



## Registered Data Sheet Perforating System Evaluation, API RP 19B Section 1

API Form 19B-Section 1     Conforms to All Requirements of Section 1     Special Test - See Remarks/Exceptions below

Service Company AVAILABLE TO ALL FROM OWEN OIL TOOLS    Explosive weight 25.0 gm, HMX powder,    Case Material STEEL

Gun OD & Trade Name 3-3/8" OD, TAG, 6SPF, 60°, 25G, SuperHERO PLUS+™, HMX    Max Temp, °F 400 1 hr 3 hr 24 hr 100 hr 200 hr

Charge Name PERFORATOR, 3-3/8", SDP, 25G, SuperHERO PLUS+™, HMX    Maximum Pressure Rating 20,000 psi,    Carrier Material STEEL

Manufacturer Charge Part No. SDP-3375-411NT4    Date of Manufacture 6-2-2008    Shot Density Tested 6    Shots/ft \_\_\_\_\_

Gun Type SCALLOPED, EXPENDABLE, HOLLOW CARRIER    Recommended Minimum ID for Running 3.75" in.

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

Debris Description SMALL STEEL PIECES    Debris Weight NA gm/charge,    Debris NA in<sup>3</sup>/charge

Remarks/Exceptions per Section 1.11 RDX VERSION AVAILABLE AS SDP-3375-311NT4

Casing Data 4-1/2" OD,    Weight 11.6 lb/ft,    API Grade, L-80    Date of Section 1 Test 7-7-2008

Target Data 120" OD,    Amount of Cement 14,804 lb,    Amount of Sand 29,610 lb,    Amount of Water 7,752.4 lb.

Date of Compressive Strength Test 7-7-2008    Briquette Compressive Strength 6,791 psi,    Age of Target 31 days

Shot No.	No 1	No 2	No 3	No 4	No 5	No 6	No 7	No 8	No 9	No 10	No 11
Clearance, in.	0.00	0.14	0.45	0.63	0.45	0.14	0.00	0.14	0.45	0.63	0.45
Casing Hole Diameter, Short Axis, in	0.37	0.41	0.43	0.43	0.43	0.42	0.38	0.39	0.47	0.43	0.43
Casing Hole Diameter, Long Axis, in	0.38	0.42	0.43	0.43	0.44	0.43	0.40	0.41	0.47	0.44	0.44
Average Casing Hole Diameter, in.	0.38	0.42	0.43	0.43	0.44	0.43	0.39	0.40	0.47	0.44	0.44
Total Depth, in.	39.75	38.25	43.85	46.75	45.25	38.25	37.25	46.86	42.25	44.35	41.75
Burr Height, in.	0.059	0.070	0.046	0.071	0.074	0.020	0.095	0.071	0.086	0.093	0.051

  

Shot No.	No 12	No 13	No 14	No 15	No 16	No 17	No 18	No 19	No 20	No 21	No 22	Average
Clearance, in.	0.14	0.00	0.14	0.45	0.63	0.45	0.14					XXXXXX
Casing Hole Diameter, Short Axis, in	0.38	0.36	0.41	0.43	0.45	0.42	0.40					0.41
Casing Hole Diameter, Long Axis, in	0.39	0.36	0.41	0.43	0.46	0.44	0.44					0.42
Average Casing Hole Diameter, in.	0.39	0.36	0.41	0.43	0.46	0.43	0.42					0.42
Total Depth, in.	42.75	34.75	45.25	43.25	45.75	45.05	40.75					42.34
Burr Height, in.	0.037	0.055	0.082	0.061	0.064	0.054	0.050					0.063

Remarks \_\_\_\_\_

### Manufacturer's Certification

Type of Certification: \_\_\_\_\_ Self    RAY FEIGENBUTZ Third Party

I certify that these tests were made according to the procedures as outlined in API 19B: Recommended Practice for Evaluation of Well Perforators, Second Edition, September 2006. All of the equipment used in these tests, such as the guns, jet charges detonator cord, etc., was standard equipment with our company for the 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 that would be furnished to perforate a well for any operator. API neither endorses these tests nor recommends the use of the perforator system described.

X CERTIFIED BY *Ray Feigenbutz* VICE PRESIDENT - ENGINEERING    7-7-2008    OWEN OIL TOOLS    12001 CR 1000 GODLEY, TX 76044

\_\_\_\_ RECERTIFIED \_\_\_\_\_ (Company Official)    \_\_\_\_\_ (Title)    \_\_\_\_\_ (Date)    \_\_\_\_\_ (Company)    \_\_\_\_\_ (Address)

Name of test as it should appear on website: 3-3/8" OD, TAG, 6SPF, 60°, 25G, SuperHERO PLUS+™ (SDP-3375-411NT4)

Name of test as it appears on application and application date: 3-3/8" TAG, 6SPF, 60°, SDP-3375-411NT4 SuperHERO PLUS+™ API 19B SECTION 1 TEST