

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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WEATHERFORD INTERNATIONAL, LLC;  
WEATHERFORD/LAMB, INC.;  
WEATHERFORD US, LP; and WEATHERFORD  
ARTIFICIAL LIFT SYSTEMS, LLC  
Petitioners

v.

PACKERS PLUS ENERGY SERVICES INC.,  
Patent Owner

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Case IPR2016-01509 (Patent 7,861,774)  
Case IPR2016-01514 (Patent 7,543,634)  
Case IPR2016-01517 (Patent 7,134,505)

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**Harold McGowen Declaration**

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## Expert Report of Harold E. McGowen III, PE

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

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

This report supplements that certain "Expert Report of Harold E. McGowen III, PE" dated 12/02/2016, hereinafter referred to as (McGowen, 2016).

### 1 SUMMARY OF OIL AND GAS EXPERIENCE

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

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

1 For more information on my qualifications, see McGowen, 2016 at pages 1-3.

## 2 **2 COMPENSATION**

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3 I was retained by the attorneys representing the Respondent to provide my expert opinion related to these  
4 matters. I am currently billing counsel for the Respondent at an hourly rate of \$350 per hour for my efforts  
5 on this project. I am also being reimbursed for reasonable expenses I incur in relation to my work on this  
6 proceeding. I will be compensated regardless of the outcome in the preceding.

## 7 **3 SCOPE OF WORK**

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8 I have been engaged by counsel to provide engineering consulting, and expert witness services. I have  
9 been asked to review the 774, 505, 634, and 501 Patents and the challenges to said patents and document  
10 my opinions from the perspective of a person of ordinary skill in the art (hereinafter "POSITA") as defined  
11 herein, having a knowledge of the pertinent art, as of November 19, 2001 (hereinafter referred to as "as  
12 of 2001" or "circa 2001"). This declaration supplements my previous declaration addressing these patents.

## 13 **4 SUMMARY OF CONCLUSIONS**

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14 It is my opinion that the Baker Hughes has failed to prove obviousness. Neither Lane Wells nor Ellsworth  
15 describe fracturing through open-hole segments, which is a critical characteristic of the 774 claims. Prior  
16 art and convention teaches away from the 774 Patent/Invention. Lane-Wells does not provide the POSITA  
17 with enough information to evaluate the general concept presented, would have been interpreted by a  
18 POSITA as an application for inflatable packers, and teaches away from the use of SBPs in an open-hole.  
19 Thus, a POSITA would not have been motivated to combine the sliding sleeve components depicted in Lane-  
20 Wells with the SBPs in Ellsworth in an open-hole portion of a well. Moreover, the POSITA would certainly  
21 not have been motivated to combine Lane-wells and Ellsworth in a Hydraulic Fracturing application when  
22 the end result could not have been known.

23 Similarly, it is my opinion that the Weatherford has failed to prove obviousness. Weatherford fails to show  
24 that a POSITA would have a reasonable expectation of success in using Yost or some modified version of  
25 Yost, or that a POSITA would attempt to modify Yost as Weatherford proposes. Yost describes scientific  
26 experiments, not the results of a commercially viable fracturing operation. And those experiments would  
27 lead a POSITA to believe that attempting to fracture through multiple open hole segments will fail to create

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