



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

Service Company Available to all _____ Design Number _____ Explosive Weight 39 gm, HMX powder, Case Material Steel
 Gun OD & Trade Name 4 5/8" High Shot Density Gun DP HMX Max. Temp. °F 400 1 hr 3 hr 24 hr 100 hr 200 hr
 Charge Name 39gms HMX ExTraIDP (DSC 07-03-53) Maximum Pressure Rating 20,000 psi, Carrier Material Steel
 Manufacturer Charge Part No. TC47H ExTraID Date of Manufacture 03/26/07 Shot Density Tested 5 Shots/ft
 Gun Type High Shot Density Gun, 5 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 4.89in.

SECTION 1 - CONCRETE TARGET

Shot No.	Date of Section 1 Test _____										
	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	0.300	1.034	1.469	1.034	0.300	0.000	0.300	1.034	1.469	1.034
Casing Hole Diameter, Short Axis, in.	0.510	0.430	0.430	0.450	0.440	0.490	0.480	0.440	0.480	0.490	0.480
Casing Hole Diameter, Long Axis, in.	0.540	0.470	0.440	0.470	0.450	0.490	0.490	0.450	0.490	0.520	0.510
Average Casing Hole Diameter, in.	0.525	0.450	0.435	0.460	0.445	0.500	0.485	0.445	0.485	0.505	0.495
Total Depth, in.	65.70	68.95	64.45	63.45	64.25	61.45	63.45	65.95	62.95	58.45	56.45
Burr Height, in.	0.077	0.065	0.081	0.065	0.090	0.055	0.046	0.085	0.072	0.066	0.079
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.	0.300	0.000	0.300	1.034	1.469	1.034	0.300	0.300	1.034	1.469	1.034
Casing Hole Diameter, Short Axis, in.	0.470	0.430	0.470	0.510	0.500	0.470	0.500	0.470	0.500	0.470	0.469
Casing Hole Diameter, Long Axis, in.	0.480	0.440	0.440	0.530	0.500	0.490	0.490	0.490	0.500	0.486	0.486
Average Casing Hole Diameter, in.	0.475	0.435	0.480	0.520	0.500	0.480	0.480	0.480	0.480	0.478	0.478
Total Depth, in.	60.45	62.45	60.95	59.45	63.45	61.95	63.45	61.95	63.45	62.63	62.63
Burr Height, in.	0.085	0.057	0.084	0.091	0.054	0.080	0.080	0.080	0.080	0.072	0.072

Date of Notice of Intent to Test: March 14th 2007 Witnessed by: J. Smirnoff (API Certified)
 Other Activities Witnessed: Target Pouring _____ Brique: 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 **E. T. A. S. A.** Perforating Projects Manager 05/03/07 Explosivos Tecnologicos Argentinos S.A. Ruta 25Km.13 Pilar- Bs. As. Argentina
 RECERTIFIED **DARIO BICHARDI** (Title) (Date) (Company) (Address)
GERENTE PRODUCTO Y SISTEMAS