UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,
U.S. DEPARTMENT OF JUSTICE
WASHINGTON, D.C. 20530
(202) 724-6464

Plaintiff,

v.

BAKER HUGHES INCORPORATED,
3900 ESSEX LANE
HOUSTON, TEXAS 77027
(713) 439-8300

HUGHES TOOL COMPANY,
3900 ESSEX LANE
HOUSTON, TEXAS 77027
(713) 439-8300

NORTON COMPANY,
120 FRONT STREET
WORCESTER, MASSACHUSETTS 01608
(508) 795-5000

EASTMAN CHRISTENSEN COMPANY,
1937 SOUTH 300 WEST
SALT LAKE CITY, UTAH 84126
(801) 487-4545

Defendants.

Civil Action No. 90-0825

Filed: 4/10/90

Judge Royce C. Lamberth

COMPLAINT

The United States of America, plaintiff, by its attorneys, acting under the direction of the Attorney General of the United States, brings this civil action to obtain equitable and

other relief as is appropriate against the defendants named herein and complains and alleges as follows:

I.

JURISDICTION AND VENUE

1. This complaint is filed and this action is instituted under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and to restrain the violation by the defendants, as hereinafter alleged, of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

2. For the purpose of this action, Baker Hughes Incorporated, Hughes Tool Company, Norton Company and Eastman Christensen Company are found within the District of Columbia.

II.

DEFINITIONS

3. "Drill bit" means a device used in drilling wells for the exploration for or the production of crude oil or natural gas. A drill bit is attached either to the end of a drill string, which consists of thirty or forty-foot sections of heavy-walled pipe assembled end-to-end leading to the drilling rig at the surface, or to the end of a motor which is attached to the end of a drill string. There are two principal types of drill bits: (1) tricone drill bits, consisting of three steel cones that rotate as the bit turns; and (2) diamond drill bits,

that have no moving parts but contain cutting elements made of natural or synthetic diamond embedded in the bottom and sides of the bit.

4. "Diamond drill bit" means a PDC bit, a TSP bit, or a natural diamond bit.

5. "Natural diamond bit" means a drill bit with natural diamond cutting elements embedded into the bottom and sides of the bit.

6. "PDC bit" means a drill bit with cutting elements made of synthetic diamond called polycrystalline diamond compact embedded into the bottom and sides of the bit.

7. "TSP bit" means a drill bit with cutting elements made of thermally stable synthetic polycrystalline diamond material embedded into the bottom and sides of the bit.

8. "HHI" means the Herfindahl-Hirschman Index, a measure of market concentration 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 percent, the HHI is 2600 ($30^2 + 30^2 + 20^2 + 20^2 = 2600$). The HHI, which takes into account the relative size and distribution of the firms in a market, ranges from virtually zero to 10,000. The HHI approaches zero when a market is occupied by a large number of firms of relatively equal size. The HHI increases as the number of firms in the market decreases and as the disparity in size between the leading firms and the remaining firms increases. A

market with a post-acquisition HHI of 1000 is moderately concentrated, and a market with a post-acquisition HHI of 1800 is highly concentrated.

III.

DEFENDANTS

9. Baker Hughes Incorporated ("BHI") is made a defendant. BHI is a corporation organized and existing under the laws of the state of Delaware, with its principal offices in Houston, Texas. BHI manufactures and sells a variety of products and services, including products and services used in the drilling of oil and gas wells. Through its division and wholly-owned subsidiary, Hughes Tool Company, BHI manufactures and sells PDC bits, TSP bits, natural diamond bits, and tricone drill bits. In 1989, BHI's total revenue from the sale of diamond drill bits in the United States was $4.6 million, of which $4 million was derived from the sale of PDC bits, $400,000 from the sale of natural diamond bits, and $200,000 from the sale of TSP bits. BHI is engaged in interstate commerce and in activities substantially affecting interstate commerce.

10. Hughes Tool Company ("HTC") is made a defendant. HTC, which operates as a division of BHI, is a corporation organized and existing under the laws of the state of Delaware, with its principal offices in Houston, Texas. HTC is engaged in interstate commerce and in activities substantially affecting interstate commerce.

11. Norton Company ("Norton") is made a defendant. Norton is a corporation organized and existing under the laws of the state of Massachusetts, with its principal offices in Worcester, Massachusetts. Norton is engaged in interstate commerce and in activities substantially affecting interstate commerce.

12. Eastman Christensen Company ("EC") is made a defendant. EC is an unincorporated joint venture organized as a general partnership between two indirect wholly-owned subsidiaries of Norton, ECC Holdings I, Inc. and Eastman Christensen Holdings II, Inc. ("the General Partners"), both Delaware corporations. Two other indirect wholly-owned subsidiaries of Norton, ECC Texas Holdings I, Inc. and ECC Texas Holdings II, Inc., both Texas corporations, own all the stock of the General Partners. EC's principal offices are located in Salt Lake City, Utah. EC manufactures and sells a variety of products and services, including products and services used in the drilling of oil and gas wells. EC manufactures and sells PDC bits, TSP bits, and natural diamond bits. In 1989, EC's total revenue from the sale of diamond drill bits in the United States was $7.7 million, of which $4.2 million was derived from the sale of PDC bits, $1.6 million from the sale of natural diamond bits, and $1.9 million from the sale of TSP bits. EC is engaged in interstate commerce and in activities substantially affecting interstate commerce.

IV.

TRADE AND COMMERCE

13. Virtually all oil and gas in the United States is discovered and produced by drilling wells that range from several hundred feet to several miles in depth. Generally these wells are drilled by a drilling contractor under contract to an oil or gas company that owns the mineral rights to the oil or gas sought to be discovered or produced. The daily cost of drilling a well ranges from under $10,000 onshore to more than $60,000 in some offshore or remote locations.

14. Approximately 15 percent of the footage drilled in the world is drilled using diamond drill bits. There are three types of diamond drill bits and each is used in drilling applications for which the others generally are not reasonable substitutes. A diamond drill bit typically costs between $10,000 and $30,000. PDC bits, used in approximately 12 percent of world footage, are used to drill soft to medium rock formations. Natural diamond bits, used in approximately 2 percent of world footage, are used in deep, hard drilling applications. TSP bits, used in approximately 1 percent of world footage, are made with synthetic diamond cutters as are PDC bits, but have a wider range of heat resistance and are thus suitable for drilling sections requiring heightened abrasion resistance and higher levels of heat generated in the drilling process. The remaining world footage is drilled using tricone drill bits.

15. Oil and gas companies and drilling contractors seek to achieve the lowest "cost-per-foot" when drilling a well. This measure is calculated by dividing the footage drilled into the total cost incurred during the time required to drill the interval. The performance achieved by a particular bit, i.e., the time it takes to drill a particular interval of a well and how long it can last without failing, is a critical factor in determining the cost-per-foot. Since the operating costs of drilling a well are high, and because replacing the bit can take several hours to a half day, drill bit purchasers seek to reduce the frequency with which bits need to be replaced. Drill bit purchasers thus select a drill bit based on durability and reliability, as well as efficiency in drilling in a particular geological formation.

16. Diamond drill bits typically cost between three and eight times as much as tricone drill bits, but last longer and usually drill faster. Diamond drill bits are therefore more likely to be used where daily drilling costs are high if the geological conditions are suitable. A significant increase in the price of natural diamond, PDC or TSP bits would not cause a significant number of consumers to switch to tricone drill bits.

17. Virtually all PDC bits sold in the United States are manufactured by companies that have headquarters, manufacturing facilities and distribution networks in the United States. In 1989, the total sales of PDC bits in the United States were about $21.62 million.

18. There is no reasonable substitute for PDC bits to which a significant number of customers would turn in response to a small but significant and nontransitory price increase.

19. The manufacture of PDC bits for sale constitutes a line of commerce and a relevant product market, and the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act (hereinafter "U.S. PDC bit market").

20. EC and BHI are direct competitors in the U.S. PDC bit market and are the third and fourth largest firms in that market. Based on 1989 sales data, EC and BHI have, respectively, about 19.4 and 18.5 percent of the U.S. PDC bit market. The four largest manufacturers of PDC bits account for over 84 percent of total sales in the market. The U.S. PDC bit market is highly concentrated and would become substantially more concentrated as a result of the violation alleged herein. The combination of the two firms would create a firm with a market share of 37.9 percent, the largest in the market, and would increase the HHI by about 720 to 2,580.

21. Virtually all natural diamond bits sold in the United States are manufactured by companies that have headquarters, manufacturing facilities and distribution networks in the United States. In 1989, the total sales of natural diamond bits in the United States were about $5.72 million.

22. There is no reasonable substitute for natural diamond bits to which a significant number of customers would turn in response to a small but significant and nontransitory price increase.

23. The manufacture of natural diamond bits for sale constitutes a line of commerce and a relevant product market, and the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act (hereinafter "U.S. natural diamond bit market").

24. EC and BHI are direct competitors in the U.S. natural diamond bit market and are the second and fifth largest firms in that market. Based on 1989 sales data, EC and BHI have, respectively, about 28 and 7 percent of the U.S. natural diamond bit market. The four largest manufacturers of natural diamond bits account for over 90 percent of total sales in the market. The U.S. natural diamond bit market is highly concentrated and would become substantially more concentrated as a result of the violation alleged herein. The combination of the two firms would create a firm with a market share of 35 percent, the largest in the market, and would increase the HHI by about 400 to about 2,750.

25. Virtually all TSP bits sold in the United States are manufactured by companies that have headquarters, manufacturing facilities and distribution networks in the United States. In 1989, the total sales of TSP bits in the United States were about $3.15 million.

26. There is no reasonable substitute for TSP bits to which a significant number of customers would turn in response to a small but significant and nontransitory price increase.

27. The manufacture of TSP bits for sale constitutes a line of commerce and a relevant product market, and the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act (hereinafter "U.S. TSP bit market").

28. EC and BHI are direct competitors in the U.S. TSP bit market and are the first and fourth largest firms in that market. Based on 1989 sales data, EC and BHI have, respectively, about 60.4 and 6.4 percent of the U.S. TSP bit market. The four largest manufacturers of TSP bits account for over 95 percent of total sales in the market. The U.S. TSP bit market is highly concentrated and would become substantially more concentrated as a result of the violation alleged herein. The combination of the two firms would create a dominant firm with a market share of 66.8 percent and would increase the HHI by about 770 to about 4,950.

29. Entry into the U.S. PDC bit market, U.S. natural diamond bit market and U.S. TSP bit market is difficult and time-consuming. To gain a significant market share a firm must establish and maintain, among other things, a reputation for the efficiency, durability and reliability of its product under actual drilling conditions in a wide variety of geographic and geological conditions. This requires a new firm to build a manufacturing and research and development facility, develop drill bits for the various applications, and test and prove the reliability of its bits to a customer's satisfaction.

30. Major manufacturers of diamond drill bits collect and maintain "bit records," which detail bit performance, and "offset well data," which show the performance of bits used

on a particular well. These bit records and offset well data report the precise bit used, the depth at and conditions in which it was used, the time and distance it drilled, and other specific information relating to the particular bit application. Bit records and offset well data facilitate analysis of the performance of various bits. Manufacturers use bit records and offset well data to convince potential customers to purchase their diamond bits, to help potential customers select the proper drill bit and determine whether the drill bit would perform at the lowest cost-per-foot in a contemplated drilling application, and to design and improve the efficiency, durability and reliability of their products. Creating such a performance record is difficult and time-consuming.

31. A new entrant must also establish a significant research and development capability, an expert technical service capability, and a knowledgeable sales and service force deployed at locations convenient to drilling sites.

32. BHI and EC regularly purchase substantial quantities of materials used in the production of diamond drill bits in interstate commerce, and their activities with respect to the manufacture and sale of diamond drill bits are in the flow of, and substantially affect, interstate commerce.

VIOLATION ALLEGED

33. On December 15, 1989, BHI, Norton, and Norton's wholly-owned subsidiaries ECC Texas Holdings I, Inc. and ECC

Texas Holdings II, Inc. entered into a purchase agreement under which Norton will cause ownership of EC to pass to BHI. The sale would, in effect, merge all of the business of BHI and EC, including their PDC bit business, natural diamond bit business, and TSP bit business, giving BHI complete control of the two firms' operations.

34. The effect of the proposed merger may be substantially to lessen competition in the U.S. PDC, natural diamond, and TSP bit markets in violation of Section 7 of the Clayton Act, in the following ways, among others:

(a) actual and potential competition between BHI and EC in the U.S. PDC, natural diamond, and TSP bit markets will be eliminated; and

(b) competition generally in the U.S. PDC, natural diamond, and TSP bit markets may be substantially lessened.

PRAYER

WHEREFORE, Plaintiff prays:

1) That the proposed merger of BHI and EC be adjudged to be a violation of Section 7 of the Clayton Act;

2) That defendants be permanently enjoined from carrying out any agreement, understanding, or plan, the effect of which would be to combine the PDC bit, natural diamond bit, and TSP bit businesses of BHI and EC;

3) That the plaintiff have such other and further relief as the Court may deem just and proper; and

4) That Plaintiff recover the costs of this action.

Dated:

Respectfully submitted,

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