American Petroleum Institute

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

Service Company: Available to all — Design Number:

Gun OD & Trade Name: 7" High Shot Density Gun BH HMX

Charge Name: 39gms HMX BH Universal (DSC 06-02-50)

Manufacturer Charge Part No.: TC50HBH — Date of Manufacture: Feb 28th 2006

Gun Type: High Shot Density Gun, 12 SPF 135°

Phasing Tested: 135° degrees, Firing Order: X Top Down, ____ Bottom Up

Debris Description: N/A

Explosive Weight: 39 gm, HMX powder, Case Material: Zamac

Max. Temp, °F: 400 1 hr ____ 3 hr ____ 24 hr ____ 100 hr ____ 200 hr

Maximum Pressure Rating: 13,000 psi, Carrier Material: Steel

Shot Density Tested: 12 Shots/ft

Recommended Minimum ID for Running: * in.

Available Firing Mode: X Selective, X Simultaneous

Debris Weight: N/A gm/charge, Debris: N/A in^3/charge

Remarks: * Gun OD after shooting in liquid 7.15In.

SECTION 1 - CONCRETE TARGET

Casing Data: 9 5/8" OD, Weight: 47 lb/ft, L-80 API Grade, Date of Section 1 Test: June 06th 2006

Target Data: 50" OD, Amount of Cement: 2900 lb., Amount of Sand: 5800 lb., Amount of Water: 1500 lb.

Date of Compressive Strength Test: June 06th 2006, Briquette Compressive Strength: 7187 psi, Age of Target: 36 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.	0.375	1.179	0.860	0.520	1.306	0.520	0.860	1.179	0.375	1.179	0.860
Casing Hole Diameter, Short Axis, in.	0.890	0.990	0.980	0.940	1.100	0.960	0.980	1.120	0.900	1.050	0.990
Casing Hole Diameter, Long Axis, in.	0.950	1.050	1.000	0.980	1.200	0.990	1.000	1.130	0.940	1.100	1.040
Average Casing Hole Diameter, in.	0.920	1.020	0.990	0.960	1.150	0.975	0.990	1.125	0.920	1.075	1.015
Total Depth, in.	5.470	6.470	6.720	6.470	6.220	6.720	7.470	6.720	6.220	6.970	5.470
Burr Height, in.	0.050	0.045	0.050	0.035	0.070	0.023	0.041	0.055	0.054	0.032	0.050

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.	0.520	1.306	0.520	0.860	1.179	0.375	1.179	0.860	0.520			0.827
Casing Hole Diameter, Short Axis, in.	0.960	1.150	0.970	0.990	1.100	0.960	0.980	1.000	0.990			1.000
Casing Hole Diameter, Long Axis, in.	0.990	1.170	1.020	1.050	1.120	0.980	0.990	1.120	1.200			1.051
Average Casing Hole Diameter, in.	0.975	1.160	0.995	1.020	1.110	0.970	0.985	1.060	1.095			**1.026**
Total Depth, in.	6.220	5.720	5.470	6.970	7.220	5.970	5.220	5.470	6.220			**6.270**
Burr Height, in.	0.043	0.060	0.065	0.042	0.040	0.055	0.045	0.051	0.049			0.048

WITNESSING INFORMATION

Date of Notice of Intent to Test: May 2nd 2006 — 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	(Company Official)	Perforating Projects Manager (Title)	June 08th 2006 (Date)	Explosivos Tecnologicos Argentinos S.A. (Company)	Ruta 25Km.13 Pilar- Bs.As. Argentina (Address)
____ RECERTIFIED					

API Form 19R-A