# 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
- Halliburton Energy Services

### Gun OD & Trade Name
- 2" 6SPF 60 Deg Ph Premium

### Charge Name
- 2" MaxForce

### Manufacturer Charge Part No.
- 101603801

### Date of Manufacture
- 24 July 07

### Gun Type
- Scalloped Hollow Steel Carrier

### Phasing Tested
- 60 degrees, Firing Order: X Top down Bottom up

### Debris Description
- Small steel fragments

### Remarks/Exceptions per Section 1.11

## Casing Data
- **2 7/8** OD,
- **Weight** 6.5 lb/ft,
- **API Grade** L-80,
- **Date of Section 1 Test** August 23, 2007

## Target Data
- **60** OD,
- **Amount of Cement** 5,288 lb,
- **Amount of Sand** 10,575 lb,
- **Amount of Water** 2,769 lb

### Date of Compressive Strength Test
- **August 23, 2007**

### Briquette Compressive Strength
- **5,697 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.
- **0.0**
- **0.9**
- **3.0**
- **4.2**
- **0.9**
- **0.9**
- **2.5**
- **2.4**
- **2.4**
- **2.4**

### Casing Hole Diameter, Short Axis, in
- **2.4**
- **2.3**
- **2.4**
- **2.4**
- **2.4**
- **2.3**
- **2.5**
- **2.4**
- **2.4**
- **2.4**

### Casing Hole Diameter, Long Axis, in
- **2.7**
- **2.4**
- **2.4**
- **2.4**
- **2.4**
- **2.4**
- **2.5**
- **2.4**
- **2.4**
- **2.4**

### Average Casing Hole Diameter, in
- **2.6**
- **2.4**
- **2.4**
- **2.4**
- **2.4**
- **2.4**
- **2.5**
- **2.4**
- **2.4**
- **2.4**

### Total Depth, in.
- **19.4**
- **17.8**
- **20.6**
- **21.5**
- **22.4**
- **23.2**
- **18.4**
- **22.3**
- **21.9**
- **20.2**

### Burr Height, in.
- **0.0**
- **0.5**
- **0.5**
- **0.6**
- **0.4**
- **0.3**
- **0.3**
- **0.8**
- **0.6**
- **0.3**

### Shot No.
- **No 12**
- **No 13**
- **No 14**
- **No 15**
- **No 16**
- **No 17**
- **No 18**
- **No 19**
- **No 20**
- **No 21**

#### Average
- **XXXXXX**
- **24**
- **25**
- **24**
- **20.3**
- **05**

### Remarks

## Manufacturer's Certification

- Type of Certification: Self x 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.

- **CERTIFIED BY**
- Technology Team Leader 9/4/07 Jet Research Center 8432 South I-35 West, Alvarado, TX
- **(Company Official)** (Date) (Company)

Name of test as it should appear on website: 2" 6 SPF 60 Deg Ph w MaxForce, 7.0 gm

Name of test as it appears on application and application date: 2" 6 SPF 60 Deg Ph Premium Gun System w/ 2" Max Force, SDP HMX - July 24, 2007