

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.				e weight	32	gm, HMX	powde	er, Case Ma	aterial	Steel		
Gun OD & Trade Name 4-1/2" 6 SPF 60° Phase Carrier			Max Ten	np, °F	400	1 hr	3	hr24	4 hr	100 hr	200 hr	
Charge Name HSD 32g HMX DP / PPG 32g HMX DP			Maximum Pressure Rating 17,000 psi, Carrier Material Steel									
Manufacturer Charge Part No. OT40301 / OT60377 Date of Manufacture 14 Dec. 2011				Shot Density Tested 6 Shots/ft								
Gun Type TCP, Wireline, PPG, Retrievable Tubular Carrier with scallop				Recommended Minimum ID for Running See Remarks							in.	
Phasing Tested 60 degrees, Firing Order: X Top down X Bottom up			Available Firing Mode: X Selective						Χ		Simultaneous	
Debris Description N/A			Debris W	Veight	N/A	g	m/charge,	Debris	N/A		in³/charge	
Remarks/Exceptions per Section 1.11 Maximum carrier diameter after shooting in liquid is 4.59"												
Casing Data 7" OD,	Weight 32	Weight 32		lb/ft, API Grade, L-8		Date of Section 1 Test		18 January 2011				
Target Data 82" OD,	Amount of Cement	7,209	lb,	Amount of Sai	POWER TO SERVICE AND ADDRESS OF THE PARTY OF	4,418	lb,	Amount of Wa	The state of the s	3,756	lb.	
Date of Compressive Strength Test 17 J	lanuary 2011	Briquette Co	mpressive	Strength	6,021	psi,	Age	of Target	3	80	days	
Shot No.	No 1 No 2	No 3	No 4	No 5	No 6	No 7	No 8	No 9	No 10	No 11	·	
Clearance, in.		1.12	1.59	1.12	0.32	0.00	0.32	1.12	1.59			
Casing Hole Diameter, Short Axis, in	ADMINISTRAÇÃO DE CONTRACTOR ADMINISTRAÇÃO DE CONTRACTOR DE	0.52	0.51	0.51	0.49	0.50	0.48	0.49	0.48	1.12		
	. 0.52 0.55	0.54	0.54	0.55	0.52	0.53	0.51	0.51	0.50	0.51		
	. 0.51 0.54	0.53	0.53	0.53	051	0.52	0.50	0.50	0.49	0.50		
Total Depth, in.		27.95	23.95	25.45	27.95	26.45	27.45	25.95	26.45	27.05		
Burr Height, in.		0.7	0.09	0.10	0.08	0.08	0.07	0.06	0.05	0.09		
	er promotor proportina esta discolario audito conscensi di dimenente condit primario di all'observazione	Antidocini proprio principa de la companio de la compa		* * * * * * * * * * * * * * * * * * *	Pristo de un contrata de la contrata del la contrata de la contrata del la contrata de la contrata del la contrata del la contrata del la con		automotionicary surgest automotive	and employees example of my development of the	Consecutive district investigation manager that	sycondermoneactic fed trigging comment		
Shot No.	No 12 No 13	No 14	No 15	No 16	No 17	No 18	No 19	No 20	No 21	No 22	Average	
Clearance, in.	0.32 0.00	0.32	1.12	1.59	1.12	0.32		ana annyannon-urusung-contratan-menunga			XXXXXX	
Casing Hole Diameter, Short Axis, in	0.48 0.50	0.52	0.53	0.54	0.50	0.50		sid energy-non-communication	ENVELOPMENT OF THE PROPERTY OF	KOMPANIA O O O O O O O O O O O O O O O O O O O	0.50	
Casing Hole Diameter, Long Axis, in	enterestation de la company de	0.55	0.55	0.57	0.52	0.52			fiecostatica producero de composito de la comp		0.52	
Average Casing Hole Diameter, in	NAME OF THE PROPERTY AND THE PROPERTY AN	0.54	0.54	0.56	0.51	0.51		ON RESERVOISES ASSESSMENT ASSESSM	Notice and the second s	REMINISTRATION OF THE PROPERTY	0.51	
Total Depth, in.	. 28.95 27.45	29.45	27.45	27.95	23.95	26.95		wy unconstructed consumpting to the construction of the constructi	S ECTION OF THE PROPERTY OF T		26.73	
Burr Height, in.	присональности политический присональной при	0.05	0.08	0.06	0.07	0.07					0.07	
Remarks The average penetration with compress	ive strength of 5,000 psi is 28.10'	(Normalized). This	charge can	also be used in	5" PPG type car	ier. The above ch	arges were m	anufactured by Dah	nana Oiltech Joi	nt Operation (D	OJO), 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 cont. 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 charged in any manner for the test. Furthermore, and the equipment was charged in any experience as the equipment that would be furnished to perforate a well for any experience as the equipment that would be furnished to perforate a well for any experience.												
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 tes nor recommends the use of the perforator system described.												
				45 O-1 0040 Oilth O-mi 51 111					25 Loyang Crescent, Blk 302 TOPS Ave 3, #02-06, Singapore 508988			
CERTIFIED BY Frankie Teo AGM RECERTIFIED (Company Official) (Title)				15 Oct 2012 Oiltech Services Pte Ltd (Date) (Company)				3, #02-0	(Address)			
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Name of test as it should appear on website: 4-1/2", HSD 32g HMX DP, 60° Phasing, 6 SPF												
Name of test as it appears on application and ap	Name of test as it appears on application and application date: Charge: HSD 32g HMX DP, Gun: 4-1/2", 6 SPF, 60° Phase Carrier											