



REGISTERED DATA SHEET PERFORATING SYSTEM EVALUATION, API RP 19B SECTION 1

Service Company Available to all _____ Design Number _____ Explosive Weight 16.5 gm, HMX powder, Case Material Steel
 Gun OD & Trade Name 2 7/8" High Shot Density Gun DP HMX Max. Temp. °F 400 1 hr 3 hr 24 hr 100 hr 200 hr
 Charge Name 2 7/8" HMX ExTraL DP (DSC 07-01-50) Maximum Pressure Rating 20,000 psi, Carrier Material Steel
 Manufacturer Charge Part No. IC46H ExTraL Date of Manufacture 01/25/07 Shot Density Tested _____ 6 _____ Shots/ft
 Gun Type High Shot Density Gun, 6 SPF 60° Recommended Minimum ID for Running _____ in.
 Phasing Tested 60° degrees, Firing Order X Top Down, Bottom Up Available Firing Mode X Selective, X Simultaneous
 Debris Description N/A Debris Weight N/A gm/charge, Debris N/A in³/charge

Remarks * Gun OD after shooting in liquid 3.05 in.
SECTION 1 - CONCRETE TARGET
 Casing Data 4 1/2" OD, Weight 11.6 lb/ft, L-80 API Grade, Date of Section 1 Test 05/02/07
 Target Data 88" OD, Amount of Cement 9,150 lb., Amount of Sand 7,113 lb., Amount of Water 4,750 lb.
 Date of Compressive Strength Test 05/02/07, Briquette Compressive Strength _____ psi, Age of Target 33 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.	0.000	0.221	0.784	1.127	0.784	0.221	0.000	0.221	0.784	1.125	0.784
Casing Hole Diameter, Short Axis, in.	0.410	0.380	0.390	0.380	0.360	0.410	0.390	0.390	0.370	0.380	0.420
Casing Hole Diameter, Long Axis, in.	0.430	0.400	0.400	0.390	0.370	0.420	0.410	0.400	0.390	0.390	0.430
Average Casing Hole Diameter, in.	0.420	0.390	0.395	0.385	0.365	0.415	0.400	0.395	0.375	0.385	0.425
Total Depth, in.	35.25	36.25	37.25	38.50	37.75	37.75	35.75	34.75	37.00	37.25	38.25
Burr Height, in.	0.052	0.049	0.054	0.057	0.037	0.048	0.035	0.037	0.051	0.048	0.053
Shot No.	No. 12	No. 13	No. 14	No. 15	No. 16	No. 17	No. 18	No. 19	No. 20	No. 21	No. 22
Clearance, in.	0.221	0.000	0.221	0.784	1.125	0.784	0.221	0.000	0.221	0.784	Average
Casing Hole Diameter, Short Axis, in.	0.420	0.370	0.370	0.360	0.370	0.400	0.410	0.390	0.370	0.370	0.387
Casing Hole Diameter, Long Axis, in.	0.440	0.380	0.390	0.390	0.390	0.420	0.430	0.390	0.380	0.380	0.400
Average Casing Hole Diameter, in.	0.430	0.375	0.380	0.360	0.380	0.410	0.420	0.390	0.375	0.375	0.394
Total Depth, in.	39.00	38.25	37.75	37.00	39.25	38.50	36.50	36.00	37.75	37.75	37.29
Burr Height, in.	0.029	0.033	0.043	0.024	0.019	0.028	0.032	0.065	0.046	0.046	0.042

WITNESSING INFORMATION
 Date of Notice of Intent to Test: March 14th 2007 Witnessed by: J. Smirnoff (API Certified)
 Other Activities Witnessed: Target Pouring _____ Briquette: Preparation _____ Testing X Burr Height Measurement X Samples Taken: Concrete X Casing X

CERTIFICATION
 I certify that these tests were made according to the procedures as outlined in API RP 19B: Recommended Practices for Evaluation of Well Perforators, First Edition, November 2000. 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, which would be furnished to perforate a well for any operator. The American Petroleum Institute neither endorses these test results nor recommends the use of the perforator system described.
 X CERTIFIED BY DARIO SCATTANZIC Perforating Projects Manager 05/03/07 Explosivos Tecnologicos Argentinos S.A. Ruta 25Km.13 Pilar- Bs.As. Argentina
 RECERTIFIED GERENTE PROYECTOS (Title) (Date) (Company) (Address)