Nanofluid Industries

Nanoparticles Pioneering the Future of Crude Oil Production

Our game-changing nanofluid technology is setting a new standard for energy-efficient enhanced oil recovery.

EOR
ENHANCED OIL RECOVERY

EOR TECHNOLOGY COMPARISON

Nanofluid
Carbon-neutral oil production

CHEMICAL-BASED EOR

~8 to ~45% INCREMENTAL OIL RECOVERY

toxic and terrible for environment

STEAM-BASED EOR

~ 24 to ~48% INCREMENTAL OIL RECOVERY

Extremely costly, limited to 2,500-ft depth.

NANOFLUID

~90% to ~500% INCREMENTAL OIL RECOVERY

TECHNOLOGY BREAKTHROUGH

Nanofluid
Carbon-neutral oil production

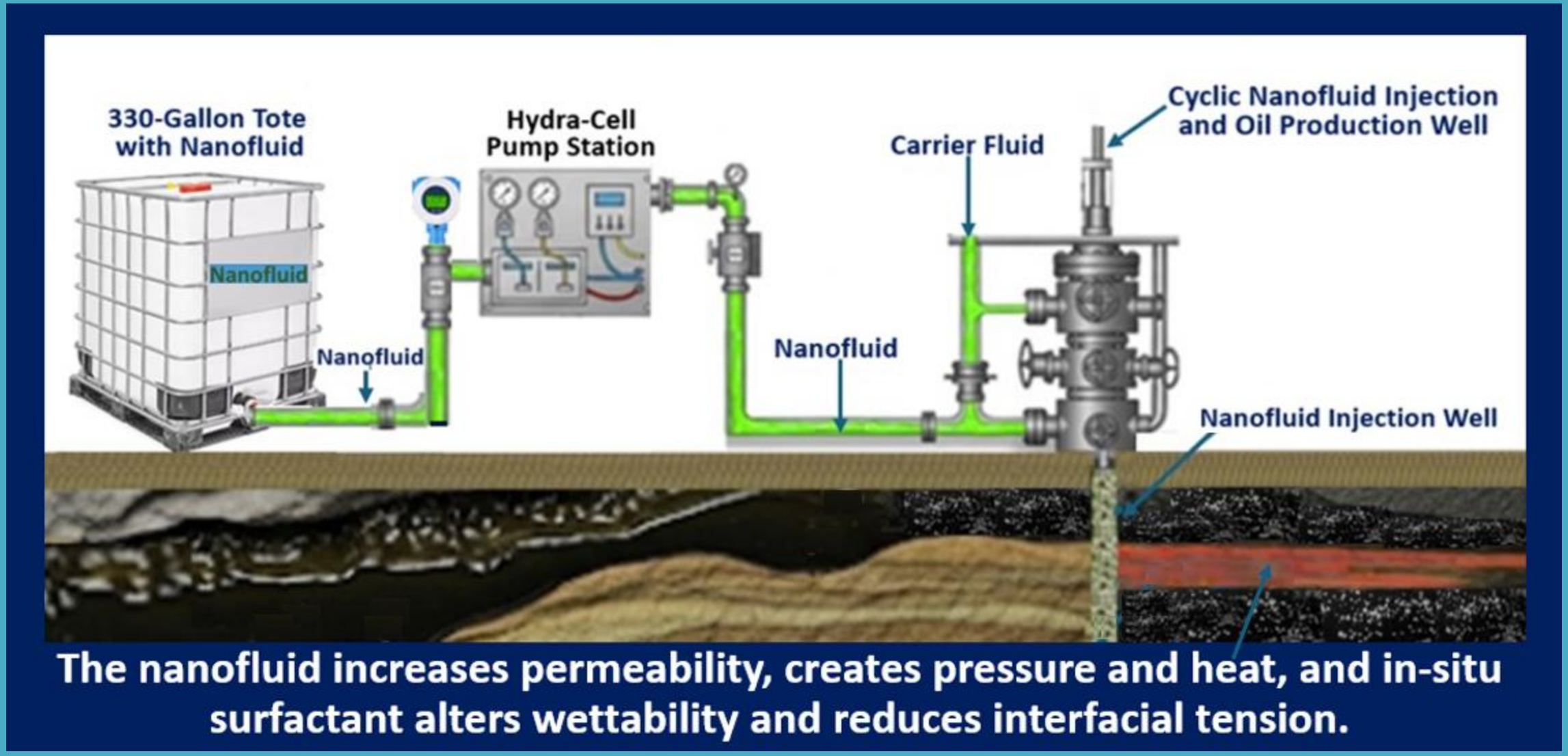
Our transformative, first-of-its-kind nanofluid was designed to significantly enhance heavy and light crude oil production compared to toxic chemical surfactants.

LOWEST	ENVIRONMENTALLY	PERMIT	EXPONENTIAL
Cost	**Friendly**	**Simple**	**Output**
than chemical surfactants	No toxic chemicals or acid	~60 day approval in Texas	Incredible early results

Defining the new standard for innovation in the oil extraction industry. The nanofluid is a game-changing technology for energy-efficient enhanced oil recovery.

PROCESS FLOW DIAGRAM - HOW IT WORKS

Nanofluid
Carbon-neutral oil production



The nanofluid increases permeability, creates pressure and heat, and in-situ surfactant alters wettability and reduces interfacial tension.

TEXAS FIELD PILOT RESULTS

Nanofluid
Carbon-neutral oil production

INITIAL FIELD PILOT
LOCATION: Slocum, TX
INJECTION DATE: April 13, 2025
FIRST DAY RESULTS

Nanofluid for Oil Extraction

April 2025	Pilot Results	Slocum, Texas

FIRST DAY PRODUCTION RESULTS

- Pilot well increased from ½ barrel to 20 barrels
- Reservoir pressure increased from 10 psi to over 300 psi
- 3,890% increase in oil production
- Temperature increased from 70°F to over 500°F
- Upgraded heavy oil from 18 to 26 gravity

Existing Production Daily Barrels	Existing One Day Revenue	Nanofluid 1st Day Barrels	Nanofluid Percentage Increase	Nanofluid 1st Day Revenue
0.5	$ 32.37	20	3890%	$1,294.00

First-Of-Its-Kind

Nanofluid is a game-changing technology for energy-efficient enhanced oil recovery.

EOR
ENHANCED OIL RECOVERY

NANOFLUID BENEFITS

Nanofluid creates significant pressure for improved oil recovery

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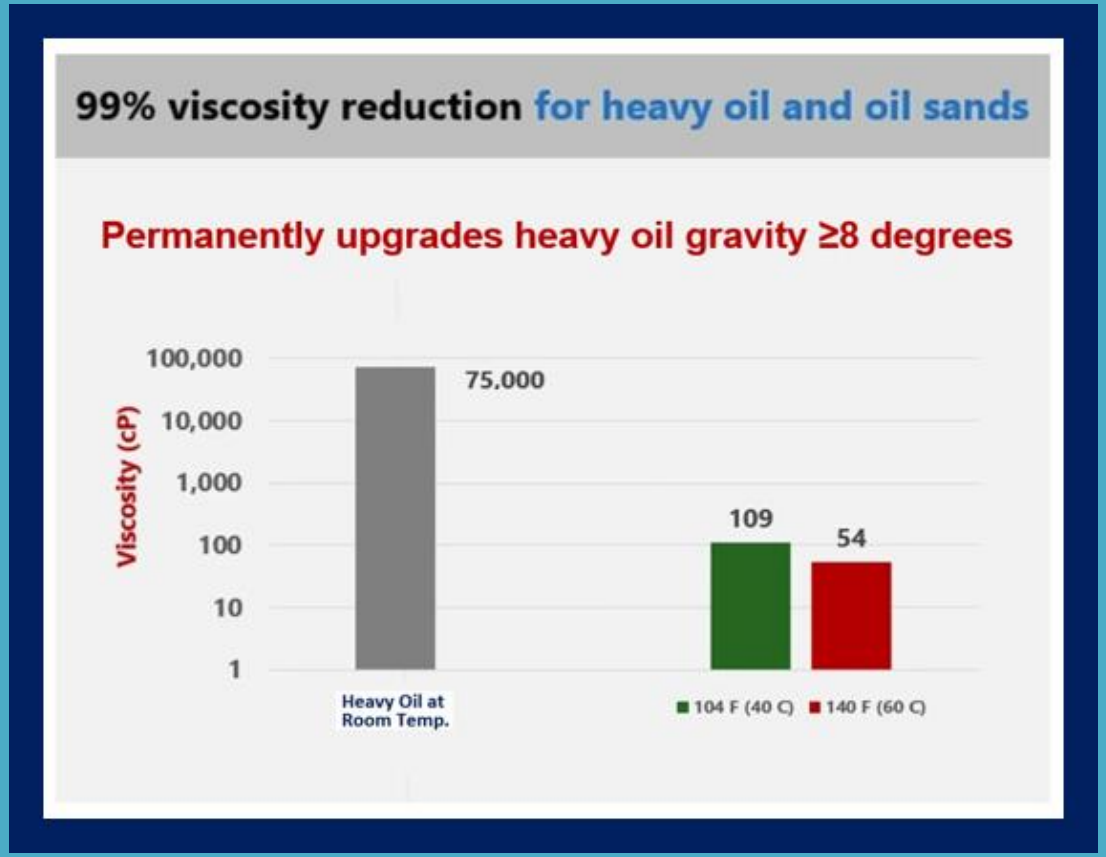
- Payback is <1 month for each injection treatment
- Capex per well is ~$18,000 for tote, HydraCell pump, piping, packer, and gauges
- Non-toxic and biodegradable nanoparticles
- Nanoparticle in-situ reaction generates significant heat and pressure
- Encapsulated nanoparticles delay reaction to penetrate deep in oil reservoirs
- 99% viscosity reduction of heavy oil
- Permanently upgrades heavy oil gravity ≥8 degrees
- Improves flow assurance near wellbore region
- Improves capillary pressure enhancing stripper well production
- Avoid plugging uneconomic stripper wells
- Nanoparticles penetrate shale oil fractures enhancing production
- Nanofluid is injected at ambient temperature
- Zero CO2 or NOx emissions
- In-situ surfactant alters rock wettability
- In-situ surfactant reduces interfacial tension
- Alters reservoir rheology enhancing oil recovery
- Optimizes oil displacement
- Improves mobility ratio for better sweep efficiency
- Permeability is significantly increased
- High-temp heat reduces viscosity enhancing heavy oil production
- Acts as a catalyst to break down asphaltenes and resins
- Paraffin or asphaltene precipitation is reduced or prevented
- ~42% sulfur reduction of heavy oil
- Nanofluid is not limited by depth or oil viscosity



VALUE PROPOSITION

- Payback is 1 to 2 months
- Capex per well is ~$18,000
- Low operational costs
- Avoid the cost of new wells
- Profitable in a low oil price market
- Non-toxic and 100% biodegradable nanoparticles
- Nanoparticles improve sweep efficiency
- Reduces interfacial tension and alters rock wettability
- Zero CO2 or NOx emissions

Nanofluid
Carbon-neutral oil production

More Oil Production + Lower Costs = Higher Profit Margins

- One-of-a-kind nanofluid oil extraction technology for lowest cost per barrel compared to chemical surfactants.
- Mission Statement: Provide a cost-effective, value-added nanofluid solution for energy-efficient enhanced oil recovery.
- Company's Motto: Deliver a game-changing nanofluid to oil companies to economically produce oil in a low-price market.

ONE-OF-A-KIND NANOFLUID

Nanofluid is a game-changing nanotechnology for energy-efficient enhanced oil recovery.

- **Targeted Delivery:** The nanoparticles target bypassed oil zones unmatched by bulk toxic chemical surfactant injection.
- **Unparalleled Nanoscale Interaction:** The nanoparticles are at a scale (~150 nm) that allows them to interact with reservoir rock to improve the oil's mobility which is difficult for large chemicals to achieve effectively.
- **Enhanced Fluid Properties:** The nanoparticles achieve improved reservoir rheology (oil flow characteristic) outperforming conventional toxic chemical surfactant fluids.
- **Reduced Environmental Footprint:** The nanofluid offers a more environmentally benign solution compared to conventional toxic chemical surfactants.

- The company provides a game-changing nanofluid compared to toxic chemical surfactants used for over 60 years.
- The nanofluid is delivered to the oilfield in 5,500-gallon ISO tanks or 330-gallon totes as shown below:

CUSTOMER TRACTION

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NANOFLUID TECHNOLOGY TIMELINE →

2021 — Lab Tests Begin
- Lab Tests with the University's Post-Doc Researchers in Dept. of Petroleum Geophysics

2025 — Initial Field Pilot
- Slocum, TX
- Completed APR '25

2026 — Commercial Launch
- Bakersfield, CA
- Texas
- Oklahoma
- Argentina

2026 — Commercial Launch
- Kuwait
- Oman
- Colombia

CONTACT INFORMATION

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