# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

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UNITED STATES OF AMER	JCA,	)	
Antitrust Division		)	
450 5 <sup>th</sup> Street NW, Suite 8000		)	
Washington, DC 20530		)	
	Plaintiff,		Case: 1:10-cv-00659 Assigned To: Kessler, Gladys
V.			Assign. Date: 4/27/2010 Description: Antitrust
BAKER HUGHES INCORPO	RATED		
2929 Allen Parkway		)	Date Filed:
Suite 2100		)	
Houston, Texas 77019		)	
		)	
and		)	
		)	
BJ SERVICES COMPANY		)	
4601 Westway Park Blvd.		Ś	
Houston, Texas 77041		)	
]	Defendants.	) )	

# **COMPLAINT**

The United States of America ("United States"), acting under the direction of the Attorney General of the United States, brings this civil action against Baker Hughes Incorporated ("Baker Hughes") and BJ Services Company ("BJ Services") to enjoin Baker Hughes' proposed merger with BJ Services, and to obtain other equitable relief. The United States complains and alleges as follows:

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#### I. NATURE OF THE ACTION

- 1. Baker Hughes' merger with BJ Services would combine two of only four companies that compete with specially equipped vessels to provide oil and gas companies with pumping services ("vessel stimulation services") necessary to enable and stimulate oil and gas production in the U.S. Gulf of Mexico ("Gulf"). These vessel stimulation services are used in the vast majority of offshore wells in the Gulf.
- 2. Baker Hughes and BJ Services compete head-to-head to provide vessel stimulation services in the Gulf, each with two vessels. This competition will be lost if this transaction is allowed to proceed. The merged firm, and the two other firms providing vessel stimulation services in the Gulf, will likely compete less aggressively, leading to higher prices and a reduction in service quality.
- 3. Absent the merger, Baker Hughes and BJ Services each need two vessels in the Gulf to compete effectively. With this transaction, the merged firm gains the incentive and ability to remove one or more stimulation vessels from the region in order to reduce the available supply of vessels and raise the price of vessel stimulation services in the Gulf. This will cause customers to pay more for vessel stimulation services.
- 4. Accordingly, the proposed merger would substantially lessen competition for vessel stimulation services in the Gulf and violates Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

#### II. THE PARTIES AND THE TRANSACTION

5. Baker Hughes is a Delaware corporation headquartered in Houston. A major supplier of

products and services for drilling, formation evaluation, completion and production to the worldwide oil and natural gas industry, Baker Hughes reported total revenues of approximately \$9.7 billion in 2009. Baker Hughes supports its two stimulation vessels in the Gulf with facilities in Louisiana and Texas.

- 6. BJ Services is a Delaware corporation headquartered in Houston. Also a leading worldwide provider of products and services to the oilfield industry, BJ Services reported revenues of \$4.1 billion for fiscal year 2009. It supports its two stimulation vessels in the Gulf with facilities in Louisiana and Texas.
- 7. Baker Hughes proposes to acquire 100% of BJ Services' stock in exchange for newly issued shares of Baker Hughes stock and cash, valued at approximately \$5.5 billion at the time the merger agreement was signed.

## III. JURISDICTION AND VENUE

- 8. This action is filed by the United States under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, which invests the Court with jurisdiction to prevent and restrain violations of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.
- 9. Baker Hughes and BJ Services provide vessel stimulation services in the flow of interstate commerce and their activities in the development and sale of these services substantially affect interstate commerce. This Court has subject matter jurisdiction over this action pursuant to Section 15 of the Clayton Act, 15 U.S.C. § 25, and 28 U.S.C. §§ 1331, 1337 (a), and 1345.
- 10. The defendants have consented to venue and personal jurisdiction in this judicial district.

#### IV. TRADE AND COMMERCE

# A. Background

# 1. Overview of Drilling and Completion Process

- 11. Offshore development of oil and natural gas resources in the Gulf involves several stages. An oil and gas company leases the exploration rights to a specific block from a state or the federal government, determines that it is seismically and economically feasible to drill for oil or gas in that block, and drills an exploratory well. Wells in the Gulf may be located in inland waters (generally 50 feet or less), on the shelf (50 to 1000 feet), in deepwater (1000 feet or greater), and in ultradeepwater (greater than 3500 feet of water).
- 12. After drilling the exploratory well, if the oil and gas company decides to extract the oil and natural gas, the well must be "completed," or prepared for production. The completion process is designed to enable and control the flow of oil and gas from the formation through the wellbore and to the surface.
- 13. During the completion process the oil and gas company installs cement casing that lines the wellbore and tubing through which the oil and gas will flow. Completion tools, such as packers, are installed at the bottom of the well to create a seal. Explosives punch holes through the casing into the formation so that the oil and gas can flow from the formation into the wellbore. Wells in the Gulf also generally require sand control and stimulation services, described in greater detail below, which involve the installation of equipment and the pumping of fluids and other proppants downhole under high pressure, as part of the completion process.
- 14. Drilling and completing a well is extremely costly, particularly in deepwater. It can take months or longer to drill and complete an offshore well. The daily costs for the drilling rig and

other assets often exceed \$100,000 for wells on the shelf and may be as much as \$1 million or more for wells in deepwater. A drilling rig and other assets remain at the drilling site while stimulation services are performed and throughout the completion process.

#### 2. Sand Control and Stimulation Services

- 15. Due to the soft rock formations in the Gulf, nearly all wells require some form of sand control to prevent the formation sand from entering the wellbore and interfering with the flow of oil. Some wells also require a stimulation service known as acidizing, in which acid is pumped into the formation to repair damage on existing wells. Each reservoir of oil and gas deposits may require a customized sand control or stimulation service (referred to here interchangeably or collectively as "stimulation services") because it may have distinct rock formation, depth, temperature, pressure, and other characteristics.
- 16. There are a number of types of sand control and stimulation services. In a "gravel pack," screens, packers and other equipment, known as "sand control tools," are installed downhole in the production zone of the wellbore. A slurry of coarse sand mixed with brine is then pumped downhole at a pressure that does not fracture the formation. Because the diameter of the sand pumped downhole is larger than the diameter of the sand in the formation, these larger "pumped" grains of sand and the sand control screen serve as a two stage filter to block the formation sand from entering the wellbore. Another type of sand control, called a "high-rate water pack," is similar to a gravel pack except that it uses a different type of fluid and the pumping takes place at a pressure that will create minor fractures in formation.
- 17. The most common form of sand control service performed offshore in the Gulf is a "frac

pack." After installation of the sand control tools, viscous fluids are pumped into the well under pressure high enough to produce fractures in the formation thirty feet or more from the wellbore. Various substances called proppants (such as sand, bauxite or other materials) are then pumped into the cracks to prop them open to facilitate the flow of oil or gas. Frac packs are highly effective in stimulating oil and gas production as well as preventing sand from migrating into the well. Performance of a frac pack is a complex engineering job that requires large amounts of fluid and proppants to be pumped under high pressure.

- 18. Stimulation vessels, on which pumps and other equipment are installed, perform most stimulation services in the Gulf. Oil and gas companies need the pumping portion of the job, performed by the stimulation vessel, to be completed promptly after the installation of the downhole sand control tools. Stimulation services represent a very small percentage of the total cost of completing a well. However, no other completion work can be performed if the vessel is late or unavailable, and any "down time" at the well site is extremely costly due to huge daily rig and other costs.
- 19. Stimulation vessels in the Gulf are designed for the specific purpose of performing stimulation services. The vessels are typically well over 200 feet in length and are equipped with high pressure pumps, blenders, and storage tanks to hold large quantities of fluid and proppant. Critical vessel specifications include its storage capacity and the horsepower and barrels per minute at which it can pump. A vessel is also equipped with a computer controlled system, called a dynamic positioning or DP system, that maintains a ship's position by using the vessel's own propellers and thrusters. These dynamic positioning systems are installed so that the vessels do

not need to hold position by using anchors and chains or by being tied to the rig.

- 20. Stimulation service providers typically lease vessels under multi-year contracts from shipbuilders that design, construct or modify a vessel to meet the provider's specific criteria. Capital costs for the vessel and equipment can exceed \$30 million, and the contracts have day rates that often exceed \$20,000 per day.
- 21. To operate in the Gulf, a stimulation service vessel must comply with a federal law known as the "Jones Act." That Act requires that a vessel be built in the United States, bear a United States flag, and be staffed with a United States crew. Only a limited number of stimulation service vessels worldwide, in addition to those presently located in the Gulf, are Jones Act compliant, and these vessels are all operated by the same four firms that provide vessel stimulation service in the Gulf.
- 22. Stimulation service providers have their own experienced crews to operate a vessel's pumping and stimulation equipment. Stimulation service providers also rely extensively on technical support from engineers and scientists, who customize the stimulation job for the specific formation and conduct research to improve, develop and test stimulation services, fluids, sand control tools and other equipment.
- 23. Each of the four firms currently providing vessel stimulation services in the Gulf operates two stimulation vessels in that region. The companies bid both for annual or multi-year contracts, in which they often compete to be designated as a customer's primary supplier, as well as for specific jobs. For greater assurance that a vessel will be available when needed, customers completing wells in the deepwater often require that a vessel stimulation provider have two

vessels in its fleet. Even when designated a customer's primary supplier, a stimulation service provider may not have a vessel available at the precise time that a customer needs the work. In that case, the customer will not wait for that supplier's vessel to be available because the downtime on the rig is so costly, but will call another provider of vessel stimulation services in the Gulf.

#### **B.** Relevant Market

- 24. The provision of vessel stimulation services for wells located in the Gulf is a line of commerce and a relevant market within the meaning of Section 7 of the Clayton Act.
- 25. Oil and gas companies have no economical alternatives to sand control or stimulation services and need these services on the great majority of offshore wells in the Gulf. While some offshore stimulation services, such as acidizing, simple gravel pack or water pack operations, may be provided by pumps that are mounted on skids rather than vessels, these skid-mounted pumps cannot perform most stimulation services in the Gulf. Skid-mounted pumps are not feasible for stimulation services such as frac packs, which require high horsepower and significant storage. Nearly all frac pack jobs in the Gulf must be done with vessels. Logistical and safety concerns also cause some customers to prefer vessels even when skid-mounted pumps are technically capable of performing a particular job. The relevant product is vessel stimulation services.
- 26. Oil and gas companies procuring vessel stimulation services for wells located in the Gulf require a provider to have stimulation service vessels capable of providing the service in the region as well as facilities, engineers, sales and other staff to support the operation. The relevant geographic region is the Gulf. This region is defined based on the locations of customers.

27. A small but significant, non-transitory increase in the price of vessel stimulation services for wells located in the Gulf would not cause oil and gas company customers to turn to skid-mounted pumps or to any other type of service, or to vessel stimulation services provided outside the Gulf, or to otherwise reduce purchases of vessel stimulation services, in volumes sufficient to make such a price increase unprofitable.

# **C.** Market Participants

28. The four vessel stimulation service providers in the Gulf are now the only significant vessel stimulation service providers operating anywhere in the world and the only providers with vessels that comply with the Jones Act. Thus, there are no other providers of vessel stimulation service to which an oil and gas company in the Gulf could turn if faced with a small but significant, non-transitory increase in the price of vessel stimulation services in the Gulf.

## V. LIKELY ANTICOMPETITIVE EFFECTS OF THE TRANSACTION

- 29. Baker Hughes' merger with BJ Services would leave only three firms to perform vessel stimulation services in the Gulf. Based on 2008 revenues for vessel stimulation services in the Gulf, BJ Services accounted for approximately twenty percent of all vessel stimulation service revenues and Baker Hughes accounted for approximately fifteen percent. The other two firms providing vessel stimulation services in the Gulf accounted for all other revenues. Using a measure of market concentration called the Herfindahl-Hirschman Index ("HHI") (defined and explained in Appendix A), the transaction will increase the HHI by over 500 points, resulting in a post-merger HHI of approximately 3300 points.
- 30. This transaction will eliminate the head-to-head competition between Baker Hughes and

BJ Services to provide vessel stimulation services in the Gulf. Baker Hughes and BJ Services have competed on price, terms of sale and service quality, and have spurred each other's efforts to develop and improve products, performance and technology. Customers have benefitted from this competition.

- 31. Baker Hughes and BJ Services are relatively close substitutes in the provision of vessel stimulation services. They charge similar prices for similar types of jobs and provide vessel stimulation services in the same water depths and at many of the same geological locations.

  Baker Hughes and BJ Services have ranked first and second in terms of numerous customers' total annual expenditures on vessel stimulation services in the Gulf.
- 32. The merger would remove the constraint the parties impose on each other's pricing. Post merger, Baker Hughes will likely find it profitable to raise the price of vessel stimulation services. Customers now differentiate among vessel stimulation service providers on the basis of reputation, service quality, equipment, and other factors. Those customers that viewed Baker Hughes and BJ Services as their first and second choices for vessel stimulation services will lose their next-best alternative for these services. The merged firm will have the incentive and ability to raise its price, since it will now capture some of the sales that would have been lost to BJ Services had Baker Hughes raised price pre-merger. The value of these diverted sales is likely to be high because both firms currently earn high price-variable cost margins. Baker Hughes' incentive to raise price post-merger will likely be recognized by the two other firms providing vessel stimulation services in the Gulf, leading them to bid less aggressively. As a result, customers will likely experience higher prices for vessel stimulation services and a reduction in

service quality.

- 33. This transaction is also likely to reduce the number of stimulation vessels in the Gulf, leading to higher prices for vessel stimulation services. Absent the transaction, neither Baker Hughes nor BJ Services would have the incentive to move any of its stimulation vessels out of the Gulf because a firm needs two vessels in the region to compete effectively. By consolidating the firms' four vessels under one company's ownership, the transaction may present a profitable opportunity to remove one or two vessels from the Gulf, an opportunity Baker Hughes had recognized. With fewer vessels committed to provide service in the Gulf, utilization of the remaining vessels will likely increase, along with the likelihood that a vessel will be unavailable at any particular time. As a consequence, given customers' need for vessels to arrive at a precise time, firms providing vessel stimulation services in the Gulf will likely be able to increase prices.
- 34. The proposed transaction, therefore, is likely to lessen competition substantially in the provision of vessel stimulation services in the Gulf.

#### VI. ENTRY

35. Successful entry into the provision of vessel stimulation services in the Gulf is difficult, costly and time consuming. A provider of vessel stimulation services must obtain or build stimulation service vessels that are Jones Act compliant, and develop a reputation and establish its reliability before an oil and gas company will consider using its products or services. A problem with the vessel stimulation service not only causes delay, which is extremely costly; it can also damage the well, jeopardizing the customer's investment and its access to the oil-producing formation. With so much at stake, customers may require that the provider of vessel stimulation

services demonstrate a track record of several years or undergo lengthy and expensive qualification inspections before being included in bids.

- 36. Most customers in the Gulf also require that a stimulation service provider have two capable vessels to ensure that a vessel is available to perform their work at the precise time required even if one of the provider's vessels is out of service or busy on another job. Building even one stimulation vessel for the Gulf takes a long time and requires large capital expenditures.
- 37. A provider of vessel stimulation services in the Gulf must support its operation with onshore facilities, such as technology centers. A strong technical team, including experienced engineers and scientists, is also essential.
- 38. A provider of vessel stimulation services may have a difficult time growing its business if it does not also offer a line of sand control tools. Many customers prefer obtaining sand control tools from the same company that provides the vessel stimulation service. This reduces the number of companies with which a customer must deal, often results in a discount in the price of the services and products, and also eliminates the possibility of "finger-pointing" between the providers in the event that there is a problem or delay with the sand control tools or stimulation services. All four providers of vessel stimulation services in the Gulf sell sand control tools in addition to stimulation services.
- 39. For these reasons, entry by an additional vessel stimulation service provider would not be timely, likely, and sufficient to prevent the substantial lessening of competition caused by the elimination of BJ Services as an independent competitor.

## VII. THE PROPOSED MERGER VIOLATES SECTION 7 OF THE CLAYTON ACT

- 40. Each and every allegation in paragraphs 1 through 39 of this Complaint is here realleged with the same force and effect as though said paragraphs were here set forth in full.
- 41. The proposed merger of BJ Services by Baker Hughes is likely to lessen competition substantially in violation of Section 7 of the Clayton Act in the provision of vessel stimulation services in the Gulf.
- 42. Baker Hughes's merger of BJ Services likely will have the following effects:
  - actual and potential competition between Baker Hughes and BJ Services in the provision of vessel stimulation services in the Gulf will be eliminated;
  - competition generally in the provision of vessel stimulation services in the Gulf
     will be lessened substantially; and
  - c. prices paid by customers for vessel stimulation services in the Gulf will likely increase.
- 43. Unless restrained, the proposed merger will violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

## VIII. REQUESTED RELIEF

- 44. Plaintiff requests that this Court:
  - a. Adjudge and decree Baker Hughes' proposed merger with BJ Services to be unlawful and in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;
  - b. Preliminarily and permanently enjoin and restrain Defendants and all persons acting on their behalf from consummating the proposed merger of BJ Services, or from

entering into or carrying out any other agreement, plan, or understanding by which Baker Hughes would acquire, be acquired by, or merge with BJ Services;

- c. Award the United States its costs for this action; and
- d. Award the United States such other and further relief as the Court deems just and proper.

Dated: April 27, 2010

Respectfully submitted,

Chuston A Varia

Assistant Attorney General

D.C. Bar # 411654

MOLLY S.(BOAST

Deputy Assistant Attorney General

DONNA N. KOOPERSTEIN

Chief

Transportation, Energy &

Agriculture Section

WILLIAM H. STALLINGS

**Assistant Chief** 

Transportation, Energy &

Agriculture Section.

PATRICIA A. BRINK

Deputy Director, Office of Operations

ANGELA Z. HUGHES

D.C. Bar \$\\ 303420

Susan L. Edelheit D.C. Bar # 250720

Michelle Livingston D.C. Bar #461268

Kathleen S. O'Neill

John M. Snyder

John W. Elias

James A. Ryan

Joseph Chandra Mazumdar

Trial Attorneys

U.S. Department of Justice

**Antitrust Division** 

Transportation, Energy &

Agriculture Section

450 Fifth Street, NW

**Suite 8000** 

Washington, DC 20530

Telephone: (202) 307-6410

Fax No. (202) 307-2784

angela.hughes@usdoj.gov

# APPENDIX A DEFINITION OF HHI

The term "HHI" means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration. The HHI is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20%, the HHI is  $2,600 (30^2 + 30^2 + 20^2 + 20^2 = 2,600)$ . The HHI takes into account the relative size distribution of the firms in a market. It approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 points when a market is controlled by a single firm. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1,000 and 1,800 points are considered to be moderately concentrated, and markets in which the HHI is in excess of 1,800 points are considered to be highly concentrated. *See Horizontal Merger Guidelines* ¶ 1.51 (revised Apr. 8, 1997). Transactions that increase the HHI by more than 100 points in highly concentrated markets presumptively raise antitrust concerns under the *Horizontal Merger Guidelines* issued by the Department of Justice and the Federal Trade Commission. *See id.*