

Registered Data Sheet Perforating System Evaluation, API RP 19B Section 1

		R	rams HMX DP	ExTrAl 6.5	2" Retrievable Through Tubing Gun ExTrA! With RT36H ExTrA! 6.5grams	un ExTrA	า Tubing G	able Through		Name of test as it should appear on website:	Name of test as
	(Address)		(Company)	_	(Date)		(Title)		(Company Official)		RECERTIFIED
ires - Argentina	Ruta 25 Km 13- Villa Rosa - Buenos Aires - Argentina	Rut	ETASA			nager	Explosives Plant Manager	Explosive	Gabriel O. Scipioni	10	X CERTIFIED BY
quipment used Furthermore, these tests	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 landom 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 last of the perforator system described.	ators, Second Edit ed and was not ch rforate a well for ar	of Well Perform un being test rnished to per	for Evaluation of the use in the g hat would be fu	ended Practice ur company for the equipment t	9B: Recomm pment with o the same as	ined in API 1: standard equi substantially t	cedures as out ord, etc., was s erefore will be s bed.	ording to the programs a detonator coron stock and the tor system descri	I certify that these tests were made according to the procedures as outlined in API 19B. Recommended Practice for Evaluation of Well Proin these tests, such as the guns, jet charges defonator cord, etc., was standard equipment with our company for the use in the gun being the equipment was closen at random from stock and therefore will be substantially the same as the equipment that would be furnished to not recommends the displaying of the perforator system described.	I certify that thes in these tests, s the equipment v nor recommend
-		1		1			iigd Party	lorge Smirnoff APIW Third Party	Self	ation:	Type of Certification:
						V	100	thenim		s Certification	Manufacturer's
											Remarks
0.029			0.019	0.022 0.	0.030	0.015	0.019	0.051	0.030	***************************************	Burr Height, in.
22,470			22.970	20.970 2:	21.220	22.220	24.220	22.720	24.220	***************************************	Total Depth, in.
0.241			0.265	0.225 0.	0.205	0.210	0.235	0.275	0.250	Average Casing Hole Diameter, in.	Average Casing
0.248			0.280	0.230 0.	0.210	0.220	0.240	0.280	0.260	Casing Hole Diameter, Long Axis, in	Casing Hole Dia
0.233			0.250	0.220 0.	0.200	0.200	0.230	0.270	0.240	Casing Hole Diameter, Short Axis, in	Casing Hole Dia
XXXXXX			0.095	0.315 0.	0.440	0.315	0.095	0.000	0.095		Clearance, in.
Average	20 No 21 No 22	No 19 No 20	No 18	No 17	No 16	No 15	No 14	No 13	No 12		Shot No
estaprovativa de	0.015 0.024	0.046 0.038	0.042 0	0.038 0	0.027	0.040	0.019	0.031	0.022		Burr Height, in.
- Control of	20.720 20.220	21.220 23.220	24.720 2	23.220 2	20.720	22.220	25.220	23.220	21.220		Total Depth, in.
ocupy of the same	0.230 0.220	0.235 0.220	0.290 0	0.250 0	0.230	0.215	0.225	0.255	0.300	Average Casing Hole Diameter, in.	Average Casing
200000000	0.240 0.230	0.240 0.230	0.300 0.	0.260 0.	0.230	0.220	0.230	0.260	0.310	Casing Hole Diameter, Long Axis, in	Casing Hole Dia
	0.220 0.210	0.230 0.210	0.280 0.	0.240 0.	0.230	0.210	0.220	0.250	0.290	Casing Hole Diameter, Short Axis, in	Casing Hole Diar
	0.440 0.315	0.095 0.315	0.000 0.	0.095 0.	0.315	0.440	0.315	0.095	0.000		Clearance, in.
	9 No 10 No 11	No 8 No 9	No 7	No 6	No 5	No 4	No 3	No 2	No 1		Shot No.
days	31	Age of Target_	psi,		Strength 5942	Briquette Compressive Strength	Briquette		03 / 16 / 2010	Date of Compressive Strength Test 03/	Date of Compres
lb.	Amount of Water 1840	lb, Amour		7100	Amount of Sand	lb,	50	Amount of Cement 3550			Target Data 55"
	010	Date of Section 1 Test 03 / 15 / 2010	ate of Section		API Grade, L-80	lb/ft,		6.4	OD, Weight 6	2 7/8"	Casing Data 27
										Remarks/Exceptions per Section 1.11	Remarks/Excepti
in³/charge	N/A	gm/charge, Debris N	gm/		Veight N/A	_ Debris Weight		inside the gun	ube debris keeps	Debris Description Cases and loading tube debris keeps inside the gun	Debris Description
Simultaneous		Selective X	S		Available Firing Mode:		Bottom up	Top down X	Firing Order:	60° degrees,	Phasing Tested
in.				ID for Running	Recommended Minimum ID for Running	Recomn			g Gun.	Retrievable Through Tubing Gun	Gun Type Retri
	Shots/ft				Shot Density Tested 6	Shot De		Date of Manufacture		Manufacturer Charge Part No. RT36H ExTrAl	Manufacturer Ch
	NSTEEL	Carrier Material STEEL	psi,	g 20000	Maximum Pressure Rating	Maximu			ExTrAl	7	Charge Name
200 hr	24 hr 100 hr		1 hr			Max Temp, °F			\! 6 SPF 60°	Name 2" DP HMX ExTrA! 6 SPF 60°	Gun OD & Trade Name
	Case Material STEEL	powder, C	XMX	gm,	Explosive weight 6.5	Explosiv	^{ASA}	ufactured by ET	e companies. Man	Service Company Available to all service companies. Manufactured by ETASA	Service Company
			tions below	Remarks/Excep	☐ Special Test - See Remarks/Exceptions be	□Sp	ction 1	irements of Ser	Conforms to All Requirements of Section 1		API Form 19B-Section 1
Consultation of the Consul										and a second second substitution of the second seco	

Name of test as it appears on application and application date: 2" Retrievable Through Tubing Gun ExTrA! With RT36H ExTrA! 6.5grams HMX DP