

# **SUPPLEMENTAL EXHIBIT D-6**

## U.S. Patent 7,861,774 – Invalidity in view of Lane Wells Products

Lane Wells Documentary and Product Art, showing combinations of packers and sliding sleeves by Lane Wells (“Lane Wells Products”), qualifies as prior art under at least 35 U.S.C. §§ 102(a), (b), (f), and (g)(2) as sold, publicly used, publicly known, invented by others, and shown in printed publications. *See, e.g.*, Composite Catalog from 1956 at DEFINV00007411 (“1956 Composite Catalog”), Lane Wells Tubing Port Valve Brochure at DEFINV00008171 (“Tubing Port Valve Brochure”), Lane Wells Packer Handbook at DEFINV00007955 (“Packers Handbook”), Lane Wells Packers Brochure from 1956 at DEFINV00007890 (“Packers Brochure”), Lane Wells’ pamphlet on “The Use of Packers In Acidizing Operations” at DEFINV00008194 (“Acidizing Pamphlet”), US Pat. No. 2,387,003 (“Barnes”) at DEFINV00008293, US Pat. No. 2,618,340 (“Lynd”) at RC\_RAP00003173, and US Pat. No. 2,005,955 (“Renouf”). The Lane Wells Products anticipate and/or render obvious the asserted claims of the 774 Patent, alone or in combination with other prior art as identified in Defendant’s Invalidity Contentions, including:

- RockSeal and RockSeal II Packers, as well as the RockSeal System, by Packers Plus, as sold, publicly used, and shown in printed publications. *See, e.g.*, July 23, 2008 Declaration of Daniel J Themig (“Themig Declaration”); “5.1 RockSeal™ II Open Hole Packer Series” advertisement from Packers Plus’ website available at Dkt. 59-2 (“Website”); RC\_PAC00021933, RC\_PAC00063156, RC\_PAC00018079, and RC\_PAC00002017.
- Wizard Packer and Sliding Sleeve System by Guiberson / Halliburton (“Wizard System”), as sold, publicly used, and shown in printed publications. *See, e.g.*, Halliburton Completions Products guide from July 1999 (“Wizard Brochure”); *see also* Wizard II Hydraulic Set Retrievable Packer, Tech Manual, April 1998 (“Tech Manual”); “Multilateral and Horizontal Completions, Wizard Packer - A Revolution in Open Hole Packers, The Wizard Packer Provides Outstanding Performance in Open Hole,” Dresser Oil Tools (“Wizard Marketing”).
- Polar Bearfoot Packer, as sold, publicly used, and shown in printed publications. *See, e.g.*, Bearfoot Packer 652-0000 Datasheet; Polar Completions Engineering Inc. Technical Manual, July 5, 2001, Rev. 1; Polar Completions Engineering Inc. Technical Manual, July 5, 2001, Rev. 2; Article entitled “Polar is the Completions Company,” pp. 18-22.
- U.S. Patent No. 6,006,838 (“Whiteley”), issued Dec. 28, 1999.
- U.S. Patent No. 6,315,041 (“Carlisle”), which was filed April 15, 1999 and issued November 13, 2001.
- “Design and Installation of a Cost Effective Completion System For Horizontal Chalk Wells Where Multiple Zones Require Acid Stimulation”, D.W. Thomson and M.F. Nazroo, Offshore Technology Conference, May 5-8, 1997, Pages 323-335, OTC 8472 and related publications<sup>1</sup> (“Halliburton,” “Halliburton II,” and “Halliburton III”).

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<sup>1</sup> Note, for purposes of determining limits on prior art, the charted reference, and the similar articles: (1) “Design and Installation of a Cost Effective Completion System For Horizontal Chalk Wells Where Multiple Zones Require Acid Stimulation”, D.W. Thomson and M.F. Nazroo, SPE Drilling & Completion September 1998, pages 151-156; SPE 51177 (“Halliburton II”) and (2) “Design and Installation of a Cost Effective Completion System For Horizontal Chalk Wells Where Multiple Zones Require Acid Stimulation”, D.W. Thomson and M.F. Nazroo, 1997 SPE Production Operations Symposium, March 9-11, 1997, pages 97-108,

- U.S. Patent 2,537,066 (“Lewis”), issued Jan. 9, 1951.
- The multi-stage fracture performed at the RET #1 well in Wayne County, West Virginia and the related publications that describe that completion such as “Production and Stimulation Analysis of Multiple Hydraulic Fracturing of a 2,000-ft Horizontal Well”, A.B. Yost II, Gas Technology Symposium, June 7–9, 1989, SPE 19090 (“Yost”).
- “Innovative Acid Fracturing Operations Used to Successfully Stimulate Central North Sea Reservoir”, A.N. Martin, SPE Annual Technical Conference, Oct. 6-9, 1996, Pages 479-486, 36620 (“Martin”).
- *Production Control of Horizontal Wells in a Carbonate Reef Structure*, Bill Ellsworth et al., 1999 CIM Horizontal Well Conference (“Ellsworth”), published by 1999.
- US Pat. No. 3,062,291 to “Brown,” filed May 11, 1959 and issued Nov. 6, 1962.
- 2001 MPas Packer documents (RC\_PAC00056250-272; RC\_PAC00056275-279) (“MPas”).

These invalidity contentions are not an admission by Defendants that the accused products, including any current or past versions of these products, are covered by or infringe any claim, particularly when the claim is properly construed. Nor shall these invalidity contentions be construed as an admission that Defendant agrees with any claim construction promoted by Rapid Completions to support its infringement contentions. The citations herein are exemplary, and should not be viewed as a limitation on Defendants’ invalidity positions; Defendants reserve the right to further edit these invalidity contentions should the need arise (*e.g.*, when additional evidence becomes available).

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<p><b>[Ipre]</b> A method for fracturing a hydrocarbon-containing formation accessible through a wellbore, the method comprising:</p>	<p>The Lane Wells Products, alone or in combination with other analogous art, embody a method for fracturing a hydrocarbon-containing formation accessible through a wellbore.</p> <p>The Lane Wells Products were intentionally placed into wellbores through hydrocarbon-containing formations for the production of hydrocarbons. The Lane Wells Products include a Tubing Port Valve and packers that were used to increase the production of hydrocarbons from the hydrocarbon-containing formations, for example, by acidizing zones, a procedure that may be used to fracture a hydrocarbon-containing formation accessible through a wellbore.</p> <p style="text-align: center;">The Lane-Wells Tubing Port Valve is used primarily to displace fluids in the</p>

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SPE 37482 (“Halliburton III”) count as a single prior art reference under General Order GO-13-20, Footnote 2 because they are the “closely related work of a single prior artist.”

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	<p>annulus above a packer. When formation pressures are such that heavy fluids in the well cannot be displaced prior to setting a packer, the installation of the Tubing Port Valve is needed. After Tubing Port Valve is placed in tubing string above packer and run in, the packer is set and the well head closed in. With the well secure, a ball is dropped through the tubing to seat in the Tubing Port Valve. Flow through the tubing is stopped and pump pressure build-up causes spring to compress which opens side ports. This inside out circulation allows safe displacement of fluids in the annulus.</p> <p><u>The Tubing Port Valve also provides a means of acidizing two zones with packer setting in either open-hole or cased hole completions. Three zone acidizing is possible with a three packer set-up and two different sized Tubing Port Valves.</u></p> <p>1956 Composite Catalog at 2854.</p> <p>Lane-Wells Tubing Port Valve has been known by various names including acidizing valve, flow diversion valve, and drop ball circulation valve. Perhaps the reason for these names can be found in the fact that the tool has been so versatile in solving sundry oil field situations, that the many application names were associated with the tool.</p> <p>However well these names describe the tool in relation to an application, they still tend to limit the tool to that application, which is contrary to fact. The fact is that the Tubing Port Valve is a diversified and versatile tool applicable to many oil field situations.</p> <p>Tubing Port Valve Brochure at 2.</p> <p>Stage Acidizing</p> <p>Frequently limestone producing horizons respond much better to stage treatments of acid instead of single treatments. This type of acidizing operation may be more readily accomplished when a Tubing Port Valve is used in the string above a</p>

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	<p>packer or between two packers. The advantage lies in the ability to remove the spent acid and products of reaction between stage treatments without having to disturb packer settings.</p> <p>In cased hole acidizing through perforation, this flexible arrangement permits a variety of completion and testing operations without tubing manipulation. <u>However, the bigger advantage is noted in open hole selective stage acidizing</u> because when a satisfactory pack-off is obtained, it is particularly desirable to maintain this seal until all treatments have been finished, and the well is ready to produce.</p> <p>Tubing Port Valve Brochure at 3.</p> <p><b>USE OF THE LANE-WELLS DROP BALL CIRCULATION SUB (Acidizing Valve)</b></p> <p><u>The Lane-Wells Drop Ball Circulation Sub (better known as the acidizing valve) was de- signed to provide a means of acidizing two zones with one packer setting in either open-hole or cased-hole completion.</u> The zone below the packer is acidized in the normal manner, and the upper zone above the packer is acidized through ports in a special acidizing valve.</p> <p>The essential part of the circulation sub are the outer body, in which are located the ports or circulation channels, the inner piston held in place closing the ports by a coiled spring, and a ball of sufficient diameter to close the throat section through the piston. A snap locking ring may or may not be included around the piston to hold it in the “open-port” position after the ball has been dropped.</p> <p>Procedure: The acidizing valve is placed in the tubing string above the packer. After the tubing is run and the packer set, the zone below the packer is acidized. During the acidizing of the lower zone, the acidizing valve remains in the closed port position permitting fluid flow through the throat of the piston. (Figure 3.1-10)</p>

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