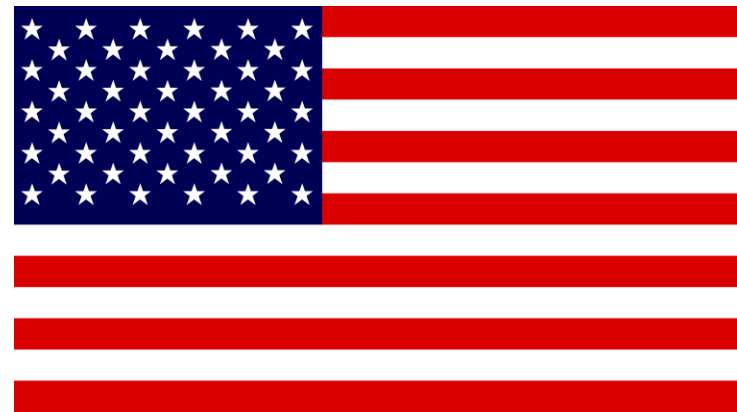


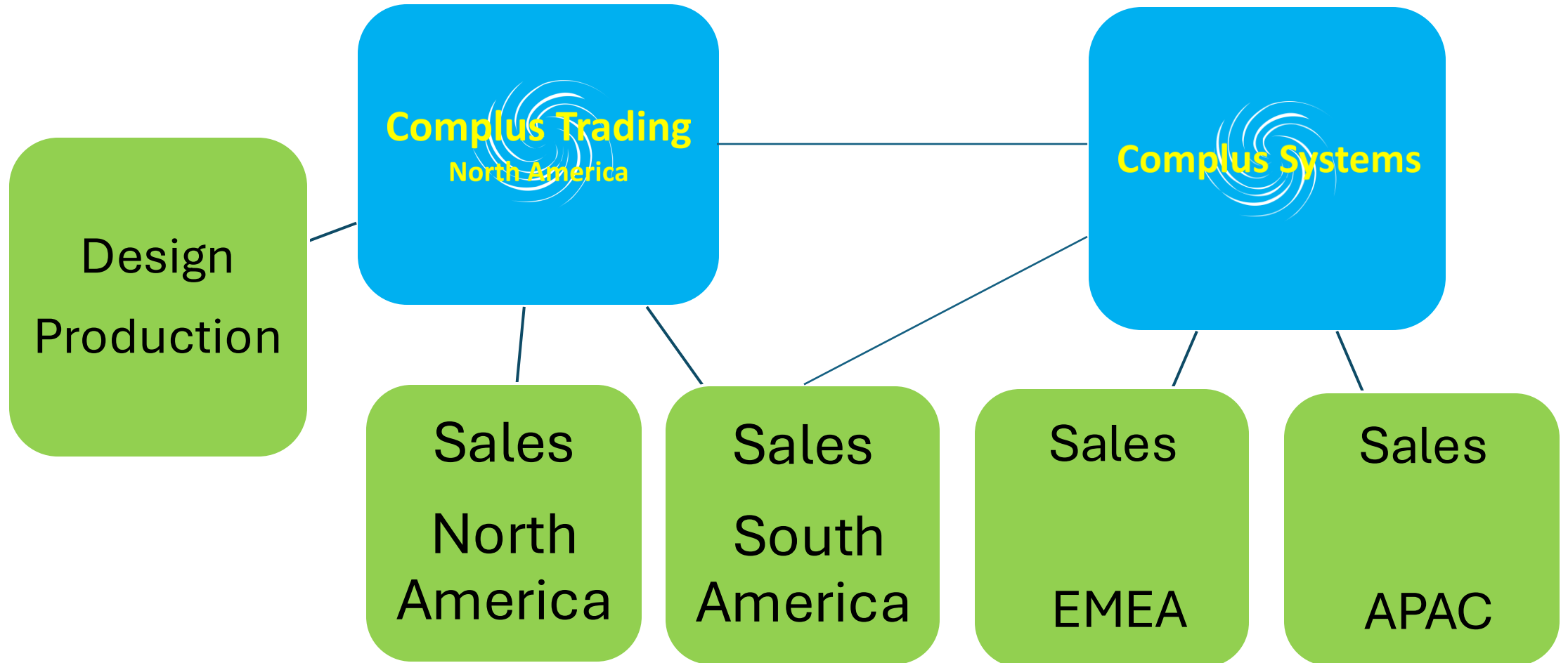
Recover More Gas
with
Soap Sticks &
Liquid Foamer

Alpha Products

June 2026



COMPLUS GROUP ORGANIZATION

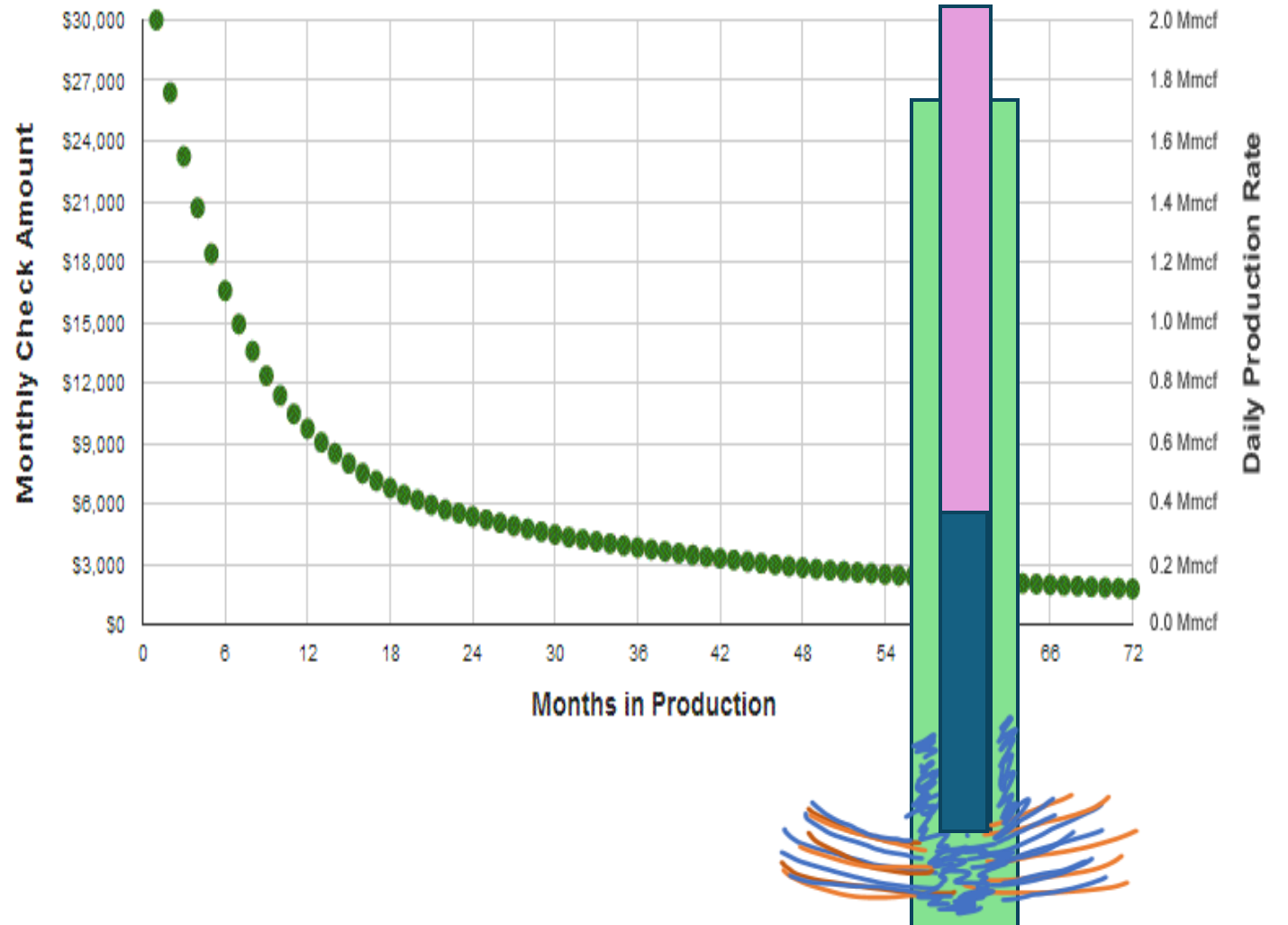


What we do:

- **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 industrial equipment that leverages **cavitation technology**

SOAP STICKS AND LIQUID FOAMER

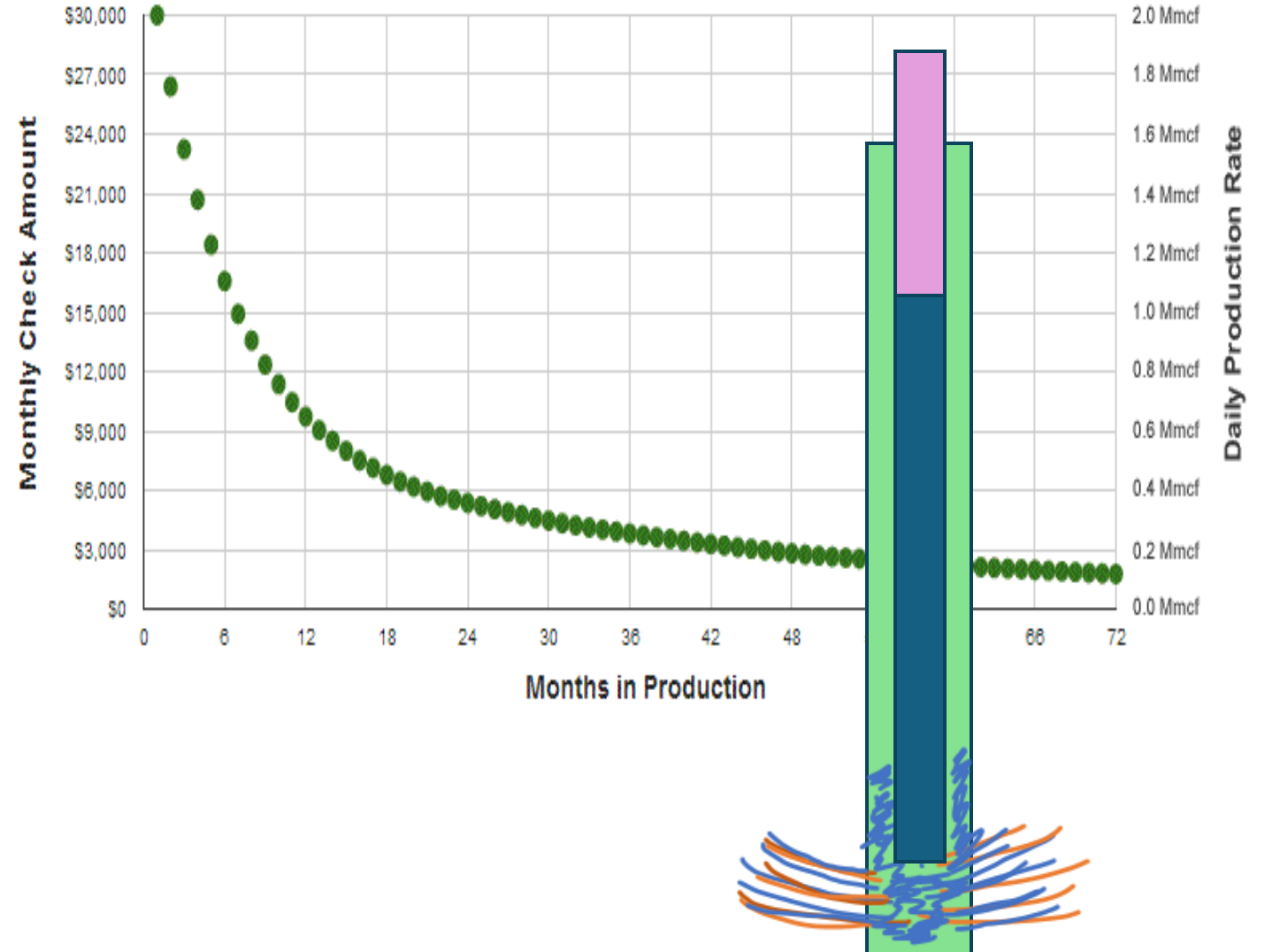
Over time, the gas wells lose pressure & become loaded with accumulated water & condensate, reducing the production of the well.



DECLINING WELL PRODUCTION

Due to:

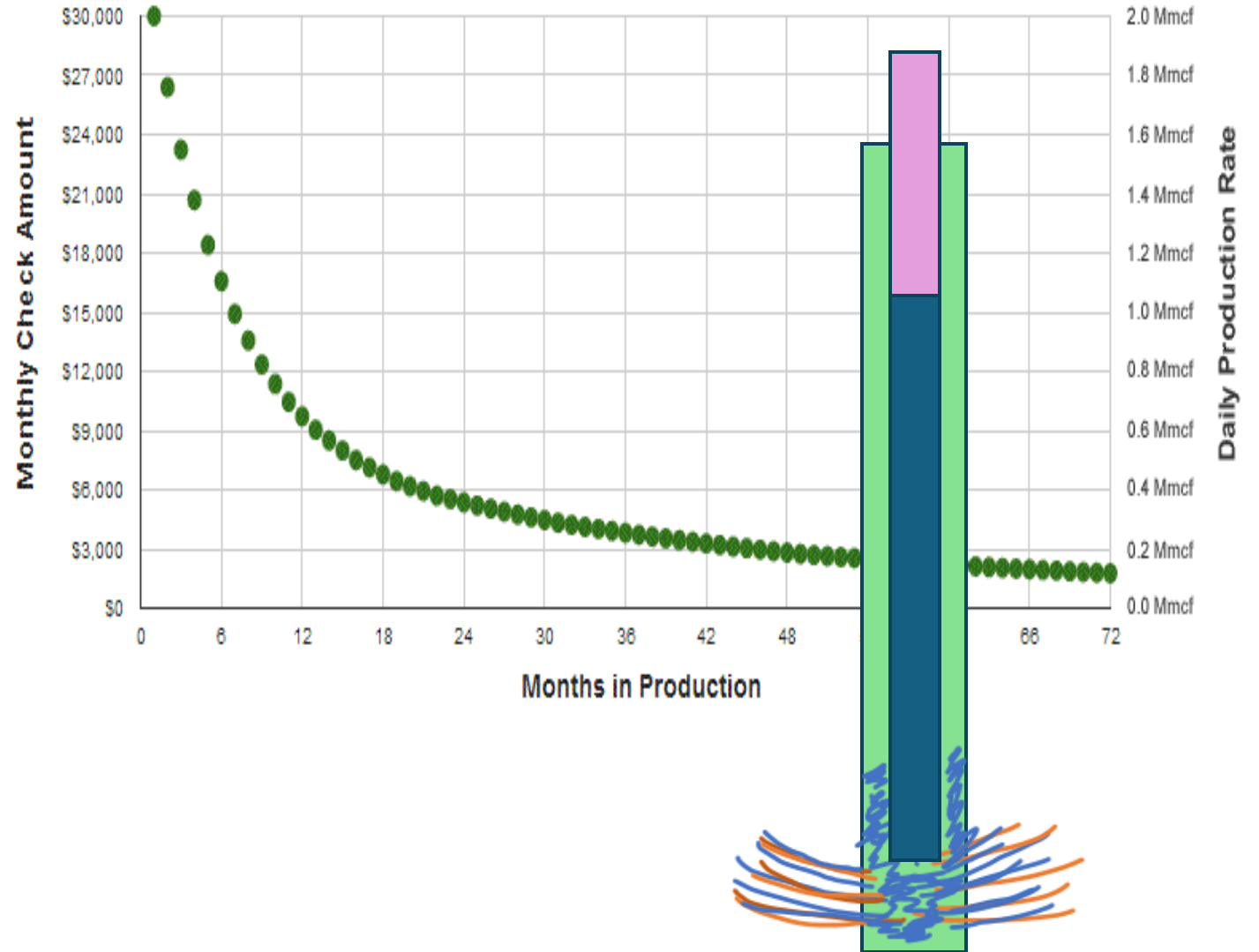
- Liquids begin to fill the tubing column over time
- Well head pressure declines, condensing begins to occur



DECLINING WELL PRODUCTION

The solutions:

- **Liquid foamer** pumped by capillary string
- **Soap Sticks** launched into the production column to foam and discharge liquids



LAUNCHING OF SOAP STICKS

- **ELECTRIC LAUNCHERS** (12v) are available for multiple launches with a capacity of 9 to 18 sticks (solar launchers are available)
- **MANUAL LAUNCH** is possible with lubricators installed on the tree; This is a simple nipple with a valve at each end suitable for low- & high-pressure wells



SOAP STICK A COST EFFECTIVE OPTION

- The uniquely formulated soap stick (bar) will fall to the bottom of the well
- As it dissolves, it will combine with water and/or condensate creating a light foam
- Sticks are designed to dissolve completely



SOAP STICK A COST EFFECTIVE OPTION

- Depending on the sticks utilized, they can remove the water content & condensate accumulation, thus enabling gas to flow freely by converting the condensate into an emulsion providing hydrostatic relief
- They allow the emulsion to quickly be broken out upon reaching the surface and prior to it reaching the separators preventing foam locking



SOAP STICK A COST EFFECTIVE OPTION

- Gas production is optimized/increased by launching the correct amount of soap sticks based on fluid volumes
- It is essential to allow our team to participate in the identification of proper well candidates
- Based on review of well data provided, the appropriate soap stick prescriptions & protocols are developed for their application



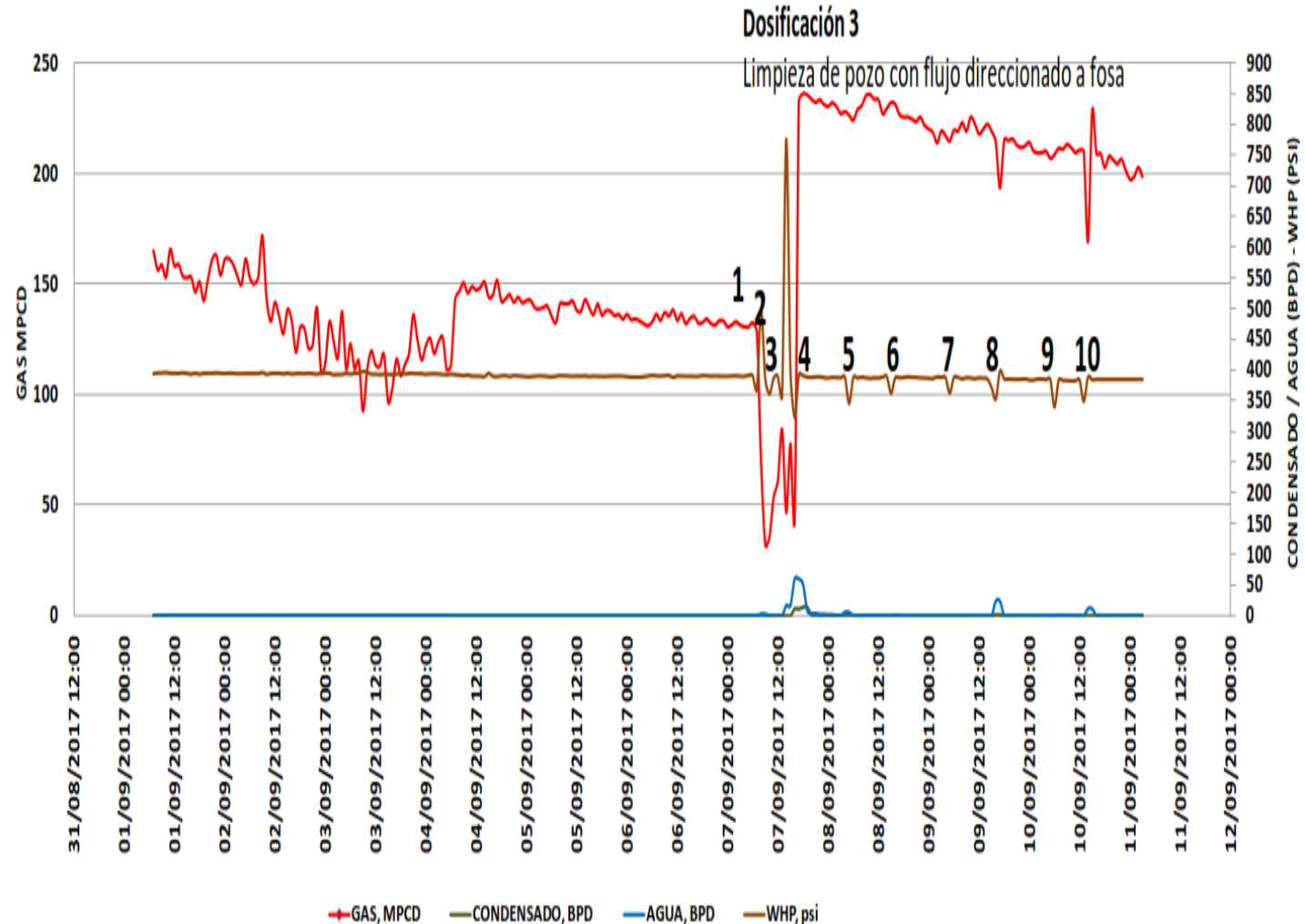
SOAP STICK A COST EFFECTIVE OPTION

Case Study: Bolivia

Original 250 MPCD with declining well production to 35 MPCD.

Initial treatment with sticks unloaded 775 barrels of condensate & water

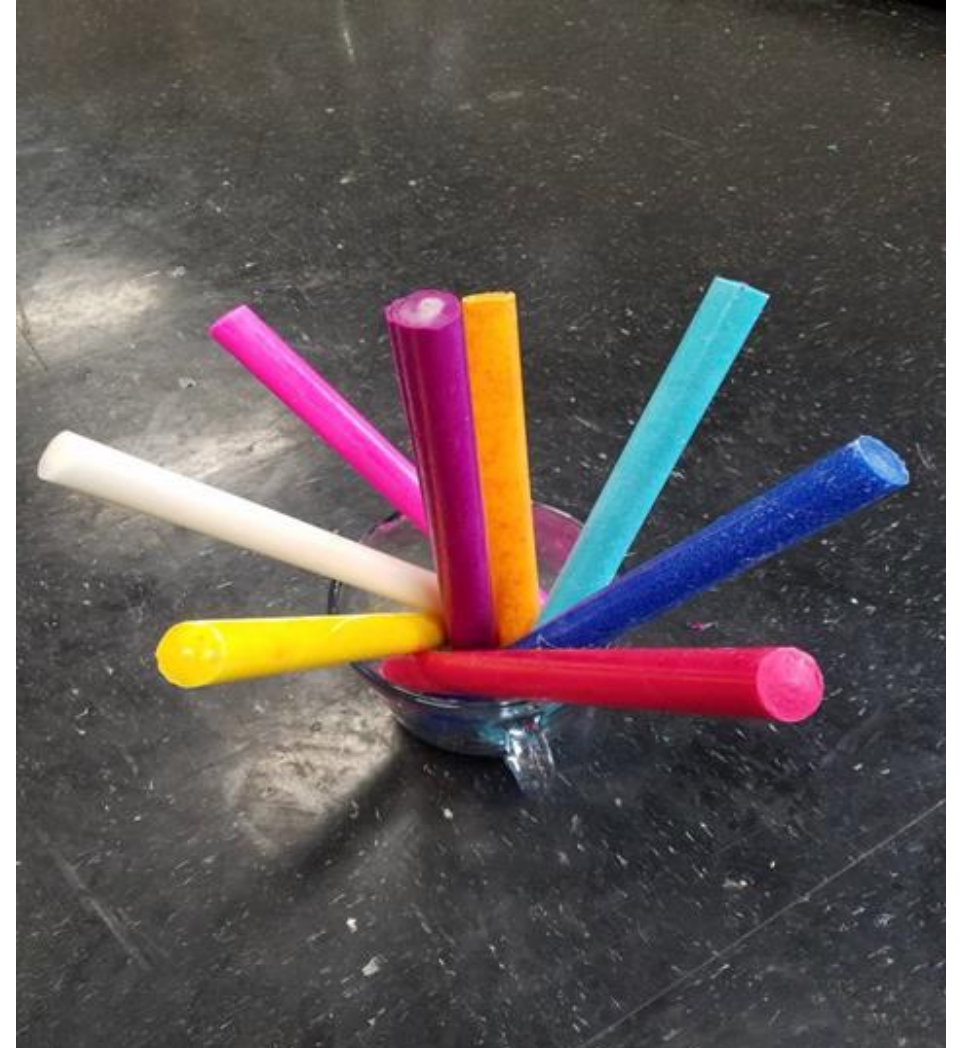
Gas production increased to 240 MPCD, a 585% increase



DIFFERENT COLORS TO FACILITATE THE IDENTIFICATION OF THE BARS

Each bar is designed for specific well characteristics & color coded for **easy identification**

- Volume of water
- % oil
- Depth of the well (temperature)
- Pipe pressure (PSI)



INNOVATIVE COMPLUS SOAP STICKS

Innovations include:

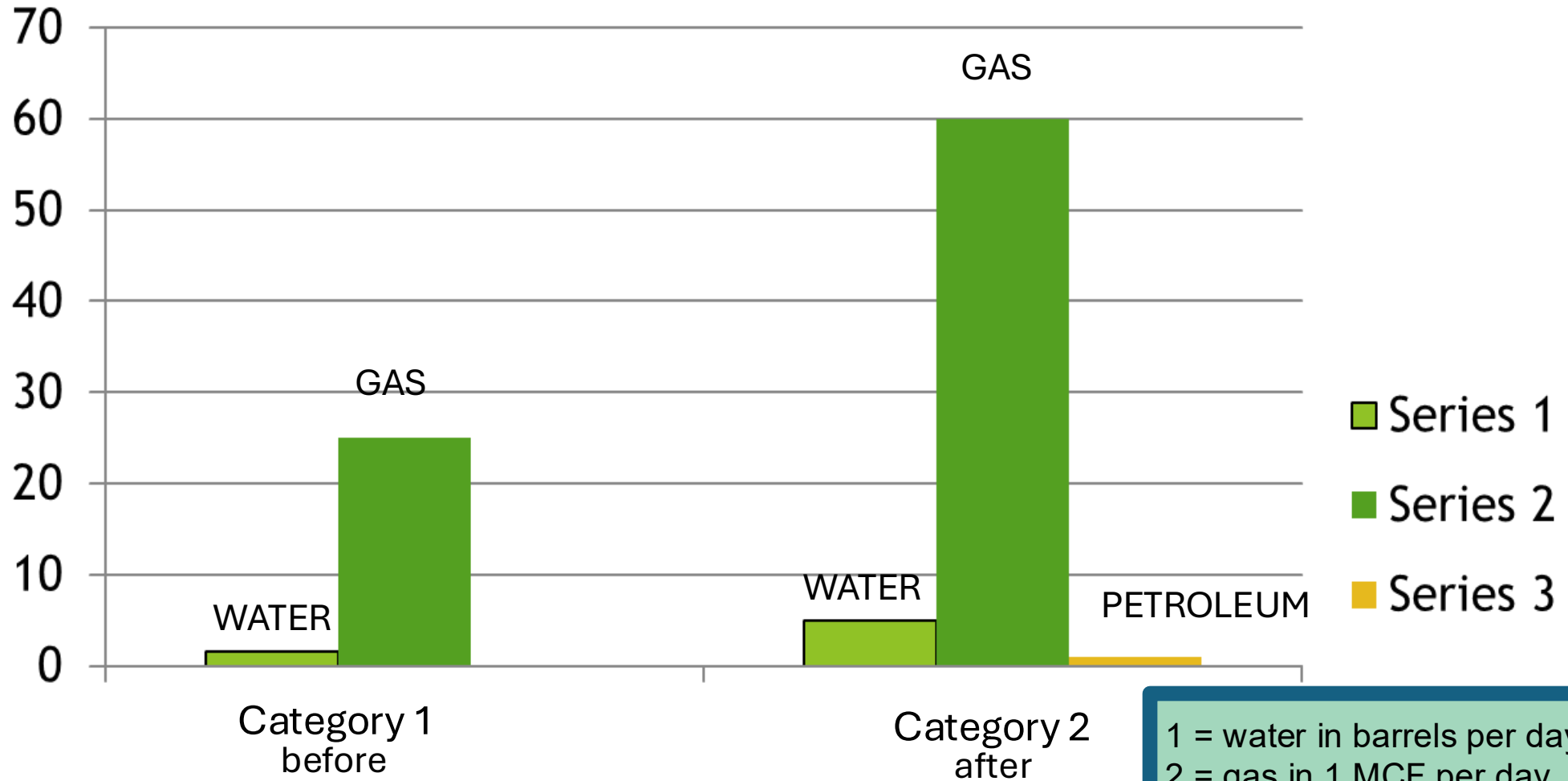
- **A LIGHTER FOAM** to discharge wells with only 10psi of pressure, the technology makes the walls of the bubble thinner & the bubbles are smaller
- **CONTROLLED DISSOLUTION**
 - OUR technology controls the speed of dissolution when it contacts the fluids from 1.25 gr/min up to 2.34 gr/min
 - This ensures up to 4 hours of constant discharge from the well depending on available fluids
 - Any residual active ingredients activate upon contact with the arrival of new fluids in the tubing

INNOVATIVE COMPLUS SOAP STICKS

- **ACTION AT GREATER DEPTH** - Deep wells do not affect the performance of the soap sticks; They have been tested up to 400° F
- **DISCHARGE GREATER HYDROCARBON CUTS**
 - Discharge wells with hydrocarbon cuts up to 70%.
 - Discharging hydrocarbon cuts up to 90% is possible
- **EMULSION BREAKOUT-** Prescribed use of sticks allows for controlled dissolution & lighter bubbles allowing for quicker breakout of the emulsion at the surface prior to the separators
 - It is rare to see cases of overdose with proper field controls

CASE STUDY

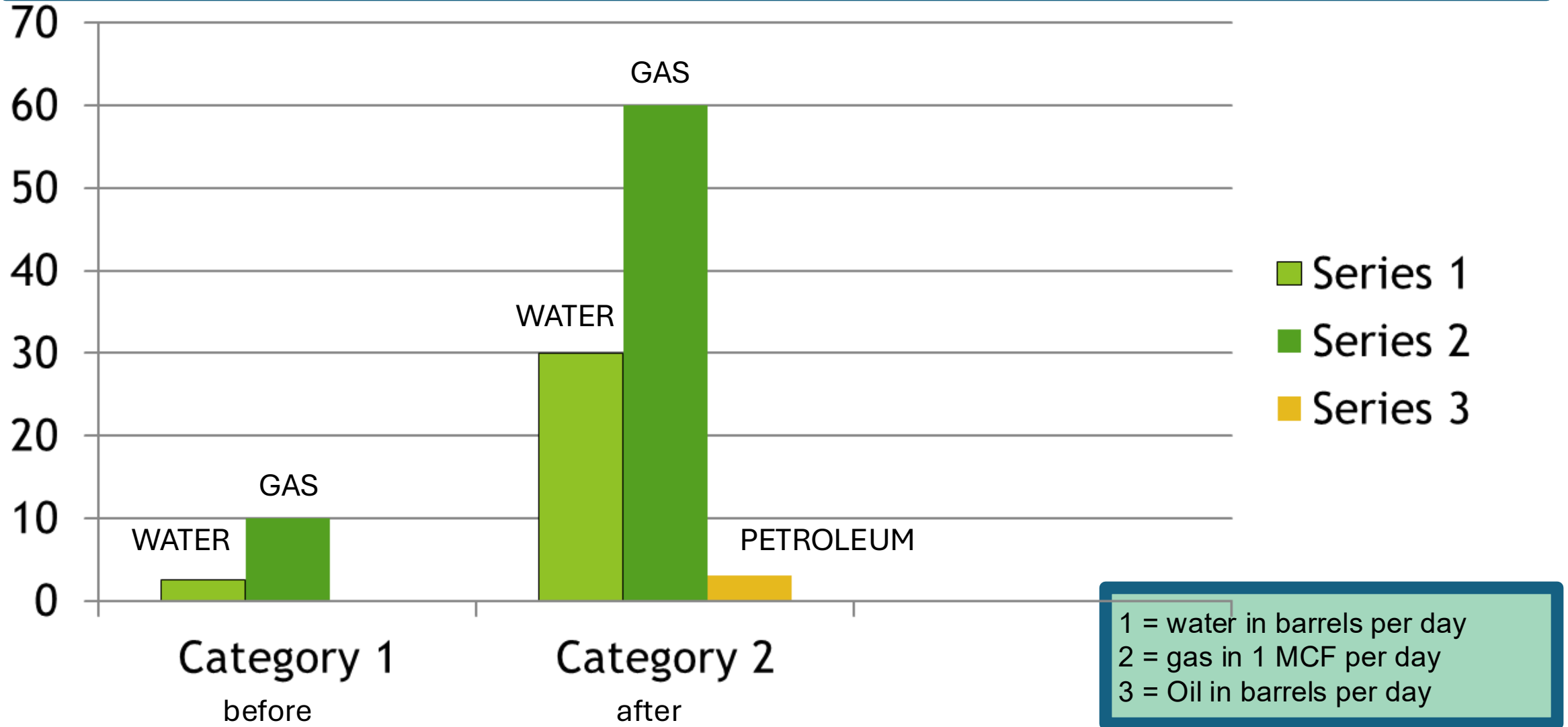
"WHITE OAK PRODUCTION" SOUTH OF TEXAS



1 = water in barrels per day
2 = gas in 1 MCF per day
3 = Oil in barrels per day

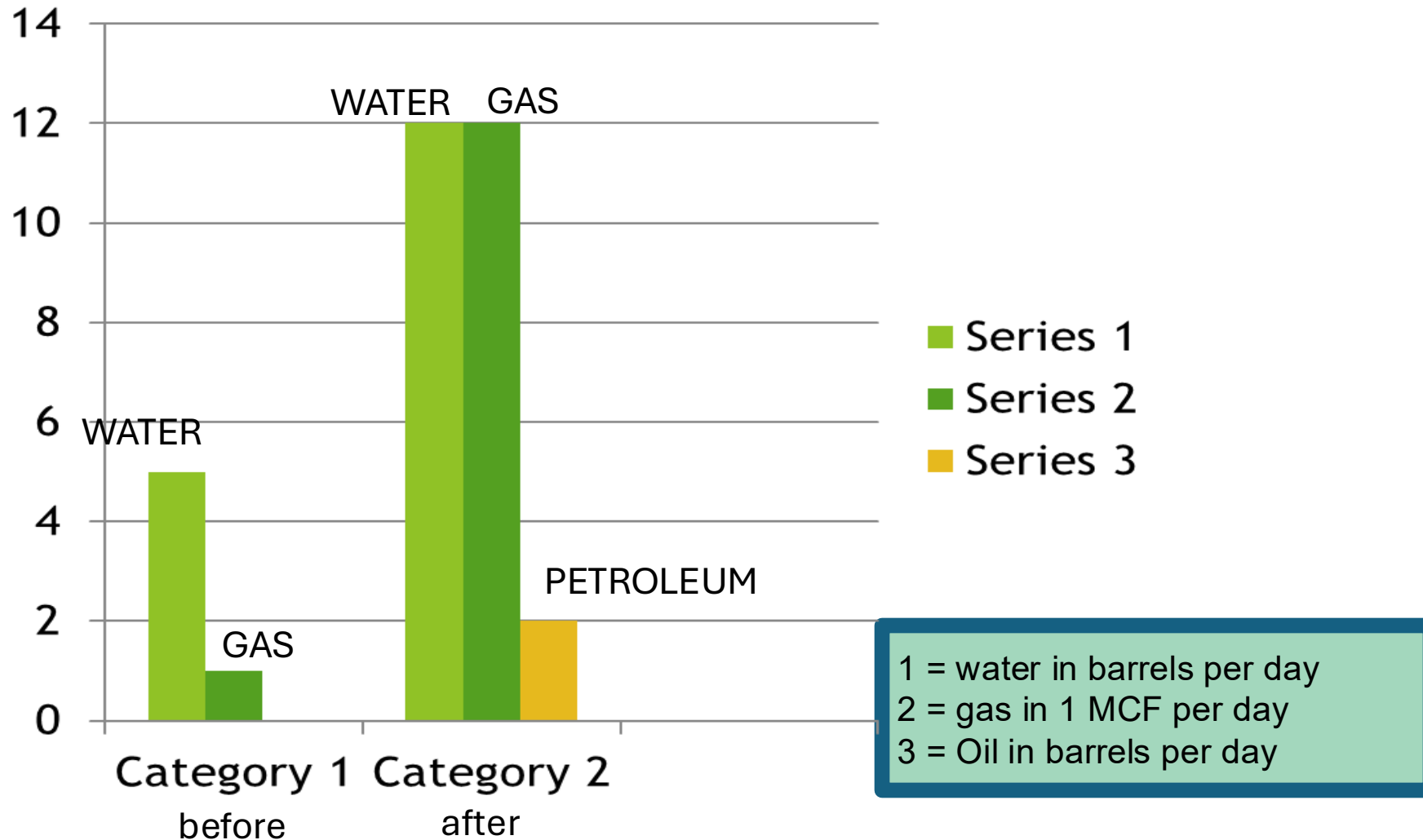
CASE STUDY

"WHITE OAK PRODUCTION" SOUTH OF TEXAS



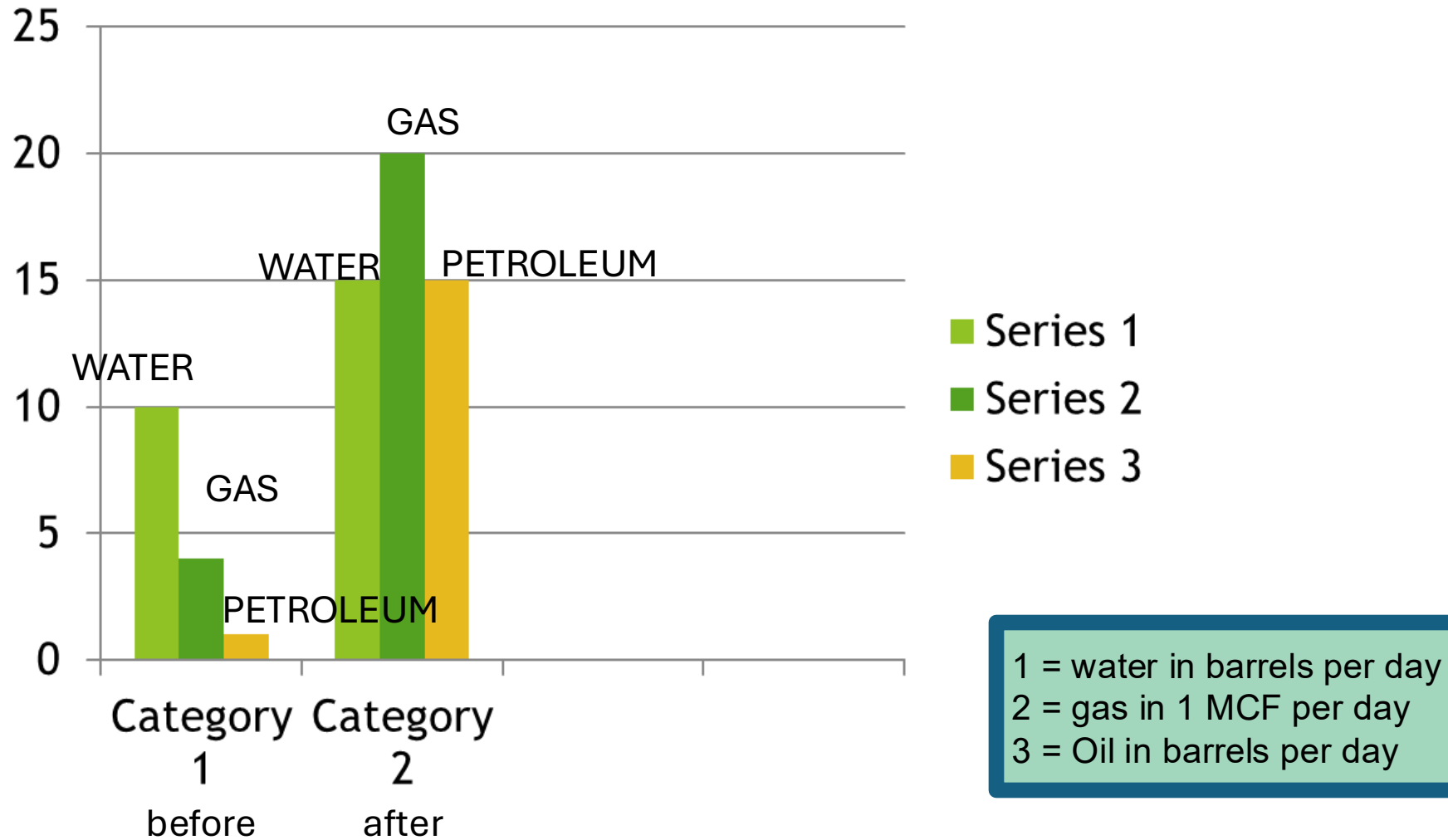
CASE STUDY

“FORTUNE OIL AND GAS” WELL GAS EAST TEXAS



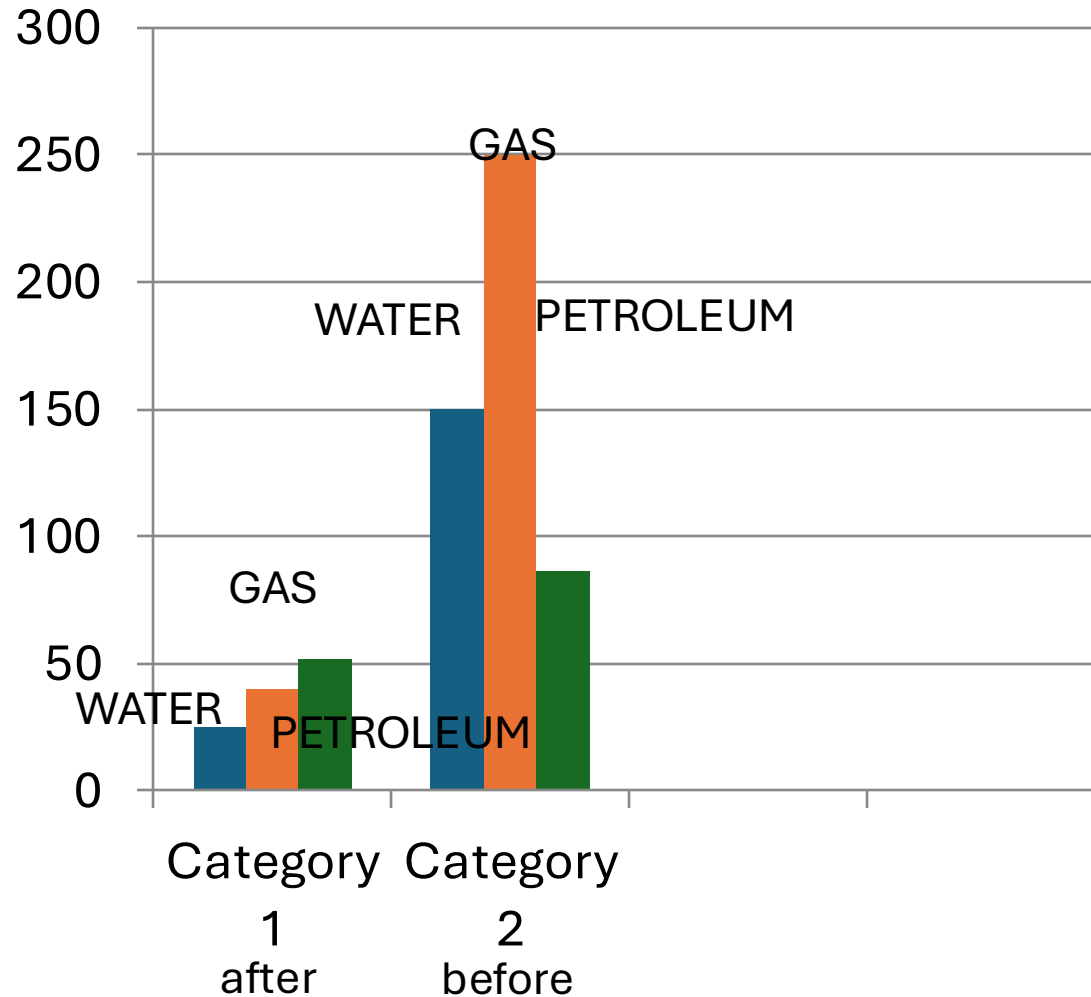
CASE STUDY

“HILCORP PRODUCTION” GAS WELL IN HOUSTON TEXAS



CASE STUDY

“HILCORP PRODUCTION” GAS WELL IN HOUSTON TEXAS



Well head pressure moved from 1,200 to 1,500 psi with stick program in place

- Series 1
- Series 2
- Series 3

1 = water in barrels per day
 2 = gas in 10,000 MCF per day
 3 = Oil in barrels per day

SOAP STICKS CATALOGUE

AlphaF-100

AlphaF-100 series ACID sticks are used to clean calcium and iron deposits from perforations in disposal wells and oil and gas producing wells. The acid blended into AlphaF-100 (approximately 30%) allows the stick to reduce the pH in the bottom of the hole near the perforations. One to two sticks will generally produce the desired results; however, this use should be doubled when perforations are badly fouled. This stick will float near the perforations and as it dissolves, it will release a slow acting sulfamic acid that will dissolve calcium deposits. The AlphaF-100 can be used in all injection wells.

Characteristics

Non-Ionic surfactant blend
Melt Point 120°F
Quick Dissolving
Color -- Tan

AlphaF-110

This is a standard soap stick applied at 1 to 12 barrels of water for all chloride levels. This stick dissolves fairly quickly in all types of wells.

Characteristics

Non-Ionic surfactant blend
Melt Point 116-122°F
Color -- Blue, Hard Stick
Foam Height 260-- Half Life 120

SOAP STICKS CATALOGUE

AlphaF-120cT This is a soap stick for unloading 1 to 15 barrels of water with up to 5% of condensate. It dissolves well in low temperature wells. Works well in locations that are < 6,000' or 1800 meters deep.

Characteristics Non-Ionic & Amphoteric surfactant blend
Melt Point 116-122°F
Color --Orange, Hard Stick
Foam Height 530—Half Life 270

AlphaF-119 This is a high foamer stick has a quick solution rate for water-only producers. The AlphaF-119 is commonly used in shallow wells < 3500 feet deep or 1166 Meters.

Characteristics Anionic surfactants
Melt point 116-120°F

Color -- Lavender
Foam height 480-- Half Life 320

SOAP STICKS CATALOGUE

AlphaF-122 This is a high foamer and works well in high levels of water with condensate. Unloads up to 34 Barrels of water and works well at depths > 3000' or 900 meters. This stick is best used in wells with bottom hole temperatures above 121°F. *It will unload 20% condensate.* For best results, *well head pressure should be greater than 100 PSI.*

Characteristics Anionic and Amphoteric surfactant blend
Melt Point 122°F
Dissolves in 30 minutes at 122°F
Color -- Pink
Foam Height 550—Half Life 315

AlphaF-118 This is one of our super foamer sticks that unloads 40 Barrels of water and 15% condensate. This stick is generally used in deep wells to get foam to the Surface because of its long half life. Dissolves in 30 Minutes temperature above 120°F

Characteristics Anionic and Amphoteric surfactant blend
Melt point 116-120°F
Color -- Red
Foam Height 600—Half Life 375

SOAP STICKS CATALOGUE

AlphaF-123 This is a strong foamer with the ability to foam 20% oil. It will unload 25 Barrels of water and 20% condensate. It works well in wells that are 6500' or 2031 meters.

Characteristics Anionic and Amphoteric surfactant blend
Melt Point 120 to 125°F
Color -- Green
Foam Height 450 -- Half Life 320

Hurricane This is our strongest foam stick and is only available in a gel tubes or water-soluble paper tubes. It unloads 60 barrels of water and 10% condensate. It should only be used in wells with high volumes of water and well head pressures > 150 PSI. The gel tube helps the stick fall deeper into the well before completely dissolving. The density of the foam height and the long Half Life help this stick unload deep wells easily and the well head pressure should be > 150 psi.

Characteristics Anionic Surfactant
Melt point 110 to 116°F
Color -- Sea Green
Foam height 620 Half Life 420

SOAP STICKS CATALOGUE

The newest series of sticks is the AlphaGV series. This series of sticks was designed to help lower pressure wells unload without foam locking the wells. Also, they were designed with 2 other problems in mind, solution rate changes (longer lasting sticks) and the ability to unload condensate at high % levels. The AlphaGV series can be used with the AlphaF series foam sticks to boost the ability to unload condensate. Each number is relative to how many grams of stick dissolve per minute at 180°F. Each 15" x 1 1/4" stick weighs approximately 363 grams. The AlphaGV series will unload in all pressures but can be very helpful in unloading low pressure wells effectively. This formula create a light foam that will ascend to the surface slowly while changing the weight of the water allowing the gas production to be increased throughout the day.

AlphaGV-125 This foam stick last up to 4.5 hours down-hole or can be effective in very deep, hot formations. It will foam up to 50% condensate and unload 1 to 15 barrels of water. In deeper wells, we will drop the AlphaGV-125 with the AlphaF-118 The AlphaF-118 will unload in 15 Minutes and the AlphaGV-125 will unload for the next 4 hours.

Characteristics	Non-Ionic and Amphoteric surfactants blend
	Melt point 120-126°F
	1.25 grams per minute solution rate
	Color -- Dark Blue

SOAP STICKS CATALOGUE

AlphaGV-198

This stick unloads 15 barrels of water and up to 20% condensate. Used in well depths in the range of 6,000 feet or 1,870 meters.

Characteristics

Non-Ionic and Amphoteric surfactants blend

Melt point 117 to 126°F

1.98 grams per minute solution rate

Color -- White

AlphaGV-206

This stick is the most popular of the AlphaGV sticks. It unloads 15 barrels solution and up to 85% condensate. Used in many different depth primarily to target high levels of condensate. Useful when used with AlphaF-118 for high volumes of water and high levels of condensate.

Characteristics

Non-Ionic and Amphoteric surfactants blend

Melt point 117 to 126°F

1.98 grams per minute solution rate

Color -- Light Blue

SOAP STICKS CATALOGUE

AlphaGV-234

This stick is a fast dissolver and unloads 1-15 barrels of water and up to 70% condensate. Commonly used in well depths < 4500 feet or 1371 meters.

Characteristics

Non-Ionic and Amphoteric surfactants blend

Melt point 116 to 122°F

1.98 grams per minute solution rate

Color – Yellow

AlphaGV-240

This is the fastest dissolving stick in the GVF series and gives a quick unload with the ability to unload up to 25% condensate in up to 15 barrels of water.

Characteristics

Nonionic and amphoteric surfactants

Melt point 116 to 122°F

240 grams per minute solution rate

Color – Pink

SOAP STICKS CATALOGUE

Chemical Treating Sticks

AlphaF-142 Foamer 142 sodium salt crystal terminator sticks are designed to prevent salt bridging in gas wells which produce low levels of water per day. We find these crystals generally form in low pressure wells. Foamer 142 contains a blend of surfactants and inhibitors that prevent sodium Sulfate, or sodium chloride crystals from growing in the tubing down hole. Once these salt crystals form, their growth rate increases and will eventually prevent the well from producing fluid or gas.

Characteristics

Non-Ionic
Melt Point 120°F
Quick Dissolving
Color -- Pale Blue

SOAP STICKS CATALOGUE

AlphaF-154 AlphaF-154 paraffin-dispersing sticks are used in wells in which paraffin in the produced condensate presents a plugging problem in the production perforations. The AlphaF-154 has 2 crystal modifiers, film foamers, and foaming surfactants to clean perforations and bring paraffin deposits to the surface. Used regularly, the AlphaF-154 will prevent the continuous deposition of paraffin in the perforations, production tubing, and flow lines.

Characteristics

Non-Ionic

Melt Point 120°F

Color -- Dark Brown / Black

AlphaF-135 The AlphaF-135 is a foaming corrosion inhibitor stick composed of a light foamer and a quaternary amine. This stick help prevent CO2 corrosion and has a low biocidal tendency that helps keep low levels of bacteria in check. This is a quick dissolving stick that will unload 5 to 10 barrels of water. It will penetrate SRB nests and sequesters low levels of CO2.

Characteristics

Non-Ionic Surfactant

Melt point 124°F

Color -- Light Blue

SOAP STICKS CATALOGUE

AlphaF-136 The AlphaF-136 is a corrosion control stick composed of a light foamer plus imidazoline and alkyl pyridine. This helps coat the tubing and protect it from H₂S and CO₂ corrosion. It will leave a film on the pipe for prolonged protection. It is fast dissolving and has a low foaming ability.

Characteristics	Non-Ionic Surfactant
	Melt point 120 -126°F
	Foam height 180 Half Life 1:00 min
	Color -- Brown

AlphaF-138 The AlphaF-138 is a corrosion and scale inhibitor. It is composed of imidazole and alkyl pyridine, plus a poly acrylamide scale inhibitor. This protects from all types of scale. This stick dissolves in about 30 minutes in water and should reach bottom easily before fully dissolving.

Characteristics	Non-Ionic Surfactant
	Melt point 126-130°F
	Color -- Brown

SOAP STICKS CATALOGUE

AlphaNF- 1920 This is a THPS stick for eliminating black water. It has a mild surfactant but very little foam height. It will help eliminate SRB down hole, in trucks or tanks and tanker trucks. It dissolves very rapidly in all waters.

Characteristics

Non-Ionic Surfactant
Melt point 122-126°F
Color – Off White

DRILL STICKS CATALOGUE

AlphaNF-1950

This is a soap stick that is used in drilling application. Drop 1 to 2 sticks in the drill stem when dealing with clays. This stick thins clay and cracks hard clays. It is a blend of Surfactants and Sodium acid Pyro phosphonate. Nick named, "Clay Cracker" by tool pushers. This stick has the ability to reduce wear on shaker screens and prevent bit balling, mud ring preventor, and calcium inhibitor.

Characteristics

Non-Ionic Surfactant
Melt point 123-128oF
Color -- Off White

AlphaNF-1930

This is a soap stick with PHPA added as a copolymer in a surfactant applied to drill fluids to help control shales and extend bentonite clay. It also helps link particles together to facilitate sweeps in well bores and minimize bit balling. Application rate is 1 stick for every drill stem addition.

Characteristics

Non-Ionic surfactant
Melt Point 120-126oF
Color -- White

SOAP STICKS CATALOGUE

AlphaFIZZ CAPS

AlphaFIZZ Caps

This is a seltzer stick used only on dead wells to help kick start the well. The application process is: drop 2 soap sticks and wait 1 hour. Then drop 6 to 8 AlphaFizz Caps in the tubing with the black end down and shut-in the well and wait for 45 minutes to 1 hour and then slowly open the well to ¼ turn only. Wait for fluid to reach the surface and then slowly open to 1/3 open. Do not open more than this - until the well is experiencing a full flow through the port.

Fizz Caps are a powder filled gelatin tube, sealed, two per vacuum sealed bag. Open the sealed bag only when ready to drop the Fizz Cap sticks. Once opened the shelf life is only one day. Keep in a cool dry place.

NOTE: WATER-SOLUBLE PAPER

A water-soluble paper shell can be added to any stick formula in place of the standard cardboard tubes. The paper-shell tube has a solid salt cap on the bottom – perfect for automatic soap stick launchers. During the summer months, the paper jacket will keep soap sticks from melting pre-maturely. It also gives the advantage of not having any trash to dispose of because it is all water soluble.

**** Note: Sample Sticks are Available ****

LIQUID FOAMER

LIQUID FOAMER

- Complus Systems has 2 basic surfactants & both have been tested at 400 ° F (204 ° C) for a 60-day duration with no signs of performance failure & no change in pH
- AlphaS-1630 is basically used for wells with oil levels from 0 to 20%
- AlphaS-1680 is basically used for wells with oil levels from 20% to 95% & also in wells with <20% oil levels, when chlorine levels are > 80,000 ppm



MAXIM PRODUCTS

- Our Liquid Surfactant with a 'MAXIM' suffix has an added inhibitor for corrosion & incrustations.
- The scale inhibitor is a high temperature phosphonate
- This corrosion inhibitor is an alkyl pyridine, excellent for continuous injection against H₂S and CO₂
- AlphaS-1630 Maxim (brown)
- AlphaS-1680 Maxim (blue)



SOAP STICKS LAUNCHERS

ECONOMICALLY DE-WATER GAS WELLS!

- Automatic *Soap Stick Launcher* will maximize gas production while reducing operator time
- With an ROI of 60 to 120 days using launchers for unattended well operation
- We offer 10 configurations of our automatic Soap Stick Launcher models in order to best suit the differing requirements of each well

Comparison of Soap Stick Launcher Models

the Model EE

the Model CE-ABV2W

the Model CE-HL-ABV2W

All 3 of these Launcher versions drop soap sticks based on time or on the command of an RTU. The CE-ABV2W and CE-HL-ABV2W Launchers will control flow from the well using the appropriate valve in the flow line. Therefore, the Model EE is reserved for those locations with a flowing rate below a specific maximum.

The Model EE is used for flow rates in 2-3/8" tubing below 250 MCFD (7 m³/D). Higher flow rates are acceptable when the tubing diameter is greater.

The Model CE-ABV2W is chosen when the flow rate is too high for the soap stick to fall past the wing block unaided. The CE-ABV2W will close the flow line valve in coordination with the launch of the soap stick.

The Model CE-HL-ABV2W is utilized when the flowing line pressure is in excess of 350-400 PSI (24-28 kg/cm²). It will also shut-in the flow line during the stick-drop sequence.

The EE is 25% less expensive than the CE-ABV2W or CE-HL-ABV2W but the EE is less flexible. The EE has a Dial Processor with a limited range of settings as shown above, whereas the CE-ABV2W and CE-HL-ABV2W are readily programmable for flow and off time, up to 99 hours.

Model 9EE – 18EE

MODEL 9EE

Solar Powered ***Soap Stick Launcher*** Eliminates the Need for Supply Gas!

The automatic *Soap Stick Launcher* increases gas well production through automatic application of soap sticks (surfactants) into the wellbore. Without an automatic Launcher, soap sticks are manually dropped by a two-valve launcher requiring the operator to make multiple visits to the well - which increases OPEX.

By utilizing the programmable automatic *Soap Stick Launcher*, surfactants can be dropped automatically over an extended period of time. Introducing soap sticks at the optimum point in the flow regime can dramatically improve production plus reduce the man hours required to maintain that production.

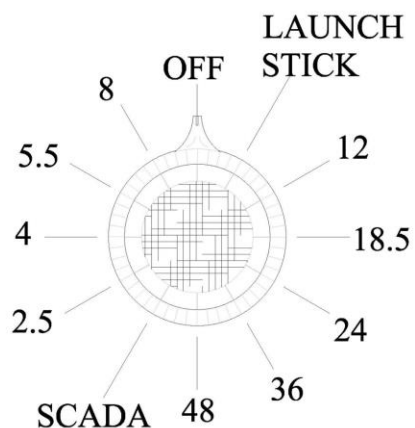


MODEL EE DIAL PROCESSOR

The Model 9EE and 18EE Soap Launchers utilize the common 1-1/4" (32mm) diameter soap stick. The capacity is 9 or 18 sticks. The Model 18 is taller than the M9 and drops 2 sticks every cycle. These Soap Launchers are solar-electric (12 volt) and use the *Select-and-Go*TM dial processor. Like our other Launchers, the EE Launchers are SCADA ready. The Model 9EE (or 18EE) is suitable for remote or difficult to reach well locations that benefit from regular introduction of surfactant.

The Model EE Launchers is the preferred model to drop a soap stick into a flowing well stream when the flow rate is below a defined maximum allowable rate for the wing block (tee) and tubing diameter.

With no supply gas requirements and no equipment going downhole, the Model 9EE (or 18EE) will help keep both CAPEX and OPEX reasonable. WP is 2000#. For a 3000# working pressure rating, add an 'H' to the item number (ex. M18H-EE).



The 2-1/2 hour setting will empty the Launcher in 24 hours.
The 5-1/2 hour setting will empty the Launcher in 48 hours.
The 18-1/2 hour setting will empty the Launcher in one week.

Model 9CE and Model 18CE

M9CE-ABV2W and M18CE-ABV2W SOAP STICK LAUNCHERS



When the flow rate is greater than the permissible rate of the Model EE, the operator has 2 options for maintaining unattended production:

- utilize the M-CE-ABV2W Launcher (see details in subsequent slides);
- program the RTU to signal the Launcher to drop a stick in coordination with the RTU closure of its flow line valve;

For higher flow rate wells, it is recommended that an ABV (actuated ball valve) be installed into the flow line to shut-in the flow from the well for a minimum duration while the falling soap stick transits the wing block tee ([view the Maximum Flow Rate Chart](#)).

For low flow rate locations, it is suggested to close the flow line long enough to build-up pressure and volume within the tubing to create the necessary flow rate to bring up accumulated liquid. Soap sticks are a great aid for atomizing liquid water. The target pressure increase would be >150 psi above the common line pressure.

M9CE-ABV2W and M18CE-ABV2W SOAP STICK LAUNCHERS



Without an automatic Launcher, soap sticks are manually dropped by a two-valve launcher requiring the operator to make multiple visits to the well, increasing OPEX.

The CE controller can be programmed to include a longer pressure-build period prior to the launch of the soap stick - for maximum liquid lift. Ideal for weaker locations.

The Model CE-ABV2W Soap Stick Launcher operates the flow-control valve (actuated ball valve) in conjunction with the stick drop.

For higher flow rate locations, a flow closure of 3 to 5 minutes will allow the soap stick to land at the top of the water column just as the well is re-opened.

M9CE Launcher and ABV2W Flow Control



- No gas emissions
- SCADA compatible
- Low-profile design
- Programmable controller
- Minimal flow restrictions
- 9 or 18 stick version
- 2000 PSI WP (3000# option)
- 55 amp/hour battery, 12 volt
- Maximum .5 amp/hour daily draw
- Launch 9 sticks/day or 9 sticks over 30 days
- Launch 18 sticks/day or 18 sticks over 30 days



M9CE and M18CE SOAP STICK LAUNCHERS



Model 9CE-ABV2W

The Model 9CE *Soap Stick Launcher* is a low-profile unit measuring only 32" tall. With a capacity of nine 1-1/4" diameter soap sticks, the Model 9CE can be programmed to drop 1 or 2 soap sticks per cycle.

Model 18CE-ABV2W

In larger diameter tubing, the gas velocity is slower. To lift liquid effectively, these locations will require a larger volume of surfactant per barrel compared to location with smaller tubing.

When a flowing well requires additional surfactant to maintain maximum production, the Model 18CE (seen here), is the unit of choice. Measuring only 15" taller than the 9CE, the Model 18CE offers a capacity of eighteen 1-1/4" diameter sticks and is programmable to drop 2 or 4 sticks at each cycle.

M9CE-ABV2W



with an ABV2W for flow line control

- Actuation: Both versions are 12v Solar Battery Powered – no supply gas required.
- Flow Rate - Gas: The Model CE can be programmed to send a low amperage signal to open/close an electric valve in the flow line such as the ABV2W. This function is required when the well produces *gas* above the allowable wing-block rate.
- Flow Rate - Liquids: The Model CE can close / open a 12v electric valve in the flow line when the well produces an *excess of water* above the allowable wing-block rate. Combining stop-cocking with a soap stick is the solution for de-watering -- up to 200 barrels of liquid per day from 2-3/8" tubing.
- 12v Flow Control Valve: An ABV2W controlled by the Model CE Launcher is ideal for shutting-in weaker wells that benefit from a pressure/volume building period of 1 or 2 hours. Once the ABV2W reopens, its large flow area causes no undue back-pressure – a real advantage for low pressure systems.
- Controller: The Solar Powered microprocessor features a continuous digital readout indicating the quantity of soap sticks in the Launcher as well as the time remaining until the next scheduled drop. The Controller can coordinate the flow from 1 or 2 electric actuated flow control valves. Control of a pneumatic valve is readily available also. Please inquire.
- Telemetry: Soap sticks can be dropped from an RTU command and the operation of the flow-control valve can be initiated by the RTU or the Launcher Controller.
- Launch Indicators: A rise in casing pressure indicates fluid loading in the tubing. Adding a transducer or Murphy Switch on the casing side can initiate a stick-drop into the tubing when the casing pressure reaches a pre-set value. Under these conditions, the launch is based on pressure, not time.
- Connections: All Models available for 2" NPT, 2-3/8", or 2-7/8" wellheads. We also offer low-profile adapters for 2" NPT through 4-1/2"-8 rnd.

Model EE Soap Stick Launcher

- Suitable for locations with lower flow rates
- Available in a 9 or 18 stick version
- 9 Position Dial-n-Go Processor – 2.5 to 48 hours cycle time
- Emissions-free 12v Electric Actuation
- Scada ready with a pre-programmed 2-minute launch delay feature
- Lowest cost per stick quantity
- No gas supply pressure required
- Easiest to understand and use
- 2000 and 3000 psi working pressure ratings
- Suitable for flowing line pressure up to 350 psi
- 250 MCFD (7000 m³/D) maximum rate up 2-3/8" tubing
- 500 MCFD (14000m³/D) maximum rate up 2-7/8" tubing
- 750 MCFD (21000m³/D) maximum rate up 3-1/2" tubing

Model CE-ABV2W Soap Stick Launcher

- Suitable for locations with flow rates that will require a shut-in period
- Suitable for higher and lower flow rates outside the ratings of the Model EE
- 9 or 18 stick option
- Digital Display – 10 minute to 99-hour cycle time options
- Program to drop 1 or more sticks each cycle (useful for certain horizontals)
- Displays the quantity of sticks remaining
- Emissions-free 12v Electric Actuation
- Scada ready – will wait up to 99 hours on the RTU to initiate a stick-drop
- Flow Control ready – choose an ABV2W or a pneumatic flow line valve
- Programmable Stick-Fall-Time - an asset for high rate, high PSI locations
- Option: alternate flow from the casing and/or the tubing
- Option: *Open-on-Pressure* setting – a low cost, high value option
- Suitable for low-pressure gathering systems up to 350 psi

Model CE-HL-ABV2W

- Required model when the flowing line pressure exceeds 350 psi
- 9 or 18 stick option
- Digital Display – 10 minutes to 99-hour flow time options
- Option of dropping 1 or more sticks each cycle
- Monitors the pressure in the tubing and Canister to protect the soap sticks
- Open-on-Pressure* feature for flow control is standard
- Displays the quantity of sticks remaining
- Flow control with an ABV2W or the Kimray-type pneumatic valve (please specify)
- Scada ready – will wait up to 99 hours for the RTU to initiate a stick-drop
- Flow Control – 10 minutes to 99-hour shut-in duration options
- Option: flow from the casing through a 2nd flow-control valve
- Programmable for extended shut-in period - helpful when pressure build-up is required
- Includes a self-dumping drip-pot as part of the Canister pre-inflation process
- Automatic canister deflation after the last soap stick has been launched

Comparisons Continued:

The **M-2 Midnight Launcher** holds 2 sticks only and drops them both at the same time. It can be loaded with the larger 1-5/8” (41mm) diameter stick which, together, is the surfactant equivalent of 3 of the standard 1-1/4” (31mm) soap sticks.

The M-2 has 7 hourly settings and is the Launcher with the lowest cost.

The soap sticks in the Model 2 Launcher will not be affected by high line pressure. The maximum line pressure limit of the M-2 is 950 PSI (66 kg/cm²) due to the differential across the large diameter valve.

The safe pressure rating of the M-2 Midnight Launcher is 2.5K (175 kg/cm²).

Midnight Launcher

MODEL 2 MIDNIGHT SOAP STICK LAUNCHERS



The **Model 2 Soap Stick Launcher** is an *automated version* of the common two-valve soap stick lubricator. It is less expensive than our higher capacity launchers. The **Midnight Launcher** increases gas well production through automatic application of soap sticks (surfactants) into the well bore.

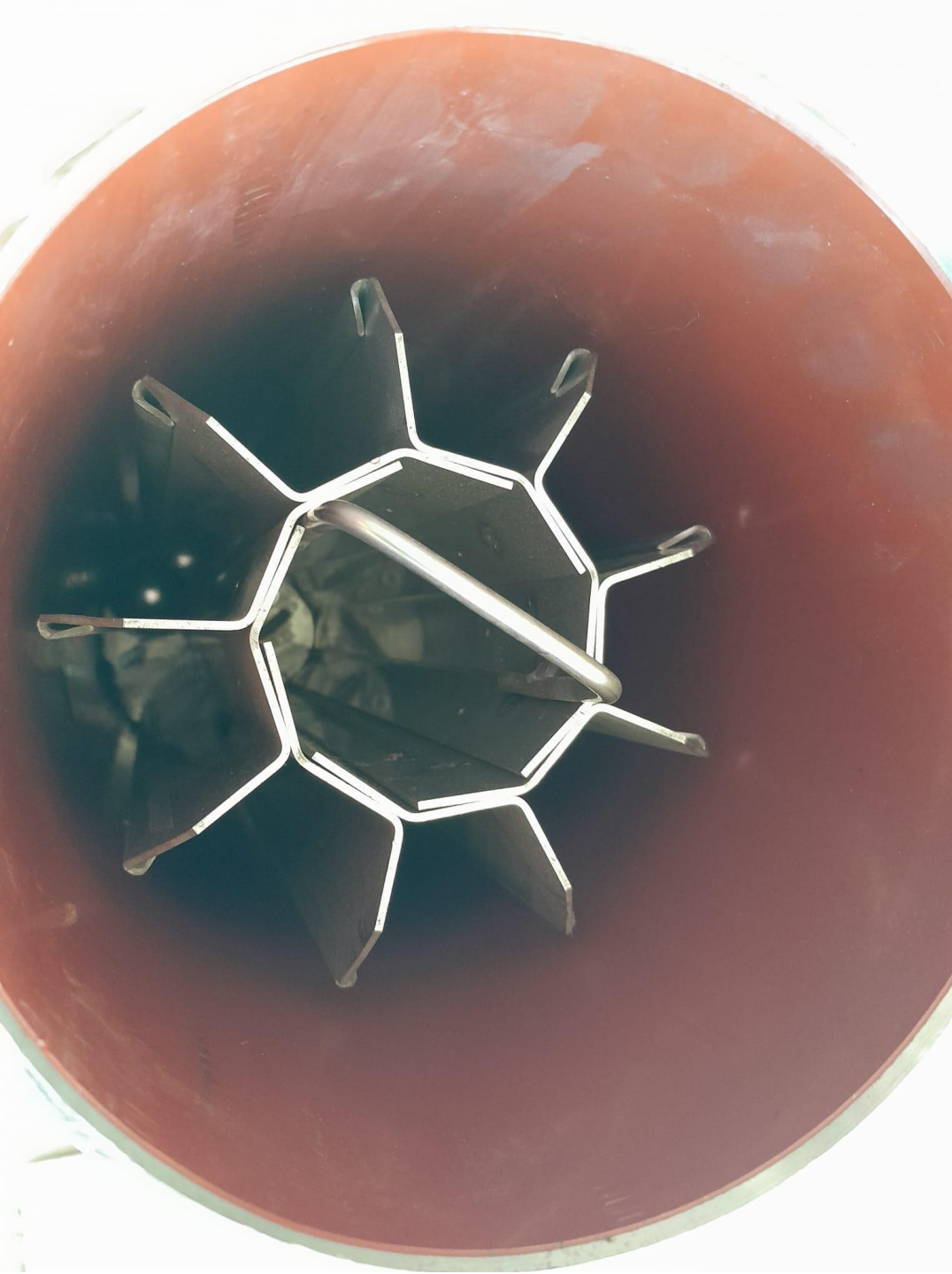
By utilizing the **Midnight Soap Stick Launcher**, surfactants can be dropped automatically. Introducing soap sticks at the optimum point in the flow regime can dramatically improve the performance of a well's production rate plus reduce the man-hours required to service the well.

Choose from 7 settings - 4 to 96 hours. The operator loads and drops 2 sticks manually, then reloads the Model 2 for a later auto-launch. Dial over to the 96 hours setting if flow from the location can be sustained by just 4 soap sticks per week.



Photo Gallery





view of the canister magazine
9 Soap Sticks

The 18-stick Canister is taller
and holds 2 chemical sticks per
slot



View of an **actuated ball valve (ABV)** used in the flow line to modulate the flow from the well.

Standard voltage is 12 with an option for 24-volts. The maximum differential across the ABV is 950 psi – a limit necessitated by the greater cross-sectional flow area of the ball valve.

When flow line pressure is greater than 950 psi, the use of the high flow rate ABV is not advisable. In that case, the CE Launchers are pre-wired to control a pneumatic Kimray-style valve. The correct model designation for ordering a CE Launcher to control a pneumatic valve is M-CE-Pn.

CONCLUSION

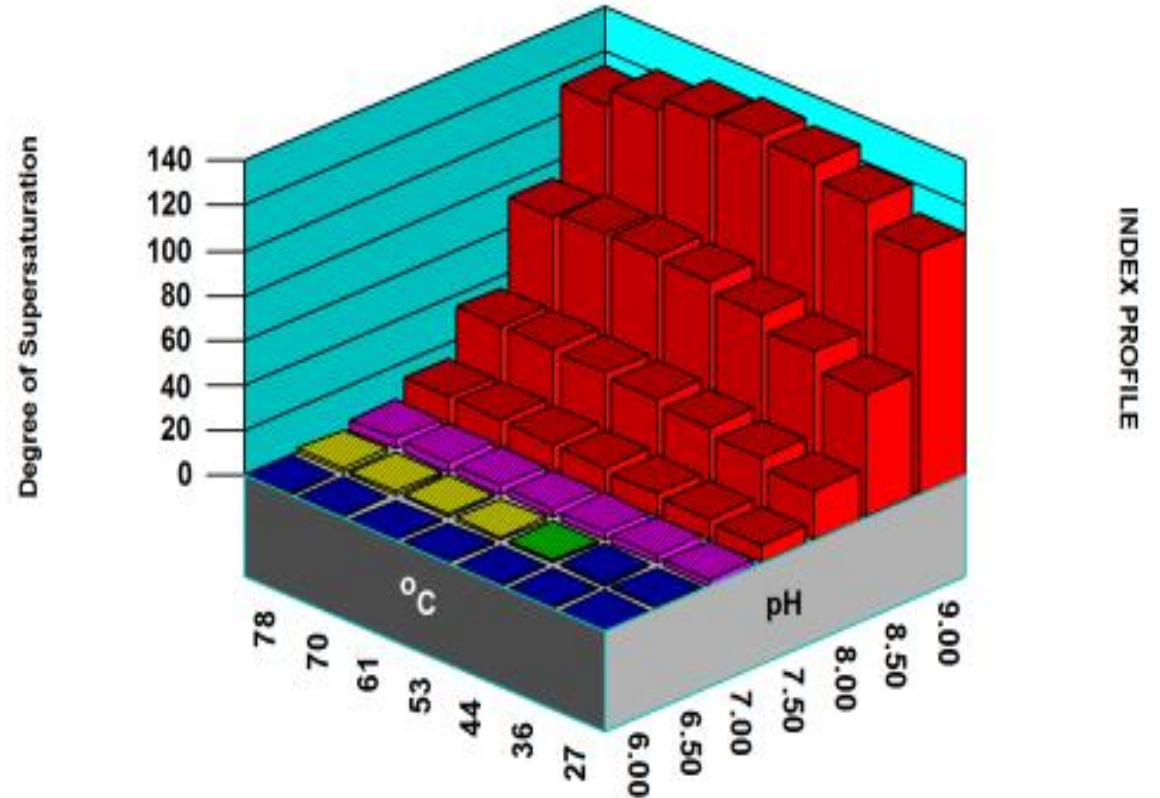
- Production increase
- Our surfactants are made to increase oil and gas production by discharging liquids from the column using foam
- These products also have the ability to protect against corrosion and scale if necessary
- Each well needs to be evaluated for volume of water & oil. knowing the well head pressure and depth is beneficial also
- Complus Systems Foam sticks have been used since 1985 and have been used in over 500,000 wells globally.
- We are on our 4th generation of foam stick technology; We continue to research and develop new answers daily



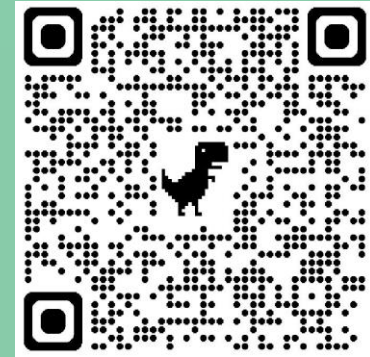
Water Analysis

- A "French Creek Scale" evaluation is available for all water samples sent to Complus Systems laboratory to determine the tendency for scale in formation water
- This allows us to determine if the incrustation tendency is in the bottom of the well or in surface equipment, to better prepare treatment plans if necessary.

Calcite Saturation Level



Thank you



Download this presentation

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 Laboratori 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