PETRO FLANGE, S.A. DE C.V.

Vendido a: FERRETERIA Y REP.. INT., S.A. DE C.V.
Direccion:
Pedido: TEL

Folio:	**3167**
Cert. No.	**PF-WNSO-811-201**
Date.	*13/03/2009*

INSPECTION CERTIFICATE

ITEM	PCS	DESCRIPTION	SPECIFICATIONS	HEAT No.	MECHANICAL COMPOSITION TENSILE Mpa	YIELD Mpa	ELONG %	R/Area %	HARDNES HB
1	30	S.O. 5" 150# R.F.	ASTM A-105-05	8329	505	272	32	35	167
2	20	W.N.3" 600# R.F. SCH-80	ASME SA-105-05	015	520	315	35	39	176
			ASME B16.5-2003						
			NACE MR-0175-03/05						

CHEMICAL COMPOSITION

ITEM	HEAT. No.	C	Mn	P	S	Si	Cu [A]	Ni [A]	Cr [A,B]	Mo [A,B]	V [A]	Nb	CE
1	8329	0.190	0.670	0.019	0.019	0.180	0.150	0.036	0.040	0.020	0.010	-	0.33
2	015	0.240	0.710	0.017	0.019	0.230	0.150	0.011	0.090	0.100	0.010	-	0.41

[A] The sum of cooper, nickel, chromium, molybdenum and vanadium shall not exceed 1.00 %
[B] The sum of chromium and molybdenum shall not exceed 0.32%

Ni+Cu)/15

NOTE: FORGED ROLLED 1150°C -1200°C
NORMALIZED 900°C AND ALLOWED TO COOL IN STILL AIR.

PETRO FLANGE S.A. DE C.V.
QUALITY ASSURANCE CONTROL DEPARTAMENT
ENTREGADO