SAHARA CHEMICAL SOLUTIONS

High Performance Chemicals for Production

SCS Oilfield Solutions

OVERVIEW

SCS provides full scale chemical flooding EOR solutions including laboratory testing, site implementation, produced production chemicals, scale dissolvers and services.

SCS' proven strengths are innovative, specialized and sustainable chemical solutions with consistent product quality.

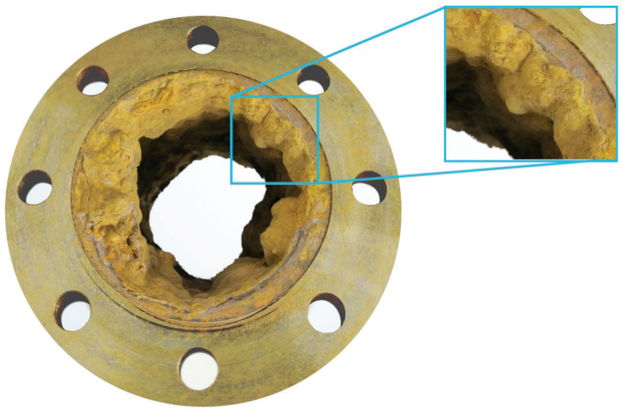
Best-in-class well site operations are crucial to maximize recovery of oil and gas reserves, while minimizing the impact on the environment. Specialty chemicals that impacts unique capabilities and functionalities are an integral part of this goal.

OILFIELD CHEMICALS

For oilfield production, SCS provides an array of high-performance chemicals to help operators and service companies meet their technical challenges.
Due to high variances of crude oil properties, most of the chemicals used in oilfield are individually formulated. SCS' specialists are fully experienced in laboratory screening and on site monitoring.
SCS always aims at providing the most efficient and cost-effective products to maximize client's benefit.

RESEARCH FORCE

SCS has robust research manpower in the oilfield production; this ensures delivery of first-class chemical solutions.
SCS research center performs theoretical research, products development, technical service and quality inspection.
SCS specialists have thorough understanding of oil production operations and chemical solutions' applications.



SAHARA CHEMICAL SOLUTIONS

Performance Chemicals Classification
Production Services

Flow Assurance

- Paraffin Inhibitor/Dispersant/ PPD
- Asphaltene inhibitor/Dispersant
- Water clarifier/Deoiler
- Drag reducer
- Demulsifier
- Defoamer

PARAFFIN CONTROL

Paraffins are naturally occurring in saturated linear or branched alkane molecules. The presence of paraffins does not indicate the potential for a paraffin problem, and most paraffinic crude are produced without precipitation or the need for chemical or physical treatment.
Paraffin can become problematic when the fluids are subjected to various physical changes required to produce crude oil with specific specs and without precipitation of paraffinic crude.
Paraffin precipitation poses a major challenge to oil production. It can cause numerous issues such as decreased flow rates and even pipeline blockage.
SCS possesses high-performance chemical additives that help tackle even the most challenging paraffinic crudes and condensates either in paraffin remediation or continuous treatment systems.

DEMULSIFIERS

During the production of crude oil, a multi-phase fluid is produced. Co-produced with the oil are natural gas and an amount of water, usually saline, which as the reservoir is depleted, can be present in quite large proportions.
Separating oil from water can be very time critical because of residence time, especially on offshore platforms. In addition, the separation process onshore must be optimized and therefore needs effective Demulsifiers.
The demulsifier bases of SCS products are especially designed for specific properties: fast dropping, excellent overall treatment and dehydrating/desalting.

WATER CLARIFIERS/DEOILER

Demulsification and separation of the hydrocarbon phase during primary separation of produced fluids usually does not leave an aqueous phase sufficiently free of hydrocarbons to meet the discharge limits required for water disposal.
SCS provides a range of water clarifier/Deoiler products working with different mechanisms: flocculation and/or coagulation.

ASPHALTENE CONTROL

When asphaltene molecules are destabilized, the asphaltene molecules precipitate and form hard and brittle deposits. Similar to the damage caused by paraffin and mineral scale, these deposits can plug pore spaces in the reservoir and near wellbore area, form downhole blockages and emulsions, cause pump failures and tubing blockages, separation issues, and tank bottoms.
SCS offers high-performance chemicals capable to stabilize asphaltene molecules in hydrocarbon liquids, reducing precipitation and deposition.

DEFOAMER

Foam in oilfield typically refers to the foam that forms in hydrocarbon production processing separators as a result of forced and rapid oil/gas separation.
Depending on the nature of the crude oil and the type of separation scheme used, foaming problems can curtail crude oil production and even cause unwanted and unexpected process shutdowns.
SCS Defoamer helps efficiently mitigate the foam problem.

Asset Integrity

- Hydrogen sulfide scavenger
- Corrosion inhibitor
- Oxygen scavenger
- Scale inhibitor
- Multifunction
- Biocide

CORROSION INHIBITOR

Oil and gas fields consume a tremendous amount of iron and steel pipe, tubing, pumps, valves, and sucker rods. Leaks cause loss of oil and gas and also permit infiltration of water and silt, thus increasing corrosion damage. Saline water and sulfides are often present in oil and gas wells. Corrosion in wells occurs inside and outside the casing. Surface equipment is subject to atmospheric corrosion. In secondary recovery operations, water is pumped into the well to force up the oil.
SCS has developed an array of corrosion inhibitor products that can be used to prevent oilfield corrosion problems.

SCALE INHIBITOR

Wells producing water are likely to develop deposits of inorganic scales. Scales can and do coat perforations, casing, production tubulars, valves, pumps, and downhole completion equipment. If allowed to proceed, this scaling will limit production, eventually requiring abandonment of the well.
SCS has developed a broad range of scale inhibitor products that can be used to prevent scale formation problems.

OXYGEN SCAVENGER

Oxygen is a serious threat to system integrity, even at extremely low amounts. Most oxygen corrosion is directly attributable to addition of fluids which have been exposed to fresh air. Oxygen can be introduced during fracs, water-floods, squeezes and workovers when large volumes of fluids are injected downhole.
SCS oxygen scavengers are selected to help keep oil and gas production systems operating at peak efficiency levels eliminating oxygen leads to reduced failures.

BIOCIDE

Bacterial contamination of oil & gas production systems is a serious production challenge requiring the right chemistry and application methods to properly control. Bacteria may have been introduced in many ways and over many years - drilling well completions, reinjection of produced waters for pressure maintenance, EOR projects, workovers, hot oil/water treatments, etc. It's often impossible to determine the cause, but once bacteria take up residence in your reservoir or production system, they are difficult to eliminate.
SCS Biocides can help minimize production issues and maximize asset life. Proper control of bacteria results in reduced operational costs, reduced H2S generation, cleaner production, more efficient operations and reduced failure rates.

HYDROGEN SULFIDE SCAVENGER

A major production challenge in oil & gas systems is the presence of Hydrogen Sulfide (H2S).
H2S is highly reactive, especially with iron, and in most systems the H2S will readily react with iron in ionic form or iron from metal surfaces, to form various species of iron sulfide (FeS). SRB colonies adhering to pipe walls can become iron sulfide factories, eating away at the pipe surface and forming pits which eventually may cause leaks and failures.
SCS H2S scavenger products will initiate an instantaneous and irreversible reaction to remove H2S with no effect on oil, gas or fuel quality resulting reduction potential on corrosion to equipment and pipelines.

SAHARA CHEMICAL SOLUTIONS

Unique Formulations

PRODUCTION	FUNCTION	CHEMISTRY	RECOMMENDED PRODUCTS
Scale Dissolvers	Calcium Carbonates Scales Removal	Blends of Carboxylic Acids, Carboxylates and Amino acids	Scale Dissolver SCSR-01
	Calcium Sulfate Scale Removal		Scale Dissolver SAG-01
	Barium & Strontium Sulfate Scale Removal		Scale Dissolver SCSR-03
	Vanadium Pentoxide & Trabzonite Scale Removal		Scale Dissolver SCSR-07
	Iron Sulfide Scale Removal		Scale Dissolver SCSR-02
	Barium Sulfate Scale Removal		Scale Dissolver SCSR-04

PRODUCTION	FUNCTION	CHEMISTRY	RECOMMENDED PRODUCTS
Flow Assurance	Paraffin Control	Modified Poly Carboxylates Poly Acrylate/Poly Vinyl	SCS-PPD 600 SCS-482...
	Demulsifier	Modified Resin Poly Amines, Polyols, Poly Alkoxylates	SCS-1001, SCS-1002, SCS-1003, SCS-1004, SCS-1005, SCS-1006 ...
	Water Clarifier	Modified Polymer, Poly Carboxylate	SCS-9000, SCS-9001...
	Asphaltene Control	Modified Polymers	SCS-AS 600
	Defoamer	Silicone Base, Fatty Alcohol Alkoxylates	SCS-5000, SCS-5001...
Asset Integrity	Corrosion Inhibitor	Imidazoline, Modified Imidazoline, Quaternary Ammonium Salt, Amine Blends	SCS-2000, SCS-2001, SCS-2003, SCS-2004, SCS-2005, SCS-2009....
	Scale Inhibitor	Poly Carboxylates, Phosphonate derivatives	SCS-4002, SCS-4003...
	Biocide	Quaternary Ammonium Salt, THPS, Glutaraldehyde	SCS-7004,SCS-7006, SCS-7008 SCS-7005, SCS-7007, SCS-7009....
	Oxygen Scavenger	Ammonium Bisulphite, Sodium Meta Bisulphite	SCS-8000, SCS-8001, SCS-8002....
	H2S Scavenger	Triazine, Catalyzed Triazine	SCS-HS 500 SCS-HS 600...
	Multifunction	Blends of Corrosion Inhibitor Intermediates and Quaternary Ammonium Salts Phosphonate Derivatives	SCS-2007, SCS-2010....