



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

MATERIAL TEST CERTIFICATE

Dimension Standard: ANSI/ASME B16.9-03

Material Standard: ASTM A234/A234M-07 WPB
NACE MR 0175-03 ISO 15156

ITEM	DESCRIPTION	SIZE	QTY (PCS)	HEAT NO.	CHEMICAL COMPOSITION (%)											
					C	Si	Mn	P	S	Cr	Ni	Mo	Cu	V	Nb	CE
					0.30 Max.	0.10 Min.	0.29-1.06	0.050 Max.	0.058 Max.	0.40 Max.	0.40 Max.	0.15 Max.	0.40 Max.	0.08 Max.	0.02 Max.	.50 Max.
1	CON REDUCER SCH80 WPB	24 x 20	10	890527	0.180	0.240	0.540	0.070	0.005	0.020	0.150	0.070	0.150	0.004	0.005	0.31
2	CON REDUCER SCH40 WPB	6 x 2	20	09P45265	0.210	0.270	0.500	0.017	0.006	0.050	0.120	0.009	0.180	0.006	0.006	0.33
3	CON REDUCER SCH40 WPB	6 x 3	10	09P06521	0.200	0.270	0.470	0.024	0.016	0.014	0.160	0.015	0.150	0.002	0.001	0.31
4	CON REDUCER SCH80 WPB	12 x 8	15	533649	0.180	0.260	0.560	0.024	0.005	0.024	0.170	0.012	0.120	0.001	0.004	0.30
5	CON REDUCER SCH80 WPB	10 x 8	15	09P48923	0.200	0.290	0.550	0.019	0.007	0.020	0.150	0.009	0.110	0.020	0.009	0.32
6	RED TEE SCH40 WPB	4X2	10	908671	0.230	0.280	0.580	0.020	0.010	0.024	0.170	0.012	0.120	0.001	0.004	0.35
7	RED TEE SCH40 WPB	6X4	10	903674	0.230	0.280	0.580	0.020	0.010	0.024	0.170	0.012	0.120	0.001	0.004	0.35

MECHANICAL PROPERTIES

ITEM	DESCRIPTION	SIZE	QTY (PCS)	HEAT NO.	TENSILE STRENGTH Min. 415 Mpa	YIELD STRENGTH Min. 240 Mpa	EL2IN (%) Min. 30%	HARDNESS (HB) 197 Max.	NOTES
2	CON REDUCER SCH40 WPB	6 x 2	20	09P45265	445	305	32	< OR =197	
3	CON REDUCER SCH40 WPB	6 x 3	10	09P06521	430	290	33	< OR =197	
4	CON REDUCER SCH80 WPB	12 x 8	15	533649	470	310	36	< OR =197	
5	CON REDUCER SCH80 WPB	10 x 8	15	09P48923	460	320	30	< OR =197	
6	RED TEE SCH40 WPB	4X2	10	908671	495	310	33	< OR =197	
7	RED TEE SCH40 WPB	6X4	10	903674	495	310	33	< OR =197	

We hereby certify that the products described herein has been manufactured in compliance with ASTM A234 WPB and ANSI B16.9 and that the test results shown herein are correct.

