

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

API Form 19B-Section 1 ☑ Conforms to All Requirements of Section 1				☐ Special Test - See Remarks/Exceptions below								
Service Company Oiltech Services Pte. Ltd.				weight	24 9	gm, <u>HMX</u>	(powd	er, Case Ma	iterial	Steel		
Gun OD & Trade Name 3-3/8" 6 SPF 60° Phase Carrier			Max Temp	o, °F	400	1 hr	3	hr24	4 hr	100 hr	200 hr	
Charge Name HSD 42C 24g HMX BH				Maximum Pressure Rating 20,000 psi, Carrier Material Steel								
Manufacturer Charge Part No. OT60065 Date of Manufacture 13 Sept. 2011				Shot Density Tested 6 Shots/ft								
Gun Type TCP, Wireline, Retrievable Tubular Carrier with scallop				Recommended Minimum ID for Running See					annotavannaturosannapusainus ereinuterikoss		in.	
Phasing Tested 60 degrees, Firing Order: X Top down X Bottom up			Available	Manufacturing and control cont			Selective	X			Simultaneous	
Debris Description N/A			Debris We	eight	N/A	9	gm/charge,	Debris	N/A		in³/charge	
Remarks/Exceptions per Section 1.11 Maximum carrier diameter after shooting in liquid is 3.53"												
Casing Data 5-1/2"	OD, Weight	17	lb/ft,	lb/ft, API Grade, L-80		Date of Section 1 Test		16 November 2011		er 2011		
Target Data 41"	OD, Amount of Cem	ent1,803	lb, A	Amount of San	and the control of the fact that the control of the	3,605	lb,	Amount of Wa		939	lb.	
Date of Compressive Strength Test 15 November 2011 Briquette Co		mpressive Strength 6,547		6,547	psi,	Age of Target		30		days		
Shot No.	No 1 N	o 2 No 3	No 4	No 5	No 6	No 7	No 8	No 9	No 10	No 11		
Clearance, in.	0.00	.29 1.05	1.52	1.05	0.29	0.00	0.29	1.05	1.52	1.05		
Casing Hole Diameter, Short Axis, in	0.74	.74 0.76	0.80	0.82	0.76	0.78	0.84	0.82	0.81	0.73		
Casing Hole Diameter, Long Axis, in	0.76	.79 0.78	0.84	0.86	0.80	0.80	0.90	0.85	0.84	0.75		
Average Casing Hole Diameter, in.	0.75	.77 0.77	0.82	0.84	0.79	0.79	0.87	0.84	0.82	0.73		
Total Depth, in.	8.30 7	.30 8.30	7.80	7.30	6.30	6.80	8.30	6.80	6.30	5.80		
Burr Height, in.	0.06 0	08 0.05	0.08	0.05	0.07	0.06	0.07	0.08	0.04	0.07		
Shot No.	No 12 N	o 13 No 14	No 15	No 16	No 17	No 18	No 19	No 20	No 21	No 22	Average	
Clearance, in.	0.29										XXXXXX	
Casing Hole Diameter, Short Axis, in	0.74	indecreases and contracted and contract of the	ALTONIO MOCCONDINO COMPANDA DE MANOCON	вонановичниций нивистой отнига	National control of the second control of th	MANAGEMENT AND THE STREET AND THE ST	erantemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamentemplaneamente	ACT STATE ST	AC PRANSIN LANGUE IN BUSINESS CHARLES CONTROL	antiferrore houses by primary better to a	0.78	
Casing Hole Diameter, Long Axis, in	0.76	And processing and pr	developments in investigation of the	CHARLISTINGWARKSTONICAMINACIA	Method cool of method from private switchers concern	THE REPORT OF THE PROPERTY OF	Restoractionsometricing	ORIGINAL PROPERTY OF THE PROPE	Estavations/investiglences/assessment	engenicorous/bustownweisresse/fidea	0.81	
Average Casing Hole Diameter, in.	0.75	manifestration of the state of		EMPLOYING MANES AND SHARE SHARE	COMPLEMENTAL PROPERTY OF THE P	ACHIEN GRAND MONTH OF THE STATE OF T	entroller manufacturity con	ecs secretary products the economic field of the	ROSEQUINES CONTRACTOR	NAMES OF BEHAVIOR OF THE PARTY	0.80	
Total Depth, in	7.30	publiculopisodadicums parecinaticulosisistemicamenterioris		Management of the Spinish Spin	No commence control of the control o		-	this demography on a construction of the sequence of the seque	***************************************		7.21	
Burr Height, in.	0.07	with the second				***************************************					0.07	
Remarks The average penetration with	h compressive strength of 5,0	00 psi is 7.77". The above	e charges wer	re manufacture	d by Dahana C	iltech Joint Op	eration (DOJ	O), Indonesia.				
Manufacturer's Certification												
Type of Certification: Self X Third Party												
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 sord, 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 use of the perforator system described.												
CERTIFIED BY Frankie Teo AGM				15 Oct 2012 Oiltech Services Pte Ltd				2, #02-0	2, #02-06, Singapore 508988			
X RECERTIFIED (Company Official) (Title) (Date) (Company) (Address)												
Name of test as it should appear on website: 3-3/8", HSD 42C 24g HMX BH, 60° Phasing, 6 SPF												
Name of test as it appears on application and application date: Charge: HSD 42C 24g HMX BH, Gun: 3-3/8", 6 SPF, 60° Phase Carrier												