

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BAKER HUGHES INCORPORATED and
BAKER HUGHES OILFIELD OPERATIONS, INC.,
Petitioners

Vs.

PACKERS PLUS ENERGY SERVICES INC.,
Patent Owner

EXPERT REPORT OF HAROLD E. McGOWEN III, PE
Prepared on Behalf of Patent Owner

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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1 **Expert Report of Harold E. McGowen III, PE**

2 My name is Harold E. McGowen, III. I have been a Registered Professional Engineer licensed in Texas since
3 1989. By my education and experience, reflected in my CV, I am qualified to render the opinions delivered
4 in this report. I have been retained by the Patent Owner in this matter.

5 The opinions provided herein are based upon the information reviewed by me at the time of the writing of
6 this report. Unless stated otherwise, the opinions contained in this report are based on a reasonable
7 degree of engineering probability. If I review, receive or discover new and pertinent information related
8 to the matter at hand I may augment, adjust, or change my opinions and request to file a supplemental
9 expert report.

10 **1 SUMMARY OF OIL AND GAS EXPERIENCE**

11 I have been employed in the oil and gas industry since 1983 as a Petroleum Engineer, manager, and
12 executive. I am a Registered Professional Engineer in the State of Texas and I received a B.S. in Mechanical
13 Engineering from Texas A&M University in 1982. I was initially cross-trained as a Petroleum Engineer over
14 a four-year period at Union Pacific Resources Company and I have continued my education through self-
15 study and various industry schools ever since. I am a Registered Professional Engineer in the State of Texas
16 with decades of experience as a Petroleum Engineer having personally designed numerous hydraulic
17 fracturing treatments and/or directed the drilling, completion and operation of numerous wells.

18 I have considerable experience with downhole tools having started my career in the engineering
19 department at an oil tool/service company and subsequently having analyzed the inner workings of
20 numerous pieces of equipment over the years. I have also worked on several multi-million dollar patent
21 cases as an expert witness or engineering consultant. Over the past 33 years, I have studied and gained
22 considerable experience in various technologies, procedures, processes, and methods related to
23 stimulation of oil and gas wells, including but not limited to acidizing and hydraulic fracturing. I have
24 recently applied my training and experience to various horizontal drilling and horizontal stage fracturing
25 projects where I was the engineer responsible for the completion design, economic evaluation, and
26 execution; therefore, I have current knowledge concerning matters relevant to this case.

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