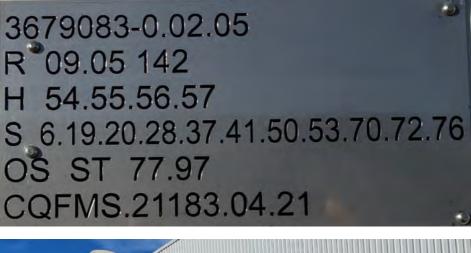


## **MANUFACTURING DATA REPORT**

*JOB NUMBER: 21183* 





**Client: CQ HOLDINGS** 

Purchase Order: N/A

**Description: RH340 BOOM** 

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 1 of 13	



### **Technical Document Report Index**

			ords vided
	Section	Yes	No
Work Instruction	1	~	
Client Purchase Order	2		✓
Quality Control Check Sheet	3	~	
Dimensional Check Sheet	4	*	
Welding & Pre-Heat Records	5	*	
NDT Records	6	*	
Machining Report	7	~	
Stress Relieving Report	8	<	
Fabrication Drawing	9	✓	
Material Certification	10	✓	
Photos	11	✓	

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 2 of 13	



# WORK INSTRUCTION

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 3 of 13	

## **Work Instruction**

## RH340 Boom Repair

JN: 21183

**CQ** Field

Mining Services

1. Remove and Inspect Top Chord plate. Inspect, prep and make fit for re-instating.

2. Remove side walls extending to either side of bulkhead areas.

3. Remove both transverse bulkheads and replace with new, including bulkhead stiffeners. Note: All welds to be blended. Effective throat thickness equivalent to 25mm Corner fillet.

4. Remove and Inspect top ear torque tube. Inspect, prep and make fit for re-instating.

5. Remove and replace top ears and bosses with BIS80 material or equivalent.

6. Reinstate side walls with new GR350PL.

7. Blend all internal bulkhead welds 300mm past any welded intersections. Effective throat thickness equivalent to 25mm Corner fillet.

8. Blend all new internal welds welds 300mm past any welded intersections. Effective throat thickness equivalent to 25mm Corner fillet.

9. Reinstate Top Chord.

10. Reinstate top torque tube.

11. NDT all welds.

12. Stress Relieve complete boom. Ex National Heat

13. Linebore all bush recepticles and replace all bushes. Ex JD Lineboring.

14. Paint - Oyster white, Lifting Points - Red.

**Photos:** Photos to be taken of all items being dispatched. Photos need to show condition of all items at time of dispatch. Photos also need to be suitable for use on website, etc (clean background, good light, show full job)."

**Dispatch Method:** Freight to site: As per client PO.

**Dispatch date to site:** As per client PO.



# **CLIENT PURCHASE ORDER**

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 4 of 13	



# **QUALITY CONTROL CHECK SHEET**

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 5 of 13	

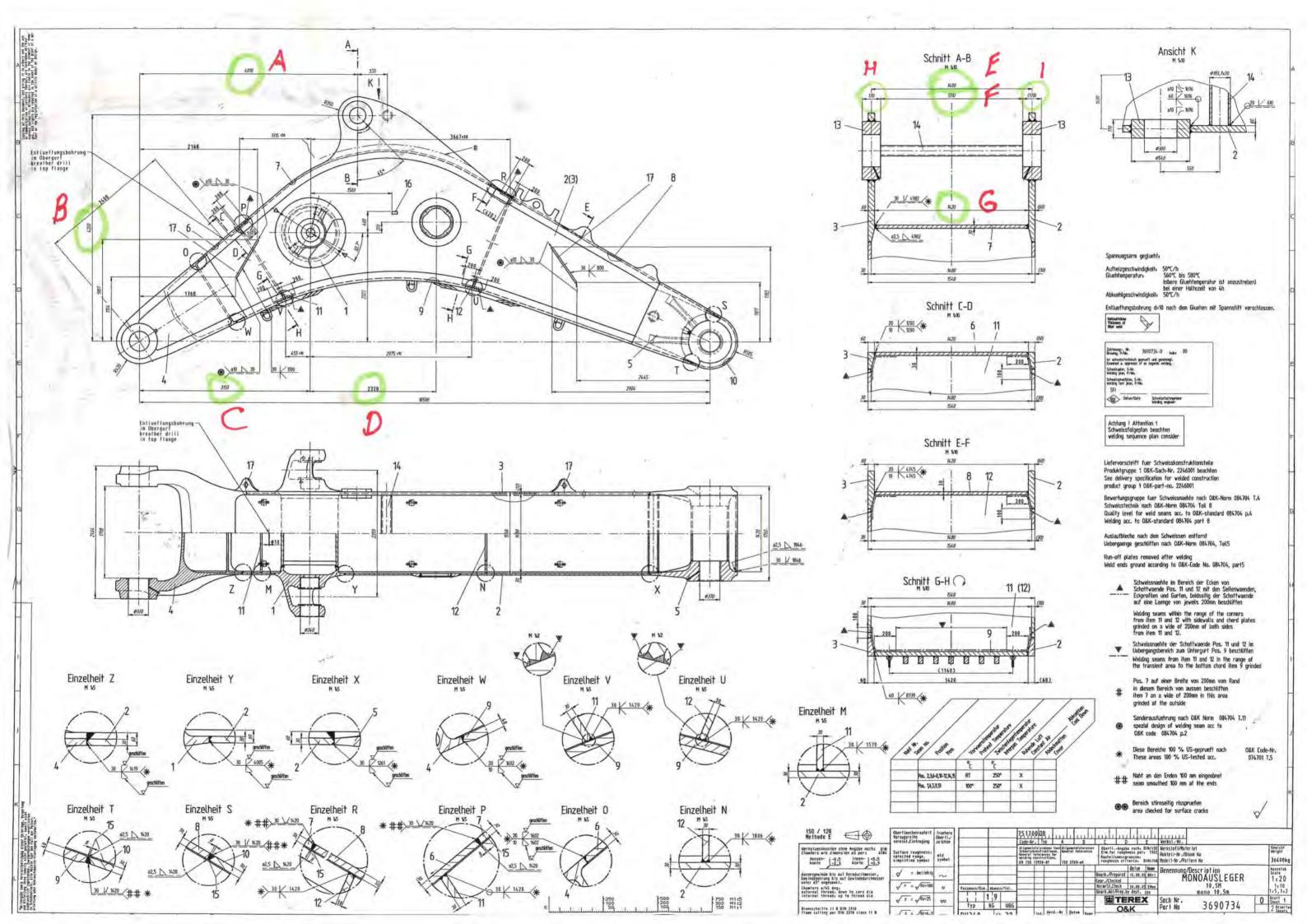
	Man	ufact	uring Quality Control	CUSTOM	ER	Customer PO No	
<b>CQField</b>	Ivian		uring Quality Control	CQ HOLD	INGS	N/A	
			Worksheet -	Customer Contact:		CQFMS Job No: 21183	
Mining Services	1			CQFMS Project Co-Ord:	S. Contor		
	-		and and and				
b Description:			Relevant Drawing No's:			Delivery Date:	
H340 Boom Refurb			TEREX 3690734	U.		13/07/1905	
	Tick	/					
ffice Use (To be completed prior to issuing to workshop)		-					
	YES	NO	Comment	Responsible Person	Sign	Date	
1 All relevant information and specification received	V			SWEAGEVame	mall	29-6-20	
2 Material ordered	V			SWEPLEName	man	30-6-20	
3 Job briefing with workshop personnel	V			MEAUEVame	m male	1-7-20	
4 Risk Assessment complete	V		JSA	NEALE	mant	1-7-20	
Vorkshop Use (Workshop Co-ordinator and personnel to complete)					the state	1. 1. 1.	
1 Items received correct from suppliers	/	1		NEALE	Mant	1- 74120	
2 Items processed correct (eg rolling and pressing)		· · · · · ·	NIA	NEAVE	m.millo	1-7-20	
3 Marking of hole location and size checked prior to drilling	/			NEALE	m. mg	1-7-20	
4 Tack items checked and tested for correct position	V			MESCHE	m-mall	1-7-26	
5 Items braced for distortion prior to welding	1			NEMOE	m.mill	1-7-20	
6 Welding information identified	V			NEAVE	n-mall2	1-7-20	
7 NDT Required	~		4×5	NEALFame	m.mcf	13-4-21	
8 HOLD POINT - Do not proceed until signed					-11/11/2	FO	
9 OK to start welding	1	-		NEALE	nml	1-7-20	
10 Welding complete, job dressed and free from spatter	1			NEAVE	nm	1-7-20	
11 All hole and item locations rechecked after welding	/			NEALE	m.ml	1-7-20	
12 Checked for distortion and fit-up	1		- 1.8	NANCE	minal	1-7-20	
13 HOLD POINT - Do not proceed until signed	1			, g, i = 2	mand		
14 Machining required-	V		JDCINF BORING	SuperALFe	in nil	14-4-21	
15 a. Specifications determined and provided to contractor	V			SUPERCE	matt	14-6-21	
14 Internal Lining required-	1			SUDDENDE	M. mill	116-4-21	
15 a. Specifications determined and provided to contractor	V	1.7		LELIK.	n. allo	14-4-21	
16 Surface treatment required-	1	1	ALLADINSOLUTIONS	SU NEALE	mimil	24-421	
17 a.Specifications determined and provided to contractor	V	12.41		SU NFAUE	ni mal	24-4-21	
18 Thickness, colour, quality checked	1			NERIE	n.nd	24-40-4121	
19 HOLD POINT - Do not proceed until signed	1				mel	7 7 1	
20 Photo's taken	1			WEACE	nime	6-57-21	
21 Job ready for dispatch	V			WEALE	mmbl	7-5-24	
22 Job completed and checked to quality standard	1			Name	Sien	Date	
23 Job loaded secure, items marked and protected				Name	Sign	Date	
24 Approved for release to the client							



# **DIMENSION CHECK SHEET**

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 6 of 13	

Client:			L	Job No:	711	83		De	scription:	RH	340 BC	OM RE	FURB	
2	Drawing No							Recor	Recorded Data					
Item	Target Dimension	Recorded Dimension	Inspected By	Date Inspected	Item	Target Dimension	Recorded Dimension	Inspected By	Date Inspected	Item	Target Dimension	Recorded Dimension	Inspected By	Date Inspected
A	4010	4010												
B	4200	4200	I		1									
C	3150	3150							1					
D	2320	2320		141										
Ē	1480	14,00						· · · · · · ·						
F	1310	1310												
G	1420	14.20												
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1	170	170												
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# WELDING/PREHEAT RECORDS

Document Name	Document ID	Version	Issue Date	Page	
Workshop MDR	F_QA-013	1	10.02.2019	Page 7 of 13	

# CQ Field

# WELDING & HEAT RECORD SHEET

Client:	(	Cq Field Minin	g	Job No:	21183		Date:			21/2	1/2020	9/3/21	
Job Description: RH340B Boom Refurbish				ent 1/H Sidewall			Drawing No:						
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp <sup>°</sup> C	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
	R/H sidewall		100°	123 0	1/3/21	8.00	265V	215 A		81ni			
Q174	11		1	127 %		(0:00	V	A					
	14			132°c		1(:00	v	А					
			5.7	122°c		(2:00	V	A					
	-			126° c	1	(:00	V V	A	21	V			
			100°c	120%	2/3/21	6:00	26.6 V	222 A		81ni			
			1	115°6		7:00	V	A					
				123° c		8.00	V	A					
-				133°c		9:00	V	A					
				130 %		12:00	V	A					
				137°C		(:00	v	A	-		-	-	<u> </u>
				122°C		2:00	v	A					
				119°c	V	3.00	V V	V A					
			100°c	123°0	3/3/21	10:00	27.0 V	238 A		81ni			
				128°		11:00	V	A					
	~			133°c 137°c		2:00	V V V	A					
-	V		v			Uncontrolled	V	A				Version No: 2	Page 1 of 1



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# **WELDING & HEAT RECORD SHEET**

Mining Services

Client:		Cq Field Minin	ng	Job No:	21183		Date:	24.02	-21		_
Job	Description:	RH340B Boo	m Refurbishm	ent Outsid	e Front s	ection (1/4)	Dray	wing No:			÷
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	
Diesel	L/H side window		(00°c	122°c	24-2-21	6:30	26.5 V	205 A		81n1	
CQ 1174	1		1	12000	1	8:00	v	A		1	
				128°c		9:00	v	А			
				132%		11:00	v	A	1		
				119°c		12:00	v	A			
				123°		(:.00	v	A			
				123°		2:00	v	A			
-			V	117%	V	3:00	vv	A V		V	
			100°	134°c	25.2.21	7:00	263 V	205 A		81ni	
			1	127°C	1	8:00	í V			1	
				133°c		9:00	V	A			
				122°c		(0:00	v	A			
				108°c		1.2:00	V	A			
				137 0		1:00	v	A			
						2:00	v	A			
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Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
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	Version No: 2	Page 1 of 1

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lient:	C	q Field Minin	g	Job No:	21183		Date:			22	-
Job	Description:	RH340B Boo	m Refurbishm	ent OUTSID	E FRON	T SECTION	Dra	wing No:	-		-
Nelder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp°c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	0
NU	L/H side while		100°c	125°c	22-2	630	28 V	235 A		81 NI	
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				.130°		\$ 30	V	A	Real of	14	
				122°c		9:30		A	A South	1	
				118%		11.30	v	A			
				138%		12:30	v	A			
				123°c"		1:30	v	A		-	
				129%		2:30	. v	A			Γ
		1	V	136°C	V	3:30	VV	V A	2	V	
			100 %	133°c	23.2	7:00	27.7 V	225 A	H.	81Ni	
		a cm	1	137°c		8:00	/ v	A		1	
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		2		127 °	a	11:00		A			
	100	t e		118°c		12:00	V	A			Ι
	<b>^</b>			122° (		1:00	V V	A			
1				125°C		2:00	V	A			
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	Version No: 2	Page 1 of 1

Client:		g Services q Field Minir	Sec.	Job No:	21183		Date:	5/3	21	21/1	11/
			m Refurbishm	Dlill	that 1	lig.	Drav	ving No:		-	
Welder ID		Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °C	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	0
	RHH Sidenall lig		100°C	1282	5/3/21	7.00	26.8 V	227A	_	dint	
	9		1	130%	//	8.00	1 V	/ A			
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Version No: 2	Page 1 of 1

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lient:		q Field Minin	ष m Refurbishm		Side ha	11	Drav	wing No:			-
		Weld Procedure	Recommended Preheat Temp °c	Actual Preheat Temp °C		Time Taken	Volts	Amps	Plant ID	Consumable Used	
Velder ID	Area Welded	No	100°C	116 %	2/3/21	7.00	27.1 V	237 A		BINI	
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_				136°L		10.00	V	A			
				132 %		11.00	V	A			
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				1272		1.00	v	A			
-				1342		2.00	v				
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Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
	Version No: 2	Page 1 of 1

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lient:	°	Cq Field Mini	ng	Job No:	21183	S.S.F	Date:	14	1	22	2-2-21	L	11.	
Job	Job Description: RH340B Boom Refurbishm		ent			Dra	Drawing No:					1 /		
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials	
133	between cours.	a second a s	150°	172°	10-3-21	7:30 am	27.V	120 A	R. C.	31N1-144	A		1	
ú 1.	<b>n</b> = 14	142	In J. Mr.	184° .	1	10:45 am	ι <sup>ι</sup> V	11 A		и	The state	1	-	
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Client:		ig Services Cq Field Minin		Job No:	b No: 21183 Date:											
Job	Description:	RH340B Boo	m Refurbishm	ent			Drawing No:									
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	the second s	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials			
133	Rear bulkhead		150	172°	16-3-21	7:00	22.5V	235 A	1	81N1-144.	8214120149505					
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# WELDING & HEAT RECORD SHEET

	21	16-3-2	Date:		21183	Job No:	σ	cq Field Minin	(	Client:
		ving No:					в m Refurbishm	1	Description:	
Consumable Used	Plant ID	Amps	Volts	Time Taken		Actual Preheat Temp °c	Recommended Preheat Temp °c	Weld Procedure No	Area Welded	Welder ID
8INI 8		227 A	295 V	7-00	16-3-21	120°C	100%		iaside nall	133
1		A	V	8.00	1	126°L	1		1	1
		A	V	9.00	1	124°C				
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	Version No: 2	Page 1 of 1	

		10.3.21	Date:	97°	21183	Job No:	ng	q Field Minir	* C	lient:
		wing No:	Dray	and the second	le Boom	ent insid	m Refurbishm	RH340B Boo	Description:	Job
Consumable Used	Plant ID	Amps	Volts	Time Taken	Date Taken	Actual Preheat Temp °c	Recommended Preheat Temp °c	Weld Procedure No	Area Welded	Welder ID
81ni		235 A	29,5 V	6:00	10.3.21	126°c	100°c	0	Outer buffle'top	Q174
0	٥	A	V.	8:00		150°c	1		1	1
		A	· V	9:00		143° c .				
		A	v	10:00		1270				Ť
		A	v	1:00		119 °C			1	
8Ini		235 A	29.5 V	200	10.3-21	137°	100°c	•	Outer baffletop	CQ039
. V		A V	J v	300	V	.142°c	V		V	V
81ni		220 A	295 V	7:00	11-3-21	140°c	100%	•	Outer hope top.	
2		220A	29.5V	8:00	1	133°c	1	1	1	1
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lient:	(	q Field Minir	Ig	Job No:	21183		Date:	12-3-2	.1		-
Job	Description:	RH340B Boo	m Refurbishm	ent Inside	Boom		Dray	wing No:			
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	
10-174	Inside poper		100%	120%	12-3-21	7.00	29.5V	226 A		81NT	8
1	1		1	12802	1	8.00	/ v	A		1	
				126°C		9.00	/ v	A			
				1292		10-00	V	A			
				1322		11-00	v	A			
1				134°C		12.00	V	A			
62-039			1	1292	1	1.00	V	A	1.0		
602039	.U		V	127%	V	2.00	V v	A		1	
10-133	inside upper		100°C	12402	15-3-21	7-00	29.5-V	124 A		BINI	
1	1		. 1	1322	1	8.00	v	A J		1	
				134 °C		9.00	V	A			-
V				131°C		10.00	V	A			
(2039			+	129%		11.00	v	A			
1				1272		12-00	v	A			
-				1280		1.00	v	A	10 - 40		
				132%		2.00	V	A			1
1			V	130°C 136°C	1	3.00	V V	A			+

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		-
Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
214100145305		
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•	Version No: 2	Page 1 of 1

	Minir	ield ng Services	5			NELDI	NG & F	IEAT F	RECOR	RD SHEE	T .	* · · ·	•
Client:		Cq Field Minir		Job No:	21183	1	Date:			16/	/10/2020	÷	÷
			om Refurbishm			· · · ·	8	awing No:				- K. j. *	
Welder ID	Area Welded	Weld Procedure No	ť	Actual Preheat		Time Taken	22	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected
DW	BOSS ON		175°c	182°c	9-12-20	8.00	·28 v	37.6 A	-	MNNO.O. 9mm	0103668	· · · ·	1.
	EARS	· · · ·		179°.	the for	9.00	v	· A			1a - 20		
		in the "		180°	er s Se	11:06	v	Å		· · ·			
	. <sup>1</sup> .	~	· · · · · ·	1.80%		12'00	• v	A					
	÷		•	1.77° 0.		13:00	v	• A		<b>9</b>			
		H		178°		14:00	v	А				•	
	2m				· · · · · · · · · · · · · · · · · · ·	•	v	. A				•	
		27 .		-	· · · · · · · · · · · · · · · · · · ·		· v	. A	· ·				
		5		den en e	n		v	A	•				
		· · · · · · · · · · · · · · · · · · ·					v	A			N.	0	
·**		*		1.	1000		v	A				-12	
7.4 7		· .					v	· A					19 
	•		4			/	V	A					
		•	· · · · ·	1			v	А		At the second			
-	. 0	1					- v	А					
				<u></u>	f'	1'	V	A	<u> </u>				

Client:		ng Services Cq Field Mini		Job No:	21183	1	Date:	1		16/	10/2020		
Job	Description:	RH340B Boo	om Refurbishm		•	*	Dra	wing No:					4
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected B Initials
It			12:00	-	30-11-20		v	A	· · · ·				1. A. R.
CQ046	Boss/EAR		140°-220°	160° .	16/12/20	1200	25.4 V	300 A		SINIHA	6958	1	1
					1 K	1.25	v	A					4
			. A)			17	V	A				•	·. /
				*		•	V	A		1. S. M. M.	0		1
						+	v	A			•		
	1.1.1.1.1.1			· *	and the second		v	A					1. 1
- 4			*	الويا روجا			• V	A				• •	<b>x</b> = -
+		0		St. Ja		*	` v	Á				1.1	
Y							v	- Å			• • • •		· , •
			•			3	v	A	1.20	1.1.1.1.1	:		
			۰.				v	A					
		1 A			· · · · · ·		۷	А					10
			· · ·				· ·v	·A			A STAN	1	
					5.8		v	A	1	1	A STR	- marine	
1		-				1	, V	• A	* 11-1 *			· · · ·	4-1
							V V	A				44	
1.	÷.					Uncontrolled	If Printed .	10	A State			Version No: 2	Page 1 of 1

		Cq Field Mini	ng	Job No:	21183	•	Date:			16/:	10/2020		
Job	Description:	RH340B Bor	om Refurbishm	ent			Dra	awing No:			N.	•7	
Velder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	the second se	Time Taken	Volts	Amps	Plant ID	* Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By:
12046	Boss/Ear		148-220	170°	9/12/20	12:30	26.7 V	475 A		MNMO	0103'66'8'.	•	
Q046.	4		1409-220	· 190° .	9/12/20	1330	25.4 V	310 A		81 Nil 144	6958		
2046	. 4	•	140-220°	180°	10/12/20	7:00	25.4 V	1	i i	"	11 -		
Q046	· 4		140°-220°		10/12/20	8:50	24.9 V	330 A		te .	0	1 × 4	
	Boss/Ear.		140-2200	180°	11/12/20	6:50 .	· · · · ·	1328 A	1	8 Wil #4 .	6.9 58	140	
2046	11			160°	11/12/20	8:00	25.1 V	1310 A		9	*1		
Q 046	"7		1405-220	180°		9:48	251 V			4.	4	(	
0046	• "		140°-220°		11/12/20	1200	27.4 V	325 A		21	. 4		
Q046	0 ()	14.	140°-220°		14/12/20	700	27.5 V	1.		8/Ni144	6958		1.2.2.2
2046	1		148-220	180°	11	830	// v	/ '' A		61	No. 4		
Q046	1	میرد. میران	140-220	170°	4	1000	'/ V	/ '' A		4	Nu.	1 2	•
Q046	11	* - K	140-220	190°	4	1200	1/ V	/ <sup>1</sup> / A		1	11		
Q046	U	1	140-220	170°	4	1330	· " v	/ 1/ A	1	11	11		· * ·
0046	d		140-220	180°		300	· v	/ " A	4	u .	. "		1992
a 046	Boss/Ear		140°-220°	185°	15/12/20	700 .	27.5 V	1 325 A	A	81NIIH4	69 58		
Q046	130337624		146"-220" "	190°	"	930	35.4 V	1300 A	1	-		• • •	* y . 7
Q046	BOSS/CDR		140-2200	190°	16/12/20	730	25.8 N	1 300 A	4	81N1+144	6958		1.1

		g Services			V	VELDIN	NG & I	HEAT	RECOR	D SHEE	T		
Client:		q Field Minii		Job No:	21183	· · .	Date:			1211	11/2020		
Job	Description:	RH340B Boo	om Refurbishm	ent			Dra	awing No:				•	
Welder ID		Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
(0039	Boon Siderall		1100-1200	127%	12/11/20	10.00.4m	24.5 V	1 288 . A		LW16 9.2	190 1263		-
EDWin	Boom s/wall	a constant for the second	10%-120%	11790			- E		thex tec Lingold	SXP 1.2 m	2001214119	-	1
Davin	Beour wall		1102-1200	1138	13-11-20	8:30 An	1 1 v	288 A	U	v	U	1	
4	Been S/wall	- 20-1	100-1200	232	13-11-20		-	1 288 A	-1	J	1		
towin	BOOM	0	110° = 720° =			1:00pm	V	288 A	U	U	4	•	
	EDENALL		1000 1202	T	10-11-20	1		290.6 A		U.	el		
	SIDEWOLL		10°0122°0		10-11-20			29.3 A		V	И		
1	BOOM	/	1100-200		16-11-20			283 A	. Ν	d	И	,	
	DOGMA	0	1021202	11600	16-11-20			28.4A	1.1	M		13.	
	Sibtuau	1	11000-1208		16-11-20			/	v v	v.	4		
•	BOOW		110 2 -170%						2	U.	Ч	1	
2) IN IN	OBE TH		110 - 1700	-	16-11-2			4		u	1.	1	
	BOOM			1	10-11-20				~	1	U .	А	
	BODM		11000-1002	1100	17-11-20		1	29.84			14 . K		
Pir Vict	RODM		11000-1200		17-11-20			23.6A		U	e,		- <u>-</u>
DWIN	POOM s/w		110%-170%	11000	17-11-20					U U	~	·	
E Vin IVI	1-0001 5/00		110°C. 1204	12100	17-11-70	11:30 10	n V	/ UA	U	C.	4		

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ea Welded Int Upper Head 11 B/H	Weld Procedure No	Recommended         Recommended         Preheat Temp °c $100 - 126$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$ $100 - 120$	Actual Preheat Temp°c 130 130 120 125 125	Date Taken 23/11/20 23/11/20 23/11/20 23/11/20 24/11/20	Time Taken 630 1200 260 630	Volts 22.1 V 22.2 V	250 A 250 A	Plant ID	Consumable Used 81Ni1H4 4	Consumable Batch No: 5982 M	Inspected By: Print Name	Inspected By Initials
Int Upper Head 11 B/H 11	No	Preheat Temp°c 100 - 126 (00 - 120 100 - 120 100 - 120 160 - 120	Temp°c 130 130 120 125	Date Taken 23/11/20 23/11/20 23/11/20 23/11/20 24/11/20	630 1200 200	22.1 V 22.2 V 22.2 V	250 A 250 A 250 A	Plant ID	Used 81 Ni 1 H 4 4	Batch No: 5982 11		
Head 19 B/H 11		(00-120 100-120 100-120 160-120	130 120 125	23/11/20 23/11/20 24/11/20	12.00	22.2 V 22.2 V	250 A 250 A		Ь	н		
n B/H n		100 - 120 100 - 120 160 - 120	120	23/4/20 24/11/20	2 60	22.2 V 22.2 V	250 A					
		100-120 160-120	125	23/4/20 24/11/20	1	22.2 V	250 A		4	4		
~		160 - 120		24/11/20	1							
			125	29/11/20	1		100 A		li	G		
		160 - 170			2:30	24.8 V	215 A		4	11		
		100 -100	130	1/12/20	8:00	21.90			LI	u		1.1.1.1.1.1.1
		11	125	11	9.60	22 8 V			ü	h		
		V	130	il	10:00	22-7V			U	и		
	A 24 1 14	u	125	1/12/20	12:00				4	и		
E.		И	130	и	1:00	P						
	1. 1.	Ü	125	и	200				u	4		
		12	119	2:-12-20	6:30	22.8V	230 A					
		Li	130	U	830	a v	" A		ч	U		
Cowity Side	evell	ų	132°	3-12-20		23 V	220 A		-16	<i>L</i> <sup>t</sup> -		
l	11-		7		11	v	A	-				
					1	V						
6	ewitySide	ewity Side wall	11 11 11 11 11	4 125 4 130 4 125 119 130	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	"       125       1/12/20       12:00       22.9       1         "       130       "       1:00       22.7       1         "       125       "       200       22.8       1         "       125       "       200       22.8       1         "       119       2:-12-20       6:50       22.8       1         "       119       2:-12-20       6:50       22.8       1         "       130       "       830       "       V         "       132"       3-12-20       8-30       23       V         "       132"       3-12-20       8-30       23       V	11       125       1/12/20       12:00       22.9 V       230 A         11       130       1100       22.7 V       230 A         11       125       1200       22.8 V       230 A         11       125       1200       22.8 V       230 A         11       125       1200       22.8 V       230 A         11       119       2:-12-20       6:50       22.8 V       230 A         11       130       130       830       10       A         11       132       3-12-20       8:30       23       2:20 A         11       132       3-12-20       8:30       23       2:20 A         11       132       3-12-20       8:30       23       2:20 A         11       132       3-12-20       8:30       10       A         11       132       3-12-20       8:30       23       2:20 A	II       125       1/12/20       12:00       22.9 V       230 A         II       130       II       1:00       22.7 V       230 A         II       125       II       200       22.7 V       230 A         II       125       II       200       22.7 V       230 A         III       125       II       200       22.8 V       230 A         III       119       2:-12-20       6:50       22.8 V       230 A         III       130       II       830       II V       A         IIII       132       3-12-20       8:30       23       V       A         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

lient:	C	q Field Minin	ıg	Job No:	21183		Date:	-		16/1	10/2020		
Job	Description:	RH340B Boo	m Refurbishm	ent			Dra	wing No:					
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
C.L	MAN HOLE -		175	175	16/10/20	0930	27 V	5:9,A	MILLER (QWZ)	Ubreticon 3 XiP			
	GOVE OFF						v	A					
	BACKING BAR BACKGOUGEREPAR PREHENT, FIL						v	А		2			
	Gewo Hush		· · · · · · · · · · · · · · · · · · ·				v	А					
5.T	weld LH Side		1750	180	18/11/20	Jam	27 V	A	COW 21				
	ciltade apall infect plate.		1950	180	19/11/20		27.V	A	Cauri			14 - A.	
RU122	4HSIDE Whall Plate		125	0	20/11/20		22.2V	24.8 A		81 NIH4	)		
	LH Side wall		186°		23.11.20	Dan.	22-1 V	15 12		81 NiH4		1	
	1.100 1000			-	1		V	A					
							V	A					446
of the second							v	А					
					-		V	A				9°5- °	*
							v	A					
							V	A		, – – – – – – – – – – – – – – – – – – –			
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WEDER - JALON

Client:	c	q Field Minir	ng —	Job No:	21183	2.5	Date:		19	1	Oà
Job	Description:	RH340B Boo	m Refurbishm	ent			Dra	wing No:			1
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	C
63-039	RIALIFTING LUG	fill prep	100-100-	127°C	10/2/21	10.00 A	27.3 V	245 A		SINT	7
CQ-039		Filkfueld	100°C-120°C	133°C	10/nhi	1.00pm	27.3 V	245 A	4	SINT	76
00-039		CaP	100°C-170°C		iohhi	3.00pm	27.2V	239A		SINI	76
Im							V	A		-	
(Q-039	forgue tuBe	Root	100°L-120°C	138°C	11/2/21	10.30Am	27.2V	242 A	- 9	SINT	7
	torquetabe	Hot pass	100%-120%		11/2/21	11.20Am	27.2V	Us A		SINF	74
CQ-039	- 11.	C11	100%-10%.		ultr	1.304m	172 V	245-A		811I	74
(2-039	1 11	CAR	cost-hor		11/2/21		26.7 V	220 A		Shi	70
	por poc ios		P o			1. 1.	v	A	1. I.		
*							v	A			
1	(e -	4 1	- 5 - 5 1				v	A		1	-
+			2	-			V	A		T	
							v	A			
							÷ v	A	40 <sup>m</sup>	12 10 10	
	-		-		7 i		V	Α			F
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in 2-21. Inspected By: Inspected By: Consumable . Initials Print Name Batch No: 7680Ho114510 7680 Holl 45 108 7 7680 Holi 45 108 < 7. 747660294026 1476602940216 1476 G1029 A021 7476602910216 Sec. a A. A. Sr. Version No: 2 Page 1 of 1 fa's ....

CI		ield			V	NELDI	\G & ⊦	IEAT F	RECOR	D SHEE	г		
Client:		Cq Field Minir	ne -	Job No:	21183		Date:	12.2	.2)	10	0-2-21		ę .
Job	Description:	RH340B Boc	om Refurbishm	nent		ę 1		wing No:				Same -	1
Welder ID	Area Welded	Weld Procedure No	- 4	Actual Preheat	Date Taken	Time Taken	Aug 4	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
	FRONT INT UPPER BULK		A.	122	12/2	820	BOV	185A	Boom	· · · ·		Games	J.F
	HEAD L/14			105	12/2	930	32 V	IB5 A	Baba			James	J.F
<i>.</i>		· · · ·		123	12/2	1030	30 V	200 A	0			James	J.F
				115	12/2	1130	28 V	190 A	Boon	-		James	J.F
			18 1	130	12/2	1250	28. V	190 A	191			James	J.F
	74-1			105	12/2	130	28 V	190 A	Boom	4	10	James	J.F
			1. 30	128	15/2	630	28 V	190 A	Boom.	1	· · · · · · · · · · · · · · · · · · ·	James	JF
1.00	·		1.11	108	15/2	730	27 v			5 ·	- x -	James	J.F
			AND	123	15/2	830	27 V	190 A				James	J.F
				135	15/2	930	27 V	190 A				James	J.F
				115	15/2	1030	27 V	190 A	Boon	4		James	J.F.
- Ann		1900 B		138	15/2.	1230	27 V	190 A	0			(Tames !	JF
	The Aller		Server 1	122	15/2	1430	27 V	190 A	Boom.			James	J.F.
and a second		tore -	15 m	135.	16/2	930	30 V	232 A	00000			James	JF
	A. C.			125	16/2	1130	30 V	245 A	Boom			James.	J.F.
	N. A.		1 m	188	16/2	1330	30 V	245A	Boom.			James.	J.F.
	din an		1				V	A					1

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WELDER - EDWIN-LOUI

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	RH340B Boo	Recommended Preheat Temp °c 120°2 120°2 120°2 120°2 120°2 120°2 120°2 120°2	Actual Preheat Temp°c 123° 123° 125° 125° 125° 125° 125° 125° 125° 125° 125°	Date Taken 10 - 2 - 21 10 - 2 - 21 10 - 2 - 21 10 / 2 - 21 10 / 2 - 21 10 / 2 - 21 10 / 2 - 21	Time Taken 7:30 7:52 11:30 12:30 2:30 0:25	Volts 29 M 1' I' V	v v v v v	el U V	Plant ID A CRW23 A A A V A V	Consumable Used I G MM IDB1 NICU 6 V
Welder ID       Area Welded         BULK HEAD       MIDDLE         MIDDLE       MIDDLE		Preheat Temp °c 120°2 120°2 120°2 120°2 120°2 120°2 (20°2	Temp°c 123°C 13° 13° 125°C 125°C	Date Taken 10 - 2 - 21 10 - 2 - 21	Time Taken 7:30 7:52 11:30 12:30 2:30	29 11 11	v v	230 U U	A C & W 2 × 3 A . A . A . V	Used 1.6 mm 1081 NI I I 6 V
Burk HODD		120°C 120°C 120°C 120°C 120°C (20°C	130 1250 1250 1250 1250	10/2/21 10/2/21 10/2/21 10/2/21	7:52 11:32 12:30 2:30	1, 1, 7v	v v	el U V	A • A • A •	1081 WÊU 6 V
BULK HEND		120°C 120°C 120°C 120°C 120°C	125°C	10/2/21	11:30 12:30 2:30	1, 1, 7v	v v	U U	A V A V	, v
BULK HEND		1200 c 1200c 1200c	1222	10/2/21	12:30 2:30	11	v	U	A U	
Burk Horo Mibo Le	1	12002	12502	. 11.	2:30	1	-		~	ι v τ
BULK HOD MIDDLE		12002	A N	. 11.		V	v	U		
BULK FIEDD MIDDLE			(27%	10/2/21	1:2h		_		A	v
BULK FIDDO MIDDLE		Ma-P		10/0/01	4:30	V	v	J	۵ v	N
BULK HOD MIDDLE		20%	12900	10/2/21	\$:30	Л	v	C!	î	1
BULK FIDD MIDDLE							v		A	
		1205	1230	11/3/21	7:00		v	U	A CORW23	1-6mm
	-	1200	126°C	11/2/21	3:20	V	v	v	A U	U
	-	20°C	12500	11-221	11:00	V	v	V	AU	U
		2000	1272	u/2/21	8:30	.11	V	V	A	V
LG	z.	200	(01°C	11/3/21	3:00	2	v	V	A	Л
		120%	12300	11/3/21	4:00	V	v	ħ	A	
		120%	2300	15/2/21	7:00	U	v	U	A U	U
		12000		15/2/21		L	V		A A	N

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Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials	
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Client:	LQ FIL	ELD 606	O BOOM	Job No:			Date:	1/04/21	-				
Job	Description:							Drawing No:					
Welder ID	Joint Type/ID	Weld Procedure No	Recommended Preheat Temp *C	Actual Preheat Temp <sup>®</sup> C	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected E Initials
LH BOOM			180	100	1/04/21	10am	208 V	140 A		ER70-56			
RH Boom	FEDT		180	100	1/04/21	10.15	20-8 V	140 A		ERTOS	5		
	CYLIN	1	180	100	1/04/21	10.30	20.8 V	140 A		11 71			
7	OUT		180	100	1/04/21	11:30	20.81	140 A		1 1			1
LI-1 BOOM	neyl in		150	100	1 1 1	10.30	20 8 V	140 A		11 7 -	f		1
	DAT		180	100	1/04/21	1\$.30	2080	140 A		33. 13		· · · · · · · · · · · · · · · · · · ·	
LH Boom	- BODY		180	100	6/04/21	Tan	20-8 V	140 A		11 11			
RHBOO	M-BODY	<	180	100	6/n/20	7-30	20.80	140 A		11.1			
1000					-rearr		v	A					
							v	A					
			1.1.1.1				v	A					
			* NOTE: Rea	adings to be rec	and in contrast, the second		d temperature is		every Hour du	ring Welding.		<i>n</i>	
					1 1 1 1 1		NSUMABLE G			1			
Mat	erial	20mm 8	& Under	20mm	- 40mm	40mm	- 60mm	60m	m<	Pro	cess	Consu	mable
Q & T 80		10	0°C	10	0°C	15	0°C	200	°C	FC	AW	E81T1-	-N1-H4
Q&T400		15	0°C	15	0°C	15	0°C	200	°C	FC	AW	E81T1-	-N1-H4
Q & T 450		15	0°C	15	0°C	15	0°C	150	)°C	FC	AW	E81T1-	-N1-H4
GR250		75	5°C	7	5°C	75	5°C	108	3°C	FCAW/	/GMAW	E71T	1-H8
GR350	1	75	5°C	7	5°C	75	5°C	108	°C	FCAW/	/GMAW	E71T	1-H8
Cruesabro		20	)°C	3	0°C	30	)°C	30	°C	FC	AW	E71T	1-H8

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Client:	C	q Field Minir	ng	Job No:	21183		Date:	4/3	21	21/	11/
Job	Description:	RH340B Boo	om Refurbishm	ient	1 (m. 1)	_	Drav	wing No:			
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	c
0174	L/H Sidewall		100°c	12700	4/3/21	6:30	265V	235 A		81ni	
1	ŀ	4		1320		730	V	A			
1		~		115%	11.1	8:30	v	А			
				119%		9:30	v	A			
				126°		10:30	v	A	1		
				128%		11:30	v	A			$\square$
				133° e	1	12:30	v	A			
	-			119"0		1:30	v	А			F
+	V		V	137°		2:30	V V	A	+		1
Q174			100°c	123°C	5/3/25	6:30	265 V	219 A		82ni	T
		Laboration and the second s		132 %	-15/01	7.30	V	A		OFICE	F
				1.1.2	-	8.30	v	А		1	t
				1.0		9.30	v	А		<i>\$</i>	T
-	*					1	v	A			t
				-		10-30	v	- A	-		$\vdash$
-						11-30	v	A	-		⊢
						1:30	V	A			$\square$
						2:30	V	А		1. 12 A.	
						2:30 Uncontrolled		А		1	T

## /11/2020

Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
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	Version No: 2	Page 1 of 1

WELDER - EDWIN-LOUI

7-	.10				e:	Dat		21183	Job No:	ng	Cq Field Minir	(	Client:
			o:	ving N	rav	D			ent	m Refurbishm	RH340B Boo	Description:	Job
	Consumable Used	Plant ID		Amps		Volts	Time Taken	Date Taken	Actual Preheat Temp °c	Recommended Preheat Temp °c	Weld Procedure No	Area Welded	Welder ID
7	16 mm 1081 Ni 46	CQW23	A	230	v	29	7:30	10-2-21	123°C	12000		BULK HEAD	
	ν	•	А	el	v	14	7:52	10f2/21	130'	120°C			
	v	<u>ي</u>	А	U	v	V	11:30	joh/21	12mc	120°C			- 1
	v	υ	A	<i>L'</i>	v	1'	2:30	10/2/21	1222	1200 C			
	N	ď	A	U	v	U	2:30	10/2/21	125%	12000			
	N	U	Α	J	v	V	4:30	10/2/21	(27%)	12002			
	2	۸.	À	ď	v	Л	\$:30	10/2/21	12900	(20%			
			A		v								
7	1.6 mm	CQ W23	A	U	v	U <sup>A</sup>	7:00	11/3/21	123%	1205		BULK HODO	
	U	U <sup>N</sup>	A	V	v	V	3:30	11/2/21	126°C	1200			
	L	И	A	V	v	V	00-11	11-221	18500	12000			
	V	и	A	V	v	.u	8:30	1/2/21	1272	2000			
1	Л	А	A	V	v	N	3:00	1 1	(01°C	1200			· · · · · ·
			A	14	v	V	4:00	11/3/21	1230	120%			· · ·
	Ц	U	A	U	V	U	7:00	15/2/51	2300	120%			
	V	V	A	N	V	11		15/2/21		120°C			
_			A		V								

-2-21	2	
Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
680		N.
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lient:		ng Services Cq Field Minir	11 -	Job No:	21183		Date:	12.2	.2)	10	0.
Job	Description:	RH340B Boo	m Refurbishm	nent			Dra	wing No:			
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	1
1	FRONT INT UPPER BULK		A.	128	122	830	300	185A	Boom		
	L/H			105	12/2	930	32 V	185 A	Bach		
	-	1		123	1212	1030	30 0	200 A	Basm		
		×	,	115	12/2	1130	28 v	190 A	Boom		
			15 10	130	12/2	1250	28 V	190 A			
1				105	12/2	1330	28 V	190 A	Boom		
-		-		128	15/2	630	28 V	190 A	Boom.		
~1	1		- AND	108	15/2	730	27 v	190 A	Boom		
		-	the second second	123	15/2	830	27 V	190 A	Boom	4	
		132 3	1.1	135	15/2	930	27 V	190 A	Boom		
				115	15/2	1030	27 V	190 A	Boom	\$	-
	ally.	and a second		138	15/2	1230	27 V	190 A	Boan.		
12	. Alla		124	122	15/2	1430	27 V	190 A	Boom.		-
200	1. 1. 1	a total and	-	135.	16/2	930	30 V	232 A	BOOM		
1				125	16/2	1130	30 V	245 A			
	1		A	138	16/2	1330	30 V	245A	Boom.		
	1.	1 1 1	1	· · · · ·			V	A			t

7-2-21 -0 . Consumable **Inspected By: Inspected By: Print Name** Initials Batch No: J.F James J.F JAMES JAMES J.F 1 James James James J.F J.F James J.F James. J.F James 1. The James .J.F . James J.F JAMES James J.F JAMES J. James. JAMES J.F Version No: 2 Page 1 of 1

		ng Services		2		Ł	,		· · · · · · · · · · · · · · · · · · ·	D SHEE		: ,	·
Client:		Cq Field Mini		Job No:	21183		Date:	· 2*		. 16/	10/2020		
Job	Description:	RH340B Boo	om Refurbishm	ent	• .		Dra	wing No:		· · · · · · · · · · · · · · · · · · ·		•	
Welder ID	Area Welded	Weld Procedure No	Preheat Temp °c	Actual Preheat Temp °c		Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected I Initials
It		·	12:0°		30-11-20	1.	v	• A			•		
CQ046	Boss/EAR		140-220°	160° .	16/12/20	1200	25.4 V	300 A		SINIHA	6958	1. A.	10 A
1					1 - K	A	v	A				• •	
14	e .			.e			v	A					°. 1
-			-		,	- : /	V	A			0		
-			1				v.	A			•		
	*						v	A					
· ·				" and of			• V	. A				• • • •	•
				1.50		14 - A	v	A	. <sup>1</sup> .				
-			4 ·	· · · · ·			, v	Å	, a		· · · /		·, ,•
-			·	· · · · ·		3	v	A				-	-
			۰.				. V	A					
	- Tri				· · · · · ·		V	A	•				
	-		1.1.1				• ·v	·A			a state		· v .
		•	÷				V	A				interesting.	
-						•	, .V	- A			100 A		
			100			· · · · ·	V	A	61 N	1			
11						Uncontrolled	If Printed		- 2	-	. 0	Version No: 2	Page 1 of 1

	<b>R F</b>	g Services	· · · ·			WELDI	NG & H	IEAT F	RECOR	DSHEE	Г.		
Client:		q Field Minii	ņg .	Job No:	21183		Date:			. 16/	10/2020	~	
Job	Description:	RH340B Boo	m Refurbishm	ent		×	Dra	wing No:					
Welder ID	Area Welded	Weld Procedure		Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
DW	BOSS ON		175°c	182°c	9-12-20	800	·28 v	37.6 A	4	MINMOO. 9mm	0103668	•	1
	EARS.			179°	71	9:00	v	. A	·				
				180%		11:06	v	· A					
				1.80%		12'00	v	А		1			
				1.77° 0.		13:00	v	• A		4			
		-		178°		14:00	V	A				•	
	1. +			1100	1.11	•	v	A					
4		20			œ.	· 🦟 🗧	v	A	· .				
					T.		v	. A			4		
	•		1				v	A		1	γ		
• •	1 1			1.	A Frank		v	A		1			
		•	7 1 .			1	v	A	•	A			
			4				v	·		1			+
			۰. ,				V	A		1		1	
	0		•		4		V	A					
			***		5 1	Te	V	A					
					0		V	A		4			

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	Minin	eld g Services			. V	VELDII	NG & I	HEAT R	RECOR	D SHEE	т		
lient:	1	Cq Field Mini	ng	Job No:	21183	1	Date:			21/	11/2020	, ,	
Job	Description:	RH340B Boo	om Refurbishm	ent	•	1	Dra	wing No:		×.	allow and a	7 - C	a or
Velder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
Q046	RH Sidwan		100 -120	130	17/11/20	630	20.8 V	384 A		LW1-6	1901263	· ·	
2046	- 4		100-120	120	12/11/20	730	233V		·	1 (*+	11 .		· · · · ·
Q046	11 .		. 1	1.25	17	900	23'3 V	305 A	-	• 11	(i .		-
3046	"		4	120	- 11	1030	11. V	″ A	-	ü	2 U		
0.046	12			125	4	230	i v	// A		11 .	. 11 192		
0.046			11	130	18/11/20	230	, <sup>(1</sup> . V	·/ A	aller .	<i>u</i> · 2	11 -		
0.646	"		. U .	130	1.8/11/20	900	11 V	11 A	1999 C	. 11	A.M	·	the fatter
0.046	4		- 11		18/11/20		/. V	11 A		11	1. II	1	The second second
0046	4		ti, '	130	18/11/20	12 30	21 V	11 A		u	11		
0.046	14.		51	120.	18/11/20.		" V	( A	C. K.		1		
0,046	. 11	Ser.	100-120	110	19/11/20	630	" V	11 A		16			in N
Q046	11	A Start	100-120	130	19/11/20	930	°le V	A	1	11 0	11	· · ·	
Q.046	Front Int upper" Bulk Head.		160-120	170	20/11/20	200	21.1 V	260 A	1	81 NIL H4	5982	A	
3046	1/	S. Conte	130-120	130	20/11/20	0815	*/ V	7" A	•	: 11	- <i>u</i>	0.00	
Q046	1 . n	Nr. C	100-120	120	20/11/20	900	11 . V	11 A		L!	4	· ·	1
Q046	ч		000-120	115.		1160	u v	и А	x	N	No. 4		
0,046	61		100-120	130	i du i ha	1230	u V	и А	2	ve	и	15	*

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WEDER - JALON

10-		199		Date:		21183	Job No:	Ig	q Field Minin		client:
			wing No:	Drav			ent	m Refurbishm	RH340B Boo	Description:	Job
	Consumab Used	Plant ID	Amps	Volts	Time Taken	Date Taken	Actual Preheat Temp °c	Recommended Preheat Temp °c	Weld Procedure No	Area Welded	Welder ID
TT	MA		245 A	27.3 V	10-00 AM	10/2/21	127°C	100-120-	fill prep	RIHLIFTING LUG	12-039
TX	SINI		245 A	27.3 V	1.00pm	10/nhi	133%	100°L-120°L	Fillefueld		CQ-039
I,	8M		239A	27.2V	3.00pm	john	147%	1002-1202	CaP		(0-039
			A							Same	-
E I	8INT		242 A	27.2V	10-30Am	11/2/21	13802	100°L-120°C	Root	forgue tuBe	Q-039
5 71	SIN		Us A	27.2V	11.20Am	u/2/21	1422	1009-120%	Hot pass	torquetibe	100-039
	8127		245-A	17.2 V	1.304n	ulphi	1372	100%-nol.	GIL	- 11	CQ-037
27	Shij		220 A	26.7 V	12.00pm	11/2/21	1252	100%- hol	CAP	torque the	(i)-039
			А	v							A State of the second s
			А	v							4 1 2
- 4	1		А	v					A	1	174
1			А	v			-	+			-
			А	v							
			А	v							
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			A	V							
$\rightarrow$			A	V						1	

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Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials	
680H01145Ta	3		
80 Holl 45 108		1	1
180 Holl 45108			1
-	1		
476602940216	1		
76602940216	1		
+76 GO29 A021	6		×.
476602940216	and the second se	X B	
			2
		1	1
1.e		1	
		1	
		- 0- <sup>10</sup>	
			1
	Version No: 2	Page 1 of 1	

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Client:	c	Cq Field Minir	ng	Job No:	21183		Date:			16/1	10/2020	*	
Job	Description:	RH340B Boo	m Refurbishm	ent			Dra	wing No:	<i>p</i>				
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
C.L	MAN HOLE -		175	175	16/10/20	0930	27 V	5:9,A	MILLER	UBREFICENC 3 XIP			
	GOUGE OFF FLATBAR						v	A					
	BACKING BAR BACKGOUGE REPAIR PREHENT, FUL	2					v	А		- <u>b</u> -			
	GOWD HUSH						v	А					
5.T	weld LH Side		1750	180	18/11/20	Jam	27 V	A	COW,21			1 A	
	elligide coall infect plate		1950	180	19/11/20	8 am	-27.V	A					P
<b>威以约2</b>	4HSIDE Wall Plate		175	180	20/11/20	100m	22.2V	27.8 A		81 NiH4			
	HH Side wall		186	180	23.11.20		22-1 V	25.3A	10	81 NiH4			
	11041-			-			v	A					
Yan alat				-			v	A	·				
No. Contraction							v	A					and a second sec
							V	A					
							v	A	-			yer. a	
		1					V	A					
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# **CQ** Field

**WELDING & HEAT RECORD SHEET** 

Client:	(	Cq Field Mini	ng	Job No:	21183		Date:			<del>16/</del>	10/2020 :	23/11/20	)
Job	Description:	RH340B Boo	om Refurbishm	ent	1.0	- T	Dra	wing No:				. ,	-
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
CQ046	Front Int Upper Bulk Head		100-120	130	23/11/20	630	22.1 V	250 A		81Ni1H4	5982		
CQ 046	4 B/H	1	100-120	130	23/11/20	12.00	22.2 V	250 A		h	ħ		
(Q 046	N		100-120	120	23/4/20	2 00	22.2 V	250 A		4	4		
COOLG	c1		100-120	125	24/11/20	630	22.4 V	250 A		le	G		
CQ046			160 - 120	125	29/11/20	2:30	24.8 V	Z15 A		~	11		
CQ133			100-120	130	1/12/20	8:00	21.90	215 A		t,	и		
Ca 133	1		- 11	125	11	9,60	22 8 V	230 A		C1	h		
Caiss				1303	vi	10:00	22-7V	230 A		4	4		
CQ046		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	U	125	1/12/20	12:00	22.9 V	230 A		4	и		
20046	Ŀ	N. M.	И	130	и	1:00	22.7 V	230 A					
CQ133			И	125	и	200	22.8 V	230 A		4	4	-	
Q046		1	12	119	2:-12-20	6:30	22.8V	230 A					
CQ 646			U	130	L	830	a v	<sup>a</sup> A	1	ч	U		
Q 133	Rear Cowity Side	eveill	v	132°	3-12-20	8.30	23 V	2.20 A		·H	11		
	I						v	A					
							V	A				1	
		1				- the	V	A A					

		eld g Services		÷	V	VELDIN	NG&H	IEAT I	RECOR	D SHEE	т		
lient:		q Field Minir		Job No:	21183		Date:			12 24/	11/2020		
Job	Description:	RH340B Boo	om Refurbishm	ent	1×*	*	Dra	wing No:					
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
0-039	Boon Siderall		1102-1200	127%	12/11/20	10.00.4m	24.5 V	288 . A		LW26 9.7	190 1263		1.
Dwin	Boom s/wall		10%-120%	11790	13-11-20		v		PLEX TEC LINCOLD	SXP 1.2 m			1
Divin	Beour wall		1102-1200	1138	13-11-20	8:30 An	1 . V	268 A	U	v	U		•
*	BODIN S/Wall		10%-120%	123E	13-11-20			288) A	-1	J	1		
Dwin	BOOL		110° = 720° =		13-11-20		C.+	288 A	U	U	4		
	BOOM SUDEWALL		100- 120%	3211	10-11-20	6		290.6 A	v	М	.1		
	SIDEWOLL		10°5128°C	12600	10-11-20			20.3 A		V	Л	-	
4	BOOM	/	1100-200		16-11-20			283 A		U	И		
	BOOM	0	1021202		16-11-20			28.4À		м		15	
	Sibtagu		110°0-1208	~	16-11-20			٨	4	U	4	3	
•	BODW							U A	v v	J. J.	Ч		
DIN IN	Ciberan Reevan				16-11-20					u		1.1.1	
	BOOM				10-11-20			<u> </u>		1)	d .	÷.	-
	BOOM		11000-1702	- 1100	17-11-20			29.84			4		
Divin.	CIDEWall	-	11000-1200		17-11-20			23.6A		U	C.		
4.	BODWOK		11000-170%		17-11-20	V		U A		U.	4	1	
	BOOM S/W		110°C- 1204	12100	17-11-20	8-00 m		UA		U	U U		

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Client:		Cq Field Mini	ng	Job No:	21183		Dates			16/	10/2020		i
Job	Description:	RH340B Boo	om Refurbishm	ent			Dra	awing No:			\$ <u>.</u>	•7	4
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	* Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
IQ046	Boss/Ear		148-220°	170°	9/12/20	12:30	26.7 V	475 A		MNMO	0103668.		4
Q046.	4		1409-220	· 190° .	9/12/20	1330	25.4 1	310 A		81 Nil 114	6958	2	
(Q046	. 4		140-2200	180°	10/12/20	7:00	25.4 1	1310 Å	-	"			
(Q046	. 4		140°-220°	170°	10/12/20	8:50	24.9 1	330 A		i.e	6	1.5	1
02.046	Boss/Ear		140-2200	180°	11/12/20	6:50 .	· · · ·	328 A	-9 <b>,</b>	8 Will HLL.	6.9 58	1	
CQ 04,6	11		140-7200	160°	11/12/20	8:00	25.1 1	316 A	, r	4	. KI		1.1.1
a 04.6	77		140 - 220	180°	10/12/20	9:48	251 1	1319 A	1.	4	. 4		
2046	. "		140-220	160°	11/12/20	12:00	27.4 1	325 A		**	· */		
Q046	• 11		140-2200		14/12/20	700	1	325 A		8/NiTH4	6958	1	1.5
2046	•1	-	148-220	180°	11	830	11 1	/ '' A		4	Kur 4	· · · · · ·	· · · · · ·
5Q046	11		140-220	170°	4	10.00	11 1	/ ' A		4	50		
Q046	11		140-220	190°	4	1200	4 1	/ <sup>1</sup> / A		7.	11		1
Q046	U		140-220	170°	1	13.30	11 1	/ " A		11	"		
0046	ď.		140-220		."	300	· \	/ " A		4	. "	1.00	
a 046	Boss/Ear		140-220"	185°	15/12/20	700 .	27.51	1 325 A		81NIIH4	69 58		182. * 
2046	- 11		146"-220" "	190°	4	930	35.4 1	1300 A				· · · ·	
Q046	BUSS/CDR		140-2200	190°	16/12/20	7 30	25.8 1	1300 A		81111144	6958		1 <i>2</i> -

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lient:		g Services Cq Field Minir		Job No:	21183		Date:	2	spin	21	11/2020		
		7	om Refurbishm	ent R/H	Side	129/1	Dra	wing No:			1		
Velder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Tak	en Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
0-039	Rf-1 Solnall		100°C	125%	20/2/	21 7.00	27.1 V	238 A		8INT	853010747902		
<u>.</u>			1	177%	1	800	j v	A		1	1		
			1.1.1	132°C		900	/ v	A					
				(23°C		1000	V V	A					
				118%		1100	v	A					
				119°C		1200	V	A					
				114°C		100	V	A				· · · · ·	
				1294		1 200	1 / v	A					
			$\downarrow$	152°C	1/3/2	1 700	V v	VA		V	V		
_			100%	1761	1/3/2		( V			81NI			
÷		-	1	124°C	1	9-00			A	1			
				129%	+	10.00			A				
				137%	+	11-00			A:		1.5		
		ч		134%		12.00			4				
									A	1.1			. · · · · · ·
			1 1/	138°L 127°C		1.00	+ (/	1/	A	/		-	
-				123°C	1	300	VI		A	,y		_	1

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Client:	Minin	g Services	-		Job No:			Date:		25/-	n SHEE	•
		RH340B Boo		furbishm	1	renim Side	1. 0	Dra	wing No:	/		
Welder ID	Area Welded	Weld Procedure No	Recor	nmended at Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	
10.079	main- Sidenall			°L	170°L	15/1/21	7.00	77.4 V	9.18 A	T	81NI	,
	1 1.2 310-04/1			1	175°C	1	8.00	l v	Γ́Α			
					118°C		9.00	v	A			
4					121.°C		10.90	V	A			
1	1				11772		11.00	V	A			T
-					130%		12.00	v	A			1
		/			1372		1	V	A			1
		-			1261.		2-00	V v	V A		V	1
1				1	131.0		3.00	27.4 V			81 Al	1
							1	21.4 11 V	11 A		17111	+
1					121°C		4.00	v	A			+
		1.1					-	v		y y		+
						<u>\</u> .		v v	A	-		+
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onsumable Batch No:	Inspected By: Print Name	Inspected By: Initials
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	Version No: 2	Page 1 of 1

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lient:		g Services q Field Minin		Job No:	21183		Date:	A.		21/	11/2020	23-2	
-			om Refurbishn		~	EWSIC	Drav	wing No:	14				
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat		Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
	main side wall		100°C	130°L	23-2	10.30	27.7 V	228 A		RINT	7680H010475		1.1
			1	1.7.8°C	1	11.30	v	A			7680 4010.4750	Ĩ.	
1				132%		12:50	V	A			1		· · · · ·
				115°L		1.30	V	A					
				115°C		2.30	V	A					
		1	V	116°C	,V	3.30	V v	i A		1	$\mathbb{V}$		10
CQ-037	proinside all	1	100%	12.2%	124-2	7.00	27.4V	216 A		8111	768040104750	ź	
	1 Noroc II		1	137%	)	8.00	) v			SINT	747660294026	3	
				128%		9.00	V	A		Í	7476502940216	1	
				124%	1	10-00	v	A			1		1.000
				118%		11.00	v	A	·				1
-	4			130%		12-00	v	A	÷				
		-		132°C		1'00	V	· A		1.	1.1.1		1
	4			127°L		2.00	V	. · · · · · · · ·				-	
	a.		V	1242	V.	3.00	V. v			V	V		-
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-						Uncontrolle	v		1 - F			Version No: 2	Page 1 of 1

/2020	23-2	
Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
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		Field
		Mining Services

# WELDING & HEAT RECORD SHEET

Client:	(	q Field Minin	ng	Job No:	21183		Date:			21/1	1/2020		
Job	Description:	RH340B Boo	m Refurbishm	ent	-		Drav	Drawing No:					
Welder ID	Area Welded	Weld Procedure No		Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By Initials
							v	А			-		
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ient:	0	q Field Mini	ng	Job No:	21183 🍾		Date:	+		21/:	11/
Job Description: RH340B Boom Refurbishm			nent	.7	£	Drav	wing No:			ju Li	
elder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °C	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Co
2046	RH Sidwall		100-120	130	17/11/20	630	20.8 V	384 A	0	LW1-6	190
2046	4	-	100 -120	120	12/11/20	730	233V	300 A	12.	1. × +	
2046	11		1	1.25	67		23'3 V	305 A		11	
3046	4		4	120	1	1030	< v	″ A		U	14
2046	D		11	125	4	230	ei v	// А	. ×.	11 .	
2046	11		19	130	18/11/20	230	11 . V	· · A	Ser.	<i>u</i> .	1
2046	"		11	130	1.8/11/20	900.		11 . A	A STATE	11	1
0046	4		- 11	120	18/11/20	10 38	11. V	11 A		il il	
2046	4	1	ti.	130.	18/11/20	12 30	Zi V		Sec. 1	it	
2046	in		51	120:	18/11/20.		v	A A	N.C.	u	200
0.046	. 11	1. Contraction of the second s	100-120	110	19/11/20	630	" V	" A	· 12	10	
2046	U	1.1.1	100-120	130	19/11/20	930	*! V	C A	I ga th	11 0	-
0	Front Int Upper" BUIK Head.		160-120	170	20/11/20	200	22.1 V	260 A	1	81 NI1 H4	3
3046	1/ 1/	Same Se	130-120	130	20/11/20	0815	11 V	?" A		11	
2046	· · · · · · · · · · · · · · · · · · ·	Mr. N. P.	100-120	120	20/11/20	900	11 V	// A		11	1.3
Q046	ч .	and a second	10+0-120	115.	4	1160	4 V	и А	*	11	N'N
	13	18.1			i de la		w V		- 1	et .	1
2046	£1		100-120'	130	you an	1230	W V	M A A	N.	e <sup>t</sup>	

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onsumable Batch No:	Inspected By: Print Name	Inspected By: Initials
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WE	LDING	&	HEAT	RECORD	SHEE
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-	Minin	g Services		1							!		
Client:	(	q Field Mini	ng	Job No:	21183		Date:			<del>16/</del>	10/2020 2	23/11/20	
Job	Description:	RH340B Boo	om Refurbishm	ent			Dra	wing No:					
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected B Initials
CQ 046	Front Int Upper Bulk Head		100-120	130	23/11/20	630	22.1 V	250 A		8INIIH4	5982		
Q046	И	A	100-120	130	23/11/20	1200	22.2 V	250 A		h	н		
(2046	N		100-120	120	23/1/20	2 00	22.2 V	250 A		4	4		
2004.6	4		100-120	125	24/11/20	630	22.4 V	250 A		U	G		
Caolo			160 - 120	125	29/11/20	2:30	21.8 V	215 A		61	11		
CQ 135			100-120	130	1/12/20	8:00	21.90	215 A		È.	4		
ca 135	-		11	125	(1	9,60	228 V			lı	4		
Cais	2		V	130;	V	10.00	22.7V	230 A		6	и		
CQ046	3		ll	125	1/12/20	12:00	1			ч	11		
CQ 046	4	N. MAL	И	130	4	1:00		230 A					
CQ133	a sug		И	125	и	200	1	230 A		4	4		
Q046	-		12	119	2:-12-20	6:30	22.8V	230 A					
CQ 046			U	130	L*	830	(1 V	" A		ч	u		
	Rear Courty Side	wall	ų		3-12-20		23 V	2:200 A		·II	L <sup>I</sup>		
						11	v	A				-	
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						11-							

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# **CQField** Mining Services

# **WELDING & HEAT RECORD SHEET**

Client:	0	q Field Minir	ng	Job No:	21183		Date:			16/1	.0/2020	1	
Job	Description:	RH340B Boo	m Refurbishm	ent	ent			Drawing No:					
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °c	Actual Preheat Temp °c	Date Taken	Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	Inspected By: Initials
C.L	MAN HOLE -		175	175	16/10/20	0930	27 V	5:9,A	MILLER (OWZ)	WARFICOR 3XP			
	GOVE OFF FLATBAR						v	A					
	BACKING BAR BACKGOUGEEPAN PREHEAT, FUL						V	А		-7.			
u ±	GRIND'ALUSH			T			v	А				4	
5.T	Weld LH Side Window		175	180	18 11 20	Jam	2 ר <u>ע</u>	А	Caw 21			-	
	c/Haide coall infect itate		195°	180	19/11/20		-27.V	A				1 A. A.	
Rut 22	4HSIDE Wheel		175	180	20/11/20	1º00m	-22.20	27.8 A	Ca422	81 NIH4			
	LH Sde wall		186	180	23.11.20	Fran.	32- V	100 10		81 NiH4			
					π		v	A	Ť				
-							V	А					(48
and the second							v	А					
							v	А		L		4 <sup>281</sup>	P
				T.			v	А					
			141				v	А		-			
							v	A					
							V	A					
							V V	A					1.5
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		g Services			v	VELDIN	IG & I	HEAT I	RECOR	D SHEE	Γ.		
Client:		q Field Minir		Job No:	21183	* *	Date:			134/:	11/2020		
dol	Description:	RH340B Boo	m Refurbishm	ent			Dra	wing No:				•	,
Welder ID	Area Welded	Weld Procedure No	Recommended Preheat Temp °C	Actual Preheat Temp °C		Time Taken	Volts	Amps	Plant ID	Consumable Used	Consumable Batch No:	Inspected By: Print Name	inspected By initials
(0039	Boom Sidenall		110° - 120°C	1278	relulzo	10.00Am	24.5 V	288 . A	-	LW16 1.2	190 1263		1.
EDWin	Boom s/wal		110%-1208	11790	13-11-20		v		HLEX YEC	3XP 1.2 m	20012141191		
EDWin	BEOUN TWOI		1102-120%	1132	13-11-20	8:30 An	1 / V	288 A		v	U		č u
4	PODINS/Wall		10%-120%	123°E		11:30A		JEE A	-1	Ų	-1		
towin	BODY		110° =- 720° =			1:00pm		288 A	U	U	4	•	
	SIDEWALL	-	1000 1202		tiettizo			290.6A	L <sup>A</sup>	M	E1		
	SIDEWOLL	•	10°5128°C		10-11-20			29.3 A		V	Л		
1	BOOM	1	1100-200		16-11-20			283 A		U	И		
DININ	BOOM	<b>.</b>	1021202	11600		1030A		2804		4		1	
	Sibtaau		11000-1208	~	16-11-2		1	Δ		v.	4	1	
~	BOOM		110 2 -170;	1180	16-11-20					U	ч	1 2	
2) MIN	Been au		110 - 170%	1212	16-11-2					u	U		
	BDOM		110 00-1002			9:00 A		29.9		()	14		
	CIDENCIU BODIN CIDENAU							23.64		U	ц	-	
SH) WIM	DODW			12000		10:304		UN A		U.	C.	15	<u> </u>
EDWIN	POOM s/w		11000-170%	12100	17-11-20	12:00 M				u			
	BOOMSW		110 %- 120%	12600		8-00 m				U			



Section 6

# **NDT REPORTS**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 8 of 13



AVIATION • INDUSTRIAL • HYDROSTATIC • MINING - INSPECTIONS AND TESTING SERVICES

A.B.N. 78 062 915 299

A.C.N. 062 915 299

## N.D.T. TEST REPORT

BA:sk 12MAY21

<b>REPORT NO.:</b>	R21-0744	Page 1 of 10
<u>CLIENT:</u>	CQ Field Mining Services 19 Connors Road Paget, Qld 4740	
<b>CLIENT CONTACT:</b>	Mr. B. Sedcole	
ORDER No.:	38412	
JOB No.:	21183	
<b>DESCRIPTION:</b>	NDT & Inspection of RH340B Boom at CQ Field Mining Services Worksho	
TECHNICIAN/S:	Mr. B. Anning / Mr. J. Bozier	
DATE OF TEST:	19MAR21 / 15APR21	
WORKSHEET REF. No.:	MPI 21 - 35413 VIS 21 - 6530 UT 21 - 0744	



Page 2 of 10

## **INSPECTION DATA:**

PROCEDURE NO.:	TP-001 / TP-301 / TP-701 / TP-702 / TP-70	)3
AUST. STANDARD:	AS 3978-2003 / AS 1171-1998 / AS 2207-2	2007 / AS/NZS 1554.4 SP
SURFACE CONDITION:	As Welded	
SURFACE PREPARATION:	Blended	
SURFACE CONDITION:	■< 6.3µm Ra, □< 3.2µm Ra	
ACC/REJ LIMITS:	AS/NZS 1554.4 2014 Cat SP Table 6.2 AS/NZS 1554.4 2014 Cat SP Table 6.3	
MATERIAL SPECIFICATION:	Carbon Steel – No Further Specification	
TEST LIMITATIONS:	0°, 45°, 60° & 70° Scans Only Some external surfaces painted at time of ir Drawing not provided	nspection
EQUIPMENT:	<ul> <li>■ Ultrasonic</li> <li>■ Radiographic</li> <li>■ Penet</li> <li>■ Other – Visual</li> </ul>	rant
	Parker B300S Contour Probe AMP-040 Castrol Flux Indicator Strip Krautkramer USM 36 Flaw Detector AUT- Krautkramer MB4S-E 0° Ultrasonic Transducer AU GE RHP 0-3.5 0° Ultrasonic Transducer AU GE MWB 45-4E 45° Ultrasonic Transducer GE MWB 60-4E 60° Ultrasonic Transducer GE MWB 70-4E 70° Ultrasonic Transducer GE MWB 45-2E 45° Ultrasonic Transducer GE MWB 60-2E 60° Ultrasonic Transducer GE MWB 70-2E 70° Ultrasonic Transducer Hetric Universal Calibration Block AUT-0 Headlamp	lucer AUT-116 UT-086 r AUT-080 r AUT-081 r AUT-082 r AUT-083 r AUT-084 r AUT-085
MAGNETISATION:	Continuous Method	
DEMAGNETISATION:	No	
REF. SENSITIVITY:	MPI – 3 Lines Castrol Flux Indicator $UT - 2^{nd}$ BWEFSH / 80% Reference	
CONSUMABLES:	Ardrox, Black Magnetic Ink 800/3, Ardrox, White Contrast Paint 8901/W,	Batch #4960506413 Batch #4960909564

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Page 3 of 10

Report No. R21-0744 dated 12MAY21

## **EQUIPMENT CONTINUED:**

TEMPERATURE:	□ 10° - 14°	■ 15° - 45°	□ 46° - 50°
RECORD:	Photograph		
LIGHTING:	1200 Lux		
% COMPLETION:	100%		
ACCESS:	100%		
MAGNIFICATION:	Nil		

## **ULTRASONIC. INSPECTION DATA:**

THICKNESS RANGE:	0 – 90mm
RANGE:	0° Scan: 0 – 200mm 45°, 60° & 70° Scan: 0 – 400mm
COUPLANT:	Kerosene
SCAN POSITION:	UM: A
SIZING:	LSE / 6dB / 20dB
TEST ACCURACY:	± 0.5mm



## **RESULTS OF EXAMINATION**

#### **INSPECTION OF RH340B BOOM:**

#### **Magnetic Particle Inspection:**

#### Worksheet No. 21 - 35413

Page 4 of 10

Identification	Result
Boom Job No. 21183 100% Inspection of Bore Faces 100% Inspection of Accessible Needle Gunned External Welds 100% Inspection of New External Welds 100% Inspection of New Internal Bulk Head Welds	<ul> <li>Nil Cracking / Anomalies Evident</li> <li>Complies with the Requirements of AS/NZS 1554.1 2014 Cat SP Table 6.2.2</li> </ul>

*Note: Lighting Conditions comply with the Requirements of AS 1171 Section 3.5.2 1998 Limitation: Drawing not provided* 

#### **Visual Inspection:**

Worksheet No. 21 - 6530

Identification	Result
Boom Job No. 21183 100% Inspection of Bore Faces 100% Inspection of Accessible Needle Gunned External Welds 100% Inspection of New External Welds 100% Inspection of New Internal Bulk Head Welds 100% Inspection of External Surfaces	<ul> <li>Nil Defects / Anomalies Evident</li> <li>Complies with the Requirements of AS/NZS 1554.1 2014 Cat SP Table 6.2.2</li> </ul>

Note – Lighting Conditions comply with the Requirements of AS 3978 Section 6.1 - 2003 Limitation 1: Some external surfaces painted at time of inspection Limitation 2: Drawing not provided



Page 5 of 10

## **RESULTS OF EXAMINATION CONTINUED**

#### **INSPECTION OF RH340B BOOM:**

#### **Ultrasonic Inspection:**

Worksheet No. 21 - 0744

Identification	Result
Boom	Nil Recordable Anomalies Evident
Job No. 21183 25% Inspection of New Welds	Complies with the Requirements of AS/NZS 1554.4 2014 Cat SP Table 6.3

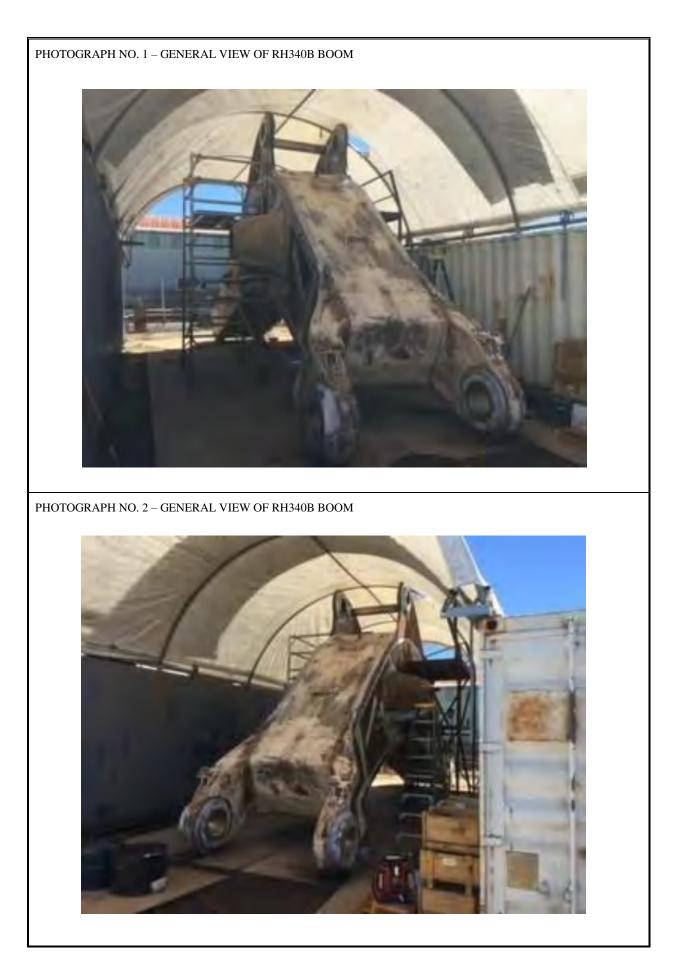
Note – Lighting Conditions comply with the Requirements of AS 3978 Section 6.1 - 2003 Limitation: Drawing not provided

<u>Technicians</u> Ben Anning Joshua Bozier

B. Anning Approved Signatory

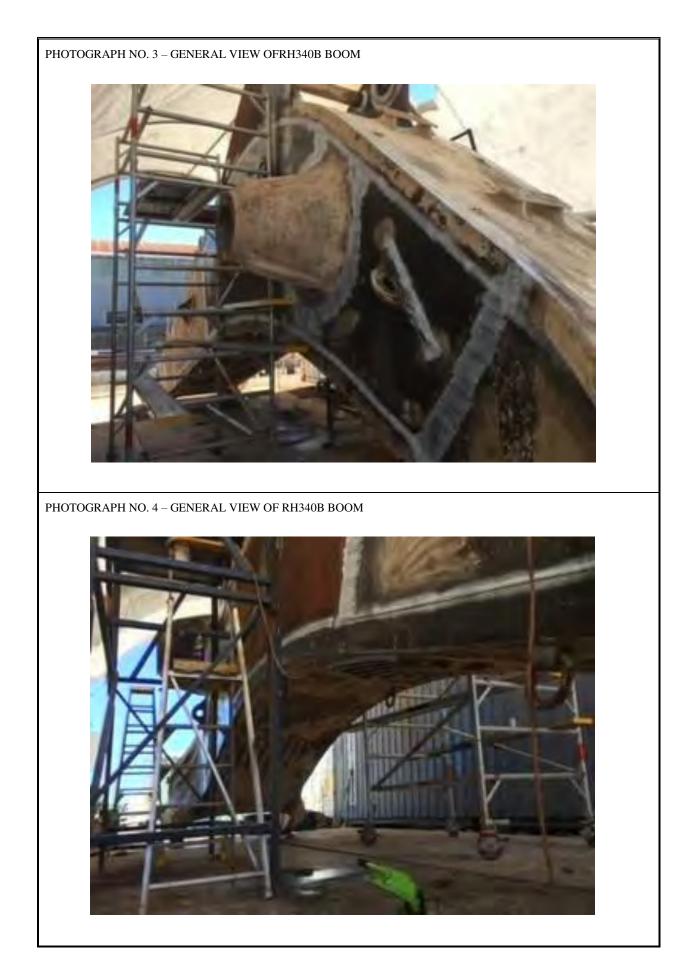


Page 6 of 10





Page 7 of 10





Page 8 of 10





Page 9 of 10





Page 10 of 10





Section 7

# **MACHINING REPORT**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 9 of 13



J.D Lineboring Pty Ltd Joshua Wright 0455250386 josh@dlineboring.com.au 157 Jensens Rd, Farleigh, 4741 ABN: 61 614 285 415

#### QA DOCUMENT:

**Customer:** Field Mining Services

#### Job Description: Linebore RH340 Boom - CQFMS Job# 21183

BORE:	Specified Size:	Bore Position:	Actual Size:
Boom – Stick	410.00mm +0.063mm –	LH	<mark>410.01mm</mark>
	0.00mm		
		RH	<mark>410.00mm</mark>
Boom Lift	365.00mm +0.057mm -	LH Inner	<mark>365.00mm</mark>
Cylinder	0.00mm		
		LH Outer	<mark>365.01mm</mark>
		RH Inner	<mark>365.00mm</mark>
		RH Outer	<mark>365.00mm</mark>
Boom Lift	410.00mm +0.063mm – 0.00mm	LH	<mark>410.01mm</mark>
		RH	<mark>410.00mm</mark>
Top Cylinder Mounts	339.949mm – 339.913mm	LH	<mark>339.94mm</mark>
		RH	<mark>339.93mm</mark>
Top Cylinder	Outside – Outside		1650mm
Mount Face	1650mm		
Distances			
	Inside – Inside		<mark>1310mm</mark>
	1310mm		
	Width	LH	<mark>170mm</mark>
	170mm	DU	170
		RH	170mm

**Notes:** Overall Face Distances for the Boom Lift Cylinders is 3070mm. To get the Top Cylinder Bores in the right position we straight edge off the outside face of the Boom Lift Cylinder bores and measure from face to Straight Edge. Measurement should be 710mm, this was achieved.



Section 8

# **STRESS RELIEVING**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 10 of 13



#### Heat Treatment Report:

Report Number: NHT 4114

Client: CQFMS

Project: RH340 Boom

Job Description: PWHT furnace

PWHT Technician: Steve Harrison

Heat Treatment Details:

Date.27/03/2021

Job Location: Workshop Mackay

Contact: Shannon

Order No: P38173

Procedure. HTP007

<u>Signature:</u> Alum

Soak Temp: 550°c	Soak Period: 2.5hrs.
Heat Increase Rate: 50°c	Controlled Cooling Rate: 100°c
Start Temp: 300°c	Switch Off Temp: 300°c
Preheat Temp: N/A	Insulation Removed At: N/A
Recorder Number: 166	Chart Speed: 25mm/h

#### Job method:

#### **NOTES**

This process was monitored using a fully calibrated temperature recorder providing a print out graph for quality assurance documentation. A copy of these charts will be provided with this report. All original charts are held on file at National Heat and are available upon request.

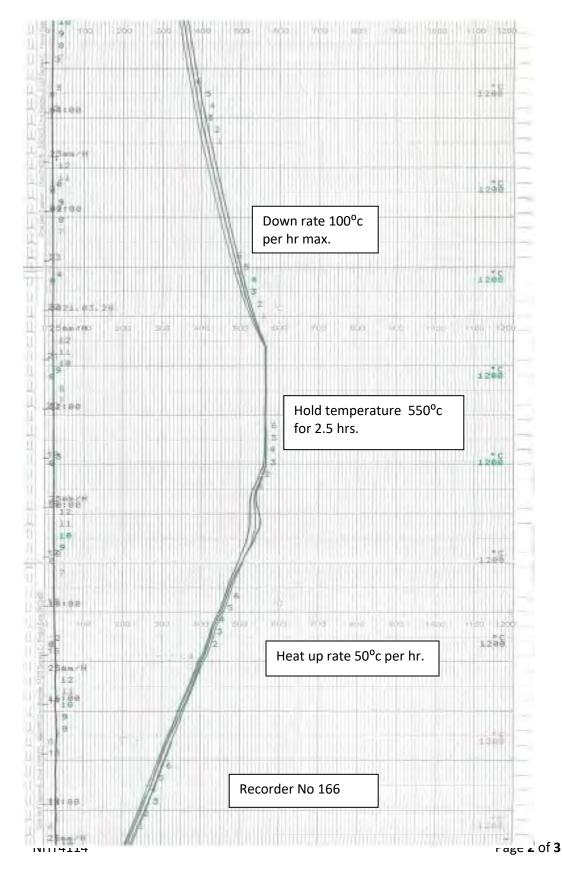
Technical Controller: Steve Harrison

Signature:

Alin



#### National Heat Pty. Ltd.





# Certificate of Calibration / Test

Certificate N°:	8166	Date of Iss	ue:	1	8	2020		
Calibration carried	out by (Print)	S. Harrison						
Equipment Description						_		
	Chino 12 Po	oint Recorder		-				
Input or Sensor Type		Outpu	at or Ran	ge				
Type K		0°	с —	-120	0°C			
Ref. N°.	Serial Nº.	2	Next C	alibrati	on due			
R166	R4139C19	6	1/8	/202	1			
Customer	Order N°.	Order N°. Ambient Temperature						
	1		_	23°C				
Calibration Signal	Recorde	r Reading	Reading Acceptance (+/- 10%)					
200°C	20	201°C		С				
600°C	60	1°C	С					
900°C	90	900°C			С			
		3						
Instrument used	Model	Serial ]	erial N°.		ate Cal	ibrated		
THERMO-ELECTRIC CALIBRATOR	TC-920	I.357913			31/7/2	020		

All measurements are performed with equipment that is traceable to National Standards, unless otherwise stated.



Signature:	Date:	4
Allen	1/8/2020	



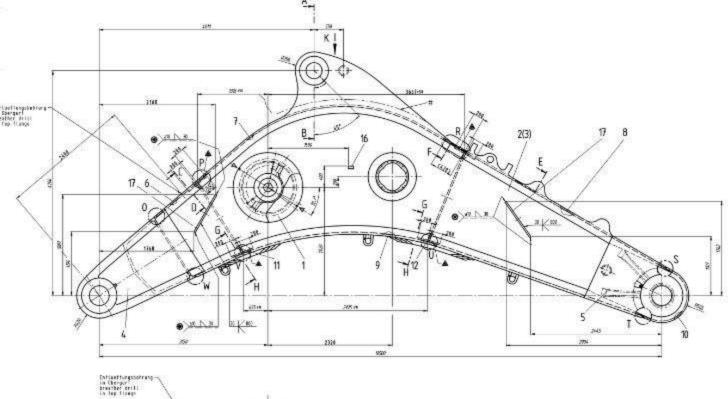


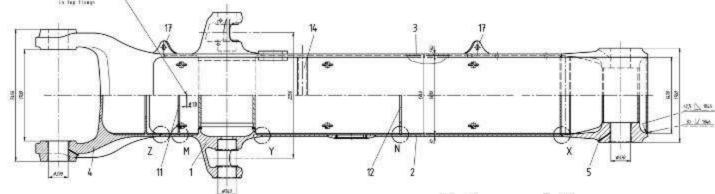


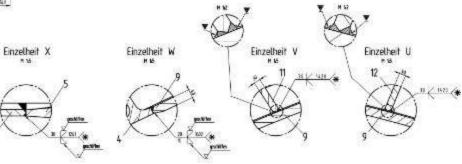
Section 9

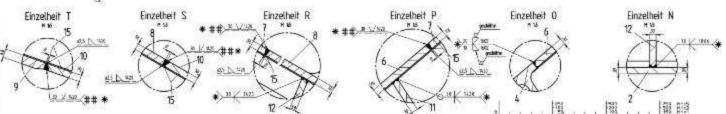
# **FABRICATION DRAWING**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 11 of 13









N 16

Einzelheit Z

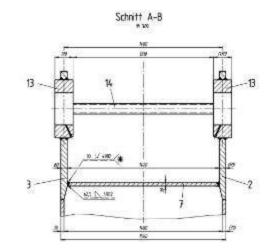
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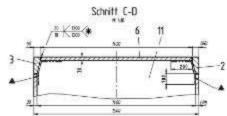
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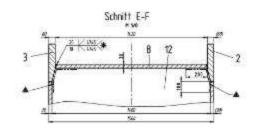
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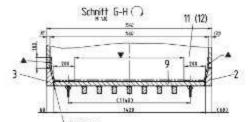
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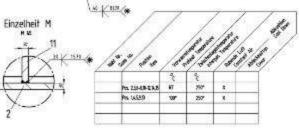
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Section 10

# **MATERIAL CERTIFICATION**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 12 of 13



THIS LABORATORY IS ACCREDITED FOR COMPLIANCE WITH ISO/IEC 17025 - TESTING. THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL. LABORATORY No. 1553.

#### **BISALLOY STEELS PTY. LTD.**

#### ABN 27 001 641 292 18 RESOLUTION DRIVE, UNANDERRA NSW 2526 AUSTRALIA PO BOX 1246, UNANDERRA NSW 2526 AUSTRALIA TELEPHONE: +61 (02) 4272 0444 FAX: +61 (02) 4272 0456

## **TEST CERTIFICATE**

PAGE: 1 of 1 PRINT DATE: 12/11/2020 DATE OF MANUFACTURE: 27/03/2020 CERTIFICATE No: 552707

CUSTOMER: INFRABUILD STEEL CENTRE MACKAY BRANCH LOCKED BAG 5044 PARRAMATTA NSW 2124					SPECIFICATION: STRUCTURE 80 (AS3597-2008 GRADE 700)										
CHEM	ICAL ANALYSIS					LA		YSIS - PEI	RCENTA	GE OF ELEME	NT BY MASS	i			
HEAT No	92-07913	С	Р	Mn	Si	S	3	Ni	Cr	Мо	Cu	AI	Sn	Ti	В
		0.140	0.010	0.990	0.50	0 0.0	02 0	.140	0.660	0.194	0.000	0.037	0.000	0.021	0.0016
BATCH No		N = 0.0 $CE(IIV)$	0023 W) = 0.4851												
HEAT TR	REATMENT DETAILS: 900	°C/WQ / 615	°C/QT												
MECHANICAL TESTS TEST METHODS				AS1391				AS1816.1	AS1544						
		PLATE SIZE			0.2% PROOF TENSILE			GAUGE DO TO	50.770	Hardness	CHARPY V-NOTCH IMPACT TEST				
PLATE	AND ORDER DETAILS		m x mm x m HICKNESS X LEI	NGTH	STRESS MPa	STRENGTH MPa	ELON- GATION %	LENGTH (mm)	PS/TS RATIO	HBW 10/3000	SPEC SIZE mm x mm		MP EN	ERGY J	LATERAL EXPANSION (mm)
PLATE No: 11 CUST O/N: 7506610164 IN	ITEM No:	2485	x 60 x 6.000	)	787	849	22	50	0.93	258	10 x 10 NOMINAL STR		300J	140 161	

= 1.355818 Joules

1inch = 25.44mm

1ft. lbf

- = 6.894757 Mpa 1ksi
- °F = (°C x 1.8) + 32
- FEED CERTIFICATE No. 201912240000141 FEED LABORATORY No.

INTERNATIONALLY ENDORSED LABORATORIES.

CNAS No: L3008 DATED.

THE ABOVE CHEMICAL ANALYSES ARE REPRODUCED FROM FEED SUPPLIER NATA OR EQUIVALENT

13/01/2020

WE CERTIFY THE ABOVE INFORMATION IS IN ACCORDANCE WITH THE RECORDS OF THE COMPANY AND CONFORMS TO THE SPECIFICATION AS STATED.



Dake Yu SIGNATORY



Section 11

# **PHOTOS**

Document Name	Document ID	Version	Issue Date	Page
Workshop MDR	F_QA-013	1	10.02.2019	Page 13 of 13













