



C&W International Fabricators

REPORT INDEX

Purchase Order: **ET2022301-3**

Quantity: **28 EA**

Shipment No. :

Shipment Date:

Activity No.	Characteristics	Reference Page
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METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-3-1-01....28	PO# :	ET2022301-3	Date:	2023-03-11
Part No:	WF41531502	API Monogram:	YES	Report#:	202303110301
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 4 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	28 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
22-9-1-2143	28	1	0.402	0.835	0.281	0.011	0.017	0.164	0.073	0.167	1.078	0.030

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm CHARPY J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302050101	28	1	114.0K	128.5K	27.2	59.0	302	70;78;88		

HEAT TREATMENT

Forgings: 5:1	Test Bar (OTC)
Normalized: 900°C 3 HRS	Normalized: 900°C 3 HRS
Austenitized: 860°C 3 HRS	Austenitized: 860°C 3 HRS
Quenchant: OIL	Quenchant: OIL
Start Temp: 23 °C	Start Temp: 23 °C
End Temp: 28 °C	End Temp: 28 °C
Temper: 560°C 4.5 HRS AIR	Temper: 560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:		Approved by:	
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C&W International Fabricators

Hardness Test Report

Serial No. :	ET2022301-3-1-01....28	P0# :	ET2022301-3	Date:	2023-03-11		
Part No:	WF41531502	API Monogram:	YES	Report#:	202303110301		
Specification:	API Spec 6A/ASTM E10	Material:	4140 110k per ASTM A29				
Description:	WECO FLANGE 4 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	28 EA		
Item	S/N	Heat Lot No.	HB	Item	S/N	Heat Lot No.	HB
1	ET2022301-3-1-01	TM2302050101	320	21	ET2022301-3-1-21	TM2302050101	311
2	ET2022301-3-1-02	TM2302050101	317	22	ET2022301-3-1-22	TM2302050101	311
3	ET2022301-3-1-03	TM2302050101	302	23	ET2022301-3-1-23	TM2302050101	302
4	ET2022301-3-1-04	TM2302050101	311	24	ET2022301-3-1-24	TM2302050101	317
5	ET2022301-3-1-05	TM2302050101	317	25	ET2022301-3-1-25	TM2302050101	311
6	ET2022301-3-1-06	TM2302050101	302	26	ET2022301-3-1-26	TM2302050101	311
7	ET2022301-3-1-07	TM2302050101	302	27	ET2022301-3-1-27	TM2302050101	302
8	ET2022301-3-1-08	TM2302050101	317	28	ET2022301-3-1-28	TM2302050101	311
9	ET2022301-3-1-09	TM2302050101	311				
10	ET2022301-3-1-10	TM2302050101	311				
11	ET2022301-3-1-11	TM2302050101	302				
12	ET2022301-3-1-12	TM2302050101	317				
13	ET2022301-3-1-13	TM2302050101	317				
14	ET2022301-3-1-14	TM2302050101	302				
15	ET2022301-3-1-15	TM2302050101	311				
16	ET2022301-3-1-16	TM2302050101	311				
17	ET2022301-3-1-17	TM2302050101	302				
18	ET2022301-3-1-18	TM2302050101	311				
19	ET2022301-3-1-19	TM2302050101	302				
20	ET2022301-3-1-20	TM2302050101	317				

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永良	徐俊
	[] Do not conform		

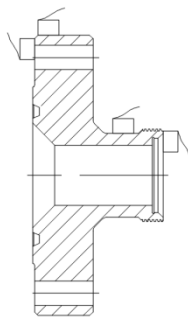


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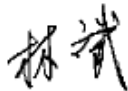
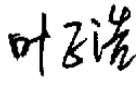
ULTRASONIC EXAMINATION REPORT

Serial No. :		ET2022301-3-1-01....28		PO# :		ET2022301-3		Date:		2023-03-11	
Part No:		WF41531502		API Monogram:		YES		Report#:		202303110301	
Specification:		API Spec 6A/ASTM A388		Material:		4140 110k per ASTM A29					
Description:		WECO FLANGE 4 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1						Qty:		28 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result		
1	ET2022301-3-1-01		TM2302050101	Acceptable	21	ET2022301-3-1-21		TM2302050101	Acceptable		
2	ET2022301-3-1-02		TM2302050101	Acceptable	22	ET2022301-3-1-22		TM2302050101	Acceptable		
3	ET2022301-3-1-03		TM2302050101	Acceptable	23	ET2022301-3-1-23		TM2302050101	Acceptable		
4	ET2022301-3-1-04		TM2302050101	Acceptable	24	ET2022301-3-1-24		TM2302050101	Acceptable		
5	ET2022301-3-1-05		TM2302050101	Acceptable	25	ET2022301-3-1-25		TM2302050101	Acceptable		
6	ET2022301-3-1-06		TM2302050101	Acceptable	26	ET2022301-3-1-26		TM2302050101	Acceptable		
7	ET2022301-3-1-07		TM2302050101	Acceptable	27	ET2022301-3-1-27		TM2302050101	Acceptable		
8	ET2022301-3-1-08		TM2302050101	Acceptable	28	ET2022301-3-1-28		TM2302050101	Acceptable		
9	ET2022301-3-1-09		TM2302050101	Acceptable							
10	ET2022301-3-1-10		TM2302050101	Acceptable							
11	ET2022301-3-1-11		TM2302050101	Acceptable							
12	ET2022301-3-1-12		TM2302050101	Acceptable							
13	ET2022301-3-1-13		TM2302050101	Acceptable							
14	ET2022301-3-1-14		TM2302050101	Acceptable							
15	ET2022301-3-1-15		TM2302050101	Acceptable							
16	ET2022301-3-1-16		TM2302050101	Acceptable							
17	ET2022301-3-1-17		TM2302050101	Acceptable							
18	ET2022301-3-1-18		TM2302050101	Acceptable							
19	ET2022301-3-1-19		TM2302050101	Acceptable							
20	ET2022301-3-1-20		TM2302050101	Acceptable							

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USSING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA	 Level as per UT II	 Level as per UT II
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2022.09.10	Test Gain:20db + 5 db		
Equipment Due Date: 2023.09.09			



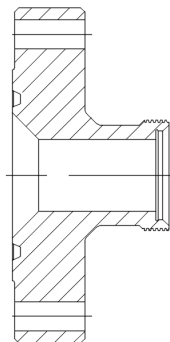
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Magnetic Particle Inspection Report

Serial No. :	ET2022301-3-1-01....28	PO# :	ET2022301-3	Date:	2023-03-11
Part No:	WF41531502	API Monogram:	YES	Report#:	202303110301
Specification:	API Spec 6A/ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 4 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	28 EA

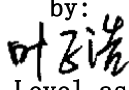
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
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2	ET2022301-3-1-02	TM2302050101	Acceptable	22	ET2022301-3-1-22	TM2302050101	Acceptable
3	ET2022301-3-1-03	TM2302050101	Acceptable	23	ET2022301-3-1-23	TM2302050101	Acceptable
4	ET2022301-3-1-04	TM2302050101	Acceptable	24	ET2022301-3-1-24	TM2302050101	Acceptable
5	ET2022301-3-1-05	TM2302050101	Acceptable	25	ET2022301-3-1-25	TM2302050101	Acceptable
6	ET2022301-3-1-06	TM2302050101	Acceptable	26	ET2022301-3-1-26	TM2302050101	Acceptable
7	ET2022301-3-1-07	TM2302050101	Acceptable	27	ET2022301-3-1-27	TM2302050101	Acceptable
8	ET2022301-3-1-08	TM2302050101	Acceptable	28	ET2022301-3-1-28	TM2302050101	Acceptable
9	ET2022301-3-1-09	TM2302050101	Acceptable				
10	ET2022301-3-1-10	TM2302050101	Acceptable				
11	ET2022301-3-1-11	TM2302050101	Acceptable				
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16	ET2022301-3-1-16	TM2302050101	Acceptable				
17	ET2022301-3-1-17	TM2302050101	Acceptable				
18	ET2022301-3-1-18	TM2302050101	Acceptable				
19	ET2022301-3-1-19	TM2302050101	Acceptable				
20	ET2022301-3-1-20	TM2302050101	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cable1 [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

Shipment Date:

[illegible]



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METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-3-2-01...28	PO#:	ET2022301-3	Date:	2023-03-11
Part No:	WP31502	API Monogram:	YES	Report#:	202303110302
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 3" 1502			Qty:	28 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
2A2873	28	1	0.41	0.86	0.24	0.007	0.015	0.019	0.026	0.18	0.97	0.009

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (KPsi)	Tensile Strength (KPsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm Charpy J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302050101	28	2	113.5K	128.0K	26.5	58.5	300	61;68;75		

HEAT TREATMENT

Forgings:	4:1	Test Bar (OTC)	
Normalized:	900°C 3 HRS	Normalized:	900°C 3 HRS
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	23 °C	Start Temp:	23 °C
End Temp:	28 °C	End Temp:	28 °C
Temper:	560°C 4.5 HRS AIR	Temper:	560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	张金龙	Approved by:	徐根
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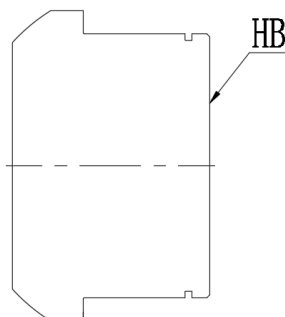


C&W International Fabricators

Hardness Test Report

Serial No. :		ET2022301-3-2-01...28		PO# :		ET2022301-3		Date:		2023-03-11	
Part No:		WP31502		API Monogram:		YES		Report#:		202303110302	
Specification:		API Spec 6A/ASTM E10		Material:		4140 110k per ASTM A29					
Description:		WECO PLUG 3" 1502						Qty:		28 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.		HB	
1	ET2022301-3-2-01		TM2302050101	311	21	ET2022301-3-2-21		TM2302050101		311	
2	ET2022301-3-2-02		TM2302050101	302	22	ET2022301-3-2-22		TM2302050101		311	
3	ET2022301-3-2-03		TM2302050101	311	23	ET2022301-3-2-23		TM2302050101		302	
4	ET2022301-3-2-04		TM2302050101	302	24	ET2022301-3-2-24		TM2302050101		302	
5	ET2022301-3-2-05		TM2302050101	302	25	ET2022301-3-2-25		TM2302050101		293	
6	ET2022301-3-2-06		TM2302050101	311	26	ET2022301-3-2-26		TM2302050101		302	
7	ET2022301-3-2-07		TM2302050101	302	27	ET2022301-3-2-27		TM2302050101		311	
8	ET2022301-3-2-08		TM2302050101	293	28	ET2022301-3-2-28		TM2302050101		302	
9	ET2022301-3-2-09		TM2302050101	302							
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11	ET2022301-3-2-11		TM2302050101	302							
12	ET2022301-3-2-12		TM2302050101	311							
13	ET2022301-3-2-13		TM2302050101	293							
14	ET2022301-3-2-14		TM2302050101	302							
15	ET2022301-3-2-15		TM2302050101	302							
16	ET2022301-3-2-16		TM2302050101	293							
17	ET2022301-3-2-17		TM2302050101	293							
18	ET2022301-3-2-18		TM2302050101	302							
19	ET2022301-3-2-19		TM2302050101	302							
20	ET2022301-3-2-20		TM2302050101	302							

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永友	徐俊
	[] Do not conform		

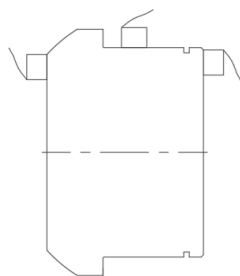


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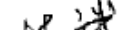
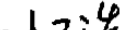
ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022301-3-2-01...28			PO# :	ET2022301-3		Date:	2023-03-11	
Part No:	WP31502			API Monogram:	YES		Report#:	202303110302	
Specification:	API Spec 6A/ASTM A388			Material:	4140 110k per ASTM A29				
Description:	WECO PLUG 3" 1502						Qty:	28 EA	
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result		
1	ET2022301-3-2-01	TM2302050101	Acceptable	21	ET2022301-3-2-21	TM2302050101	Acceptable		
2	ET2022301-3-2-02	TM2302050101	Acceptable	22	ET2022301-3-2-22	TM2302050101	Acceptable		
3	ET2022301-3-2-03	TM2302050101	Acceptable	23	ET2022301-3-2-23	TM2302050101	Acceptable		
4	ET2022301-3-2-04	TM2302050101	Acceptable	24	ET2022301-3-2-24	TM2302050101	Acceptable		
5	ET2022301-3-2-05	TM2302050101	Acceptable	25	ET2022301-3-2-25	TM2302050101	Acceptable		
6	ET2022301-3-2-06	TM2302050101	Acceptable	26	ET2022301-3-2-26	TM2302050101	Acceptable		
7	ET2022301-3-2-07	TM2302050101	Acceptable	27	ET2022301-3-2-27	TM2302050101	Acceptable		
8	ET2022301-3-2-08	TM2302050101	Acceptable	28	ET2022301-3-2-28	TM2302050101	Acceptable		
9	ET2022301-3-2-09	TM2302050101	Acceptable						
10	ET2022301-3-2-10	TM2302050101	Acceptable						
11	ET2022301-3-2-11	TM2302050101	Acceptable						
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18	ET2022301-3-2-18	TM2302050101	Acceptable						
19	ET2022301-3-2-19	TM2302050101	Acceptable						
20	ET2022301-3-2-20	TM2302050101	Acceptable						

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA		
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2022.09.10	Test Gain:20db + 5 db		
Equipment Due Date: 2023.09.09			
		Level as per UT II	Level as per UT II



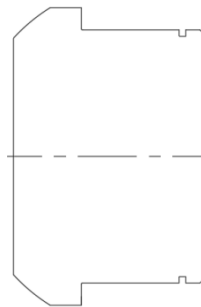
C&W International Fabricators

Magnetic Particle Inspection Report

Serial No. :	ET2022301-3-2-01...28	PO# :	ET2022301-3	Date:	2023-03-11
Part No:	WP31502	API Monogram:	YES	Report#:	202303110302
Specification:	API Spec 6A/ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 3" 1502			Qty:	28 EA

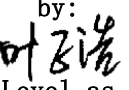
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-3-2-01	TM2302050101	Acceptable	21	ET2022301-3-2-21	TM2302050101	Acceptable
2	ET2022301-3-2-02	TM2302050101	Acceptable	22	ET2022301-3-2-22	TM2302050101	Acceptable
3	ET2022301-3-2-03	TM2302050101	Acceptable	23	ET2022301-3-2-23	TM2302050101	Acceptable
4	ET2022301-3-2-04	TM2302050101	Acceptable	24	ET2022301-3-2-24	TM2302050101	Acceptable
5	ET2022301-3-2-05	TM2302050101	Acceptable	25	ET2022301-3-2-25	TM2302050101	Acceptable
6	ET2022301-3-2-06	TM2302050101	Acceptable	26	ET2022301-3-2-26	TM2302050101	Acceptable
7	ET2022301-3-2-07	TM2302050101	Acceptable	27	ET2022301-3-2-27	TM2302050101	Acceptable
8	ET2022301-3-2-08	TM2302050101	Acceptable	28	ET2022301-3-2-28	TM2302050101	Acceptable
9	ET2022301-3-2-09	TM2302050101	Acceptable				
10	ET2022301-3-2-10	TM2302050101	Acceptable				
11	ET2022301-3-2-11	TM2302050101	Acceptable				
12	ET2022301-3-2-12	TM2302050101	Acceptable				
13	ET2022301-3-2-13	TM2302050101	Acceptable				
14	ET2022301-3-2-14	TM2302050101	Acceptable				
15	ET2022301-3-2-15	TM2302050101	Acceptable				
16	ET2022301-3-2-16	TM2302050101	Acceptable				
17	ET2022301-3-2-17	TM2302050101	Acceptable				
18	ET2022301-3-2-18	TM2302050101	Acceptable				
19	ET2022301-3-2-19	TM2302050101	Acceptable				
20	ET2022301-3-2-20	TM2302050101	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1100Uw/C m²		

Shipment Date:

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-3-3-01...28	PO#:	ET2022301-3	Date:	2023-03-11
Part No:	WN31502	API Monogram:	YES	Report#:	202303110303
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO NUT 3" 1502			Qty:	28 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
8308430M	28	1	0.41	0.89	0.26	0.003	0.016	0.03	0.03	0.20	1.00	0.03

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (KPsi)	Tensile Strength (KPsi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302050101	28	2	111.5K	129.0K	26.0	58.0	303	56;69;78		

HEAT TREATMENT

Forgings:	4:1	Test Bar (OTC)	
Normalized:	900°C 3 HRS	Normalized:	900°C 3 HRS
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	23 °C	Start Temp:	23 °C
End Temp:	28 °C	End Temp:	28 °C
Temper:	560°C 4.5 HRS AIR	Temper:	560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	张金龙	Approved by:	徐根
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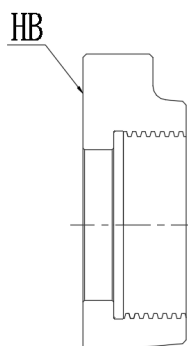


C&W International Fabricators

Hardness Test Report

Serial No. :		ET2022301-3-3-01...28		PO# :		ET2022301-3		Date:		2023-03-11	
Part No:		WN31502		API Monogram:		YES		Report#:		202303110303	
Specification:		API Spec 6A/ASTM E10		Material:		4140 110k per ASTM A29					
Description:		WECO NUT 3" 1502						Qty:		28 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.		HB	
1	ET2022301-3-3-01		TM2302050101	300	21	ET2022301-3-3-21		TM2302050101		307	
2	ET2022301-3-3-02		TM2302050101	300	22	ET2022301-3-3-22		TM2302050101		310	
3	ET2022301-3-3-03		TM2302050101	310	23	ET2022301-3-3-23		TM2302050101		300	
4	ET2022301-3-3-04		TM2302050101	308	24	ET2022301-3-3-24		TM2302050101		305	
5	ET2022301-3-3-05		TM2302050101	305	25	ET2022301-3-3-25		TM2302050101		305	
6	ET2022301-3-3-06		TM2302050101	303	26	ET2022301-3-3-26		TM2302050101		308	
7	ET2022301-3-3-07		TM2302050101	303	27	ET2022301-3-3-27		TM2302050101		308	
8	ET2022301-3-3-08		TM2302050101	310	28	ET2022301-3-3-28		TM2302050101		310	
9	ET2022301-3-3-09		TM2302050101	303							
10	ET2022301-3-3-10		TM2302050101	303							
11	ET2022301-3-3-11		TM2302050101	308							
12	ET2022301-3-3-12		TM2302050101	310							
13	ET2022301-3-3-13		TM2302050101	308							
14	ET2022301-3-3-14		TM2302050101	308							
15	ET2022301-3-3-15		TM2302050101	305							
16	ET2022301-3-3-16		TM2302050101	310							
17	ET2022301-3-3-17		TM2302050101	308							
18	ET2022301-3-3-18		TM2302050101	308							
19	ET2022301-3-3-19		TM2302050101	310							
20	ET2022301-3-3-20		TM2302050101	308							

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永友	徐俊
	[] Do not conform		

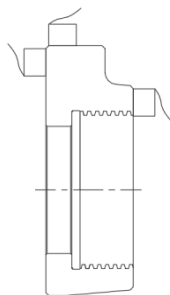


C&W International Fabricators

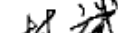
ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022301-3-3-01...28	PO# :	ET2022301-3	Date:	2023-03-11		
Part No:	WN31502	API Monogram:	YES	Report#:	202303110303		
Specification:	API Spec 6A/ASTM A388	Material:	4140 110k per ASTM A29				
Description:	WECO NUT 3" 1502			Qty:	28 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-3-3-01	TM2302050101	Acceptable	21	ET2022301-3-3-21	TM2302050101	Acceptable
2	ET2022301-3-3-02	TM2302050101	Acceptable	22	ET2022301-3-3-22	TM2302050101	Acceptable
3	ET2022301-3-3-03	TM2302050101	Acceptable	23	ET2022301-3-3-23	TM2302050101	Acceptable
4	ET2022301-3-3-04	TM2302050101	Acceptable	24	ET2022301-3-3-24	TM2302050101	Acceptable
5	ET2022301-3-3-05	TM2302050101	Acceptable	25	ET2022301-3-3-25	TM2302050101	Acceptable
6	ET2022301-3-3-06	TM2302050101	Acceptable	26	ET2022301-3-3-26	TM2302050101	Acceptable
7	ET2022301-3-3-07	TM2302050101	Acceptable	27	ET2022301-3-3-27	TM2302050101	Acceptable
8	ET2022301-3-3-08	TM2302050101	Acceptable	28	ET2022301-3-3-28	TM2302050101	Acceptable
9	ET2022301-3-3-09	TM2302050101	Acceptable				
10	ET2022301-3-3-10	TM2302050101	Acceptable				
11	ET2022301-3-3-11	TM2302050101	Acceptable				
12	ET2022301-3-3-12	TM2302050101	Acceptable				
13	ET2022301-3-3-13	TM2302050101	Acceptable				
14	ET2022301-3-3-14	TM2302050101	Acceptable				
15	ET2022301-3-3-15	TM2302050101	Acceptable				
16	ET2022301-3-3-16	TM2302050101	Acceptable				
17	ET2022301-3-3-17	TM2302050101	Acceptable				
18	ET2022301-3-3-18	TM2302050101	Acceptable				
19	ET2022301-3-3-19	TM2302050101	Acceptable				
20	ET2022301-3-3-20	TM2302050101	Acceptable				

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA		
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5Pφ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2022.09.10	Test Gain:20db + 5 db		
Equipment Due Date: 2023.09.09			
		Level as per UT II	Level as per UT II

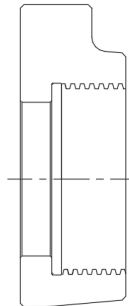


C&W International Fabricators

Magnetic Particle Inspection Report

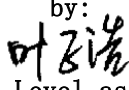
Serial No. :		ET2022301-3-3-01...28		PO# :		ET2022301-3		Date:		2023-03-11		
Part No:		WN31502		API Monogram:		YES		Report#:		202303110303		
Specification:		API Spec 6A/ASTM E709		Material:		4140 110k per ASTM A29						
Description:		WECO NUT 3" 1502							Qty:		28 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result			
1	ET2022301-3-3-01		TM2302050101	Acceptable	21	ET2022301-3-3-21		TM2302050101	Acceptable			
2	ET2022301-3-3-02		TM2302050101	Acceptable	22	ET2022301-3-3-22		TM2302050101	Acceptable			
3	ET2022301-3-3-03		TM2302050101	Acceptable	23	ET2022301-3-3-23		TM2302050101	Acceptable			
4	ET2022301-3-3-04		TM2302050101	Acceptable	24	ET2022301-3-3-24		TM2302050101	Acceptable			
5	ET2022301-3-3-05		TM2302050101	Acceptable	25	ET2022301-3-3-25		TM2302050101	Acceptable			
6	ET2022301-3-3-06		TM2302050101	Acceptable	26	ET2022301-3-3-26		TM2302050101	Acceptable			
7	ET2022301-3-3-07		TM2302050101	Acceptable	27	ET2022301-3-3-27		TM2302050101	Acceptable			
8	ET2022301-3-3-08		TM2302050101	Acceptable	28	ET2022301-3-3-28		TM2302050101	Acceptable			
9	ET2022301-3-3-09		TM2302050101	Acceptable								
10	ET2022301-3-3-10		TM2302050101	Acceptable								
11	ET2022301-3-3-11		TM2302050101	Acceptable								
12	ET2022301-3-3-12		TM2302050101	Acceptable								
13	ET2022301-3-3-13		TM2302050101	Acceptable								
14	ET2022301-3-3-14		TM2302050101	Acceptable								
15	ET2022301-3-3-15		TM2302050101	Acceptable								
16	ET2022301-3-3-16		TM2302050101	Acceptable								
17	ET2022301-3-3-17		TM2302050101	Acceptable								
18	ET2022301-3-3-18		TM2302050101	Acceptable								
19	ET2022301-3-3-19		TM2302050101	Acceptable								
20	ET2022301-3-3-20		TM2302050101	Acceptable								

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		



C&W International Fabricators

REPORT INDEX

Purchase Order: **ET2022301-7**

Quantity: **16 EA**

Shipment No. :

Shipment Date:

Activity No.	Characteristics	Reference Page
1. 1	WECO FLANGE 7 1/16" 15M X 2" 1502 THD	Page-2
1. 1. 1	Metallurgical Test Certificate	Page-2
1. 1. 2	Mechanical Testing	Page-2
1. 1. 3	Chemical Testing	Page-2
1. 1. 4	Heat Treatment	Page-2
2. 1	Hardness Test	Page-3
2. 2	Ultrasonic Testing	Page-4
2. 3	Magnetic Particle Inspection Report	Page-5



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-7-1-01....16	PO# :	ET2022301-7	Date:	2023-03-11
Part No:	WF71521502	API Monogram:	YES	Report#:	202303111001
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 7 1/16" 15M X 2" 1502 THD EE LU PSL3 PR1			Qty:	16 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
22-9-1-2143	16	1	0.402	0.835	0.281	0.011	0.017	0.164	0.073	0.167	1.078	0.030

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm Charpy J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302080101	16	2	115.0K	126.2K	26.0	58.0	303	51;60;65		

HEAT TREATMENT

Forgings: 5:1	Test Bar (OTC)
Normalized: 900°C 3 HRS	Normalized: 900°C 3 HRS
Austenitized: 860°C 3 HRS	Austenitized: 860°C 3 HRS
Quenchant: OIL	Quenchant: OIL
Start Temp: 23 °C	Start Temp: 23 °C
End Temp: 28 °C	End Temp: 28 °C
Temper: 560°C 4.5 HRS AIR	Temper: 560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:		Approved by:	
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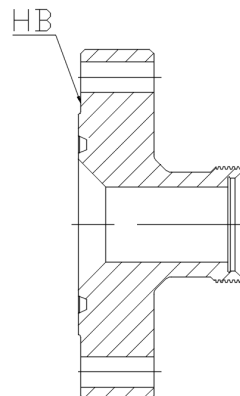


C&W International Fabricators

Hardness Test Report

Serial No. :		ET2022301-7-1-01....16		PO# :		ET2022301-7		Date:		2023-03-11	
Part No:		WF71521502		API Monogram:		YES		Report#:		202303111001	
Specification:		API Spec 6A/ASTM E10		Material:		4140 110k per ASTM A29					
Description:		WECO FLANGE 7 1/16" 15M X 2" 1502 THD EE LU PSL3 PR1						Qty:		16 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.		HB	
1	ET2022301-7-1-01		TM2302080101	302							
2	ET2022301-7-1-02		TM2302080101	311							
3	ET2022301-7-1-03		TM2302080101	293							
4	ET2022301-7-1-04		TM2302080101	302							
5	ET2022301-7-1-05		TM2302080101	311							
6	ET2022301-7-1-06		TM2302080101	311							
7	ET2022301-7-1-07		TM2302080101	302							
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9	ET2022301-7-1-09		TM2302080101	293							
10	ET2022301-7-1-10		TM2302080101	302							
11	ET2022301-7-1-11		TM2302080101	302							
12	ET2022301-7-1-12		TM2302080101	311							
13	ET2022301-7-1-13		TM2302080101	302							
14	ET2022301-7-1-14		TM2302080101	293							
15	ET2022301-7-1-15		TM2302080101	311							
16	ET2022301-7-1-16		TM2302080101	293							

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永良	徐俊
	[] Do not conform		

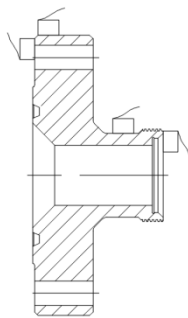


C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No. :		ET2022301-7-1-01....16		PO# :		ET2022301-7		Date:		2023-03-11		
Part No:		WF71521502		API Monogram:		YES		Report#:		202303111001		
Specification:		API Spec 6A/ASTM A388		Material:		4140 110k per ASTM A29						
Description:		WECO FLANGE 7 1/16" 15M X 2" 1502 THD EE LU PSL3 PR1							Qty:		16 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result			
1	ET2022301-7-1-01		TM2302080101	Acceptable								
2	ET2022301-7-1-02		TM2302080101	Acceptable								
3	ET2022301-7-1-03		TM2302080101	Acceptable								
4	ET2022301-7-1-04		TM2302080101	Acceptable								
5	ET2022301-7-1-05		TM2302080101	Acceptable								
6	ET2022301-7-1-06		TM2302080101	Acceptable								
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8	ET2022301-7-1-08		TM2302080101	Acceptable								
9	ET2022301-7-1-09		TM2302080101	Acceptable								
10	ET2022301-7-1-10		TM2302080101	Acceptable								
11	ET2022301-7-1-11		TM2302080101	Acceptable								
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13	ET2022301-7-1-13		TM2302080101	Acceptable								
14	ET2022301-7-1-14		TM2302080101	Acceptable								
15	ET2022301-7-1-15		TM2302080101	Acceptable								
16	ET2022301-7-1-16		TM2302080101	Acceptable								

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USSING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA		
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P Φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2022.09.10	Test Gain:20db + 5 db		
Equipment Due Date: 2023.09.09			
		Level as per UT II	Level as per UT II



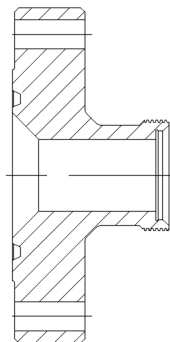
C&W International Fabricators

Magnetic Particle Inspection Report

Serial No. :	ET2022301-7-1-01....16	PO# :	ET2022301-7	Date:	2023-03-11
Part No:	WF71521502	API Monogram:	YES	Report#:	202303111001
Specification:	API Spec 6A/ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 7 1/16" 15M X 2" 1502 THD EE LU PSL3 PR1			Qty:	16 EA

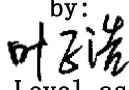
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
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2	ET2022301-7-1-02	TM2302080101	Acceptable				
3	ET2022301-7-1-03	TM2302080101	Acceptable				
4	ET2022301-7-1-04	TM2302080101	Acceptable				
5	ET2022301-7-1-05	TM2302080101	Acceptable				
6	ET2022301-7-1-06	TM2302080101	Acceptable				
7	ET2022301-7-1-07	TM2302080101	Acceptable				
8	ET2022301-7-1-08	TM2302080101	Acceptable				
9	ET2022301-7-1-09	TM2302080101	Acceptable				
10	ET2022301-7-1-10	TM2302080101	Acceptable				
11	ET2022301-7-1-11	TM2302080101	Acceptable				
12	ET2022301-7-1-12	TM2302080101	Acceptable				
13	ET2022301-7-1-13	TM2302080101	Acceptable				
14	ET2022301-7-1-14	TM2302080101	Acceptable				
15	ET2022301-7-1-15	TM2302080101	Acceptable				
16	ET2022301-7-1-16	TM2302080101	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cable1 [✓]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

Shipment Date:

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-7-2-01...16	PO#:	ET2022301-7	Date:	2023-03-11
Part No:	WP21502	API Monogram:	YES	Report#:	202303111002
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 2" 1502			Qty:	16 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
2A2873	16	1	0.41	0.86	0.24	0.007	0.015	0.019	0.026	0.18	0.97	0.009

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (KPsi)	Tensile Strength (KPsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm Charpy J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302080101	16	2	113.5K	128.0K	26.5	58.5	300	61;68;75		

HEAT TREATMENT

Forgings:	4:1	Test Bar (OTC)	
Normalized:	900°C 3 HRS	Normalized:	900°C 3 HRS
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	23 °C	Start Temp:	23 °C
End Temp:	28 °C	End Temp:	28 °C
Temper:	560°C 4.5 HRS AIR	Temper:	560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	张金龙	Approved by:	徐根
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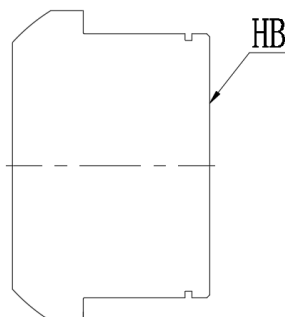


C&W International Fabricators

Hardness Test Report

Serial No. :		ET2022301-7-2-01...16		PO# :		ET2022301-7		Date:		2023-03-11	
Part No:		WP21502		API Monogram:		YES		Report#:		202303111002	
Specification:		API Spec 6A/ASTM E10		Material:		4140 110k per ASTM A29					
Description:		WECO PLUG 2" 1502						Qty:		16 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.		HB	
1	ET2022301-7-2-01		TM2302080101	302							
2	ET2022301-7-2-02		TM2302080101	293							
3	ET2022301-7-2-03		TM2302080101	311							
4	ET2022301-7-2-04		TM2302080101	302							
5	ET2022301-7-2-05		TM2302080101	302							
6	ET2022301-7-2-06		TM2302080101	311							
7	ET2022301-7-2-07		TM2302080101	293							
8	ET2022301-7-2-08		TM2302080101	302							
9	ET2022301-7-2-09		TM2302080101	302							
10	ET2022301-7-2-10		TM2302080101	293							
11	ET2022301-7-2-11		TM2302080101	311							
12	ET2022301-7-2-12		TM2302080101	302							
13	ET2022301-7-2-13		TM2302080101	293							
14	ET2022301-7-2-14		TM2302080101	302							
15	ET2022301-7-2-15		TM2302080101	311							
16	ET2022301-7-2-16		TM2302080101	302							

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永友	徐俊
	[] Do not conform		

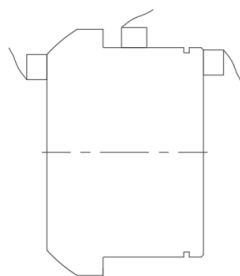


C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022301-7-2-01...16	PO# :	ET2022301-7	Date:	2023-03-11		
Part No:	WP21502	API Monogram:	YES	Report#:	202303111002		
Specification:	API Spec 6A/ASTM A388	Material:	4140 110k per ASTM A29				
Description:	WECO PLUG 2" 1502			Qty:	16 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-7-2-01	TM2302080101	Acceptable				
2	ET2022301-7-2-02	TM2302080101	Acceptable				
3	ET2022301-7-2-03	TM2302080101	Acceptable				
4	ET2022301-7-2-04	TM2302080101	Acceptable				
5	ET2022301-7-2-05	TM2302080101	Acceptable				
6	ET2022301-7-2-06	TM2302080101	Acceptable				
7	ET2022301-7-2-07	TM2302080101	Acceptable				
8	ET2022301-7-2-08	TM2302080101	Acceptable				
9	ET2022301-7-2-09	TM2302080101	Acceptable				
10	ET2022301-7-2-10	TM2302080101	Acceptable				
11	ET2022301-7-2-11	TM2302080101	Acceptable				
12	ET2022301-7-2-12	TM2302080101	Acceptable				
13	ET2022301-7-2-13	TM2302080101	Acceptable				
14	ET2022301-7-2-14	TM2302080101	Acceptable				
15	ET2022301-7-2-15	TM2302080101	Acceptable				
16	ET2022301-7-2-16	TM2302080101	Acceptable				

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA		
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2022.09.10	Test Gain:20db + 5 db		
Equipment Due Date: 2023.09.09			
		Level as per UT II	Level as per UT II



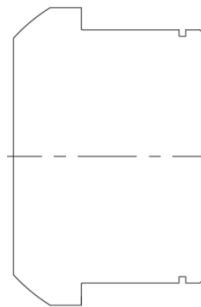
C&W International Fabricators

Magnetic Particle Inspection Report

Serial No. :	ET2022301-7-2-01...16	PO# :	ET2022301-7	Date:	2023-03-11
Part No:	WP21502	API Monogram:	YES	Report#:	202303111002
Specification:	API Spec 6A/ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 2" 1502			Qty:	16 EA

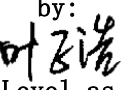
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-7-2-01	TM2302080101	Acceptable				
2	ET2022301-7-2-02	TM2302080101	Acceptable				
3	ET2022301-7-2-03	TM2302080101	Acceptable				
4	ET2022301-7-2-04	TM2302080101	Acceptable				
5	ET2022301-7-2-05	TM2302080101	Acceptable				
6	ET2022301-7-2-06	TM2302080101	Acceptable				
7	ET2022301-7-2-07	TM2302080101	Acceptable				
8	ET2022301-7-2-08	TM2302080101	Acceptable				
9	ET2022301-7-2-09	TM2302080101	Acceptable				
10	ET2022301-7-2-10	TM2302080101	Acceptable				
11	ET2022301-7-2-11	TM2302080101	Acceptable				
12	ET2022301-7-2-12	TM2302080101	Acceptable				
13	ET2022301-7-2-13	TM2302080101	Acceptable				
14	ET2022301-7-2-14	TM2302080101	Acceptable				
15	ET2022301-7-2-15	TM2302080101	Acceptable				
16	ET2022301-7-2-16	TM2302080101	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cablel [✓]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1100Uw/C m²		

Shipment Date:

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022301-7-3-01...16	PO#:	ET2022301-7	Date:	2023-03-11
Part No:	WN21502	API Monogram:	YES	Report#:	202303111003
Specification:	API Spec 6A/ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO NUT 2" 1502			Qty:	16 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.75	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.25	0.30	0.25	1.10	0.30
8308430M	16	1	0.41	0.89	0.26	0.003	0.016	0.03	0.03	0.20	1.00	0.03

0.03MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (KPsi)	Tensile Strength (KPsi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J(ft. lb) At-46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TM2302080101	16	2	111.5K	129.0K	26.0	58.0	303	56;69;78		

HEAT TREATMENT

Forgings:	4:1	Test Bar (OTC)	
Normalized:	900°C 3 HRS	Normalized:	900°C 3 HRS
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	23 °C	Start Temp:	23 °C
End Temp:	28 °C	End Temp:	28 °C
Temper:	560°C 4.5 HRS AIR	Temper:	560°C 4.5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	张金龙	Approved by:	徐根
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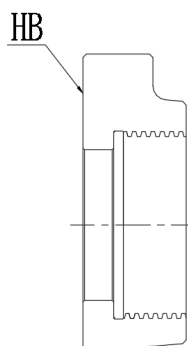


C&W International Fabricators

Hardness Test Report

Serial No. :		ET2022301-7-3-01...16		PO# :		ET2022301-7		Date:		2023-03-11	
Part No:		WN21502		API Monogram:		YES		Report#:		202303111003	
Specification:		API Spec 6A/ASTM E10		Material:		4140 110k per ASTM A29					
Description:		WECO NUT 2" 1502						Qty:		16 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.		HB	
1	ET2022301-7-3-01		TM2302080101	303							
2	ET2022301-7-3-02		TM2302080101	303							
3	ET2022301-7-3-03		TM2302080101	308							
4	ET2022301-7-3-04		TM2302080101	310							
5	ET2022301-7-3-05		TM2302080101	308							
6	ET2022301-7-3-06		TM2302080101	308							
7	ET2022301-7-3-07		TM2302080101	300							
8	ET2022301-7-3-08		TM2302080101	310							
9	ET2022301-7-3-09		TM2302080101	305							
10	ET2022301-7-3-10		TM2302080101	310							
11	ET2022301-7-3-11		TM2302080101	303							
12	ET2022301-7-3-12		TM2302080101	303							
13	ET2022301-7-3-13		TM2302080101	308							
14	ET2022301-7-3-14		TM2302080101	305							
15	ET2022301-7-3-15		TM2302080101	310							
16	ET2022301-7-3-16		TM2302080101	305							

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永友	徐俊
	[] Do not conform		

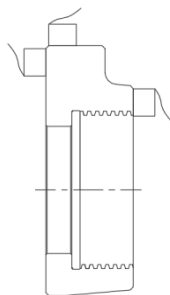


C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022301-7-3-01...16	PO# :	ET2022301-7	Date:	2023-03-11		
Part No:	WN21502	API Monogram:	YES	Report#:	202303111003		
Specification:	API Spec 6A/ASTM A388	Material:	4140 110k per ASTM A29				
Description:	WECO NUT 2" 1502			Qty:	16 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-7-3-01	TM2302080101	Acceptable				
2	ET2022301-7-3-02	TM2302080101	Acceptable				
3	ET2022301-7-3-03	TM2302080101	Acceptable				
4	ET2022301-7-3-04	TM2302080101	Acceptable				
5	ET2022301-7-3-05	TM2302080101	Acceptable				
6	ET2022301-7-3-06	TM2302080101	Acceptable				
7	ET2022301-7-3-07	TM2302080101	Acceptable				
8	ET2022301-7-3-08	TM2302080101	Acceptable				
9	ET2022301-7-3-09	TM2302080101	Acceptable				
10	ET2022301-7-3-10	TM2302080101	Acceptable				
11	ET2022301-7-3-11	TM2302080101	Acceptable				
12	ET2022301-7-3-12	TM2302080101	Acceptable				
13	ET2022301-7-3-13	TM2302080101	Acceptable				
14	ET2022301-7-3-14	TM2302080101	Acceptable				
15	ET2022301-7-3-15	TM2302080101	Acceptable				
16	ET2022301-7-3-16	TM2302080101	Acceptable				

Sketch:



ABOVE FORGED ARE ULTRASONICALLY TESTED FOR INTERNAL DEFECTS USING FLAT-BOTTOM HOLE PROCEDURE;
NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:ASTM A388	Technique: Straight/Contact	Examined BY:	Approved by:
Exam. Stage: After heat treatment	Calibration Block: CSK IA		
Equipment: CTS-2020	Couplant: OIL		
Probe Used : 2.5P Φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date : 2022.09.10	Test Gain: 20db + 5 db	Level as per UT II	Level as per UT II
Equipment Due Date: 2023.09.09			



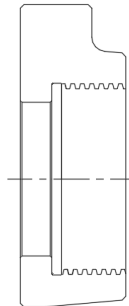
C&W International Fabricators

Magnetic Particle Inspection Report

Serial No. :	ET2022301-7-3-01...16	PO# :	ET2022301-7	Date:	2023-03-11
Part No:	WN21502	API Monogram:	YES	Report#:	202303111003
Specification:	API Spec 6A/ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO NUT 2" 1502			Qty:	16 EA

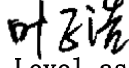
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022301-7-3-01	TM2302080101	Acceptable				
2	ET2022301-7-3-02	TM2302080101	Acceptable				
3	ET2022301-7-3-03	TM2302080101	Acceptable				
4	ET2022301-7-3-04	TM2302080101	Acceptable				
5	ET2022301-7-3-05	TM2302080101	Acceptable				
6	ET2022301-7-3-06	TM2302080101	Acceptable				
7	ET2022301-7-3-07	TM2302080101	Acceptable				
8	ET2022301-7-3-08	TM2302080101	Acceptable				
9	ET2022301-7-3-09	TM2302080101	Acceptable				
10	ET2022301-7-3-10	TM2302080101	Acceptable				
11	ET2022301-7-3-11	TM2302080101	Acceptable				
12	ET2022301-7-3-12	TM2302080101	Acceptable				
13	ET2022301-7-3-13	TM2302080101	Acceptable				
14	ET2022301-7-3-14	TM2302080101	Acceptable				
15	ET2022301-7-3-15	TM2302080101	Acceptable				
16	ET2022301-7-3-16	TM2302080101	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cablel [✓]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		



C&W International Fabricators

REPORT INDEX

Purchase Order: **ET2022193-1**

Quantity: **50 EA**

Shipment No. :

Shipment Date:

Activity No.	Characteristics	Reference Page
1. 1	WECO FLANGE 3 1/16" 15M X 3" 1502 THD	Page-2
1. 1. 1	Metallurgical Test Certificate	Page-2
1. 1. 2	Mechanical Testing	Page-2
1. 1. 3	Chemical Testing	Page-2
1. 1. 4	Heat Treatment	Page-2
2. 1	Hardness Test	Page-3
2. 2	Ultrasonic Testing	Page-4
2. 3	Magnetic Particle Inspection Report	Page-5



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022193-1-01...15	PO#:	ET2022193	Date:	2022-11-15							
Part No:		API Monogram:	YES	Report#:	20221115							
Specification:	API Spec 6A/ ASTM A370	Material:	4140 110k per ASTM A29									
Description:	WECO FLANGE 3 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	50 EA							
TEST CONDITION												
Test Bar Size:	QTC, 4" x 4" x 8"		Bar Di:	12.7 mm (0.5")								
Melt Practice	EF + LF + VD		Reduction Ratio Min:	4:1								
Yield Stress	0.2% offset		Gauge Length	50.8mm								
CHEMICAL COMPOSITION												
Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.40	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.50	0.3	0.25	1.10	0.30
T020-8028	50	1	0.42	0.839	0.269	0.006	0.013	0.212	0.051	0.163	0.949	0.012
0.03MECHANICAL COMPOSITION												
Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm Charpy J (ft. lb) At-46° c	Minimum Lateral	Shear Fraction		
Spec Min			110K	125K	18.0	35.0	280	27J				
Spec Max			/	/	/	/	320	/				
TM2210210301	50	1	121.5 K	130.5 K	47.5	61.4	302	42;51;57				
HEAT TREATMENT												
Forgings:	4:1					Test Bar (OTC)						
Normalized:	905°C 5 HRS					Normalized:	905°C 5 HRS					
Austenitized:	860°C 5 HRS					Austenitized:	860°C 5 HRS					
Quenchant:	OIL					Quenchant:	OIL					
Start Temp:	29 °C					Start Temp:	29 °C					
End Temp:	38 °C					End Temp:	38 °C					
Temper:	580°C 7 HRS AIR					Temper:	580°C 7 HRS AIR					
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.												
Inspected by:						Approved by:						



C&W International Fabricators

Hardness Test Report

Serial No. :	ET2022193-1-01....15	PO# :	ET2022193	Date:	2022-11-15
Part No:		API Monogram:	YES	Report#:	20221115
Specification:	API Spec 6A/ ASTM E10	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 3 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	50 EA

Item	S/N	Heat Lot No.	HB	Item	S/N	Heat Lot No.	HB
1	ET2022193-1-01	TM2210210301	302	26	ET2022193-1-26	TM2210210301	311
2	ET2022193-1-02	TM2210210301	311	27	ET2022193-1-27	TM2210210301	302
3	ET2022193-1-03	TM2210210301	302	28	ET2022193-1-28	TM2210210301	317
4	ET2022193-1-04	TM2210210301	293	29	ET2022193-1-29	TM2210210301	302
5	ET2022193-1-05	TM2210210301	293	30	ET2022193-1-30	TM2210210301	311
6	ET2022193-1-06	TM2210210301	302	31	ET2022193-1-31	TM2210210301	293
7	ET2022193-1-07	TM2210210301	293	32	ET2022193-1-32	TM2210210301	293
8	ET2022193-1-08	TM2210210301	311	33	ET2022193-1-33	TM2210210301	302
9	ET2022193-1-09	TM2210210301	311	34	ET2022193-1-34	TM2210210301	311
10	ET2022193-1-10	TM2210210301	302	35	ET2022193-1-35	TM2210210301	302
11	ET2022193-1-11	TM2210210301	317	36	ET2022193-1-36	TM2210210301	293
12	ET2022193-1-12	TM2210210301	302	37	ET2022193-1-37	TM2210210301	302
13	ET2022193-1-13	TM2210210301	293	38	ET2022193-1-38	TM2210210301	293
14	ET2022193-1-14	TM2210210301	311	39	ET2022193-1-39	TM2210210301	302
15	ET2022193-1-15	TM2210210301	317	40	ET2022193-1-40	TM2210210301	302
16	ET2022193-1-16	TM2210210301	311	41	ET2022193-1-41	TM2210210301	317
17	ET2022193-1-17	TM2210210301	302	42	ET2022193-1-42	TM2210210301	311
18	ET2022193-1-18	TM2210210301	302	43	ET2022193-1-43	TM2210210301	302
19	ET2022193-1-19	TM2210210301	311	44	ET2022193-1-44	TM2210210301	307
20	ET2022193-1-20	TM2210210301	302	45	ET2022193-1-45	TM2210210301	311
21	ET2022193-1-21	TM2210210301	293	46	ET2022193-1-46	TM2210210301	302
22	ET2022193-1-22	TM2210210301	311	47	ET2022193-1-47	TM2210210301	293
23	ET2022193-1-23	TM2210210301	317	48	ET2022193-1-48	TM2210210301	302
24	ET2022193-1-24	TM2210210301	293	49	ET2022193-1-49	TM2210210301	302
25	ET2022193-1-25	TM2210210301	302	50	ET2022193-1-50	TM2210210301	311

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Inspected by:	Approved by:
Judgments:	☒ [V] Conform ☐ [] Do not conform	刘永友	徐俊



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022193-1-01....15	PO# :	ET2022193	Date:	2022-11-15		
Part No:		API Monogram:	YES	Report#:	20221115		
Specification:	API Spec 6A/ ASTM A388	Material:	4140 110k per ASTM A29				
Description:	WECO FLANGE 3 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	50 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022193-1-01	TM2210210301	Acceptable	26	ET2022193-1-26	TM2210210301	Acceptable
2	ET2022193-1-02	TM2210210301	Acceptable	27	ET2022193-1-27	TM2210210301	Acceptable
3	ET2022193-1-03	TM2210210301	Acceptable	28	ET2022193-1-28	TM2210210301	Acceptable
4	ET2022193-1-04	TM2210210301	Acceptable	29	ET2022193-1-29	TM2210210301	Acceptable
5	ET2022193-1-05	TM2210210301	Acceptable	30	ET2022193-1-30	TM2210210301	Acceptable
6	ET2022193-1-06	TM2210210301	Acceptable	31	ET2022193-1-31	TM2210210301	Acceptable
7	ET2022193-1-07	TM2210210301	Acceptable	32	ET2022193-1-32	TM2210210301	Acceptable
8	ET2022193-1-08	TM2210210301	Acceptable	33	ET2022193-1-33	TM2210210301	Acceptable
9	ET2022193-1-09	TM2210210301	Acceptable	34	ET2022193-1-34	TM2210210301	Acceptable
10	ET2022193-1-10	TM2210210301	Acceptable	35	ET2022193-1-35	TM2210210301	Acceptable
11	ET2022193-1-11	TM2210210301	Acceptable	36	ET2022193-1-36	TM2210210301	Acceptable
12	ET2022193-1-12	TM2210210301	Acceptable	37	ET2022193-1-37	TM2210210301	Acceptable
13	ET2022193-1-13	TM2210210301	Acceptable	38	ET2022193-1-38	TM2210210301	Acceptable
14	ET2022193-1-14	TM2210210301	Acceptable	39	ET2022193-1-39	TM2210210301	Acceptable
15	ET2022193-1-15	TM2210210301	Acceptable	40	ET2022193-1-40	TM2210210301	Acceptable
16	ET2022193-1-16	TM2210210301	Acceptable	41	ET2022193-1-41	TM2210210301	Acceptable
17	ET2022193-1-17	TM2210210301	Acceptable	42	ET2022193-1-42	TM2210210301	Acceptable
18	ET2022193-1-18	TM2210210301	Acceptable	43	ET2022193-1-43	TM2210210301	Acceptable
19	ET2022193-1-19	TM2210210301	Acceptable	44	ET2022193-1-44	TM2210210301	Acceptable
20	ET2022193-1-20	TM2210210301	Acceptable	45	ET2022193-1-45	TM2210210301	Acceptable
21	ET2022193-1-21	TM2210210301	Acceptable	46	ET2022193-1-46	TM2210210301	Acceptable
22	ET2022193-1-22	TM2210210301	Acceptable	47	ET2022193-1-47	TM2210210301	Acceptable
23	ET2022193-1-23	TM2210210301	Acceptable	48	ET2022193-1-48	TM2210210301	Acceptable
24	ET2022193-1-24	TM2210210301	Acceptable	49	ET2022193-1-49	TM2210210301	Acceptable
25	ET2022193-1-25	TM2210210301	Acceptable	50	ET2022193-1-50	TM2210210301	Acceptable
Sketch:							
UT Code:ASTM A388		Technique:Straight/Contact		Examined BY:		Approved by:	
Exam. Stage: After heat treatment		Calibration Block:CSK IA					
Equipment:CTS-2020		Couplant: OIL					
Probe Used :2.5P φ10		Acceptance Criteria: API 6A PSL 3		Level as per UT II		Level as per UT II	
Equipment Calibration Date :2021. 09. 10		Test Gain:20db + 5 db					
Equipment Due Date: 2022. 09. 09							



C&W International Fabricators

Magnetic Particle Inspection Report

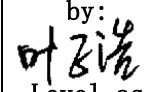
Serial No. :	ET2022193-1-01....15	PO# :	ET2022193	Date:	2022-11-15
Part No:		API Monogram:	YES	Report#:	20221115
Specification:	API Spec 6A/ ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO FLANGE 3 1/16" 15M X 3" 1502 THD EE LU PSL3 PR1			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022193-1-01	TM2210210301	Acceptable	26	ET2022193-1-26	TM2210210301	Acceptable
2	ET2022193-1-02	TM2210210301	Acceptable	27	ET2022193-1-27	TM2210210301	Acceptable
3	ET2022193-1-03	TM2210210301	Acceptable	28	ET2022193-1-28	TM2210210301	Acceptable
4	ET2022193-1-04	TM2210210301	Acceptable	29	ET2022193-1-29	TM2210210301	Acceptable
5	ET2022193-1-05	TM2210210301	Acceptable	30	ET2022193-1-30	TM2210210301	Acceptable
6	ET2022193-1-06	TM2210210301	Acceptable	31	ET2022193-1-31	TM2210210301	Acceptable
7	ET2022193-1-07	TM2210210301	Acceptable	32	ET2022193-1-32	TM2210210301	Acceptable
8	ET2022193-1-08	TM2210210301	Acceptable	33	ET2022193-1-33	TM2210210301	Acceptable
9	ET2022193-1-09	TM2210210301	Acceptable	34	ET2022193-1-34	TM2210210301	Acceptable
10	ET2022193-1-10	TM2210210301	Acceptable	35	ET2022193-1-35	TM2210210301	Acceptable
11	ET2022193-1-11	TM2210210301	Acceptable	36	ET2022193-1-36	TM2210210301	Acceptable
12	ET2022193-1-12	TM2210210301	Acceptable	37	ET2022193-1-37	TM2210210301	Acceptable
13	ET2022193-1-13	TM2210210301	Acceptable	38	ET2022193-1-38	TM2210210301	Acceptable
14	ET2022193-1-14	TM2210210301	Acceptable	39	ET2022193-1-39	TM2210210301	Acceptable
15	ET2022193-1-15	TM2210210301	Acceptable	40	ET2022193-1-40	TM2210210301	Acceptable
16	ET2022193-1-16	TM2210210301	Acceptable	41	ET2022193-1-41	TM2210210301	Acceptable
17	ET2022193-1-17	TM2210210301	Acceptable	42	ET2022193-1-42	TM2210210301	Acceptable
18	ET2022193-1-18	TM2210210301	Acceptable	43	ET2022193-1-43	TM2210210301	Acceptable
19	ET2022193-1-19	TM2210210301	Acceptable	44	ET2022193-1-44	TM2210210301	Acceptable
20	ET2022193-1-20	TM2210210301	Acceptable	45	ET2022193-1-45	TM2210210301	Acceptable
21	ET2022193-1-21	TM2210210301	Acceptable	46	ET2022193-1-46	TM2210210301	Acceptable
22	ET2022193-1-22	TM2210210301	Acceptable	47	ET2022193-1-47	TM2210210301	Acceptable
23	ET2022193-1-23	TM2210210301	Acceptable	48	ET2022193-1-48	TM2210210301	Acceptable
24	ET2022193-1-24	TM2210210301	Acceptable	49	ET2022193-1-49	TM2210210301	Acceptable
25	ET2022193-1-25	TM2210210301	Acceptable	50	ET2022193-1-50	TM2210210301	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cable1 [✓]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		



C&W International Fabricators

REPORT INDEX

Purchase Order: **ET2022193-1-2**

Quantity: **50 EA**

Shipment No. :

Shipment Date:

Activity No.	Characteristics	Reference Page
1. 1	WECO PLUG 3" 1502	Page-2
1. 1. 1	Metallurgical Test Certificate	Page-2
1. 1. 2	Mechanical Testing	Page-2
1. 1. 3	Chemical Testing	Page-2
1. 1. 4	Heat Treatment	Page-2
2. 1	Hardness Test	Page-3
2. 2	Ultrasonic Testing	Page-4
2. 3	Magnetic Particle Inspection Report	Page-5



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2022193-1-2-01....15	PO#:	ET2022193	Date:	2022-11-15							
Part No:		API Monogram:	YES	Report#:	20221115							
Specification:	API Spec 6A/ ASTM A370	Material:	4140 110k per ASTM A29									
Description:	WECO PLUG 3" 1502			Qty:	50 EA							
TEST CONDITION												
Test Bar Size:	QTC, 4" x 4" x 8"		Bar Di:	12.7 mm (0.5")								
Melt Practice	EF + LF + VD		Reduction Ratio Min:	4:1								
Yield Stress	0.2% offset		Gauge Length	50.8mm								
CHEMICAL COMPOSITION												
Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.40	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.50	0.3	0.25	1.10	0.30
00764554Z	50	1	0.41	0.74	0.31	0.023	0.006	0.04	0.05	0.17	1.00	0.01
0.03MECHANICAL COMPOSITION												
Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mm X 10mm Charpy J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction		
Spec Min			110K	125K	18.0	35.0	280	27J				
Spec Max			/	/	/	/	320	/				
TM2210210301	50	1	121.5 K	130.5 K	47.5	61.4	302	42;51;57				
HEAT TREATMENT												
Forgings:	4:1					Test Bar (OTC)						
Normalized:	905°C 5 HRS					Normalized:	905°C 5 HRS					
Austenitized:	860°C 5 HRS					Austenitized:	860°C 5 HRS					
Quenchant:	OIL					Quenchant:	OIL					
Start Temp:	29 °C					Start Temp:	29 °C					
End Temp:	38 °C					End Temp:	38 °C					
Temper:	580°C 7 HRS AIR					Temper:	580°C 7 HRS AIR					
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.												
Inspected by:						Approved by:						



C&W International Fabricators

Hardness Test Report

Serial No. :	ET2022193-1-2-01....15	PO# :	ET2022193	Date:	2022-11-15
Part No:		API Monogram:	YES	Report#:	20221115
Specification:	API Spec 6A/ ASTM E10	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	HB	Item	S/N	Heat Lot No.	HB
1	ET2022193-1-2-01	TM2210210301	311	26	ET2022193-1-2-26	TM2210210301	302
2	ET2022193-1-2-02	TM2210210301	302	27	ET2022193-1-2-27	TM2210210301	302
3	ET2022193-1-2-03	TM2210210301	293	28	ET2022193-1-2-28	TM2210210301	293
4	ET2022193-1-2-04	TM2210210301	293	29	ET2022193-1-2-29	TM2210210301	296
5	ET2022193-1-2-05	TM2210210301	302	30	ET2022193-1-2-30	TM2210210301	302
6	ET2022193-1-2-06	TM2210210301	307	31	ET2022193-1-2-31	TM2210210301	293
7	ET2022193-1-2-07	TM2210210301	302	32	ET2022193-1-2-32	TM2210210301	307
8	ET2022193-1-2-08	TM2210210301	296	33	ET2022193-1-2-33	TM2210210301	311
9	ET2022193-1-2-09	TM2210210301	293	34	ET2022193-1-2-34	TM2210210301	302
10	ET2022193-1-2-10	TM2210210301	296	35	ET2022193-1-2-35	TM2210210301	307
11	ET2022193-1-2-11	TM2210210301	302	36	ET2022193-1-2-36	TM2210210301	311
12	ET2022193-1-2-12	TM2210210301	307	37	ET2022193-1-2-37	TM2210210301	311
13	ET2022193-1-2-13	TM2210210301	311	38	ET2022193-1-2-38	TM2210210301	302
14	ET2022193-1-2-14	TM2210210301	296	39	ET2022193-1-2-39	TM2210210301	293
15	ET2022193-1-2-15	TM2210210301	293	40	ET2022193-1-2-40	TM2210210301	302
16	ET2022193-1-2-16	TM2210210301	293	41	ET2022193-1-2-41	TM2210210301	293
17	ET2022193-1-2-17	TM2210210301	302	42	ET2022193-1-2-42	TM2210210301	293
18	ET2022193-1-2-18	TM2210210301	302	43	ET2022193-1-2-43	TM2210210301	311
19	ET2022193-1-2-19	TM2210210301	293	44	ET2022193-1-2-44	TM2210210301	302
20	ET2022193-1-2-20	TM2210210301	296	45	ET2022193-1-2-45	TM2210210301	302
21	ET2022193-1-2-21	TM2210210301	307	46	ET2022193-1-2-46	TM2210210301	293
22	ET2022193-1-2-22	TM2210210301	302	47	ET2022193-1-2-47	TM2210210301	307
23	ET2022193-1-2-23	TM2210210301	311	48	ET2022193-1-2-48	TM2210210301	302
24	ET2022193-1-2-24	TM2210210301	302	49	ET2022193-1-2-49	TM2210210301	311
25	ET2022193-1-2-25	TM2210210301	293	50	ET2022193-1-2-50	TM2210210301	302

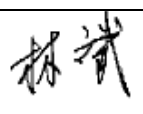
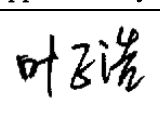
Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永友	徐俊
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No. :	ET2022193-1-2-01....15	PO# :	ET2022193	Date:	2022-11-15		
Part No:		API Monogram:	YES	Report#:	20221115		
Specification:	API Spec 6A/ ASTM A388	Material:	4140 110k per ASTM A29				
Description:	WECO PLUG 3" 1502			Qty:	50 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022193-1-2-01	TM2210210301	Acceptable	26	ET2022193-1-2-26	TM2210210301	Acceptable
2	ET2022193-1-2-02	TM2210210301	Acceptable	27	ET2022193-1-2-27	TM2210210301	Acceptable
3	ET2022193-1-2-03	TM2210210301	Acceptable	28	ET2022193-1-2-28	TM2210210301	Acceptable
4	ET2022193-1-2-04	TM2210210301	Acceptable	29	ET2022193-1-2-29	TM2210210301	Acceptable
5	ET2022193-1-2-05	TM2210210301	Acceptable	30	ET2022193-1-2-30	TM2210210301	Acceptable
6	ET2022193-1-2-06	TM2210210301	Acceptable	31	ET2022193-1-2-31	TM2210210301	Acceptable
7	ET2022193-1-2-07	TM2210210301	Acceptable	32	ET2022193-1-2-32	TM2210210301	Acceptable
8	ET2022193-1-2-08	TM2210210301	Acceptable	33	ET2022193-1-2-33	TM2210210301	Acceptable
9	ET2022193-1-2-09	TM2210210301	Acceptable	34	ET2022193-1-2-34	TM2210210301	Acceptable
10	ET2022193-1-2-10	TM2210210301	Acceptable	35	ET2022193-1-2-35	TM2210210301	Acceptable
11	ET2022193-1-2-11	TM2210210301	Acceptable	36	ET2022193-1-2-36	TM2210210301	Acceptable
12	ET2022193-1-2-12	TM2210210301	Acceptable	37	ET2022193-1-2-37	TM2210210301	Acceptable
13	ET2022193-1-2-13	TM2210210301	Acceptable	38	ET2022193-1-2-38	TM2210210301	Acceptable
14	ET2022193-1-2-14	TM2210210301	Acceptable	39	ET2022193-1-2-39	TM2210210301	Acceptable
15	ET2022193-1-2-15	TM2210210301	Acceptable	40	ET2022193-1-2-40	TM2210210301	Acceptable
16	ET2022193-1-2-16	TM2210210301	Acceptable	41	ET2022193-1-2-41	TM2210210301	Acceptable
17	ET2022193-1-2-17	TM2210210301	Acceptable	42	ET2022193-1-2-42	TM2210210301	Acceptable
18	ET2022193-1-2-18	TM2210210301	Acceptable	43	ET2022193-1-2-43	TM2210210301	Acceptable
19	ET2022193-1-2-19	TM2210210301	Acceptable	44	ET2022193-1-2-44	TM2210210301	Acceptable
20	ET2022193-1-2-20	TM2210210301	Acceptable	45	ET2022193-1-2-45	TM2210210301	Acceptable
21	ET2022193-1-2-21	TM2210210301	Acceptable	46	ET2022193-1-2-46	TM2210210301	Acceptable
22	ET2022193-1-2-22	TM2210210301	Acceptable	47	ET2022193-1-2-47	TM2210210301	Acceptable
23	ET2022193-1-2-23	TM2210210301	Acceptable	48	ET2022193-1-2-48	TM2210210301	Acceptable
24	ET2022193-1-2-24	TM2210210301	Acceptable	49	ET2022193-1-2-49	TM2210210301	Acceptable
25	ET2022193-1-2-25	TM2210210301	Acceptable	50	ET2022193-1-2-50	TM2210210301	Acceptable
Sketch:							
UT Code:ASTM A388		Technique:Straight/Contact		Examined BY:		Approved by:	
Exam. Stage: After heat treatment		Calibration Block:CSK IA		 Level as per UT II		 Level as per UT II	
Equipment:CTS-2020		Couplant: OIL					
Probe Used :2.5P φ10		Acceptance Criteria: API 6A PSL 3					
Equipment Calibration Date :2021. 09. 10		Test Gain:20db + 5 db					
Equipment Due Date: 2022. 09. 09							



C&W International Fabricators

Magnetic Particle Inspection Report

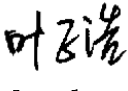
Serial No. :	ET2022193-1-2-01....15	PO# :	ET2022193	Date:	2022-11-15
Part No:		API Monogram:	YES	Report#:	20221115
Specification:	API Spec 6A/ ASTM E709	Material:	4140 110k per ASTM A29		
Description:	WECO PLUG 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	ET2022193-1-2-01	TM2210210301	Acceptable	26	ET2022193-1-2-26	TM2210210301	Acceptable
2	ET2022193-1-2-02	TM2210210301	Acceptable	27	ET2022193-1-2-27	TM2210210301	Acceptable
3	ET2022193-1-2-03	TM2210210301	Acceptable	28	ET2022193-1-2-28	TM2210210301	Acceptable
4	ET2022193-1-2-04	TM2210210301	Acceptable	29	ET2022193-1-2-29	TM2210210301	Acceptable
5	ET2022193-1-2-05	TM2210210301	Acceptable	30	ET2022193-1-2-30	TM2210210301	Acceptable
6	ET2022193-1-2-06	TM2210210301	Acceptable	31	ET2022193-1-2-31	TM2210210301	Acceptable
7	ET2022193-1-2-07	TM2210210301	Acceptable	32	ET2022193-1-2-32	TM2210210301	Acceptable
8	ET2022193-1-2-08	TM2210210301	Acceptable	33	ET2022193-1-2-33	TM2210210301	Acceptable
9	ET2022193-1-2-09	TM2210210301	Acceptable	34	ET2022193-1-2-34	TM2210210301	Acceptable
10	ET2022193-1-2-10	TM2210210301	Acceptable	35	ET2022193-1-2-35	TM2210210301	Acceptable
11	ET2022193-1-2-11	TM2210210301	Acceptable	36	ET2022193-1-2-36	TM2210210301	Acceptable
12	ET2022193-1-2-12	TM2210210301	Acceptable	37	ET2022193-1-2-37	TM2210210301	Acceptable
13	ET2022193-1-2-13	TM2210210301	Acceptable	38	ET2022193-1-2-38	TM2210210301	Acceptable
14	ET2022193-1-2-14	TM2210210301	Acceptable	39	ET2022193-1-2-39	TM2210210301	Acceptable
15	ET2022193-1-2-15	TM2210210301	Acceptable	40	ET2022193-1-2-40	TM2210210301	Acceptable
16	ET2022193-1-2-16	TM2210210301	Acceptable	41	ET2022193-1-2-41	TM2210210301	Acceptable
17	ET2022193-1-2-17	TM2210210301	Acceptable	42	ET2022193-1-2-42	TM2210210301	Acceptable
18	ET2022193-1-2-18	TM2210210301	Acceptable	43	ET2022193-1-2-43	TM2210210301	Acceptable
19	ET2022193-1-2-19	TM2210210301	Acceptable	44	ET2022193-1-2-44	TM2210210301	Acceptable
20	ET2022193-1-2-20	TM2210210301	Acceptable	45	ET2022193-1-2-45	TM2210210301	Acceptable
21	ET2022193-1-2-21	TM2210210301	Acceptable	46	ET2022193-1-2-46	TM2210210301	Acceptable
22	ET2022193-1-2-22	TM2210210301	Acceptable	47	ET2022193-1-2-47	TM2210210301	Acceptable
23	ET2022193-1-2-23	TM2210210301	Acceptable	48	ET2022193-1-2-48	TM2210210301	Acceptable
24	ET2022193-1-2-24	TM2210210301	Acceptable	49	ET2022193-1-2-49	TM2210210301	Acceptable
25	ET2022193-1-2-25	TM2210210301	Acceptable	50	ET2022193-1-2-50	TM2210210301	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD-9000	MT Code	ASTM E709	Examined BY:  Level as per MT II	Approved by:  Level as per MT II
Test Method	Fulcrum [] Cable1 [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

REPORT INDEX

Purchase Order: ET2020008-3

Quantity: 100 EA

Shipment No. :

Shipment Date:

[illegible]

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2020008-3-1-001...100	PO#:	ET2020008	Date:	2020-05-17							
Part No:	WF41531502	API Monogram:	YES	Report#:	20200517							
Specification:	API Spec 6A/ ASTM A370	Material:	4140 110K per ASTM A29									
Description:	WECO FLANGE 4 1/16" 15M-3"1502THD EE L-U PSL3 PR1			Qty:	100 EA							
TEST CONDITION												
Test Bar Size:	QTC, 4" x 4" x 8"		Bar Di:	12.7 mm (0.5")								
Melt Practice	EF + LF + VD		Reduction Ratio Min:	4:1								
Yield Stress	0.2% offset		Gauge Length	50.8mm								
CHEMICAL COMPOSITION												
Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.50	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.50	0.35	0.25	1.10	0.30
117-10-081	100	1	0.40	0.52	0.33	0.004	0.020	0.10	0.05	0.167	0.93	0.005
MECHANICAL COMPOSITION												
Heat Lot No.	QTY.	Test No.	Yield Strength (KPsi)	Tensile Strength (KPsi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm Charpy J(ft. lb) At -46° c	Minimum Lateral	Shear Fraction		
Spec Min			110K	125K	18.0	35.0	280	27J				
Spec Max			/	/	/	/	320	/				
TC20042802-2	50	1	115.0K	129.5K	24.0	64.5	316	65;68;75				
TC20042602-2	50	2	114.5K	128.5K	26.5	61.0	310	82;89;96				
MECHANICAL COMPOSITION												
Forgings:	4:1					Test Bar (OTC)						
Normalized:						Normalized:						
Austenitized:	880°C 3 HRS					Austenitized:	880°C 3 HRS					
Quenchant:	OIL					Quenchant:	OIL					
Start Temp:	24 °C					Start Temp:	24 °C					
End Temp:	37 °C					End Temp:	37 °C					
Temper:	600°C 3 HRS AIR					Temper:	600°C 3 HRS AIR					
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.												
Inspected by:					Approved by:							

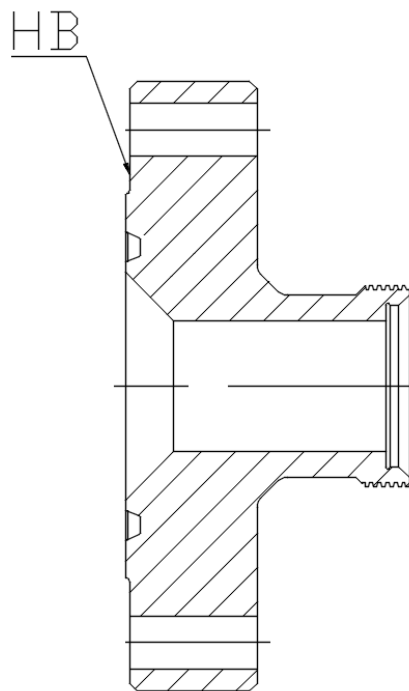
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Hardness Test Report

Serial No. :		ET2020008-3-1-001... 100		PO# :		ET2020008	Date:	2020-05-17
Part No:		WF41531502		API Monogram:		YES	Report#:	20200517
Specification:		API Spec 6A/ ASTM E10		Material:		4140 110K per ASTM A29		
Description:		WECO FLANGE 4 1/16" 15M-3"1502THD EE L-U PSL3 PR1					Qty:	100 EA
Item	S/N	Heat Lot No.	HB	Item	S/N	Heat Lot No.	HB	
1	ET2020008-3-1-001	TC20042802-2	293	51	ET2020008-3-1-051	TC20042602-2	281	
2	ET2020008-3-1-002	TC20042802-2	287	52	ET2020008-3-1-052	TC20042602-2	293	
3	ET2020008-3-1-003	TC20042802-2	291	53	ET2020008-3-1-053	TC20042602-2	285	
4	ET2020008-3-1-004	TC20042802-2	281	54	ET2020008-3-1-054	TC20042602-2	296	
5	ET2020008-3-1-005	TC20042802-2	293	55	ET2020008-3-1-055	TC20042602-2	287	
6	ET2020008-3-1-006	TC20042802-2	293	56	ET2020008-3-1-056	TC20042602-2	293	
7	ET2020008-3-1-007	TC20042802-2	285	57	ET2020008-3-1-057	TC20042602-2	285	
8	ET2020008-3-1-008	TC20042802-2	281	58	ET2020008-3-1-058	TC20042602-2	293	
9	ET2020008-3-1-009	TC20042802-2	281	59	ET2020008-3-1-059	TC20042602-2	281	
10	ET2020008-3-1-010	TC20042802-2	285	60	ET2020008-3-1-060	TC20042602-2	293	
11	ET2020008-3-1-011	TC20042802-2	287	61	ET2020008-3-1-061	TC20042602-2	291	
12	ET2020008-3-1-012	TC20042802-2	293	62	ET2020008-3-1-062	TC20042602-2	302	
13	ET2020008-3-1-013	TC20042802-2	296	63	ET2020008-3-1-063	TC20042602-2	287	
14	ET2020008-3-1-014	TC20042802-2	285	64	ET2020008-3-1-064	TC20042602-2	293	
15	ET2020008-3-1-015	TC20042802-2	287	65	ET2020008-3-1-065	TC20042602-2	296	
16	ET2020008-3-1-016	TC20042802-2	293	66	ET2020008-3-1-066	TC20042602-2	311	
17	ET2020008-3-1-017	TC20042802-2	281	67	ET2020008-3-1-067	TC20042602-2	302	
18	ET2020008-3-1-018	TC20042802-2	285	68	ET2020008-3-1-068	TC20042602-2	293	
19	ET2020008-3-1-019	TC20042802-2	285	69	ET2020008-3-1-069	TC20042602-2	287	
20	ET2020008-3-1-020	TC20042802-2	291	70	ET2020008-3-1-070	TC20042602-2	285	
21	ET2020008-3-1-021	TC20042802-2	287	71	ET2020008-3-1-071	TC20042602-2	291	
22	ET2020008-3-1-022	TC20042802-2	293	72	ET2020008-3-1-072	TC20042602-2	287	
23	ET2020008-3-1-023	TC20042802-2	285	73	ET2020008-3-1-073	TC20042602-2	281	
24	ET2020008-3-1-024	TC20042802-2	287	74	ET2020008-3-1-074	TC20042602-2	293	
25	ET2020008-3-1-025	TC20042802-2	281	75	ET2020008-3-1-075	TC20042602-2	287	
26	ET2020008-3-1-026	TC20042802-2	285	76	ET2020008-3-1-076	TC20042602-2	285	
27	ET2020008-3-1-027	TC20042802-2	281	77	ET2020008-3-1-077	TC20042602-2	296	
28	ET2020008-3-1-028	TC20042802-2	287	78	ET2020008-3-1-078	TC20042602-2	281	
29	ET2020008-3-1-029	TC20042802-2	285	79	ET2020008-3-1-079	TC20042602-2	293	
30	ET2020008-3-1-030	TC20042802-2	291	80	ET2020008-3-1-080	TC20042602-2	287	
31	ET2020008-3-1-031	TC20042802-2	293	81	ET2020008-3-1-081	TC20042602-2	285	
32	ET2020008-3-1-032	TC20042802-2	285	82	ET2020008-3-1-082	TC20042602-2	291	
33	ET2020008-3-1-033	TC20042802-2	281	83	ET2020008-3-1-083	TC20042602-2	296	
34	ET2020008-3-1-034	TC20042802-2	293	84	ET2020008-3-1-084	TC20042602-2	285	
35	ET2020008-3-1-035	TC20042802-2	287	85	ET2020008-3-1-085	TC20042602-2	296	
36	ET2020008-3-1-036	TC20042802-2	281	86	ET2020008-3-1-086	TC20042602-2	287	
37	ET2020008-3-1-037	TC20042802-2	281	87	ET2020008-3-1-087	TC20042602-2	281	

38	ET2020008-3-1-038	TC20042802-2	293	88	ET2020008-3-1-088	TC20042602-2	285
39	ET2020008-3-1-039	TC20042802-2	287	89	ET2020008-3-1-089	TC20042602-2	293
40	ET2020008-3-1-040	TC20042802-2	281	90	ET2020008-3-1-090	TC20042602-2	287
41	ET2020008-3-1-041	TC20042802-2	285	91	ET2020008-3-1-091	TC20042602-2	302
42	ET2020008-3-1-042	TC20042802-2	293	92	ET2020008-3-1-092	TC20042602-2	293
43	ET2020008-3-1-043	TC20042802-2	296	93	ET2020008-3-1-093	TC20042602-2	296
44	ET2020008-3-1-044	TC20042802-2	285	94	ET2020008-3-1-094	TC20042602-2	302
45	ET2020008-3-1-045	TC20042802-2	291	95	ET2020008-3-1-095	TC20042602-2	293
46	ET2020008-3-1-046	TC20042802-2	287	96	ET2020008-3-1-096	TC20042602-2	285
47	ET2020008-3-1-047	TC20042802-2	293	97	ET2020008-3-1-097	TC20042602-2	287
48	ET2020008-3-1-048	TC20042802-2	287	98	ET2020008-3-1-098	TC20042602-2	291
49	ET2020008-3-1-049	TC20042802-2	285	99	ET2020008-3-1-099	TC20042602-2	296
50	ET2020008-3-1-050	TC20042802-2	293	100	ET2020008-3-1-100	TC20042602-2	293

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永良	徐俊
	[] Do not conform		

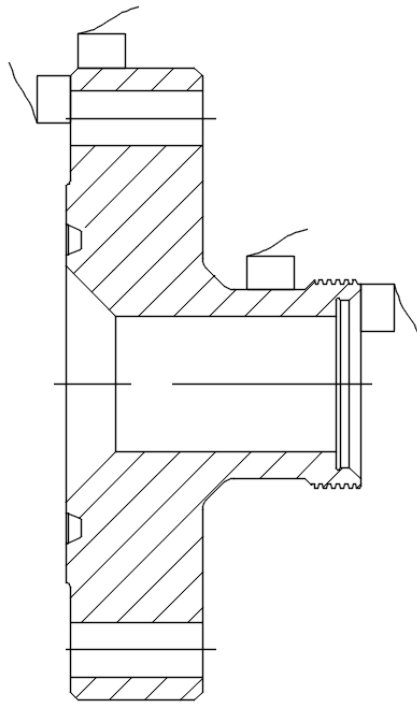
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

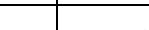
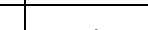
ULTRASONIC EXAMINATION REPORT

Serial No. :		ET2020008-3-1-001... 100		PO# :		ET2020008		Date:		2020-05-17	
Part No:		WF41531502		API Monogram:		YES		Report#:		20200517	
Specification:		API Spec 6A/ ASTM A388		Material:		4140 110K per ASTM A29					
Description:		WECO FLANGE 4 1/16" 15M-3"1502THD EE L-U PSL3 PR1						Qty:		100 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result		
1	ET2020008-3-1-001		TC20042802-2	Acceptable	51	ET2020008-3-1-051		TC20042602-2	Acceptable		
2	ET2020008-3-1-002		TC20042802-2	Acceptable	52	ET2020008-3-1-052		TC20042602-2	Acceptable		
3	ET2020008-3-1-003		TC20042802-2	Acceptable	53	ET2020008-3-1-053		TC20042602-2	Acceptable		
4	ET2020008-3-1-004		TC20042802-2	Acceptable	54	ET2020008-3-1-054		TC20042602-2	Acceptable		
5	ET2020008-3-1-005		TC20042802-2	Acceptable	55	ET2020008-3-1-055		TC20042602-2	Acceptable		
6	ET2020008-3-1-006		TC20042802-2	Acceptable	56	ET2020008-3-1-056		TC20042602-2	Acceptable		
7	ET2020008-3-1-007		TC20042802-2	Acceptable	57	ET2020008-3-1-057		TC20042602-2	Acceptable		
8	ET2020008-3-1-008		TC20042802-2	Acceptable	58	ET2020008-3-1-058		TC20042602-2	Acceptable		
9	ET2020008-3-1-009		TC20042802-2	Acceptable	59	ET2020008-3-1-059		TC20042602-2	Acceptable		
10	ET2020008-3-1-010		TC20042802-2	Acceptable	60	ET2020008-3-1-060		TC20042602-2	Acceptable		
11	ET2020008-3-1-011		TC20042802-2	Acceptable	61	ET2020008-3-1-061		TC20042602-2	Acceptable		
12	ET2020008-3-1-012		TC20042802-2	Acceptable	62	ET2020008-3-1-062		TC20042602-2	Acceptable		
13	ET2020008-3-1-013		TC20042802-2	Acceptable	63	ET2020008-3-1-063		TC20042602-2	Acceptable		
14	ET2020008-3-1-014		TC20042802-2	Acceptable	64	ET2020008-3-1-064		TC20042602-2	Acceptable		
15	ET2020008-3-1-015		TC20042802-2	Acceptable	65	ET2020008-3-1-065		TC20042602-2	Acceptable		
16	ET2020008-3-1-016		TC20042802-2	Acceptable	66	ET2020008-3-1-066		TC20042602-2	Acceptable		
17	ET2020008-3-1-017		TC20042802-2	Acceptable	67	ET2020008-3-1-067		TC20042602-2	Acceptable		
18	ET2020008-3-1-018		TC20042802-2	Acceptable	68	ET2020008-3-1-068		TC20042602-2	Acceptable		
19	ET2020008-3-1-019		TC20042802-2	Acceptable	69	ET2020008-3-1-069		TC20042602-2	Acceptable		
20	ET2020008-3-1-020		TC20042802-2	Acceptable	70	ET2020008-3-1-070		TC20042602-2	Acceptable		
21	ET2020008-3-1-021		TC20042802-2	Acceptable	71	ET2020008-3-1-071		TC20042602-2	Acceptable		
22	ET2020008-3-1-022		TC20042802-2	Acceptable	72	ET2020008-3-1-072		TC20042602-2	Acceptable		
23	ET2020008-3-1-023		TC20042802-2	Acceptable	73	ET2020008-3-1-073		TC20042602-2	Acceptable		
24	ET2020008-3-1-024		TC20042802-2	Acceptable	74	ET2020008-3-1-074		TC20042602-2	Acceptable		
25	ET2020008-3-1-025		TC20042802-2	Acceptable	75	ET2020008-3-1-075		TC20042602-2	Acceptable		
26	ET2020008-3-1-026		TC20042802-2	Acceptable	76	ET2020008-3-1-076		TC20042602-2	Acceptable		
27	ET2020008-3-1-027		TC20042802-2	Acceptable	77	ET2020008-3-1-077		TC20042602-2	Acceptable		
28	ET2020008-3-1-028		TC20042802-2	Acceptable	78	ET2020008-3-1-078		TC20042602-2	Acceptable		
29	ET2020008-3-1-029		TC20042802-2	Acceptable	79	ET2020008-3-1-079		TC20042602-2	Acceptable		
30	ET2020008-3-1-030		TC20042802-2	Acceptable	80	ET2020008-3-1-080		TC20042602-2	Acceptable		
31	ET2020008-3-1-031		TC20042802-2	Acceptable	81	ET2020008-3-1-081		TC20042602-2	Acceptable		
32	ET2020008-3-1-032		TC20042802-2	Acceptable	82	ET2020008-3-1-082		TC20042602-2	Acceptable		
33	ET2020008-3-1-033		TC20042802-2	Acceptable	83	ET2020008-3-1-083		TC20042602-2	Acceptable		
34	ET2020008-3-1-034		TC20042802-2	Acceptable	84	ET2020008-3-1-084		TC20042602-2	Acceptable		
35	ET2020008-3-1-035		TC20042802-2	Acceptable	85	ET2020008-3-1-085		TC20042602-2	Acceptable		
36	ET2020008-3-1-036		TC20042802-2	Acceptable	86	ET2020008-3-1-086		TC20042602-2	Acceptable		
37	ET2020008-3-1-037		TC20042802-2	Acceptable	87	ET2020008-3-1-087		TC20042602-2	Acceptable		

38	ET2020008-3-1-038	TC20042802-2	Acceptable	88	ET2020008-3-1-088	TC20042602-2	Acceptable
39	ET2020008-3-1-039	TC20042802-2	Acceptable	89	ET2020008-3-1-089	TC20042602-2	Acceptable
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42	ET2020008-3-1-042	TC20042802-2	Acceptable	92	ET2020008-3-1-092	TC20042602-2	Acceptable
43	ET2020008-3-1-043	TC20042802-2	Acceptable	93	ET2020008-3-1-093	TC20042602-2	Acceptable
44	ET2020008-3-1-044	TC20042802-2	Acceptable	94	ET2020008-3-1-094	TC20042602-2	Acceptable
45	ET2020008-3-1-045	TC20042802-2	Acceptable	95	ET2020008-3-1-095	TC20042602-2	Acceptable
46	ET2020008-3-1-046	TC20042802-2	Acceptable	96	ET2020008-3-1-096	TC20042602-2	Acceptable
47	ET2020008-3-1-047	TC20042802-2	Acceptable	97	ET2020008-3-1-097	TC20042602-2	Acceptable
48	ET2020008-3-1-048	TC20042802-2	Acceptable	98	ET2020008-3-1-098	TC20042602-2	Acceptable
49	ET2020008-3-1-049	TC20042802-2	Acceptable	99	ET2020008-3-1-099	TC20042602-2	Acceptable
50	ET2020008-3-1-050	TC20042802-2	Acceptable	100	ET2020008-3-1-100	TC20042602-2	Acceptable

Sketch:



UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA	 Level as per UT II	 Level as per UT II
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P Φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2019. 09. 10	Test Gain:20db + 5 db		
Equipment Due Date: 2020. 09. 09			

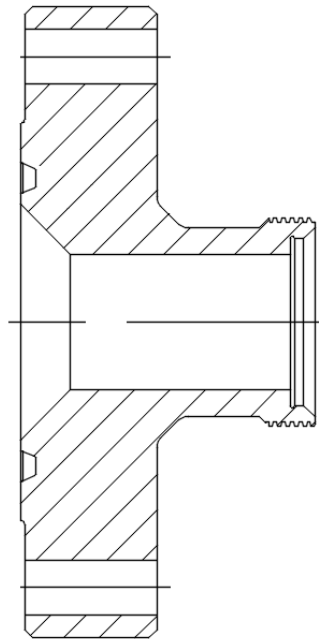
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Magnetic Particle Inspection Report

Serial No. :		ET2020008-3-1-001... 100		PO# :		ET2020008		Date:		2020-05-17	
Part No:		WF41531502		API Monogram:		YES		Report#:		20200517	
Specification:		API Spec 6A/ ASTM E709		Material:		4140 110K per ASTM A29					
Description:		WECO FLANGE 4 1/16" 15M-3"1502THD EE L-U PSL3 PR1						Qty:		100 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result		
1	ET2020008-3-1-001		TC20042802-2	Acceptable	51	ET2020008-3-1-051		TC20042602-2	Acceptable		
2	ET2020008-3-1-002		TC20042802-2	Acceptable	52	ET2020008-3-1-052		TC20042602-2	Acceptable		
3	ET2020008-3-1-003		TC20042802-2	Acceptable	53	ET2020008-3-1-053		TC20042602-2	Acceptable		
4	ET2020008-3-1-004		TC20042802-2	Acceptable	54	ET2020008-3-1-054		TC20042602-2	Acceptable		
5	ET2020008-3-1-005		TC20042802-2	Acceptable	55	ET2020008-3-1-055		TC20042602-2	Acceptable		
6	ET2020008-3-1-006		TC20042802-2	Acceptable	56	ET2020008-3-1-056		TC20042602-2	Acceptable		
7	ET2020008-3-1-007		TC20042802-2	Acceptable	57	ET2020008-3-1-057		TC20042602-2	Acceptable		
8	ET2020008-3-1-008		TC20042802-2	Acceptable	58	ET2020008-3-1-058		TC20042602-2	Acceptable		
9	ET2020008-3-1-009		TC20042802-2	Acceptable	59	ET2020008-3-1-059		TC20042602-2	Acceptable		
10	ET2020008-3-1-010		TC20042802-2	Acceptable	60	ET2020008-3-1-060		TC20042602-2	Acceptable		
11	ET2020008-3-1-011		TC20042802-2	Acceptable	61	ET2020008-3-1-061		TC20042602-2	Acceptable		
12	ET2020008-3-1-012		TC20042802-2	Acceptable	62	ET2020008-3-1-062		TC20042602-2	Acceptable		
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14	ET2020008-3-1-014		TC20042802-2	Acceptable	64	ET2020008-3-1-064		TC20042602-2	Acceptable		
15	ET2020008-3-1-015		TC20042802-2	Acceptable	65	ET2020008-3-1-065		TC20042602-2	Acceptable		
16	ET2020008-3-1-016		TC20042802-2	Acceptable	66	ET2020008-3-1-066		TC20042602-2	Acceptable		
17	ET2020008-3-1-017		TC20042802-2	Acceptable	67	ET2020008-3-1-067		TC20042602-2	Acceptable		
18	ET2020008-3-1-018		TC20042802-2	Acceptable	68	ET2020008-3-1-068		TC20042602-2	Acceptable		
19	ET2020008-3-1-019		TC20042802-2	Acceptable	69	ET2020008-3-1-069		TC20042602-2	Acceptable		
20	ET2020008-3-1-020		TC20042802-2	Acceptable	70	ET2020008-3-1-070		TC20042602-2	Acceptable		
21	ET2020008-3-1-021		TC20042802-2	Acceptable	71	ET2020008-3-1-071		TC20042602-2	Acceptable		
22	ET2020008-3-1-022		TC20042802-2	Acceptable	72	ET2020008-3-1-072		TC20042602-2	Acceptable		
23	ET2020008-3-1-023		TC20042802-2	Acceptable	73	ET2020008-3-1-073		TC20042602-2	Acceptable		
24	ET2020008-3-1-024		TC20042802-2	Acceptable	74	ET2020008-3-1-074		TC20042602-2	Acceptable		
25	ET2020008-3-1-025		TC20042802-2	Acceptable	75	ET2020008-3-1-075		TC20042602-2	Acceptable		
26	ET2020008-3-1-026		TC20042802-2	Acceptable	76	ET2020008-3-1-076		TC20042602-2	Acceptable		
27	ET2020008-3-1-027		TC20042802-2	Acceptable	77	ET2020008-3-1-077		TC20042602-2	Acceptable		
28	ET2020008-3-1-028		TC20042802-2	Acceptable	78	ET2020008-3-1-078		TC20042602-2	Acceptable		
29	ET2020008-3-1-029		TC20042802-2	Acceptable	79	ET2020008-3-1-079		TC20042602-2	Acceptable		
30	ET2020008-3-1-030		TC20042802-2	Acceptable	80	ET2020008-3-1-080		TC20042602-2	Acceptable		
31	ET2020008-3-1-031		TC20042802-2	Acceptable	81	ET2020008-3-1-081		TC20042602-2	Acceptable		
32	ET2020008-3-1-032		TC20042802-2	Acceptable	82	ET2020008-3-1-082		TC20042602-2	Acceptable		
33	ET2020008-3-1-033		TC20042802-2	Acceptable	83	ET2020008-3-1-083		TC20042602-2	Acceptable		
34	ET2020008-3-1-034		TC20042802-2	Acceptable	84	ET2020008-3-1-084		TC20042602-2	Acceptable		
35	ET2020008-3-1-035		TC20042802-2	Acceptable	85	ET2020008-3-1-085		TC20042602-2	Acceptable		
36	ET2020008-3-1-036		TC20042802-2	Acceptable	86	ET2020008-3-1-086		TC20042602-2	Acceptable		
37	ET2020008-3-1-037		TC20042802-2	Acceptable	87	ET2020008-3-1-087		TC20042602-2	Acceptable		

38	ET2020008-3-1-038	TC20042802-2	Acceptable	88	ET2020008-3-1-088	TC20042602-2	Acceptable
39	ET2020008-3-1-039	TC20042802-2	Acceptable	89	ET2020008-3-1-089	TC20042602-2	Acceptable
40	ET2020008-3-1-040	TC20042802-2	Acceptable	90	ET2020008-3-1-090	TC20042602-2	Acceptable
41	ET2020008-3-1-041	TC20042802-2	Acceptable	91	ET2020008-3-1-091	TC20042602-2	Acceptable
42	ET2020008-3-1-042	TC20042802-2	Acceptable	92	ET2020008-3-1-092	TC20042602-2	Acceptable
43	ET2020008-3-1-043	TC20042802-2	Acceptable	93	ET2020008-3-1-093	TC20042602-2	Acceptable
44	ET2020008-3-1-044	TC20042802-2	Acceptable	94	ET2020008-3-1-094	TC20042602-2	Acceptable
45	ET2020008-3-1-045	TC20042802-2	Acceptable	95	ET2020008-3-1-095	TC20042602-2	Acceptable
46	ET2020008-3-1-046	TC20042802-2	Acceptable	96	ET2020008-3-1-096	TC20042602-2	Acceptable
47	ET2020008-3-1-047	TC20042802-2	Acceptable	97	ET2020008-3-1-097	TC20042602-2	Acceptable
48	ET2020008-3-1-048	TC20042802-2	Acceptable	98	ET2020008-3-1-098	TC20042602-2	Acceptable
49	ET2020008-3-1-049	TC20042802-2	Acceptable	99	ET2020008-3-1-099	TC20042602-2	Acceptable
50	ET2020008-3-1-050	TC20042802-2	Acceptable	100	ET2020008-3-1-100	TC20042602-2	Acceptable

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000	MT Code	ASTM E709	Examined	Approved
Test Method	Fulcrum [] Cablel [✓]	Particle Type	Fluorescence Wet	BY: 林斌 Level as	by: 叶正浩 Level as
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100	per	per
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1	MT II	MT II
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

REPORT INDEX

Purchase Order: **ET2020008-3**

Quantity: **100 EA**

Shipment No. :

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	WECO PLUG 3"1502	Page-2
1.1.1	Metallurgical Test Certificate	Page-2
1.1.2	Mechanical Testing	Page-2
1.1.3	Chemical Testing	Page-2
1.1.4	Heat Treatment	Page-2
2.1	Hardness Test	Page-3
2.2	Ultrasonic Testing	Page-4
2.3	Magnetic Particle Inspection Report	Page-5

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2020008-3-2-001...100	PO#:	ET2020008	Date:	2020-05-17
Part No:	WP31502	API Monogram:	YES	Report#:	20200517
Specification:	API Spec 6A/ ASTM A370	Material:	4140 110K per ASTM A29		
Description:	WECO PLUG 3"1502 EE L-U PSL3 PR1			Qty:	100 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.50	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.50	0.35	0.25	1.10	0.30
117-10-081	100	1	0.40	0.52	0.33	0.004	0.020	0.10	0.05	0.167	0.93	0.005

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm Charpy J(ft. lb) At-46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TC19060201	100	1	115.5K	129.0K	23.0	61.0	310	61;69:78		

MECHANICAL COMPOSITION

Forgings:	4:1	Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 3 HRS	Austenitized:	880°C 3 HRS
Quenchant:	WATER	Quenchant:	WATER
Start Temp:	18 °C	Start Temp:	31 °C
End Temp:	39 °C	End Temp:	39 °C
Temper:	600°C 3 HRS AIR	Temper:	600°C 3 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:		Approved by:	
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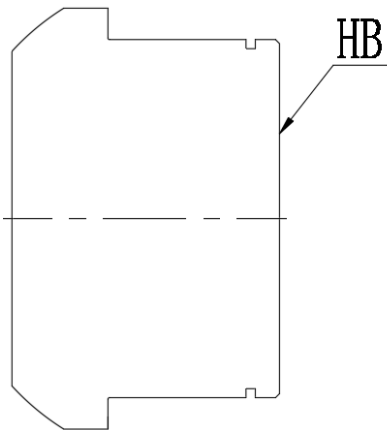
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Hardness Test Report

Serial No. :		ET2020008-3-2-001... 100		PO# :		ET2020008	Date:	2020-05-17	
Part No:		WP31502		API Monogram:		YES	Report#:	20200517	
Specification:		API Spec 6A/ ASTM E10		Material:		4140 110K per ASTM A29			
Description:		WECO PLUG 3"1502 EE L-U PSL3 PR1					Qty:	100 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.	HB
1	ET2020008-3-2-001		TC19060201	296	51	ET2020008-3-2-051		TC19060201	296
2	ET2020008-3-2-002		TC19060201	302	52	ET2020008-3-2-052		TC19060201	281
3	ET2020008-3-2-003		TC19060201	285	53	ET2020008-3-2-053		TC19060201	285
4	ET2020008-3-2-004		TC19060201	287	54	ET2020008-3-2-054		TC19060201	285
5	ET2020008-3-2-005		TC19060201	293	55	ET2020008-3-2-055		TC19060201	293
6	ET2020008-3-2-006		TC19060201	285	56	ET2020008-3-2-056		TC19060201	302
7	ET2020008-3-2-007		TC19060201	281	57	ET2020008-3-2-057		TC19060201	296
8	ET2020008-3-2-008		TC19060201	293	58	ET2020008-3-2-058		TC19060201	287
9	ET2020008-3-2-009		TC19060201	287	59	ET2020008-3-2-059		TC19060201	293
10	ET2020008-3-2-010		TC19060201	285	60	ET2020008-3-2-060		TC19060201	296
11	ET2020008-3-2-011		TC19060201	287	61	ET2020008-3-2-061		TC19060201	302
12	ET2020008-3-2-012		TC19060201	302	62	ET2020008-3-2-062		TC19060201	293
13	ET2020008-3-2-013		TC19060201	293	63	ET2020008-3-2-063		TC19060201	296
14	ET2020008-3-2-014		TC19060201	296	64	ET2020008-3-2-064		TC19060201	302
15	ET2020008-3-2-015		TC19060201	285	65	ET2020008-3-2-065		TC19060201	287
16	ET2020008-3-2-016		TC19060201	281	66	ET2020008-3-2-066		TC19060201	285
17	ET2020008-3-2-017		TC19060201	296	67	ET2020008-3-2-067		TC19060201	287
18	ET2020008-3-2-018		TC19060201	296	68	ET2020008-3-2-068		TC19060201	285
19	ET2020008-3-2-019		TC19060201	293	69	ET2020008-3-2-069		TC19060201	281
20	ET2020008-3-2-020		TC19060201	285	70	ET2020008-3-2-070		TC19060201	293
21	ET2020008-3-2-021		TC19060201	281	71	ET2020008-3-2-071		TC19060201	302
22	ET2020008-3-2-022		TC19060201	287	72	ET2020008-3-2-072		TC19060201	302
23	ET2020008-3-2-023		TC19060201	293	73	ET2020008-3-2-073		TC19060201	296
24	ET2020008-3-2-024		TC19060201	302	74	ET2020008-3-2-074		TC19060201	293
25	ET2020008-3-2-025		TC19060201	296	75	ET2020008-3-2-075		TC19060201	293
26	ET2020008-3-2-026		TC19060201	285	76	ET2020008-3-2-076		TC19060201	302
27	ET2020008-3-2-027		TC19060201	293	77	ET2020008-3-2-077		TC19060201	296
28	ET2020008-3-2-028		TC19060201	293	78	ET2020008-3-2-078		TC19060201	302
29	ET2020008-3-2-029		TC19060201	285	79	ET2020008-3-2-079		TC19060201	287
30	ET2020008-3-2-030		TC19060201	296	80	ET2020008-3-2-080		TC19060201	296
31	ET2020008-3-2-031		TC19060201	293	81	ET2020008-3-2-081		TC19060201	285
32	ET2020008-3-2-032		TC19060201	302	82	ET2020008-3-2-082		TC19060201	285
33	ET2020008-3-2-033		TC19060201	302	83	ET2020008-3-2-083		TC19060201	296
34	ET2020008-3-2-034		TC19060201	293	84	ET2020008-3-2-084		TC19060201	293
35	ET2020008-3-2-035		TC19060201	296	85	ET2020008-3-2-085		TC19060201	302
36	ET2020008-3-2-036		TC19060201	287	86	ET2020008-3-2-086		TC19060201	296
37	ET2020008-3-2-037		TC19060201	285	87	ET2020008-3-2-087		TC19060201	293

38	ET2020008-3-2-038	TC19060201	281	88	ET2020008-3-2-088	TC19060201	296
39	ET2020008-3-2-039	TC19060201	293	89	ET2020008-3-2-089	TC19060201	302
40	ET2020008-3-2-040	TC19060201	287	90	ET2020008-3-2-090	TC19060201	293
41	ET2020008-3-2-041	TC19060201	296	91	ET2020008-3-2-091	TC19060201	296
42	ET2020008-3-2-042	TC19060201	287	92	ET2020008-3-2-092	TC19060201	285
43	ET2020008-3-2-043	TC19060201	281	93	ET2020008-3-2-093	TC19060201	287
44	ET2020008-3-2-044	TC19060201	293	94	ET2020008-3-2-094	TC19060201	281
45	ET2020008-3-2-045	TC19060201	296	95	ET2020008-3-2-095	TC19060201	285
46	ET2020008-3-2-046	TC19060201	296	96	ET2020008-3-2-096	TC19060201	293
47	ET2020008-3-2-047	TC19060201	293	97	ET2020008-3-2-097	TC19060201	302
48	ET2020008-3-2-048	TC19060201	285	98	ET2020008-3-2-098	TC19060201	296
49	ET2020008-3-2-049	TC19060201	287	99	ET2020008-3-2-099	TC19060201	293
50	ET2020008-3-2-050	TC19060201	293	100	ET2020008-3-2-100	TC19060201	302

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永良	徐俊
	[] Do not conform		

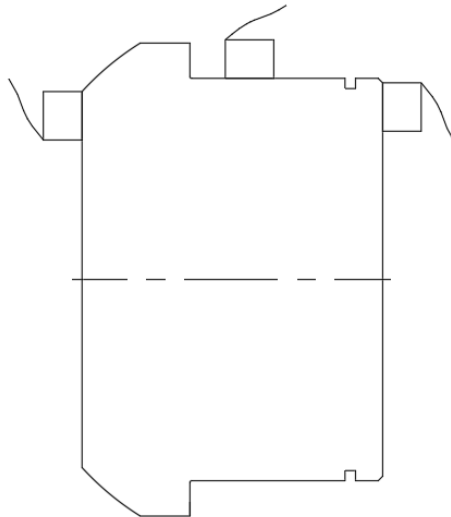
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

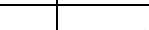
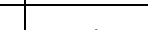
ULTRASONIC EXAMINATION REPORT

Serial No. :		ET2020008-3-2-001... 100		PO# :		ET2020008		Date:		2020-05-17	
Part No:		WP31502		API Monogram:		YES		Report#:		20200517	
Specification:		API Spec 6A/ ASTM A388		Material:		4140 110K per ASTM A29					
Description:		WECO PLUG 3"1502 EE L-U PSL3 PR1						Qty:		100 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result		
1	ET2020008-3-2-001		TC19060201	Acceptable	51	ET2020008-3-2-051		TC19060201	Acceptable		
2	ET2020008-3-2-002		TC19060201	Acceptable	52	ET2020008-3-2-052		TC19060201	Acceptable		
3	ET2020008-3-2-003		TC19060201	Acceptable	53	ET2020008-3-2-053		TC19060201	Acceptable		
4	ET2020008-3-2-004		TC19060201	Acceptable	54	ET2020008-3-2-054		TC19060201	Acceptable		
5	ET2020008-3-2-005		TC19060201	Acceptable	55	ET2020008-3-2-055		TC19060201	Acceptable		
6	ET2020008-3-2-006		TC19060201	Acceptable	56	ET2020008-3-2-056		TC19060201	Acceptable		
7	ET2020008-3-2-007		TC19060201	Acceptable	57	ET2020008-3-2-057		TC19060201	Acceptable		
8	ET2020008-3-2-008		TC19060201	Acceptable	58	ET2020008-3-2-058		TC19060201	Acceptable		
9	ET2020008-3-2-009		TC19060201	Acceptable	59	ET2020008-3-2-059		TC19060201	Acceptable		
10	ET2020008-3-2-010		TC19060201	Acceptable	60	ET2020008-3-2-060		TC19060201	Acceptable		
11	ET2020008-3-2-011		TC19060201	Acceptable	61	ET2020008-3-2-061		TC19060201	Acceptable		
12	ET2020008-3-2-012		TC19060201	Acceptable	62	ET2020008-3-2-062		TC19060201	Acceptable		
13	ET2020008-3-2-013		TC19060201	Acceptable	63	ET2020008-3-2-063		TC19060201	Acceptable		
14	ET2020008-3-2-014		TC19060201	Acceptable	64	ET2020008-3-2-064		TC19060201	Acceptable		
15	ET2020008-3-2-015		TC19060201	Acceptable	65	ET2020008-3-2-065		TC19060201	Acceptable		
16	ET2020008-3-2-016		TC19060201	Acceptable	66	ET2020008-3-2-066		TC19060201	Acceptable		
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18	ET2020008-3-2-018		TC19060201	Acceptable	68	ET2020008-3-2-068		TC19060201	Acceptable		
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20	ET2020008-3-2-020		TC19060201	Acceptable	70	ET2020008-3-2-070		TC19060201	Acceptable		
21	ET2020008-3-2-021		TC19060201	Acceptable	71	ET2020008-3-2-071		TC19060201	Acceptable		
22	ET2020008-3-2-022		TC19060201	Acceptable	72	ET2020008-3-2-072		TC19060201	Acceptable		
23	ET2020008-3-2-023		TC19060201	Acceptable	73	ET2020008-3-2-073		TC19060201	Acceptable		
24	ET2020008-3-2-024		TC19060201	Acceptable	74	ET2020008-3-2-074		TC19060201	Acceptable		
25	ET2020008-3-2-025		TC19060201	Acceptable	75	ET2020008-3-2-075		TC19060201	Acceptable		
26	ET2020008-3-2-026		TC19060201	Acceptable	76	ET2020008-3-2-076		TC19060201	Acceptable		
27	ET2020008-3-2-027		TC19060201	Acceptable	77	ET2020008-3-2-077		TC19060201	Acceptable		
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31	ET2020008-3-2-031		TC19060201	Acceptable	81	ET2020008-3-2-081		TC19060201	Acceptable		
32	ET2020008-3-2-032		TC19060201	Acceptable	82	ET2020008-3-2-082		TC19060201	Acceptable		
33	ET2020008-3-2-033		TC19060201	Acceptable	83	ET2020008-3-2-083		TC19060201	Acceptable		
34	ET2020008-3-2-034		TC19060201	Acceptable	84	ET2020008-3-2-084		TC19060201	Acceptable		
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36	ET2020008-3-2-036		TC19060201	Acceptable	86	ET2020008-3-2-086		TC19060201	Acceptable		
37	ET2020008-3-2-037		TC19060201	Acceptable	87	ET2020008-3-2-087		TC19060201	Acceptable		

38	ET2020008-3-2-038	TC19060201	Acceptable	88	ET2020008-3-2-088	TC19060201	Acceptable
39	ET2020008-3-2-039	TC19060201	Acceptable	89	ET2020008-3-2-089	TC19060201	Acceptable
40	ET2020008-3-2-040	TC19060201	Acceptable	90	ET2020008-3-2-090	TC19060201	Acceptable
41	ET2020008-3-2-041	TC19060201	Acceptable	91	ET2020008-3-2-091	TC19060201	Acceptable
42	ET2020008-3-2-042	TC19060201	Acceptable	92	ET2020008-3-2-092	TC19060201	Acceptable
43	ET2020008-3-2-043	TC19060201	Acceptable	93	ET2020008-3-2-093	TC19060201	Acceptable
44	ET2020008-3-2-044	TC19060201	Acceptable	94	ET2020008-3-2-094	TC19060201	Acceptable
45	ET2020008-3-2-045	TC19060201	Acceptable	95	ET2020008-3-2-095	TC19060201	Acceptable
46	ET2020008-3-2-046	TC19060201	Acceptable	96	ET2020008-3-2-096	TC19060201	Acceptable
47	ET2020008-3-2-047	TC19060201	Acceptable	97	ET2020008-3-2-097	TC19060201	Acceptable
48	ET2020008-3-2-048	TC19060201	Acceptable	98	ET2020008-3-2-098	TC19060201	Acceptable
49	ET2020008-3-2-049	TC19060201	Acceptable	99	ET2020008-3-2-099	TC19060201	Acceptable
50	ET2020008-3-2-050	TC19060201	Acceptable	100	ET2020008-3-2-100	TC19060201	Acceptable

Sketch:



UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA	 Level as per UT II	 Level as per UT II
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2019. 09. 10	Test Gain:20db + 5 db		
Equipment Due Date: 2020. 09. 09			

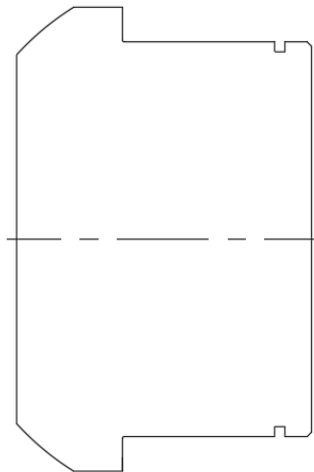
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Magnetic Particle Inspection Report

Serial No. :		ET2020008-3-2-001... 100		PO# :		ET2020008		Date:		2020-05-17	
Part No:		WP31502		API Monogram:		YES		Report#:		20200517	
Specification:		API Spec 6A/ ASTM E709		Material:		4140 110K per ASTM A29					
Description:		WECO PLUG 3"1502 EE L-U PSL3 PR1						Qty:		100 EA	
Item	S/N		Heat Lot No.	Result	Item	S/N		Heat Lot No.	Result		
1	ET2020008-3-2-001		TC19060201	Acceptable	51	ET2020008-3-2-051		TC19060201	Acceptable		
2	ET2020008-3-2-002		TC19060201	Acceptable	52	ET2020008-3-2-052		TC19060201	Acceptable		
3	ET2020008-3-2-003		TC19060201	Acceptable	53	ET2020008-3-2-053		TC19060201	Acceptable		
4	ET2020008-3-2-004		TC19060201	Acceptable	54	ET2020008-3-2-054		TC19060201	Acceptable		
5	ET2020008-3-2-005		TC19060201	Acceptable	55	ET2020008-3-2-055		TC19060201	Acceptable		
6	ET2020008-3-2-006		TC19060201	Acceptable	56	ET2020008-3-2-056		TC19060201	Acceptable		
7	ET2020008-3-2-007		TC19060201	Acceptable	57	ET2020008-3-2-057		TC19060201	Acceptable		
8	ET2020008-3-2-008		TC19060201	Acceptable	58	ET2020008-3-2-058		TC19060201	Acceptable		
9	ET2020008-3-2-009		TC19060201	Acceptable	59	ET2020008-3-2-059		TC19060201	Acceptable		
10	ET2020008-3-2-010		TC19060201	Acceptable	60	ET2020008-3-2-060		TC19060201	Acceptable		
11	ET2020008-3-2-011		TC19060201	Acceptable	61	ET2020008-3-2-061		TC19060201	Acceptable		
12	ET2020008-3-2-012		TC19060201	Acceptable	62	ET2020008-3-2-062		TC19060201	Acceptable		
13	ET2020008-3-2-013		TC19060201	Acceptable	63	ET2020008-3-2-063		TC19060201	Acceptable		
14	ET2020008-3-2-014		TC19060201	Acceptable	64	ET2020008-3-2-064		TC19060201	Acceptable		
15	ET2020008-3-2-015		TC19060201	Acceptable	65	ET2020008-3-2-065		TC19060201	Acceptable		
16	ET2020008-3-2-016		TC19060201	Acceptable	66	ET2020008-3-2-066		TC19060201	Acceptable		
17	ET2020008-3-2-017		TC19060201	Acceptable	67	ET2020008-3-2-067		TC19060201	Acceptable		
18	ET2020008-3-2-018		TC19060201	Acceptable	68	ET2020008-3-2-068		TC19060201	Acceptable		
19	ET2020008-3-2-019		TC19060201	Acceptable	69	ET2020008-3-2-069		TC19060201	Acceptable		
20	ET2020008-3-2-020		TC19060201	Acceptable	70	ET2020008-3-2-070		TC19060201	Acceptable		
21	ET2020008-3-2-021		TC19060201	Acceptable	71	ET2020008-3-2-071		TC19060201	Acceptable		
22	ET2020008-3-2-022		TC19060201	Acceptable	72	ET2020008-3-2-072		TC19060201	Acceptable		
23	ET2020008-3-2-023		TC19060201	Acceptable	73	ET2020008-3-2-073		TC19060201	Acceptable		
24	ET2020008-3-2-024		TC19060201	Acceptable	74	ET2020008-3-2-074		TC19060201	Acceptable		
25	ET2020008-3-2-025		TC19060201	Acceptable	75	ET2020008-3-2-075		TC19060201	Acceptable		
26	ET2020008-3-2-026		TC19060201	Acceptable	76	ET2020008-3-2-076		TC19060201	Acceptable		
27	ET2020008-3-2-027		TC19060201	Acceptable	77	ET2020008-3-2-077		TC19060201	Acceptable		
28	ET2020008-3-2-028		TC19060201	Acceptable	78	ET2020008-3-2-078		TC19060201	Acceptable		
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30	ET2020008-3-2-030		TC19060201	Acceptable	80	ET2020008-3-2-080		TC19060201	Acceptable		
31	ET2020008-3-2-031		TC19060201	Acceptable	81	ET2020008-3-2-081		TC19060201	Acceptable		
32	ET2020008-3-2-032		TC19060201	Acceptable	82	ET2020008-3-2-082		TC19060201	Acceptable		
33	ET2020008-3-2-033		TC19060201	Acceptable	83	ET2020008-3-2-083		TC19060201	Acceptable		
34	ET2020008-3-2-034		TC19060201	Acceptable	84	ET2020008-3-2-084		TC19060201	Acceptable		
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36	ET2020008-3-2-036		TC19060201	Acceptable	86	ET2020008-3-2-086		TC19060201	Acceptable		
37	ET2020008-3-2-037		TC19060201	Acceptable	87	ET2020008-3-2-087		TC19060201	Acceptable		

38	ET2020008-3-2-038	TC19060201	Acceptable	88	ET2020008-3-2-088	TC19060201	Acceptable
39	ET2020008-3-2-039	TC19060201	Acceptable	89	ET2020008-3-2-089	TC19060201	Acceptable
40	ET2020008-3-2-040	TC19060201	Acceptable	90	ET2020008-3-2-090	TC19060201	Acceptable
41	ET2020008-3-2-041	TC19060201	Acceptable	91	ET2020008-3-2-091	TC19060201	Acceptable
42	ET2020008-3-2-042	TC19060201	Acceptable	92	ET2020008-3-2-092	TC19060201	Acceptable
43	ET2020008-3-2-043	TC19060201	Acceptable	93	ET2020008-3-2-093	TC19060201	Acceptable
44	ET2020008-3-2-044	TC19060201	Acceptable	94	ET2020008-3-2-094	TC19060201	Acceptable
45	ET2020008-3-2-045	TC19060201	Acceptable	95	ET2020008-3-2-095	TC19060201	Acceptable
46	ET2020008-3-2-046	TC19060201	Acceptable	96	ET2020008-3-2-096	TC19060201	Acceptable
47	ET2020008-3-2-047	TC19060201	Acceptable	97	ET2020008-3-2-097	TC19060201	Acceptable
48	ET2020008-3-2-048	TC19060201	Acceptable	98	ET2020008-3-2-098	TC19060201	Acceptable
49	ET2020008-3-2-049	TC19060201	Acceptable	99	ET2020008-3-2-099	TC19060201	Acceptable
50	ET2020008-3-2-050	TC19060201	Acceptable	100	ET2020008-3-2-100	TC19060201	Acceptable

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000	MT Code	ASTM E709	Examined	Approved
Test Method	Fulcrum [] Cablel [✓]	Particle Type	Fluorescence Wet	BY: 林斌	by: 叶飞浩
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100	Level as	Level as
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1	per	per
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$	MT II	MT II

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

REPORT INDEX

Purchase Order: ET2020008-3

Quantity: 100 EA

Shipment No. :

Shipment Date:

[illegible]

SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

METALLURGICAL TEST CERTIFICATE

Serial No.:	ET2020008-3-3-001...100	PO#:	ET2020008	Date:	2020-05-17
Part No:	NT31502	API Monogram:	YES	Report#:	20200517
Specification:	API Spec 6A/ ASTM A370	Material:	4140 110k per ASTM A29		
Description:	WECO NUT 3"1502 EE L-U PSL3 PR1			Qty:	100 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No.:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.38	0.60	0.15	/	/	/	/	0.15	0.80	/
Spec Max			0.43	1.00	0.35	0.025	0.025	0.50	0.35	0.25	1.10	0.30
8308430M	100	1	0.41	0.89	0.26	0.003	0.016	0.03	0.03	0.20	1.00	0.03

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm Charpy J(ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max			/	/	/	/	320	/		
TC20041201	100	1	113.5K	129.0K	26.0	60.0	302	62;69;78		

MECHANICAL COMPOSITION

Forgings:	4:1	Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 4 HRS	Austenitized:	880°C 4 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	23 °C	Start Temp:	23 °C
End Temp:	39 °C	End Temp:	39 °C
Temper:	600°C 4 HRS AIR	Temper:	600°C 4 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:		Approved by:	
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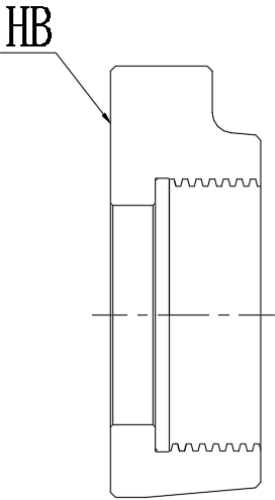
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Hardness Test Report

Serial No. :		ET2020008-3-3-001... 100		PO# :		ET2020008	Date:	2020-05-17	
Part No:		NT31502		API Monogram:		YES	Report#:	20200517	
Specification:		API Spec 6A/ ASTM E10		Material:		4140 110k per ASTM A29			
Description:		WECO NUT 3"1502 EE L-U PSL3 PR1					Qty:	100 EA	
Item	S/N		Heat Lot No.	HB	Item	S/N		Heat Lot No.	HB
1	ET2020008-3-3-001		TC20041201	308	51	ET2020008-3-3-051		TC20041201	302
2	ET2020008-3-3-002		TC20041201	311	52	ET2020008-3-3-052		TC20041201	310
3	ET2020008-3-3-003		TC20041201	315	53	ET2020008-3-3-053		TC20041201	311
4	ET2020008-3-3-004		TC20041201	311	54	ET2020008-3-3-054		TC20041201	299
5	ET2020008-3-3-005		TC20041201	305	55	ET2020008-3-3-055		TC20041201	302
6	ET2020008-3-3-006		TC20041201	302	56	ET2020008-3-3-056		TC20041201	296
7	ET2020008-3-3-007		TC20041201	316	57	ET2020008-3-3-057		TC20041201	300
8	ET2020008-3-3-008		TC20041201	302	58	ET2020008-3-3-058		TC20041201	295
9	ET2020008-3-3-009		TC20041201	305	59	ET2020008-3-3-059		TC20041201	302
10	ET2020008-3-3-010		TC20041201	308	60	ET2020008-3-3-060		TC20041201	305
11	ET2020008-3-3-011		TC20041201	311	61	ET2020008-3-3-061		TC20041201	311
12	ET2020008-3-3-012		TC20041201	302	62	ET2020008-3-3-062		TC20041201	302
13	ET2020008-3-3-013		TC20041201	302	63	ET2020008-3-3-063		TC20041201	310
14	ET2020008-3-3-014		TC20041201	311	64	ET2020008-3-3-064		TC20041201	311
15	ET2020008-3-3-015		TC20041201	293	65	ET2020008-3-3-065		TC20041201	299
16	ET2020008-3-3-016		TC20041201	309	66	ET2020008-3-3-066		TC20041201	302
17	ET2020008-3-3-017		TC20041201	305	67	ET2020008-3-3-067		TC20041201	296
18	ET2020008-3-3-018		TC20041201	306	68	ET2020008-3-3-068		TC20041201	300
19	ET2020008-3-3-019		TC20041201	308	69	ET2020008-3-3-069		TC20041201	295
20	ET2020008-3-3-020		TC20041201	302	70	ET2020008-3-3-070		TC20041201	295
21	ET2020008-3-3-021		TC20041201	302	71	ET2020008-3-3-071		TC20041201	298
22	ET2020008-3-3-022		TC20041201	311	72	ET2020008-3-3-072		TC20041201	302
23	ET2020008-3-3-023		TC20041201	302	73	ET2020008-3-3-073		TC20041201	300
24	ET2020008-3-3-024		TC20041201	310	74	ET2020008-3-3-074		TC20041201	295
25	ET2020008-3-3-025		TC20041201	311	75	ET2020008-3-3-075		TC20041201	302
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28	ET2020008-3-3-028		TC20041201	296	78	ET2020008-3-3-078		TC20041201	305
29	ET2020008-3-3-029		TC20041201	300	79	ET2020008-3-3-079		TC20041201	295
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31	ET2020008-3-3-031		TC20041201	302	81	ET2020008-3-3-081		TC20041201	302
32	ET2020008-3-3-032		TC20041201	305	82	ET2020008-3-3-082		TC20041201	300
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35	ET2020008-3-3-035		TC20041201	308	85	ET2020008-3-3-085		TC20041201	310
36	ET2020008-3-3-036		TC20041201	302	86	ET2020008-3-3-086		TC20041201	311
37	ET2020008-3-3-037		TC20041201	302	87	ET2020008-3-3-087		TC20041201	317

38	ET2020008-3-3-038	TC20041201	298	88	ET2020008-3-3-088	TC20041201	313
39	ET2020008-3-3-039	TC20041201	311	89	ET2020008-3-3-089	TC20041201	296
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41	ET2020008-3-3-041	TC20041201	308	91	ET2020008-3-3-091	TC20041201	312
42	ET2020008-3-3-042	TC20041201	311	92	ET2020008-3-3-092	TC20041201	316
43	ET2020008-3-3-043	TC20041201	305	93	ET2020008-3-3-093	TC20041201	310
44	ET2020008-3-3-044	TC20041201	309	94	ET2020008-3-3-094	TC20041201	314
45	ET2020008-3-3-045	TC20041201	310	95	ET2020008-3-3-095	TC20041201	312
46	ET2020008-3-3-046	TC20041201	310	96	ET2020008-3-3-096	TC20041201	312
47	ET2020008-3-3-047	TC20041201	295	97	ET2020008-3-3-097	TC20041201	314
48	ET2020008-3-3-048	TC20041201	302	98	ET2020008-3-3-098	TC20041201	310
49	ET2020008-3-3-049	TC20041201	305	99	ET2020008-3-3-099	TC20041201	312
50	ET2020008-3-3-050	TC20041201	311	100	ET2020008-3-3-100	TC20041201	310

Sketch:



Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	280HBW-320HBW	Inspected by:	Approved by:
Judgments:	[V] Conform	刘永良	徐俊
	[] Do not conform		

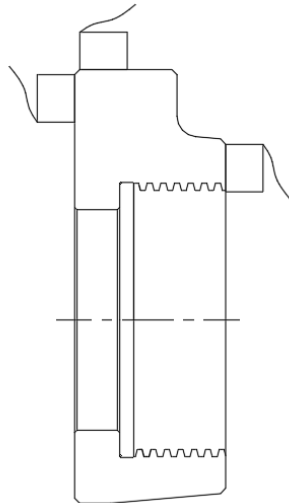
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

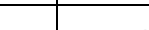
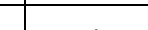
ULTRASONIC EXAMINATION REPORT

Serial No. :		ET2020008-3-3-001... 100		PO# :		ET2020008	Date:	2020-05-17
Part No:		NT31502		API Monogram:		YES	Report#:	20200517
Specification:		API Spec 6A/ ASTM A388		Material:		4140 110k per ASTM A29		
Description:		WECO NUT 3"1502 EE L-U PSL3 PR1					Qty:	100 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result	
1	ET2020008-3-3-001	TC20041201	Acceptable	51	ET2020008-3-3-051	TC20041201	Acceptable	
2	ET2020008-3-3-002	TC20041201	Acceptable	52	ET2020008-3-3-052	TC20041201	Acceptable	
3	ET2020008-3-3-003	TC20041201	Acceptable	53	ET2020008-3-3-053	TC20041201	Acceptable	
4	ET2020008-3-3-004	TC20041201	Acceptable	54	ET2020008-3-3-054	TC20041201	Acceptable	
5	ET2020008-3-3-005	TC20041201	Acceptable	55	ET2020008-3-3-055	TC20041201	Acceptable	
6	ET2020008-3-3-006	TC20041201	Acceptable	56	ET2020008-3-3-056	TC20041201	Acceptable	
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9	ET2020008-3-3-009	TC20041201	Acceptable	59	ET2020008-3-3-059	TC20041201	Acceptable	
10	ET2020008-3-3-010	TC20041201	Acceptable	60	ET2020008-3-3-060	TC20041201	Acceptable	
11	ET2020008-3-3-011	TC20041201	Acceptable	61	ET2020008-3-3-061	TC20041201	Acceptable	
12	ET2020008-3-3-012	TC20041201	Acceptable	62	ET2020008-3-3-062	TC20041201	Acceptable	
13	ET2020008-3-3-013	TC20041201	Acceptable	63	ET2020008-3-3-063	TC20041201	Acceptable	
14	ET2020008-3-3-014	TC20041201	Acceptable	64	ET2020008-3-3-064	TC20041201	Acceptable	
15	ET2020008-3-3-015	TC20041201	Acceptable	65	ET2020008-3-3-065	TC20041201	Acceptable	
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17	ET2020008-3-3-017	TC20041201	Acceptable	67	ET2020008-3-3-067	TC20041201	Acceptable	
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22	ET2020008-3-3-022	TC20041201	Acceptable	72	ET2020008-3-3-072	TC20041201	Acceptable	
23	ET2020008-3-3-023	TC20041201	Acceptable	73	ET2020008-3-3-073	TC20041201	Acceptable	
24	ET2020008-3-3-024	TC20041201	Acceptable	74	ET2020008-3-3-074	TC20041201	Acceptable	
25	ET2020008-3-3-025	TC20041201	Acceptable	75	ET2020008-3-3-075	TC20041201	Acceptable	
26	ET2020008-3-3-026	TC20041201	Acceptable	76	ET2020008-3-3-076	TC20041201	Acceptable	
27	ET2020008-3-3-027	TC20041201	Acceptable	77	ET2020008-3-3-077	TC20041201	Acceptable	
28	ET2020008-3-3-028	TC20041201	Acceptable	78	ET2020008-3-3-078	TC20041201	Acceptable	
29	ET2020008-3-3-029	TC20041201	Acceptable	79	ET2020008-3-3-079	TC20041201	Acceptable	
30	ET2020008-3-3-030	TC20041201	Acceptable	80	ET2020008-3-3-080	TC20041201	Acceptable	
31	ET2020008-3-3-031	TC20041201	Acceptable	81	ET2020008-3-3-081	TC20041201	Acceptable	
32	ET2020008-3-3-032	TC20041201	Acceptable	82	ET2020008-3-3-082	TC20041201	Acceptable	
33	ET2020008-3-3-033	TC20041201	Acceptable	83	ET2020008-3-3-083	TC20041201	Acceptable	
34	ET2020008-3-3-034	TC20041201	Acceptable	84	ET2020008-3-3-084	TC20041201	Acceptable	
35	ET2020008-3-3-035	TC20041201	Acceptable	85	ET2020008-3-3-085	TC20041201	Acceptable	
36	ET2020008-3-3-036	TC20041201	Acceptable	86	ET2020008-3-3-086	TC20041201	Acceptable	
37	ET2020008-3-3-037	TC20041201	Acceptable	87	ET2020008-3-3-087	TC20041201	Acceptable	

38	ET2020008-3-3-038	TC20041201	Acceptable	88	ET2020008-3-3-088	TC20041201	Acceptable
39	ET2020008-3-3-039	TC20041201	Acceptable	89	ET2020008-3-3-089	TC20041201	Acceptable
40	ET2020008-3-3-040	TC20041201	Acceptable	90	ET2020008-3-3-090	TC20041201	Acceptable
41	ET2020008-3-3-041	TC20041201	Acceptable	91	ET2020008-3-3-091	TC20041201	Acceptable
42	ET2020008-3-3-042	TC20041201	Acceptable	92	ET2020008-3-3-092	TC20041201	Acceptable
43	ET2020008-3-3-043	TC20041201	Acceptable	93	ET2020008-3-3-093	TC20041201	Acceptable
44	ET2020008-3-3-044	TC20041201	Acceptable	94	ET2020008-3-3-094	TC20041201	Acceptable
45	ET2020008-3-3-045	TC20041201	Acceptable	95	ET2020008-3-3-095	TC20041201	Acceptable
46	ET2020008-3-3-046	TC20041201	Acceptable	96	ET2020008-3-3-096	TC20041201	Acceptable
47	ET2020008-3-3-047	TC20041201	Acceptable	97	ET2020008-3-3-097	TC20041201	Acceptable
48	ET2020008-3-3-048	TC20041201	Acceptable	98	ET2020008-3-3-098	TC20041201	Acceptable
49	ET2020008-3-3-049	TC20041201	Acceptable	99	ET2020008-3-3-099	TC20041201	Acceptable
50	ET2020008-3-3-050	TC20041201	Acceptable	100	ET2020008-3-3-100	TC20041201	Acceptable

Sketch:



UT Code:ASTM A388	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage: After heat treatment	Calibration Block:CSK IA	 Level as per UT II	 Level as per UT II
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P φ10	Acceptance Criteria: API 6A PSL 3		
Equipment Calibration Date :2019. 09. 10	Test Gain:20db + 5 db		
Equipment Due Date: 2020. 09. 09			

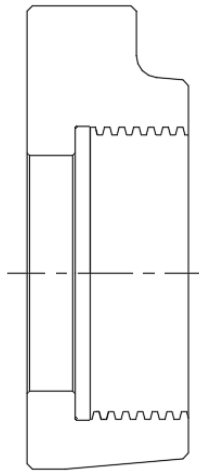
SHANG HAI SHENG QIN PETROLEUM MACHINERY MANUFACTURE CO., LTD.

Magnetic Particle Inspection Report

Serial No. :		ET2020008-3-3-001... 100		PO# :		ET2020008	Date:	2020-05-17
Part No:		NT31502		API Monogram:		YES	Report#:	20200517
Specification:		API Spec 6A/ ASTM E709		Material:		4140 110k per ASTM A29		
Description:		WECO NUT 3"1502 EE L-U PSL3 PR1					Qty:	100 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result	
1	ET2020008-3-3-001	TC20041201	Acceptable	51	ET2020008-3-3-051	TC20041201	Acceptable	
2	ET2020008-3-3-002	TC20041201	Acceptable	52	ET2020008-3-3-052	TC20041201	Acceptable	
3	ET2020008-3-3-003	TC20041201	Acceptable	53	ET2020008-3-3-053	TC20041201	Acceptable	
4	ET2020008-3-3-004	TC20041201	Acceptable	54	ET2020008-3-3-054	TC20041201	Acceptable	
5	ET2020008-3-3-005	TC20041201	Acceptable	55	ET2020008-3-3-055	TC20041201	Acceptable	
6	ET2020008-3-3-006	TC20041201	Acceptable	56	ET2020008-3-3-056	TC20041201	Acceptable	
7	ET2020008-3-3-007	TC20041201	Acceptable	57	ET2020008-3-3-057	TC20041201	Acceptable	
8	ET2020008-3-3-008	TC20041201	Acceptable	58	ET2020008-3-3-058	TC20041201	Acceptable	
9	ET2020008-3-3-009	TC20041201	Acceptable	59	ET2020008-3-3-059	TC20041201	Acceptable	
10	ET2020008-3-3-010	TC20041201	Acceptable	60	ET2020008-3-3-060	TC20041201	Acceptable	
11	ET2020008-3-3-011	TC20041201	Acceptable	61	ET2020008-3-3-061	TC20041201	Acceptable	
12	ET2020008-3-3-012	TC20041201	Acceptable	62	ET2020008-3-3-062	TC20041201	Acceptable	
13	ET2020008-3-3-013	TC20041201	Acceptable	63	ET2020008-3-3-063	TC20041201	Acceptable	
14	ET2020008-3-3-014	TC20041201	Acceptable	64	ET2020008-3-3-064	TC20041201	Acceptable	
15	ET2020008-3-3-015	TC20041201	Acceptable	65	ET2020008-3-3-065	TC20041201	Acceptable	
16	ET2020008-3-3-016	TC20041201	Acceptable	66	ET2020008-3-3-066	TC20041201	Acceptable	
17	ET2020008-3-3-017	TC20041201	Acceptable	67	ET2020008-3-3-067	TC20041201	Acceptable	
18	ET2020008-3-3-018	TC20041201	Acceptable	68	ET2020008-3-3-068	TC20041201	Acceptable	
19	ET2020008-3-3-019	TC20041201	Acceptable	69	ET2020008-3-3-069	TC20041201	Acceptable	
20	ET2020008-3-3-020	TC20041201	Acceptable	70	ET2020008-3-3-070	TC20041201	Acceptable	
21	ET2020008-3-3-021	TC20041201	Acceptable	71	ET2020008-3-3-071	TC20041201	Acceptable	
22	ET2020008-3-3-022	TC20041201	Acceptable	72	ET2020008-3-3-072	TC20041201	Acceptable	
23	ET2020008-3-3-023	TC20041201	Acceptable	73	ET2020008-3-3-073	TC20041201	Acceptable	
24	ET2020008-3-3-024	TC20041201	Acceptable	74	ET2020008-3-3-074	TC20041201	Acceptable	
25	ET2020008-3-3-025	TC20041201	Acceptable	75	ET2020008-3-3-075	TC20041201	Acceptable	
26	ET2020008-3-3-026	TC20041201	Acceptable	76	ET2020008-3-3-076	TC20041201	Acceptable	
27	ET2020008-3-3-027	TC20041201	Acceptable	77	ET2020008-3-3-077	TC20041201	Acceptable	
28	ET2020008-3-3-028	TC20041201	Acceptable	78	ET2020008-3-3-078	TC20041201	Acceptable	
29	ET2020008-3-3-029	TC20041201	Acceptable	79	ET2020008-3-3-079	TC20041201	Acceptable	
30	ET2020008-3-3-030	TC20041201	Acceptable	80	ET2020008-3-3-080	TC20041201	Acceptable	
31	ET2020008-3-3-031	TC20041201	Acceptable	81	ET2020008-3-3-081	TC20041201	Acceptable	
32	ET2020008-3-3-032	TC20041201	Acceptable	82	ET2020008-3-3-082	TC20041201	Acceptable	
33	ET2020008-3-3-033	TC20041201	Acceptable	83	ET2020008-3-3-083	TC20041201	Acceptable	
34	ET2020008-3-3-034	TC20041201	Acceptable	84	ET2020008-3-3-084	TC20041201	Acceptable	
35	ET2020008-3-3-035	TC20041201	Acceptable	85	ET2020008-3-3-085	TC20041201	Acceptable	
36	ET2020008-3-3-036	TC20041201	Acceptable	86	ET2020008-3-3-086	TC20041201	Acceptable	
37	ET2020008-3-3-037	TC20041201	Acceptable	87	ET2020008-3-3-087	TC20041201	Acceptable	

38	ET2020008-3-3-038	TC20041201	Acceptable	88	ET2020008-3-3-088	TC20041201	Acceptable
39	ET2020008-3-3-039	TC20041201	Acceptable	89	ET2020008-3-3-089	TC20041201	Acceptable
40	ET2020008-3-3-040	TC20041201	Acceptable	90	ET2020008-3-3-090	TC20041201	Acceptable
41	ET2020008-3-3-041	TC20041201	Acceptable	91	ET2020008-3-3-091	TC20041201	Acceptable
42	ET2020008-3-3-042	TC20041201	Acceptable	92	ET2020008-3-3-092	TC20041201	Acceptable
43	ET2020008-3-3-043	TC20041201	Acceptable	93	ET2020008-3-3-093	TC20041201	Acceptable
44	ET2020008-3-3-044	TC20041201	Acceptable	94	ET2020008-3-3-094	TC20041201	Acceptable
45	ET2020008-3-3-045	TC20041201	Acceptable	95	ET2020008-3-3-095	TC20041201	Acceptable
46	ET2020008-3-3-046	TC20041201	Acceptable	96	ET2020008-3-3-096	TC20041201	Acceptable
47	ET2020008-3-3-047	TC20041201	Acceptable	97	ET2020008-3-3-097	TC20041201	Acceptable
48	ET2020008-3-3-048	TC20041201	Acceptable	98	ET2020008-3-3-098	TC20041201	Acceptable
49	ET2020008-3-3-049	TC20041201	Acceptable	99	ET2020008-3-3-099	TC20041201	Acceptable
50	ET2020008-3-3-050	TC20041201	Acceptable	100	ET2020008-3-3-100	TC20041201	Acceptable

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000	MT Code	ASTM E709	Examined	Approved
Test Method	Fulcrum [] Cablel [✓]	Particle Type	Fluorescence Wet	BY: 林斌	by: 叶飞浩
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100	Level as	Level as
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1	per	per
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$	MT II	MT II



REPORT INDEX

Purchase Order: LB18-161-5

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018.07.17

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	LB18-161-5-1-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WF310x21502F	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO FLANGE 3 1/16" 10M - 2" 1502 FEMALE			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.28	0.40	0.15					0.15	0.80	0.20
Spec Max			0.33	0.60	0.30	0.025	0.025	0.50		0.25	1.10	0.30
17392989	50	1	0.29	0.58	0.21	0.001	0.005	0.02	0.03	0.23	0.98	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction
Spec Min			75 K	95 K	18.0	35.0	197	27J		
Spec Max							235			
18090801	50	1	85 K	106 K	35.0	62		41;52;45		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	WATER	Quenchant:	WATER
Start Temp:	25 °C	Start Temp:	25 °C
End Temp:	40 °C	End Temp:	40 °C
Temper:	600°C 4 HRS AIR	Temper:	600°C 4 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	LB18-161-5-1-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WF310x21502F	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO FLANGE 3 1/16" 10M - 2" 1502 FEMALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	LB18-161-5-1-01	18090801	219	26	LB18-161-5-1-26	18090801	231
2	LB18-161-5-1-02	18090801	229	27	LB18-161-5-1-27	18090801	231
3	LB18-161-5-1-03	18090801	229	28	LB18-161-5-1-28	18090801	219
4	LB18-161-5-1-04	18090801	231	29	LB18-161-5-1-29	18090801	219
5	LB18-161-5-1-05	18090801	231	30	LB18-161-5-1-30	18090801	219
6	LB18-161-5-1-06	18090801	219	31	LB18-161-5-1-31	18090801	225
7	LB18-161-5-1-07	18090801	219	32	LB18-161-5-1-32	18090801	225
8	LB18-161-5-1-08	18090801	225	33	LB18-161-5-1-33	18090801	230
9	LB18-161-5-1-09	18090801	225	34	LB18-161-5-1-34	18090801	230
10	LB18-161-5-1-10	18090801	230	35	LB18-161-5-1-35	18090801	227
11	LB18-161-5-1-11	18090801	230	36	LB18-161-5-1-36	18090801	227
12	LB18-161-5-1-12	18090801	231	37	LB18-161-5-1-37	18090801	215
13	LB18-161-5-1-13	18090801	231	38	LB18-161-5-1-38	18090801	215
14	LB18-161-5-1-14	18090801	219	39	LB18-161-5-1-39	18090801	218
15	LB18-161-5-1-15	18090801	219	40	LB18-161-5-1-40	18090801	218
16	LB18-161-5-1-16	18090801	220	41	LB18-161-5-1-41	18090801	231
17	LB18-161-5-1-17	18090801	220	42	LB18-161-5-1-42	18090801	231
18	LB18-161-5-1-18	18090801	225	43	LB18-161-5-1-43	18090801	229
19	LB18-161-5-1-19	18090801	225	44	LB18-161-5-1-44	18090801	229
20	LB18-161-5-1-20	18090801	227	45	LB18-161-5-1-45	18090801	229
21	LB18-161-5-1-21	18090801	227	46	LB18-161-5-1-46	18090801	225
22	LB18-161-5-1-22	18090801	221	47	LB18-161-5-1-47	18090801	225
23	LB18-161-5-1-23	18090801	221	48	LB18-161-5-1-48	18090801	227
24	LB18-161-5-1-24	18090801	223	49	LB18-161-5-1-49	18090801	227
25	LB18-161-5-1-25	18090801	223	50	LB18-161-5-1-50	18090801	227

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	Fu Wei Ming
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	LB18-161-5-1-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WF310x21502F	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO FLANGE 3 1/16" 10M - 2" 1502 FEMALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-1-01	18090801	Acceptable	26	LB18-161-5-1-26	18090801	Acceptable
2	LB18-161-5-1-02	18090801	Acceptable	27	LB18-161-5-1-27	18090801	Acceptable
3	LB18-161-5-1-03	18090801	Acceptable	28	LB18-161-5-1-28	18090801	Acceptable
4	LB18-161-5-1-04	18090801	Acceptable	29	LB18-161-5-1-29	18090801	Acceptable
5	LB18-161-5-1-05	18090801	Acceptable	30	LB18-161-5-1-30	18090801	Acceptable
6	LB18-161-5-1-06	18090801	Acceptable	31	LB18-161-5-1-31	18090801	Acceptable
7	LB18-161-5-1-07	18090801	Acceptable	32	LB18-161-5-1-32	18090801	Acceptable
8	LB18-161-5-1-08	18090801	Acceptable	33	LB18-161-5-1-33	18090801	Acceptable
9	LB18-161-5-1-09	18090801	Acceptable	34	LB18-161-5-1-34	18090801	Acceptable
10	LB18-161-5-1-10	18090801	Acceptable	35	LB18-161-5-1-35	18090801	Acceptable
11	LB18-161-5-1-11	18090801	Acceptable	36	LB18-161-5-1-36	18090801	Acceptable
12	LB18-161-5-1-12	18090801	Acceptable	37	LB18-161-5-1-37	18090801	Acceptable
13	LB18-161-5-1-13	18090801	Acceptable	38	LB18-161-5-1-38	18090801	Acceptable
14	LB18-161-5-1-14	18090801	Acceptable	39	LB18-161-5-1-39	18090801	Acceptable
15	LB18-161-5-1-15	18090801	Acceptable	40	LB18-161-5-1-40	18090801	Acceptable
16	LB18-161-5-1-16	18090801	Acceptable	41	LB18-161-5-1-41	18090801	Acceptable
17	LB18-161-5-1-17	18090801	Acceptable	42	LB18-161-5-1-42	18090801	Acceptable
18	LB18-161-5-1-18	18090801	Acceptable	43	LB18-161-5-1-43	18090801	Acceptable
19	LB18-161-5-1-19	18090801	Acceptable	44	LB18-161-5-1-44	18090801	Acceptable
20	LB18-161-5-1-20	18090801	Acceptable	45	LB18-161-5-1-45	18090801	Acceptable
21	LB18-161-5-1-21	18090801	Acceptable	46	LB18-161-5-1-46	18090801	Acceptable
22	LB18-161-5-1-22	18090801	Acceptable	47	LB18-161-5-1-47	18090801	Acceptable
23	LB18-161-5-1-23	18090801	Acceptable	48	LB18-161-5-1-48	18090801	Acceptable
24	LB18-161-5-1-24	18090801	Acceptable	49	LB18-161-5-1-49	18090801	Acceptable
25	LB18-161-5-1-25	18090801	Acceptable	50	LB18-161-5-1-50	18090801	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2018.12	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	LB18-161-5-1-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WF310x21502F	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO FLANGE 3 1/16" 10M - 2" 1502 FEMALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-1-01	18090801	Acceptable	26	LB18-161-5-1-26	18090801	Acceptable
2	LB18-161-5-1-02	18090801	Acceptable	27	LB18-161-5-1-27	18090801	Acceptable
3	LB18-161-5-1-03	18090801	Acceptable	28	LB18-161-5-1-28	18090801	Acceptable
4	LB18-161-5-1-04	18090801	Acceptable	29	LB18-161-5-1-29	18090801	Acceptable
5	LB18-161-5-1-05	18090801	Acceptable	30	LB18-161-5-1-30	18090801	Acceptable
6	LB18-161-5-1-06	18090801	Acceptable	31	LB18-161-5-1-31	18090801	Acceptable
7	LB18-161-5-1-07	18090801	Acceptable	32	LB18-161-5-1-32	18090801	Acceptable
8	LB18-161-5-1-08	18090801	Acceptable	33	LB18-161-5-1-33	18090801	Acceptable
9	LB18-161-5-1-09	18090801	Acceptable	34	LB18-161-5-1-34	18090801	Acceptable
10	LB18-161-5-1-10	18090801	Acceptable	35	LB18-161-5-1-35	18090801	Acceptable
11	LB18-161-5-1-11	18090801	Acceptable	36	LB18-161-5-1-36	18090801	Acceptable
12	LB18-161-5-1-12	18090801	Acceptable	37	LB18-161-5-1-37	18090801	Acceptable
13	LB18-161-5-1-13	18090801	Acceptable	38	LB18-161-5-1-38	18090801	Acceptable
14	LB18-161-5-1-14	18090801	Acceptable	39	LB18-161-5-1-39	18090801	Acceptable
15	LB18-161-5-1-15	18090801	Acceptable	40	LB18-161-5-1-40	18090801	Acceptable
16	LB18-161-5-1-16	18090801	Acceptable	41	LB18-161-5-1-41	18090801	Acceptable
17	LB18-161-5-1-17	18090801	Acceptable	42	LB18-161-5-1-42	18090801	Acceptable
18	LB18-161-5-1-18	18090801	Acceptable	43	LB18-161-5-1-43	18090801	Acceptable
19	LB18-161-5-1-19	18090801	Acceptable	44	LB18-161-5-1-44	18090801	Acceptable
20	LB18-161-5-1-20	18090801	Acceptable	45	LB18-161-5-1-45	18090801	Acceptable
21	LB18-161-5-1-21	18090801	Acceptable	46	LB18-161-5-1-46	18090801	Acceptable
22	LB18-161-5-1-22	18090801	Acceptable	47	LB18-161-5-1-47	18090801	Acceptable
23	LB18-161-5-1-23	18090801	Acceptable	48	LB18-161-5-1-48	18090801	Acceptable
24	LB18-161-5-1-24	18090801	Acceptable	49	LB18-161-5-1-49	18090801	Acceptable
25	LB18-161-5-1-25	18090801	Acceptable	50	LB18-161-5-1-50	18090801	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



REPORT INDEX

Purchase Order: LB18-161-5

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018.07.17

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	LB18-161-5-2-01... 50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WP21502M	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO PLUG 2" 1502 MALE			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4 " x 4 " x 8 "	Bar Di:	12.7 mm (0.5 ")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.28	0.40	0.15					0.15	0.80	0.20
Spec Max			0.33	0.60	0.30	0.025	0.025	0.50		0.25	1.10	0.30
17392989	50	1	0.29	0.58	0.21	0.001	0.005	0.02	0.03	0.23	0.98	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At-46° c	Minimum Laterl	Shear Fraction
Spec Min			75 K	95 K	18.0	35.0	197	27J		
Spec Max							235			
18082402-2	50	1	85 K	106 K	35.0	62		41;52;45		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	860°C 3 HRS	Austenitized:	860°C 3 HRS
Quenchant:	WATER	Quenchant:	WATER
Start Temp:	25 °C	Start Temp:	25 °C
End Temp:	40 °C	End Temp:	40 °C
Temper:	600°C 4 HRS AIR	Temper:	600°C 4 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	LB18-161-5-2-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WP21502M	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO PLUG 2" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	LB18-161-5-2-01	18082402-2	223	26	LB18-161-5-2-26	18082402-2	225
2	LB18-161-5-2-02	18082402-2	223	27	LB18-161-5-2-27	18082402-2	225
3	LB18-161-5-2-03	18082402-2	223	28	LB18-161-5-2-28	18082402-2	231
4	LB18-161-5-2-04	18082402-2	219	29	LB18-161-5-2-29	18082402-2	231
5	LB18-161-5-2-05	18082402-2	219	30	LB18-161-5-2-30	18082402-2	231
6	LB18-161-5-2-06	18082402-2	219	31	LB18-161-5-2-31	18082402-2	228
7	LB18-161-5-2-07	18082402-2	230	32	LB18-161-5-2-32	18082402-2	228
8	LB18-161-5-2-08	18082402-2	230	33	LB18-161-5-2-33	18082402-2	228
9	LB18-161-5-2-09	18082402-2	230	34	LB18-161-5-2-34	18082402-2	219
10	LB18-161-5-2-10	18082402-2	227	35	LB18-161-5-2-35	18082402-2	219
11	LB18-161-5-2-11	18082402-2	227	36	LB18-161-5-2-36	18082402-2	219
12	LB18-161-5-2-12	18082402-2	227	37	LB18-161-5-2-37	18082402-2	226
13	LB18-161-5-2-13	18082402-2	219	38	LB18-161-5-2-38	18082402-2	226
14	LB18-161-5-2-14	18082402-2	219	39	LB18-161-5-2-39	18082402-2	226
15	LB18-161-5-2-15	18082402-2	219	40	LB18-161-5-2-40	18082402-2	224
16	LB18-161-5-2-16	18082402-2	220	41	LB18-161-5-2-41	18082402-2	224
17	LB18-161-5-2-17	18082402-2	220	42	LB18-161-5-2-42	18082402-2	224
18	LB18-161-5-2-18	18082402-2	220	43	LB18-161-5-2-43	18082402-2	230
19	LB18-161-5-2-19	18082402-2	229	44	LB18-161-5-2-44	18082402-2	230
20	LB18-161-5-2-20	18082402-2	229	45	LB18-161-5-2-45	18082402-2	230
21	LB18-161-5-2-21	18082402-2	229	46	LB18-161-5-2-46	18082402-2	226
22	LB18-161-5-2-22	18082402-2	217	47	LB18-161-5-2-47	18082402-2	226
23	LB18-161-5-2-23	18082402-2	217	48	LB18-161-5-2-48	18082402-2	226
24	LB18-161-5-2-24	18082402-2	217	49	LB18-161-5-2-49	18082402-2	229
25	LB18-161-5-2-25	18082402-2	225	50	LB18-161-5-2-50	18082402-2	229

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	Fu Wei Ming
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	LB18-161-5-2-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WP21502M	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO PLUG 2" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-2-01	18082402-2	Acceptable	26	LB18-161-5-2-26	18082402-2	Acceptable
2	LB18-161-5-2-02	18082402-2	Acceptable	27	LB18-161-5-2-27	18082402-2	Acceptable
3	LB18-161-5-2-03	18082402-2	Acceptable	28	LB18-161-5-2-28	18082402-2	Acceptable
4	LB18-161-5-2-04	18082402-2	Acceptable	29	LB18-161-5-2-29	18082402-2	Acceptable
5	LB18-161-5-2-05	18082402-2	Acceptable	30	LB18-161-5-2-30	18082402-2	Acceptable
6	LB18-161-5-2-06	18082402-2	Acceptable	31	LB18-161-5-2-31	18082402-2	Acceptable
7	LB18-161-5-2-07	18082402-2	Acceptable	32	LB18-161-5-2-32	18082402-2	Acceptable
8	LB18-161-5-2-08	18082402-2	Acceptable	33	LB18-161-5-2-33	18082402-2	Acceptable
9	LB18-161-5-2-09	18082402-2	Acceptable	34	LB18-161-5-2-34	18082402-2	Acceptable
10	LB18-161-5-2-10	18082402-2	Acceptable	35	LB18-161-5-2-35	18082402-2	Acceptable
11	LB18-161-5-2-11	18082402-2	Acceptable	36	LB18-161-5-2-36	18082402-2	Acceptable
12	LB18-161-5-2-12	18082402-2	Acceptable	37	LB18-161-5-2-37	18082402-2	Acceptable
13	LB18-161-5-2-13	18082402-2	Acceptable	38	LB18-161-5-2-38	18082402-2	Acceptable
14	LB18-161-5-2-14	18082402-2	Acceptable	39	LB18-161-5-2-39	18082402-2	Acceptable
15	LB18-161-5-2-15	18082402-2	Acceptable	40	LB18-161-5-2-40	18082402-2	Acceptable
16	LB18-161-5-2-16	18082402-2	Acceptable	41	LB18-161-5-2-41	18082402-2	Acceptable
17	LB18-161-5-2-17	18082402-2	Acceptable	42	LB18-161-5-2-42	18082402-2	Acceptable
18	LB18-161-5-2-18	18082402-2	Acceptable	43	LB18-161-5-2-43	18082402-2	Acceptable
19	LB18-161-5-2-19	18082402-2	Acceptable	44	LB18-161-5-2-44	18082402-2	Acceptable
20	LB18-161-5-2-20	18082402-2	Acceptable	45	LB18-161-5-2-45	18082402-2	Acceptable
21	LB18-161-5-2-21	18082402-2	Acceptable	46	LB18-161-5-2-46	18082402-2	Acceptable
22	LB18-161-5-2-22	18082402-2	Acceptable	47	LB18-161-5-2-47	18082402-2	Acceptable
23	LB18-161-5-2-23	18082402-2	Acceptable	48	LB18-161-5-2-48	18082402-2	Acceptable
24	LB18-161-5-2-24	18082402-2	Acceptable	49	LB18-161-5-2-49	18082402-2	Acceptable
25	LB18-161-5-2-25	18082402-2	Acceptable	50	LB18-161-5-2-50	18082402-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2018.12	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	LB18-161-5-2-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	WP21502M	API Monogram	YES	Report#:	20181006
Specification	API Spec 6A/LU PSL3 PR1	Material:	4130 75 k	Coating:	Red
Description:	WECO PLUG 2" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-2-01	18082402-2	Acceptable	26	LB18-161-5-2-26	18082402-2	Acceptable
2	LB18-161-5-2-02	18082402-2	Acceptable	27	LB18-161-5-2-27	18082402-2	Acceptable
3	LB18-161-5-2-03	18082402-2	Acceptable	28	LB18-161-5-2-28	18082402-2	Acceptable
4	LB18-161-5-2-04	18082402-2	Acceptable	29	LB18-161-5-2-29	18082402-2	Acceptable
5	LB18-161-5-2-05	18082402-2	Acceptable	30	LB18-161-5-2-30	18082402-2	Acceptable
6	LB18-161-5-2-06	18082402-2	Acceptable	31	LB18-161-5-2-31	18082402-2	Acceptable
7	LB18-161-5-2-07	18082402-2	Acceptable	32	LB18-161-5-2-32	18082402-2	Acceptable
8	LB18-161-5-2-08	18082402-2	Acceptable	33	LB18-161-5-2-33	18082402-2	Acceptable
9	LB18-161-5-2-09	18082402-2	Acceptable	34	LB18-161-5-2-34	18082402-2	Acceptable
10	LB18-161-5-2-10	18082402-2	Acceptable	35	LB18-161-5-2-35	18082402-2	Acceptable
11	LB18-161-5-2-11	18082402-2	Acceptable	36	LB18-161-5-2-36	18082402-2	Acceptable
12	LB18-161-5-2-12	18082402-2	Acceptable	37	LB18-161-5-2-37	18082402-2	Acceptable
13	LB18-161-5-2-13	18082402-2	Acceptable	38	LB18-161-5-2-38	18082402-2	Acceptable
14	LB18-161-5-2-14	18082402-2	Acceptable	39	LB18-161-5-2-39	18082402-2	Acceptable
15	LB18-161-5-2-15	18082402-2	Acceptable	40	LB18-161-5-2-40	18082402-2	Acceptable
16	LB18-161-5-2-16	18082402-2	Acceptable	41	LB18-161-5-2-41	18082402-2	Acceptable
17	LB18-161-5-2-17	18082402-2	Acceptable	42	LB18-161-5-2-42	18082402-2	Acceptable
18	LB18-161-5-2-18	18082402-2	Acceptable	43	LB18-161-5-2-43	18082402-2	Acceptable
19	LB18-161-5-2-19	18082402-2	Acceptable	44	LB18-161-5-2-44	18082402-2	Acceptable
20	LB18-161-5-2-20	18082402-2	Acceptable	45	LB18-161-5-2-45	18082402-2	Acceptable
21	LB18-161-5-2-21	18082402-2	Acceptable	46	LB18-161-5-2-46	18082402-2	Acceptable
22	LB18-161-5-2-22	18082402-2	Acceptable	47	LB18-161-5-2-47	18082402-2	Acceptable
23	LB18-161-5-2-23	18082402-2	Acceptable	48	LB18-161-5-2-48	18082402-2	Acceptable
24	LB18-161-5-2-24	18082402-2	Acceptable	49	LB18-161-5-2-49	18082402-2	Acceptable
25	LB18-161-5-2-25	18082402-2	Acceptable	50	LB18-161-5-2-50	18082402-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



C&W International Fabricators

REPORT INDEX

Purchase Order: LB18-161-5

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018-07-17

Activity No.	Characteristics	Reference Page
1.1	HAMMER NUT-2" 1502	Page-2
1.1.1	Metallurgical Test Certificate	Page-2
1.1.2	Mechanical Testing	Page-2
1.1.3	Chemical Testing	Page-2
1.1.4	Heat Treatment	Page-2
2.1	Hardness Test	Page-3-1-2
2.2	Ultrasonic Testing	Page-4-1-2
2.3	Magnetic Particle Inspection Report	Page-5-1-2



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	LB18-161-5-3-01...50	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	HN21502	API Monogram	YES	Report#:	20181005
Specification	API Spec 6A/ L-U PSL3 PR1	Material:	4140	Coating:	RED
Description:	HAMMER NUT-2" 1502			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
7303672M	50	1	0.42	0.95	0.27	0.003	0.016	0.02	0.02	0.21	1.03	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (pa)	Tensile Strength (pa)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J(ft. lb) At-46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
18062602-2	50	1	125 K	131 K	19.5	55		50.49.60		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	860°C 3.0 HRS	Austenitized:	860°C 3.0 HRS
Quenchant:	Oil	Quenchant:	Oil
Start Temp:	26°C	Start Temp:	26°C
End Temp:	38°C	End Temp:	38°C
Temper:	650°C 4 HRS AIR	Temper:	650°C 4 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	LB18-161-7-3-01...25	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	HN31502	API Monogram	YES	Report#:	20181005
Specification	API Spec 6A/ L-U PSL3 PR1	Material:	4140	Coating:	RED
Description:	HAMMER NUT-3" 1502			Qty:	25 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	LB18-161-5-3-01	18062602-2	302	26	LB18-161-5-3-26	18062602-2	302
2	LB18-161-5-3-02	18062602-2	306	27	LB18-161-5-3-27	18062602-2	306
3	LB18-161-5-3-03	18062602-2	296	28	LB18-161-5-3-28	18062602-2	296
4	LB18-161-5-3-04	18062602-2	293	29	LB18-161-5-3-29	18062602-2	293
5	LB18-161-5-3-05	18062602-2	290	30	LB18-161-5-3-30	18062602-2	290
6	LB18-161-5-3-06	18062602-2	290	31	LB18-161-5-3-31	18062602-2	293
7	LB18-161-5-3-07	18062602-2	293	32	LB18-161-5-3-32	18062602-2	306
8	LB18-161-5-3-08	18062602-2	306	33	LB18-161-5-3-33	18062602-2	306
9	LB18-161-5-3-09	18062602-2	306	34	LB18-161-5-3-34	18062602-2	311
10	LB18-161-5-3-10	18062602-2	311	35	LB18-161-5-3-35	18062602-2	290
11	LB18-161-5-3-11	18062602-2	290	36	LB18-161-5-3-36	18062602-2	296
12	LB18-161-5-3-12	18062602-2	296	37	LB18-161-5-3-37	18062602-2	296
13	LB18-161-5-3-13	18062602-2	296	38	LB18-161-5-3-38	18062602-2	302
14	LB18-161-5-3-14	18062602-2	302	39	LB18-161-5-3-39	18062602-2	302
15	LB18-161-5-3-15	18062602-2	302	40	LB18-161-5-3-40	18062602-2	306
16	LB18-161-5-3-16	18062602-2	306	41	LB18-161-5-3-41	18062602-2	296
17	LB18-161-5-3-17	18062602-2	296	42	LB18-161-5-3-42	18062602-2	290
18	LB18-161-5-3-18	18062602-2	290	43	LB18-161-5-3-43	18062602-2	293
19	LB18-161-5-3-19	18062602-2	293	44	LB18-161-5-3-44	18062602-2	311
20	LB18-161-5-3-20	18062602-2	311	45	LB18-161-5-3-45	18062602-2	302
21	LB18-161-5-3-21	18062602-2	302	46	LB18-161-5-3-46	18062602-2	306
22	LB18-161-5-3-22	18062602-2	302	47	LB18-161-5-3-47	18062602-2	296
23	LB18-161-5-3-23	18062602-2	306	48	LB18-161-5-3-48	18062602-2	290
24	LB18-161-5-3-24	18062602-2	296	49	LB18-161-5-3-49	18062602-2	293
25	LB18-161-5-3-25	18062602-2	290	50	LB18-161-5-3-50	18062602-2	311

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	LB18-161-7-3-01...25	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	HN31502	API Monogram	YES	Report#:	20181005
Specification	API Spec 6A/ L-U PSL3 PR1	Material:	4140	Coating:	RED
Description:	HAMMER NUT-3" 1502			Qty:	25 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-3-01	18062602-2	Acceptable	26	LB18-161-5-3-26	18062602-2	Acceptable
2	LB18-161-5-3-02	18062602-2	Acceptable	27	LB18-161-5-3-27	18062602-2	Acceptable
3	LB18-161-5-3-03	18062602-2	Acceptable	28	LB18-161-5-3-28	18062602-2	Acceptable
4	LB18-161-5-3-04	18062602-2	Acceptable	29	LB18-161-5-3-29	18062602-2	Acceptable
5	LB18-161-5-3-05	18062602-2	Acceptable	30	LB18-161-5-3-30	18062602-2	Acceptable
6	LB18-161-5-3-06	18062602-2	Acceptable	31	LB18-161-5-3-31	18062602-2	Acceptable
7	LB18-161-5-3-07	18062602-2	Acceptable	32	LB18-161-5-3-32	18062602-2	Acceptable
8	LB18-161-5-3-08	18062602-2	Acceptable	33	LB18-161-5-3-33	18062602-2	Acceptable
9	LB18-161-5-3-09	18062602-2	Acceptable	34	LB18-161-5-3-34	18062602-2	Acceptable
10	LB18-161-5-3-10	18062602-2	Acceptable	35	LB18-161-5-3-35	18062602-2	Acceptable
11	LB18-161-5-3-11	18062602-2	Acceptable	36	LB18-161-5-3-36	18062602-2	Acceptable
12	LB18-161-5-3-12	18062602-2	Acceptable	37	LB18-161-5-3-37	18062602-2	Acceptable
13	LB18-161-5-3-13	18062602-2	Acceptable	38	LB18-161-5-3-38	18062602-2	Acceptable
14	LB18-161-5-3-14	18062602-2	Acceptable	39	LB18-161-5-3-39	18062602-2	Acceptable
15	LB18-161-5-3-15	18062602-2	Acceptable	40	LB18-161-5-3-40	18062602-2	Acceptable
16	LB18-161-5-3-16	18062602-2	Acceptable	41	LB18-161-5-3-41	18062602-2	Acceptable
17	LB18-161-5-3-17	18062602-2	Acceptable	42	LB18-161-5-3-42	18062602-2	Acceptable
18	LB18-161-5-3-18	18062602-2	Acceptable	43	LB18-161-5-3-43	18062602-2	Acceptable
19	LB18-161-5-3-19	18062602-2	Acceptable	44	LB18-161-5-3-44	18062602-2	Acceptable
20	LB18-161-5-3-20	18062602-2	Acceptable	45	LB18-161-5-3-45	18062602-2	Acceptable
21	LB18-161-5-3-21	18062602-2	Acceptable	46	LB18-161-5-3-46	18062602-2	Acceptable
22	LB18-161-5-3-22	18062602-2	Acceptable	47	LB18-161-5-3-47	18062602-2	Acceptable
23	LB18-161-5-3-23	18062602-2	Acceptable	48	LB18-161-5-3-48	18062602-2	Acceptable
24	LB18-161-5-3-24	18062602-2	Acceptable	49	LB18-161-5-3-49	18062602-2	Acceptable
25	LB18-161-5-3-25	18062602-2	Acceptable	50	LB18-161-5-3-50	18062602-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2018.12	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	LB18-161-7-3-01...25	PO# // Item	LB18-161	Date:	2018-07-17
Part No:	HN31502	API Monogram	YES	Report#:	20181005
Specification	API Spec 6A/ L-U PSL3 PR1	Material:	4140	Coating:	RED
Description:	HAMMER NUT-3" 1502			Qty:	25 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	LB18-161-5-3-01	18062602-2	Acceptable	26	LB18-161-5-3-26	18062602-2	Acceptable
2	LB18-161-5-3-02	18062602-2	Acceptable	27	LB18-161-5-3-27	18062602-2	Acceptable
3	LB18-161-5-3-03	18062602-2	Acceptable	28	LB18-161-5-3-28	18062602-2	Acceptable
4	LB18-161-5-3-04	18062602-2	Acceptable	29	LB18-161-5-3-29	18062602-2	Acceptable
5	LB18-161-5-3-05	18062602-2	Acceptable	30	LB18-161-5-3-30	18062602-2	Acceptable
6	LB18-161-5-3-06	18062602-2	Acceptable	31	LB18-161-5-3-31	18062602-2	Acceptable
7	LB18-161-5-3-07	18062602-2	Acceptable	32	LB18-161-5-3-32	18062602-2	Acceptable
8	LB18-161-5-3-08	18062602-2	Acceptable	33	LB18-161-5-3-33	18062602-2	Acceptable
9	LB18-161-5-3-09	18062602-2	Acceptable	34	LB18-161-5-3-34	18062602-2	Acceptable
10	LB18-161-5-3-10	18062602-2	Acceptable	35	LB18-161-5-3-35	18062602-2	Acceptable
11	LB18-161-5-3-11	18062602-2	Acceptable	36	LB18-161-5-3-36	18062602-2	Acceptable
12	LB18-161-5-3-12	18062602-2	Acceptable	37	LB18-161-5-3-37	18062602-2	Acceptable
13	LB18-161-5-3-13	18062602-2	Acceptable	38	LB18-161-5-3-38	18062602-2	Acceptable
14	LB18-161-5-3-14	18062602-2	Acceptable	39	LB18-161-5-3-39	18062602-2	Acceptable
15	LB18-161-5-3-15	18062602-2	Acceptable	40	LB18-161-5-3-40	18062602-2	Acceptable
16	LB18-161-5-3-16	18062602-2	Acceptable	41	LB18-161-5-3-41	18062602-2	Acceptable
17	LB18-161-5-3-17	18062602-2	Acceptable	42	LB18-161-5-3-42	18062602-2	Acceptable
18	LB18-161-5-3-18	18062602-2	Acceptable	43	LB18-161-5-3-43	18062602-2	Acceptable
19	LB18-161-5-3-19	18062602-2	Acceptable	44	LB18-161-5-3-44	18062602-2	Acceptable
20	LB18-161-5-3-20	18062602-2	Acceptable	45	LB18-161-5-3-45	18062602-2	Acceptable
21	LB18-161-5-3-21	18062602-2	Acceptable	46	LB18-161-5-3-46	18062602-2	Acceptable
22	LB18-161-5-3-22	18062602-2	Acceptable	47	LB18-161-5-3-47	18062602-2	Acceptable
23	LB18-161-5-3-23	18062602-2	Acceptable	48	LB18-161-5-3-48	18062602-2	Acceptable
24	LB18-161-5-3-24	18062602-2	Acceptable	49	LB18-161-5-3-49	18062602-2	Acceptable
25	LB18-161-5-3-25	18062602-2	Acceptable	50	LB18-161-5-3-50	18062602-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



REPORT INDEX

Purchase Order: YB19-008-2

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018.01.23

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23							
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503							
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red							
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA							
TEST CONDITION												
Test Bar Size:	QTC, 4" x 4" x 8"		Bar Di:	12.7 mm (0.5")								
Melt Practice	EF + LF + VD		Reduction Ratio Min:	4:1								
Yield Stress	0.2% offset		Gauge Length	50.8mm								
CHEMICAL COMPOSITION												
Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
417-10-071	50	1	0.43	0.62	0.29	0.005	0.017	0.15	0.05	0.18	1.04	
MECHANICAL COMPOSITION												
Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHAMPY J (ft. lb) At -46° c		Minimum Lateral	Shear Fraction	
Spec Min			110K	125K	18.0	35.0	280	27J				
Spec Max							320					
19041302-2	50	1	113 K	129 K	22.0	51		31;33;42				
HEAT TREATMENT												
Forgings						Test Bar (OTC)						
Normalized:						Normalized:						
Austenitized: 880°C 3 HRS						Austenitized: 880°C 3 HRS						
Quenchant: OIL						Quenchant: OIL						
Start Temp: 19 °C						Start Temp: 19 °C						
End Temp: 41 °C						End Temp: 41 °C						
Temper: 660°C 5 HRS AIR						Temper: 660°C 5 HRS AIR						
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.												
Inspected by:		LIU YONG YOU				Approved by:		XU YAN				



C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-1-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-1-01	19041302-2	296	26	YB19-008-2-1-26	19041302-2	293
2	YB19-008-2-1-02	19041302-2	293	27	YB19-008-2-1-27	19041302-2	302
3	YB19-008-2-1-03	19041302-2	293	28	YB19-008-2-1-28	19041302-2	311
4	YB19-008-2-1-04	19041302-2	302	29	YB19-008-2-1-29	19041302-2	302
5	YB19-008-2-1-05	19041302-2	311	30	YB19-008-2-1-30	19041302-2	302
6	YB19-008-2-1-06	19041302-2	302	31	YB19-008-2-1-31	19041302-2	307
7	YB19-008-2-1-07	19041302-2	302	32	YB19-008-2-1-32	19041302-2	296
8	YB19-008-2-1-08	19041302-2	293	33	YB19-008-2-1-33	19041302-2	293
9	YB19-008-2-1-09	19041302-2	311	34	YB19-008-2-1-34	19041302-2	302
10	YB19-008-2-1-10	19041302-2	307	35	YB19-008-2-1-35	19041302-2	293
11	YB19-008-2-1-11	19041302-2	302	36	YB19-008-2-1-36	19041302-2	311
12	YB19-008-2-1-12	19041302-2	302	37	YB19-008-2-1-37	19041302-2	296
13	YB19-008-2-1-13	19041302-2	293	38	YB19-008-2-1-38	19041302-2	307
14	YB19-008-2-1-14	19041302-2	296	39	YB19-008-2-1-39	19041302-2	302
15	YB19-008-2-1-15	19041302-2	296	40	YB19-008-2-1-40	19041302-2	296
16	YB19-008-2-1-16	19041302-2	293	41	YB19-008-2-1-41	19041302-2	307
17	YB19-008-2-1-17	19041302-2	302	42	YB19-008-2-1-42	19041302-2	293
18	YB19-008-2-1-18	19041302-2	302	43	YB19-008-2-1-43	19041302-2	311
19	YB19-008-2-1-19	19041302-2	311	44	YB19-008-2-1-44	19041302-2	302
20	YB19-008-2-1-20	19041302-2	307	45	YB19-008-2-1-45	19041302-2	293
21	YB19-008-2-1-21	19041302-2	302	46	YB19-008-2-1-46	19041302-2	311
22	YB19-008-2-1-22	19041302-2	311	47	YB19-008-2-1-47	19041302-2	296
23	YB19-008-2-1-23	19041302-2	296	48	YB19-008-2-1-48	19041302-2	293
24	YB19-008-2-1-24	19041302-2	293	49	YB19-008-2-1-49	19041302-2	311
25	YB19-008-2-1-25	19041302-2	293	50	YB19-008-2-1-50	19041302-2	302

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-1-01	19041302-2	Acceptable	26	YB19-008-2-1-26	19041302-2	Acceptable
2	YB19-008-2-1-02	19041302-2	Acceptable	27	YB19-008-2-1-27	19041302-2	Acceptable
3	YB19-008-2-1-03	19041302-2	Acceptable	28	YB19-008-2-1-28	19041302-2	Acceptable
4	YB19-008-2-1-04	19041302-2	Acceptable	29	YB19-008-2-1-29	19041302-2	Acceptable
5	YB19-008-2-1-05	19041302-2	Acceptable	30	YB19-008-2-1-30	19041302-2	Acceptable
6	YB19-008-2-1-06	19041302-2	Acceptable	31	YB19-008-2-1-31	19041302-2	Acceptable
7	YB19-008-2-1-07	19041302-2	Acceptable	32	YB19-008-2-1-32	19041302-2	Acceptable
8	YB19-008-2-1-08	19041302-2	Acceptable	33	YB19-008-2-1-33	19041302-2	Acceptable
9	YB19-008-2-1-09	19041302-2	Acceptable	34	YB19-008-2-1-34	19041302-2	Acceptable
10	YB19-008-2-1-10	19041302-2	Acceptable	35	YB19-008-2-1-35	19041302-2	Acceptable
11	YB19-008-2-1-11	19041302-2	Acceptable	36	YB19-008-2-1-36	19041302-2	Acceptable
12	YB19-008-2-1-12	19041302-2	Acceptable	37	YB19-008-2-1-37	19041302-2	Acceptable
13	YB19-008-2-1-13	19041302-2	Acceptable	38	YB19-008-2-1-38	19041302-2	Acceptable
14	YB19-008-2-1-14	19041302-2	Acceptable	39	YB19-008-2-1-39	19041302-2	Acceptable
15	YB19-008-2-1-15	19041302-2	Acceptable	40	YB19-008-2-1-40	19041302-2	Acceptable
16	YB19-008-2-1-16	19041302-2	Acceptable	41	YB19-008-2-1-41	19041302-2	Acceptable
17	YB19-008-2-1-17	19041302-2	Acceptable	42	YB19-008-2-1-42	19041302-2	Acceptable
18	YB19-008-2-1-18	19041302-2	Acceptable	43	YB19-008-2-1-43	19041302-2	Acceptable
19	YB19-008-2-1-19	19041302-2	Acceptable	44	YB19-008-2-1-44	19041302-2	Acceptable
20	YB19-008-2-1-20	19041302-2	Acceptable	45	YB19-008-2-1-45	19041302-2	Acceptable
21	YB19-008-2-1-21	19041302-2	Acceptable	46	YB19-008-2-1-46	19041302-2	Acceptable
22	YB19-008-2-1-22	19041302-2	Acceptable	47	YB19-008-2-1-47	19041302-2	Acceptable
23	YB19-008-2-1-23	19041302-2	Acceptable	48	YB19-008-2-1-48	19041302-2	Acceptable
24	YB19-008-2-1-24	19041302-2	Acceptable	49	YB19-008-2-1-49	19041302-2	Acceptable
25	YB19-008-2-1-25	19041302-2	Acceptable	50	YB19-008-2-1-50	19041302-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2019.6	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-1-01	19041302-2	Acceptable	26	YB19-008-2-1-26	19041302-2	Acceptable
2	YB19-008-2-1-02	19041302-2	Acceptable	27	YB19-008-2-1-27	19041302-2	Acceptable
3	YB19-008-2-1-03	19041302-2	Acceptable	28	YB19-008-2-1-28	19041302-2	Acceptable
4	YB19-008-2-1-04	19041302-2	Acceptable	29	YB19-008-2-1-29	19041302-2	Acceptable
5	YB19-008-2-1-05	19041302-2	Acceptable	30	YB19-008-2-1-30	19041302-2	Acceptable
6	YB19-008-2-1-06	19041302-2	Acceptable	31	YB19-008-2-1-31	19041302-2	Acceptable
7	YB19-008-2-1-07	19041302-2	Acceptable	32	YB19-008-2-1-32	19041302-2	Acceptable
8	YB19-008-2-1-08	19041302-2	Acceptable	33	YB19-008-2-1-33	19041302-2	Acceptable
9	YB19-008-2-1-09	19041302-2	Acceptable	34	YB19-008-2-1-34	19041302-2	Acceptable
10	YB19-008-2-1-10	19041302-2	Acceptable	35	YB19-008-2-1-35	19041302-2	Acceptable
11	YB19-008-2-1-11	19041302-2	Acceptable	36	YB19-008-2-1-36	19041302-2	Acceptable
12	YB19-008-2-1-12	19041302-2	Acceptable	37	YB19-008-2-1-37	19041302-2	Acceptable
13	YB19-008-2-1-13	19041302-2	Acceptable	38	YB19-008-2-1-38	19041302-2	Acceptable
14	YB19-008-2-1-14	19041302-2	Acceptable	39	YB19-008-2-1-39	19041302-2	Acceptable
15	YB19-008-2-1-15	19041302-2	Acceptable	40	YB19-008-2-1-40	19041302-2	Acceptable
16	YB19-008-2-1-16	19041302-2	Acceptable	41	YB19-008-2-1-41	19041302-2	Acceptable
17	YB19-008-2-1-17	19041302-2	Acceptable	42	YB19-008-2-1-42	19041302-2	Acceptable
18	YB19-008-2-1-18	19041302-2	Acceptable	43	YB19-008-2-1-43	19041302-2	Acceptable
19	YB19-008-2-1-19	19041302-2	Acceptable	44	YB19-008-2-1-44	19041302-2	Acceptable
20	YB19-008-2-1-20	19041302-2	Acceptable	45	YB19-008-2-1-45	19041302-2	Acceptable
21	YB19-008-2-1-21	19041302-2	Acceptable	46	YB19-008-2-1-46	19041302-2	Acceptable
22	YB19-008-2-1-22	19041302-2	Acceptable	47	YB19-008-2-1-47	19041302-2	Acceptable
23	YB19-008-2-1-23	19041302-2	Acceptable	48	YB19-008-2-1-48	19041302-2	Acceptable
24	YB19-008-2-1-24	19041302-2	Acceptable	49	YB19-008-2-1-49	19041302-2	Acceptable
25	YB19-008-2-1-25	19041302-2	Acceptable	50	YB19-008-2-1-50	19041302-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-2-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
417-10-071	50	1	0.43	0.62	0.29	0.005	0.017	0.15	0.05	0.18	1.04	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHAMPY J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
19041402-2	50	1	113 K	129 K	22.0	51		31;33;42		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 3 HRS	Austenitized:	880°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	19 °C	Start Temp:	19 °C
End Temp:	41 °C	End Temp:	41 °C
Temper:	660°C 5 HRS AIR	Temper:	660°C 5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-2-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-2-01	19041402-2	285	26	YB19-008-2-2-26	19041402-2	281
2	YB19-008-2-2-02	19041402-2	285	27	YB19-008-2-2-27	19041402-2	293
3	YB19-008-2-2-03	19041402-2	285	28	YB19-008-2-2-28	19041402-2	285
4	YB19-008-2-2-04	19041402-2	291	29	YB19-008-2-2-29	19041402-2	285
5	YB19-008-2-2-05	19041402-2	283	30	YB19-008-2-2-30	19041402-2	291
6	YB19-008-2-2-06	19041402-2	286	31	YB19-008-2-2-31	19041402-2	291
7	YB19-008-2-2-07	19041402-2	286	32	YB19-008-2-2-32	19041402-2	283
8	YB19-008-2-2-08	19041402-2	285	33	YB19-008-2-2-33	19041402-2	283
9	YB19-008-2-2-09	19041402-2	281	34	YB19-008-2-2-34	19041402-2	293
10	YB19-008-2-2-10	19041402-2	281	35	YB19-008-2-2-35	19041402-2	293
11	YB19-008-2-2-11	19041402-2	293	36	YB19-008-2-2-36	19041402-2	291
12	YB19-008-2-2-12	19041402-2	285	37	YB19-008-2-2-37	19041402-2	286
13	YB19-008-2-2-13	19041402-2	285	38	YB19-008-2-2-38	19041402-2	283
14	YB19-008-2-2-14	19041402-2	283	39	YB19-008-2-2-39	19041402-2	281
15	YB19-008-2-2-15	19041402-2	291	40	YB19-008-2-2-40	19041402-2	291
16	YB19-008-2-2-16	19041402-2	291	41	YB19-008-2-2-41	19041402-2	291
17	YB19-008-2-2-17	19041402-2	283	42	YB19-008-2-2-42	19041402-2	285
18	YB19-008-2-2-18	19041402-2	283	43	YB19-008-2-2-43	19041402-2	281
19	YB19-008-2-2-19	19041402-2	291	44	YB19-008-2-2-44	19041402-2	281
20	YB19-008-2-2-20	19041402-2	291	45	YB19-008-2-2-45	19041402-2	285
21	YB19-008-2-2-21	19041402-2	285	46	YB19-008-2-2-46	19041402-2	296
22	YB19-008-2-2-22	19041402-2	285	47	YB19-008-2-2-47	19041402-2	293
23	YB19-008-2-2-23	19041402-2	293	48	YB19-008-2-2-48	19041402-2	285
24	YB19-008-2-2-24	19041402-2	293	49	YB19-008-2-2-49	19041402-2	283
25	YB19-008-2-2-25	19041402-2	281	50	YB19-008-2-2-50	19041402-2	286

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-2-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-2-01	19041402-2	Acceptable	26	YB19-008-2-2-26	19041402-2	Acceptable
2	YB19-008-2-2-02	19041402-2	Acceptable	27	YB19-008-2-2-27	19041402-2	Acceptable
3	YB19-008-2-2-03	19041402-2	Acceptable	28	YB19-008-2-2-28	19041402-2	Acceptable
4	YB19-008-2-2-04	19041402-2	Acceptable	29	YB19-008-2-2-29	19041402-2	Acceptable
5	YB19-008-2-2-05	19041402-2	Acceptable	30	YB19-008-2-2-30	19041402-2	Acceptable
6	YB19-008-2-2-06	19041402-2	Acceptable	31	YB19-008-2-2-31	19041402-2	Acceptable
7	YB19-008-2-2-07	19041402-2	Acceptable	32	YB19-008-2-2-32	19041402-2	Acceptable
8	YB19-008-2-2-08	19041402-2	Acceptable	33	YB19-008-2-2-33	19041402-2	Acceptable
9	YB19-008-2-2-09	19041402-2	Acceptable	34	YB19-008-2-2-34	19041402-2	Acceptable
10	YB19-008-2-2-10	19041402-2	Acceptable	35	YB19-008-2-2-35	19041402-2	Acceptable
11	YB19-008-2-2-11	19041402-2	Acceptable	36	YB19-008-2-2-36	19041402-2	Acceptable
12	YB19-008-2-2-12	19041402-2	Acceptable	37	YB19-008-2-2-37	19041402-2	Acceptable
13	YB19-008-2-2-13	19041402-2	Acceptable	38	YB19-008-2-2-38	19041402-2	Acceptable
14	YB19-008-2-2-14	19041402-2	Acceptable	39	YB19-008-2-2-39	19041402-2	Acceptable
15	YB19-008-2-2-15	19041402-2	Acceptable	40	YB19-008-2-2-40	19041402-2	Acceptable
16	YB19-008-2-2-16	19041402-2	Acceptable	41	YB19-008-2-2-41	19041402-2	Acceptable
17	YB19-008-2-2-17	19041402-2	Acceptable	42	YB19-008-2-2-42	19041402-2	Acceptable
18	YB19-008-2-2-18	19041402-2	Acceptable	43	YB19-008-2-2-43	19041402-2	Acceptable
19	YB19-008-2-2-19	19041402-2	Acceptable	44	YB19-008-2-2-44	19041402-2	Acceptable
20	YB19-008-2-2-20	19041402-2	Acceptable	45	YB19-008-2-2-45	19041402-2	Acceptable
21	YB19-008-2-2-21	19041402-2	Acceptable	46	YB19-008-2-2-46	19041402-2	Acceptable
22	YB19-008-2-2-22	19041402-2	Acceptable	47	YB19-008-2-2-47	19041402-2	Acceptable
23	YB19-008-2-2-23	19041402-2	Acceptable	48	YB19-008-2-2-48	19041402-2	Acceptable
24	YB19-008-2-2-24	19041402-2	Acceptable	49	YB19-008-2-2-49	19041402-2	Acceptable
25	YB19-008-2-2-25	19041402-2	Acceptable	50	YB19-008-2-2-50	19041402-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2019.6	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-2-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-2-01	19041402-2	Acceptable	26	YB19-008-2-2-26	19041402-2	Acceptable
2	YB19-008-2-2-02	19041402-2	Acceptable	27	YB19-008-2-2-27	19041402-2	Acceptable
3	YB19-008-2-2-03	19041402-2	Acceptable	28	YB19-008-2-2-28	19041402-2	Acceptable
4	YB19-008-2-2-04	19041402-2	Acceptable	29	YB19-008-2-2-29	19041402-2	Acceptable
5	YB19-008-2-2-05	19041402-2	Acceptable	30	YB19-008-2-2-30	19041402-2	Acceptable
6	YB19-008-2-2-06	19041402-2	Acceptable	31	YB19-008-2-2-31	19041402-2	Acceptable
7	YB19-008-2-2-07	19041402-2	Acceptable	32	YB19-008-2-2-32	19041402-2	Acceptable
8	YB19-008-2-2-08	19041402-2	Acceptable	33	YB19-008-2-2-33	19041402-2	Acceptable
9	YB19-008-2-2-09	19041402-2	Acceptable	34	YB19-008-2-2-34	19041402-2	Acceptable
10	YB19-008-2-2-10	19041402-2	Acceptable	35	YB19-008-2-2-35	19041402-2	Acceptable
11	YB19-008-2-2-11	19041402-2	Acceptable	36	YB19-008-2-2-36	19041402-2	Acceptable
12	YB19-008-2-2-12	19041402-2	Acceptable	37	YB19-008-2-2-37	19041402-2	Acceptable
13	YB19-008-2-2-13	19041402-2	Acceptable	38	YB19-008-2-2-38	19041402-2	Acceptable
14	YB19-008-2-2-14	19041402-2	Acceptable	39	YB19-008-2-2-39	19041402-2	Acceptable
15	YB19-008-2-2-15	19041402-2	Acceptable	40	YB19-008-2-2-40	19041402-2	Acceptable
16	YB19-008-2-2-16	19041402-2	Acceptable	41	YB19-008-2-2-41	19041402-2	Acceptable
17	YB19-008-2-2-17	19041402-2	Acceptable	42	YB19-008-2-2-42	19041402-2	Acceptable
18	YB19-008-2-2-18	19041402-2	Acceptable	43	YB19-008-2-2-43	19041402-2	Acceptable
19	YB19-008-2-2-19	19041402-2	Acceptable	44	YB19-008-2-2-44	19041402-2	Acceptable
20	YB19-008-2-2-20	19041402-2	Acceptable	45	YB19-008-2-2-45	19041402-2	Acceptable
21	YB19-008-2-2-21	19041402-2	Acceptable	46	YB19-008-2-2-46	19041402-2	Acceptable
22	YB19-008-2-2-22	19041402-2	Acceptable	47	YB19-008-2-2-47	19041402-2	Acceptable
23	YB19-008-2-2-23	19041402-2	Acceptable	48	YB19-008-2-2-48	19041402-2	Acceptable
24	YB19-008-2-2-24	19041402-2	Acceptable	49	YB19-008-2-2-49	19041402-2	Acceptable
25	YB19-008-2-2-25	19041402-2	Acceptable	50	YB19-008-2-2-50	19041402-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
8308430M	50	1	0.41	0.89	0.26	0.003	0.016	0.03	0.03	0.20	1.00	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At -46° c	Minimum Lateral	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
18122820-2	50	1	115 K	129 K	20.5	52		31;33;45		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 2.5 HRS	Austenitized:	880°C 2.5 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	25 °C	Start Temp:	25 °C
End Temp:	39 °C	End Temp:	39 °C
Temper:	660°C 5 HRS AIR	Temper:	660°C 5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-3-01	18122820-2	302	26	YB19-008-2-3-26	18122820-2	302
2	YB19-008-2-3-02	18122820-2	293	27	YB19-008-2-3-27	18122820-2	311
3	YB19-008-2-3-03	18122820-2	302	28	YB19-008-2-3-28	18122820-2	311
4	YB19-008-2-3-04	18122820-2	320	29	YB19-008-2-3-29	18122820-2	293
5	YB19-008-2-3-05	18122820-2	320	30	YB19-008-2-3-30	18122820-2	320
6	YB19-008-2-3-06	18122820-2	311	31	YB19-008-2-3-31	18122820-2	311
7	YB19-008-2-3-07	18122820-2	320	32	YB19-008-2-3-32	18122820-2	302
8	YB19-008-2-3-08	18122820-2	302	33	YB19-008-2-3-33	18122820-2	302
9	YB19-008-2-3-09	18122820-2	302	34	YB19-008-2-3-34	18122820-2	302
10	YB19-008-2-3-10	18122820-2	302	35	YB19-008-2-3-35	18122820-2	302
11	YB19-008-2-3-11	18122820-2	302	36	YB19-008-2-3-36	18122820-2	311
12	YB19-008-2-3-12	18122820-2	302	37	YB19-008-2-3-37	18122820-2	311
13	YB19-008-2-3-13	18122820-2	293	38	YB19-008-2-3-38	18122820-2	320
14	YB19-008-2-3-14	18122820-2	302	39	YB19-008-2-3-39	18122820-2	302
15	YB19-008-2-3-15	18122820-2	311	40	YB19-008-2-3-40	18122820-2	302
16	YB19-008-2-3-16	18122820-2	311	41	YB19-008-2-3-41	18122820-2	302
17	YB19-008-2-3-17	18122820-2	302	42	YB19-008-2-3-42	18122820-2	302
18	YB19-008-2-3-18	18122820-2	311	43	YB19-008-2-3-43	18122820-2	311
19	YB19-008-2-3-19	18122820-2	293	44	YB19-008-2-3-44	18122820-2	320
20	YB19-008-2-3-20	18122820-2	320	45	YB19-008-2-3-45	18122820-2	320
21	YB19-008-2-3-21	18122820-2	302	46	YB19-008-2-3-46	18122820-2	302
22	YB19-008-2-3-22	18122820-2	311	47	YB19-008-2-3-47	18122820-2	302
23	YB19-008-2-3-23	18122820-2	311	48	YB19-008-2-3-48	18122820-2	302
24	YB19-008-2-3-24	18122820-2	302	49	YB19-008-2-3-49	18122820-2	293
25	YB19-008-2-3-25	18122820-2	311	50	YB19-008-2-3-50	18122820-2	302

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-3-01	18122820-2	Acceptable	26	YB19-008-2-3-26	18122820-2	Acceptable
2	YB19-008-2-3-02	18122820-2	Acceptable	27	YB19-008-2-3-27	18122820-2	Acceptable
3	YB19-008-2-3-03	18122820-2	Acceptable	28	YB19-008-2-3-28	18122820-2	Acceptable
4	YB19-008-2-3-04	18122820-2	Acceptable	29	YB19-008-2-3-29	18122820-2	Acceptable
5	YB19-008-2-3-05	18122820-2	Acceptable	30	YB19-008-2-3-30	18122820-2	Acceptable
6	YB19-008-2-3-06	18122820-2	Acceptable	31	YB19-008-2-3-31	18122820-2	Acceptable
7	YB19-008-2-3-07	18122820-2	Acceptable	32	YB19-008-2-3-32	18122820-2	Acceptable
8	YB19-008-2-3-08	18122820-2	Acceptable	33	YB19-008-2-3-33	18122820-2	Acceptable
9	YB19-008-2-3-09	18122820-2	Acceptable	34	YB19-008-2-3-34	18122820-2	Acceptable
10	YB19-008-2-3-10	18122820-2	Acceptable	35	YB19-008-2-3-35	18122820-2	Acceptable
11	YB19-008-2-3-11	18122820-2	Acceptable	36	YB19-008-2-3-36	18122820-2	Acceptable
12	YB19-008-2-3-12	18122820-2	Acceptable	37	YB19-008-2-3-37	18122820-2	Acceptable
13	YB19-008-2-3-13	18122820-2	Acceptable	38	YB19-008-2-3-38	18122820-2	Acceptable
14	YB19-008-2-3-14	18122820-2	Acceptable	39	YB19-008-2-3-39	18122820-2	Acceptable
15	YB19-008-2-3-15	18122820-2	Acceptable	40	YB19-008-2-3-40	18122820-2	Acceptable
16	YB19-008-2-3-16	18122820-2	Acceptable	41	YB19-008-2-3-41	18122820-2	Acceptable
17	YB19-008-2-3-17	18122820-2	Acceptable	42	YB19-008-2-3-42	18122820-2	Acceptable
18	YB19-008-2-3-18	18122820-2	Acceptable	43	YB19-008-2-3-43	18122820-2	Acceptable
19	YB19-008-2-3-19	18122820-2	Acceptable	44	YB19-008-2-3-44	18122820-2	Acceptable
20	YB19-008-2-3-20	18122820-2	Acceptable	45	YB19-008-2-3-45	18122820-2	Acceptable
21	YB19-008-2-3-21	18122820-2	Acceptable	46	YB19-008-2-3-46	18122820-2	Acceptable
22	YB19-008-2-3-22	18122820-2	Acceptable	47	YB19-008-2-3-47	18122820-2	Acceptable
23	YB19-008-2-3-23	18122820-2	Acceptable	48	YB19-008-2-3-48	18122820-2	Acceptable
24	YB19-008-2-3-24	18122820-2	Acceptable	49	YB19-008-2-3-49	18122820-2	Acceptable
25	YB19-008-2-3-25	18122820-2	Acceptable	50	YB19-008-2-3-50	18122820-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique: Straight/Contact	Examined BY:	Approved by:
Exam. Stage: Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block: CSK IA	XU YAN	XU YAN
Equipment: CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used : 2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date : 2019. 6	Test Gain: 20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-3-01	18122820-2	Acceptable	26	YB19-008-2-3-26	18122820-2	Acceptable
2	YB19-008-2-3-02	18122820-2	Acceptable	27	YB19-008-2-3-27	18122820-2	Acceptable
3	YB19-008-2-3-03	18122820-2	Acceptable	28	YB19-008-2-3-28	18122820-2	Acceptable
4	YB19-008-2-3-04	18122820-2	Acceptable	29	YB19-008-2-3-29	18122820-2	Acceptable
5	YB19-008-2-3-05	18122820-2	Acceptable	30	YB19-008-2-3-30	18122820-2	Acceptable
6	YB19-008-2-3-06	18122820-2	Acceptable	31	YB19-008-2-3-31	18122820-2	Acceptable
7	YB19-008-2-3-07	18122820-2	Acceptable	32	YB19-008-2-3-32	18122820-2	Acceptable
8	YB19-008-2-3-08	18122820-2	Acceptable	33	YB19-008-2-3-33	18122820-2	Acceptable
9	YB19-008-2-3-09	18122820-2	Acceptable	34	YB19-008-2-3-34	18122820-2	Acceptable
10	YB19-008-2-3-10	18122820-2	Acceptable	35	YB19-008-2-3-35	18122820-2	Acceptable
11	YB19-008-2-3-11	18122820-2	Acceptable	36	YB19-008-2-3-36	18122820-2	Acceptable
12	YB19-008-2-3-12	18122820-2	Acceptable	37	YB19-008-2-3-37	18122820-2	Acceptable
13	YB19-008-2-3-13	18122820-2	Acceptable	38	YB19-008-2-3-38	18122820-2	Acceptable
14	YB19-008-2-3-14	18122820-2	Acceptable	39	YB19-008-2-3-39	18122820-2	Acceptable
15	YB19-008-2-3-15	18122820-2	Acceptable	40	YB19-008-2-3-40	18122820-2	Acceptable
16	YB19-008-2-3-16	18122820-2	Acceptable	41	YB19-008-2-3-41	18122820-2	Acceptable
17	YB19-008-2-3-17	18122820-2	Acceptable	42	YB19-008-2-3-42	18122820-2	Acceptable
18	YB19-008-2-3-18	18122820-2	Acceptable	43	YB19-008-2-3-43	18122820-2	Acceptable
19	YB19-008-2-3-19	18122820-2	Acceptable	44	YB19-008-2-3-44	18122820-2	Acceptable
20	YB19-008-2-3-20	18122820-2	Acceptable	45	YB19-008-2-3-45	18122820-2	Acceptable
21	YB19-008-2-3-21	18122820-2	Acceptable	46	YB19-008-2-3-46	18122820-2	Acceptable
22	YB19-008-2-3-22	18122820-2	Acceptable	47	YB19-008-2-3-47	18122820-2	Acceptable
23	YB19-008-2-3-23	18122820-2	Acceptable	48	YB19-008-2-3-48	18122820-2	Acceptable
24	YB19-008-2-3-24	18122820-2	Acceptable	49	YB19-008-2-3-49	18122820-2	Acceptable
25	YB19-008-2-3-25	18122820-2	Acceptable	50	YB19-008-2-3-50	18122820-2	Acceptable

Sketch/Inspection Coverage:

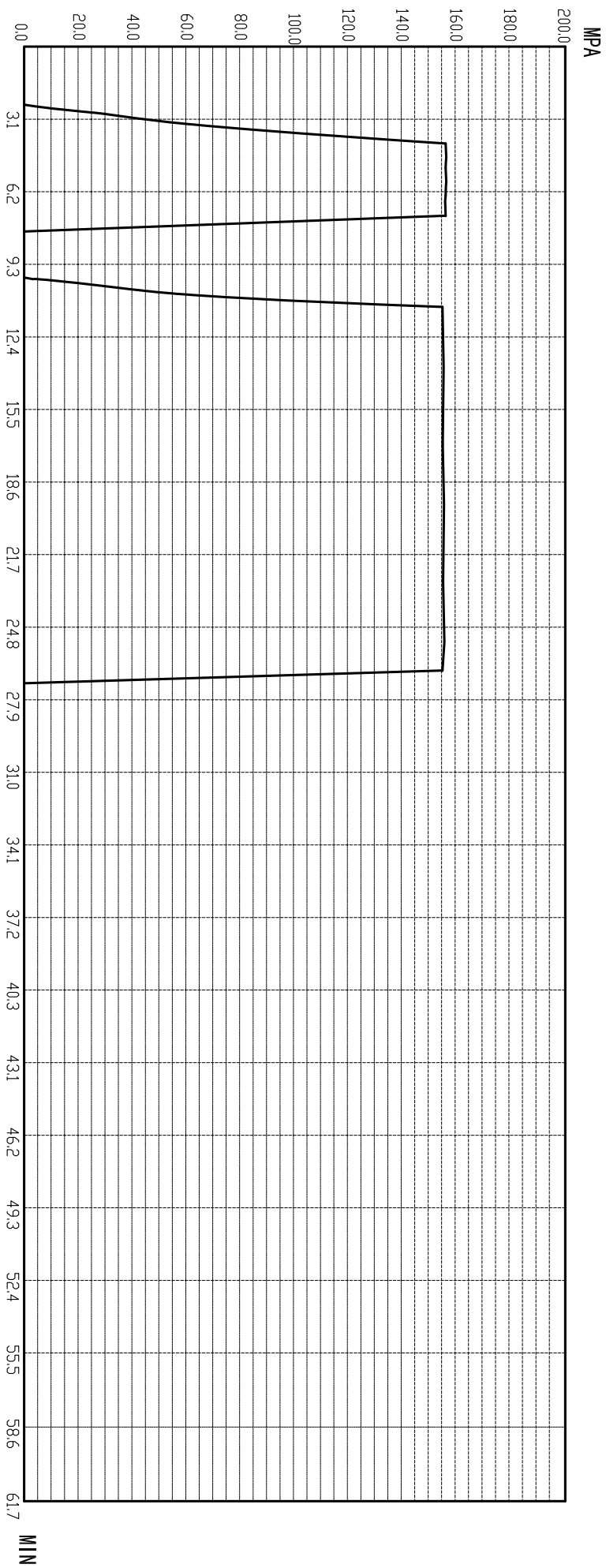
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		

SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.
Hydraulic Test Report

Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	07:10:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-01	End Time	07:30:41	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

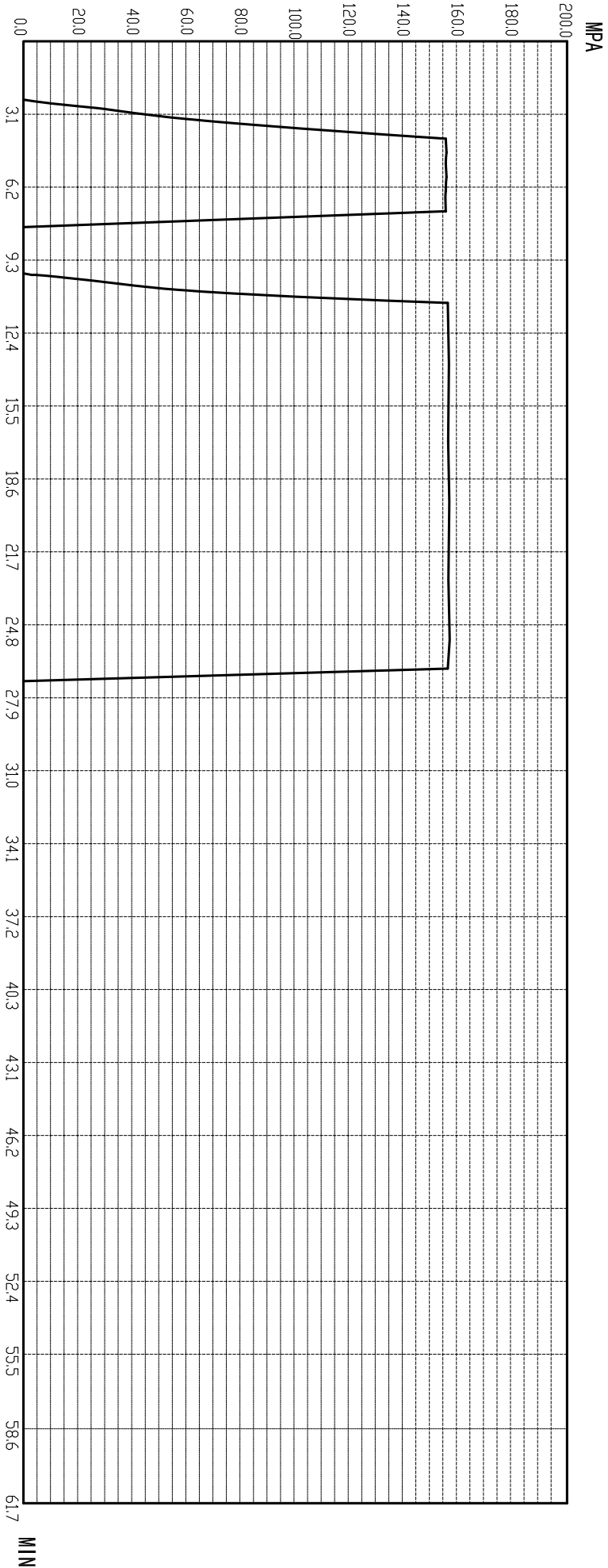
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	07:45:04	Gage SN	Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-02	End Time	08:05:22	TTA-032	Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.12

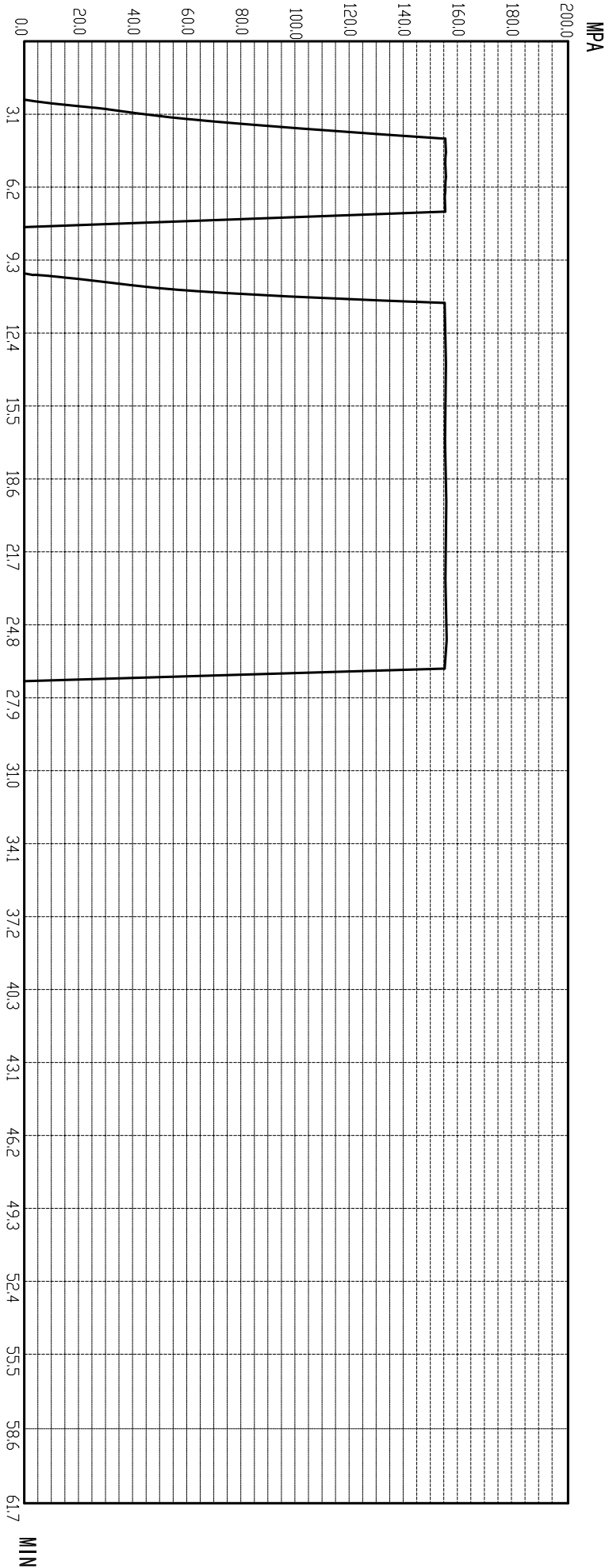
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	08:18:35	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-03	End Time	08:38:56	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)	Hold Time (Min)	
	Water	Room	155.5 155.5	3 15	
Result	No visible leakage shall occur each holding period				
	Checker: ZHUGUANGXUE Date: 2019.01.12				
Remark	Hydrostatic body test				

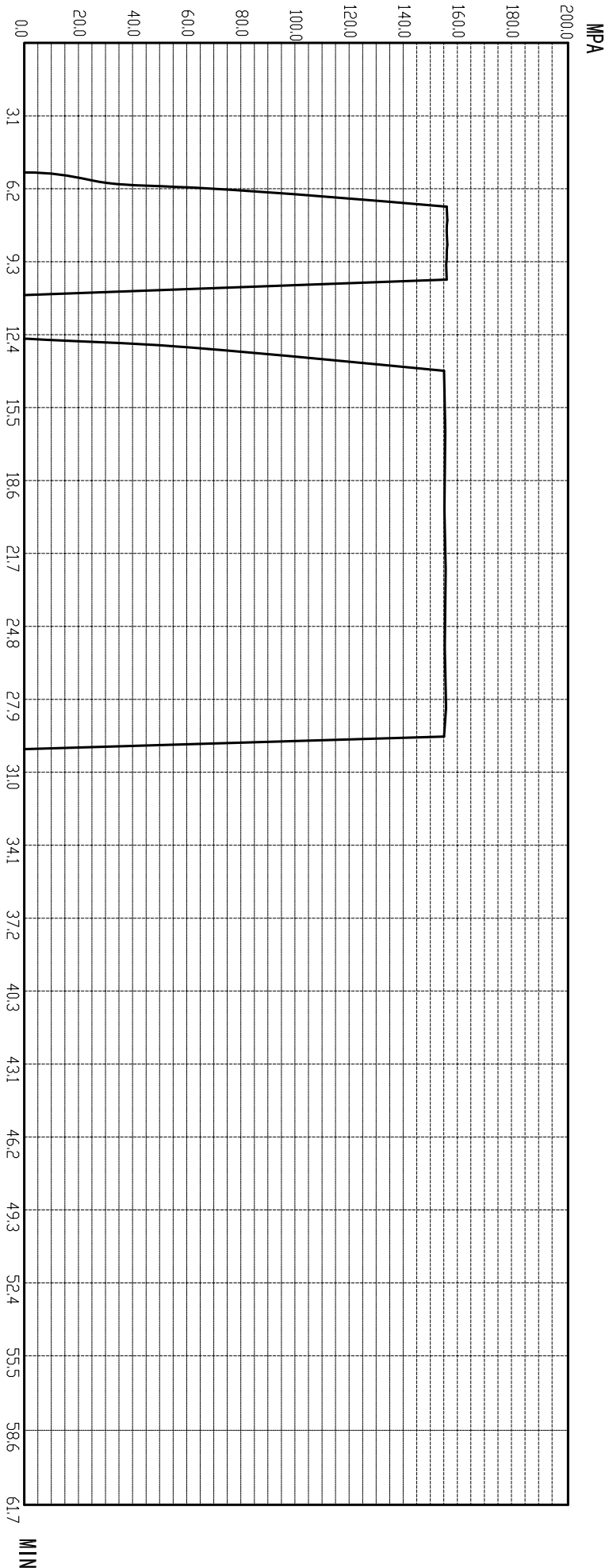
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	08:50:23	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-04	End Time	09:10:57	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
	Checker: ZHUGUANGXUE						Date: 2019.01.12
Remark	Hydrostatic body test						

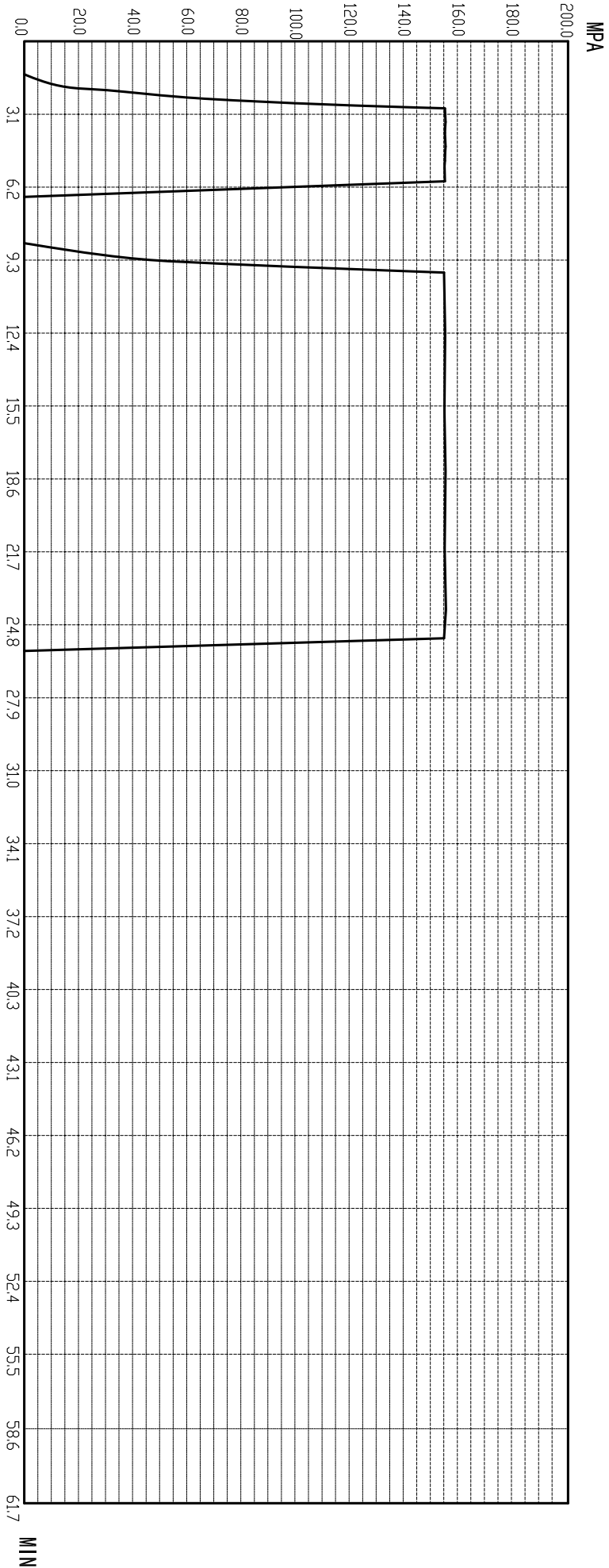
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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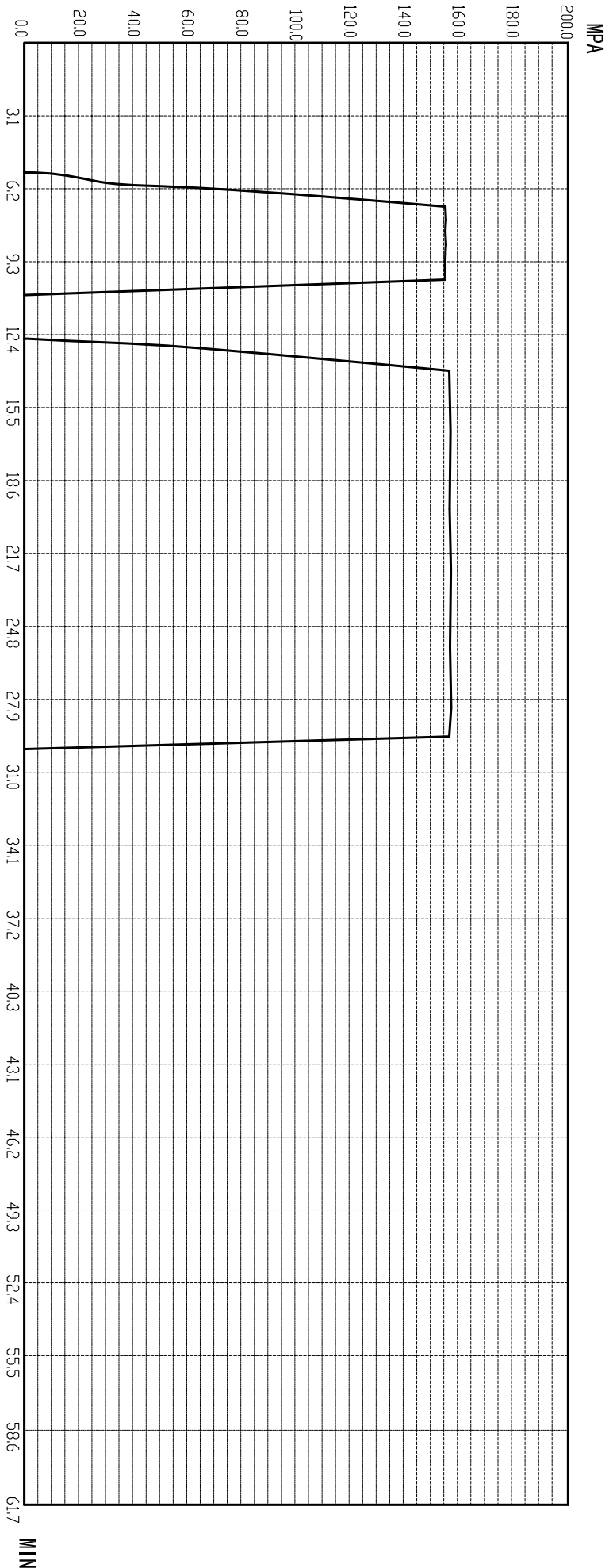
Description	WECCO FLANGE 4 1/16 15M X 3" 1502	Start Time	09:25:41	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-05	End Time	09:47:36	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.
Hydraulic Test Report

Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:00:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-06	End Time	10:20:29	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

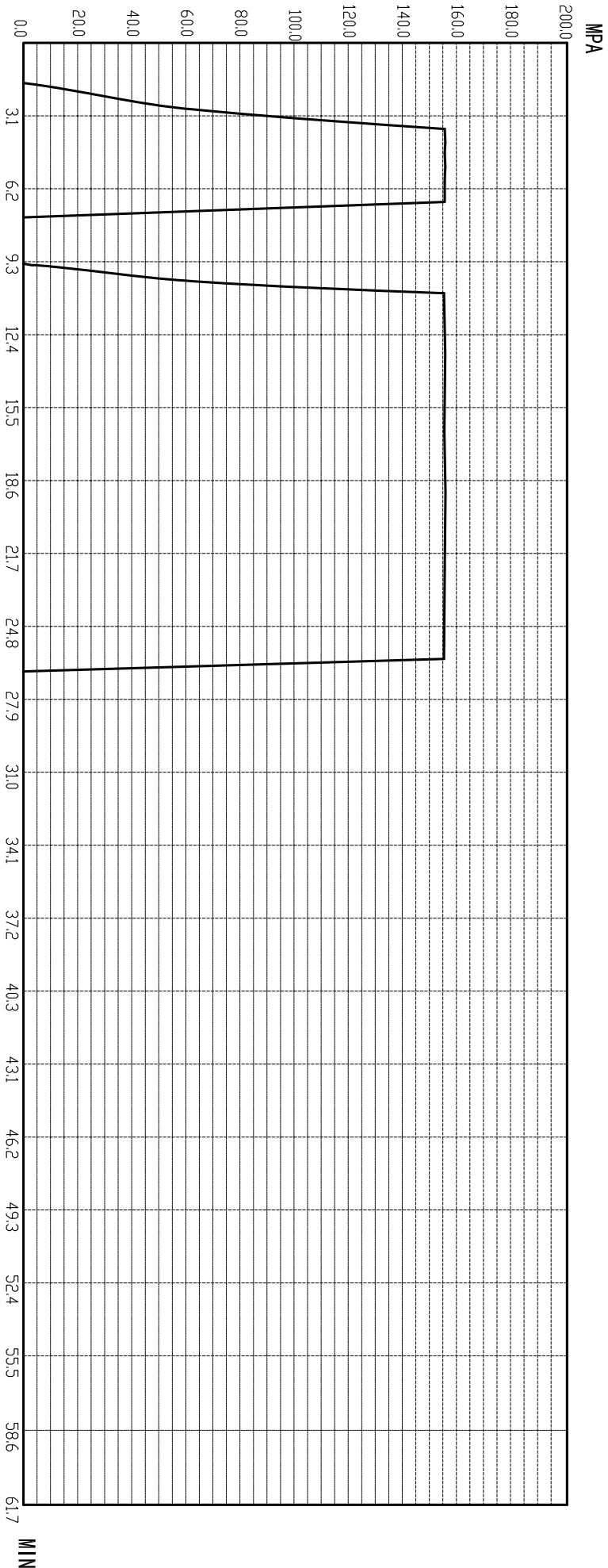
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:33:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-07	End Time	10:53:51	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

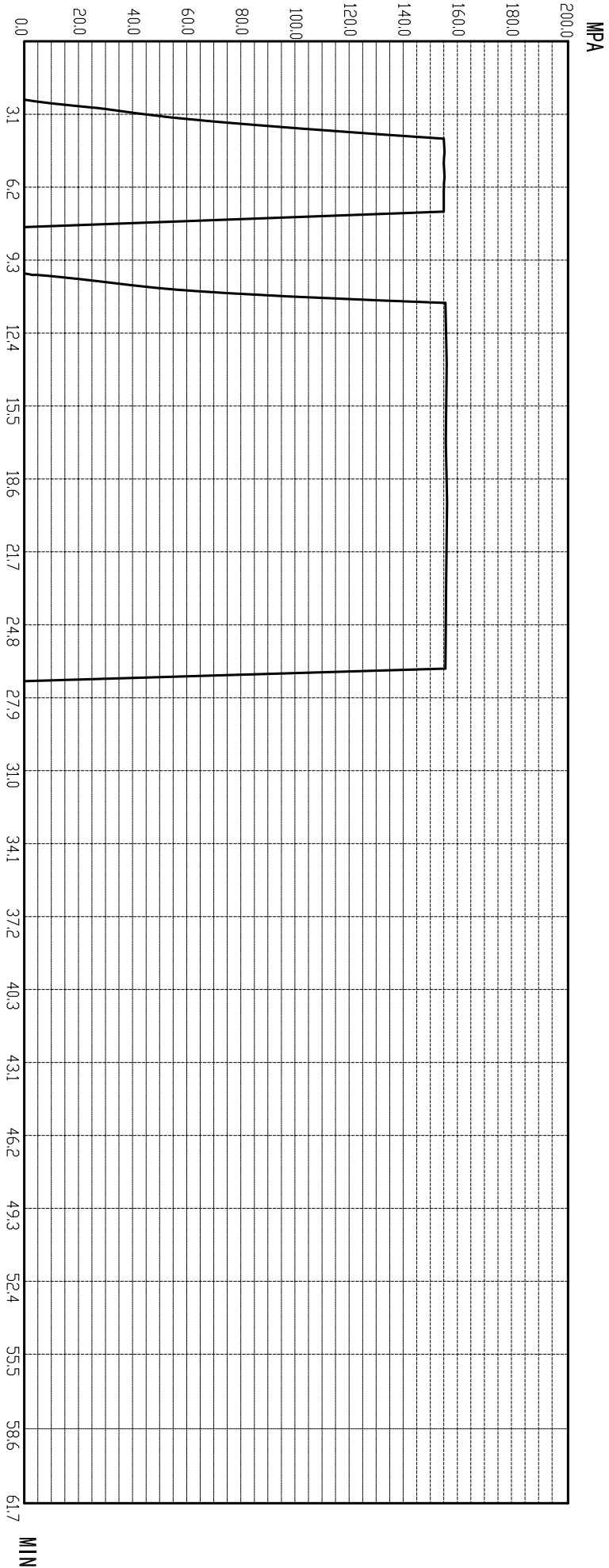
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	11:05:14	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-08	End Time	11:25:31	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

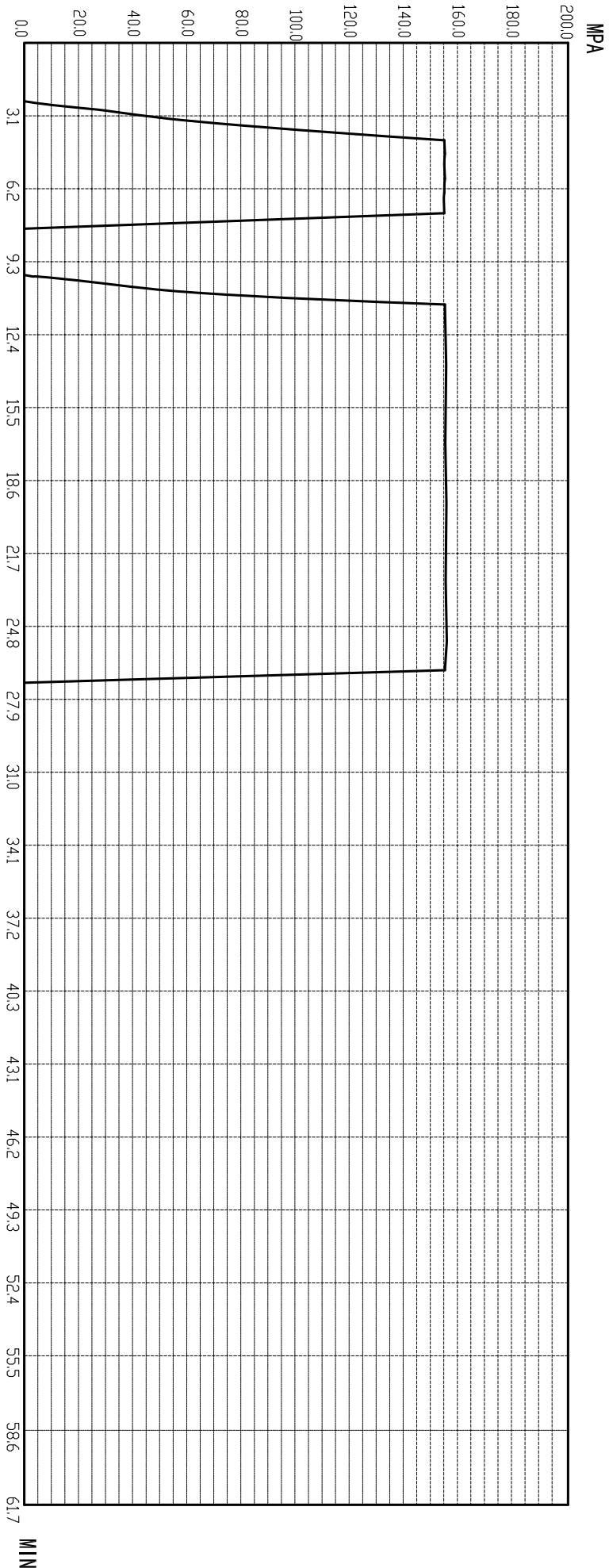
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	12:28:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-09	End Time	12:49:15	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

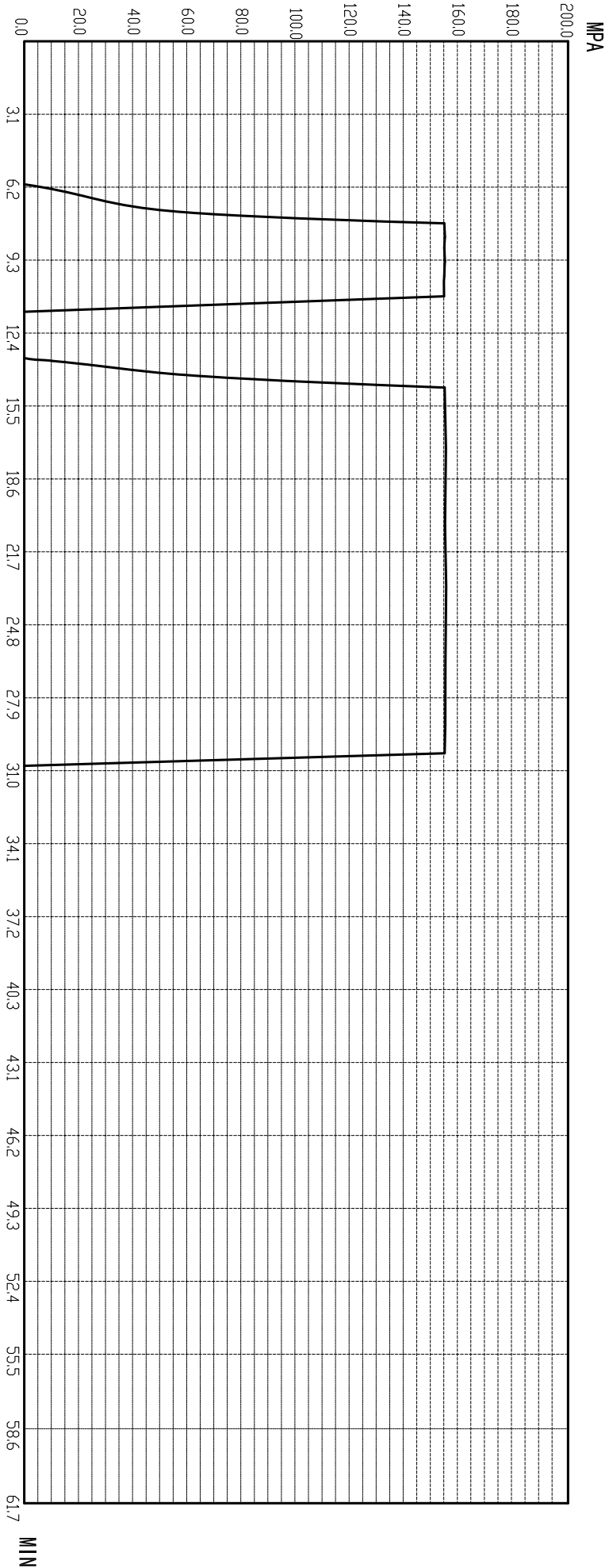
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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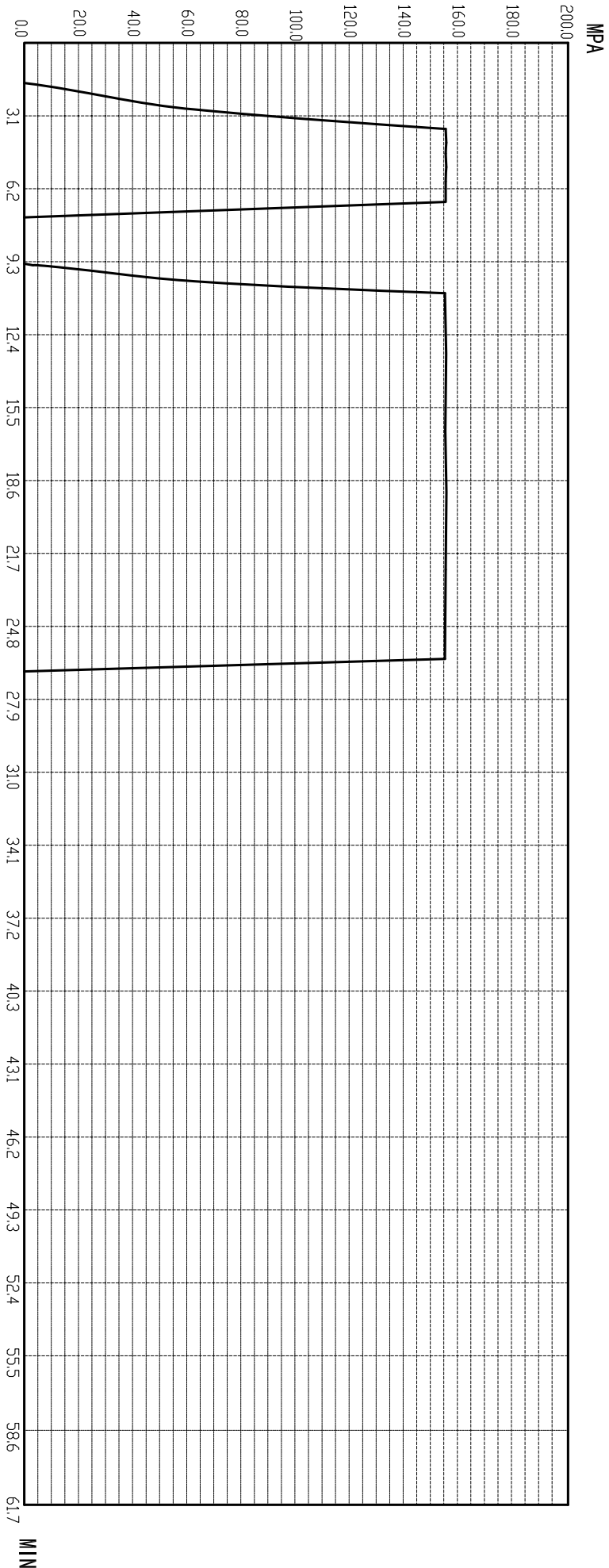
Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	13:05:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-10	End Time	13:25:55	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.
Hydraulic Test Report

Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	13:40:35	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-11	End Time	14:00:56	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

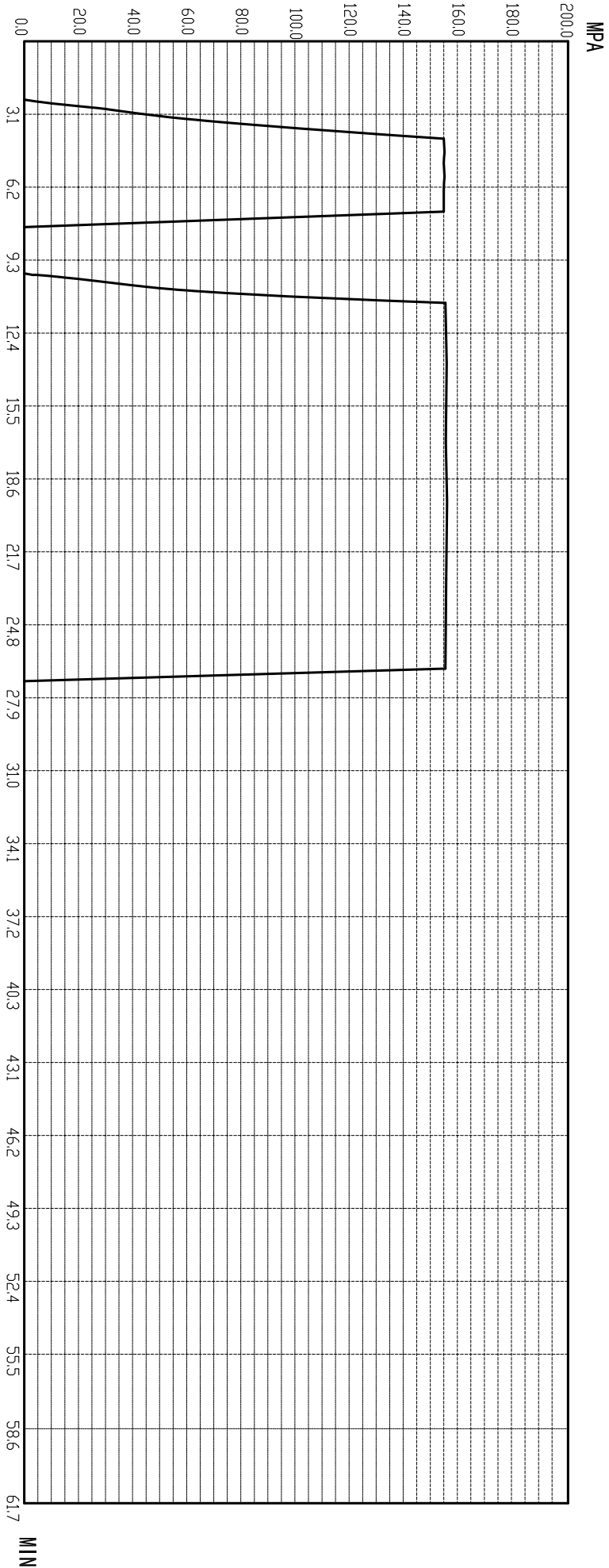
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	14:15:23	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-12	End Time	14:35:57	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)	Hold Time (Min)	
	Water	Room	155.5 155.5	3 15	
Result	No visible leakage shall occur each holding period				
	Checker: ZHUGUANGXUE Date: 2019.01.12				
Remark	Hydrostatic body test				

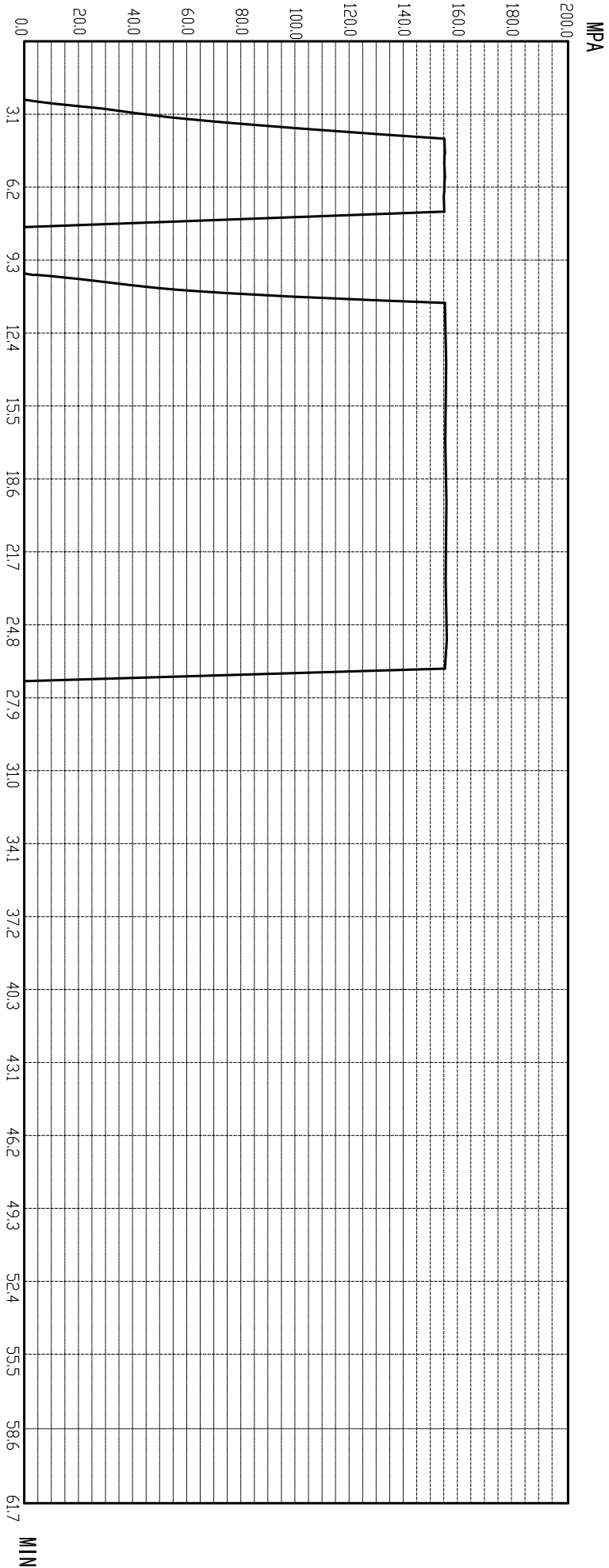
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	14:48:41	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-13	End Time	15:08:54	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

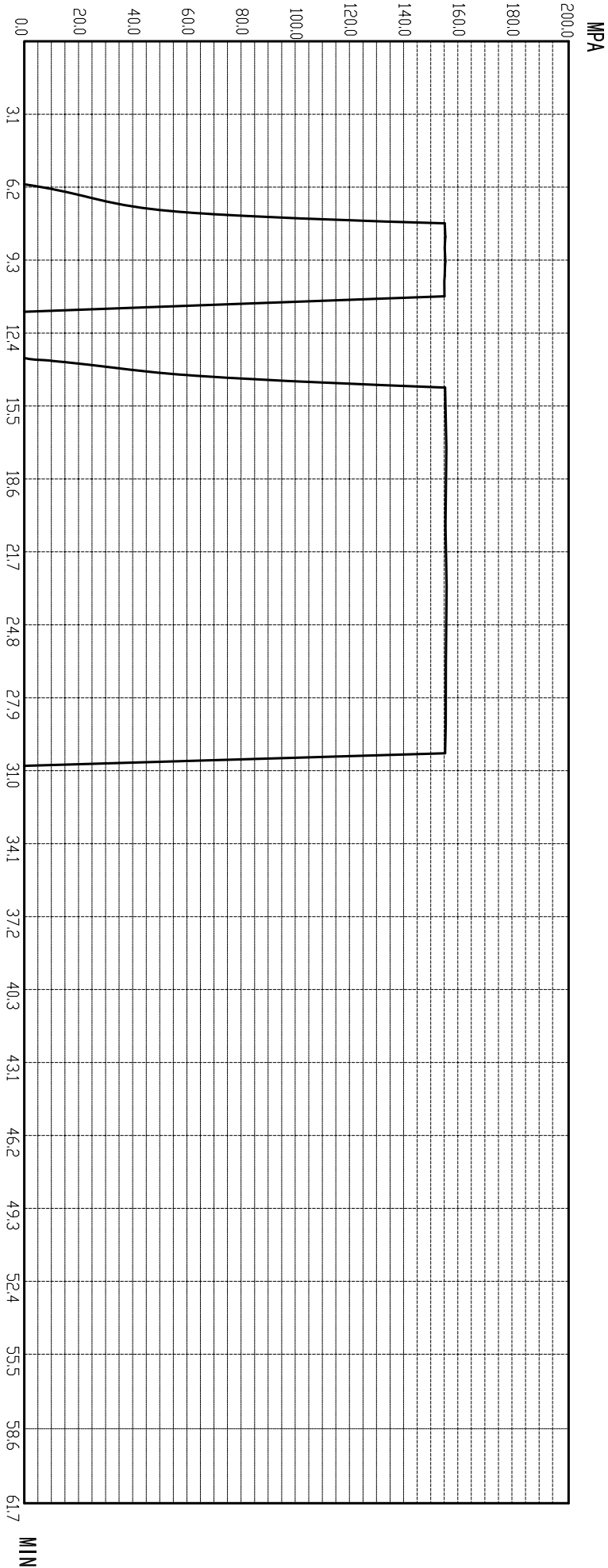
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	15:20:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-14	End Time	15:40:25	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

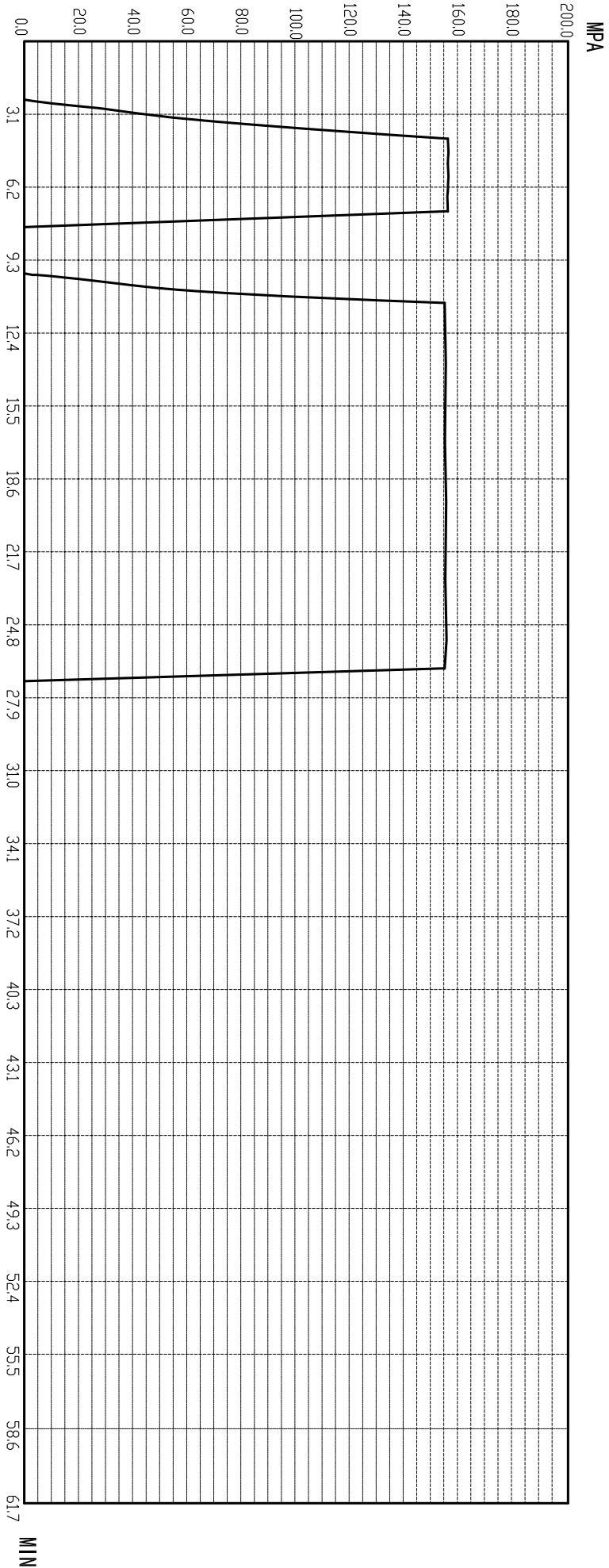
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	15:56:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-15	End Time	16:16:51	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)	Hold Time (Min)	
	Water	Room	155.5 155.5	3 15	
Result	No visible leakage shall occur each holding period				
	Checker: ZHUGUANGXUE Date: 2019.01.12				
Remark	Hydrostatic body test				

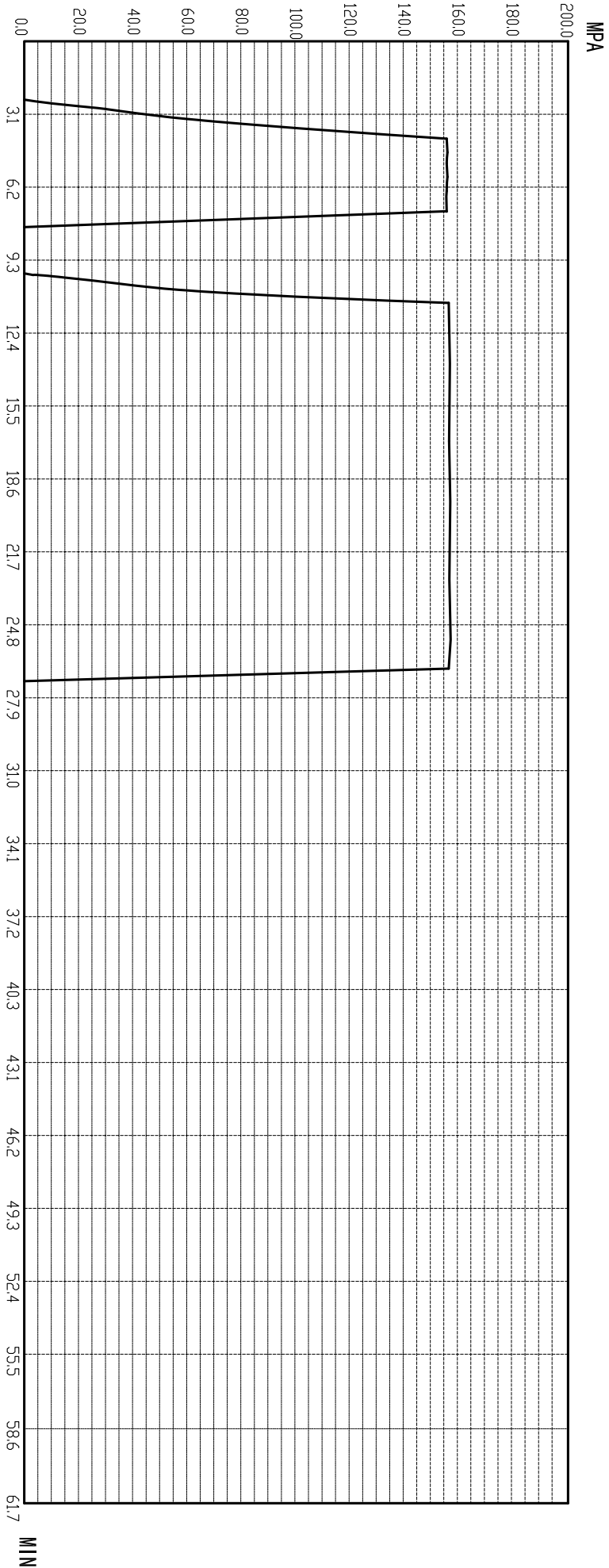
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	16:30:04	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-16	End Time	16:50:22	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

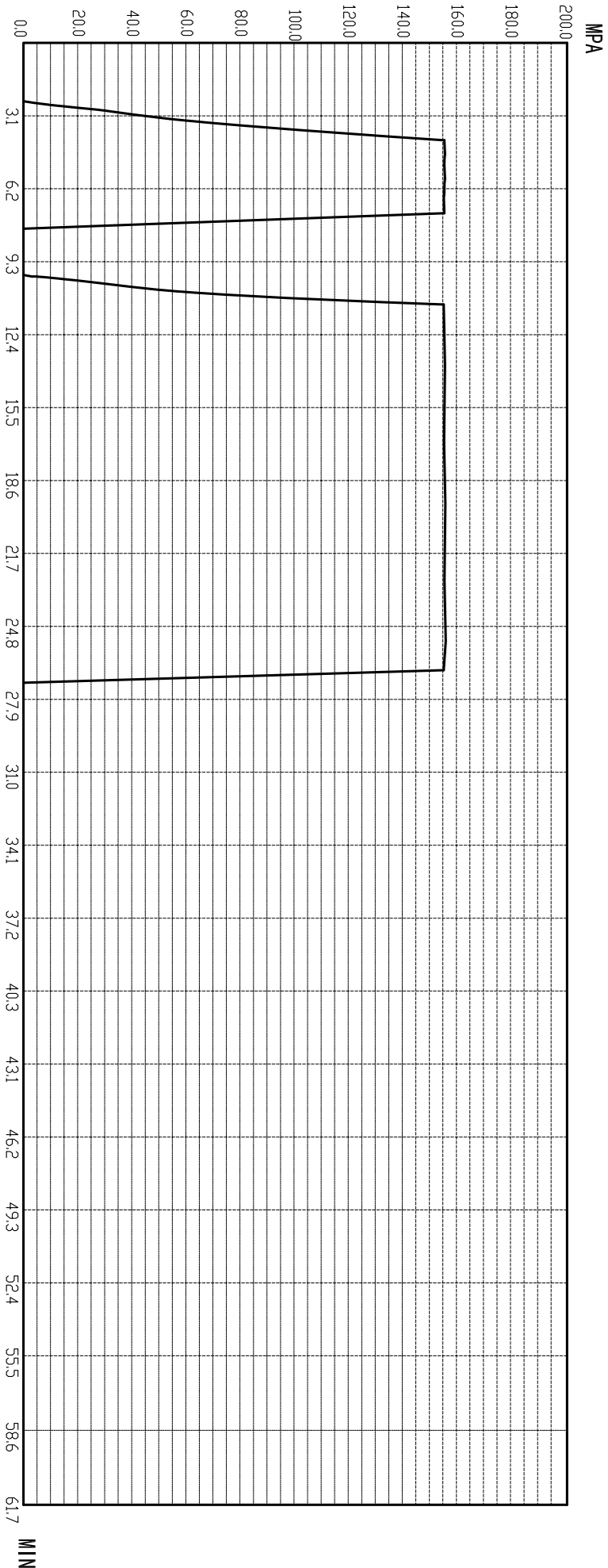
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	17:27:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-17	End Time	17:48:15	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

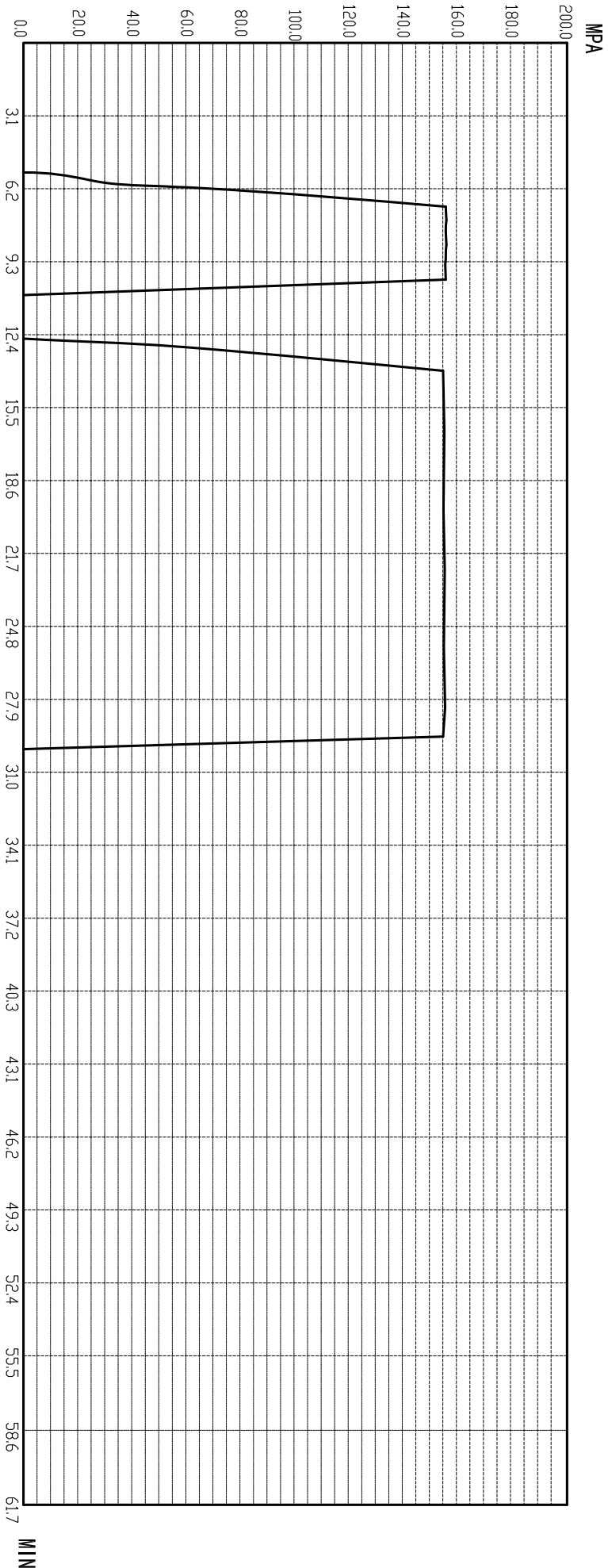
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	18:00:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-18	End Time	18:20:41	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

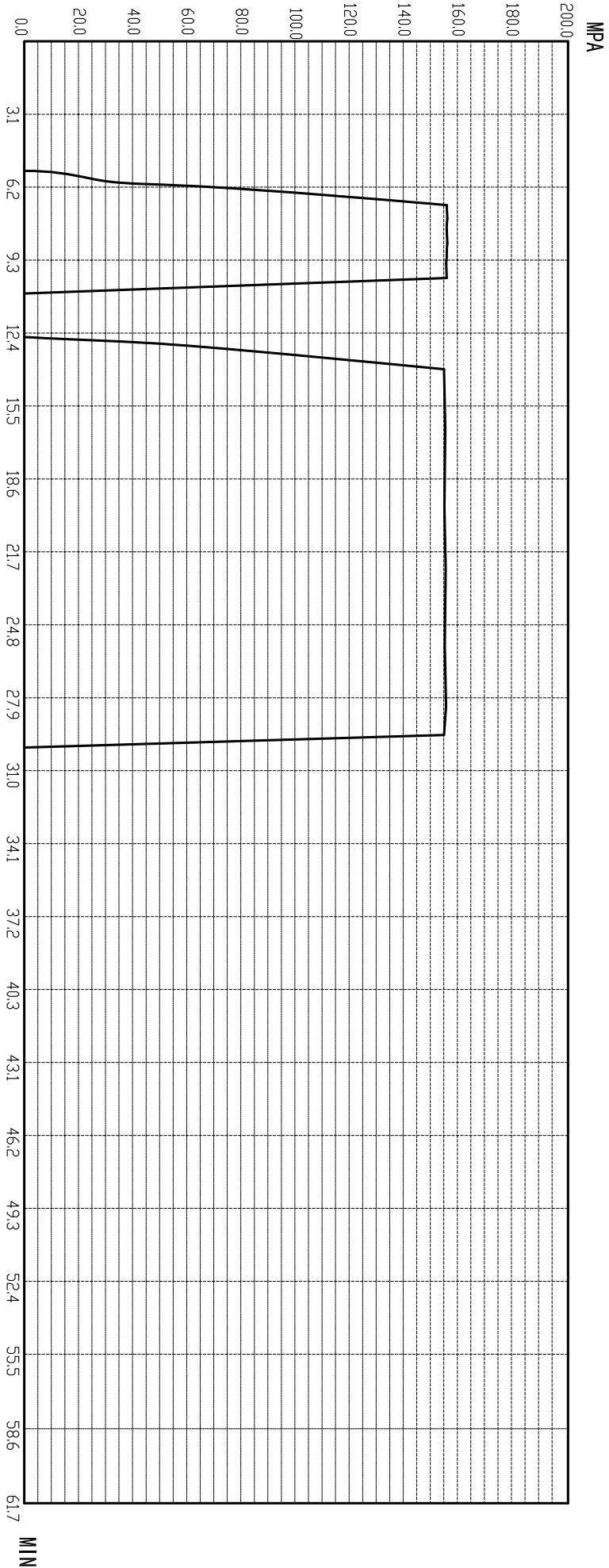
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	18:35:28	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-19	End Time	18:55:51	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

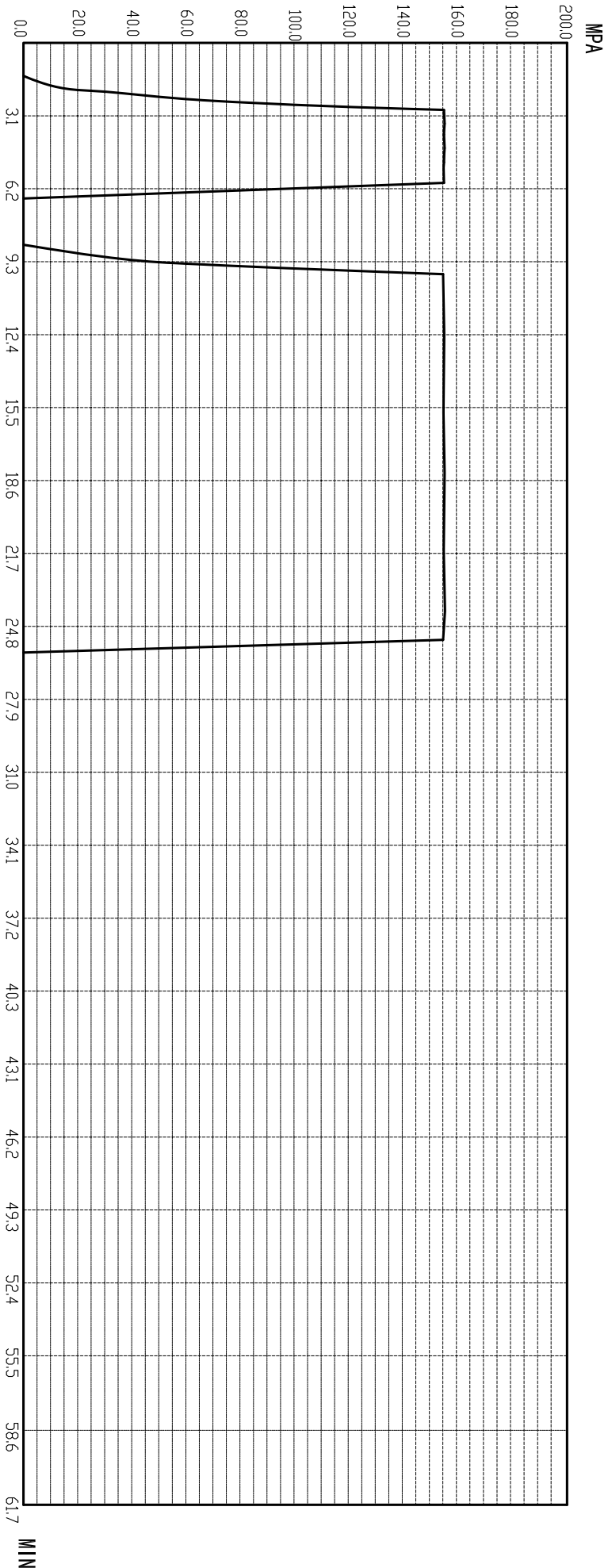
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3” 1502	Start Time	19:08:24	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-20	End Time	19:28:42	TTA-032		Date	2019.01.12



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.12
Remark	Hydrostatic body test						

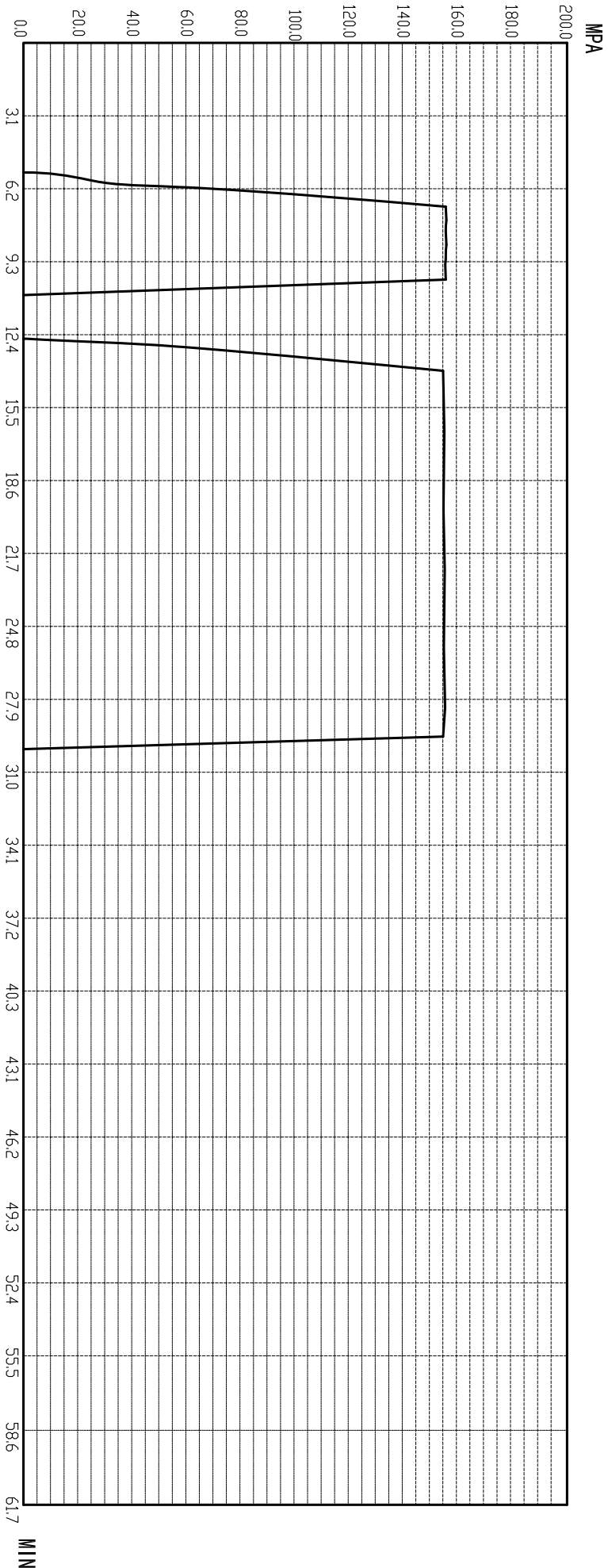
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	07:17:46	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-21	End Time	07:37:52	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
	Checker: ZHUGUANGXUE Date: 2019.01.13						
Remark	Hydrostatic body test						

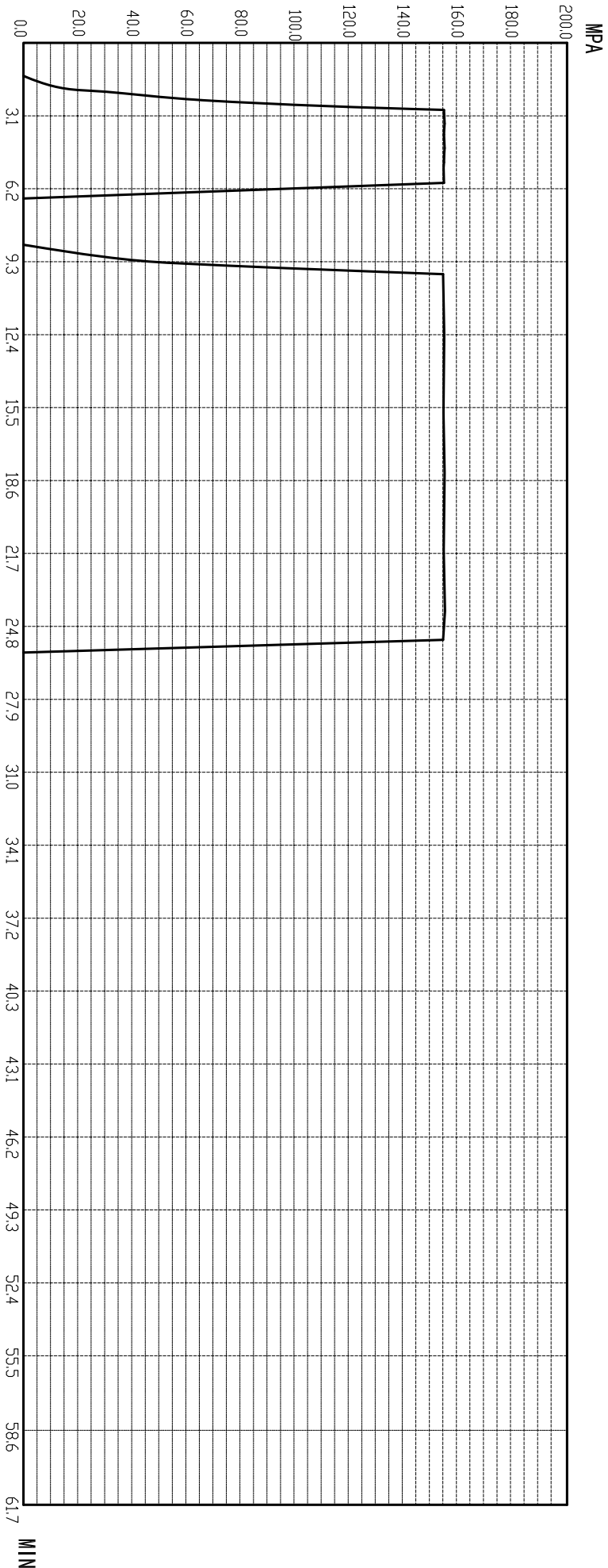
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	07:50:07	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-22	End Time	08:10:29	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

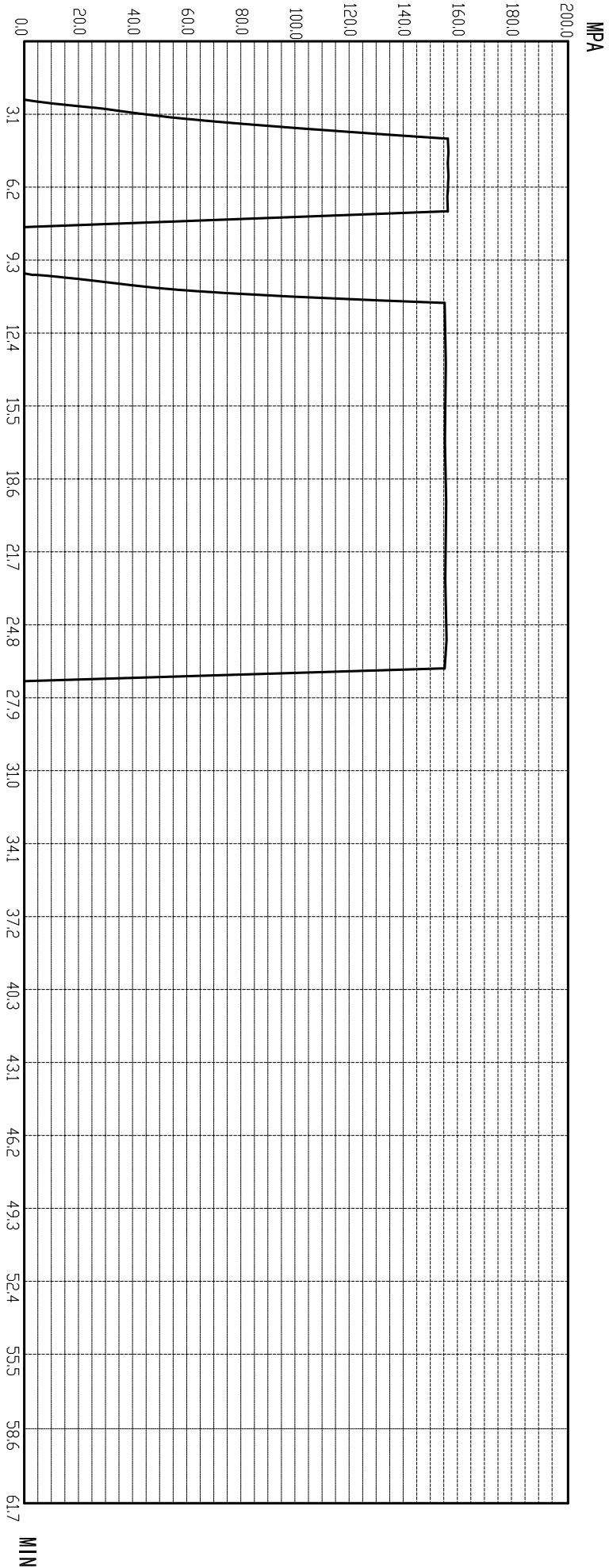
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	08:24:37	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-23	End Time	08:44:50	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)	Hold Time (Min)	
	Water	Room	155.5 155.5	3 15	
Result	No visible leakage shall occur each holding period				
	Checker: ZHUGUANGXUE Date: 2019.01.13				
Remark	Hydrostatic body test				

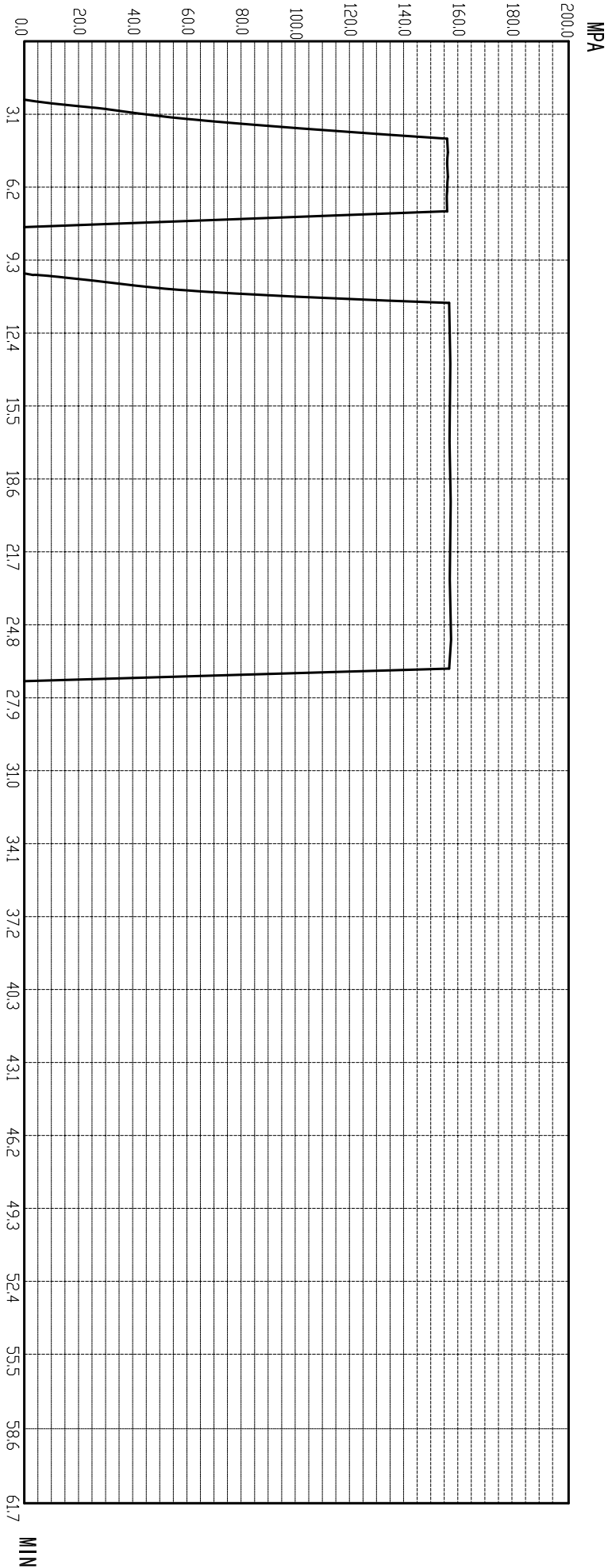
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	08:57:14	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-24	End Time	09:18:21	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

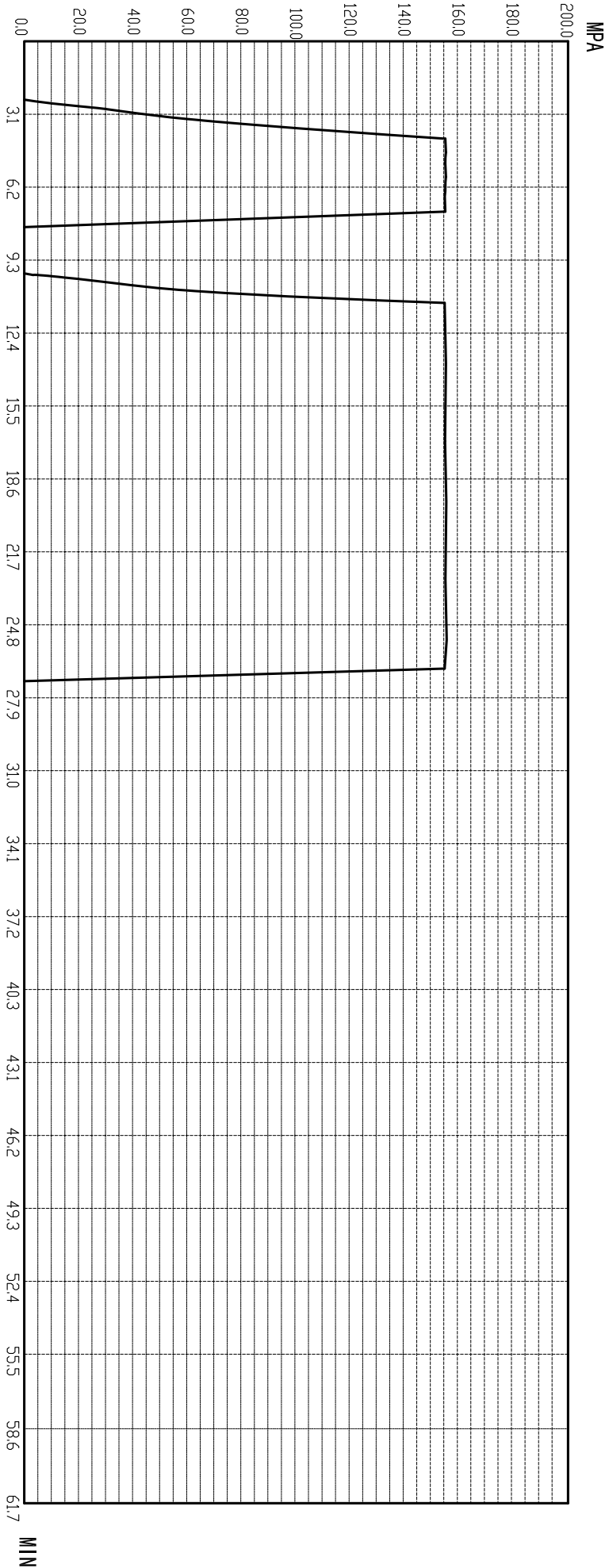
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	09:30:26	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-25	End Time	09:50:40	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.13

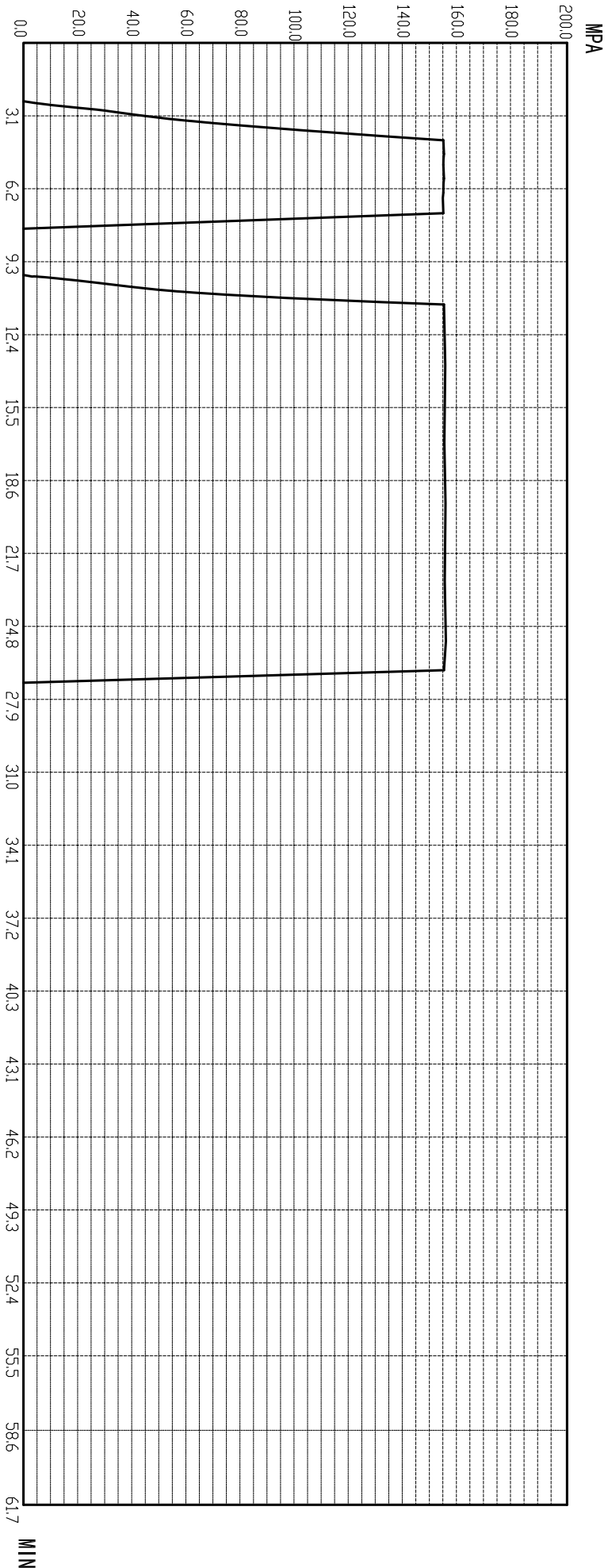
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:03:08	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-26	End Time	10:24:22	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

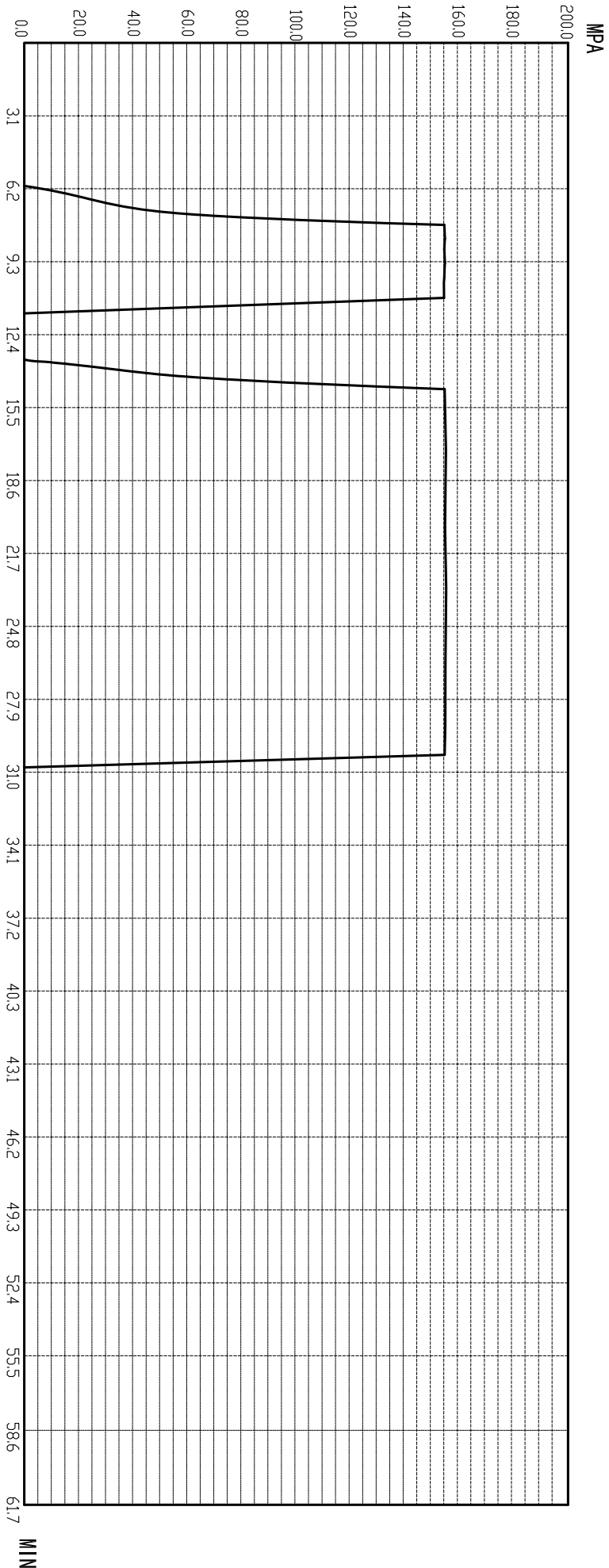
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:36:15	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-27	End Time	10:56:20	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

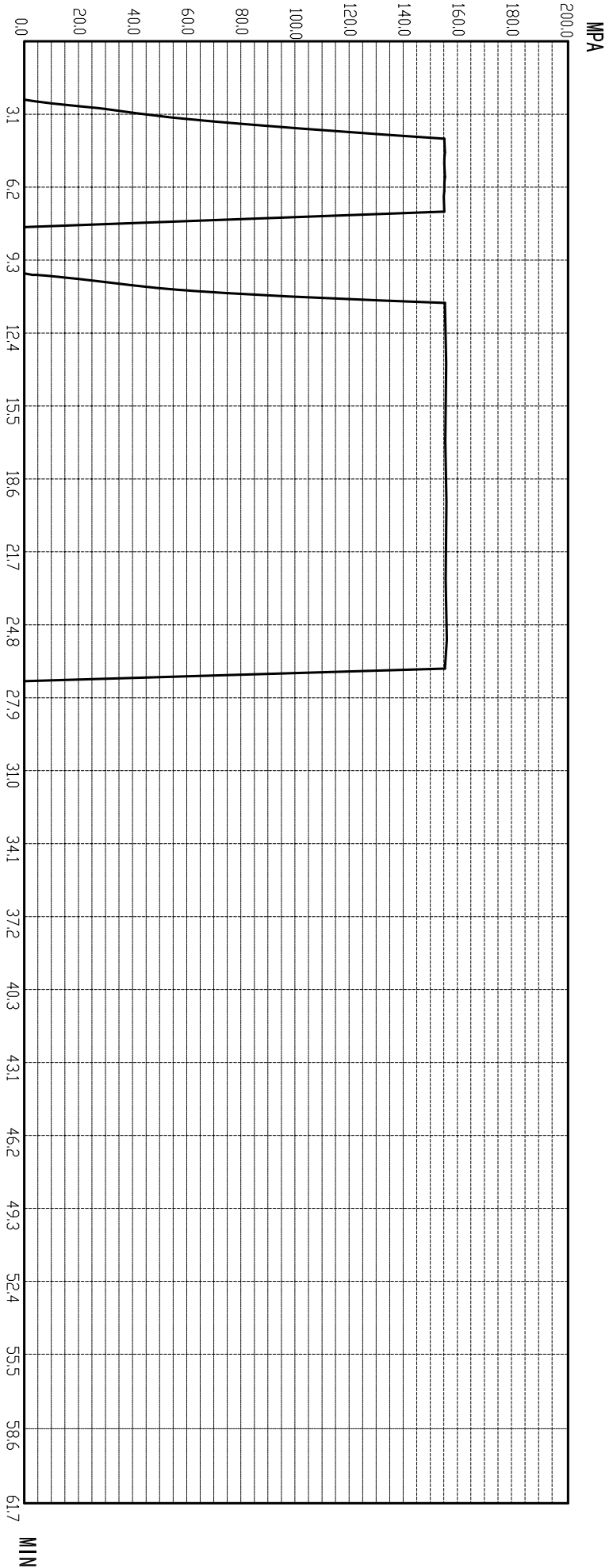
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	11:10:28	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-28	End Time	11:30:35	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

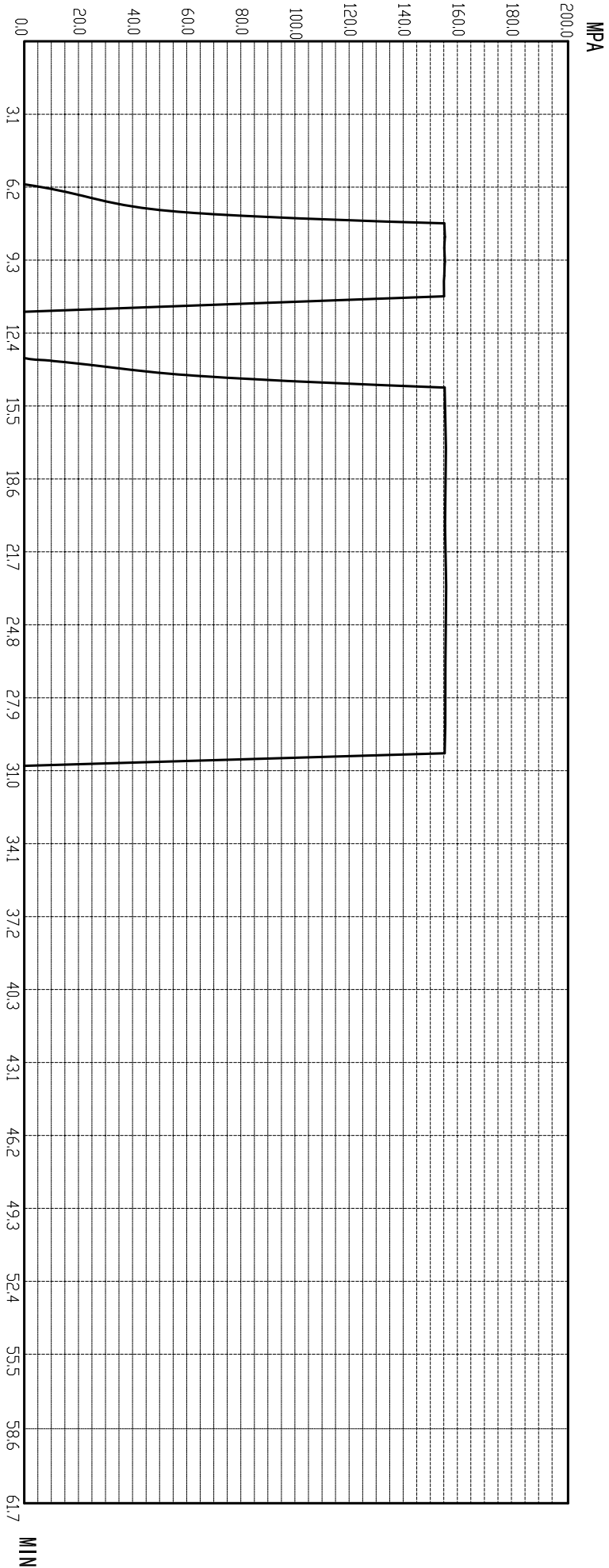
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	12:25:41	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-29	End Time	12:45:55	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

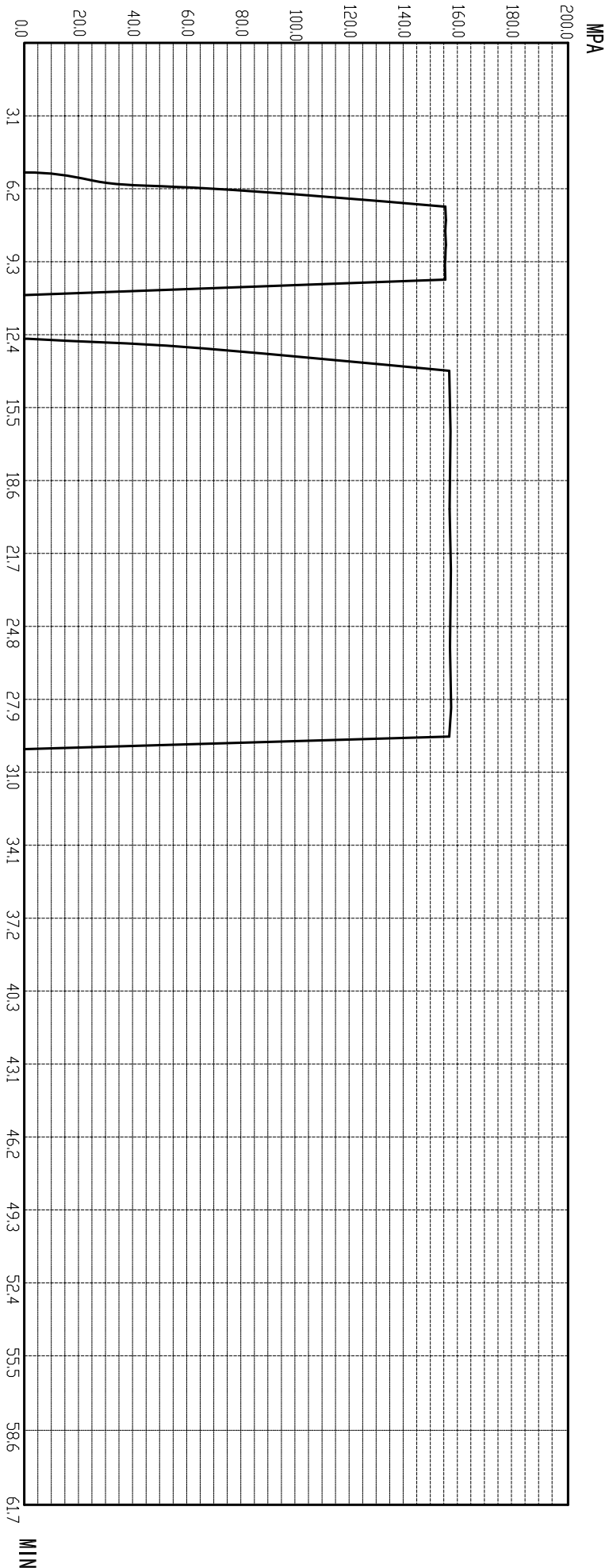
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	12:48:11	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-30	End Time	13:08:35	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.13

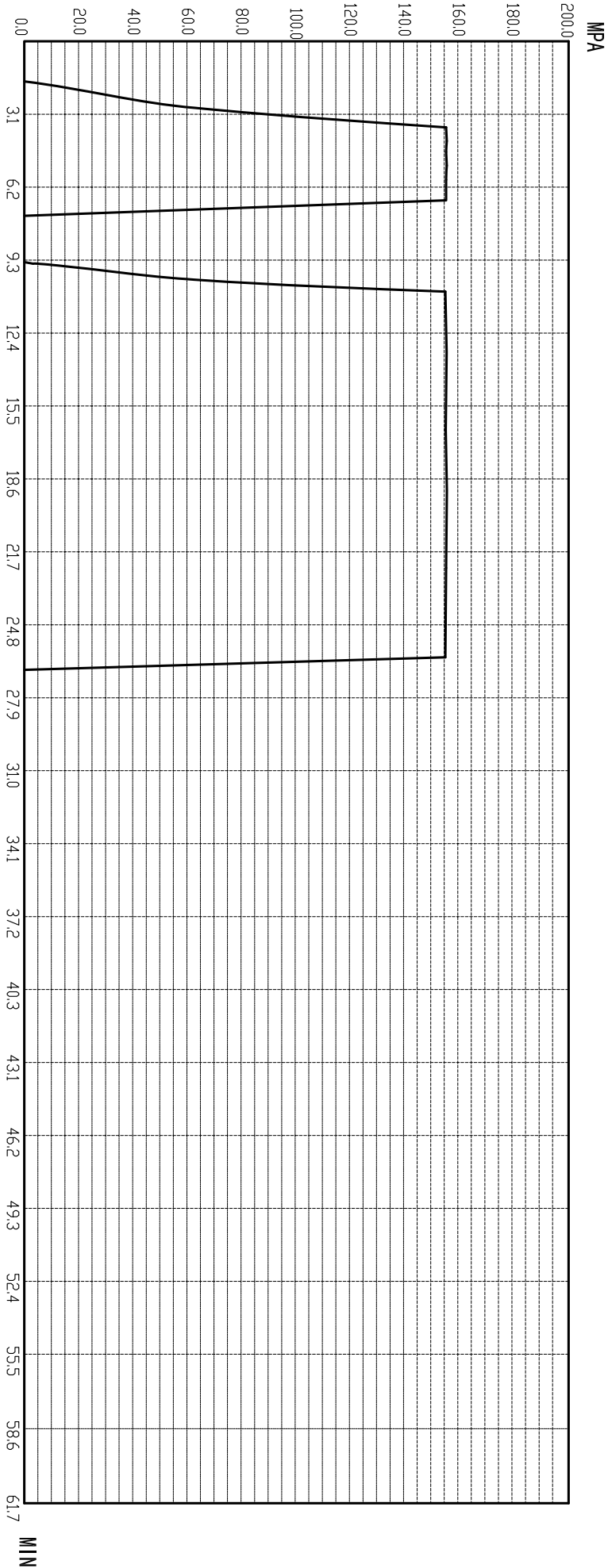
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	13:20:04	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-31	End Time	13:40:22	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

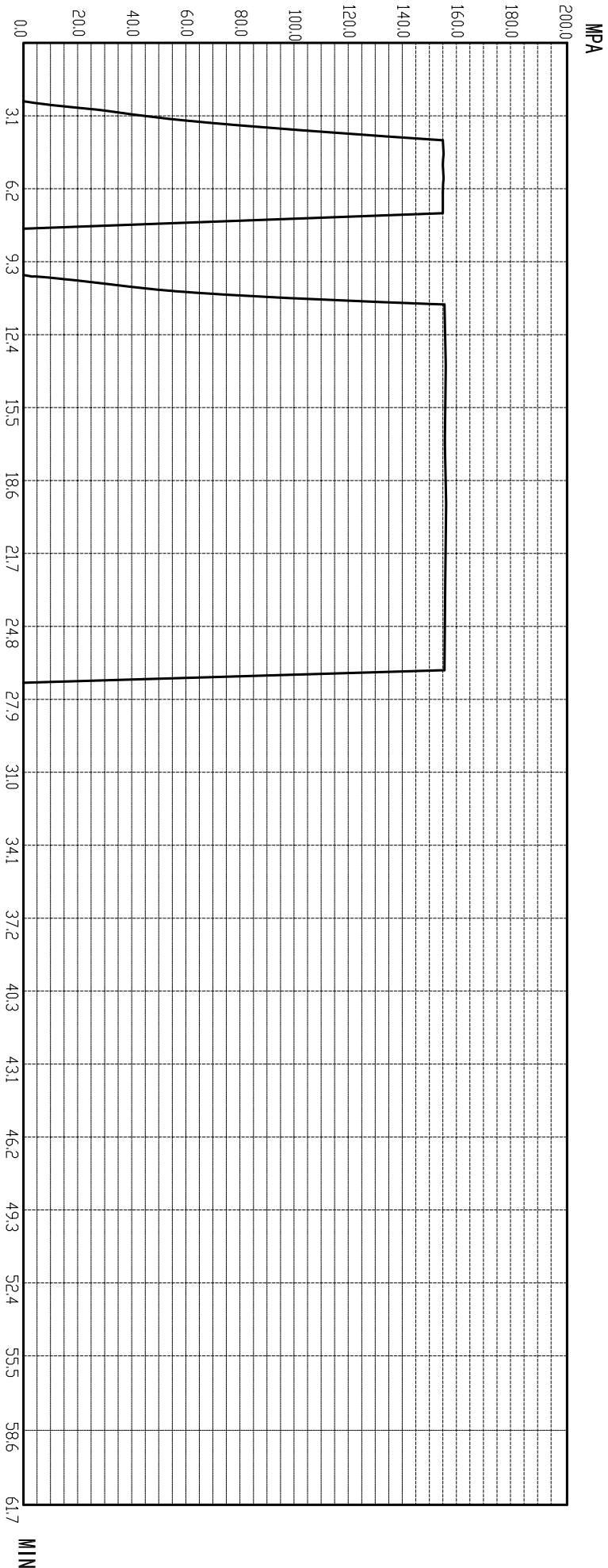
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	13:52:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-32	End Time	14:12:35	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
	Checker: <u>ZHU GUANGXUE</u>						Date: <u>2019.01.13</u>
Remark	Hydrostatic body test						

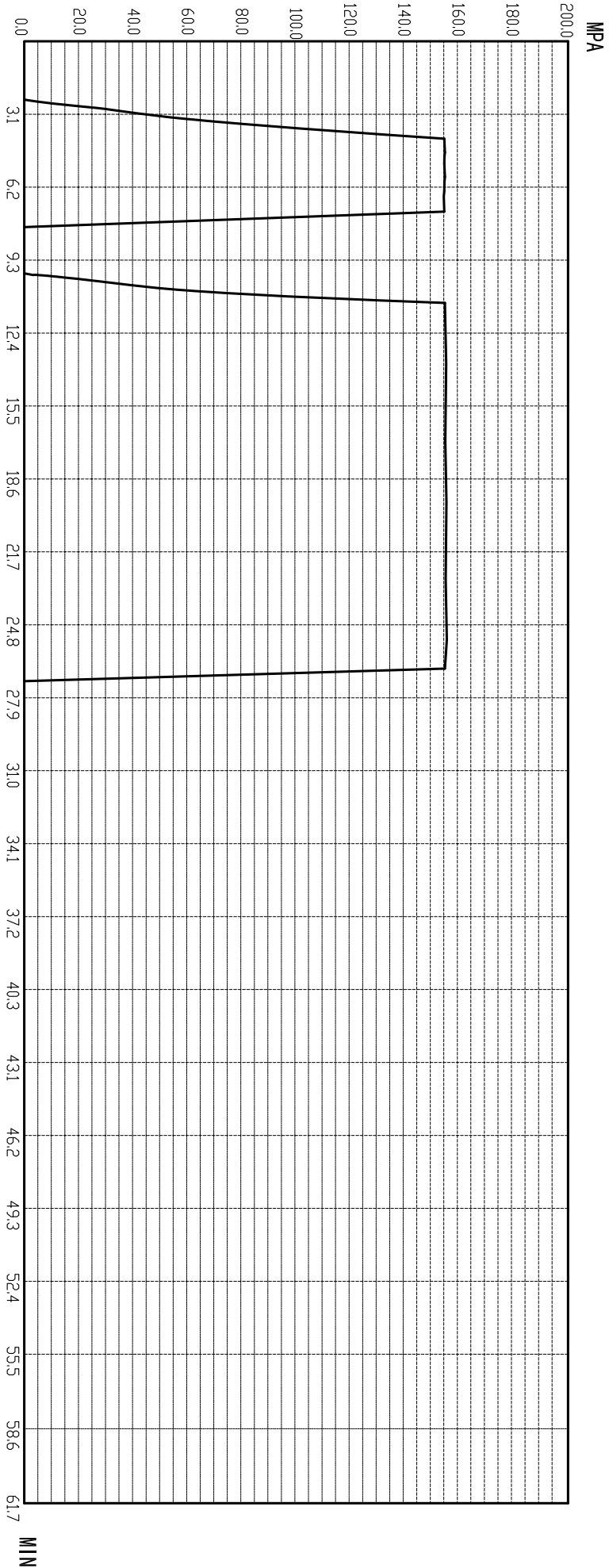
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	14:25:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-33	End Time	14:45:41	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

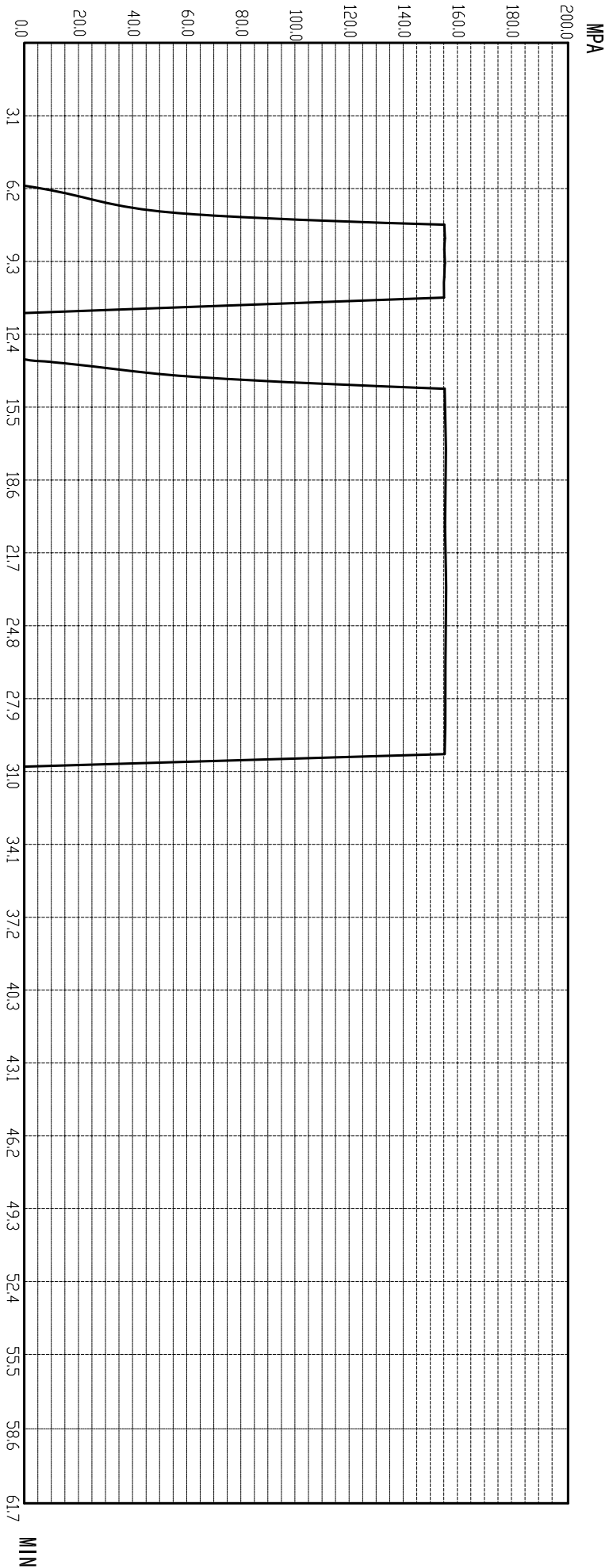
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	14:56:16	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-34	End Time	15:16:20	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

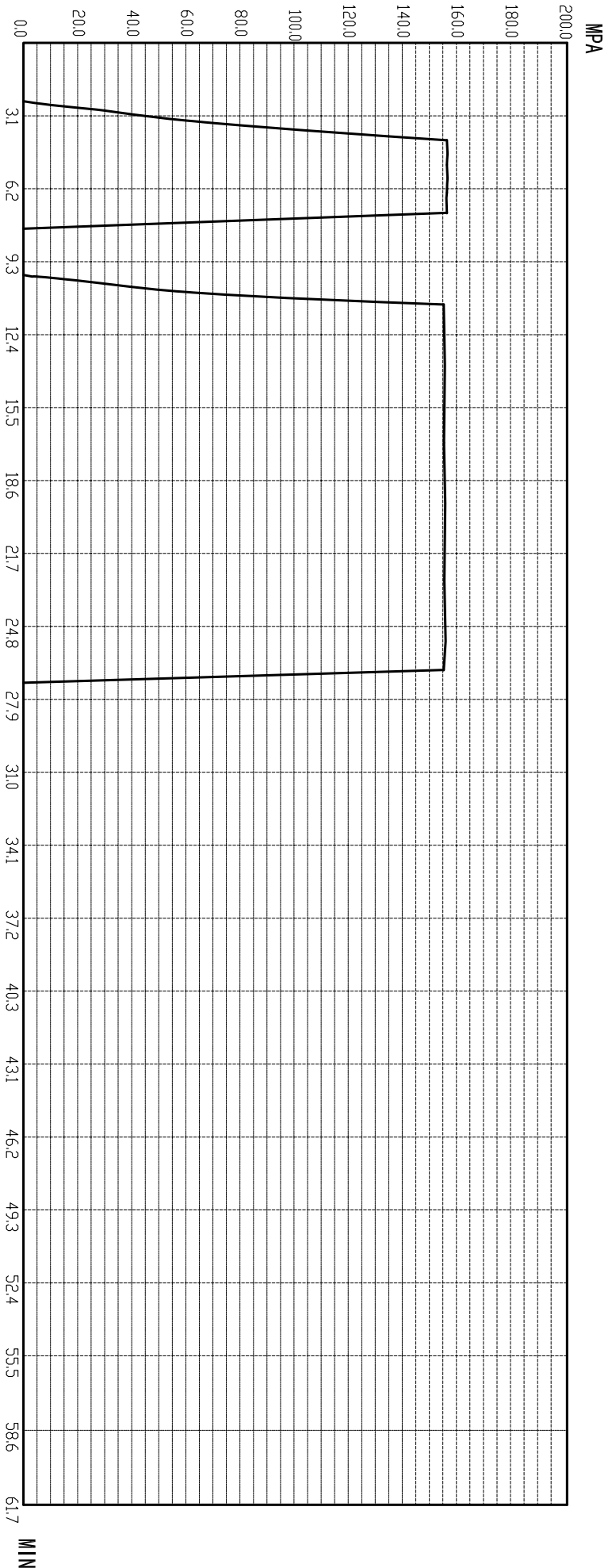
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	15:30:22	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-35	End Time	15:50:20	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

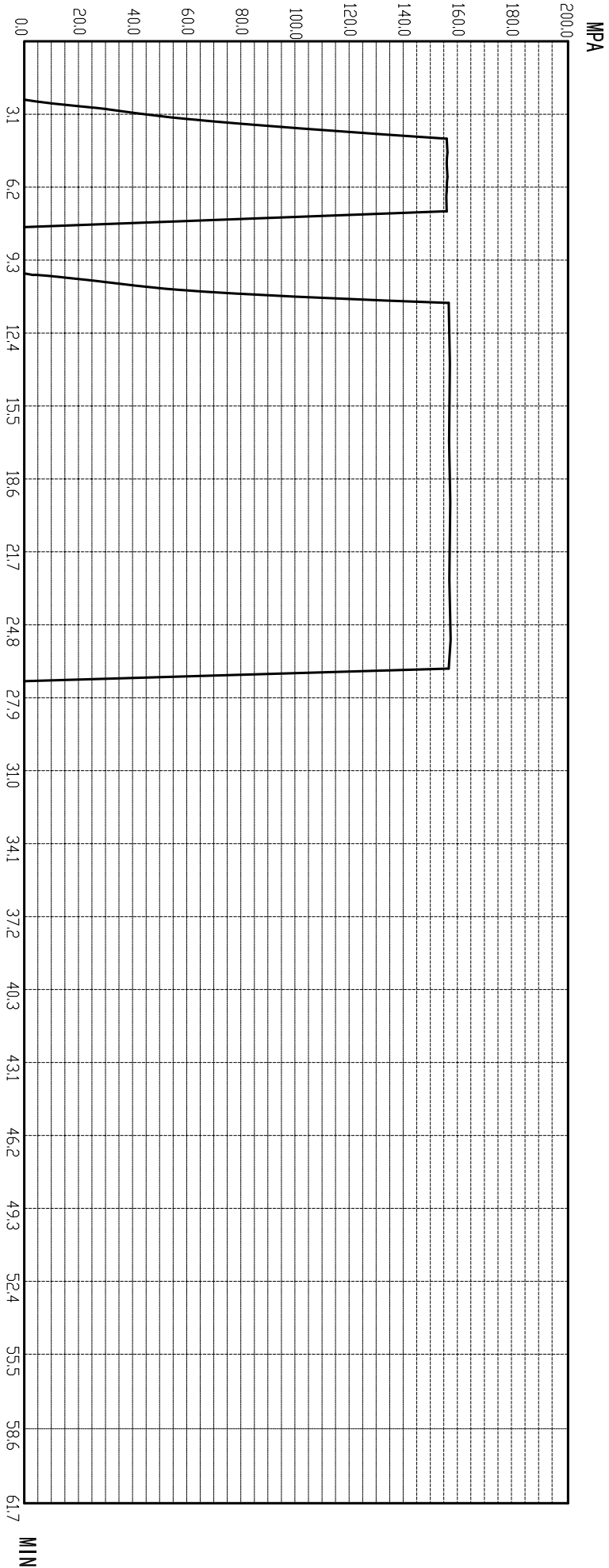
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	16:03:31	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-36	End Time	16:23:40	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.13

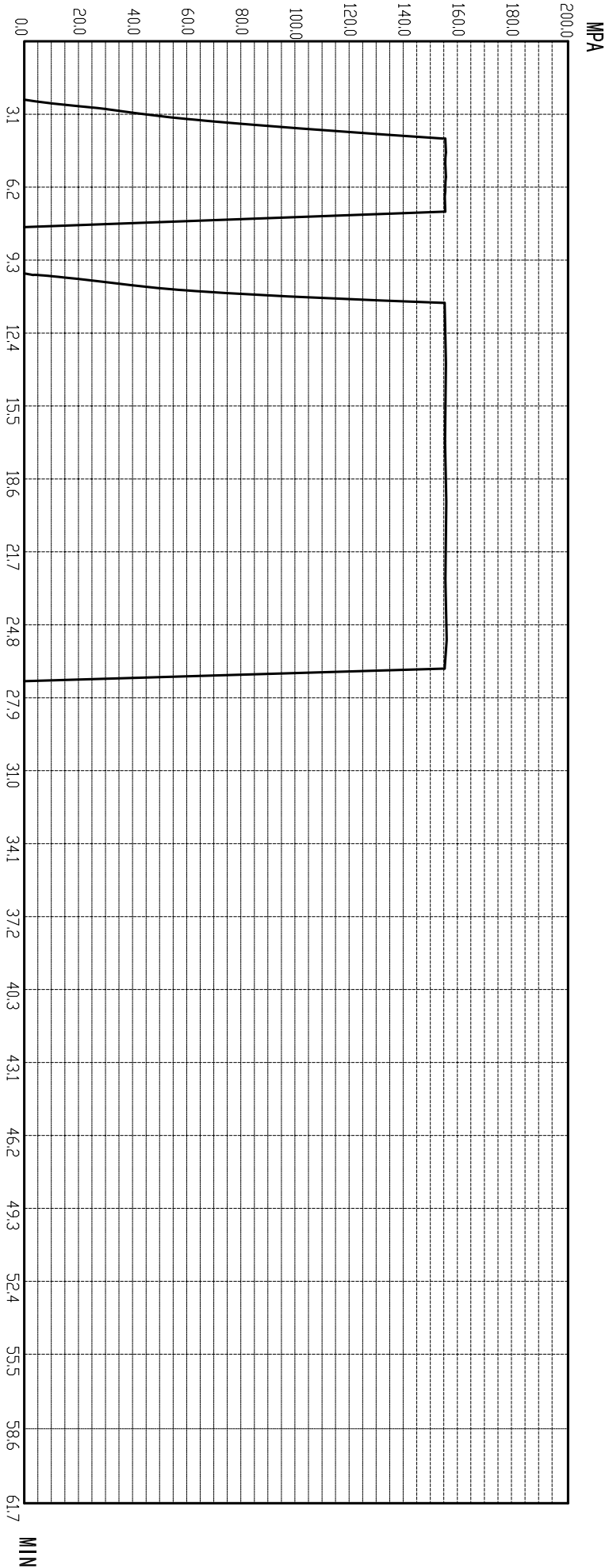
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	16:34:43	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-37	End Time	16:54:56	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

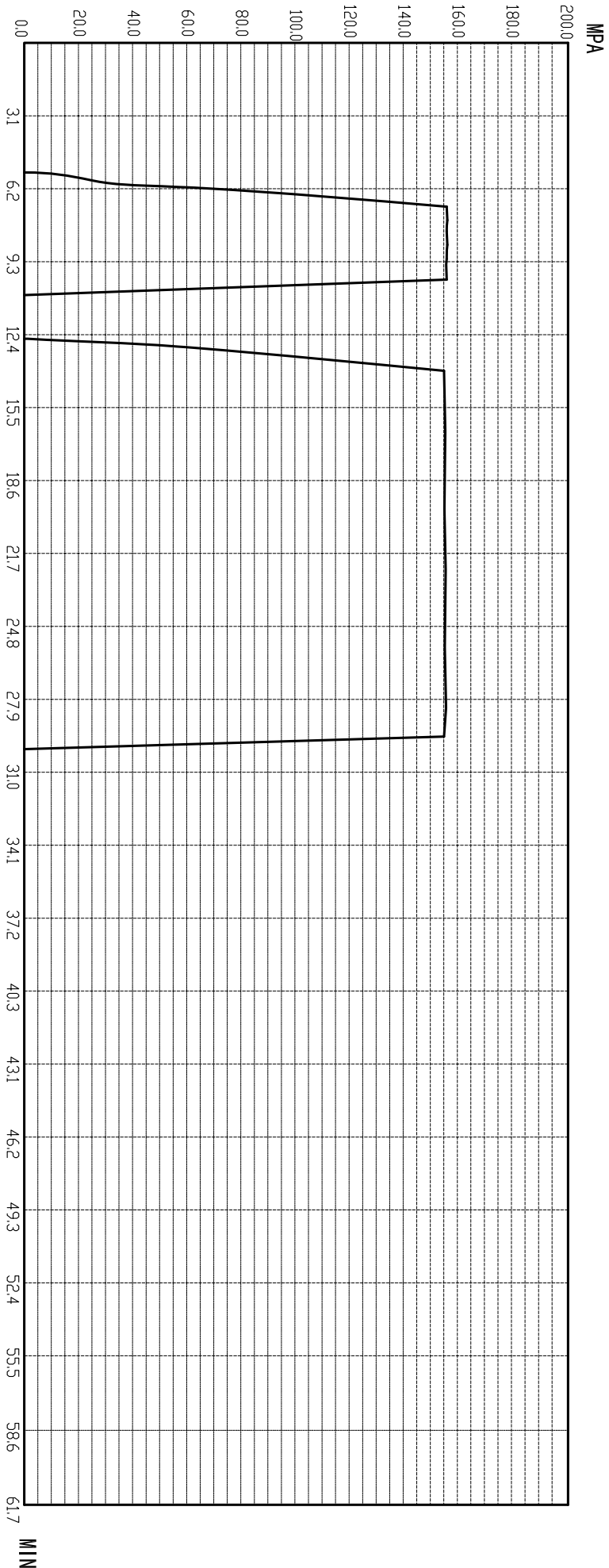
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	17:25:12	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-38	End Time	17:45:24	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

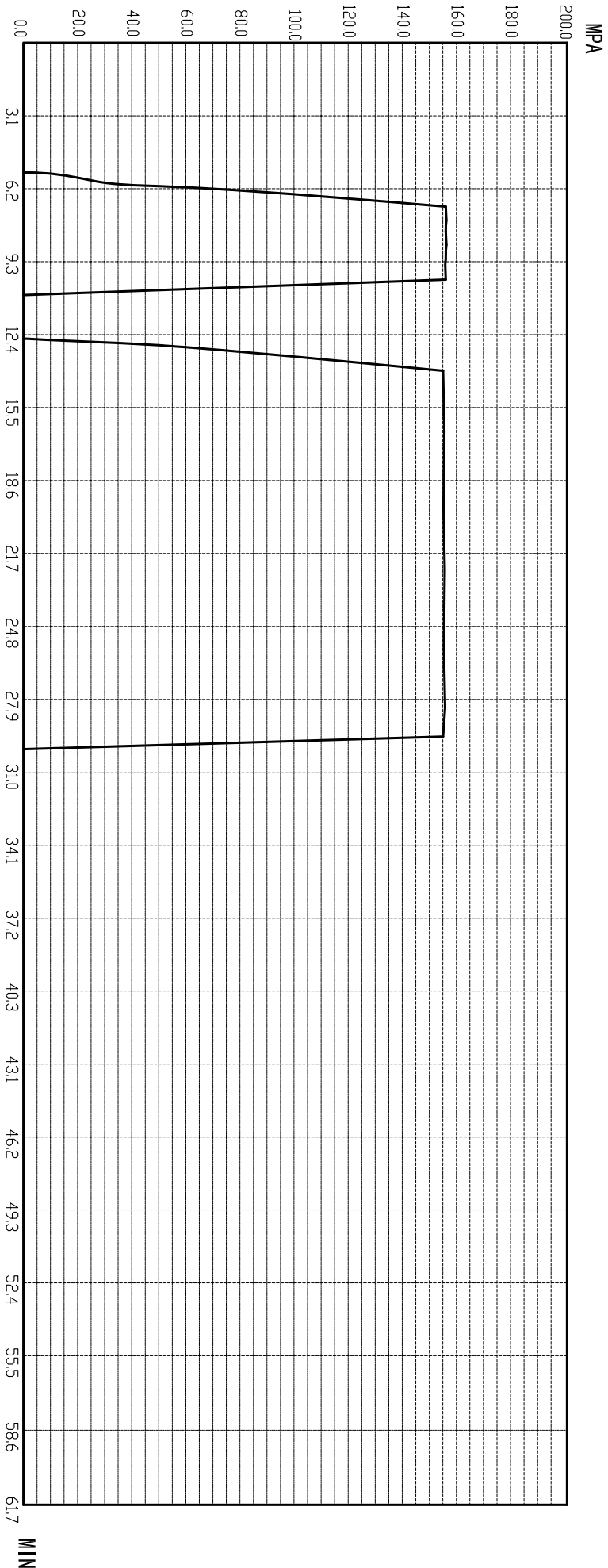
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	17:58:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-39	End Time	18:18:52	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.13

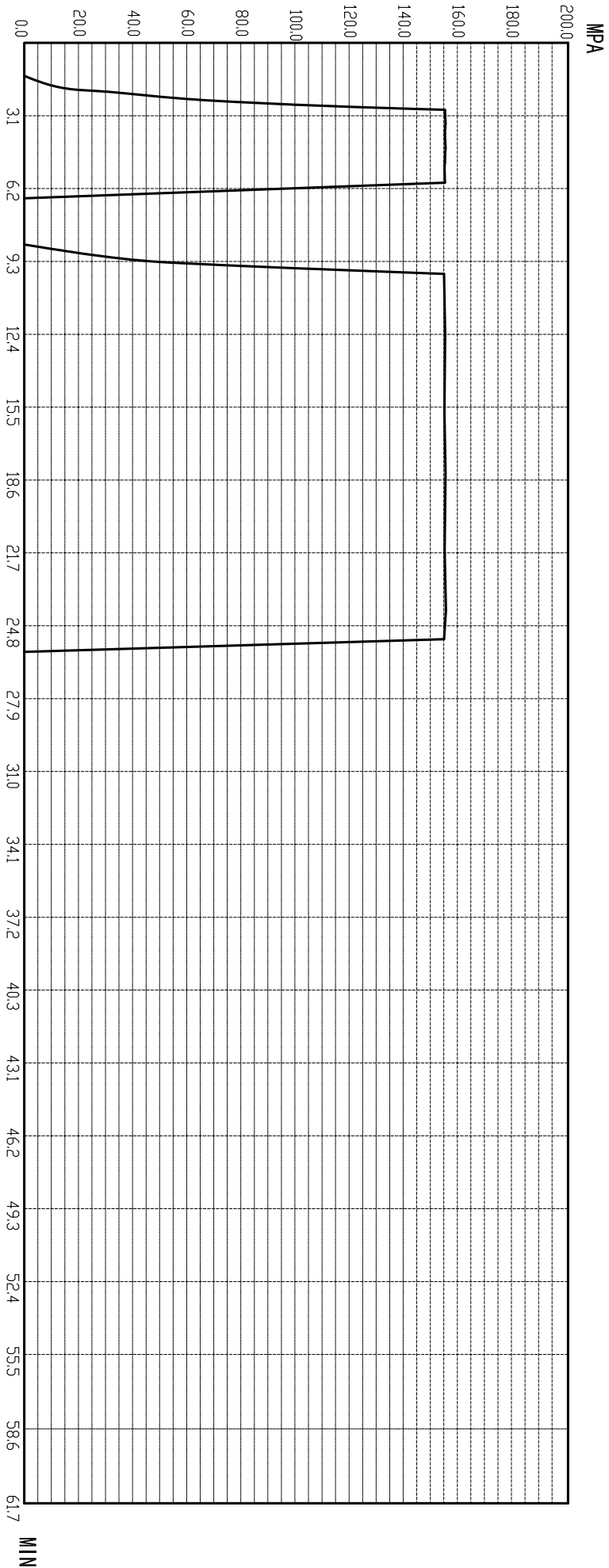
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	18:30:16	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-40	End Time	18:50:32	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

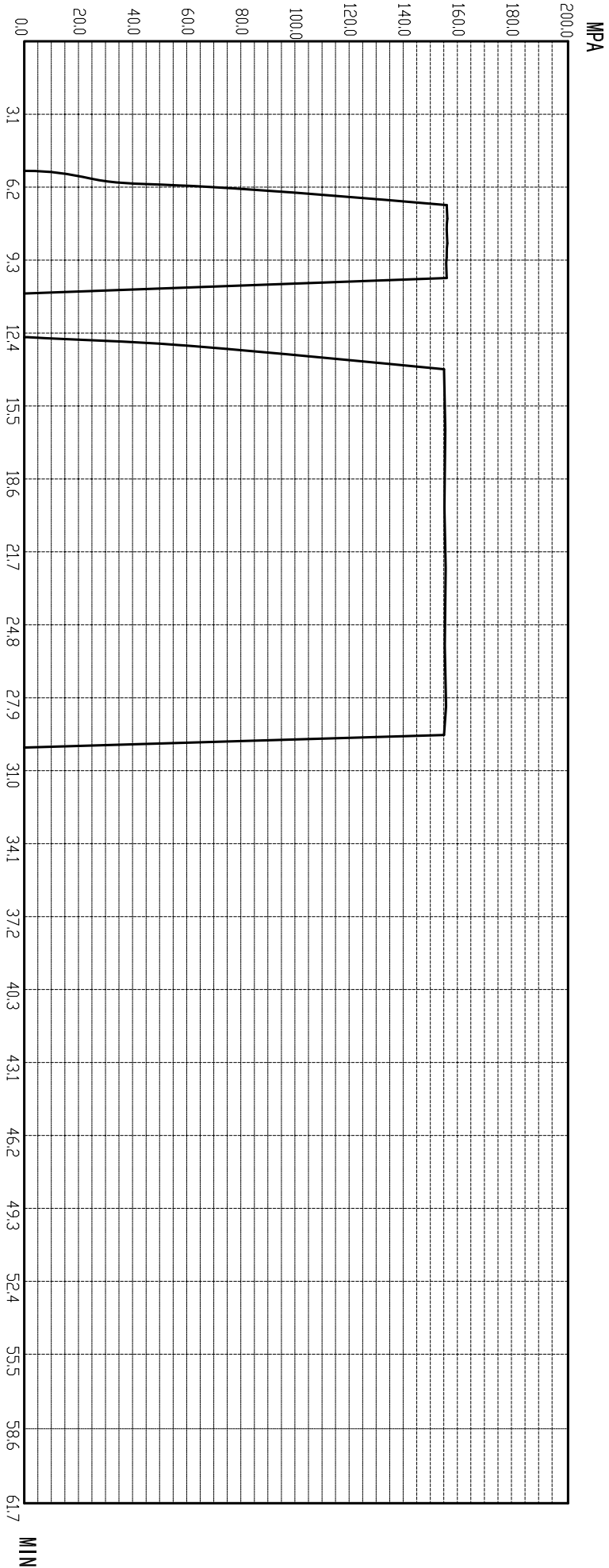
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	19:03:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-41	End Time	19:23:51	TTA-032		Date	2019.01.13



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.13
Remark	Hydrostatic body test						

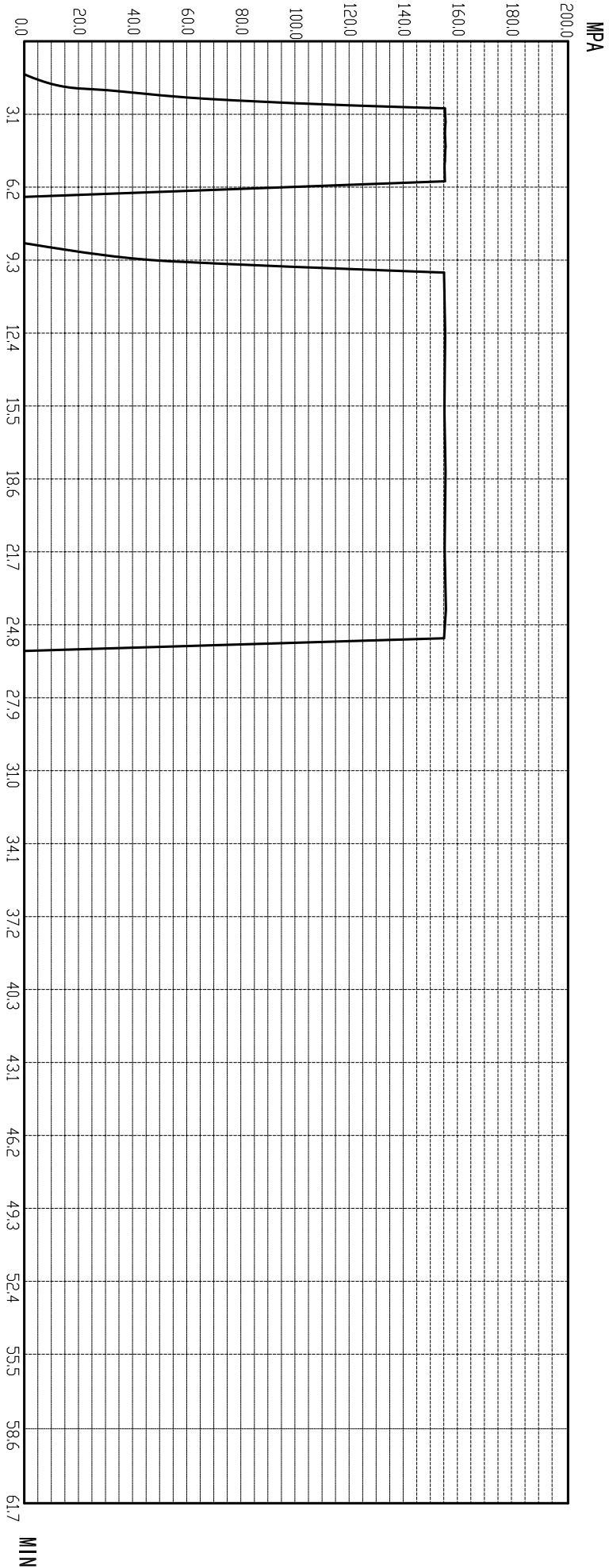
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	07:15:24	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-42	End Time	07:35:32	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						

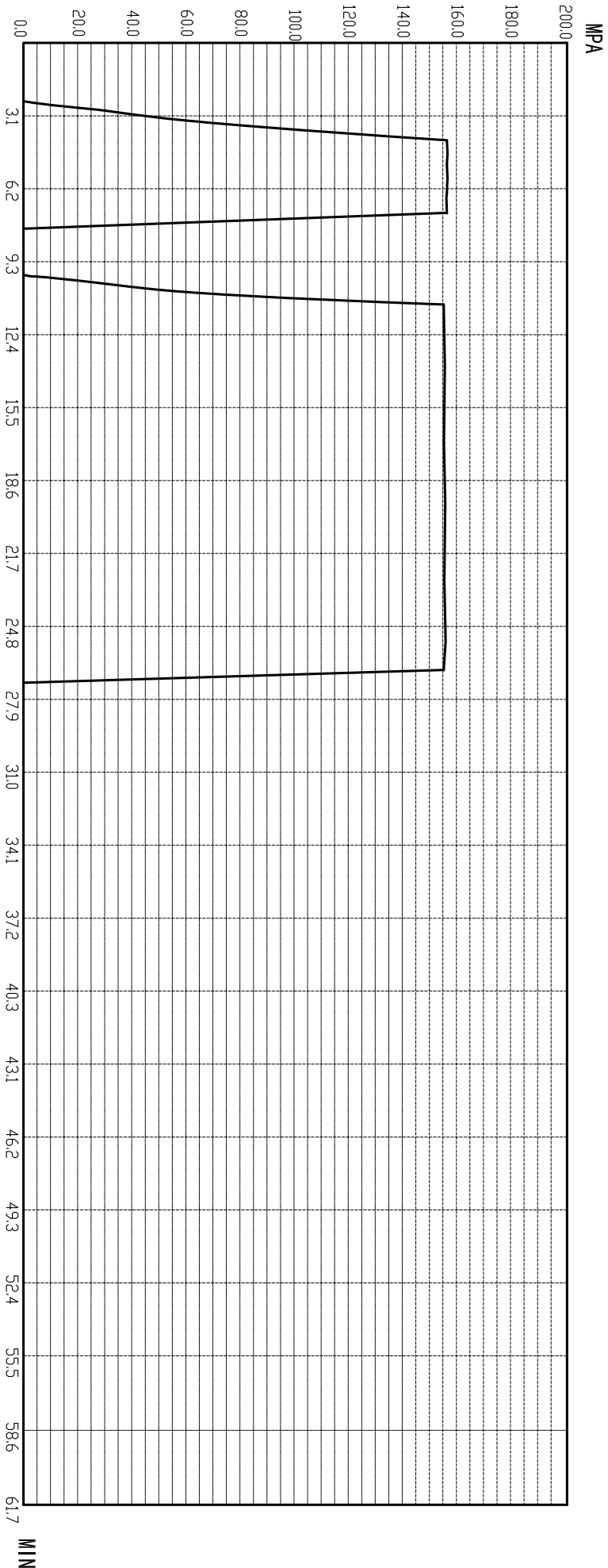
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3” 1502	Start Time	07:48:35	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-43	End Time	08:08:56	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						

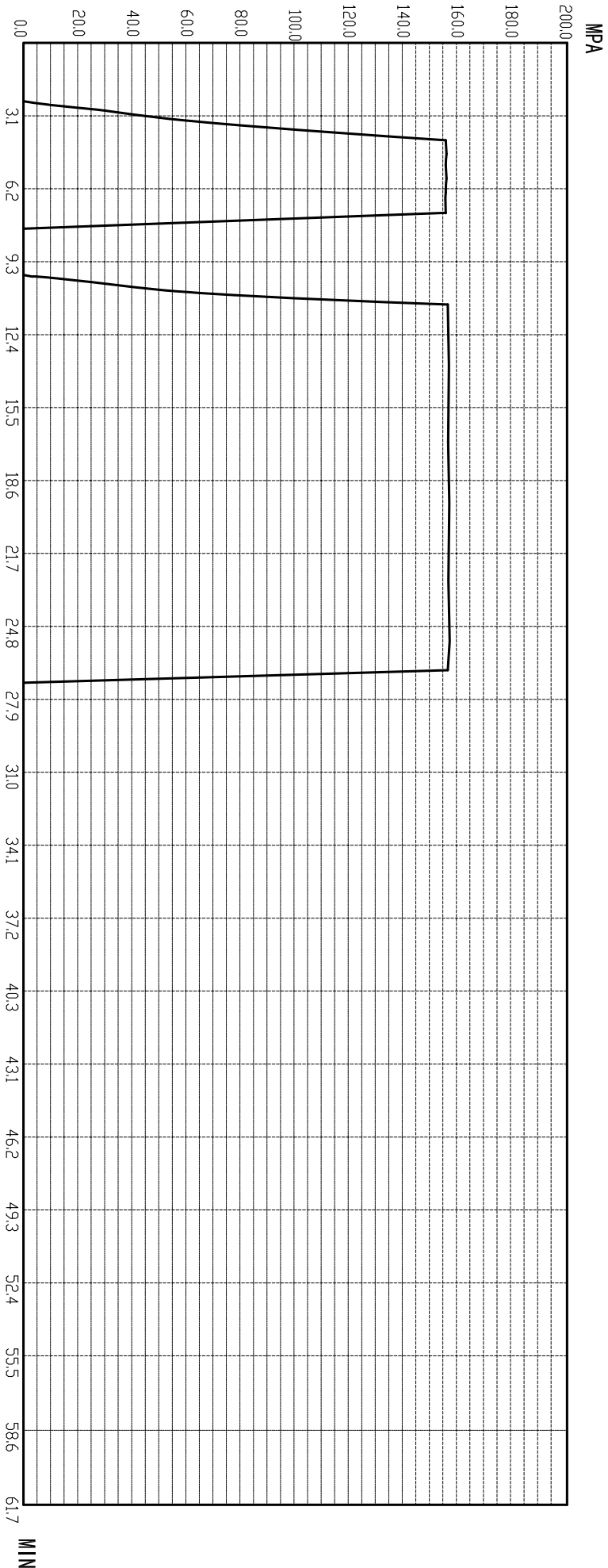
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3” 1502	Start Time	08:20:23	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-44	End Time	08:40:57	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE

Date: 2019.01.14

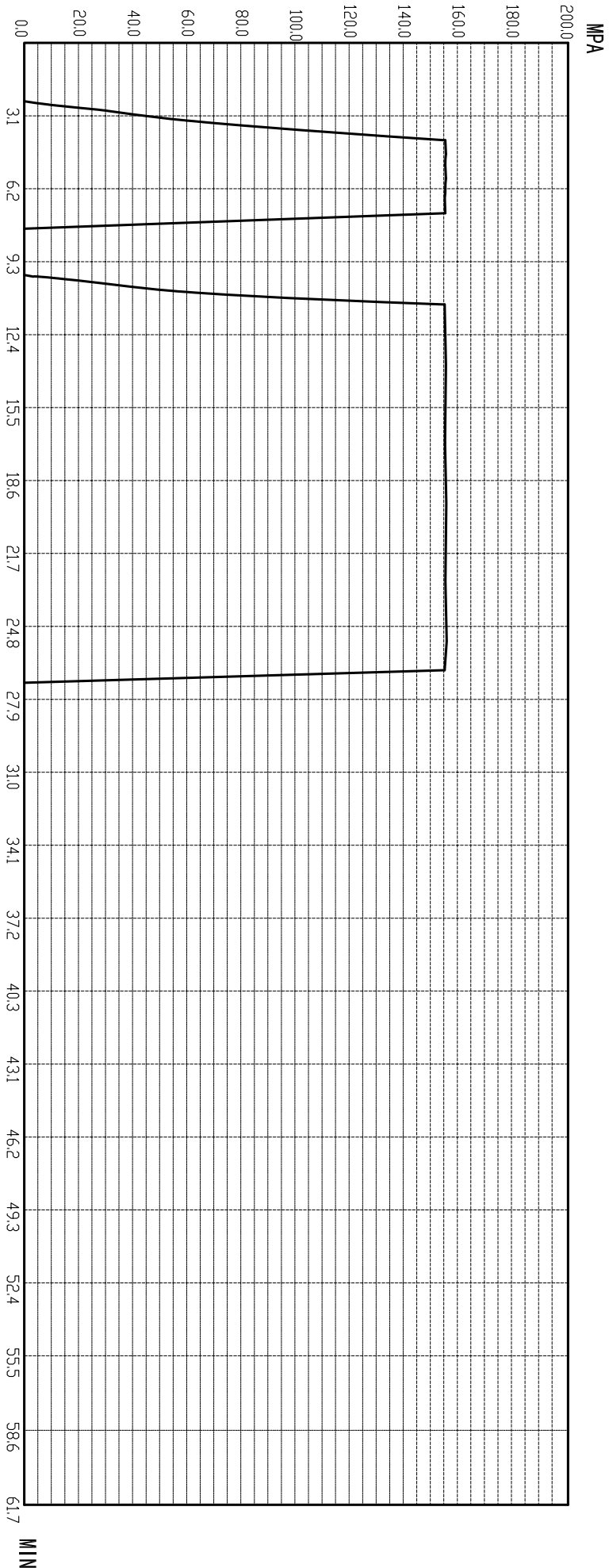
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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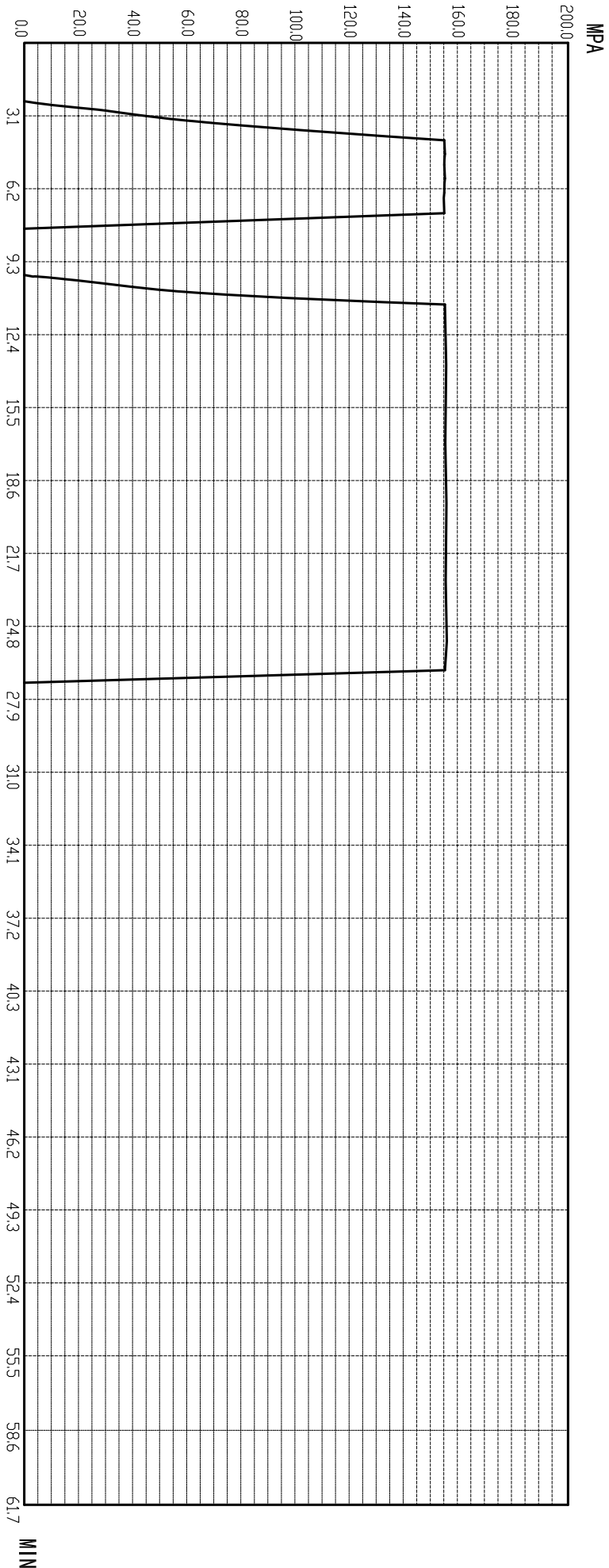
Description	WECO FLANGE 4 1/16 15M X 3” 1502	Start Time	08:55:11	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-45	End Time	09:15:36	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						

SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.
Hydraulic Test Report

Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	09:27:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-46	End Time	09:48:15	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)	
	Water	Room	155.5	155.5	3	15
Result	No visible leakage shall occur each holding period					
Remark	Hydrostatic body test					

Checker: ZHUGUANGXUE Date: 2019.01.14

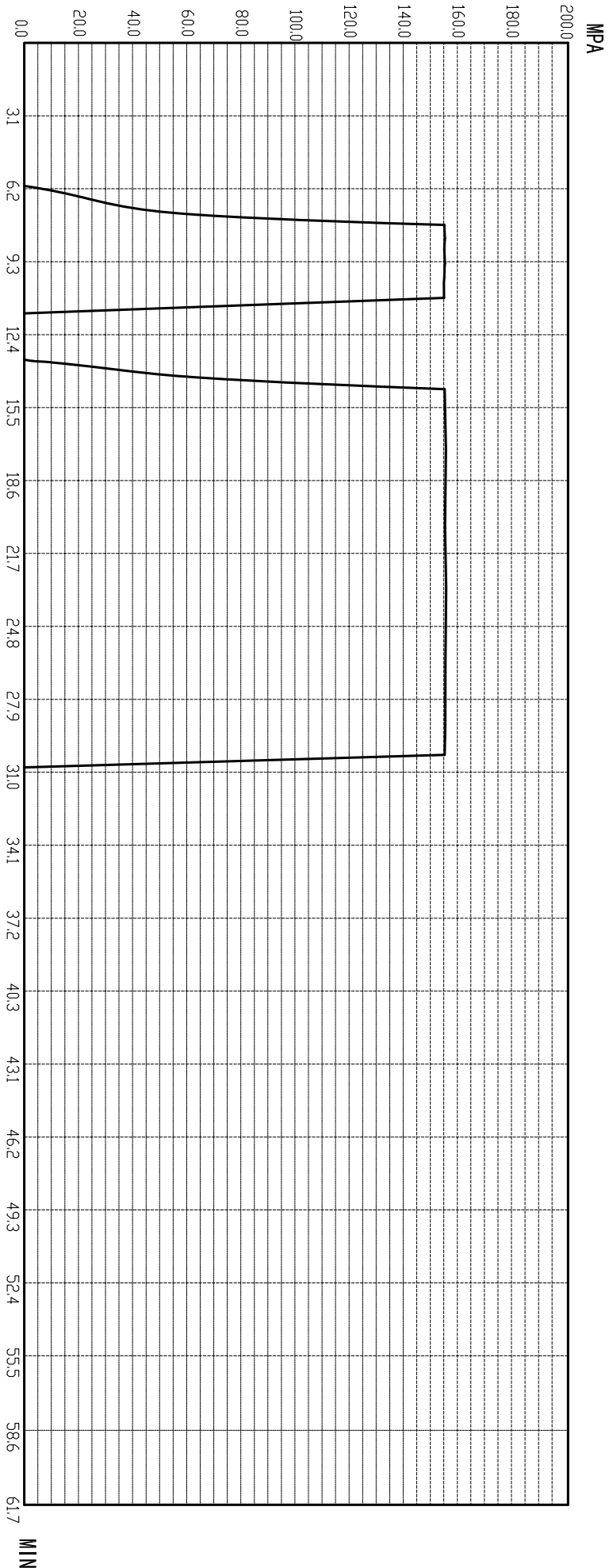
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:00:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-47	End Time	10:21:41	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)	Hold Time (Min)	
	Water	Room	155.5 155.5	3 15	
Result	No visible leakage shall occur each holding period				
	Checker: ZHUGUANGXUE Date: 2019.01.14				
Remark	Hydrostatic body test				

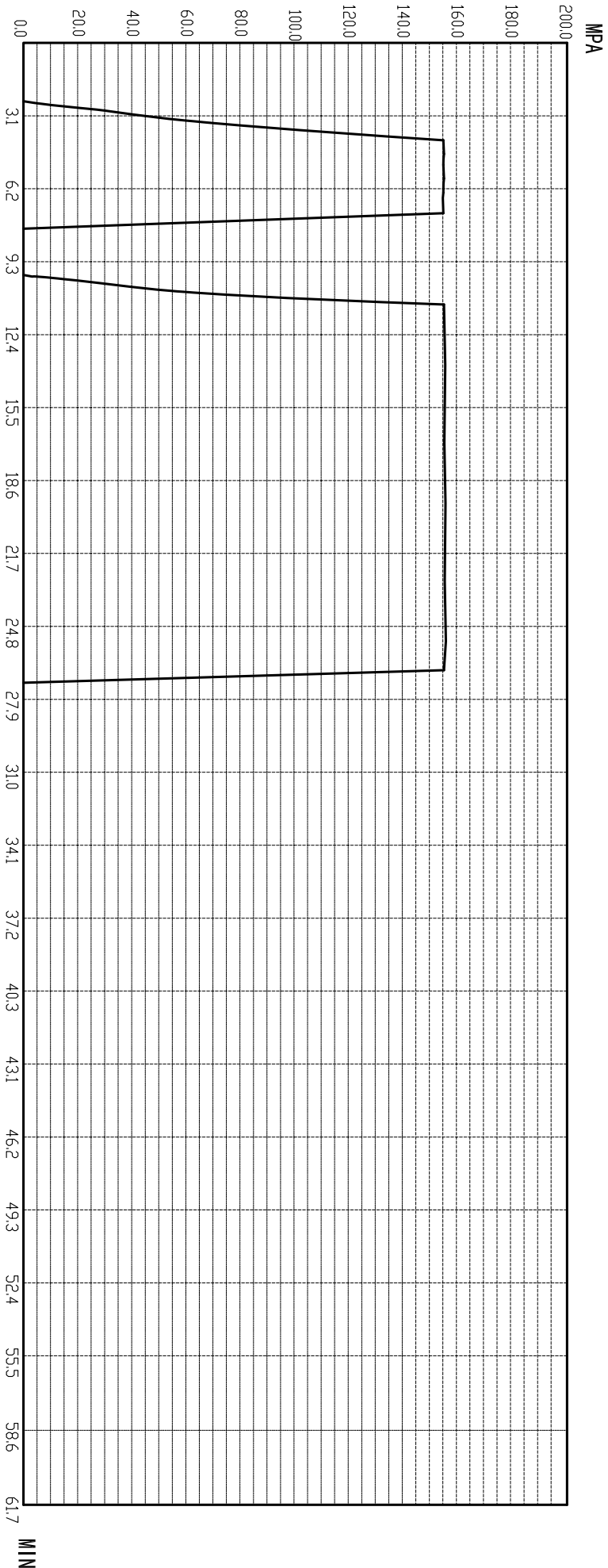
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

+

Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	10:35:04	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-48	End Time	10:55:22	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						

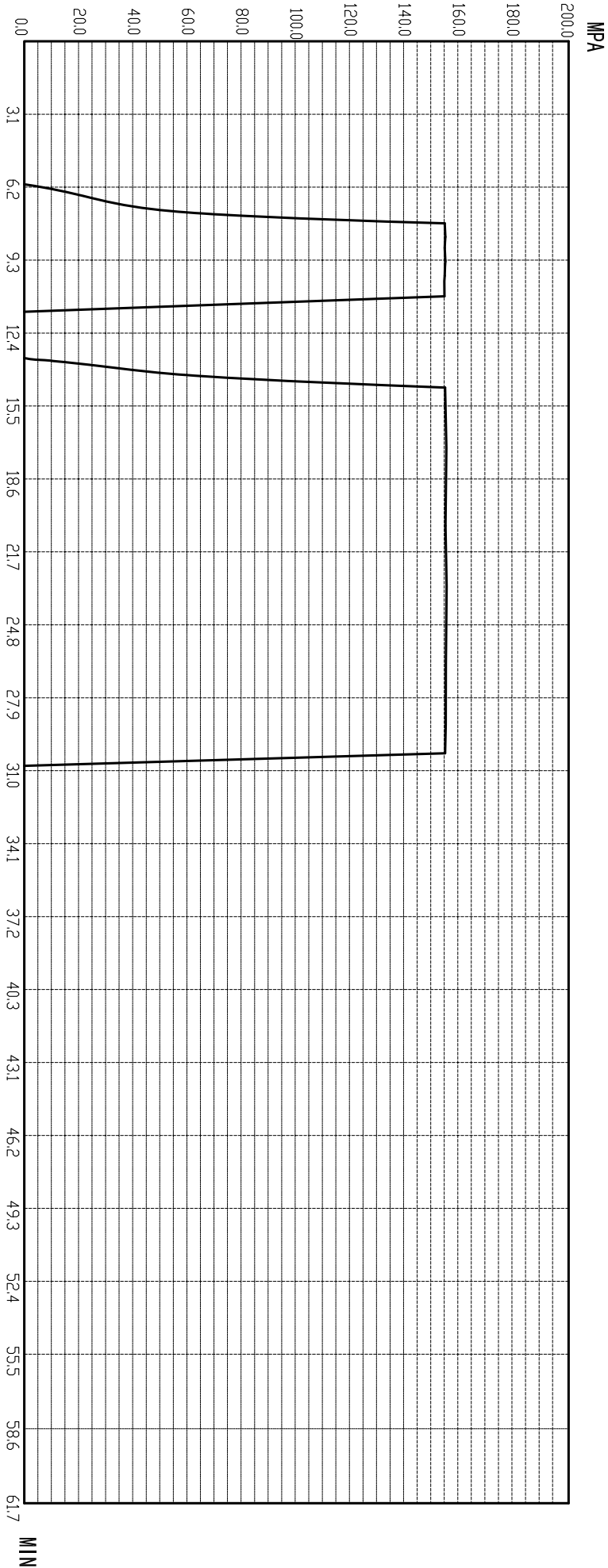
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

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Description	WECO FLANGE 4 1/16 15M X 3" 1502	Start Time	11:08:13	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-49	End Time	11:28:35	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						

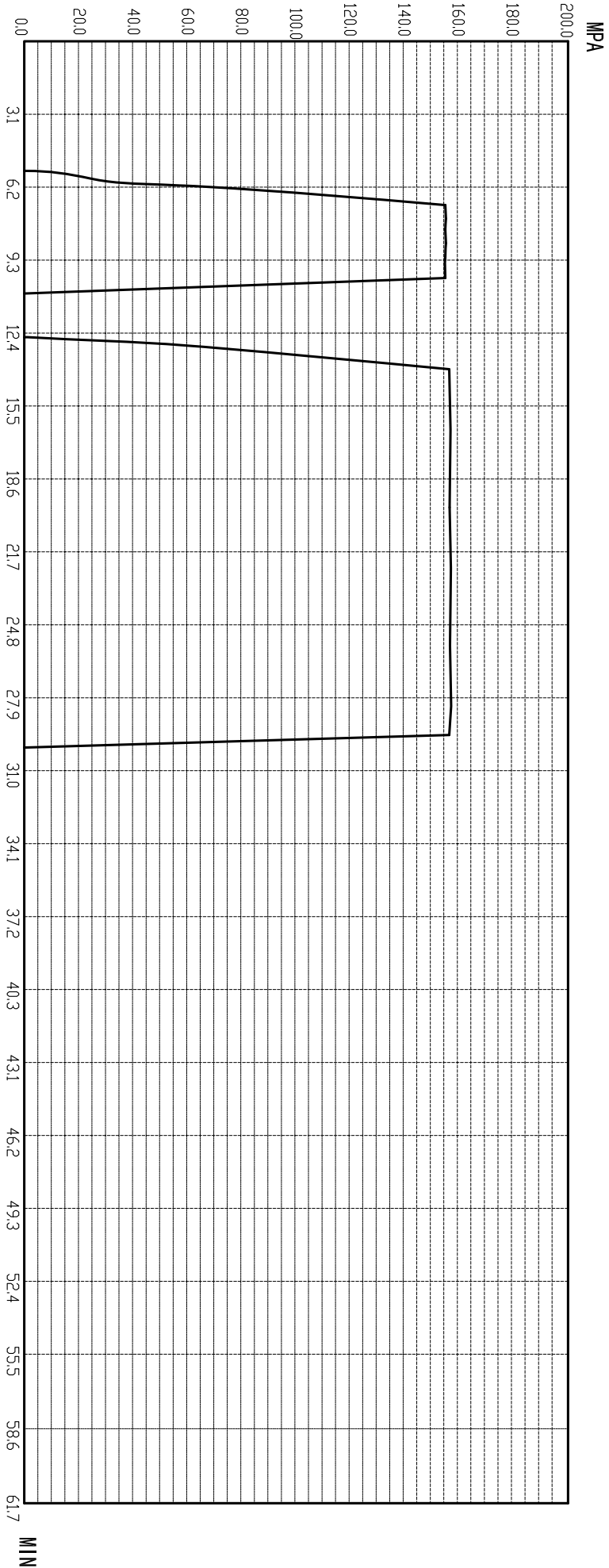
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SHANGHAI SHENGQIN PETROLEUM MANUFACTURE CO.,LTD.

Hydraulic Test Report

+

Description	WECC FLANGE 4 1/16 15M X 3” 1502	Start Time	12:26:38	Gage SN		Test Spec	API 6A/PSL3
Seri	YB19-008-2-1-50	End Time	12:46:51	TTA-032		Date	2019.01.14



Item	Test Fluid	Test Temp (°C)	Test Pressure (MPa)		Hold Time (Min)		
	Water	Room	155.5	155.5	3	15	
Result	No visible leakage shall occur each holding period						
Checker: ZHUGUANGXUE							Date: 2019.01.14
Remark	Hydrostatic body test						



REPORT INDEX

Purchase Order: YB19-008-2

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018.01.23

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
417-10-071	50	1	0.43	0.62	0.29	0.005	0.017	0.15	0.05	0.18	1.04	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
19041302-2	50	1	113 K	129 K	22.0	51		31;33;42		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 3 HRS	Austenitized:	880°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	19 °C	Start Temp:	19 °C
End Temp:	41 °C	End Temp:	41 °C
Temper:	660°C 5 HRS AIR	Temper:	660°C 5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-1-01	19041302-2	296	26	YB19-008-2-1-26	19041302-2	293
2	YB19-008-2-1-02	19041302-2	293	27	YB19-008-2-1-27	19041302-2	302
3	YB19-008-2-1-03	19041302-2	293	28	YB19-008-2-1-28	19041302-2	311
4	YB19-008-2-1-04	19041302-2	302	29	YB19-008-2-1-29	19041302-2	302
5	YB19-008-2-1-05	19041302-2	311	30	YB19-008-2-1-30	19041302-2	302
6	YB19-008-2-1-06	19041302-2	302	31	YB19-008-2-1-31	19041302-2	307
7	YB19-008-2-1-07	19041302-2	302	32	YB19-008-2-1-32	19041302-2	296
8	YB19-008-2-1-08	19041302-2	293	33	YB19-008-2-1-33	19041302-2	293
9	YB19-008-2-1-09	19041302-2	311	34	YB19-008-2-1-34	19041302-2	302
10	YB19-008-2-1-10	19041302-2	307	35	YB19-008-2-1-35	19041302-2	293
11	YB19-008-2-1-11	19041302-2	302	36	YB19-008-2-1-36	19041302-2	311
12	YB19-008-2-1-12	19041302-2	302	37	YB19-008-2-1-37	19041302-2	296
13	YB19-008-2-1-13	19041302-2	293	38	YB19-008-2-1-38	19041302-2	307
14	YB19-008-2-1-14	19041302-2	296	39	YB19-008-2-1-39	19041302-2	302
15	YB19-008-2-1-15	19041302-2	296	40	YB19-008-2-1-40	19041302-2	296
16	YB19-008-2-1-16	19041302-2	293	41	YB19-008-2-1-41	19041302-2	307
17	YB19-008-2-1-17	19041302-2	302	42	YB19-008-2-1-42	19041302-2	293
18	YB19-008-2-1-18	19041302-2	302	43	YB19-008-2-1-43	19041302-2	311
19	YB19-008-2-1-19	19041302-2	311	44	YB19-008-2-1-44	19041302-2	302
20	YB19-008-2-1-20	19041302-2	307	45	YB19-008-2-1-45	19041302-2	293
21	YB19-008-2-1-21	19041302-2	302	46	YB19-008-2-1-46	19041302-2	311
22	YB19-008-2-1-22	19041302-2	311	47	YB19-008-2-1-47	19041302-2	296
23	YB19-008-2-1-23	19041302-2	296	48	YB19-008-2-1-48	19041302-2	293
24	YB19-008-2-1-24	19041302-2	293	49	YB19-008-2-1-49	19041302-2	311
25	YB19-008-2-1-25	19041302-2	293	50	YB19-008-2-1-50	19041302-2	302

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-1-01	19041302-2	Acceptable	26	YB19-008-2-1-26	19041302-2	Acceptable
2	YB19-008-2-1-02	19041302-2	Acceptable	27	YB19-008-2-1-27	19041302-2	Acceptable
3	YB19-008-2-1-03	19041302-2	Acceptable	28	YB19-008-2-1-28	19041302-2	Acceptable
4	YB19-008-2-1-04	19041302-2	Acceptable	29	YB19-008-2-1-29	19041302-2	Acceptable
5	YB19-008-2-1-05	19041302-2	Acceptable	30	YB19-008-2-1-30	19041302-2	Acceptable
6	YB19-008-2-1-06	19041302-2	Acceptable	31	YB19-008-2-1-31	19041302-2	Acceptable
7	YB19-008-2-1-07	19041302-2	Acceptable	32	YB19-008-2-1-32	19041302-2	Acceptable
8	YB19-008-2-1-08	19041302-2	Acceptable	33	YB19-008-2-1-33	19041302-2	Acceptable
9	YB19-008-2-1-09	19041302-2	Acceptable	34	YB19-008-2-1-34	19041302-2	Acceptable
10	YB19-008-2-1-10	19041302-2	Acceptable	35	YB19-008-2-1-35	19041302-2	Acceptable
11	YB19-008-2-1-11	19041302-2	Acceptable	36	YB19-008-2-1-36	19041302-2	Acceptable
12	YB19-008-2-1-12	19041302-2	Acceptable	37	YB19-008-2-1-37	19041302-2	Acceptable
13	YB19-008-2-1-13	19041302-2	Acceptable	38	YB19-008-2-1-38	19041302-2	Acceptable
14	YB19-008-2-1-14	19041302-2	Acceptable	39	YB19-008-2-1-39	19041302-2	Acceptable
15	YB19-008-2-1-15	19041302-2	Acceptable	40	YB19-008-2-1-40	19041302-2	Acceptable
16	YB19-008-2-1-16	19041302-2	Acceptable	41	YB19-008-2-1-41	19041302-2	Acceptable
17	YB19-008-2-1-17	19041302-2	Acceptable	42	YB19-008-2-1-42	19041302-2	Acceptable
18	YB19-008-2-1-18	19041302-2	Acceptable	43	YB19-008-2-1-43	19041302-2	Acceptable
19	YB19-008-2-1-19	19041302-2	Acceptable	44	YB19-008-2-1-44	19041302-2	Acceptable
20	YB19-008-2-1-20	19041302-2	Acceptable	45	YB19-008-2-1-45	19041302-2	Acceptable
21	YB19-008-2-1-21	19041302-2	Acceptable	46	YB19-008-2-1-46	19041302-2	Acceptable
22	YB19-008-2-1-22	19041302-2	Acceptable	47	YB19-008-2-1-47	19041302-2	Acceptable
23	YB19-008-2-1-23	19041302-2	Acceptable	48	YB19-008-2-1-48	19041302-2	Acceptable
24	YB19-008-2-1-24	19041302-2	Acceptable	49	YB19-008-2-1-49	19041302-2	Acceptable
25	YB19-008-2-1-25	19041302-2	Acceptable	50	YB19-008-2-1-50	19041302-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P ϕ 10	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2019.6	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-1-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WF415x31502M	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO FLANGE 4 1/16" 15M - 3" 1502 MALE			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-1-01	19041302-2	Acceptable	26	YB19-008-2-1-26	19041302-2	Acceptable
2	YB19-008-2-1-02	19041302-2	Acceptable	27	YB19-008-2-1-27	19041302-2	Acceptable
3	YB19-008-2-1-03	19041302-2	Acceptable	28	YB19-008-2-1-28	19041302-2	Acceptable
4	YB19-008-2-1-04	19041302-2	Acceptable	29	YB19-008-2-1-29	19041302-2	Acceptable
5	YB19-008-2-1-05	19041302-2	Acceptable	30	YB19-008-2-1-30	19041302-2	Acceptable
6	YB19-008-2-1-06	19041302-2	Acceptable	31	YB19-008-2-1-31	19041302-2	Acceptable
7	YB19-008-2-1-07	19041302-2	Acceptable	32	YB19-008-2-1-32	19041302-2	Acceptable
8	YB19-008-2-1-08	19041302-2	Acceptable	33	YB19-008-2-1-33	19041302-2	Acceptable
9	YB19-008-2-1-09	19041302-2	Acceptable	34	YB19-008-2-1-34	19041302-2	Acceptable
10	YB19-008-2-1-10	19041302-2	Acceptable	35	YB19-008-2-1-35	19041302-2	Acceptable
11	YB19-008-2-1-11	19041302-2	Acceptable	36	YB19-008-2-1-36	19041302-2	Acceptable
12	YB19-008-2-1-12	19041302-2	Acceptable	37	YB19-008-2-1-37	19041302-2	Acceptable
13	YB19-008-2-1-13	19041302-2	Acceptable	38	YB19-008-2-1-38	19041302-2	Acceptable
14	YB19-008-2-1-14	19041302-2	Acceptable	39	YB19-008-2-1-39	19041302-2	Acceptable
15	YB19-008-2-1-15	19041302-2	Acceptable	40	YB19-008-2-1-40	19041302-2	Acceptable
16	YB19-008-2-1-16	19041302-2	Acceptable	41	YB19-008-2-1-41	19041302-2	Acceptable
17	YB19-008-2-1-17	19041302-2	Acceptable	42	YB19-008-2-1-42	19041302-2	Acceptable
18	YB19-008-2-1-18	19041302-2	Acceptable	43	YB19-008-2-1-43	19041302-2	Acceptable
19	YB19-008-2-1-19	19041302-2	Acceptable	44	YB19-008-2-1-44	19041302-2	Acceptable
20	YB19-008-2-1-20	19041302-2	Acceptable	45	YB19-008-2-1-45	19041302-2	Acceptable
21	YB19-008-2-1-21	19041302-2	Acceptable	46	YB19-008-2-1-46	19041302-2	Acceptable
22	YB19-008-2-1-22	19041302-2	Acceptable	47	YB19-008-2-1-47	19041302-2	Acceptable
23	YB19-008-2-1-23	19041302-2	Acceptable	48	YB19-008-2-1-48	19041302-2	Acceptable
24	YB19-008-2-1-24	19041302-2	Acceptable	49	YB19-008-2-1-49	19041302-2	Acceptable
25	YB19-008-2-1-25	19041302-2	Acceptable	50	YB19-008-2-1-50	19041302-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



REPORT INDEX

Purchase Order: YB19-008-2

Quantity: 50 EA

Shipment No. :

Shipment Date: 2018.01.23

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-2-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
417-10-071	50	1	0.43	0.62	0.29	0.005	0.017	0.15	0.05	0.18	1.04	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHAMPY J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
19041402-2	50	1	113 K	129 K	22.0	51		31;33;42		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 3 HRS	Austenitized:	880°C 3 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	19 °C	Start Temp:	19 °C
End Temp:	41 °C	End Temp:	41 °C
Temper:	660°C 5 HRS AIR	Temper:	660°C 5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-2-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-2-01	19041402-2	285	26	YB19-008-2-2-26	19041402-2	281
2	YB19-008-2-2-02	19041402-2	285	27	YB19-008-2-2-27	19041402-2	293
3	YB19-008-2-2-03	19041402-2	285	28	YB19-008-2-2-28	19041402-2	285
4	YB19-008-2-2-04	19041402-2	291	29	YB19-008-2-2-29	19041402-2	285
5	YB19-008-2-2-05	19041402-2	283	30	YB19-008-2-2-30	19041402-2	291
6	YB19-008-2-2-06	19041402-2	286	31	YB19-008-2-2-31	19041402-2	291
7	YB19-008-2-2-07	19041402-2	286	32	YB19-008-2-2-32	19041402-2	283
8	YB19-008-2-2-08	19041402-2	285	33	YB19-008-2-2-33	19041402-2	283
9	YB19-008-2-2-09	19041402-2	281	34	YB19-008-2-2-34	19041402-2	293
10	YB19-008-2-2-10	19041402-2	281	35	YB19-008-2-2-35	19041402-2	293
11	YB19-008-2-2-11	19041402-2	293	36	YB19-008-2-2-36	19041402-2	291
12	YB19-008-2-2-12	19041402-2	285	37	YB19-008-2-2-37	19041402-2	286
13	YB19-008-2-2-13	19041402-2	285	38	YB19-008-2-2-38	19041402-2	283
14	YB19-008-2-2-14	19041402-2	283	39	YB19-008-2-2-39	19041402-2	281
15	YB19-008-2-2-15	19041402-2	291	40	YB19-008-2-2-40	19041402-2	291
16	YB19-008-2-2-16	19041402-2	291	41	YB19-008-2-2-41	19041402-2	291
17	YB19-008-2-2-17	19041402-2	283	42	YB19-008-2-2-42	19041402-2	285
18	YB19-008-2-2-18	19041402-2	283	43	YB19-008-2-2-43	19041402-2	281
19	YB19-008-2-2-19	19041402-2	291	44	YB19-008-2-2-44	19041402-2	281
20	YB19-008-2-2-20	19041402-2	291	45	YB19-008-2-2-45	19041402-2	285
21	YB19-008-2-2-21	19041402-2	285	46	YB19-008-2-2-46	19041402-2	296
22	YB19-008-2-2-22	19041402-2	285	47	YB19-008-2-2-47	19041402-2	293
23	YB19-008-2-2-23	19041402-2	293	48	YB19-008-2-2-48	19041402-2	285
24	YB19-008-2-2-24	19041402-2	293	49	YB19-008-2-2-49	19041402-2	283
25	YB19-008-2-2-25	19041402-2	281	50	YB19-008-2-2-50	19041402-2	286

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-2-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-2-01	19041402-2	Acceptable	26	YB19-008-2-2-26	19041402-2	Acceptable
2	YB19-008-2-2-02	19041402-2	Acceptable	27	YB19-008-2-2-27	19041402-2	Acceptable
3	YB19-008-2-2-03	19041402-2	Acceptable	28	YB19-008-2-2-28	19041402-2	Acceptable
4	YB19-008-2-2-04	19041402-2	Acceptable	29	YB19-008-2-2-29	19041402-2	Acceptable
5	YB19-008-2-2-05	19041402-2	Acceptable	30	YB19-008-2-2-30	19041402-2	Acceptable
6	YB19-008-2-2-06	19041402-2	Acceptable	31	YB19-008-2-2-31	19041402-2	Acceptable
7	YB19-008-2-2-07	19041402-2	Acceptable	32	YB19-008-2-2-32	19041402-2	Acceptable
8	YB19-008-2-2-08	19041402-2	Acceptable	33	YB19-008-2-2-33	19041402-2	Acceptable
9	YB19-008-2-2-09	19041402-2	Acceptable	34	YB19-008-2-2-34	19041402-2	Acceptable
10	YB19-008-2-2-10	19041402-2	Acceptable	35	YB19-008-2-2-35	19041402-2	Acceptable
11	YB19-008-2-2-11	19041402-2	Acceptable	36	YB19-008-2-2-36	19041402-2	Acceptable
12	YB19-008-2-2-12	19041402-2	Acceptable	37	YB19-008-2-2-37	19041402-2	Acceptable
13	YB19-008-2-2-13	19041402-2	Acceptable	38	YB19-008-2-2-38	19041402-2	Acceptable
14	YB19-008-2-2-14	19041402-2	Acceptable	39	YB19-008-2-2-39	19041402-2	Acceptable
15	YB19-008-2-2-15	19041402-2	Acceptable	40	YB19-008-2-2-40	19041402-2	Acceptable
16	YB19-008-2-2-16	19041402-2	Acceptable	41	YB19-008-2-2-41	19041402-2	Acceptable
17	YB19-008-2-2-17	19041402-2	Acceptable	42	YB19-008-2-2-42	19041402-2	Acceptable
18	YB19-008-2-2-18	19041402-2	Acceptable	43	YB19-008-2-2-43	19041402-2	Acceptable
19	YB19-008-2-2-19	19041402-2	Acceptable	44	YB19-008-2-2-44	19041402-2	Acceptable
20	YB19-008-2-2-20	19041402-2	Acceptable	45	YB19-008-2-2-45	19041402-2	Acceptable
21	YB19-008-2-2-21	19041402-2	Acceptable	46	YB19-008-2-2-46	19041402-2	Acceptable
22	YB19-008-2-2-22	19041402-2	Acceptable	47	YB19-008-2-2-47	19041402-2	Acceptable
23	YB19-008-2-2-23	19041402-2	Acceptable	48	YB19-008-2-2-48	19041402-2	Acceptable
24	YB19-008-2-2-24	19041402-2	Acceptable	49	YB19-008-2-2-49	19041402-2	Acceptable
25	YB19-008-2-2-25	19041402-2	Acceptable	50	YB19-008-2-2-50	19041402-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2019.6	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-2-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WP31502T	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110K	Coating:	Red
Description:	WECO PLUG 3" 1502 THDS			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-2-01	19041402-2	Acceptable	26	YB19-008-2-2-26	19041402-2	Acceptable
2	YB19-008-2-2-02	19041402-2	Acceptable	27	YB19-008-2-2-27	19041402-2	Acceptable
3	YB19-008-2-2-03	19041402-2	Acceptable	28	YB19-008-2-2-28	19041402-2	Acceptable
4	YB19-008-2-2-04	19041402-2	Acceptable	29	YB19-008-2-2-29	19041402-2	Acceptable
5	YB19-008-2-2-05	19041402-2	Acceptable	30	YB19-008-2-2-30	19041402-2	Acceptable
6	YB19-008-2-2-06	19041402-2	Acceptable	31	YB19-008-2-2-31	19041402-2	Acceptable
7	YB19-008-2-2-07	19041402-2	Acceptable	32	YB19-008-2-2-32	19041402-2	Acceptable
8	YB19-008-2-2-08	19041402-2	Acceptable	33	YB19-008-2-2-33	19041402-2	Acceptable
9	YB19-008-2-2-09	19041402-2	Acceptable	34	YB19-008-2-2-34	19041402-2	Acceptable
10	YB19-008-2-2-10	19041402-2	Acceptable	35	YB19-008-2-2-35	19041402-2	Acceptable
11	YB19-008-2-2-11	19041402-2	Acceptable	36	YB19-008-2-2-36	19041402-2	Acceptable
12	YB19-008-2-2-12	19041402-2	Acceptable	37	YB19-008-2-2-37	19041402-2	Acceptable
13	YB19-008-2-2-13	19041402-2	Acceptable	38	YB19-008-2-2-38	19041402-2	Acceptable
14	YB19-008-2-2-14	19041402-2	Acceptable	39	YB19-008-2-2-39	19041402-2	Acceptable
15	YB19-008-2-2-15	19041402-2	Acceptable	40	YB19-008-2-2-40	19041402-2	Acceptable
16	YB19-008-2-2-16	19041402-2	Acceptable	41	YB19-008-2-2-41	19041402-2	Acceptable
17	YB19-008-2-2-17	19041402-2	Acceptable	42	YB19-008-2-2-42	19041402-2	Acceptable
18	YB19-008-2-2-18	19041402-2	Acceptable	43	YB19-008-2-2-43	19041402-2	Acceptable
19	YB19-008-2-2-19	19041402-2	Acceptable	44	YB19-008-2-2-44	19041402-2	Acceptable
20	YB19-008-2-2-20	19041402-2	Acceptable	45	YB19-008-2-2-45	19041402-2	Acceptable
21	YB19-008-2-2-21	19041402-2	Acceptable	46	YB19-008-2-2-46	19041402-2	Acceptable
22	YB19-008-2-2-22	19041402-2	Acceptable	47	YB19-008-2-2-47	19041402-2	Acceptable
23	YB19-008-2-2-23	19041402-2	Acceptable	48	YB19-008-2-2-48	19041402-2	Acceptable
24	YB19-008-2-2-24	19041402-2	Acceptable	49	YB19-008-2-2-49	19041402-2	Acceptable
25	YB19-008-2-2-25	19041402-2	Acceptable	50	YB19-008-2-2-50	19041402-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		



REPORT INDEX

Purchase Order: YB19-008-2

Quantity: 50 EA

Shipment No. :

Shipment Date: 2019.01.23

[illegible]



C&W International Fabricators

METALLURGICAL TEST CERTIFICATE

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

TEST CONDITION

Test Bar Size:	QTC, 4" x 4" x 8"	Bar Di:	12.7 mm (0.5")
Melt Practice	EF + LF + VD	Reduction Ratio Min:	4:1
Yield Stress	0.2% offset	Gauge Length	50.8mm

CHEMICAL COMPOSITION

Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.35	0.60	0.15					0.15	0.80	0.20
Spec Max			0.43	1.00	0.30	0.025	0.025	0.50		0.25	1.10	0.30
8308430M	50	1	0.41	0.89	0.26	0.003	0.016	0.03	0.03	0.20	1.00	

MECHANICAL COMPOSITION

Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mmX10mm CHARPY J (ft. lb) At -46° c	Minimum Laterl	Shear Fraction
Spec Min			110K	125K	18.0	35.0	280	27J		
Spec Max							320			
18122820-2	50	1	115 K	129 K	20.5	52		31;33;45		

HEAT TREATMENT

Forgings		Test Bar (OTC)	
Normalized:		Normalized:	
Austenitized:	880°C 2.5 HRS	Austenitized:	880°C 2.5 HRS
Quenchant:	OIL	Quenchant:	OIL
Start Temp:	25 °C	Start Temp:	25 °C
End Temp:	39 °C	End Temp:	39 °C
Temper:	660°C 5 HRS AIR	Temper:	660°C 5 HRS AIR

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.

Inspected by:	LIU YONG YOU	Approved by:	XU YAN
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C&W International Fabricators

Hardness Test Report

Serial No:	YB19-008-2-3-01...50			PO# // Item	YB19-008		Date:	2019-01-23	
Part No:	WN31502			API Monogram	YES		Report#:	20190503	
Specification	API Spec 6A/LU PSL3 PR1			Material:	4140 110k		Coating:	Red	
Description:	WECO NUT - 3" 1502						Qty:	50 EA	

Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	YB19-008-2-3-01	18122820-2	302	26	YB19-008-2-3-26	18122820-2	302
2	YB19-008-2-3-02	18122820-2	293	27	YB19-008-2-3-27	18122820-2	311
3	YB19-008-2-3-03	18122820-2	302	28	YB19-008-2-3-28	18122820-2	311
4	YB19-008-2-3-04	18122820-2	320	29	YB19-008-2-3-29	18122820-2	293
5	YB19-008-2-3-05	18122820-2	320	30	YB19-008-2-3-30	18122820-2	320
6	YB19-008-2-3-06	18122820-2	311	31	YB19-008-2-3-31	18122820-2	311
7	YB19-008-2-3-07	18122820-2	320	32	YB19-008-2-3-32	18122820-2	302
8	YB19-008-2-3-08	18122820-2	302	33	YB19-008-2-3-33	18122820-2	302
9	YB19-008-2-3-09	18122820-2	302	34	YB19-008-2-3-34	18122820-2	302
10	YB19-008-2-3-10	18122820-2	302	35	YB19-008-2-3-35	18122820-2	302
11	YB19-008-2-3-11	18122820-2	302	36	YB19-008-2-3-36	18122820-2	311
12	YB19-008-2-3-12	18122820-2	302	37	YB19-008-2-3-37	18122820-2	311
13	YB19-008-2-3-13	18122820-2	293	38	YB19-008-2-3-38	18122820-2	320
14	YB19-008-2-3-14	18122820-2	302	39	YB19-008-2-3-39	18122820-2	302
15	YB19-008-2-3-15	18122820-2	311	40	YB19-008-2-3-40	18122820-2	302
16	YB19-008-2-3-16	18122820-2	311	41	YB19-008-2-3-41	18122820-2	302
17	YB19-008-2-3-17	18122820-2	302	42	YB19-008-2-3-42	18122820-2	302
18	YB19-008-2-3-18	18122820-2	311	43	YB19-008-2-3-43	18122820-2	311
19	YB19-008-2-3-19	18122820-2	293	44	YB19-008-2-3-44	18122820-2	320
20	YB19-008-2-3-20	18122820-2	320	45	YB19-008-2-3-45	18122820-2	320
21	YB19-008-2-3-21	18122820-2	302	46	YB19-008-2-3-46	18122820-2	302
22	YB19-008-2-3-22	18122820-2	311	47	YB19-008-2-3-47	18122820-2	302
23	YB19-008-2-3-23	18122820-2	311	48	YB19-008-2-3-48	18122820-2	302
24	YB19-008-2-3-24	18122820-2	302	49	YB19-008-2-3-49	18122820-2	293
25	YB19-008-2-3-25	18122820-2	311	50	YB19-008-2-3-50	18122820-2	302

Sketch:

Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm		
Acceptable Hardness	197HBW-235HBW	Approved by:	Inspected by:
Judgments:	[V] Conform	XU YAN	LIU YONG YOU
	[] Do not conform		



C&W International Fabricators

ULTRASONIC EXAMINATION REPORT

Serial No:	YB19-008-2-3-01... 50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-3-01	18122820-2	Acceptable	26	YB19-008-2-3-26	18122820-2	Acceptable
2	YB19-008-2-3-02	18122820-2	Acceptable	27	YB19-008-2-3-27	18122820-2	Acceptable
3	YB19-008-2-3-03	18122820-2	Acceptable	28	YB19-008-2-3-28	18122820-2	Acceptable
4	YB19-008-2-3-04	18122820-2	Acceptable	29	YB19-008-2-3-29	18122820-2	Acceptable
5	YB19-008-2-3-05	18122820-2	Acceptable	30	YB19-008-2-3-30	18122820-2	Acceptable
6	YB19-008-2-3-06	18122820-2	Acceptable	31	YB19-008-2-3-31	18122820-2	Acceptable
7	YB19-008-2-3-07	18122820-2	Acceptable	32	YB19-008-2-3-32	18122820-2	Acceptable
8	YB19-008-2-3-08	18122820-2	Acceptable	33	YB19-008-2-3-33	18122820-2	Acceptable
9	YB19-008-2-3-09	18122820-2	Acceptable	34	YB19-008-2-3-34	18122820-2	Acceptable
10	YB19-008-2-3-10	18122820-2	Acceptable	35	YB19-008-2-3-35	18122820-2	Acceptable
11	YB19-008-2-3-11	18122820-2	Acceptable	36	YB19-008-2-3-36	18122820-2	Acceptable
12	YB19-008-2-3-12	18122820-2	Acceptable	37	YB19-008-2-3-37	18122820-2	Acceptable
13	YB19-008-2-3-13	18122820-2	Acceptable	38	YB19-008-2-3-38	18122820-2	Acceptable
14	YB19-008-2-3-14	18122820-2	Acceptable	39	YB19-008-2-3-39	18122820-2	Acceptable
15	YB19-008-2-3-15	18122820-2	Acceptable	40	YB19-008-2-3-40	18122820-2	Acceptable
16	YB19-008-2-3-16	18122820-2	Acceptable	41	YB19-008-2-3-41	18122820-2	Acceptable
17	YB19-008-2-3-17	18122820-2	Acceptable	42	YB19-008-2-3-42	18122820-2	Acceptable
18	YB19-008-2-3-18	18122820-2	Acceptable	43	YB19-008-2-3-43	18122820-2	Acceptable
19	YB19-008-2-3-19	18122820-2	Acceptable	44	YB19-008-2-3-44	18122820-2	Acceptable
20	YB19-008-2-3-20	18122820-2	Acceptable	45	YB19-008-2-3-45	18122820-2	Acceptable
21	YB19-008-2-3-21	18122820-2	Acceptable	46	YB19-008-2-3-46	18122820-2	Acceptable
22	YB19-008-2-3-22	18122820-2	Acceptable	47	YB19-008-2-3-47	18122820-2	Acceptable
23	YB19-008-2-3-23	18122820-2	Acceptable	48	YB19-008-2-3-48	18122820-2	Acceptable
24	YB19-008-2-3-24	18122820-2	Acceptable	49	YB19-008-2-3-49	18122820-2	Acceptable
25	YB19-008-2-3-25	18122820-2	Acceptable	50	YB19-008-2-3-50	18122820-2	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam. Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	XU YAN	XU YAN
Equipment:CTS-2020	Couplant: OIL	Level as per UT II	Level as per UT III
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2019.6	Test Gain:20db + 5 db		



C&W International Fabricators

Magnetic Particle Inspection Report

Serial No:	YB19-008-2-3-01...50	PO# // Item	YB19-008	Date:	2019-01-23
Part No:	WN31502	API Monogram	YES	Report#:	20190503
Specification	API Spec 6A/LU PSL3 PR1	Material:	4140 110k	Coating:	Red
Description:	WECO NUT - 3" 1502			Qty:	50 EA

Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	YB19-008-2-3-01	18122820-2	Acceptable	26	YB19-008-2-3-26	18122820-2	Acceptable
2	YB19-008-2-3-02	18122820-2	Acceptable	27	YB19-008-2-3-27	18122820-2	Acceptable
3	YB19-008-2-3-03	18122820-2	Acceptable	28	YB19-008-2-3-28	18122820-2	Acceptable
4	YB19-008-2-3-04	18122820-2	Acceptable	29	YB19-008-2-3-29	18122820-2	Acceptable
5	YB19-008-2-3-05	18122820-2	Acceptable	30	YB19-008-2-3-30	18122820-2	Acceptable
6	YB19-008-2-3-06	18122820-2	Acceptable	31	YB19-008-2-3-31	18122820-2	Acceptable
7	YB19-008-2-3-07	18122820-2	Acceptable	32	YB19-008-2-3-32	18122820-2	Acceptable
8	YB19-008-2-3-08	18122820-2	Acceptable	33	YB19-008-2-3-33	18122820-2	Acceptable
9	YB19-008-2-3-09	18122820-2	Acceptable	34	YB19-008-2-3-34	18122820-2	Acceptable
10	YB19-008-2-3-10	18122820-2	Acceptable	35	YB19-008-2-3-35	18122820-2	Acceptable
11	YB19-008-2-3-11	18122820-2	Acceptable	36	YB19-008-2-3-36	18122820-2	Acceptable
12	YB19-008-2-3-12	18122820-2	Acceptable	37	YB19-008-2-3-37	18122820-2	Acceptable
13	YB19-008-2-3-13	18122820-2	Acceptable	38	YB19-008-2-3-38	18122820-2	Acceptable
14	YB19-008-2-3-14	18122820-2	Acceptable	39	YB19-008-2-3-39	18122820-2	Acceptable
15	YB19-008-2-3-15	18122820-2	Acceptable	40	YB19-008-2-3-40	18122820-2	Acceptable
16	YB19-008-2-3-16	18122820-2	Acceptable	41	YB19-008-2-3-41	18122820-2	Acceptable
17	YB19-008-2-3-17	18122820-2	Acceptable	42	YB19-008-2-3-42	18122820-2	Acceptable
18	YB19-008-2-3-18	18122820-2	Acceptable	43	YB19-008-2-3-43	18122820-2	Acceptable
19	YB19-008-2-3-19	18122820-2	Acceptable	44	YB19-008-2-3-44	18122820-2	Acceptable
20	YB19-008-2-3-20	18122820-2	Acceptable	45	YB19-008-2-3-45	18122820-2	Acceptable
21	YB19-008-2-3-21	18122820-2	Acceptable	46	YB19-008-2-3-46	18122820-2	Acceptable
22	YB19-008-2-3-22	18122820-2	Acceptable	47	YB19-008-2-3-47	18122820-2	Acceptable
23	YB19-008-2-3-23	18122820-2	Acceptable	48	YB19-008-2-3-48	18122820-2	Acceptable
24	YB19-008-2-3-24	18122820-2	Acceptable	49	YB19-008-2-3-49	18122820-2	Acceptable
25	YB19-008-2-3-25	18122820-2	Acceptable	50	YB19-008-2-3-50	18122820-2	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: XU YAN Level as per MT II	Approved by: XU YAN Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra $\leq 6.3\mu\text{m}$	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	$\geq 1000\text{Uw/C m}^2$		