



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 ExTra! DP (DSC 07-03-53) Maximum Pressure Rating 20.000 psi, Carrier Material Steel
Manufacturer Charge Part No. TC47H ExTra! 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

Casing Data 7" OD, Weight 32 lb/ft, L-80 API Grade, Date of Section 1 Test
Target Data 150" OD, Amount of Cement 26.400 lb., Amount of Sand 52.800 lb., Amount of Water 13.728 lb.
Date of Compressive Strength Test 05/02/07, Briquette Compressive Strength 6.877 psi, Age of Target 33 days

Table with 12 columns for Shot No. (1-12) and rows for Clearance, Casing Hole Diameter (Short/Long Axis), Average Casing Hole Diameter, Total Depth, Burr Height. Includes an Average column for shots 12-22.

WITNESSING INFORMATION

Date of Notice of Intent to Test: March 14th 2007 Witnessed by: J. Smirnov (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.

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
RE-CERTIFIED DARIO ECHEGARAYEN (Title) (Date) (Company) (Address)

PERFORATING PROJECTS MANAGER