

CERTIFICATE OF INSPECTION & TEST

ORIGINAL



ST&H CORPORATION
 411-3 Shinwol-ri, Jinryemyun, Gimhae-si Gyungnam, Korea
 Tel:82.51.744-4680(5 line) Fax:82.51.744-4670
 E-mail : stcorp@kornet.net

(EN 10204 3.1)

Certified to ISO9001:2008, ISO14001:2004, PED97/23/EC by LRQA

Certified API Spec Q1 and API Spec 6A (Licence No : 6A-1284)



Customer : PLESA ANAHUAC Y CIAS.,S.A DE C.V.				Contract No. : 15982				Report No : MSH8188				Date: SEP.09.2013				
Spec. For Material : ASTM/ASME A/SA105N-11(NACE MR0175/ISO 15156-2009)												Heat Treatment				
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	910°C NORMALIZED & A C				
Heat No./Batch no.	MAX	0.350	0.350	1.050	0.035	0.040	0.400	0.300	0.120	0.400	0.080					
	MIN		0.100	0.600												
05490B		0.203	0.200	0.880	0.016	0.006	0.011	0.026	0.002	0.010	0.001	Dimensional Inspection				
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)										Hardness Test (HB)
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual		Average		Notch Type						
Dia	Gage Length					min	min									
12.5	50	MAX					Test Result				187		GOOD			
		MIN	250.000	485.000	22.000	30.000	①	②	③	Average					Temp	
12.5	50		342.000	547.000	37.000	66.000					144, 149		Ultrasonic Examination			
ITEM / SIZE			Q'TY		ITEM / SIZE			Q'TY		ITEM / SIZE					Q'TY	
150LBS WNRF STD 12"			20		BLANK					BLANK					Magnetic Particle Examination	
BLANK																
															Remarks : **CE = 0.36 (LONG FORMULAR)	

NOTE :
 1MPa = 145.037 psi
 1MPa = 0.145037 ksi
 1psi = 0.006895 MPa
 1ksi = 6.89476 MPa

W.C:Water Cool O.C:Oil Cool
 A.C:Air Cool N.A:Non Action
 N:Normalized A:Annealed
 Q.T:Quenched and Tempered
 N.T:Normalized and Tempered

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order.

[Signature]



Witnessed by / H. J. LEE Manager of Q.A Dept. / S. H. LEE