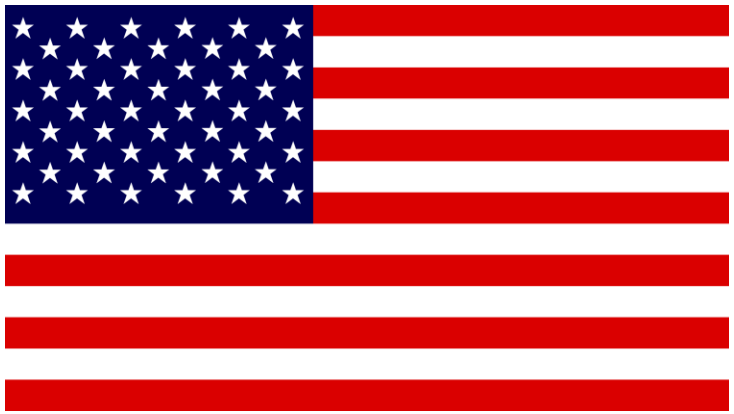
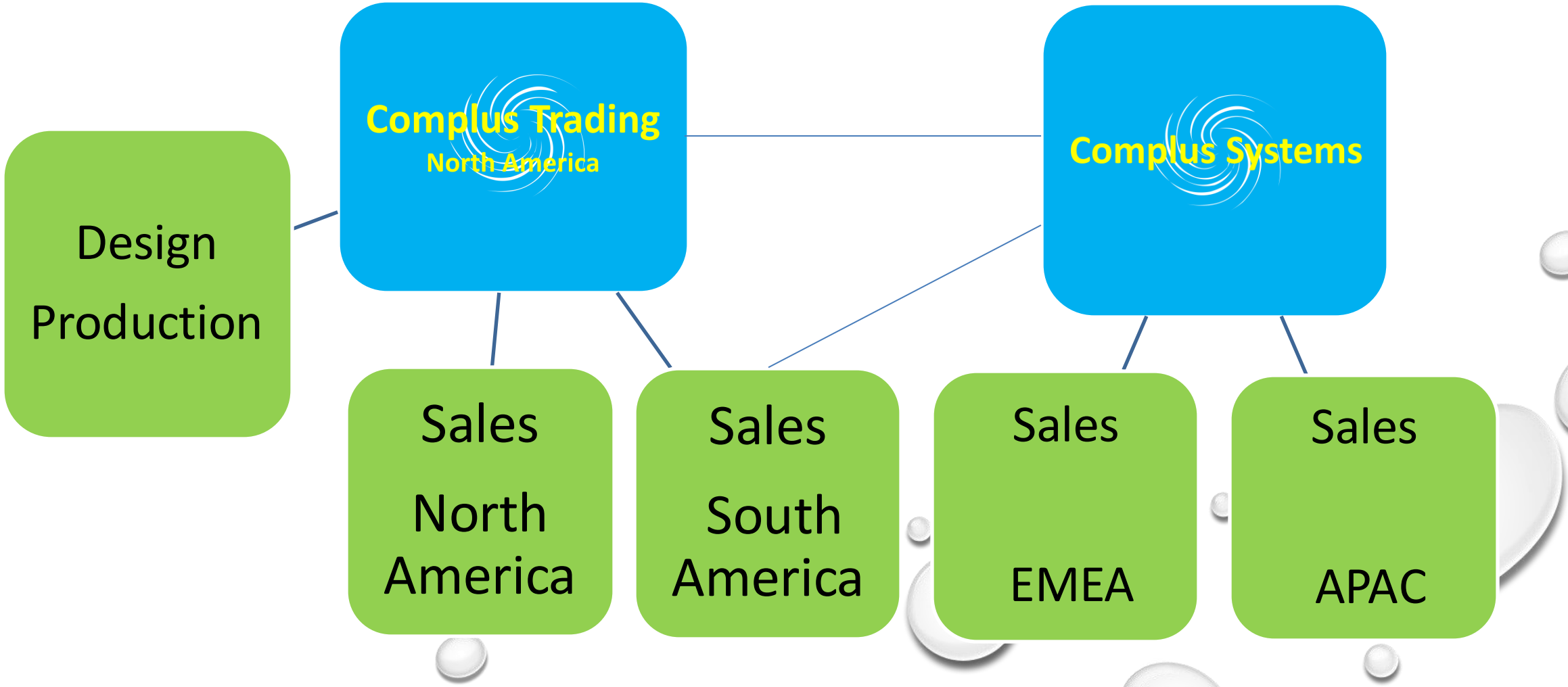
Recover More with AlphaZyme ® EOR Products

Complus Trading
North America



June 2026

COMPLUS GROUP ORGANIZATION



What we do:

- **COMPLUS GROUP produces green EOR Products**

- **Enhanced oil recovery** products for oil well production increase and optimization

- **Foaming products**, soap sticks and liquid foamer for gas wells production increase and optimization

- **Pipeline cleaning products,** using enzymes and advanced active nanotechnology

- **Bioremediation solution of** soil and water contaminated with hydrocarbons

- **Water treatment** through **i**ndustrial equipment that leverages **cavitation technology**

Who is Complus Trading North America?

- Innovative organization (Part of Complus Systems Group) who has created a family of **EOR Alpha products** manufactured in U.S. & used worldwide
- They successfully ↑ oil mobility & recovery in both primary & secondary production phases as well as waterfloods
- They utilize a unique nanotechnology including a true oil-releasing catalyst, non-living enzyme
- Newly developed methodologies have enhanced applicability of these products ➔
  - In upstream oil-recovery segments
  - New markets such as midstream separation, remediation & storage cleaning

Technology Background

What is AlphaZyme® ?

- AlphaZyme® is an innovative microbe technology to enhance oil recovery
- A natural biological catalyst designed to ↑ oil mobility & improve relative-permeability, helping to recover more OOIP
- A 100% biodegradable solution that is more powerful & longer lasting in the reservoir due to its catalytic functionality

Alpha products can handle adverse well conditions such as alterations in:

- Temperature
- pH
- Salinity
- Radioactive Isotopes
- NORM
- Sulfur
- Hydrogen Sulfide content
- Paraffin
- Polymers blockage caused by old EOR products

Value of AlphaZyme® in Oil Recovery

Risk

- **No harm to people or environment**
- **No damage to equipment or systems**
- **No negative impacts to reservoir**
- **No impact to the hydrocarbon product**

Return on Investment

Incremental oil typically pays for treatment in 30-90 day

- Water injection communication time to producers must be considered – including accurate measurements

Anticipated ROI ≥ 2-3x investment

- Ability to have established historical data production & accurate measurements are key

Benefit of environmentally friendly solution

- Better for assets & reservoirs
- Improvement to crude quality / value - pure separation, no chemical bi-products

Value of AlphaZyme® in Oil Recovery

Benefits

Sustainable increases in oil production utilizing AlphaZyme® technology

Recover More OOIP
- Help to release trapped oil & enhance oil's mobility to produce

Production Improvement
- Reach unrecoverable oil through tight rock with time, water +AZ
- Aid oil mobility through formation w/o impact to crude, no added emulsions, effective for both heavy and light oil

Flow Assurance
- Alleviate blockages; mobilizes paraffin to production, not solving it (not inhibitor)

Life of Well Improvement
- Oil's improved mobility sustains profitability & delay P&A costs

Execution

Complus Trading Solutions works with clients to plan & execute field-specific projects

Near Wellbore Treatments
- Advantageous for selected wells for huff-n-puff stimulation or similar operation

Existing Injectors (with known channels of communication)
- Distributes product through the field, improving sweep efficiency and aiding oil's mobility

Reclaimed AlphaZyme®-Water
- Recovered post treatment, if feasible, utilized for additional stimulation operations in the field, helping secure economic success at a low cost

Solution Comparison

AlphaZyme® surpasses traditional recovery solutions in nearly every feature

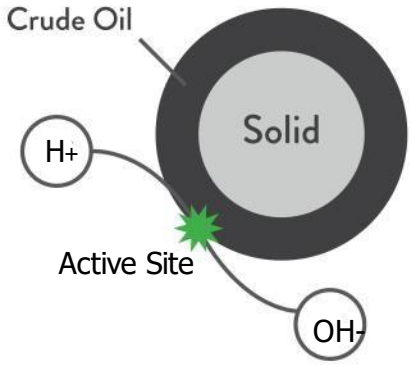
Feature	Microbes	Surfactant	Polymer	Thermal	AlphaZyme®
Category	Biology	Chemistry	Chemistry	Physics	Biology
Description	Living bacteria to break up the oil	Reduces IFT	Large sized molecules to push oil	Increases mobility through heat	Millions of interactions per seconds to free oil
Market acceptance	🟡	🟢	🟢	🟢	🟡
Applied as Conventional EOR Solution	🟢	🟢	🟢	🟢	🟢
Applied as an Unconventional EOR Solution	🔴	🟢	🔴	🔴	🟢
Provides effective physical mobilization of oil	🟡	🔴	🟢	🟢	🟢
Positive impact to IFT, Contact Angle, Capillary	🔴	🟢	🟡	🔴	🟢
Retains Efficacy over long distances	🔴	🟡	🟡	🔴	🟢
Minimal treatments required for efficacy	🟡	🟡	🔴	🔴	🟢
Non-consumable and Reusable solution	🔴	🔴	🔴	🔴	🟢
Ease of use, no special equipment required	🔴	🟢	🟡	🔴	🟢
No risk to equipment or reservoir	🔴	🟡	🟡	🟢	🟢
Environmentally friendly and non-harmful	🟢	🔴	🔴	🟢	🟢

These features directly affect capex and opex

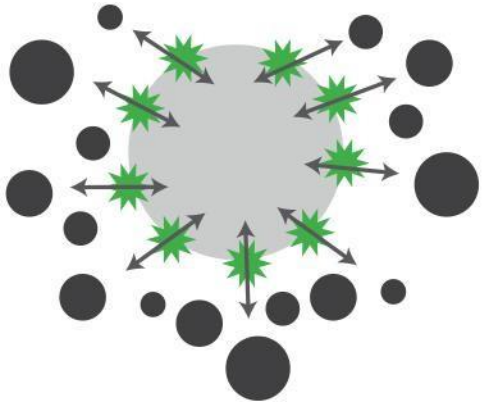
🟢 = High 🟡 = Medium 🔴 = Low

How does AlphaZyme® work?

Oil releasing process with **AlphaZyme®**



AlphaZyme® molecule interacting with crude oil attached to solid



AlphaZyme® physically releases oil from solid, relieving IFT, improving contact angle & reducing capillary pressures

Oil-wetted surface changed to a water-AlphaZyme®-wetted surface

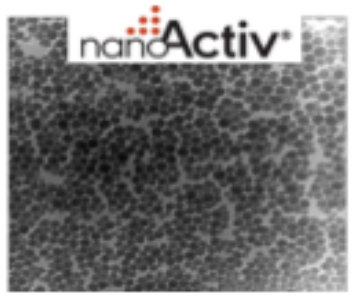
Technology and Mechanism

- AlphaZyme® - innovative microbiology technology using nanoActiv® for use to enhance oil-recovery
- Enzymatic function of catalyst is limited to its interaction with hydrocarbons (HC)
- AlphaZyme® can perform its catalytic function repeatedly w/o losing efficacy over time
- Mechanism involves 3 components: H^+, OH^- & “active site” which represents the proprietary DNA component
  - H+ and OH^- components form a polar part and “active site” forms a non-ionic part
- Upon contact with HC, the non-ionic part enables enzyme to penetrate the HC → H^+ and OH^- components work to release microscopic droplets of oil

Technology and Mechanism (cont'd)

- This results in clean release of oil by relieving interfacial tension, improving contact angle & reducing capillary pressures
- Process is continuous over time & produces no bi-products
- The HC's mobility is improved w/o impacting the HC chain or changing viscosity
- AlphaZyme® catalyst can provide production impacts that have been measured & tested in the field for periods of > 12 months after a single treatment
- AlphaZyme® is thus a non-consumable & reusable downhole oil-recovery technology which is an environmentally friendly solution

ABOUT nanoActiv®



Other Companies "Nanoparticles"

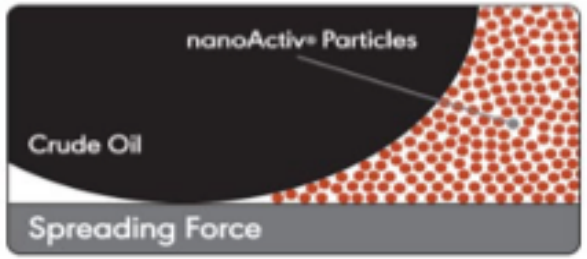
Competitors used fumed silica which clumps.

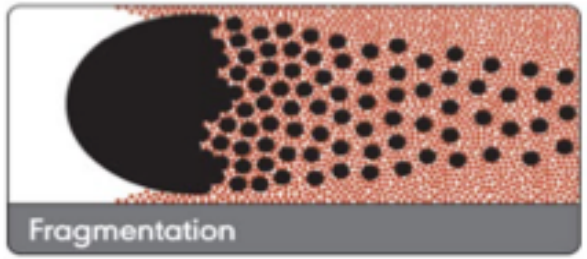
What is nanoActiv®?

nanoActiv is a nano-sized sand particle with the ability to alter wettability, reduce contact angle, access nano-sized pore spaces, and dislodge trapped oil and gas. The particles are proprietarily treated to resist high concentrations of salinity/brine and high temperatures (up to 325F) to handle harsh conditions.

How does nanoActiv® work?

nanoActiv® uses a natural phenomenon called Brownian motion to create disjoining pressure. The particles have a long-lasting, mechanical function, rather than a short-lived chemical reaction.





Why use nanoActiv®?

nanoActiv helps to produce more oil and gas from new and existing wells. nanoActiv is environmentally-friendly (nonhazardous) and economic.

When to use nanoActiv®?

During the initial completion/stimulation, a re-frac, tailing an acid job, or during a nanoActiv re-stimulation/production treatment.

nanoActiv® is a nano-sized silicon dioxide particle that is negatively charged, resilient, and nonhazardous.

Term	Explanation	Relevance
Nano-Sized	1,000,000 times smaller than a millimeter	Allows to penetrate the smallest pore throats, fractures, and covers vast amounts of surface area.
Silicon Dioxide	A **sand particle**	Long-lasting, not a short-lived chemical reaction.
Negatively Charged	Adds movement (Brownian Motion)	Adds mechanical function.
Resilient	Brine resistant & heat tolerant	Ability to withstand harsh envionments.
Nonhazardous	Completely safe to handle	Environmentally-friendly, non-hazmat to transport.

13,000 nanoActiv® particles will fit in one grain of sand and cover 27x more surface area.

FAQ AlphaZyme®

What are the best well candidates?

- Wells with production, pressure & mechanically sound
- Unconventional reservoirs
- A ”good” well using AlphaZyme® makes it a better well
- Don’t expect an “F” well to become an “A” well
- Expect a “C” well to become a ”B” well or a “B” well to become a “B+”
- Well with up to 80% water cut (we have had success with higher water cuts)

Can AlphaZyme® treatment replace a re–frac?

- AlphaZyme® can be added to a re-frac
- AlphaZyme® can be an economic alternative to re-frac, small enough to release trapped oil and gas in existing fractures

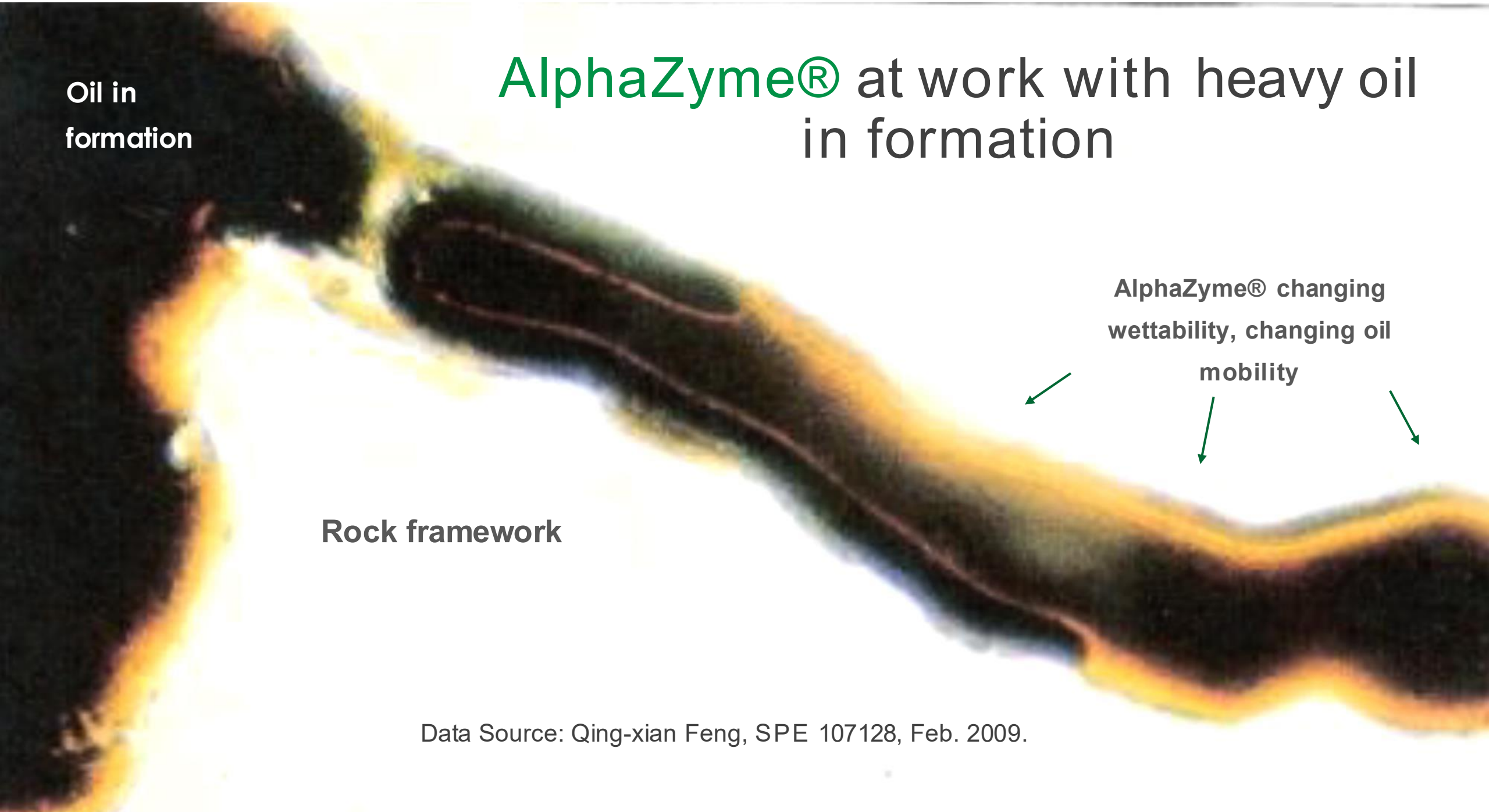
Can AlphaZyme® be pumped during an acid job?

- AlphaZyme® can be pumped after an acid job by placing a fresh-water pill or after flowing the well back post acid treatment

Does gas have to used to displace the treatment.?

- No however we do encourage use of gas to further displace particles

AlphaZyme® at work with heavy oil in formation



Data Source: Qing-xian Feng, SPE 107128, Feb. 2009.

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- As AlphaZyme® reaches the oil / sand mixture, oil immediately releases from the substrate
- **Without any agitation, AZ cleanly releases oil from the surface of rock**
- Gravity then does its job; the pure oil separates and floats to surface while sediment is left behind on the surface floor

Summary of AlphaZyme® Benefits

- AZ-EOR products are based on advance engineered nanotechnologies that improve the penetration into the formation, dramatically optimizing oil recovery
- AlphaZyme® products are developed with different formulations to optimize oil recovery based on downhole temps
- **AlphaZyme® D-300 & D-310** can be used with both heavy and light oil and work effectively up to 180°F
- **AlphaZyme® D-300 HT and D-310 HT** work effectively 180°F up to 300°F
- Alpha XT® - Formulated for extreme temps needs based on specific well characteristics
- AlphaZyme® products are engineered to help change the viscosity of oil, changing stones & sand from oil wet to water wet with nanotechnology that permits product penetration deeper in the formation thus enabling dramatically enhanced oil recovery compared to other traditional products

Summary of AlphaZyme® Benefits

- **AlphaZyme® D-300 is** user friendly w/o need for pre-treatment of pre-warming prior to injecting in well tubing or casing
- Quantity of product needed is calculated with annulus equation
- **AlphaZyme® D-400 & D-409** is used for flooding operations with large quantity of high-pressure steam water to unblock those oil wells previously blocked by polymers used in older EOR products
- **AlphaSteam® Flash** products enable perfect oil recovery of very heavy oils & bitumen
- **AlphaStrip® BTS** products are designed to help strip the oils from sands when used on Tar Sands, while softening & braking up Bitumen type oil particles into smaller droplets when used with Bitumen Oils, leading to higher levels of oil reclamation during the frothing tank processes
- **AlphaZyme® D-600** family products are used as a sludge buster product to separate oil from mud and thus improve production by changing the viscosity of the oil

Summary of AlphaZyme® Benefits

Complus Systems offers the following products:

- Complete array of EOR products for all types of formations & oils
- Bioremediation products for soil & water polluted by oil spills & brine
- Products operate in any condition and with any type of oil & temperature
- Products are totally non-toxic, sustainable, EPA certified & eco-friendly

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Market-Entry / Case studies

Case Studies - Success increasing production

New Mexico Delaware Basin, over 36 months

- Cumulative production of 20 wells Bone Spring & Wolfcamp
- 65,000 incremental increase Barrels over 33 off set wells

Texas Austin Chalk Formation over 6 months **Oil production Increases**

- “A” Wells High output wells using a low dosage treatment = 12% cumulative increase over 180 Days
- “B” Wells Lower output wells using higher dosage treatment = 174% cumulative increase over 180 Days

Texas Frio County Buda Chalk Formation over 6 months **Gas production increases**

- “A” Wells High output wells using a low dosage treatment = 30% cumulative increase over 180 Days
- ”B” Wells Lower output wells using high dosage treatment = 564% cumulative increase over 180 Days

Texas Austin Chalk Formation 8 wells over 60 days, wells in 7% decline prior to treatment

- **Cumulative Monthly BBL oil increase 192%**
- Forecasted production 1,610 BBL Actual 3,585 BBL

API-22 Oil
AlphaZyme® D-300
Client Lab Test



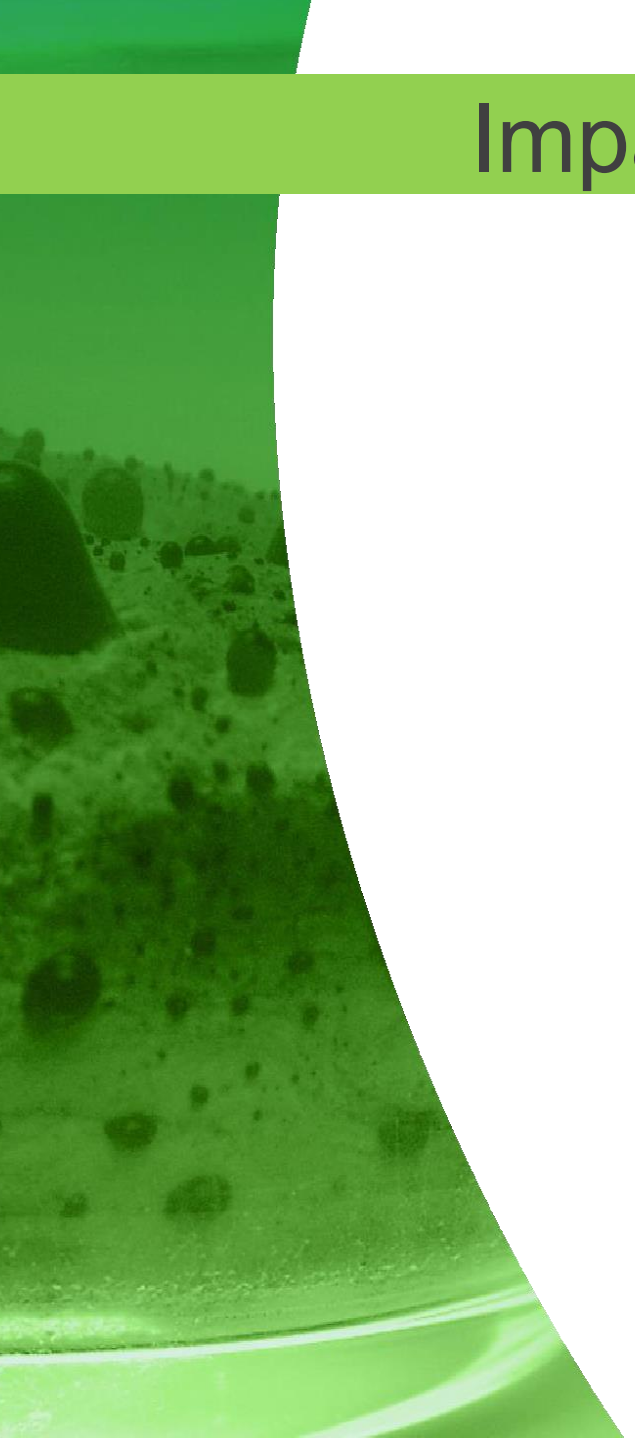



SERVICE HAND FIELD TEST, CHINA

API-22 oil poured into glass container

- Cut plastic bottle received API-22 oil
  Water only added, no reaction after period of time
- AlphaZyme® product added to water
  AZ added at approximately 10% concentration and allowed to work
- After 30-45 minutes
  Released oil is now visible at surface of water
- After 3-hours
  Significant portion of oil is mobilized to water surface
- After 5-hours
  AZ has released more than 90% oil from bottom and side walls, without agitation or heat

Impacting on Unconventional Resources



- When production begins the following improvements to oil mobility are achieved:
  - Oil-released from the surface of rock
  - Reduced IFT & capillary pressures
  - Improved contact angle
  - Improved relative-permeability
  - Maximize Oil recovery
  - Reduced impact to environment

- Mixed with frac water, AlphaZyme® will treat an unconventional horizonal during a multi-stage frac process

- Implemented during the frac process, AlphaZyme® will maximizes its opportunity to interact with hydrocarbons.

- As each stage is completed AlphaZyme® will benefit from a beneficial soak period, optimizing its impact potential

We build products for your specific needs

- Recover More Oil
- Heavy oil
- Paraffin/Asphaltene
- FSO Tanker Cleaning Applications
- Rail Car Cleaning applications
- Application specific targets

PRODUCT Information & Application Catalogue

AlphaZyme® D-300 Enzyme Based EOR

AlphaZyme® D-300 is used as a well stimulation product to improve production by improving the viscosity of the oil. Temperature limit is 300°C.
AlphaZyme® D-300 can also be used in Water Flood Programs and is offered as AlphaZyme® D-300 WC.

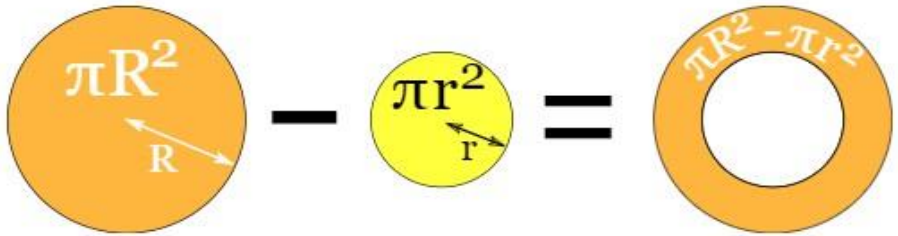
Product Dilution

These products are to be diluted to a 10% to 20% activity rate and injected into the Well Head at the well. Precise Displacement by volume should be calculated using the Annulus Formula. **Never use this product in the concentrated form.**

AlphaZyme® D-300 Enzyme Based EOR

Example of Annulus Volume formula injecting down the casing

If the client does not want to remove the pump and use the annulus to push the treatment down in the formation, calculate the casing volume with the same formula and subtract the tubing volume for the casing and that is our displacement rate x 1.5.



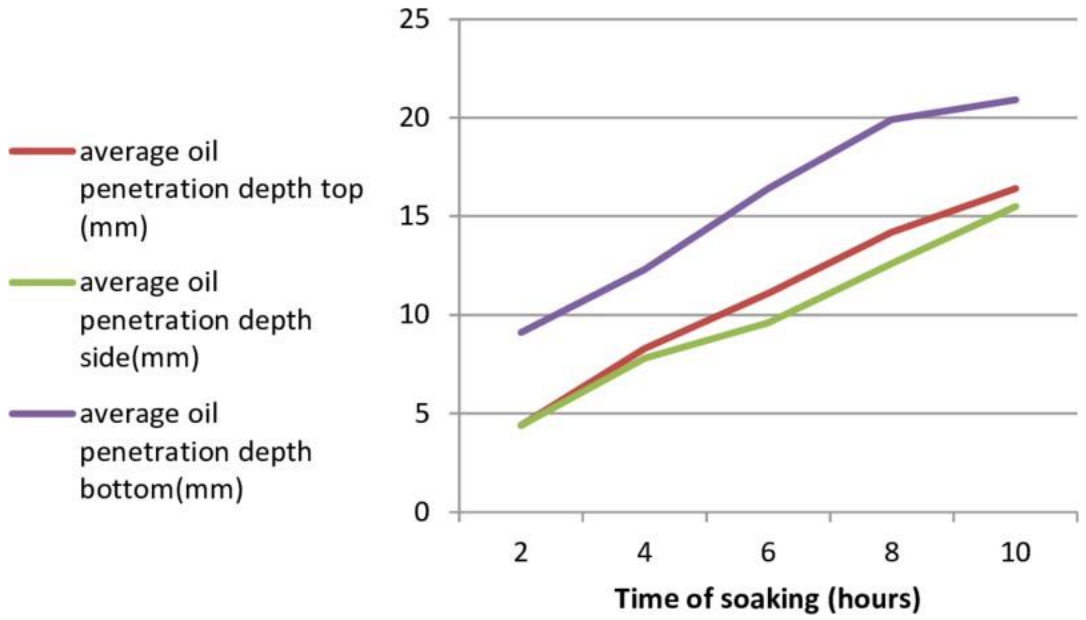
$$\text{Area} = \pi R^2 - \pi r^2$$
$$= \pi(R^2 - r^2)$$

When treating down the annulus, always set the pump in the upward position and tighten the stuffing box before beginning the treatment. However normally, per each well, consider a quantity of 1 metric ton of concentrated AlphaZyme® D-300 to be diluted to 10% with produced water (or saline water or normal water) in a mixing tank, equivalent to 10 metric tons of water and the mix shall be injected in the annulus with a 5000 psi pump.

AlphaZyme® D-300 Enzyme Based EOR

SOAKING PERIOD

In order to maximize the duration of stimulation up to the maximum of 36 months, we suggest, at the end of at least one week soaking period, partially open the well, to only 30% capacity for 3 days, then to 50% for another 3 days and to 100% after another 6 days. This way the Enzyme will continue to work for a long time after treatment. According to experience on previously treated wells, results may vary based on type of formation. Some soak times have been up to 14 days to get maximum output.



AlphaZyme® D-400PB & D-409PB enzyme based EOR

AlphaZyme® D-400 PB High Temperature is a microemulsion/ nanoparticle product designed and formulated with co-solvents and surfactants to enhance the removal of polymers fluids and improving the performance of water floods by reducing surface tension, breaking down PHPA and changing producing rock from oil wet to water wet. This product also has an oil enhancing enzyme built to release oil imbibed in the rock.

AlphaZyme® D-400 PB High Temperature delivers superior water wetting characteristics in both carbonate and sandstone reservoirs. The result is a more efficient stimulation with residual wetting, that enhances the performance and life of an oil or gas well and its longevity.

The AlphaZyme® D-400 PB (Polymer Breaker) High Temperature is a product developed to break up polymer damage in formations. This damage can be caused by previous water flood applications of polymer and also frac damage caused by polymer. AlphaZyme® D-400 PB (Polymer Breaker) is a special nanosurfactant with added nanoparticles. This product is effective in all API levels.

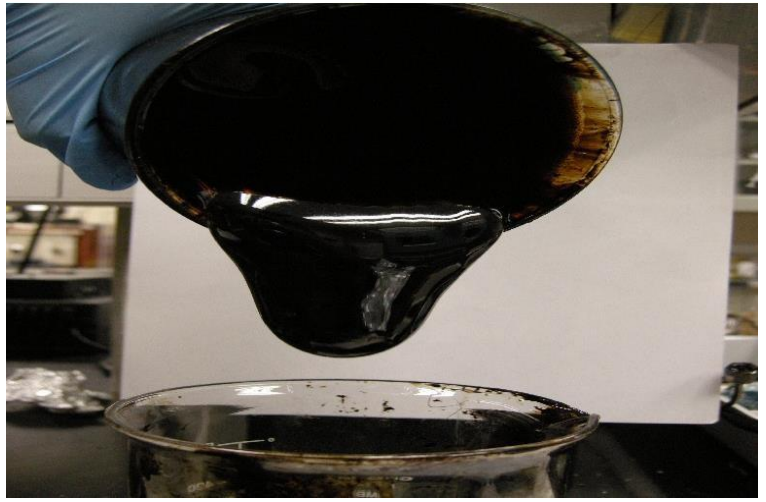
AlphaZyme® D-400 PB& D-409PB Enzyme Based EOR

Specific Gravity:	1.026	Appearance/Odor: Amber/Alcohol Odor
Flash Point:	2.05°F	pH: 6 to 8

AlphaZyme® D-400 PB High Temperature is recommended at a loading of .75 to 1.5 GPT in fracturing fluids. Do not allow it to touch active acid in the formation. Always run a compatibility of fluids prior to use on existing wells. AlphaZyme® D-400 PB High Temperature is available in 55 gallon drums and various totes or bulk.

AlphaSteam® Flash 500 WB Heavy Oil EOR

Complus Trading North America, LLC offers ASF-500 WB in a Liquid Surfactant Blend. This product has various specifically designed stabilizers, nanosurfactants, and nanoparticles for use in Heavy Oil Wells where Steam Injection Methods are used for oil extraction and increased well stimulation. It is designed to give excellent foaming characteristics upon injection into the well's formation. This foaming action allows for deeper formation penetration and increased dispersion, of the steam and our chemical additives, to advance further into all areas of the formation. ASF-500 WB is designed and contains specific products to handle and perform optimally in "High Temperature Well Environments".



The "Steam Injection Method for well stimulation" is designed for the delivery of chemicals deep into the formation. Steam Injection has a tendency for the steamed chemicals to travel the path of least resistance. With our ASF-500 WB the foam is directed into all areas of the formation. ASF-500 WB carries penetrating Nano Surfactants that helps penetrate heavy oils and bitumen, while delivering our Nano Particles to assist in breaking up the oil particles into smaller droplets thus allowing better flow back to the well bore and adding to better separation of the larger particles.

Specific Gravity: 1.021

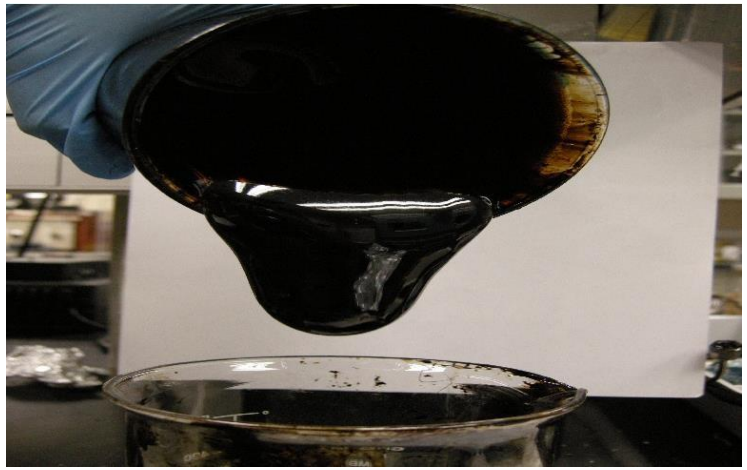
PH : 8-9.

AlphaSteam® Flash 500 WB Heavy Oil EOR

APPLICATION

ASF-500 WB is designed for steam injection into heavy oils, bitumen and/or tar sands

Concentrations levels of 20% to 30% at 10,000 ppm are commonly recommended for well stimulation applications and may vary from well to well depending on the specific oil characteristics and well formations being targeted. ASF-500 WB is only to be used in hot water and steam applications. Increased ppm can be more beneficial.



AlphaStrip® BTS (Bitumen & Tar Sands)-100 Lower Temperatures EOR

APPLICATION

AS BTS-100 LT is designed to be used during the Bitumen and/or Tar Sands Frothing Tank Reclamation and Secondary Separation Recovery Processes.

*Concentrations 1 GPT or 1000 ppm are commonly recommended for application but may vary due to the quality and
content of the Bitumen and Oil Sands being treated. This product performance can be improved in hot water at < 180^{o}F.

Products are available for secondary recover through centrifuges

AlphaStrip® BTS (Bitumen & Tar Sands)-110 Higher Temperatures EOR

Complus Trading North America, LLC offers our AlphaStrip® BTS-110 HT as a Liquid Microemulsion Surfactant with Nanoparticles to enhance oil molecule penetration and molecule dispersion for use with Bitumen and Tar Sand Oils. This product is designed specifically to help strip the oils from sands when used on Tar Sands, while softening and braking up Bitumen type oil particles and into smaller droplets when used on Bitumen Oils. This allowing for higher levels of oil reclamation during the frothing tank processes.

Tar Sands Oils trap sands within the oil itself. By using our AS BTS-110 HT, with our proven microemulsion and nanoparticle technology, this product specifically softens the Tar Sand Oils and allows for the removal these oils from the sands. When used on Bitumen type oils, AS BTS-110 HT allows for these oil molecules to also soften so that these oils can be moved and handled more easily, thus reducing handling time of the Bitumen and reducing processing costs normally associated with Bitumen in the frothing reclamation and secondary separation recovery processes. This is all achieved through Complus Systems' specifically designed Nanoparticles found in our oil penetrating Alpha-Strip® Formulas. These Nanoparticles help to pry and loosen oils from the sands by softening the molecules and softening the Bitumen molecules. This softening process enabling more oils to be captured and recovered in the secondary separation recovery process. This process now becomes faster, easier and more cost effective in handling these Tar Sands and Bitumen Hydrocarbons.

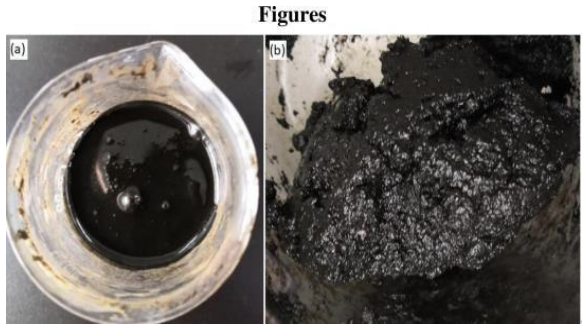
Our nanoparticles in this formula are 10 to 15 nanometers and is a special coated sodium silicate.

Specific Gravity: 1.021

pH : 8-9

AlphaStrip® D-600 SB(Sludge Buster) EOR

AlphaZyme® D-600 SB is used as a sludge buster product to separate oil from mud and thus improve production by changing the viscosity of the oil. Temperature limit is 0 to 82°C. AlphaZyme® D-600 SB is derived from AlphaZyme® D-300 and also contains enzymes but cannot be used at high temperatures (i.e. cannot be used inside wells for stimulation). **Do not allow AlphaZyme® D-600 SB to freeze.**



Treatment Calculation of AlphaZyme D-600 SB

Application rate One (1) gallon of Product per 10 cubic Yards of sludge

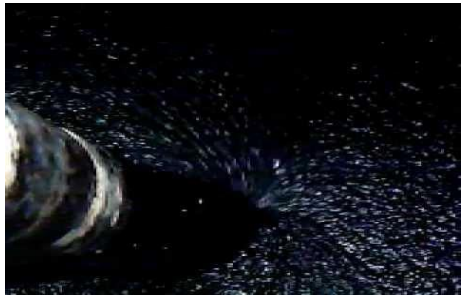
Big frac tank mixer, processes 60 tons per hour

Cubic yards of sludge per ton: 1.25 estimate

One hour cycle of 60-ton mixer: 1.25 x 60 =

75 Cubic Yards per hour processed by in the big frac tank mixer

Gallons per hour of AlphaZyme® D-600 SB = 7.5 Gallons per hour



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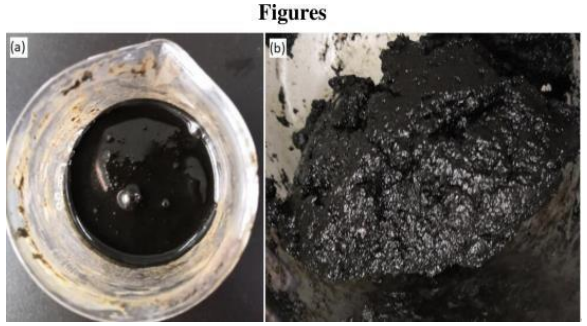

Treatment Calculation of AlphaZyme -600 SB

Application rate One (1) gallon of per 10 cubic Yards of sludge

Big frac tank mixer, processes 60 tons per hour

Cubic yards of sludge per ton: 1.25 estimate

One hour cycle of 60 ton mixer =

75 Cubic Yards per hour processed

75 cubic yard 10:1 ratio require 7.5 gallons per hour of AlphaZyme® D-600 SB yet to be det

AlphaZyme® D-600 SB (Sludge Buster) EOR

Step by step application procedure

1. D-600 SB is sprayed onto Sludge, Ground and Mixed into Sludge prior to inserting into frac tank.
2. Water is then inserted in frac tank with Sludge treated with D-600 SB.
3. Additional mixing is done in tank.
4. Oil is released from Sludge and skimmed off the top of the water.
5. Remaining water is removed and held for further reuse.
6. Remaining soil is then removed from frac tank.
7. Optionally, the remaining soil can be bioremediated with our CCCP-7010 or CCCP-7010 DESERT BLOOM products, to be eventually reused as already fertilized agricultural soil.

AlphaZyme® D-610 SB (Sludge Buster) EOR

Step by step application procedure

1. D-610 SB is sprayed on to Sludge, Ground and Mixed into Sludge prior to inserting into frac tank.
2. Water is then inserted in frac tank with Sludge treated with D-610 SB
3. Additional mixing is done in tank.
4. Oil is released from Sludge and skimmed off of the top of the water.
5. Remaining water is removed and held for further reuse.
6. Remaining soil is then removed from frac tank.
7. Optionally, the remaining soil can be bioremediated with our CCCP-7010 or CCP-7010 DESERT BLOOM products, to be eventually reused as already fertilized agricultural soil.

Thank you

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AMERICA
Complus Trading North America LLC
5151 Katy Freeway, Suite 140,
Houston, TX 77007, USA
info@complustrading.com
Office: +1 830.200.5119
www.complustrading.com

WEST EUROPE
Complus Systems
Via Lavoratori Autobianchi 1,
Building 9,
20832 Desio (MB), Italy
info@complusystems.com
Office: +39 02 8719 9397
www.complusystems.com

EAST EUROPE
Complus Systems
Vabaõhumuuseumi tee 5/2-15,
13522 Tallinn,
Estonia
info@complusystems.com
Office: +372 5010996
www.complusystems.ee