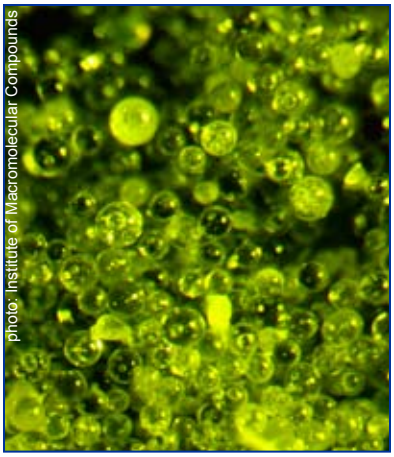

Oilfield Chemicals

US Industry Study with Forecasts for **2015 & 2020**

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INDUSTRY STRUCTURE

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Oil and gas drilling activity -- which began to rebound in 2010 -- is expected to continue to expand due to the recovery of oil prices and the development of shale gas resources.

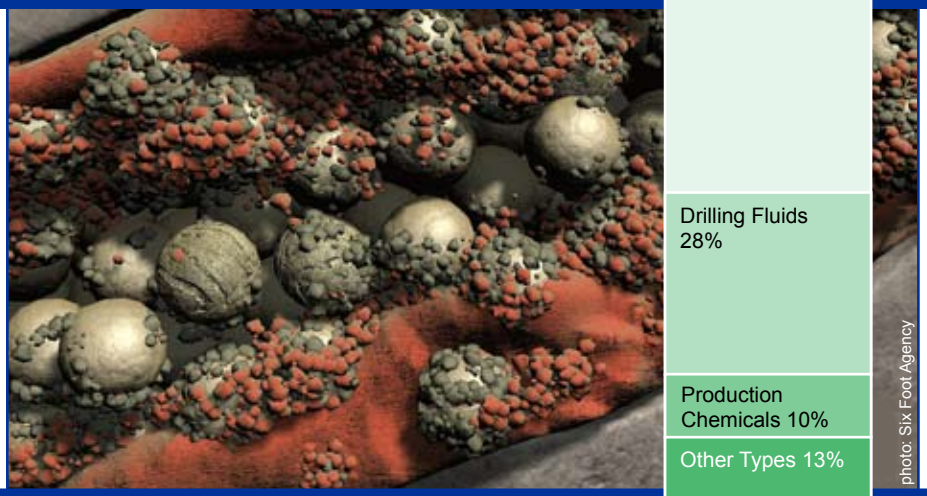
US demand to rise 8.3% annually through 2015

US demand for oilfield chemicals is projected to increase 8.3 percent per year to $13.6 billion in 2015. Following a precipitous dropoff that began in late 2008 and lasted through much of 2009, upstream oil and gas activity in the US has accelerated. Drilling activity began to rebound in 2010, registered even faster growth through the first half of 2011, and is expected to continue to expand due to the recovery of oil prices and the development of shale gas resources.

Shale development efforts key to boosting demand

Well stimulation activities such as hydraulic fracturing are considered to be an indispensible component of developing the immense reserves of oil and gas held by shale formations. Growth has been supported by companies looking to establish a foothold in the shale gas segment because it is expected to be an increasingly important element of the domestic energy supply. Also, producers have sought to develop already acquired leases. Continued shale development efforts will boost demand for chemicals and other raw materials used in stimulation fluids. Already, shale gas development has reshaped the oilfield chemical product mix as suppliers adopt drilling and fracturing fluids better suited for use in such applications as sophisticated multistage fracturing operations and drilling in environmentally sensitive areas.

US Oilfield Chemicals Demand
($13.6 billion, 2015)



Although there is substantial optimism about the prospects for US upstream oil and gas activity (and, in turn, for oilfield chemical demand), a number of factors could serve to restrain demand. Perhaps foremost among them is the opposition -- strong in some parts of the US -- to the use of hydraulic fracturing. Much of this opposition is rooted in concerns about the potential effects of the process on groundwater supplies. Although properly fractured, cemented and completed wells pose no harm to groundwater supplies, oilfield mishaps have prompted safety concerns that may restrict growth in upstream oil and gas activity in the longer term. However, to date the momentum has favored exploration and production activity.

Stimulation fluid materials to register fastest growth

The market potential for raw materials used in the formulation of oilfield chemical products is based most fundamentally on the outlook for the finished products in which they are used. As a result, raw materials such as natural gums, polymers, acids and surfactants used in stimulation fluids are likely to register the fastest growth, driven by continued expansion of well stimulation technologies, fueled in part by sustained growth in shale development. In contrast, gases and other products used in enhanced oil recovery (EOR) materials are likely to post less impressive, though still considerable, advances.

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Sample Text, Table & Chart

TABLE V-5

COMMODITY CHEMICAL DEMAND IN OILFIELD APPLICATIONS
(million dollars)

Item	2000	2005	2010	2015	2020
Active Rotary Drilling Rigs					
mil lb chem/rig					
Commodity Oilfield Chemicals (mil lb)					
cents/lb					
Commodity Oilfield Chemical Demand					
Cement					
Barite					
Acids					
Bromine Compounds					
Clays					
Calcium Chloride					
Other					
% commodities					
Oilfield Chemical Raw Material Dmnd					

SAMPLE TABLE

OILFIELD CHEMICAL RAW MATERIALS

Surfactants

Demand for surfactants in oilfield applications is forecas billion. Volume de ounds in the same y n each of the three

SAMPLE TEXT

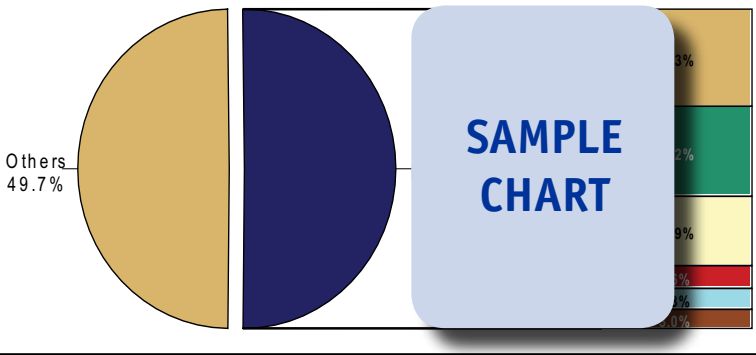
rowth in drilling ar creases in overall oil a duction, future surfactant demand will be supported by the gr of the higher-value oilfield chemical formulations necessary t produce oil and gas when faced with demanding downhole c These more specialized formulations make significant use of which can provide a broad range of performance enhancemer mulated oilfield chemical products.

Surfactants (or surface active agents) are defined as chemical agents which modify the interaction between two surfaces and provide a variety of functions including dispersing, wetting/foaming, emulsification, demulsification, detergency and viscosity modification. Raw materials are derived from petrochemical feedstocks (e.g., ethylene) and renewable materials such as animal fats and vegetable oils such as palm oil or coconut oil. In oilfield applications, surfactants can function as emulsifiers, dispersants, oil-wetters, water-wetters, foamers and defoamers. Surfactants improve fluid tolerance to ion contamination and increase the inhibitive properties of the fluid in drilled shales. They a to alter and control temperature stability, corrosiveness and f tendencies of the drilling fluid.

Surfactants, particularly foaming agents, are used in we tion applications. Foamers can reduce water loading, increas duction and reduce corrosion. These products allow end use chemical techniques to underperforming gas wells before res

CHART VI-1

US FORMULATED OILFIELD CHEMICAL MARKET SHARE
($9.1 billion, 2010)



SAMPLE CHART

Oilfield Chemicals

US Industry Study with Forecasts for ***2015 & 2020***

Sample Profile, Table & Forecast

TABLE IV-2

OILFIELD STIMULATION CHEMICAL DEMAND
(million dollars)

Item	2000	2005	2010	2015	2020
Producing Wells (000)					140
000 gal fluid/well					3
Stimulation Fluid Volume (mil gal)					0
Explosives Volume (mil lbs)					4
$/gallon - all fluids					2
Stimulation Chemical Demand					0
Stimulation Fluids:					0
Hydraulic Fracturing Fluids					0
Acid Frac/Acidizing Fluids					0
Explosives					0
% stimulation chemicals					6
Oilfield Chemical Demand					00

SAMPLE TABLE

COMPANY PROFILES

Champion Technologies Incorporated
3200 Southwest Freeway, Suite 2700
Houston, TX 77027
713-627-3303
http://www.ch

Annual Sales:
Employment:

Key Products: enhancement, corrosion and egrity management; and add menting and related operatic

SAMPLE PROFILE

Champion Technologies is involved in the production and supply of a variety of chemicals for the oil production industry. The privately held company's products include chemicals used in the drilling, production, pipeline and refinery stages of oil production. Champion is owned by Permian Mud Service Incorporated (Houston, Texas), which, in turn, is 80-percent owned by the Johnson family.

The Company's products encompass chemicals for such applications as flow assurance, production enhancement, corrosion and scale control, oil/water separation and integrity management. These chemicals are used in the oil and gas production, heavy oil, enhanced oil recovery, deepwater, oil sands, pipeline and refinery markets. In addition, Champion Technologies provides specialty chemicals and related services to oilfield services companies via the Special Products division.

For flow assurance and production enhancement applications, Champion Technologies offers such products as FLEXOIL paraffin inhibitors, ASSURE hydrate inhibitors, FLOTRON paraffin control and

"Demand for stimulation chemicals used in oilfield applications is forecast to rise nearly ten percent per year through 2015 to $6.7 billion. Efforts to boost production from maturing oil and gas fields will result in a substantial increase in well stimulation activity -- in a high price environment, these methods become an economical way of enhancing well output."

--Section IV, pg. 115

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Other Studies

Shale Gas: Products & Services

Demand for products and services used in US shale gas development will grow 12.5 percent annually through 2015, as activity continues to escalate in emerging shale plays. Drilling equipment and consumables, and fluids and materials will both grow equally fast. Gains for services will be led by pressure pumping, and completion and production. This study analyzes the $29 billion US shale gas product and service industry, with forecasts for 2015 and 2020 by type, region and shale play. The study also evaluates company market share and profiles industry players.

#2777 ..... August 2011 ..... $4900

World Well Stimulation Materials

Global demand for well stimulation materials will rise 14 percent annually through 2015. Advances will be driven by higher oil prices that have spurred increased drilling activity and justified the additional costs of well stimulation. The US will remain the dominant market. This study analyzes the $5.8 billion world well stimulation material industry, with forecasts for 2015 and 2020 by type, country (US, Russia, China, Canada) and region (Latin America, Europe, Asia/Pacific, Africa/Mideast). The study also evaluates company market share and profiles industry competitors.

#2752 ..... April 2011 ..... $6100

World Oilfield Chemicals

Global oilfield chemical demand will rise 8.6 percent yearly through 2014, driven by a recovery in the oil and gas industry and higher oil and gas prices. North America will remain the dominant region while Central and South America grows the fastest. Stimulation and enhanced oil recovery chemicals will lead gains. This study analyzes the $13.7 billion world oilfield chemical industry, with forecasts for 2014 and 2019 by product, world region and for 26 countries. It also evaluates company market share and profiles industry competitors.

#2702 ..... December 2010 ..... $5900

Well Stimulation Materials

US demand for oil and gas well stimulation materials is projected to increase 14 percent annually through 2014. Gains will be buoyed by renewed efforts to reduce dependence on foreign energy sources. The largest segment, proppants, will also be one of the fastest growing, along with gases and other materials. This study analyzes the $3.8 billion US well stimulation material industry, with forecasts for 2014 and 2019 by product and US regional market. It also evaluates company market share and profiles industry players.

#2636 ..... May 2010 ..... $4900

Refinery Chemicals

US refinery chemical demand will rise five percent annually through 2014, driven by the use of new, higher-value products that offer enhanced performance. Merchant hydrogen will remain the largest product type and grow the fastest. Petroleum treatment and conversion will remain the largest and fastest growing applications. This study analyzes the $5.5 billion US refinery chemical industry, with forecasts for 2014 and 2019 by application and product. It also evaluates company market share and profiles industry players.

#2629 ..... April 2010 ..... $4700

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