

Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F Buffer Railcar Inspection Documents

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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APPENDIX F.1 – BUFFER RAILCAR FABRICATION INSPECTION DOCUMENTATION

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Appendix F.1.1 – Buffer Railcar Travelers

		Orano Federal Services								
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Type of Submittal: First			60	Re-Submittal	SDRL I	ist Item I	No: 15			
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Submitted By: RICK FOR			ORD	Rick Ford	Digitally eigned by Rick Flord Deler 2019 01; 19 07-eth01 -04107	PR	OJECT MANAGE			
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FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRG-012

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Project: 00225.03.0050 DOE Atlas Project

		Orano Federal Services SUPPLIER DOCUMENT SUBMITTAL REVIEW						
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Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 052					
Charge No:	002	25.03.0050.02.00001	Due Date: 4/2/2019					
Document(s):	Se	e DTF No.: 052						
RE	27.0	NSTRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)					
PE	_	slade Klein						
REVIEWERS	Slad	ide Klein, Bernie Counterman						
QA	Berr	nie Counterman						
	*	Technical Review						
Comments/M Technical Re	30.3	ttached Yes No						
Technical Re	viewer(s	s) (Sign/Date): KLEIN Slade	Date: 2019.03.19 08:18:55 -07'00					
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Project: 00225.03.0050 DOE Atlas Project

Buffer Railcar IDOX 020001

#1

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

Quality Assurance Center Sill Assembly Reporting Form CUSTOMER WITNESS POINT: * Material Inspection- Deck and/or Car Body Steel to occur on first available car on order. **Customer Signature** Draft Sill Arrangement Number **CUSTOMER WITNESS POINT:** * Start of Welding Process to occur on first available car on order. Position #1 Fit and weld center sill bottom plate, assemble center sill and end draft sills to deck plate Steel Stamp Number Inspect all welds Welders Clock # All repairs to be made and forms completed before moving Draft Sill section Group leader or foreman's signature Inspector's signature Full QA Form 86 ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0



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Buffer Railcar IDOX 020001

Cuality Assurance
First Under Frame Reporting Form

Position #2
Fit cross bearers, cross ties, cross tie gussets, body bolster and end sills. Weld top of cross bearers, gussets, back-up strips, side sill and center plates

Inspection
Inspect all parts/sub-assemblies for proper application to drawings
Inspect all welds

Welders Clock # 300 K. Pater

Welders Clock # 300 K. Pater

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature foot. The pater and end sills. Weld top of cross bearers, gussets, back-up strips, side sill and center plates

Inspect all parts/sub-assemblies for proper application to drawings

All repairs to be made and forms completed before moving assembly

Date 4-12-18

QA Form 86 Revision No. 0 ATLAS Span Bolster Assembly

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Project: 00225.03.0050 **DOE Atlas Project**

Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions Form 86

ATLAS Buffer Car Assembly Quality Assurance Apply Brake Material Position #3 Fit and weld brake material, apply cushioning unit Inspection Inspect all parts/sub-assemblies for proper application to drawings Inspect all welds Welders Clock # 109 Cushion Unit Serial Numbers: A. NKRC 11801001653 B. NKRC 1180100162 X All repairs to be made and forms completed before moving assembly Group leader or foreman's signature Swit Melly Date 5-2-18

Inspector's signature Bill Paller Date 5/2/18 QA Form 86 ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0

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Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

Quality Assurance Reporting Form Turn Over

Position #4
Weld Cross bearers and cross ties, body bolsters, center sill, end sills, and side sills

Inspection

Inspect all parts/sub-assemblies for proper application to drawings

Welders Clock # 300 K. Feter Some ST Role Hunder Land

All repairs to be made and forms completed before moving assembly

CUSTOMER WITNESS POINT:

Customer Signature VI - 196

Inspector's signature Kill

* Start of NDE Process to occur on first available car on order.

Group leader or foreman's signature Lift Melly Date 4-19-18

QA Form 86 Revision No. 0 ATLAS Span Bolster Assembly

October 12, 2017

4



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Project: 00225.03.0050 DOE Atlas Project

Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

QA Form 86 Revision No. 0 **ATLAS Span Boister Assembly**

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Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

Quality Assurance Reporting Form
Position #6 Apply airbrake, piping and components
Inspection Inspect all parts/sub-assemblies for proper application to drawings
Inspect all welds and fasteners
Welders Clock #
All repairs to be made and forms completed before moving assembly
CUSTOMER WITNESS POINT:
* AAR Witness Brake Test; to occur on Buffer Railcar.
Customer Signature Blown 5 Date 12/3/18
CUSTOMER HOLD POINT:
* Final Acceptance Inspection Hold Point; to occur with each railear.
Customer Signature 18 Court Date 2/19/19
Group leader or foreman's signature IM Melly Date 5/2/18 Inspector's signature Malu Date 2MAY18
QA Form 86 ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions Form 86A ATLAS Buffer Car Draft Sill

	Quality Assurance Draft Sill Arrangement Reporting Form
	Draft Sill Arrangement Number 2
	Inspection Inspect all parts/sub-assemblies for proper application to drawings
	Inspect Fit-up OK
	Check Cushioning Unit Pocket Dimensions 6
	Weld Draft Sill 6 P
	Inspect all welds
X	Welders Clock # 300 K. Pelander 57 Relywith he 81 Trans Bufu 844 mill from
	All repairs to be made and forms completed before moving Draft Sill section
	Group leader or foreman's signature well Tell Date 4.16-18
	Inspector's signature bill ball Date 16APR 18
	QA Form 86A ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0



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Project: 00225.03.0050 DOE Atlas Project

· Buffer Railcar IDOX 020002

2

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

Quality Assurance Center Sill Assembly Report	rting Form	
CUSTOMER WITNESS I	n- Deck and/or Car Body Steel to occur o	on first available car on orde
Customer Signature	Sencuel Court Date 31	121/18
Draft Sill Arrangement Nur	nber_3	
* Start of Welding P	POINT: yocess to occur on first available car on o leuand beaut	order.
	om plate, assemble center sill and end draft	sills to deck plate
Steel Stamp Number		, and a second
Inspect all welds		
Welders Clock # # 824 /	RON PRILE RISSON MEUS OSH CLYDE IN HENKE	
All repairs to be made and for	orms completed before moving Draft Sill so	ection
Group leader or foreman's s	ignature destr Medy	Date_4-23-18
Inspector's signature Sil	1 Baker	Date 4-23-18
QA Form 86 Revision No. 0	ATLAS Span Bolster Assembly	October 12, 2017

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Buffer Railcar IDOX 020002

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

Quality Assurance First Under Frame Reporting Form Position #2 Fit cross bearers, cross ties, cross tie gussets, body bolster and end sills. Weld top of cross bearers, gussets, back-up strips, side sill and center plates Inspection Inspect all parts/sub-assemblies for proper application to drawings Inspect all welds Welders Clock # All repairs to be made and forms completed before moving assembly Group leader or foreman's signature Ø Inspector's signature Kill QA Form 86 ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0 2

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Project: 00225.03.0050 DOE Atlas Project

Buffer Railcar IDOX 020002

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

		and Buildi Cui Ass	Cilibiy	
Quality Assurance Apply Brake Mate	• erial			
Position #3 Fit and weld brake	e material, apply cush	nioning unit		
Inspection Inspect all parts/su	ab-assemblies for pro	per application to drawi	ngs	
Inspect all welds _	ox			
Welders Clock #	842 109			
	805016514			
B. PKAC 1180 All repairs to be ma		eted before moving asse	embly	
Group leader or for	reman's signatureø	lett Nuly	Date_	6-5-18
Inspector's signatur	re Ball But	en	Date_	6/5/18
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QA Form 86 . Revision No. 0	ATLAS Spa	an Bolster Assembly		October 12, 2017



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Project: 00225.03.0050 DOE Atlas Project

· Buffer Railcar IDOX 020002

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

ATLAS Buffer Car Assembly Quality Assurance Reporting Form Turn Over Position #4 Weld Cross bearers and cross ties, body bolsters, center sill, end sills, and side sills Inspection Inspect all parts/sub-assemblies for proper application to drawings Inspect all welds and fasteners Welders Clock # All repairs to be made and forms completed before moving assembly CUSTOMER WITNESS POINT: * Start of NDE Process to occur on firsy available car on order. Customer Signature Vt Group leader or foreman's signature & QA Form 86 ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0



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Bu	ıffer Railcar IDOX 020002		
	· • •	Kasgro Specialty Railcar Solu Form 86 ATLAS Buffer Car Asseml	
	Quality Assurance Reporting Form	2	
	Position #5 Apply Safety Appliances ar	ad Couplers	
	Inspect all parts/sub-assemb Inspect all welds and fasten	olies for proper application to drawings	
	Welders Clock #		
	All repairs to be made and for	orms completed before moving assembly	,
	Group leader or foreman's s	ignature_Sept Neely	Date 6-5-18
	Inspector's signature R	il Bale	Date 6-5-18 Date 6/5/18
	QA Form 86 Revision No. 0	ATLAS Span Bolster Assembly	October 12, 2017
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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Buffer Railcar IDOX 020002

Kasgro Specialty Railcar Solutions Form 86 ATLAS Buffer Car Assembly

•	ATDAS Builter Car Assembl	S.
Quality Assurance Reporting Form		
Position #6 Apply airbrake, piping and compo	onents	
Inspection Inspect all parts/sub-assemblies for	or proper application to drawings	
Inspect all welds and fasteners	GR	
Welders Clock # / f 4, / 3/		
Åll repairs to be made and forms	completed before moving assembly	
CUSTOMER WITNESS POIN	Γ;	
* AAR Witness Brake Customer Signature	Test; to occur on Buffer Railcar.	12/3/18
CUSTOMER HOLD POINT:		
	spection Hold Point; to occur with	
Customer Signature	Cour & Date	2/19/19
Group leader or foreman's signature	no Scott Neily	Date 6-5-18
Inspector's signature y PUV /	-	Date 9 3/10
QA Form 86 ATI Revision No. 0	AS Span Bolster Assembly	October 12, 2017



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Doc./Rev.: EIR-3021970-000

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Buffer Railcar IDOX 020002

#)

Kasgro Specialty Railcar Solutions Form 86A ATLAS Buffer Car Draft Sill

Quality Assurance Draft Sill Arrangement Reporting Form
Draft Sill Arrangement Number
Inspection Inspect all parts/sub-assemblies for proper application to drawings
Inspect Fit-up
Check Cushioning Unit Pocket Dimensions OF
Weld Draft Sill
Inspect all welds
Welders Clock # 824 ROM PAICE 841 JOHN EKENZE
All repairs to be made and forms completed before moving Draft Sill section
Group leader or foreman's signature MENT Mely Date 4-25-18
Inspector's signature Date Date
QA Form 86A ATLAS Span Bolster Assembly October 12, 2017 Revision No. 0



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Appendix F.1.2 – Burning Table Inspection Reports, Forms 9Z-A and 9Z-A

			Oran	o Feder	al Serv	vices						
orano			DATA TRANSMITTAL FORM									
Supplier	ne	KA:	SGRO RA	L CORP.	, INC.	DTF No	041	IA		Page 1 of 1		
P.O./SC No: 15C3011916								Date	ate: 4/02/22019			
Type of Submittal: First				Re-Subm	ittal		SDRL LI	st Item No	: 24			
Submitted for:			Review	□Info	ormation	Nur	mber of Cop	oies Subm	itted:	1.		
Submitted By: RICK FO		RD	Rick	k Ford	Digitally sign Date 2019 i -0700*	ned by Pick Ford 04 00 08 56 41	PROJECT MANAGE			IAGE		
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										AP RWC	AWC	REV
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							Date	4/3/20	19			
				FS DISPOS	SITION CO	DES AND D	EFINITIO	NS				
AP	Approv	ed.		Work may proceed,			Resubmittal is not required					
AWC	Approv	ed with	Comment	Work may proce	ay proceed; comments provided for Supplier's consideration only.			Resubmittal is not required				
REV	Review	ved			eed; comments provided for Supplier's consideration only.							
RWC	Review	ved wit	Comment	Work may proc Buyer comme		ct to incorp	oration a	nd complian	ce w/	Correct and resubmit		ubmit
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	2000		ittal Acknowledged									
Project Manage	Receip idgment roceed	t Subm t of the and th ger (P or De	Supplier, the inc e Supplier shall i M) / Engineering esignated	Work may not proceed. No other action required. Incorporation of FS' comments will result in a change to the ill immediately provide a written notice to FS' C&P Represer						order/Suribing th	bcontract, e change,	work

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Orano Fed			eral Services					
orano		SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW					
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 041A					
Charge No:	0022	5.03.0050.02.00001	Due Date: 4/15/2019					
Document(s):	See	DTF No.: 041A	*					
RE	47.57	STRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)					
PE	Slade	lade Klein						
REVIEWERS	Slade	Klein, Bernie Counterman						
QA	Berni	e Counterman						
		Technical Review						
Comments/Ma		ached Yes No 🔳						
Technical Rev	viewer(s)	(Sign/Date): KLEIN Slade	Date: 2019.04.02 09:59:27 -07'00					
		Quality Assurance Review (As	Applicable)					
Comments/Ma								
No Commer	nts							
QA Reviewer	(s) (Sign/	Date): Barred Court	Digitally signed by COUNTERMAN Bernard Date: 2019.04.03 08:12:16 -07'00'					
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KAS 149 Rev. 1

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

			DATE 7/21/10	
P.O.# 15C3011916_		CAR/JOB # ATLA	SB	
MATERIAL DESCRI	PTION BOLSTER F	FLANGE		
DRAWING 1160-6		ITEM # 3-1		
MILL REPORTS REG	CEIVED YES	NO N/A REPORT	S CORRECT YES NO_ N/A_	
ACCEPTANCE PER SAM LOT SIZE 1-10 11-20 21-50 51-100 101-200 201-500 / YUP	APLE SIZE WHEN SAM SAMPLE SIZE 1 2 3 4 5 6 7 PER 500 LOT	APLING LOTS OF MATERIAL REJECTION CRITERIA 1 2 3 4 5 6 7 PER 500 LOT		
1 101-	7 1 LIX 000 LOT	8	5/8"	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS	
3-27-18	8	Φ	BB KMC 021918-004	
*			***************************************	
To the best of my knowledge all information contained in this document is accurate. S ied: Kasgro Rail				

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KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

			DATE 7/21/10
P.O.# 15C3011916_		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION BOLSTER \	WEB	
DRAWING 1160-6		ITEM # 3-2	
MILL REPORTS RE	CEIVED YES_	NO N/A REPORT	rs correct yes_no_ n/a_
ACCEPTANCE PER SAL	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	1
1-10	1	1	1
11-20	2	2	1
21-50	3	3	1
51-100	4	4	1
101-200	5	5	1
201-500	6	6	1
/ ¡UP	7 PER 500 LOT	7 PER 500 LOT	
Y JUP	1 PER 300 LOT	16	I 1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	
3-27-/8	14	d COMMITTINE WAINING	BB KMC 02/3/8-004
3-61-18	16	Ψ	MA KNIC 0213/8-007
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

			DATE 7/21/10	
P.O.# 15C3011916_		CAR/JOB # ATLA	SB	
MATERIAL DESCRI	PTION SIDE BEAR	ING STIFFENER		
DRAWING 1160-6		ITEM # 3-3		
MILL REPORTS REC	CEIVED YES	NO N/A REPORT	TS CORRECT YES NO_ N/A_	
ACCEPTANCE PER SAM LOT SIZE 1-10 11-20 21-50 51-100 101-200 201-500 UP		APLING LOTS OF MATERIAL REJECTION CRITERIA 1 2 3 4 5 6 7 PER 500 LOT 8 QUANTITY REMAINING	1/2" REMARKS SB KMC 02/3/8-004	
To the best of my knowledge all information contained in this document is accurate. Signed: Kasgro Rail				

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

DATE 7/21/10 P.O.# 15C3011916		BURININ	3 INDLE INSPECTION REPORT	
MATERIAL DESCRIPTION SIDE BEARING SPACER DRAWING 1160-6 ITEM # 3-4 MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1-20 2 2-50 3 51-100 4 4 101-200 5 5 201-500 6 6 UP 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS				DATE 7/21/10
MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 3 51-100 4 4 4 101-200 5 5 201-500 6 6 [VIP 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS	P.O.# 15C3011916		CAR/JOB # ATLAS	SB
MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 3 51-100 4 4 101-200 5 5 201-500 6 6 201-500 6 6 201-500 6 6 201-500 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS	MATERIAL DESCR	IPTION SIDE BEAR	ING SPACER	
ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 3 51-100 4 4 4 101-200 5 5 5 201-500 6 6 2UP 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS	DRAWING 1160-6		ITEM # 3-4	
ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 3 51-100 4 4 4 101-200 5 5 201-500 6 6 201-500 6 6 2UP 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS			•	
LOT SIZE	MILL REPORTS RE	ECEIVED YES	NO N/A REPORT	S CORRECT YES NO_ N/A_
1-10		MPLE SIZE WHEN SA	MPLING LOTS OF MATERIAL	1
11-20				
21-50 3 3 3 51-100 4 4 101-200 5 5 5 201-500 6 6 6 6 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS				
51-100				
101-200				
201-500 6 6 6 UP 7 PER 500 LOT 7 PER 500 LOT 8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS	51-100			
VP	101-200	5		
8 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS	201-500	6		
DATE CUT QUANTITY QUANTITY REMAINING , REMARKS	<u>U</u> P	7 PER 500 LOT		3/9"
D/112 001		CHANTEL		
5-4-18 4 4 BID RAIC BIOSIS*OII				
	5-4-18	4	4	BIG KAC 010310-011
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			71	
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To the best of my knowledge all information contained in this document is accurate.	. 1.	Kallan VIII	Voca	ro Rell
To the best of my knowledge all information contained in this document is accurate. Signed: Kasgro Rail	Signed:	Manu	Kasg	to Kall

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP FORM 9Z-A BURNING TABLE INSPECTION REPORT				
			DATE 7/21/10	
P.O.# 15C3011916		CAR/JOB # ATLAS	S B	
MATERIAL DESCRI	PTION CROSSBEA	RER BOTTOM FLANGE		
DRAWING 1160-7		ITEM # 3-5		
			S CORRECT YES NO_ N/A_	
	IPLE SIZE WHEN SAN	MPLING LOTS OF MATERIAL	1	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA		
1-10	1	1 2		
11-20	2	3		
21-50	3 4	4		
51-100		5		
101-200	5	6		
201-500	6	7 PER 500 LOT		
UP	7 PER 500 LOT	20	3/4"	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS	
3-21-18	20	b	BB KIUC010318-006	
3 21-10	- 20	-	1777 7777000	
To the best of my knowledge all information contained in this document is accurate. Signified: Kasgro Rail				

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

		GRO RAIL CORP	
	BURNING	TABLE INSPECTION REPORT	DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	B B
MATERIAL DESCRIP	PTION CROSSBEA	RER FLANGE	
DRAWING 1160-7		ITEM # 3-6	
			S CORRECT YES NO_ N/A_
	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1 2	
11-20	2	3	
21-50	3	4	
51-100	4	5	
101-200	5		
201-500	6	6	
<u>/)UP</u>	7 PER 500 LOT	7 PER 500 LOT	l 1/2"
	T GUALITITY	20	REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	FB KMC 010318-003
3-21-18	20	$-\varphi$	MB KMC 010318-003
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

		GRO RAIL CORP FORM 9Z-A TABLE INSPECTION REPORT	
	DOTATIVO		DATE 7/21/10
		CAR/JOB # ATLAS	: R
P.O.# 15C3011916		CARIJOD # ATLAC	
MATERIAL DESCRIF	TION CROSSBEA	RER BOTTOM FLANGE	
DRAWING 1160-7		ITEM # 3-7	
			S CORRECT YESNO N/A
	SAMPLE SIZE	MPLING LOTS OF MATERIAL REJECTION CRITERIA	
LOT SIZE	1	1	
1-10 11-20	2	2	
21-50	3	3	
51-100	4	4	
	5	5	
101-200	6	6	
201-500		7 PER 500 LOT	
7 JUP	7 PER 500 LOT	10	3/4"
DATE OUT	QUANTITY	QUANTITY REMAINING	REMARKS
DATE CUT 3-2/-/8		Ø	RAB KMC010318-006
3-21-18	10	Ψ	1716 1410
			_
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

KASGRO RAIL CORP

FORM 9Z-A

	BURNING	TABLE INSPECTION REPORT	
		1	DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	В
MATERIAL DESCRIF	TION CROSSBEA	RER FLANGE	
DRAWING 1160-7		ITEM # 3-8	
			S CORRECT YES_NO_ N/A_
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAN	IPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
7)UP	7 PER 500 LOT	7 PER 500 LOT	1/2"
		10	REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	AB KILL 010318-003
3-21-18	10	φ — — — — — — — — — — — — — — — — — — —	FAB KIGG 810318-003
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Signed:	Mague	Kas	gro Rail

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

KASGRO RAIL CORP

	BURNING	TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	В
MATERIAL DESCRIF	TION BOLSTER D	NAPHRAM	
DRAWING 1160-7		ITEM # 3-9	
			S CORRECT YES NO_ N/A_
ACCEPTANCE PER SAM	APLE SIZE WHEN SAM	IPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	11	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
/ _{ UP	7 PER 500 LOT	7 PER 500 LOT	1/2"
a per		8	REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	BB KMC 021918-003
4-3-18	8	Ø	1913 KMCO217/0-003
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

		1	DATE 3-15-10
P.O.# 15C3011916		CAR/JOB # ATLAS	ВВ
MATERIAL DESCRIF	TION CROSSTIE		
DRAWING D-1160-7		ITEM # 3-10	
DRAWING D-1100-7			/
MILL REPORTS REC	CEIVED YES	NO N/A REPORT	S CORRECT YES NO N/A
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAM SAMPLE SIZE	MPLING LOTS OF MATERIAL REJECTION CRITERIA	
1-10	1	1	
11-20	2	2 3	
21-50	3	4	
51-100	5	5	
101-200	6	6	
201-500 !)UP	7 PER 500 LOT	7 PER 500 LOT]
[<u>)UP</u>	11 EK 000 EG 1	22	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3/15/2018	22	0	BB
			to.
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Signed: _ Bll_	Maker		sgro Rail
Signed	/		

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	SB
MATERIAL DESCRI	PTION SIDE SILL E	SOTTOM FLANGE	
DRAWING 1160-10		ITEM # 3-11	
		NON/AREPORT	TS CORRECT YES NO_ N/A_
LOT SIZE	SAMPLE SIZE]
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
4 110	7 DED 500 LOT	7 PER 500 LOT	

	<u></u>	
QUANTITY	QUANTITY REMAINING	REMARKS
2-	d)	BB RMC,021918-002
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	QUANTITY Z_	QUANTITY QUANTITY REMAINING

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Page F-32 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

	RECEIVIN	IG INSPECTION REPORT
		DATE 3-15-10
P.O.# 15C3011916		CAR/JOB # ATLAS B
MATERIAL DESCRI	PTION STRINGER	
DRAWING D-1160-8		ITEM # 3-12
MILL REPORTS REC	CEIVED YES /	NO N/A REPORTS CORRECT YES NO N/A
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
1-UP	7 PER 500 LOT	7 PER 500 LOT
)		16
DATE CUT	QUANTITY	QUANTITY REMAINING REMARKS
3/28/2018	16	0 BB
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

DATE 3-15-10

D	a	#	1	5	C3	'n	11	191	16

CAR/JOB # ATLAS B

MATERIAL DESCRIPTION STRINGER

DRAWING D-1160-8

ITEM # 3-13

MILL REPORTS RECEIVED YES_NO__ N/A__ REPORTS CORRECT YES_NO_ N/A_

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	11
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
1-UP	7 PER 500 LOT	7 PER 500 LOT

32

DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

	1,120			
			DATE 3-15-10	
P.O.# 15C3011916	CAR/JOB # ATLAS B			
MATERIAL DESCRI	PTION STRINGER			
DRAWING D-1160-8	3	ITEM # 3-14		
MILL REPORTS RE	CEIVED YES 🗸	NO N/A REPORT	rs correct yes No_ N/A_	
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL		
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA		
1-10	1	1		
11-20	2	2	1	
21-50	3	3	1	
51-100	4	4	1	
	5	5	1	
101-200	6	6		
201-500		7 PER 500 LOT	1	
1-UP	7 PER 500 LOT	16	1	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS	
DATE CUT	16	0	BB	
3/28/2018	10			
				
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

ŧ	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	3 B
MATERIAL DESCRIE	OTION CENTER SI	LL BOTTOM FLANGE	
WATERIAL DESCRI	HOW OLIVIER OF	EE BOTTOMT 187 117 12	
DRAWING 1160-8		ITEM # 3-15	
		NON/AREPORT	S CORRECT YES NO_ N/A_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5 6	
201-500	6	7 PER 500 LOT	}
1-UP	7 PER 500 LOT	2	1"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-9-18	2-	Ø	BB RMC011318-004
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

	OUDMING	FORM 9Z-A TABLE INSPECTION REPORT	
ī	BURNING		
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S B
MATERIAL DESCRIP	TION SIDE SILL B	OTTOM FLANGE	
DRAWING 1160-10		ITEM # 3-16	
			S CORRECT YES NO_ N/A_
	SAMPLE SIZE	REJECTION CRITERIA	1
LOT SIZE	1	1	
1-10 11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
`1-UP	7 PER 500 LOT	7 PER 500 LOT]
/		4	1" REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	BB KUC 011318 004
4-9-18	4	4	DO KACONSIS - 007
			140.
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

KASGRO RAIL CORP

:	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S B
MATERIAL DESCRI	PTION SIDE SILL B	OTTOM FLANGE	
DRAWING 1160-10		ITEM # 3-17	
			S CORRECT YES NO_ N/A_
ACCEPTANCE PER SAM	APLE SIZE WHEN SAN	PLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	11	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT]
./		4	1" REMARKS
DATE CUT	QUANTITY	QUANTITY, REMAINING	BB KUC 021918-002
4-10-18	4	9	BB KUC 0214 1 2 - 00 E
		- Company	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

	BURNING	TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	ВВ
MATERIAL DESCRI	PTION CENTER SI	LL BOTTOM FLANGE	
DRAWING 1160-11		ITEM # 3-18	
			S CORRECT YES NO N/A
	MPLE SIZE WHEN SAN	PLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	
)-0.		4	1"
DATE CUT	QUANTITY	QUANTITY, REMAINING	REMARKS
4.9-18	4	D	BB KMC010318-005
7.7.70		7	
To the best of my knowled:	edge all information con	stained in this document is accurate	



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

DATE 3-15-10

			DATE 0-10-10	
P.O.# 15C3011916	.O.# 15C3011916 CAR/JOB # ATLAS B			
MATERIAL DESCRIF	PTION COUPLER (CARRIER		
DRAWING D-1160-1	2	ITEM # 3-21		
		NO N/A REPORT	S CORRECT YES NO_ N/A_	
LOT SIZE	SAMPLE SIZE			
1-10	1	1		
11-20	2	2		
21-50	3	3		
51-100	4	4		
101-200	5	5		
201-500	6	6		
1-UP	7 PER 500 LOT	7 PER 500 LOT]	

DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3/15/2018	4	0	BB
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

	KASC	GRO RAIL CORP	
	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916	CENTEL	CAR/JOB # ATLAS	S B
MATERIAL DESCRIF	PTION SIDE SILL V	VEB	
DRAWING 1160-15		ITEM # 3-23	
			S CORRECT YES NO_ N/A_
	IPLE SIZE WHEN SAM	IPLING LOTS OF MATERIAL	ı
LOT SIZE	SAMPLE SIZE		
1-10	1	11	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
~1-UP	7 PER 500 LOT	7 PER 500 LOT	
}	1	2	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-26-18	2-	d	BBKMC 021918-003
3-26-10			1,110-150-180
	 		
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

	BURNING	S TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S B
MATERIAL DESCRI	PTION DRAFT SILI	_ SPACER	
DRAWING 1160-13		ITEM # 3-24	
			S CORRECT YES NO_ N/A_
		MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1 1	1	
11-20	2	2	
21-50	3	3	
51-100	44	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	J 1/2"
		4	REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	BB KMC 021918-003
3-29-18	· -Z	. Ø)	MS KINC 021918 005
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION DRAFT SIL	L FLANGE	
DRAWING 1160-13		ITEM # 3-25	
			TS CORRECT YES NO_ N/A_
		MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA 1	
11-20	2	2	1
21-50	3	3	1
51-100	4	4	
101-200	5	5	1
201-500	6	6	1
1-UP	7 PER 500 LOT	7 PER 500 LOT	1
		8	1"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-9-18	8	Φ	BBKMC 010318-005
			I .
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

	KAS	GRO RAIL CORP		
	BURNING	FORM 9Z-A TABLE INSPECTION REPORT		
			DATE 7/21/10	
P.O.# 15C3011916		CAR/JOB # ATLAS	SB	
MATERIAL DESCRI	PTION DRAFT SIL	L WEB		
DRAWING 1160-14	ITEM # 3-26			
MILL REPORTS REC	CEIVED YES	/ NO N/A REPORT	S CORRECT YES NO_ N/A_	
	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL	1	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA		
1-10	11	11		
11-20	2	2		
21-50	3	3		
51-100	4	4		
101-200	5	5		
201-500	6	6		
1-UP	7 PER 500 LOT	7 PER 500 LOT 2	J 1/2"	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS	
3-27-18		ф	BB KMC 021318-004	
3.21.1			72 7100 5 - 1010 - 1	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

		DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS B
MATERIAL DESCR	PTION DRAFT SIL	L WEB
DRAWING 1160-14		ITEM # 3-27
MILL REPORTS RE	CEIVED YES	NO N/A REPORTS CORRECT YES NO
ACCEPTANCE PER SA		MPLING LOTS OF MATERIAL
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA

N/A__

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
F1-UP	7 PER 500 LOT	7 PER 500 LOT

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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KASGRO RAIL CORP

	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S B
MATERIAL DESCRIP	PTION CENTER SI	LL WEB	
DRAWING 1160-15		ITEM # 3-28	
			S CORRECT YES NO_ N/A_
	PLE SIZE WHEN SAN	MPLING LOTS OF MATERIAL REJECTION CRITERIA	1
LOT SIZE 1-10	SAMPLE SIZE 1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT]
	r	2	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS BB KMCOZI918-003
3-26-18	2_	<u> </u>	1313 KMC021718-003
		100	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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	NAGO	SINO WALL OOK	
FORM 9Z-A			
BURNING TABLE INSPECTION REPORT			
			DATE 7/21/10
		045405 # 471 4	2.5
P.O.# 15C3011916	C.,	CAR/JOB # ATLAS	8 8
MATERIAL DESCRIF	PTION CENTER SI	LL WEB	
DRAWING 1160-15		ITEM # 3-29	
			S CORRECT YES NO_ N/A_
ACCEPTANCE PER SAM	IPLE SIZE WHEN SAN	PLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	ļ
1-UP	7 PER 500 LOT	7 PER 500 LOT	4 (0)
	Oll A Limimy	4	1/2" REMARKS
DATE CUT	QUANTITY	QUANTITY REMAINING	156 KMC 021918-003
3-26-18	4	Ф	15/16 KIGU 02/9/8-003

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 **DOE Atlas Project**

KASGRO RAIL CORP

	BURNIN	G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION SPACER		
DRAWING 1160-13		ITEM # 3-30	
MILL REPORTS REC	CEIVED YES /	NO N/A REPORT	rs correct yesNo N/A
		MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE		
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	-
201-500	6	6 7 DED 600 LOT	-
- 1-UP	7 PER 500 LOT	7 PER 500 LOT 4	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	
9-10-18	4	OANTIT KEWANING	BB KMC.010318-012
7-10-18	7	Ψ	THE TONCE OF UST & UTC
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

,		GRO RAIL CORP FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S В
MATERIAL DESCRI	PTION SIDE SILL E	BOTTOM FLANGE	
DRAWING 1160-9		ITEM # 3-31	
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAM	APLING LOTS OF MATERIAL	S CORRECT YES NO_ N/A_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA 1	
1-10	2	2	
11-20	3	3	
21-50		4	
51-100 101-200	5	5	
201-500	6	6	
/ \UP	7 PER 500 LOT	7 PER 500 LOT	
1, 101	7	2	1"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-10-18	'2_	6	BB KMC 021918-00'Z

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KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

		·	DATE 1121/10
P.O.# 15C3011916		CAR/JOB # ATLAS	В
MATERIAL DESCRIP	TION DECK PLAT	E	
DRAWING 1160-16		ITEM # 3-32	
MILL REPORTS REC	EIVED YES	NO N/A REPORT	S CORRECT YES NO_ N/A_
ACCEPTANCE PER SAM LOT SIZE 1-10 11-20 21-50 51-100 101-200	3 4 5	PLING LOTS OF MATERIAL REJECTION CRITERIA 1 2 3 4 5	
201-500 1-UP	6 7 PER 500 LOT	7 PER 500 LOT	3/4"
DATE CUT 3-22-18 3-22-18	QUANTITY / /	QUANTITY REMAINING	REMARKS BB KMC031418-001 BB KMC031418-002
To the best of my knowl	edge all information co	ntained in this document is accura	te. igro Rall



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

			DATE 7/21/10	
P.O.# 15C3011916		CAR/JOB # ATLA	SB	
MATERIAL DESCRI	PTION END SILL V	VEB		
DRAWING 1160-17		ITEM # 3-33		
MILL REPORTS RE	MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A			
ACCEPTANCE PER SAI	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL		
LOT SIZE		REJECTION CRITERIA	1	
1-10	1	1		
11-20	2	2	1	
21-50	3	3		
51-100	4	4]	
101-200	5	5		
201-500	6	6		
1-UP	7 PER 500 LOT	7 PER 500 LOT		
/		2	3/8"	

			3/6
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-29-18	2	\$	PB KINCO10318-012
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KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

	BUKNING	TABLE MOREOTION INC. ON	
		ι	DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	В
MATERIAL DESCRIF	TION END SILL W	/EB	
DRAWING 1160-17		ITEM # 3-34	
MILL REPORTS REC	CEIVED YES_/I	, NO N/A REPORT	S CORRECT YES NO_ N/A_
ACCEPTANCE PER SAN	IPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	11	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	
) -U F	TI LITOGO LO.	6	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-29-18	6	φ	BBKMC010318-012
3-29-10		1	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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KASGRO RAIL CORP

FORM 9Z-A
URNING TABLE INSPECTION REPORT

	BURNIN	G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION END SILL F	FLANGE	
DRAWING 1160-17		ITEM # 3-35	
MILL REPORTS RE	CEIVED YES	NO N/A REPORT	TS CORRECT YES _NO_ N/A_
1-10 11-20 21-50 51-100 101-200 201-500 1-UP	MPLE SIZE WHEN SAI SAMPLE SIZE 1 2 3 4 5 6 7 PER 500 LOT	MPLING LOTS OF MATERIAL REJECTION CRITERIA 1 2 3 4 5 6 7 PER 500 LOT	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-29-18	1	5	BBKMC021918-003
4-31-18	5	₽	BB KMC032618-001
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KASGRO RAIL CORP

FORM 9Z-A

	BURNIN	G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION END SILL F	LANGE	
DRAWING 1160-17		ITEM # 3-36	
MILL REPORTS RE	CEIVED YES	NO N/A REPOR	TS CORRECT YES _NO_ N/A_
ACCEPTANCE PER SAI	MPLE SIZE WHEN SAI	MPLING LOTS OF MATERIAL	_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4]
101-200	5	5	
201-500	6	6	1
1-UP	7 PER 500 LOT	7 PER 500 LOT	
.)	1	2	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-31-18	こ	Ø	BB KMC 032618-001
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 **DOE Atlas Project**

		GRO RAIL CORP FORM 9Z-A 3 TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION GUSSET		
DRAWING 1160-17		ITEM # 3-37	
			TS CORRECT YES _NO_ N/A_
LOT SIZE	SAMPLE SIZE	MPLING LOTS OF MATERIAL REJECTION CRITERIA	1
1-10	1	1	
11-20	2	2	
21-50	3	3	i e
51-100	4	4	
101-200	5	5	
201-500	6	6	1
1-UP	7 PER 500 LOT	7 PER 500 LOT	
,		16	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-10-18	16	4	BB KMC 010318-011
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KASGRO RAIL CORP

?	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916	916 CAR/JOB # ATLAS B		
MATERIAL DESCRI	PTION GUSSET		
DRAWING 1160-17		ITEM # 3-38	
		NO N/A REPORT	S CORRECT YES NO_ N/A_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1/-UP	7 PER 500 LOT	7 PER 500 LOT	
		44	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-10-18	44	Ø	BBKNC 010318-011
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DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-10-18	44	8	B& KUC 010318-011
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KASGRO RAIL CORP

	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	SB
MATERIAL DESCRI	PTION SIDE SILL V	VEB	
DRAWING 1160-18		ITEM # 3-39	
			S CORRECT YES NO_ N/A_
		MPLING LOTS OF MATERIAL	1
LOT SIZE		REJECTION CRITERIA	
1-10	1		
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	J 1/2"
DATE OUT	OLIANITITY	2	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-3+18	2	\$	BB KMC 032618-001
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O.# 15C3011916	CAR/JOB # ATLAS B	
MATERIAL DESCRIPTION SIDE SILL WEB		
DRAWING 1160-18	ITEM # 3-40	

MILL REPORTS RECEIVED YES NO__ N/A__ REPORTS CORRECT YES NO_ N/A_

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE SAMPLE SIZE REJECTION CRITERIA

1-10 1 1

11-20 2 2 3 3 21-50 51-100 4 4 101-200 5 5 201-500 6 6 1-UP 7 PER 500 LOT 7 PER 500 LOT

DATE CUT QUANTITY QUANTITY REMAINING REMARKS
4-3-18 6 BB KMC 032618-001

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KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

DATE 3-15-10

			DATE 3-15-10
P.O.# 15C3011916		CAR/JOB # ATLAS	ВВ
MATERIAL DESCRIP	PTION STRINGER		
DRAWING D-1160-8		ITEM # 3-42	
		NON/AREPORT	S CORRECT YES_NO_ N/A_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	11	
11-20	2	2	
21-50	3	3	
51-100	4	4	Į
101-200	5	5	-
201-500	6	6	

QUANTITY	QUANTITY REMAINING	REMARKS
	0	BB
		1
	QUANTITY 16	

7 PER 500 LOT

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7 PER 500 LOT

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DRAWING D-1160-7

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

ITEM # 3-43

DATE 3-15-10

P.O.# 15C3011916 CAR/JOB # ATLAS B
MATERIAL DESCRIPTION END CROSSTIE

MILL REPORTS RECEIVED YES_NO__ N/A_ REPORTS CORRECT YES_NO_ N/A_

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
/)UP	7 PER 500 LOT	7 PER 500 LOT
		6

DATE CUT QUANTITY QUANTITY REMAINING REMARKS

3/15/2018 6 0 BB

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KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

DATE 3-15-10

	DATE 0-10-10
P.O.# 15C3011916	CAR/JOB # ATLAS B
MATERIAL DESCRIPTION END CRO	SSTIE
DRAWING D-1160-7	ITEM # 3-44

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL SAMPLE SIZE | REJECTION CRITERIA LOT SIZE 1-10 2 11-20 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 7 PER 500 LOT 7 PER 500 LOT)UP

DATE CUT QUANTITY QUANTITY REMAINING REMARKS
3/15/2018 2 0 BB

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	S B
MATERIAL DESCRI	PTION HAND BRAI	KE LEVER	
DRAWING 1160-19		ITEM # 3-48	
			rs correct yes_No_ N/A_
	MPLE SIZE WHEN SAN	MPLING LOTS OF MATERIAL	1
LOT SIZE		REJECTION CRITERIA	-
1-10	1	1 2	1
11-20	3	3	1
21-50	4	4	1
51-100	5	5	1
101-200	6	6	1
201-500 1-UP	7 PER 500 LOT	7 PER 500 LOT	1
)-UP	17 PER 300 LOT	2	J 3/4"
DATE CUT	QUANTITY	QUANTITY, REMAINING	REMARKS
5-9-18	*2	QUANTITIC TOTAL	BB KNC 022218-003
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

CAR/JOB # ATLAS B P.O.# 15C3011916 : { LEVER BRACKET MATERIAL DESCRIPTION ITEM # 3-49 **DRAWING 1160-21**

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOTSIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
1-UP	7 PER 500 LOT	7 PER 500 LOT

QUANTITY REMAINING REMARKS DATE CUT QUANTITY

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Page F-63 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O.# 15C3011916 CAR/JOB # ATLAS B

MATERIAL DESCRIPTION BRACKET SIDE PLATE

DRAWING 1160-21

ITEM # 3-50

MILL REPORTS RECEIVED YES / NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
1-UP	7 PER 500 LOT	7 PER 500 LOT

DATE CUT QUANTITY QUANTITY REMAINING REMARKS

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

KASGRO RAIL CORP

	BURNING	FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	\$ B
MATERIAL DESCRI	PTION BRACKET	SIDE PLATE	
DRAWING 1160-21		ITEM # 3-51	
			S CORRECT YES NO_ N/A_
	MPLE SIZE WHEN SAM	MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	11	11	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
A1*Nb	7 PER 500 LOT	7 PER 500 LOT	}
			1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4/10/18	2	$lackbox{}{\phi}$	BB KMC 010318-013
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

	DATE 7/21/10
P.O.# 15C3011916	CAR/JOB # ATLAS B
MATERIAL DESCRIPTION LEVER BRAC	CKET PLATE
DRAWING 1160-21 IT	EM # 3-52
MILL REPORTS RECEIVED YES NO	D N/A REPORTS CORRECT YES, NO_ N/A_

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL			
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	

| 21-50 | 3 | 3 | 51-100 | 4 | 4 | 4 | 101-200 | 5 | 5 | 5 | 201-500 | 6 | 6 | 6 | 1-UP | 7 PER 500 LOT | 7 PER 500 LOT

DATE CUT, QUANTITY QUANTITY REMAINING REMARKS
4/10/18 2 Ø BB KMC0/03/8-0/3

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

	BURNIN	G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	S B
MATERIAL DESCRI	IPTION LEVER BRA	ACKET PLATE	
DRAWING 1160-21		ITEM # 3-53	
			TS CORRECT YES NO_ N/A_
LOT SIZE	SAMPLE SIZE	MPLING LOTS OF MATERIAL REJECTION CRITERIA	1
1-10	1	1	-{
11-20	2	2	-{
21-50	3	3	
51-100	4	4	-
101-200	5	5	
201-500	6	6	-
1-UP	7 PER 500 LOT	7 PER 500 LOT	1
./		2	J 1/2"
DATE CUT,	QUANTITY	QUANTITY REMAINING	REMARKS
4/10/18	2	d	BB KMC010318-013
9 1			
			1.
	1		1
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP				
FORM 9Z-A BURNING TABLE INSPECTION REPORT				
			DATE 7/21/10	
P.O.# 15C3011916		CAR/JOB # ATLAS	SB	
MATERIAL DESCRIE	PTION HAND BRAI	KE BRACKET		
DRAWING 1160-22		ITEM # 3-54		
MILL REPORTS REC	CEIVED YES	NO N/A REPORT	S CORRECT YES NO N/A	
ACCEPTANCE PER SAM	MPLE SIZE WHEN SAM	IPLING LOTS OF MATERIAL	_	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA		
1-10	1	1		
11-20	2	2		
21-50	3	3		
51-100	4	4		
101-200	5	5		
201-500	6	6	'	
1-UP	7 PER 500 LOT	7 PER 500 LOT		
		2	1/4"	
DATE CUT,	QUANTITY	QUANTITY REMAINING	REMARKS	
4/10/18	2	Φ	BB-KMC 010318-010	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

201-500

1-UP

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

	BURNING	G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION HAND BRA	KE PLATE	
DRAWING 1160-22		ITEM # 3-55	
			FS CORRECT YES_∕NO N/A
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIAL	1
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	

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7 PER 500 LOT

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7 PER 500 LOT

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

DATE 7/21/10

	DATE
P.O.# 15C3011916	CAR/JOB # ATLAS B
MATERIAL DESCRIPTION HAND BRA	AKE PLATE
DRAWING 1160-22	ITEM # 3-56

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL			
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1 <u>-UP</u>	7 PER 500 LOT	7 PER 500 LOT	

DATE CUT QUANTITY QUANTITY REMAINING REMARKS

2//10/18 2 P BB KNC 0103/8-013

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		GRO RAIL CORP FORM 9Z-A 3 TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION HAND BRA	KE PLATE	
DRAWING 1160-22		ITEM # 3-57	
		NON/AREPORT	rs correct yesnío_ n/a_
LOT SIZE	SAMPLE SIZE		1
1-10	1	1	1
11-20	2	2	1
21-50	3	3	1
51-100	4	4	1
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT]
DATE OUT	OLIANTITY	2	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	
4-10-18	2-	<u> </u>	BB KMC 010318-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

	BURNING	FORM 9Z-A B TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916	CAR/JOB # ATLAS B		
MATERIAL DESCRI	PTION HAND BRA	KE GUSSET	
DRAWING 1160-22		ITEM # 3-58	
		NO N/A REPORT	S CORRECT YES _NO_ N/A_
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	11	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	
7		2	1/211

- / .		2	1/2"
DATE CUT, ,	QUANTITY	QUANTITY REMAINING	REMARKS BB KMC 010318-013
4/10/18	2	φ	B15 KMC 010318-013
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLAS	S B
MATERIAL DESCRIF	PTION HAND BRAI	KE WASHER	
DRAWING 1160-22		ITEM # 3-59	
DRAWING 1160-22		11 EIVI # 3-09	
			S CORRECT YES NO_ N/A_
		MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1 2	1 2	
11-20	3	3	
21-50	4	4	{
51-100			
101-200	5	5	
201-500	6	6	
' 1-UP	7 PER 500 LOT	7 PER 500 LOT 2] 1 1 /4"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
5-9-18	7	4	BB KMC 021318-003
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		GRO RAIL CORP FORM 9Z-A 3 TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	S B
MATERIAL DESCRI	PTION RESERVOI	R SUPPORT BRACKET	
DRAWING 1160-23		ITEM # 3-60	
			S CORRECT YES VNO_ N/A_
		IPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
`1-UP	7 PER 500 LOT	7 PER 500 LOT	
		2	1/2"
DATE CUT ,	QUANTITY	QUANTITY REMAINING	REMARKS
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

	BURNING	FORM 9Z-A G TABLE INSPECTION REPORT			
			DATE 7/21/10		
P.O.# 15C3011916		CAR/JOB # ATLA	SB		
MATERIAL DESCRI	PTION RESERVOI	R SUPPORT BRACKET			
DRAWING 1160-23		ITEM # 3-61			
	MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL				
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	1		
1-10	1	1	1		
11-20	2	2			
21-50	3	3			
51-100	4	4	1		
101-200	5	5			
201-500	6	6	1		
1-UP	7 PER 500 LOT	7 PER 500 LOT			
2 3/8"					
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS		
4-10-18	2	\$	BB KMC010318-012		
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

P.O.# 15C3011916 CARJOB # ATLAS B MATERIAL DESCRIPTION RESERVOIR SUPPORT BRACKET DRAWING 1160-23 ITEM # 3-62 MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 51-100 4 4 4 101-200 5 5 5-1-100 4 4 4 101-200 5 6 201-500 6 6 AUP 7 PER 500 LOT 7 PER 500 LOT DATE CUT QUANTITY QUANTITY REMAINING REMARKS DATE CUT QUANTITY QUANTITY REMAINING REMARKS DATE CUT QUANTITY QUANTITY REMAINING REMARKS		BURNING	G TABLE INSPECTION REPORT	
MATERIAL DESCRIPTION RESERVOIR SUPPORT BRACKET DRAWING 1160-23 ITEM # 3-62 MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 21-UP 7 PER 500 LOT 7 PER 500 LOT DATE CUT QUANTITY QUANTITY REMAINING REMARKS				DATE 7/21/10
MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 1-UP 7 PER 500 LOT 7 PER 500 LOT DATE CUT QUANTITY QUANTITY REMAINING REMARKS	P.O.# 15C3011916		CAR/JOB # ATLA	SB
MILL REPORTS RECEIVED YES_NON/A REPORTS CORRECT YES_NON/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 201-500 6 6 1-UP 7 PER 500 LOT 7 PER 500 LOT DATE CUT QUANTITY QUANTITY REMAINING REMARKS	MATERIAL DESCRI	PTION RESERVOI	R SUPPORT BRACKET	
ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 1 1 11-20 2 2 2 21-50 3 3 3 51-100 4 4 4 101-200 5 5 201-500 6 6 1-UP 7 PER 500 LOT 7 PER 500 LOT DATE CUT QUANTITY QUANTITY REMAINING REMARKS	DRAWING 1160-23		ITEM # 3-62	
LOT SIZE				TS CORRECT YES NO_ N/A_
1-10	ACCEPTANCE PER SAM	IPLE SIZE WHEN SAN	MPLING LOTS OF MATERIAL	_
11-20				
21-50 3 3				_
51-100				
101-200				
201-500 6 6 6				ļ
7 PER 500 LOT 7 PER 500 LOT 2 3/8" DATE CUT QUANTITY QUANTITY REMAINING REMARKS				_
DATE CUT QUANTITY QUANTITY REMAINING REMARKS	201-500			}
DATE CUT QUANTITY QUANTITY REMAINING REMARKS	1-UP	7 PER 500 LOT]
TICHW WITO	DATE CUT	OHANTITY		
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP FORM 9Z-A BURNING TABLE INSPECTION REPORT					
			DATE 7/21/10		
P.O.# 15C3011916		CAR/JOB # ATLA	\$ B		
MATERIAL DESCRI	PTION DRAFT STO	OP			
DRAWING 1160-13		ITEM # 3-67			
		NO N/A REPOR'	TS CORRECT YES VNO_ N/A_		
LOT SIZE		REJECTION CRITERIA	7		
1-10	1	1	1		
11-20	2	2	1		
21-50	3	3	1		
51-100	4	4			
101-200	5	5	1		
201-500	6	6	1		
1-UP	7 PER 500 LOT	7 PER 500 LOT	1		
,		16	1 1/2"		
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS		
4-4-18	76	Ø	BB-KILC 021318-002		
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

¥	BURNIN	G TABLE INSPECTION REPORT		
			DATE 7/21/10	
P.O.# 15C3011916	1916 CAR/JOB # ATLAS B			
MATERIAL DESCRI	PTION ABDW SUF	PPORT BRACKET		
DRAWING 1160-32		ITEM # 3-68		
MILL REPORTS RE	CEIVED YES	NO N/A REPORT	TS CORRECT YES_NO_ N/A_	
ACCEPTANCE PER SAI	MPLE SIZE WHEN SAI	MPLING LOTS OF MATERIAL		
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA]	
1-10	1	1]	
11-20	2	2]	
21-50	3	3		
51-100	4	4	_	
101-200	5	5		
201-500	6	6	_	
' <u>1-UP</u>	7 PER 500 LOT	7 PER 500 LOT		
		2	3/8"	
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS	
4-10-18	2	φ	BA KMC 010318-012	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

		FORM 9Z-A	
	BURNIN	G TABLE INSPECTION REPORT	•
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	AS B
MATERIAL DESCRI	PTION ABOW SUF	PORT BRACKET	
DRAWING 1160-32		ITEM # 3-69	
		NO N/A REPOR	TS CORRECT YES NO_ N/A_
ACCEPTANCE PER SAI	MPLE SIZE WHEN SAI	MPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	1
21-50	3	3	1
51-100	4	4	_
101-200	5	5	
201-500	6	6	1
1-UP	7 PER 500 LOT	7 PER 500 LOT	j
, 		2	3/8"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
4-10-18	2	Φ	BBKNC010318-012
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

• .	BURNIN	FORM 9Z-A G TABLE INSPECTION REPORT		
			DATE 7/21/10	
P.O.# 15C3011916		CAR/JOB # ATLA	SB	
MATERIAL DESCRI	PTION SLIDE BRA	CKET PLATE		
DRAWING 1160-32		ITEM # 3-70		
		NO N/A REPORT	S CORRECT YES NO_ N/A_	
LOT SIZE	SAMPLE SIZE		1	
1-10	1	1		
11-20	2	2		
21-50	3	3		
51-100	4	4		
101-200	5	5		
201-500	6	6		
/1-UP	7 PER 500 LOT	7 PER 500 LOT		
4 3/8"				
DATE CUT ,	QUANTITY	QUANTITY REMAINING	REMARKS	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O.#	15C301	1916
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CAR/JOB # ATLAS B

MATERIAL DESCRIPTION RING SUPPORT

DRAWING 1160-32

ITEM # 3-73

MILL REPORTS RECEIVED	YESNO	N/A	REPORTS CORRECT	YES VNO_	N/A_
ACCEPTANCE DER SAMPLE SIZE	WHEN SAMPLING LO	OTS OF MA	TERIAL		

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF WATERIAL			
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	. 1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
`1-UP	7 PER 500 LOT	7 PER 500 LOT	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		GRO RAIL CORP FORM 9Z-A TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION UNCOUPLI	NG BRACKET	
DRAWING 1160-33		ITEM # 3-76	
			TS CORRECT YES _NO_ N/A_
		MPLING LOTS OF MATERIAL	1
LOT SIZE	SAMPLE SIZE		
1-10 11-20	1	1	
21-50	2 3	3	
51-100	4	4	1
101-200	5	5	
201-500	6	6	
1-UP	7 PER 500 LOT	7 PER 500 LOT	
1-01	71 LIN 300 LOT	4	1/4"
DATE CUT . ,	QUANTITY	QUANTITY REMAINING	REMARKS
4/10/19	4	4	BB KMC 010318-010
4.0/10	,	P	1343 74-16 25 70 378 010

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

	KAS	GRO RAIL CORP	
	BURNIN	FORM 9Z-A G TABLE INSPECTION REPORT	
	DOMINI	• More mor control (NE) ON	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB # ATLA	SB
MATERIAL DESCRI	PTION UNCOUPLI	NG BRACKET	
DRAWING 1160-33		ITEM # 3-77	
MILL REPORTS RE	CEIVED YES 🗸	NO N/A REPOR	TS CORRECT YES NO_ N/A_
ACCEPTANCE PER SAI	MPLE SIZE WHEN SAI	MPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1]
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500 1-UP	6	6	-
1-05	7 PER 500 LOT	7 PER 500 LOT 4]
DATE CUT , ,	QUANTITY	QUANTITY REMAINING	1/4"
4/10/18	4	QUANTITE REMAINING	REMARKS
410/10	7	——————————————————————————————————————	BB KMC 010318-010
		· · · · · · · · · · · · · · · · · · ·	
To the best of my knowled	dae all information of at	ained in this document is accurate	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

i		FORM 9Z-A G TABLE INSPECTION REPORT	
			DATE 7/21/10
P.O.# 15C3011916		CAR/JOB#ATLA	SB
MATERIAL DESCRI	PTION DRAFT SIL	L WEB	
DRAWING 1160-14		ITEM # 3-78 CB	
MILL REPORTS RE	CEIVED YES/	NO N/A REPOR	TS CORRECT YES <u>√</u> NO_ N/A_
		MPLING LOTS OF MATERIAL	
LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA]
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	1
¹~`∕į-UP	7 PER 500 LOT	7 PER 500 LOT	1
.,		2	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-27-18	2	Þ	BB KMC021318-004
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O.# 15C3011916

CAR/JOB # ATLAS B

MATERIAL DESCRIPTION DRAFT SILL WEB

DRAWING 1160-14

ITEM # 3-79

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
1-UP	7 PER 500 LOT	7 PER 500 LOT

DATE CUT QUANTITY QUANTITY REMAINING REMARKS

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z RECEIVING INSPECTION REPORT

DATE 3-15-10

P.O.:	# 15	C301	1	91	6

CAR/JOB # ATLAS B

MATERIAL DESCRIPTION CROSSTIE

DRAWING D-1160-7

ITEM # 3-80

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA
1-10	1	1
11-20	2	2
21-50	3	3
51-100	4	4
101-200	5	5
201-500	6	6
/)UP	7 PER 500 LOT	7 PER 500 LOT

2

DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3/15/2018	2	0	BB
		A.D. L.	
	V1110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	•••	
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

BURNING	FORM 9Z-A G TABLE INSPECTION REPORT	
		DATE 7/21/10
	CAR/JOB # ATLA	SB
PTION DOUBLER		
	ITEM # 3-92	
•		"S CORRECT YES _√NO_ N/A_
SAMPLE SIZE	REJECTION CRITERIA	
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7 PER 500 LOT	7 PER 500 LOT	
	4	1/2"
QUANTITY	QUANTIŢY REMAINING	REMARKS
	PTION DOUBLER CEIVED YES MPLE SIZE WHEN SAM SAMPLE SIZE 1 2 3 4 5 6 7 PER 500 LOT	CAR/JOB # ATLA: PTION DOUBLER ITEM # 3-92 CEIVED YESNO N/A REPORT MPLE SIZE WHEN SAMPLING LOTS OF MATERIAL SAMPLE SIZE REJECTION CRITERIA 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5 6 6 6 7 PER 500 LOT 7 PER 500 LOT

		-1	1/2
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-29-18	.4	φ	BBKMC 021318-004
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A **BURNING TABLE INSPECTION REPORT**

	DATE 7/21/10
P.O.# 15C3011916	CAR/JOB # ATLAS B
MATERIAL DESCRIPTION DOUBLER	
DRAWING 1160-46	ITEM # 3-93

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 11-20 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 1-UP 7 PER 500 LOT 7 PER 500 LOT

		4	1/2"
DATE CUT	QUANTITY	QUANTITY REMAINING	REMARKS
3-29-18	4	Φ	REMARKS 66 KMC021318-004
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A
BURNING TABLE INSPECTION REPORT

	DATE 7/21/10
P.O.# 15C3011916	CAR/JOB # ATLAS B
MATERIAL DESCRIPTION LADDER F	PC
DRAWING 1160-45	ITEM # 3-96

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 11-20 2 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6 V-UP 7 PER 500 LOT 7 PER 500 LOT

		4	1/2"
DATE CUT,	QUANTITY	QUANTITY REMAINING	REMARKS
4/10/18	4)	Φ	BA KMC 010318-013
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O.# 15C3011916

CAR/JOB # ATLAS B

MATERIAL DESCRIPTION LADDER SPACER

DRAWING 1160-46

ITEM # 3-97

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A

ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL

LOT SIZE	SAMPLE SIZE	REJECTION CRITERIA	
1-10	1	1	
11-20	2	2	
21-50	3	3	
51-100	4	4	
101-200	5	5	
201-500	6	6	
`1-UP	7 PER 500 LOT	7 PER 500 LOT	

		4	3/8"
DATE CUT	QUANTITY	QUANTITY, REMAINING	REMARKS
4/10/18	4	Ø	BBKMC010318-011
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP

FORM 9Z-A BURNING TABLE INSPECTION REPORT

DATE 7/21/10

P.O	.#	15C301	1916

CAR/JOB # ATLAS B

MATERIAL DESCRIPTION STRIKER FLANGE

DRAWING 1160-46

1-UP

ITEM # 3-100

MILL REPORTS RECEIVED YES NO N/A REPORTS CORRECT YES NO N/A ACCEPTANCE PER SAMPLE SIZE WHEN SAMPLING LOTS OF MATERIAL LOT SIZE SAMPLE SIZE REJECTION CRITERIA 1-10 11-20 2 2 21-50 3 3 51-100 4 4 101-200 5 5 201-500 6 6

7 PER 500 LOT

DATE CUT QUANTITY QUANTITY REMAINING REMARKS LIST 18 QUANTITY REMAINING REMARKS REMARKS REMARKS REMARKS				1/2"
4-39/8 8 P BE KMC 032618-001	DATE CUT	QUANTITY	QUANTITY REMAINING	
#6 FMC 032618-881	4-39/8	8	b	DA 1/110 0336184 001
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7 PER 500 LOT

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.1.3 - Car Body - Heat Identification Form, Form 44B

orar	00	DATA TRANSMITTAL FORM							
Supplier:		SGRO R	AIL CORP.	INC	DTF No	: 39			Page 1 of 1
P.O./SC N	_	C3011916			V-34-1/55	. 55	т —	D-	ate: 2/22/2019
Type of S		10,20,400							
21		-4	W. C.			140			
Submitte		☑ Approva		_	mation		COLUMN CO.	nes Sub	omitted: 1
Submitte	d By:	RICK FO	ORD	Rick	Ford	Date: 2010 D	ed by Rick Ford 2.22 09:16:40	PR	OJECT MANAGE
		(Name)			(Sign				(Title)
ITEM NUMBER		DOCUMENT NUMBER	REVISION NUMBER			OCUMEN			FS DISPOSITION
1	KAS	138		ATLAS CAS TEST DATA	KBUFFER	ARS LATLO	N INSTALLATIO	N AND	AP AWC REV
2	KAS	139		ATLAS CASK FORMS 42, 4		RIAL HEAT IS	DENTIFICATION		RWC DS RSA AP AWC REV RWC DS RSA
3	KAS	140		ATLAS BUTYE	RIDOX 20001	BODY MATER	SAL HEAT IDENTI	HICATION.	☑ AP □ AWC □ REV
		52.7	+	ATLAS BUFFE	R 100X 2000	BODY MATER	SAL HEAT (DENTIL)	FICATION,	RWC DS RSA AP NAWC REV
+	KAS 1	141		FORM					□RWC □DS □RSA □ AP □AWC □REV
5	KAS 1	142		1 1 1 1			FORCE BRAIG		RWC DS RSA
В	KAS 1	143		ATLAS CASK INSPECTION	CAR IDOX 1	0001, FORM 5	5-12-B NEW CAR		☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA
7	KAS	144		ATLAS CASK RAIL SEDAR	IDOX 10001 BKI / MCCAB	SUPPLIER C	ERTIFICATION	WISTED	AP AWC REV
									□ AP □ AWC □ REV □ RWC □ DS □ RSA
									☐ AP ☐ AWC ☐ REV
Comment	8:		_	_		Technic	al Reviewer	(I.e. RE	PTL, SME, QA, etc.)
No com	ments						EIN S	lade	Date: 2019.02.26 07:33:08 -08'00'
						9.43	2/26/2	2019	
AP	Approved		Work may proc	SITION COD	ES AND I	EFINITIO	N5		Resubmittal is not required
-	11	ith Comment			rts provide	d for Suppl	er's consider	ation only	Resubmittal is not
200	Reviewed	Sentential Control		Work may proceed; comments provided for Supplier's consideration only. Work may proceed; comments provided for Supplier's consideration only.			required		
	O-December	ith Comment	Work may proc	Work may proceed; subject to incorporation and compilance w/			Correct and resubmit		
DS	Disapprove	d		Buyer comments. Work may not proceed.			Correct and resubmit		
RSA	Receipt Sub	mittai Acknowledge	d No other action	required.					
Project I Manage	Manager (r (EM) or D		immediately prov	vide a writte	Digitally sign DN consider Services, or	FS' C&F	Represent	ative des	Order/Subcontract, work scribing the change. 02/26/2019

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federal Services				
oran		SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW			
Supplier / PO No.: KASGRO / 15C3011916 DTF No. / Rev: 039						
Charge No:	0022	25.03.0050.02.00001	Due Date: 3/8/2019			
Document(s)	See	DTF No.: 039				
RE	EVIEW IN	ISTRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)			
PE	Slade	Klein				
REVIEWERS	Slade	Klein, Bernie Counterman				
QA	Berni	ie Counterman				
	-	Technical Review				
Comments/M	du.	ached Yes No 🔳				
No comme	ents					
No comme		(Sign/Date): KLEIN Slade	Date: 2019.02.25 15:52:04 -08'00			
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Technical Re	eviewer(s) Markup At eviewer C Cask Car	(Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No Domments: Form 36 Brake Test - Why is the Gross	Applicable) Shoe Force = 0 Digitally signed by COUNTERMAN Bernard			
Technical Re Comments/M Technical Re KAS 142 C	eviewer(s) Markup Att eviewer C Cask Car er(s) (Signa	(Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No Somments: Form 36 Brake Test - Why is the Gross Date): Busined Count	Applicable) Shoe Force = 0 Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 10:22:16 -08'00'			
Technical Re Comments/M Technical Re KAS 142 C	eviewer(s) Markup Att eviewer C Cask Car er(s) (Signa	(Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No Somments: Form 36 Brake Test - Why is the Gross Date): Busined Count	Applicable) Shoe Force = 0 Digitally signed by COUNTERMAN Bernard			
Technical Re Comments/M Technical Re KAS 142 C	eviewer(s) Markup Att eviewer C Cask Car er(s) (Signa	(Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No Somments: Form 36 Brake Test - Why is the Gross Date): Busined Count	Applicable) Shoe Force = 0 Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 10:22:16 -08'00'			

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Atlas

4-AXLE ATLAS BUFFER CAR BODY BOLSTER - HEAT IDENTIFCATION FORM 44B - 3/12/2010

DATE: 1	DATE: 11/14/18 Bolster Number: IDOX 20001						
TO THE I	TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIG	NED: Bûl	Kahu			_KASGRO RA	IL	
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/ CAR	MATERIAL	special testing	
3-1	D-1160-6	8500243	NUCOR	4	A-572-60	NO	
3-2	D-1160-6	8500243	NUCOR	8	A-572-60	NO	
3-3	D-1160-6	8500243	NUCOR	4	A-572-60	NO	
3-4	D-1160-6	821Y01750	ARCELORMITTAL	4	A-572-60	NO	

Note: The recording of false, fictitious, or fraudulent statements or entries on this document may be punishable as a felony under Federal statutes

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

Atlas

DATE: 1	11/14/18		BODY NUMBER: IDO	X 020001		
то	THE BEST O	F MY KNOWLEDGE AL	L INFORMATION CONTA	INED IS ACC	URATE	
	SIGNED:	Bill Bake	KA	SGRO RAIL		
Use of ASTM 5		16	the mechanical properties for grade 60 mate	ial are satisfied		
Charpy impact to	sting, when required,	will be in accordance with ASTM A873.	The minimum average absorbed energy sha	be 20 ft-fbs		
il zero degrees f	. Tranyerse impact te	st is required for plate widths over 24 in	ches			
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	specia testin
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-5	D-1160-7	D-1755	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-6	D-1160-7	811W16430	ARCELORMITTAL	10	A-572-50	
3-7	D-1160-7	D-1755	ARCELORMITTAL	5	A-572-50	
3-7	D-1160-7	D-1755	ARCELORMITTAL	5	A-572-50	
3-7	D-1160-7	D-1755	ARCELORMITTAL	5	A-572-50	
3-7	D-1160-7	D-1755	ARCELORMITTAL	5	A-572-50	
3-7	D-1160-7	D-1755	ARCELORMITTAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELORMITTAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELORMITTAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELORMITTAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELORMITTAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELORMITTAL	5	A-572-50	
3-9	D-1160-7	811W16430	ARCELORMITTAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELORMITTAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELORMITTAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELORMITTAL	4	A-572-50	

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

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Page F-95 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Atlas

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

DATE: 11/14/18 BODY NUMBER: IDOX 020001							
					LIDATE		
TO			LL INFORMATION CONTAI	NED IS ACC	URATE		
SIGNED: Sill Balu KASGRO RAIL							
Use of ASTM 5			d the mechanical properties for grade 60 materi	ial are satisfied			
		·	. The minimum average absorbed energy shall	be 20 ft-fbs			
at zero degrees f	F. Tranverso impact	test is required for plate widths over 24 is	xhes				
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	specia testin	
3-15	D-1160-8	D-1702	ARCELORMITTAL	1	A-572-50		
3-31	D-1160-9	812Z36570	ARCELORMITTAL	1	A-572-50		
3-11	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-11	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-16	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-16	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-17	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-17	D-1160-10	812Z36570	ARCELORMITTAL	2	A-572-50		
3-18	D-1160-11	811W00780	ARCELORMITTAL	2	A-572-50	Charp	
3-18	D-1160-11	811W00780	ARCELORMITTAL	2	A-572-50	Charp	
3-24	D-1160-13	811W16430	ARCELORMITTAL	2	A-572-50		
3-24	D-1160-13	811W16430	ARCELORMITTAL	2	A-572-50		
3-25	D-1160-13	811W00780	ARCELORMITTAL	4	A-572-50		
3-25	D-1160-13	811W00780	ARCELORMITTAL	4	A-572-50		
3-25	D-1160-13	811W00780	ARCELORMITTAL	4	A-572-50		
3-25	D-1160-13	811W00780	ARCELORMITTAL	4	A-572-50		
3-30	D-1160-13	7503454	NUCOR	2	A-572-50		

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

Page 2 of 4



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFICATION FORM 44B - 3/12/2010

Atlas

			3 - 3/12/2010			
DATE:	11/14/18	3	BODY NUMBER: IDOX	020001		
TO	THE BEST	OF MY KNOWLEDGE AL	L INFORMATION CONTAIL	NED IS ACC	URATE	
1.0		0.101				
	SIGNED:			GRO RAIL		
			the mechanical properties for grade 60 materia.			
		d, will be in accordance with ASTM AB73. test is required for plate widths over 24 inc	The minimum average absorbed energy shall hes	DG ZUTI-105		
			T			special
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	testing
3-30	D-1160-13		NUCOR	2	A-572-50	
3-66	D-1160-13		ARCELORMITTAL	4	A-572-50	
3-66	D-1160-13		ARCELORMITTAL	4	A-572-50	
3-66	D-1160-13		ARCELORMITTAL	4	A-572-50	
3-66	D-1160-13		ARCELORMITTAL	4	A-572-50	
3-67	D-1160-13		ARCELORMITTAL	8	A-572-50	
3-67	D-1160-13		ARCELORMITTAL	8	A-572-50	
3-67	D-1160-13		ARCELORMITTAL	8	A-572-50	
3-67	D-1160-13		ARCELORMITTAL	8	A-572-50	
3-67 3-67	D-1160-13 D-1160-13		ARCELORMITTAL	8	A-572-50 A-572-50	
3-67	D-1160-13		ARCELORMITTAL	8	A-572-50 A-572-50	
3-67	D-1160-13		ARCELORMITTAL ARCELORMITTAL	8	A-572-50 A-572-50	
3-26	D-1160-14		NUCOR	1	A-572-60	Charpy
3-27	D-1160-14		NUCOR	1 1	A-572-60	Charpy
3-78	D-1160-14		NUCOR	1	A-572-60	Charpy
3-79	D-1160-14		NUCOR	1	A-572-60	Charpy
3-23		811W16430	ARCELORMITTAL	1	A-572-50	Спотру
3-28		811W16430	ARCELORMITTAL	1 1	A-572-50	
3-29		811W16430	ARCELORMITTAL	2	A-572-50	
3-29		811W16430	ARCELORMITTAL	2	A-572-50	
3-32	D-1160-16	823Z65170	ARCELORMITTAL	1	A-572-50	
3-33	D-1160-17	7503454	NUCOR	1	A-572-50	
3-34	D-1160-17		NUCOR	3	A-572-50	
3-34	D-1160-17		NUCOR	3	A-572-50	
3-34	D-1160-17		NUCOR	3	A-572-50	
3-35	D-1160-17		ARCELORMITTAL	3	A-572-50	
3-35	D-1160-17		ARCELORMITTAL	3	A-572-50	
3-35	D-1160-17		ARCELORMITTAL	3	A-572-50	
3-36	D-1160-17		ARCELORMITTAL	1	A-572-50	
3-37	D-1160-17		ARCELORMITTAL	8	A-36	
3-37	D-1160-17		ARCELORMITTAL	8	A-36	
3-37	D-1160-17		ARCELORMITTAL	8	A-36	
3-37	D-1160-17		ARCELORMITTAL	8	A-36	
3-37 3-37	D-1160-17		ARCELORMITTAL	8 8	A-36	
3-37	D-1160-17 D-1160-17		ARCELORMITTAL	8	A-36 A-36	
3-37	D-1160-17		ARCELORMITTAL ARCELORMITTAL	8	A-36 A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36 A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38	D-1160-17	321Y01750	ARCELORMITTAL	22	A-36	
3-38	D-1160-17		ARCELORMITTAL	22	A-36	
3-38		321Y01750	ARCELORMITTAL	22	A-36	

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

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Page F-97 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION

Atlas

FOR	M 44B - 3/12/2010			
3-38 D-1160-17 821Y01750	ARCELORMITTAL	22	A-36	
Rid Robert				
Bill Bake				

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFICATION FORM 44B - 3/12/2010

Atlas

DATE: 11/14/18			BODY NUMBER: IE	OX 020001		
то	THE BEST	OF MY KNOWLEDGE A	LL INFORMATION CON	TAINED IS ACC	URATE	
	SIGNED	Bill Baher		KASGRO RAIL		
Use of ASTM 5	72 grade 50 materia	el is acceptable for grade 60 mat1 provide	ed the mechanical properties for grade 60 s	natorial are satisfied		-
Charpy impact to	osting, when require	od, will be in accordance with ASTM A67.	The minimum average absorbed energy	shall be 20 ft-lbs		
at zero degrees i	F. Tranverse impact	lest is required for plate widths over 24	inches			
PART NO.		HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	speck testin
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-39		811W16430	ARCELOMITAL	1	A-572-50	
3-40		811W16430	ARCELOMITAL	3	A-572-50	
3-40	D-1160-18	811W16430	ARCELOMITAL	3	A-572-50	
3-40	D-1160-18	811W16430	ARCELOMITAL	3	A-572-50	
3-92	D-1160-46	8500243	NUCOR	2	A-572-60	
3-92	D-1160-46	8500243	NUCOR	2	A-572-60	
3-93	D-1160-46	8500243	NUCOR	2	A-572-60	
3-93	D-1160-46		NUCOR	2	A-572-60 A-572-60	
Velding Wir	e	BRAND: HOBART 1/16", 76	364 70 SERIES 4661T 00		7.0.2-00	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Atlas

4-AXLE ATLAS BUFFER CAR BODY BOLSTER - HEAT IDENTIFCATION FORM 44B - 3/12/2010

DATE : 1	11/14/18		Bolster Nun	nber:	IDOX 20002	
TO THE	BEST OF MY K	NOWLEDGE ALL I	NFORMATION CO			
SIG	NED: <i>Bill</i>	Bahn			_KASGRO RA	IL
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/ CAR	MATERIAL	special testing
3-1	D-1160-6	8500243	NUCOR	4	A-572-60	NO
3-2	D-1160-6	8500243	NUCOR	8	A-572-60	NO
3-3	D-1160-6	8500243	NUCOR	4	A-572-60	NO
3-4	D-1160-6	821Y01750	ARCELORMITTAL	4	A-572-60	NO

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

Atlas

DATE : '	DATE: 11/14/18 BODY NUMBER: IDOX 020002							
то	THE BEST O	F MY KNOWLEDGE AL	L INFORMATION CONTAI	NED IS ACC	URATE			
	SIGNED:	Bill Baker	KA	SGRO RAIL				
Use of ASTM 57	72 grade 50 material i	s acceptable for grade 60 mat 7 provided	the mechanical properties for grade 60 materi	al are satisified				
Charpy impact to	sting, when required,	will be in accordance with ASTM A673.	The minimum average absorbed energy shall	be 20 ft-lbs				
al zero degrees f	. Tranverse impact te	st is required for plate widths over 24 inc	hes					
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	specia testin		
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-5	D-1160-7	D-1755	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3.6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-6	D-1160-7	811W16430	ARCELOMITAL	10	A-572-50			
3-7	D-1160-7	D-1755	ARCELOMITAL	5	A-572-50			
3-7	D-1160-7	D-1755	ARCELOMITAL	5	A-572-50			
3-7	D-1160-7	D-1755	ARCELOMITAL	5	A-572-50			
3-7	D-1160-7	D-1755	ARCELOMITAL	5	A-572-50			
3-7	D-1160-7	D-1755	ARCELOMITAL	5	A-572-50			
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50			
3-8		811W16430	ARCELOMITAL	5	A-572-50			
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50			
3-8		811W16430	ARCELOMITAL	5	A-572-50			
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50			
3-9		811W16430	ARCELOMITAL	4	A-572-50			
3-9		811W16430	ARCELOMITAL	4	A-572-50			
3-9		811W16430	ARCELOMITAL	4	A-572-50			
3-9		811W16430	ARCELOMITAL	4	A-572-50			

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Atlas

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

DATE:	11/14/18	3	BODY NUMBER: ID	OX 020002		
то	THE BEST	OF MY KNOWLEDGE A	LL INFORMATION CONT.	AINED IS ACC	URATE	
	SIGNED:	BillBaher	K	ASGRO RAIL	•	
Use of ASTM 5	72 grado 50 materia	al is acceptable for grade 60 mail provide	d the mechanical properties for grade 60 ma	sterial are satisified		
			 The minimum average absorbed energy si 	hall be 20 ft-lbs		
at zero degrees i	F. Tranverse impact	lest is required for plate widths over 24	inches			
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
3-15	D-1160-8	D-1702	ARCELOMITAL	1	A-572-50	
3-31	D-1160-9	812Z36570	ARCELOMITAL	1	A-572-50	
3-11	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-11	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-16	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-16	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-17	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-17	D-1160-10	812Z36570	ARCELOMITAL	2	A-572-50	
3-18	D-1160-11	811W00780	ARCELOMITAL	2	A-572-50	Charp
3-18	D-1160-11	811W00780	ARCELOMITAL	2	A-572-50	Charpy
3-24	D-1160-13	811W16430	ARCELOMITAL	2	A-572-50	-
3-24	D-1160-13	811W16430	ARCELOMITAL	2	A-572-50	
3-25	D-1160-13	811W00780	ARCELOMITAL	4	A-572-50	
3-25	D-1160-13	811W00780	ARCELOMITAL	4	A-572-50	
3-25	D-1160-13	811W00780	ARCELOMITAL	4	A-572-50	
3-25	D-1160-13	811W00780	ARCELOMITAL	4	A-572-50	
3-30	D-1160-13	7503454	NUCOR	2	A-572-50	

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFICATION FORM 44B - 3/12/2010

Atlas

D 4 27 7	4 4 14 4 14 6		3 - 3/12/2010		·			
DATE:	11/14/18	3	BODY NUMBER: IDOX	(020002				
TO	THE BEST	OF MY KNOWLEDGE AL	L INFORMATION CONTAIN	NED IS ACC	URATE			
SIGNED: Bill Bale KASGRO RAIL								
Use of ASTM 572 grade 50 material is acceptable for grade 60 mattl provided the mechanical properties for grade 60 material are satisfied								
Charpy impact to	esting, when require	d, will be in accordance with ASTM A673.	The minimum average absorbed energy shall					
at zero degrees t	F. Tranverse impact	test is required for plate widths over 24 inci	hes					
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	specia		
3-30	D-1160-13	7503454	NUCOR	2	A-572-50	testin		
3-66	D-1160-13	D-1755	ARCELOMITAL	4	A-572-50			
3-66	D-1160-13		ARCELOMITAL	4	A-572-50			
3-66	D-1160-13	D-1755	ARCELOMITAL	4	A-572-50			
3-66	D-1160-13	D-1755	ARCELOMITAL	4	A-572-50			
3-67	D-1160-13	822Z36570	ARCELOMITAL	8	A-572-50			
3-67	D-1160-13	822Z36570	ARCELOMITAL	8	A-572-50			
3-67	D-1160-13	822Z36570	ARCELOMITAL	8	A-572-50			
3-67	D-1160-13	822Z36570	ARCELOMITAL	8	A-572-50			
3-67	D-1160-13	822Z36570	ARCELOMITAL	8	A-572-50	l		
3-67	D-1160-13		ARCELOMITAL	8	A-572-50			
3-67	D-1160-13		ARCELOMITAL	8	A-572-50			
3-67	D-1160-13		ARCELOMITAL	8	A-572-50	<u> </u>		
3-26	D-1160-14		NUCOR	1	A-572-60	Charp		
3-27	D-1160-14		NUCOR	1	A-572-60	Charp		
3-78	D-1160-14		NUCOR	1	A-572-60	Charp		
3-79	D-1160-14		NUCOR	1	A-572-60	Charp		
3-23		811W16430	ARCELOMITAL	1	A-572-50	Chilp		
3-28		811W16430	ARCELOMITAL	1	A-572-50	-		
3-29	D-1160-15		ARCELOMITAL	2	A-572-50	_		
3-29	D-1160-15		ARCELOMITAL	2	A 672-50			
3-32	D-1160-16		ARCELOMITAL	1	A-572-50			
3-33	D-1160-17		NUCOR	1	A-572-50			
3-34	D-1160-17		NUCOR	3	A-572-50			
3-34	D-1160-17		NUCOR	3	A-572-50			
3-34	D-1160-17		NUCOR	3	A-572-50			
3-35	D-1160-17		ARCELOMITAL	3	A-572-50			
3-35	D-1160-17		ARCELOMITAL	3	A-572-50			
3-35	D-1160-17		ARCELOMITAL	3	A-572-50			
3-36	D-1160-17	811W16430	ARCELOMITAL	1	A-572-50			
3-37	D-1160-17		ARCELOMITAL	8	A-36	-		
3-37	D-1160-17		ARCELOMITAL	8	A-36			
3-37	D-1160-17		ARCELOMITAL	8	A-36			
3-37	D-1160-17		ARCELOMITAL	8	A-36			
3-37	D-1160-17	821Y01750	ARCELOMITAL	8	A-36			
3-37	D-1160-17		ARCELOMITAL	8	A-36			
3-37	D-1160-17		ARCELOMITAL	8	A-36			
3-37		321Y01750	ARCELOMITAL	8	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17	R21Y01750	ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
3-38	D-1160-17		ARCELOMITAL	22	A-36			
	D-1160-17	21V01750	ARCELOMITAL	22	A-36			
		321Y01750	ARCELOMITAL	22	A-36			
		321Y01750	ARCELOMITAL	22	A-36			
		321Y01750		22				
		21Y01750	ARCELOMITAL ARCELOMITAL	22	A-36			
					A-36			
3-38	D-1160-17 8	21Y01750	ARCELOMITAL	22	A-36			

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

Page 3 of 4

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Atlas

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

3-38 D-1160-17 821Y01750 ARCELOMITAL 22 A-36

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

Page 4 of 4

Page F-104 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFCATION FORM 44B - 3/12/2010

Atlas

DATE:	11/14/18	3	BODY NUMBER: ID	OX 020002		
то	THE BEST	OF MY KNOWLEDGE A	LL INFORMATION CON	TAINED IS ACC	URATE	
	SIGNED:	Bill Bah		KASGRO RAIL		
Use of ASTM 5	72 grade 50 materia	il is acceptable for grade 60 matt provide	d the mechanical properties for grade 60 n	natorial are satisfied		
			The minimum average absorbed energy	shall be 20 ft-lbs		
at zero degrees f	. Tranverse impact	test is required for plate widths over 24 is	nches			
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	specia testin
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-38		821Y01750	ARCELOMITAL	22	A-36	
3-39		811W16430	ARCELOMITAL	-1	A-572-50	
3-40	D-1160-18	811W16430	ARCELOMITAL	3	A-572-50	
3-40	D-1160-18	811W16430	ARCELOMITAL	3	A-572-50	
3-40	D-1160-18	811W16430	ARCELOMITAL	3	A-572-50	
3-92	D-1160-46	8500243	NUCOR	2	A-572-60	
3-92	D-1160-46	8500243	NUCOR	2	A-572-60	
3-93	D-1160-46	8500243	NUCOR	2	A-572-60	
3-93	D-1160-46	8500243	NUCOR	2	A-572-60	
Nelding Wir	'e	BRAND: HOBART 1/16", 70	36A, 70 SERIES, 4661T 80			

Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under federal statutes.

Page 5 of 4

Page F-105 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.1.4 – New Car Inspection Form, Form 5-12-B

6	-	Orano Federal Services DATA TRANSMITTAL FORM								
orar	0_									
Supplier:	KA:	SGRO RA	AIL CORP.	, INC. DTF	No: 042	2		Page_1	of_	t
P.O./SC N	o: 15C	3011916					Da	te: 2/2	6/2019	
Type of Si	ıbmittal:	☑ First		Re-Submittal		SDRL Li	st Item N	lo: 24	V	
Submitted	for:	☑ Approva	Review	☐ Informatio	n Nu	mber of Cop	ies Sub	mitted:	1	
Submitted	ву: R	ICK FO	ORD	Rick Fo	rd Digitally sty	ned by Rick Ford 02.26 11:40:39	PRO	OJEC	T MAI	NAGE
		(Name)			Ignature)				(Title)	
ITEM NUMBER		OCUMENT NUMBER	REVISION NUMBER		DOCUMEN			1	FS DISPOSITI	ION
1	KAS 1	52		ATLAS SUFFER CAL REPORT (DOX 2000	FORM 5 NEW	CAR INSPECTIO	N	☑ AP	AWC	
2	WAG .	F9	1	ATLAS BLEFFER CAR		AR INSPECTION F	REPORT	RWC Z AP	DS AWC	REV
2	KAS 15	7		IDOX 20002				RWC	DS	□ RSA □ REV
3	KAS 1	54	9	TUV NDE UT OF ATLAS DECK ATTACHMENT PARTS			RWC		RSA	
	101							☐ AP ☐ RWC	□ AWC	□REV □RSA
								□ AP	□ AWC	REV
							-	RWC	DAWC	□ RSA □ REV
	11.7							RWC		□ RSA
								☐ AP ☐ RWC	☐ AWC	REV RSA
	1		+				\neg	AP	AWC	REV
	+-		-				-	RWC	DS AWC	□ RSA □ REV
								AP RWC		RSA
lentified on UT one after rewo oceptance cho OTF-043 - KA	be corrected a f-2? So tracea ork was perform inged? The PC 8 162 ATLAS	bilty such as item n med on the outer pin 0 to rework the oute KD UP K18-0341A)	we the 8 blocks identifi umber needs to be est blocks or was the orb riph blocks has a com if this is the PO to re submitted to explain U	abilished. 2) Was UT-2 eria of the test pletion date of 11/28/1 work the blocks identif	KLI	EIN S 3/12/2	lade		7.0	
			FS DISPO	SITION CODES AN	D DEFINITIO)NS				
AP /	pproved		Work may proc	eed.						ot required
AWC /	Approved with	h Comment	Work may proc	eed; comments pro	ded for Supp	iller's consider	ation only.	Resu	bmittal is n red	ot
REV F	Reviewed			eed; comments prov			-	_	bmittal is n	ot required
RWC F	Reviewed wit	h Comment	Work may proc Buyer comme	eed; aubject to inc nts.	orporation a	and compliant	e w/	Corre	ect and re	submit
DS C	Sapproved		Work may not	Work may not proceed.				Corre	ect and re	submit
RSA F	Receipt Subm	nttal Acknowledge	d No other action	required.				1		
Project M Manager	ceed and th	ne Supolier shal M) / Engineeri esignated	ncorporation of FS I immediately proving	ide a written noti	to FS' C&	P Represent	ative des	cribing th	ne change	

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

			520 CW
		Orano Federa	al Services
orano	0	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 042
Charge No:	002	25.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	Sa	e DTF No.: 042	
DE	-		EC Cons and Dure Childre Cide atal
PE		NSTRUCTIONS: (List Supplier Doc. No. and Rev. e Klein	F5 Spec and Dwg, Codes, Stds, etc.)
REVIEWERS	77.720	le Klein, Bernie Counterman	
QA	-	nie Counterman	
	-	Technical Review	
Comments/M Technical Re	400	ttached Yes No 🔳	
No commer	nts		
tra acritima.	-		
Technical Re	viewer(s	(Sign/Date): KLEIN Slade	Date: 2019.03.04 19:08:58 -08'00
		Quality Assurance Review (As	Applicable)
Comments/M	arkup A	ttached Yes No	replication
Technical Re	viewer C	Comments:	
	and ar	re identified as defects with variable orien	ng this examination are not to classified as tation and size within the plate". And Test
Was this fur	rther e	valuated further, repaired and/or reinspec	ted?
QA Reviewer	(s) (Sign	VDate): Based Count	Digitally signed by COUNTERMAN Bernard Date: 2019.03.12 08:23:08 -07'00'
COMMENT	T DISPO	SITION (If Applicable, Attached further comment	s and disposition correspondence as necessary)

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

Page F-107 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		KASGRO RAIL C	Page 10
		Charles I in	ORF
		FORM 5	
Revision "9"	NEW CAR INSPECTION Date 02/13/19		
Car Number	IDOX 020001		Job Number
Wheat / Auda	36"/ 6 1/2" X 9"		300 Number
Part Number			
Wheel pressure		Bearing pressure	
on file		on file	
MANU/M	OD/C/DA/ Sr. #	Axle	MANU/MOD/C/DA/ Sr. #
Left			Right
SW/H36/C/11-17/06052		1	SW/H36/C/11-17/06059
SW/H36/C/11-17/06105		2	SW/H36/C/11-17/06088
SW/H36/C/11-17/06558		3	SW/H36/C/11-17/06112
SW/H36/C/11-1	7/05606	4	SW/H36/C/11-17/06142
	HANDBRAKE - Mod	del No. ELLCON 35790	GROUP U
COUPLERS	Туре		HEIGHT
B-END	SE68DE 32 13/16"		The state of the s
A-END	SE68DE	32 3/4"	
DRAFT SYSTE	Part Number		
A End	18852-D		
B End	18852-D		
TRUCKS			
Part Number			
Part Number	Left side frame (but F92-10FH-UB	Boister B92-714N-HJ	Right side frame (buttons) F92-10FH-UB
TRUCKS Part Number No.	The second secon		

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		KAS		RAIL RM 5	CORP		Page 2	
Revision "9"		NE	W CAR	NSPE	CTION	D	ate: 02/13/19	
Car Number IDOX 020001						Job Number		
Cer Number IDOX 020001			_			and Hamen	-	
SPRINGS	- PATTERN	/TYPE						
Outer Coil			5 D7 OC				17.1	
Inner Coil			5 D6 IC					
Inner Inner	3.65	TY APPLIANCES -:	5 D6A IIC			OKAY	· /	
AIR BRAN		DB20	1					
		4.2						
	& Cotter Ke		OKAY					
	ing Free & C	Clear	OKAY					
Brake Shoe	9		2"					
SIDE BEA	RING CLE	ARANCE	4					
BR	5"		1	BL	5 1/16"	XV		
AR	5"		3.7	AL	5"			
TESTING	Test X			Cold	Chan Tast			
Single Car				Golden Shoe Test X Truck Curve Test X				
Slack Adjus	Restriction 1	Test X	4	Load T	and the state of	X	- 4	
SINCK ADJUS	ster Test			Load 1	est A		1	
DIMENSIO	ONS							
	Vidth: 10 Ft 8 ck Length: 6 Deck He	60 Ft						
Deck Heightfs); At "A" End Right Side: 42 11-16" At Center Right Side: 43 1/8" At "B" End Right Side: 42 3/8"				At Cent	End Left Side: 4 ter Left Side: 43 End Left Side: 4	5/8*		
	right Side.	,- w.s.						

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		KASG	RO RAIL CO FORM 5	ORP Page 10				
Revision "9"		NEW C	ON Date: 02/13/19					
Car Number	IDOX 020003	2		Job Number				
Wheel / Ande	36"/ 6 1/2"	X 9"						
Part Number	a.	4-1-1-1		A. A.				
Wheel pressure		Bearing press	re	/				
on file		on file		1				
MANU/MOD/C/DA/ Sr. #			Axle	MANU/MOD/C/DA/ Sr. #				
	Left		100	Right				
SW/H36/C/11-17	SW/H36/C/11-17/06723		1	SW/H36/C/11-17/08095				
SW/H36/C/11-17/18145		-	2	SW/H36/C/11-17/17187				
SW/H36/C/11-17		1	3	SW/H36/C/11-17/06123				
SW/H36/C/11-17	/06045		4	SW/H36/C/11-17/06077				
	HANDBRAKE -	Model No.	ELLCON 35790 G	ROUP U				
COUPLERS		TYPE		HEIGHT				
B-END	SE68DE	70.4	32 13/16"					
A-END	SE68DE		32 11/16"					
DRAFT SYSTE	Part Number							
A End B End	18852-D 18852-D							
	10032-0							
TRUCKS								
Part Number	Left side frame	(huttone)	Bolster	Right side frame (buttons)				
No	F92-10FH-UB	(cuttons)	B92-714N-HJ	F92-10FH-UB				
No.				5				
No.	5			3				

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		KAS	2000	RAIL RM 5	CORP		Page 2
Rayision "9"		NE	W CAR I	NSPE	CTION		ato: 02/13/19
Car Number IDOX 020002							
			_			Job Number	-
SPRINGS	- PATTERN /	TYPE					
Outer Coil			5 D7 OC				
Inner Coll			5 D6 IC				
Inner Inner	Coil		5 D6A IIC	-			· ·
AIR BRAN		20					
		20					
	& Cotter Keys		OKAY				
	ing Free & Clea	ar	OKAY				
Brake Shoe			2"				
SIDE BEA	RING CLEAR	ANCE					
BR	5"	7	1	BL	5 1/16"	XV	
AR	5 1/16"		11	AL	5"		N/A
TESTING	Test X			Goldon	Shoo Tost		
Single Car				Golden Shoe Test X Truck Curve Test X			
Slack Adjus	Restriction Tes	st X	4	Load T	active transfer	X	- الله
SIGUR MUJUS	not rest	•	1	LONG I	oo. A		
DIMENSIO)NS						
	Vidth: 10 Ft 8 In ick Length: 60 Deck Heig	Ft					
Deck Helghtfs); At "A" End Right Side: 42 11-16" At Center Right Side: 43 1/8" At "B" End Right Side: 42 3/8"				At Cent	End Left Side: 4 er Left Side: 43 End Left Side: 4	5/8*	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.1.5 – Certificate of Conformance

				10000	202.00	al Services	T. CO.		
orai	10_			DATA	TRAN	SMITTAL	FORM	1	
Supplier:	KA	SGRO RA	IL CORP.	, INC.	DTF No	FNo: 041B			age 1 of 1
P.O./SC N		3011916						Date:	4/22/2019
Type of S	ubmittal:	First	7	Re-Subm	ittal	SDI	RL List Ite	m No:	24
Submitted for:		Review	☐ Info	rmation	Number o	f Copies	Submi	tted: 1	
Submitte	d By	RICK FO) PD	Rick	Forc	Digitally algred by Rick Date: 2019-04-22 14-47 -04007	ford D	PO.	JECT MANAGE
9,900,111,100		(Name)	טאוע			ature)		NOC	(Title)
	-		_	-					
NUMBER		DOCUMENT NUMBER	REVISION NUMBER			OCUMENT ESCRIPTION			FS DISPOSITION
1	KAS 1	47		KABGRO C	ERTIFICATE 20001	OF CONFORMANCE	ATLAS BUFF	ER 🕜	AP AWC REV
2	WAC 4	40		KASGRO CE	ERTIFICATE O	F CONFORMANCE AT	LAS BLIFFER	Z	AP AWC REV
2	2 KAS 148			CAR IDOX 2	10002	er armount & A.	Char.	-19	RWC DS RSA
									RWC DS RSA
								밀	AP □AWC □REV RWC □DS □RSA
_	-		1	-				-15	
									RWC DS RSA
									AP AWC REV
_	-		+	+				-16	
								١ŏ	RWC DS RSA
	1			1					AP AWC REV
	+-		+	-				-12	AP DAWC DREV
								шн	AP □ AWC □ REV
Comment	8:		•	_		Technical Rev	lewer (1.e.,	RE, PT	L, SME, QA, etc.)
No com	ments					VI EIN	Clar	do D	ate: 2019.04.24 7:24:28 -07'00'
						KLEIN	Sid	ae o	7:24:28 -07'00'
						Date 4/2	4/20	19	
			FS DISPO	SITION CO	DES AND D	EFINITIONS			
AP	Approved		Work may proc	-				-17	Resubmittal is not required
AWC	Approved w	th Comment			ents provide	d for Supplier's cor	nsideration	only.	Resubmittal is not required
REV	Reviewed		Work may proc	eed; comme	ents provide	d for Supplier's cor	nsideration	only.	Resubmittal is not required
RWC	Reviewed w	th Comment	Work may prod Buyer comme		ct to Incorp	oration and com	pliance w/		Correct and resubmit
DS	Disapproved		Work may not						Correct and resubmit
RSA	Receipt Subr	mittai Acknowledged	No other action	required.				gerel e	
		e Supplier, the in the Supplier shall			en notice t	o FS' C&P Repri	esentative		der/Subcontract, <u>work</u> bing the change.
		PM) / Engineerin	9 11/1	64	Digitally sign DN c-ARD	ed by DENTON Mark AS GROUP, ASTCH2800HDEDD2H700			24/2010
	r (EM) or D al (DI) App	esignated	Mark a.	re water	D=00/10	Mark: Mark: M34 (0:29/04-04/00)	Date	: 04/	24/2019

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federal Services							
orano	,	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW						
Supplier / PO	No,:	KASGRO / 15C3011916	DTF No. / Rev: 041B						
Charge No:	0022	25.03.0050.02.00001	Due Date: 5/6/2019						
Document(s):	See	DTF No.: 041B	*						
RE		STRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg. Codes. Stds. etc.)						
PE	Stade Klein								
REVIEWERS	Slade	Klein, Bernie Counterman							
QA	Bernie Counterman								
		Technical Review							
Comments/M.	arkup Att	ached Yes No							
Technical Rev	newer Co								
		onmens:							
No commer	nts	(Sign/Date): KLEIN Slade							
No commen	its viewer(s)	(Sign/Date): KLEIN Slade Quality Assurance Review (As							
No commer	viewer(s)	(Sign/Date): KLEIN Slade Quality Assurance Review (As ached Yes No							
No commen Technical Rev	viewer(s) arkup Att	(Sign/Date): KLEIN Slade Quality Assurance Review (As ached Yes No	Date: 2019.04.24 07:23:33 -07'00 Applicable)						
Technical Rev Comments/M Technical Rev	viewer(s) arkup Att	(Sign/Date): KLEIN Slade Quality Assurance Review (As ached Yes No							
No commen Technical Rev Comments/M Technical Rev	viewer(s) arkup Att viewer Co	(Sign/Date): KLEIN Slade Quality Assurance Review (Assurance III) ached Yes No III omments:	Applicable) Digitally signed by COUNTERMAN Bernard						
Technical Rev Comments/Mi Technical Rev No Commen	viewer(s) arkup Att viewer Co	(Sign/Date): KLEIN Slade Quality Assurance Review (As ached Yes No omments:	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.04.24 05:40:38 -07'00'						
No comment Technical Rev Comments/Mi Technical Rev No Commen	viewer(s) arkup Att viewer Co	(Sign/Date): KLEIN Slade Quality Assurance Review (Assurance III) ached Yes No III omments:	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.04.24 05:40:38 -07'00'						
No comment Technical Rev Comments/Mi Technical Rev No Commen	viewer(s) arkup Att viewer Co	(Sign/Date): KLEIN Slade Quality Assurance Review (As ached Yes No omments:	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.04.24 05:40:38 -07'00'						

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS 147

Kasgro Rail Corporation 121 Rundle Rd.* New Castle, PA 16102 724-658-961 * 724-658-7639 Fax *www.kasgro.com



KASGRO

CERTIFICATE OF ORDER CONFORMANCE

Date: 04/22/2019

SUPPLIER: KasgroRail Corp 121 Rundle Rd New Castle PA 16102

Rail Car Number: IDOX 020001

WE HEREBY CERTIFY THAT WE HAVE COMPLIED WITH AAR REQUIREMENTS AND ALL THE REQUIREMENTS OF YOUR PURCHASE ORDER NO. 15C3011916

Director of Quality Control

TITLE

NOTE: The Recording of False, Fictitious or Fraudulent Statements or Entries on the Document may be Punishable as Felony Under Federal Statutes.

SpecialtyRailCarSolutions

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS 148

Kasgro Rail Corporation 121 Rundle Rd.* New Castle, PA 16102 724-658-9061 * 724-658-7639 Fax * www.kasgro.com



KASGRO

CERTIFICATE OF ORDER CONFORMANCE

Date:04/22/2019

SUPPLIER: KasgroRail Corp 121 Rundle Rd New Castle PA 16102

Rail Car Number: IDOX 020002

WE HEREBY CERTIFY THAT WE HAVE COMPLIED WITH AAR REQUIREMENTS AND ALL THE REQUIREMENTS OF YOUR PURCHASE ORDER NO. 15C3011916

Director of Quality Control

TITLE

NOTE: The Recording of False, Fictitious or Fraudulent Statements or Entries on the Document may be Punishable as Felony Under Federal Statutes.

SpecialtyRail CarSolutions

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

APPENDIX F.2 - SPECIAL PROCESS INSPECTION DOCUMENTATION

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.2.1 - Static Force Brake Test Data, Form 36-A

1				Orano Federa	al Services					
ora	no_			DATA TRANS	SMITTAL F	ORM				
Supplier	: K	ASGRO RA	IL CORP.	. INC. DTF No:	037		Page 1 of 1			
P.O./SC	_	C3011916					ate: 2/1/2019			
Type of	Submittal:	☐ First		Re-Submittal SDRL List Item			No:	24		
Submitt	ed for:	Approval	Review	☐ Review ☐ Information Number of Copies Su			bmin	red:	1	
Submitt	Submitted By: RICK FO (Name)		RD Rick Ford		Digitally algred by Rick Fo Date: 2019 02.01 14:56:44 -05/07	PR	OJ	ECT	ГМА	NAGE
				(Signature)				- 1	(Title)	
ITEM	R	DOCUMENT NUMBER	REVISION NUMBER		OCUMENT SCRIPTION			D	FS ISPOSIT	ION
1	KAS			FORM 45A, ATLAS CASK O		ING FORM		AP	AWC	REV
2	KAS	119		ATLAS BUFFER CARS, IDO INSPECTION REPORTS	X 020001-020002, TUV V	WELD	Z.	AP RWC	DS AWO	RSA REV
3	KAS	120		ATLAS BUFFER CARS IDOS	X 020001-020002 TUV N	DE		AP RWC	□ AWC	REV
4	KAS	121		ATLAS BUFFER CAR IDOX (2000) -02000 BRAKE EQUALIZATION, EMERGENCY APPLICATION AND HANDBRAKE TESTS					□ AWC	
5	KAS	122		ATLAS BUFFER CARS IDOX 020001-020002 MRE YON / S-865 WITHERS / ACCEPTANCE LETTER FOR SINGLE CAR AIR BRAKE TEST					□ AWC	_
8	KAS	123		FORM 56, 5-A, ATLAS BUFFER CARS IDOX 020001-02002 BTATIC BRANE FORCE TEST					AWO	
7	KAS	124		SUPPLIER CERTIFICATION FORM / AMSTED RAIL TOM SEDARSKI TMS- / HANDBHAKE INSPECTION IDOX (SZDD) 1-525XIZ					AWO	
В	KAS	125		SUPPLIER CERTIFICATION FORM / AMSTED RAIL SHAWN PEETZ BUFFER CARS TRUCK WISPECTION DOX (2000)-020002					AWO	
9	KAS	126		SUPPLIER CERTIFICATION FORM / TYCI MATT DEGEORGE IDOX 020001-020002 EQUIPMENT MET S-401				AP RWC	□ AWO	REV
Comme	nts:		Ů.		Technical Review		-		4.00	
No cor	nments				KLEIN :	Slade	e D	ate: 2	2019.0 35 -08	2.19
-					Date 2/19	/2019)			
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AP	Approved		Work may proc	eed.						not required
AWC	Approved	with Comment	Work may proc	eed; comments provided	for Supplier's consi	deration only		Resub require	mittai is : ed	not
REV	Reviewed			eed; comments provided		7, 10, 17, 19, 19	<i>f.</i>	Resub	mittal is r	not required
RWC	Reviewed	with Comment	Work may proc Buyer comme	eed; aubject to Incorpo nts.	oration and compli	ance w/		Сопте	ct and re	submit
DS	Disapprovi	ed	Work may not	proceed.				Согте	ct and re	submit
RSA	Receipt Su	bmftal Acknowledged	No other action	required.			-1 -			
hall not o Project	roceed and Manager		immediately prov	comments will result vide a written notice to Digitally signs Old contain. Surface		entative de	scrib	ing the	e chang	

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

orano		Orano Federal Services								
	,	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW							
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 037							
Charge No:	0022	5.03.0050.02.00001	Due Date: 2/22/2019							
Document(s):	See	DTF No.: 037	,							
RE		STRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)							
PE	PE Slade Klein									
REVIEWERS	Slade	Klein, Bernie Counterman								
QA	Bernie Counterman									
		Technical Review								
Comments/Ma	arkup Atta	ched Yes No								
Technical Rev	viewer Co	mments:								
Technical Rev	viewer(s)	Sign/Date): KLEIN Slade	Date: 2019.02.19 06:40:32 -08'00							
Technical Rev	viewer(s)	(Sign/Date): KLEIN Slade Quality Assurance Review (As	Date: 2019.02.19 06:40:32 -08'00 Applicable)							
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	arkup Atta	Quality Assurance Review (Assisted Yes No								
Comments/Ma	arkup Atta viewer Co	Quality Assurance Review (Assisted Yes No								
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Comments/Ma Technical Rev No Commen	arkup Atta viewer Co nts (s) (Sign/I	Quality Assurance Review (Assisted Yes No III) mments: Date: Based Court	Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 05:58:53 -08'00'							
Comments/Ma Technical Rev No Commen	arkup Atta viewer Co nts (s) (Sign/I	Quality Assurance Review (Assisted Yes No III) mments: Date: Based Court	Applicable) Digitally signed by COUNTERMAN Bernard							
Comments/Ma Technical Rev No Commen	arkup Atta viewer Co nts (s) (Sign/I	Quality Assurance Review (Assisted Yes No III) mments: Date: Based Court	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 05:58:53 -08'00'							

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

FOR	M 36		STATIC			AIL COR		Rev 1	11/20/	2008	
Brake	System:	DB 10/DB	20			Date:		12-4-18			
	Rigging:	TRUCK M				Product Or	der:				
	Adjuster:	ELLCON				Car Type:		FLAT			
land	brake:	ELLCON	35790 GROU	PU		For:					
7.7	rank:	N/A			Car Series:			IDOX 0200 IDOX 0200	TOO DESCRIPTION		
	we Wheel:	8"	D CHOP			Test Car No:			001		
Prake Shoe: 2" TREAD SHOE						Date Built:	-		-		_
Nir Br	ir Brake Force (Gross): #				Light Weigh	t	71600	#			
Brake Lever Ratio:			11			Gross Rail I	The state of the s	263000	#		
	brake Force			#	Brake Force Schem.:						
EMP	Y LOAD %		1	%	and the s	Brake Arran	gement:		1		
				RAKE SH	OE FOR	CE (IN NE	POUND	IS)			
-	Brake Cylli	nder Pressu	Min red 6-7	Light Car:		Londed Car:		FORCE	3350 lbs. o	a Vest	
	WHEEL	CHANNEL	UNTAPPED	UNTAPPED	TAPPED	UNTAPPED	TAPPED	H	Chair		
P	L-1	1	205			3723	3745	A	9192	(1)	
N	R-1	3	307			4006	4124	N	11097	(2)	
E	L-2	2	292			3903	4164	D	10116	(3)	
ū	R-2	4	268	1		3993	4475	В	11630	(4)	
M	L-3	7	354			4028	4416	R	-	1	
A	R-3	6	369			4055	4298	A			
T	L4	8	287		- 100	3986	4061	K			
i	R-4	5	364			3584	3702	E			
C	TOTA	10.	0		0		0		0	-	
-	BCP @ Mn	'A'End	(AVERAGE)	AR. Fug		CHARMOND	(AVERAGE)	(MAGNEN)	1	-	
	Red.		#DWW01			0.0 0.0			-		
RSTOR		25/8			Brake Cy	Inder Pressure	Min. 30psig	Reduction:	0.00 6	4	
RAVE	L	25/8		a 14			Emergen	cy Application	76.5		
			Pneur	natic		Handbrake			Pneumat	tic	
			Load	ed %		Loaded %			Light %		
_	OE FORCE	100 =	92 0						x 100		DEV/01
LIG	HT WEIGHT		12.5	1%		15.98%)		
METSI	OE FORCE X	100 -	Q	#DIVIO!		x100 =	#DIV/0!				
-	SS RAIL LOAD		0		0						
	SHOE FORCE		0	#DIV/OI	0	×100 +	#DIVIO!		1 × 100		OFV/ID!
	BRAKE PIPE	CHARGEOF	90	psig			ATTESTED:	Cory J.	Waarer		_

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

FOR	M 36		STATIC			AIL CORE		Rev 1	11/20/2008	
Brake	System:	DB 10/DB	20		_	Date:		12-4-18		_
	Rigging:	TRUCK M	OUNT			Product Ore	der:			
lack	Adjuster:	ELLCON	Total Control			Car Type:		FLAT		
la nd	brake:	ELLCON	35790 GROU	PU	For: Car Series: Test Car No:					
	crank:	N/A							001-020002	
-	ve Wheel;	8"						IDOX 020	002	
Brake	rake Shoe: 2" TREAD SHOE			Date Bulk:						
Nr B	rake Force	(Gross):		#		Light Weigh	t	71600	#	
	Lever Rati			:1	Gross Rail Load:			263000	#	
	brake Force				Brake Force Schem.:				1	
MP	Y LOAD %		%		Brake Arrangement:					
				RAKE SH	OE FOR	CE (IN NE	POUND	IS)		
-	Brane Cyti	nder Pressu	Min red 6-7	Light Car:	-	Londod Car:		FORCE	330 ltm. on Vert	T
	WEEL	CHANNEL	UNTAPPED	UNTAPPED	TAPPED	UNTAPPED	TAPPED	H	Chain	
P	LI	1	346			3749	3751	A	9071 (1)	Ī
N	R-1	3	468			4130	4106	N	10532 (2)	1
E	L2	2	354			3863	4030	D	9779 (3)	1
U	R-2	4	381			4065	4288	В	10985 (4)	
M	La	7	428			4253	4516	R		1
A	R-3	6	380			4177	4528	A		
T	L4	8	304			3886	3938	K		1
1	R-4	5	351			3969	3882	E		
C	TOTA	LS:	0		0	-2-2	0		0	
	BCP @ Mn	'A' End	PARTICE)	B. Fug	-	(Manufactual	(NEMACE)	(MAXIMEM)	1	,
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1510		2 5/8			Brake C)	Ender Pressure			0.00	r
RAVE	Ŀ	2.7/6	_				Energen	cy Application		
			Pneur			Handbrake			Preumatic	
_			Load	M %		Loaded %			Light %	#DIV RE
_	HOE FORCE X	192	12.50	50%		15 34%			0 x 100=	M.PV.
			12.5			13.3476				
	SS RAL LOAD		0	SOLVIOI.	0	The second second	MONION			
	HOEFORCE &		0	KON/IDI	2		PONVIOL	- 1	2 × 100 =	aDIV/ID
	BRAKE PIPE	CHARGEOF	90	paig			ATTESTED:	Cory J	Wageer	

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orano

Orano Federal Services

Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.2.2 - Single Car Air Brake Test Report Form 6-A

Orano Supplier: P.O./SC No: Type of Submitted for Submitted By	KASGRO RA 15C3011916 nittal: First		, INC. DTF No.	12.52	7.00												
P.O./SC No: Type of Subn Submitted for	15C3011916			Tota		DATA TRANSMITTAL FORM											
Type of Subn Submitted for	nittal: First	KLEIN SI	ASGRO RAIL CORP., INC. DTF No: 046 Page 1 of 1														
Submitted for	- 1		ade 16/03/6-30707 Da			e: 2/28/2019											
	r Annmya		Re-Submittal	t Item No	o: 24												
Submitted By	(Supprova	☑ Review	☐ Information	Number of Cop	ies Subn	nitted: 1											
	RICK FO	ORD	Rick Ford	Digitally algred by Rick Ford Debt 2018 02 28 08:40:52 -05/02	PRO	JECT MANAGE											
	(Name)		(Signa			(Title)											
ITEM DOCUMENT NUMBER NUMBER		REVISION NUMBER		OCUMENT SCRIPTION		FS DISPOSITION											
1	KAS 171		IDOX 10001 FORM 6	AIR BRAKE TEST 2/12	2/2019	AP AWC REV											
		+	IDOX 20001 FORM 6	AIR BRAKE TEST 2/12	onto	RWC DS RSA											
2	KAS 172			AND AND ARRANGE		RWC DS RSA											
3	KAS 173		IDOX 20002 FORM 6 AIR BRAKE TEST 2/12/2019			Z AP AWC REV											
4 KAS 174			IDOX 10001 FORM 6	AIR BRAKE TEST 2/27	/2019	□ AP □ AWC □ REV □ RWC □ DS □ RSA											
				ST REPEATED DUE TO TRUC	_	AP AWC REV											
		1	BOLSTER WORK			RWC DS RSA											
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						□ AP □ AWC □ REV □ RWC □ DS □ RSA											
	+	1	1			AP AWC REV											
-		1	-			RWC DS RSA											
						RWC DS RSA											
	add a identificatio erformed after Am mbly.			KLEIN SI	ade	Date: 2019.03.12 11:30:57 -07'00'											
		FS DISPO	SITION CODES AND D	EFINITIONS													
AP Appr	roved	Work may proc	eed.			Resubmittal is not required											
AWC Appr	roved with Comment	Work may proc	eed; comments provided	for Supplier's considera	dion only.	Resubmittal is not required											
REV Revi	ewed		eed; comments provided			Resubmittal is not required											
RWC Revi	ewed with Comment	Work may proc Buyer comme	eed; aubject to incorp nts.	oration and complianc	e w/	Correct and resubmit											
DS Disa	pproved	Work may not	proceed.			Correct and resubmit											
	ept Submittal Acknowledge ent of the Supplier, the in																

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federal Services								
orano	,	SUPPLIER DOCUMEN	NT SUBMITTAL REVIEW							
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 046							
Charge No:	002	25.03.0050.02.00001	Due Date: 3/8/2019							
Document(s):	Sec	e DTF No.: 046								
RE	27.7	NSTRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)							
PE	PE Slade Klein									
REVIEWERS	Slad	e Klein, Bernie Counterman								
QA	Bern	ie Counterman								
	4	Technical Review								
Comments/M	300	ttached Yes No 🔳								
No commer	nts.									
No commer	nts.									
) (Sign/Date): KLEIN Slade	Date: 2019.03.04 19:32:42 -08'0							
		VIII CONTRACTOR OF COMPA	Date: 2019.03.04 19:32:42 -08'0							
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Technical Re Comments/M Technical Re	viewer(s arkup Af viewer C	Quality Assurance Review (Astached Yes No Somments:	Applicable)							
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Comments/M Technical Re Should KAS Amstead bo	viewer(s arkup At viewer C 3 174 II oss insp	Quality Assurance Review (Assurance Review (Assu	Applicable) Intified as "Brake test reperformed after Digitally signed by COUNTERMAN Bernard Date: 2019.03.12 10:39:38-07'00'							

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Rev.5		
•		- N -
K	lasgr	ro Rail Corp
FOR	M 6	2/24/2016 7.Dex
Air Brake Test Report		CAR NUMBER @2@@01
(X=Tested)		
*		
Single Car Test, 1Set	\prec	Single Car Test, 2 Sets
Single Car Test (includes B.C. Pressrure Test)	>_	Single Car Test (includes B.C. Pressure Test), 2 Sets
Slack Adjuster Test	X	Retainer Valve Test
Empty / Load Valve Test		Brake Pipe Leakage Test
System Leakage Test	\times	Equailization Pressure
Piston Travel (Unit Brakes)		If Equipped With Load Sensor
Piston Travel (Trk MTD Brakes)	\times	Retainer Valve Test Brake Pipe Leakage Test Equailization Pressure If Equipped With Load Sensor Equailization Pressure Load Sensor Equailization Pressure Loaded
WABCOPAC / NYPOAC Piston Travel Adjustment		
(Truck Mounted Brake es with Slack Adjuster		Equalitzation Pressure Empty
Lube Handbrake		Slack Adjuster Rack Measurement
SYSTEM REPAIRS- List repairs, parts replaced, Location, and w	why m	nade.
Piston Travels D 75 D 75		
1) 28 17 28		
ECHARITZATION PRESSURE	SOF	R 63 EM 76
· (NO	ත	MPTY LOND REMINIC LONDED (AR)
DB-10c		
18- 20		
NEW WORK AIR B.	RAK	E EL LOGO SONSOR 40%
		1
Signature of Tester The R BL		Date 2-/1-/9
Signature of Tester Mic /2 //		Date 2-//-/9

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

2.	
Rev.5 .	•
Kasgr	ro Rail Corp
FORM 6	2/24/2016
Air Brake Test Report	CAR NUMBER IDOX 020002
(X=Tested)	CAR NOWINER 12 02 0002
Single Car Test, 1Set	Single Car Test, 2 Sets
Single Car Test (includes B.C. Pressrure Test)	Single Car Test (includes B.C. Pressure Test), 2 Sets
Slack Adjuster Test	Retainer Valve Test
Empty / Load Valve Test	Brake Pipe Leakage Test
	Equalization Pressure
System Leakage Test	If Equipped With Load Sensor
Piston Trave! (Trk MTD Brakes)	Equalization Pressure Load Sensor
WABCOPAC / NYPOAC Piston Travel Adjustment	Equalization Pressure Loaded >
(Truck Mounted Brake es with Slack Adjuster	Equalization Pressure Empty
Lube Handbrake	Slack Adjuster Rack Measurement
SYSTEM REPAIRS- List repairs, parts replaced, Location, and why m	ade.
Piston Travels D 3/	
5 22 11 22	
	,
EUWALIZATION PRESSURE S	SER 63 EM 76
(NO En	PTY LOID REGION 1. ONDED CAIS
DB-10c	
DB-20	
	• •
NEW YORK AIR BRAKE EL LO	40 Sersia 40%
1 - 21	7 4 47
Signature of Tester Mk 12 31_	Date 2-//-/9/

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.2.3 – AAR Witness Letter for Single Car Brake Test Results

	1			Orano	Feder	al Serv	rices									
ora	no_			DATA TRANSMITTAL FORM												
Supplier	: KA	SGRO RA	AIL CORP.	, INC.	DTF No	050			Page 1	of_	t					
P.O./SC	No: 150	3011916	KLEIN Slade	Date: 2019/03.1	0			Da	Date: 3/14/2019							
Type of	Submittal:	☑ First		Re-Submittal SDRL List Item							No: 24					
Submitted for: Approval			Review	☑ Infor	mation	Nun	nber of Cop	mitted:	1							
Submitte	ed By:	RICK FO	ORD	Rick	Ford	Digitally eight Data: 2019 0 -04707	ed by Rick Ford 12.14 14:22:34	PR	OJECT	MAN	NAGER					
		(Name)			(Sign:					Title)						
ITEM DOCUMENT NUMBER NUMBER			REVISION NUMBER		OCUMEN		FS DISPOSITION									
1	KAS 1	83		ATLAS BUFF TEST WITNE	ER CARS A	☑ AP		REV								
	KAS 1	0.4	1	TEST WITNESS LETTER FOR COMPLIANCE TO S-486 ATLAS CASK CAR AAR / TTCI SINGLE CAR AIR BRAKE TEST WITNESS LETTER FOR COMPLIANCE TO S-486						DS AWC	REV					
4	NAS I	04		WITNESS LET	TER FOR C	OMPLIANCE	TO S-486		RWC	DS	□ RSA □ REV					
									□ RWC	DS	RSA					
				1					□ AP □ RWC	□ AWC	□REV □RSA					
			+	+				-	□ AP	LAWC	REV					
									RWC	DS	RSA					
	3 3								AP	AWC						
	-		1	-					□ RWC □ AP	DS	☐ RSA ☐ REV					
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									□ AP	AWC	REV					
_	-		+	-				-	RWC	DS	□ RSA □ REV					
									RWC	DS	RSA					
Commen	ita:		· ·			Technic	cal Reviewer	(I.e., RE,	PTL, SME	QA, etc.)					
No con	nments					KLE	EIN S	lade	Date: 2	2019.03 34 -07'1	3.19 00'					
						Date	3/19/2	2019	1							
			FS DISPO	SITION COD	ES AND D	EFINITIO	NS.				- 3					
AP	Approved		Work may proc	eed.					Resub	mittai is ni	ot required					
AWC	Approved wi	th Comment	Work may proc	eed; commer	ts provide	for Suppl	ler's consider	ation only	Resub	mittal is n	ot					
REV	Reviewed		Work may proc		2.				-		ot required					
RWC	Reviewed w	ith Comment	Work may proc Buyer comme		to Incorp	oration ar	nd compilan	ce w/	Согтес	t and rea	submit					
DS	Disapproved	1	Work may not	proceed.					Согтес	ct and rea	submit					
RSA		mttai Acknowledge							11							
Project Manage	roceed and t	he Supplier shal PM) / Engineeri Designated	immediately proving	ride a writte	Digitally sign Div constant Sankas, so	FS' C&F	Represent	ative des	scribing the	change						

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federa	ral Services									
orano	,	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW									
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 050									
Charge No:	0022	25.03.0050.02.00001	Due Date: 3/18/2019									
Document(s):	See	DTF No.: 050										
	-081-08 (1014)	ISTRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)									
PE	Slade	Klein										
REVIEWERS												
QA	Berni	Bernie Counterman										
		Technical Review										
Comments/M	300	tached Yes No 🔳										
No commer	nts											
		(Sign/Date): KLEIN Slade	Date: 2019.03.14 15:16:48 -07'00									
		(Sign/Date): KLEIN Slade Quality Assurance Review (As	Date: 2019.03.14 15:16:48 -07'00									
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Technical Recomments/M	viewer(s) arkup Att viewer Conts	Quality Assurance Review (Astached Yes No omments:	Applicable) Digitally signed by COUNTERMAN Bernard									
Technical Recomments/M Technical Recomments/M No Comments	viewer(s) arkup Att viewer Conts	Quality Assurance Review (Astached Yes No omments:	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.03.15 08:06:53 -07'00'									
Technical Recomments/M Technical Recomments/M No Comments	viewer(s) arkup Att viewer Conts	Quality Assurance Review (Astached Yes No omments:	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.03.15 08:06:53 -07'00'									

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

Page F-126 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project



Milie You Field Inspector - MID/QA Auditor Cell: 814-515-3803

Email: Mike_yon@aar.com

March 12, 2019

File: KAS-NEWCPA-MC06-0219-MSY

Subject: Specification testing of (IDOX 20001 and 20002), Heavy Duty Flat Car.

Mr. David L. Cackovic
Chief - Technical Standards & Inspections
Transportation Technology Center, Inc.
P.O. Box 11130
Pueblo, CO 81001
E-mail: David_Cackovic@aar.com

Dear Mr. Cackovic,

Specification testing of (IDOX 20001 and 20002), Heavy Duty Flat Car, specifically the Single Car Air Brake Test has been completed. Testing was done at the Kasgro Rail Corporation facility in New Castle, Pennsylvania on February 11, 2019 to comply with S-486.

I was present (test witness) for the required Single Car Air Brake Test and can conclude that applicable requirements of AAR Specification S-486 have been satisfactorily addressed.

Attached information was supplied by the Kasgro Rail Corporation in support of the approval process. Should you need any additional information, please do not besitate to call.

Sincerely,

Mike Yon

ce: Anna Fox, TTCI Kasgro, mark@kasgro.com J. Hannafious, TTCI

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery

Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

st Raport	Kasgro Rail Corp FORM 6-A 2/25/2016 CASH CARNUMBER //201
(X= 'ested',	
Single Car Test, 13at Single Car Test (Includes B.C. Pressure Test) Sax Adjuster Test Enr.ph / Looi Valve Test Switch Leakage Test Faton Travel Tirk MTD Brases) Paton Travel Tirk MTD Brases WARCDPAC / MYPCAC Piston Travel Adjuster If A2 03 #4 Lube Handbrake SYSTEM REPAIRS List repairs, perts replaced, Location, and why made.	Single Car Tost, 2 Sets. Single Car Tost, 1 incl. dos 8.C. Pressure Testi, 2 Sets. Stake Male Test Stake Male Test Equalitation Pressure Equalitation Pressure Load Sensor Equalitation Pressure Load Sensor Equalitation Pressure Empty Stads Adjustor Ratis Mossurement Awhy made.
CELL SES	
KSYM7717.4TOW PRESSINE!	SER 63 EOTTE (LANCE CIK NO CINY PENN
105 20. 105 - 20	NEW YOR BURE. FLX 40% LOND SENSOR
Signature of Tosies - 202# 2	Signature of Tosica 302 18 18 18 18

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Air Blake Test Ruport (X=Tested)	Kasgro Rail Corp FORM 6-A 2/25/2015	V2015 CARMUMBER 100X 2000Z
Single Carriest, 1Set Single Carriest, 1Set State Adjuster Test Emony / Load Valva Test System Leakage Test Paton Travel (Unit Brakes) WABCOPAC / NYPOAC Paton Travel Adjuster (Truck Mounted Brake es with Stack Adjuster #11 #2 #3 #44	scure Test) X X X X X X X X X X X X X	Single Car Yest, 2 Sats Single Car Yest, 4 Sats Refainer Wive Test Brake Pipe Leskage Test Equalization Pressure Lad Sensor Equalization Pressure Lad Sensor Equalization Pressure Laded Equalization Pressure Laded Equalization Pressure Laded Equalization Pressure Laded Equalization Pressure Ength Slack Adjustor Rack Measuroment Slack Adjustor Rack Measuroment
SYSTEM REPAIRS. Like repairs, par	SYSTEM REPARS. List repairs, parts replaced, Location, and why made.	
たないろびょころがいか	MASSIRE SER	65 MITE (AKTEMINAMENOCAK)
DB-10c	NEW YEK AIR	AIR BRAKE ZUX -40% Luty SCOKIZ
Sgnature of Lester - 2722	K 18%	Signature of Lester 1924 & 182

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orano

Orano Federal Services

Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.2.4 – NDE & Weld Examination Results – Buffer Railcar Fabrication

	1			OranoTe	ederal Sen	11003					
ora	no_			DATA TR	ANSMIT	TAL FO	RM				
Supplier	r. K	ASGRO RA	IL CORP.	, INC. DT	F No: 037			Page 1 of 1			
P.O./SC		C3011916					Da	ate: 2/1/2019			
Type of	Submittal:	☑ First		Re-Submittal		SDRL Li	st Item N	No: 24			
Submitt	ed for:	☑ Approval	Review	Informati	ion Nur	mber of Cop	ies Sub	mitted: 1			
Submitted By: RICK FO (Name) TEM DOCUMENT NUMBER NUMBER			ORD	Rick Fo	ord Date: 2010	red by Rick Ford 02.01 14.56.44	PRO	ROJECT MANAGE			
					K Ford Digitally algraed by Rich Food Date: 2019 02:01 14:56:44 PI (Signature)			(Titie)			
			REVISION NUMBER		DOCUMEN			FS DISPOSITION			
HUMDS	KAS		NUMBER	FORM 48A, ATLAS		-	FORM	AP AWC REV			
	1000		+	ATLAS BUFFER CA	RS. IDOX 020001-0	20002 TUV WELL		RWC DS RSA RBA RWC REV			
2	KAS	119		INSPECTION REPO	ORTS	1172760		RWC DS RSA			
3	KAS	120		ATLAS BUFFER CA INSPECTION REPO	RS (DCX 820001-0) RTS	20002 TUV NDE		RWC DS RSA			
4	KAS	121		ATLAS BUFFER CAL EMERGENCY APPL			LIZATION,	☑ AP □ AWC □ REV □ RWC □ DS □ RSA			
5	KAS	122		ATLAS BUFFER CARS WITNESS / ACCEPTA	NCE LETTER FOR S	☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA					
В	KAS	123		FORM 36, 6-A, ATLA STATIC BRAKE FOR	S BUFFER CARS	☑ AP □ AWC □ REV □ RWC □ DS □ RSA					
7	KAS	124		SUPPLIER CERTIFIC TMB-/ HANDBRAKE	✓ AP □ AWC □ REV □ RWC □ DS □ RSA						
3	KAS	125		SUPPLIER CERTIFIC BUFFER CARS TRUE	AP DAWC DEV						
9	KAS	126		SUPPLIER CERTIFI IDOX 020001-02000	ORGE	☐ AP ☐ AWC ☐ REV☐ RWC ☐ DS ☐ RSA					
Comme	nts:		0		Techni	PTL, SME, QA, etc.)					
No cor	mments				KLE	EIN S	lade	Date: 2019.02.19 06:42:35 -08'00'			
					Date	2/19/2	2019				
			FS DISPO	SITION CODES A	ND DEFINITIO	NS					
AΡ	Approved		Work may proc	eed.				Resubmittal is not required			
AWC	Approved w	ith Comment	Work may prod	eed; comments pr	ovided for Supp	ller's consider	ation only.	Resubmittal is not required			
REV	Reviewed		-	eed; comments pro			-	Resubmittal is not required			
RWC	Det Contract	with Comment	Buyer comme		icorporation a	nu compeano	ze W/	Correct and resubmit			
DS	Disapprove		Work may not	Maria Cara				Correct and resubmit			
RSA	Receipt Sub	mittal Acknowledged	No other action corporation of F3								

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federa	ral Services								
orano	,	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW								
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 037								
Charge No:	0022	5.03.0050.02.00001	Due Date: 2/22/2019								
Document(s):	See	DTF No.: 037									
RE	VIEW IN	STRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)								
PE	Slade	Klein									
REVIEWERS	Slade Klein, Bernie Counterman										
QA	Bernie Counterman										
		Technical Review									
Comments/M	300	ached Yes No									
No commer	nts										
		(Sign/Date): KLEIN Slade	Date: 2019.02.19 06:40:32 -08'00								
		(Sign/Date): KLEIN Slade Quality Assurance Review (As	Date: 2019.02.19 06:40:32 -08'00								
	viewer(s) arkup Att	Quality Assurance Review (As									
Technical Rev	viewer(s) arkup Att	Quality Assurance Review (As									
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Technical Rev Comments/M Technical Rev No Commen	viewer(s) arkup Att viewer Co nts (s) (Sign/	Quality Assurance Review (Assurance Review (Assu	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 05:58:53 -08'00'								

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 4 Rev. I P.O. #: K18-0079 Work Order #: 468009 Project: Buffer Car #I Page 1 of 4

Date:
Description:

November 19, 2018 thru December 5, 2018 Revised December 10, 2018

Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Su	rface C	onditio	u:	Pro	duction	n Stage:		VT Gauge Ide	ntification:
NDE-VT-5	As Welded X In Progres							58	Mfg.	G.A.L.		
Test Method Standard:			Per	cent of	cent of Inspection: X Final *					Weld Gauge	Fillet Weld Gages	
AWS D15.1				x	100%			(Other		Model	N/A
Acceptance Standard:		% For Welds:							Cert. # F 4858			
AWS D15.1	Root Pass							Other V-Wac Gage				
Product Form:	Intermediate											
N/A	v						x	F	inal			
Type of Material: Carbon St	teel											
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Ballast Plates												
3-80 to 3-32 (Deck)									<u> </u>			
"A" End		X		X							71" From RS	
*B" End					L							
Left Side	ļ	X	X								88" and 117" fro	
Right Side		X		-		X	X				150" and 154"	from BE
3-81 to 3-80	ļ										500 (040 5	DQ
"A" End	ļ	X		X			X				50" / 84" from	RS
"B" End	1											
Left Side	1								-		160000000000000000000000000000000000000	nnatus PE
Right Side		X		<u> </u>			X				15772007271	"/381" from BE
3-82 to 3-81 "A" End					ļ							
"B" End		-									44"/50"/108' fi	I G
		X- X	_X_	X		X			\vdash		96" from AE/8	
Left Side				_X_			X		\vdash		50"/74" from E	
Right Side		_X	X			X	_ A_		\vdash		30 7/4 Holli E	<u> </u>
Technician: Daniel S. Gjur	rich	Da	iml	D	Zici	ih		10	Daniel S	Giu	Level: CWI	#93041371
Reviewed By:)	5		/			NV.	320 (CWI 91	2041	171 1/2020 Pate: 12/	1./.1

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

NDFG-0100 March 19, 2004 dde

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

DOE Atlas Project Project: 00225.03.0050

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: P.O. #: 4Rev.1 K18-0079 468009 Work Order #: Buffer Car #1 Project:

Page 2 of

Date: November 19, 2018 thru December 5, 2018 Revised December 10, 2018 Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:	Surface C					n:	Pro	duction	Stage:		VT Gauge Identification:		
NDE-VT-5			As	Welded			>	()	n Progre	SS	Mfg. G.A.L.		
Test Method Standard:			Per	cent of	Inspec	tion:	>		inal *		Weld Gauge Fillet Weld Gages		
AWS D15.1	X 100% Other							other		Model N/A			
Acceptance Standard:	% For Welds:								Cert. # F 4858				
AWS D15.1			-										
Product Form:				Intermediate									
N/A	X Final												
Type of Material: Carbon Ste	eel							`	******				
Type of Manter and Calcon Bu													
										72			
Product / Weld			1 1				8	Incomplete Pen	Exceed Reinforcement	Weld Undersized			
Identification	¥.	ķ	14	ğ	*3	5	usi	용	2 2	g			
130mmounes	Accept	Reject	Lincar	Rounded	Cracks	Undercut	Lack Fusion	Ĕ	2 5	5	Remarks:		
Buffer Cars #1	▼	-	"	×	0	5	128	8	四.房	19			
							~	Ē	2	š			
Ballast Plates								-					
3-83 to 3-82	-												
"A" End	1	***************************************				-	-						
"B" End	1									-			
Left Side		X					X				5"7 90" from AE		
Right Side		X				X	X			Х	36"/80"/300" from BE		
		.,,,,											
"A" End Plates													
3-100 to 3-32 (Deck)													
"A" End		X	X	X							1"/23"/27"/60" from RS		
"B" End		X								X	Corner		
Left Side	1												
Right Side		X	X								14"/19" from AE		
3-99 to 3-100													
"A" End		_X					X				Corner / 43" from RS		
"B" End													
Left Side	1												
Right Side	/			ايرا	h	<i>_</i> _	1		لسرحا				
Technician:	Dani	el S. G	iurich	1)	1.	19			De	niel S Gjurich		
	-	THE RESIDENCE OF THE PERSON OF	MANUSACULANA MANUSACULANA	N	lun	12	<u>~~</u> y	and	THE	_B Da	Mei 5 Gjunen VI 93041171		
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Reviewed By:		\mathcal{A}	-						4	Dat	,		
nortewed by,				-	~~					Dat	te: 12/1./18		

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 4 Rev. I P.O. #: K18-0079 Work Order #: 468009 Project: Buffer Car #I Page 3 of

Date: November 19, 2018 thru December 5, 2018 Revised December 10, 2018
Description: Visual Inspections of Buffer Car #IDOX-020001

TRIS Procedure:	Surface Condition						Pro	ductio	n Stage	;	VT Gauge Identification:		
NDE-VT-5			As	Welded	i)	(I	n Progr	ess	Mfg. G.A.L.		
Test Method Standard:	Percent of Inspection:							Final *		Weld Gauge	Fillet Weld Gages		
AWS D15.1	X 100%								Other		Model	N/A	
Acceptance Standard:	%						For	Welds	s:		Cert. #	F 4858	
AWS D15.1									V-Wac Gage				
Product Form:	Intermediate												
N/A							X		inal				
Type of Material: Carbon S	teel												
							_	ä	Exceed Reinforcement	Weld Undersized			
Product / Weld Identification	1 %	ಕ	Ħ	3	8	Undercut	Si	5 P	2 8	- iš			
Identification	Accept	Reject	Linear	Rounded	Cracks	p	L.	<u>ज</u> ि	3 8	Pag		Remarks:	
Buffer Cars #1	<	1 24	ä	2	0	5	Lack Fusion	Incomplete Pen	直道	d U			
							12	Ĭ	2	×e]			
"A" End Plates						·			H	_			
3-98 to 3-99	-												
"A" End		X	*******	-	-	-				X	44" from RS		
B End	1	X	-			X	X				1"/ 48"/ 62" fro	om RS	
Left Side		X	X	X			X				16" long/36" fr		
Right Side		X		X		-	X				24"/30" from		
3-84 to 3-98													
"A" End	1												
"B" End	/												
Left Side	/			-									
Right Side		X		X							28" from AS		
anu z I ni	-						_						
"B" End Plates 3-100 to 3-32 (Deck)								-					
"A" End	7												
"B" End	1	-											
Left Side	-	х					X				48" from BE		
Right Side	7						_^_				40 HOM BE		
Technician:	Dani	el S. Gj	urich	1)	l x	12	Lan	2			el: CWI #93041171	
		num oquacure o	**************************************		market 1 more	minum di non		AUNIC	S CI	aniel (3 Glurich 3041171	100000000000000000000000000000000000000	
D-1	7	1						Lisan		vvi 9. C1E1	30917/7 XD 4/4/2000	,	
Reviewed By:	-								- 40	_'Dat	XP. 4/1/2020	./19	

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 4 Rev.1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 4 of 4

Date:	
Description:	

November 19, 2018 thru December 5, 2018 Revised December 10, 2018

Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Su	rface C	onditio	n;	Pro	ductio	n Stage:	:	VT Gauge Ide	entification:
NDE-VT-5			As	Welder	1		>	ζ Ι	n Progre	ess	Mfg.	G.A.L.
Test Method Standard:			Per	rcent of	Inspec	tlon:		ζ 1	Final *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%				Other		Model	N/A
Acceptance Standard:			-		%		For	Welds			Cert.#	F 4858
AWS D15.1			-		•				Root Pas	22	Other	V-Wac Gage
Product Form:									ntermed		- 11.41	
N/A							x	_	inal	iluto		
Type of Material: Carbon S	Steel											
			·	·						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Product / Weld Identification	Į,	ಕ	a	3	9	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		
1dentification	Accept	Reject	Linear	Rounded	Cracks	ge	Ř.	lg l	8 2	Cnd	Remarks:	
Buffer Cars #1			П	2		Þ	Lac	Incon	Rein	Weld		
"B" End Plates												
3-90 to 3-100												
"A" End	1											
B End	1											
Left Side		Х					X				48" FBE	
Right Side	1											
3-98 to 3-99												
"A" End		X					X				7" FRS	
"B" End	1											
Left Side	1											
Right Side	/											
3-84 to 3-98												
"A" End	1											
"B" End	/					PROFESSION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRE						
Left Side	/											
Right Side	/											
Technician: Daniel S. Gju	rich	D	aml	1	De	and	WS>	Dani	iel S Gj 9304	urich	Level: CWI	193041171
0					/	All I	1113	QC1	EXP.	4/1/2	020	
Reviewed By.		\triangle					*			Dat	ie: 12/	/11

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

DOE Atlas Project Project: 00225.03.0050

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: P.O. #: 5 Rev.1 K18-0079 468009 Work Order #: Project: Buffer Car #1

Page

Date: December 3, 2018, thru December 10, 2018 Revised January 9, 2019 Description: Visual Inspections of Repairs to Buffer Car # IDOX-020001

TRIS Procedure:			Sui	rface C	onditio	n:	Pro	ductio	n Stage:	1	VT Gauge Identification:		
NDE-VT-5			As	Welder	l		>	1	n Progre	288	Mfg. G.A.L.		
Test Method Standard:			Per	rcent of	Inspec	tion:	_ >	C F	inal *		Weld Gauge	Fillet Weld Gages	
AWS D15.1				X	100%	r e		(Other		Model	N/A	
Acceptance Standard:					%		For	Welds	11		Cert. #	F 4858	
AWS D15.1								E	Root Pas	S	Other	V-Wac Gage	
Product Form:								— ₁	ntermed	iate			
N/A							×	F	inal				
Type of Material: Carbon S	Steel						-						
Product / Weld				_			g	Pen	ij	ized			
Identification	Į.	첮	k	्रञ्ज	ম	2	usic	윉	8 8	E.			
	Accept	Reject	Linear	Rounded	Cracks	Undercut	17.	혍	3 5	Š	Remarks:		
Buffer Cars #1		_	_	ĸ		ອ	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized			
Ballast Plates						**********						830VA	
3-80 to 3-32 (Deck)	-		l										
"A" End R1	7	***************************************			-								
Left Side R1	1								-				
Right Side R1	1					and the section of th		-					
3-81 to 3-80													
"A" End R1	1												
Right Side R1	1												
3-82 to 3-81													
"B" End R1	1												
Left Side R1	1												
Right Side R1	/												
Ballast Plates											_		
3-83 to 3-82												Daniel S Gjurich	
Left Side R1	/										NAMS	CWI 93041171	
Right Side R1	1											QC1 EXP. 4/1/2020	
	-												
		ارا		1									
Technician: Daniel S. Gju	rich	K)	enel	1	Gri	uh					Level: CWI	#93041171	
Reviewed By:	Reviewed By:									r	Date:	0/19	

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

NDTG-0100 March 19, 2004

Page F-136 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 5 Rev.1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 2 of 3

Date: December 3, 2018, thru December 10, 2018 Revised January 9, 2019
Description: Visual Inspections of Repairs to Buffer Car # IDOX-020001

TRIS Procedure:		Surface Condition:							n Stage:		VT Gauge Identification:				
NDE-VT-5				Weldec			>		n Progre	ess	Mfg. G.A.L.				
Test Method Standard:			Per	cent of	Inspec		>		inal *		Weld Gaug	NAME OF TAXABLE PARTY O			
AWS D15.1				X 100% Other							Model N/A Cert. # F 4858				
Acceptance Standard:			% For Welds:												
AWS D15,1								F	Root Pas	S	Other V-Wac Gage				
Product Form:								1	ntermed	iate					
N/A							X	F	inal						
Type of Material: Carbon S	Steel														
Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:			
Buffer Cars #1	Ā	ă.	ä	Ro	Ö	Ç	Lack	Incom	Ex Reinfe	Weld U					
"A" End Plates															
3-100 to 3-32 (Deck)															
"A" End R1	1														
"B" End R1	1														
Right Side R1	1														
3-99 to 3-100															
"A" End R1	1		-												
"A" End Plates															
3-98 to 3-99															
"A" End R1	1														
"B" End R1	1														
Left Side R1	1														
Right Side R1	1										A				
3-84 to 3-98												Daniel S Gjurich			
Right Side R1	/										(AWS)	CWI 93041171 QC1 EXP. 4/1/2020			
					9		10	-							
Technician:	Dani	el S. Gj	urich	_//	and	$\ell_{\mathcal{X}}$	12	und	l			Level: CWI #93041171			
Reviewed By:)	_			iriin alminisanalas		_			Dai	te:	1,0/19			

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NDTG-0100 March 19, 2004 ddk

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Project:

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 5 Rev. 1 P.O. #: K18-0079 Work Order #: 468009

Buffer Car #1

Page 3 of 3

Date: December 3, 2018, thru December 10, 2018 Revised January 9, 2019
Visual Inspections of Repairs to Buffer Car # IDOX-020001

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon S	Steel		Surface Condition: As Welded X In Progr Percent of Inspection: X Final * X 100% Other % For Welds: Root Par Intermec X Final		ess	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	entification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage					
Product / Weld Identification Buffer Cars #1	Accept	Reject	Lincar	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:
"B" End Plates 3-100 to 3-32 (Deck) Left Side R1 "B" End Plates 3-99 to 3-100 Left Side R1 "B" End Plates 3-98 to 3-99 "A" End R1] 									aws	Daniers CWI 930	41171
Technician:	Danie	el S. Gji	ırich		Dan de		Je.	1.2		NIIO	QC1 EXF	rel: CWI #93041171
Reviewed By:		_		_1	Lan	w/_		surla		Dat		1/19

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 3Rev2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 1 of 4

Date: November 19, 2018 thru December 3, 2018 Revised December 10, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:		AND DESCRIPTION OF THE PARTY OF	C	face Co	anditi-	**	Dro	duction	n Stage:		VT Gauge Identification:	
NDE-VT-5				Welded		u;					-	G.A.L.
							X		n Progre	*S\$	Mfg.	
Test Method Standard:			Per	cent of			X	-	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1			_	<u> </u>	100%				Other		Model	N/A
Acceptance Standard:			_		%		For	Welds			Cert. #	F 4858
AWS D15.1			Roo							-	Other	V-Wac Gage
Product Form:								Б	ntermed	iate		
N/A							X	F	inal			
Type of Material: Carbon Ste	eel											
								g	Exceed Reinforcement	Weld Undersized		
Product / Weld	- H	*	ایا	8	8	ğ	Lack Fusion	Incomplete Pen	7 8	crsi		
Identification	Accept	Reject	Linear	ם	Cracks	Ĕ	E		8 5	ņģ	Remarks:	
Duffen Com #1	A P	32	3	Rounded	Ö	Undercut	절	E I	표임	O P		
Buffer Cars #1				_		_	13	ğ	<u>e</u>	હું		
										-		
Ballast Plates												
3-80 to 3-32 (Deck)												V-y-y-
"A" End		X		X							5'7" from right	side
"B" End	1				*							
Left Side		x	х	1			х	,			end	4"/from "A" end/9"from "B"
Right Side	/			1							14'2" from "A"	end Meets code
3-81 to 3-80												
"A" End		X					X				16" from left si	de
"B" End	1											
Left Side		X	X				X				281" from "A"	end/220" from "A" end
Right Side	1											
3-82 to 3-81												
"A" End	1											
"B" End	/											
Left Side		X				X					122" from "A"	end
Right Side	1											
Technician: Daniel S. Gjuri	ich	Da	nul	Sl	Line	-		№ E	Danlel S			193041171
	Tourism State of the Control of the	N. Promoto	not stored from	Parameter C	yuu	no. Contraction	CAW!	3	WI 9:			
1		A		/				6	QC1 EX	XP. 4/	1/2020	
Reviewed By: Date: 12/1/15												

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 3 Rev. 2 P.O. #: K18-0079 Work Order #: 468009 Project: Buffer Car #2 Page 2 of 4

Date: November 19, 2018 thru December 3, 2018 Revised December 10, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:			Sui	face C	onditio	n;	Production Stage:				VT Gauge Ide	entification:
NDE-VT-5			As	Welded			х	I	n Progre	ss	Mfg.	G.A.L.
Test Method Standard:			Per	cent of	Inspec	tion:	- >	F	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				x	100%			(Other		Model	N/A
Acceptance Standard:			-		%		For	Welds	:		Cert. #	F 4858
AWS D15.1			•					F	Root Pas	\$	Other	V-Wac Gage
Product Form:								I	ntermed	iate		
N/A							X	F	inal			
Type of Material: Carbon St	cel											
	1							8	ايا	8		
Product / Weld				מי	.,	5	Lack Fusion	Ã,	- E	rsjz		
Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	E E	ğ	8 8	ğ		Remarks:
	₽ °	8.	:5	2	රී	Ja Za	성	Į,	출임	5		
Buffer Cars #1				"			្ន	incomplete Pen	Exceed Reinforcement	Weld Undersized		
						Ļ				-		
Ballast Plates								-				
3-83 to 3-82											1000 000	100.5
"A" End		X					X				12" from R\$ /	12" from LS
"B" End Left Side	/	X	х	x		X	X				120"// 54" 600	A end/3"/9'6"/15' from "B" end
Right Side		- ^	X	X			X			*************	CONTRACTOR OF THE PARTY OF THE	from B/152"/40" from A end
Right Side			_^_				_^_			-	80 Hom B/223	Holi B/132 740 Holi A cad
"A" End Plates					~							
3-100 to 3-32 (Deck)												
"A" End	7	MY44******		1							Meets Code	
"B" End	-	х					X				19" from LS	
Left Side		Х	Х	Х			Х				48" from "A"	end/12" from "B" end
Right Side		Х					х				46" from "A"	end
3-99 to 3-100			N. C.									
"A" End	/											
"B" End	1					10000000000000000000000000000000000000						w
Left Side	1											
Right Side	/			L	h	ــــــــــــــــــــــــــــــــــــــ	لــــــــــــــــــــــــــــــــــــــ		LI		L	
Technician:	Dani	el S. G	jurich	D.	ant	L	Yin	L	A .	Dan	iel S Giurich	vel: CWI #93041171
the state of the s		MCC.F/FFNIST	1000	1~1	adver !	7	1/10		W2W	CW	93041171	
Λ		1				/		1		QC'	EXP. 4/1/20	20
Reviewed By:	لر								Y	Da		

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These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

3 Rev.2 Report #: K18-0079 Work Order #: 468009 Buffer Car #2 Project:

3 Page of

Date: November 19, 2018 thru December 3, 2018 Revised December 10, 2018 Description: Visual Inspections of Buffer Car # IDOX-020002

AMERICAN CONTRACTOR OF THE PROPERTY OF THE PRO			**************************************		HILTH-DISUMNON	·			A DESCRIPTION OF THE PERSON NAMED IN				
TRIS Procedure:					Conditio	n:	Production Stage:				VT Gauge Identification:		
NDE-VT-5			As	Weldo	đ			K 1	n Progr	ess	Mfg.	G.A.L.	
Test Method Standard:			Pe	rcent o	f Inspec	tion:	,	Κ Ι	Final *		Weld Gauge	Fillet Weld Gages	
AWS D15.1				X	100%			(Other		Model	N/A	
Acceptance Standard:					%		For	Welds	3:		Cert. #	F 4858	
AWS D15,1			,	Root Pass							Other	V-Wac Gage	
Product Form:								— ₁	ntermed	liate			
N/A							X		inal				
Type of Material: Carbon	Steel												
S. A. A. A. M. A. A.	T		Ī		Ī			5	į į	pag			
Product / Weld Identification	1 5	Ħ	1 5	Rounded	9	턩	Sign	E E	7 8	3			
Identification	Accept	Reject	Linear	1	Cracks	Į į	昆	쥖	9 2	pa		Remarks:	
Buffer Cars #1	· ·	2	מ	88	0	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized			
"A" End Plates	_	 	1		1				-				
3-98 to 3-99					1	l							
"A" End		X	1				X				36" from RS		
"B" End	/												
Left Side	1		1	1		-					2" from "A" cr	nd / Meets code	
Right Side	/					-							
3-84 to 3-98													
"A" End	1			1							33" from RS /	Meets code	
"B" End	1												
Left Side	1												
Right Side	1												
"B" End Plates					1								
3-100 to 3-32 (Deck)													
"A" End		Х					X				36" from LS		
"B" End		Х	X	X							33"/44" from I	S	
Left Side	1	ļ											
Right Side	/	L	L	L,	Δ		الما		,				
Technician:	Dani	iel S. G	jurich	K	Jan	lx	Gh.	iúbs		Dan	Lev iel S Gjurich	rel: CWI #93041171	
_					-		/		M2>	CW	93041171		
Reviewed By:	_/	<u></u>	-						V	QC1 Da	EXP. 4/1/20	29,5	
TÜV RHEINLAND INDIS	TRIAL S	sot tia	TONE	INC								/	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 3 Rev.2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 4 of 4

Date: November 19, 2018 thru December 3, 2018 Revised December 10, 2018

Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A	As Welded Percent of Inspection: X 100%							Welds	n Stage: n Progree linal * Other ; toot Pas ntermed	s	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	ntification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Type of Material: Carbon St Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
"B" End Plates 3-99 to 3-100 "A" End	,											
"B" End Left Side Right Side	1	х	***********				_X	·			33" from A end	
3-98 to 3-99 "A" End "B" End	1										5" from A end	
Left Side Right Side 3-84 to 3-98	,	х	X	X							5" from A end	
"A" End "B" End Left Side Right Side	<u>'</u>	х	х	х							22" from LS	
Technician: Daniel S. Gjurich Saral A Grund Devel: CWI #93041171										93041171		
Reviewed By:		.)	>,	·			AWS	>> C¹	WI 93 C1 EX	0411	71	·./11

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 6
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 1 of 2

Date: November 19, 2018 thru December 12, 2018

Description: Visual Inspections of Repairs to Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon Steel			As	Surface Condition: As Wolded Percent of Inspection: X 100% %				Welds	n Stage: In Progre Final * Other S: Root Pas Intermed Final	:ss	Mfg. Weld Gauge Model Cert. # Other	entification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Product / Weld Identification Buffer Cars #2	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Ballast Plates												
3-80 to 3-32 (Deck)												
"A" End R1	1											
Left Side R1	1											
3-81 to 3-80												
"A" End R1	1											
Left Side R1	1											
3-82 to 3-81				1		300,130,000,000				200.330000		
Left Side R1	1.						1					
3-83 to 3-82			1	1								
"A" End R1	1.				1							
Left Side R1	17		-							*******		
Right Side R1	1.			T			1			~		
"A" End Plates	1		1		l	J		****************	1		A -	L-LC Cludeb
3-100 to 3-32 (Deck)	1		1	1	1			-			Dai	niel S Gjurich
*B" End R1	1						-	Assertation			CANAS CV	1 93041171 1 EXP. 4/1/2020
Left Side R1	17										QC	1-EXP-4/112020
Right Side R1	1;				_	***********	-				X	
Technician: Daniel S. Gj	Vaul Sajanh				Level: CWI #93041171							
Reviewed By:	411	elder	دنسه								Date: 12/	19/18

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Description:

Report #: 6
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 2 of 2

Date: Novembe

November 19, 2018 thru December 12, 2018

Visual Inspections of Repairs to Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5	Surface Condi As Welded				n:	Production Stage: In Progress				VT Gauge I	lentification:	
NDE-V 1-3 Test Method Standard:									n Progre Final *	288		G.A.L.
AWS D15.1		Percent of Inspection: X 100% 						-			Weld Gauge Model Cert. #	
									Other			N/A
Acceptance Standard: AWS D15.1								Welds				F 4858
								Root Pass			Other	V-Wac Gage
Product Form:							Intermediate			iate	te	
N/A	X Final											
Type of Material: Carbon S	Steel									·		
W 1 . / W 11							а	E	Ħ	Zog Zog		
Product / Weld Identification	Į,	ಕ	ar	3	9	E	Sio	te I	78 8	E		
Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	4	ple	3 8) od		Remarks:
Buffer Cars #2	4	æ	7	8	0	ភ	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		
"A" End Plates												
3-98 to 3-99												
"A" End R1	1											
"B" End Plates										***********		
3-100 to 3-32 (Deck)												
"A" End R1	1											
"B" End R1	1.											
"B" End Plates												
3-99 to 3-100												
Left Side R1	1.		-							and or introduced		
3-98 to 3-99	· .											
Left Side R1	1 :								-			
3-84 to 3-98												
"B" End R1	1							-			T	
											o Di	niel S Gjurich
									-	é		NI 93041171
											0	C1 EXP. 4/1/2020
					h						-	
Technician:	Daniel S. Gjurich						19	Spirch Level: CWI #93041				

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These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

NDTG-0100 March 19, 2004 dlk

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #; 2 P.O. #: K18-0079 Work Order #: 468009 Project: Buffer Car #2 Page 1 of 10

Date:
Description:

March 21, 2018 thru September 18, 2018 Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:			Sur	rface (Condit	ion:	Production Stage: VT Gauge					uge Identification:
NDE-VT-5			As	Welde	d		,	(1	n Prog	ress	Mfg.	G.A.L.
Test Method Standard:			Per	rcent o	f Insp	ection:	7	I	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%	6		_ (Other		Model	N/A
Acceptance Standard:			_		%		For Welds:			:	Cert. #	F 4858
AWS D15.1			_					F	Root Pa	iss	Other	V-Wac Gage
Product Form:								I	nterme	diate		
N/A							>	C F	inal			
Type of Material: Carbon	Steel											
n 1 ./m///									Ħ			**************************************
Product / Weld Identification							.g	2	ğ	72		
10епписацов				3	,,	l g l	TIS.	ple	- ž	Sizk		Remarks:
Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Underout	Lack Fusion	om c	nice in	P S		
Build Cars #1	Ac	Re	3	Ro	ပ်	5	Ę	Incomplete Pen	Exceed Reinforcement	Weld Undersized		
Cross Bearers												
3-6 to 3-5 (20 Items)	1.											
Bolster Assemblies												
"B" End (2 Assys)	1											
3-2 to 3-32 BR	1											
3-2 to 3-32 BL	1									**************************************		
3-3 to 3-32 &3-2	1											
"A" End (2 Assys)	1			a DM St. Pl. Ch. channel								
3-2 to 3-32 AR	/											THE CONTRACT OF THE PARTY OF TH
3-2 to 3-32 AL	1				MAN DEPARTMENT							
3-3 to 3-32 &3-2	1											
Center Sill to Deck										- 5	A De	niel S Gjurich
3-28 to 3-32 (LS)										-		VI 93041171
Inside	/											1 EXP. 4/1/2020
Outside	/											

					,			The state of the s		1		
Technician: Daniel S. Gjurich Sam & Beinh											Level: C	WI #93041171
Reviewed By:										Dat	te: <u>c1/2</u>	0/18

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These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 2
P.O. #: K
Work Order #: 4

K.18-0079 468009 Buffer Car #2 Page 2 of 10

Date: Description:

March 21, 2018 thru September 18, 2018 Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:		Surface Condition:						roduc	tion St	age:	VT Ga	uge Identification:
NDE-VT-5			As	Welde	d		2	X 1	n Prog	ress	Mfg.	G.A.L.
Test Method Standard:			Per	rcent o	f Insp	ection:	:	X 1	Final *		Weld Gauge	Fillet Weld Gages
AWS D15.1				Х	100%	6		(Other		Model	N/A
Acceptance Standard:					%			For	Welds		Cert. #	F 4858
AWS D15.1								1	Root Pa	ISS	Other	V-Wac Gage
Product Form:									nterme	diate		
N/A							7	<u>x </u>	Final			
Type of Material: Carbon Steel												
					<u> </u>	1	1	T			I .	
Product / Weld									Exceed Reinforcement			
Identification				703		#	Sio	용	Į į	Zeg		~ .
	t l	ಕ	늄	8	22	្ត្រ	곮	E C	8 8	E		Remarks:
Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	ei če	Weld Undersized		
	<	×	H	8	Ö	ם	1	급증	包以	ĭ ⊃		
Center Sill to Deck												
3-23 to 3-32 (RS)												
Inside	1											
Outside	1				*							
Cross Bearer to Center Sill and Deck												
3-5 to 3-28 & 3-32	1									(all-communic	(5 welds LS)	
3-5 to 3-23 & 3-32	1				-						(5 welds RS)	
3-7 to 3-28 & 3-32	1										(4 welds LS)	
3-7 to 3-23 & 3-32	/				-						(4 welds RS)	
Stringers to Cross Bearer							1000,000	10000000000				
3-13 to 3-5	1				5						(8 welds "A"	end RS)
3-13 to 3-5	1					1					(8 welds "B"	end RS)
3-13 to 3-5	1				14	Mela	D-				(8 welds "A"	end LS)
3-13 to 3-5	1				1	10	Civi	9/50			(8 welds "B"	end LS)
Stringers to Deck							QC_{2}	9304	urich			
(16) 3-13 to 3-32	1						,	KO	179		(8 LS & 8 RS	5)
(8) 3-12 to 3-32	1					,		4,	urich 171 (1/2020		(4 LS & 4 RS	
Technician: Daniel S.	Gjurich	1	K.	and		Yeur	L				Level; C	WI #93041171
	_				/	/						The state of the s

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These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

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 Mr. Mark Zeigler
 Report #:
 2

 Kasgro Rail Corporation
 P.O. #:
 K18-0079

 121 Rundle Road
 Work Order #:
 468009

 New Castle, PA 16102
 Project:
 Buffer Car #2

Date: March 21, 2018 thru September 18, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:			Sur	face Co	onditio	n;	Pro	duction	n Stage:		VT Gauge Identification:		
NDE-VT-5			As Welded X In Progress								Mfg.	G.A.L.	
Test Method Standard:			Per	cent of	Inspec	tion:		K F	inal *		Weld Gauge	Fillet Weld Gages	
AWS D15.1				X	100%				Other		Model	N/A	
Acceptance Standard:			-		%		For	Welds			Cert.#	F 4858	
AWS D15.1								F	Root Pas	s	Other	V-Wac Gage	
Product Form:								!	ntermed	iate			
N/A													
Type of Material: Carbon Sto	eel												
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	ncomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:	
Center Sill to Center Sill	<.	-24			O_			<u> </u>	mĸ	2_			
3-27 to 3-23	1			*:				 		Promomposers	"B" End		
3-26 to 3-28	7					Continue		l			"B" End		
3-78 to 3-28	1				Park Times						"A" End		
3-79 to 3-23	1										"A" End		
Center Sill to Deck													
3-78 to 3-32 (Inside)	1	-						1			"A" End		
3-78 to 3-32 (outside)	1						***				"A" End		
3-79 to 3-32 (inside)	1									pp-1	"A" End		
3-79 to 3-32 (outside)	1					_					"A" End		
3-26 to 3-32 (inside)	1					-45					"B" End		
3-26 to 3-32 (outside)	1			NAME OF TAXABLE PARTY.	To A	144					"B" End		
3-27 to 3-32 (inside)	1				1.	AL Jo	Dan	3/ -			"B" End		
3-27 to 3-32 (outside)	1						CM	00 G	w.		"B" End		
				7			461 F	20099	1201				
181100112 100						DECEMBER OF STREET		1. 4/	1/20				
				**	10				liich 121 12020				
Technician: Daniel S. G	Jun	1	12	ent				· '4 ,	Level: CWI	W93041171			
Reviewed By:											e: a/s	eo f. 4	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #; 2
P.O. #; K18-0079
Work Order #: 468009
Project; Buffer Car #2

Page 4 of 10

Date: March 21, 2018 thru September 18, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form:	e e e e e e e e e e e e e e e e e e e	Surface Condition: As Wolded Percent of Inspection: X 100% %							n Stage: in Progre Final * Other s: Root Pas	:68 S	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	ntification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
N/A Type of Material: Carbon St	eel								inal?	iate		
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	ack Fusion	ncomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:
Gusset to Center Sill & Deck												
(2)3-9 to 3-26&3-27&3-32	1										"B" End	
(2)3-9 to 3-78&3-79&3-32	1										"A" End	
Stringer to Deck												
(8) 3-14 to 3-32	1						-				(4) "A" End (4) "B" End
Bolster to Center Sill & Deck												
3-1 to 3-78 & 3-32	1										"A" End	
3-1 to 3-79 & 3-32	1										"A" End	
3-1 to 3-26 & 3-32	1				_					***************************************	"B" End	
3-1 to 3-27 & 3-32	1			New York	1						"B" End	
Cross ties To Stringer				A.	N.S.No	Dan	21-					
(11) 3-10 to 3-13	1			1		CWI	S G	Ullar				
Cross tie To Stringer						VC1	X041	174				
3-80 to 3-12	1		0		4 -		4,	1/200			"B" End Only	/
3-1 to 3-27 & 3-32											93041171	
Reviewed By:										Dat	ne: <u>a</u>];	25/18

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

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> > VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Rcport #; P.O. #; K18-0079 Work Order #: 468009 Buffer Car #2 Project:

Date: March 21, 2018 thru September 18, 2018 Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:		Sur	onditio	n:	Pro	duction	n Stage:		VT Gauge Identification:				
NDE-VT-5			As !	Welded	i		>	()	n Progre	ss	Mfg.	G.A.L.	
Test Method Standard:			Per	cent of	Inspec	tion:	>	C F	inal *		Weld Gauge	Fillet Weld Gages	
AWS D15.1				X	100%				Other		Model	N/A	
Acceptance Standard:			_		%		For	Welds	:		Cert. #	F 4858	
AWS D15.1								F	Root Pas	S	Other	V-Wac Gage	
Product Form:							-	1	ntermed	iatc			
N/A							>	F	inal				
Type of Material: Carbon Steel													
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:	
n 1600 - 6	1 3	2	_:=	~ ~	- 5	_5_		Ĕ	0.5	_ ≩			
End Sill to Center Sill	-,-												
3-33 to 3-27	1	_									"B" End		
3-34 to 3-26	1										"B" End		
3-33 to 3-78 3-34 to 3-79	1										"A" End		
			_								"A" End		
Stringer to Deck 3-42 to 3-32	7							سنسند			(4) #A# === 1 (A) EDE Carl	
Side Sill Web to Deck	-										(4) "A" End (4) B ENO	
3-26 to 3-32	-,-										Left side		
3-26 to 3-32			-	-								·	
Draft sill Flange to Cntr.				-				,,		,	Right side		
Sill					man 1								
3-25 to 3-26	1				AWS	® D ₂					*B" End		
3-25 to 3-27	1	***			A STATE OF THE PARTY OF THE PAR	CN	1/e/S	2/.			"B" End		
3-25 to 3-78	1					QC,	930	" Urich			"A" End		
3-25 to 3-79	1						dka	8/27			"A" End	iin maanin maan	
Technician: Daniel S. C	jurich		W.	eul.	11	Lu	iil	50	₹0		Level: CWI #	93041171	
Reviewed By:	PIAI S	OLUT	/	N/C	/					_ Dat	e: a) -	20/14	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

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Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

2 Page 6 of K18-0079

Date: March 21, 2018 thru September 18, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:			Sui	face C	onditio	n:	Pro	ductio	n Stage	:	VT Gauge Identification:	
NDE-VT-5			As	Welded	1			K !	la Progr	ess	Mfg.	G.A.L.
Test Method Standard:			Per	cent of	Inspec	tion:		<u> </u>	Final *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%	,			Other		Model	N/A
Acceptance Standard:					%		For	Weld			Cert, #	F 4858
AWS D15.1								-	Root Pas	S	Other	V-Wac Gage
Product Form:							-	1	intermed	liate		
N/A							X	1	Final			
Type of Material: Carbon S	teel											
					l		-	Ī	ğ			
Product / Weld								ncomplete Pen	Exceed Reinforcement	Weld Undersized		
Identification							igi	8	8	de		Remarks:
Duffen Com #1	t	4.2	ы	Rounded	8	Undercut	Lack Fusion	Îde	7 .5	5		Nomara.
Buffer Cars #1	Accept	Reject	Linear	ä	Cracks	gg	상	S S	8.1	eld		
	_ <u> </u>	- R	Ľ.	- R	Ö	5		Ĕ	W %	_≥		
Draft Stop to Center Sill												
(2) 3-67 to 3-78	1										"A" End	
(2) 3-67 to 3-79	1										"A" End	
(2) 3-67 to 3-26	1									Mark Constants	"B" End	
(2) 3-67 to 3-27	1										*B" End	
Stringer to Deck	II											
(4) 3-42 to 3-32	/										"A" End	
(4) 3-42 to 3-32	1										"B" End	
End Crossties to Deck	ļ									-		
3-43 to 3-32	1										"B" End (RS)	
3-44 to 3-32	_				-						B" End (LS)	
(2) 3-43 to 3-32	/					1	_				"A" End	
Side sill to Side sill					MAN	270	Paniel	Sam	ich 71 /2020			
3-29 to 3-40	1						VVI S	3041	ich		"B" End (LS)	
3-29 to 3-39	1						CT E	KP AL	77		"B" End (RS)	
(2) 2-39 to 3-29	/	-/1		,/					14020		"A" End	
Technician: Daniel S. Gjur	12	Lin	h					Level: CWI #	93041171			
				1	, •							
Reviewed By:										_ Dat	e: <u>0,/.</u>	20/15

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

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Date:	March 21, 2018 thru September 18, 2018
Description:	Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Product Form; N/A Type of Material: Carbon St	ccl		Surface Condition: As Welded Percent of Inspection: X 100% %					X X r Weld:	in Stage In Progri Final * Other S: Root Pas Interned	ess	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	entification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Product / Weld Identification Buffer Cars#I	Accept	Reject	Linear	Rounded	Cracks	Underout	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Side Sill to Deck												
3-40 to 3-32	1										"B" End (LS)	
3-39 to 3-32	1										*B* End (RS)	
3-39 to 3-32	1									-	"A" End (LS&	
Gussets to Side Sill												i. 3.5. A
(11) 3-38 to 3-29	1		-	i							Left Side	
(11) 3-38 to 3-29	1		A CONTRACTOR OF THE PARTY OF TH								Right side	
(2) 3-37 to 3-40	1			***************************************		-					"B" End (LS)	
(2) 3-37 to 3-39	1				-						"B" End (RS)	
(2) 3-37 to 3-39	1					·					"A" End (2 ea	ch I SEPS)
Gussets to Deck							_				A CHOTE OU	cir Educto)
(11) 3-38 to 3-32	7										Left Side	
(11) 3-38 to 3-32	7			-							Right side	
(4) 3-37 to 3-32	7			1111	0 0			h 1			"A" End (2 ea	ch I SEPS1
(4) 3-37 to 3-32	7			4445	200	Phiel S	Glun				*B" End (2 ea	
					0	93	0411	h			D LIIU IZ Ca	cir coarto)
						1-EX	All	·				
								2020		***************************************		
					_							
Technician: Daniel S. Gjur	enl	1	Ya	1				Level: CWI	793041171			
Reviewed By:			<u> </u>		···		Dat	e: <u>ev</u>]	205/04			

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These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc.

Mirch 19, 2004

Mirch 19, 2004

Page F-151 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 8 of 10

Date: March 21, 2018 thru September 18, 2018
Description: Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon St	Surface Condition: As Welded Percent of Inspection: X 100%							X I X I r Welds	n Stage: in Progressinal * Other s: Root Pas intermed	sss s	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	ntification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wae Gage
Product / Weld Identification Buffer Cars#I	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	ncomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Front Draft Stop to												
Center Sill 1-8 to 3-78	17										"A" End	
1-8 to 3-79	1/		Front							-	"A" End	
1-8 to 3-26	1										"8" End	
1-8 to 3-27	1					-				*****	"B" End	
Stringers to Deck	 '- 										D CITO	
(16) 3-13 to 3-32	1										(0 C 0 0 D	N
(8) 3-12 to 3-32	1				<u> </u>						(8 LS & 8 RS	
Bottom Flange to Side Sill											(4 L5 & 4 KG	0)
3-16 to 3-29	17	_									Center (1 LS	7 4 DC\
(2) 3-17 to 3-40	1										"A" End	x 1 (0)
3-11 to 3-40	1				-		-			-	"B" End	
3-31 to 3-39	17			-	11/5\	Dan					"B" End	
Bottom Flange to Web					STATE OF THE PARTY	CM	9/8 G					
3-15 to 3-23	1		· l			QC1	9304	"ifch			(RS) Center	
3-15 to 3-28	1			150		,	10	177			(LS) Center	
								urich 171 1/2020			1	
Technician: Daniel S. Gjur	ich		De	ul.	19	frim	R				Level: CWI #	93041171
Reviewed By:		1			/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	1	Service Control	Dat	e: <u>e./</u> ,	20/14

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NDTG-0100 Murch 19, 2004 dde

Page F-152 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: P.O. #; Work Order #: Project:

K18-0079 468009 Buffer Car #2 Page 9 of 10

Date: Description: March 21, 2018 thru September 18, 2018 Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure:			Su	rface C	onditio	n:	Pro	duction	n Stage:		VT Gauge Identification:		
NDE-VT-5			As	Welder)		,	(I	n Progre	ess	Mfg.	G.A.L.	
Test Method Standard:			Per	cent of	Inspec	tion:	,	ζ · Ι	inal *		Weld Gauge	Fillet Weld Gages	
AWS D15.1				X	100%				Other		Model	N/A	
Acceptance Standard:					%		For	Welds	:		Cert. #	F 4858	
AWS D15.1			-					F	Root Pas	ŝ	Other	V-Wac Gage	
Product Form:									ntermed	iate			
N/A				— F	inat								
Type of Material: Carbon St	cel					***************************************							
	1		Γ	·		-	Ι				r		
Product / Weld								E		Weld Undersized			
Identification							_	P.	9	isi			
				70		+	isi	<u> </u>	2	ď	Remarks:		
Buffer Cars #1	Į į	Ħ	Ħ	nge	××	ည်	Ę	di	के ह	D B			
	Acocpt	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	છ			
Bottom Fig. To Draft Sill		- 12		924				=	u Œ				
Web													
3-18 to 3-26	/										"A" End		
3-18 to 3-27	1										"A" End		
3-18 to 3-78	1										"B" End		
3-18 to 3-79	1										"B" End		
Doubler Plate to Cntr. Sill													
3-92 to 3-23	/										"A" End RS		
3-92 to 3-23	/										"B" End RS		
3-93 to 3-28	_/_										"A" End LS		
3-93 to 3-28	_/_										"B" End LS		
										-			
			_			2007a, 27 stantas asia asia							
			-	-									
					NW.	10-6	ant.						
		~		-	1.00	C	WI	Glun		-			
			7			Q	7 5	04717	d d				
Technician: Daniel S, Giur		<i></i>	<i>y</i>	//	0	-		4/1/	h 1 2020		Lt. CWI 4	(02041171	
Technician: Daniel S, Gjur	ıcn	1	buf.		Zan	ul				V3.003.000	Level; CWI #	793041171	
_													
Reviewed By:		1	~	/						Dat	m a1	25/18	
		-,								Dai	·	510/0	

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NDTG-0100 March 19, 2004 ddk

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 2
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #2

Page 10 of 10

Date: Description: March 21, 2018 thru September 18, 2018 Visual Inspections of Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon St	ecl		As	rface C Welded rcent of X	1	tion:	X	Welds	n Stage: n Progre Pinal * Other :: Root Pass ntermedi	ss	VT Gauge Mfg. Weld Gaug Model Cert. # Other	c Identification: G.A.L. ge Fillet Weld Gages N/A F 4858 V-Wac Gage
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Ballast Plates												
3-80 to 3-32 (Deck)	1											
3-81 to 3-80	1				-	-						
3-82 to 3-81	1									****		
3-83 to 3-82	1											
"A" End												
3-100 to 3-32 (Deck)	1											
3-99 to 3-100	1											
3-98 to 3-99	1											
3-84 to 3-98	1											
"B" End												
3-100 to 3-32 (Deck)	1					70-7-1-1-1				7	A	
3-99 to 3-100	1									A	BALLS !	Daniel S Gjurlch
3-98 to 3-99	1									4	F-118 - (2VVI 93044494
3-84 to 3-98	1									and to be constituted	V	C1 EXP. 4/1/2020
												7.112020
Technician: Daniel S. Gjur	ich		K	Here	(X	Du	inl				Level: C	WI #93041171
Reviewed By:	>	1	_		,]	Date: 6	1/20/18

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Page F-154 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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of

VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

18-0079 68009 wffer Car #1

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Su	rface (Conditi	ion:	P	roduct	ion Sta	ige:	VT Ga	uge Identification:
NDE-VT-5			As	Welde	d		3	(I	n Progi	ress	Mfg.	G.A.L.
Test Method Standard:			Per	cent o	f Insp	ection:	>	F	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				Х	100%	6			Other		Model	N/A
Acceptance Standard:			-		%			For '	Welds:		Cert. #	F 4858
AWS D15.1			_					F	Root Pa	SS	Other	V-Wac Gage
Product Form:							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	I	nterme	diate		
N/A							- 3	<u> </u>	inal			
Type of Material: Carbon	Steel											
Product / Weld Identification	.pt	Ħ	ч	pep	S	rcut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:
Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack	Incor	Exce Reinf	Weld		
Cross Bearers		E CONSTRUCTION OF						##W/P/W/W/W/				
3-6 to 3-5 (20 items)	1											
Bolster Assemblies												
"B" End (2 Assys)	1											
3-2 to 3-32 BR	1											
3-2 to 3-32 BL	1											
3-3 to 3-32 &3-2	1											
"A" End (2 Assys)	1											
3-2 to 3-32 AR	1											
3-2 to 3-32 AL	1											
3-3 to 3-32 &3-2	1				_ /_							
Center Sill to Deck												
3-28 to 3-32 (LS)					1	Ws	Dan	iel o				
Inside	1	-			,	ALERS SERVICE	CM	93V C	Jurich			
Outside	1						QC1	EXP	1771			
								.,	jurich 1171 11/202	0		
			-	-				ļ	L	<u> </u>		
Technician: Daniel S.	Gjuricl	1	No	anul	S	Zu	uf				Level: C	CWI #93041171
Reviewed By:		1			/					Da	te: a/e	0/18

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

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Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 2 of 10

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Su	rface (Condit	ion;	P	roduct	ion Sta	age:	VT Ga	uge Identification:
NDE-VT-5			As	Welde	ed		7	K I	n Prog	ress	Mfg.	G.A.L.
Test Method Standard:			Per	rcent o	f Insp	ection:	>	K F	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%	ó			Other		Model	N/A
Acceptance Standard:			-		%			For	Welds:		Cert. #	F 4858
AWS D15.1			•					F	Root Pa	ISS	Other	V-Wac Gage
Product Form:							-	I	nterme	diate		
N/A								ζ F	inal			
Type of Material: Carbon	Steel											
T. 1 . / W. 11									Ħ			
Product / Weld							ion	2	ğ	72		
Identification			١.,	- P	, s	G G	-Sus	ld.	g 0	siz		Remarks:
Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		
Center Sill to Deck												
3-23 to 3-32 (R3)												
Inside	1											
Outside	1											
Cross Bearer to Center												
Sill and Deck			- Palette Chamberlands									
3-5 to 3-28 & 3-32	1										(5 welds LS)	
3-5 to 3-23 & 3-32	1			-		-			-		(5 welds RS)	
3-7 to 3-28 & 3-32 3-7 to 3-23 & 3-32	<u> </u>										(4 welds LS)	AND THE RESIDENCE OF THE PARTY
				<u> </u>		e ver er en annan an					(4 welds RS)	
Stringers to Cross Bearer 3-13 to 3-5	,				1		-				(O1-1- #A)	I DO)
3-13 to 3-5	1			#	4445	9 0					(8 welds "A" (8 welds "B"	
3-13 to 3-5	1				and the same of th	Cia	le/o				(8 welds "A"	
3-13 to 3-5	1		14		F	QC	830 C	Urio.			(8 welds "B"	
Stringers to Deck							JOS.	177			To Meige D	ena Loj
(16) 3-13 to 3-32	7		\vdash				- 4	11200			(8 LS & 8 RS	21
(8) 3-12 to 3-32	+;-					Oan CWI QC1		-050			(4 LS & 4 RS	
	<u></u>		J)		-	7.						
Technician: Daniel S.	Gjuricl	1 6	NA	ind	16	Zim	4		- tonge shows		Level, C	WI #93041171
Reviewed By:	,	1								Dat	te; e /e.	2/.4

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

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Page

 Mr. Mark Zeigler
 Report #:
 1

 Kasgro Rail Corporation
 P.O. #:
 K18-0079

 121 Rundle Road
 Work Order #:
 468009

 New Castle, PA 16102
 Project:
 Buffer Car #1

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Sur	face C	onditio	n:	Pro	duction	Stage:		VT Gauge Ide	entification:
NDE-VT-5			As	Welded	l		>	Ji	n Progre	ss	Mfg.	G.A.L.
Test Method Standard:			Per	cent of	Inspec	tion:	- >	F	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%				Other		Model	N/A
Acceptance Standard:			-		%		For	Welds	:		Cert.#	F 4858
AWS D15.1			-					F	Root Pas	S	Other	V-Wac Gage
Product Form:								I	ntermed	iate		
N/A							X	F	inal			
Type of Material: Carbon Sto	cel											
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:
Center Sill to Center Sill												
3-27 to 3-23	1										"B" End	
3-26 to 3-28	1							_			"B" End	
3-78 to 3-28	1										"A" End	
3-79 to 3-23	_/_										"A" End	
Center Sill to Deck												
3-78 to 3-32 (inside)	_/_										"A" End	
3-78 to 3-32 (outside)	1										"A" End	
3-79 to 3-32 (inside)	1										"A" End	
3-79 to 3-32 (outside)	1										"A" End	
3-26 to 3-32 (inside)	1				-						"B" End	
3-26 to 3-32 (outside)	1				210.	1					"B" End	
3-27 to 3-32 (Inside)	1				LANS	100	aniei				"B" End	
3-27 to 3-32 (outside)	1				-	- e	W	Gjuri			"B" End	
						W(1 EV	4117	,		· · ·	
								4/1/2	22-			
				*****					h 1 1020			
Technician: Daniel S. G	jurich		Da	ul	D	2,	1				Level: CWI	#93041171
Reviewed By:		1	-	- Andrew C	/				,	Dat	e: <u>a/s</u>	0/14

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NDTG-0100 March 19, 2004 dSk

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 4 of 10

Date: Description: March 21, 2018 thru September 6, 2018 Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Sui	rface C	anditio	n:	Pro	duction	Stage:		VT Gauge Ide	ntification:
NDE-VT-5			As	Welded	l			X I	n Progre	ss	Mfg.	G.A.L.
Test Method Standard:			Per	cent of	Inspec	tion:		X F	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%				Other		Model	N/A
Acceptance Standard:					%		For	r Welds	:		Cert. #	F 4858
AWS D15.1								F	loot Pas	S	Other	V-Wac Gage
Product Form:								I	ntermed	iate		
N/A							Х	F	inal			
Type of Material: Carbon Sto	eel											
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks:
Gusset to Center Sill & Deck												
(2)3-9 to 3-26&3-27&3-32	1										*B" End	
(2)3-9 to 3-78&3-79&3-32	1										"A" End	
Stringer to Deck												
(8) 3-14 to 3-32	1										(4) "A" End (4) "B" End
Bolster to Center Sill & Deck												
3-1 to 3-78 & 3-32	1										"A" End	
3-1 to 3-79 & 3-32	1				- Carlotte						"A" End	
3-1 to 3-26 & 3-32	1				Alak	100					"B" End	
3-1 to 3-27 & 3-32	1				1	C	aniel s	Gjurio 41171			"B" End	
Cross ties To Stringer						QC	93	Gjurio				
(11) 3-10 to 3-13	1			74"			EXA	47177	"			
Cross tie To Stringer								1/1/20	22-			
3-80 to 3-12	1			2					<0		"B" End Only	/
Technician: Daniel S. C	ijurich		D	mul	1.1	In	in.				Level: CWI #	93041171
Reviewed By:		1_			/					Dat	te: a/z	5/14

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Page F-158 May 1, 2019



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS-120

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VISUAL INSPECTION REPORT

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Page 5

 Mr. Mark Zeigler
 Report #:
 1

 Kasgro Rail Corporation
 P.O. #:
 K18-0079

 121 Rundle Road
 Work Order #:
 468009

 New Castle, PA 16102
 Project:
 Buffer Car #1

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon Standard:	eel		As Per	Welded	Inspec 100% %	tion:		Velds:	Stage: a Progressinal * other coot Passatermedicinal	ate	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	entification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Underout	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized		Remarks;
End Sill to Center Sill												
3-33 to 3-27	1										*B* End	
3-34 to 3-26	1										"B" End	
3-33 to 3-78	1										"A" End	
3-34 to 3-79	1			-	ALDELOWS.						"A" End	
Stringer to Deck			Lancas de la constantina della									
3-42 to 3-32	1										(4) "A" End	(4) "B" End
Side Sill Web to Deck												
3-26 to 3-32	1				-4						Left side	
3-26 to 3-32	1			8	Mars.						Right side	
Draft sill Flange to Cutr.				1	70	CWI	9/S G	4rich 171 1/2020				
3-25 to 3-26	1		-17			C1 K	304	"NCH			"B" End	
3-25 to 3-27	1						10.4	100			"B" End	
3-25 to 3-78	1							12020			"A" End	4/12
3-25 to 3-79	1										"A" End	
Technician: Daniel S. C	Gjurich	,	1	eenl	1/	give					Level: CWI	#93041171
Reviewed By:		1	_		/					Da	to: eL/	25/11

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings, of the items listed, at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of nondestructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TÜV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability. This report shall not be reproduced without the written consent of TUV Rheinland Industrial Solutions, Inc. NOTO-0100 Merch 19, 2091 disk

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS-120

Grand Rapids, MI - Pittsburgh, PA - Birmingham, AL

NDE « MECHANICAL LAB » ENVIRONMENTAL



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 VISUAL INSPECTION REPORT

 Mr. Mark Zeigler
 Report #:
 1
 Page
 6

 Kasgro Rail Corporation
 P.O. #:
 K18-0079
 K18-0079
 Work Order #:
 468009

 New Castle, PA 16102
 Project:
 Buffer Car #1

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:			Sui	rface C	onditio	n:	Pro	ductio	n Stage:		VT Gauge Ide	ntification:
NDE-VT-5			As	Welded	l)	K 1	n Progre	ess	Mfg.	G.A.L.
Test Method Standard;			Per	rcent of	Inspec	tion:	7	K 1	inal *		Weld Gauge	Fillet Weld Gages
AWS D15.1				X	100%	,	,	(Other		Model	N/A
Acceptance Standard:					%		For	Welds	:		Cert. #	F 4858
AWS D15.1								I	Root Pas	s	Other	V-Wac Gage
Product Form:								I	ntenned	iate		
N/A							X	I	≀inal			
Type of Material: Carbon S	teel											
	T 1		Ι	I	T	T	T	Ϊ		79	1	
Product / Weld								뒿	Exceed Reinforcement	Weld Undersized		
Identification							8	2	i ii	<u>6</u>		
Tacini i caron	١			ष्ट		Ħ	usi	1 26	_ 2	Ju		Remarks:
Buffer Cars #1	8	g	12	pg	SS.	le i	X X	Į Š	3 원	P		
	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	ncomplete Pen	S .5	S.		
Draft Stop to Center Sill									1 1			
(2) 3-67 to 3-78	1						1				"A" End	
(2) 3-67 to 3-79	1										"A" End	
(2) 3-67 to 3-26	1			-							"B" End	
(2) 3-67 to 3-27	1	COOP-MAN SACRETO	-								"B" End	
Stringer to Deck												
(4) 3-42 to 3-32	1										"A" End	
(4) 3-42 to 3-32	1										"B" End	
End Crossties to Deck												
3-43 to 3-32	1			CONTRACT OF	1						"B" End (RS)	
3-44 to 3-32	I			All	510	0					"B" End (LS)	
(2) 3-43 to 3-32	1			No.	SERVICE (Wile.	S Gjuj 30411 5 4/1/				"A" End	
Side sill to Side sill					Q	C1 5	300 141	ich.				
3-29 to 3-40	1					1 8	0 11	7			"B" End (LS)	
3-29 to 3-39	1						4/1/	2020			"B" End (RS)	
(2) 2-39 to 3-29	1							-40			"A" End	
Technician: Daniel S. Gju	rich	1	len	L.	II,	int.					Level: CW1 #	93041171
						C100000 10000		(n. i. a.) anii anii anii				
D)	λ			•							. / .
Reviewed By:			\rightarrow	~						Da	te: <u>a/2</u>	15/18

TÜV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 - Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 **DOE Atlas Project**

KAS-120

Grand Rapids, M1 - Pittsburgh, PA - Birmingham, AL

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VISUAL INSPECTION REPORT

www.favris.com

Project:

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Date:

Report #: K18-0079 P.O. #: Work Order #; 468009 Buffer Car #1

7 10 Page of

March 21, 2018 thru September 6, 2018 Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A		Control of Control	As	Welde	f Inspec	tion:		Welds	n Stage: n Progree Final * Other :: Root Pas ntermed	ess s	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	ntification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Type of Material: Carbon S	iteel							•				
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Side Sill to Deck												
3-40 to 3-32	1/				ļ					************	"B" End (LS)	
3-39 to 3-32	1										"B" End (RS)	
3-39 to 3-32	1	-									"A" End (LS&F	RS)
Gussets to Side Sill												
(11) 3-38 to 3-29	1	eneral remarks									Left Slde	
(11) 3-38 to 3-29	1										Right side	
(2) 3-37 to 3-40	1										"B" End (LS)	
(2) 3-37 to 3-39	1										"B" End (RS)	
(2) 3-37 to 3-39	1]			"A" End (2 eac	ch LS&RS)
Gussets to Deck					I	I						
(11) 3-38 to 3-32	7										Left Side	
(11) 3-38 to 3-32	1				- Carrier						Right side	
(4) 3-37 to 3-32	1				ALAZA	1 0/					"A" End (2 eac	ch LS&RS)
(4) 3-37 to 3-32	1				1.10	C	110/	GL.			*B" End (2 eac	ch LS&RS)
					P.	Qr	93	041	h			
				,			EXI	177	7			
				2000000				1/1/2	h 1 1020			
			0						-5			
Technician: Daniel S. Gju	rich	/	Jan	ul	l,	y	L				Level: CWI #	93041171
Reviewed By:)	1			y					_ Da	te: 9/2	20/18

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS-120

Grand Rapids, MI - Pittsburgh, PA - Birmingham, AL

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VISUAL INSPECTION REPORT

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Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 8 of 10

Date: March 21, 2018 thru September 6, 2018
Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A Type of Material: Carbon St	eel		As	Welded	Inspec	tion:		Welds	n Stage: n Progree Final * Other :: Root Pass ntermedi	ss	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	ntification; G.A.L. Fillet Weld Gages N/A F 4858 V-Wae Gage
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Front Draft Stop to												
Center Sill 1-8 to 3-78	1										"A" End	
1-8 to 3-79	1								\vdash		"A" End	
1-8 to 3-26						-					*B" End	
1-8 to 3-27	1										*B" End	
Stringers to Deck						-	_				D EIIU	
	1										(01 C 0 0 D)	2)
(16) 3-13 to 3-32						-					(8 LS & 8 R	
(8) 3-12 to 3-32	/										(4 LS & 4 R	5)
Bottom Flange to Side Sill												0.1.00
3-16 to 3-29 (2) 3-17 to 3-40				·							Center (1 LS	a 1 no)
3-11 to 3-40	1		-		1000000	1			\vdash		"B" End	
3-31 to 3-39				and industrial to the state of	ALA	6/2	Da				"B" End	
Bottom Flange to Web					-	(SUN OF	800			D 2110	
3-15 to 3-23	1					Q	C1 .8	3000	Ch		(RS) Center	
3-15 to 3-28	1			· · · · · · ·			EX	0 11	7		(LS) Center	
- 10.000 - 10.000				***************************************				9/1/	ich 1 2020		1 2 7 2 2 1 1 1 1	
Technician: Daniel S. Gjur	ich	K	Joseph	L	B	hur	/				Level: CWI	#93041171
Reviewed By:	2		<u></u>	>					· ~.	Da	te: a/s	20/18

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

KAS-120

Grand Rapids, MI – Pittsburgh, PA – Birmingham, AL

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VISUAL INSPECTION REPORT

www.tuvris.com

Project:

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102 Report #: 1 P.O. #: K18-0079 Work Order #: 468009

Buffer Car #1

Page 9 of 10

Date:

March 21, 2018 thru September 6, 2018

Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure:				face C		n ·	Pro	duction	n Stage:	21000000	VT Gauge Ide	ntification
NDE-VT-5			-	Welded		ш.			n Progre		Mfg.	G.A.L.
Test Method Standard:				cent of		tlan.			inal *	,33	Weld Gauge	Fillet Weld Gages
AWS D15.1			1 61	X					Other		Model	N/A
			-	_^_	% %		12.	Welds			Cert.#	F 4858
Acceptance Standard: AWS D15.1					%		For		i: Root Pas	_	Other	V-Wac Gage
Product Form:								-			Other	v-wac Gage
									ntermed	iate		
N/A							X	F	inal			
Type of Material: Carbon St	cei											
	-			-					-			· · · · · · · · · · · · · · · · · · ·
	1 1									껖		
Product / Weld								incomplete Pen	Exceed Reinforcement	Weld Undersized		
Identification							io.	2	Ĕ	8	Remarks:	
D . W C #1	ایا		_ [Rounded	s	Undercut	Lack Fusion		- Š	స్త		
Buffer Cars #1	Accept	Reject	Cinear	วนัก	Cracks	- 2	몽	8	2 3	꽂		
	2	Se.	-5	જ	8	5	Ŗ	Ĕ	22 %	ž		
Bottom Flg. To Draft Sill												
Web		-			-		***************************************					
3-18 to 3-26	1										"A" End	
3-18 to 3-27	_/_									was 2000 to 1000	"A" End	
3-18 to 3-78	1										B" End	
3-18 to 3-79	1										"B" End	
Doubler Plate to Cntr. Sill												
3-92 to 3-23	1										"A" End RS	
3-92 to 3-23	1					_					"B" End RS	
3-93 to 3-28											"A" End LS	
3-93 to 3-28	_/_										"B" End LS	
						A						
					14	44	D-					
					- 1	00	Clan	1/50				
							DO -	930 G/C	Wich.			
····							107	1047	177			
			*******					9/	12000			
			A		-	2	L	L	frich 171 1/2020		I	· · · · · · · · · · · · · · · · · · ·
Technician: Daniel S. Gjuri	ich		11		19	· ·	~ /				Level: CWI	#93041171
		/	V w	w(/	V-2	zem	n	parameter de la compa				
^												
Reviewed By:	/	1			/					Dat	te: al	20/18
torioned by.	4	- American				-					···	copio

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Industrial Solutions

VISUAL INSPECTION REPORT

Mr. Mark Zeigler Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Report #: 1
P.O. #: K18-0079
Work Order #: 468009
Project: Buffer Car #1

Page 10 of 10

Date:

March 21, 2018 thru September 6, 2018

Description: Visual Inspections of Buffer Car # IDOX-020001

TRIS Procedure: NDE-VT-5 Test Method Standard: AWS D15.1 Acceptance Standard: AWS D15.1 Product Form: N/A		in the second se	As	Welde	Conditions d f Inspect	tion:		Welds	n Stage: n Progre Final * Other s: Root Pas ntermed	ess	VT Gauge Ide Mfg. Weld Gauge Model Cert. # Other	entification: G.A.L. Fillet Weld Gages N/A F 4858 V-Wac Gage
Type of Material: Carbon S	teel											
Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:	
Ballast Plates												
3-80 to 3-32 (Deck)	1											
3-81 to 3-80	1											
3-82 to 3-81	1											
3-83 to 3-82	1								<u> </u>			
"A" End		winesia inime			-					Fermina		
3-100 to 3-32 (Deck)	/											
3-99 to 3-100	1									Acceptance Market		
3-98 to 3-99	1								<u> </u>			
3-84 to 3-98 "B" End												
	١., ١				445							
3-100 to 3-32 (Deck) 3-99 to 3-100	1	******			100	- O	22		-	and the same of th		
3-98 to 3-99	1			<u>. </u>	-	Ch	"0/ _S			Made de Construent		
3-84 to 3-98	1			. 1		ACA.	200	Herri		Mary Company of Compan		
3-84 (0 3-90	'						CHO'S	1/C/	-			
					<u> </u>		. 4	1/2				
Technician: Daniel S. Gjur	rich		Da	ul	1	Zin	Diels S	-503 ₀	1		Level: CWI	#93041171
Reviewed By:		1			/	,					Date: Adm	21.4

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

APPENDIX F.3 - OTHER INSPECTION DOCUMENTATION

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orano

Orano Federal Services

Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.3.1 – FRA Safety Appliance Compliance Letter

1	3			Orano Feder	al Services		
ora	no_			DATA TRAN	SMITTAL FO	RM	
Supplier	r: KA	SGRO RAI	L CORP.	INC. DTF No.	038		Page 1 of 1
P.O./SC	No: 15C	3011916	KLEIN	Slade 14(1231-0000)		Dat	e: 2/19/2019
Type of	Submittal:	☑ First		Re-Submittal	SDRL Lis	st Item N	o: 24
Submitt	ted for:	Approval	Review	☐ Information	Number of Cop	ies Subn	nitted: 1
Submitt	ted By:	ICK FO	RD	Rick Ford	Digitally algred by Rick Ford Date: 2019 02 19 13:31:27 -25107	PRO	JECT MANAGE
		(Name)		(Signa			(Title)
ITEM		DOCUMENT NUMBER	REVISION NUMBER		OCUMENT		FS DISPOSITION
1	KAS 1				ASER DIMENSIONS FOR PI	N [AP AWC REV
2	KAS 1			and the tree and the	CTION FOR BUFFER	CARS	RWC DS RSA AP AWC REV
	17	-	9	12-12-27-20-20			RWC DS RSA
3	KAS 1	29		AAR S-486 BRAK	E TEST CERTIFICA	NON	RWC DS RSA
	KAS 1	30		TRACK SCALE C	ALIBRATION RECO	20 23 32 3	☑ AP □ AWC □ REV □ RWC □ DS □ RSA
5	KAS 13	31		TUV UT NDE F	REPORT CASK	CAR	☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA
3	KAS 1	32		TUV PT NDE F	REPORT CASK		AP DAWC DREV
7	KAS 1	33 🖟		TUV MT NDE	REPORT CASK	- i	AP AWC REV
В	KAS 1	43 134		TUV VT NDE F	REPORT CASK	CAR	AP DAWC REV
							AP AWC REV
Comme	nts:				Technical Reviewer	(I.e., RE, F	
odified KAS 1	some of thes 33 does not i	e. Kasgro to subr	nit final dimens block or outer	pin block weld MT.	KLEIN SI	-	Date: 2019.02.27 13:47:33 -08'00'
			FS DISPOS	SITION CODES AND D	EFINITIONS		
AΡ	Approved		Work may proc	eed.			Resubmittal is not required
AWC	Approved with	h Comment	Work may proce	eed; comments provided	d for Supplier's considera	ation only.	Resubmittal is not required
REV	Reviewed			The state of the state of the state of	for Supplier's considera		Resubmittal is not required
RWC	Reviewed wit	th Comment	Work may proc Buyer comme		oration and compliant	S9 W/	Correct and resubmit
	Disapproved	nttal Acknowledged	Work may not	*			Correct and resubmit
DS RSA			No other action	romilrod.			

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

0		Orano Federal Services					
orano	,	SUPPLIER DOCUMENT SUBMITTAL REVIEW					
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 038				
Charge No:	0022	25.03.0050.02.00001	Due Date: 3/8/2019				
Document(s):	Sec	DTF No.: 038					
RF	27.0	ISTRUCTIONS: (List Supplier Doc. No. and Rev.	ES Spec and Dwo Codes Stds etc.)				
PE		Klein	, o operand only, south, state, cary				
REVIEWERS	Slade	Slade Klein, Bernie Counterman					
QA	-	ie Counterman					
		Technical Review					
Comments/Ma	arkup Att	tached Yes No					
	es not		shear blocks and outer pin blocks. This				
KAS 133 do was require	es not d by Ka	include the required MT inspection of the					
KAS 133 do was require	es not d by Ka	include the required MT inspection of the asgro drawing 1155-41.	Date: 2019.02.26 07:23:43 -08'0				
KAS 133 do was required	es not d by Ka viewer(s)	include the required MT inspection of the asgro drawing 1155-41. (Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No	Date: 2019.02.26 07:23:43 -08'0				
KAS 133 do was require Technical Rev Comments/Ma Technical Rev Only potenti Discussed v	viewer(s) arkup Att	include the required MT inspection of the asgro drawing 1155-41. (Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No	Date: 2019.02.26 07:23:43 -08'0 Applicable) the technician on the UT report8188). The technician signature is not				
KAS 133 do was require Technical Rev Comments/Ma Technical Rev Only potenti Discussed v required pro	viewer(s) arkup Att viewer Co ial ques vith TU vided t	(Sign/Date): KLEIN Slade Quality Assurance Review (Astached Yes No omments: Stion was regarding missing signature by V Rheinland Level III (Randy @ 616-818 the report is signed by his supervisor. The	Date: 2019.02.26 07:23:43 -08'0 Applicable) the technician on the UT report8188). The technician signature is not				

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project



U.S. Department of Transportation

Federal Railroad Administration 1200 New Jersey Avenue, SE Washington, DC 20590

NOV 2 0 2018

Mr. Mark Zeigler Director of Quality Control Kasgro Rail Corporation 121 Rundle Road New Castle, PA 16102

Re: Kasgro Order, 110 Ton 60 Ft. Flat Car, S-2043 Buffer Cars with Ballast Weight, Car Numbers IDOX 020001-IDOX 020002

Dear Mr. Zeigler:

This reply is about Kasgro Rail Corporation's (Kasgro) September 26, 2018, letter advising the Federal Railroad Administration (FRA) of the availability for review of a new car type. In this case, Kasgro tendered the following drawings for the above referenced order:

- 1. 1160-4, Handbrake Arrangement
- 2. 1160-3 Stencil Arrangement
- 3. 1160-1 General Arrangement

These flat cars are being built to meet the requirements of Association of American Railroads (AAR) Standard S-2044, Appendix D1, "Safety Appliances for Flatcars with Full Decks," and Title 49 Code of Federal Regulations Part 224, Reflectorization of Rail Freight Rolling Stock.

On October 30, 2018, FRA Region 2 Motive Power and Equipment (MP&E) inspectors made a Sample Car Inspection (SCI) of flat car IDOX 020002 at the Kasgro plant in New Castle, Pennsylvania. This inspection found minor exceptions which were corrected by Kasgro and the car is now compliant with applicable regulations.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Based on the sample car inspection and a review of the above referenced drawings, FRA finds the safety appliance arrangement, the handbrake arrangement, and reflectorization application for the above series of cars series of cars acceptable as submitted. FRA's inspection revealed no other apparent hazards in the safety appliance arrangement. However, FRA's response should in no way be construed as certification or approval that the equipment complies with all federal requirements. The drawings provided will serve as a reference for all cars built to this configuration, unless a revision takes place that affects the location, dimension, or manner of application of the safety appliances. If any such revision occurs, FRA's letter of acceptability would no longer apply.

Should you have any question or concern, the FRA point of contact for this issue is Dr. Tom Blankenship, Mechanical Engineer at 202-493-6446 or harold.blankenship@dot.gov.

Sincerely,

Gary G. Fairbanks

Staff Director, MP&E Division

orano

Orano Federal Services

Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.3.2 – Amsted/TTCI Supplier Certification Letters

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orano				DATA TRA	NSMIT	TAL FO	RM				
Supplier:	KA	SGRO RA	IL CORP.	, INC. DTF	No: 037			Pa	ge_1	of_	1
P.O./SC No: 15C3011916							Da	ate: 2/1/2019			
Type of Submittal: First			Re-Submittal		SDRL Li	st Item I					
Submitted for:		Review	Informatio	n Nun	nber of Cop	ies Sub	min	ed:	1		
Submitted By: RICK FO		RD	Rick Fo	rd Departy star	ed by Rick Ford 12:01 14:56:44	PR	OJ	ECT	MAI	NAGE	
(Name)				(gnature)	1			- 1	Title)		
ITEM DOCUMENT NUMBER NUMBER		REVISION NUMBER		DOCUMEN				D	FS ISPOSIT	ION	
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2	KAS 11	-		ATLAS BUFFER CARS		20002, TUV WELL	D	₹	AP	DS AWC	
3	KAS 1		1	INSPECTION REPORTS ATLAS BUFFER CARS IDOX (2000)1-020002 TUV NDE			7	AP	DS AWC		
4	KAS 12	21		ATLAS BUFFER CAR IDOX (2000) -020002 BRAKE EQUALIZATION,			7	AP	☐ DS ☐ AWC		
5	KAS 12	22		ATLAS BUFFER CARS IDOX 020001-020002 MIKE YON / 6-486				7	□RWC □DS □RSA □AP □AWC □REV □RWC □DS □RSA		
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7	KAS 1	24	SUPPLIER CERTIFICATION FORM/AMSTED RAIL TOM BEDARESG TMS-/HANDERAKE INSPECTION HOOX (2000)-00000			7		AWC			
8	KAS 12	25	SUPPLIER CERTIFICATION FORM / AMSTED RAIL BHANN PEETZ BUFFER CARS TRUCK INSPECTION (DOX 02000)-020002					AP RWC	☐ AWC	□ REV □ RSA	
9	KAS 12	26		SUPPLIER CERTIFIC IDOX 020001-020002	ATION FORM / TO EQUIPMENT ME	CI MATT DEGEC T S-401	ORGE		AP RWC	☐ AWC	☐ REV
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					Date	2/19/2	2019				
			FS DISPO	SITION CODES AN	ID DEFINITIO	NS.				- /-	
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REV Re	viewed		Work may proceed; comments provided for Supplier's consideration only.				1	Resub	mittal is n	ot required	
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DS DIS	sapproved		Work may not	proceed.					Согте	ct and re	submit
RSA RA	celpt Subm	iftal Acknowledged	No other action	required.							

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Federal Services						
orano		SUPPLIER DOCUMENT SUBMITTAL REVIEW						
Supplier / PO No.:		KASGRO / 15C3011916	DTF No. / Rev: 037					
Charge No:	0022	5.03.0050.02.00001	Due Date: 2/22/2019					
Document(s):	See	DTF No.: 037	,					
RE	VIEW IN	STRUCTIONS: (List Supplier Doc. No. and Rev.	FS Spec and Dwg, Codes, Stds, etc.)					
PE	Slade	Klein						
REVIEWERS	Slade	Klein, Bernie Counterman						
QA	Berni	e Counterman						
		Technical Review						
Comments/M	arkup Att	ached Yes No						
Technical Rev	viewer Co	mments:						
Technical Rev	viewer(s)	(Sign/Date): KLEIN Slade	Date: 2019.02.19 06:40:32 -08'00					
Technical Rev	viewer(s)	(Sign/Date): KLEIN Slade Quality Assurance Review (As						
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Comments/M: Technical Rev No Commen	arkup Attu viewer Co nts	Quality Assurance Review (Assurance Review (Assu	Applicable) Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 05:58:53 -08'00'					

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Kasgro Reil Corporation 121 Rundie Rd. • New Cooks, PA 16102 724-658-9061 • 724-658-7639 Fax• www.kasgro.com



KASGRO

Car Number(s): IDOX 020001-IDOX 020002

SUPPLIER CERTIFICATION

I have inspected at Kasgro Rail Corp., located at 121 Rundle rd., New 4 Axle Atlas Buffer Car(s)	Castle, PA 16102.
The equipment is applied to car: Model 8500 TN. and the Model 35790 Hand Brake	18
This equipment has been applied in accordance with our recommend Application and workmanship has been approved by me for our Comp	ed practices and is operating to our satisfaction pany.
Representative: Tom Sedant.	Date: 12 - 5 - 18
Title: Director Service Eng Brk. Systems	
Company: Amsted Rail	

Specialty Rell Car Solutions

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Keegro Reil Gerponetion 121 Rundle Rd. • New Costle, PA 16102 724-858-9081 • 724-608-7638 Face www.kasgro.com



KASGRO

Car Number(s): IDOX 020001-IDOX 020002

SUPPLIER CERTIFICATION.

l have Inspected at Kasgro Rail Corp., located at 121 Rundle rd., New Castle, PA 16102. 4 Axle Atlas Ruffer Cor(s)
The equipment is applied to car:
trucks inspected and one ready for test
This equipment has been applied in accordance with our recommended practices and is operating to our satisfaction. Application and workmanship has been approved by me for our Company.
Representative: Shawn Pertz Date: 12-5-18
Title: Product Englisher
company: Anstel Rail

Specially Rad Car Solutions

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Keegro Rail Corporation 121 Syndia Rd. - New Casile, PA 16102 724-858-9091 - 724-659-7639 Fax: www.kasgiis.cuiii



KASGRO

Car Number(s): IDOX 020001-IDOX 020002

SUPPLIER CERTIFICATION

Fhave (nspected at Kasgro Rall Corp., located at 121 Rund 4 Axie Atlas Buffer Car(s)	
The equipment is applied to car:	
This equipment has been applied in approximate with our r	recommended practices and is operating to our satisfaction.
Application and workmanship has been approved by me f	for our Company.
Representative: Matt <u>De George</u> Title: Enginees:	Date: 12 - 5-18
THE ENTINGES.	
company TTCI	

Specially Red Cer Salutions

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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APPENDIX F.4 – COMMON INSPECTION DOCUMENTATION

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Appendix F.4.1 – Weld Procedure Qualification Records (PQR)

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			-	DATA TRAN	SMIT	TAL F	ORM			
Suppli	er: (ASSRO RAIL CO	DRP., INC.	DTF No	. 00			Page	10/2	
P.O./SC No: 1503011916						1	De	tte: (16/39/17		
Туре о	Type of Submittal: SFirst				SDRL List Item N			Vo 9,10		
Submitted for: Approva		☐ Review	☐ Review ☐ Information		Number of Copies Subr		mitted:	mitted: 1		
Suhmi	tted By:	RICK F	ORD	Ruh	in Aux		H	PROJE	ECT MANAGER	
		(Name)		Sign	(tire)	>			(Title)	
HUME		DOCUMENT NUMBER	REVISION NUMBER		OCUMEN SCRIPTIC				AFS DISPOSITION	
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AFS-FN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

A		AREVA Federal Services LLC					
AREVA		SUPPLIER DOCUMENT SUBMITTAL REVIEW					
Supplier / PO	No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 001				
Charge No:	0022	25.03.0050.02.00001	Due Date: 7/14/2017				
Document(s):	See	e DTF No.:001					
100		INSTRUCTIONS: (List Supplier Doc. No. and Rev.	AFS Spec and Dwg, Codes, Stds, etc.)				
PE	Slad	de Klein					
REVIEWERS	Sla	ade Klein, Bernie Counterman					
QA	Ben	nie Counterman					
		Technical Review					
	-	Attached Yes No					
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AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

#01	 Joint detail states "See Attached" no joint detail attached.
#02	 ASTM A52, Grade 60 is not listed in AWS D15.1, Table 8.1 for prequalified materials. ASTM A52
	was withdrawn in 1925 and replaced by ASTM A83 (which is also not prequalified material).
	 Preheat and interpass temperatures are identified as "See Attached Report". The attached report contains joint geometry and does not contain preheat or interpass temperatures.
#03	No Comments
#04	Tensile Test Results state "See Attached Report". Report is not attached.
	Need to include UT report #23.
#05	No Comments
#06	 It is assumed (not stated) that the values are the pulling force. Therefore the test pressure should
	be changed to 2860 PSI +185 PSI -0 PSI and the test load would be 68826 LBS +4345 LBS - 0 LBS
#07	No Comments
#08	No Comments
#09-10	 Need to identify the ID of trucks A through F on Exhibit F. Also, might be good to identify front or rear (A end or B end).
#11	No Comments
#12	No Comments
#13	No Comments
#14	No Comments
#15	
#18	No Comments No Comments
#17	
#18	
#18	No Comments
#18	Originator signature not legible. Also, is he a Level III? Need TÜNdestmant NDTG CTR 1.
	Need TÜV document NDTG-CTP-1 Need TÜV document NDTG-LTGG-t
#20	Need TÜV document NDTG-UTQC-1
#20	No Comments
#21	No Comments
#22	No Comments
#23	 No Comments
#23	No Comments
#23	No Comments
#24	No Comments
#25	No Comments
#26	No Comments
#27	No Comments
#28	 No Comments
#29	No Comments
#30	No Comments
#31	No Comments
#32	No Comments
#33	No Comments
#34	No Comments
#35	No Comments
#36	 No Comments
#37	No Comments
#38	No Comments
#39	 Need to add a statement similar to "Except as noted on NCR Nos" if any NCRs are generated
#40	No Comments
#41	No Comments
#42	No Comments
#43	No Comments
WPS F001	No Comments
WPS F004	Preheat and interpass temperature states "See attached report". Report is not attached

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

AWS D1	6.1/D15.1M:2	012				ANNEX
		lo.	ROCEDURE	e Qualifica	Tion record (POR)	
	PROC	EDURE SPECI	FICATION		GROOVE W	eld test results
Materia	l specificatio	A572 Grade	50		Tensile strength, psl	
Medial	ananana F	CAW			1. (A) 78026	
Manual	or machina	Both (Semi-Au	utomatic)		2, (B) 77322	
Position	of welding	Vertical	20		Builded-hand teats 12 m	oot-, 2 face-, or 4 side-bend)
Filler m	etal specific	ation AWS A5.2	20		•	
	etai classiiic ietal crade*.	ation_E71T-1			Root 1. Side-Pass	Face 1. Side- Pass
Shlolds	no age CO2	Flou	rate 35 cfh		2. Side-Pass	2. Side-Pass
Single	or mulliple p	ass Multiple				
Singla	e elgilium to	C Single			Radiographic-ultrason	la exemination
Welding	g current DC	EP			PIT report no. N/A	
	g progressio				UT report no. #256	
	t temperatur					
Position	et treatment	N/A	. 4004		fille? We	ld test results
		ston Mills - Clock matal has no AV		n,	Minimum eize muitiple p Macroelch	ass Maximum size single pas Macroetch
1/101101	Linspecti	nn.			1. N/A 2. N/A	1. N/A 3. N/A
					3. N/A	2. N/A
	ence Accer	otable			All-weld-metal tension	test
	ut NONE	ME				
e-iping	porosity _NO	JNE	~~~~		Tensile strength, psi Nii Yield point/strength, psi	
Teat de	to July 10, 2	014			Elongation in 2 in, % N	
	sed by Danle				Laboratory tast no	
					•	
			,	Welding Pro	OCEDURE	
B	Electrode	Electrical Ch	arapteristics	1	T T	
Pass No.	Size	Amperes	Volts	Travel Speed	,	oint Detail
-				-		DIRE DOLLIN
All	1/16"	255	26	4 ipm	See Attached:	
l						
1				-	1	
1			ŧ		1	
			i		1	,
						•
						•
					Thickness of wold is	vors not to avosad 1/4"
					Thickness of weld la	yers not to exceed 1/4"
					are correct and that the to	est welds were prepared, weld
and tes	led in accord			in this record of AWS D15.1;	are correct and that the to	est welds were prepared, weld
	led in accord				are correct and that the to	est welds were prepared, weld Melding Specification for Cars a
and tes	ted in accord	lance with the r			are correct and that the to	est welds were prepared, weld Welding Specification for Care a
and tes	ted in accorditives.	lance with the r			are correct and that the to	est welds were prepared, weld Welding Specification for Care a

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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ANNEX D	
	, .
Procedure qualifi	CATION RECORD (PCR)
PROCEDURE SPECIFICATION	GROOVE WELD TEST RESULTS
Material specification A656 gr. 80 to A572 gr. 60	Tensile strength, psi
Welding process F.C.A.W.	1. N/A
Manual or machine. Manual.	2. N/A
Position of welding 2F Filter motal specification A5.29	Guided-bend-tests (2 root-, 2 face-, or 4 side-bend)
Filler metal classification_E8141-W1-1CU_H8	Root Face
Weld metal grade* N/A Shielding gas CO2 Flow rate 35 CFH	1. N/A 1. N/A 2. N/A 2. N/A
Single or multiple pass Single	Radiographic-ultrasonic examination
Single or multiple are Single Welding current Direct	
Welding progression Forehand	AT report no. UT report no.
Prefreat temperature 250° F Positival treatment None	
Welder's name RICHARD BUCCIARELLI (0798)	FILLET WELD TEST RESULTS
*Applicable when filler metal has no AWS classification.	
	Macroetch Macroetch Macroetch 1. 2, 1. 250" 9, 250" 8, 250"
VISUAL INSPECTION	e, 2, <u>:250ⁿ</u>
Appearance Acceptable Undercut Minor	All-weld-metal tension test
Ploing porosity None	Tonelle etrength, pel N/A
Test date 3/40/2008	Yield point/strength, pal., N/A. Elongation in 2 in., % N/A
Wilnessed by KASCRO RAID	· Laboratory test no.
WEITING	PROCEDURE
1 2000	· Josephann
Pase Electrode Wolding Current No. Size Ampères Volte Travel Spe	eed Joint Detail
100	
1 1/16" 300 31 8-11 1	pm
	4 12
	1/24/
	,
at the state of th	and are covered and they the feet welde were prepared. Welded
We, the undersigned, certify that the statements in this reco and tested in accordance with the requirements of AWS D18	rd are correct and that the test welds were prepared, welded, 5.1, (2012) Railroad Welding Specification — Cars and
Locomolives.	(year)
2000 Head	Manufacturer or Contractor KASGRO RAIL CORFORATION
- 400	
Precedure no. F-003	Authorized by Alfah. 2018
Precedure no. F-003 Revision no. 1	Authorized by Authorized Date 11/25/13
Precedure no. F-003	Authorized by Date 11/25/13,

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			-			•
	AV	VS D15.1/D15.1N	1:2007			· · · · · ANNEX D
				PROCEDI	JRE QUALIFI	CATION RECORD (PQR)
		PRO	CEDURE SPE	CIFICATION	I	GROOVE WELD TEST RESULTS
	Ma	terial specificat	ion A572 gr	60 to A	240 gr 304	Tensile strength, psi
	We	ding process_	F.C.A.W	•		1.79,000 (See attached report)
	Ma Pos	nual or machine ition of welding	e <u>Manual</u>	ł-		2.77,500 (See attached report)
	Fille	er metal specific	cation A5.	22		Guided-bend tests (2 root-, 2 face-, or 4 side-bend)
	Fille	er metal classifi	cationDW	309L		
		d metal grade*. elding gasC0		w rate 4	S CRU .	1. 1/32" tear 1 NO DEFERTE
	Sing	le or multiple p		iple 4	J Cen	2. 1/16" tear 2. NO DEFECTS
	Sing	le or multiple a	re Sing	le ·		Radiographic-ultrasonic examination
	Weld	ling current ling progressio	DCRP			RT report no.
	Preh	at temperatur	e 50° F			RT report no. 23
	Post	heat treatment	None			EU LET WELD YEAR DERWY
	Weld	er's name _M	ICHAEL J.	PENZERRO)	FILLET WELD TEST RESULTS
	Appi	icable when filler	metal has no Al	NS classificat	ion.	Minimum size multiple pass Maximum size single pass Macroetch Macroetch
	visu	AL INSPECTION	ON			1 2 1
		arance Acce				3 2
	Unde	rout Nor	10 10			All-weld-metal tension test
	Piping	porosity Nor				Tonella etranella 1 M/A
	T 1	- <i> </i>				Yield point/strength, psi N/A
		ate 6/18 ssed by KAS		npp		Elongation in 2 in, % N/A
	***************************************	3000 Hy	ato mini	47(1), 4		Laboratory test no.
					WELDING PRO	OCEDURE
-	Pass	Electrode	Welding	Current		
	No.	Size	Amperes	Volts	Travel Speed	Joint Detail
1					1	Som Detail
1	ALL	.062"	250	32	18 ipm	
1						MR /
1		1 1				7.77
1						.375
I						N 45°
l			1	İ		
			- 1	1		
	- 1		1			1
L						
w	e. Ihe	tindersianed o	orlify that the	etatomonio i	in this	
			ce with the req	uirements of	f AWS D15.1, (e correct and that the test welds were prepared, welded,
Lo	comol	ives.	•			(year) Railroad Welding Specification for Cars and
'n	ocedu	e no. 08KF	R-F1087			Indidentification of Control WACCED DAYS
	vision					Manufacturer or Contractor KASGRO, RATL CORP.
						ulhorized by
O.F	m D-2				D	ale 6-30-018



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

	15.1/D15.1M:	2012			KSINIA			
v		F	ROCEDUR	e qualifica	NTION RECORD (POR)			
	PROC	EDURE SPEC	RECATION		GROOVE WELD TEST RESULTS			
Matari		A572 Gr. 65		14	Tensile strength, pel			
Woldin	a nrongee F	CAW			1(1) 88,000			
Manue	for mechine	, Both (Semi-A	utomatic)		2, (2) 86,000			
Positio	n of walding	2G - Horizonta	l .		Gulded-bend tests (2 root-, 2 face-, or 4 side-bend)			
Filler n	netal specific	eation AWS A5.	22		•			
	netal ciaesiiid netal grade".	oation DW-309L N/A			Root Face 1. No Defects - Pass 1. No Defects - Pass			
Shlaldl	na age CO	2 Flow	v rate 35 cfh		2. No Defects - Pass 2. No Defects - Pass			
Single	or multiple p	ass Multiple	11,010		2, 140 0616013-1 833			
Single	or multiple a	ro Single			Radiographic-ultrasonic examination			
	g current Do				RT report no. N/A			
		n Horizontal			UT report noLab #158009 - Report #1			
	at temperatur at treatment							
		Williams #131			FILLET WELD TEST RESULTS			
		r metal has no Al	WS classification	n.	Minimum size multiple pass Meximum size single per Macroetch Macroetch			
VISUA	L INSPECTI	ON			1. Acceptable 2. Acceptable 1. N/A 3. N/A 3. Acceptable 2. N/A			
Appear	rance Accer	otable						
Underc	ut NONE				All-weld-metal tension test			
Piping	porosity No	ONE			Tensile strength, psi N/A			
		14 0046			Yield point/strength, psi N/A			
	to January 1 sed by Danie				Elongation in 2 in, % N/A			
		gra, Gjunion		The state of the s				
WILLD	sed by Dans				Laboratory test no. N/A			
WILLIAS	360 Dy <u>5000</u>		•	WELDING PRO				
	,	Electrical Ch		WELDING PRO				
Pass No.	Electrode Size			WELDING PRO	OCEDURE			
Pass	Electrode	Electrical Ch	aracteristics		OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	OCEDURE Joint Detail			
Pass No.	Electrode Size	Electrical Ch Amperes	aracteristics Volts	Travel Speed	Joint Detail See Attached:			
Pass No.	Electrode Size 1/16"	Electrical Ch Amperes 255	volts 28	Travel Speed 11. IPM	Joint Detail See Attached: Thickness of weld layers not to exceed 1/4"			
Pass No. All	Electrode Size 1/16"	Electrical Ch Amperes 255	volts 28	Travel Speed 11. IPM in this record a fAWS D15.1:	Joint Detail See Attached: Thickness of weld layers not to exceed 1/4" are correct and that the test welds were prepared, welde 2012 Pailroad Welding Specification for Cars as			
Pass No. All	Electrode Size 1/16" undersigned in accorditives.	Electrical Ch Amperes 255	volts 28	Travel Speed 11. IPM in this record at 14 AWS D15.1:	Joint Detail See Attached: Thickness of weld layers not to exceed 1/4" are correct and that the test welds were prepared, welde (2012			

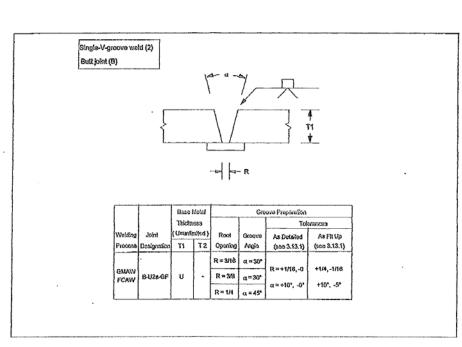
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b-u2a-gf.gff

Preheat

Less than or = to 3/4" 50 deg. Over 3/4" thru 1-12" 150 deg. Over 1-1/2" thru 2-1/2" 225 deg. Over 2-1/2" 300 deg.

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ARE	VA			DATA TRAN	SMITTAL F	ORM	
AIN.L	421						
Supplier	KA.	SGRO RA	AIL CORP.	INC. DTF No	012A	- 4	Page 1 of 1
P.O./SC	No: 150	3011916			-	Da	te: 04/05/2018
Type of	Submittal:	☑ First		Re-Submittal	SDR	L List Item N	lo: 9
Submitte	ed for:	☐ Approva	☐ Review	Information	Number of	Copies Sub	mitted: 1
Submitte	ed By:	RICK FO	ORD	Rick Ford	Digitally signed by Rick 9 Date: 2018.04 (6 21 22 2 -04/02	PRO	DJECT MANAGER
		(Name)		4	ature)		(Title)
ITEM		DOCUMENT NUMBER	REVISION NUMBER		OCUMENT ESCRIPTION		AFS DISPOSITION
	KAS	30		POR 09KRC-	1092		□ AP □ AWC □ REV
				CONCESSO DE CO			RWC DS RSA AP AWC REV
							RWC DS RSA
							RWC DS RSA
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Commen	its:		_		Technical Revie	wer (Le., RE.	PTL, SME, QA, etc.)
No cor	mments						KLEIN Slade 2018.04.10 10:24:52 -07'0
					KLLIN	Slaue	2018.04.10 10:24:52 -07'0
					Date 4/10	0/2018	
			AFS DISPO	SITION CODES AND	DEFINITIONS		
AP	Approved	4	Work may proce	eed.			Resubmittal is not required
AWC	Approved w	th Comment	Work may proce	eed; comments provide	d for Supplier's cons	sideration only.	Resubmittal is not required
REV	Reviewed			ed; comments provide		4	Resubmittal is not required
RWC	Reviewed w	ith Comment	Work may proce Buyer commer	eed; aubject to Incorp nta.	oration and comp	itance w/	Correct and resubmit
os	Disapproved		Work may not	The state of the s			Correct and resubmit
		mftal Acknowledge					
hall not or Project	dgment of the roceed and to Manager (I	e Supplier, the in	corporation of AF immediately prov	S' comments will reside a written notice to		esentative de	Order/Subcontract, wor scribing the change. 4/10/2018

AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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		AREVA Feder	AREVA Federal Services LLC				
AREV	A	SUPPLIER DOCUMEN	T SUBMITTAL REVIEW				
Supplier / PO	No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 012A				
Charge No:	0022	25.03.0050.02.00001	Due Date: 4/19/2018				
Document(s):	Se	e DTF No.: 012A					
RE	VIEW	INSTRUCTIONS: (List Supplier Doc. No. and Rev.	AFS Spec and Dwg, Codes, Stds, etc.)				
PE	Sla	de Klein					
REVIEWERS	Sla	de Klein, Bernie Counterman					
QA	Ber	nie Counterman					
		Technical Review					
Comments/Ma	arkup /	Attached Yes No					
Technical Rev	rewei	Comments.					
Technical Rev	riewer	(s) (Sign/Date): KLEIN Slade	KLEIN Slade				
Technical Rev	viewer(2018.04.10 05:22:50 -07'00"				
		(Sign/Date): KLEIN Slade Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00'				
	arkup /	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00"				
Comments/Ma Technical Rev	arkup /	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00"				
Comments/Ma	arkup /	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00"				
Comments/Ma Technical Rev	arkup /	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00"				
Comments/Ma	arkup /	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00"				
Comments/Ma Technical Rev No Commen	arkup / viewer	Quality Assurance Review (As Attached Yes No	2018.04.10 05:22:50 -07'00' Applicable) Digitally signed by Bernard Counterman				
Comments/Ma Technical Rev No Commen	arkup / viewer nts	Quality Assurance Review (As Attached Yes No Comments:	2018.04.10 05:22:50 -07'00' Applicable) Digitally signed by Bernard Counterman Date: 2018.04.10 08:02:44 -07'00'				
Comments/Ma Technical Rev No Commen	arkup / viewer nts	Quality Assurance Review (As Attached Yes No	Digitally signed by Bernard Counterman Date: 2018.04.10 08:02:44 -07'00'				
Comments/Ma Technical Rev No Commen	arkup / viewer nts	Quality Assurance Review (As Attached Yes No Comments:	Digitally signed by Bernard Countermar Date: 2018.04.10 08:02:44 -07:00*				

AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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ť	. 4 2 (5, 177	anut						
	. 44 [5. 177	140127			. ANNEX D			
		Ĭ	ROCEDU	RE QUALIFIC	ATION RECORD (PQR)			
	PROC	EDURE SPEC			GROOVE WELD TEST RESULTS			
Mater	al specificati	on A514T1	to A572	on: 60	Tensile strength, psi			
Weldir	g process _	Lux Cored	Arc Wel	dina	1. See attached report			
Manua	al or machine	Manual Vertical			2.			
Filler	netal specific	ation A5.25	9		Guided-bend tests (2 root-, 2 face-, or 4 side-bend)			
Fillern	netal classific	cation_E11	171-K3		5 .			
Weld r	netal grade*				1. SIDE - NO DEFECTS1. SIDE - NO DEFECTS			
Shield	ing gas /5 /	r 25CO ² Flov	v rate	CFH	2. SIDE - NO DEFECTS2. SIDE - NO DEFECTS			
Single	or multiple p	ass <u>Mulit</u> re Sing	pre		Hadiographic-ultrasonic examination			
Weldin	g current	Direc	t (DCRP)				
Weldin	g progressio	nUphi.	1		RT report no			
Prehea	et temperatur	e125° None	F	-				
Welder	's name	ALBIN WILL	TAME 79	75	FILLET WELD TEST RESULTS			
*Applica	able when iller	metal has no AV	VS classificati	ion.	Minimum size multiple pass Maximum size single pass			
					Macroelch			
VISUA	L INSPECTI	ÒΝ			1 2 1 3 3			
Appear	ance_AC	CEPTABLE						
Underc	utNo	ne			All-weld-metal tension test			
Piping !	porosity <u>No</u>	ne			Tensile strength, psi			
Test dal	te				Yield point/strength, psi			
Witness					Elongation in 2 in, %			
				WELDING PR				
Pass	Electrode	Welding		1				
No.	Size	Amperes	Volts	Travel Speed	Joint Deiail			
ATJ.	.062 ¹¹	203	27	0 11 1				
	*002	203	21	8-11 ipm	/			
					yang.			
					K/I			
-								
					45			
	ĺ		İ					
	1							
e, the u	ndersigned,	certify that the	statements	in this record at	re correct and that the test welds were prepared, welded,			
comotiv	in accountage	ice with the req	uirements o	r AWS D15,1, (e correct and that the test welds were prepared, weldsd, 2012) Rallroad Welding Specification for Cars and (year)			
ocedure	no. 09KR	2-1092			nanufacturer or Contractor KASCRO RATE CORPORATION			
vision n		.:			uthorized by			
					utinonzed by alate 11/25/13 -			
m D-2								



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Project: 00225.03.0050 DOE Atlas Project

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ULTRASONIC INSPECTION AWS REPORT

Kasgro Rail Inc. 121 Rundle Rd. New Castle, PA 16104

Report#:
P.O.#: K08-0315 Page
P.O.#: K08-0315 Page
Work Order#: F3517
Project: Mitaubishi

Date: Dec. 22, 2008

Description: UT weld qualification plate (A514 - A572 6d.60)

Client Order #: Length: 15" Ultrasonic Unit: KB MS 350 Test Method Standard: Aws 15. Thickness: 1 " Serial #: Acceptance Standard: Aws 15.1 Location: Kagro shop# 1 Discontinuity. Decibels Distance Attenuation Factor Indication Level Weld Identification Indication Number From C 12-7875 × 2.25 Klb 2 Couplant: Sonofeeh Frequency: Surface Condition: flush weld. Calibration Blocks: DSC Technician: R. Nichol Level: Level: II R- Nichal Interpreter:

excited by:

Was performed in accordance with accepted industry practice as well as the test methods referenced. This test report applies only to those items tested. This report shall not be alocal except in full without the written consent of Non-Destructive Testing Group, Inc.

Quality by Integrity and Knowledge
DOMESTIC & INTERNATIONAL LOCATIONS

NDTG-0004 August 20, 2003

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179 State Street · Struthers, Ohio 44471 · (330) 755-7373

January 5, 2009

Test Report:

Kail Testing Laboratories, Inc. R.D. #5 Box 419 New Castle, PA 16105

Phone (724) 946-3104 Fax (724) 946-3104

Attn: Mr. Paul Kail '

(2) Welded steel test specimens of grade A514-TI to A572 Grade 60—sample identified as A and B—rec'd 12-23-08 for mechanical testing per AWS D 15.1M2007 Railroad Specifications for Kasgro Rail.

Page 1 of 1

Welder: Albin Williams, #133
Base Metal: A514-TI to A572 Grade 60
Filler: AWS A5.29; E111TI-K3

Filler Size: .0625" Position: 3G Vertical

Processes: Flux Cored Arc Welding

Gas: 75 % Argon, 25% CO² at 40 CFH

Mechanical Test Results: (ASTM A 370-08a)

Job	Sample	Outside Diameter	Area	Ultimate	Ultimate	Type & Location of	
 #	#	Inches	Sq. In.	Load lbs	Stress psi	Failure	
						•	
63698	Α	.502	.1979	19,620	99,000	Ductile / Base Metal	
63699	В	.504	.1995	19,630	98,500	Ductile / Base Metal	

Frank L. Galletta, Mgr.

agA



The results reported are limited to the sample tested and constitute data only with respect to the sample tested. Information and data in this report are correct and reliable to the best of

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Project: 00225.03.0050 DOE Atlas Project

Appendix F.4.2 – Weld Procedure Specification (WPS) Records

ARI	EVA			DATA	TRANS	TIME	AL FORM	V	
277.04	12		22		Same of the	200		12:	
Supplie		ASGRO RAIL COR	P.,INC.		DTF No:	012		Pag	ge <u>1</u> of <u>1</u>
P.O./SC		5C3011916						Date:	03/20/2018
Type of	Submittal	: X First		Re-Subm	ittal		SDRL List Ite	m No:	9
Submit	ted for:	☐ Approval		☐ Info	rmation	Num	ber of Copies	Submitte	ed: 1
Submitt	ted By:	RICK FO	ORD		Rut	Tim		PRO	DJECT MANAGER
		(Name)			(Signati	ulre)	2		(Title)
NUMB		DOCUMENT NUMBER	REVISION NUMBER			CUMENT			DISPOSITION
1		KAS 027			WPS	F001, RE	EV3	8	AP □ AWC ဩ REV
2		KAS 028			WPS	F002, RE	EV 5	_	RWC DS RSA
3	31	KAS 029			WPS 08KF	R-F1087	REV. 2	8	AP □ AWC □ REV
4		KAS 030			WPSF	004, RE	EV. 1		
5		KAS 031			WPS KR	C-F-004	IA-514	D/	RWC DS RS
6		KAS 032			WPS F	003, RE	EV. 1	2	AP □ AWC □ REI RWC □ DS □ RSA
7	11	KAS 033			WPS 15KJ	R F1087	, REV. 2	_	RWC DS RS
								_	RWC DS DRS
								8,	AP AWC REV
Comme KAS 03		omplete duplicate	of KAS 031, KAS	030 will b	ie.	Technic KLEIN S	al Reviewer (i.e.,	RE, PTL,	SME, QA, etc.)
		submit KAS 030 to				Date 4/			
			AFR DISPO	SITION CO	DDES AND D	EENITIC	NS.		
AP	Approved		Work may proor	_	DEC MILE D		Trans.	F	Resubmittal is not require
AWC	Approved	with Comment			ints provided f	for Supplie	er's consideration of	ant. F	Resubmittal is not equired
REV	Reviewed	-	Work may proce	ed; comme	nts provided f	or Supplie	er's consideration of		equired Resubmittal is not require
RWC	Reviewed	with Comment	Work may proce Buyer commer		ct to incorpor	ration an	d compliance w/	c	Correct and resubmit
DS	Disapprov	red	Work may not	proceed.				C	Correct and resubmit
	Decreird S	ibmittai Acknowledged	No other action	required.					

AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Technical Reviewer(s) (Sign/Date): KLEIN Slade Digitally signed by KLEIN Slade Date: 2018.04.05 07:53:47 -07'00' Quality Assurance Review (As Applicable) Comments/Markup Attached Yes No Technical Reviewer Comments: delete KAS 030 - incomplete and all required information is contained in KAS 031. KAS 031 - need PQR 09KRC-1092	A	AREVA Feder	AREVA Federal Services LLC						
Charge No: 00225.03.0050.02.00001 Due Date: 3/20/2018 Document(s): See DTF No.: 012 REVIEW INSTRUCTIONS: (Ust Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein REVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Review Comments/Markup Attached Yes No Technical Reviewer Comments: KAS 30 and KAS 31 are duplicates. Technical Reviewer(s) (Sign/Date): KLEIN Slade Date: 2018.04.05 07:53:47-0700' Quality Assurance Review (As Applicable) Comments/Markup Attached Yes No Technical Reviewer Comments: Assurance Review (As Applicable) Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable) Comments/Markup Attached Yes No Technical Reviewer (As Applicable)	AREV	A SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW						
REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein REVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Review Comments/Markup Attached Yes No Technical Review Comments/Markup Attached Yes No Technical Reviewer Comments: KAS 30 and KAS 31 are duplicates. Technical Reviewer(s) (Sign/Date): KLEIN Slade Date: 2018.04.05 07:53:47 -0700* Quality Assurance Review (As Applicable) Comments/Markup Attached Yes No Technical Reviewer Comments: delete KAS 030 - incomplete and all required information is contained in KAS 031. KAS 031 - need PQR 09KRC-1092 QA Reviewer(s) (Sign/Date): Bernard Counterman Digitally signed by Bernard Counterman Digitally signed by Bernard Counterman Date: 2018.04.04 11:14:13-0700*	Supplier / PO N	No.: Kasgro Rail / 15C3011916	DTF No. / Rev: 012						
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COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessition)	Technical Revi	iewer(s) (Sign/Date): KLEIN Slade Quality Assurance Review (Assurance Comments: 030 - incomplete and all required information is	Date: 2018.04.05 07:53:47 -07'00' Applicable)						
	Technical Revi Comments/Ma Technical Revi delete KAS 0 KAS 031 - ne	iewer(s) (Sign/Date): KLEIN Slade Quality Assurance Review (Assurance Attached Yes No incomplete and all required information is seed PQR 09KRC-1092	Applicable) Contained in KAS 031. Digitally signed by Bernard Counterman						

AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

			Pi	AOCEDURE	e Qualifica	TION RECORD (POR)	
,		PROC	EDURE SPECI	FICATION		GROOVE WELL	TEST RESULTS
	Materia	d specificatio	n A572 Grade	50		Tensile strength, psi	
	Maldin	enranana F	CAW			1. (A) 78026	
	Manual	l or machine	Both (Semi-Au Vertical	itomatic)		2, (B) 77322	
	Position Filler m	n oi welding letet enacific	ation AWS A5.2	20		Guided-band tests (2 root-	, 2 face-, or 4 side-bend)
	Filler m	ielai ejassiic Ielai classiic	ation E71T-1			Root	Face
	Weldim	netal grade*_				1. Side-Pass	1. Side-Pass
	Shisida	ng gas <u>CO2</u>	Flow	rate 35 cfh		2. Side-Pass	2. Side-Pass
	Single	or mulliple p or mulliple a	ASS Multiple			Rediographic-ultrasonio e	temination
		or mumpio a g current DC			ti de la companya de la companya de la companya de la companya de la companya de la companya de la companya de		•
		g progressio				RT report no. N/A UT report no. #256	
	Prehea	t temperetur	a 70 deg.			or report not	
	Posthe	at treatment	N/A	. Ilona		FILLET WELD	Test results
			ston Mills - Clock matal has no AV		n.	Minimum eizo muitiplo pass	
						Macroetch	Macroetch 1. N/A 3. N/A
	Visual	l inspecti	ON .			1. N/A 2. N/A 3. N/A	1. N/A 3. N/A
	Aonesi	ence Accer	table			THE PROPERTY OF THE PARTY OF TH	
	Underd	U NONE				All-weld-metal tension tes	it.
	Plping	porosity <u>NO</u>	NE	*****		Tensile strength, psi N/A	
	************	to July 10, 2	014			Vield point/strength, psi N/A	\
	Witness	sed by Danie	al S. Glurich		*******	Elongation in 2 in, % N/A Laboratory test no. N	/A
	***************************************					Ecoptain's tool inst	70.00
					BURN DUDIES DES	ncenupe	
			Electrical Chr		WELDING PR	OCEDURE	
	Pass	Electrode	Electrical Cha	aracterístics			N Detell
	No.	Size	Amperes	volts	Travel Speed		t Detail
			V1010-1-1	aracterístics			t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint	t Detell
	No.	Size	Amperes	volts	Travel Speed	Joint See Attached:	
	No.	Size	Amperes	volts	Travel Speed	Joint	
	No. All	Size 1/16" undersigns and in accord	Amperes 255	volts 26	Travel Speed 4 ipm	Joint See Attached:	rs not to exceed 1/4" welds were prepared, welde
	We, the	Size 1/16" undersigns and in accord	Amperes 255 d, certify that the reacce with the re-	volts 26	Travel Speed 4 ipm	Joint See Attached: Thickness of weld layer are correct and that the test (2012) Rallroad Wol	rs not to exceed 1/4" welds were prepared, welde
	We, the	Size 1/16" undersigne led in accorditives.	Amperes 255 d, certify that the reacce with the re-	volts 26	Travel Speed 4 ipm	Joint See Attached: Thickness of weld layer are correct and that the test (2012) Rallroad Well (year)	rs not to exceed 1/4" welds were prepared, welde ding Specification for Cars ar
	We, the and test Locome	Size 1/16" undersigns ted in accordings.	Amperes 255 d, certify that the reacce with the re-	volts 26	Travel Speed 4 ipm	Joint See Attached: Thickness of weld layer are correct and that the test (2012	rs not to exceed 1/4" welds were prepared, welde ding Specification for Cars at

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

ANNEXD

TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Qualified	by procedure	qualification no class 182 (A3)	F-001 A572/gr42	850; A500, A50	0/gr B, A218/gr WČC; efc)
Molding	process FCAV	V			The second secon
					.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Position :	of Welding- Fle	t Honzonial,	letilical, Ove	rhead	
Fillerma	af specification	A6,20			
Filler me	lal classificatio	n E71T-1			
Fills NA	1				
Weld me	fal grade, N/A				ow rate: 35-50 eff1
Shlelding	gas. CO2			- FI	ow late: 25-90 ear
Single o	multiole pass	Both			According to the same of the s
Single o	multiple are 8	Single			The state of the s
Welding	current Direct				The state of the s
Polatily	DCEP		5.7.10		
Att. Caller	meantanalan V	(enlcal (3G) - I	Thun —		
martf. 2	Marant 18881	HO SOULIG HIST	21	.C. carret	the state of the s
Preneat	and interpass	temperature	See allache	d tebatr	
Dashviol	d Heaf Treatm	ent None			
Applical	ac only when his	ler metal has no	AWS classifio	al'on.	
7.70					
			V	aetding bro	CEDURE
Pass	eborloela	Welding (Current.	Travel	
No.	Size	Amperes	Volts	Speed	Joint Defall
1	Second 1	-		100	

See attached reports 27-32 8-13 fpm 180-280 Q45* F ia 25-31 8-13 ipm 200-400 1/16" 17-32 6-13 fpm 250-400 3/32" 200-400 8-13 lpm 25-31 H-20 1/164 6-13 lpm 17-32 260-400 3/32" V-3G: :045" 160-210 24-39 4-9 (pm 6-11 lpm 25-30 ·1/16th 180-250 24-29 8-13 lpm 180-240 046 ,046" 8-13 lpm 200-270 28-30 1/16" Thickness of weld layers not to exceed 1/4*

This procedure may vary due to fabrication sequencer litrup: pass size; etc., within the limitation of variables given in AWS D16, 1. (2012) Railroad Wolding Specification for Cars and Locomotives. (year):

Proceduré no. F-001	Manbfacturer or Contractor, KASGRO RAIL, CORP. Authorized by Japan
Revision no. 3	11/25/13
60 mo	Date L 1720/10



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

ANNEX	D				AWS D15.1/D15.1M:2012
		PREQUA	LIFIED WEL	DING PROCE	EDURE SPECIFICATION (WPS)
Materia	al specificati	A 572 Grad	e 50 and A 572		
Weldin	g process	F.C.A.W.			
Manua	or machine	Manual			
Positio	n of welding	Flat, Horizon	tal, Vertical and	l Overhead	
Filler m Filler m Flux_1	etal classific	ation A5.29 cation E81T-1-	NiIC-JH8		
Weld n	netal grade*	N/A			
Shieldi	ng gasC)2			Flow rate 35 - 50 CFH
Single	or multiple p		ıltiple		
	or multiple a g current <u> </u>				
Polarity	Reverse				
Welding	nogressio	n Vertical (3G)- Uphill		
Root tre	eatment <u>C</u>	lean to sound me	etal		
		ass temperatur	See attache	a report	None X
		tment <u>None</u> i filler metal has i	no AWS claseifi	cation.	NoneX
			ATTO GIGOSIII	Secretary.	
				WELDING PRO	OCEDURE
Pass	Electrode	Electrical Ch			
No.	Size	Amperes	Volts	Travel Speed	Joint Detail
4.0	Paguirad				40 44 1 10
As	Required			0.12.101/	*See Attached Report
F-1G	1/16"	200-400	25-31	8-13 1PM	
H-2G	1/16"	180-250	24-39	8-13 IPM	
V-3G	1/16"	180-250	24-39	6-11 1PM	
0-4G	1/16"	200-270	26-30	8-13 1PM	
- 1	1				Thickness of weld layers not to exceed 1/4"
					-
ilis nm	cedure may	vary due to fel	rication com	ence fitue con	ss size, etc., within the limitation of variables given in AWS
715.1: (2012) Railroad Wei	ding Specifica	tion for Cars an	nd Locomolives.
	(year)				
rocedu	rana F-	002			Massara Rail Cara
100600	10 110.				Manufacturer or Contractor Kasgro Rail Corp.
	no	5			Authorized by
Revision					Data 11-2-17

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Doc./Rev.: EIR-3021970-000

-AWS D15.1: 2012

Project: 00225.03.0050 DOE Atlas Project

..' RAILROAD WELDING SPECIFICATION

PREQUALIFIED WEIDING PROCEDURE SPECIFICATION (WPS) F.C.A.W.

Notesk

1. Preheat and interpass temperatures:
Less than or equal to $3/4^{11} - 50^{\circ}$ F minimum
Over $3/4^{11}$ thru $1_{2}^{11} - 150^{\circ}$ F minimum
Over 1_{2}^{11} thru $2_{2}^{11} - 225^{\circ}$ F minimum
Over $2_{2}^{11} - 300^{\circ}$ F minimum

2. When the width of the layer of groove weld in the flat, horizontal or overhead position is 5/8" or greater, a split layer technique is used for the next layer. In vertical, a split layer is used when the width of the layer exceeds 1".

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

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Project: 00225.03.0050 DOE Atlas Project

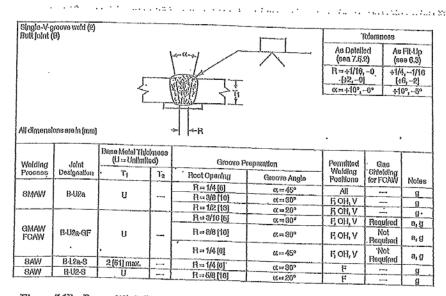


Figure 7.1B—Prequalified Complete Joint Penetration (CJP) Groove Welded Joint Details

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

AWS D15.1/D15.1M:2012 TEST QUALIFIED WELDING PROCEDURE SPECIFICATIONS (WPS) Qualified by procedure qualification no. 08865-1087-6/30/08/ AND 15KR-F1087-1/14/15. **Asterial specification AST2 GRADE 60 TO A240 GRADE 304 elding process E.C.A.W.						
Cualified by procedure qualification no.08KRF-1087-6/30/08/AND 15KR-FL087-1/14/15. **Jaterial specification A372 GRADE 60 TO A240 GRADE 304 elding process E.C.A.W. nutual or machine Manual sitton of welding 16 Flat ellider metal specification 5.32. Filler metal aclassification pt/3031. Fikv. Weld metal grade* Shielding gas002	ANNEX	(D				1
Cualified by procedure qualification no.Q8KRF-1087-6/30/08/ AND 15KR-F1087-1/14/15.	,		UALIFIED WEL	DING PROC	EDURE SPECIEIC	ATIONS (M/DS)
relaterial specification a 272 GRADE 60 TO A240 GRADE 304 eliding process E.C.A.W., unual or machine Manual aithon of welding 16 Elat eliding rocess E.C.A.W., unual or machine Manual aithon of welding 16 Elat eliding rocess E.C.A.W. eliding and eliding 16 Elat eliding as a consideration by the state of	Qualifie					Ariolda (WPS)
elating process F.C.A.W. pinual or machine Manual siltion of welding 16 Flat	nateria.	specification A572 GRADE 60 TO A	1240 GRADE 304	AND ISKK-P	1087-1/14/15.	
ALL062" Jeffer metal psecification 5.22 Filler metal classification DW-3091 Flox Weld metal grade* Shielding gas	elding	process <u>F.C.A.W.</u>				
riller metal classification 5,22 Filler metal classification DW-3091. Flux Weld interial grade* Shielding gas C02 Flow rate 40–50 CFH Single or multiple pass Multiple. Single or multiple pare. Single Welding current DCEP Polarity Reverse Welding progression Forehand Root treatment Clean to sound metal Preheat and interpass temperature 50°F Post weld Heat Treatment None None None X *Applicable only whan filler metal has no anso classification. WELDING PROCEDURE Amperes Volts Travel Speed Joint Detail ALL062" 240-280 29-33 15-18 imp 375 45°						
Filer metal classification <u>pW-309L</u> Flow rate						
Weld metal grade* Shlelding ass	Filler me	etal specification 5.22				
Welding corrent		tal classification DW-309L				
Shlelding gas		etal grade*				
Single or multiple are. Single Single or multiple are. Single Welding current DCEP Polarity Reverse Welding progression Forehand Root treatment Clean to sound metal Preheat and interpass temperature. 50°F Posts weld Hear Treatment None None X *Applicable only when filler metal has no avis classification. WELDING PROCEDURE Welding Current Amperes Volts Travel Speed Joint Detail ALL .062" 240-280 29-33 15-18 imp 375 45°			ow rate 40 – 50	CEH		
Welding progression_Forehand Root treatment_Clean to sound metal Preheat and interpass temperature_SO'F Post weld Heat Treatment_None_None_x *Applicable only when filler metal has no aws classification. WELDING PROCEDURE Welding Current Amperes Volts Travel Speed Joint Detail ALL .062" 240-280 29-33 15-18 imp .375 45°	Single or	multiple pass Multiple		0111		
Polarity Reverse Welding progression _ Forehand Root treatment _Clean to sound metal Preheat and interpass temperature _ 50°F Post weld Heat Treatment _None _ None _ x *Applicable only when filler metal has no avas classification. WELDING PROCEDURE Welding Current Amperes						
Welding progression _ Forehand Root treatment _ Clean to sound metal _ Preheat and interpass temperature _ SO'F _ Post weld Heat Treatment _ None _ x _ *Applicable only when filler metal has no aws classification. WELDING PROCEDURE Welding Current _ Amperes Volts Travel Speed Joint Detail ALL062" 240-280 29-33 15-18 imp37545°						
Root treatment Clean to sound metal Preheat and interpass temperature SO'F Post weld Heat Treatment None None None X *Applicable only when filler metal has no aws classification. WELDING PROCEDURE Welding Current Amperes Voits Travel Speed Joint Detail ALL .062" 240-280 29-33 15-18 imp .375 45°	Welding	nrogression Foreband				
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Post weld Heat Treatment None None X *Applicable only when filler metal haz no aws classification. WELDING PROCEDURE Welding Current Amperes Volts Travel Speed Joint Detail ALL .062" 240-280 29-33 15-18 imp						
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ALL .062" Welding Current Amperes Volts Travel Speed Joint Detail 240-280 29-33 15-18 imp .375 .375			w	ELDING PR	OCEDURE	
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ALL .062" 240-280 29-33 15-18 imp	.		1			
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ALL .062" 240-280 29-33 15-18 imp	ass	Electrode Size	Welding	Current		
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1572) 1 2012 Namioad Welding Specification for Cars and Locomotives,	J.L,	7 Venicon Meinrig Shecurcation	for Cars and Loco	motives.		g mring
(Year)	{Yea	rj -				
Manufacturer or Contractor KASGRO RAIL CORP.	cedure no	o. 08KR-F1087	4 Manu	facturer or Co	ntractor KASGRO PA	II CORP
me I sel com.				_	A SORO KA	BL CORP.
Islon no. 2 Authorized by Auth	ISION NO.		 Autho 	rized by	man l	
7-1 Date <u>07/27/15</u>					11/1	<u>-</u>

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TEST	QUALIFIED	WELDING	PROCEDURE SPECIFICATION (WPS)

Qualified by procedure qua Material specification	514T1 to A572 Grade 60			
	.C.A.W.			
	anual			
Position of weldingV	ertical			
Filler metal specification _	A5.29			
Filler metal classification	E11191_K3			
Flux				
Weld metal grade*				
Shielding gas 75% Arg	on 25% C02	_ Flow rate _	40 CFH	
Single or multiple pass	Multiple			
Single or multiple arc	Single			
Welding current				
Polarity				
Welding progression				
Root treatment				
	perature _See_attached_re	port:		
Postweld Heat Treatment _		4		

WELDING PROCEDURE

		Welding	current		
Pass no.	Electrode size	Amperes	Volts	Travel speed	Joint detail
All	•062 ¹¹	190–300	27–30	8-11 iym	N 1 745
					(2) = 2 -

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the ilmitation of variables given in AWS D15.1, (_2012__).

Procedure noE-004	Manufacturer or contractor, KASCRO RATE CORP.
Revision no1	Authorized by
Form D-3	Date

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^{*}Applicable only when filler metal has no AWS classification.



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		Moldin	g process	F.C.A.V					
			or machine						,
				Vertica					
		Filler m	etal specifica	tion A5.	29				
		Filler m	etal classifica	ationE11	171-K3				
		Flux _							
		Weld m	etal grade* _,						
		Shieldi	ng gas _ 75%	Argon 259	& C02		. Flow rate	_40_CFH	
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						WARPING FIL	QUEDONE.		
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		This pro	ocedure may	vary due to fat	orication sec	uence, fit-up, p	oass size, etc.,	within the limitation of variables given in	
		This pro	ocedure may 5.1, <u>2012</u> yéar	vary due to fat).	orication sec	juence, fit-up, p	oass size, etc., '	within the limitation of variables given in	
		AWS D1	5.1, <u>2012</u> year	<u> </u>).	oricationsec		oass size, etc., Manufacturer		
1		AWS D1	5.1, <u>2012</u> yéar ure no. <u>F</u>	<u> </u>).	orication sec		Manufacturer		
		AWS D1	5.1, <u>2012</u> year	<u> </u>).	orication sec				
-		AWS D1	5.1, (2012 year ure no	<u> </u>).	orication sec		Manufacturer	or contractor, KASCRO RAIL CORP.	-

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AWS D15.1: 2012 RAILROAD WELDING SPECIFICATION PREQUALIFIED WELDING PROCEDURE SPECIFICATION Notes* Proheat and interpose temperatures: Less than or equal to $3/4^{\circ}$ – 50° F minimum Over $3/4^{\circ}$ thru 1_{2}^{1} – 150° F minimum Over 1_{2}^{1} thru 2_{2}^{1} – 225° F minimum Over 2_{2}^{2} – 300° F minimum 2. When the width of the layer of groove weld in the flat, horizontal or overhead position is 5/8" or greater, a split layer technique is used for the next layer. In vertical, a split layer is used when the width of the layer exceeds 1".

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	TEST GUAL ESER WEI DING MAG COLOR	•
	TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS) Material specification . A572 oxade 60 to A656 grade 80	
	Meniual or machine Manual:	
	Position of weiding Flat, Horizontal, Vertical, Overhead Filter metal specification, A5,29	
	Filer metal classification ESITI-NIICI FIS Flux N/A	
	Wold melal grede W.A.	
	Single of multiple ness Single/Multiple Flow rate 35 to 50 CFH	-
	Single or multiple are Single Welding autrent Direct	The second secon
	Welding progression Ventucal Uphili	
	Hool treatment	
	Postweid Heat Trastment None None K Applicable only when iller metal has no AWS classification.	
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1	Welding ourrent	
	Pasa Elgotrode no. stze Amperes Volte speed Joint detail	1
	All: 1/16" See attached 8-11 ipm	1
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Ì	This procedure may vary due to fabrication acquence, lit-up, pass size, etc., within the limitation of variables grant year.	Ivan in
į	Procedure no. F-003 Manufacturer or contractor Rail Co	· http://
N. Adams	Revision no. Authorized by Allas Sen	
1	Form D-1 Date 3 1725/13	



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.	THOS MILAL INTERNATIONAL	•
1	TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS) Meterial specification <u>A572 grade</u> 60 to <u>A656 grade</u> 80	
	Welding process F.C.A.M Merical or machine Wannal.	
-	Position of weldingFlat., Hortsontal., Vertical, Overhead	
1	Filler metal classification BRITI-NIICI HS Flux N/A	and the same of th
	Weld melal grade: W/A.	
ŀ	Shielding gag C02 Single or multiple pass Single/Multiple Flow rate 35 to 50 GRH	the same standard warms
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	Polarity Réverse Welding progression Ventical Uphili	
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į	Procedure no. F-003 Manufacturer or contractor Raigno Rail Co	כומו
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1	Form D-1 Dala : 11/25/13 : 0 /	

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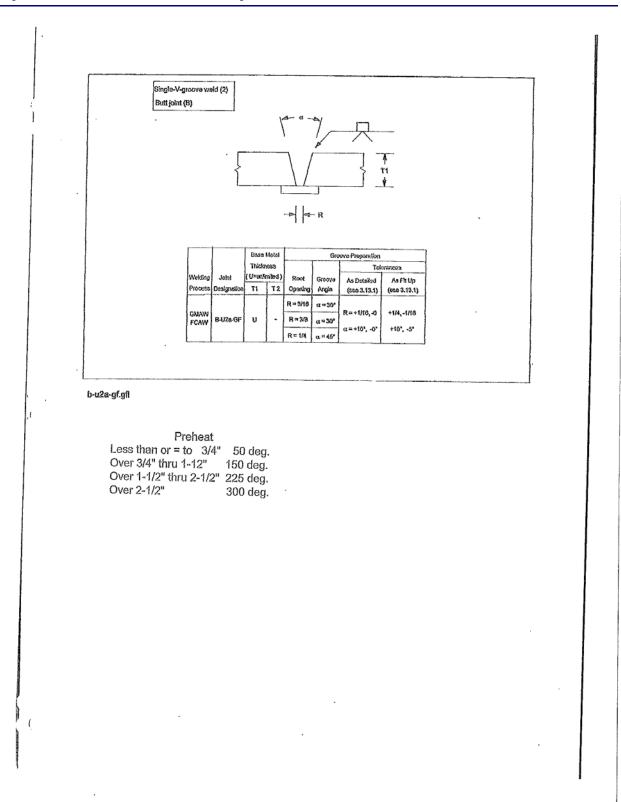
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			test q	UALIFIED W	ELDING PR	OCEDURE SPECIFICATION (WPS)	
	Quali	fled by proc	edure qualifica	dion no. 15KF	R-F1087		()
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F	iller	metal classi	fication_DW-3	091_			
	lux_ Veld :	N/A netal grade	* N/A				_
.8	hield	ing gas Ci	D2 - Welding (Flow rate 30 to 50	Manage .
		or multiple	pass <u>Multiple</u> arc DCEP				-
		g current_E y _DCEP	CEP				***
W	eldin	g progressio	n N/A				_
R	oot fr	eatment _G	irind, chip and ass temperatu	wire brush			- '
Po	stwe	ld Heat Trea	alment N/A				
*A	pplica	ble only whe	n filler metal has	no AWS classil	ication.		_
					WELDING PE	ROCEDURE	
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D15.	: (2012) (year)	Railroad Weld	ication sequer ling Specificati	ice, lit-up, pas: on for Cars an	s size, etc., within the limitation of variables given in AWS d Locomolives,	1
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Appendix F.4.3 - Kasgro Welder Qualifications Records

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Supplie	er:	KASGRO	RAIL CORP.	INC. DTF	lo: 018			Page 1 of 1		
P.O./SC	No:	15C3011916			4 - 1		Da	ate: 03/27/18		
Type of	f Subm	ittal: 🖸 First		Re-Submittal		SDRL Lis	st Item	No: 20		
Submit	tted for	🗵 Аррг	oval Review	☐ Information	Nun	ber of Cop	ies Sut	bmitted: 1		
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AWC	The state of the s			beed; comments provided for Supplier's consideration only.				y. Resubmittal is not required		
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RWC	2000	Reviewed with Comment Work may proceed; subject to be Buyer comments.			corporation and compliance wi				Correct and resubmit	
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AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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A	П	AREVA Federa	al Services LLC				
AREVA		SUPPLIER DOCUMENT SUBMITTAL REVIEW					
Supplier / PO	No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 018				
Charge No:	0022	25.03.0050.02.00001	Due Date: 4/10/2018				
Document(s):	Se	e DTF No.: 018					
RE	VIEW	INSTRUCTIONS: (List Supplier Doc. No. and Rev.	AFS Spec and Dwg, Codes, Stds, etc.)				
PE	Slad	de Klein					
REVIEWERS	Slad	de Klein, Bernie Counterman					
QA	Ben	nie Counterman					
		Technical Review					
Comments/M.	arkup A	Attached Yes No					
Technical Rev	viewer	Comments:					
Technical Rev	viewer(s) (Sign/Date): KLEIN Slade	KLEIN Slade 2018.04.10 05:01:37 -07'00'				
		Quality Assurance Review (As I	Applicable)				
	7	Attached Yes No 🔳					
Technical Rev			A 9 1 2 3 4 3 4 3 5 5 5 6 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5				
 Darryl Be qualification face and 	acher is to K 1-root	i - 4G Groove weld had 1-face and 1-root be n - qualification for .375 and 3G were performance (Ref. D15.1, Section 9.4 Qualification bend. Should be 2 side bends. ie - qualification for 1G and 3G use ID #703	ormed for Miner Rail Services. Need on Responsibility). 4G Groove weld had				
QA Reviewen	(s) (Sig	n/Date):Bernard Counterman	Digitally signed by Bernard Counterman Date: 2018.04.04 14:18:14 -07'00'				
COMMENT	DISP	OSITION (If Applicable. Attached further comments	and disposition correspondence as necessary				
	-						

AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Special particular part	Cla If covered by AWS specifics:	and the distant	1751 - FN	0
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		F	LLER METAL		
Specification	no5.	20	bearing at T	717-1 En	. 6
Describe fille	r metal (if not	covered by AWS specifics	illon)	F n	0
s backing at	rip asan?	Yes			
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		A-CA-06-10	— cored arc	welding 100% C	s for gas metal arc or 02
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project



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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

	(See	OW-301, S	REPRESENTATION OF THE PROPERTY	ALIFICATIONS Boiler and Fre	(WPQ) ssure Vessel Co	ode)
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dendification of WPS tollow	ed by wold:	or danna west	ing of test courses		· ype	
Sass material(s) wolcad	SA	106-B to	SALOS-B		Tnickness	432"
Manual or Sen	iautometic	Variables for	Each Process (QW-a	90)	Actual Values	Range Duelified
decking linetal, weld may	tal, welcad	from both side	es, flux, etc.) (QW-40	2)	None	with or without.
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() Plate (X) Pipe lette	er diameter,	(eqiq r			5.625° 0	
Filler metal specification	(SFA): 5.	\$ 5.5	Classification (CIV)-	104)	F-6010 E-	7018
Filler metal F. Ko.					3 4	_F-1 fthru 7-4
Filler metal variety for 61					N/A	N/A
Carsumatic insection G					N/A	N/A
Weld deposit thickness to	or each web	ding process			,532	1.084
Welding position HG, 5G	, etc.) (OW-	40a)			5G	All ocsitions
Progression (aphill/down					Uphill	Dirii11
Backing gas for GTAW, F	AW. or GM	AW; fuel gas	for OFW (OW-406)		N/A	N/A
GMAW transfer mode (Q	W-400)				N/A	N/A
GTAW wolding current to	/pe/oclarity				N/A	N/A
Machine Met	dina Variata	don depailed No.	ocess Uşod (QW-380	c.	and and all of the	Co. Now
Direct/remote visual cont	enting wasten	and the the Ph	poess dand (GAA-280		Actual Values	Range Qualified
Automatic voltage contro	The second second				_	
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Consumable insert	, etc.)					
Backing (metal, weld met	al, welded i	rom both side	s, flux, etc.;	1		
			Gulded Ben	d Test Results		
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project



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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Appearance S	latisferiumy	,lmlery, l	Do.A.	⊋ ping perosity	Jane
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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ANNEX D					
	WELDER A	ND WELDING OPE	RATOR QUALIF	ICATION RE	CORD
Wolding process? (Hat, horizontal, of In attacrdance with Material specifical Diameter and war	E.C.A.W. Menne overhead, or vortica th procording specifi don A51411 to	ATRIN WILLIAMS at	Semiautomatic: nether anward or do	x	offication no13 Washing Vertical Up
		FILL	R METAL		
Specification no. Describe filler me	AS 29 fal (if not covered by	Classification_ y AWS specification)_	±11171-K3	Fan	
Is backing step us	sed?	Yas		-	
Filler metal dlame	der and trade name	HIIITI-KS ESAB		erged arc or your	us for gas metal arc or fl. gon: 25% CO2
		VISUAL	INSPECTION		
Арреаналев, Асс	ceptable	Umkercut 3	korna	Pining	porosity Notice
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LISTOE BEIND	2 NO J	MONACES"	SIDE GEND	4	NO DEFECTS
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Appearance,	Consultantia -	-	Fillet size		
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araz o cometo		ER AND WELDING OPERAT		ATION TEST RECO	131
Welding process Pasition 40	F.C.A.W.	name ALBIN D. WILL. Manual Scroove Weld	Semiautomati	c XMac	hing
n Accordance w Malerial specific	nth procedur Alion		alified joi	nt Fig. no. C	18
limmeter and wa Bickess range t	ill thickness his qualifies	(if pipe) — otherwise, joint th 1.0"	tickness	500"	- +-
pecification no lescribe filler m	5.20 atal (it not go	FILLE: Class Pycred by AWS specification	NETAL figation E71's	Eng	», <u>δ</u>
s backing strip of liter meral dram		Yes le name 1 <u>/16" Lincoln</u>	Hux for su	pmerged and program	s for gas metal arc or fit COZ
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3-11-			-		
est willocased &	y		Te	at no	
Ve, the undersign	ned, cortify to he requireme	hat the statements in this reco nts of the Anxaicua Welding (ord are correct Society AWS D1	and that the welds w	ere prepared and lestist
			Authorized	er or contractor	RASERO RALLI COMP
orm D-4			Dale 9	11-00	

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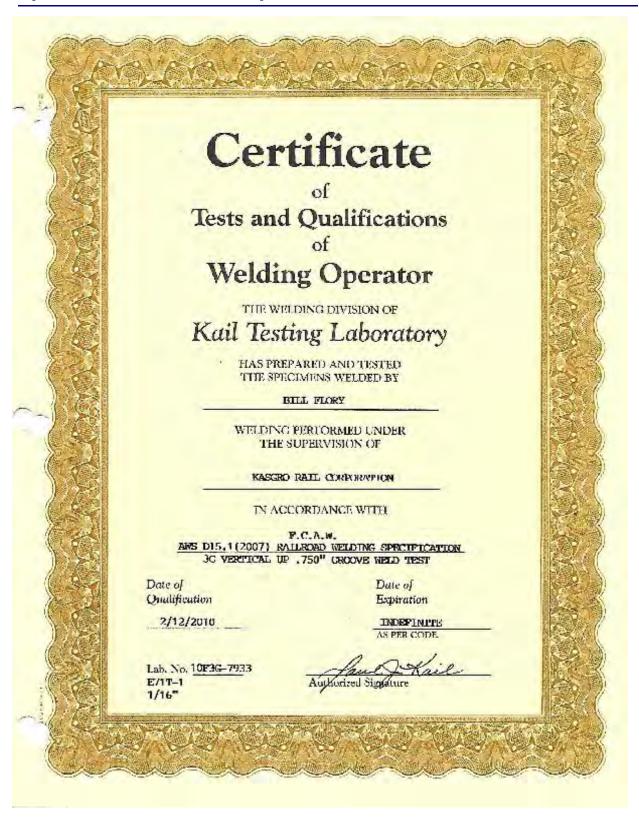
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ALL DESCRIPTION OF THE PROPERTY OF THE PROPERT	1000				,
	WELDER AL	ND WELDING OPS	BATOR OUALIE	CATION RECORD	ID.
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Material specifical Diameter and wat	ioA-36	-otherwise, joint thic			And the page of
			ER METAL		
Specification on	5 29	Classification		1000 6	
Describe liller mo	al (if not covered b	y AWS specification).		140. 0	
ls backing strip re	od?	Yes			-
Filter areful dignic	tor and hade hame	3/32" Lincoln		erged arc or gas for ding 100% C02	gas metal arc :
		VISUAL	INSPECTION		
Арреаналов <u>. Я</u> в	disfactory	Undersut	one	Piping porus	ally None
			nt Test Results	(-21	
Туре	1	desult	lype		Hesulf
SIDE BEND	1 001	DEPROTS	,	W. S. C. W. S. C	
SIDE BEND	NO.1	DESPENDING.			
Test conducted by per	Fund J.	K LADORATORY		t no. 10F1 <u>G-79</u> 2/18/201	
	, ·	Fillet I	est Results		
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Test conducted by		ze of any crack or toa	ring of the specimer Laboratory too	1) t no	
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		- 143 (2009 D	0.540.5	A STATE OF THE STA	
We, the undersigne in accordance with	ol, certify that the s the requirements of	latements in this reco AWS 1115 1, (<u>2001</u> (yas	 Theilroad Welc 	at the test welds validing Specification is	are propared an r Curs and Lace
			Manufacturer of Authorized by	r Contractor _KAS	CRO RAIL C
Form D 4			Day 211	1801	



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(Flat, horizontal prochaged, or verifical —if vertical, state whether upw har accordance with procedure accordance in no. F=001 Material specification — 8, 36 — Diameter and wall thickness (if pipe) otherwise, joint trickness — Thickness range this qualifies — UNLTMTPS) FILLER METAL Specification — 0, 717 — UNLTMTPS) Filter metal diameter shall be not covered by AWS specification — 0, 717 — Describe filter metal (if not covered by AWS specification) Is backing styp insed? — YOS — YOS — Filter metal diameter and back name — 1/15" intincolin — Flox — Cores — WISDAL INSPECTION — Cores — WISDAL INSPECTION————————————————————————————————————	IdentateX, and or downward.) 30 50" F-no: If submerged are quality10 N 'care, are green.	Machine
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Describe filler metal (if not covered by AWS specification) Is backing strip used? Filter metal districtions and trade name1/15"introcio	ir submerged are or all die welding10 N12 uitsType	jes for gas motal aid or li 0% CGZ profesity Biode
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Fillet Test Results Appearance Fracture lest roof penetration (Describe the location, halfret, and size of any chack or tearing of these per lest conducted by Der Fracture Lest and Size of Easy chack or tearing of these per lest conducted by Der Fracture Lest conducted by Test conducted by Der Fracture Lest conducted by Test conducted by Der Fracture Lest conducted by D	a diamental	
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Fracture lest roof penetration Macro (Describe the location, halfare, and size of any crack or tearing of the rest conducted by Page 1985 of FADIOGRAPHIC TEST H		
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	tion Results	Remarks
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Manut	nd Welding Specifical	
Page 44 Date 2	nd Welding Specifical —	KASCEO BAIL COMEO



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

NDE « MECHANICAL I	AB		www.toorts.com	industrial 8
Reported To:	Mr. Dave Stal Kasgro Rail C 121 Rundle R New Castle, F	kirp oad A 16102	Date: P/O Number; Report Number: Project:	March 25, 2015 QAP I Welder Qualification
AWS - WELDER, V	welding (DPERATOR OR T	ACK WELDER QUA	LIFICATION TEST RECOR
Name: Brett Sh Type of Welder: Ser Welding Procedure Sor	mi Automaric	F-001	Welding Co. Identification Numb Rev: 0	de: AWS D15.1/015.1M-2012 er: 837 Date: 3/25/15
Variables	CONTRACTOR OF THE		Actual Values	Qualification Range
Process/Type			FCAW	FCAW
Blectrode (single/multi-	ple)		Single	Single
Current/Polarity			DCEP	T Single
Position			3G	Flat, Vertical Fillet & Grou
Weld Progression			Uphill	Uphili
Backing (With or With	out)		With	With
Material/Spec		A36	to A35	All AWS Proqualified Mate
Base Metal Thickness: (Plate)				
Groove		-	18	
Fillet			1" N/A	1/8" to Unlimited
Thickness: (Pipe/mb	c)	,	N/A	1/8" to Unlimited
Groove	-2		N/A	1/8" to Unlimited
Fillet	-		N/A	1/8" to Unlimited
Diameter: (Pipe)				772 111 17711111111111
Graove			N/A	24" OD aux3 Over
Fillet			N/A	Any Diameter
Filler Motal				
Spec. No.	eventure and		A5.20	
Class			E71T-1	
F-No.			6.	F6
Ges/Flux Type Other	Name and the same	1	00% CO ₂	-
		1-1/20	N/A	N/A
VISUAL INSPECTIO Guided Bend Test Res Type		able: V Ye. Result	No Date o	ощим welded: <u>3/25/15</u> Result
Side Bend		Defects - PASS		
Side Bend		o Defects - PASS	1	
Fillet Test Results Appearance: N/A	4		TOTAL CO.	
Fracture Test Root	1		Pillet Size:	
(Describe the location,	sature and six	e of any court or bind		Contraction of the Contraction o
Radiographic Test Re	sults	STATE OF STA	ед от ніс вросимент.	The state of the s
Film ID	Results	Remandes	Film ID	Results Romarks
N/A	37/4	1	L	
Film evaluated by: Mechanical tests condu	N/A	de Minhest (Work of	Совправу:	M. 152-11
DOMESTICATION OF LINEAR COUNTY OF		is Nichol / Rich Porto		Test Number: 150383
11/1/2014	La	Gjarch		einland Industrial Solutions
Welding supervised by:			all.S based on the req	nitements of the code listed above
Welding supervised by: The welder identified of		PASSES, FA		
Welding supervised by:		PASSES, FA	Date	:: _4/1/2015
Welding supervised by: The welder identified of	bove 4	PASSES, FA		:: 4/1/2015 :: 4/1/2/20/5
Welding supervised by: The welder identified of Reviewer's Signature: Client Approval: as test results report our find	bove V	of inspection and shall be	Date TÜV RHEINIA reviewed by the chent for com- print the overall companies and	W

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Project: 00225.03.0050 DOE Atlas Project

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1	ofr, Dave Stahi Essere Rail Corp 21 Rundle Read New Castle, PA 16102	Deter P/O Mumber: Report Number:	March 25, 2015 QAV
	•	Projects	Welder Qualification
AWS - WELDER, W	ELDING OPERATOR (OR TACK WELDER QUA	JUFICATION TEST RECORD
Powers Brott She		Webling Co	ado: <u>AWS DIS I/DIS I</u> M-2012
Type of Walder Son Welding Procedure Spec	Mension Mo. F-001	Identification Numb	
Variehka	ADMINISTRAÇÃO DE COMPANSA DE C	Rov: 0	Deta: 3/25/15
Process/Type		ecord Astrial Values	Qualification Runge
Electrode (single/multiple	L)	FCAW	FCAW
Current/Polarity	~	Ringle DCEP	Single
Position		3G	Flat, Vertical Willet & Croove
Wald Progression		Uphil	Uphill
Eacking (With or Without	ri)	With	Wife
Maturiet/Spec	Ait	to A36	All AWS Pregnalified Material
Base Metal			The same of the sa
Thickness: (Pkgs)	- 0.00		1
Groove		1"	1/2" to Hallewised
Fillet		N/Δ	1/8° to Unlimited
Thickness: (Pipertube)	!		
Groove Fillet		N/A	i/2" to Urdimited
Planeter (Pipe)		N/A	1/8" to Unlimited
Grante (Fipe)	1	200	
Filler		N/A	24" OD and Over
Filler Metal		N/A	Any Diameter
Spec. No.	į.	A5.20	
Class		571T-1	
F-No.	- 1,22,2	6	1/5
Gas/Mex Type		100% CO.	
Other		N/A	N/A
VISUA), INSPECTION Colded Bend Test Resu		Yes No Date of	toupan welded:3/25/15
Туре	Result	Type	Result
Side Bond	No Defents PASS		
Side Rend	No Defects - PASS		
Fillet Test Mosuita		Town and	
Appearance: N/A		Fillet Size:	The second secon
Generalisms Tours Dispose	har 17 c - 1	Macroetch	
		remains or the shackplessic	
(Describe the location, as	Ifo	12.50	
(Describe the location, as Redingraphic Test Resp	lts .	l Kilm ID	Been to December
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Describe the location, as Reddingraphic Test Read Film ID N/A Film evaluated by: I Machanical tests consider	Its Results Removis I/A	Соотраву:	
Describe the location, as Reddingraphic Test Read Film ID N/A Film evaluated by: I Machanical tests consider	lis Results Networks I/A of by: Chais Nichal / Rich	Company: Purham Laboratory	/ Test Number: 150383
(Describe the location, us Realingtenphis Test Read Film ID N/A. Film evaluated by: P Wischemical tests conduct Wolding supervised by:	Its Results Newporks I/A If the Nichal / Rich Dan Gjurch	Company: Laboratory Company: TUV Rh	Test Number: 150383 Girdand Indestrial Solutions
(Describe the location, us Reddingraphic Test Reag Fitm ID N/A Vilm evaluated by: P Wischemical tests conduct Wolding supervised by: The welder identified abo	Its Results Networks I/A If Chais Nichal / Rich Dan Gjurch	Company: Purham Laboratory Company: TUV Rh FAILS based on the req	/ Test Number: 150383
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(Describe the location, us Reddingtraphic Test Read Film ID N/A Film evaluated by: It Wischemical tests constituen Wolding supervised by: The welder identified abo Reviewer's Signature: Client Approval:	He Results Networks WA M by: Chais Nichal / Rich] Lon Gjurch No. V. PASSES.	Company: Laboratory Company: TUV Rh FAILS based on the reg Date TVV RHITALLA District Company TVV RHITALLA District Company TVV RHITALLA District Company TVV RHITALLA	Test Number: 150383 einland industrial Solutions purcents of the code listed share. a: 4/1/2615 c: 4/1/2/15
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DE * MECHANICAL	LAB		www.instince	120F	Industrial Solut
Reported To:	Mr. Deve Stahi Kasaro Rail Corp 121 Rundlo Rasal New Castle, PA 16		P/O Nomb Report Numb Ptojs	en QAF ren I ron Wolder	25, 2015 Qualification
		RATORORY	ACK WELDER (PUARIFICA	TION TEST RECORD
where Erst S Syne of Weldert S	hepand ond Authoratic		Weldin	ig Code: AV	% DI5.1/DI5.1M-2012
Valding Procedure S	deciliention No. 15	-007	Identification I Rev:		Date: 3/25/15
Variable					
roceas/Type	1	N SCORE	Actual Values FCA9/		Qualification Range
Isotroda (single/mult	ticle)		Hingle		FCAW Siggle
hument/Potarity			DCEP		olega
Parising.			3G	F.	st, Vertical Fills; & Groove
Weld Progression	-97 . 13		Uphill		Ughill
Sacking (With at Wit	thoot)		With		P/ith
Material/Spec		AJS	to A36	A	AWS Proquelified Material
Thickness: (Flate)					
Groove	-		1"		120m. 11 C 1 - 1
Fillet	7	-	N/A		L/8" to Unlimited
Thickness: (Pice/iu	be)		1021		1/8" to Untimited
Gmass			N/A		1/8° to Unlimited
Fillet			N/A	7400	1/8" to Halimited
Diameter: (Pipe)					
Grouve	-	N/A			24" OD and Over
Fillet iller Metal		N/A			Any Dismoter
Spec. No.	-		4.000		
Class			A5.20 P7UT-1		
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Ther ISUAL INSPECTION Inided Bend Test Ro Type	esuits	Yes	No I		slded; <u>3/25/15</u>
Ther TSUAL INSPECTION Trained Bend Teat As Type Side Bend	suits Re No Defe	esult ests – PASS			
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ther ISUAL INSPECTION Inided Read Test Re- Type Side Bend Side Bend Side Bend Other Test Results Spearance: No.	suits Re No Defe	esult ests – PASS	No 1 Typ		slded; <u>3/25/15</u>
ther ISUAL INSPECTION Initial Rend Test Ro Type Side Bend Side Bend illet Test Results Spearance: N. Instrum Test Reof;	Suits Re No Defe	esult ests – PASS ests - PASS	Fillet Size:		slded; <u>3/25/15</u>
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

NDE • MEXIKANICAI	LAD		www.lawila.com	(framil)	Industrial Sol
Reperied To:	Mr. Dave Stal Kesero Rail C 121 Rundle Re	comp osed	Date: P/O Number: Report Number:	March 25, 20 QAF	
	Now Castle, P		Project:	Welder Gusli	
AWS - WELDER	, welding (PERATOR OR 1	ACK WELDER QUA	LIPICATION	TEST RECORD
Name: Feet S	hopsad	and the same of the same	Welding Co	zka <u>AWS 1015</u>	J/D15.HM-2012
Type of Webles:	medification Ma.	P-001	Identification Numb		Ottorio -
Variable			Rave <u>0</u>		3/25/1.5
Fraces/ Vive	u.i	Kechto	Actual Values FCAY/	Qns	liffication Rungs
Electrode (single/uni	tinla)		Single		FCAW
Current/Polarity	760 X 300		DCEP	-	Siegl <u>e</u>
Position.			3G	Flat, Yes	tical Fillet & Grugve
Weld Progression			Uphill		Uphill
Backing (With or Wi Material Ospec	alout)	102	With		With
Dase Metal	-22-	A36	to A36	AL AWS	Prequalified Majoria
Thickness: (Plate)					
Grouse			In	144	" to Unlimited
fillet			N/A		" to Collimited
Tirickmess: (Pipo/to	(bs)				- arrivationed
Groove			N/A	1/8	" m Unlimited
Fillet	· · · · · · · · · · · · · · · · · · ·		N/A		" to Unlimited
Diameteat (Pipe) Greeve	i		27/4	1	
Fillet			N/A N/A		OD and Over
Filler Motel			IVA	_	ny Diameter
Spec. No.			A5:20		
Cleas			B71T-1		
F-No.			6		786
Gas/Flux Type		10	00% CO ₂		
Other	1		N/A		N/A
VISUAL INSPECTI	The second of the	Me: Ye	No Date	compon walded;	3/25/15
Guided Bend Test Ro Tyce	ermits	Daniel:	95		5
Side Bond	No	Result Defects PASS	Тура		Result
Side Bend	No	Defects - PASS	1		
Fillet Test Results			·		
	VΔ .		Fillet Size:		
Freeture Test Root:		-	Masaoetch:		
	, DEREC, sint size	of any stack or fast	ng of the specimen);		
(Describe the location	ATA (FEE)	Remarks	Film ID	Mosphs	20.00
	Results		CHILD ID	CONDIN.	Remarks
(Describe the location Radiographic Test R	Results				
(Describe the location Radiographic Test R Film ID N/A Film evaluated by:	N/A		Сопадам	-	
(Describe the location Radiographic Test R Film ID N/A Film evaluated by: [Machemical tests your	N/A netod by: Chri		Сопераву:	Test Number:	150353
(Describe the location Radiographic Test R Film ID N/A	N/A netod by: Chri		Congray: Laboratory	Test Number:	190323 il Solutions
(Describe the location Realingraphie Test R Film ID N/A Film evaluated by: Machemical tests count Wolding supervised by	N/A neted by: Chri v: Dan	s Nichol / Rich Yurun Gjurch	Company: Laboratory Company: TUV Rh	oinland Industrie	il Solutions
(Describe the location Radiographic Test R Film ID N/A Film evaluated by Machenical tests count Wolding supervised by The webler identified	N/A uncted by: Chris v: Dan ubove	s Nichol / Rich Yurun Gjurch	Company: Laboratory Company: TUV Rh	oinland <u>Industri</u> s piiroments of the	190983 il Solutions code listed allava.
(Describe the location Radiographic Test R Film ID N/A Film evaluated by Machemical tests could Wolding supervised by The wolder identified Reviewer's Signature	N/A ueted by: Chri v: Dan shove \(\sqrt{1} \)	s Nichol / Rich Yurun Gjurch	Company: Laboratory Company: TUV Rh III.S hasad on the reg	oinland <u>Industria</u> pairoments of the a: <u>4/4/2</u> 015	d Solutions code listed allows.
(Describe the location Radiographic Test R Film ID N/A Film evaluated by Machenical tests count Wolding supervised by The webler identified	N/A ueted by: Chri v: Dan shove \(\sqrt{1} \)	s Nichol / Rich Yurun Gjurch	Company: Laboratory Company: TUV Rh III.S hasad on the reg	oinland <u>Industri</u> s piiroments of the	d Solutions code listed allows.
(Describe the location Radiographic Test R Film ID IVA Film evaluated by Machenical tests could Wolding supervised by The webker identified Reviewer's Signature Client Approval	N/A nerod by: Christian thoras V I i i i i i i i i i i i i i i i i i i	is Nichel / Rich Purin Gjurch PASSES, FA	Company: Laboratory Company: TUV Rh U.S hased on the reg Date Date TVV RHEINLA reviewed by the client for com	oinland Industrie purcements of the e: <u>M/2</u> 015 = 4/2/ c IND INDUSTRI	<u>ll Solutions</u> code listed alama. 20/5 ALSOLUTBONS, IN

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Crand Raptda, MI B	Thei, MI - Pitts	burgh, PA Birming	dun, AL – Peca	tur. Al.	A	TÜVRheinlam
MOE * MECHANICAL	LAB		www.invel	la com	A marin	industrial Solutio
Reported To:	Mr. Dave Stat Kasgro Rail C 121 Randis R New Castle, P	രന്ന മേർ	P/O Na Rapoci Na Pr		March 25, 2 QAP J Wekker Qua	
aws - welder,	WELDING (PERATOR OR T	ACK WELDER	R QUAL	LIFICATIO	NTEST RECORD
Name: Bout 9	hopard		T/e)	ding Ces	ie: AWS Di	5,1/1015.1M-2012
Type of Wolden 8 Welding Procedure Sy	esni Automatic	72.001	_ Identification	in Numb	er: #37	
				ev: <u>0</u>	Date:	3/25/15
Vaciable	25		Actual Vafans		Q	ralitication Russer
rearss/Typo Sketrody (single/mot	delete		PCAW			FCAW
Diment/Polarity	119:4)		Single DCRP	10 To 10 To 10	-	Single
osition		-	3G		Giles St.	erfical Fills) & Chroove
Weld Progression			Uphill		1,121, 11	Uplif0
lacking (With or Wil	poet)		With		-	With
Staterial/Space	Aborona Ja	A36	to A3	i ú	All Atv	S Pregualified Material
ksse Metal Thickness: (Piste)						
Greeve			554			
Filkt			1.			/8" to Unlimited
Thickness: (Pine/te	he)	Annual Control of the	N/A		1	/8" to Colimited
Goove			N/A		1	/5° to Unlimited
Pillet			N/A			/8* to Unlimited
Diameter: (Pipe)			18.			TO SO CONTRAINED
Groove			N/A		2	4" CD and Over
Fillet			N/A			Any Diameter
iller Metal						
Spec. No. Class	-		A5.20			
F-No.			6			7.0
es/Flux Type		10	9% CO ₂		-	F6
dher			N/A	-	-	WA
TSUAL INSPECTION		iple: V Yes	No No	Date co	upon welded	
Турс		Result	T	ура		Result
Side Bend	No.	Defocts - PASS				SOURCE
Side Band	No.	Dofbots - PASS				
illot Test Results	ī.					
ppearance: No ractive Test Root:	/A	-	Flitet Size:			
Rescribe the location	nature and six	uf any crack or tearis	Macroaids:			
adlegramate Test R	manue, and size	on safe crack of reality	ig or one specima:	0 j:		
film iD	Results	Remarks	Hilm ID	73	icanits	Romarks
NiA					1	- Acceptant
Film evaluated by:	N/A		Сетрацу:			
lechnoical tests condi- folding supervised by		s Michol / Rich Porter	an J.al		Test Number:	
crame antistrees pi	. Dan	Gierch	Company:	UV Rho	inland Industr	ial Solutions
ne welder identified a	ibove 1 1	ASSES. FA	IT.S based on	the rega	irements of th	o code listed above.
teviewer's Signature:	Michan.	Same	F14.	200	4/1/2015	
Clical Approval:	T. Carl	Sal	- Other	Date:	4121	20)5
		//	TWITE BY	TERMS IN	UD DATE-STATE	Yaz mar improses said
Many and American Coffee of Front	THE RESIDENTIFIES AND	Competion and shall be a of the factors that decemb while component quality or	evicand by the class See the owners!! compo	Day comme	Transpire due tibras monte	PAR SOLUTIONS, INC. 1011 Requirements. Due to the 1011 made or liability assumed by
	2 4, TOTA & S	Acres 1	Richard A Porini	100		2000m5
			CWI 05081311 OC1 EXP. 8/1/2			faller Quelification (fage 1 of 1
100-0700	USTRIAL BOUL	BYARD . ALIQUEPPA			(724%378, 480)	» FAX (224),378,2940

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

oc Sulit	www.fisvefe.equa	Industrial Solution
) hates	March 25, 2015
Keil Corp	P/O Number:	
mile Rosed	Report Namber:	1
astie, PA 16102	Project	Welder Qualification
ING OPERATOR OR	TACK WELDER QU	AT THICATION YEST RECORD
		lode: AWS D15.1/D15.1M-2012
matic	Ideot/destion Nur	nber: 937
en No. F-001		
Keuge	rd Actual Values	Qualification Range
		FCAW
		Single
		Biligio
	3G	Fist, Verdeal Fittet & Groove
	Uphill	Uphili
	97 toh	Wich
A36	to A36	All AWS Prespatified Material

		1/8" to Unlimited
	N/A	1/8" to Unlimited
1	541-	
		1/3" to Onlimited
4	N/A	1/3" to Unlimited
i	307	
		24° (10) and Over
	N/A	Any Discounter
	4404	
		
	774	F5
		N/A
Constitution 1 12		
reasimators: y re	rs No Dam	coupon welded: _3/25/15
Eastit	Trons	TIn I
	, Mr.	Result
	Fille: Size:	T.
	Magreetoly	
aid size of any crack or fear	ing of the specimen):	
	- D	
a komendos	Film IO	Results themperks
	Company:	
Chris Michel / Rich Port	man Laborate	ry Tost Number: 150383
Dan Gjorch	Company: TEV Is	heinkind Industrial Solutions
V PASSES, PA		equirements of the code listed above.
March Soffman		ute: 4/1/2015
12/2/		ne: 41.212015
		,
	reviewed by the client for ac	airty, no goteration is made or Habitity assumed by
	CM 05061311 QC1 EXP 68 PC41	Benfarer (2002013 AWS Welcor (Smillifornion Pager Log) 1
	Result No Defects - PASS No De	Record Actual Values PCAW Single DCEP

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

NDE * MACHANICAL	1.433	Www.lo	syrboxen.	Industrial So
Reported Tir.	bie, Dave Stahi Kaagro Rail Corp 12), Rundle Ro <i>sil</i> New Casile, PA 16102	Report	Date: Namber: Number: Project:	March 25, 2015 QAF 1 Wolder Qualification
	WELDING OPERATO	R OR TACK WELD	er quai	JFICATION TEST RECORD
Name: Bron S	hopard	. V	Valding Cod	le: <u>AWS D15.1/D15.1</u> M-2012
Type of Wakier: _S Welding Procedure Se	per Amomatic Seclification No. (7-06)	Identifica	stion Numbe	
			Rove 6	Date: <u>3/25/15</u>
Variable	ñ.	Record Actual Values		Qualification Range
Process/Type Electrode (single/molt	Pal A	FCAW		FCAW
Carrent/Polenity	Tiles)	Single	To the second	Single
Position		DCEP		
Weld Progressing		3G Uphili	decidents.	Flat, Vertical Fillet & Groove
Backing (With or Wit	hout)	Wifi	77.70	Uphin
Misterial/Appec	A38	TOTAL CONTRACTOR OF THE PARTY O	A36	Wills All AWS Prepaulified Materia
Base Metal	· · · · · · · · · · · · · · · · · · ·	-	1.50	Add Ann S Proposition to analys
Thickness: (Plate)				1
Groove		1"		1/3" to Unlimited
Fillet		N/A		1/3" to Unlimited
Thiokness: (Pipe/tul	(90			
Greave Filler		N/A		1/6° to Unbignited
Disagreter (Pipe)		N/A		1/8" to Unlimited
Growe		200		0.40.000
Fillet		N/A N/A		24" OD and Over
Lilier Metal		.,7/7	- 54	Any Dismeter
Suec. No.	ŧ	A5.30		
Closs		R71T-1	-	-
F-No.		5		16
Cas/Plus Type		100% (20)2		
Other		M/A		NI/A
VISUAL INSPECTION Guided Bond Test Re	ON Acceptable:	Y Yea No	Dete of	лцэнн welded: <u>3/25/15</u>
Туре	Result		Type	Result
Side Bond	No Defects - 2.			
Side Rend	No Defects - P.	ASS J		
Filiet Test through Appearance: No		Francisco .		
Epichure Test Root:	ri .	Fillet Sizze	Y-1-10-240-4-4	
	nature, and size of any crack	Macrostch:		
Radiographic Test Re	mults	A MENTAL OF THE SPECIAL	ten):	
Film ID	Results Reman	Acs Film ID	6	awilts Remarks
N/A			-	- AVAIDALES
Film evaluated by:		Соограду:		
Machanical tests consider	cood by: Chais Nichal / Ri		Laboratory	Past Noraber: 150383
Welding supervised by	Dan Gjunch	Company:	TUV Rice	intend industrial Solutions
The welder identified a	bove V PASSES.	FAILS based	on the requ	framents of the code listed above.
Reviewer's Signature:	Alle March State	district and the second	Date:	4/1/2015
Cliant Approval:	Sollar Soll		Date:	412/2015
	tings at the time of inspection and ing is contouring all of the factors ins, inc. ("1815") for the component	shall be reviewed by the cl		NO SAMMANTREAL SOLUTIONS, IF heree to the project requirements. Due to who governed is much or Robbitly seamed
			rima:	Trevision 7/20/2013

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

and Rapida, MI - 8		2000 antitu		- P. P. P. P. P. P. P. P. P. P. P. P. P.		TÜVRheinla
DE « MECHANICA)	LAH		Www.fest	rris.com	Sandana Sandana	sindustrial Solut
Reported To:	Mr. Dave Stabl			Date:	March 25, 201	5
	Kasgro Rail Co			Youther;	QAF	
	121 Ruadle Ro			Number:	1	
	Now Castle, PA	10102		Project:	Wolder Qualifi	ication
ws - welder,	WELDING O	FERATOR OR	TACK WELDS	er quai	LITTCATION	TEST RECORD
	hegard		W.	elding Co	de: AWS DIS.	1/D15.104-2012
yps of Wolder: 8	emi Automeric		Identifica	tion Numb	vr: 837	
Telding Procedure S	pecification No.	F-001		Rev: 0	Dute:	3/25/15
Verieble	.f	Reco	rd Actual Values	-	(Jus!	ification Range
gooss Type			FCAW			FCAW
sobude (single/mai	dplc)		Single			Singly
rrent/Polarity			DOUB			3-171
sition	-	170	3/3		Flor, Vett	ical Fills, & Groove
Weld Propression with ac Wit	3		Uphill		1	Ughill
ateria (Mono	aroct)	400	With		American I	4/ith
atema (Metal		A36	to	136	Allawsi	roqualified Linlerial
Thickness: (Plate)						
Groove			10		1	
Fiffer						to Unlimital
Thickness: (Pioc/m	helt		N/A		1/8	to Delicated
Groove			WA		1.50	1 A. TEITS 16
Fillet			N/A			to Unlimited
Glaracter: (Pipe)	1000 to 1000 to 1000		AVA	-	1/8	to Unlimited
Gruove	1		N/A		0.311	OTHER LOSS
Fillat	·		N/A			CD and Over
lier Metal			Pisk		A	ny Distractor
Spec. No.	į.		A5.20			
Class			E71T-1			
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

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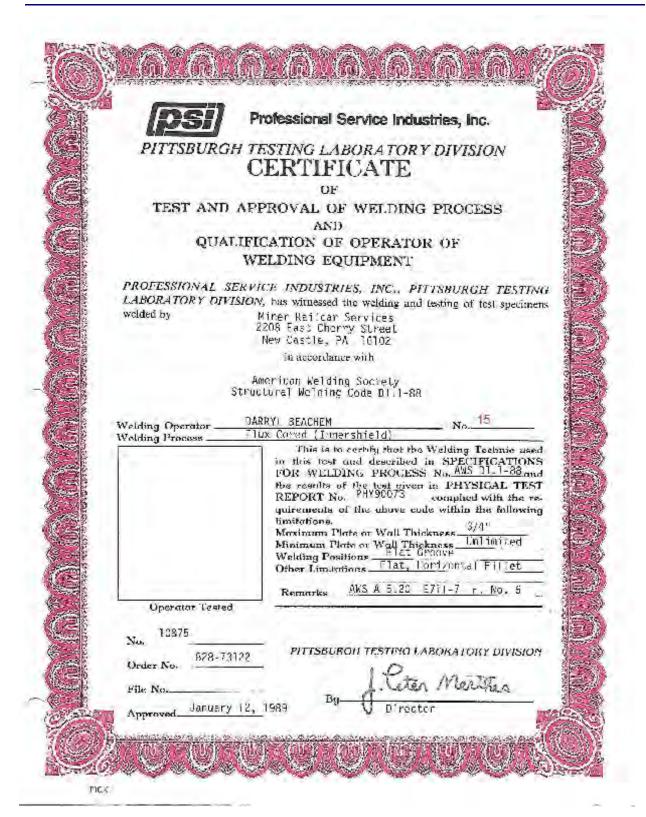
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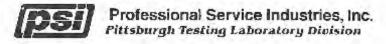
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project



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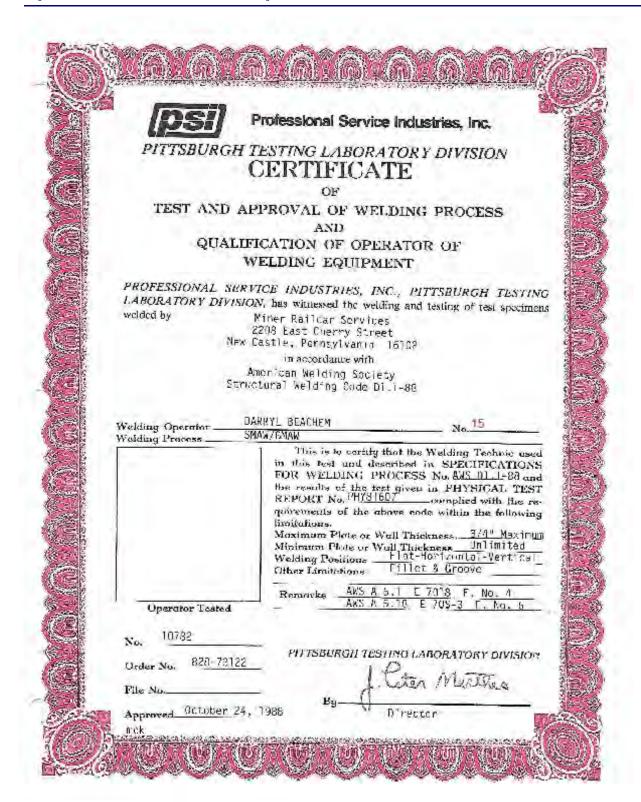
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Professional Service Industries, Inc. Pittsburgh Testing Laboratory Division

650 Puptai Street Pittspirght Pennsylvania (9990 412/922-4000

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project



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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project



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Project: 00225.03.0050 DOE Atlas Project

AWS 315 (0) 5.1M(2007)				والمساوية
				AMNEX D
WEI	DEH AND WELDING OPER	ATOR GUALIFIC	ATION RECOR	to.
Wolder or welding operator Wolding process PCAM	sname GEORGE SEPESTE	Sau Allematic	Identifica	alion no. 825
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

ANNEXIO					AWS DUSING
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ilier metal diami	eter and trade name	1/16" Lincol	 Flux for submit cored are wek 	orgad are or gas for tine 100% CD2	gas metal are or flox
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

AR	EV	A			DATA TRANSMITTAL FORM					
Suppli	ier:	TKA:	SGRO RAII	CORP	P., INC. DTF No: 18A				Page 1 of 1	
P.O./SC	C No:	_	3011916						Dat	e: 4/11/18
Type o			First	[7]	Re-Submit	tal	- 1	SDRL List Item No:		
Submit			☐ Approval	Review	☐ Infor	mation	Numbe	L ber of Copies Subm		1-3
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NUME			DOCUMENT REVISION DOCUMENT NUMBER NUMBER DESCRIPTION			AFS DISPOSITION				
1		W7			Clock #15	Darryl Bea	chem Welding Qualification		cation	AP AWC REV
2		W9			Clock #825	George Se	epesie Weld	ing Qualific	ations	AP AWC REV
3	-	Vacan	4112018 Letter		Letter Turnfer	ing Weider Clur	elfications to Ke	ago flori pre	- 1	AP AWC REV
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AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		Orano Fede	eral Services
orano	,	SUPPLIER DOCUME	ENT SUBMITTAL REVIEW
Supplier / PO	No.:	PTI / 16C3016046	DTF No. / Rev: 018A
Charge No:	01916.01.C	005.08.00100	Due Date: 4/26/2018
Document(s):	See DT	F-018A	
RE	VIEW INSTRUCT	TIONS: (List Supplier Doc. No. and R	ev. FS Spec and Dwg, Codes, Stds, etc.)
PE	Slade Klein		
REVIEWERS	Slade Klein	, Bernie Counterman	
QA	Bernie Cou	nterman	
		Technical Revie	ove .
	arkup Attached	Yes No 🔳	
Technical Rev	viewer(s) (Sign/Da	ate): KLEIN Slade	Digitally signed by KLEIN Slade Date: 2018.04.24 07:52:31 -07'00'
Technical Rev	viewer(s) (Sign/Da	ate): KLEIN Slade Quality Assurance Review (Date: 2018.04.24 07:52:31 -07'00'
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FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

Kasgro Rail Corporation 121 Rundle Road - New Castle, PA 16201 724-658-9061 - 724-658-7856 FAX - www.KASGRO.com





April 11, 2018

Weld Performance Qualification Records.

The weld performance qualification records of the following employees have been reviewed. They conform to the requirements of the American Welding Society D 15.1 Railroad Welding Specification for Cars and Locomotives.

Clock # 15 Darryl Beachem Clock # 825George Sepesie

This review was preformed when the ownership of the company was changed from Miner Railcar to Kasgro Rail Corp.

Reviewed By:

Mark Zeigler

Specialty Rall Car Solutions

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

From: Rick Ford

To: KLEIN Slade (ORN-RE)

CC DENTON Mark (ORN-RE); COUNTERMAN Bernie (ORN-RE); Mark

Subject: Kasgro Welder Identification

Date: Tuesday, April 10, 2018 12:34:37 PM

Attachments: Kaspro Welder List.vis

Slade,

A number of the welder qualifications were developed under previous company names prior to Kasgro ownership using various methods such as social security numbers and/or employee numbers, that are no longer valid.

In reference to issue of welder identification and the original welder qualification records, the method used by Kasgro Rail is to use their current employee number per the attached list.

Sincerely,

Rick Ford Kasgro Rail

From: David Stull <dave@kasgro.com> Sent: Tuesday, April 10, 2018 2:41 PM

To: Rick Ford Subject: FW:

From: Bill Baker [mailto:bbaker@kasgro.com] Sent: Monday, April 09, 2018 6:49 AM

To: dave@kasgro.com

Subject:

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Emp.#	Employee Name
11	James Clark
12	Jim McCready
15	Darryl Beachem
16	Bill Baker
56	Scott Neely
57	Robert Walker
81	Trevor Barker
131	Al Williams
148	Mark Baker
157	Adam Durst
300	Keith Peterson
373	John Novakovich
812	Ryan Vogus
814	Thomas Cummins
815	Leonard Agee
819	Bill Flory
821	Triston Mills
822	Charles Spaulding
823	Steven Presnar
824	Ron Price
825	George Sepesie
826	Randall Robison
834	Matt Smith
836	Paul Klamer
837	Brett Shepard
841	John Henke
842	Neil Shalenberger
843	Josh Clyde
844	Mike Beachem

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

ARI	EVA			DATA TRANS	SMITTAL FO	RM	
Supplie	er. K	ASGRO RA	AIL CORP.	INC. DTF No:	019	- 1	Page 1 of 1
P.O./SC		C3011916	AL COM .	1140.	010	Date	
	f Submittal:		- 0	Re-Submittal	SDRLL	ist Item No	
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Submit	tted By:	RICK FO	1.77	Rick Ford		PRO	JECT MANAGER
		(Name)		(Signa			(Title)
NUME		DOCUMENT NUMBER	REVISION NUMBER		OCUMENT SCRIPTION		AFS DISPOSITION
	KAS	W10		Clock #11 James C	lark Welding Quali	fications	AP AWC REV
2	KAS	W11		Clock #12 Jimmy Mc	Cready Welding Qual	mications	AP AWC REV
3	KAS	W12		Clock #841 John He	nke Welding Qualif	ications	AP AWC REV
			+	Clock #373 John Nov		-	RWC DS RSA
+	KAS	10.77	-	19 3-7-10 Color (2)			RWC DS RSA
5	KAS	W14		Clock #643 Josh Cryde Welding Qualifications			RWC DS RSA
В	KAS	W15		Clock #300 Kelth Pet	erson Welding Qualif	cations	RWC DS RSA
7	KAS	W16		Clock #815 Leonard	Agee Welding Quali	fications L	AP AWC REV
В	KAS	W17		Clock #148 Mark B	aker Welding Quali	fications	AP DAWC REV
9	KAS	W18		Clock #834 Matthew	Smith Welding Quali	fications	AP □AWC □REV
Commi	avest.	comments	on attached		Technical Reviews		
		026. Re-subr Cready (W11)	nit for James	Clark (W10)	Date 4/10/		2018.04.10 04:59:05 -07'00
					, n. 1-4.	2010	
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RWC	Reviewed	with Comment		eed; subject to incorpo			Correct and resubmit
DS	Disapprove	ed	Work may not				Correct and resubmit
	The same of the	omital Acknowledge	d No other action	required.			

AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

		AREVA Federa	al Services LLC
AREV	A	SUPPLIER DOCUMEN	T SUBMITTAL REVIEW
Supplier / PO	No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 019
Charge No:	0022	5.03.0050.02.00001	Due Date: 4/10/2018
Document(s):	See	e DTF No.: 019	
RE	VIEW II	NSTRUCTIONS: (List Supplier Doc. No. and Rev.	AFS Spec and Dwg, Codes, Stds, etc.)
PE	Slad	e Klein	
REVIEWERS	Slad	e Klein, Bernie Counterman	
QA	Bern	ie Counterman	
		Technical Review	
	arkun A		
20 O W 1	viewer C	Comments:	
Technical Rev No additiona	al com	Comments:	KLEIN Slade 2018.04.10 04:53:23 -07'00'
Technical Rev No additiona	al com	Comments: ments.	2018.04.10 04:53:23 -07'00'
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Technical Rev Technical Rev Comments/Ma Technical Rev	viewer Com viewer(s viewer Com vi	Comments: ments. (Sign/Date): KLEIN Slade Quality Assurance Review (As a stached Yes No	2018.04.10 04:53:23 -07'00' Applicable)
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AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Project: 00225.03.0050 DOE Atlas Project



Professional Service incustries, inc. Pittsburgh Testing Laboratory Division

Pitisburgh, Pennsylvania 15220 412422 4000

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older Identification No.	011		Date Teste		L	Lab No.	
lient			4/15/88 Welding Code (ID & year) AWS_DI_,1-88			PHY80142 Cileni Order No.	
Miner Railc 2208 East C	herry Street	Base Material Specification A-36 Group 1					
New Castle,	Specimen	Specimen Specimen Plate D Pipe		Joint Snove Filet			
FEUX CORT		Furnished Others	0.00	Plane Thicks 3/8"			
Institute	al Groove		Ø PTL			Diameter &	Wall Thickness
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Party Thursday, M.D.	- 1	QUALIFI	CATION	RESULTS			
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Remarks & Report Di	stribution (*deno	nes data not provided	or not applica	ive)	Submille	Ceter	Merthe

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Professional Service Industries, Inc. Pittsburgh Testing Laboratory Division 850 Poptar Street Prijeburgh, Pennsylvania 15220 v12/322 4000

Abiden/Weider Operator's Name	WELDING OPERA	Date Reported	1	PTL Order No.	
James Clark		4/29/88		828-73122	
Velder Identification No.	D11	4/15/88		PHY80142	
Miner Railcar Se	rvicas	Welding Code (ID & year AWS D1.1 Base Material Specifican		Client Order No.	_
2208 East Cherry		A-36			
New Castle,PA 1		Specimen Pipe		Joint Groove Fillet	
Proopss GMAW		Specimen Furnished	-	Plate Thickness 1" Thick	
Posnion Vertical	Groove	Specimens Machined [2] FTL Others		Diameter & Wall Thickness	s
Weld Progression ☐ Up ☐ Down	CW Char	Thickness Range Quali Unil imited			
Welding Procedure No. R	ev. No.	Ourrent Volts 18- AMPS: 125-150 1 AC	DOC	Polarity Direct Howar	50
Weiding Procedure Data by: 0	FIL Wrinessed (Tech):		□ Othe	£	-
	FILL	ER METAL			
Specification No. ANS A 5.	18 Classification	E 705-3	F. No.	б	
Backing A-36	Diameter	25.00	Trade Na	ime	
Shielding XX Ges: 75% Ar	gon 25% CO.	15-20	CFH		_
	VISUAL INSPI	ECTION (AWS ON	LY)		
Appearance	Undercut		Piping P	orosity	
Vertical	GUIDED BE	ND TEST RESULT	rs		
TYPE	HESULTS	TYPE		RESULTS	
Face Bend	The second secon	ASS			
Root Bend	HI SELLE	ASS			-
Knot nend		TEST RESULTS			
United Assessment	Filler Stre	120(1)000000			
Weld Appearance Pass Fail	Leg: in x in.	☐ Concavi	ty: i	n. П Convexity:	
	Person [] Fall				_
Fracture Test Results (Describe)	ocation, nature 8 size of any o	cracks or training of the spe-	cimen)		
	RADIOGRAP	HIC TEST RESU	LTS		ė.
FAM Results	: Remarks	Film Mentification	Resu	lts Hemarks	
	-		1	Part I	
Tasts Witnessed by:			-		y-
	QUALIFIC	CATION RESULTS	3		
The Wekler/Operator identified a above for the variables stated.	NOOES DOOES	NOT meet the parlorman	ce qualific	exions specified in the Code	ida
Remarks & Report Distribution	denotes data not provided (ov not applicable)	Submite	Citan Mer	KK, Man



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project



Professional Service Industries, Inc. Fittsburgh Testing Laboratory Division

850 Poplar Street Pinsburgh, Pennsylvania 15220 412/922-4000

WELDE	AND W	ELDING OPERA	TOR QUALIFICA	TION TE	ST REPORT	
Welder/Welder Operator	s Name		0ate Reported 4/29/88		71L Order No. 828-73122	
Milder Identification No.	01	1	Date Tested 4/15/88	1	Lab No. PHY80142	
Client			Welding Code (ID & year) AWS Di., 1-88		Client Order No.	
Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102			Base Material Specification A-36 Group 1			
			Specimen K1 Plate Pipe		loint	
Proceshielded Me	tal Arc W	elding	Specimen Furnished PTL LI Other		Plate Thickness 3/8"	
Position Yertic	al Groove		Specimens Machined		Diameter & Wall Thickness	
Wold Progression [OW TILLER	Thickness Range Quali 3/4" Max	ified		
Welding Procedure No. D1.1-88	AWS Rev. No		Current AMPS: 80-200 AC	The second secon	Polarity □ Direct XX Reverse	
Welding Procedure Data	aby: Det	L Witnessed (Tech):		□ Others	E 41	
		FILL	ER METAL			
	S A 5.1	Classification	E 7018	F No.	F. No. 4	
	36 Steel	Diameter 1 Fig.	1/8"	1180¢ Non	ic.	
Shielding 🔲 588:			CTION (AWS ON	IIVI		
			CHOIA (AMS OF	Piping Po		
Арреагалов	-	Undercut		-4	ОВПУ	
VERTICAL		GUIDED BEN	D TEST RESUL	15		
TYPE		RESULTS	TYPE	-	RESULTS	
Face Bend	Ni Ni	Defects PA	SS		- 8	
Root Bend	No	Defects PA	55			
NOOL DEIN	1 10		TEST RESULTS			
Weld Appearance	Eith	Size				
Pass D Feil	Leg	The state of the s	☐ Gancav	itys in	Convexity:	
Macro Eych Test Result	L Pass	Li Fail				
Fracture Test Results (I	Describe logatio	n, nature & size of any c	racks or toaring of the spe	cimen)		
		RADIOGRAP	HIC TEST RESU	LTS	- W	
Film Identification	Results	Pemarks	Film Identification	Result	s Remarks	
-	-		9-1			
Tests Witnessed by:				× × 1.		
		QUALIFIC	ATION RESULTS	5		
The Welder/Operator is above for the variables	dentified above stated	IX DOES DOES	NOT meet the performan	nce qualificati	ions specified in the Code idea	
Remarks & Report Dis		otes data nat provided or	r not applicable)	Submitte	Eten Mentre	
leg					Men	

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	WELDER AND WELDING OPE	DATOR FULAL ISS	ITION DECORD	
Wickling process I CAV	oris mene JAMISS N. CLA		destitie	ation no. D11
Hostron 3G Vertica (Flat nonzontal overhead in accordance with proce- Material openification	a1. UP i drivertica — Pivertical, state v dura specification no — Pina _ A=36.	dether nyward m apin'i lift <u>er f</u> u	r chewaywens)	
Diameter and wall thicker Thickess range that add if		1		
	1,100	R METAL ficationE_7	19(-) Fre	6
is Backing strip used? Eiter matal dismisterand	Yo <u>s</u> racepame ⊿045 ^M linguli	Flux for such	rerged ara or gas do no 100 %	s for gas reels! argent lina CO2
Appearance Shriste	VISUAL INSP natory Juderyal Name	ECTION	liping parasity	None
	Gulded Be	nt Test Heautis		
ypè	Result	Турс		Hoself
31DE DEND	NO DEFECTS			
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liest conducted by	Tanal J. Karl	- Test date .	6/29/95	-1643
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We, the undersigned, conti- accordance with the ranging	fy that the statements in this repairments of the American Weigling	urdaressin eul ac Ecclety AWS D18.1	Jihar the we'ds w	ere propareg and les eo in
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Torre D 4		Date 65	2995	-

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Position	iding operator's recy <u>F.C.A.</u> <u>4G-OV41an</u>	YL: Memori	Sennas tomat	61 A Mag	
Material appen	ifikation			tordownward) wint fig <u>. no C</u>).B
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Specification Describe 3 fo		k .		197-1 F no	i 6
s backing str Filler matal ci	nplused? laureter and trac	ros do namo _045" Lino	ala Physforsi	Jomerged ard of ya welding1000)	s for gas metal ard or to
Appearance.	Sacusfacto	Ur dercut	ISPECTION None Rent Test Hesuits	Proing perosity	None
т.	урс	Plesuli	7:	/pe	Hesult
SIDE BEY	N)	NO DEPOCIS	1		
SIDE PR	ND -	NO DEFECTS			×
rest ramabucts	- Constant	PETING LABORATORS	Laborati		8F4G-2265
opouranne Tacture test i Describe the	per faux roof penetration location, major	2 Hartin	Test Results Filets.ze	8/25/2003	10
Fiest constitute Augustration Tradition (cost) Describe the Fost conducte	per Face roof penetration location, maler and by	La Harline Street	Test Results Filets.ze	e 8/25/2003 rcoetch ecimen.) Lateratory test; Test cate	10
Appearanne Tracture test i Describe the	per Face roof penetration location, maler and by	La Harline Street	Test (lat. **Test Results **Filets.ze* Me r testing at the sp	e 8/25/2003 rcoetch ecimen.) Lateratory test; Test cate	10
Expourance : Tactors test : Describe the Est conducte Film Lecntifi-	per facult root penetration pocation, maluri activy per	Strate and any precise RADIO GRAD	Test dat Test dat Test dat Test dat Test dat Filet size Me r testing of the sp PHIC TEST RESU Film identifi-	e 3/25/2003 icostan edimen.) Latieratory testr Test cate	10.
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Capeuranus : Tactors test : Describe the Cast conducte Film Leondfi- Leo	per faces root panet/atto, root panet/at	And aventany creek of RADIOGRAI	Test dat Test dat Felt dat Filet size Me restring at the sp PHIC TEST RESU Film identification Ife record are cornect og Society AWS Dit Manufactu	icoetch ecimen.) Lateratory test; Test cate LTS Results sting. and that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the welds well such that the well such	Romarks



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Velder or welding operato	CAMES Mos	CREADY	Moster no012
Arothing process F.C.A	W. Manual	CREADY Ident Serviculomistic X fuert	Aachtine
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mat, nonzonial, overneso Il ≅poolicance with proces	for vertical is rivertical, sta dore specification no.	to whother upward or downward) DURC-0129	
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is backing atrip used?	Yes		
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Satisfy.	VISUAL IN	ASPECTION	
watearance - Date of the	Lindergut Ru	M⊇ Piping porosity	None
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SIDE BENC	NO DEFECTS		
	NO DIFFELIS	_ 1	
Test conducted by KALL	PERTING LADORATINY	Constant service II	E18-2214
501	dul Tail	∠ Laboratory test no	1
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est with usood by	A-2-2-	ecuru Amarmed and thal the welds re Society AWS 195.1. (

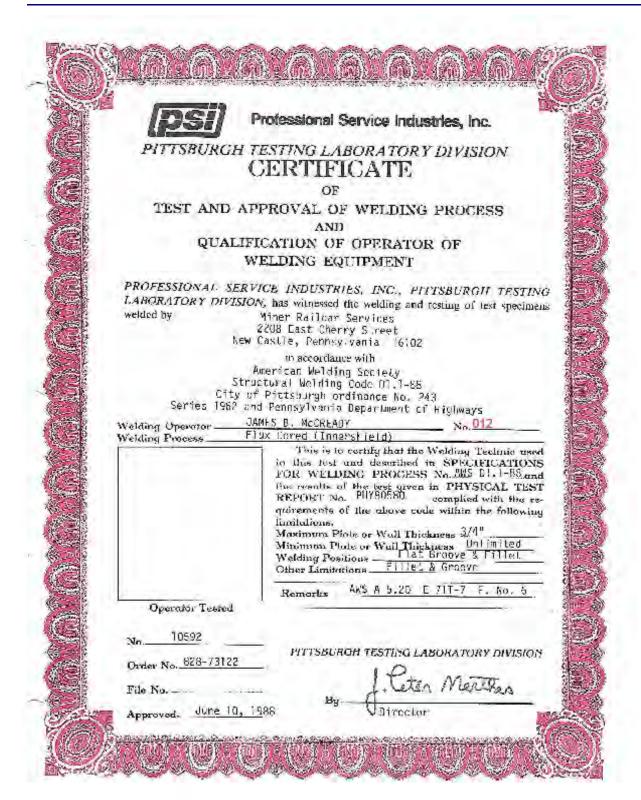
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Professional Service Industries, Inc. Pittsburgh Testing Laboratory Division

859 Poplar Street Patsburgh, Pennsylvania 15220 412922-4000

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT Welder/Welder Operator's Name Date Reported PTL Order No. JAMES B. MCCREADY Jone 27, 1988 828-73122 Wolder Identification No. Date Tested Lab No. 012 June 10, 1988 PHY80580 Wolding Code (ID & year) Client Order No. AWS D1.1-88 Miner Railcar Services Base Material Specification 2208 East Cherry Street A-36 New Castle, PA 16102 Specimen 3 Plate 1. Pipe Croove F. Fillet Process GMAW Specimen Furnished Plate Thickness Z PTL Cibers 3/8" Thick Position Specimens Machined Diameter & Wall Thickness Vertical Groove KI PTL Chers Weld Progression I Up □ cw Thickness Range Qualified Llon 3/4" maximum □ ccw Down RIDL Walding Procedure Curem Volts 18-21 Polarho AMPS:125-150 LI AC 13 DC Nn ☐ Direct LI Reverse Welding Procedure Data by: 1 & PTL Witnessed (Tech): Mike Azzara FILLER METAL Specification No. ANS A 5.18 Classification F. 70 S-3 F. No. 6 Backing Diamater Trade Name 75% Argon 25% CO2 XXXXXXX 15-20 CFH VISUAL INSPECTION (AWS ONLY) Афревталюе Undercut Piping Pornsity **GUIDED BEND TEST RESULTS** VERTICAL RESULTS **HESULTS** FACE BEND Defect Under 1/8"-PASS Delect Under 1/8"-PASS ROOT BEND FILLET TEST RESULTS Weld Appearance Fillet Size Pass ☐ Fall Lear Cl Concavity ☐ Convexity: Macro Etch Tost Hesuits □ Гава Li Fail Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen) RADIOGRAPHIC TEST RESULTS Him Identification Film Dogulla **Hemarks** Results Flemarks Identification Tests Witnessed by: QUALIFICATION RESULTS The Welder/Operator identified above 💆 DOES 📑 DOES NOT intest the performance qualifications specified in the Code identified above for the variables stated. Remarks & Report Distribution, 1"denotes data not provided or not applicable) leter // lerito 41 SCHORDANI SUDMITTER AS THE COMPLEXAND PROPERTY OF CALLY SIGNIFICANCES WERE COMPLESSED ON CALLSONS ON CO. A STREET WAS ARRESTED AND ASSAULT OF CALLS ON CA



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Project: 00225.03.0050 DOE Atlas Project



650 Poplar Street Pittsburgh, Pennsylvania 15293 412/922 4000

	ator's Name		TOR QUALIFICATI	PTL Order No.
	B. McCREADY	1	June 27, 1988	828-73122
Welder identification	012		Date lested June 10, 1988	Lab No. PHV80580
Client			Wording Code (ID & year) AWS DI . 1 - 88	Client Order No.
2208 Fa.	ailcar Servic st Cherry Str	reet	Nase Material Specification A=36 Group 1	
New ras.	tle, PA 1610)2	Specimen XX Plate L Pipe	XXI Groove CI Filte:
Princess Flux	Cored (Inner	rshield)	Specimen Furnished XI PTL L Others	Plate Thickness 3/8"
Position Flat	Groove		Specimens Machined XI PTL Others	Diemeler & Wall Thickness
Weld Progression		CW DLER	Thickness Range Qualified 3/4" max imm	
Wording Procedure No. AWS DT		0	Current AMPS 125-250 ☐ AC .	Polarity L Direct XXX Reverse
Wolding Procedure	Galaby: XI PTL	Witnessed (Tech): M	like Azzara L	J Others:
		FILLE	ER METAL	
Specification No.	AWS A 5.20	Glassif patien	E 71 T-7	No 6
	-36 Stee1	Diameter		rade Name
Sheking i 6a		Flu	~	
		VISUAL INSPE	CTION (AWS ONLY	1
Appearance		Undercut	P	joing Porcetty
Flat Groove		GUIDED BEN	D TEST RESULTS	
TYPE		RESULTS	TYPE	RESULTS
FACE BEND	Defec	t Under 1/8"-PASS		
ROOT BEND	Defe	ot Under 1/814PASS		
KOUT BEND			Page thousand the	
KOUT BEND		FILLET T	EST RESULTS	
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Welc Applearance Pass ☐ Fa	il Leg:		EST RESULTS	In Li Convexity:
Welc Appearance Pass ☐ Fa	il Leg:	Size:		In Li Convexity:
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Welc Applearance Pass Fa Pass Fa Mauro Etch Tost Result Fracture Test Result Film Identif cation ests Witnessad by:	il Leg: cills Li Pass s (Describe location, lilesus; lilesus;	In S In. LI Far rature 8 size of any cre RADIOGRAPH Famules	Concavity: Concav	Rosums Fremarks
Welc Applications Pass Fail Mauro Etch Test Result Fracture Test Result Film Identification Sets Witnessed by: The Welder/Operators Showe for the variable	il Leg: silfs	In S In. LI Far rature 8 size of any cre RADIOGRAPH Famules	CTEST RESULTS Film Identification TION RESULTS The main metities performance quality.	

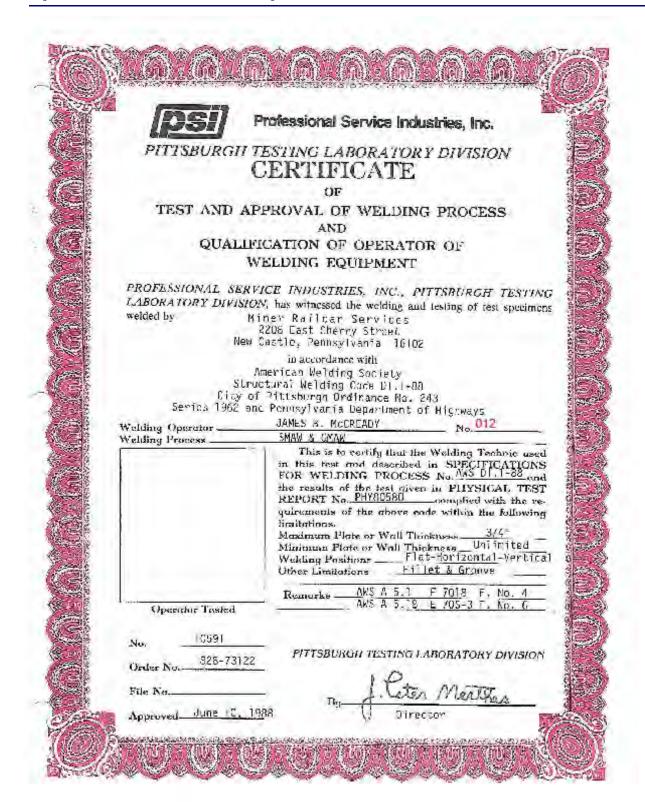
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WELL	ER AND	WELDER OPERA	TOR QUALIFICA	TION	FOT DECOME
Welder/Welder Operato	e's Name			ATTOM &	A Carrier of the Carr
JAMES B.	McCreacy		June 27, 1988	A.	971. Order No. 828-73122
Worder Identification No	012	-	Date Tested		Lab No.
Chem	-		June 10, 1988		PHY80580
Miner Raile	ar Servi	res	AWS D1.1-88	13/7	
2208 East C	herry Sti	reet.	Base Material Specific	ation	
New Castle,	PA 1610	75	A-36		
L			Specimen		Joint Caroons C Filter
Process	3		Specimen Furnished		Plate Thickness
Shielded Hetal	Arc Wele	ing	MPTL DOM	ra:	3/8"
Vertical Greev	4		Specimens Machined	-	Diamoter & Well Thickness
Mistac		DOW DLOR	Michness Range Qua		-
	Down i	DCCW DRIEL	- FACTORESS Hange Qual	3/4" Na	x imum
Worlding Procedure AM: No. D1.1-88	S Roy, N		Current		Poisrty
Welding Procedure Data			AMPS: 80-2000 AC		Di Direct IOI Removae
			Mike Azzara	☐ Other	nc.
		FILLE	ER METAL		
Specification No. AWS Backing A-36 Stes	A5.1		7018	F.Na. 4	
Shielding Diggs	E.L	Diameter 1/8		Trade Na	Ú1-9
-		VISUAL INSPE	CTION (AWS ON	LY)	
opposition		Undertail		Piping Po	wosity
VERTICAL.		GUIDED BEN	D TEST RESULT	2	
TYPE		RESULTS	TYPE	~	RESULTS
SIDE BEND	Defi	ect Under 1/8"-PASS	1112		MESULIS
SIDE BEND					
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Pass FRM Recro Elich Yest Results recture Test Results (De: Film ksentification	D Pass sconbe location	D Fan Unature & size of any crac RADIOGRAPH Hemarks QUALIFICA	IC TEST RESULT Film Identification	rnen) TS Resulta	



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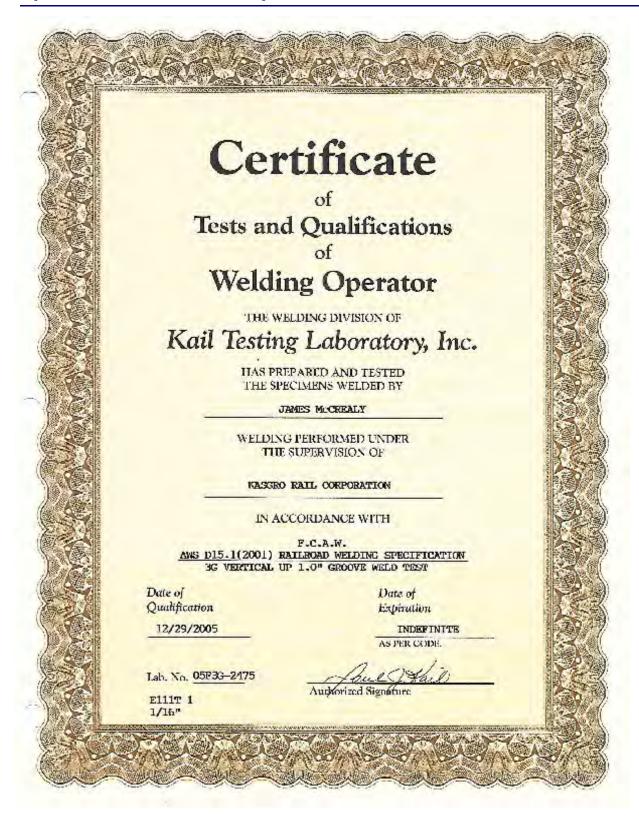
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Neores: John Honks:			oda: _AWS D15.1/D13.1M-2012
Type of Western Somi Automatic		Identification Num	ber 841
Welding Procedure Specification No.	T-001	Rev. 0	Date: 4/13/2016
Variables	Day	and Antasi Vektos	
Propess/Type	4004	FCAW	Cambification Range
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Filler	100	NA	1/\$" to Unimented
Diesaster (Piec)			
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Film evaluated by: NVA		Company:	
Mechanical tests conducted by: Tom	Pless/Rich Poster		Test Number: 151996
Wolding supervised by: Mari	Ziegler		ainland inclustrial Solutions
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Welder or wal	lding operators nan	e JOHN BOVAKO	VICH LLI	Identifica	tion no. 373
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Kasgro Rail Corp

121 Rundle Road New Castle, PA 16102

AWS - WELDER PERFORMANCE QUALIFICATION TEST RECORD

Name: Josh Clyde Type of Welder: Semi Automatic	Welding C Identification Num	ode: AWS D15.1 2012
Welding Procedure Specification No.	F-001 Rev: 0	Date: 9/5/2017
Variables	Record Actual Values	C. V. Springer
Process/Type	FCAW	Qualification Range
Electrode (single/multiple)	The state of the s	FCAW
Current/Polarity	Single	Single
The state of the s	DCEP	77.4 - 132. 2 - 1379. 1 - 127
osition	3G	Flat and Vertical Fillet and Groov
Weld Progression	Uphill	UphiU
Backing (With or Without)	With	Backing Only
Material/Spec	A572 Gr50 to A572 Gr50	All AWS Prequalified Material
Base Meral		i
Thickness: (Plate)	•	4.84
Groove		1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	N/A	1/8" to Unlimited
Fillel	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	Greater Than 24" OD
Fillet	N/A	Any Diameter
Filler Metal		
Spec. No.	A520	
Class	F71 T-1	
F-No.	6	F6
Jas/Plux Type	CO2	
Other	N/A	N/A
Unided Bond Test Results Type Side Bend	Result Type PASS	compon welded: 9/5/2017 Result
Side Bend	PASS	and the process of the contract of the contrac
illet Test Results	rass	mere, me, and have to be a consequent to
Appearance: N/A	Fillet Size:	
racture Test Root:	Managarah.	
	of any crack or tearing of the specimen):	
Radiographic Test Results Film ID Results	Remarks Film ID	Results Remarks
N/A Results	Remarks 1 mm m	Results Remarks
Film evaluated by: N/A	Company:	
		ry Test Number: 154187
Welding supervised by: 50071 /	Company: TLVR	theinland Industrial Solutions
The welder identified above 🕠 🕠	PASSES. FAILS based on the re	equirements of the code listed above.
min 1	n n —	
Reviewer's Signature	D. D.	atc: 9/12/17
0		
We, the undersigned, certify that the tested in conformance with the requi- Locomotives.	statements in this record are cornect and that it rements of Section 11 of AWS D15.1 (2012) year	he test welds were prepared, welded, and Railroad Welding Specification for Cars an
nfacturer or Contractor Kasgro Spe	cialty Railear	
horizai By Mark Zeigler		Date: September 12, 2017

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E • MECHANI	CAL LAB • ENVIRONMENT	TAL ww	w.tuvris.com	Industrial	Solutions
		GUIDED	BEND TEST		
Mr, Mark Zeigle Kasgro Rail Cor 121 Rundle Roa New Castle, 124	orstion i		Report #: PO #: Lab #: Date Receiv		l of
Date: Septerol	ber 12, 2017		Work Orde	1 463668	
PQR#:	N/A		Welder ID;	Josh Clyde - 843	
Process:	FCAW		Position:)G	
Base Metal(s)	A572 Gr50 to A572 Gr50		Coupon Shape:	1"Plate	
Test #	Orientation	Result	Test#	Orientation	Result
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2	Side	PASS			
	Wrap Around Bend Jig:	Equip	pment Used:	X Guided Fixture	***************************************
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Pin Diameter:	AWS D15,1	[2	X Conforming	1 Trion Conton	ming
TO STATE OF THE PARTY OF THE PA		1 2	X Conforming	T Tron Camer	ming
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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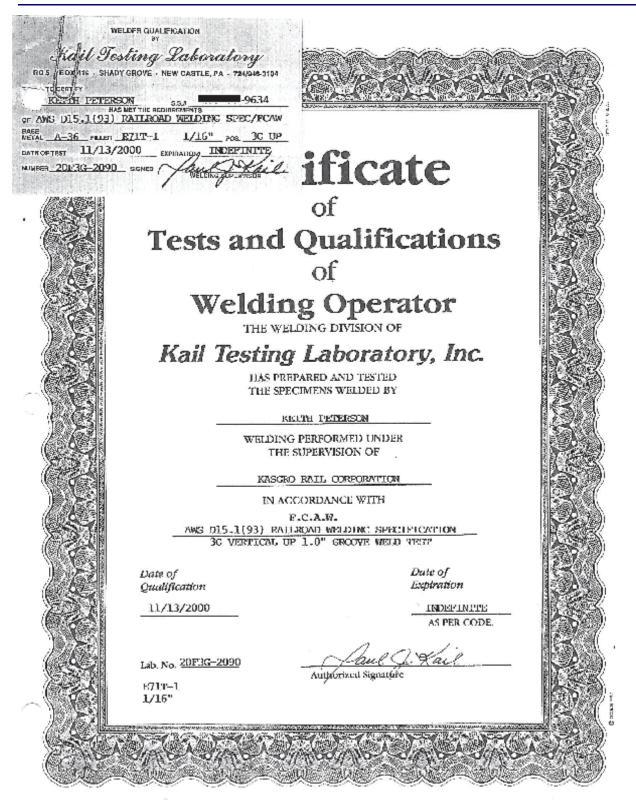
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Material specification 📖	A-36			
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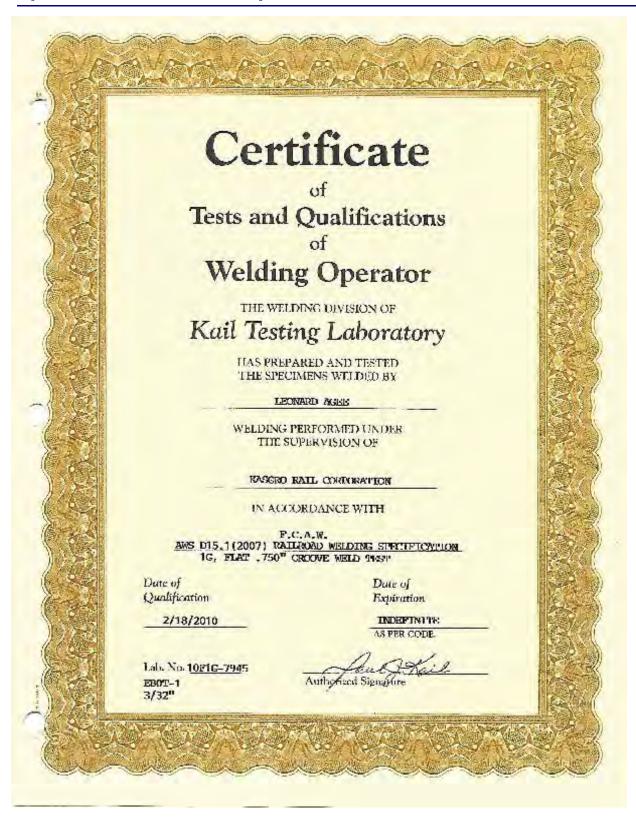
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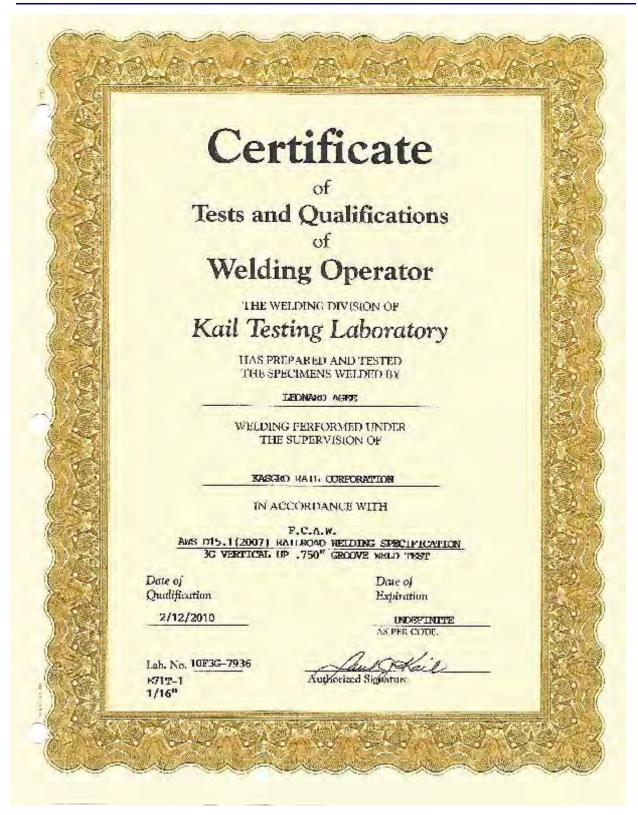
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

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Reported To:	Mr. Dave Stab Kasgro Rail Co 121 Rundle Ro New Castle, Pa	нгр ad	P/O Number: Report Number: Project:	December 11, 2014 QAF I Welder Qualification
AWS - WELDER	WELDING O	PERATOR OR	TACK WELDER QUA	LIFICATION TEST RECOR
Name: Matthe	w Smith		Welding Co	de: AWS D15.1/D15.IM-2012
Type of Welder: S Welding Procedure S	cmi Automatic	F-001	Identification Numb	
and the second second second second	Victoria Santa Carlo State Const.		Rev: 6	Date: 12-11-14
Variebi	es	Rocco	rd Actual Values	Qualification Range
Process/Type	W-1-V	- 100 C C C C C C C C C C C C C C C C C C	FCAW	FCAW
Electrode (single/mu)	minte)		Single	Single
Current/Polarity Position			IXCEP	Flat, Vertical, Herizontal Fill
Weld Progression	······································		3G makin	Grnove
Backing (With or Wi	chene)		Uphill With	Ophill
Material/Spec	cuciii)	A36	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	With
Base Metal		N30	to A36	All AWS Proqualified Mate
Thickness: (Plate)				1
Omove			311	1/8" to unlimited
Fillet.			N/A	1/8" to unlimited
Thickness: (Pice/tu	(be)		(MI)	The lie tabilities
Groove			N/A	1/s* to unlimited
Fillet			N/A	1/8* to unlimited
Diameter: (Pipe)	-			100000000000000000000000000000000000000
Groove			N/A	24" and greater
Fillet			NA	Any Diameter
Filler Metal				
Spec. No.			A5.20	
Class			E71T-1	
F-No.			6	6
GastFlux Type			160% CO ₂	
Other		The second section of the second	N/A	Not an essential variable
VISUAL INSPECT		ble: Y	cs No Date	соврен weldesh: <u>12/11/14</u>
Guided Bend Test R Type	esults.	Result	Toma	Result
Side Rend	T No	Defects - PASS	Турс	Rusan
		Defects - PASS		And the second s
Side Rend	1 200	werens - Finds		
Side Bend Fillet Test Results	***		Fillet Size:	
Fillet Test Results	li A			
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Page F-328 May 1, 2019

100 INDUSTRIAL DOULDY ARD a ALIQUIPPA, PA 45001 a TELEPHONE (724)-378-3900 → FAX (724)-378-3940



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Attachment 49

	y			Orano	Feder	al Servic	es		
oral	10		DATA TRANSMITTAL FORM						
Supplier: KASGRO RA			CORP.	INC.	DTF No	019A			Page 1 of 1
P.O./SC N							-	Dat	te: 05/14/18
Type of S	Type of Submittal: First			Re-Submit	tal		SDRL Lis	t Item N	o: 20
Submitte	d for:	☑ Approval	☐ Approval ☐ Review ☐ Information Number of Copies Subs		es Subr	nitted: 1			
Submitte	d By:	RICK FO	RD	Rick	Ford	Digitally signed to Date: 2016.05.14 -04'02'	y Rick Ford 168:06:37	PRO	JECT MANAGER
	-	(Name)			(Signa				(Title)
ITEM NUMBER		DOCUMENT NUMBER	REVISION NUMBER			OCUMENT		T	FS DISPOSITION
	KAS			Clock #10		Clark Weldin	g Qualifica	ations	AP AWC REV
	7 2 2 2			Clock #44	Name of the	Cready Weld	las Ousliks	akaas	RWC DS RSA AP AWC REV
2	KAS	W11		Cioca #11	Jimmy MC	Cleady Weld	ing Quanic	duone	RWC DS RSA
3	KAS4	112018 LETTER		Letter Transferring Welder Qualifications to Kasagro from previous company name				☑ AP □ AWC □ REV □ RWC □ DS □ RSA	
	111								□ AP □ AWC □ REV
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AP	Approved	- i	Work may proce	eed.					Resubmittal is not required
AWC	Approved w	ith Comment	Work may proce	ed; commer	ts provided	d for Supplier	s considerat	ion only.	Resubmittal is not required
REV	Reviewed		Work may proce	ed; commen	rts provided	for Supplier	s considerat	lon only.	Resubmittal is not required
RWC	Reviewed w	ith Comment	Work may proce Buyer commer		to incorp	oration and	compliance	w/	Correct and resubmit
DS	Disapproved	1	Work may not						Correct and resubmit
RSA	Receipt Sub	mittal Acknowledged	No other action	required.					
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FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

0		Orano Fede	eral Services
orano	ENT SUBMITTAL REVIEW		
Supplier / PO	No.:	PTI / 16C3016046	DTF No. / Rev: 019A
Charge No:	01916.01.	C005.08.00100	Due Date: 5/28/2018
Document(s):	See DT	F No.: 019A	
RE			ev. FS Spec and Dwg, Codes, Stds, etc.)
PE	Slade Klein		
REVIEWERS	Slade Kleir	n, Bernie Counterman	
QA	Bernie Cou	interman	
		Technical Revi	w
Comments/M	arkup Attached	Yes No	
Technical Rev	viewer Comments	5	
Technical Rev	viewer(s) (Sign/D	ate): KLEIN Slade	Digitally signed by KLEIN Slade Date: 2018.05.21 09:15:23 -07'00'
		Quality Assurance Review	As Applicable)
Comments/M	arkup Attached	Yes No 🔳	
Technical Rev	viewer Comments	5:	
No Comme	nts		
OA Davidson			
QA Reviewen	(s) (Sign/Date):	Brand Count	Digitally signed by Bernard Counterman Date: 2018.05.21 13:54:27 -07'00'
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FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Kasgro Rall Corporation 121 Rundle Road - New Castle, PA 16102 724-658-9061 - 724-658-7856 FAX - www.KASGRO.com





April 11, 2018

Weld Performance Qualification Records.

The weld performance qualification records of the following employees have been reviewed. They conform to the requirements of the American Welding Society D 15.1 Railroad Welding Specification for Cars and Locomotives.

James Clark James McCready

This review was preformed when the ownership of the company was changed from Miner Railcar to Kasgro Rail Corp.

Reviewed By:

Mark Zeigler

Specialty Rail Car Solutions

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

From: Bick Ford

To: KLEIN Slade (ORN-RE)

Co DENTON Mark (ORN-RE); COUNTERMAN Bernie (ORN-RE); Mark

Subject: Kasgro Welder Identification

Date: Tuesday, April 10, 2018 12:34:37 PM

Attachments: Kaspro Welder List.xls

Slade,

A number of the welder qualifications were developed under previous company names prior to Kasgro ownership using various methods such as social security numbers and/or employee numbers, that are no longer valid.

In reference to issue of welder identification and the original welder qualification records, the method used by Kasgro Rail is to use their current employee number per the attached list.

Sincerely,

Rick Ford Kasgro Rail

From: David Stull <dave@kasgro.com> Sent: Tuesday, April 10, 2018 2:41 PM

To: Rick Ford Subject: FW:

From: Bill Baker [mailto:bbaker@kasgro.com] Sent: Monday, April 09, 2018 6:49 AM

To: dave@kasgro.com

Subject:

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Emp.#	Employee Name
11	James Clark
12	Jim McCready
15	Darryl Beachem
16	Bill Baker
56	Scott Neely
57	Robert Walker
81	Trevor Barker
131	Al Williams
148	Mark Baker
157	Adam Durst
300	Keith Peterson
373	John Novakovich
812	Ryan Vogus
814	Thomas Cummins
815	Leonard Agee
819	Bill Flory
821	Triston Mills
822	Charles Spaulding
823	Steven Presnar
824	Ron Price
825	George Sepesie
826	Randall Robison
834	Matt Smith
836	Paul Klamer
837	Brett Shepard
841	John Henke
842	Neil Shalenberger
843	Josh Clyde
844	Mike Beachem

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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P.O./SC	C No:	-	3011916	ar oora .		020		Date		
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Submi	tted By	K	ICK FO	טאט	Rick Ford		19:33:97	PRO	JECT MANAGER	
			(Name)		(Signati	ure)			(Title)	
NUME			OCUMENT NUMBER	REVISION NUMBER		CUMENT	la .		AFS DISPOSITION	
(KAS W	19		Clock #844 Michael Be	sacham Wei	ding Qualifi	cations	AP AWC REV	
2	1	KAS W	20		Clock #842 Nell Shelen	berger Weld	drig Qualific	ations	AP AWC REV	
3		KAS W	21		Clock #836 Paul Kla	mer Weldi	ing Qualific	ations	AP AWC REV	
	-		74	1				RWC DS RSA AP AWC REV		
	- 1	KAS W	22	-				RWC DS RSA		
i	- 1	KAS W	23		Clock # 37 Robert Walker Weiding Qualifications			RWC DS RSA		
3	1	KAS W	24		Clock #624 Rohald Price Welding Qualifications			☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA		
7		KAS W	25		Clock #812 Ryan Vogus Welding Qualifications			AP AWC REV		
3	1	KAS W	26		Clock #56 Scott Neely Welding Qualifications			AP DAWC DREV		
9	- 1	KAS W	27		Clock #823 Steven Persnar Weiding Qualifications			AP AWC REV		
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AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

See DTF No.: 020 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein	A	П	AREVA Federal Services LLC					
harge No: 00225.03.0050.02.00001 Due Date: 4/10/2018 Document(s): See DTF No.: 020 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein EVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Reviewer Comments/Markup Attached Yes No echnical Reviewer Comments: O comments. Reviewer(s) (Sign/Date): KLEIN Slade Quality Assurance Review (As Applicable) Comments/Markup Attached Yes No echnical Reviewer Comments: andall Robinson - 1G & 3G qualification ID #2880. 4G qualification ID #478 Digitally signed by Bernard Counterman Date: 2018.04.05 15:58:54-07:00*	AREV	A	SUPPLIER DOCUMENT	T SUBMITTAL REVIEW				
harge No: 00225.03.0050.02.00001 Due Date: 4/10/2018 Document(s): See DTF No.: 020 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein EVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Reviewer Comments/Markup Attached Yes No echnical Reviewer Comments: O comments. Reviewer(s) (Sign/Date): KLEIN Slade Quality Assurance Review (As Applicable) Comments/Markup Attached Yes No echnical Reviewer Comments: andall Robinson - 1G & 3G qualification ID #2880. 4G qualification ID #478 Digitally signed by Bernard Counterman Date: 2018.04.05 15:58:54-07:00*	Supplier / PO	No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 020				
See DTF No.: 020 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, Stds, etc.) PE Slade Klein EVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Review comments/Markup Attached Yes No echnical Review comments. Reviewer(s) (Sign/Date): KLEIN Slade Quality Assurance Review (As Applicable) comments/Markup Attached Yes No echnical Reviewer Comments: andall Robinson - 1G & 3G qualification ID #2880. 4G qualification ID #478 A Reviewer(s) (Sign/Date): Bernard Counterman Date: 2018.04.05 15:58:54-07:00*	Charge No:	0022						
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Bate: 2016.91.00 16.66.01 87 00								
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessar								
	QA Reviewen	(s) (Sig	n/Date):Bernard Counterman					
	A SELLINA	506	Committee of the Commit	Date: 2018.04.05 15:58:54 -07'00'				
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AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Orano Federal Services

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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Kasgro Rail Corp

121 Rundle Road New Castle, PA 16102

WELDER PERFORMANCE QUALIFICATION TEST RECORD

		Identification N	lumber: 344	
Welding Procedure Specification No	. F-001	Rev:		ate: 10/2/2017
Variables	Record /	Actual Values		Qualification Range
rocess/Type	1	CAW		FCAW
lectrode (single/multiple)		Single		Single
urrent/Polarity	the second secon	XCEP	The second second	- Lining III
asitioa	 	3G	Clat or	nd Vertical Fiftet and Groov
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acking (With or Without)		With		
faterial/Spec	A572 Gr50			Backing Only
ase Metal	A572 GE90	to A572 Gr.	10 All.	AWS Proqualified Material
TOP I A SHARE				
Thickness: (Plate)	-	60		1 10 W - 12 W - 1 W
Groove		1"		1/8* to Unfimited
Fillet		N/A		1/8" to Unlimited
Thickness: (Pipe/tube)				100
Groove		N/A		1/8" to Unlimited
Fillet		N/A		1/8" to Unfimited
Diameter: (Pipe)				
Groove	1	N/A		Greater Than 24" OD
Fillet	distribution to the second of	N/A		Any Diameter
iller Metul			MATERIA POR LINE	
Spec. No.	1	A5.20		
Class	+	711-1	CLO FOR IT WO	
F-No.		6		16
tas/blux Type	A STATE OF THE PARTY OF THE CO.	CO2		
Piner		N/A	www.cc. v.	N/A
Fulded Bend Test Results Type Side Bend	Result PASS	No I	Pate coupon we) be	ded: 16/7/2017 Result
Side Bend	PASS			
fillet Test Results	PASS	la company		
illet Test Results	PASS	Fillet Size: N	/Λ	Anna Lana Anna Anna Anna Anna Anna Anna
fillet Test Resulfs ppearance: N/A racture Test Root: N/A		Macroetch: N	/A /A	
Gilet Test Results appearance: N/A fracture Test Root: N/A		Macroetch: N		
file! Test Besuits ppearance: N/A racture Test Root: N/A Describe the location, nature, and si		Macroetch: N		
file! Test Besuits ppearance: N/A racture Test Root: N/A Describe the location, nature, and si		Macroetch; N. g of the specimen):		Romarks
file! Test Results Appearance: N/A Facture Test Root: K/A Describe the location, nature, and si Radiographic Test Results Film ID Results	ize of any crack or tearin	Macroetch: N	/A	Remarks
file! Test Results Appearance: N/A racture Test Root: N/A Describe the location, nature, and si Radiographic Test Results Film ID Results N/A	ize of any crack or tearin	Macroetch: N. g of the specimen): Film ID N/A	Results	Romarks
file! Test Results Experience: N/A Facture Test Root: N/A Describe the location, nature, and si Radiographic Test Results Film III Results N/A Film evaluated by: N/A	ize of any crack or tearin Remarks	Macroetch: N. g of the specimen): Film ID N/A Company: N/	Results	1
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File! Test Results Appearance: N/A recurse Test Root: N/A Describe the location, nature, and si Radiographic Test Results Filin III Results N/A Film evaluated by: N/A Acchanical tests conducted by: Te	ize of any crack or tearin Remarks	Macroetch: N. g of the specimen): Film ID N/A Company: N// Labor	Results Results	1
illet Test Besuits ppearance: N/A racture Test Root: N/A Describe the location, nature, and si adiographic Test Results f'ilin ID Results N/A Film evaluated by: N/A lechanical rests conducted by: Te felding supervised by:	ize of any crack or tearin Remarks	Macroetch: No. No. No. Film ID	Results Results Yeatory Test Nurr V Kheinland Inc	iber: 154283 #
File! Test Results Appearance: N/A recurse Test Root: N/A Describe the location, nature, and si Rediographic Test Results Film D: Results N/A Film evaluated by: N/A Achanical resis conducted by: Te Velding supervised by:	Remarks The Plese/Tim Clark PASSES, FA the statements in this rece	Waercetch: N. g of the specimen): Film ID N/A Company: N/ Labor Company: T1. ILS based on the	Results Results Tatory Test Num V Kheinland Induction requirements at the test welds	ther: 154283 dustrial Satutions of the code listed above.
Fillet Test Results appearance: N/A recurse Test Root: N/A Describe the location, nature, and si Radiographic Test Results Film BD Results N/A Film evaluated by: N/A dechanical tests conducted by: Test Welding supervised by: The welder identified above X We, the undersigned, certify that tested in conformance with the recursions.	Remarks Remarks om Plese/Tim Clark PASSES,FA the statements in this recognificancits of Section 11 of	Macroetch: Nog of the specimen): Film ID N/A Company: N// Labor Company: T1. ILS based on the specimen of AWS D15.1 (2015)	Results Results Tatory Test Num V Kheinland Induction requirements at the test welds	ther: 154283 dustrial Satutions of the code listed above.
Fillet Test Results appearance: N/A recurse Test Root: N/A Describe the location, nature, and si Radiographic Test Results Film BD Results N/A Film evaluated by: N/A dechanical tests conducted by: Test Welding supervised by: The welder identified above X We, the undersigned, certify that tested in conformance with the recursions.	Remarks Remarks om Plese/Tim Clark PASSES,FA the statements in this recognificancits of Section 11 of	Macroetch: Nog of the specimen): Film ID N/A Company: N// Labor Company: T1. ILS based on the specimen of AWS D15.1 (2015)	Results Results Tatory Test Num V Kheinland Induction requirements at the test welds	ther: 154283 dustrial Satutions of the code listed above.
Gilet Test Results Appearance: N/A Fracture Test Root: N/A Describe the location, nature, and si Radiographic Test Results Film BD Results N/A Film evaluated by: N/A Mechanical tests conducted by: Te Welding supervised by: The welder identified above X We, the undersigned, certify that tested in conformance with the receivable.	Remarks Remarks om Plese/Tim Clark PASSES,FA the statements in this recognificancits of Section 11 of	Macroetch: Nog of the specimen): Film ID N/A Company: N// Labor Company: T1. ILS based on the specimen of AWS D15.1 (2015)	Results Tatory Test Num V Kheinland Indicate requirements at the test welds Railroad Wei	ther: 154283 dustrial Satutions of the code listed above.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Golded Bend Tost Reputi RI K 0.720.19

Project: 00225.03.0050 DOE Atlas Project

rand Rapids, MI	– Pittsburgh, PA – Birmingha	um, AL			einland [®]
AE • MECHANI	CAL LAB • ENVIRONMENT	CAL WY	vw.tuvris.com	Industrial	Solutions
		GUIDED	BEND TEST		
Mr, Mark Zeigler Kusgro Rail Con 121 Rondle Roet New Castle, PA	oration I		Report #: PO #: Lab #: Date Receiv Date Tested	1 34 350 853 81	l of
Date: October	5, 2017		Work Order	: 464194	
PQR #:	N/A		Welder ID:	Michael Beachem - 844	
Process:	FCAW		Position:	3G	W. Wall
Base Metal(s)	A572 Gr50 to :A572 Gr50		Coupen Shape:	l"Plate	
Test#	Orientation	Result	Test#	Ovientation	Result
t.	Side	PASS			
2	Side	PASS			
	Wrap Around Bend Jig:	Equi	pment Used:	X Guided Fixture	÷
Pin Diameter:	1.5"		L	A Guided Pixiale	
Specification: Test Witness By:	AWS DIS.1	[3	X Conforming	Non-Confer	ming
Test Technician:	Tom Plese				
			Respectful	ly submitted,	
				(Jank 2017,10,05 11:24:16	94100
			Tim Clark		violet.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

Kasgro Rail Corp

121 Rundle Road New Castle, PA 16102

AWS - WELDER PERFORMANCE QUALIFICATION TEST RECORD

Nume: Neil Shelenberger		Welding Code	: AWS D15.1 2012		
Type of Welder: Semi Automatic	7	Identification Number			
Welding Procedure Specification No.	F-001	Rev: 0	Date: <u>8/15/2017</u>		
Variables	Record Ac	ensal Values	Qualification Range		
Process/Type	FC	AW	FCAW		
Edectrode (single/multiple)	Si	ngle	Single		
Current Polarity		CLP			
Position		3G	Flot and Vertical Fillet and Groov		
Weld Progression		phill	Uphill		
Backing (With or Without)		vith	Dacking Only		
Material/Spec		A572 Gr50	All AWS Prequalified Material		
Base Metal	A272 0130 1	3512,0150	All A w 5 Frequence statement		
Thickness: (Plate)					
Groove		I"	1/8" to Unlimited		
Fillet		VA	1/8" to Unlimited		
	P	OA.	178 to Chimneso		
Thickness: (Pipe/tube)		71.5	ORD Y1-12		
Groove		VA.	1/8" to Unlimited		
Fiflet	1	VA.	1/8" to Unlimited		
Diameter: (Pipe)					
Groove		VA.	Greater Than 74" OD		
1 illet	1	√A	Any Diameter		
Filler Metal					
Spec. No.		5.20			
Class	177	H-I	4		
F-No.		6	F6		
Gas/Hux Type		O3			
Other)	N/A	N/A		
VISUAL INSPRCTION Accepta	ble: Yes	No Date co	upon welded: 8/15/2017		
Guided Bend Test Results	10.	140 000000	aport ribided. 415.2011		
Type	Result	Туре	Result		
Side Bend	PASS	2790	100 activ		
Side Bend	PASS				
Fillet Test Results	17635	reservative subsequences controlled	D.D		
Appearance: N/A	1	Fillet Size:			
Fracture Test Rooc		Macroetch:			
7.5-55-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5	a francisco de la contractica		A CONTRACTOR OF THE PROPERTY O		
(Describe the location, nature, and size	of any crack or rearing	of the specument.			
Radiographic Test Results Film ID Results	Remarks	Film ID R	osults Remarks		
N/A	CHIAPES	FIRM ID IX	Osuits Retuality		
	<u></u>		Andrew Control of the		
Film evaluated by: N/A	Disco Disk and Destroy	Company:	D		
	Plese/Richard Portman		Fest Number: 154115		
Welding supervised by: エンガ	NEZZY	Company: TUV Rhe	inland Industrial Solutions		
The welder identified above	PASSES, FAII	S based on the requ	irements of the code fisted above.		
Reviewer's Signature:	Sijke	Dates	&/24/2017		
We, the undersigned, certify that the tested in conformance with the required Locomotives.	e statements in this recording the statements of Section 11 of	d are correct and that the t AWS D15.1 (2012) Rai year	est welds were prepared, welded, and Irond Welding Specification for Cars a		
anufacturer or Contractor <u>Kassero Spe</u>	cialty Railcar				
nthorized By Mark Zeigler		D	atc August 17, 2017		

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Project: 00225.03.0050 DOE Atlas Project

nti Rapids, 311	- Pittsburgh, PA - Birmingh	iam, AL			einland*
e • MECHANI	CAL LAB * ENVIRONMEN	TAL we	vw.tuvris.com	industrial	SCILLIONS
		GUIDED	BEND TEST		
Ar, Mark Zeigle Jasgro Ruil Con			Report#: PO#:	463300A Page K17-2045	l of
21 Rundle Road	1		Lab #:	154115	
New Castle, PA	16102		Date Receiv Dare Tested		
Date; August.	22, 2017		Work Order	r: 463300	
PQR #:	N/A		Welder ID:	Noil Shelenberger - 842	
Process:	FCAW		Position:	3G	
Base Metal(s)	A572 Gr80 to A572 Gr50		Coupon Shape:	I* Plate	
Test#	Orientation	Result	Test#	Orientation	Result
Į.	Side	PASS			
2	Side	PASS			
		Equip	oment Used:		
in Diameter:	Wrap Around Bend Jig: 1.5**		[X Guided Fixture	
pecification:	AWS D15.1	1 2	[] Conforming	Non-Conform	ning
est Wilness By:					
est Technician:	Tom Plese				
			Respectful	lly submitted,	
				Tion Clark 2017:00:22 11:33:07 04:00*	
			Tim Clark		
			Laboratory	y Manager ioland Industrial Solutions, In	

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

	Mr. Deve Stah Kasgro Rail Ci 121 Rundle Ro New Castle, P.	orp xxl A 16102	Date: P/O Number: Report Number: Project:	December 11, 2014 QAF 1 Welder Qualifysation	
		PERATOR OR 1	FACK WELDER QUAI		
Name: Paul Klar			Welding Cod	k: AWS D15.1/D15.1M-	2012
Type of Welder: See Welding Procedure Spe		K-IMI1	Identification Number Rev: 0	Date: 12-11-14	-
Variables		Record	d Actual Values	Qualification R	muo
Process/I vne	mercial processing	Access	FCAW	PCAW	mgo
Electricie (single/multip	olu)		Single	Single	
Current/Polarity			DCEP	Flat, Vertical, Horizon	tal Fille
Position			3G	Greove	
Weld Progression			Uphill	Uphili	
Recking (With or Withe	шт)		With	With	
Material/Spec		A36	to A36	All AWS Prequalified	i Materi
Base Metal					
Thickness: (Plate)			7.0		
Groove Fillet			ξυ 810	1/8" to calling	
Thickness: (Pine/Inde	ō.		N/A	U8° to calimi	en
Croove	9		N/A	1/8" to unlimit	ssá.
Fillet			N/A	1/8" to unline:	
Diameter: (Pipe)		The state of the s	.va	LAS TO BEGINE	100
GISHIYB			N/A	24" and great	er
Fillet	IN SERVICE CONTRACTOR		N/A	Any Diamete	
Filler Motal					Section Co.
Spec. No.			A5.20	1	
Class			671T-J		
F-No.			6	6	
Gas/Flux Type			00% CO ₂		2.44
Other			N/A	Not an essential v	ariable
VISUAL INSPECTIO		ible: N Ye	es No Date o	oupon welded: 12/11/14	
Guided Bend Test Res Type	uits	Result	Type	Resi	171
Side Bend	I No	Defects - PASS	1224	T	LIL.
Side Bend		Defects - PASS			
Fillet Test Results		A SMY			
Appearance: N/A	£		Fillet Size:		
Authoritation 1977	Property and the second		Macroetch:		
Fracture Text Root:	nature, and sho	e of any crack or tea	ring of the specimen):		
Fracture Test Root: (Describe the location, o		-			
Fracture Test Root: (Describe the keestion, a Radiographic Test Re-	Regulta	Remarks	Fifm ID 3	Results Rema	rks
Fracture Test Root: (Describe the location,) Rudiographic Test Re- Film (D			L		
Fracture Test Root: (Describe the location, a Radiographic Test Re- Film ID N/A			Company:	Water Committee of the	
Fracture Test Root: (Describe the location, a Radiographic Test Re- Film ID N/A Film evaluated by:	N/A	71 17117	Company and the Company of the Compa	Test Number: 141586	-
Fractine Fest Root; (Describe the location, 1 Roddings aphic Test Res Film 1D N/A Film evaluated by: Mechanical tests condu-	uted by: Ten	Plese / Rich Portm	an Laboratory		
Fracture Test Root: (Describe the location, a Radiographic Test Re- Film ID N/A Film evaluated by:	uted by: Ten	: Plese / Rich Portm Gjørch	an Lahoratony	sinland Industrial Solutions	m adge
Fracture Fest Root; (Describe the location, 1 Roddings aphic Test Res Film ID N/A Film evaluated by: Mechanical tests condu-	oted by: Ten Dag	Gorch	an Laboratory	anland Industrial Solutions	
Fracture Fest Root; (Describe the location, 1 Radiographic Test Re- Film 1D N/A Film evaluated by: Mechanical tests condu- Weiding supervised by: The welder identified al	bove v	Gorch	an Laboratory Company: TUV Rhi	sinland Industrial Solutions pirements of the code listed	
Fractine Fest Root: (Describe the location, Redding aphic Test Res- Film ID N/A Film evaluated by: Mechanical tests canda- Weiding supervised by: The welder identified al Reviewer's Signature:	bove v	Gorch	an Laboratory Company: TUV Rhi	anland Industrial Solutions	
Fracture Fest Root; (Describe the location, Rodding aphic Test Re- Film (D) N/A Film evaluated by: Mechanical tests condu- Weiding supervised by: The welder identified al	bove v	Gorch	an Laboratory Company: TUV Rhi	sinland Industrial Solutions pirements of the code listed	
Fracture Test Root: (Describe the location, Rodding aphic Test Res- Film ID N/A Film evaluated by: Mechanical tests canda- Welding supervised by: The welder identified al Reviewer's Signature:	bove v	Gorch	un Laboratory Company: TUV Rio AILS bused on the requ Date	infund industrial Solutions uitements of the code listed in [2]	labove.
Fracture Test Rout; (Describe the location, 1 Radiographic Test Res Film 1D N/A Film evaluated by: Mechanical tests condu- Weiding supervised by: The welder identified al Reviewer's Signature: Client Approval:	bove V	FASSISS F	un Laboratory Company: TUV Rio AILS bused on the requ Date	infund industrial Solutions unrements of the code listed at the code l	above.

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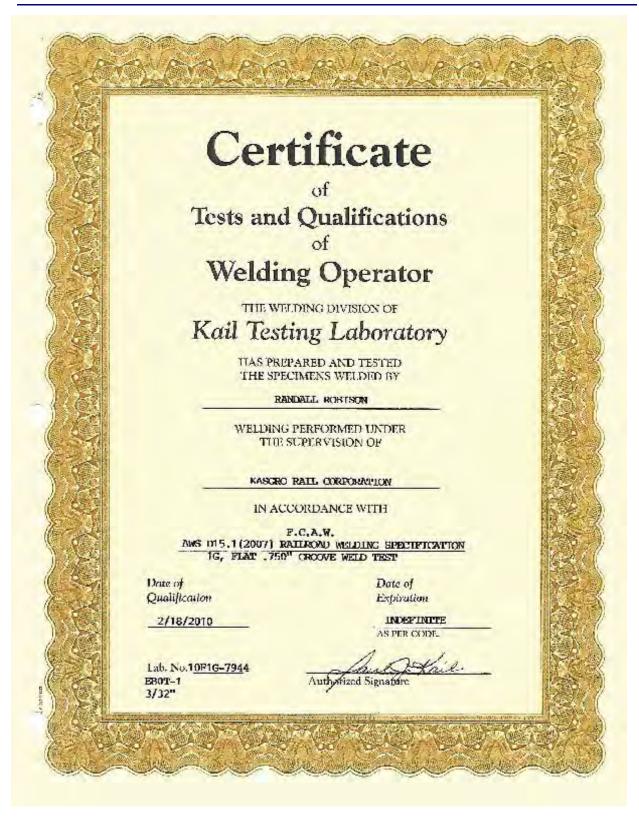
100 INDUSTRIAL BOULEVARD * ALEQUIFPA, PA 13001 * TELEPRONE (724)-378-3900 * FAX (724)-178-3940



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

WAR 115 ND 5.10/2007	A
4	
WELDER AND WELDING	OPERATOR QUALIFICATION RECORD
Welder or welding operator's name RANDAT.I. Welding process FCAN Margar (Flat, horizontal, overhead, or warval if vertical, si	KOBISTO Identification ric. 826 Seminutornatic X Machine
In accordance with procedure specification no	_F-305
Dameter and wall thickness (if pipe)—atherwise, to	at thickness . 750 th
Thickness range this qualifies UNLIMITE	-
	FILLER METAL
Sectification no. 7.29 Chesifica	ition EBUT-1 F-nc. 6
Describe filler motor (1 not povored by AWS specific	ationi
to backing strip insert? Yes	
Filter metal diameter and trade name 3/32". Liting	
	spread and wolding100%_C02
VI	SUAL INSPECTION
Appearance_Salisfactory Underoul	
Activities and the second seco	1 majorised
Guio	ed Bent Text Results
Type Result	Type Result
SIDE BEND , NO DEFECTS	
STUR BEND BO DEFECTS	
lesiccommondby RATH TESTING INDOMENT	04Y Laboratory testine. 10E1G-7944 testidate 2/18/2010
1	lilet Tesi Results
Appearance	Filetave
Fracture test cool pronotestion	Macroelch
(Flescribe the location, nature, and size of any back Trist conducted by	or coving of the speciment) Laboratory lest rec
per	Test date
RADIOG	FIAPHIC IFST RESULTS
Film	
bientification Desuits Hamark	Film S birmification Possuts Hermarks
	The state of
Test witnessed by	Laboratory test no
per	Test date
Wit, the undersigned, craffly that the statements is the	s iccord are confed and that the test welds were prepared and
in accordance with the requirements of AWS D15. (2007 Scalroad Westing Squalification for Cars and Eccord (984)
	Manufacturer or Contractor KASCRQ RAIL CON
	Authorized by
Form De4	Balls 2-18-10
SHIP T	10000-2000

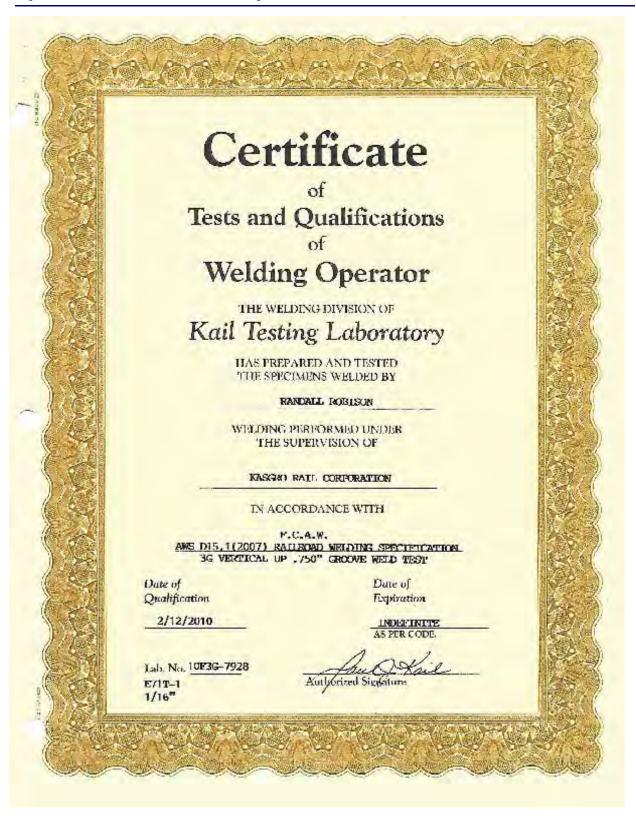
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Project: 00225.03.0050 DOE Atlas Project

					-/
	Secretary and the second				· ·
	MET DELI VID	WELDING OPE	RATOR QUALIFIC	ATION RECOR	1
Weider a welding o	perator's nameR	ANDALL ROBIS	ON	Identificat	826
Wolding process _ P	ECOVII Manual		Semiautomatic	V Danible	-
(Flat, nor zonia , ove In secordance will p	thead, or vertica.—I	Evention, state wi	nemen upward or dow	nward.) 3C Vert	ical Up
Material specification	4-36				
Diameter and wall the	irkness (if pipe) of	Ferwise joint this	koess "750 ⁿ		
Thickness range this	constitesDN	IMITED	-	_	
		FILL	ER METAL		
Specification no. 5	5.20	Classification	E/1T-1	Ena 6	
Describe: filler metal	W yd beievot fan hj	MS specification),		7710. 0	
ls backing strip ussel	W	9/			
Hiller invital diameter	and trade rome. T	/16" Trincols	1 Dux for subsequen	grat are or gas for a	the mostal and
		132,000	cored are we'dir	ig100% C0	S The macatrano di
		totesti a c	Mencoue.		
Acheerance Salis	efactor.		INSPECTION		
SO FORTE SEE LOGICE	armittacy_		one	^J ipina perosil	None
		Guided Be	nt Test Hesuits		
уро		Pesoit	Type		Desult
STOR BOD	NO DEF	ECTS			
SUDE SMAD	NO DEF	DITS			
oot cendusted by <u>*</u>	AIL PESILNO L	ABORATORY	Laboratory test r	io10F3G=792	8
	Taul Ja	el_	Tost date	2/12/2010	
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per =	7	Fillet Te	et Donnille.		
1		Fillet To	est Results		
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ppearance_ racture test roof peni pearabe the local or		-	Andrews .		
ppearance_ racture test most pep rescribe the local or set conducted by		-	Fillet size Misorcetal ing of the speciment) Laboratory test in		
epiesanos_ racturo test root peni Describe the local or		-	fullet size Misorcetel ing of the speciment)		
ppearance_ racture test most pep rescribe the local or set conducted by		any week or fear	Fillet size Misorcetal ing of the speciment) Laboratory test in		
igneerance_ racture test real pen Describe the local or Ask conducted by		any week or fear	Inflot size Miscipetal ing of the speciment) Latinitatory test in Test date. CITEST RESULTS		
iopearance_ racture test woll pen Describe the local or est conducted by per		any week or fear	Inflot size Macroetal ing of the specimen.) Laboratory test in Test date:		Пешығқ
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equevarios_ racture test real pape Describe the local or est conducted by per Prim destification	, nalure, and sizo of	any mack or toar	Inflet size Miscreetal ing of the speciment, Latinitatory test in Test date. CITEST RESULTS Hilm Identification	Results	Петығк
price dates	, nalure, and sizo of	any mack or toar	Inflot size Madipetal Madipetal Inglof Telespediment) Latinizationy telefor Test date CITEST RESULTS Hilm	Results	Петығк
price arise properties the local or set conducted by per least of the local or per least of the local or per least of the local or per least witnessed by	nature, and disc of	IPADIOGRAPHI Demerks Insuls in the record	Inflet size Miscretzh ing of the speciment) Lateratory test in Test date: Lateratory test in Test date: diere correct and that Refront Westin	Besultz	cusered and
equeverion recture test with period or set conducted by period on the set with each or set with each or set with each of the set with e	nature, and disc of	In The second	Inflet size Macroetal ing of the speciment, Lateratory test in Test date Lateratory test in Lateratory test in Test date dere correct and that Lateratory Weich	Besult: Description for Communication for Commu	prepared and Cars and Locom
Agriculture test most perpose the local or and conducted by per HTM life at the local or and conditional life at the local or and conditional life at the local or and local life at the life at the local life at	nature, and disc of	IPADIOGRAPHI Demerks Insuls in the record	Inflet size Macroetal ing of the speciment, Lateratory test in Test date Lateratory test in Lateratory test in Test date dere correct and that Lateratory Weich	Besultz	prepared and Cars and Locom
Approvence_ recture test woll perpose the local or set conducted by per Firm Identification	nature, and disc of	IPADIOGRAPHI Demerks Insuls in the record	Inflet size Macroetal ing of the speciment, Lateratory test in Test date Lateratory test in Lateratory test in Test date dere correct and that Lateratory Weich	Besult: Description for Communication for Commu	prepared and Cars and Locom

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	WELDER AN	D WELDING OPE	RATOR QUALIFI	CATION RECOR	D
Wekling process (Fkst. horizontal, o In percentance wit	P.C.A. w Manual overhead, or varilical- h procedure specific		Similautomatic	klentifica X Machi Mwanti 4G Ove	nc
Material specifical Diameter and vol Thickness sanged	thickness (if pipe)—	otherwise join thick	ness .500"		
		Pare			
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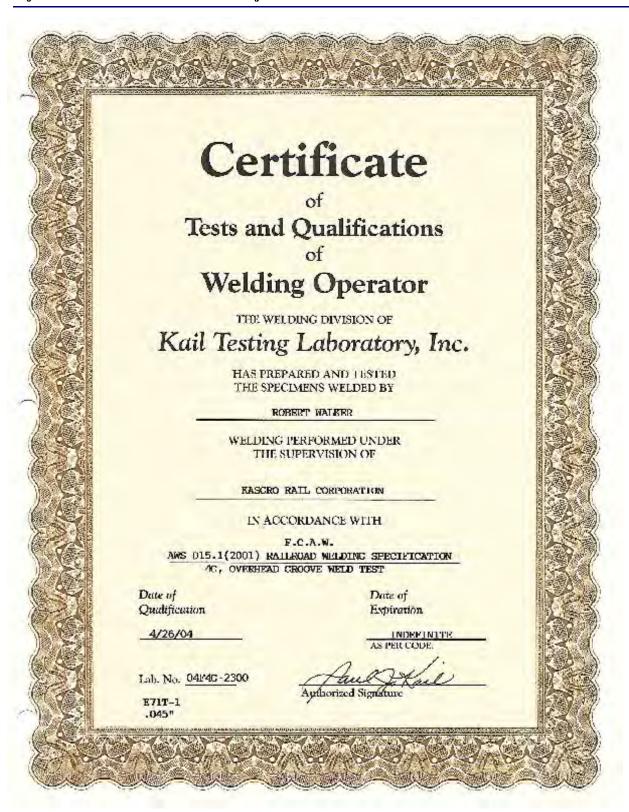
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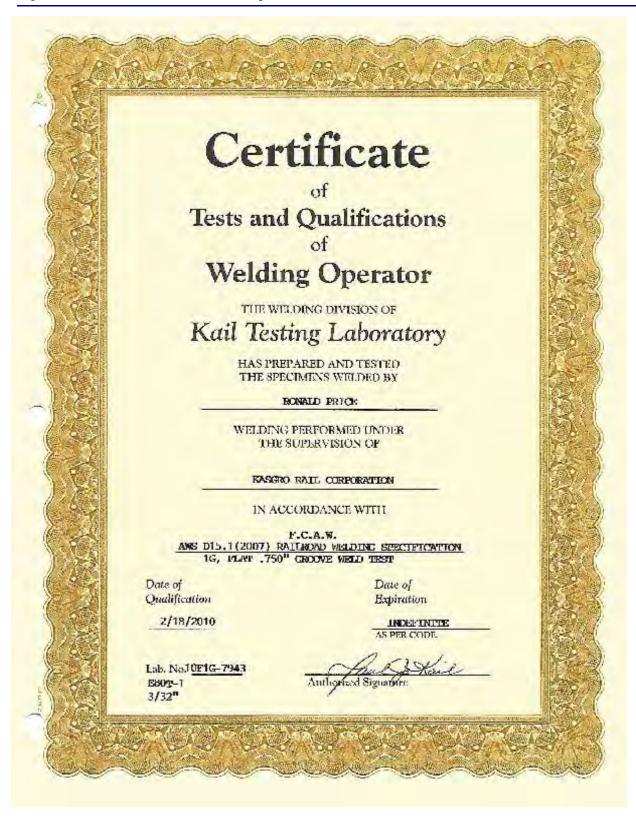
WELDER AND WELDING OPERATOR QUALIFICATION RECORD Worlder or wolding operator's name ROBERT WALKER
Westing process P. C. A.W. Manual laentification no. _ Semiautomatic. . Machine 40 Overhead. (Flat, horizontal, overhead or vertical — if vertical, state whether upward or cownward) in accordance with procedure specification no Preductifical joint tige not Diameter and wall thickness (if pipe) athorwise, joint thickness 1.0" Thickess range this qualifies _ FILLER METAL 5.20 Specification no. . Classification _ Describe filler metal (it not covered by AWS specification)... Verse is backing strip used? Filter metal diameter and trade name ___045" Limcoln Flux for submerged are or gas for gas metal are or cored are welding _ 100% (20 VISUAL INSPECTION Appearance Satisfactory Uncercut None ___ Piping perosity .___ **Guided Bent Test Results** Result Result. Туре SIDE PEND NO DEFECTS. NO DEFECTS SIDE BEND 04F4G-2300 Laboratory testino. liest conducted by J Test date _ Fillet Test Results Appearance Egipture lest mol penetration . Marcoetch . (Describe the Incation, insture, and size of any grack or tearing of the specimen.) Laboratory test no. Tost conducted by Test date RADIOGRAPHIC TEST RESULTS Film Film iemarks identifi-**Bosnits** Remarka dentifi-Results cation cation Test no. Test witnessed by Wo, the undersigned, certify that the statements in this record are correct and that the weids were prepared and tested in arrivantance with the reculrements of the American Welding Society AWS D IS.1, (__ Form D-4



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In accordance with proce-	dure specification no. F-r	005		
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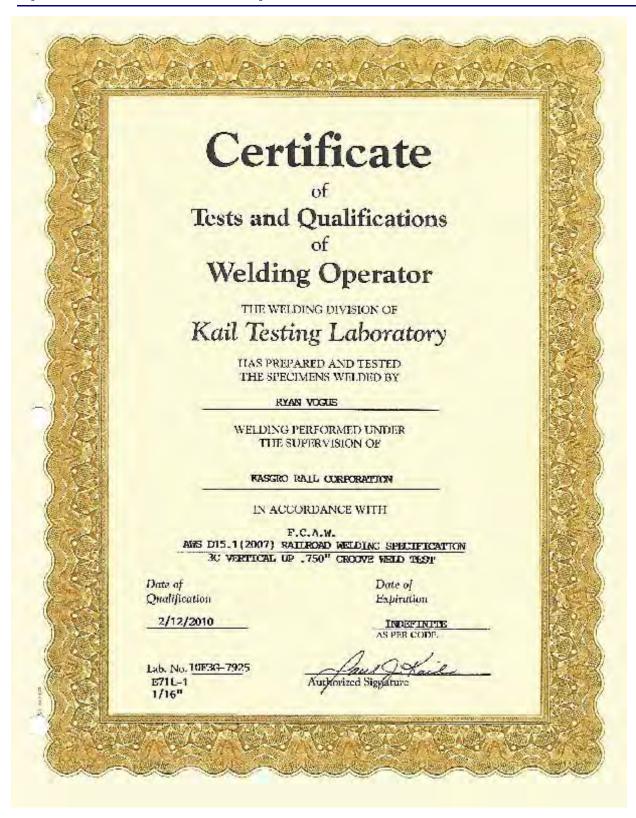
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per / KATA TIS	THE LABORATION Y	aboratory tes José date	tind. <u>10F1G=7</u> 93 2/18/2010	
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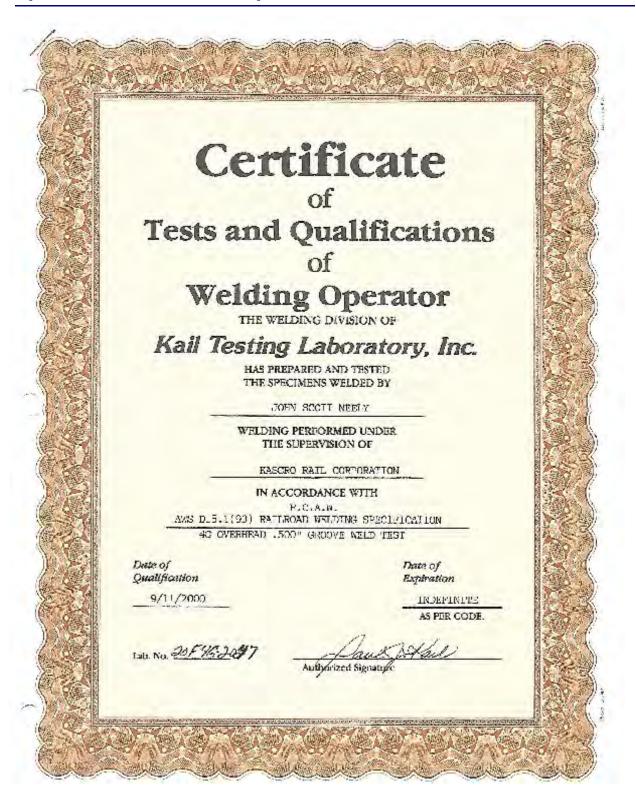
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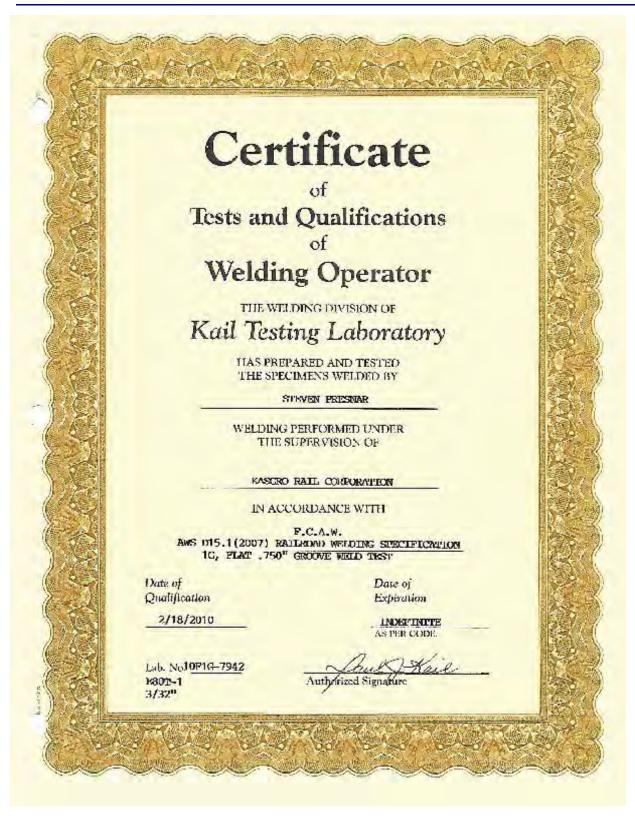
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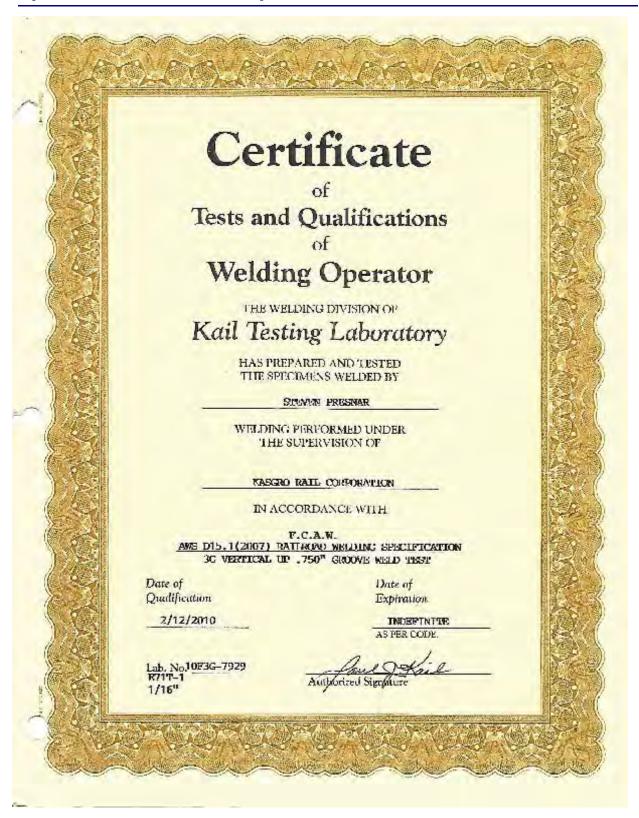
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ANNEX LI					4WS D15 12
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

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AFS-EN-FRM-023 Rev 01 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Document(s): See DTF No.: 021 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, PE Slade Klein REVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Review Comments/Markup Attached Yes No Technical Reviewer Comments:	. 1
Charge No: 00225.03.0050.02.00001 Due Date: 4/10/2018 Document(s): See DTF No.: 021 REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. AFS Spec and Dwg, Codes, PE Slade Klein REVIEWERS Slade Klein, Bernie Counterman QA Bernie Counterman Technical Review Comments/Markup Attached Yes No Technical Reviewer Comments:	
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QA Bernie Counterman Technical Review Comments/Markup Attached Yes No Technical Reviewer Comments:	
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No comments	
Technical Reviewer(s) (Sign/Date): KLEIN Slade KLEIN Slade 2018.04.10 05:12:28	8 -07'00'
Quality Assurance Review (As Applicable)	
Comments/Markup Attached Yes No	
Technical Reviewer Comments:	
Triston Mills - 1G & 3G use ID #9980, 4G uses ID #673	
QA Reviewer(s) (Sign/Date): Bernard Counterman Digitally signed by Bernard Date: 2018.04.05 18:14:	
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition corresponde	ence as necessar

AFS-EN-FRM-026 Rev 00 (Effective August 18, 2014) Refer to AFS-EN-PRC-012

Page 1 of X

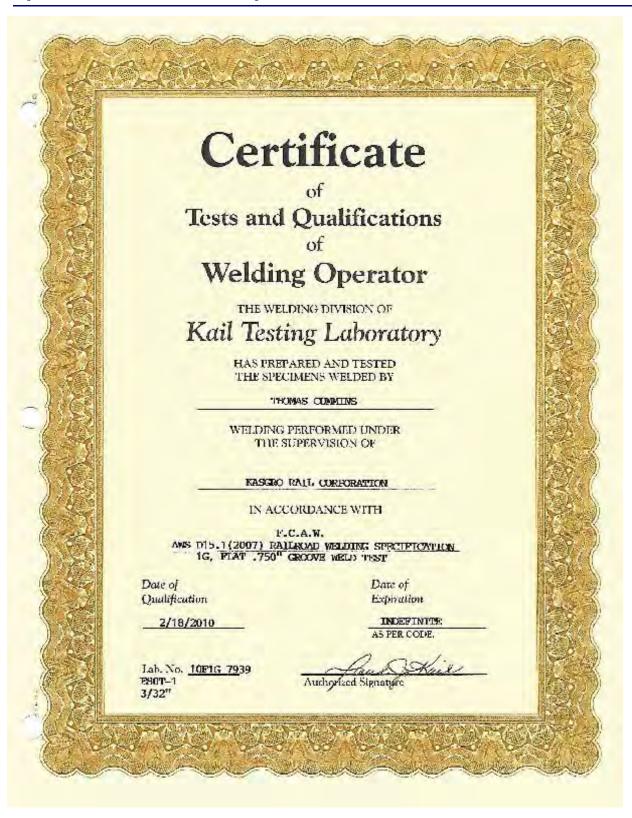
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	WELDER AN	ND WELDING OP	ERATOR QUALIFIC	CATION RECORD)
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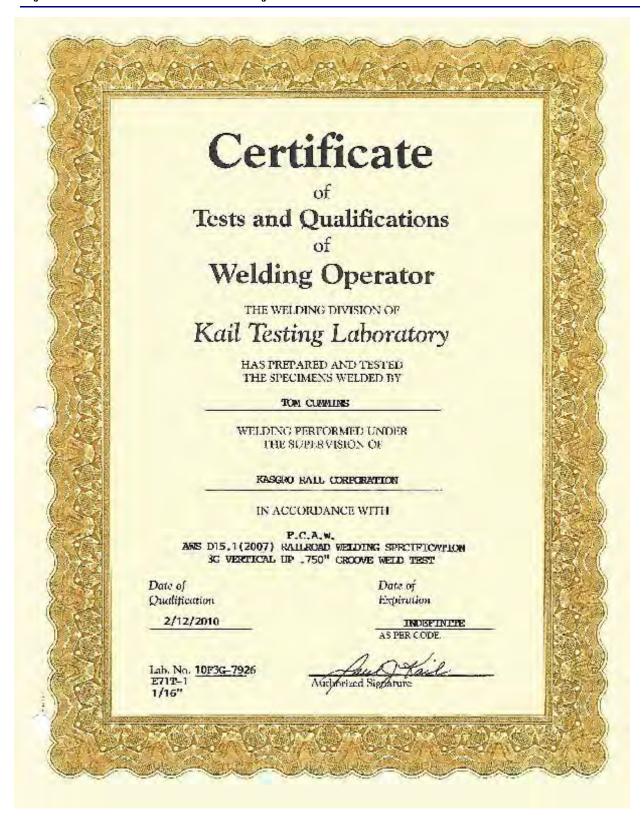
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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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Project: 00225.03.0050 DOE Atlas Project

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We, the undersign accordance with it	he requirements o	of the American Weigin			ASSTO RAIL CORP.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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SIDE SKU

Test conducted by

186

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TRAVOR DARKER Identification no. Semiautomatic Machine 30 Jeruleal In (Flat, horizontal eventical or vertical — if vertical, state whener upward or downward) in accordance with proposition specification no Programment food govern fog. no In accordance with proportions specification no Material specification is Diameter and wall tolochase (i' pipe) — atherwise, joint thickness
Thingses renne tols qualifies
Thingses renne tols qualifies Thickess range this dualifies ... FILLER METAL Classification <u>E777</u> Describe fider metal (if not povered by AWS specification) Year s packing strip user? _ Filler metal diameter and trade name 1/10" Lincoln Flux for submerged and or gas for gas metal are or flux cored are welding _ VISUAL INSPECTION Appearance Satisfactory Underdut None Piping porosity Guided Bent Test Results Rosult Result Type: STOR PEND Minor check/Pissed

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

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	ot paretralian pagion, miture, in d l by per	ot ponetralikin ocation, mature, and size of any grack or liby per	of ponetration	ot ponetration	

Fillet Test Results

I/CET tech/FACSED

We, the undersigned, pertify that the statements in this record are correct and that the welds were grepared and fested in some dance with the requirements of the American Welding Society AWS D18.1; $(\frac{-\sqrt{3}}{\text{year}})$.

Manufacturer er convincer MASCEN 3/ TE (00FF).
Authorized by

Test no...

25136-1239

Form 2-4

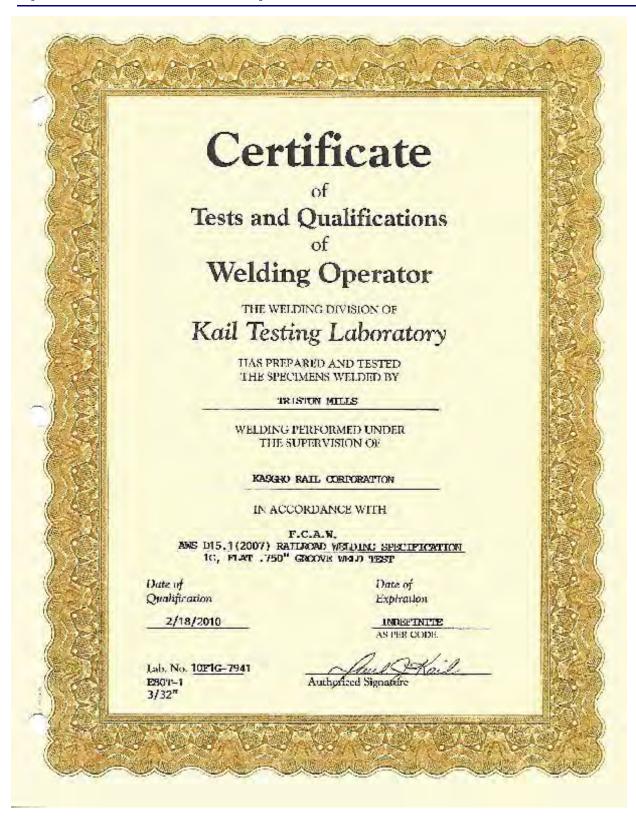
Test witnessed by



Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

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WVS.015.0013.10/sate/				: 4
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in accordance with the requirement	2 of AWS D15 1 (200 190	17 (Halicuszi Weil	iling Specification to	r Cara and Living
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		in incrized of	111111111	/
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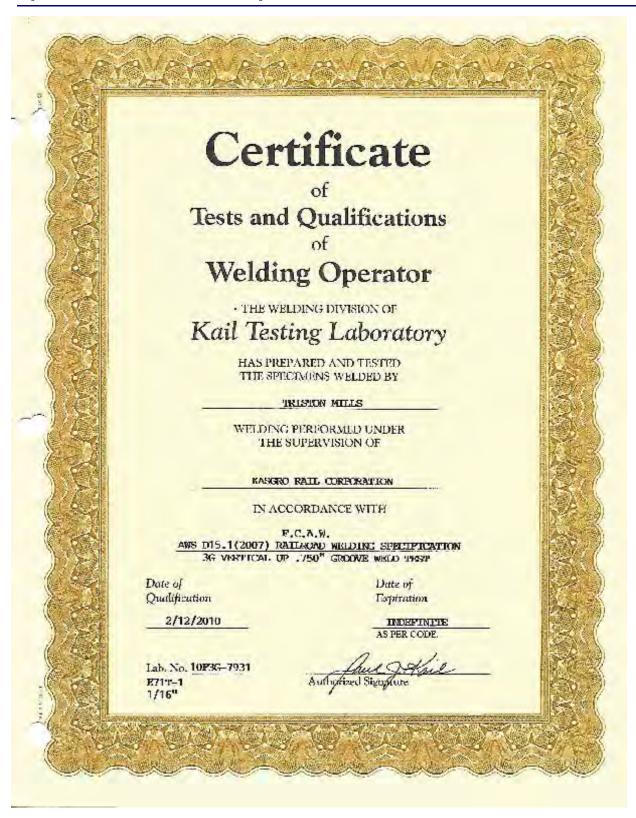
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AWS D15.7/019 (M.20)	0/				ANNEX
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ANNEX 12					AWS DIE
	WELDER AN	D WELDING OP	ERATOR QUALIFI	CATION RECO	RD
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		Guided B	ent Test Results		
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Form D-4			Delle 3-9	1000	

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Appendix F.4.4 – Kasgro Personnel AAR S-486 Brake Test Certification

1)			Orano Fede	ral Serv	ices		
ora	no_			DATA TRAN	SMITT	AL FO	RM	
Supplie	r. K	ASGRO RAI	L CORP.	, INC. DTF N	038			Page 1 of 1
P.O./SC	No: 15	C3011916	KLEIN	Slade 181231-0000	-		Da	te: 2/19/2019
Type of	Submittal:	☑ First		Re-Submittal		SDRL Lis	it Item N	io: 24
Submitt	ed for:	Approval	Review	Information	Num	ber of Cop	ies Sub	mitted: 1
Submitt	ed By:	RICK FO	RD	Rick Ford	Date 2019 0	ed by Risch Food. 1,19 (3,31,37	PRO	OJECT MANAGE
	- 1	(Name)	,,,		ature)			(Title)
ITEM		DOCUMENT NUMBER	REVISION NUMBER		OCUMEN			FS DISPOSITION
1	KAS		HOMBER	ATLAS CASK CAR CMS BLOCK ATTACHMENT	LASER CIME		N.	AP JAWC REV
2	KAS	128		FRA S-2044 INPSE	CTION FO	R BUFFER	CARS	AP AWC REV
3	KAS	129		AAR S-486 BRAI	E TEST	CERTIFICA	MOITA	☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA
	KAS	130		TRACK SCALE	CALIBRAT	TION RECO	ORDS	☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA
5	KAS	131		TUV UT NDE	REPOR	TCASK	CAR	PAP DAWC REV
3	KAS	132		TUV PT NDE	REPOR	T CASK	CAR	☐ AP ☐ AWC ☐ REV ☐ RWC ☐ DS ☐ RSA
7	KAS	133		TUV MT NDE	REPOR	T CASK	CAR	AP AWC REV
3	KAS	143 134		TUV VT NDE	REPOR	T CASK	CAR	AP AWC REV
								AP AWC REV
Comme	nts:				Technic	al Reviewer	I.e. RE	PTL SME QA etc.)
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			FS DISPO	SITION CODES AND	EFINITION	结		
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AWC		with Comment		eed; comments provide				required
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Project Manag	t Manager ((PM) / Engineering Designated		State toran		Ones federal		12/27/2019

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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0		Orano Federa	l Services
orano	,	SUPPLIER DOCUMEN	IT SUBMITTAL REVIEW
Supplier / PO	No.:	KASGRO / 15C3011916	DTF No. / Rev: 038
Charge No:	0022	25.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	Soc	DTF No.: 038	
DE		STRUCTIONS: (List Supplier Doc. No. and Rev.	ES Spag and Dury Coder Stdr. etc.)
PE	_	Klein	rs speciand bwg, codes, sids, etc.)
REVIEWERS	2.720	Klein, Bernie Counterman	
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		Technical Review	
Technical Rev KAS 133 do	viewer Co	ached Yes No III	shear blocks and outer pin blocks. This
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Technical Rev KAS 133 do was require	es not d by Ka	ached Yes No No nomments: include the required MT inspection of the sgro drawing 1155-41. (Sign/Date): KLEIN Slade	Date: 2019.02.26 07:23:43 -08'0
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FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Part 49 232.203			
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Written Exam on Freight Air Brake Single Car Tests oer AAR S-486 - 13



tringse trata reata per se	FKIC 13-7070 - 25
NAME: MARK BAKER. COMPANY: 5/250 80 Rold CORT.	DATE: <u>2-9-28</u> MARK: <u>20-13%</u>
- the state of the	tion the same to the same to the same to the same to the same to the same to the same to the same to the same to
Circle the feiter next to the most correct answer for ea correct per AAR S 486-13. There is only one answer to or will make the statement current in each case. RGAS BEFORE ANSWERING.	hat is the most correct for each question.
.4. What is the minimum brake cylinder pressure that in application on a loaded car?	
2. To secure rehable and uniform results with the Man kept free from leakage and must be disassembled than shor being placed into service or mo a. 366 days. b. 60 days c. 30 days di)92 days e. None of the above.	; , creaned and tested not less not(asiny :
3. The hosercombination hose and pipe between the must be W. LD, with W connections nipples end near 4 feet. b. 6 feet. ②8 feet d. 2 foot e. None of the above.	test device and the cullet hose coupling to: exceed in length (AAR 2.2.2).
4. Whon applying the brake cylinder gauge it must be cor. Which location is covedly ear. Which location is covedly s. Any tap on the car will work (by) he lap downstream from the empty/load of the above.	equipmont
. 5, The Daily Test 2.3 allows for how much lookage fro a, no leakage	om the test device rotary valve exhaust?
@ 2013 Mighter Co	orporation

(UnF4)

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Written Exam - AAR S-486-13 $_{ m C}$ 6. Why is it necessary to blow out the supply line before any connection is made to the Single Car Test Davice? To remove moisture from the air line. To remove dirt from the air line. c. To remove any toreign object from the ak line. (d) Ni of the above. G. Mone of the above. 7. Whish performing a daily test, what variance between the brake cylinder pressure gauge and the test device is allowed per the Daily Test (2.3.4)? (^a)+/-3psl. b. W-5psi. c. +/- Gpsl. d. All of the above, World of the abovo. c. 8. In the Brake Pipe Leakage Test (3.3) with the cut-out cock closed, the brake pipe is charged to 90 psi and the bruke pips is checked for leakage. The reservoirs are completely drained of air for this tost, why? To check for leakage from the reservoirs. b. To check for leakage in the brake cylinder. To check for leakage in the brake pipe. d. To check for leakage at the angle-cock. (e) In check for loakage past the dut collector/cutout cock. When checking brake cylinder piston travel in autordance with Piston Travel & Rigging Test 3.9, a der equipped with empty/load brake equipment must have the equipment in the cosition. a. Empty (b)Loaded Empty or loaded does not metter. d. Whatever the car is compty or loaded e. None of the above 10. Cars with an A-1 Reduction Relay Valvo and less than _ ___fool of brake pipe must have the B-1 Quick Service valve nufflied whomperforming the Separate Vent Valve Test 3.4. a. 100 b. 90 €85

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(2 ((1))

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d. Any longth of feet c. Not required to plug



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	Written Exam - AAR S-486-13
	c 21. During the Service Stability Test 3.8, if the car goes into emergency, the most probable cause of failure would be the (a) Emergency portion. b. Service portion c. # 8 vent valve. d. Emptyload valve. e. None of the above.
	12. Before performing the Service Stability Test 3.8 on a cen equipped with a #8 Vent Valvo, the vent valve must be pullified by
Ç	13. When checking piston travel during the Piston Travel & Rigging Test 3.9, the piston travel must be in accordance with what standards? a. The badge plate b. The decal on the car c. 7 – 9 inches ØAAR Rule 3 c. The standard for that car, which may be a, b, c or dienany combination thereof.
	744. The Hand Brake Inspection (AAR 3.6) Includes the following requirements. An of brake application to check the piston traval OB the handbrake with 30VV oil, apply the handbrake, check the bell crank, check the shock with a bar, release the handbrake Checking this brake shoes for wear Checking the operation of the empty/load equipment All of the above
	35. In the Emergency Toal 3.10, once the 3/8" cock has been opened, the brake sylinder pressure must be compared to the pressure noted in the Sorvice Stability Test? a. The same (ii) A minimum of 5 asi higher than full service pressure d. A minimum of 5 per lower than full service pressure d. Zero psi e. None of the above.

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Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Written Exam - AAR 8-486-13	- December
16. For the Sqivice Statulity Test 3,8, brake pipa pressure is reduced to c. a. 00 psi	?
b, 40 psi	 `
€50 psi.	
d. Reduch přessure to zem	
s. None of the above.	
17. During the Release After Emergency Test 3.11, brake pipe is charged to 28 pxi 0 valve is placed in position 3. Brake pipe must rise. This verifies the	í, the retary _is
и. Servit.e Accelerated Rolpase Гонфте b. Brake cyllrider	
a. Reservoir	
d. Single Car Test Device ③Emergency Accolorated Release Festure	
18. How long must the brake cylinder remain extended during the Reteining Valvo T a. Five minutes	Fest 3.12?
b. Sen minutes	
©Fourminutes	
d. Four bours e. Does not have to remain applied	
19. Brake cylinder prossure at the end of the waiting period described in question ? Retaining Valve Test, 3, 12 must be	8 Jurithe
a. 25 psj	
(5)(2.53)	
c. 15 paj	
d. Between 60 - 70 psi	
e. Higher than full scryice	
20. The flow/after is used to verify the partia charged when performing the Minimum a and Quick Souvice Elmiting Valve Tost 3.13. What is the minimum point that the charged to perform this test?	application armust be
(3)The ball floats below the top of the tubo	
b. The ball is helow the red line.	
 The ball is at the hollom of the tube. The ball is two lines below the red line. 	
e. None of the above.	
- · · · · · · · · · · · · · · · · · · ·	
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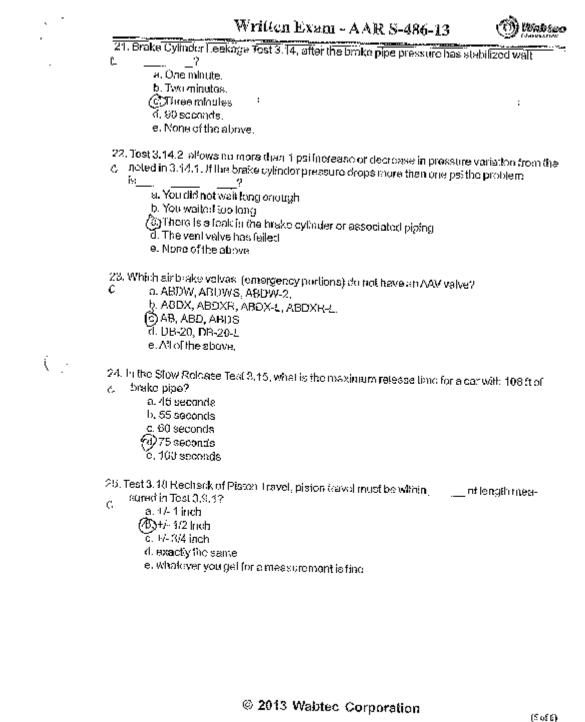
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	Written Exam - AAR S-486-13 (1) Washington
:	26. When completing the Empty/Load Test 3.20, the brake cylinder pressure noted in 3.20.2 must be at least lower than pressure noted in Test 3.9.4. a. 5 psi b. 10 psi c. 27 psi d. 20 psi e. None of the above.
	27. After removing this brake cytholer measurement gauge from the brake cylinder pressure tap, in Test 3.21.1, the tap must be checked for leskage. How much leakage is allowed on the brake cylinder pressure tap? a 3 pst. b. 2 pst. c, 1 pst. d, Ne leakage is allowed on the process of the process of the process.
<u>(</u> .	28. When performing the Stack Adjuster & Platen Travel Adjustment Test 4.1, you reduce heaks pipe pressure to on the fest device gauge to make the brake applications. © 60 psi c. 80 psi d. zero psi e. 20 psi
	29. When performing the Brake Cylinder Leakage Test 4,5 in the Special rests, an empty corwitto empty/confibrake equipment must have the empty/cod sonsor in the a. Empty position b. Ecoded position c. Empty or loaded does not matter d. Ronnved e. None of the above
	30. During the Single Cor Test when reducing the brake pipe pressure, if the brake pipe continues to reduce after the test device handle is placed in Position 3, the person performing the test is instructed to do what? a. Change the emergency portion b. Change the service portion Move the test device handle to position 2 to stop the reduction in pressure, then never the handle back to position 3. Perform this procedure once, d. Gall a new test device, that one has failed e. Let the brake pipe pressure drop as far as it wants, it does not matter
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ਾractical ≝xam of Single Car Yest	All more
Procedures per S-486-13	(S) BIRBINGS
Name: 22.4 4	
Name: Mork Boket Company: Koneya	
2 atc 7-70 .2018 Work. 0.0	
The instructor must observe the person taking the feet. Depending a pour the type of car under in the space provided if the person taking the last the Depending a pour the type of car under	r tost, imbicate
is not perfusiond in accurrance with applicable standards or the instructionlester is not satisfied a dure, indicate in the fast commun. At the read of the last, the first perfusion in the fast commun. At the read of the last, the first perfusion in the fast commun.	with the proce-
dure, fredicate in the fair column. At the end of the test, the instructor/tester army odd any notes the pass or last situation. Note sest 3.1% 3.1 is not applied by the test set of AAK Specifications.	s will quality a
TEST	TAIN
2.0 - SINGLE CAR TEST DEVICE	16 62 Chy
Tated device with the W	TXT
1. Is trial device within date allowed by AAR standaré. 2. Air sample to wishing an 90 mil.	"i
. 2. Air capply to minimum 90 pai, reconstructed 100 psi for testing. 3. Test decay within 15 degrees of yearingl.	1 1 1
• 4. Hone us tost device an longer than 8 feet.	
] ! [
2.3 - DAILY TEST	721
 Rhow out the startly before coupling to set device. 	-{- -}
2. Davine in high pressure.	[
3. Close 3/8" cock.	
-4. Hardle to Position 2.	1 1 1
-5. Close & open flowerfor, bath rises and falls, these not stick.	1 : 1
.6 Handle to Position 3.	i i l
 7. Altool-dimming coupling and traise cylinder pange. 8. Eardle to Posision 1, procure at 90 psi. 	1
-9. Sel to Low Pressure, gauge roads 80 psi.	1 1 !
10. Brake cylinder measurement gauge within ±/-3 psi of test device gauge.	1 1 1
11. Heact to Figh Presents.	1 1 1
12. Charge to 90 psi, Position 9.	1 ! !
*13. Time i minale, i estesso al pri rechest crist compand a 12 betta i i	i []
114. Open 3/8 12/18, temoch duching counting.	
f 15. App 5 coupling wite .28 mm appealant.	1
"16. Close 3/8" rock, handle to Position 1	
27. Check from tetos. Bell floors is tween combination from and to a of the	! ! 1
Lo. Postucia a, egien Messia(u: and 3.58° conf.	{ }
19. Remove coupling, close 3/8" cuck.	i I
 20. Leakage: all HP and and retary valve calcust less than 1" bubble in 5 seconds. 	!
3.0 - TESTS - STANDARD PREIGHT BRAKE	1
3.1 - Prelliningry Procedures & Inspections	
Wheels checked, our protected from movement. Bondanda references.	1.4
Heavilbrake released, brake cylinder publised returned into brake cylinder. Chericalogy, leader larger via a reference of the control of the contro	
3. Check shees, brake levens, pins, reds, rigging for your and does not bind or feet. 4. Check dates on an inners, if not changed, replace hose gaskets. 5. Both and a pressure.	}
5. Both angle cocks upon.	
6. Apply broke oxinder man swement tap, if not installed.	1 i 1
* 6 Apply brake cylinder measurement game to take	
3. Retainer valvu in Direct Educist (EX)	
9 I observe the processor, & effects on year value of recommend	
10. Comalcidy drain reserveirs	
1), Close bannels pipe cut out each	
12. Set grapty/300d equipment to leaded passitua acregatived.	

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Project: 00225.03.0050 DOE Atlas Project

Practical Exam per \$-486-13 Walter TEST 3.2 - Connecting Device to Car) I. Confiew Duily Test completed. 4 2. Supply line blows on . Test device reads 90 in TIP, 80 in J.P. 14.3/8" cock closed. 5. Flowrator open. K. Close bounds pipe out out cock. Roservoirs draines. Completest device to car six hose - prefer B and, -9. Angla cooks opes, handle in Position . FO. Continuous blow at angle cock open and. 11. Close englocock, attach demoty, rengen. 3.3 • Brake Pipe Leakage Teat Position 1, charge broke pipe to 50 ysi. 2. Close flowrator, top of flow rater ball below condemning line. Open Rownaint. 3.4 - Separate Brake Pipa Venting Devices - OPTIONAL-3.4.1 - Continuous Quick Service Test - OPTIONAL- Control valve cut out, charged to 90 psi, handle to Pusition 4. 2. Pressure reduces on gange, must not produce emotyoney. Intermittent exhaust af quick service vent. Nu exhausi = failure. 3. Handle to Position 1, reclarge to 90 psi. 3.4.2, 3.4.3 - Separate Vent Valve Tost - OPTIONAL - A-1 Reduction Relay and < RS' of BP plug 8-1 Quick Service. 2. Position 5, reduce BP to 50 psi ther top 3. BP pressure does not reduce to zero. 3. Segmente entergrancy year, valve, $\rm RP < 75^\circ$ nso: Position 5, >75° nse Position 6. 4. BP no lower than 40 psi, open 3/87 each. BP pressure must resting to zero. S. Clase 3/8" cock. 3.5 - System Leakago Test i. Handle in Position I. 7.2. Cet is control value, charge in 90 psi. During change, no venting of remines; brake cylinder magains in recesse. Close flowcator, ball below condemning lide, 5. Soap reservoir pipes fittings and gasknis for leaks. No leakage altowed. 6. Open flowrater. 3.6 - Hand Brake Inspection 1. Lubricate handbrake - if required. 2. IXB role used, piston pashrod into boldow rod. 3. Apply bundleake, check belt crank position,

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4. Use Par, all shots all locations (III) applies are tight. No binding or fouling.

7. Chain unwound, bellemink dreps to lower limit, trailzortal chain tos stack.

Wahenpate/Nycopite tracks one since per heart light.
 Ridesse handbreke, chain fully unwerted.



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Practical Fxam per S-486-13 Wall ten 3.7 - Slack Adjuster Conditioning , 1. lestell block(s) between shee(s) and whee (s). 2. Charge to 90 pai, make 15 per reduction, introdiately action to Position . . 3. West for cylinder to release. Make 30 psi reduction, Position 5, immediately return to Position 1. Whit for cylinder to selease. Charge to 90 pai, Florerado: half below top of take. Open Florerator. 3.8 · Servico Stability Test Vent valve pfugged as applicable. VX ideed stan palled, air blow neticed as applicable. 2. Cars up to 75°, 40 psi cert tottom in Position 5, 66.55 per use Position 4, 1ap @ 50 psi. No Reservency. Use Position 2 to stop reduction as applicable. 3. Cars > 75°, 40 per reduction in Position 6, 60°55 per use Position 4, kep 60°55 per No. Dinessence, Use Position 2 to stop reduction as applicable. Blood stem of VX valve reset as applicable. 3.9 - Piston Travel (W/Blocks), Rigging & SC Pressure Measure & note picton travel per AAR Standards. Clack brake levers for angularity. 3. Determine all shoes firmly see against wheels, verify no feeling in linkage. Brake cylinder pressure must be higher than 50 psf. (except case with Mrd valves). 5. Mesinlating valves and emply flood volves unabje to set to fooder most develop valuation 25 psi BC pressure. Note brake cylinder pressure. 3.10 - Emergency Tost 41. Less with <100ft of BE, BP no lower than 40 pri, quickly open WE" zock. 3. Cars with > 160 ft of BP, BP no lower than 40 psi, Position 4 open 3/8" work. Must produce emergency application, SP to sere. BC pressure trays to at least 5 psi higher from full service 3.9.5. 3.11 - Rolease Tost after Emergency Relaine/handle to high pressure (HP) position. Close 3/8" cook, hardle to Position 3, watch BP for 2 minutes. 3. Open 3/8" cook, no air exhapst, closs 3/8" cook. 4. Handle to Position 1, charge BP to 26 psr, innovalintally reform bandle to Pushion 3. 5. Bake pipe pressure must continue to rise. 3.12 - Retaining Valve Tost 1) Firstle to Position 1, charge for four minutes 2. Brakes (nowin applied, BC pressure must be equal to or greater tran 12 psi. Retained to circuit exhaust (EX), blow of air noted at estainer valve exhaust. 3.13 - Mhr. Application & Quick Service Limiting Valve Position 1, charge to 90 pai, flowrator bold is below top of tube. 2. Hasdle to Pesision 4, reduce to \$7 psi, Position 3. <u>Diakes squat spply.</u> 4. DP deeps feelow to 86 psi, use Prection 2 there lap to stup as required - only oney, 5 Reducing volve to low pressure, device i andle to Position 1.

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Practical Exam per S-486-13



)) MK	July Harri
TEST	راي ا	
3.14 - Brake Cylinder Leakage Test	1	₽:.
4. Pressure sightly cut the 8th not wealt 3 principles	+~.	÷
A. Pidre RC, pressure, Brake evilorier recession poper has an extension as		
and the property of the proper	J	
4. No more than I pai increase or discrease is allowed.		
5. Close flowrator, observe hall stabilizes.		i
6. Top of Bowrstor Sail ment stay below consistsnoing time.		
7. Open flowrator by-pass enck.		
3.15 - Slow Rulensa Test		
1. B. pressure (d. 20 gsi, brakes modisel bonda in D. de	X_	! .
A BECKIOUS VAIVE handle to high process a character and an area.		
- CONDICAL A, BEASES RELIES FOLDER within time consideration and a consideration of the consideration of the consideration of the consideration of the consideration of the consideration of the consideration of the constant		
	1 1	ì
5. Remove block(s) between stoe(s) and wheel(s).		
16 - Slack Adjuster Conditioning (without blocks)		ļ
1. Make 15 psi reduction, insuediately return to Position i.	X	
2. Walt for cylinder to release.	Ţ	
Make 30 psi reduction. Position 5, immediately return to Position 1. Must for outlinder to a significant control of the	ÎΙ	
4. Wait for cylinder to release.		
 Charge to 90 psi, Flowrator ball below top of take. Open flowrator. 	1	
	1 1	
17-Accelorated Application Valve (AAV) Test	וֹצוֹ	-
1. Hannes to Position 4, BP pressure reducing note to bear at a pressure at the second	†°∸⊦	
	1 1	
3. Reduce 3P to 60 psi, Position 3. No exhaust - fidled emergency portion)	
d. BP continues to drop, use Position 2 thro lap to stop as regioned <u>- turby</u> onse. 5. BP reduction most step.		
1 receiptor trinsi sico.		
18 - Recheck of Piston Travol (W/O blocks, cars with auto stack adjusters)	اسبيط	
	لِكَ	
4. Use Pastieou 5, ή and jan for reach δύτρεί	1	
3. Rechieck piston knyel,		
4. Piston (savel most 82 within +/- 1/2" of travel noted at 3.9.1.		
 Niely forpings to cycle slack gaingter with govern) against the Theorem. 		
The state of the s		
 Slack originator defective, finish had before replacing. 	įį	
19 - Manual Release Valve Tost	<u></u> _	
Li Handle to Pestidium 5. By drops to zero. Common store on EU 30 of the store of t	! <u>X</u> [
and the state of the control of the		
l. Brake egyinder pisjon must reture se recesur		
- FONCEUM 1, 40 (2) Pressure position	1	
. Hreke Cylindor pisten raust remain in release		
. U821/S Cuppty and has gramty/had on selsons		
6. Prostrion 1, clianue to 80 psi.		
4 LOSHIGE 5 Invalues BD to make		
2. Position 5, reduce BP to zero. 0. Greke must apply Gu to 3.21		

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Project: 00225.03.0050 DOE Atlas Project

Practical Exam per S-486-13



	-		
TEST	.		్వ
3.20 - Empty/Load Test	··· ·	<u>.</u>	
i. Floudle to Position I. 2. Regulator valve in High Pressure.	+	4	
3. Set coppy/land valve to empty configuration.		- 1	
4. Charge 82 multi flowerier batt is below ten of take			
3. Hangle to Position 5, reduce 13P to zero, brakes must combine			
O. Micke Symmetry pressure must be 17 mg Nobert full appropriate to 2 or 5	į	ļ	
7. Scap empty/load device, reservoir and paping for leaks - no feakage allowed.		[
3.21 - Disconnecting the Studie Car Test Device	- -	뒭	-
N. NEURONO UNINCE CHIRDION GOOD propositive law NEURonal and All Control of the C	-	-21	
 Any valve plugged, where ping reapply cent protector. Separate chargency portion out in. Secure car from movement. 	ĺ	ŀ	
4. Shot off air supply or Position 3 on medicine			
as Disast car reactivoirs. EmptyAeast reset to empty.	1	- 1	
6. Remove during coupling.	1	-	
***************************************		Ī	
4.0 - SPECIAL TESTS - OPTIONAL	_ \	_	
4.1 - Slack Adjuster Tost and Piston Travel Adjustment	-		_
4.2 - Retaining Valve Test		-	_
4.3 - Auxiliary Devices			
4.4 - Brake Cylinder Pressure Tap - Leakage Test		_	
4.5 - Brake Cylinder Leakage Test Using Gauge			_
4.6 - Empty/Locd Test			
exceptions:		` 1	
· — — — — — — — — — — — — — — — — — — —			- 1
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Appendix F.4.5 – AWS Weld Examination Inspector Certification

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ora	no_			DATA TF	RANSM	IITTAL FO	RM	
Supplie	r. KA	SGRO RA	IL CORP.	INC. D	TF No: ()	144	-1	Page 1 of 1
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Type of	Submittal:	☑ First		Re-Submittal		SDRL Lis	st Item N	lo: 20
Submitt	ted for:	Approval	Review	☐ Informa	tion	Number of Cop	ies Subi	mitted: 1
Submitt	ted By:	RICK FO	RD	Rick F	ord 🚟	illy algraed by Rick Ford 2010 02:26 13:50:51 2	PRO	DJECT MANAGE
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ITEM		DOCUMENT NUMBER	REVISION NUMBER			MENT		FS DISPOSITION
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AΡ	Approved		Work may proc	eed.				Resubmittal is not required
AWC	Approved w	Ith Comment	Work may proc	eed; comments p	rovided for S	Supplier's considera	ation only.	Resubmittal is not required
REV	Reviewed					Supplier's considera		Resubmittal is not required
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DS	Disapproved	1	Work may not	proceed.				Correct and resubmit
RSA	Receipt Sub	mitai Acknowledgeo	No other action	required.				
f, in the ju hall not o Project Manag	adgment of the proceed and	e Supplier, the in the Supplier shall PM) / Engineerin Designated	corporation of FS immediately prov	comments wi	tice to FS	C&P Representa at A. Dentan tor, a sawChana Federal to dentan@onano grada	ative desc	Orden/Subcontract, work cribing the change.

FS-EN-FRM-023 Rev 02 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Charge No:		Doe Date:	
Document(s):			
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Technical Reviewer(s) (Sign Comments/Markup Attacher Technical Reviewer Comme	(VOate): Quality Assurance d Yes No		ondence as necessar

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018) Refer to FS-EN-PRC-012

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Project: 00225.03.0050 DOE Atlas Project



Cartification of NDT Qualification:

Dan Gjurich

The excession, training and experience of the individual homes above has been reviewed, and found to meet or excess the requirements so taken below.

Professional Qualifications/Cartifications

Research	Check Parts	Dete	Exa Data
GMT-TC-1A, Light Personnel, Lovel ii	01/20/2001	11/25/2014	11/20/2010
TS074-GIB-0100271, Liquid Panetrani, Lovey II, Limited Solvant Romovable	11/25/2014	61/02/2018	01/080921
BNT-TC-IA, Magnitic Particle, Level II Limited - Yole Only	08/27/2008	00/23/2014	09/23/2019
T9074-GIEL-010/271, Magnetic Parante Lewis It Lichted Yolki Only	09/23/2014	U1/09/2010	D1409/2021
AWS, Carried Welding Inspector	Q4/01/1885	04/01/2017	04/01/2000

Bya Examination Record

Local Trees Distor 02/00/2016

Correction Required

Probables:

240/01/00

The increases ramped above has calculately decisionaireled this obidy to read the J-1 follows on a standard Jeogar best chest, and the capacity to distinguish and differentiate colors used to the NDE neethods for which the individual is qualified.

The Individual stated above to cartilled in the Indicated NES Mainton(a) and Lawaija). The cartification(a) will explay an the catalog balance construction of employment.

I haraby serally that, to the best of my imprisorys, the information listed above in Irus and cornect.

Cinude D. Dayle

Certification Program Manager, Lavel III

14 MAR 201

FOR VERIFCATION OF CERTIFICATION CONTACT 206-938-3313

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Orano Federal Services Title: Design and Prototype Fabrication of Railcars for Transport of High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery Appendix F

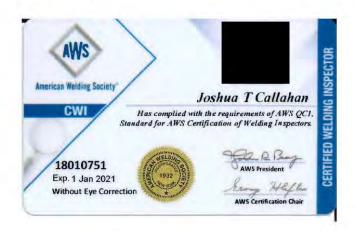
Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

Wednesday, February 22, 2019

AWS Certification information received from Jennifer Novak Amsted Rail Quality Assurance Manager, Worldwide Sourcing.

Verification of Amsted Rail AWS Certified Welding Inspector Qualification for Joshua Callahan.



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Appendix F.4.6 – Measuring and Test Equipment Calibration Record, Kasgro Form 14 for Track Scale

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Charge No:	0022	5.03.0050.02.00001	Due Date: 3/8/2019									
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TRACK SCALE - TEST AND INSPECTION REPORT As per NIST Handbook 44 Testing Standards DATE OF TEST

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Appendix F.4.7 – Safety Monitoring System Installation and Testing Results

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Charge No:	0022	25.03.0050.02.00001	Due Date: 3/8/2019										
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February 15, 2019

Rick Ford Kasgro Rail Corp. 121 Rundle Road New Castle, PA 16102

Dear Rick.

Lat-Lon, LLC has completed the AAR-S-2043 System Safety Monitoring (SSM) installation on three Atlas Project DOE railcars. The installation took place on February 12th through 15th and the first rail car is IDOX 10001 and has two systems, one on each end. The second and third railcars, IDOX 20001 and IDOX 20002, have one system each, installed on the "A" end of both cars for a total of four units.

I have attached System Health Reports data from each of the units as of the morning of February 15th to demonstrate that the systems are operational. I have also attached a few photos.

Please let me know if you need any additional information.

Regards,

2300 S. Jason St. -Denver, CO 80223 - 303-937-7406 - Toll Free: 877-300-6566 - Fax: 303-531-5754 www



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Appendix F.4.8 – Fabrication Specifications

The following list of specifications encompasses both the fabrication of the prototype railcars and future fabrication activities. A detailed discussion of railcar specifications is included in the Phase 3 Report, Section 3.2.

Railroad Transportation Requirements

- AAR's Manual of Standards and Recommended Practices
- AAR's Manual of Standards and Recommended Practices, Section J Quality Assurance M-1003 (2014)
- AAR Standard S-2043, Performance Specification for Trains Used to Carry High-Level Radioactive Material
- AAR Standard S-2044, Safety Appliance Requirements for Freight Cars

Other DOE Requirements

- Oak Ridge National Laboratory (ORNL) report, Cask Railcar System Requirements
 Document.
 - Note that in AFS' Request for Information (RFI) AFS-RFI-00225-0001-00 [6], Table 3-3 of the ORNL requirements document [5] was questioned regarding the establishment of bounding design requirements specifically for the conceptual cradle designs. The DOE responded to the RFI that the table "simply lists the largest and heaviest cradle characteristics that exist at this time," hence, the word "bounding" is used to describe these characteristics. As a result, AFS has not limited its conceptual cradle designs specifically to the values in this table and has determined bounding conditions necessary to meet AAR S-2043 and AAR Plate E requirements.
 - Cask cradles are to be tall enough and open-ended so that the impact limiters can be attached to a cask after the cask is secured to the cradle while on the Atlas railcar with a clearance of at least 1 inch above the cask car deck
 - The cask cradle must be specifically designed to meet the requirements of AAR Rule 88 (which specifies the minimum mechanical requirements for railcars used in interchange commerce service), as included in the AAR 2015 Field Manual of the AAR Interchange Rules
 - The Atlas railcar, including a cradle and a cask, and buffer car clearances must fit within AAR Plate E, except when loaded with casks that are more than 128 inches wide with impact limiters attached

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 Refer to AAR Standards S-2028, S-2029, S-2030, and S-2031 for railcar plate requirements

Nuclear Regulatory Commission (NRC) Requirements

For shipments under subtitle A or subtitle C of the NWPA, HLRM must be shipped in transport casks certified by the NRC in accordance with 10 CFR Part 71 [14]. The cask cradle and its attachments are to meet commercial grade requirements.

Code Requirements

The following design codes were used in the development of the conceptual cradle design:

ANSI N14.6 used to provide a lifting criteria for the cradles

ASME Boiler and Pressure Vessel Codes and ASTM codes for material properties, material yield, and ultimate strengths

Project Quality Requirements

 Atlas and buffer railcar fabrication activities are performed in accordance with the fabricator's AAR M-1003-approved QA program

Specific Project Quality Requirements

A summary of specific project quality requirements includes:

- QA requirements of AAR Standard S-2043, Performance Specification for Trains Used to Carry High-Level Radioactive Material
- AAR Manual of Standards and Recommended Practices (MSRP), Section J Specification for Quality Assurance, Specification M-1003
- Orano Federal Services *Quality Assurance Program Description (QAPD), AFS-QA-PMD-001* (Note: for prototype railcar production only)
- Orano Federal Services Project Specific QA Plan, QA-3014737, *Design and Prototype Fabrication of Atlas Railcars for HLRM* (Note: for prototype railcar production only)
- Orano Federal Services *Quality Assurance Surveillance Plan* as incorporated into DOE contract DE-NE0008390, Part III, Attachment J-C (Note: for prototype railcar production only)
- Kasgro Rail's Quality Assurance Manual for AAR Specification M-1003 (Note: for prototype railcar production only)

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