QW-484 WELDE	R/WELDING	OPERATOR PE	RFORMA	NCE QUAI	LIFICAT]	ONS (WPQ)
		ion IX, ASME Bo				, _,
Welder's Name Bobby Acke	r	Clock number	0435	Stamp no.	N/A	
Welding process(es) used	FCAW		_ Type(s) _		tomatic	
31 () —			(Au	tomatic, Manua		r Semi-Auto.)
dentification of WPS followe	d by welder during	welding of test coupo				
Base material(s) welded3				ckness	.109"	
Filler metal specification (SFA) A5.22	110		.107	
mer metal specification (SF)	1) Class (QW-404))				
Manual or S	amiautamatia Varia	bles for Fook Droses (4	OW 250)	A	· 1	D O P#-1
Racking (metal, weld n	emiautomatic varia	bles for Each Process (on the sides, flux, etc.) (QW-	(W-330) (402)	Actual V		Range Qualified
ASME P-No. 8	to ASME D.No. 9	(QW-403)	-40 <i>2)</i>	w/o Back	uig	w/o Backing
$\begin{array}{c} ASVIE 1-NO. \underline{} \\ \hline () Plate (X) Pit \end{array}$	w Abivie i -ivuo	nino) (OW 403)		P8 1 1/2" o.		P8
Base metal thickness –	OFW (OW-403)	pipe) (QW-403)		.109"	.u	1"o.d unlimited .055"218"
Filler metal F-No. (QV				6		6
		cored) – GTA/PAW (QV	V 404)	FCAW		
Consumable insert for	TAW and DAW (C	W 404)	v-404)			FCAW
Weld deposit thickness				N/A .109"		N/A
Welding position (1G,		ccss (QW-404)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.055"218"
Progression (uphill/dov	od, etc.) (QW-405)			1G		1G, 1F
		fuel and for OEW (OW)	400)	N/A		N/A
		fuel gas for OFW (QW-	408)	N/A		N/A
GMAW transfer mode GTAW welding curren	(QW-409)	400)		N/A		N/A
GIAW weiding curren	t type/potarity (Qw-	409)		<u>N/A</u>		N/A
A water word in /B/Fa all in a	**************************************	641 D	NET 260\	A 4 1 1 1 1 1		
Direct/remote visual co	e weiding variables	for the Process Used (C	(w-300)	Actual V	aiues	Range Qualified
				N/A		N/A
Automatic voltage cont				N/A		N/A
Automatic joint trackin				N/A		N/A
Welding position (1G,	og, etc.)			N/A		N/A
Consumable insert	. 1 11 10 1	1 1 0		N/A		N/A
Backing (metal, weld m		th sides, flux, etc.)		N/A	1011 W 1011 W 1010	<u>N/A</u>
Multiple or single pass				N/A		N/A
Change from automatic				N/A		N/A
Filler for EBW or LBW	1			N/A	-	N/A
Laser type				N/A		N/A
Drive type for FRW			N			N/A
Vacuum type for EBW				N/A		N/A
		Guided Bend Tes				
Guided Bend Test Type	() QW-462.2 (S		W-462.3(a)(Tra	ans. R&F) () QW-462.3(b) (Long. R&F)
Side		Pass				
Side		Pass				
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
isual examination results (QW-			7		****	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
adiographic test results (QW-30		N/A				
For alternative qualification of g		ography)				
llet Weld – Fracture testN			Length and	percent of defe		<u>'A</u> in.
acro test fusion N/A	Fillet leg siz	e N/A in x N	A in. (Concavity/conve	exityN	//A in.
elding test conducted by	Floyd Kiel 4K Tec	hnalogy Stylles	yel.			
echanical tests conducted by _	Trinity Metals Lab	CVI 941	20191 Laborate	ory test no9	010084	
		AND THE PARTY OF T				
e certify that the statements i	n this record are co	orrect and that the test	coupons were	prepared, weld	ded, and teste	ed in accordance with
	ASME Code.			- 1		
quirements of Section IX of the						
quirements of Section IX of the			Organization	Texas Manu	<u>ifacturing Co.</u>	, Inc.
equirements of Section IX of the			-			
equirements of Section IX of the part 1-24-09			-	Texas Manu		

QW-484 WELDE	R/WELDING O	PERATOI	R PERFORMA	NCE QUA	LIFICATI	ONS (WPQ)
(See	QW-301, Section	n IX, ASM	E Boiler and Pi	ressure Ve	essel Code)	
Welder's Name Christopher S						
Welding process(es) used	FCAW		Type(s)	Semi-A	utomatic	
canning process (cs) as co			(Au	itomatic, Man	ual, Machine, o	r Semi-Auto.)
Identification of WPS followed	d by welder during v	velding of test			,,	
				ickness	.109"	OPENIAL CONTINUED DE PENEDOS DE SERVE CONTINUES
Base material(s) welded 31 Filler metal specification (SFA	Class (OW-404)	A5 '	77		.102	
i mer mear specimeation (or 7)	(211 101)		<u> </u>			
Manual or Se	emiautomatic Variabl	les for Fach Pr	ncass (OW_350)	Actual	Voluge	Range Qualified
Backing (metal, weld m				w/o Bac		w/o Backing
ASME P-No. 8				P8	KIIIE	P8
	e (enter diameter, if pi		1403)	1 1/2"	o d	1"o.d unlimited
Base metal thickness – C		pe) (Q11-405)		.109"		.055"218"
Filler metal F-No. (QW				6		6
Filler metal product for		red) – GTA/PA	W (OW-404)	FCAW		FCAW
Consumable insert for C			" (Q" 101)	N/A		N/A
Weld deposit thickness				.109		.055"218"
Welding position (1G, 5		255 (211 101)		1G		1G, 1F
Progression (uphill/dow				N/A		N/A
Backing gas for GTAW		el gas for OFW	(OW-408)	N/A	N/A	
GMAW transfer mode		g	(411 100)	N/A		N/A
GTAW welding current)9)		N/A	- And and the Address of the Annual State of t	N/A
5	J1 -1					
Automatic/Machine	Welding Variables fo	or the Process I	Ised (OW-360)	Actual	Values	Range Qualified
Direct/remote visual con		or the riocess t	3564 (Q 11 500)	N/A	varues	N/A
Automatic voltage contr				N/A		N/A
Automatic joint tracking				N/A		N/A
Welding position (1G,				N/A		N/A
Consumable insert	,,			N/A	the same of the same specific transfer and the same same same same same same same sam	N/A
Backing (metal, weld m	etal, welded from both	sides, flux, etc.)	N/A	the state of the s	N/A
Multiple or single pass			•1	N/A		N/A
Change from automatic				N/A		N/A
Filler for EBW or LBW				N/A	Control of the Contro	N/A
Laser type				N/A	 	N/A
Drive type for FRW				N/A	N/A	
Vacuum type for EBW				N/A		N/A
•						The state of the s
		Guided Bo	end Test Results			
Guided Bend Test Type	() QW-462.2 (Sig	ie)	(X)QW-462.3(a)(Tr	ans, R&F)	() OW-462.3(b) (Long. R&F)
Side			Pass			//
Side			Pass		and the second of the style of the second of the second of	*****
Side			1 455	<u> </u>		
Visual examination results (QW-	302.4) Pass					
Radiographic test results (QW-30		N/A		4,04	and the section of th	
(For alternative qualification of g				-		
Fillet Weld – Fracture test N/		rapity)	I enoth and	d percent of de	efects N	/A in.
Macro test fusion N/A		N/A rinus		Concavity/cor		I/A in.
	Floyd Kiel 4K Tech		17/7/	Concavity/con		WZX III.
Mechanical tests conducted by		183≫ CWI	94120191 Laborat	ory test no	9010102	
	Will I	QC1	EXP. 12/09	.01) 1001 1101	7010102	
We certify that the statements is	n this record are con	ect and that th	ne test compons were	nrenared we	elded and test	ed in accordance with the
requirements of Section IX of the		reet and that th	ie test eoupons were	propurou, w	oraca, and wor	od in decordance with the
			Organization	Texas Ma	nufacturing Co.	Inc
			~15m112m1011			
Date 1-24-09			Ву			
	MANUEL.		- V			
			-			

QW-484 WELDER	WELDING OPERATO	R PERFORMA	NCE QUALIFICA	TIONS (WPQ)
(See O	W-301, Section IX, ASM	IE Boiler and Pi	ressure Vessel Code	e)
Welder's Name <u>Dallas Carter</u>	Clock num			,
Welding process(es) usedFO	CAW	Type(s)	Semi-Automatic	
		(Au	tomatic, Manual, Machine	c, or Semi-Auto.)
Identification of WPS followed b	welder during welding of test			,,
			ickness .109"	
Base material(s) welded 3161 Filler metal specification (SFA)	Class (OW-404) A5	22		And the state of t
in mot motal specification (Si 11)	(211 101)	· ////	h	
Manual or Sem	iautomatic Variables for Each Pi	rocess (OW-350)	Actual Values	Range Qualified
	al, welded from both sides, flux, etc		w/o Backing	w/o Backing
	ASME P-No. 8 (QV		P8	P8
() Plate (X) Pipe (enter diameter, if pipe) (QW-403)	,	1 1/2" o.d.	1"o.d unlimited
Base metal thickness - OF	W (QW-403)		.109"	.055"218"
Filler metal F-No. (QW-4			6	6
Filler metal product form ((solid/cored/flux-cored) - GTA/PA	W (QW-404)	FCAW	FCAW
Consumable insert for GT.			N/A	N/A
	each welding process (QW-404)		.109"	055"218"
Welding position (1G, 5G,			1G	1G, 1F
Progression (uphill/downh			N/A	N/A
	AW, or GMAW; fuel gas for OFW	/ (QW-408)	N/A	N/A
GMAW transfer mode (Q			N/A	N/A
GTAW welding current ty	pe/polarity (QW-409)		N/A	N/A
	elding Variables for the Process	Used (QW-360)	Actual Values	Range Qualified
Direct/remote visual contro			N/A	N/A
Automatic voltage control	(GIAW)		N/A	N/A
Automatic joint tracking	ata)		N/A	N/A
Welding position (1G, 5G Consumable insert	i, etc.)		N/A N/A	N/A N/A
	l, welded from both sides, flux, etc	~)	N/A N/A	
Multiple or single pass per		·. <i>)</i>	N/A	N/A
Change from automatic to			N/A	N/A
Filler for EBW or LBW	macimic		N/A	N/A
Laser type			N/A	N/A
Drive type for FRW			N/A	N/A
Vacuum type for EBW			N/A	N/A
			and the second of the second o	
	Guided B	Bend Test Results		
Guided Bend Test Type	() QW-462.2 (Side)	(X)QW-462.3(a)(Tr	ans. R&F) () QW-462	2.3(b) (Long. R&F)
Side		Pass		
Side		Pass		
Visual examination results (QW-30)	2.4) Pass			
Radiographic test results (QW-304)				
(For alternative qualification of groo	ove welds by radiography)			
Fillet Weld - Fracture test N/A		Length an	d percent of defects	<u>N/A</u> in.
Macro test fusion N/A	Fillet leg size <u>N/A</u> in.	x <u>M/A</u> in.	Concavity/convexity	<u>N/A</u> in.
Welding test conducted by Fl		DEXIEL		
Mechanical tests conducted byT	rinity Metals Latinia CWI	94120191 Laborat	ory test no. <u>9010091</u>	
We certify that the statements in t				
		ine test' t őúpons were	prepared, welded, and to	ested in accordance with the
requirements of Section IX of the AS	SME Code.	<u> </u>	m	O. Tu
		Organization	Texas Manufacturing	Co., Inc.
Doto 1 24 00		D		
Date <u>1-24-09</u>	:	Ву		

QW-484 WELDER/WELDING OPE	ERATOR PER	RFORMANO	CE QUAI	LIFICATI	IONS (WPQ)
(See QW-301, Section I	X, ASME Boi	ler and Pres	sure Ves	sel Code)	
Welder's Name <u>Larry Dellinger</u>	Clock number	3274	Stamp no.	. <u>N/A</u>	
Welding process(es) used FCAW		Type(s)	Semi-Aut		
		(Autor	natic, Manua	l, Machine, o	r Semi-Auto.)
Identification of WPS followed by welder during weld	ling of test coupor	TM 004			•
			ness	.109"	
Filler metal specification (SFA) Class (QW-404)	A5.22				
					And the second s
Manual or Semiautomatic Variables fo	or Each Process (C	W-350)	Actual V	alues	Range Qualified
Backing (metal, weld metal, welded from both sid			w/o Backi	ing	w/o Backing
ASME P-No. 8 to ASME P-No. 8	(QW-403)		P8		P8
() Plate (X) Pipe (enter diameter, if pipe)	(QW-403)		1 1/2" o.	.d	1"o.d unlimited
Base metal thickness – OFW (QW-403)			.109"		.055"218"
Filler metal F-No. (QW-404)			6		6
Filler metal product form (solid/cored/flux-cored)		-404)	FCAW		FCAW
Consumable insert for GTAW and PAW (QW-40 Weld deposit thickness for each welding process			N/A .109"		N/A
Welding position (1G, 5G, etc.) (QW-405)	(QW-404)	•	.109* 1G		055"218" 1G, 1F
Progression (uphill/downhill) (QW-405)		•	N/A	-	N/A
Backing gas for GTAW, PAW, or GMAW; fuel gas	as for OFW (OW-4		N/A		
GMAW transfer mode (QW-409)	15 101 OI W (Q W 4		N/A		N/A
GTAW welding current type/polarity (QW-409)		•	N/A		N/A
		•			
Automatic/Machine Welding Variables for th	ne Process Used (O	W-360)	Actual V	alues	Range Qualified
Direct/remote visual control		,	N/A		N/A
Automatic voltage control (GTAW)			N/A		N/A
Automatic joint tracking			N/A		N/A
Welding position (1G, 5G, etc.)			N/A		N/A
Consumable insert			N/A	to a sign of the state of the s	N/A
Backing (metal, weld metal, welded from both sid	es, flux, etc.)	;	N/A		N/A
Multiple or single pass per side			N/A	and the second s	N/A
Change from automatic to machine			N/A		N/A
Filler for EBW or LBW		•	N/A		N/A
Laser type			<u>N/A</u> N/A		N/A N/A
	Drive type for FRW				
Vacuum type for EBW		•	N/A		N/A
	Guided Bend Tes	t Doculte			
Guided Bend Test Type () QW-462.2 (Side)		V-462.3(a)(Trans	D&E) () OW-462 36	b) (Long. R&F)
Side () Qw-402.2 (Side)	Pass	W-402.3(a)(11alls	s. Rai)) QW-402.3(b) (Long. R&I')
Side	Pass			,	
Suc	1 435				
Visual examination results (QW-302.4) Pass					
, , , , , , , , , , , , , , , , , , , ,	N/A				
(For alternative qualification of groove welds by radiograph					
Fillet Weld – Fracture test N/A	-J)	Length and p	ercent of def	ects N	/A in.
	V/A in. x N/		ncavity/conv		√A in.
Welding test conducted by Floyd Kiel 4K Technolo	gy SHOYO LULE				
Mechanical tests conducted by Trinity Metals I	QUI 9412019	11 Laboratory	test no. 9	010089	
	//	/no			
We certify that the statements in this record are correct	and that the test	coupons were pi	repared, welc	ded, and test	ed in accordance with the
requirements of Section IX of the ASME Code.					_
		Organization _	Texas Man	utacturing Co	., Inc.
Date 1.24.00		D _{v2}			
Date		By			

QW-484 WELDER/WELDING OPERATOR PE	RFORMAN	CE QUALIFICAT	TONS (WPQ)
(See QW-301, Section IX, ASME Bo	iler and Pre	essure Vessel Code))
Welder's Name Orville Aycox Clock number			
Welding process(es) used <u>FCAW</u>	Type(s)	Semi-Automatic	
	(Auto	omatic, Manual, Machine,	or Semi-Auto.)
Identification of WPS followed by welder during welding of test coupo			1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974
Base material(s) welded316L/316L	Thic	kness109"	
Base material(s) welded 316L/316L Filler metal specification (SFA) Class (QW-404) A5.22			and the dealers are not and a second a second and a second a second and a second a second and a second and a second and a
Manual or Semiautomatic Variables for Each Process (Actual Values	Range Qualified
Backing (metal, weld metal, welded from both sides, flux, etc.) (QW ASME P-No. 8 to ASME P-No. 8 (QW-403)	-402)	w/o Backing P8	w/o Backing P8
() Plate (X) Pipe (enter diameter, if pipe) (QW-403)		1 1/2" o.d.	1"o.d unlimited
Base metal thickness – OFW (QW-403)		.109"	.055"218"
Filler metal F-No. (QW-404)		6	6
Filler metal product form (solid/cored/flux-cored) – GTA/PAW (QV	W-404)	FCAW	FCAW
Consumable insert for GTAW and PAW (QW-404)	,	N/A	N/A
Weld deposit thickness for each welding process (QW-404)		.109"	.055"-,218"
Welding position (1G, 5G, etc.) (QW-405)		1G	1G, 1F
Progression (uphill/downhill) (QW-405)		N/A	N/A
Backing gas for GTAW, PAW, or GMAW; fuel gas for OFW (QW-	408)	N/A	N/A
GMAW transfer mode (QW-409)	,	N/A	N/A
GTAW welding current type/polarity (QW-409)		N/A	N/A
Automatic/Machine Welding Variables for the Process Used ((OW-360)	Actual Values	Range Qualified
Direct/remote visual control	- /	N/A	N/A
Automatic voltage control (GTAW)		N/A	N/A
Automatic joint tracking		N/A	N/A
Welding position (1G, 5G, etc.)		N/A	N/A
Consumable insert		N/A	N/A
Backing (metal, weld metal, welded from both sides, flux, etc.)		N/A	N/A
Multiple or single pass per side		N/A	N/A
Change from automatic to machine		N/A	N/A
Filler for EBW or LBW		N/A	N/A
Laser type		<u>N/A</u>	N/A
Drive type for FRW		N/A	N/A
Vacuum type for EBW		N/A	N/A
Guided Bend Te	et Results		
	W-462.3(a)(Tran	ns. R&F) () OW-462.3	(b) (Long. R&F)
Side Pass			(4) (-3-8-1001)
Side Pass			
Visual examination results (QW-302.4) Pass Radiographic test results (QW-304 and QW-305) N/A			
(For alternative qualification of groove welds by radiography)			
Fillet Weld – Fracture test N/A			N/A in.
Macro test fusion N/A Fillet leg size N/A in. x	//A in. Co	oncavity/convexity	<u>N/A</u> in.
Welding test conducted by Floyd Kiel 4K Technology Floyd (Mark)	· · · · · · · · · · · · · · · · · · ·	and the second s	
Mechanical tests conducted by Trinity Metals 1910 CWI 94120101	•	y test no. <u>9010085</u>	
We certify that the statements in this record are correct and that the test requirements of Section IX of the ASME Code.	coupons were p	prepared, welded, and tes	ted in accordance with the
•	Organization	Texas Manufacturing Co	o., Inc.
Date 1_24_00	D _v ,		
Date 1-24-09	Ву		

QW-484 WELDER	/WELDING OP	ERATOR	PERFORMAN	ICE QUA	LIFICA	TIONS (WPQ)
(See C	W-301, Section	IX, ASM	E Boiler and Pro	essure Ve	essel Code	e)
Welder's Name Wesley Eldred	ge	Clock numb	per7526	Stamp n	o. <u>N/A</u>	
Welding process(es) usedFo	CAW		Type(s)		utomatic	
				omatic, Man		, or Semi-Auto.)
Identification of WPS followed l	y welder during wel	ding of test of				,
				kness	.109"	
Base material(s) welded 316 Filler metal specification (SFA)	Class (QW-404)	A5.2	.2			
	iautomatic Variables	for Each Pro	cess (QW-350)	Actual w/o Bac	Values	Range Qualified w/o Backing
ASME P-No. 8 to	ASME P-No 8	OW)	-403)	P8	Kuig	P8
() Plate (X) Pipe (.00)	1 1/2"	1"o.d unlimited	
Base metal thickness – OF		(2 102)		.109"	.055"218"	
Filler metal F-No. (QW-4				6		6
Filler metal product form) – GTA/PAV	V (QW-404)	FCAW		FCAW
Consumable insert for GT	AW and PAW (QW-4	04)		N/A		N/A
Weld deposit thickness for		(QW-404)		.109	,,	.055"218"
Welding position (1G, 5G	, etc.) (QW-405)			1G		1G, 1F
Progression (uphill/downl			•	N/A		N/A
Backing gas for GTAW, P	'AW, or GMAW; fuel g	gas for OFW	(QW-408)	N/A		N/A
GMAW transfer mode (Q	(W-409)			N/A		N/A
GTAW welding current ty	pe/polarity (QW-409)			N/A		N/A
Automatic/Machine W Direct/remote visual contr		he Process U	sed (QW-360)	Actual N/A	Values	Range Qualified N/A
Automatic voltage control				N/A	*************************	N/A
Automatic joint tracking	()			N/A	Carlotte and the second section of the section of t	Ň/A
Welding position (1G, 50	i, etc.)			N/A		N/A
Consumable insert	•			N/A		N/A
Backing (metal, weld meta		des, flux, etc.))	N/A		N/A
Multiple or single pass per				N/A		N/A
Change from automatic to	machine			N/A		N/A
Filler for EBW or LBW			-	<u>N/A</u>		N/A
Laser type				N/A		N/A
Drive type for FRW				N/A	N/A	
Vacuum type for EBW				N/A		N/A
		Guided Be	nd Test Results			
Guided Bend Test Type	() QW-462.2 (Side)		(X)QW-462.3(a)(Tran	ns. R&F)	() QW-462.	3(b) (Long. R&F)
Side			Pass		· · · · · · · · · · · · · · · · · · ·	MM (Company) and the state of t
Side		l	Pass	i		
Visual examination results (QW-30 Radiographic test results (QW-304 (For alternative qualification of ground Fillet Weld – Fracture test N/A Macro test fusion N/A Welding test conducted by Fl Mechanical tests conducted by T	and QW-305) ove welds by radiograp Fillet leg size ovd Kiel 4K Techwoli	N/A in a	94120191 Laborator	oncavity/con	vexity	N/A in. N/A in.
We certify that the statements in requirements of Section IX of the As	this record are correct	and that the	EXP. 12/09			sted in accordance with the
			Organization	Texas Ma	nufacturing C	Co., Inc.
Date <u>1-24-09</u>	•		Ву		TANKAR TANKAR MARINI PERMANAN	