

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

· Outermoster for)	ms HMX DP	rA! 39grai	[C47H Ex]	7" High Shot Density Gun ExTrA! With TC47H ExTrA! 39gra	ty Gun Ex	hot Densi		pplication and application date	Name of test as it appears on application and application date:
montenan				-	s HMX DP	A! 39gram	C47H ExTr	A! With To	Gun ExTr	Shot Density Gun ExTrA! With TC47H ExTrA! 39grams	7" High	Name of test as it should appear on website.
	ss)	(Address)			(Company)		(Date)	,	(Title)		(Company Official)	RECERTIFIED
res - Argentina	a - Buenos Ai	Ruta 25 Km 13- Villa Rosa - Buenos Aires - Argentina	Ruta 25 K	A	ETAS/			nager	s Plant Ma	Explosives Plant Manager	Gabriel O. Scipioni	X CERTIFIED BY
uipment used Furthermore, these tests	3. All of the ex r for the test. her endorses	eptember 2006 in any manne rator. API neith	nd Edition, Se not changed Il for any oper	arforators, Second Edition, September 2006. All of the equipment used tested and was not changed in any manner for the test. Furthermore, perforate a well for any operator. API neither endorses these tests	on of Well Pene gun being to furnished to	e for Evaluation the use in the transfer that would be	ended Practic ur company fo the equipmen	9B: Recomm ipment with o the same as	ined in API 1 tandard equi substantially	bed.	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 us ns riet 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. Furthermor, rapidom 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 are perforator system described.	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 random 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 Ose of the perforator system described.
									ind Party	Jorge Smirhoff APIW TINITE PARTY	Self Jorg	Type of Certification:
									2	The same	15	Manufacturer's Certification
				0.000			0.070	0.020	1	1	0.000	Remarks
0.045				0.065	0.042	0.068	0.048	0.025	0.041	0.065	0.056	Total Depth, in
0.429				0.405	0.470	0.420	0.410	0.430	0.425	0.505	, in 0.405	Average Casing Hole Diameter, in.
0.444				0.430	0.480	0.450	0.420	0.440	0.430	0.520	kis, in 0.420	Casing Hole Diameter, Long Axis, in
0.414				0.380	0.460	0.390	0.400	0.420	0.420	0.490	xis, in 0.390	Casing Hole Diameter, Short Axis, in
XXXXXX				0.758	1.394	0.000	1.394	0.758	0.205	1.681	0.205	Clearance, in.
Average	No 22	No 21	No 20	No 19	No 18	No 17	No 16	No 15	No 14	No 13	No 12	Shot No.
	0.049	0.021	0.057	0.055	0.030	0.038	0.034	0.031	0.059	0.019	0.056	Burr Height, in
our committee	57.470	56,470	50.470	58.470	56.470	55,470	55.970	54.470	59.470	57.470	45.470	Total Depth, in
	0.405	0.445	0.400	0.425	0.420	0.435	0.500	0.390	0.425	0.435	in 0.395	Average Casing Hole Diameter, in.
	0.410	0.460	0.430	0.430	0.430	0.450	0.520	0.400	0.450	0.440	is, in 0.420	Casing Hole Diameter, Long Axis, in
	0.400	0.430	0.370	0.420	0.410	0.420	0.480	0.380	0.400	0.430	ds, in 0.370	Casing Hole Diameter, Short Axis, in
0000000	0.758	1.394	0.000	1.394	0.758	0.205	1.681	0.205	0.758	1.394	0.000	Clearance, in
	No 11	No 10	No 9	No 8	No 7	No 6	No 5	No 4	No 3	No 2	No 1	Shot No.
days			Age of Target 31	Age of T	psi,	10	Strength 6210	Briquette Compressive Strength	Briquette		Test 03 / 16 / 2010	Date of Compressive Strength Test
lb.		ater 16520	Amount of Water	,		nd 63600	Amount of Sand	lb,	800	Amount of Cement 31800	OD, Amoun	
			15 /2010	ction 1 Test 03 /15 /2010	Date of Sec	L-80	API Grade, L	lb/ft,		47	OD, Weight 47	Casing Data 9 5/8"
											n 1.11	Remarks/Exceptions per Section 1.11
in³/charge			Debris N/A	gm/charge, De	-		Veight N/A	Debris Weight		inside the gun	loading tube debris keeps	Debris Description Cases and loading tube debris keeps inside the gun
Simultaneous				Selective X			Available Firing Mode:		Bottom up	Top down X	degrees, Firing Order:	Phasing Tested 135° dee
in.					ing	ım ID for Runn	Recommended Minimum ID for Running	Recomm			Gun.	Gun Type High Shot Density Gun.
		Shots/ft _				2	Shot Density Tested 12	Shot Der		Date of Manufacture		2
			Carrier Material STEEL	psi, Carrier I		ing 13000	Maximum Pressure Rating	Maximu			DP ExTrAI	Charge Name 39 grams HMX DP ExTrAI
200 hr	100 hr		2,	3 hr				Max Temp, °F			7" DP HMX ExTrA! 12 SPF 135°	
		Case Material STEEL	Case Ma	powder,	gm, HMX	0	Explosive weight 39	Explosive	ASA	ufactured by ET	Available to all service companies. Manufactured by ETASA	Service Company Available to
				WO		e Remarks/Ex	Special Test - See Remarks/Exceptions bel	□ Spe	tion 1	rements of Sec	☑ Conforms to All Requirements of Section	API Form 19B-Section 1
		AND RECORD AND PROPERTY AND ADDRESS.		DETAILS OF THE PROPERTY OF THE PARTY OF THE			AND DESCRIPTION OF THE PERSON					