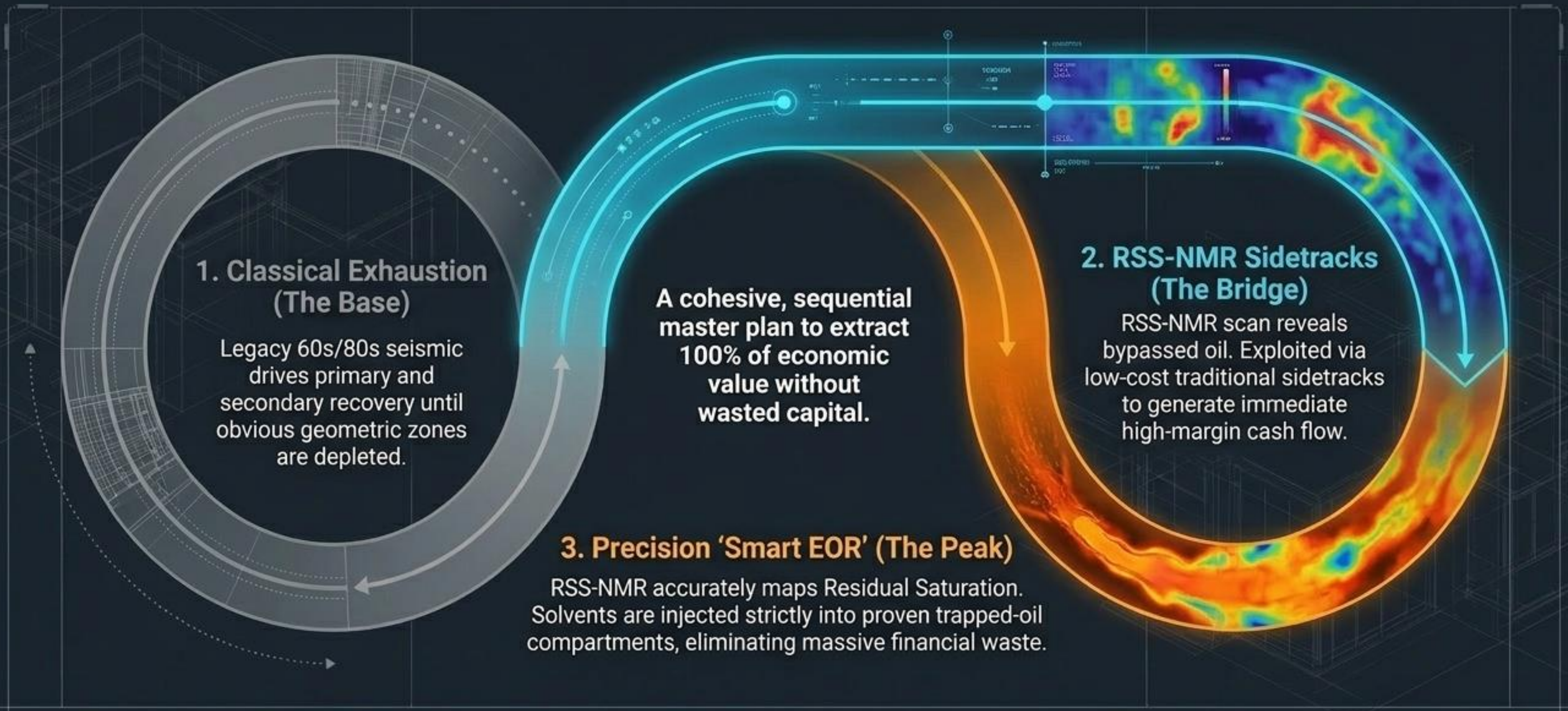
**Mechanism:** Modifies interfacial tension to 'wash' oil from rock pores (Polymers, ASP).



## Microbial (MEOR)

**Mechanism:** Emerging tech utilizing biosurfactant-producing microorganisms to facilitate flow.

# The Synthesis: The Ultimate 3-Step Asset Lifecycle



## 1. Classical Exhaustion (The Base)

Legacy 60s/80s seismic drives primary and secondary recovery until obvious geometric zones are depleted.

A cohesive, sequential master plan to extract 100% of economic value without wasted capital.

## 2. RSS-NMR Sidetracks (The Bridge)

RSS-NMR scan reveals bypassed oil. Exploited via low-cost traditional sidetracks to generate immediate high-margin cash flow.

## 3. Precision 'Smart EOR' (The Peak)

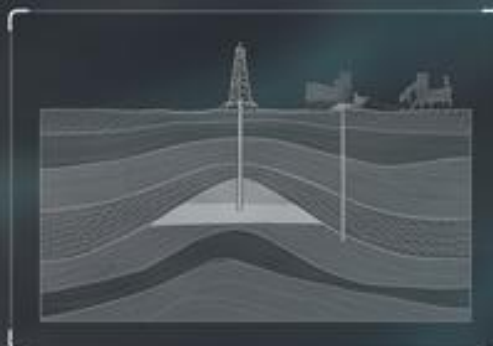
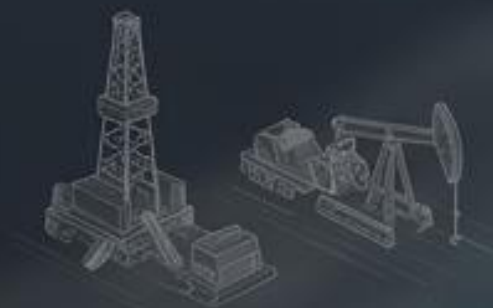
RSS-NMR accurately maps Residual Saturation. Solvents are injected strictly into proven trapped-oil compartments, eliminating massive financial waste.

# The End of the Guesswork Economy

## The Past

### Gambling on Geometry

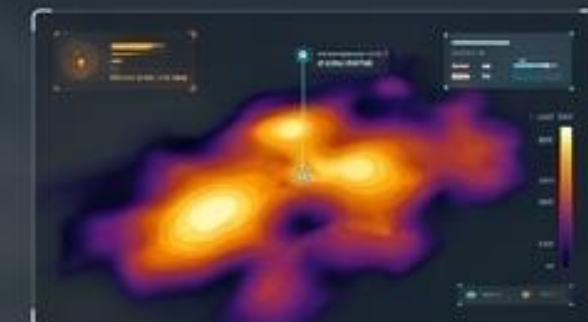
Searching for massive discoveries with speculative capital, blind spots, and decades-long lead times.



## The Future

### Optimizing the Network

Targeting guaranteed fluid accumulations within existing infrastructure for immediate, high-margin financial flow.



Stop guessing. Start optimizing. Transform historical technical data into **absolute lifecycle value**.



## Disclaimer

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-  In Charge: World

# Versatilidad de Aplicación (Multi-Industria)



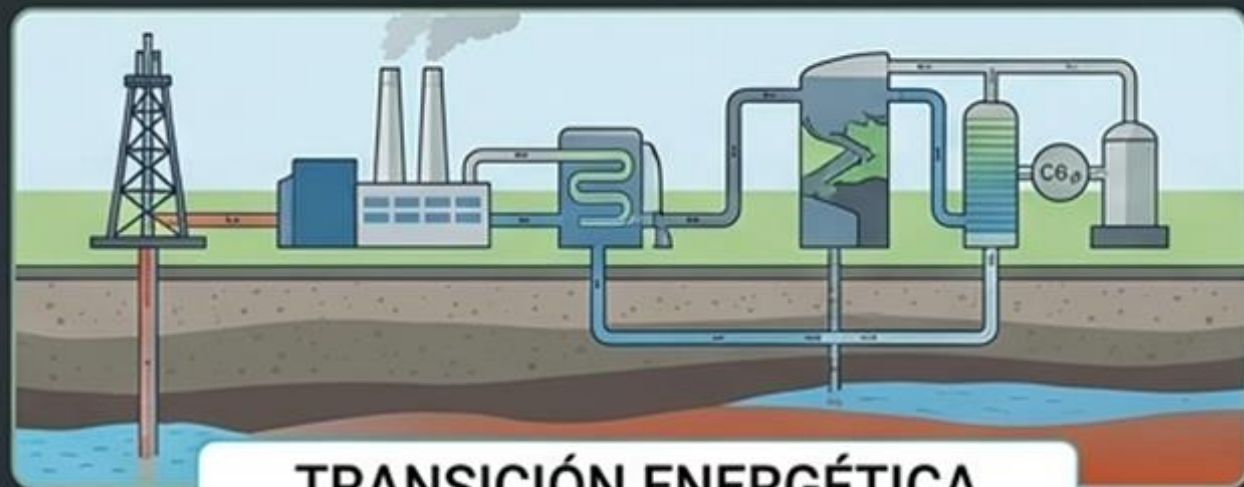
## HIDROCARBUROS

Petróleo, Condensado, Gas



## METALES Y MINERALES CRÍTICOS

Oro, Cobre, Litio



## TRANSICIÓN ENERGÉTICA

Geotermia Profunda, CCUS, Hidrógeno



## RECURSOS HÍDRICOS

Agua Potable Subterránea

La sinergia tecnológica elimina falsos positivos identificando la resonancia molecular exacta del mineral o fluido objetivo.