



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

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

Direccion:

Pedido: TEL

Folio:	3323
Cert. No.	PF-WN-952-352
Date.	23/04/2009

INSPECTION CERTIFICATE

ITEM	PCS	DESCRIPTION	SPECIFICATIONS	HEAT No.	MECHANICAL COMPOSITION				
					TENSILE Mpa	YIELD Mpa	ELONG %	R/Area %	HARDNES HB
1	5	BLD 1" 150# R.F.	ASTM A-105-5 ASME SA-105-05 ASME B16.5-2003 NACE MR-0175-03/05	08K26801	487	259	32	36	184
2	30	BLD 2" 150# R.F.		TNNN	488	268	32	31	167
3	20	S.O. 1" 150# R.F.		08K47301	485	250	26	35	174
4	25	S.O. 1" 300# R.F.		750	496	285	26	34	182
5	6	S.W. 1-1/2" 150# R.F. SCH-40		08K69413	488	268	32	31	167
6	5	S.W. 2" 300# R.F. SCH-40		08K69502	505	275	26	36	159
7	5	W.N. 2" 150# R.F. SCH-160		08K40702	487	262	32	31	174
8	10	W.N. 1" 300# R.F. SCH-40		07K00401	492	272	24	37	152
9	10	W.N. 1" 600# R.F. SCH-40		07K0069501	496	277	30	33	181
10	30	BLD 2" 150# R.F.		315	501	262	24	36	174

CHEMICAL COMPOSITION

ITEM	HEAT. No.	C	Mn	P	S	Si	Cu ^A	Ni ^A	Cr ^{AB}	Mo ^{AB}	V ^A	Nb	CE
1	08K26801	0.180	0.650	0.021	0.023	0.200	0.170	0.060	0.050	0.040	0.036	-	0.33
2	TNNN	0.210	0.680	0.021	0.023	0.180	0.170	0.030	0.080	0.030	0.050	-	0.37
3	08K47301	0.180	0.650	0.017	0.023	0.200	0.130	0.060	0.011	0.090	0.010	-	0.32
4	750	0.259	0.825	0.024	0.023	0.259	0.272	0.028	0.011	0.030	0.001	-	0.42
5	08K69413	0.210	0.680	0.021	0.023	0.180	0.170	0.030	0.080	0.030	0.050	-	0.37
6	08K69502	0.160	0.624	0.014	0.027	0.348	0.247	0.017	0.046	0.009	0.004	-	0.29
7	08K40702	0.170	0.650	0.021	0.035	0.348	0.247	0.038	0.082	0.009	0.004	-	0.32
8	07K00401	0.245	0.724	0.019	0.025	0.184	0.190	0.028	0.020	0.029	0.010	-	0.39
9	07K0069501	0.229	0.700	0.021	0.035	0.199	0.174	0.054	0.029	0.011	0.016	-	0.37
10	315	0.264	0.736	0.022	0.020	0.234	0.274	0.025	0.009	0.032	0.005	-	0.42

^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.

QUALITY ASSURANCE CONTROL DEPARTMENT

