



MILL TEST CERTIFICATE

Customer:		Standard:	API 5L PSL2	Steel Grade:	X60
Contrat No:	HNSC 16219-LO	COUNTRY OF ORIGIN:	MADE IN CHINA	Speciffication:	530*12.7MM
Description of Goods:	CARBON SEAMLESS STEEL PIPE	Delivery Condition:	Quenched & Tempered	Date of Issuing:	2013.12.20

Heat No.	1	2	化学成分 Pipe Chemical Composition (wt%)																	1	涡流 E. T.	磁粉 M. P. I.	无损检验Non-Destructive Test					Surface And Dimension	Conclusion		
			3	4	C	Si	Mn	P	S	Cr	Ni	Mo	V	Ti	Cu	Nb	Al	B	E1				E2	超声U. T. / 漏磁E. M. I.		Thickness Testing Coverage	Result				
																								纵向Longitudinal						横向Transverse	
																								External Surface						External Surface	
13042H			H	B	0.13	0.27	1.20	0.013	0.006	0.02	0.01	0.07	0.06	0.020	0.03	0.026	0.032	0.0004	0.36	0.21	P	Passed	Passed	1	ASTM E570 N 12.5%	ASTM E570 N 12.5%	PASSED	PASSED	OK	OK	
13042H			P	P	0.14	0.27	1.23	0.010	0.003	0.02	0.01	0.06	0.07	0.020	0.03	0.028	0.027	0.0005	0.38	0.23											
13042H			P	P	0.15	0.28	1.24	0.010	0.003	0.02	0.01	0.06	0.07	0.021	0.03	0.029	0.028	0.0005	0.39	0.23											

LOT NO.:	拉伸试验 Tensile Test										冲击试验 Impact Test								Hardness Test Max (HV10)			DWTT (/ °C)			Hydro-static Test (Mpa)								
	1	2	3	4	5	7	8	屈服 Yield Strength R <sub>0.2</sub> (MP a)	抗拉 Tensile Strength R <sub>m</sub> (Mpa)	伸长 Elong- ation A <sub>50</sub> %	屈强比 Y/T %	断缩率 R. A. %	1	2	3	4	6	7	Absorbed Energy (J)				Shear Area (%)				W	HAZ	BM	1	2	A.V	
																			1	2	3	AVG	1	2		3							AVG
2302482	P	P	1	7	4	1	8	468	585	50	80		P	P	2	C	1	2	224	261	416	300	95	95	95	95	240	235	230	100	95	98	20.5

Remark: \*3化学成分Chemical Composition:H=熔炼分析Heat(Ladle) Analysis P=产品分析Product Analysis \*4取样位置Sampling Position:B=母材Base Metal P=管体Pipe Body \*附加元素E1:V+Nb+Ti \*附加元素E2:C+Si/30+(Mn+Cu+Cr)/20+Ni/60+Mo \*附加元素E3:TAI/N/10  
\*1位置Position:E=管端Pipe EndsP=管体Pipe Body\*2无损检验方法Type of Test:U=超声波检验U.T.  
\*1取样位置Sampling Position:P=管体Pipe Body \*2试验类型Test Type:P=产品试验\*3取向Orientation:1=纵向Longitudinal2=横向Transverse \*4尺寸Size:7=弧形试样StripT×38.10mmB=7.5×10×55mm \*5标距Gauge Length:4=50.8mm or 2in \*6缺口类型Notch Type:1=V型\*7试验温度Temp:4=4°F or -20°C=10°C—35°C \*8屈服类型Yield Type:H=Rt0.5

Total:	21 支PIECES	243.89 米METERS	39.650吨MT
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Note: 1) When high-strength pressure line pipes are used in conjunction with normal steel, the quality of which shall be assured as normal pipes.  
2) The pipe damaged during transportation and loading are not within the scope of inspection:

WE HEREBY CERTIFY THAT THIS PRODUCT HAS BEEN MANUFACTURED AND TESTED WITH RESULTS IN ACCORDANCE WITH REQUIREMENTS OF THE SPECIFICATION.

PERSON IN CHARGE OF QUALITY EXAMINATION

