

CERTIFICATION DATA SHEET

3-3/8" OD, TAG, 6 SPF, 60°, 25G, SUPER-HERO (SDP-3375-311NT4)

FORM 43F

PERFORATING SYSTEM EVALUATION, RP 43, SECTIONS 1 AND 2

SDP-3375-311NT4

Service Company AVAILABLE TO ALL FROM OWEN OIL TOOLS, INC. Explosive Weight 25 gm, RDX powder, Case Material STEEL

Gun OD & Trade Name 3-3/8" OD, TAG, 6 SPF, 60°, 25G, SUPER-HERO (SDP-33 75-311NT4) Max. Temp, F 330 1 hr 3 hr 24 hr 100 hr

Charge Name PERFORATOR, 3-3/8", SDP, 25G, SUPER-HERO, RDX Maximum Pressure Rating 20,000 psi, Carrier Material STEEL

Manufacturer Charge Part No. SDP-3375-311NT4 Date of Manufacture 11-Sep-08 Shot Density 6 shots/ft

Gun Type SCALLPOED, EXPE Recommended Minimum ID for Running 3.800 in.

Phasing Tested 60 degrees, Firing Order X Top down, Bottom up Available Firing Mode X Selective, X Simultaneous.

Debris Description SMALL STEEL PIECES Debris Weight N/A gm/charge, Debris N/A in.3/charge

Remarks HMX VERSION AVAILABLE AS SDP-3375-411NT4

SECTION 1 - CONCRETE TARGET

Casing Data 4 1/2 OD, Weight 11.6 lb/ft, L-80 API Grade, Date of Concrete Test 08-Feb-08

Target Data 108" OD, Briquet Compressive Strength 5750 psi, Age of Target 32 days

Shot No.	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	
Clearance, in.	<u>0.00</u>	<u>0.14</u>	<u>0.45</u>	<u>0.83</u>	<u>0.45</u>	<u>0.14</u>	<u>0.00</u>	<u>0.14</u>	<u>0.45</u>	<u>0.83</u>	
Casing Hole Diameter, Short Axis, in.	<u>0.37</u>	<u>0.42</u>	<u>0.43</u>	<u>0.42</u>	<u>0.41</u>	<u>0.43</u>	<u>0.38</u>	<u>0.40</u>	<u>0.44</u>	<u>0.41</u>	
Casing Hole Diameter, Long Axis, in.	<u>0.38</u>	<u>0.43</u>	<u>0.44</u>	<u>0.43</u>	<u>0.43</u>	<u>0.45</u>	<u>0.41</u>	<u>0.41</u>	<u>0.44</u>	<u>0.41</u>	
Average Casing Hole Diameter, in.	<u>0.38</u>	<u>0.43</u>	<u>0.44</u>	<u>0.43</u>	<u>0.42</u>	<u>0.44</u>	<u>0.40</u>	<u>0.41</u>	<u>0.44</u>	<u>0.41</u>	
Total Depth, in.	<u>45.26</u>	<u>45.83</u>	<u>49.55</u>	<u>52.83</u>	<u>51.13</u>	<u>52.75</u>	<u>46.28</u>	<u>52.94</u>	<u>47.75</u>	<u>50.12</u>	
Burr Height, in.	<u>0.04</u>	<u>0.05</u>	<u>0.04</u>	<u>0.04</u>	<u>0.03</u>	<u>0.04</u>					
Shot No.	No. 11	No. 12	No. 13	No. 14	No. 15	No. 16	No. 17	No. 18	No. 19	No. 20	Average
Clearance, in.	<u>0.45</u>	<u>0.14</u>									
Casing Hole Diameter, Short Axis, in.	<u>0.43</u>	<u>0.42</u>									<u>0.41</u>
Casing Hole Diameter, Long Axis, in.	<u>0.45</u>	<u>0.44</u>									<u>0.43</u>
Average Casing Hole Diameter, in.	<u>0.44</u>	<u>0.43</u>									<u>0.42</u>
Total Depth, in.	<u>47.18</u>	<u>48.30</u>									<u>49.16</u>
Burr Height, in.											<u>0.04</u>

Remarks PENETRATION NORMALIZED TO 5000 PSI CONCRETE WOULD BE 51.00" (5% PER 1000 PSI)

SECTION 2 - BEREA SANDSTONE CORE TARGET

	Shot No.	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Average
Berea Bulk Porosity, _____	Faceplate Hole Diameter, Short Axis, in.							
	Faceplate Hole Diameter, Long Axis, in.							
Date of Berea Test _____	Average Faceplate Hole Diameter, in.							
	Total Depth, in.							

CERTIFICATION

Type of Certification: Self Third Party

I certify that these tests were made according to the procedures as outlined in RP 43: Recommended Practices for Evaluation of Well Perforators, Fifth Edition, January 1991. All of the equipment used in these tests, such as the guns, jet charges, detonator cord, etc., was standard with our company for use in the gun being tested, and was not changed in any manner for the test. Furthermore, the equipment was chosen at random from stock and therefore will be substantially the same as the equipment which would be furnished to perforate a well for any operator.

CERTIFIED BY Dan W. Pratt DAN W. PRATT VICE PRESIDENT - ENGINEERING 08-Feb-08 OWEN OIL TOOLS, INC 8900 FORUM WAY, FT. WORTH TX. 76140

RECERTIFIED _____ (Company Officer) (Title) (Date) (Company) (Address)