



EN10204/3.1
证书编号(Certificate No.): C20230270004-1/8

客户名称(Customer): 合同号(Contract No.): 102007956 热处理制度及交货状态(Treatment way & Delivery Condition): Q&T (Min Tempering Temperature: 675 °C)
产品标准(Product Standard): API 5CT 10th-2018 总重量(Total Weight): 814075kg 总长度(Total Length): 11539.953M 总支数(Total Pieces): 943 扣型(Connection): PE 产品规格等级(Product specification level): PSL-2

序号 NO.	钢号 (钢级) Grade	规格Size 管体(外径*壁厚*长度) D*St*L PIPE	炉号 Heat No.	批号 Lot No.	化学成分(CHEMICAL COMPOSITION) % P-Product analysis(产品分析), H-Heat analysis(熔炼分析)																无损检测 NDT				制造方法 Manufacture process		热轧及无缝 Hot Rolling & Seamless		
					C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Su	N	超声波 UT	磁粉 MFL	涡流 WF/PI 管端 PIPE END	手动超声 MUT	管体试验 Drift Test	涂漆 Coating	外观尺寸 Visual & Dimension	螺纹检验 Threads Test	
					>10 ⁻²	<10 ⁻²	>10 ⁻²	>10 ⁻³	>10 ⁻³	<10 ⁻²	<10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	>10 ⁻²	(L2)	(L2)	(AI-30/100)	(-)	-	-	-	-
1	L80-1	244.48*11.99* 3-12.6M	2304802	H2208517	P	35	24	154	7	1	12.7	0.6	0.6	0.3	-	0.2	1.8	0.3	0.5	2.1	3.9	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	27	25	155	9	1	14	1	1	-	1	-	2.1	-	-	-	-								
2	L80-1	244.48*11.99* 3-12.6M	2304809	H2208518	P	23	24	152	14	2	13	0.5	0.7	0.4	-	0.2	2.7	0.2	0.4	2.1	1.6	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	25	25	155	11	3	14	1	1	-	1	-	4	-	-	-	-								
3	L80-1	244.48*11.99* 3-12.6M	2304808	H2208523	P	22	24	150	15	2	13.2	0.5	0.6	0.4	-	0.2	3.1	0.2	0.4	2.2	0.3	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	25	23	150	8	4	13.6	0.5	0.6	0.3	-	0.2	3.8	0.4	0.5	2.3	1								
序号 NO.	拉伸试验(纵向)Tensile Test(Longitudinal)				晶粒度 Grain Size ASTM E112 比较法 Comparison method	冲击试验Impact Test(I)				硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test				数量(Quantity)											
	试样数量/标准号 Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)		试样尺寸/方向 Size(mm)/Orie ntation	取件位置 Sample location	温度 Temperature 0 °C	平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Locatio n	1	2	3	平均值 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPE OR CUM	长度(M) Length	重量(Kg) Weight								
1	38.1/50.8	688	562	34	55*10*7.5- T	尾(W)	123	113	118	118	100	100	100	外Out	17.1	17.4	15.1	16.5	-	Acceptance	5	54.889	3797						
		702	591	35		头(H)	-	-	-	-	-	-	-	-	中Mid	18.1	19.1	18.7	18.6					-					
2	38.1/50.8	710	612	34	55*10*7.5- T	尾(W)	133	148	136	139	100	100	100	外Out	18.3	16.0	16.9	17.1	-	Acceptance	2	22.013	1515						
		699	592	33		头(H)	-	-	-	-	-	-	-	-	中Mid	19.5	20.2	20.2	20.0					-					
3	38.1/50.8	709	604	35	55*10*7.5- T	头(H)	-	-	-	-	-	-	-	外Out	17.9	18.1	16.3	18.1	-	Acceptance	1	11.113	776						
		705	606	35		尾(W)	112	119	120	117	100	100	100	中Mid	19.0	19.5	19.3	19.3	-										

Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0684) were performed at the mill of facility ID 7898 and this mill is an authorized API Marker
地址: 中国安徽省滁州市管滁中路899号 No. 1899 7100 Middle Road, Zhuchou City, Anhui Province, China 邮编: P.C. 239000 | 电话: TEL: +86 550 311 2455 传真: FAX: +86 550 306 7318 网址: http://www.vallourec.com.cn



瓦卢瑞克天大(安徽)股份有限公司

VALLOUREC TIANDA (ANHUI) CO., LTD

产品质量证明书

MILL TEST CERTIFICATE



EN10204/3.1

证书编号Certificate No.: C202302070004-2/8

客户名称Customer:

合同号Contract No.: 102007956

热处理制度及交货状态Treatment way & Delivery Condition: Q&T (Min Tempering Temperature: 675 °C)

产品标准Product Standard: API 5CT 10th-2018

总重量Total Weight: 814075kg

总长度Total Length: 11539.953M

总支数Total Pieces: 943

扣型Connection: PE

产品规格等级Product specification level: PSL-2

Main product specification table with columns for item no., grade, size, heat no., lot no., chemical composition (C, Si, Mn, P, S, Cr, Ni, Cu, Ti, Mo, V, Al, Nb, B, Sn, N), NDT, manufacturing process, and test results (Tensile, Impact, Hardness, Hydrostatic).

Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Maker.

地址Add: 中国安徽省滁州市紫薇中路1899号 No. 1899 Z紫薇 Middle Road, Chuzhou City, Anhui Province, China. 邮编P.C: 239000 电话TEL: +86 550 311 2465 传真FAX: +86 550 306 7318 网址http://www.vallourec.com.cn



瓦卢瑞克天大(安徽)股份有限公司
VALLOUREC TIANDA (ANHUI) CO., LTD
产品质量证明书
MILL TEST CERTIFICATE



EN10204/3.1
证书编号(Certificate No.): C202302070004-3/8

客户名称(Customer): 合同号(Contract No.): 102007956 热处理制度及交货状态(Treatment way & Delivery Condition): Q&T (Min Tempering Temperature: 675 °C)
产品标准(Product Standard): API 5CT 10th-2018 总重(Total Weight): 8140758g 总长度(Total Length): 11539.953M 总支数(Total Pieces): 943 扣型(Connection): PE 产品规范等级(Product specification level): PSL-2

序号 NO.	钢号 (牌号) Grade	规格 Size (管体(外径*壁厚*长度) D*δ*L) PIPE	炉号 Heat No.	批号 Lot No.	化学成分(CHEMICAL COMPOSITION) % P-Product analysis(产品分析), H-Heat analysis(冶炼分析)																	无损检测 NDT				制造方法 Manufacture process		热轧及无缝 Hot Roll/Ink/Seamless	
					取样 位置 Type	C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Sn	N	超声波 UT	磁粉 MFL	湿敏粉 WPMF 管端 PIPE END	手动超声 MUT	通径试验 Drift Test	涂层 Coating	外观和尺寸 Visual & Dimension	螺纹检验 Threads Test
						<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²								
1	L80-1	244.48*11.99* 3-12.6M	2304807	H2208531	P	23	24	150	14	2	13.9	0.5	0.6	0.3	-	0.2	2.9	0.2	0.4	1.9	2.7	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
2	L80-1	244.48*11.99* 3-12.6M	2304811	H2208532	P	22	24	149	12	3	12.7	0.5	0.6	0.2	-	0.2	3.8	0.2	0.2	1.2	0.5	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
3	L80-1	244.48*11.99* 3-12.6M	2304807	H2208531	P	27	22	153	5	1	13.4	0.5	0.6	0.3	-	0.2	3.7	0.2	0.4	2.2	9	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
序号 NO.	拉伸试验(纵向)Tensile Test(Longitudinal)				晶粒度, 级 Grain Size ASTM E112 比较法 Comparison method	冲击试验 Impact Test (J)				硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test				数量(Quantity)											
	试样宽度/标距 width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)		试样尺寸/方向 Size(mm)/Orientation	取样位置 Sample Location	温度 Temperature 0 °C	平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location	1	2	3	平均 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPE OR C/CM	长度 (M) Length	重量 (Kg) Weight								
1	38.1/50.8	708	597	34	55*10*7.5-T	尾(W)	115	124	128	122.3	100	100	100	外Out	17.0	18.0	18.4	17.8	-	Acceptance	6	65.219	4553						
2	38.1/50.8	721	624	34	55*10*7.5-T	尾(W)	117	115	127	119.7	100	100	100	外Out	19.8	19.0	20.5	19.8	-	Acceptance	6	64.961	4542						
3	38.1/50.8	716	616	35	55*10*7.5-T	尾(W)	127	125	126	126	100	100	100	外Out	16.7	16.6	18.7	17.3	-	Acceptance	2	22.23	1546						

Statement: Hydrostatic testing, thread processing, moisture length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Marking
地址 Add: 中国安徽省滁州市琅琊中路1899号 No. 1899 Ziwu Middle Road, Chuzhou City, Anhui Province, China. 邮编 P.C: 239000 电话 TEL: (86) 550 311 2655 传真 FAX: (86) 550 306 7318 网址 http://www.vallourec.com.cn



瓦卢瑞克天大(安徽)股份有限公司
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产品质量证明书
MILL TEST CERTIFICATE



EN10204/3.1
证书编号 Certificate No.: C202302070004-4/8

客户名称 Customer: 合同号 Contract No.: 102007956 热处理制度及交货状态 Treatment way & Delivery Condition: Q&T (Min Temper (ing Temperature: 675 °C)
产品标准 Product Standard: API 5CT 10th-2018 总重量 Total Weight: 814075Kg 总长度 Total Length: 11539.953M 总支数 Total Pieces: 943 扣型 Connection: PE 产品规范等级 Product specification level: PSL-2

序号 NO.	钢号 (钢级) Grade	规格 Size 管体 (外径*壁厚*长度 D*St*L) PIPE	炉号 Heat No.	批号 Lot No.	化学成分 (Chemical Composition) % P-Product analysis (产品分析), H-Heat analysis (冶炼分析)																	无损检测 NDT				制造方法 Manufacture process		热轧无缝 Hot Rolling Seamless		
					取样位置 Type	C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Sn	N	超声波 UT	漏磁 MPI	湿磁粉 WPMPI 管端 PIPE END	手动超声 MUT	水压试验 Drift Test	涂层 Coating	外观和尺寸 Visual & Dimension	螺纹检验 Threads Test	
						×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻³	×10 ⁻³	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻²	×10 ⁻³	×10 ⁻³	×10 ⁻³	×10 ⁻³	(L2)	(L2)	(A1-30/100)	(-)				
1	L80-1	244.48*11.99* 3-12.6M	2304812	H2208535	P	23	23	151	10	3	13.6	0.5	0.6	0.3	-	0.2	3	0.2	0.4	2.1	1.4	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-	
						25	24	150	9	3	13.6	0.5	0.6	0.3	-	0.2	3.1	0.2	0.4	2.2	4.2									
2	L80-1	244.48*11.99* 3-12.6M	22B09444	H2212511	P	28	27	153	10	6	15.3	1.8	1	0.2	0.3	0.3	2.3	0.5	0.7	2.9	1.3	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-	-
						27	26	155	9	6	15.3	1.8	1	0.2	0.3	0.3	2.3	0.5	0.5	3	1.3									
3	L80-1	244.48*11.99* 3-12.6M	22B09413	H2212512	P	27	29	160	13	6	16.4	2.5	1	0.2	0.3	0.3	1.9	0.5	1	3	3.6	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-	-
						27	29	160	13	6	16.4	2.5	1	0.2	0.3	0.3	1.9	0.5	1.1	3	4.3									
序号 NO.	拉伸试验 (纵向) Tensile Test (Longitudinal)				晶粒度 初 ASTM E112 比较法 Comparison method	冲击试验 Impact Test (J)				硬度试验 Hardness Test -HRC				水压试验 Hydrostatic Test				数量 (Quantity)												
	试样宽度/标距 Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)		试样尺寸 方向 Size (mm) / Orientation	取样位置 Sample Location (mm)	温度 Temperature 0 °C	平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location 序号	1	2	3	平均值 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPE OR C/C/M	长度 (M) Length	重量 (Kg) Weight									
1	38.1/50.8	697	593	35	55*10*7.5- T	头 (T)	-	-	-	-	-	-	-	外Out	16.6	17.5	16.8	17.0	-	Acceptance	3	32.678	2284							
		690	591	35		尾 (W)	119	124	121	121.3	100	100	100	内In	21.3	19.6	19.2	20.0	-											
2	38.1/50.8	711	586	35	55*10*7.5- T	头 (T)	78	77	81	78.7	100	100	100	外Out	17.0	17.3	17.5	17.3	-	Acceptance	84	1032.731	73095							
		721	609	35		尾 (W)	-	-	-	-	-	-	-	内In	18.6	18.0	17.0	17.9	-											
3	38.1/50.8	709	590	35	55*10*7.5- T	头 (T)	105	105	105	105	100	100	100	外Out	17.7	17.8	17.4	17.6	-	Acceptance	90	1102.791	78272							
		733	620	35		尾 (W)	-	-	-	-	-	-	-	内In	18.0	19.3	19.9	19.1	-											

Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Marking
地址 Add: 中国安徽省滁州市紫薇中路 399 号 No. 399 Ziwai Middle Road, Chuzhou City, Anhui Province, China 邮编 P.C: 239000 电话 TEL: +86 550 311 2453 传真 FAX: +86 550 306 7318 网址 HTTP: www.vallourec.com.cn



EN10204/3.1

证书编号 Certificate No.: C202302070004-5/8

客户名称 Customer:

合同号 Contract No.: 102007956

热处理制度及交货状态 Treatment way & Delivery Condition: Q&T (Min Tempering Temperature: 675 °C)

产品标准 Product Standard: API 5CT 10th+2018

总重量 Total Weight: 814075Kg

总长度 Total Length: 11539.953M

总支数 Total Pieces: 943

扣型 Connection: PE

产品规范等级 Product specification level: PSL-2

序号 NO.	钢号 (牌号) Grade	规格 Size	炉号 Heat No.	批号 Lot No.	化学成分 (Chemical Composition) % P-Product analysis (产品分析), H-Heat analysis (炉号分析)														无损检测 NDT 免				制造方法 Manufacture process		热轧或无缝 Hot Rolled/Seamless				
					取样 位置 Type	C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Su	N	超声检测 UT	磁粉 MFL	涡流检测 RFMPI 管端 PIPE END	手动超声 MUT	通径试验 Drift Test	涂层 Coating	外观和尺寸 Visual Dimension	螺纹检验 Threads Test
						$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^3$	$\times 10^3$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^2$								
1	L80-1	244.48*11.99* 3-12.6M	22B09435	H2212513	P	24	29	153	20	4	15.8	6.9	1.1	0.2	0.3	0.3	2.5	0.5	0.3	1.6	1	(L2)	(L2)	A1-30/100	(-)	Acceptance	-	-	-
					H	24	29	157	19	4	15.9	7.5	1.1	0.2	0.3	0.3	2.4	0.5	0.4	1.6	1								
2	L80-1	244.48*11.99* 3-12.6M	22H09442	H2212514	P	26	29	157	21	4	16.5	7.6	1.1	0.2	0.4	0.3	2.2	0.5	0.4	1.6	0.9	Acceptance	Acceptance	Acceptance	-	Acceptance	-	-	-
					H	25	29	159	19	3	16.5	7.8	1.1	0.2	0.4	0.3	2.2	0.5	0.4	1.6	0.9								
3	L80-1	244.48*11.99* 3-12.6M	22B09440	H2212515	P	26	27	153	14	6	15.3	2.2	1.1	0.5	0.4	0.4	2.7	0.5	1	2.7	3.6	Acceptance	Acceptance	Acceptance	-	Acceptance	-	-	-
					H	26	26	153	12	5	15.3	2.2	1.1	0.5	0.4	0.4	2.7	0.5	1	2.9	3.8								
序号 NO.	试样长度/标准 Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)	晶粒度, 符合 ASTM E112 比较法 Comparison method	冲击试验 Impact Test (J)				硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test		数量 (Quantity)													
						试样尺寸/方向 Size (mm) / Orientation	取样位置 Sample Location (mm)	温度 Temperature 0 °C	平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location a)	1	2	3	平均 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPE OR C/CM	长度 (M) Length	重量 (Kg) Weight								
1	38.1/50.8	709	603	34	-	55*10*7.5-T	头(T)	86	91	101	92.7	100	100	100	外Out	17.5	17.1	17.1	17.2	-	Acceptance	66	807.93	57154					
		728	622	35	-		尾(W)	-	-	-	-	-	-	-	中Mid	18.3	17.6	17.9	17.9	-									
2	38.1/50.8	708	602	35	-	55*10*7.5-T	头(T)	90	78	86	84.7	100	100	100	外Out	16.8	16.9	17.1	16.9	-	Acceptance	86	1053.076	74184					
		724	607	34	-		尾(W)	-	-	-	-	-	-	-	中Mid	17.7	16.9	18.5	17.7	-									
3	38.1/50.8	698	590	30	-	55*10*7.5-T	头(T)	83	83	90	85.3	100	100	100	外Out	16.6	16.6	17.0	16.7	-	Acceptance	84	1030.594	72543					
		715	596	32	-		尾(W)	-	-	-	-	-	-	-	中Mid	18.1	18.7	17.2	18.0	-									

Statement Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Millery.
地址 Add: 中国安徽省滁州市管滁中路899号 No. 1899 Ziwu Middle Road, Chuzhou City, Anhui Province, China 邮编 P. O. 239000 电话 TEL: 186 550 311 2465 传真 FAX: 186 550 306 7318 网址 http://www.vallourec.com.cn



EN10204/3.1

证书编号(Certificate No.): C202302070004-6/8

客户名称(Customer):

合同号(Contract No.): 102007956

热处理制度及交货状态(Treatment way & Delivery Condition): Q&T (Min Tempering Temperature: 675 °C)

产品标准(Product Standard): API 5CT 10th-2018

总重量(Total Weight): 814075kg

总长度(Total Length): 11539.953M

总支数(Total Pieces): 943

扣型(Connection): PE

产品规格等级(Product Specification level): PSL-2

序号 NO.	钢号 (钢级) Grade	规格Size 管体(外径*壁厚*长度) D*St*L PIPE	炉号 Heat No.	批号 Lot No.	化学成分(CHEMICAL COMPOSITION) % P-Product analysis(产品分析); H-Heat analysis(冶炼分析)																	无损检测 NDT				制造方法 Manufacture process		热处理 Heat Treatment	
					取样 Type	C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Sr	N	超声波 UT	漏磁 MPI	磁粉 WFPI 管端 PIPE END	手动超声 MUT	涡流 Eddy Test	涂层 Coating	外观和尺寸 Visual & Dimension	螺纹检查 Threads Test
						<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻³	<10 ⁻³	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻²	<10 ⁻³	<10 ⁻³	<10 ⁻³	<10 ⁻³	(L2)	(L2)	(A1-30/100)	(-)	-	-	-
1	L80-1	244.48*11.99* 3-12.6M	22B09438	H2212516	P	27	28	161	12	6	15.5	2.3	1	0.2	0.3	0.2	2.3	0.5	0.9	2.9	3.8	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	26	26	149	10	2	14	2	1	0.3	1	0.5	2.8	1	-	0.1	5.2								
2	L80-1	244.48*11.99* 3-12.6M	22B09437	H2212517	P	27	31	163	16	5	15.5	2.4	1	0.4	0.3	0.3	2.4	0.5	1.1	3	3	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	25	28	151	14	2	14	2	1	0.3	1	0.6	2.4	1	-	0.1	5.5								
3	L80-1	244.48*11.99* 3-12.6M	22B09439	H2212518	P	27	25	156	14	5	14.8	2.4	1	0.2	0.3	0.4	2.7	0.5	0.8	2.9	3.7	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	26	25	156	12	5	14.8	2.3	1	0.2	0.3	0.4	2.7	0.5	0.6	2.7	3.7								
序号 NO.	拉伸试验(纵向)Tensile Test(Longitudinal)				晶粒度-按 ASTM E112 比较法 Comparison method	冲击试验(Impact Test(I))				硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test				数量(Quantity)											
	试样宽度(标准值) Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)		试样尺寸/方向 Size(mm)/Orientation	取样位置 Sample Location	温度 Temperature			平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location	平均 Mean			硬度变化 Hardness variation	最小压力 Min pressure		支数 PCS PIPE OR C/M	长度(M) Length	重量(Kg) Weight							
								1	2	3				1	2	3		1	2				3	43.5 (bar)	5 (s)				
							≥ 8 J			≥ 12 J	≥ 75 %		≤ 23			≤													
1	38.1/50.8	715	607	32	-	55*10*7.5-T	头(H)	73	77	80	76.7	100	100	100	外Out	16.6	15.8	16.6	16.3	-	Acceptance	79	973.878	68787					
		717	603	33	-		尾(W)	-	-	-	-	-	-	内In	17.6	16.9	17.9	17.5	-										
2	38.1/50.8	717	591	32	-	55*10*7.5-T	头(H)	77	86	83	82	100	100	100	外Out	17.1	18.3	18.0	17.8	-	Acceptance	84	1037.516	73184					
		726	620	29	-		尾(W)	-	-	-	-	-	-	内In	17.3	19.2	19.4	18.6	-										
3	38.1/50.8	708	601	34	-	55*10*7.5-T	头(H)	85	77	77	79.7	100	100	100	外Out	16.4	16.0	17.0	16.5	-	Acceptance	51	629.905	44340					
		709	604	31	-		尾(W)	-	-	-	-	-	-	内In	18.8	18.7	18.1	18.5	-										

Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Marking
地址Add: 中国安徽省滁州市紫薇中路399号 No. 399 71st Middle Road, Suzhou City, Anhui Province, China 邮编P.C: 239000 电话TEL: (86 550 311) 2453 传真FAX: (86 550 306) 7318 网址http: "www.vallourec.com.cn



瓦卢瑞克天大 (安徽) 股份有限公司
VALLOUREC TIANDA (ANHUI) CO., LTD
产品质量证明书
MILL TEST CERTIFICATE



EN10204/3.1

证书编号 Certificate No.: C202302070004-7/8

客户名称 Customer:

合同号 Contract No.: 102007956

热处理制度及交货状态 Treatment way & Delivery Condition: Q&T (Min Tempering Temperature: 675 °C)

产品标准 Product Standard: API 5CT 10th-2018

总重量 Total Weight: 814075Kg

总长度 Total Length: 11539.953M

总支数 Total Pieces: 943

扣型 Connection: PE

产品规范等级 Product specification level: PSL-2

序号 NO.	钢号 (钢级) Grade	规格 Size 管体 (外径*壁厚*长度 D*S*L) PIPE	炉号 Heat No.	批号 Lot No.	化学成分 (Chemical Composition) % P-Product analysis (产品分析), H-Heat analysis (炼钢分析)													无损检测 NDT				制造方法 Manufacture process		热轧无缝 Hot Rolling & Seamless					
					取样 位置 Type	C	Si	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Sn	N	超声波 UT	磁粉 MFL	涡流 WAPI 管端 PIPE END	手动超声 MUT	落锤试验 Drop Test	涂层 Coating	外观和尺寸 Visual & Dimension	螺纹检验 Threads Test
						$\times 10^2$	$\times 10^2$	$\times 10^2$	$\times 10^{-3}$	$\times 10^{-3}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-2}$	$\times 10^{-3}$	$\times 10^{-3}$	$\times 10^{-3}$								
1	L80-1	244.48*11.99* 3-12.6M	22B09436	H2212519	P	26	30	155	17	5	15.1	2.3	1	0.3	0.3	0.4	2.4	0.5	1.4	2.9	3.2	FL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	26	29	155	15	5	15.2	2.3	1	0.4	0.3	0.4	2.4	0.5	1	2.8	3.5								
2	L80-1	244.48*11.99* 3-12.6M	22B09434	H2212520	P	27	26	154	14	7	14.8	2.3	0.9	0.2	0.3	0.3	2.7	0.5	1.2	2.9	2.9	FL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	26	26	158	13	6	14.8	2.3	0.9	0.2	0.3	0.3	2.7	0.5	0.9	2.8	2.7								
3	L80-1	244.48*11.99* 3-12.6M	22B09411	H2212521	P	24	29	159	20	3	15.2	7.1	1.2	0.3	0.4	0.3	2.4	0.5	0.3	1.6	0.9	FL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-
					H	26	28	150	11	3	14	2	1	0.3	1	0.6	2.4	1	-	0.1	4.4								
序号 NO.	拉伸试验 (纵向) Tensile Test (Longitudinal)				冲击试验 Impact Test (J)						硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test		数量 (Quantity)												
	试样规格/标准 Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)	晶粒度, 按 ASTM E112 比较法 Grain Size Comparison method	试样尺寸/方向 Size (mm) / Orientation	取样位置 Sample Location (mm)	温度 °C			平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location (a/b)	1	2	3	平均 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPF OR U/C/M	长度 (M) Length	重量 (Kg) Weight						
								1	2	3																			
								≥ 8 J	≥ 12 J	≥ 75 %					≤ 23	≤ -	43.5 (0bar)	5 (S)											
1	38.1/50.8	713	603	31	-	55*10*7.5-T	头 (T)	78	80	86	81.3	100	100	100	外Out	17.0	19.0	16.7	17.6	-	Acceptance	84	1031.789	72241					
		741	627	29	-		尾 (W)	-	-	-	-	-	-	-	-	中Mid	17.2	19.2	18.1	18.2					-				
2	38.1/50.8	720	613	32	-	55*10*7.5-T	头 (T)	83	80	75	79.3	100	100	100	外Out	16.5	17.7	17.3	17.2	-	Acceptance	63	772.084	54561					
		698	583	32	-		尾 (W)	-	-	-	-	-	-	-	-	中Mid	17.5	17.5	17.1	17.4					-				
3	38.1/50.8	720	612	34	-	55*10*7.5-T	尾 (W)	-	-	-	-	-	-	-	外Out	16.5	17.2	16.3	16.7	-	Acceptance	85	1041.263	73639					
		697	592	34	-		头 (T)	82	85	79	82	100	100	100	100	中Mid	16.9	17.5	17.5	17.5					-				



Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SUT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Marker
地址 Add: 中国安徽省滁州市紫薇中路899号 No. 1899 7100 Middle Road, Chuzhou City, Anhui Province, China 邮编 P.C: 239000 电话 Tel: +86 550 311 2163 传真 FAX: +86 550 306 7318 网址 http: www.vallourec.com.cn



EN10204/3.1

证书编号(Certificate No.): C202302070004-8/8

客户名称(Customer):

合同号(Contract No.): 102007956

热处理制度及交货状态(Treatment way & Delivery Condition): Q&T (Min Tempering Temperature: 675 °C)

产品标准(Product Standard): API 5CT 10th-2018

总重量(Total Weight): 814075Kg

总长度(Total Length): 11539.953M

总支数(Total Pieces): 943

扣型(Connection): PE

产品规格等级(Product specification level): PSL-2

序号 NO.	钢号 (牌号) Grade	规格Size 管体 (外径*壁厚*长度 D*St*L) PIPE	炉号 Heat No.	批号 Lot No.	化学成分(CHEMICAL COMPOSITION) % P-Product analysis(产品分析), H-Heat analysis(炉渣分析)														无损检测 NDT②				制造方法 Manufacture process		无损检测 Hot Rolling&Scanless					
					C	Su	Mn	P	S	Cr	Ni	Cu	Ti	Mo	V	Al	Nb	B	Su	N	超声波 UT	磁粉 MFL	湿粉 WFMP 管端 PIPE END	手动超声 MUT	通径试验 Drift Test	涂漆 Coating	外观和尺寸 Visual& Dimension	螺纹检验 Threads Test		
					10^{-2}	10^{-2}	10^{-2}	10^{-3}	10^{-3}	10^{-2}	10^{-2}	10^{-2}	10^{-2}	10^{-2}	10^{-2}	10^{-2}	10^{-2}	10^{-3}	10^{-3}	10^{-3}	10^{-3}	(L2)	(L2)	0A1-30/100	(-)					
1	L80-1	244.48*11.99*8 3-12.6M	22B09445	H2212522	P	24	27	161	19	3	16.6	6.9	1	0.2	0.1	0.2	2.2	0.5	0.3	1.5	0.8	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	EL/ET/IL/IT Acceptance	-	Acceptance	-	-	-	
					H	24	28	164	17	3	16.7	6.6	1	0.2	0.4	0.2	2.1	0.5	0.2	1.5	0.6									
					H	26	28	154	10	2	16	2	1	0.2	1	0.5	2.2	1	-	0.1	4.6									
2					P																									
					H																									
3					P																									
					H																									
序号 NO.	拉伸试验(纵向)Tensile Test(Longitudinal)				晶粒度, 按 Grain Size ASTM E112 比较法 Comparison method	冲击试验Impact Test(J)				硬度试验 Hardness Test-HRC				水压试验 Hydrostatic Test				数量(Quantity)												
	试样宽度/标距Specimen width Gauge length	抗拉强度 Tensile strength (MPa)	屈服强度 Yield strength (MPa)	伸长率 Elongation (%)		试样尺寸/方向 Size(mm)/Orientation	取样位置 Sample Location	温度 Temperature 0 °C			平均值 Average	剪切面积百分比 Percent shear area (%)	位置 Location	1	2	3	平均 Mean	硬度变化 Hardness variation	最小压力 Min pressure	最小时间 Min duration	支数 PCS PIPE OR C/C/M	长度 (M) Length	重量 (Kg) Weight							
								1	2	3	≥ 8 J	≥ 12 J	≥ 75 %					≤ 23	$\leq -$	43.5 (Mpa)	5 (S)									
1	38.1/50.8	705	599	35	-	55*10*7.5- T	头(T)	81	86	76	81	100	100	100	外Out	16.1	16.4	16.6	16.4	-	Acceptance	55	677.231	47769						
							中Mid	17.7	17.7	18.2	17.9	-																		
							内In	16.5	17.0	16.7	16.7	-																		
2							外Out	15.3	16.4	16.4	16.0	-	外Out																	
							中Mid	17.8	17.8	17.6	17.7	-																		
							内In	15.9	16.8	18.4	17.0	-																		
3							外Out						外Out																	
							中Mid																							
							内In																							



Statement: Hydrostatic testing, thread processing, measure length and weight, coating and API marking application (SCT-0681) were performed at the mill of facility ID 7898 and this mill is an authorized API Mucker
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