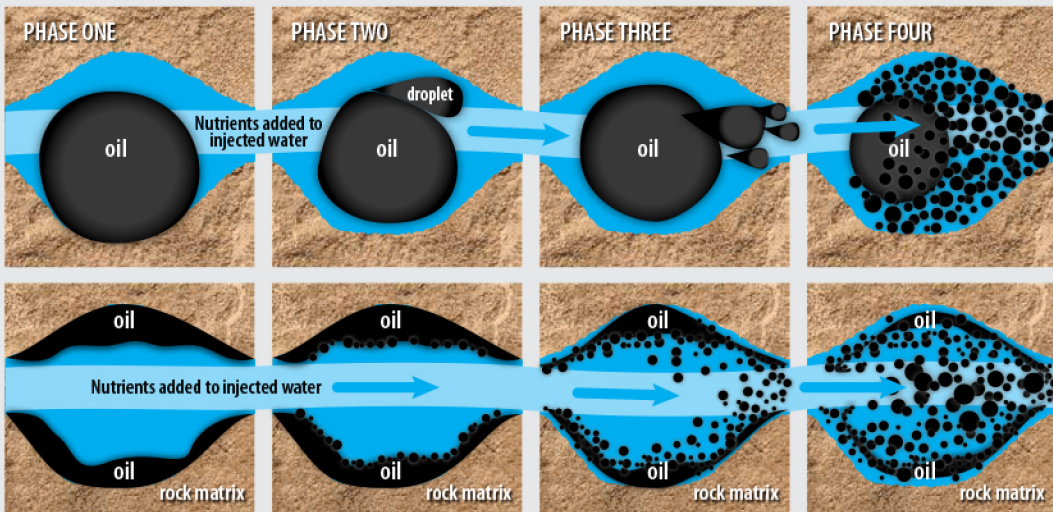




Technology Breakthrough: 61 Oil Fields, 300+ Well Applications, 94% Success Rate

The creation of micro-oil droplets is designed to recover trapped and immobile oil. This technology is an entirely new direction in the field of microbial enhanced oil recovery (MEOR).

Micro-oil droplets created by Titan's Organic Oil Recovery[®] Technology are the answer to releasing trapped oil from the rock pores. The breakthrough is using microbial energy within the pore spaces.



- Injection of nutrients
- Targeted microbes respond
- Microbes move away from water and rock surfaces
- Microbes surround, attach to and dislodge oil
- Trapped oil becomes micro-oil droplets
- Oil now flows more easily through rock pores

The Concept: Micro-Oil Droplets

- A new approach with microbes for enhanced oil recovery
- Resident microbes are the closest source of energy to oil droplets trapped in pore spaces
- Allow the microbes to create micro-droplets of oil that can flow more easily through the reservoir pore matrix
- Production increases usually within 2-12 weeks
- 100% environmentally friendly—no microbes or harmful chemicals are injected—biodegradable
- Decreases lifting costs
- Life of field is extended for many years
- Costly oil field shutdown expenses postponed
- Best applied to waterfloods
- True Enhanced Recovery, not accelerated
- Declines altered
- Water cut decreases

The Benefits

- Multi-year increases in daily oil production from mature fields
- Low cost to implement / low risk
- No capital outlay required

Proven Science — Reliable Technology





Customers acknowledge 200% average production increase from 25 wells from Texas, Canada and California



- **Improved Oil Recovery Symposium 2021, European Association of Geoscientists (EAGE) CNOOC:** Organic Oil Recovery; 50% Production Increase Pilot, Scott field, North Sea
- **SPE 207486 -MS ADIPEC Conference November 2021:** Organic Oil Recovery Success in Southern Oman, Petrogas; rescheduled
- **SPE 204 884 -MS MEOS Conference November 2021:** Organic Oil Recovery Production Pilot in Bahrain, Tatweer; rescheduled.
- **SPE 124319 MEOR Success in Southern Saskatchewan:** Husky Energy: Documents oil production increases of: 225%, 450%, 100% and 533% on various test wells.
- **SPE 129742 MEOR Success in Southern California:** Venoco Inc.: Documents oil production increases of: 300%, 15%, 27%, and 752% on various well tests in Southern California
- **SPE 145054 What Has Been Learned From 100 MEOR Applications:** Husky, Venoco, Titan Oil Recovery: 100 Applications documenting an average oil production increase of 127% from pre-treatment rates to post-treatment maximum rates.
- **SPE 154216 A Texas MEOR Application Shows Outstanding Production Improvement:** Atinum E&P, Inc. Documents oil production increases ranging from 25–90% with a dramatic reduction of water cut.

The North American Papers were selected for presentation and officially approved for publication by: The Program Committee for the 2009 SPE Annual Technical Conference in New Orleans, Louisiana 4–7 October 2009; The Program Committee for the 2010 SPE Improved Oil Recovery Symposium in Tulsa, Oklahoma 24–28 April 2010; The SPE Kuala Lumpur, Malaysia Enhanced Oil Recovery Conference July 2011; The SPE Tulsa Improved Oil Recovery Symposium April 2012.

Global Results: Treatment Summary

Type	Number of Treatments	Number of Wells	Number of Increases	Success Rate	Oil Increase
In-Situ Producer Test	49	47	36	73%	140%
Producers	19	18	17	89%	133%
Injectors	238	81	234	98%	54%
Total	306	146	287	94%	92%

IMPORTANT NOTE: Production increases have lasted between 30 days and 3 years from a single application.

Organic Oil Recovery: Low Cost and Effective Enhanced Oil Recovery

- Increases Oil Production
- Releases Trapped and Immobile Oil
- Improves Declines
- Increases Reserves
- Field Proven
- Low Cost
- Biodegradable
- Requires No Capital Expense, No Drilling, No “Fracking”
- Easily Applied to Single Producers and Water floods
- 98% Success Rate on Injector Wells

Comparison to Other Enhanced Oil Recovery Methods

Other EOR methods

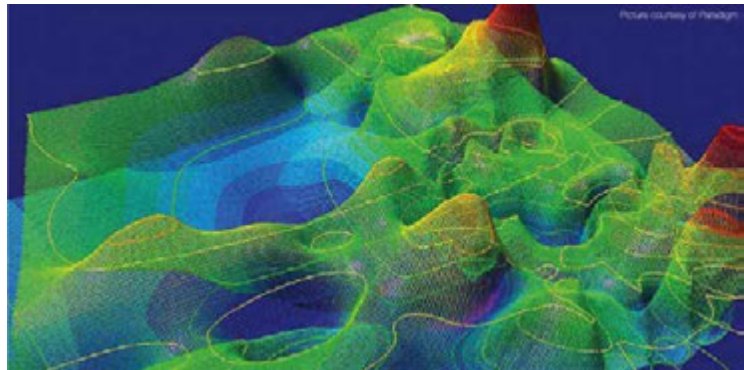
- Large capital expenses
- Often 2-3 year implementation
- Offshore limited platform space
- Large volume of product
- Well bore plugging issues
- Topsides modifications necessary
- Disposal and aquatic issues

Organic Oil Recovery

- No capital expenses and low cost
- Less than 6 months to implement pilot
- Only pressure pump required
- Low volume of product
- Well bore cleaning effect
- Possible up to 105°C (221°F) in some waterfloods
- No disposal or aquatic issues
- Environmentally friendly, biodegradable

Ideal Reservoir Parameters

- API Gravity: 12-40
- Temperature: Below 88°C (190°F)
- Water PH between 6-8
- Permeability: Greater than 1mD (the higher the better)
- Salinity: Below 215,000 ppm TDS
- Porosity: Normal range
- Rock type: Sandstone or carbonates
- Active waterflood ideal
- Offshore and onshore



The Titan 5-Step Process



Hunting Energy Services— Our Partner in 29 Countries



HUNTING

Hunting is the world's oldest oil service company, established over 120 years ago. The company provides products and services to the upstream oil and gas industry. Sales and service operations are located in the major oil centres of the world, comprising over eighty company owned facilities and a network of more than sixty licensed partners.

From this global footprint, the company's sales, service, and manufacturing can meet virtually any customer requirement with a full range of applications above and below the wellhead.

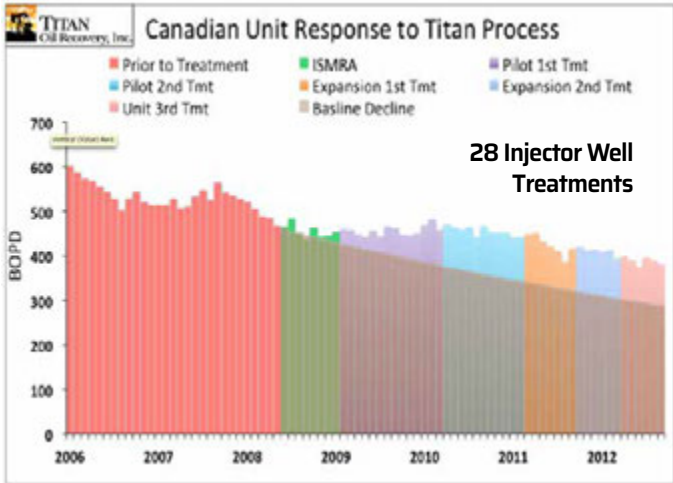
Regarding Organic Oil Recovery, Hunting states:

“Combining petroleum engineering and breakthrough biotechnology, the process produces more oil, lowers lifting costs and allows the optimization of a field's potential.

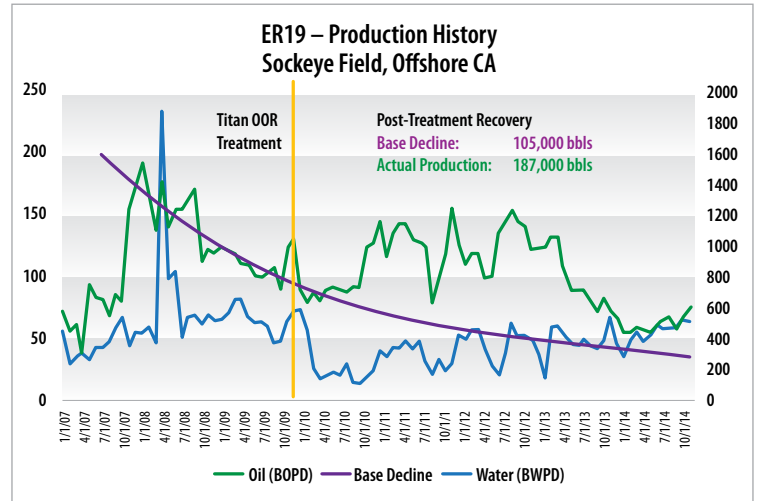
“The technology is a breakthrough in low cost, no capital required oil recovery offering oil operators an advanced, state-of-the-art secondary and tertiary oil recovery technology.”

Field Successes

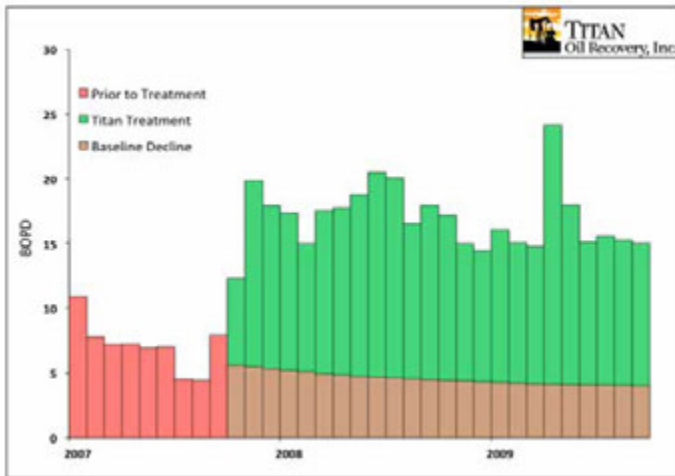
Approximately \$11 million of oil revenue to the operator from \$3.5 million Titan cost



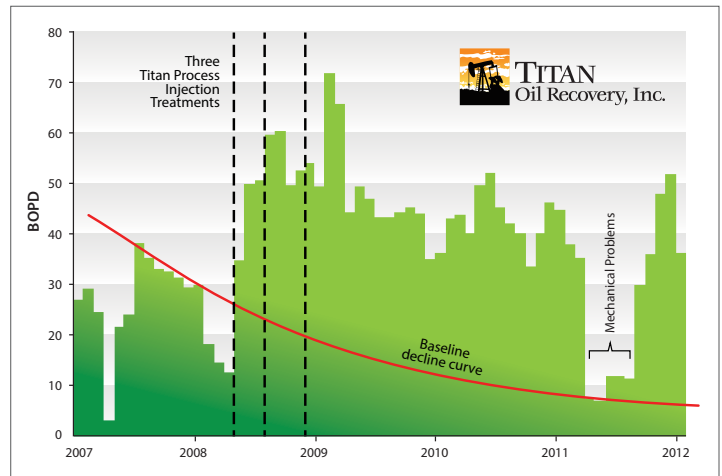
Offshore California — Up 50% for 3 Years After last Treatment



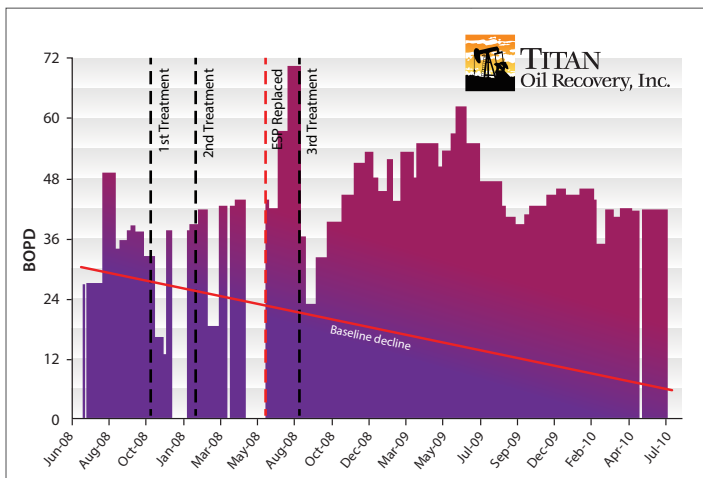
Saskatchewan Well Response to Titan Process
 200% production increase lasting 2 yrs. from 1 treatment



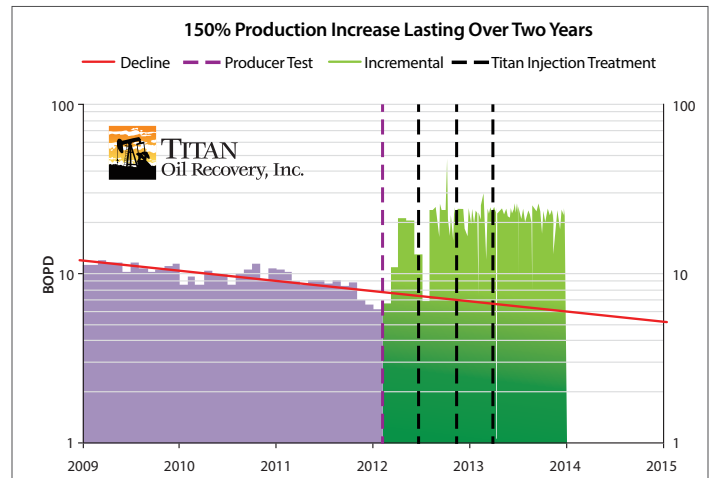
Canadian Water Injector Treatment Impacts Offset Producer
 Production up 300% 3 yrs. after last treatment



Field 8 Producer - Alberta Canada

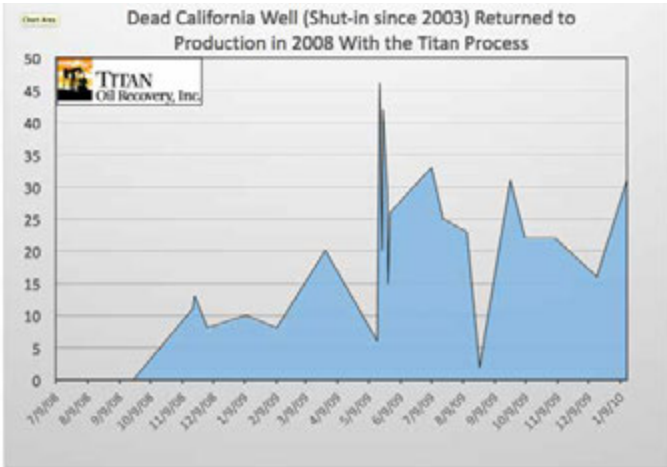


Multiple Treatment Pilot

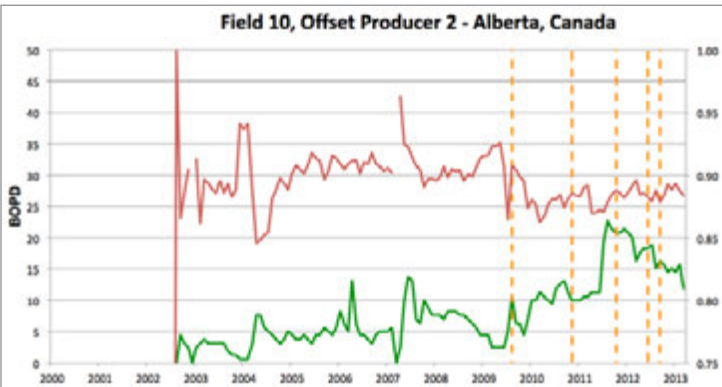


Dead Well Revived

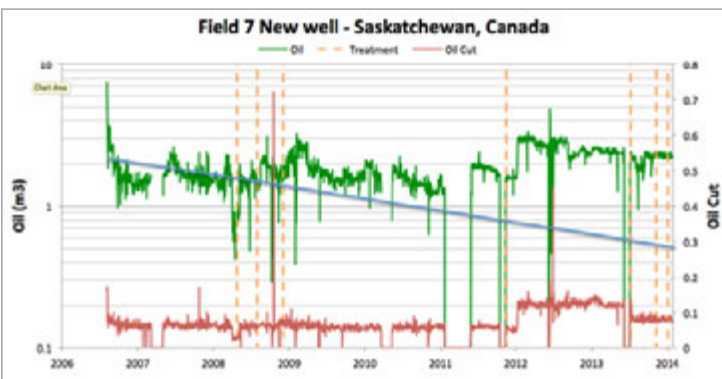
Graph shows Table presented in SPE Paper 129742



This producer increased 700% in 2 yrs from 2 applications. Water declined during this time.

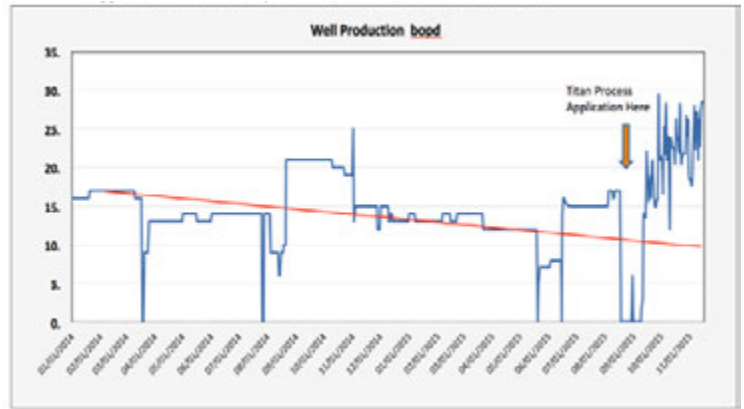


Five Years Above Baseline with only 7 applications



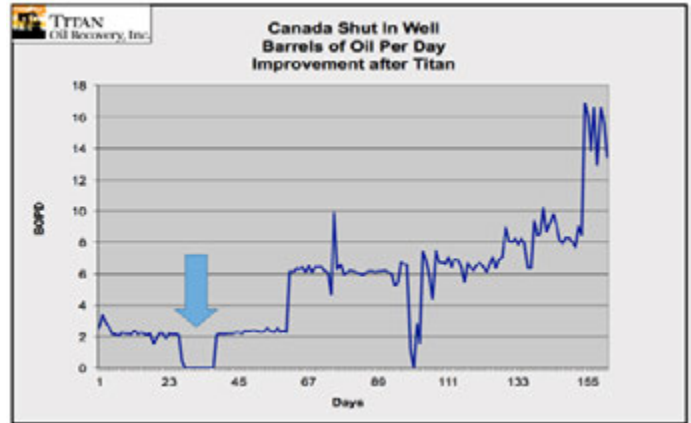
Continued Success in Indonesia

Production well now producing 140% above baseline 4 months after Titan Process application. Blue line is oil production, Red line is 18 month decline curve.

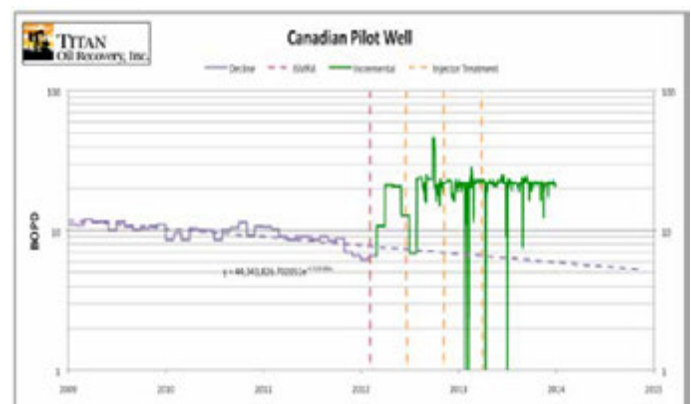


Extraordinary Response from Shut in Well

See SPE Paper 124319 Husky Energy



150% Production Increase Lasting Over 2 Years



For Service in Europe, Middle East, Australia and Asia:
 Phone: +44 (0)1224 787000 Fax: +44 (0)1224 787100
 Email: Roger.Findlay@Hunting-intl.com
 www.OrganicOilRecovery.com



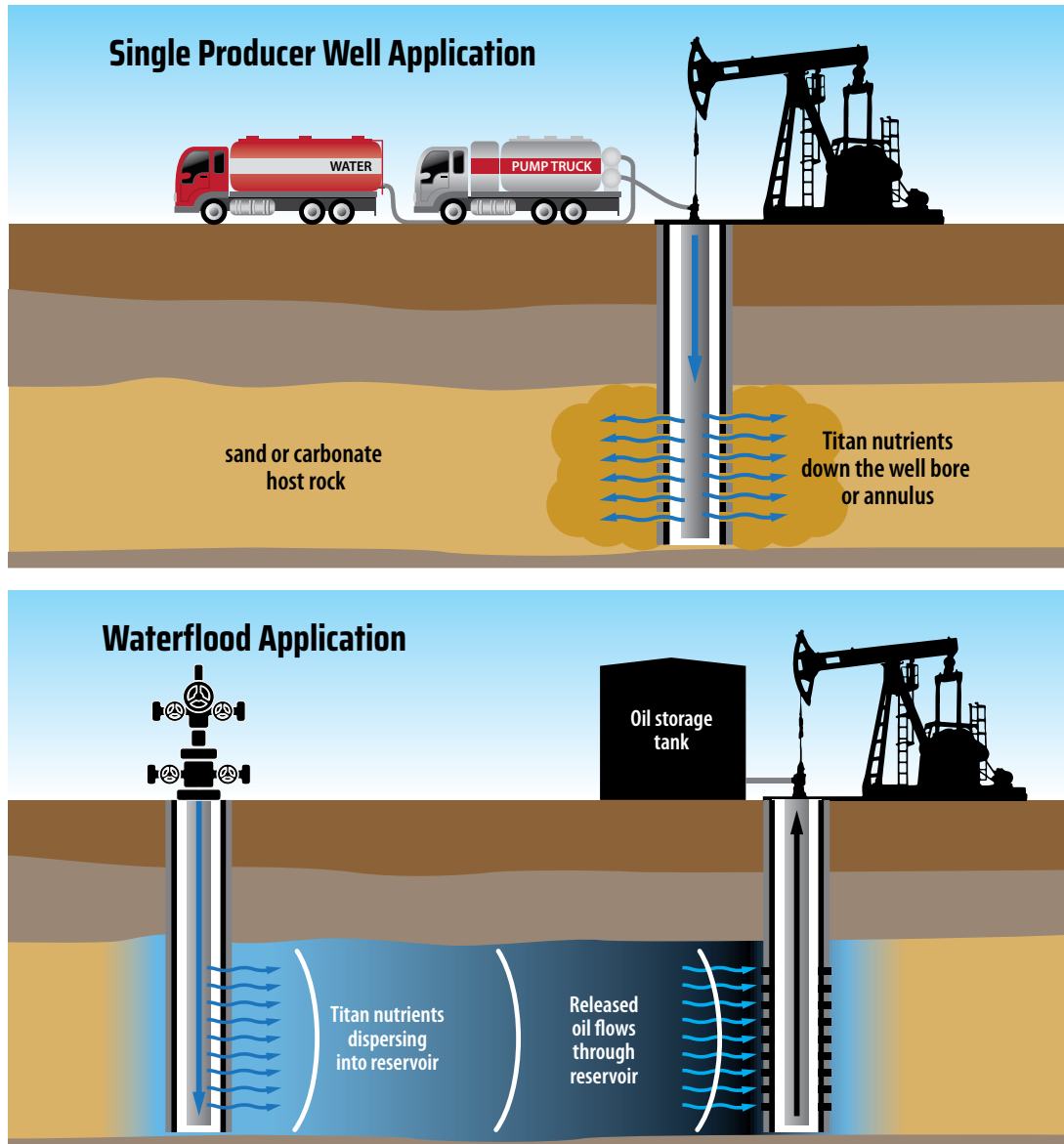
TITAN
 Oil Recovery, Inc.

For Service in North & South America:
 USA: (310) 281-0015 International: 001-310-281-0015
 Email: KGerbino@TitanOilRecovery.com
 www.TitanOilRecovery.com

An Overview of Titan's Organic Oil Recovery Process

MICRO-OIL DROPLETS

Specialized nutrients feed only certain existing microbes in the reservoir which multiply by millions of times after consuming the nutrients. These nutrients cause the microbes to seek out and attach themselves to trapped oil globules, distorting them as well as dislodging them from the rock matrix.



AFTER PRIMARY PRODUCTION

Approximately 50% or more of global oil fields go to waterflooding as a secondary production method. Titan's Organic Oil Recovery process works best with waterflooded fields.

After successful pilot tests on individual production wells the next step is to apply the Titan nutrients into injection wells and a much larger area of the reservoir, saturating hundreds of times more of the rock matrix where trapped oil and microbes are located.

Injection well applications should only take one to two days and then be repeated three times within a year. As success is seen here then an entire field implementation is planned and executed.

In certain cases, some of the oil, water and microbes can form a mild viscous emulsion when traveling through the high permeability thief zones. This mild emulsion also helps to block off some of the thief zones that are causing high water production. Some injection water is then diverted to travel through other untapped areas of the reservoir, thereby increasing more oil production. The primary oil production increases are coming from the micro-oil-droplet effect. Water cut decreases are commonly observed.