



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



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.1 – BUFFER RAILCAR FABRICATION INSPECTION DOCUMENTATION

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Appendix F.1.1 – Buffer Railcar Travelers

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 052 Page 1 of 1
P.O./SC No: 15C3011916	KLEIN Slade <small>Date: 2019.03.19 10:56:22 -07'00'</small> Date: 3/19/2019
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 15
Submitted for: <input checked="" type="checkbox"/> Approval <input checked="" type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.03.19 07:48:01 -07'00'</small> PROJECT MANAGER
<small>(Name)</small>	<small>(Signature)</small> <small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 189		ATLAS CASK CAR SHOP TRAVELERS	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 190		ATLAS BUFFER CAR 1 SHOP TRAVELER	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 191		ATLAS BUFFER CAR 2 SHOP TRAVELER	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments.	Technical Reviewer (I.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>Date: 2019.03.19 08:36:22 -07'00'</small> Date 3/19/2019
---------------------------	---

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, c=US Date: 2019.03.19 12:30:37 -0400</small> Date: 03/19/2019
--	--

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



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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 052
Charge No:	00225.03.0050.02.00001	Due Date: 4/2/2019
Document(s):	See DTF No.: 052	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.03.19 08:18:55 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.03.19 08:22:16 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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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 *Bernard Court* Date 3/21/18

Draft Sill Arrangement Number 1

CUSTOMER WITNESS POINT:

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

X Position #1 *Bernard Court* 4/10/18
 Fit and weld center sill bottom plate, assemble center sill and end draft sills to deck plate

Steel Stamp Number 1

Inspect all welds

Welders Clock # 300 *R. Peters*
57 Paul V. ...
81 ...
844 ...

All repairs to be made and forms completed before moving Draft Sill section

Group leader or foreman's signature *Scott Rudy* Date 3-26-18

Inspector's signature *Bill ...* Date 3/26/18



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Buffer Railcar IDOX 020001

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 OK

X Welders Clock # 300 K. Peters
57 [Signature]
81 [Signature]
844 [Signature]

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Ruby Date 4-12-18

Inspector's signature Bill Baker Date 4-12-18



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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 OK

Welders Clock # ~~1500~~
842
109

Cushion Unit Serial Numbers:

- A. NKRC 11801001653
- B. NKRC 1180100162X

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Neely Date 5-2-18

Inspector's signature Bill Baker Date 5/2/18



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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

Inspect all welds and fasteners OK

X Welders Clock # 300 K. Peterson
57 Rob Duval
81 Jason Braker
844 Mike Baker

All repairs to be made and forms completed before moving assembly

CUSTOMER WITNESS POINT:

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

Customer Signature VI - B. Cunniff Date 4/10/18

Group leader or foreman's signature Steve Neely Date 4-18-18

Inspector's signature Bill Baker Date 4-19-18

QA Form 86
 Revision No. 0

ATLAS Span Bolster Assembly

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Buffer Railcar IDOX 020001

Kasgro Specialty Railcar Solutions
Form 86
ATLAS Buffer Car Assembly

Quality Assurance
 Reporting Form

Position #5
 Apply Safety Appliances and Couplers

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

Inspect all welds and fasteners OK

Welders Clock # ~~1001 R. P. [unclear]~~
109,131

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Neely Date 5-2-18

Inspector's signature Bill Baker Date 5/2/18



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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 OK

Welders Clock # ~~XXXXXXXXXXXX~~
109, 131

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 [Signature] Date 12/3/18

CUSTOMER HOLD POINT:

* Final Acceptance Inspection Hold Point; to occur with each railcar.

Customer Signature [Signature] Date 2/19/19

Group leader or foreman's signature [Signature] Date 5/2/18

Inspector's signature [Signature] Date 2 MAY 18

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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 OK

Weld Draft Sill OK

Inspect all welds /

X Welders Clock # 300 K. Peterson
57 R. Williams
81 T. Brown
844 M. Adams

All repairs to be made and forms completed before moving Draft Sill section

Group leader or foreman's signature Scott Neely Date 4-15-18

Inspector's signature Till Baker Date 16 APR 18



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Buffer Railcar IDOX 020002

2

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 Bernard Court Date 3/21/18

Draft Sill Arrangement Number 3

CUSTOMER WITNESS POINT:

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

Position #1 Bernard Court 4/10/18
 Fit and weld center sill bottom plate, assemble center sill and end draft sills to deck plate

Steel Stamp Number J

Inspect all welds

X Welders Clock # #824 RON PRICE
#821 TRISTON MULLS
#813 JOSH CLYDE
841 JOHN HEWKE

All repairs to be made and forms completed before moving Draft Sill section

Group leader or foreman's signature Scott Aedy Date 4-23-18

Inspector's signature Bill Baker Date 4/23/18



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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

X Welders Clock # #824 Ron Price
#821 TRISTON MILLER
#843 JOHN CLYDE
841 JOHN HENKES

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Keely Date 4-23-18

Inspector's signature Bill Baker Date 4/23/18

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ATLAS Span Bolster Assembly

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Buffer Railcar IDOX 020002

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 OK

Welders Clock # 842
109

Cushion Unit Serial Numbers:

A. NKRC 11805016514

B. NKRC 11805016990

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Neely Date 6-5-18

Inspector's signature Bob Baker Date 6/5/18

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Buffer Railcar IDOX 020002

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

Inspect all welds and fasteners OK

X Welders Clock # #824 Ron PRICE
841 JOHN HENKE

All repairs to be made and forms completed before moving assembly

CUSTOMER WITNESS POINT:
 * Start of NDE Process to occur on first available car on order.

Customer Signature Mr. B. Counts Date 4/16/18

Group leader or foreman's signature Scott Mully Date 4-23-18

Inspector's signature Bill Baker Date 4/23/18

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Buffer Railcar IDOX 020002

Kasgro Specialty Railcar Solutions
Form 86
ATLAS Buffer Car Assembly

Quality Assurance
 Reporting Form

Position #5
 Apply Safety Appliances and Couplers

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

Inspect all welds and fasteners OK

Welders Clock # 109
131

All repairs to be made and forms completed before moving assembly

Group leader or foreman's signature Scott Neely Date 6-5-18

Inspector's signature Bill Palmer Date 6/5/18



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Buffer Railcar IDOX 020002

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 GR

Welders Clock # 109, 131

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 Bill Connor Date 12/3/18

CUSTOMER HOLD POINT:

* Final Acceptance Inspection Hold Point; to occur with each railcar.

Customer Signature Bill Connor Date 2/19/19

Group leader or foreman's signature Scott Neely Date 6-5-18

Inspector's signature Bill Parker Date 4/5/18

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Buffer Railcar IDOX 020002

#2

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

Quality Assurance
 Draft Sill Arrangement Reporting Form

Draft Sill Arrangement Number 7

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

Inspect Fit-up OK

Check Cushioning Unit Pocket Dimensions OK

Weld Draft Sill OK

Inspect all welds OK

X Welders Clock # #824 Ron Price
Sill JOHN HENKE

All repairs to be made and forms completed before moving Draft Sill section

Group leader or foreman's signature Scott Neely Date 4-25-18

Inspector's signature Bill Baker Date 25APR18

QA Form 86A
 Revision No. 0

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Project: 00225.03.0050 DOE Atlas Project

	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 041A
Charge No:	00225.03.0050.02.00001	Due Date: 4/15/2019
Document(s):	See DTF No.: 041A	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.04.02 09:59:27 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):-		Digitally signed by COUNTERMAN Bernard Date: 2019.04.03 08:12:16 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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

Orano Federal Services				
DATA TRANSMITTAL FORM				
Supplier:	KASGRO RAIL CORP., INC. DTF No: 39 Page 1 of 1			
P.O./SC No:	15C3011916 KLEIN Slade <small>Date: 2019.02.27 13:35:08-0800</small> Date: 2/22/2019			
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal SDRL List Item No: 24			
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information Number of Copies Submitted: 1			
Submitted By:	RICK FORD <small>Digitally signed by Rick Ford Date: 2019.02.22 09:16:40 -0800</small> Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.22 09:16:40 -0800</small> PROJECT MANAGER			
	<small>(Name) (Signature) (Title)</small>			
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 138		ATLAS CASK/BUFFER CAR'S LAYON INSTALLATION AND TEST DATA	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 139		ATLAS CASK BODY MATERIAL HEAT IDENTIFICATION, FORMS 42, 40A, 44B	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 140		ATLAS BUFFER IDOX 2001 BODY MATERIAL HEAT IDENTIFICATION, FORM 44B	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 141		ATLAS BUFFER IDOX 2002 BODY MATERIAL HEAT IDENTIFICATION, FORM	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 142		ATLAS CASK CAR FORM 36 STATIC FORCE BRAKE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 143		ATLAS CASK CAR IDOX 10001, FORM 5-13-B NEW CAR INSPECTION	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 144		ATLAS CASK IDOX 10001 SUPPLIER CERTIFICATION/ AMSTED RAIL SEDARSH / MCCABE	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
Comments:			Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)	
No comments			KLEIN Slade <small>Date: 2019.02.26 07:33:08 -08'00'</small>	
			Date 2/26/2019	
FS DISPOSITION CODES AND DEFINITIONS				
AP	Approved	Work may proceed.	Resubmittal is not required	
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required	
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required	
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit	
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit	
RSA	Receipt Submittal Acknowledged	No other action required.		
If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.				
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval			Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, c=US Date: 2019.02.26 12:29:54 -0800	
			Date: 02/26/2019	

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



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

 orano	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 039
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 039	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.25 15:52:04 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
KAS 142 Cask Car Form 36 Brake Test - Why is the Gross Shoe Force = 0		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 10:22:16 -08'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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

Atlas

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

DATE : 11/14/18		Bolster Number: IDOX 20001				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baker</i>				KASGRO RAIL		
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 Page 1 of 1



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

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

Atlas

DATE : 11/14/18			BODY NUMBER: IDOX 020001			
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Bader</i>			KASGRO RAIL			
<small>Use of ASTM 572 grade 50 material is acceptable for grade 60 matl provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A873. The minimum average absorbed energy shall be 20 ft-lbs</small>						
<small>at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
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	

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



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

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

Atlas

DATE : 11/14/18		BODY NUMBER: IDOX 020001				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baker</i>				KASGRO RAIL		
<small>Use of ASTM 672 grade 60 material is acceptable for grade 60 matl provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A673. The minimum average absorbed energy shall be 20 ft-lbs at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
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	Charpy
3-18	D-1160-11	811W00780	ARCELORMITTAL	2	A-572-50	Charpy
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	

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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

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

Atlas

Table with columns: PART NO., PRINT NO., HEAT NUMBER, MELTER, QTY/CAR, MATERIAL, special testing. Includes header information: DATE: 11/14/18, BODY NUMBER: IDOX 020001, and a signature line.

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



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

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFICATION

Atlas

FORM 44B - 3/12/2010

3-38	D-1180-17	821Y01750	ARCELORMITTAL	22	A-36	
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Bill Baker

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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

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

Atlas

DATE: 11/14/18		BODY NUMBER: IDOX 020001				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baber</i>				KASGRO RAIL		
<small>Use of ASTM 572 grade 50 material is acceptable for grade 60 material provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A673. The minimum average absorbed energy shall be 20 ft-lbs</small>						
<small>at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-39	D-1160-18	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	
Welding Wire		BRAND: HOBART 1/16", 7036A, 70 SERIES, 4661T 80 SERIES				

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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

Atlas

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

DATE : 11/14/18		Bolster Number: IDOX 20002				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baker</i>				KASGRO RAIL		
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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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

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

Atlas

DATE : 11/14/18		BODY NUMBER: IDOX 020002				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baker</i>				KASGRO RAIL		
<small>Use of ASTM 572 grade 50 material is acceptable for grade 60 mat'l provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A673. The minimum average absorbed energy shall be 20 ft-lbs at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
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	
3-5	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	
3-6	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	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50	
3-8	D-1160-7	811W16430	ARCELOMITAL	5	A-572-50	
3-9	D-1160-7	811W16430	ARCELOMITAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELOMITAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELOMITAL	4	A-572-50	
3-9	D-1160-7	811W16430	ARCELOMITAL	4	A-572-50	

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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

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

Atlas

DATE : 11/14/18		BODY NUMBER: IDOX 020002				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Baker</i>				KASGRO RAIL		
<small>Use of ASTM 572 grade 50 material is acceptable for grade 60 mail provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A673. The minimum average absorbed energy shall be 20 ft-lbs at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
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	Charpy
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	

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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

4-AXLE ATLAS BUFFER CAR BODY - HEAT IDENTIFICATION

Atlas

FORM 44B - 3/12/2010

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

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Page 4 of 4



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

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

Atlas

DATE : 11/14/18		BODY NUMBER: IDOX 020002				
TO THE BEST OF MY KNOWLEDGE ALL INFORMATION CONTAINED IS ACCURATE						
SIGNED: <i>Bill Bahn</i>				KASGRO RAIL		
<small>Use of ASTM 572 grade 50 material is acceptable for grade 60 matl provided the mechanical properties for grade 60 material are satisfied</small>						
<small>Charpy impact testing, when required, will be in accordance with ASTM A673. The minimum average absorbed energy shall be 20 ft lbs</small>						
<small>at zero degrees F. Transverse impact test is required for plate widths over 24 inches</small>						
PART NO.	PRINT NO.	HEAT NUMBER	MELTER	QTY/CAR	MATERIAL	special testing
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-38	D-1160-17	821Y01750	ARCELOMITAL	22	A-36	
3-39	D-1160-18	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	
Welding Wire		BRAND: HOBART 1/16", 7036A, 70 SERIES, 4661T 80 SERIES				

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



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

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 042 Page <u>1</u> of <u>1</u>
P.O./SC No: 15C3011916	Date: 2/26/2019
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 24
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD <small>(Name)</small>	Rick Ford <small>(Signature)</small> <small>Digitally signed by Rick Ford Date: 2019.02.26 11:40:39 -0500</small>
	PROJECT MANAGER <small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 152		ATLAS BUFFER CAR FORM 5 NEW CAR INSPECTION REPORT IDOX 20001	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 153		ATLAS BUFFER CAR FORM 5 NEW CAR INSPECTION REPORT IDOX 20002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 154		TUV NDE UT OF ATLAS DECK ATTACHMENT PARTS	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: <small>KAS 154 must be corrected and resubmitted: 1) Are the 8 blocks identified on UT-1 the same as identified on UT-2? So traceability such as item number needs to be established. 2) Was UT-2 done after rework was performed on the outer pin blocks or was the criteria of the test acceptance changed? The PO to rework the outer pin blocks has a completion date of 11/29/18 DTF-043 – KAS 162 ATLAS KD UP K18-0341A). If this is the PO to rework the blocks identified on UT-1, the dates don't match. Please revise the submittal to explain UT-2.</small>	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.) KLEIN Slade Date: 2019.03.12 11:10:15 -0700 Date 3/12/2019
---	---

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.



Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	Digitally signed by Mark A. Denton <small>DNI: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano-group.com</small> Date: 03/12/2019 <small>DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano-group.com</small>
--	---

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



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

 orano	Orano Federal Services	
SUPPLIER DOCUMENT SUBMITTAL REVIEW		
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 042
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 042	
<small>REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. FS Spec and Dwg. Codes, Stds, etc.)</small>		
PE	Slade Klein	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.03.04 19:08:58 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
TUV report #UT-1 identifies that "... Indications found during this examination are not to classified as laminations and are identified as defects with variable orientation and size within the plate". And Test Results is identified as N/A.		
Was this further evaluated further, repaired and/or reinspected?		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.03.12 08:23:08 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
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 Appendix F

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 Project: 00225.03.0050 DOE Atlas Project

Page 1 of 2			
KASGRO RAIL CORP			
FORM 5			
NEW CAR INSPECTION			
Revision "0"		Date: 02/13/19	
Car Number	IDOX 020001		Job Number
Wheel / Axle	36" / 6 1/2" X 9"		
Part Number			
Wheel pressure on file		Bearing pressure on file	
MANU/MOD/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/11-17/05606		4	SW/H36/C/11-17/06142
HANDBRAKE - Model No. ELLCON 35790 GROUP U			
COUPLERS		TYPE	HEIGHT
B-END	SE68DE	32 13/16"	
A-END	SE68DE	32 3/4"	
DRAFT SYSTEM			
	Part Number		
A End	18852-D		
B End	18852-D		
TRUCKS			
Part Number			
No.	Left side frame (buttons)	Bolster	Right side frame (buttons)
	F92-10FH-LJB	B92-714N-HJ	F92-10FH-LJB
1	5		5
2	4		4
INSPECTOR:	CW		DATE: 2/19/19



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
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 Appendix F

Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

Page 2 of 2	
KASGRO RAIL CORP	
FORM 5	
NEW CAR INSPECTION	
Revision "0"	Date: 02/13/19
Car Number IDOX 020001	Job Number
SPRINGS - PATTERN / TYPE	
Outer Coil	5 D7 OC
Inner Coil	5 D6 IC
Inner Inner Coil	5 D6A IIC
CLEARANCE OF SAFETY APPLIANCES - 2" Minimum — 1/2" Preferred	OKAY
AIR BRAKES	
Brake Valve DB10/DB20	
Brake Pins & Cotter Keys	OKAY
Brake Rigging Free & Clear	OKAY
Brake Shoe	2"
SIDE BEARING CLEARANCE	
BR 5"	BL 5 1/16"
AR 5"	AL 5"
TESTING	
Single Car Test <input checked="" type="checkbox"/>	Golden Shoe Test <input checked="" type="checkbox"/>
Brake Pipe Restriction Test <input checked="" type="checkbox"/>	Truck Curve Test <input checked="" type="checkbox"/>
Slack Adjuster Test <input checked="" type="checkbox"/>	Load Test <input checked="" type="checkbox"/>
DIMENSIONS	
Maximum Width: 10 Ft 8 In	
Working Deck Length: 60 Ft	
Deck Height(s):	
At "A" End Right Side: 42 11-16"	At "A" End Left Side: 42 3/4"
At Center Right Side: 43 1/8"	At Center Left Side: 43 5/8"
At "B" End Right Side: 42 3/8"	At "B" End Left Side: 42 3/8"
INSPECTOR: CW	Date: 2/19/19



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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Page 1 of 2			
KASGRO RAIL CORP			
FORM 5			
NEW CAR INSPECTION			
Revision "3"		Date: 02/13/19	
Car Number	<u>IDOX 020002</u>	Job Number	_____
Wheel / Axle	<u>36" / 6 1/2" X 9"</u>		
Part Number _____			
Wheel pressure on file	_____	Bearing pressure on file	_____
MANU/MOD/C/DA/ Sr. #		Axle	MANU/MOD/C/DA/ Sr. #
Left			Right
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/11-17/22785		3	SW/H36/C/11-17/06123
SW/H36/C/11-17/06045		4	SW/H36/C/11-17/06077
HANDBRAKE - Model No. <u>ELLCON 35790 GROUP U</u>			
COUPLERS	TYPE		HEIGHT
B-END	<u>SE68DE</u>	<u>32 13/16"</u>	
A-END	<u>SE68DE</u>	<u>32 11/16"</u>	
DRAFT SYSTEM			
	Part Number		
A End	<u>18852-D</u>		
B End	<u>18852-D</u>		
TRUCKS			
Part Number			
No.	Left side frame (buttons)	Bolster	Right side frame (buttons)
	<u>F92-10FH-UB</u>	<u>B92-714N-HJ</u>	<u>F92-10FH-UB</u>
1	5		5
2	5		5
INSPECTOR: <u>CW</u>		DATE: <u>2/19/19</u>	



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
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 Project: 00225.03.0050 DOE Atlas Project

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KASGRO RAIL CORP	
FORM 5	
NEW CAR INSPECTION	
Revision "0"	Date: 02/13/19
Car Number IDOX 020002	Job Number
SPRINGS - PATTERN / TYPE	
Outer Coil	5 D7 OC
Inner Coil	5 D6 IC
Inner Inner Coil	5 D6A IIC
CLEARANCE OF SAFETY APPLIANCES - 2" Minimum — 1/2" Preferred	
	OKAY
AIR BRAKES	
Brake Valve DB10/DB20	
Brake Pins & Cotter Keys	OKAY
Brake Rigging Free & Clear	OKAY
Brake Shoe	2"
SIDE BEARING CLEARANCE	
BR 5"	BL 5 1/16"
AR 5 1/16"	AL 5"
TESTING	
Single Car Test X	Golden Shoe Test X
Brake Pipe Restriction Test X	Truck Curve Test X
Slack Adjuster Test X	Load Test X
DIMENSIONS	
Maximum Width: 10 Ft 8 In	
Working Deck Length: 60 Ft	
Deck Height(s):	
At "A" End Right Side: 42 11-16"	At "A" End Left Side: 42 3/4"
At Center Right Side: 43 1/8"	At Center Left Side: 43 5/8"
At "B" End Right Side: 42 3/8"	At "B" End Left Side: 42 3/8"
INSPECTOR: CW	Date: 2/19/19



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
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Appendix F

Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 041B
Charge No:	00225.03.0050.02.00001	Due Date: 5/6/2019
Document(s):	See DTF No.: 041B	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date):		KLEIN Slade
		Date: 2019.04.24 07:23:33 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard
		Date: 2019.04.24 05:40:38 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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

KAS 147

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 020001

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


Mark Ziegler

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.

Specialty Rail Car Solutions



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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Project: 00225.03.0050 DOE Atlas Project

KAS 148

Kasgro Rail Corporation
121 Rundle Rd. • New Castle, PA 16102
724-658-9061 • 724-658-7689 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. 15C3011918


Mark Zeigler

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.

Specialty Rail Car Solutions



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Project: 00225.03.0050 DOE Atlas Project

APPENDIX F.2 – SPECIAL PROCESS INSPECTION DOCUMENTATION

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

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 037 Page <u>1</u> of <u>1</u>
P.O./SC No: 15C3011916	Date: 2/1/2019
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 24
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.01 14:58:44 -0500</small> PROJECT MANAGER
<small>(Name)</small>	<small>(Signature)</small> <small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 118		FORM 48A, ATLAS CASK CAR IDOX 010001 WEIGHING FORM	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 119		ATLAS BUFFER CARS, IDOX 020001-020002, TUV WELD INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 120		ATLAS BUFFER CARS IDOX 020001-020002 TUV NDE INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 121		ATLAS BUFFER CAR IDOX 020001-020002 BRAKE EQUALIZATION, EMERGENCY APPLICATION AND HANDBRAKE TESTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 122		ATLAS BUFFER CARS IDOX 020001-020002 MRE YON 1/6-655 WITNESSES / ACCEPTANCE LETTER FOR SINGLE CAR AIR BRAKE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 123		FORM 36, 6-A, ATLAS BUFFER CARS IDOX 020001-020002 STATIC BRAKE FORCE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 124		SUPPLIER CERTIFICATION FORM / AMSTED RAIL TOM SEDARSKI TMS-7 HANDBRAKE INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 125		SUPPLIER CERTIFICATION FORM / AMSTED RAIL SHAWN PEETZ BUFFER CARS TRUCK INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
9	KAS 126		SUPPLIER CERTIFICATION FORM / TTCI MATT DEGEORGE IDOX 020001-020002 EQUIPMENT MET S-401	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments	Technical Reviewer (I.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>Date: 2019.02.19 06:42:35 -08'00'</small> Date 2/19/2019
--------------------------	---

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, ou=ORF Date: 2019.02.19 10:23:33 -0500</small>	Date: 02/19/2019
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FS-EN-FRM-023 Rev 02 (Effective March 1, 2018)
 Refer to FS-EN-PRC-012



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

 orano	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 037
Charge No:	00225.03.0050.02.00001	Due Date: 2/22/2019
Document(s):	See DTF No.: 037	
<small>REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. FS Spec and Dwg. Codes, Stds, etc.)</small>		
PE	Slade Klein	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.19 06:40:32 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 06:58:53 -08'00'
<small>COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)</small>		

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



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
 High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP									
FORM 36		STATIC FORCE BRAKE TEST DATA				Rev 1		11/20/2008	
Brake System:	DB 10/DB20			Date:	12-4-18				
Brake Rigging:	TRUCK MOUNT			Product Order:					
Slack Adjuster:	ELLCON 7100			Car Type:	FLAT				
Handbrake:	ELLCON 35790 GROUP U			For:					
Bell Crank:	N/A			Car Series:	IDOX 020001-020002				
Sheave Wheel:	8"			Test Car No:	IDOX 020001				
Brake Shoe:	2" TREAD SHOE			Date Built:					
Air Brake Force (Gross):				#	Light Weight:	71600		#	
Brake Lever Ratio:				:1	Gross Rail Load:	263000		#	
Handbrake Force (Gross):				#	Brake Force Schem.:				
EMPTY LOAD %:				%	Brake Arrangement:				
MEASURED BRAKE SHOE FORCE (IN NET POUNDS)									
Brake Cylinder Pressure (psig):									
P N E U M A T I C	WHEEL	CHANNEL	Min red 6-7 UNTAPPED	Light Car: UNTAPPED	Loaded Car: TAPPED	UNTAPPED	TAPPED	FORCE H A N D B R A K E	3360 lbs. on Vert. Chain
	L-1	1	205			3723	3745	A	9192 (1)
	R-1	3	307			4006	4124	N	11097 (2)
	L-2	2	282			3903	4164	D	10116 (3)
	R-2	4	268			3993	4475	B	11630 (4)
	L-3	7	354			4028	4416	R	
	R-3	6	369			4055	4298	A	
	L-4	8	287			3986	4061	K	
	R-4	5	364			3584	3702	E	
	TOTALS:			0		0	0	0	
BCP @ Min Red.	"A" End	(AVERAGE) #DIV/0!	"B" END	(MINIMUM)	(AVERAGE)	(MAXIMUM)			
				0.0	0.0	0.0			
PISTON TRAVEL:	2 5/8"		Brake Cylinder Pressure, Min. 30psig Reduction:				0.00		64
	2 5/8"		Emergency Application:				76.5		
	Pneumatic Loaded %		Handbrake Loaded %		Pneumatic Light %				
NET SHOE FORCE x100 = LIGHT WEIGHT	12.54%		15.98%		0 x 100 = #DIV/0!				
NET SHOE FORCE x100 = GROSS RAIL LOAD	0 #DIV/0!		0 x 100 = #DIV/0!		0				
NET SHOE FORCE x100 = GROSS SHOE FORCE	0 #DIV/0!		0 x 100 = #DIV/0!		0 x 100 = #DIV/0!				
BRAKE PIPE CHARGE OF			90 psig		ATTESTED: <i>Cory J. Wagner</i>				



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 Project: 00225.03.0050 DOE Atlas Project

KASGRO RAIL CORP										
FORM 36		STATIC FORCE BRAKE TEST DATA				Rev 1		11/20/2008		
Brake System:	DB 10/DB20			Date:	12-4-18					
Brake Rigging:	TRUCK MOUNT			Product Order:						
Slack Adjuster:	ELLCON 7100			Car Type:	FLAT					
Handbrake:	ELLCON 35790 GROUP U			For:						
Bell Crank:	N/A			Car Series:	IDOX 020001-020002					
Sheave Wheel:	8"			Test Car No:	IDOX 020002					
Brake Shoe:	2" TREAD SHOE			Date Built:						
Air Brake Force (Gross):		#	Light Weight:	71600	#					
Brake Lever Ratio:		:1	Gross Rail Load:	263000	#					
Handbrake Force (Gross):		#	Brake Force Schem.:							
EMPTY LOAD %:		%	Brake Arrangement:							
MEASURED BRAKE SHOE FORCE (IN NET POUNDS)										
Brake Cylinder Pressure (psig):										
P N E U M A T I C			Min red 6-7	Light Car:	Loaded Car:		FORCE		3360 lbs. on Vert. Chain	
	WHEEL	CHANNEL	UNTAPPED	UNTAPPED	TAPPED	UNTAPPED	TAPPED	H		
	L-1	1	346			3749	3751	A	9071 (1)	
	R-1	3	468			4130	4106	N	10532 (2)	
	L-2	2	356			3863	4030	D	9779 (3)	
	R-2	4	381			4065	4288	B	10985 (4)	
	L-3	7	428			4253	4514	R		
	R-3	6	380			4177	4528	A		
	L-4	8	304			3886	3938	K		
	R-4	5	351			3969	3882	E		
TOTALS:			0		0	0	0		0	
BCP @ Min Red:		"A" END	AVERAGE	"B" END	(MINIMUM)	(AVERAGE)	(MAXIMUM)			
			#DIV/0!		0.0	0.0	0.0			
PISTON TRAVEL:		2.58"	Brake Cylinder Pressure, Min. 30psig Reduction:				0.00	64		
		2.78"	Emergency Application:				76.6			
		Pneumatic Loaded %		Handbrake Loaded %		Pneumatic Light %				
NET SHOE FORCE x 100 = LIGHT WEIGHT		12.56%		15.34%		0 x 100 = #DIV/0!				
NET SHOE FORCE x 100 = GROSS RAIL LOAD		0 #DIV/0!		0 #DIV/0!		0				
NET SHOE FORCE x 100 = GROSS SHOE FORCE		0 #DIV/0!		0 #DIV/0!		0 x 100 = #DIV/0!				
BRAKE PIPE CHARGE OF		90 psig		ATTESTED: <i>Cory J. Wagner</i>						



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

Orano Federal Services				
DATA TRANSMITTAL FORM				
Supplier:	KASGRO RAIL CORP., INC. DTF No: 046 Page 1 of 1			
P.O./SC No:	15C3011916 KLEIN Slade Date: 2019.03.12 16:43:36 -0700 Date: 2/28/2019			
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal SDRL List Item No: 24			
Submitted for:	<input checked="" type="checkbox"/> Approval <input checked="" type="checkbox"/> Review <input type="checkbox"/> Information Number of Copies Submitted: 1			
Submitted By:	RICK FORD Rick Ford Digitally signed by Rick Ford Date: 2019.02.28 08:40:32 -0500 PROJECT MANAGER <small>(Name) (Signature) (Title)</small>			
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 171		IDOX 10001 FORM 6 AIR BRAKE TEST 2/12/2019	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 172		IDOX 20001 FORM 6 AIR BRAKE TEST 2/12/2019	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 173		IDOX 20002 FORM 6 AIR BRAKE TEST 2/12/2019	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 174		IDOX 10001 FORM 6 AIR BRAKE TEST 2/27/2019	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
			KAS 174 2/27/2019 ABT TEST REPEATED DUE TO TRUCK BOLSTER WORK	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
Comments:			Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)	
KAS 174, add a identification to the form that this brake test was performed after Amstead boss inspection and car reassembly.			KLEIN Slade Date: 2019.03.12 11:30:57 -0700	
			Date 3/4/2019	
FS DISPOSITION CODES AND DEFINITIONS				
AP	Approved	Work may proceed.	Resubmittal is not required	
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required	
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required	
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit	
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit	
RSA	Receipt Submittal Acknowledged	No other action required.		
If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.				
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval			Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, c=US Date: 03/12/2019	

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



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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 046
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 046	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.03.04 19:32:42 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Should KAS 174 IDOX 010001 Form 6 ABT 2-27-19 be identified as "Brake test reperformed after Amstead boss inspection"?		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.03.12 10:39:38 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

Rev.5	Kasgro Rail Corp	
	FORM 6 2/24/2016	CAR NUMBER <u>1DOK 020001</u>
Air Brake Test Report (X=Tested)		
Single Car Test, 1Set	<u>X</u>	Single Car Test, 2 Sets
Single Car Test (Includes B.C. Pressure Test)	<u>X</u>	Single Car Test (includes B.C. Pressure Test), 2 Sets
Slack Adjuster Test	<u>X</u>	Retainer Valve Test
Empty / Load Valve Test	<u>X</u>	Brake Pipe Leakage Test
System Leakage Test	<u>X</u>	Equalization Pressure
Piston Travel (Unit Brakes)	<u>X</u>	If Equipped With Load Sensor
Piston Travel (Trk MTD Brakes)	<u>X</u>	Equalization Pressure Load Sensor
WABCO/PAC / NYPOAC Piston Travel Adjustment	<u>X</u>	Equalization Pressure Loaded
(Truck Mounted Brakes with Slack Adjuster	<u>X</u>	Equalization Pressure Empty
Lube Handbrake	<u>X</u>	Slack Adjuster Rack Measurement
SYSTEM REPAIRS- List repairs, parts replaced, Location, and why made.		
Piston Travels <u>B 2 5/8 A 2 5/8</u>		
<u>EQUALIZATION PRESSURE SER 63 EM 76</u>		
<u>(NO EMPTY LOAD RETURN - LOADED CAR)</u>		
<u>DB-10C</u>		
<u>DB-20</u>		
<u>NEW YORK AIR BRAKE EL LOAD SENSOR 4097</u>		
Signature of Tester <u>Mik R BL</u> Date <u>2-11-19</u>		



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Rev.5		Kasgro Rail Corp	
Air Brake Test Report (X=Tested)		FORM 6 2/24/2016	CAR NUMBER IDOX 020002
Single Car Test, 1Set	<input checked="" type="checkbox"/>	Single Car Test, 2 Sets	<input type="checkbox"/>
Single Car Test (includes B.C. Pressure Test)	<input checked="" type="checkbox"/>	Single Car Test (includes B.C. Pressure Test), 2 Sets	<input type="checkbox"/>
Slack Adjuster Test	<input checked="" type="checkbox"/>	Retainer Valve Test	<input checked="" type="checkbox"/>
Empty / Load Valve Test	<input type="checkbox"/>	Brake Pipe Leakage Test	<input checked="" type="checkbox"/>
System Leakage Test	<input checked="" type="checkbox"/>	Equalization Pressure	<input checked="" type="checkbox"/>
Piston Travel (Unit Brakes)	<input checked="" type="checkbox"/>	If Equipped With Load Sensor	<input checked="" type="checkbox"/>
Piston Travel (Trk MTD Brakes)	<input type="checkbox"/>	Equalization Pressure Load Sensor	<input checked="" type="checkbox"/>
WABCO/PAC / NYPOAC Piston Travel Adjustment	<input type="checkbox"/>	Equalization Pressure Loaded	<input checked="" type="checkbox"/>
(Truck Mounted Brakes with Slack Adjuster	<input type="checkbox"/>	Equalization Pressure Empty	<input type="checkbox"/>
Lube Handbrake	<input type="checkbox"/>	Slack Adjuster Rack Measurement	<input type="checkbox"/>
SYSTEM REPAIRS- List repairs, parts replaced, Location, and why made.			
Piston Travels B 2 1/2 A 2 1/2			
EQUALIZATION PRESSURE SER 63 FM 76			
(100 EMPTY LOW PRESSURE LOADED CAR)			
DB-10c			
DB-20			
NEW YORK AIR BRAKE FL LOAD SENSOR 4090			
Signature of Tester Mike R Bl		Date 2-11-19	



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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 050
Charge No:	00225.03.0050.02.00001	Due Date: 3/18/2019
Document(s):	See DTF No.: 050	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.03.14 15:16:48 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.03.15 08:08:53 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018)
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Project: 00225.03.0050 DOE Atlas Project



Mike Yon
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 hesitate to call.

Sincerely,

Mike Yon

cc: Anna Fox, TTCI
Kasgro, mark@kasgro.com
J. Hannafous, TTCI



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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

Rev. 1	Kasgro Rail Corp		CAR NUMBER <u>170X-2001</u>
Air Brake Test Report (Re-Tested)	FORM 6-A 2/25/2016		
Single Car Test, 1 Set	<input checked="" type="checkbox"/>	Single Car Test (incl. incl. incl. B.C. Pressure Test), 2 Sets	<input checked="" type="checkbox"/>
Single Car Test (includes B.C. Pressure Test)	<input checked="" type="checkbox"/>	Retainer Valve Test	<input checked="" type="checkbox"/>
Slack Adjuster Test	<input checked="" type="checkbox"/>	Brake Pipe Leakage Test	<input checked="" type="checkbox"/>
Empty / Load Valve Test	<input checked="" type="checkbox"/>	Equalization Pressure	<input checked="" type="checkbox"/>
System Leakage Test	<input checked="" type="checkbox"/>	If Equipped With Load Sensor	<input checked="" type="checkbox"/>
Piston Travel (Unit Brakes)	<input checked="" type="checkbox"/>	Equalization Pressure Load Sensor	<input checked="" type="checkbox"/>
Piston Travel (W/ MTD Brakes)	<input checked="" type="checkbox"/>	Equalization Pressure Empty	<input checked="" type="checkbox"/>
WABCO/PAC / MYPAC Piston Travel Adjustment		Slack Adjuster Back Measurement	<input checked="" type="checkbox"/>
Truck Mounted Brakes with Slack Adjuster			
#1 02			
#2 03			
#3 04			
Lube Handbrake			
SYSTEM REPAIRS: List repairs, parts replaced, location, and why made.			
Piston Travels	<u>Both Ade</u>		
	<u>EQUALIZATION PRESSURE: SER 63, F0776 (checked car no empty sensor)</u>		
	<u>DBS 100</u>		
	<u>18-20</u>		
	<u>NEW YORK AIR BRAKE FLX 40% LOAD SENSOR</u>		
Signature of Tester	<u>[Signature]</u>		Date <u>2-11-19</u>

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



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

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 037 Page <u>1</u> of <u>1</u>
P.O./SC No: 15C3011916	Date: 2/1/2019
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 24
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.01 14:58:44 -0500</small> PROJECT MANAGER
<small>(Name)</small>	<small>(Signature)</small> <small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 118		FORM 48A, ATLAS CASK CAR IDOX 010001 WEIGHING FORM	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 119		ATLAS BUFFER CARS, IDOX 020001-020002, TUV WELD INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 120		ATLAS BUFFER CARS IDOX 020001-020002 TUV NDE INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 121		ATLAS BUFFER CAR IDOX 020001-020002 BRAKE EQUALIZATION, EMERGENCY APPLICATION AND HANDBRAKE TESTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 122		ATLAS BUFFER CARS IDOX 020001-020002 MRE YON 1/6-605 WITNESSES / ACCEPTANCE LETTER FOR SINGLE CAR AIR BRAKE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 123		FORM 36, 6-A, ATLAS BUFFER CARS IDOX 020001-020002 STATIC BRAKE FORCE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 124		SUPPLIER CERTIFICATION FORM / AMSTED RAIL TOM SEDARSKI TMS-7 HANDBRAKE INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 125		SUPPLIER CERTIFICATION FORM / AMSTED RAIL SHAWN PEETZ BUFFER CARS TRUCK INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
9	KAS 126		SUPPLIER CERTIFICATION FORM / TICI MATT DEGEORGE IDOX 020001-020002 EQUIPMENT MET 6-401	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments	Technical Reviewer (I.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>Date: 2019.02.19 06:42:35 -08'00'</small> Date 2/19/2019
--------------------------	---

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.com, ou=ORF Date: 2019.02.19 10:23:33 -0500</small>	Date: 02/19/2019
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FS-EN-FRM-023 Rev 02 (Effective March 1, 2018)
 Refer to FS-EN-PRC-012



Orano Federal Services
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High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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 Project: 00225.03.0050 DOE Atlas Project

	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 037
Charge No:	00225.03.0050.02.00001	Due Date: 2/22/2019
Document(s):	See DTF No.: 037	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.19 06:40:32 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 05:58:53 -08'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



Orano Federal Services
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High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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KAS-119

Grand Rapids, MI – Pittsburgh, PA – Birmingham, AL
 NDE • MECHANICAL LAB • ENVIRONMENTAL www.tuvris.com



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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	Other	Model N/A
Product Form: N/A		For Welds: <input type="checkbox"/> Root Pass	Cert. # F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Intermediate	Other V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Excess Reinforcement	Weld Undersized	Remarks:
Ballast Plates											
3-80 to 3-32 (Deck)											
A End		X		X							71" From RS
B End	/										
Left Side		X	X								88" and 117" from BE
Right Side		X				X	X				150" and 154" from BE
3-81 to 3-80											
A End		X		X			X				50" / 84" from RS
B End	/										
Left Side	/										
Right Side		X					X				157"/200"/271"/381" from BE
3-82 to 3-81											
A End	/										
B End		X	X	X		X					44"/50"/108" from LS
Left Side		X		X			X				96" from AE/84" from BE
Right Side		X	X			X	X				50"/74" from BE

Technician: Daniel S. Gjurich

Daniel S. Gjurich

Level: CWI #93041171



Daniel S. Gjurich
 CWI 93041171
 QC1 EXP. 4/1/2020

Reviewed By: *[Signature]*

Date: 12/11/18

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NDFO-0100
 March 19, 2004
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VISUAL INSPECTION REPORT

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



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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	Other	Model N/A
Product Form: N/A		For Welds: <input type="checkbox"/> Root Pass <input type="checkbox"/> Intermediate <input checked="" type="checkbox"/> Final	Cert. # F 4858 Other V-Wac Gage
Type of Material: Carbon Steel			

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Ballast Plates											
3-83 to 3-82											
"A" End	/										
"B" End	/										
Left Side		X					X				5" / 90" from AE
Right Side		X				X	X			X	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	/										
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	/										
Right Side	/										

Technician: Daniel S. Gjurich  Daniel S Gjurich Level: CWI #93041171
 CWI 93041171
 QC1 EXP. 4/1/2020
 Reviewed By:  Date: 12/12/18

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other _____	Model N/A
Product Form: N/A		For Welds: _____ Root Pass	Cert. # F 4858
Type of Material: Carbon Steel		_____ Intermediate	Other V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
"A" End Plates											
3-98 to 3-99											
A End		X								X	44" from RS
B End		X				X	X				1" / 48" / 62" from RS
Left Side		X	X	X			X				16" long / 36" from AE
Right Side		X		X			X				24" / 30" from AE
3-84 to 3-98											
A End	/										
B End	/										
Left Side	/										
Right Side		X		X							28" from AS
"B" End Plates											
3-100 to 3-32 (Deck)											
A End	/										
B End	/										
Left Side		X					X				48" from BE
Right Side	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]*

Daniel S. Gjurich
 CWI 93041171
 QC1 EXP. 4/1/2020
 Date: 12/10/18

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Mr. Mark Zeigler
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 New Castle, PA 16102

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

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Date: November 19, 2018 thru December 5, 2018 Revised December 10, 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 Steel	Surface Condition: As Welded Percent of Inspection: X 100% _____ %	Production Stage: <input checked="" type="checkbox"/> In Progress <input checked="" type="checkbox"/> Final * Other For Welds: _____ Root Pass _____ Intermediate <input checked="" type="checkbox"/> Final	VT Gauge Identification: Mfg. G.A.L. Weld Gauge Fillet Weld Gages Model N/A Cert. # F 4858 Other V-Wac Gage
---	--	--	---

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
"B" End Plates											
3-90 to 3-100											
A End	/										
B End	/										
Left Side		X					X				48" FBE
Right Side	/										
3-98 to 3-99											
A End		X					X				7" FRS
B End	/										
Left Side	/										
Right Side	/										
3-84 to 3-98											
A End	/										
B End	/										
Left Side	/										
Right Side	/										

Technician: Daniel S. Gjurich Daniel S Gjurich Level: CWI #93041171
 CWI-93041171
 QC1 EXP. 4/1/2020

Reviewed By: Date: 12/10/18

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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	For Welds: <input type="checkbox"/> Other	Model: N/A
Product Form: N/A		<input type="checkbox"/> Root Pass	Cert. #: F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Intermediate	Other: V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
Ballast Plates											
3-80 to 3-32 (Deck)											
A End R1	/										
Left Side R1	/										
Right Side R1	/										
3-81 to 3-80											
A End R1	/										
Right Side R1	/										
3-82 to 3-81											
B End R1	/										
Left Side R1	/										
Right Side R1	/										
Ballast Plates											
3-83 to 3-82											
Left Side R1	/										
Right Side R1	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 1/10/19

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 New Castle, PA 16102

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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds: _____ Root Pass	Cert. # F 4858
Type of Material: Carbon Steel		_____ Intermediate	Other V-Wac Gage
		X Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
"A" End Plates											
3-100 to 3-32 (Deck)											
"A" End R1	/										
"B" End R1	/										
Right Side R1	/										
3-99 to 3-100											
"A" End R1	/										
"A" End Plates											
3-98 to 3-99											
"A" End R1	/										
"B" End R1	/										
Left Side R1	/										
Right Side R1	/										
3-84 to 3-98											
Right Side R1	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 1/10/19

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Report #: 3Rev2
 P.O. #: K18-0079
 Work Order #: 468009
 Project: Buffer Car #2

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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	For Welds: <input type="checkbox"/> Root Pass <input type="checkbox"/> Intermediate <input checked="" type="checkbox"/> Final	Model: N/A Cert. #: P 4858 Other: V-Wac Gage
Product Form: N/A			
Type of Material: Carbon Steel			

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
Ballast Plates											
3-80 to 3-32 (Deck)											
"A" End		X		X							5'7" from right side
"B" End	/										
Left Side		X	X	/			X				22"/56"/154"/174"/from "A" end/9" from "B" end
Right Side	/			/							14'2" from "A" end Meets code
3-81 to 3-80											
"A" End		X					X				16" from left side
"B" End	/										
Left Side		X	X				X				281" from "A" end/220" from "A" end
Right Side	/										
3-82 to 3-81											
"A" End	/										
"B" End	/										
Left Side		X					X				122" from "A" end
Right Side	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich*  Daniel S. Gjurich Level: CWI #93041171
 CWI 93041171
 QC1 EXP. 4/1/2020
 Reviewed By: *[Signature]* Date: 12/11/18

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 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

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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	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds: _____ Root Pass	Cert. # F 4858
Type of Material: Carbon Steel		_____ Intermediate	Other V-Wac Gage
		X Final	

Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Excess Reinforcement	Weld Undersized	Remarks:
Ballast Plates 3-83 to 3-82											
A End		X					X				12" from RS / 12" from LS
B End	/										
Left Side		X	X	X		X	X				128"/154" from A end/3"/9"6"/15" from "B" end
Right Side		X	X	X			X				86" from B/225" from B/152"/40" from A end
"A" End Plates 3-100 to 3-32 (Deck)											
A End	/			/							Meets Code
B End		X					X				19" from LS
Left Side		X	X	X			X				48" from "A" end/12" from "B" end
Right Side		X					X				46" from "A" end
3-99 to 3-100											
A End	/										
B End	/										
Left Side	/										
Right Side	/										

Technician: Daniel S. Gjulich *Daniel S. Gjulich*  Daniel S. Gjulich Level: CWI #93041171
 CWI 93041171
 QC1 EXP. 4/1/2020
 Date: 12/12/18

Reviewed By: *CA*

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 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

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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	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		X Final	

Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
"A" End Plates											
3-98 to 3-99											
"A" End		X					X				36" from RS
"B" End	/										
Left Side	/			/							2" from "A" end / Meets code
Right Side	/										
3-84 to 3-98											
"A" End	/			/							33" from RS / Meets code
"B" End	/										
Left Side	/										
Right Side	/										
"B" End Plates											
3-100 to 3-32 (Deck)											
"A" End		X					X				36" from LS
"B" End		X	X	X							33"/44" from LS
Left Side	/										
Right Side	/										

Technician: Daniel S. Gjulich *Daniel S. Gjulich* Level: CWI #93041171
 Daniel S. Gjulich
 CWI 93041171
 QC1 EXP. 4/1/2020
 Date: 12/10/18

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

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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model: N/A
Product Form: N/A		For Welds:	Cert. #: F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Root Pass	Other: V-Wac Gage
		<input type="checkbox"/> Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
"B" End Plates											
3-99 to 3-100											
A End	/										
B End	/										
Left Side		X					X				33" from A end
Right Side	/										
3-98 to 3-99											
A End	/										
B End	/										
Left Side		X	X	X							5" from A end
Right Side	/										
3-84 to 3-98											
A End	/										
B End	/	X	X	X							22" from LS
Left Side	/										
Right Side	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171
 Reviewed By: *[Signature]* Daniel S. Gjurich
 CWI 93041171
 QC1 EXP. 6/1/2020 Date: 12/10/18

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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 TÜV Rheinland Industrial Solutions, Inc.

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KAS-119

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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

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Date: November 19, 2018 thru December 12, 2018
 Description: Visual Inspections of Repairs to Buffer Car # IDOX-020002

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	<input type="checkbox"/> Other	Model: N/A
Product Form: N/A		For Welds: Root Pass	Cert. #: F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Intermediate	Other: V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #2											
Ballast Plates											
3-80 to 3-32 (Deck)											
A End R1	/										
Left Side R1	/										
3-81 to 3-80											
A End R1	/										
Left Side R1	/										
3-82 to 3-81											
Left Side R1	/										
3-83 to 3-82											
A End R1	/										
Left Side R1	/										
Right Side R1	/										
A End Plates											
3-100 to 3-32 (Deck)											
B End R1	/										
Left Side R1	/										
Right Side R1	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *Daniel S. Gjurich* Date: 12/19/18

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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	For Welds: _____ Root Pass	Model N/A
Product Form: N/A		_____ Intermediate	Cert. # F 4858
Type of Material: Carbon Steel		<input checked="" type="checkbox"/> Final	Other V-Wac Gage

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Cross Bearers											
3-6 to 3-5 (20 Items)	/										
Bolster Assemblies											
B End (2 Assys)	/										
3-2 to 3-32 BR	/										
3-2 to 3-32 BL	/										
3-3 to 3-32 & 3-2	/										
A End (2 Assys)	/										
3-2 to 3-32 AR	/										
3-2 to 3-32 AL	/										
3-3 to 3-32 & 3-2	/										
Center Sill to Deck											
3-28 to 3-32 (LS)											
Inside	/										
Outside	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 9/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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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	Surface Condition: As Welded	Production Stage: X In Progress X Final *	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	Other	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	For Welds:	Model: N/A
Product Form: N/A		Root Pass	Cert. #: F 4858
Type of Material: Carbon Steel		Intermediate	Other: V-Wac Gage
		X Final	

Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen.	Exceed Reinforcement	Weld	Undersized	Remarks:
Center Sill to Deck												
3-23 to 3-32 (RS)												
Inside	/											
Outside	/											
Cross Bearer to Center Sill and Deck												
3-5 to 3-28 & 3-32	/											(5 welds LS)
3-5 to 3-23 & 3-32	/											(5 welds RS)
3-7 to 3-28 & 3-32	/											(4 welds LS)
3-7 to 3-23 & 3-32	/											(4 welds RS)
Stringers to Cross Bearer												
3-13 to 3-5	/											(8 welds "A" end RS)
3-13 to 3-5	/											(8 welds "B" end RS)
3-13 to 3-5	/											(8 welds "A" end LS)
3-13 to 3-5	/											(8 welds "B" end LS)
Stringers to Deck												
(16) 3-13 to 3-32	/											(8 LS & 8 RS)
(8) 3-12 to 3-32	/											(4 LS & 4 RS)

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: _____ Date: 2/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		<input checked="" type="checkbox"/> Final	

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	/										"B" End
3-26 to 3-28	/										"B" End
3-78 to 3-28	/										"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)	/										"A" End
3-79 to 3-32 (inside)	/										"A" End
3-79 to 3-32 (outside)	/										"A" End
3-26 to 3-32 (inside)	/										"B" End
3-26 to 3-32 (outside)	/										"B" End
3-27 to 3-32 (inside)	/										"B" End
3-27 to 3-32 (outside)	/										"B" End

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: _____ Date: 9/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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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	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		X Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
Gusset to Center Sill & Deck											
(2)3-9 to 3-26&3-27&3-32	/										"B" End
(2)3-9 to 3-78&3-79&3-32	/										"A" End
Stringer to Deck											
(8) 3-14 to 3-32	/										(4) "A" End (4) "B" End
Bolster to Center Sill & Deck											
3-1 to 3-78 & 3-32	/										"A" End
3-1 to 3-79 & 3-32	/										"A" End
3-1 to 3-26 & 3-32	/										"B" End
3-1 to 3-27 & 3-32	/										"B" End
Cross ties To Stringer											
(11) 3-10 to 3-13	/										
Cross tie To Stringer											
3-80 to 3-12	/										"B" End Only

Technician: Daniel S. Gjurich Level: CWI #93041171

Daniel S. Gjurich
 Daniel S. Gjurich
 CWI 93041171
 QC1 EXP. 4/1/2020

Reviewed By: *[Signature]* Date: 9/25/18

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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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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	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		X Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
End Sill to Center Sill											
3-33 to 3-27	/										"B" End
3-34 to 3-26	/										"B" End
3-33 to 3-78	/										"A" End
3-34 to 3-79	/										"A" End
Stringer to Deck											
3-42 to 3-32	/										(4) "A" End (4) "B" End
Side Sill Web to Deck											
3-26 to 3-32	/										Left side
3-26 to 3-32	/										Right side
Draft sill Flange to Cntr. Sill											
3-25 to 3-26	/										"B" End
3-25 to 3-27	/										"B" End
3-25 to 3-78	/										"A" End
3-25 to 3-79	/										"A" End

Technician: Daniel S. Gjurich Level: CWI #93041171

Reviewed By: Date: 9/20/14

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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Root Pass	Other V-Wac Gage
		<input type="checkbox"/> Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Draft Stop to Center Sill											
(2) 3-67 to 3-78	/										"A" End
(2) 3-67 to 3-79	/										"A" End
(2) 3-67 to 3-26	/										"B" End
(2) 3-67 to 3-27	/										"B" End
Stringer to Deck											
(4) 3-42 to 3-32	/										"A" End
(4) 3-42 to 3-32	/										"B" End
End Crossies to Deck											
3-43 to 3-32	/										"B" End (RS)
3-44 to 3-32	/										"B" End (LS)
(2) 3-43 to 3-32	/										"A" End
Side sill to Side sill											
3-29 to 3-40	/										"B" End (LS)
3-29 to 3-39	/										"B" End (RS)
(2) 2-39 to 3-29	/										"A" End

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 04/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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 March 19, 2004
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Orano Federal Services
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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	For Welds: <input type="checkbox"/> Root Pass	Model N/A
Product Form: N/A		<input type="checkbox"/> Intermediate	Cert. # F 4858
Type of Material: Carbon Steel		<input checked="" type="checkbox"/> Final	Other V-Wac Gage

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Excess Reinforcement	Weld Undersized	Remarks:
Side Sill to Deck											
3-40 to 3-32	/										*B* End (LS)
3-39 to 3-32	/										*B* End (RS)
3-39 to 3-32	/										*A* End (LS&RS)
Gussets to Side Sill											
(11) 3-38 to 3-29	/										Left Side
(11) 3-38 to 3-29	/										Right side
(2) 3-37 to 3-40	/										*B* End (LS)
(2) 3-37 to 3-39	/										*B* End (RS)
(2) 3-37 to 3-39	/										*A* End (2 each LS&RS)
Gussets to Deck											
(11) 3-38 to 3-32	/										Left Side
(11) 3-38 to 3-32	/										Right side
(4) 3-37 to 3-32	/										*A* End (2 each LS&RS)
(4) 3-37 to 3-32	/										*B* End (2 each LS&RS)

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 01/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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VISUAL INSPECTION REPORT

Mr. Mark Ziegler
 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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Root Pass	Other V-Wac Gage
		<input type="checkbox"/> Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification Buffer Cars #1	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Excess Reinforcement	Weld Undersized	Remarks:
Front Draft Stop to Center Sill											
1-8 to 3-78	/										"A" End
1-8 to 3-79	/										"A" End
1-8 to 3-26	/										"B" End
1-8 to 3-27	/										"B" End
Stringers to Deck											
(16) 3-13 to 3-32	/										(8 LS & 8 RS)
(8) 3-12 to 3-32	/										(4 LS & 4 RS)
Bottom Flange to Side Sill											
3-16 to 3-29	/										Center (1 LS & 1 RS)
(2) 3-17 to 3-40	/										"A" End
3-11 to 3-40	/										"B" End
3-31 to 3-39	/										"B" End
Bottom Flange to Web											
3-15 to 3-23	/										(RS) Center
3-15 to 3-28	/										(LS) Center

AWS
 Daniel S. Gjurich
 CWI #93041171
 QC1 EXP. 4/1/2020

Technician: Daniel S. Gjurich

Level: CWI #93041171

Reviewed By:

Date: 02/20/18

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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 TÜV Rheinland Industrial Solutions, Inc.

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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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	For Welds: <input type="checkbox"/> Root Pass	Model: N/A
Product Form: N/A		<input type="checkbox"/> Intermediate	Cert. #: F 4858
Type of Material: Carbon Steel		<input checked="" type="checkbox"/> Final	Other: V-Wac Gage

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
Ballast Plates											
3-80 to 3-32 (Deck)	/										
3-81 to 3-80	/										
3-82 to 3-81	/										
3-83 to 3-82	/										
"A" End											
3-100 to 3-32 (Deck)	/										
3-99 to 3-100	/										
3-98 to 3-99	/										
3-84 to 3-98	/										
"B" End											
3-100 to 3-32 (Deck)	/										
3-99 to 3-100	/										
3-98 to 3-99	/										
3-84 to 3-98	/										

Technician: Daniel S. Gjulich *Daniel S. Gjulich* Level: CWI #93041171

Daniel S. Gjulich
 CWI 93041171
 QCT EXP. 4/1/2020

Reviewed By: *[Signature]* Date: 2/25/19

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		Root Pass	Other V-Wac Gage
		Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Cross Bearers											
3-6 to 3-5 (20 items)	/										
Bolster Assemblies											
B End (2 Assys)	/										
3-2 to 3-32 BR	/										
3-2 to 3-32 BL	/										
3-3 to 3-32 & 3-2	/										
A End (2 Assys)	/										
3-2 to 3-32 AR	/										
3-2 to 3-32 AL	/										
3-3 to 3-32 & 3-2	/										
Center Sill to Deck											
3-28 to 3-32 (LS)											
Inside	/										
Outside	/										

 Daniel S Gjurich
 CWI 93041171
 QC1 EXP. 4/1/2020

Technician: Daniel S. Gjurich *Daniel S Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 2/20/18

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		Root Pass	Other V-Wac Gage
		Intermediate	
		X Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Center Sill to Deck											
3-23 to 3-32 (RS)											
Inside	/										
Outside	/										
Cross Bearer to Center Sill and Deck											
3-5 to 3-28 & 3-32	/										(5 welds LS)
3-5 to 3-23 & 3-32	/										(5 welds RS)
3-7 to 3-28 & 3-32	/										(4 welds LS)
3-7 to 3-23 & 3-32	/										(4 welds RS)
Stringers to Cross Bearer											
3-13 to 3-5	/										(8 welds "A" end RS)
3-13 to 3-5	/										(8 welds "B" end RS)
3-13 to 3-5	/										(8 welds "A" end LS)
3-13 to 3-5	/										(8 welds "B" end LS)
Stringers to Deck											
(16) 3-13 to 3-32	/										(8 LS & 8 RS)
(8) 3-12 to 3-32	/										(4 LS & 4 RS)

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 03/22/18

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 TÜV Rheinland Industrial Solutions, Inc.

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	----- %	<input type="checkbox"/> Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Root Pass	Other V-Wac Gage
		<input type="checkbox"/> Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	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	/										"B" End
3-26 to 3-28	/										"B" End
3-78 to 3-28	/										"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)	/										"A" End
3-79 to 3-32 (inside)	/										"A" End
3-79 to 3-32 (outside)	/										"A" End
3-26 to 3-32 (inside)	/										"B" End
3-26 to 3-32 (outside)	/										"B" End
3-27 to 3-32 (inside)	/										"B" End
3-27 to 3-32 (outside)	/										"B" End

 Daniel S. Gjurich
 CWI 93041171
 OCT EXP. 4/1/2020

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: *2/20/18*

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 TÜV Rheinland Industrial Solutions, Inc.

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		X Final	

Product / Weld Identification	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	/										"B" End
(2)3-9 to 3-78&3-79&3-32	/										"A" End
Stringer to Deck											
(8) 3-14 to 3-32	/										(4) "A" End (4) "B" End
Bolster to Center Sill & Deck											
3-1 to 3-78 & 3-32	/										"A" End
3-1 to 3-79 & 3-32	/										"A" End
3-1 to 3-26 & 3-32	/										"B" End
3-1 to 3-27 & 3-32	/										"B" End
Cross ties To Stringer											
(11) 3-10 to 3-13	/										
Cross tie To Stringer											
3-80 to 3-12	/										"B" End Only

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 2/25/18

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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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		____ Root Pass	Other V-Wac Gage
		____ Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
End Sill to Center Sill											
3-33 to 3-27	/										"B" End
3-34 to 3-26	/										"B" End
3-33 to 3-78	/										"A" End
3-34 to 3-79	/										"A" End
Stringer to Deck											
3-42 to 3-32	/										(4) "A" End (4) "B" End
Side Sill Web to Deck											
3-26 to 3-32	/										Left side
3-26 to 3-32	/										Right side
Draft sill Flange to Cntr. Sill											
3-25 to 3-26	/										"B" End
3-25 to 3-27	/										"B" End
3-25 to 3-78	/										"A" End
3-25 to 3-79	/										"A" End

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: _____ Date: 04/25/18

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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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other _____	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		_____ Root Pass	Other V-Wac Gage
		_____ Intermediate	
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Draft Stop to Center Sill											
(2) 3-67 to 3-78	/										"A" End
(2) 3-67 to 3-79	/										"A" End
(2) 3-67 to 3-26	/										"B" End
(2) 3-67 to 3-27	/										"B" End
Stringer to Deck											
(4) 3-42 to 3-32	/										"A" End
(4) 3-42 to 3-32	/										"B" End
End Crossies to Deck											
3-43 to 3-32	/										"B" End (RS)
3-44 to 3-32	/										"B" End (LS)
(2) 3-43 to 3-32	/										"A" End
Side sill to Side sill											
3-29 to 3-40	/										"B" End (LS)
3-29 to 3-39	/										"B" End (RS)
(2) 2-39 to 3-29	/										"A" End

Technician: Daniel S. Gjurich Level: CWI #93041171

Reviewed By: _____ Date: 2/26/18

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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge: Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	For Welds:	Model: N/A
Product Form: N/A		<input type="checkbox"/> Root Pass	Cert. #: F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Intermediate	Other: V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Exceed Reinforcement	Weld Undersized	Remarks:
Side Sill to Deck											
3-40 to 3-32	/										"B" End (LS)
3-39 to 3-32	/										"B" End (RS)
3-39 to 3-32	/										"A" End (LS&RS)
Gussets to Side Sill											
(11) 3-38 to 3-29	/										Left Side
(11) 3-38 to 3-29	/										Right side
(2) 3-37 to 3-40	/										"B" End (LS)
(2) 3-37 to 3-39	/										"B" End (RS)
(2) 3-37 to 3-39	/										"A" End (2 each LS&RS)
Gussets to Deck											
(11) 3-38 to 3-32	/										Left Side
(11) 3-38 to 3-32	/										Right side
(4) 3-37 to 3-32	/										"A" End (2 each LS&RS)
(4) 3-37 to 3-32	/										"B" End (2 each LS&RS)

Daniel S. Gjurich
 CWI 93041171
 QCI EXP 4/1/2020

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 9/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

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Orano Federal Services
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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

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

TRIS Procedure: NDE-VT-5	Surface Condition: As Welded	Production Stage: X In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: X 100%	X Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	_____ %	Other	Model N/A
Product Form: N/A		For Welds:	Cert. # F 4858
Type of Material: Carbon Steel		Root Pass	Other V-Wac Gage
		Intermediate	
		X Final	

Product / Weld Identification	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	/										*A" End
1-8 to 3-79	/										*A" End
1-8 to 3-26	/										*B" End
1-8 to 3-27	/										*B" End
Stringers to Deck											
(16) 3-13 to 3-32	/										(8 LS & 8 RS)
(8) 3-12 to 3-32	/										(4 LS & 4 RS)
Bottom Flange to Side Sill											
3-16 to 3-29	/										Center (1 LS & 1 RS)
(2) 3-17 to 3-40	/										*A" End
3-11 to 3-40	/										*B" End
3-31 to 3-39	/										*B" End
Bottom Flange to Web											
3-15 to 3-23	/										(RS) Center
3-15 to 3-28	/										(LS) Center

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

AWS
 Daniel S. Gjurich
 CWI #93041171
 QC1 EXP. 4/1/2020

Reviewed By: *[Signature]* Date: *2/20/18*

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 TÜV Rheinland Industrial Solutions, Inc.

NDTQ-0100
 March 19, 2004
 dsk



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**

KAS-120

Grand Rapids, MI – Pittsburgh, PA – Birmingham, AL
 NDE • MECHANICAL LAB • ENVIRONMENTAL www.tuvrls.com



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	Surface Condition: As Welded	Production Stage: <input checked="" type="checkbox"/> In Progress	VT Gauge Identification: Mfg. G.A.L.
Test Method Standard: AWS D15.1	Percent of Inspection: <input checked="" type="checkbox"/> 100%	<input checked="" type="checkbox"/> Final *	Weld Gauge Fillet Weld Gages
Acceptance Standard: AWS D15.1	<input type="checkbox"/> %	For Welds:	Model N/A
Product Form: N/A		<input type="checkbox"/> Root Pass	Cert. # F 4858
Type of Material: Carbon Steel		<input type="checkbox"/> Intermediate	Other V-Wac Gage
		<input checked="" type="checkbox"/> Final	

Product / Weld Identification	Accept	Reject	Linear	Rounded	Cracks	Undercut	Lack Fusion	Incomplete Pen	Excess Reinforcement	Weld Undersized	Remarks:
Buffer Cars #1											
Ballast Plates											
3-80 to 3-32 (Deck)	/										
3-81 to 3-80	/										
3-82 to 3-81	/										
3-83 to 3-82	/										
"A" End											
3-100 to 3-32 (Deck)	/										
3-99 to 3-100	/										
3-98 to 3-99	/										
3-84 to 3-98	/										
"B" End											
3-100 to 3-32 (Deck)	/										
3-99 to 3-100	/										
3-98 to 3-99	/										
3-84 to 3-98	/										

Technician: Daniel S. Gjurich *Daniel S. Gjurich* Level: CWI #93041171

Reviewed By: *[Signature]* Date: 2/20/18

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 TÜV Rheinland Industrial Solutions, Inc.

NDT0-0100
 March 19, 2005
 458



Orano Federal Services
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Project: 00225.03.0050 DOE Atlas Project

APPENDIX F.3 – OTHER INSPECTION DOCUMENTATION

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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.3.1 – FRA Safety Appliance Compliance Letter

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 038 Page <u>1</u> of <u>1</u>
P.O./SC No: 15C3011916	KLEIN Slade <small>Date: 2019.02.27 14:12:31 -0800</small> Date: 2/19/2019
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 24
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.19 13:31:27 -0800</small> PROJECT MANAGER
(Name)	(Signature) (Title)

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 127		ATLAS CASK CAR CMS LASER DIMENSIONS FOR PIN BLOCK ATTACHMENT BLOCKS	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 128		FRA S-2044 INSPECTION FOR BUFFER CARS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 129		AAR S-486 BRAKE TEST CERTIFICATION	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 130		TRACK SCALE CALIBRATION RECORDS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 131		TUV UT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 132		TUV PT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 133		TUV MT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 143 134		TUV VT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments:

1) NOTE: KAS 127 provides as-built railcar dimensions. Kasgro rework modified some of these. Kasgro to submit final dimensions separately.
 2) KAS 133 does not include the shear block or outer pin block weld MT.
 3) KAS 134 does not include VT of the shear block welds.

Technical Reviewer (I.e., RE, PTL, SME, QA, etc.)

KLEIN Slade Date: 2019.02.27 13:47:33 -08'00'

Date **2/27/2019**

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval

Mark A. Denton Digitally signed by Mark A. Denton Date: 2019.02.27 17:04:03 -0800 **Date: 02/27/2019**

DIT: com/Mark A. Denton, o: orano/Orano Federal Services, email/mark.denton@orano.gov, cn=US

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



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

	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 038
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 038	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
KAS 133 does not include the required MT inspection of the shear blocks and outer pin blocks. This was required by Kasgro drawing 1155-41.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.26 07:23:43 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Only potential question was regarding missing signature by the technician on the UT report. Discussed with TUV Rheinland Level III (Randy @ 616-818-8188). The technician signature is not required provided the report is signed by his supervisor. This report is signed by the individuals supervisor.		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 09:29:24 -08'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



Orano Federal Services
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Project: 00225.03.0050 DOE Atlas Project



U.S. Department
of Transportation
**Federal Railroad
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

NOV 20 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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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,

A handwritten signature in black ink that reads "Gary G. Fairbanks". The signature is written in a cursive style with a large, looped "G" and "F".

Gary G. Fairbanks
Staff Director, MP&E Division



Orano Federal Services
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Appendix F

Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

Appendix F.3.2 – Amsted/TTCI Supplier Certification Letters

	Orano Federal Services		
DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	037
P.O./SC No:	15C3011916	Date:	2/1/2019
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	24
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1
Submitted By:	RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.01 14:58:44 +05'00'</small>	PROJECT MANAGER
	<small>(Name)</small>	<small>(Signature)</small>	<small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 118		FORM 48A, ATLAS CASK CAR IDOX 010001 WEIGHING FORM	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 119		ATLAS BUFFER CARS, IDOX 020001-020002, TUV WELD INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 120		ATLAS BUFFER CARS IDOX 020001-020002 TUV NDE INSPECTION REPORTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 121		ATLAS BUFFER CAR IDOX 020001-020002 BRAKE EQUALIZATION, EMERGENCY APPLICATION AND HANDBRAKE TESTS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 122		ATLAS BUFFER CARS IDOX 020001-020002 MKE YON / S-485 WITNESS / ACCEPTANCE LETTER FOR SINGLE CAR AIR BRAKE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 123		FORM 36, 6-A, ATLAS BUFFER CARS IDOX 020001-020002 STATIC BRAKE FORCE TEST	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 124		SUPPLIER CERTIFICATION FORM / AMSTED RAIL TOM REDA/RSO TMS-7 HANDBRAKE INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 125		SUPPLIER CERTIFICATION FORM / AMSTED RAIL SHAWN PEETZ BUFFER CARS TRUCK INSPECTION IDOX 020001-020002	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
9	KAS 126		SUPPLIER CERTIFICATION FORM / TPCI MATT DEGEORGE IDOX 020001-020002 EQUIPMENT MET S-401	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments	Technical Reviewer (I.e., RE, PTL, SME, QA, etc.) KLEIN Slade Date: 2019.02.19 06:42:35 -08'00' Date 2/19/2019
--------------------------	--

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, c=US Date: 2019.02.19 10:22:35 -0800	Date: 02/19/2019
--	---	------------------

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



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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 Project: 00225.03.0050 DOE Atlas Project

 orano	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 037
Charge No:	00225.03.0050.02.00001	Due Date: 2/22/2019
Document(s):	See DTF No.: 037	
<small>REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. FS Spec and Dwg. Codes, Stds, etc.)</small>		
PE	Slade Klein	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.19 06:40:32 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.19 06:58:53 -08'00'
<small>COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)</small>		

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



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Kasgro Rail Corporation
 121 Rundle Rd. • New Castle, PA 16102
 724-658-8061 • 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 Castle, PA 16102.
4 Axle Atlas Buffer Car(s)

The equipment is applied to car: Model 8500 TMB
and the Model 35790 Hand Brake

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: Tom Sedwick Date: 12-5-18
 Title: Director Service Eng. - Brk. Systems
 Company: Amsted Rail

Specialty Rail Car Solutions



Orano Federal Services
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Kasgro Rail Corporation
 121 Rundle Rd. • New Castle, PA 16102
 724-858-6081 • 724-858-7630 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 Castle, PA 16102.
4 Axle Atlas Buffer Car(s)

.....

The equipment is applied to car: _____

.....
Trucks inspected and are 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 Peetz
 Title: Product Engineer
 Company: Amsted Rail

Date: 12-5-18

Specialty Rail Car Solutions



Orano Federal Services
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 Project: 00225.03.0050 DOE Atlas Project

Kasgro Rail Corporation
 121 Rundle Rd. • New Castle, PA 16102
 724-838-8881 • 724-858-7689 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 Castle, PA 16102.
4 Axle Atlas Buffer Car(s)

The equipment is applied to car: _____

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.

equipment met criteria S-401

Representative: Matt DeGeorge
 Title: Engineer
 Company: TTCI

Date: 12-5-18

Specialty Rail Car Solutions



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APPENDIX F.4 – COMMON INSPECTION DOCUMENTATION

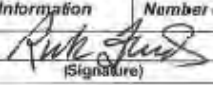
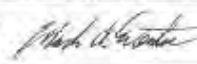
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Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
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Appendix F

Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

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


AREVA Federal Services LLC				
DATA TRANSMITTAL FORM				
Supplier:	KASPRO RAIL CORP., INC.	DTF No.:	00	Page 1 of 2
P.O./SC No.:	15C3011916	Date:	08/30/17	
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No.:	9,10	
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1	
Submitted By:	RICK FORD (Name)	 (Signature)	PROJECT MANAGER (Title)	
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION
1	KAS001	0	ATLAS PROJECT PHASE 2 DOCUMENT SUBMITTAL (SEE ATTACHED)	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
<p>The enclosed document submittals are accepted with comment for continued use on the Atlas railcar project. Resubmittal is not required, however consideration of AFS comments should be included in future work with the ultimate validation of Atlas project phase two documents being the receipt of the AAR EECs notice-to-proceed with test phase for the Atlas and buffer railcars.</p>				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
Comments: See above statement and attached comments.				Technical Reviewer (i.e., RE, PTI, SME, QA, etc.) KLEIN Slade <small>Digitally signed by KLEIN Slade Date: 2017.08.01 09:54:31 -0700</small>
				Date: 8/1/2017
AFS DISPOSITION CODES AND DEFINITIONS				
Code	Definition	Action	Resubmittal	
AP	Approved	Work may proceed.	Resubmittal is not required.	
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required.	
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required.	
RWC	Reviewed with Comment	Work may proceed, subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit.	
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit.	
RSA	Receipt Submittal Acknowledged	No other action required.		
If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.				
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval			<small>Digitally signed by KLEIN Slade Date: 2017.08.01 09:54:31 -0700</small>	Date: 08/31/2017

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



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

	AREVA Federal Services LLC	
SUPPLIER DOCUMENT SUBMITTAL REVIEW		
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 001
Charge No:	00225.03.0050.02.00001	Due Date: 7/14/2017
Document(s): See DTF No.:001		
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
1) WPS F002, Material specification should be: A572 Grade 50 and A572 Grade 60 2) Multiple documents have been provided as an example based on the M290 these documents will need to be updated or reproduced for the Atlas railcar. 3) The track scale test is an annual test and was last performed May 2016. 4) TUV UT Reference section 2.0 lists AWS D15.2, it should be AWS D15.1.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Digitally signed by KLEIN Slade Date: 2017.07.11 10:26:14 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Technical Reviewer Comments:		
See attached comments.		
QA Reviewer(s) (Sign/Date): COUNTERMAN Bernard		Digitally signed by COUNTERMAN Bernard Date: 2017.07.31 15:33:14 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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

#01	<ul style="list-style-type: none"> Joint detail states "See Attached" no joint detail attached.
#02	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> No Comments
#04	<ul style="list-style-type: none"> Tensile Test Results state "See Attached Report". Report is not attached. Need to include UT report #23.
#05	<ul style="list-style-type: none"> No Comments
#06	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> No Comments
#08	<ul style="list-style-type: none"> No Comments
#09-10	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> No Comments
#12	<ul style="list-style-type: none"> No Comments
#13	<ul style="list-style-type: none"> No Comments
#14	<ul style="list-style-type: none"> No Comments
#15	<ul style="list-style-type: none"> No Comments
#16	<ul style="list-style-type: none"> No Comments
#17	<ul style="list-style-type: none"> No Comments
#18	<ul style="list-style-type: none"> No Comments
#19	<ul style="list-style-type: none"> Originator signature not legible. Also, is he a Level III? Need TÜV document NDTG-CTP-1 Need TÜV document NDTG-UTQC-1
#20	<ul style="list-style-type: none"> No Comments
#21	<ul style="list-style-type: none"> No Comments
#22	<ul style="list-style-type: none"> No Comments
#23	<ul style="list-style-type: none"> No Comments
#23	<ul style="list-style-type: none"> No Comments
#23	<ul style="list-style-type: none"> No Comments
#24	<ul style="list-style-type: none"> No Comments
#25	<ul style="list-style-type: none"> No Comments
#26	<ul style="list-style-type: none"> No Comments
#27	<ul style="list-style-type: none"> No Comments
#28	<ul style="list-style-type: none"> No Comments
#29	<ul style="list-style-type: none"> No Comments
#30	<ul style="list-style-type: none"> No Comments
#31	<ul style="list-style-type: none"> No Comments
#32	<ul style="list-style-type: none"> No Comments
#33	<ul style="list-style-type: none"> No Comments
#34	<ul style="list-style-type: none"> No Comments
#35	<ul style="list-style-type: none"> No Comments
#36	<ul style="list-style-type: none"> No Comments
#37	<ul style="list-style-type: none"> No Comments
#38	<ul style="list-style-type: none"> No Comments
#39	<ul style="list-style-type: none"> Need to add a statement similar to "Except as noted on NCR Nos.:" if any NCRs are generated
#40	<ul style="list-style-type: none"> No Comments
#41	<ul style="list-style-type: none"> No Comments
#42	<ul style="list-style-type: none"> No Comments
#43	<ul style="list-style-type: none"> No Comments
WPS F001	<ul style="list-style-type: none"> No Comments
WPS F004	<ul style="list-style-type: none"> Preheat and interpass temperature states "See attached report". Report is not attached



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

ANNEX D

PROCEDURE QUALIFICATION RECORD (PQR)

PROCEDURE SPECIFICATION

Material specification A56 gr 80 to A572 gr 60
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding 2F
 Filler metal specification A5.29
 Filler metal classification E81T1-Ni-NU HG
 Weld metal grade* N/A
 Shielding gas CO2 Flow rate 35 CFH
 Single or multiple pass Single
 Single or multiple arc Single
 Welding current Direct
 Welding progression Forehand
 Preheat temperature 250° F
 Postheat treatment None
 Welder's name RICHARD BUCCIARELLI (0798)
 *Applicable when filler metal has no AWS classification.

VISUAL INSPECTION

Appearance Acceptable
 Undercut Minor
 Piping porosity None
 Test date 9/10/2008
 Witnessed by KASPRO RAIL

GROOVE WELD TEST RESULTS

Tensile strength, psi
 1. N/A
 2. N/A
 Guided-bend tests (2 root, 2 face, or 4 side-bend)
 Root Face
 1. N/A 1. N/A
 2. N/A 2. N/A
 Radiographic-ultrasonic examination
 RT report no. _____
 UT report no. _____

FILLET WELD TEST RESULTS

Minimum size multiple pass Maximum size single pass
 Macroetch Macroetch
 1. _____ 2. _____ 1. 250" 3. 250"
 3. _____ 2. 250"
 All-weld-metal tension test
 Tensile strength, psi N/A
 Yield point/strength, psi N/A
 Elongation in 2 in.; % N/A
 Laboratory test no. _____

WELDING PROCEDURE

Pass No.	Electrode Size	Welding Current		Travel Speed	Joint Detail
		Ampere	Volts		
1	1/16"	300	31	8-11 ipm	

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of AWS D16.1, (2012) Railroad Welding Specification - Cars and Locomotives, (year)

Procedure no. F-003
 Revision no. 1
 Form D-2

Manufacturer or Contractor KASPRO RAIL CORPORATION
 Authorized by [Signature]
 Date 11/25/13



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

AWS D15.1/D15.1M:2007

ANNEX D

PROCEDURE QUALIFICATION RECORD (PQR)

PROCEDURE SPECIFICATION

Material specification A572 gr 60 to A240 gr 304
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding 1G Flat
 Filler metal specification A5.22
 Filler metal classification DW-309L
 Weld metal grade*
 Shielding gas CO2 Flow rate 45 CFH
 Single or multiple pass Multiple
 Single or multiple arc Single
 Welding current DCRP
 Welding progression Forehand
 Preheat temperature 50° F
 Postheat treatment None
 Welder's name MICHAEL J. PENZERRO
 *Applicable when filler metal has no AWS classification.

GROOVE WELD TEST RESULTS

Tensile strength, psi
 1. 79,000 (See attached report)
 2. 77,500 (See attached report)

Guided-bend tests (2 root-, 2 face-, or 4 side-bend)

Root		Face	
1. <u>1/32" tear</u>	1. <u>NO DEFECTS</u>	2. <u>1/16" tear</u>	2. <u>NO DEFECTS</u>

Radiographic-ultrasonic examination

RT report no. _____
 UT report no. 23

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch	Maximum size single pass Macroetch
1. _____ 2. _____	1. _____ 3. _____
3. _____	2. _____

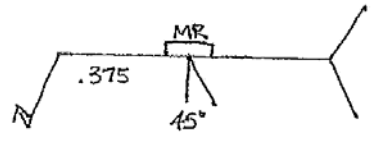
All-weld-metal tension test

Tensile strength, psi N/A
 Yield point/strength, psi N/A
 Elongation in 2 in, % N/A
 Laboratory test no. _____

VISUAL INSPECTION

Appearance Acceptable
 Undercut None
 Piping porosity None
 Test date 6/18/2008
 Witnessed by KASCRO RAIL CORP.

WELDING PROCEDURE

Pass No.	Electrode Size	Welding Current		Travel Speed	Joint Detail
		Amperes	Volts		
ALL	.062"	250	32	18 ipm	

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of AWS D15.1, (2007) Railroad Welding Specification for Cars and Locomotives.
 (year)

Procedure no. 08KR-F1087

Manufacturer or Contractor KASCRO RAIL CORP.

Revision no. _____

Authorized by [Signature]

Form D-2

Date 6-25-08



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

AWS D16.1/D16.1M:2012

ANNEX D

PROCEDURE QUALIFICATION RECORD (PQR)

PROCEDURE SPECIFICATION

Material specification A572 Gr. 65 to A240 Gr. 304
 Welding process FCAW
 Manual or machine Both (Semi-Automatic)
 Position of welding 2G - Horizontal
 Filler metal specification AWS A5.22
 Filler metal classification DW-309L
 Weld metal grade N/A
 Shielding gas CO2 Flow rate 35 cfm
 Single or multiple pass Multiple
 Single or multiple arc Single
 Welding current DCEP
 Welding progression Horizontal
 Preheat temperature 70 deg.
 Postheat treatment N/A
 Welder's name Al Williams #131
 *Applicable when filler metal has no AWS classification.

VISUAL INSPECTION

Appearance Acceptable
 Undercut NONE
 Piping porosity NONE
 Test date January 14, 2015
 Witnessed by Daniel S. Gjurich

GROOVE WELD TEST RESULTS

Tensile strength, psi
 1. (1) 88,000
 2. (2) 86,000

Guided-bend tests (2 root-, 2 face-, or 4 side-bend)

Root		Face	
1. <u>No Defects - Pass</u>	1. <u>No Defects - Pass</u>	2. <u>No Defects - Pass</u>	2. <u>No Defects - Pass</u>

Radiographic-ultrasonic examination

RT report no. N/A
 UT report no. Lab #158009 - Report #1

FILLET WELD TEST RESULTS

Minimum size multiple pass	Maximum size single pass
Macroetch	Macroetch
1. <u>Acceptable</u>	1. <u>N/A</u>
2. <u>Acceptable</u>	2. <u>N/A</u>
3. <u>Acceptable</u>	3. <u>N/A</u>

All-weld-metal tension test

Tensile strength, psi N/A
 Yield point/strength, psi N/A
 Elongation in 2 in, % N/A
 Laboratory test no. N/A

WELDING PROCEDURE

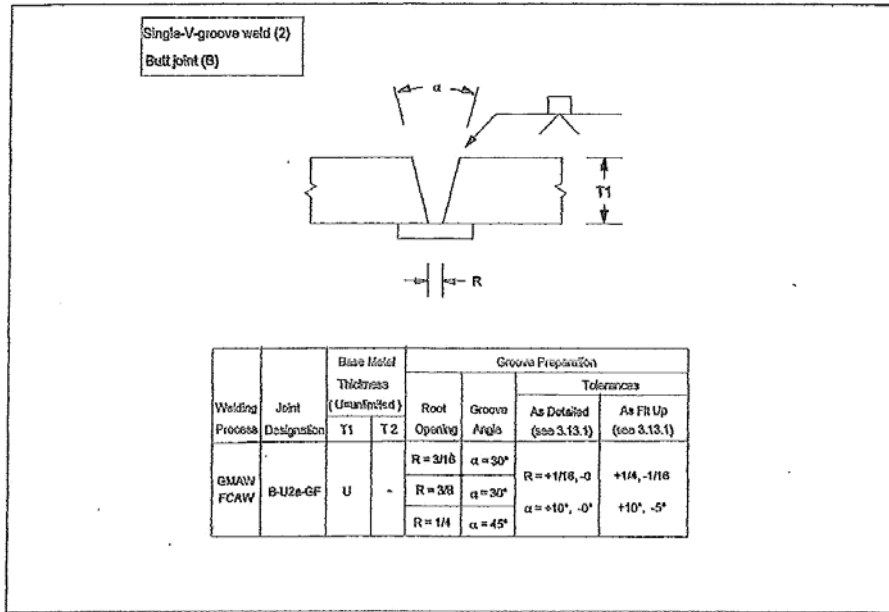
Pass No.	Electrode Size	Electrical Characteristics		Travel Speed	Joint Detail
		Amps	Volts		
All	1/16"	255	28	11 IPM	See Attached: Thickness of weld layers not to exceed 1/4"

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of AWS D16.1: (2012) Railroad Welding Specification for Cars and Locomotives. (year)

Procedure no. 15KR-F1087 Manufacturer or Contractor Kasgro Rail Corp.
 Revision no. 2 Authorized by [Signature]
 Form D-2 Date 1-14-15

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



b-u2a-gf.gfl

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.



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

AREVA		AREVA Federal Services LLC	
DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	012A
P.O./SC No:	15C3011916	Date:	04/05/2018
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	9
Submitted for:	<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1
Submitted By:	RICK FORD <small>(Name)</small>	<i>Rick Ford</i> <small>Digitally signed by Rick Ford Date: 2018.04.05 21:22:28 -0400</small> <small>(Signature)</small>	PROJECT MANAGER <small>(Title)</small>

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION
1	KAS 030		PQR 09KRC-1092	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA <input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>KLEIN Slade 2018.04.10 10:24:52 -0700</small> Date: 4/10/2018
--------------------------	--

AFS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by DENTON Mark DN: c=AREVA GROUP, 2.5.4.45=197A37C139C410E2D0170E, o=ORANO Mark Date: 2018.04.10 13:40:32 -0400</small>	Date: 04/10/2018
--	---	------------------

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



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

	AREVA Federal Services LLC	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 012A
Charge No:	00225.03.0050.02.00001	Due Date: 4/19/2018
Document(s):	See DTF No.: 012A	
	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		KLEIN Slade 2018.04.10 05:22:50 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date): Bernard Counterman		Digitally signed by Bernard Counterman Date: 2018.04.10 08:02:44 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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

ANNEX D

PROCEDURE QUALIFICATION RECORD (PQR)

PROCEDURE SPECIFICATION

Material specification A514T1 to A572 gr 60
 Welding process Flux Cored Arc Welding
 Manual or machine Manual
 Position of welding Vertical
 Filler metal specification A5.29
 Filler metal classification E111T1-K3
 Weld metal grade* _____
 Shielding gas 75 Ar 25CO₂ Flow rate 40 CFH
 Single or multiple pass Multiple
 Single or multiple arc Single
 Welding current Direct (DCRP)
 Welding progression Uphill
 Preheat temperature 125° F
 Postheat treatment None
 Welder's name ALBIN WILLIAMS 7875
 *Applicable when filler metal has no AWS classification.

GROOVE WELD TEST RESULTS

Tensile strength, psi
 1. See attached report
 2. _____

Guided-bend tests (2 root-, 2 face-, or 4 side-bend)

Root	Face
1. <u>SIDE -- NO DEFECTS</u> 1. <u>SIDE -- NO DEFECTS</u>	
2. <u>SIDE -- NO DEFECTS</u> 2. <u>SIDE -- NO DEFECTS</u>	

Radiographic-ultrasonic examination
 RT report no. _____
 UT report no. See attached report #F3517

VISUAL INSPECTION

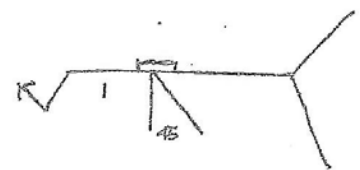
Appearance ACCEPTABLE
 Undercut None
 Piping porosity None
 Test date _____
 Witnessed by _____

FILLET WELD TEST RESULTS

Minimum size multiple pass	Maximum size single pass
Macroetch	Macroetch
1. _____ 2. _____	1. _____ 3. _____
3. _____	2. _____

All-weld-metal tension test
 Tensile strength, psi _____
 Yield point/strength, psi _____
 Elongation in 2 in, % _____
 Laboratory test no. _____

WELDING PROCEDURE

Pass No.	Electrode Size	Welding Current		Travel Speed	Joint Detail
		Amperes	Volts		
ALL	.062"	203	27	8-11 ipm	

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of AWS D15.1, (2012) Railroad Welding Specification for Cars and Locomotives. (year)

Procedure no. 09KRC-1092
 Revision no. 1
 Form D-2

Manufacturer or Contractor KASPRO RAIL CORPORATION
 Authorized by [Signature]
 Date 11/25/13



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

51



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 Inches	Area Sq. In.	Ultimate Load lbs	Ultimate Stress psi	Type & Location of Failure
63698	A	.502	.1979	19,620	99,000	Ductile / Base Metal
63699	B	.504	.1995	19,630	98,500	Ductile / Base Metal

Frank L. Galletta
 Frank L. Galletta, Mgr.

agd



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 our knowledge; however, results are not guaranteed and no responsibility is assumed. This report may not be reproduced without the full permission and the information to...



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.4.2 – Weld Procedure Specification (WPS) Records

	AREVA Federal Services LLC		
DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	012
P.O./SC No:	15C3011916	Date:	03/20/2018
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	9
Submitted for:	<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1	
Submitted By:	RICK FORD (Name)	 (Signature)	PROJECT MANAGER (Title)
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION
1	KAS 027		WPS F001, REV 3
2	KAS 028		WPS F002, REV 5
3	KAS 029		WPS 08KR-F1087, REV. 2
4	KAS 030		WPS F004, REV. 1
5	KAS 031		WPS KRC-F-004A-514
6	KAS 032		WPS F003, REV. 1
7	KAS 033		WPS 15KR F1087, REV. 2
			<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
			<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
			<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
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			<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
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			<input type="checkbox"/> AP <input type="checkbox"/> AWC <input checked="" type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
Comments:		Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)	
KAS 030 is an incomplete duplicate of KAS 031. KAS 030 will be disregarded. Re-submit KAS 030 to include PQR 09KRC-1082.		KLEIN Slade <small>digital signature date 04/05/2018</small>	
		Date 4/5/2018	
AFS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may not proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	
If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.			
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval			Date: 04/05/2018

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



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

	AREVA Federal Services LLC	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 012
Charge No:	00225.03.0050.02.00001	Due Date: 3/20/2018
Document(s):	See DTF No.: 012	
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 <input type="checkbox"/> No <input type="checkbox"/>		
Technical Reviewer Comments:		
KAS 30 and KAS 31 are duplicates.		
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
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 Date: 2018.04.04 11:14:13 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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

ANNEX D

TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Qualified by procedure qualification no. F-001
 Material specification Class 1&2 (A38, A572/gr42&60, A600, A600/gr B, A210/gr WCC, etc)
 Welding process FCAW
 Manual or machine Both
 Position of welding Flat, Horizontal, Vertical, Overhead
 Filler metal specification A6.20
 Filler metal classification E71T-1
 Flux N/A
 Weld metal grade N/A
 Shielding gas CO2 Flow rate 36-60 cfm
 Single or multiple pass Both
 Single or multiple arc Single
 Welding current Direct
 Polarity DCEP
 Welding progression Vertical (3G) - Uphill
 Root treatment Clean to sound metal
 Preheat and Interpass temperature See attached report
 Postweld Heat Treatment None
Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass No.	Electrode Size	Welding Current		Travel Speed	Joint Detail
		Amps	Volts		
As required					See attached reports Thickness of weld layers not to exceed 1/4"
F 1G	3/16"	180-280	27-32	8-13 ipm	
	1/16"	200-400	26-31	8-13 ipm	
	3/32"	250-400	17-32	8-13 ipm	
H-2G	1/16"	200-400	26-31	8-13 ipm	
	3/32"	250-400	17-32	8-13 ipm	
V-3G	1/16"	160-210	24-39	4-9 ipm	
	3/32"	180-250	26-30	6-11 ipm	
O-4G	3/16"	180-240	24-29	8-13 ipm	
	1/16"	200-270	26-30	8-13 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D16.1, (2012) Railroad Welding Specification for Cars and Locomotives, (year)

Procedure no. F-001 Manufacturer or Contractor KANSAS RAIL CORP.
 Revision no. 3 Authorized by [Signature]
 Form D-3 Date 11/25/13



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

AWS D15.1/D15.1M:2012

PREQUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Material specification A 572 Grade 50 and A 572 Grade 60
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding Flat, Horizontal, Vertical and Overhead
 Filler metal specification A5.29
 Filler metal classification E81T-1-NiIC-JH8
 Flux N/A
 Weld metal grade* N/A
 Shielding gas CO2 Flow rate 35 - 50 CFH
 Single or multiple pass Single/Multiple
 Single or multiple arc Single
 Welding current Direct
 Polarity Reverse
 Welding progression Vertical (3G)- Uphill
 Root treatment Clean to sound metal
 Preheat and interpass temperature See attached report
 Postweld Heat Treatment None None

*Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass No.	Electrode Size	Electrical Characteristics		Travel Speed	Joint Detail
		Amperes	Volts		
As	Required				*See Attached Report Thickness of weld layers not to exceed 1/4"
F-1G	1/16"	200-400	25-31	8-13 IPM	
H-2G	1/16"	180-250	24-39	8-13 IPM	
V-3G	1/16"	180-250	24-39	6-11 IPM	
O-4G	1/16"	200-270	26-30	8-13 IPM	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D15.1: (2012) Railroad Welding Specification for Cars and Locomotives.
 (year)

Procedure no. F-002
 Revision no. 5
 Form D-1

Manufacturer or Contractor Kasgro Rail Corp.
 Authorized by [Signature]
 Date 11-2-17



Orano Federal Services
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Appendix F

Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

-AWS D15.1: 2012

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RAILROAD WELDING SPECIFICATION

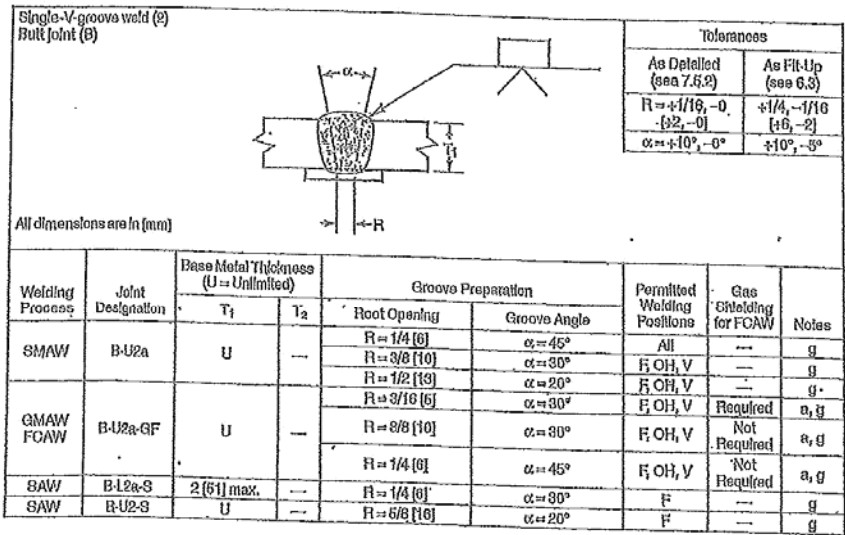
PREQUALIFIED WELDING PROCEDURE SPECIFICATION (WPS) F.C.A.W.

Notes*

1. Preheat and interpass temperatures:
Less than or equal to $3/4''$ – 50° F minimum
Over $3/4''$ thru $1\frac{1}{8}''$ – 150° F minimum
Over $1\frac{1}{8}''$ thru $2\frac{1}{2}''$ – 225° F minimum
Over $2\frac{1}{2}''$ – 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".

Orano Federal Services
**Title: Design and Prototype Fabrication of Railcars for Transport of
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Figure 7.1B—Prequalified Complete Joint Penetration (CJP) Groove Welded Joint Details



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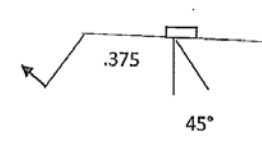
ANNEX D

TEST QUALIFIED WELDING PROCEDURE SPECIFICATIONS (WPS)

AWS D15.1/D15.1M:2012

Qualified by procedure qualification no. 08KR-F1087-6/30/08/ AND 15KR-F1087-1/14/15.
 Material specification A572 GRADE 60 TO A240 GRADE 304
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding 1G Flat
 Filler metal specification 5.22
 Filler metal classification DW-309L
 Flux _____
 Weld metal grade* _____
 Shielding gas CO2 Flow rate 40-50 CFH
 Single or multiple pass Multiple
 Single or multiple arc 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 x
 *Applicable only when filler metal has no aws classification.

WELDING PROCEDURE

Pass No.	Electrode Size	Welding Current		Travel Speed	Joint Detail
		Amperes	Volts		
ALL	.062"	240-280	29-33	15-18 imp	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D15.1, (2012) Railroad Welding Specification for Cars and Locomotives.
 (Year)

Procedure no. 08KR-F1087 Manufacturer or Contractor KASGRO RAIL CORP.
 Revision no. 2 Authorized by [Signature]
 Date 07/27/15



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

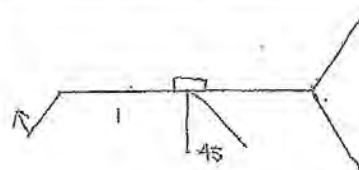
Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Qualified by procedure qualification # 09KRC-1092
 Material specification A514M to A572 Grade 60
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding Vertical
 Filler metal specification A5.29
 Filler metal classification E111M-K3
 Flux _____
 Weld metal grade* _____
 Shielding gas 75% Argon 25% CO2 Flow rate 40 CFH
 Single or multiple pass Multiple
 Single or multiple arc Single
 Welding current Direct
 Polarity Reverse
 Welding progression Uphill
 Root treatment Clean to sound metal
 Preheat and interpass temperature See attached report
 Postweld Heat Treatment None

*Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
ALL	.062"	190-300	27-30	8-11 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D15.1, (2012 year).

Procedure no. E-004 Manufacturer or contractor KASCRO RAIL CORP.
 Revision no. 1 Authorized by [Signature]
 Form D-3 Date 11/25/13



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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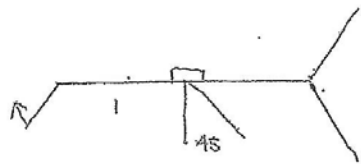
Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Qualified by procedure qualification # 09KRC-1092
 Material specification A514T1 to A572 Grade 60
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding Vertical
 Filler metal specification A5.29
 Filler metal classification E111T1-K3
 Flux _____
 Weld metal grade* _____
 Shielding gas 75% Argon 25% CO2 Flow rate 40 CFH
 Single or multiple pass Multiple
 Single or multiple arc Single
 Welding current Direct
 Polarity Reverse
 Welding progression Uphill
 Root treatment Clean to sound metal
 Preheat and interpass temperature See attached report
 Postweld Heat Treatment None

*Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
ALL	.062"	190-300	27-30	8-11 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D15.1, (2012 year).

Procedure no. E-004 Manufacturer or contractor KASCRO RAIL CORP.
 Revision no. 1 Authorized by [Signature]
 Form D-3 Date 11/25/13



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Doc./Rev.: EIR-3021970-000

Project: 00225.03.0050 DOE Atlas Project

AWS D15.1: 2012

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RAILROAD WELDING SPECIFICATION

PREQUALIFIED WELDING PROCEDURE SPECIFICATION (PWPS) F.C.A.W.

Notes*

1. Preheat and interpass temperatures:
Less than or equal to $3/4$ " - 50° F minimum
Over $3/4$ " thru $1\frac{1}{2}$ " - 150° F minimum
Over $1\frac{1}{2}$ " thru $2\frac{1}{2}$ " - 225° F minimum
Over $2\frac{1}{2}$ " - 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".



Orano Federal Services
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TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Material specification A572 grade 60 to A656 grade 80
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding Flat, Horizontal, Vertical, Overhead
 Filler metal specification A5.29
 Filler metal classification ER70T1-NiCl2 88
 Flux N/A
 Weld metal grade N/A
 Shielding gas CO2 Flow rate 35 to 50 CFH
 Single or multiple pass Single/Multiple
 Single or multiple arc Single
 Welding current Direct
 Polarity Reverse
 Welding progression Vertical - Uphill
 Root treatment Clean to sound metal
 Preheat and Interpass temperature 250° F
 Postweld Heat Treatment None None X
 *Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amps	Volts		
ALL	1/16"	See attached report		8-11 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D18.1, (2012 year).

Procedure no. E-003 Manufacturer or contractor Kasgro Rail Corp
 Revision no. 1 Authorized by [Signature]
 Form D-1 Date 11/25/13



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

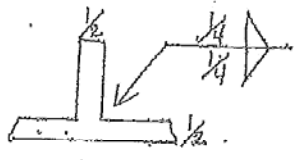
Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

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TEST QUALIFIED WELDING PROCEDURE SPECIFICATION (WPS)

Material specification A572 grade 60 to A656 grade 80
 Welding process F.C.A.W.
 Manual or machine Manual
 Position of welding Flat, Horizontal, Vertical, Overhead
 Filler metal specification A5.29
 Filler metal classification E81T1-NiClJ B8
 Flux N/A
 Weld metal grade N/A
 Shielding gas CO2 Flow rate 35 to 50 CFH
 Single or multiple pass Single/Multiple
 Single or multiple arc Single
 Welding current Direct
 Polarity Reverse
 Welding progression Vertical - Uphill
 Root treatment Clean to sound metal
 Preheat and Interpass temperature 250° F
 Postweld Heat Treatment None None X
 *Applicable only when filler metal has no AWS classification.

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amps	Volts		
ALL	1/16"	See attached report		8-11 ipm	

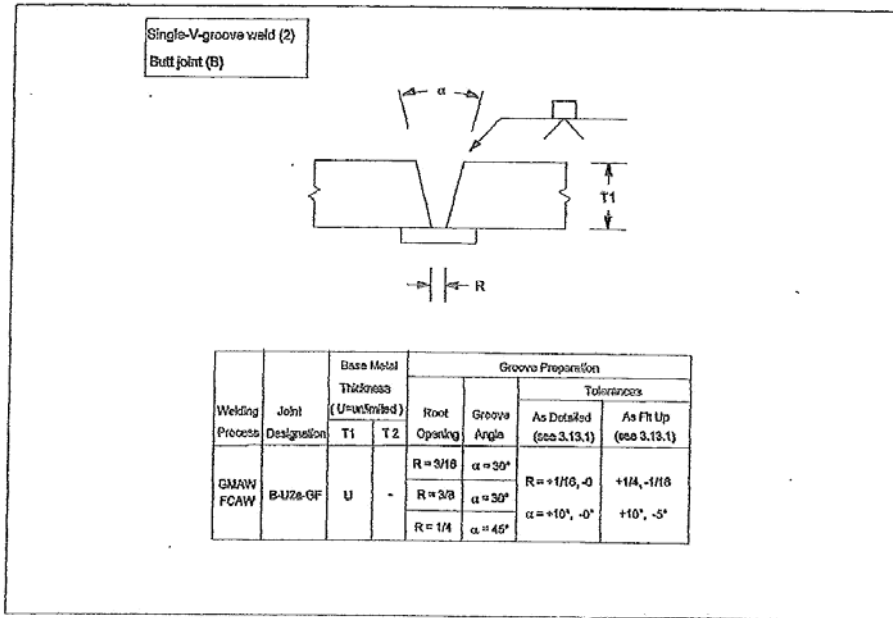
This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in AWS D16.1 (2012).

Procedure no. W-003 Manufacturer or contractor Kasgro Rail Corp
 Revision no. 1 Authorized by [Signature]
 Form D-1 Date 11/25/13



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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b-u2a-gf.gfl

Preheat

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



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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 Project: 00225.03.0050 DOE Atlas Project

Appendix F.4.3 – Kasgro Welder Qualifications Records

	AREVA Federal Services LLC		
DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	018
P.O./SC No:	15C3011916	Date:	03/27/18
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	20
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1
Submitted By:	RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2018.03.27 15:35:03 +0500</small>	PROJECT MANAGER
	(Name)	(Signature)	(Title)

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION
1	KAS W1		Clock #157 Adam Durst Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS W2		Clock #131 Albin Williams Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS W3		Clock #819 Bill Flory Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS W4		Clock #837 Bret Shepard Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS W5		Clock #109 Charles Klunski Welding Qualifications	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS W6		Clock #822 Charles Spaulding Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS W7		Clock #15 Darryl Beachem Welding Qualifications	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS W8		Clock #817 Donald Keller Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
9	KAS W9		Clock #825 George Sepesie Welding Qualifications	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: Please see comments on DTF-018 FRM-026. Re-submit W5 and W7. For W9, George Sepesie please provide ID # clarification.	Technical Reviewer (I.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>KLEIN Slade 2018.04.10 07:01:23 -0700</small> Date: 4/10/2018
--	--

AFS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by DENISON Mark DN: cn=DENISON GROUP, 2.5.4.48=187A37C138C410E0001700, o=DENISON Mark, Date: 2018.04.10 10:23:30 -0400</small> Date: 04/10/2018
--	--

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



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High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
Appendix F

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	AREVA Federal Services LLC	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 018
Charge No:	00225.03.0050.02.00001	Due Date: 4/10/2018
Document(s):	See DTF No.: 018	
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No additional comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		KLEIN Slade 2018.04.10 05:01:37 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
1. Charles Kulinski - 4G Groove weld had 1-face and 1-root bend. Should be 2 side bends. 2. Darryl Beachem - qualification for .375 and 3G were performed for Miner Rail Services. Need qualifications to Kasgro. (Ref. D15.1, Section 9.4 Qualification Responsibility). 4G Groove weld had 1-face and 1-root bend. Should be 2 side bends. 3. George Sepesie - qualification for 1G and 3G use ID #7031. Qualification for 4G uses ID #631.		
QA Reviewer(s) (Sign/Date): Bernard Counterman		Digitally signed by Bernard Counterman Date: 2018.04.04 14:18:14 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operators name ADAM F. DURSI Identification no. 157
 Welding process SA-C.A.W. Manual Semi-automatic Machine
 Position 3R Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Permitted for use CIB no. CIB
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0"
 In excess range, this qualifies as LIMITED

FILLER METAL

Specification no. 5.20 Classification F71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KATI TESTING LABORATORY Laboratory test no. 99/30 1961
 for Adam F. Dursi Test date 12/10/99

Filler Test Results

Appearance _____ Fillet size _____
 Fracture test (describe location) _____ Marbetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 for _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in
 accordance with the requirements of the American Welding Society AWS D16.1, (_____)
 YEAR

Manufacturer or contractor KASIRO RATT, CORP.

Authorized by Adam F. Dursi

Date 12-10-99

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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name ADAM DUBST Identification no. 157
 Welding process E.C.A.W. Manual Semiautomatic Machine
 Position 4G Overhead Groove Weld
 (Flat, horizontal, overhead or vertical - If vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint fig no. C1E
 Material specification A-36
 Diameter and wall thickness (if pipe) - otherwise, joint thickness 1.0"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Flipping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KATI TESTING LABORATORY Laboratory test no. 20F4C-2047
 per [Signature] Test date 9/11/2000

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcoetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1. (93 year)

Manufacturer or contractor KASPRO RAIL CORP.
 Authorized by [Signature]
 Date 9-11-00

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QW-484 SUGGESTED FORMAT FOR WELDER/WELDING OPERATOR
PERFORMANCE QUALIFICATIONS (W/PQ)
 (See QW-301, Section IX, ASME Boiler and Pressure Vessel Code)

Welder's name: ADAM LORENT Clock number: _____ Stamp no.: 167
 Welding process(es) used: S.M.A.W. Type: Manual
 Identification of W/PQ followed by welder during welding of test coupon: _____
 Base material(s) welded: SA106-B to SA106-B Thickness: 432"

Manual or Semiautomatic Variables for Each Process (QW-380)	Actual Values	Range Qualified
Backing (metal, weld metal, welded from both sides, flux, etc.) (QW-402)	None	With or without
ASME P-No. <u>B 1</u> (to ASME P-No. (QW-403))	<u>P-1</u>	<u>P-1 to P-11 & P-4X</u>
() Plate (X) Pipe (outer diameter, () pipe)	<u>5.625" OD</u>	<u>2.075" & Over</u>
Filler metal specification (SFA): <u>5.1 & 5.5</u> Classification (QW-404)	<u>E-6010 E-7018</u>	
Filler metal P-No.	<u>3 4</u>	<u>P-1 thru P-4</u>
Filler metal variety for GTAW, PAW (QW-404)	<u>N/A</u>	<u>N/A</u>
Consumable insert for GTAW or PAW	<u>N/A</u>	<u>N/A</u>
Weld deposit thickness for each welding process	<u>.532"</u>	<u>1.054"</u>
Welding position (1G, 5G, etc.) (QW-405)	<u>6G</u>	<u>All positions</u>
Progression (uphill/downhill)	<u>Uphill</u>	<u>Uphill</u>
Backing gas for GTAW, PAW, or GMAW; fuel gas for OFW (QW-406)	<u>N/A</u>	<u>N/A</u>
GMAW transfer mode (QW-409)	<u>N/A</u>	<u>N/A</u>
GTAW welding current type/polarity	<u>N/A</u>	<u>N/A</u>

Machine Welding Variables for the Process Used (QW-380)	Actual Values	Range Qualified
Directional visual control		
Automatic voltage control (GTAW)		
Automatic joint tracking		
Welding position (1G, 5G, etc.)		
Consumable insert		
Backing (metal, weld metal, welded from both sides, flux, etc.)		

Qualified Bend Tests Type	() QW-462.2 (SFA) Result	() QW-462.3(a) (Thick JCF) Type	() QW-462.3(b) (Seng. R & F) Results
SIDE BEND 1	1/32" tear/PASSED	SIDE BEND 3	Minor check/PASSED
SIDE BEND 2	1/64" tear/PASSED	SIDE BEND 4	3/64" tear/PASSED

Visual examination results (QW-382.4) Satisfactory
 Radiographic test results (QW-384 and QW-385) _____
 (For alternative qualification of groove welds by radiography)
 Fillet Weld — Fracture test _____ Length and percent of defects _____ in.
 Macro test fusion _____ Fillet leg size _____ in. Convexity/concavity _____ in.
 Welding test conducted by K&L TESTING LABORATORY
 Mechanical tests conducted by K&L TESTING LABORATORY Laboratory test no. ZOP-1030
 We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Organization: KANSAS RAIL CORP.

Date: 9/11/2000

By: [Signature]

1298 This form (E30008) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2900, Fairfield, NJ 07004-2900.





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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: ALLEN WILLIAMS Identification no. 131
 Welding process: F.C.A.W. Manual Semiautomatic X Machine
 Position: 1C FLAT
 (Flat, horizontal, overhead or vertical - if vert. test, state whether upward or downward)
 In accordance with procedure specification no. 01KRC-3129
 Material specification: A-35
 Diameter and wall thickness (if pipe) - otherwise, joint thickness: 1.5"
 Thickness range this applies: UNLIMITED

FILLER METAL

Specification: E-20 Classification: E701-1 F no. 6
 (Describe filler metal (if not covered by AWS specification))
 Is backing strip used? Yes
 Filler metal diameter and trade name: 3/32" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding: 100% Cu2

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping density: None

Guided Bent Test Results

Type	Result	Type	Result
EDGE BEND	3/32" bend/PASSED		
SHOULDER BEND	NO DEFECTS		

Test conducted by: KATI TESTING LABORATORY Laboratory test no. 01PIG-2215
 per: [Signature] Test date: 11/30/01

Fillet Test Results

Appearance: Fillet size:
 Fracture test root penetration: Marcellouch:
 (Describe the location, nature, and size of any crack or tearing of the specimen)
 Test conducted by: Laboratory test no.:
 per: Test date:

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: Test no.:
 per:

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.3, 1-93 ()
 year

Manufacturer or contractor: KASCRO RAIL CORPORATION
 Authorized by: [Signature]
 Date: 11-30-01

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: ADDEN WILLIAMS Identification No. 131
 Working process: S.M.A.W. Manual X Semi-automatic _____ Machine _____
 Position: R2 Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint sig. no. CIR
 Material specification: A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: 0.50"
 Thickness range this qualification: 1.0"

FILLER METAL
 Specification: E-1 & E-5 Classification: R 7978 Filler: 4
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/8" Inconel Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding: _____

VISUAL INSPECTION
 Appearance: Satisfactory Undercut: None Pitting porosity: None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	1/64" tear/DISSIP		

Test conducted by: KAIL BERTING LABORATORY Laboratory test no.: 20582-1626
 per: Kail Berting Test date: 5/25/99

Filet Test Results

Appearance: _____ Filet size: _____
 Fracture test and penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1, (80 year)

Man (producer or contractor): KUBRO RATT DOOR
 Authorized by: [Signature]
 Date: 5-25-99

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name ALBIN WILLIAMS Identification no. 131
 Welding process F.C.A.W. Manual Semi-automatic X Machine
 Position 3C Vertical Up
 (Flat, horizontal, overhead or vertical. If vertical, state whether upward or downward)
 In accordance with procedure specification no. 05KRC-0136
 Material specification A-36
 Diameter and wall thickness (if pipe) - otherwise, joint thickness 1.0
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.29 Classification E11ET-1 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" BRAR Flux for submerged arc or gas for gas metal arc or flux cored arc welding 110001 CD2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	3/64" tear/PASSED		
SIDE BEND	1/32" tear/PASSED		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 05790-2476
 per [Signature] Test date 12/29/2005

Fitup Test Results

Appearance Fillet size
 Fracture test root penetration Marcocatch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001) year.

Manufacturer or contractor KASPRO RAIL CORP.
 Authorized by [Signature]
 Date 12-29-05

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name ALVIN WITKOWSKI 131
 Welding process MIG Manual Semiautomatic Machine
 Position Vertical up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 in accordance with procedure specification no. Prequalified Joint Fig. no. 010
 Material specification A-00
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0"
 Thickness range this qualifies UNSPECIFIED

FILLER METAL

Specification no. A-00 Classification E71T-1 Filler R
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% CG

VISUAL INSPECTION

Appearance Satisfactory Internal None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>1/16" Pass/PASSED</u>		

Test conducted by ALVIN WITKOWSKI Laboratory test no. WFC-2318
 on 5/25/99 Test date 5/25/99

Fit-Up Test Results

Appearance None None None
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 on _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 on _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (99 year).

Manufacturer or contractor KARGHO KALL CORP.
 Authorized by Mark York
 Date 5-25-99

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: ARTHUR WILLIAMS Identification no. 131
 Welding process: E.C.A.W. Manual _____ Semiautomatic: X Machine _____
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward.) 3G Vertical Up
 In accordance with procedure specification no. E-004
 Material specification: A514T1 to A572 grade 60
 Diameter and wall thickness (if pipe)—otherwise, joint thickness: 1.0"
 Thickness range this qualifies: UNLIMITED

FILLER METAL

Specification no. A5.29 Classification: E11TT1-K3 F.no. 6
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/16" E11TT1-K3 ESAB Flux for submerged arc or gas for gas metal arc or flux cored arc welding: 75% Argon 25% CO2

VISUAL INSPECTION

Appearance: Acceptable Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND 1	NO DEFECTS	SIDE BEND 3	NO DEFECTS
SIDE BEND 2	NO DEFECTS	SIDE BEND 4	NO DEFECTS

Test conducted by: KATE TESTING LABORATORY Laboratory test no. 0913C-7883
 per Arthur Williams Test date: 1/14/2009

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D11.5 1, (2007) Railroad Welding Specification—Cars and Locomotives.
 (year)

Manufacturer or Contractor: KASCO BATT. CORP.
 Authorized by: [Signature]
 Date: 1-5-09

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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name ALBIN D. WILLIAMS Identification no. 131
 Welding process E.C.A.W. Manual Semiautomatic X Machine
 Position 4G Overhead Groove Weld
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint fig. no. CR
 Material specification: A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	1/32" tear/PASSED		
SIDE BEND	1/64" tear/PASSED		

Test conducted by KAL TESTING LABORATORY Laboratory test no. 20P42-2046
 per *Paul J. Karl* Test date 9/11/2003

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1, (93)
 year

Manufacturer or contractor RASERO RAIL, CORP.
 Authorized by *Paul J. Karl*
 Date 9-11-03

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AWS D16.10/15.1M 2007

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: BILL FLORY Identification no. 8175
 Welding process: ECAW Manual Semicautomatic X Machine
 (Flat, horizontal, overhead, or vertical; if vertical, state whether upward or downward.) 1G, Flat
 In accordance with procedure specification no. F-005
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness: .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-29 Classification E80C-1 I-no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KATE TESTING LABORATORY Laboratory test no. 10F1G-7946
 per [Signature] Test date 2/18/2010

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the data herein in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D16.1, (2007) Manual Welding Specification for Gases and Locomotives (98)

Manufacturer or Contractor KASCORO RAIL CORP.
 Authorized by [Signature]
 Date 2/18/10

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Certificate
 of
Tests and Qualifications
 of
Welding Operator

THE WELDING DIVISION OF
Kail Testing Laboratory

HAS PREPARED AND TESTED
 THE SPECIMENS WELDED BY

BILL FLORY

WELDING PERFORMED UNDER
 THE SUPERVISION OF

KASRO RAIL CORPORATION

IN ACCORDANCE WITH

F. C. A. W.
AWS D15.1 (2007) RAILROAD WELDING SPECIFICATION
3C VERTICAL UP .750" GROOVE WELD TEST

Date of
 Qualification

2/12/2010

Date of
 Expiration

INDEFINITE
 AS PER CODE

Lab. No. 10F3G-7933
 E/IT-1
 1/16"

Paul J. Kail
 Authorized Signature



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AWS D18.10.1.1M:2007

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: BILL FLORY Identification no. 819
 Welding process: ECM Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward.) 3C Vertical (D)
 In accordance with procedure specification no. W-001
 Material specification A-36
 Diameter and wall thickness (if pipe) or other size, joint thickness .750"
 Thickness range this qualifies UNE, TMPT50

FILLER METAL

Specification no. 5.20 Classification E/TT-1 Filler 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc in flux
 covered arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Pitting porosity None

Guided Bend Test (results)

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KAIL TESTING LABORATORY Laboratory test no. 10E3G-7933
 per [Signature] Test date 2/12/2010

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of this specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Item Identification	Results	Remarks	Item Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, verify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D18.1.1 (2007) : Nonferrous Welding Specification for Cars and Locomotives
 (yes)

Manufacturer or Contractor KANSAS RAIL CORPORATION

Authorized by [Signature]

Date 2-12-10



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

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

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Reported To: Mr. Dave Stahl
 Kasego Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Brett Sheppard Welding Code: AWS D15.1/15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. F-001 Rev: II Date: 3/25/15

Variables	Record	Actual Values	Qualification Range
Process/Type		FCAW	FCAW
Electrode (Single/multiple)		Single	Single
Current/Polarity		DC/EP	
Position		3G	Flat, Vertical Fillet & Groove
Weld Progression		Uphill	Uphill
Barking (With or Without)		With	With
Material/Spec	A36	to A36	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove		1"	1/8" to Unlimited
Fillet		N/A	1/8" to Unlimited
Thickness: (Pipe/tube)			
Groove		N/A	1/8" to Unlimited
Fillet		N/A	1/8" to Unlimited
Diameter: (Pipe)			
Groove		N/A	24" OD and Over
Fillet		N/A	Any Diameter
Filler Metal			
Spec. No.		A5.20	
Class		E71T-1	
F-No.		6	F6
Gas/Flux Type		100% CO ₂	
Other		N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results
 Appearance: N/A Fillet Size: _____

Fracture Test Root
 Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen): _____

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____

Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 150383

Welding supervised by: Dan Gjurich Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/1/2015

Client Approval: _____ Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings 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 TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Portman
 CWI 08301311
 CC1 EXP. 01/2017

Revision 7/19/2013
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
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Reported To: Mr. Dave Stahl
 Kasego Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Eric Shepard Welding Code: AWS D15.1/D15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 337
 Welding Procedure Specification No. E-001 Rev: 0 Date: 3/25/15

Variable	Record Actual Value	Qualification Range
Process Type	FCM	FCM
Electrode (single/multiple)	Single	Single
Current/Polarity	DCEP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Progression	Uphill	Uphill
Becking (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Prequalified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/2" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	N/A	1/2" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Miller Model		
Spec. No.	A5.20	
Class	E71T-1	
F.No.	6	68
Gas/Flux Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results Appearance: N/A Fillet Size: _____

Fracture Test Root: _____ Microetch: _____

(Describe the location, nature, and size of any crack or tearing of the specimen)

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____

Mechanical tests conducted by: Chris Nichol / Rich Purman Laboratory Test Number: 150383

Welding supervised by: Don Gjurch Company: TUV Rheinland Industrial Solutions

The welder identified above **PASSES** **FAILS** based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/1/2015

Client Approval: _____ Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.
 These test results report our findings 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 ascertaining all of the factors that determine the overall structural quality, no guarantee is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Postman
 CWT 33081311
 CC1 EXP. 8/1/2017

Revision 7/18/2013
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
 NDE & MECHANICAL LAB www.tuv.com



Reported To: Mr. Dave Stahl
 Kasgro Rail Corp
 121 Rundlo Road
 New Castle, PA 16102

Date: March 25, 2015
 W/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Eric Shepard Welding Code: AWS D15.1/D15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. E-001 Rev: 0 Date: 3/25/15

Variables	Record	Annual Values	Qualification Range
Process/Type		FCAW	FCAW
Electrode (single/multiple)		Single	Single
Current/Polarity		DCEP	
Position		3G	Flat, Vertical Fillet & Groove
Weld Progression		Uphill	Uphill
Backing (With or Without)		With	With
Material/Spec		A36 to A36	All AWS Prequalified Material
Base Metal			
Thickness (Flat)			
Groove		1"	1/8" to Unlimited
Fillet		N/A	1/8" to Unlimited
Thickness (Pipe/tube)			
Groove		N/A	1/8" to Unlimited
Fillet		N/A	1/8" to Unlimited
Diameter (Pipe)			
Groove		N/A	24" OD and Over
Fillet		N/A	Any Diameter
Filler Metal			
Spec. No.		A5.20	
Class		E71T-1	
E-No.		G	F6
Gas/Flux Type		100% CO ₂	
Other		N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Weld Test Results
 Appearance: N/A Fillet Size: _____
 Fracture Test Root: _____ Match: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen): _____

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____
 Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 150383
 Welding supervised by: Don Gjurch Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES, RAILS based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/1/2015
 Client Approval: _____ Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings 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 TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A Portman
 CWI 08061311
 OCT EXP 8/1/2017

Revision 1/10/2013
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
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Reported To: Mr. Dave Stahl
 Kasego Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Fred Shepard Welding Code: AWS D15.1D15.1M-2012
 Type of Welder: Exam Automatic Identification Number: 837
 Welding Procedure Specification No. R-001 Rev: 0 Date: 3/25/15

Variable	Record Actual Value	Qualification Range
Process / type	FCAW	FCAW
Electrode (single/multi-)	Single	Single
Current/Polarity	DCEP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Preparation	Upbill	Upbill
Backing (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Prequalified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/Tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Welder Metal		
Spec. No.	A5.20	
Class	E71T-1	
R-No.	6	76
Gas/Flux Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Type	Result	Type	Result
Side Bond	No Defects - PASS		
Side Bond	No Defects - PASS		

Fillet Test Results
 Appearance: N/A Fillet Size:
 Fracture Test Root: Measure:
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company:

Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 1905E3

Welding supervised by: Dan Gjurch Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: *[Signature]*

Date: 3/1/2015

Client Approval: *[Signature]*

Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings of 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 controlling all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Portman
 CWR 08061311
 CC1 EXP. 8/1/2017

Revision 1/16/2013
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
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Reported To: Mr. Dave Stahl
 Kuegro Rail Corp
 121 Rundell Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: J
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: SWA Record Welding Code: AWS D15.1Q15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 637
 Welding Procedure Specification No. E-091 Rev: 0 Date: 3/25/15

Variables	Record	Actual Values	Qualification Range
Process/Type	PCAW		PCAW
Electrode (single/multiple)	Single		Single
Current/Polarity	DCRP		
Position	3G		Flat, Vertical, Fillet & Groove
Weld Progression	UpHill		UpHill
Backing (With or Without)	With		With
Material/Spec	A36	to A36	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Thickness: (Pipe/Tube)			
Groove	N/A		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Diameter: (Pipe)			
Groove	N/A		24" OD and Over
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	E71T-1		
T-No.	6		F6
Gas/Flux Type	100% CO ₂		
Other	N/A		N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results

Appearance: N/A Fillet Size:

Fracture Test Root

(Describe the location, nature, and size of any crack or tearing of the specimen):

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company:

Mechanical tests conducted by: Chris Menol / Rich Portman

Laboratory Test Number: 150385

Welding supervised by: Dan Church

Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES FAILS based on the requirements of the code listed above.

Reviewer's Signature: [Signature]

Date: 4/1/2015

Client Approval: [Signature]

Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of non-destructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") as to the component quality or serviceability.



Richard A. Portman
 CWS 00221911
 OCT EXP. 8/1/2017

Revision: 000005
 AWS Welder Qualification (Page 1 of 1)

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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

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

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Reported To: Mr. Dave Stolt
 Kasco Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Eccot Shepard Welding Code: AWS D15.1/D15.10-2012
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. F401 Rev: 0 Date: 3/25/15

Variables	Record Actual Value	Qualification Range
Process/Type	FCAW	FCAW
Electrode (single/multiple)	Single	Single
Current/Polarity	DCEP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Progression	Uphill	Uphill
Sparking (With or Without)	With	With
Material/Spec	A36	All AWS Prequalified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe)		
Groove	N/A	24" (D) and Over
Fillet	N/A	Any Diameter
Welder Metal		
Spec. No.	A320	
Class	E71T-1	
E-No.	6	Y6
Gas/Gas Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fit Test Results
 Appearance: N/A Fillet Size: _____
 Fracture Test Root: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen): _____

Macrographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____
 Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 150343
 Welding supervised by: Dan Gjosch Company: TUV Rheinland Industrial Solutions

The welder identified above: PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/1/2015

Client Approval: _____ Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of non-destructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Portman
 CWI 0308131
 OCT EXP. 6/1/2017

Revision 7/30/2013
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
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Reported To: Mr. Dave Stahl
 Krago Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Brent Sheppard Welding Code: AWS D15.1/D15.1R-2002
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. W-001 Rev: 0 Date: 3/25/15

Variable	Record Actual Values	Qualification Range
Process/Type	FCAW	FCAW
Electrode (single/multiple)	Single	Single
Current/Polarity	DCEP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Progressing	Uphill	Uphill
Beckling (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Prequalified Materials
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/Tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Filler Metal		
Spec. No.	A5.20	
Class	E71T-1	
F-No.	6	P6
Gas/flux Type	100% O ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results Appearance: N/A Fillet Size: _____

Fracture Test Root: _____ Macroetch: _____

(Describe the location, nature, and size of any crack or tearing of the specimen): _____

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____

Mechanical tests conducted by: Chris Nighal / Rich Postman Laboratory Test Number: 150383

Welding supervised by: Dem Gjurch Company: TUV Rheinland Industrial Solutions

The welder identified above **PASSES** **FAILS** based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/1/2015

Client Approval: _____ Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.
 These test results report our findings 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 TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.

Richard A. Postman
 CWI 35081311
 OC1 EXP 6/1/2017
 Revision 7/10/2015
 AWS Welder Qualification Page 1 of 1

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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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
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Reported To: Mr. Dave Stahl
 Kresgo Rail Corp
 121 Round Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAT
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: West, Sheppard Welding Code: AWS D15, MD15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. F-001 Rev: 1 Date: 3/25/15

Verifica	Record Actual Values	Qualification Range
Process/Type	PCAW	PCAW
Electrode (single/multiple)	Single	Single
Current/Polarity	DCRP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Progression	Upbill	Upbill
Beading (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Prequalified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Filler Metal		
Spec. No.	E5.20	
Class	E71T-1	
P-No.	6	F6
Gas/Flux Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results
 Apparatus: N/A Fillet Size:
 Fracture Test Root: Macromech:

(Describe the location, nature, and size of any crack or tearing of the specimen):

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company:
 Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 150383
 Welding supervised by: Dan Giruch Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES FAILS based on the requirements of the code listed above.

Reviewer's Signature: [Signature] Date: 4/1/2015
 Client Approval: [Signature] Date: 4/21/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.
 These test results report our findings at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of non-destructive testing in evaluating all of the factors that determine the overall component quality, no guarantee is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Portman
 AWS 88081311
 QC1 EXP. 8/1/2017
 Revision 0102/015
 AWS Welder Qualification Page 1 of 1

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Orano Federal Services
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Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
 NDE & MECHANICAL LAB www.nvris.com



Reported To: Mr. Dave Sobel
 Kasgro Rail Corp
 121 Rendle Road
 New Castle, PA 16102

Date: March 25, 2015
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Brett Shepard Welding Code: AWS D15.1/D15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 837
 Welding Procedure Specification No. F-001 Rev: 0 Date: 3/25/15

Variables	Record Actual Values	Qualification Range
Process/Type	FCAW	FCAW
Electrode (single/multiple)	Single	Single
Current/Polarity	DCEP	Single
Position	3G	Flat, Vertical Fillet & Groove
Weld Preparation	Uphill	Uphill
Beckling (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Prequalified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Filler Metal		
Spec. No.	A5.20	
Class	E71T-1	
P-No.	6	F6
Gas/Flux Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 3/25/15

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fit Test Results
 Appearance: N/A Fillet Size:
 Penetration Test Root: Macroetch:
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Macrographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film exhibited by: N/A Company:
 Mechanical tests conducted by: Chris Nichol / Rich Portman Laboratory Test Number: 150383
 Welding supervised by: Dan Gjurch Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: [Signature] Date: 4/1/2015
 Client Approval: [Signature] Date: 4/2/2015

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.
 These test results report our findings 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 TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or serviceability.



Richard A. Portman
 CWI 06081311
 GC1 EXP. 6/1/2017

Revision 7/10/2011
 AWS Welder Qualification Page 1 of 1

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CHUCK KULINSKI Identification no. 109
 Welding process E-C-A-W Manual Semi-automatic Machine
 Position 1G Flat
 (Flat, horizontal, overhead or vertical. If vertical, state whether upward or downward)
 In accordance with procedure qualification no. 07-RSC-0129
 Material specification A 36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0"
 Thickness range this quality UNLIMITED

FILLER METAL

Specification no. E-20 Classification E70T-1 Group 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes No
 Filler metal diameter and trade name 3/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 used in welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping possibly None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KAT TESTING LABORATORY Laboratory test no. 01F10-2176
 per Paul J. K... Test date 9/06/01

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature and size of any cracks or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1 (93)
 YEAR

Manufacturer or contractor KASIRO RAIL CORP.
 Authorized by Mark Zeig
 Date 9-6-01

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CHUCK KULINSKI Identification no. 109
 Welding process: C.K.A.W. Manual Semiautomatic: X Machine
 Position 3G Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification in QIRRC-0131
 Material specification SAW
 Diameter and wall thickness (if pipe) otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. 5.10 Classification 5356 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? NO
 Filler metal diameter and trade name 3/64" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 core arc welding: 100% AF

VISUAL INSPECTION

Appearance Satisfactory Undercut NODC Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	1/16" tear/PASSRD		
SIDE BEND	1/16" tear/PASSLD		

Test conducted by KALL TESTING LABORATORY Laboratory test no. 01M36-1434
 per Paul J. Kall Test date 10/16/01

Fillet Test Results

Appearance Fillet size
 Pressure test rupt penetration March 2001
 (Describe the test) (nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1 (SAW) (SAW)
 Year

Manufacturer or contractor KALCRO RAIL CORP.
 Authorized by
 Date 10/16/01

Form 01-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CHARLES KULINSKI identification no. 109
 Welding process E.C.A.P. Manual Semiautomatic Machine
 Position 90° Vertical Up
 (Flat, horizontal, overhead or vertical - if vertical, state whether downward or downweild)
 in accordance with procedure specification no. Resqualified joint fig. on C11
 Material specification A-28
 Diameter and wall thickness (if pipe) - otherwise, joint thickness 500"
 Thickness range this qualifies 1, 2"

FILLER METAL

Specification no. E.20 Classification KY2-1 F no. E
 (Describe filler metal if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" diameter Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding CO2S CO2

VISUAL INSPECTION

Appearance sound factory Uncoupled None Piping priority None

GUIDED BEND TEST RESULTS

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KALL ADVANCE LABORATORY Laboratory test no. W000-1988
 per [Signature] Test date 3/21/99

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marboetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1: 2E year.

Manufacturer or contractor YASUKU RAIL CORP.

Authorized by [Signature]

Date 3-21-99

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CHARLES KULLINANT Identification no. 109
 Welding process G.M.A. W Manual Semi-automatic _____ Machine _____
 Position CA Vertical on the
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Experimental Joint, 10g, No. 010
 Material specification A-36
 Diameter and wall thickness (if pipe) otherwise, joint thickness .380"
 Thickness range this qualifies 1/2"

FILLER METAL

Specification no. E.2 & 5.5 Classification E 70TB F no. 1
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/8" Gasshield Flux for submerged arc or gas for gas metal arc or flux covered arc welding _____

VISUAL INSPECTION

Appearance Good Unconformities None Dishing possible None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>STON BEND</u>	<u>NO DEFECTS</u>		

Test conducted by WALT TESTING LABORATORY Laboratory test no. 88220-2071
 our Paul J. Paul Test date 1/21/80

Filet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Microetch _____
 (Describe the position, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D18.1, (1-83) _____
 year

Manufacturer or distributor WESCAM PATH CORP.
 Authorized by Paul J. Paul
 Date 5-21-99

Form 344



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Certificate
 of
Tests and Qualifications
 of
Welding Operator

THE WELDING DIVISION OF
Kail Testing Laboratory, Inc.

HAS PREPARED AND TESTED
 THE SPECIMENS WELDED BY

CHARLES KULINSKI

WELDING PERFORMED UNDER
 THE SUPERVISION OF

KASCRO RAIL CORPORATION

IN ACCORDANCE WITH

F-C-A-W.
AWS D15.1(2001) RAILROAD WELDING SPECIFICATION
33 VERTICAL UP 1.0" GROOVE WELD TEST

Date of
 Qualification

12/29/2005

Date of
 Expiration

INDEFINITE
 AS PER CODE.

Lab. No. 05F3G-2480

E111T-1
 1/16"

Charles Kulinski
 Authorized Signature



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CHARLES KUTINSKI Identification no. 109
 Welding process E.C.A.W. Manual Semiautomatic Machine
 Position 35 Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. 05222-0116
 Material specification A-35
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.29 Classification E111T-1 F no. 5
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 7/16" ESAB Flux for submerged arc or gas for gas metals, arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Spying porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 05130-2490
 per [Signature] Test date 12/29/2005

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcoetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001 _____) year.

Manufacturer or contractor KANSAS RAIL CORP.
 Authorized by [Signature]
 Date 12/29/05

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name: GREGG CULIVSKI Identification no. 109
 Welding process: C-A-W Manual Semi-automatic Machine _____
 Position: VD Vertical Up
 (If 1st, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specifications no. Prequalified joint fig. no. C1B
 Material specification: A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: 1.0"
 Thickness range this qualifies: UNLIMITED

FILLER METAL

Specification no.: 3.20 Classification: E71T-1 F no.: 6
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 coated arc welding: 100% CO2

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by: ZAP TESTING LABORATORY Laboratory test no.: 20F06-2096
 per: [Signature] Test date: 11/13/2000

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (93 year).

Manufacturer or contractor: KASSBO RAIL CORP.
 Authorized by: [Signature]
 Date: 1-13-00

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name CHARLES KUTINSKI Identification no. 109
 Welding process: E.M.S.W. Manual Semiautomatic _____ Machine _____
 Position: 1G Overhead
 (Flat, horizontal, overhead or vertical) — if vertical, state whether upward or downward
 in accordance with procedure specification no. Declassified joint fig. no. CID
 Material specification: A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: .375"
 Thickness range this qualifies: .750"

FILLER METAL

Specification no.: E-1 & E-2 Classification: E-7018 F no.: 4
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/8" TITCOIN Flux for shielded arc or gas for gas metal arc or flux
 cored arc welding: _____

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
FACE BEND	1/32" beak/PASSED		
ROOT BEND	3/64" beak/PASSED		

Test conducted by: WALK TESTING LABORATORY Laboratory list no.: 03840-1754
 per: [Signature] Test date: 8/05/2003

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1, (2001)
 year

Manufacturer or contractor: KANSAS RAIL CORP.
 Authorized by: [Signature]
 Date: 8-5-03

Form D-4



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ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: CHARLES SPAULDING Identification No. 822
 Welding process: ECAW Manual Semi-automatic Machine
 (Flat, horizontal, overhead, or vertical - if vertical, state whether upward or downward) 3C Vertical Up
 In accordance with procedure specification no. E-001
 Material specification: A-36
 Diameter and wall thickness (if pipe) - otherwise, joint thickness: .750"
 Thickness range this qualifies: UNI, TMT, TPF

FILLER METAL

Specification no. E5.20 Classification E710-1 Group 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? _____
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding: 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KATE THS/METALLABORATORY Laboratory test no. 10P30-1954
 per John Hall Test date 2/25/2010

Filet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any cracks or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1, (2007) Railroad Welding Specification - Cars and Locomotives.
 (year)

Manufacturer or Contractor: KALROD RAIL CORPORATION

Authorized by: [Signature]



Date: 2-25-10

Form D-4



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 Professional Service Industries, Inc. PITTSBURGH TESTING LABORATORY DIVISION CERTIFICATE OF TEST AND APPROVAL OF WELDING PROCESS AND QUALIFICATION OF OPERATOR OF WELDING EQUIPMENT	
PROFESSIONAL SERVICE INDUSTRIES, INC., PITTSBURGH TESTING LABORATORY DIVISION, has witnessed the welding and testing of test specimens welded by	
Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102	
in accordance with	
American Welding Society Structural Welding Code D1.1-88	
Welding Operator <u>DARRYL BEACHEM</u> No. <u>15</u> Welding Process <u>Flux Cored (Innershield)</u>	
	This is to certify that the Welding Technique used in this test and described in SPECIFICATIONS FOR WELDING PROCESS No. AWS D1.1-88 and the results of the test given in PHYSICAL TEST REPORT No. PHY90073 complied with the requirements of the above code within the following limitations.
	Maximum Plate or Wall Thickness <u>3/4"</u> Minimum Plate or Wall Thickness <u>Unlimited</u> Welding Positions <u>Flat Groove</u> Other Limitations <u>Flat, Horizontal Fillet</u>
Operator Tested	Remarks <u>AWS A 5.20 E711-7 r. No. 5</u>
No. <u>10375</u> Order No. <u>628-73122</u> File No. _____ Approved <u>January 12, 1989</u>	PITTSBURGH TESTING LABORATORY DIVISION By <u>J. Peter Merittas</u> Director



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WELDER AND WELDER OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name DAIRYL BEACHEM	Date Reported November 21, 1988	PTL Order No. 828-73122			
Welder Identification No. 15	Date Tested October 24, 1988	Lab No. PHY81607			
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102	Welding Code (10 & year) AWS D1.1-88				
	Base Material Specification A-36				
Process Shielded Metal Arc Welding	Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe	Joint <input type="checkbox"/> Groove <input type="checkbox"/> Fillet			
Position Vertical Groove	Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Plate Thickness 3/8"			
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L	Specimens Matched <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Diameter & Wall Thickness —			
Welding Procedure AWS No. D1.1-88 Rev. No. —	Thickness Range Qualified 3/4" Maximum	Current AMPS: 80-200 <input type="checkbox"/> AC <input type="checkbox"/> DC			
Welding Procedure Data by: <input checked="" type="checkbox"/> PTL Witnessed (Tech):	Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse				
FILLER METAL					
Specification No. AWS A5.1	Classification E7018	F.No. 4			
Backing A-36 Steel	Diameter 1/8"	Trade Name			
Shielding <input type="checkbox"/> Gas <input type="checkbox"/> Flux:					
VISUAL INSPECTION (AWS ONLY)					
Appearance	Undercut	Piping Porosity			
VERTICAL GUIDED BEND TEST RESULTS					
TYPE	RESULTS	TYPE	RESULTS		
FACE BEND	Defect Under 1/8"-PASS				
ROOT BEND	Defect Under 1/8"-PASS				
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail	Fillet Size Leg: in. x in.	<input type="checkbox"/> Convexity: in. <input type="checkbox"/> Concavity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail	Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)				
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated. CITY OF PCH. ORDINANCE No. 243 & PA DEPT. OF HIGHWAYS					
Remarks & Report Distribution (* denotes data not provided or not applicable)					Submitted by: <i>J. Peter Merit</i> Manager



Orano Federal Services
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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

850 Packer Street
 Pittsburgh, Pennsylvania 15226
 412-229-4300


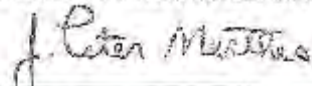
WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT			
Welder/Welder Operator's Name DARRYL BENCHEM		Date Reported November 21, 1988	PTL Order No. 828-73122
Welder Identification No. 15		Date Tested October 24, 1988	Lab No. PHY21607
Client Miner Railroad Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS D1.1-88	Client Order No.
Process GMW		Base Material Specification A36	Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe
Position Vertical Groove		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Joint <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Plate Thickness 3/8" Thick
Welding Procedure No. _____ Rev. No. _____		Thickness Range Qualified 3/4" Maximum	Current VOLTS 18-21
Welding Procedure Data by: <input checked="" type="checkbox"/> PTL Witnessed (Tech): _____		AMPS 125-150 AC <input type="checkbox"/> DC	Polarity <input type="checkbox"/> Direct <input type="checkbox"/> Reverse
FILLER METAL			
Specification No. AWS A5.18	Classification E/DS-E	Filler 6	Trade Name
Backing A36	Diameter .045	Shielding <input checked="" type="checkbox"/> Gas 75% Argon 25% CO ₂ 15-20 CFH	
VISUAL INSPECTION (AWS ONLY)			
Appearance	Undercut	Piping Porosity	
GUIDED BEND TEST RESULTS			
TYPE	RESULTS	TYPE	RESULTS
FACE BEND	Defect Under 1/8"-PASS		
ROOT BEND	Defect Under 1/8"-PASS		
FILLET TEST RESULTS			
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail	Fillet Size Leg: <input type="checkbox"/> n. x <input type="checkbox"/> n. <input type="checkbox"/> Convexity: <input type="checkbox"/> n.	Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail	
Fracture Test Results (Describe location, nature & size of any cracks or testing of the specimen)			
RADIOGRAPHIC TEST RESULTS			
File Identification	Results	Remarks	File Identification
Tests Witnessed by:		Submitted by: <i>J. Peter Marthes</i> Manager	
QUALIFICATION RESULTS			
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.			
Remarks & Report Distribution: (*denotes data not provided or not applicable)		Submitted on:	

ALL REPORTS ARE SUBJECT TO THE CONFIDENTIALITY AND PROPRIETY OF CLIENTS. PUBLICATION OF STATEMENTS, OPINIONS OR INFORMATION FROM THIS REPORT IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF PSI.



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 Professional Service Industries, Inc. PITTSBURGH TESTING LABORATORY DIVISION CERTIFICATE OF TEST AND APPROVAL OF WELDING PROCESS AND QUALIFICATION OF OPERATOR OF WELDING EQUIPMENT	
<p><i>PROFESSIONAL SERVICE INDUSTRIES, INC., PITTSBURGH TESTING LABORATORY DIVISION</i>, has witnessed the welding and testing of test specimens welded by</p> <p align="center"> Miner Railcar Services 2208 East Cherry Street New Castle, Pennsylvania 16102 in accordance with American Welding Society Structural Welding Code D1.1-88 </p>	
Welding Operator <u>DARRYL BEACHEN</u> Welding Process <u>SMAW/GMAW</u>	No. <u>15</u>
Operator Tested	This is to certify that the Welding Technique used in this test and described in SPECIFICATIONS FOR WELDING PROCESS No. AWS D1.1-88 and the results of the test given in PHYSICAL TEST REPORT No. PHYS1607 complied with the requirements of the above code within the following limitations: Maximum Plate or Wall Thickness <u>3/4" Maximum</u> Minimum Plate or Wall Thickness <u>Unlimited</u> Welding Positions <u>Flat-Horizontal-Vertical</u> Other Limitations <u>Filler & Groove</u>
	Remarks <u>AWS A 5.1 E 7018 F, No. 1</u> <u>AWS A 5.10 E 705-3 F, No. b</u>
No. <u>10782</u> Order No. <u>820-73122</u> File No. _____ Approved <u>October 24, 1988</u> rck	PITTSBURGH TESTING LABORATORY DIVISION  By _____ Director



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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

650 Foster Street
 Pittsburgh, Pennsylvania 15220
 412-922-4300

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name DARRYL BEACHEM		Date Reported January 25, 1989		PTL Order No. 828-73122	
Welder Identification No. 15		Date Tested January 12, 1989		Lab No. PHY90073	
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS D1.1-88		Client Order No.	
		Base Material Specification A-36 Group 1			
Process Flux Cored (Innershield)		Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe		Joint BU2a XXI Groove <input type="checkbox"/> J Fillet	
Position Flat Groove		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Plate Thickness 3/8"	
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> C/W		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Diameter & Wall Thickness	
Welding Procedure No. AWS D1.1-88		Thickness Range Qualified 3/4" Maximum		Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse	
Welding Procedure Data by: <input type="checkbox"/> PTL		Witnessed (Tech): A. J. Lepczyk		<input type="checkbox"/> Others	
FILLER METAL					
Specification No. AWS A 5.20		Classification E71T-7		F No. 6	
Rac-ing A-36 Steel		Diameter		Trade Name	
Shielding <input type="checkbox"/> Gas		<input type="checkbox"/> Flux			
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Figma Porosity	
FLAT GROOVE		GUIDED BEND TEST RESULTS			
TYPE		RESULTS		TYPE	
FACE BEND		Defect Under 1/8"-PASS			
ROOT BEND		Defect Under 1/8"-PASS			
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Fillet Size Leg: in. x in. <input type="checkbox"/> Concavity: in. <input type="checkbox"/> Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail					
Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)					
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.					
Remarks & Report Distribution (*denotes data not provided or not applicable) mck				Submitted by: <i>J. Peter Martin</i> Master	

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSIONS OR OTHER INFORMATION DERIVED FROM THIS REPORT IS PROHIBITED WITHOUT APPROVAL.



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operators name: DAVID W. CACHEN Identification no: 15
 Welding process: F. O. A. W. Manual _____ Semi-automatic X Machine _____
 Position: 30 Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specified on no. Prequalified Joint, Fig. No. 018
 Material specification: A-20
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: 1.00"
 Thickness range this qual line: 0.50-1.25"

FILLER METAL

Specification no.: A. 20 Classification: E6010-1 Flux _____
 Describe filler metal (if not covered by AWS specification): _____
 Is backing used? Yes
 Filler metal, manufacturer and trade name: 1/16" E6010 Flux for submerged arc or gas for gas metal arc or flux
 used for welding: 100% CO₂

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping areas by: None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by: ALL WELDING LABORATORY Laboratory test no.: 00730-1000
 per: [Signature] Test date: 07/25/88

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (90)
 year _____

Manufacturer or contractor: WAGGON PART CORP.
 Authorized by: [Signature]
 Date: 02/22/89

Form W-1



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name BRADY BUCHHEIM Identification no. 15
 Welding process S.M.A.W. Manual Semiautomatic _____ Machine _____
 Position 1G Overhead
 (Flat, horizontal, overhead or vertical – if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalification Joint sig. CIR
 Material specification AISC
 Diameter and wall thickness (if pipe) – otherwise, joint thickness .375"
 Thickness range this qualifies .750"

FILLER METAL

Specification no. E-1 & E-3 Classification E-7018 F no. 1
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/8" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding _____

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>FACE BEND</u>	<u>Minor check/PASSING</u>		
<u>ROOT BEND</u>	<u>1/16" tear/PASSING</u>		

Test conducted by KEL WISWING LABORATORY Laboratory test no. 03040-1750
 per [Signature] Test date 8/05/2003

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcoatch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001)
 year

Manufacturer or contractor KASCOR RAIL CORP.
 Authorized by [Signature]
 Date 8-5-03

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name DONALD E. KELLER Identification no. 817
 Welding process F.C.B.W. Manual Semi-automatic Machine
 Position 3V Vertical Up
 (Flat, horizontal, overhead or vertical – if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified Joint, Fig. no. 010
 Material specification A-26
 Diameter and wall thickness (if pipe) – otherwise, joint thickness 1.0"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing with used? Yes
 Filler metal diameter and trade name .045" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 06E03-2524
 per Paul J. Karl Test date 6/16/2006

Filler Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marstonch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001)
 year

Manufacturer or contractor KANSAS RAIL CORPORATION
 Authorized by [Signature]
 Date 6-16-06

Form D-1



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ANNEX D

AWS D15.1:2001

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name GEORGE SEPSTIE Identification no. B25
 Welding process: P, C, A, W, Manual Semi-automatic Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward.) 4G Overhead
 In accordance with procedure specification no. E-001
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. 5.20 Classification E71T-1 Class 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KA, U.S. MARSHALLS LABORATORY Laboratory test no. 08F1G-7798
 per Paul J. Karl Test date 3/04/2008

Fit Test Results

Appearance _____ Filler size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this record are correct and that the test results were prepared and tested in accordance with the requirements of AWS D15.1: (2001) Railroad Welding Specifications - Cars and Locomotives. (year)

Manufacturer or Contractor WASCOP RAIL CORP.
 Authorized by [Signature]
 Date 3/4/08

Form D-1



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 High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery**
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AREVA		AREVA Federal Services LLC			
DATA TRANSMITTAL FORM					
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	18A	Page 1 of 1	
P.O./SC No:	15C3011916	Date:	4/11/18		
Type of Submittal:	<input type="checkbox"/> First <input checked="" type="checkbox"/> Re-Submittal	SDRL List Item No:	20		
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1		
Submitted By:	RICK FORD	Rick Ford	<small>Digitally signed by Rick Ford Date: 2018.04.11 12:55:46 -0400</small>	PROJECT MANAGER	
	<small>(Name)</small>	<small>(Signature)</small>		<small>(Title)</small>	

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION		
1	W7		Clock #15 Darryl Beachem Welding Qualification	<input checked="" type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
2	W9		Clock #825 George Sepesle Welding Qualifications	<input checked="" type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
3	Kasgro 4112018 Letter		Letter transferring Welder Qualifications to Kasgro from previous company name	<input checked="" type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
				<input type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
				<input type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
				<input type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA
				<input type="checkbox"/> AP	<input type="checkbox"/> AWC	<input type="checkbox"/> REV
				<input type="checkbox"/> RWC	<input type="checkbox"/> DS	<input type="checkbox"/> RSA

Comments: No comments	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.) KLEIN Slade <small>Digitally signed by KLEIN Slade Date: 2018.04.24 08:08:44 -0700</small> Date: 4/24/2018
--------------------------	---

AFS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by Mark A. G. Date DN: c=AREVA GROUP, 2.5.4.42=197A37C1280410E0001700, ou=CDT/OTM/Mark Date: 2018.04.24 13:01:36 -0400</small>	Date: 04/24/2018
--	--	------------------

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



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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	PTI / 16C3016046	DTF No. / Rev: 018A
Charge No: 01916.01.C005.08.00100	Due Date: 4/26/2018	
Document(s):	See DTF-018A	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Clock 109 (Charles Kluinski) will NOT be used for welding and was not resubmitted. Clock 15 (Darryl Beachem ok per letter. Miner Rail Services is now Kasgro. Clock numbers provided for all welders per R. Ford email.		
Technical Reviewer(s) (Sign/Date):	KLEIN Slade	Digitally signed by KLEIN Slade Date: 2018.04.24 07:52:31 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by Bernie Counterman Date: 2018.04.24 08:00:31 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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



KASGRO

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 # 825 George Sepesie

This review was performed 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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From: [Rick Ford](#)
To: [KLEIN Slade \(ORN-BE\)](#)
Cc: [DENTON Mark \(ORN-BE\)](#); [COUNTERMAN Bernie \(ORN-BE\)](#); [Mark](#)
Subject: Kasgro Welder Identification
Date: Tuesday, April 10, 2018 12:34:37 PM
Attachments: [Kasgro 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:



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

Kasgro Welder Employee Numbers

Emp. #	Employee Name
11	James Clark
12	Jim McCreedy
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



Orano Federal Services
**Title: Design and Prototype Fabrication of Railcars for Transport of
 High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery**
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 Project: 00225.03.0050 DOE Atlas Project


AREVA		AREVA Federal Services LLC			
DATA TRANSMITTAL FORM					
Supplier: KASGRO RAIL CORP., INC.		DTF No: 019		Page 1 of 1	
P.O./SC No: 15C3011916			Date: 03/27/18		
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal		SDRL List Item No: 20			
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information		Number of Copies Submitted: 1			
Submitted By: RICK FORD		Rick Ford <small>Digitally signed by Rick Ford Date: 2018.03.27 15:34:40 -0700</small>		PROJECT MANAGER	
<small>(Name)</small>		<small>(Signature)</small>		<small>(Title)</small>	
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION	
1	KAS W10		Clock #11 James Clark Welding Qualifications	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
2	KAS W11		Clock #12 Jimmy McCreedy Welding Qualifications	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA	
3	KAS W12		Clock #841 John Henke Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
4	KAS W13		Clock #373 John Novakovich Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
5	KAS W14		Clock #843 Josh Clyde Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
6	KAS W15		Clock #300 Keith Peterson Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
7	KAS W16		Clock #815 Leonard Agee Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
8	KAS W17		Clock #148 Mark Baker Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
9	KAS W18		Clock #634 Matthew Smith Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
Comments:			Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)		
Please address comments on attached DTF-019 RFM-026. Re-submit for James Clark (W10) and James McCreedy (W11).			KLEIN Slade <small>KLEIN Slade 2018.04.10 04:59:05 -0700</small>		
			Date 4/10/2018		
AFS DISPOSITION CODES AND DEFINITIONS					
AP	Approved	Work may proceed.		Resubmittal is not required	
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required	
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required	
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.		Correct and resubmit	
DS	Disapproved	Work may <u>not</u> proceed.		Correct and resubmit	
RSA	Receipt Submittal Acknowledged	No other action required.			
If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.					
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval				Date: 04/10/2018	
		<small>Digitally signed by Mark A. G. Slade DN: c=AREVA GROUP, 2.5.4.40=197A37C1280410E2001700, ou=CDOT/OTM Mark, Date: 2018.04.10 08:51:37 -0700</small>			

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



Orano Federal Services
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 Project: 00225.03.0050 DOE Atlas Project

	AREVA Federal Services LLC	
SUPPLIER DOCUMENT SUBMITTAL REVIEW		
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 019
Charge No:	00225.03.0050.02.00001	Due Date: 4/10/2018
Document(s):	See DTF No.: 019	
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No additional comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		KLEIN Slade 2018.04.10 04:53:23 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
1. James Clark – qualification for .375 was performed for Miner Rail Services. Need qualifications to Kasgro. (Ref. D15.1, Section 9.4 Qualification Responsibility). 2. James McCready – qualification 3-4 unlimited flat-groove was performed for Miner Rail Services. Need qualifications to Kasgro. (Ref. D15.1, Section 9.4 Qualification Responsibility). qualification 3-4 unlimited flat-horizontal was performed for Miner Rail Services. Need qualifications to Kasgro.		
QA Reviewer(s) (Sign/Date): Bernard Counterman		Digitally signed by Bernard Counterman Date: 2018.04.05 15:19:50 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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Professional Service Industries, Inc.

PITTSBURGH TESTING LABORATORY DIVISION

CERTIFICATE

OF

TEST AND APPROVAL OF WELDING PROCESS

AND

QUALIFICATION OF OPERATOR OF

WELDING EQUIPMENT

PROFESSIONAL SERVICE INDUSTRIES, INC., PITTSBURGH TESTING LABORATORY DIVISION, has witnessed the welding and testing of test specimens welded by

MINER RAILCAR SERVICES
 2208 EAST CHERRY STREET
 NEW CASTLE, PA 16102

in accordance with
 American Welding Society
 Structural Welding Code **DI-1-88**

Welding Operator James Clark No. 011
 Welding Process SAW/GMAW/Flux Cored (Innershield)

Operator Tested

This is to certify that the Welding Technique used in this test and described in SPECIFICATIONS FOR WELDING PROCESS No. AWS DI-1-88 and the results of the test given in PHYSICAL TEST REPORT No. PHY80142 complied with the requirements of the above code within the following limitations.

Maximum Plate or Wall Thickness 3/4" MAX.
 Minimum Plate or Wall Thickness Unlimited
 Welding Positions Flat-Horizontal-Vertical
 Other Limitations Fillet & Groove

Remarks A5.20, A5.18, A5.1 E711-7, E70S-3
E7018 F. NO. 4 & 6

No. 10387
 Order No. 828-73122
 File No. _____
 Approved. 4-15-88

PITTSBURGH TESTING LABORATORY DIVISION

By Peter Mentzer
 Director



Orano Federal Services
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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

600 Morgan Avenue
 Pittsburgh, Pennsylvania 15220
 412/927-4000

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name James Clark		Date Reported 4/29/88		PTL Order No. 828-73122	
Welder Identification No. 011		Date Tested 4/15/88		Lab No. PHY80142	
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS DI, 1-88		Client Order No.	
		Base Material Specification A-36 Group 1			
Process F00X CORED (INNERSHIELD)		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Joint <input type="checkbox"/> Groove <input type="checkbox"/> Fillet	
Position Vertical Groove		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Plate Thickness 3/8"	
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L		Thickness Range Qualified 3/4" Max.		Diameter & Wall Thickness ---	
Welding Procedure No. 01.1-88 AWS		Rev. No.		Current AMPS: 80-200 <input type="checkbox"/> AC <input checked="" type="checkbox"/> DC	
Welding Procedure Data by: <input type="checkbox"/> PTL Witnessed (Tech):		Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse			
FILLER METAL					
Specification No. AMS A 5. 20		Classification E71T-7		F. No. 6	
Backing A-36 Steel		Diameter		Trade Name	
Shielding <input type="checkbox"/> Gas: <input type="checkbox"/> Flux:					
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Piping Porosity	
GUIDED BEND TEST RESULTS					
VERTICAL	TYPE	RESULTS	TYPE	RESULTS	
	Face Bend	No Defects	PASS		
	Root Bend	No Defects	PASS		
FILET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Filler Size Leg: in. x in. <input type="checkbox"/> Concavity: in. <input type="checkbox"/> Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail					
Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)					
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.					
Remarks & Report Distribution (*denotes data not provided or not applicable)				Submitted by: <i>J. Peter Mentzer</i> Manager	
1cq					

ALL TESTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. INDICATIONS OR STATEMENTS CONCERNING OR EXTRACTS OF RESULTS HEREON ARE WRITTEN APPROVAL.



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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

850 Poplar Street
 Pittsburgh, Pennsylvania 15220
 412922 4000

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name James Clark		Date Reported 4/29/88		PTL Order No. 828-73122	
Welder Identification No. 011		Date Tested 4/15/88		Lab No. PHY80142	
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS D1.1		Client Order No.	
		Base Material Specification A-36			
Process GMAW		Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe		Joint <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet	
Position Vertical Groove		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Plate Thickness 1" Thick	
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Diameter & Wall Thickness	
Welding Procedure No. Rev. No.		Thickness Range Qualified Unlimited		Current VOLTS 18-21 AMPS: 125-150 I AC <input type="checkbox"/> DC <input type="checkbox"/> Polarity <input type="checkbox"/> Direct <input type="checkbox"/> Reverse	
Welding Procedure Data by: <input checked="" type="checkbox"/> PTL Witnessed (Tech): <input type="checkbox"/> Others:					
FILLER METAL					
Specification No. AWS A 5-18		Classification E 70S-3		F. No. 6	
Backing A-36		Diameter 15-20 CFH		Trade Name	
Shielding <input checked="" type="checkbox"/> Gas: 75% Argon 25% CO ₂					
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Piping Porosity	
GUIDED BEND TEST RESULTS					
Vertical		TYPE		RESULTS	
Face Bend		No Defects		PASS	
Root Bend		No Defects		PASS	
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Fillet Size Leg: in. x in. <input type="checkbox"/> Concavity: in. <input type="checkbox"/> Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail					
Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)					
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.					
Remarks & Report Distribution (*denotes data not provided or not applicable)				Submitted by: <i>Peter Martias</i> Manager	
Tcg					

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRA TESTS WITHOUT WRITTEN APPROVAL.



Orano Federal Services
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Appendix F

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 Project: 00225.03.0050 DOE Atlas Project



Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

L P001
 Rev. 7/95
 850 Poplar Street
 Pittsburgh, Pennsylvania 15220
 412/922-4000

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name		Date Reported 4/29/88		PTL Order No. 828-73122	
Welder Identification No. 011		Date Tested 4/15/88		Lab No. PHY80142	
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS D1.1-88		Client Order No.	
		Base Material Specification A-36 Group 1			
Process Shielded Metal Arc Welding		Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe		Joint <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet	
		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Plate Thickness 3/8"	
Position Vertical Groove		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Diameter & Wall Thickness	
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L		Thickness Range Qualified 3/4" Max.			
Welding Procedure No. D1.1-88 AWS		Rev. No.		Current AMPS: 80-200 <input type="checkbox"/> AC <input checked="" type="checkbox"/> DC	
Welding Procedure Data by: <input type="checkbox"/> PTL Witnessed (Tech):		Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse			
Welding Procedure Data by: <input type="checkbox"/> PTL Witnessed (Tech): <input type="checkbox"/> Others:					
FILLER METAL					
Specification No. AWS A 5.1		Classification E 7018		F No. F. No. 4	
Backing A-36 Steel		Diameter 1/8"		Trade Name	
Shielding <input type="checkbox"/> Gas: <input type="checkbox"/> Flux:					
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Piping Porosity	
GUIDED BEND TEST RESULTS					
VERTICAL TYPE		RESULTS		RESULTS	
Face Bend		No Defects PASS			
Root Bend		No Defects PASS			
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Fillet Size Leg: in. x in. <input type="checkbox"/> Concavity: in. <input type="checkbox"/> Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail					
Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)					
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated					
Remarks & Report Distribution (*denotes data not provided or not applicable)				Submitted By: <i>J. Peter Meathes</i> Manager	
leg					

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Project: 00225.03.0050 DOE Atlas Project

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: JAMES N. CLARK Certification no.: 011
 Welding process: IGMA Manual Semi-automatic Machine
 Position: 3G Vertical UP
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Unspecified joint Fig. no. CID
 Material specification: A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: 1"
 Thickness range the qualifies: UNLIMITED

FILLER METAL

Specification no.: E 719 Classification: E 719-1 Filler: 6
 (Reserve filler metal (if not covered by AWS specification))
 Is backing strip used? Yes
 Filler metal diameter and trade name: 0.045" Titanium Flux for submerged arc or gas for gas metal arc: as
 cored arc welding: 100% CO₂

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Riping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>1/64" tear/PASSER</u>		

Test conducted by: KATH WESTING LABORATORY Laboratory test no.: 95-1643
 per: Paul J. Karl Test date: 6/29/95

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Markspotch: _____
 (Describe the location, nature, and severity of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film condition	Results	Remarks	Film condition	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are true and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D18.1, (95 year)

Manufacturer or contractor: KANSAS BALL BEARING
 Authorized by: [Signature]
 Date: 6/29/95

Form D-4



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 Project: 00225.03.0050 DOE Atlas Project

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: JAMES CLARK Identification no. 011
 Welding process: E.C.A.W. Manual Semi-automatic Machine
 Position: EG OVERHEAD
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified Joint fig. no. C1B
 Material specification: A-36
 Carrier and wall thickness (if pipe) otherwise, joint thickness: .500"
 Thickness range this qualifies: 1.0"

FILLER METAL

Specification no. E-20 Classification: E70Y-1 F no. 6
 Describe filler metal (if not covered by AWR specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name: .045" Lincoln Flux for submerged arc or gas for gas metal arc or flux core arc welding: 100% CO₂

VISUAL INSPECTION

Appearance: Satisfactory Undercut None Poring porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by: KM TESTING LABORATORY Laboratory test no. D3F2G-2265
 per: Paul J. Hault Test date: 8/25/2003

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Mercoction: _____
 (Describe the location, nature and size of any cracks or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no. _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (_____, 2001_____) year.

Manufacturer or contractor: KASIMO RAIL CORP.
 Authorized by: Mark Sepp
 Date: 8-25-03

Firm D-4



Orano Federal Services
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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name JAMES MCCREERY Identification no. 012
 Welding process P.C.A.R. Manual Semi-automatic X Machine
 Position 1G FLAT
 (Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
 In accordance with procedure specification no. Q15RC-0123
 Material specification A-56
 Diameter and wall thickness of pipe, or otherwise, joint thickness 1.0"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-20 Classification E70F-I F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" Lincoln flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
STOP BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KALL WELDING LABORATORY Laboratory test no. 01EIG-2214
 per *[Signature]* Test date 11/30/01

Fitup Test Results

Appearance Fitup size
 maximum root penetration Mandrel
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1. (93 year).


Manufacturer or contractor KASCRO RAIL CORPORATION
 Authorized by *[Signature]*
 Date 11-30-01

Form D-4



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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 Project: 00225.03.0050 DOE Atlas Project

 Professional Service Industries, Inc. PITTSBURGH TESTING LABORATORY DIVISION CERTIFICATE OF TEST AND APPROVAL OF WELDING PROCESS AND QUALIFICATION OF OPERATOR OF WELDING EQUIPMENT	
<p><i>PROFESSIONAL SERVICE INDUSTRIES, INC., PITTSBURGH TESTING LABORATORY DIVISION</i>, has witnessed the welding and testing of test specimens welded by</p> <p align="center"> Miner Railcar Services 2208 East Cherry Street New Castle, Pennsylvania 16102 </p> <p align="center"> in accordance with American Welding Society Structural Welding Code D1.1-88 City of Pittsburgh ordinance No. 243 Series 1962 and Pennsylvania Department of Highways </p>	
Welding Operator <u>JAMES B. McCREADY</u> No. <u>012</u> Welding Process <u>Flux Cored (Innershield)</u>	<p>This is to certify that the Welding Technique used in this test and described in SPECIFICATIONS FOR WELDING PROCESS No. AWS D1.1-88 and the results of the test given in PHYSICAL TEST REPORT No. PHY80580 complied with the requirements of the above code within the following limitations.</p> <p> Maximum Plate or Wall Thickness <u>3/4"</u> Minimum Plate or Wall Thickness <u>Unlimited</u> Welding Positions <u>Flat, Groove & Fillet</u> Other Limitations <u>Fillet & Groove</u> </p>
Operator Tested No. <u>10592</u> Order No. <u>828-73122</u> File No. _____ Approved: <u>June 10, 1986</u>	Remarks <u>AWS A 5.20 E 71T-7 F. No. 5</u> PITTSBURGH TESTING LABORATORY DIVISION By <u>J. Peter Mentzer</u> Director



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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

859 Poplar Street
 Pittsburgh, Pennsylvania 15222
 412-922-4000

LP-50.1
 Rev. 7/88

WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name JAMES B. MCCREADY		Date Reported June 27, 1988	PTL Order No. 828-73122		
Welder Identification No. 012		Date Tested June 10, 1988	Lab No. PHY80580		
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102		Welding Code (ID & year) AWS D1.1-88	Client Order No.		
Process GMAW		Base Material Specification A-36	Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe		
Position Vertical Groove		Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Joint <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet		
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L		Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Plate Thickness 3/8" Thick		
Welding Procedure No. _____ Rev. No. _____		Current Volts 18-21	Polarity <input type="checkbox"/> Direct <input type="checkbox"/> Reverse		
Welding Procedure Data by: <input checked="" type="checkbox"/> PTL Witnessed (Tech): Mike Azzara		Thickness Range Qualified 3/4" maximum			
FILLER METAL					
Specification No. AWS A 5.18		Classification E 70 S-3		F. No. 6	
Backing A 36		Diameter .045		Trade Name	
Shielding <input checked="" type="checkbox"/> Gas: 75% Argon 25% CO₂ XX Argon 15-20 CFH					
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Piping Porosity	
GUIDED BEND TEST RESULTS					
VERTICAL		RESULTS		RESULTS	
TYPE			TYPE		
FACE BEND		Defect Under 1/8"-PASS			
ROOT BEND		Defect Under 1/8"-PASS			
FILLET TEST RESULTS					
Weld Appearance <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		Fillet Size Leg: in. x in. <input type="checkbox"/> Convexity: in. <input type="checkbox"/> Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail					
Fracturing Test Results (Describe location, nature & size of any cracks or tearing of the specimen)					
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.					
Remarks & Report Distribution: (* denotes data not provided or not applicable)				Submitted by: <i>Peter Martin</i>	

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Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

650 Poplar Street
 Pittsburgh, Pennsylvania 15203
 412922-4000


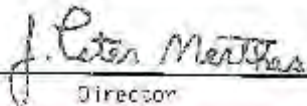
WELDER AND WELDING OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name JAMES B. McCREADY		Date Reported June 27, 1988		PTL Order No. 828-73122	
Welder Identification No. 012		Date Tested June 10, 1988		Lab No. PHY80560	
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16702		Welding Code (ID & year) AWS D1.1-88		Client Order No.	
Process Flux Cored (Innershield)		Base Material Specification A-36 Group 1		Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe	
Position Flat Groove		Specimens Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others		Joint BU2g <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet	
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L		Thickness Range Qualified 3/4" maximum		Plate Thickness 3/8"	
Welding Procedure No. AWS D1.1-88 Rev. No. 0		Current AMPS 125-250 <input type="checkbox"/> AC <input type="checkbox"/> DC		Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse	
Welding Procedure Date by: <input checked="" type="checkbox"/> PTL		Witnessed (Tech): Mike Azzara		<input type="checkbox"/> Others:	
FILLER METAL					
Specification No. AWS A 5.20		Classification E 71 T-7		E No. 6	
Backing A-36 Steel		Diameter		Trade Name	
Shielding <input type="checkbox"/> Gas:		Flux:			
VISUAL INSPECTION (AWS ONLY)					
Appearance		Undercut		Poring Porosity	
GUIDED BEND TEST RESULTS					
Flat Groove		RESULTS		RESULTS	
TYPE		TYPE		TYPE	
FACE BEND		Defect Under 1/8" - PASS			
ROOT BEND		Defect Under 1/8" - PASS			
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Fillet Size: Leg: in x in, Concavity: in, Convexity: in.			
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail		Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)			
RADIOGRAPHIC TEST RESULTS					
Film Identification	Exposure	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated.					
Remarks & Report Distribution: (indicates data not provided or not applicable)					
					Subscribed and <i>J. Peter Mentzer</i> Manager

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 Professional Service Industries, Inc. PITTSBURGH TESTING LABORATORY DIVISION CERTIFICATE OF TEST AND APPROVAL OF WELDING PROCESS AND QUALIFICATION OF OPERATOR OF WELDING EQUIPMENT	
<p><i>PROFESSIONAL SERVICE INDUSTRIES, INC., PITTSBURGH TESTING LABORATORY DIVISION</i>, has witnessed the welding and testing of test specimens welded by</p> <p align="center"> Miner Railcar Services 2206 East Cherry Street New Castle, Pennsylvania 16102 </p> <p align="center"> in accordance with American Welding Society Structural Welding Code D1.1-88 City of Pittsburgh Ordinance No. 243 Series 1962 and Pennsylvania Department of Highways </p>	
Welding Operator _____ Welding Process _____	JAMES K. MCCREADY No. 012 SMAW & GMAW
<div style="border: 1px solid black; width: 150px; height: 100px; margin-bottom: 5px;"></div> Operator Tested	This is to certify that the Welding Technician used in this test and described in SPECIFICATIONS FOR WELDING PROCESS No. AWS D1.1-88 and the results of the test given in PHYSICAL TEST REPORT No. <u>PHY02580</u> complied with the requirements of the above code within the following limitations: Maximum Plate or Wall Thickness <u>3/4"</u> Minimum Plate or Wall Thickness <u>Unlimited</u> Welding Positions <u>Flat-Horizontal-Vertical</u> Other Limitations <u>Fillet & Groove</u>
	Remarks <u>AWS A 5.1 F 7018 F, No. 4</u> <u>AWS A 5.18 E 705-3 F, No. 6</u>
No. <u>10591</u> Order No. <u>328-73122</u> File No. _____ Approved <u>June 12, 1988</u>	PITTSBURGH TESTING LABORATORY DIVISION  Director



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psi Professional Service Industries, Inc. Pittsburgh Testing Laboratory Division		850 Pookin Street Pittsburgh, Pennsylvania 15220 412/522-4000			
WELDER AND WELDER OPERATOR QUALIFICATION TEST REPORT					
Welder/Welder Operator's Name JAMES B. McCready	Date Reported June 27, 1988	PTL Order No. 828-73122			
Welder Identification No. 012	Date Tested June 10, 1988	Lab No. PHY80580			
Client Miner Railcar Services 2208 East Cherry Street New Castle, PA 16102	Welding Code (ID & year) AWS D1.1-88	Base Material Specification A-36			
	Specimen <input checked="" type="checkbox"/> Plate <input type="checkbox"/> Pipe	Joint <input checked="" type="checkbox"/> Groove <input type="checkbox"/> Fillet			
Process Shielded Metal Arc Welding	Specimen Furnished <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Plate Thickness 3/8"			
Position Vertical Groove	Specimens Machined <input checked="" type="checkbox"/> PTL <input type="checkbox"/> Others	Diameter & Wall Thickness —			
Weld Progression <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down <input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> L to R <input type="checkbox"/> R to L	Thickness Range Qualified 3/4" Maximum				
Welding Procedure AWS No. D1.1-88 Rev. No. —	Current AMPS: 80-200 <input type="checkbox"/> AC <input checked="" type="checkbox"/> DC	Polarity <input type="checkbox"/> Direct <input checked="" type="checkbox"/> Reverse			
Welding Procedure Data by: <input checked="" type="checkbox"/> PTL Witnessed (Tech): Mike Azzara	<input type="checkbox"/> Others				
FILLER METAL					
Specification No. AWS A5.1	Classification E7018	F. No. 4			
Backing A-36 Steel	Diameter 1/8"	Trade Name			
Shielding <input type="checkbox"/> Gas <input type="checkbox"/> Flux					
VISUAL INSPECTION (AWS ONLY)					
Appearance	Undercut	Porosity			
VERTICAL GUIDED BEND TEST RESULTS					
TYPE	RESULTS	TYPE	RESULTS		
SIDE BEND	Defect Under 1/8" - PASS				
SIDE BEND	Defect Under 1/8" - PASS				
FILLET TEST RESULTS					
Weld Appearance <input type="checkbox"/> Pass <input type="checkbox"/> Fail	Fillet Size Leg: in. x in.	<input type="checkbox"/> Convexity: in.	<input type="checkbox"/> Convexity: in.		
Macro Etch Test Results <input type="checkbox"/> Pass <input type="checkbox"/> Fail	Fracture Test Results (Describe location, nature & size of any cracks or tearing of the specimen)				
RADIOGRAPHIC TEST RESULTS					
Film Identification	Results	Remarks	Film Identification	Results	Remarks
Tests Witnessed by:					
QUALIFICATION RESULTS					
The Welder/Operator identified above <input checked="" type="checkbox"/> DOES <input type="checkbox"/> DOES NOT meet the performance qualifications specified in the Code identified above for the variables stated. CITY OF PENNSYLVANIA No. 243 & PA DEPT. OF HIGHWAYS					
Remarks & Report Distribution (* denotes data not provided or not applicable)				Submitted By J. Carter Martin	



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: JAMES B. McCLADY Identification no. 012
 Welding process: W.C.A.W. Manual Semi-automatic Machine
 Position: AS Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint fig. no. C1B
 Material specification: A-36
 Diameter and wall thickness (if pipe) otherwise, joint thickness: 1"
 Thickness range (if equal leg): UNLIMITED

FILLER METAL
 Specification no. 5, 20 Classification: E 7018 Filler 0
 Describe filler metal (if not covered by AWS specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name: 0.045" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 core arc welding: 100% ER3

VISUAL INSPECTION
 Appearance: Satisfactory Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by: KATI WELDING LABORATORY Laboratory test no. 95P30-1657
 per: [Signature] Test date: 10/10/95

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Warpage: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (____ 93 ____ year).

Manufacturer or contractor: [Signature]
 Authorized by: [Signature]
 Date: 10-10-95

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name JAMES MOORZALY Identification no. 012
 Welding process E.C.A.W. — Manual — Semiautomatic X — Machine
 Position 3G Vertical Ho
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. OSRRC-0136
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.29 Classification E11T-1 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" ES2P Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KALL TESTING LABORATORY Laboratory test no. OSRRC 2475
 per [Signature] Test date 12/29/2005

Fillet Test Results

Appearance Fillet size
 Fracture test: root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001) year.

Manufacturer or contractor KANSAS RAIL CORP.
 Authorized by [Signature]
 Date 12-29-05

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: JAMES MCCREARY Identification no. 012
 Welding process: E.C.A.W. Manual Semi-automatic X Machine
 Position: 4G OVERHEAD
 (Flat, horizontal, overhead or vertical. If vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint file no. 410
 Material specification: A 36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness: .500"
 Thickness range thickness: 1.00"

FILLER METAL

Specification no. 5.20 Glass fraction: 70M-1 F no. 6
 Describe filler metal (if not covered by AWS specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name: .045" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding: 100% Cu

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
SPOT BEND	NO DEFECTS		
ROOT BEND	NO DEFECTS		

Test conducted by: NATI TESTING LABORATORY Laboratory test no. Q3F4G 2266
 per Paul J. Hall Test date: 8/25/2003

Filet Test Results

Appearance: Fillet size:
 Fracture test root penetration: Macroetch:
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: Laboratory test no.:
 per: Test date:

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: Test no.:
 per:

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1 (— 2001),
 year

Manufacturer or contractor: ZASCO RAIL CORP.
 Authorized by:
 Date: 8-25-03

Form D-4



Orano Federal Services
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General Inquiry: 800-368-5777 • TOLL-FREE • 24 Hours • 7 Days a Week • In PA: 717-261-2200
 TUV Rheinland

Reported To: Mr. Dave Stahl
 Esagro Rail Corp
 121 Rundle Road
 New Castle, PA 16102
 Date: April 19, 2016
 P/O Number: QAF
 Report Number: 455841-1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: John Hawk
 Type of Welder: Semi Automatic
 Welding Code: AWS D15.1/D15.1M-2012
 Identification Number: 841
 Welding Procedure Specification No.: T-001
 Rev: 0
 Date: 4/13/2016

Variables	Record Actual Values	Qualification Range
Process Type	FCAW	FCAW
Polarity: (single/multiple)	Single	Single
Current/Polarity	DCSP	
Position	3G	Flat, Vertical Fillet & Groove
Weld Progression	Uphill	Uphill
Bechling (With or Without)	With	With
Material/Spec	A36 to A36	All AWS Unqualified Material
Base Metal		
Thickness: (Plate)		
Groove	1"	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Thickness: (Pipe/Tube)		
Groove	N/A	1/8" to Unlimited
Fillet	N/A	1/8" to Unlimited
Diameter: (Pipe)		
Groove	N/A	24" OD and Over
Fillet	N/A	Any Diameter
Filler Metal		
Spec. No.	A5.20	
Class	E71T-1	
E-Pos.	6	FC
Gas/Flux Type	100% CO ₂	
Other	N/A	N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 4/13/2016

Type	Result	Type	Result
Side Bend	PASS		
Side Bend	PASS		

Fit Test Results Appearance: N/A Fillet Size: Macroscopic

Pressure Test Root Macroscopic
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company:

Mechanical tests conducted by: Tom Place/Rich Portman Laboratory Test Number: 151996
 Welding supervised by: Mark Ziegler Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: _____ Date: 4/20/2016
 Client Approval: *Mark Ziegler* Date: 4/20/2016

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.
 These test results report the findings at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the
 firm's commitment to objective testing, it is not possible to determine the overall component quality, no guarantee is made or liability assumed by
 TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality or responsibility.
 TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC. 1001 EXP. BLVD. SUITE 1000 RICHMOND, VA 23261-1000
 PHONE: 800-368-5777 FAX: 703-761-1000
 Website: www.tuv.com
 E-Mail: info@tuv.com
 RVD-151996-1
 AWS Welder Qualification Page 1 of 1



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Kasgro Rail Corp
 121 Rundle Road
 New Castle, PA 16102

AWS - WELDER PERFORMANCE QUALIFICATION TEST RECORD

Name: Josh Clyde Welding Code: AWS D15.1 2012
 Type of Welder: Semi Automatic Identification Number: 843
 Welding Procedure Specification No. F-001 Rev: 0 Date: 9/5/2017

Variables	Record Actual Values		Qualification Range
Process/Type	FCAW		FCAW
Electrode (single/multiple)	Single		Single
Current/Polarity	DCEP		
Position	3G		Flat and Vertical Fillet and Groove
Weld Progression	Uphill		Uphill
Backing (With or Without)	With		Backing Only
Material/Spec	A572 Gr50	to A572 Gr50	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Thickness: (Pipe/tube)			
Groove	N/A		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Diameter: (Pipe)			
Groove	N/A		Greater Than 24" OD
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	F71T-1		
F-No.	6		F6
Gas/Flux Type	C02		
Other	N/A		N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 9/5/2017

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	PASS		
Side Bend	PASS		

Fillet Test Results

Appearance: N/A Fillet Size:
 Fracture Test Root: Macroetch:
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company:

Mechanical tests conducted by: Tom Plesz/Rich Portman Laboratory Test Number: 154187

Welding supervised by: SCOTT MOELY Company: TLV Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

Reviewer's Signature: [Signature] Date: 9/12/17

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in conformance with the requirements of Section 11 of AWS D15.1 (2012) Railroad Welding Specification for Cars and Locomotives.

Manufacturer or Contractor: Kasgro Specialty Railcar

Authorized By Mark Zeigler Date: September 12, 2017



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Grand Rapids, MI – Pittsburgh, PA – Birmingham, AL.
 NDE • MECHANICAL LAB • ENVIRONMENTAL www.tuvris.com



GUIDED BEND TEST

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

Report #: 463668A Page 1 of 1
 PO #: K17-2045
 Lab #: 154187
 Date Received: 9/07/2017
 Date Tested: 9/08/2017

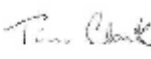
Date: September 12, 2017

Work Order: 463668

PQR #:	N/A	Welder ID:	Josh Clyde - 843
Process:	FCAW	Position:	JG
Base Metal(s):	A572 Gr50 to A572 Gr50	Coupon Shape:	1" Plate

Test #	Orientation	Result	Test #	Orientation	Result
1	Side	PASS			
2	Side	PASS			

Equipment Used:	
<input type="checkbox"/> Wrap Around Bend Jig:	<input checked="" type="checkbox"/> Guided Fixture
Pin Diameter: 1.5"	
Specification: AWS D15.1	<input checked="" type="checkbox"/> Conforming <input type="checkbox"/> Non-Conforming
Test Witness By:	
Test Technician: Tom Plese	

Respectfully submitted,

 Tim Clark
 Laboratory Manager
 TÜV Rheinland Industrial Solutions, Inc.

Testing was performed in accordance with accepted industry practices as well as the test methods referenced. TÜV Rheinland Industrial Solutions, Inc. has no other knowledge of the origin, ownership, production, use, installation, or maintenance of the equipment, and makes no claims as to the suitability or final use of the material. The manufacturer's copy is the master record. This report shall not be reproduced, except in full, without the written consent of TÜV Rheinland Industrial Solutions, Inc.

Guided Bend Test Report
 10/16/2016



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name KRITH DEBERSON Identification no. 300
 Welding process E.C.A.W. Manual Semiautomatic X Machine
 Position 3G Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. 05KRC-0135
 Material specification A-36
 Diameter and wall thickness (if pipe) otherwise, joint thickness
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.29 Classification E111C-1 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? YES
 Filler metal diameter and trade name 1/16" ESAB Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SLIDE BEND	1/8" tear/PASS-01		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 06139-2413
 per [Signature] Test date 1/09/2006

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001)
 year

Manufacturer or contractor ARGO RAIL CORP.
 Authorized by [Signature]
 Date 1-7-06

Form D-4



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WELDER QUALIFICATION BY <i>Kail Testing Laboratory</i> RD 5 BOX 116 SHADY GROVE NEW CASTLE, PA - 72434-3104 TO CERTIFY KEITH PETERSON S.S.N. [REDACTED] -9634 HAS MET THE REQUIREMENTS OF AWS D15.1(93) RAILROAD WELDING SPEC/FCAW BASE METAL <u>A-36</u> FILLER <u>E71T-1</u> 1/16" POS. <u>3G UP</u> DATE OF TEST <u>11/13/2000</u> EXPIRATION <u>INDEFINITE</u> NUMBER <u>20F3G-2090</u> SIGNED <i>A. J. Kail</i> WELDING SUPERVISOR	
<h1>ificate</h1> of <h2>Tests and Qualifications</h2> of <h2>Welding Operator</h2> THE WELDING DIVISION OF <h3><i>Kail Testing Laboratory, Inc.</i></h3> HAS PREPARED AND TESTED THE SPECIMENS WELDED BY <u>KEITH PETERSON</u> WELDING PERFORMED UNDER THE SUPERVISION OF <u>KASCO RAIL CORPORATION</u> IN ACCORDANCE WITH <u>F.C.A.W.</u> <u>AWS D15.1(93) RAILROAD WELDING SPECIFICATION</u> <u>3G VERTICAL UP 1.0" GROOVE WELD TEST</u>	
Date of Qualification <u>11/13/2000</u>	Date of Expiration <u>INDEFINITE</u> AS PER CODE.
Lab. No. <u>20F3G-2090</u> <u>E71T-1</u> <u>1/16"</u>	<i>A. J. Kail</i> Authorized Signature



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name: KEITH PRORSOE Identification no. 300
 Welding process: S.M.A.W. Manual Semiautomatic _____ Machine _____
 Position: AC Overhead
 (Flat, horizontal, overhead or vertical – If vertical, state whether upward or downward)
 In accordance with procedure specification no. Plasma Shielded Joint Fig. no. C1B
 Material specification: A-36
 Diameter and wall thickness (if pipe) – otherwise, joint thickness: .125"
 Thickness range this qualifies: .750"

FILLER METAL

Specification no. 5.1 & 5.5 Classification: E-7018 F no. 4
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/8" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding: _____

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Piping porosity: None

Guided Bend Test Results

Type	Result	Type	Result
<u>FACE BEND</u>	<u>Minor check/PASSED</u>		
<u>ROOT BEND</u>	<u>1/32" bead/PASSED</u>		

Test conducted by: KALLI TESTING LABORATORY Laboratory test no. 03E43-1757
 per: [Signature] Test date: 3/15/2003

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Marcatch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no. _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: _____ Test no. _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001), year.

Manufacturer or contractor: KANSAS CITY SOUTHERN RAIL CORP.
 Authorized by: [Signature]
 Date: 3-15-03

Form D 4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name LEONARD MOSE Identification no. 815
 Welding process F.C.A.W. Manual Semi-automatic Machine
 Position 4G Overhead
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint, fig. no. 018
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .750"
 Thickness range this qualifies .5"

FILLER METAL

Specification no. 5.20 Classification E 714-1 F no. G
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name .045" LINCOLN Flux for submerged arc or gas for gas metal arc or flux
 coated arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
STIFF BEND	1/32" tear/PASSED		

Test conducted by KAIL TESTING LABORATORY Laboratory test no. 03F10-2447
 per [Signature] Test date 3/18/2005

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcatch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (_____ 200_____)
 year

Manufacturer or contractor KASCO RAIL CORPORATION
 Authorized by [Signature]
 Date 3-18-2005



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AWS D15.1 (2/15, 1M2007)

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name LEONARD AGEE Identification no. B15
 Welding process ECAW Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical; if vertical, state whether upward or downward) 1C, Flat
 In accordance with procedure specification no. 7-005
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.29 Classification E60T-5 I no. 6
 Describe filler metal (if not covered by AWS specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% O₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Cracking None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>STDR BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KATH TESTING LABORATORY Laboratory test no. 10F1G-7945
 per [Signature] Test date 2/18/2010

Fillet Test Results

Appearance Fillet size
 Cracks test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1, (2007) Railroad Welding Specification for Cars and Locomotives, (year)

Manufacturer or Contractor KASCO RAIL CORP.

Authorized by [Signature]

Date 2-18-10

Form 3.4



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name MARK BAKER Identification no. 148
 Welding process GTAW Manual Semiautomatic X Machine
 Position 4C Overhead
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joints (ig. no. C/E
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .375"
 Thickness range this qualifies .750"

FILLER METAL

Specification no. E-20 Classification E7018 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance: Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
FACE BEND	NO DEFECTS		
ROOT BEND	1/32" BEAD/PASSED		

Test conducted by RAV TESTING LABORATORY Laboratory test no. 03F10-2290
 per [Signature] Test date 12/02/2003

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Matchup
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2003 year).

Manufacturer or contractor KASCRO RAIL CORP.
 Authorized by [Signature]
 Date 12-2-03

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name MARK BARRIK Identification no. 148
 Welding process G.M.A.W. Manual Semi-automatic Machine
 Position 3G VERTICAL UP
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Procedure # 01KRC-0131
 Material specification 6061
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .500"
 Thickness range (for plates) 1.0"

FILLER METAL

Specification no. 5.10 Classification 5356 Filler 6
 Describe filler metal (if not covered by AWS specification)
 In backing strip used? NO
 Filler metal diameter and trade name 3/64" LINCOLN Flux for submerged arc or gas for gas metal arc or flux
 cord and welding 100% ARGON

VISUAL INSPECTION

Appearance Satisfactory Undercut None Hoop porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	1/32" Tear/PASSFD		
EDGE BEND	3/64" tear/PASSFD		

Test conducted by KALYPSUS INC LABORATORY Laboratory test no. DTM36-1435
 per [Signature] Test date 10/16/01

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Mandrel _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1, [93] year.

Manufacturer or contractor KASCO DATA CORP.
 Authorized by [Signature]
 Date 10-16-01

Form F-4



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Date of Qualification
 11/12/99

Date of Expiration
 INDEFINITE
 AS PER CODE.

Lab. No. 99F3G-1959

Paul J. Kail
 Authorized Signature



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name MARK R. BAXFR Identification no. 148
 Welding process C.O.A.W. Manual Semiautomatic Machine
 Position 3G Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint file, CW, CCB
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise joint thickness .500"
 Thickness range thickness 1.0"

FILLER METAL

Specification no. 5.20 Classification E70T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" L. NICK N Flux for salt-bearing arc or gas furnace metal arc or flux
 name and welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Pitting porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	7/64" tear/PASSED		
SIDE BEND	NO DEFECTS		

Test conducted by KAL TESTING LABORATORY Laboratory test no. 99F30 1959
 per [Signature] Test date 11/12/99

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marking: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film location	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (1993) year.

Manufacturer or contractor Casgro Rail Corp.
 Authorized by [Signature]
 Date 11-12-99

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name MARY HAKKER Identification no. 148
 Welding process E.L.E.W. Manual Semiautomatic Machine
 Position 31 Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint fig. no. C18
 Material specification A-18
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 0"
 Thickness range (if quantities) UNLIMITED

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	Minor check/PASSED		

Test conducted by KAL TESTING LABORATORY Laboratory test no. 20131-2092
 Per [Signature] Test date 11/13/2000

Filet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcobitch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 Per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (93 year),

Manufacturer or contractor KASSHO RAIL CORP.
 Authorized by [Signature]
 Date 11-13-00

Form D-1



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Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
 NDE + MECHANICAL LAB www.tuvr.com



Reported To: Mr. Dave Stahl
 Kasgro Rail Corp
 121 Kunkle Road
 New Castle, PA 16102

Date: December 11, 2014
 P/O Number: OAF
 Report Number: I
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Matthew Smith Welding Code: AWS D15.1D15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 834
 Welding Procedure Specification No. F-001 Rev: 0 Date: 12-11-14

Variables	Record Actual Values		Qualification Range
Process/Type	PCAW		PCAW
Electrode (single/multiple)	Single		Single
Current/Polarity	DC/EP		Flat, Vertical, Horizontal Fillet & Groove
Position	3G		Uphill
Weld Progression	Uphill		With
Backing (With or Without)	With		All AWS Prequalified Material
Material/Spec	A36	to A36	
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to unlimited
Fillet	N/A		1/8" to unlimited
Thickness: (Pipe/tube)			
Groove	N/A		1/8" to unlimited
Fillet	N/A		1/8" to unlimited
Diameter: (Pipe)			
Groove	N/A		24" and greater
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	E71T-E		
E.No.	6		6
Gas/Flux Type	100% CO ₂		
Other	N/A		Not an essential variable

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 12/11/14

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results: Appearance: N/A Fillet Size: _____
 Fracture Test Root: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen): _____

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____
 Mechanical tests conducted by: Pam Pless / Rich Portman Laboratory Test Number: 141586
 Welding supervised by: Don Church Company: TUV Rheinland Industrial Solutions

The welder identified above **PASSES**, **FAILS** based on the requirements of the code listed above.

Reviewer's Signature: [Signature]
 Client Approval: [Signature]

Date: 12/24/14
 Date: 12/24/14

TÜVRHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings at the time of inspection and shall be reviewed by the client for compliance to the project requirements. Due to the limitations of non-destructive 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 of any item inspected.



Reviewed by: Richard A. Portman
 CWS 05061301
 QC1 EXP. 8/1/2017
 Revised: 7/15/2013
 AWS Welder Qualification



Orano Federal Services
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Attachment 49

Orano Federal Services	
DATA TRANSMITTAL FORM	
Supplier: KASGRO RAIL CORP., INC.	DTF No: 019A
P.O./SC No: 15C3011916	Date: 05/14/18
Type of Submittal: <input type="checkbox"/> First <input checked="" type="checkbox"/> Re-Submittal	SDRL List Item No: 20
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1
Submitted By: RICK FORD	Rick Ford Digitally signed by Rick Ford Date: 2018.05.14 15:09:37 -0700
(Name)	(Signature)
PROJECT MANAGER (Title)	

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS W10		Clock #10 James Clark Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS W11		Clock #11 Jimmy McCready Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS4112018 LETTER		Letter Transferring Welder Qualifications to Kasgro from previous company name	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: No comments.	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.) KLEIN Slade Digitally signed by KLEIN Slade Date: 2018.05.21 15:29:51 -0700 Date 5/21/2018
---------------------------	---

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.

Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	Digitally signed by Mark A. G. Date DN: c=AREVA GROUP, 2.5.4.40=197A37C12804105D001708, o=CDOT/OTM Mark Date: 2018.05.22 08:58:34 -0700 Date: 05/22/2018
--	--

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



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

	Orano Federal Services	
	SUPPLIER DOCUMENT 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 DTF No.: 019A	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Digitally signed by KLEIN Slade Date: 2018.05.21 09:15:23 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No Comments		
QA Reviewer(s) (Sign/Date):		Digitally signed by Bernie Counterman Date: 2018.05.21 13:54:27 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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

Kasgro Rail Corporation
121 Rundle Road • New Castle, PA 16102
724-658-8061 • 724-658-7856 FAX • www.KASGRO.com



KASGRO

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 performed when the ownership of the company was changed from Miner Railcar to Kasgro Rail Corp.

Reviewed By:

Mark Zeigler

Specialty Rail Car Solutions



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

From: [Rick Ford](#)
To: [KLEIN Slade \(ORN-BE\)](#)
Cc: [DENTON Mark \(ORN-BE\)](#); [COUNTERMAN Bernie \(ORN-BE\)](#); [Mark](#)
Subject: Kasgro Welder Identification
Date: Tuesday, April 10, 2018 12:34:37 PM
Attachments: [Kasgro 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:



Orano Federal Services
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Project: 00225.03.0050 DOE Atlas Project

Kasgro Welder Employee Numbers

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
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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

		AREVA Federal Services LLC			
		DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	020	Page 1 of 1	
P.O./SC No:	15C3011916	Date:	03/27/18		
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	20		
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1		
Submitted By:	RICK FORD	Rick Ford	<small>Digitally signed by Rick Ford Date: 2018.03.27 15:33:57 -0700</small>	PROJECT MANAGER	
	<small>(Name)</small>	<small>(Signature)</small>		<small>(Title)</small>	
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION	
1	KAS W19		Clock #844 Michael Beacham Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
2	KAS W20		Clock #842 Neil Shelenberger Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
3	KAS W21		Clock #838 Paul Klamer Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
4	KAS W22		Clock #826 Randy Robinson Welding Qualifications	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
5	KAS W23		Clock # 57 Robert Walker Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
6	KAS W24		Clock #824 Ronald Price Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
7	KAS W25		Clock #812 Ryan Vogus Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
8	KAS W26		Clock #56 Scott Neely Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
9	KAS W27		Clock #823 Steven Persnar Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA	
Comments:			Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)		
Randy Robinson, 1G and 3G qualification ID #2880, 4G qualification ID #478. Please provide clarification.			KLEIN Slade <small>KLEIN Slade 2018.04.10 07:03:18 -0700</small> Date 4/10/2018		
AFS DISPOSITION CODES AND DEFINITIONS					
AP	Approved	Work may proceed.		Resubmittal is not required	
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required	
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required	
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.		Correct and resubmit	
DS	Disapproved	Work may <u>not</u> proceed.		Correct and resubmit	
RSA	Receipt Submittal Acknowledged	No other action required.			
<small>If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.</small>					
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval		 <small>Digitally signed by Mark A. G. [unclear] DN: c=AREVA GROUP, 2.5.4.40=197A37C1280410E2001700, ou=CD/IT/CA/Mark, Date: 2018.04.10 10:06:19 -0700</small>		Date: 04/10/2018	

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



Orano Federal Services
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Appendix F

Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project

	AREVA Federal Services LLC	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 020
Charge 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	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		KLEIN Slade 2018.04.10 05:08:00 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Randall Robinson - 1G & 3G qualification ID #2880. 4G qualification ID #478		
QA Reviewer(s) (Sign/Date): Bernard Counterman		Digitally signed by Bernard Counterman Date: 2018.04.05 15:58:54 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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

Kasgro Rail Corp

121 Rundle Road
 New Castle, PA 16102

WELDER PERFORMANCE QUALIFICATION TEST RECORD

Name: Michael Bechem Welding Code: AWS D15.1 2012
 Type of Welder: Semi Automatic Identification Number: 844
 Welding Procedure Specification No. F-001 Rev: 0 Date: 10/2/2017

Variables	Record Actual Values		Qualification Range
Process/Type	FCAW		FCAW
Electrode (single/multiple)	Single		Single
Current/Polarity	DC/EP		
Position	3G		Flat and Vertical Fillet and Groove
Weld Progression	Uphill		Uphill
Backing (With or Without)	With		Backing Only
Material/Spec	A572 Gr50	to A572 Gr50	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Thickness: (Pipe/tube)			
Groove	N/A		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Diameter: (Pipe)			
Groove	N/A		Greater Than 24" OD
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	E71T-1		
F-No.	6		1/6
Gas/Flux Type	CO ₂		
Other	N/A		N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 10/7/2017

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	PASS		
Side Bend	PASS		

Fillet Test Results
 Appearance: N/A Fillet Size: N/A
 Fracture Test Root: N/A Macroetch: N/A
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
<u>N/A</u>			<u>N/A</u>		

Film evaluated by: N/A Company: N/A
 Mechanical tests conducted by: Tom Plese/Tim Clark Laboratory Test Number: 154285
 Welding supervised by: Company: T. V Rheinland Industrial Solutions

The welder identified above PASSES, FAILS based on the requirements of the code listed above.

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in conformance with the requirements of Section 11 of AWS D15.1 (2012) Railroad Welding Specification for Cars and Locomotives.

Manufacturer or Contractor Kasgro Specialty Railcar

Authorized By Mark Zeigler  Date: October 2, 2017



Orano Federal Services
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Project: 00225.03.0050 DOE Atlas Project

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GUIDED BEND TEST

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

Report #: 464194A Page 1 of 1
 PO #: K17-2045
 Lab #: 154283
 Date Received: 10/02/2017
 Date Tested: 10/05/2017

Date: October 5, 2017

Work Order: 464194

PQR #:	N/A	Welder ID:	Michael Beachem - 811
Process:	FCAW	Position:	3G
Base Metal(s):	A572 Gr50 to A572 Gr50	Coupon Shape:	1" Plate

Test #	Orientation	Result	Test #	Orientation	Result
1	Side	PASS			
2	Side	PASS			

Equipment Used:

Wrap Around Bend Jig Guided Fixture

Pin Diameter: 1.5"

Specification: AWS D13.1 Conforming Non-Conforming

Test Witness By:

Test Technician: Tom Plose

Respectfully submitted,

 Tim Clark
 2017-10-05 11:24:16 -0400
 Tim Clark
 Laboratory Manager
 TÜV Rheinland Industrial Solutions, Inc.

Testing was performed in accordance with accepted industry practice as well as the manufacturer's instructions. TÜV Rheinland Industrial Solutions, Inc. has no direct knowledge of the sample, sampling procedure, nor condition of the sample, and makes no claim as to the suitability for final use of the material. This test report applies only to those items tested. This report shall not be reproduced or copied without the written consent of TÜV Rheinland Industrial Solutions, Inc.

Guided Bend Test Report
 EIR-3021970



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

Kasgro Rail Corp

121 Rundle Road
 New Castle, PA 16102

AWS - WELDER PERFORMANCE QUALIFICATION TEST RECORD

Name: Neil Shelenbierer Welding Code: AWS D15.1 2012
 Type of Welder: Semi Automatic Identification Number: 842
 Welding Procedure Specification No. F-001 Rev: 0 Date: 8/15/2017

Variables	Record Actual Values		Qualification Range
Process/Type	FCAW		FCAW
Electrode (single/multiple)	Single		Single
Current/Polarity	DC/CP		
Position	3G		Flat and Vertical Fillet and Groove
Weld Progression	Uphill		Uphill
Backing (With or Without)	With		Backing Only
Material/Spec	A572 Gr50	to A572 Gr50	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Thickness: (Pipe/tube)			
Groove	N/A		1/8" to Unlimited
Fillet	N/A		1/8" to Unlimited
Diameter: (Pipe)			
Groove	N/A		Greater than 24" O.D.
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	E71T-1		
F-No.	6		F6
Gas/flux Type	CO ₂		
Other	N/A		N/A

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 8/15/2017

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	PASS		
Side Bend	PASS		

Fillet Test Results
 Appearance: N/A Fillet Size: _____
 Fracture Test Root: _____ Macroetch: _____

(Describe the location, nature, and size of any crack or tearing of the specimen): _____

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film evaluated by: N/A Company: _____

Mechanical tests conducted by: Tom Pless/Richard Portman Laboratory Test Number: 154115

Welding supervised by: EDD NEELY Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES FAILS based on the requirements of the code listed above.

Reviewer's Signature: *Mark Zeiler* Date: 8/24/2017

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in conformance with the requirements of Section 11 of AWS D15.1 (2012) Railroad Welding Specification for Cars and Locomotives.
 year _____

Manufacturer or Contractor: Kasgro Specialty Railcar

Authorized By: Mark Zeiler Date: August 17, 2017



Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Project: 00225.03.0050 DOE Atlas Project

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GUIDED BEND TEST

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

Report #: 463300A Page 1 of 1
 PO #: K17-2045
 Lab #: 154115
 Date Received: 8/17/2017
 Date Tested: 8/22/2017

Date: August 22, 2017

Work Order: 463300

PQR #:	N/A	Welder ID:	Noel Shelenberger - 842
Process:	FCAW	Position:	3G
Base Metal(s):	A572 Gr50 to A572 Gr59	Coupon Shape:	1" Plate

Test #	Orientation	Result	Test #	Orientation	Result
1	Side	PASS			
2	Side	PASS			

Equipment Used:


Wrap Around Bend Jig Guided Fixture

Pin Diameter: 1.5"

Specification: AWS D15.1 Conforming Non-Conforming

Test Witness By:

Test Technician: Tom Plese

Respectfully submitted,

 Tim Clark
 2017.08.22 11:33:07
 0667
 Tim Clark
 Laboratory Manager
 TÜV Rheinland Industrial Solutions, Inc.

This report is prepared in accordance with accepted industry practice as well as the test methods referenced. TÜV Rheinland Industrial Solutions, Inc. has exercised the degree of care in the sampling procedure, the condition of the samples, and makes no claims as to the suitability, or actual use of the material. This report applies only to those measurements. This report shall not be reproduced except in full without the written consent of TÜV Rheinland Industrial Solutions, Inc.

Guided Bend Test Report
 IR 8/22/17



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

Grand Rapids, MI – Flint, MI – Pittsburgh, PA – Birmingham, AL – Decatur, AL
 NDE – MECHANICAL LAB www.tuv.com



Reported To: Mr. Dave Stahl
 Kasgro Rail Corp
 121 Rundle Road
 New Castle, PA 16102

Date: December 11, 2014
 P/O Number: QAF
 Report Number: 1
 Project: Welder Qualification

AWS - WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Name: Paul Kramer Welding Code: AWS D15.1/D15.1M-2012
 Type of Welder: Semi Automatic Identification Number: 836
 Welding Procedure Specification No. F-401 Rev: 0 Date: 12-11-14

Variables	Record Actual Values		Qualification Range
Process/Type	FCAW		FCAW
Electronic (Single/multiple)	Single		Single
Current/Polarity	DCSP		Flat, Vertical, Horizontal Fillet & Groove
Position	3G		Urb'fl
Weld Progression	Uphill		Urb'fl
Backing (With or Without)	With		With
Material/Spec	A36	to A36	All AWS Prequalified Material
Base Metal			
Thickness: (Plate)			
Groove	1"		1/8" to unlimited
Fillet	N/A		1/8" to unlimited
Thickness: (Pipe/tube)			
Groove	N/A		1/8" to unlimited
Fillet	N/A		1/8" to unlimited
Diameter: (Pipe)			
Groove	N/A		24" and greater
Fillet	N/A		Any Diameter
Filler Metal			
Spec. No.	A5.20		
Class	E71T-1		
F-No.	6		6
Gas/Flux Type	100% CO ₂		
Other	N/A		Not an essential variable

VISUAL INSPECTION Acceptable: Yes No Date coupon welded: 12/11/14

Guided Bend Test Results

Type	Result	Type	Result
Side Bend	No Defects - PASS		
Side Bend	No Defects - PASS		

Fillet Test Results
 Appearance: N/A Fillet Size:
 Fracture Test Root: Macroetch:
 (Describe the location, nature, and size of any crack or tearing of the specimen):

Radiographic Test Results

Film ID	Results	Remarks	Film ID	Results	Remarks
N/A					

Film explained by: N/A Company:
 Mechanical tests conducted by: Tom Plesz / Rich Portman Laboratory Test Number: 141586
 Welding supervised by: Dan Gorch Company: TUV Rheinland Industrial Solutions

The welder identified above PASSES FAILS based on the requirements of the code listed above.

Reviewer's Signature: *Richard B...* Date: 12/24/14

Client Approval: *Mark Z...* Date: 12/24/14

TUV RHEINLAND INDUSTRIAL SOLUTIONS, INC.

These test results report our findings 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 assurance is made or liability assumed by TUV Rheinland Industrial Solutions, Inc. ("TRIS") for the component quality.



Billard A Portman
 CWI 16061811
 GC1 EXP. 04/2017

Revision 01/2013
 AWS Welder Qualification



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
 High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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Doc./Rev.: EIR-3021970-000
 Project: 00225.03.0050 DOE Atlas Project





Orano Federal Services
Title: Design and Prototype Fabrication of Railcars for Transport of
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Project: 00225.03.0050 DOE Atlas Project





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

AWS D15.1:2007

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name RANDALL ROBINSON Identification no. 826
 Welding process ECAW Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical. If vertical, state whether upward or downward.) 3C Vertical (up)
 In accordance with procedure specification no. E-001
 Material specification A-36
 Diameter and wall thickness (if pipe); otherwise, joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.20 Classification E/IT-1 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results:

Type	Result	Type	Result
<u>STUR TEST</u>	<u>NO DEFECTS</u>		
<u>STUR TEST</u>	<u>NO DEFECTS</u>		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 10T3C-1928
 per *Faulty Paul* Test date 2/12/2010

Fillet Test Results:

Appearance Fillet size
 Fracture test (root penetration) Material
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1:2007 ; Manual Welding Specification for Cars and Locomotives (year)

Manufacturer or Contractor: KATYDD RAIL CORPORATION

Authorized by *Mat [Signature]*
 Date 2-12-10

Date/Day



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: ROBERT WA KING Identification no. 057
 Welding process: F.C.A.W. Manual Semi-automatic Machine
 Position: 1G PLAT
 (Flat, horizontal, overhead or vertical – if vertical, state whether upward or downward)
 In accordance with procedure specification: Q1TRC-0129
 Material specification: A-36
 Diameter and wall thickness (if pipe) – otherwise, joint thickness: 1.0"
 Thickness range the qualifies: UNLIMITED

FILLER METAL

Specification no.: 5.20 Classification: E70T-1 Filler: 6
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 3/32" Lincoln Flux or submerged arc or gas for gas metal arc or flux
 stored arc welding: 100% CO₂

VISUAL INSPECTION

Appearance: SATISFACTORY Undercut: NONE Piping porosity: NONE

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>1/4" tear/PASSED</u>		
<u>EDGE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by: SAFETY TESTING LABORATORY Laboratory test no.: Q1PLG 2156
 per: [Signature] Test date: 11/23/01

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (____/____/____) year.

Manufacturer or contractor: ESSEX RAIL CORPORATION
 Authorized by: [Signature]
 Date: 11-3-01

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operators name ROBERT W. MATTHEW Identification no. 057
 Welding process P, U, A, W Manual Semi-automatic Machine
 Position SG Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical state whether upward or downward)
 In accordance with procedure specification no. PROBABILISTIC SAFETY PEG. NO. CIR
 Material specification A 309
 Diameter and wall thickness (if pipe) or other size joint thickness 1.0"
 Nickness range this qualifies

FILLER METAL

Specification no. A 309 Classification E71T-1 F no. 8
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal brand and trade name Lincoln Electric Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% O₂

VISUAL INSPECTION

Appearance Good factory Undercut None Piping activity None

Cutted Bent Test Results

Type	Result	Type	Result
<u>WIDE BEND</u>	<u>NO DEFECTS</u>		
<u>STIFF BEND</u>	<u>1/16" Deep/PERIOD</u>		

Test witnessed by DAVE WATSON LABORATORY Laboratory test no. 2013-1290
 per [Signature] Test date 3/28/07

Fillet Test Results

Appearance Fillet size
 Fracture test: root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (07) year

Manufacturer or contractor KANSAS RAIL CORP.
 Authorized by [Signature]
 Date 5/28/07

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name ROBERT WALKER Identification no. 057
 Welding process E.C.O.W. Manual Semicautomatic X Machine
 Position 4H Overhead
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint fig. no. C18
 Material specification A-36
 Diameter and wall thickness (if pipe) otherwise, joint thickness .5071"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. E.20 Classification EUIT-1 F no.
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name .045" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% CW2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KALO TESTING LABORATORY Laboratory test no. 04F4G-2300
 per Paul J. Kaul Test date 4/26/04

Fillet Test Results

Appearance Fillet size
 Fracture test (not penetration) Marquench
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D 15.1, (2001)
 year

Manufacturer or contractor KANSAS RAIL CO.
 Authorized by
 Date 4-26-04

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AWS D 15 (D15.1M) 007

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operators name: RONALD PRICE Identification no. B24
 Welding process: DCAW Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical. If vertical, state whether upward or downward.) 3G Vertical Up
 In accordance with procedure specification no. W-001
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness .750"
 Thickness range (if applicable) UNLIMITED

FILLET METAL

Specification no. E-20 Classification E71T-1 Filler G
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Uncerred None Piping priority None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by RATE TESTING LABORATORY Laboratory test no. 10FRC-7930
 per [Signature] Test date 2/12/2010

Fillet Test Results

Appearance Fillet size
 Fracture test, root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D 15.1 (2007) Revised Welding Specification for Cars and Locomotives.

Manufacturer or Contractor KASCRO RAIL CORPORATION

Authorized by [Signature]

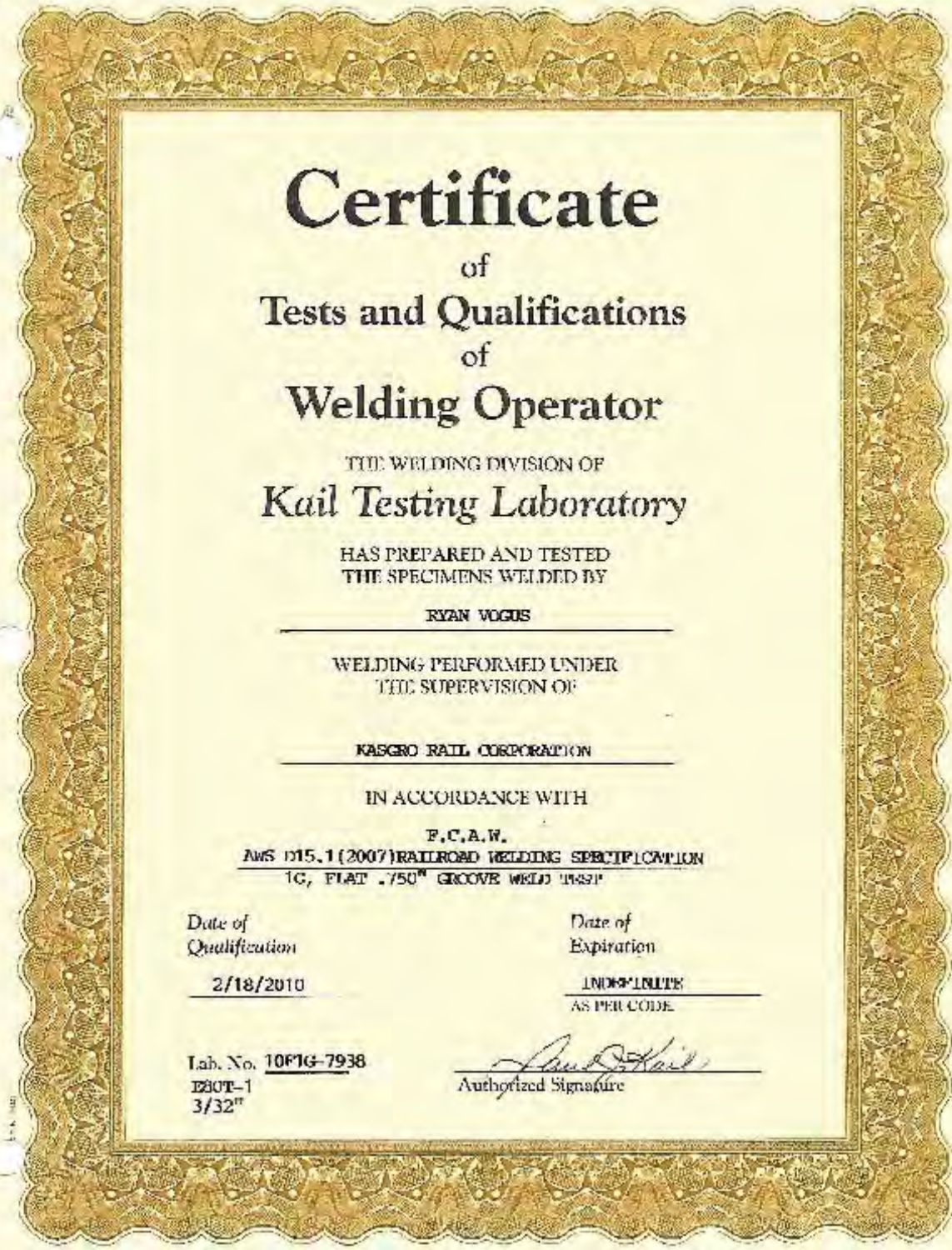
Date 2/2/10

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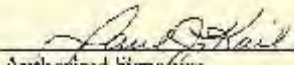
Doc./Rev.: EIR-3021970-000
Project: 00225.03.0050 DOE Atlas Project



Date of
Qualification
2/18/2010

Date of
Expiration
INDETERMINATE
AS PER CODE

Lab. No. 10F1G-7938
E30T-1
3/32"


Authorized Signature



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AWS 118.1AD15.11M0007

ANNEX 11

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator name RYAN VOGUS Identification no. 812
 Welding process FCBM Manual Semiautomatic X Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward) 1G, Flat
 In accordance with procedure specification no. W-005
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-29 Classification E60T-1 Fills 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? YES
 Filler metal diameter and trade name 3/32" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Rippling porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>STICH BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KATE TESTING LABORATORY Laboratory test no. 10F1G-7938
 per [Signature] Test date 2/18/2010

Filet Test Results

Appearance Hit of size
 Fracture type, root penetration Match
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D16.1, (A-2007) Railroad Welding Specification for Cars and Components, (Steel).

Manufacturer or Contractor KASCO RAIL CORP.
 Authorized by [Signature]
 Date 2-18-10

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AWS D15.1D11.1M 2007

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name RYAN VOIGUS Identification no. 812
 Welding process ECAN Manual Semi-automatic Machine
 (Flar, horizontal, overhead, or vertical. If vertical, state whether upward or downward.) 3G Vertical Up
 In accordance with procedure specification no. E-001
 Material specification A-36
 Diameter and wall thickness of pipe or plate, joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-20 Classification E71T-1 Form 6
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 covered arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 10F36-7925
 per [Signature] Test date 2/12/2010

Filet Test Results

Appearance _____ Filet size _____
 Fracture test no. of penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1.1, 2007 () Railcar Welding Specification for Cars and Locomotives. (year) _____

Manufacturer or Contractor KANSAS RAIL CORPORATION

Authorized by [Signature]

Date 2/2/10

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Date of Qualification
 9/11/2000

Date of Expiration
 INDEFINITE
 AS PER CODE.

Lab. No. 20144-2005

[Signature]
 Authorized Signatory



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

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Welder or welding operator's name RYAN VOGLS Identification no. _____
 Welding process F.C.A.W. Manual _____ Semiautomatic X Machine _____
 Position 40 Overhead Groove Weld
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified Joint Fig. no. C1E
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
STDB BEND	NO DEFECTS		
SIDE BEND	Minor check/PASSED		

Test conducted by KATI TESTING LABORATORY Laboratory test no. 20E40-2045
 per [Signature] Test date 9/11/2000

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (93)
 year

Manufacturer or contractor KASCO RAIL CORP.
 Authorized by [Signature]
 Date 9-11-00

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: J. SCOTT KEELY Identification no: 056
 Welding process: FCA-B-W Manual Semi-automatic Machine
 Position: 1G Flat
 (Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
 In accordance with procedure specification no: ORRC-D129
 Material specification: A 36
 Diameter and wall thickness (if pipe) - otherwise, joint thickness: 1.0"
 Thickness range this qualifies: UNLIMITED

FILLER METAL

Specification no: E 5.20 Classification: E70C-1 Filling: 6
 Describe filler metal (if not covered by AWS specification): _____
 Is backing also used? Yes
 Filler metal diameter and trade name: 3/32" E70C-1 Flux for submerged arc or gas for gas metal arc or flux cored arc welding: 100% Co2

VISUAL INSPECTION

Appearance: Satisfactory Undercut: None Filing porosity: None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
STIFF BEND	NO DEFECTS		

Test conducted by: KATH TESTING LABORATORY Laboratory test no: 01E1G-2183
 per: [Signature] Test date: 10/16/01

Fillet Test Results

Appearance: _____ Fillet size: _____
 Fracture test metal penetration: _____ Macroetch: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by: _____ Test no: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D-5.1, (93 year).

Manufacturer or contractor: EMERO RAIL CORP.
 Authorized by: [Signature]
 Date: 10-16-01

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: J. SCOTT WELBY Identification no. 056
 Welding process: F.O.A.W. Manual Semiautomatic Machine
 Position: 2G Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical state whether upward or downward)
 In accordance with procedure specification no. Unspecified joint (up. do. CW)
 Material specification: A-38
 Diameter and wall thickness (in pipe) — otherwise joint thickness: 1.0"
 Thickness range this qualifies: UNLIMITED

FILLER METAL
 Specification no.: A-20 Classification: AW12-2 Flux: E
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name: 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 coated arc welding: 100% CW

VISUAL INSPECTION
 Appearance: Substructure Undercut: None Piping porosity: None

Guided Bent Test Results

Type	Result	Type	Result
STEP 5870	NO DEFECTS		
STEP 5880	NO DEFECTS		

Test conducted by: KALLI OPTICAL LABORATORY Laboratory test no.: 37530-1780
 per: [Signature] Test date: 8/28/97

Fillet Test Results
 Appearance: _____ Fillet size: _____
 Fracture test root penetration: _____ Max depth: _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by: _____ Laboratory test no.: _____
 per: _____ Test date: _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by: _____ Test no.: _____
 per: _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, _____ year.

Manufacturer or contractor: KANSAS PIPE CORP.
 Authorized by: [Signature]
 Date: 8-28-97

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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name J. SCOTT ⁰⁵⁶ Welder Identification no. _____
 Welding process M.C.A.W. Manual _____ Semi-automatic X Machine _____
 Position OG Overhead _____
 (Flat, horizontal, overhead or vertical. If vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint, fig. no. 41B _____
 Material specification A-36 _____
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 375" _____
 Thickness range thickness .750" _____

FILLER METAL

Specification no. 5.20 Classification E7017 F no. 6 _____
 Describe filler metal (if not covered by AWS specification) _____
 Is backing air used? Yes _____
 Filler metal diameter and trade name .045" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 core arc welding 100% CO₂ _____

VISUAL INSPECTION

Appearance Satisfactory Undercut None Pitting porosity None _____

Guided Bend Test Results

Type	Result	Type	Result
<u>FACE BEND</u>	<u>1/16" CLEAR/PASSED</u>		
<u>ROOT BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KATE TESTING LABORATORY Laboratory test no. 03690-2268
 per [Signature] Test date 9/24/2003

Filet Test Results

Appearance _____ Fillet size _____
 Fracture: root penetration _____ Match _____
 (Describe the location, nature, and extent of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1 (—2001—) ^{year} _____.

Manufacturer or contractor KASCRC RAIL, CORP

Authorized by [Signature]

Date 9-29-03

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Date of Qualification

9/11/2000

Date of Expiration

INDEFINITE
 AS PER CODE.

Lab. No.

20F462087

Authorized Signature



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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name JOHN SCOTT NEEDY Identification no. 056
 Welding process F.C.A.W. Manual _____ Semi-automatic X Machine _____
 Position 4G Overhead Groove Weld
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Pregualified joint fig. no. C1B
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLED METAL

Specification no. 5.20 Classification E711 1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 9/11/2000
 per [Signature] Test date 2000-09-20/21

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D16.1, (93 year).

Manufacturer or contractor KASPRO RAIL CORP.
 Authorized by [Signature]
 Date 9-11-00

Form D-4



Orano Federal Services
 Title: Design and Prototype Fabrication of Railcars for Transport of
 High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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ANSI Z39-18 (2015-11-01) 2007

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name STEVEN PRUSSNER identification no. 823
 Welding process (FCAW) Manual Semi-automatic Machine
 (Flat, horizontal, overhead, or vertical - if vertical, state whether upward or downward) 1G, P1aL
 In accordance with procedure specification no. E-005
 Material specification A-36
 Diameter and wall thickness (if pipe) - otherwise, joint thickness .750"
 Thickness range (if applicable) UNLIMITED

FILLER METAL

Specification E-29 Classification E80T-1 F-number 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" Lincoln Flux for submerged arc or gas metal arc or flux cored arc welding 100% CO2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SHOE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KATE TESTING LABORATORY Laboratory test no. 1CE1G-7942
 per [Signature] Test date 2/18/2010

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1 (2007) Horizontal Welding Specification for Carbon and Low-alloy Steels.

Manufacturer or Contractor KASPRO RAIL CORP.
 Authorized by [Signature]
 Date 2-15-10

Form D-4



Orano Federal Services
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ANNEX U

AWS D15.1:2001

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name SIEVE DRESNAR Identification no. 823
 Welding process F, C, A, W, Manual Subautomatic Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward) 4G Overhead
 In accordance with procedure specification no. F-001
 Material specification A-36
 Diameter and wall thickness (if pipe)—otherwise, joint thickness .500"
 Thickness range this qualifies 1.0"

FILLET METAL

Specification no. 5.20 Classification R711-1 F-no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance: Satisfactory Undercut None Flaring porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by RAIL TESTING LABORATORY Laboratory test no. 08P43-7797
 per [Signature] Test date 3/04/2008

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1, (2001) Railroad Welding Specification—Cars and Locomotives, (year)

Manufacturer or Contractor KANSAS RAIL CORP.
 Authorized by [Signature]
 Date 3/4/08

Form D-4



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AREVA		AREVA Federal Services LLC			
DATA TRANSMITTAL FORM					
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	021	Page 1 of 1	
P.O./SC No:	15C3011916	Date:	03/27/18		
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	20		
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1		
Submitted By:	RICK FORD	Rick Ford	<small>Digitally signed by Rick Ford Date: 2018.03.27 15:33:07 -0400</small>	PROJECT MANAGER	
	<small>(Name)</small>	<small>(Signature)</small>		<small>(Title)</small>	

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	AFS DISPOSITION
1	KAS W28		Clock # 814 Thomas Cummings Welder Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS W29		Clock #81 Trevor Barker Welding Qualifications	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS W30		Clock #821 Triston Mills Welding Qualifications	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
				<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA

Comments: Triston Mills, 1G and 3G use ID #9980, 4G uses ID #673. Please provide clarification.	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.) KLEIN Slade KLEIN Slade <small>2018.04.10 07:04:15 -0700</small> Date 4/10/2018
--	--

AFS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of AFS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to AFS' C&P Representative describing the change.


Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval 	<small>Digitally signed by Mark A. G. [unclear] DN: c=AREVA GROUP, 2.5.4.40=197A37C128041002001700, ou=CDOT/OTM Mark, Date: 2018.04.10 10:08:46 -0400</small> Date: 04/10/2018
--	---

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



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	AREVA Federal Services LLC	
SUPPLIER DOCUMENT SUBMITTAL REVIEW		
Supplier / PO No.:	Kasgro Rail / 15C3011916	DTF No. / Rev: 021
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, Stds, etc.)		
PE	Slade Klein	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date):	KLEIN Slade	KLEIN Slade 2018.04.10 05:12:28 -07'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
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 Counterman Date: 2018.04.05 16:14:48 -07'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		



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AWS D15.1.1 (1) 2/07

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: TRUMAN CUMMINS Identification no. 814
 Welding process: ECBW Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward) Flat
 In accordance with procedure specification no. E-005
 Material specification A-36
 Diameter and wall thickness (if pipe) otherwise, joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-29 Classification E00T-1 F-no. 6
 Describe filler metal (if not covered by AWS specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO2

VISUAL INSPECTION

Appearance: Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
SIDE BEND	NO DEFECTS		

Test conducted by KALD INSPECTION LABORATORY Laboratory test no. 10F1G-7939
 per [Signature] Test date 2/18/2018

Fillet Test Results

Appearance Fillet size
 Fracture test next penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1, (2007) Railroad Welding Specification for Cars and Locomotives. (year)

Manufacturer or Contractor KANSAS RAIL CORP.
 Authorized by [Signature]
 Date 2-18-18

Form D-4



Orano Federal Services
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WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name THEODORE BARKER Identification no. 081
 Welding process M.C.A.N. Manual Semi-automatic Machine
 Position G FLAT
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Q1318-0129
 Material specification A-36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.0"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. E-30 Classification A701-1 F no. 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" LINCOLN Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance: SATISFACTORY Undercut None Spine porosity None

Guided Bend Test Results

Type	Result	Type	Result
SIDE BEND	NO DEFECTS		
STDF BEND	NO DEFECTS		

Test conducted by K&L TESTING LABORATORY Laboratory test no. UEPLG-2253
 per Paul J. Hall Test date 7/14/2003

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Marcobatch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Details	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1, (2001) year

Manufacturer or contractor KASIRO RAIL CORP.
 Authorized by Mark Taylor
 Date 7-14-03

Form D-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name TERVON BARRETT Identification no. 081
 Welding process E.C.A.W. Manual Semi-automatic Machine
 Position 3G Vertical up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Procedure Joint No. 018
 Material specification A 36
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 3/8"
 Thickness range, min. to max. 1/8"

FILLER METAL

Specification no. E 6010 Classification E 717.1 E no. 2
 Describe filler metal (if not covered by AWS specification):
 Is backing strip used? Yes
 Filler metal diameter and trade name 3/32" TIGER Flux for submerged arc or gas for gas metal arc or flux cored arc welding AWS 002

VISUAL INSPECTION

Appearance of the Welding Weld
 Discoloration None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>300° BEND</u>	<u>NO DEFECTS</u>		
<u>180° BEND</u>	<u>3/8" Cracks/Passes</u>		

Test conducted by DAVE BRIDGES LABORATORY Laboratory test no. 00225.1568
 per Paul J. Hall Test date 3/28/88

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per
 We, the undersigned, certify that the test results in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1 (88)
 year
 Manufacturer or contractor SCOTT'S BELL CORP.
 Authorized by Mark Taylor
 Date 3-5-88



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name STAYTON HANSEN Identification no. 081
 Working process TIG Manual Semi-automatic Machine
 Position GC Horizontal up
 (Flat, horizontal, overhead or vertical if vertical, state whether upward or downward)
 in accordance with procedure specification no. Unqualified Joint Sig. no. 010
 Material specification A 307
 Diameter and wall thickness (if pipe) — otherwise, joint thickness .875"
 Thickness range (if applicable) .75" - .9375"

FILLER METAL

Specification no. A 107 Classification A 107B F no. 4
 Describe filler metal (if not covered by AWS specification): _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Nitro 107 Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding _____

VISUAL INSPECTION

Appearance Outside Factory Undercut None Ripping pores by None

Guided Bend Test Results

Type	Result	Type	Result
<u>FACE PASS</u>	<u>NO DEFECTS</u>		
<u>ROOT PASS</u>	<u>1/16" bend/PASSED</u>		

Test conducted by WELD TESTING LABORATORY Laboratory test no. 303002290
 per Shad J. Paul Test date 6/26/89

Filler Test Results

Appearance _____ Fillet size _____
 Fracture test: root penetration _____ Mandrel test _____
 (Describe the location, nature, and size of any crack or loading of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

File identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS Q15.1, (1988 year).

Manufacturer or contractor VERBIC FATT CORP.
 Authorized by [Signature]
 Date 3-5-99

Form B-4



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WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name TRAVOR BARBER Identification no. 081
 Welding process E. S. A. E. Manual Semi-automatic X Machine
 Position 30 Vertical Up
 (Flat, horizontal, overhead or vertical — if vertical, state whether upward or downward)
 In accordance with procedure specification no. Prequalified joint leg. no. 018
 Material specification A-58
 Diameter and wall thickness (if pipe) — otherwise, joint thickness 1.5"
 Thickness range this qualification UNLIMITED

FILLER METAL

Specification no. E. 80 Classification E70C-7 F no. 6
 Describe filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
STOP BEND	Minor check/PASSED		
STOP BEND	1/16" crack/PASSED		

Test conducted by KALLAN SUTHERLAND Laboratory test no. 26430-1299
 per Paul J. Fair Test date 2/22/19

Fillet Test Results

Appearance Fillet size
 Fracture test root penetration Macroetch
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film identification	Results	Remarks	Film identification	Results	Remarks

Test witnessed by Test no.
 per

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of the American Welding Society AWS D15.1. (09 year)

Manufacturer or contractor MASCHEE RAIL CORP.
 Authorized by
 Date 2/22/19

Form 3-4



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Date of Qualification

2/18/2010

Date of Expiration

INDEFINITE
AS PER CODE.

Lab. No. 10FIG-7941
EQ1-1
3/32"

David J. Kail
Authorized Signature



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AWS D15.10119 (M,2007)

ANNEX D

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name CRISTON MILLS Identification no. 821
 Welding process PAW Manual Semi-automatic X Machine
 (Flat, horizontal, overhead, or vertical—if vertical, state whether upward or downward) 3C Vertical Up
 In accordance with procedure specification no. F-001
 Material specification A-36
 Diameter and wall thickness (if pipe) otherwise joint thickness .750"
 Thickness range this qualifies UNLIMITED

FILLER METAL

Specification no. 5.20 Classification E71T-1 F no. 6
 Describes filler metal (if not covered by AWS specification)
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" Lincoln Flux for submerged arc or gas for gas metal arc or flux cored arc welding 100% CB2

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bend Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KAIL TESTING LABORATORY Laboratory test no. 10P2G-7931
 per [Signature] Test date 2/12/2010

Fillet Test Results

Appearance Fillet size
 Location test metal orientation Macroetch
 (Describe the location, nature, and size of any crack or tearing of the workman.)
 Test conducted by Laboratory test no.
 per Test date

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by Laboratory test no.
 per Test date

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D15.1, (2002) Manual Welding Specification for Cars and Locomotives, year

Manufacturer or Contractor KANSAS RAIL CORPORATION

Authorized by [Signature]

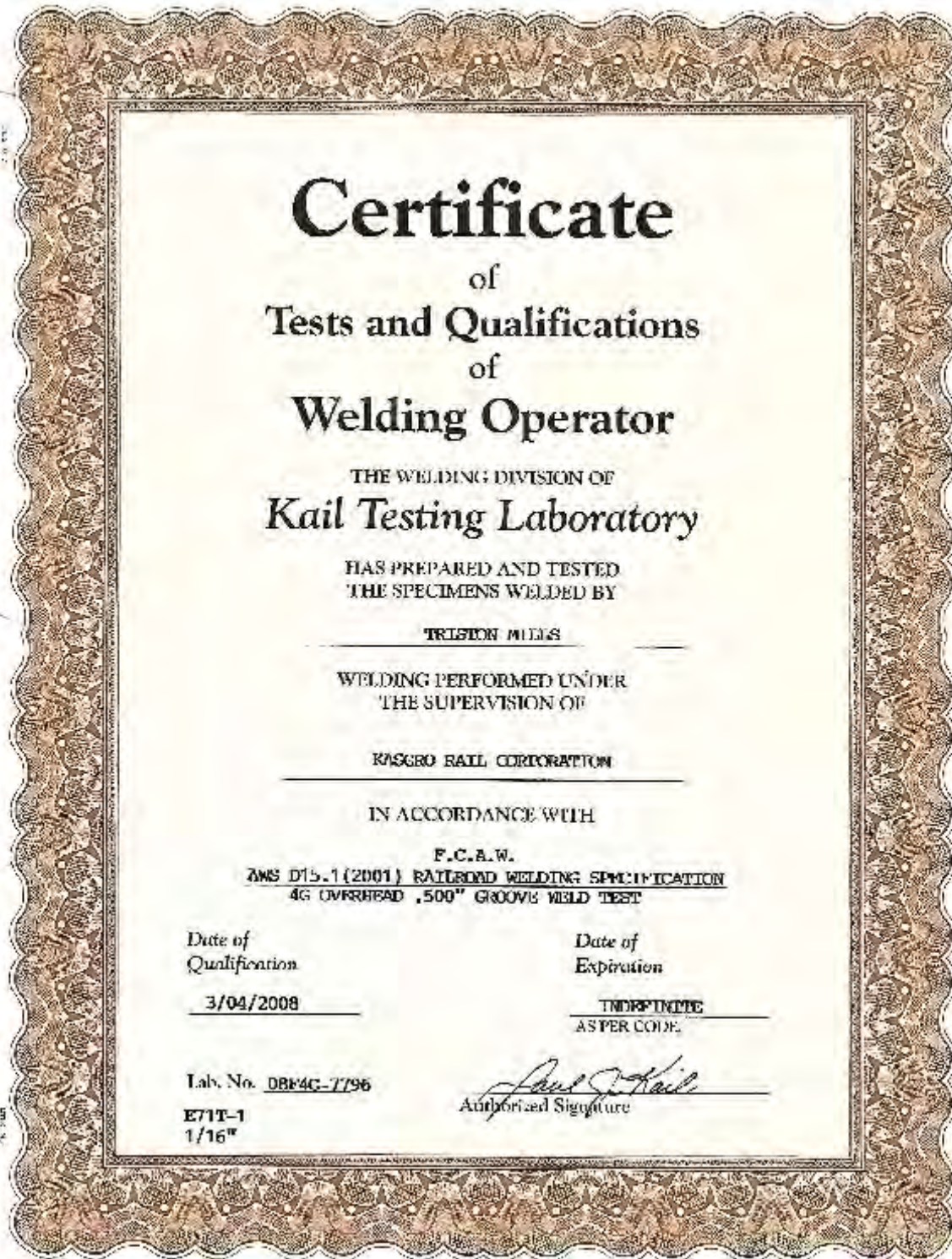
Date 2-12-10

Form 004



Orano Federal Services
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Project: 00225.03.0050 DOE Atlas Project





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ANNEX B

AWS D13, F6001

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name: TRISTON MILLS Identification no. 821
 Welding process: (P, C, A, W) Manual Semiautomatic Machined
 (Flat, horizontal, overhead, or vertical - if vertical, state whether upward or downward) 4G Overhead
 In accordance with procedure specification no. F-001
 Material specification A-36
 Diameter and wall thickness (if pipe) - otherwise joint thickness .500"
 Thickness range this qualifies 1.0"

FILLER METAL

Specification no. 5.20 Classification E71T-1 Flux 6
 Describe filler metal (if not covered by AWS specification) _____
 Is backing strip used? Yes
 Filler metal diameter and trade name 1/16" TIG root Flux for submerged arc or gas for gas metal arc or flux
 cored arc welding 100% CO₂

VISUAL INSPECTION

Appearance Satisfactory Undercut None Piping porosity None

Guided Bent Test Results

Type	Result	Type	Result
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		
<u>SIDE BEND</u>	<u>NO DEFECTS</u>		

Test conducted by KALIS TESTING LABORATORY Laboratory test no. 08F46-7796
 per [Signature] Test date 3/04/2018

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size of any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Laboratory test no. _____
 per _____ Test date _____

We, the undersigned, certify that the statements in this section are correct and that the test welds were prepared and tested in accordance with the requirements of AWS D13.1, (2001) Railcar Welding Specification—Cars and Locomotives, (year)

Manufacturer or Contractor KASCO RAIL CORP.
 Authorized by [Signature]
 Date 3/4/18

Form D-1



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

		Orano Federal Services	
DATA TRANSMITTAL FORM			
Supplier:	KASGRO RAIL CORP., INC.	DTF No:	038
P.O./SC No:	15C3011916	Date:	2/19/2019
Type of Submittal:	<input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No:	24
Submitted for:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted:	1
Submitted By:	RICK FORD	Rick Ford	PROJECT MANAGER
	(Name)	(Signature)	(Title)

ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 127		ATLAS CASK CAR CMS LASER DIMENSIONS FOR PIN BLOCK ATTACHMENT BLOCKS	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 128		FRA S-2044 INPECTION FOR BUFFER CARS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 129		AAR S-486 BRAKE TEST CERTIFICATION	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 130		TRACK SCALE CALIBRATION RECORDS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 131		TUV UT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 132		TUV PT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 133		TUV MT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input checked="" type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 143 134		TUV VT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input checked="" type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA

Comments:	Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)
1) NOTE: KAS 127 provides as-built railcar dimensions. Kasgro rework modified some of these. Kasgro to submit final dimensions separately.	KLEIN Slade Date: 2019.02.27 13:47:33 -08'00'
2) KAS 133 does not include the shear block or outer pin block weld MT.	
3) KAS 134 does not include VT of the shear block welds.	Date 2/27/2019

FS DISPOSITION CODES AND DEFINITIONS			
AP	Approved	Work may proceed.	Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.	Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.	Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.	Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.	

If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.



Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval		Date: 02/27/2019
<small>Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, c=US Date: 2019.02.27 17:04:03 -0800</small>		

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



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 orano	Orano Federal Services	
SUPPLIER DOCUMENT SUBMITTAL REVIEW		
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 038
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 038	
<small>REVIEW INSTRUCTIONS: (List Supplier Doc. No. and Rev. FS Spec and Dwg. Codes, Stds, etc.)</small>		
PE	Slade Klein	
REVIEWERS	Slade Klein, Bernie Counterman	
QA	Bernie Counterman	
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
KAS 133 does not include the required MT inspection of the shear blocks and outer pin blocks. This was required by Kasgro drawing 1155-41.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.26 07:23:43 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Only potential question was regarding missing signature by the technician on the UT report. Discussed with TUV Rheinland Level III (Randy @ 616-818-8188). The technician signature is not required provided the report is signed by his supervisor. This report is signed by the individuals supervisor.		
QA Reviewer(s) (Sign/Date): 		Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 09:29:24 -08'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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Wabtec CORPORATION

This is to certify that
Mark Butler
 (First and Last Name)

of Wabtec
 (Name of Company)

has met the requirements for testing in accordance with FRA Regulation Part 49 232.203 for testing freight equipment on the date and for the process specified on reverse.

PROCESS	DATE	INSTR. INITIALS	RETEST DUE
MANUAL SCT	1-10-19		1-10-2
AUTOMATED SCT			
SCP - SCT			
TERMINAL BRAKE TESTING			

[Signature]
 (Inspector Signature)

Wabtec CORPORATION



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Written Exam on Freight Air Brake
Single Car Tests per AAR S-486 - 13



NAME: MARK BAKER DATE: 1-9-18
 COMPANY: WABTEC RAIL CORP. MARK: 28 93%

Circle the letter next to the most correct answer for each question or will make the statement correct per AAR S-486-13. There is only one answer that is the most correct for each question or will make the statement correct in each case. READ THE QUESTIONS CAREFULLY BEFORE ANSWERING.

1. What is the minimum brake cylinder pressure that must be obtained for a full service brake application on a loaded car?
 - a. 85 psi
 - b. 80 psi
 - c. 70 psi
 - d. 50 psi
 - e. None of the above.

2. To secure reliable and uniform results with the Manual Single Car Test Device, it must be kept free from leakage and must be disassembled, cleaned and tested not less frequently than _____ after being placed into service or more often if necessary (AAR 2.2)?
 - a. 365 days.
 - b. 60 days
 - c. 30 days
 - d. 92 days
 - e. None of the above.

3. The hose combination hose and pipe between the test device and the outlet hose coupling must be 3/4" I.D. with 1/2" connections, nipples and not exceed _____ in length (AAR 2.2.2).
 - a. 4 feet.
 - b. 6 feet.
 - c. 8 feet
 - d. 2 feet
 - e. None of the above.

4. When applying the brake cylinder gauge it must be applied to the correct tap on the freight car. Which location is correct?
 - a. Any tap on the car will work
 - b. The tap downstream from the empty/load equipment
 - c. The tap upstream from the empty/load equipment
 - d. None of the above.

5. The Daily Test 2.3 allows for how much leakage from the test device rotary valve exhaust?
 - a. no leakage
 - b. 1 psi in one minute
 - c. 3 psi
 - d. a 1" bubble in 5 seconds

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Written Exam - AAR S-486-13



6. Why is it necessary to blow out the supply line before any connection is made to the Single Car Test Device?
- a. To remove moisture from the air line.
 - b. To remove dirt from the air line.
 - c. To remove any foreign object from the air line.
 - d. All of the above.
 - e. None of the above.
7. When 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. +/- 3psi.
 - b. +/- 5psi.
 - c. +/- 6psi.
 - d. All of the above.
 - e. None of the above.
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 brake pipe is checked for leakage. The reservoirs are completely drained of air for this test, why?
- a. To check for leakage from the reservoirs.
 - b. To check for leakage in the brake cylinder.
 - c. To check for leakage in the brake pipe.
 - d. To check for leakage at the angle cock.
 - e. To check for leakage past the dirt collector/cutoff cock.
9. When checking brake cylinder piston travel in accordance with Piston Travel & Rigging Test 3.9, a car equipped with empty/load brake equipment must have the equipment in the _____ position.
- a. Empty
 - b. Loaded
 - c. Empty or loaded does not matter
 - d. Whichever the car is empty or loaded
 - e. None of the above
10. Cars with an A-1 Reduction Relay Valve and less than _____ feet of brake pipe must have the H-1 Quick Service valve nullified when performing the Separate Vent Valve Test 3.4.
- a. 100
 - b. 90
 - c. 85
 - d. Any length of foot
 - e. Not required to plug

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Written Exam - AAR S-486-13



11. 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. Empty/load valve.
 - e. None of the above.
12. Before performing the Service Stability Test 3.8 on a car equipped with a #8 Vent Valve, the vent valve must be nullified by _____.
- a. Removing the valve
 - b. Closing the cut out cock
 - c. Removing the vent on the valve and inserting the plug portion of the vent into the body of the vent valve
 - d. Hitting it with a hammer
 - e. None of the above.
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 bridge plate
 - b. The decal on the car
 - c. 7 – 9 inches
 - d. AAR Rule 3
 - e. The standard for that car, which may be a, b, c and or any combination thereof.
14. The Hand Brake Inspection (AAR 3.6) includes the following requirements.
- a. An air brake application to check the piston travel
 - b. Oil the handbrake with 30W oil, apply the handbrake, check the bell crank, check the shoes with a bar, release the handbrake
 - c. Checking the brake shoes for wear
 - d. Checking the operation of the empty/load equipment
 - e. All of the above
15. In the Emergency Test 3.10, once the 3/8" cock has been opened, the brake cylinder pressure must be _____ compared to the pressure noted in the Service Stability Test?
- a. The same
 - b. A minimum of 5 psi higher than full service pressure
 - c. A minimum of 5 psi lower than full service pressure
 - d. Zero psi
 - e. None of the above.

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16. For the Service Stability Test 3.8, brake pipe pressure is reduced to _____?
- a. 10 psi
 - b. 40 psi
 - c. 50 psi
 - d. Reduce pressure to zero
 - e. None of the above.
17. During the Release After Emergency Test 3.11, brake pipe is charged to 28 psi, the rotary valve is placed in position 3. Brake pipe must rise. This verifies the _____ is functioning correctly?
- a. Service Accelerated Release Feature
 - b. Brake cylinder
 - c. Reservoir
 - d. Single Car Test Device
 - e. Emergency Accelerated Release Feature
18. How long must the brake cylinder remain extended during the Retaining Valve Test 3.12?
- a. Five minutes
 - b. Ten minutes
 - c. Four minutes
 - d. Four hours
 - e. Does not have to remain applied
19. Brake cylinder pressure at the end of the waiting period described in question 18 for the Retaining Valve Test 3.12 must be _____?
- a. 25 psi
 - b. 12 psi
 - c. 15 psi
 - d. Between 60 - 70 psi
 - e. Higher than full service
20. The flowrator is used to verify the car is charged when performing the Minimum application and Quick Service Limiting Valve Test 3.13. What is the minimum point that the car must be charged to perform this test?
- a. The ball floats below the top of the tube.
 - b. The ball is below the red line.
 - c. The ball is at the bottom of the tube.
 - d. The ball is two lines below the red line.
 - e. None of the above.

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21. Brake Cylinder Leakage Test 3.14, after the brake pipe pressure has stabilized wait _____?
- a. One minute.
 - b. Two minutes.
 - c. Three minutes
 - d. 60 seconds.
 - e. None of the above.
22. Test 3.14.2 allows no more than 1 psi increase or decrease in pressure variation from the noted in 3.14.1. If the brake cylinder pressure drops more than one psi the problem is _____?
- a. You did not wait long enough
 - b. You waited too long
 - c. There is a leak in the brake cylinder or associated piping
 - d. The vent valve has failed
 - e. None of the above
23. Which air brake valves (emergency portions) do not have an AAM valve?
- a. ABDW, ABDWS, ABDW-2,
 - b. ABDX, ABDXR, ABDX-L, ABDXR-L
 - c. AB, ABD, ABDS
 - d. DB-20, DR-20-L
 - e. All of the above.
24. In the Slow Release Test 3.15, what is the maximum release time for a car with 108 ft of brake pipe?
- a. 45 seconds
 - b. 55 seconds
 - c. 60 seconds
 - d. 75 seconds
 - e. 100 seconds
25. Test 3.10 Recheck of Piston Travel, piston travel must be within _____ of length measured in Test 3.8.1?
- a. +/- 1 inch
 - b. +/- 3/2 inch
 - c. +/- 3/4 inch
 - d. exactly the same
 - e. whatever you get for a measurement is fine

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Written Exam - AAR S-486-13



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. 17 psi
 - d. 20 psi
 - e. None of the above.
27. After removing the brake cylinder measurement gauge from the brake cylinder pressure tap, in Test 3.21.1, the tap must be checked for leakage. How much leakage is allowed on the brake cylinder pressure tap?
- a. 3 psi.
 - b. 2 psi.
 - c. 1 psi.
 - d. No leakage is allowed
 - e. None of the above.
28. When performing the Slack Adjuster & Piston Travel Adjustment Test 4.1, you reduce brake pipe pressure to _____ on the test device gauge to make the brake applications.
- a. 50 psi
 - b. 60 psi
 - c. 80 psi
 - d. zero psi
 - e. 20 psi
29. When performing the Brake Cylinder Leakage Test 4.5 in the Special Tests, an empty car with empty/load brake equipment must have the empty/load sensor in the _____
- a. Empty position
 - b. Loaded position
 - c. Empty or loaded does not matter
 - d. Removed
 - e. None of the above
30. During the Single Car 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
 - c. Move the test device handle to position 2 to stop the reduction in pressure, then move the handle back to position 3. Perform this procedure once.
 - d. Get a new test device, last one has failed
 - e. Let the brake pipe pressure drop as far as it wants, it does not matter

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Practical Exam of Single Car Test
Procedures per S-486-13



Name: Mark Baker Company: Koyco
 Date: 1/10/2018 Mark: Pass

The instructor must observe the person taking the test. Depending upon the type of car under test, indicate in the space provided if the person taking the test passed each section of the test. If any part of an individual test is not performed in accordance with applicable standards or the instructor/ tester is not satisfied with the procedure, indicate in the fail column. At the end of the test, the instructor/ tester may add any notes that will qualify a pass or fail situation. Note test 3.12.3.1 is not applicable for cars tested to AAR Specifications.

TEST	PASS	FAIL
2.0 - SINGLE CAR TEST DEVICE 1. Test device within date allowed by AAR standard. 2. Air supply to minimum 90 psi, recommended 100 psi for testing. 3. Test device within 15 degrees of vertical. 4. Hinge on test device no longer than 8 feet.	X	
2.3 - DAILY TEST 1. Blow out air supply before coupling to test device. 2. Device in High pressure. 3. Close 3/8" cock. 4. Handle to Position 2. 5. Close & open flow valve, ball rises and falls, does not stick. 6. Handle to Position 3. 7. Attach dummy coupling and brake cylinder gauge. 8. Handle to Position 1, pressure at 90 psi. 9. Set to Low Pressure, gauge reads 80 psi. 10. Brake cylinder measurement gauge: within +/-3 psi of test device gauge. 11. Reset to High Pressure. 12. Change to 90 psi, Position 3. 13. Time 1 minute, leakage < 1 psi or check with soap suds < 1" bubble in 5 seconds. 14. Open 3/8" cock, remove dummy coupling. 15. Apply coupling with .28 mm opening. 16. Close 3/8" cock, handle to Position 1. 17. Check flow valve. Ball floats between one-humping line and top of tube. 18. Position 3, open flow valve and 3/8" cock. 19. Remove coupling, close 3/8" cock. 20. Leakage: at BP end and rotary valve end of less than 1" bubble in 5 seconds.	X	
3.0 - TESTS - STANDARD FREIGHT BRAKE 3.1 - Preliminary Procedures & Inspections 1. Wheels checked, car protected from movement. 2. Handbrake released, brake cylinder pushed manual into brake cylinder. 3. Check shoes, brake levers, pins, rods, rigging for wear and does not bind or foul. 4. Check dates on air hoses, if not changed, replace hose gaskets. 5. Both angle cocks open. 6. Apply brake cylinder measurement tap, if not installed. 7. Apply brake cylinder measurement gauge to tap. 8. Retainer valve in Direct Exhaust (EX) 9. J hook vent procedure & elbow on vent valve if equipped. 10. Completely drain reservoirs. 11. Close branch pipe cut out cock 12. Set empty/load equipment to loaded position as required.	X	

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Practical Exam per S-486-13



TEST	PASS	FAIL
3.2 - Connecting Device to Car 1. Confirm Daily Test completed. 2. Supply line blown out. 3. Test device reads 90 in TR, 80 in J.P. 4. 3/8" cock closed. 5. Flowwater open. 6. Close branch pipe cut out cock. 7. Reservoirs drained. 8. Connect test device to car air hoses - prefer B end. 9. Angle cocks open, handle in Position 1. 10. Continuous blow at angle cock open end. 11. Close angle cock, attach demoty, reopca.	X	
3.3 - Brake Pipe Leakage Test 1. Position 1, charge brake pipe to 50 psi. 2. Close flowwater, top of flowwater ball below condensing line. 3. Open flowwater.	X	
3.4 - Separate Brake Pipe Venting Devices - OPTIONAL - 3.4.1 - Continuous Quick Service Test - OPTIONAL - 1. Control valve cut out, charged to 90 psi, handle to Position 4. 2. Pressure reduces on gauge, must not produce emergency. 3. Intermittent exhaust at quick service vent. No exhaust - failure. 3. Handle to Position 1, recharge to 90 psi.	N/A	
3.4.2, 3.4.3 - Separate Vent Valve Test - OPTIONAL - 1. A-1 Retention Relay end < 85" of BP plug B-1 Quick Service. 2. Position 5, reduce BP to 50 psi then to 3. BP pressure does not reduce to zero. 3. Separate emergency vent valve, BP < 75" use Position 5, > 75" use Position 6. 4. BP no lower than 40 psi, open 3/8" cock. BP pressure must reduce to zero. 5. Close 3/8" cock.	N/A	
3.5 - System Leakage Test 1. Handle in Position 1. 2. Cut in control valve, charge to 90 psi. 3. During charge, no venting or retained brake cylinder remains in release. 4. Close flowwater, ball below condensing line. 5. Soap reservoir pipes fittings and gaskets for leaks. No leakage allowed. 6. Open flowwater.	X	
3.6 - Hand Brake Inspection 1. Lubricate handbrake - if required. 2. HBR released, piston pushed into hollow rod. 3. Apply handbrake, check bell crank position. 4. Use bar, all shoes all locations HD applies are tight. No binding or foulage. 5. Whitecaps/Nycopac tracks one shoe per beam tight. 6. Release handbrake, chain fully unwound. 7. Chain unwound, bell crank drops to lower limit, horizontal chain has slack.	X	

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Practical Exam per S-486-13



TFSI	PASS	FAIL
3.7 - Slack Adjuster Conditioning 1. Install block(s) between shoe(s) and wheel(s). 2. Charge to 90 psi, make 15 psi reduction, immediately return to Position 1. 3. Wait for cylinder to release. 4. Make 30 psi reduction, Position 5, immediately return to Position 1. 5. Wait for cylinder to release. 6. Charge to 90 psi, Flowmeter ball below top of tube. Open Flowmeter.	X	
3.8 - Service Stability Test 1. Vent valve plugged as applicable. VX bleed stem pulled, air blow noticed as applicable. 2. Cars up to 75', 40 psi reduction in Position 5, (if 55 psi use Position 4, lap @ 50 psi. No Emergency. Use Position 2 to stop reduction as applicable. 3. Cars > 75', 40 psi reduction in Position 6, (if 55 psi use Position 4, lap @ 50 psi. No Emergency. Use Position 2 to stop reduction as applicable. 4. Bleed stem of VX valve reset as applicable.	X	
3.9 - Piston Travel (W/Blocks), Rigging & BC Pressure 1. Measure & note piston travel per AAR Standards. 2. Check brake levers for regularity. 3. Determine all shoes firmly set against wheels, verify no fouling in linkage. 4. Brake cylinder pressure must be higher than 90 psi, (except cars with blind valves). 5. Modulating valves and emergency valves unable to set to loaded must develop minimum 25 psi BC pressure. 6. Note brake cylinder pressure.	X	
3.10 - Emergency Test 1. Cars with <100ft of H&L BP no lower than 40 psi, quickly open 3/8" cock. 2. Cars with > 100 ft of BP, BP no lower than 40 psi, Position 4 open 3/8" cock. 3. Must produce emergency application, BP to zero. 4. BC pressure must be at least 5 psi higher than full service 3.9.5.	X	
3.11 - Release Test after Emergency 1. Release handle to high pressure (HP) position. 2. Close 3/8" cock, handle to Position 3, watch BP for 2 minutes. 3. Open 3/8" cock, no air exhaust, close 3/8" cock. 4. Handle to Position 1, change BP to 25 psi, immediately return handle to Position 3. 5. Brake pipe pressure must continue to rise.	X	
3.12 - Retaining Valve Test 1. Handle to Position 1, charge for four minutes. 2. Brakes remain applied, BC pressure must be equal to or greater than 12 psi. 3. Retainer to direct exhaust (DX), blow of air noted at retaining valve exhaust.	X	
3.13 - Min. Application & Quick Service Limiting Valve 1. Position 1, charge to 90 psi, flowmeter ball is below top of tube. 2. Handle to Position 4, reduce to 87 psi, Position 3. 3. Brakes must apply. 4. BP drops below to 86 psi, use Position 2 then lap to stop as required - only once. 5. Reducing valve to low pressure, device handle to Position 1.	X	

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Practical Exam per S-486-13



UNST	PASS	FAIL
3.14 - Brake Cylinder Leakage Test 1. Pressure stabilized @ 80 psi, wait 3 minutes. 2. Note BC pressure. Brake cylinder pressure must be greater than 12 psi. 3. Wait another minute, check BC pressure. 4. No more than 1 psi increase or decrease is allowed. 5. Close flowrate, observe ball stabilizes. 6. Top of flowrate ball must stay below conditioning line. 7. Open flowrate by-pass crank.	X	
3.15 - Slow Release Test 1. BP pressure @ 80 psi, brakes applied, handle in Position 3. 2. Reducing valve handle to high pressure, check BP length. 3. Position 2, brakes must release within time specified by BP length. note exhaust @ retained. 4. Position 1, change to 90 psi. 5. Remove block(s) between stone(s) and wheel(s).	X	
3.16 - Slack Adjuster Conditioning (without blocks) 1. Make 15 psi reduction, immediately return to Position 1. 2. Wait for cylinder to release. 3. Make 30 psi reduction. Position 5, immediately return to Position 1. 4. Wait for cylinder to release. 5. Change to 90 psi, flowrate ball below top of tube. Open flowrate.	X	
3.17 - Accelerated Application Valve (AAV) Test 1. Handle to Position 4, BP pressure reducing, note exhaust at emergency portion. 2. No emergency application. 3. Reduce BP to 60 psi, Position 3. No exhaust - filled emergency portion. 4. BP continues to drop, use Position 2 thru 4 tap to stop as required - only once. 5. BP reduction must stop.	X	
3.18 - Recheck of Piston Travel (W/O blocks, cars with auto slack adjusters) 1. If BP out at 60 psi, reduce to 60 psi in Position 5. 2. Use Position 5, 4 and tap to reach 60 psi. 3. Recheck piston travel. 4. Piston travel must be within +/- 1/2" of travel noted in 3.9.1. 5. May require to cycle slack adjuster with several applications. Last time BP to 90 psi flowrate ball below top of tube. 6. Slack adjuster defective, finish test before replacing.	X	
3.19 - Manual Release Valve Test 1. Handle to Position 5. BP drops to zero. (remove strap on ELX-S as applicable) 2. Pull release rod for 5 seconds, brakes release. (check lockout button on ELX-S) 3. Verify release rod does not bind or fail. 4. Brake cylinder piston must return to release. 5. Position 1, High Pressure position. 6. Brake cylinder piston must remain in release. 7. Car supply rod has supply load go to 3.21 8. Position 1, change to 80 psi. 9. Position 5, reduce BP to zero. 10. Brake must apply Gu to 3.21	X	

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Practical Exam per S-486-13



TEST	PASS	FAIL
3.20 - Empty/Load Test 1. Handle to Position 1. 2. Regulator valve in High Pressure. 3. Set empty/load valve to empty configuration. 4. Charge BP until Emergency brake is below top of tube. 5. Handle to Position 3, reduce BP to zero, <u>brakes must apply</u> . 6. Brake cylinder pressure must be 17 psi below full service in 3.9.5. 7. Soap empty/load device, reservoir and piping for leaks - <u>no leakage allowed</u> .	X	
3.21 - Disconnecting the Single Car Test Device 1. Remove brake cylinder gauge, soap pressure tap - <u>No leakage allowed</u> . 2. Any valve plugged, remove piping reapply vent protection. Separate emergency portion out in. 3. Secure rail from movement. 4. Shut off air supply at Position 3 on test device. 5. Drain car rear vents. Empty/load reset to empty. 6. Remove dummy coupling.	X	
4.0 - SPECIAL TESTS - OPTIONAL		
4.1 - Slack Adjuster Test 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/Load Test		
Exceptions: _____ _____ _____ _____ _____ _____		
Tested By: <u>Tom Webb</u> Title: <u>Field Service Technician</u> Company: <u>Wabtec</u>		

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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:		DTF No. / Rev:
Charge No:		Due Date:
Document(s):		
REVIEW INSTRUCTIONS (List Supplier Doc. No. and Rev. FS Spec and Dwg. Codes, Stds, etc.)		
PE		
REVIEWERS:		
QA		
Technical Review		
Comments/Markup Attached Yes <input type="checkbox"/> No <input type="checkbox"/>		
Technical Reviewer Comments:		
Technical Reviewer(s) (Sign/Date):		
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input type="checkbox"/>		
Technical Reviewer Comments:		
QA Reviewer(s) (Sign/Date):		
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

FS-EN-FRM-026 Rev 01 (Effective March 1, 2018)
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Certification of NDT Qualification:

Dan Gjurich

The education, training and experience of the individual named above has been reviewed, and found to meet or exceed the requirements as listed below.

Professional Qualifications/Certifications

<u>Description</u>	<u>Original Cert. Date</u>	<u>Re-Cert. Date</u>	<u>Exp. Date</u>
SNT-TC-1A, Liquid Penetrant, Level II	01/05/2007	11/25/2014	11/25/2019
T9074-GIB-010/271, Liquid Penetrant, Level II, Limited Solvent Removable	11/25/2014	01/02/2018	01/02/2021
SNT-TC-1A, Magnetic Particle, Level II Limited – Yoke Only	05/27/2008	09/23/2014	09/23/2019
T9074-GIB-010/271, Magnetic Particle Level II Limited – Yoke Only	05/23/2014	01/09/2018	01/09/2021
AWS, Certified Welding Inspector	04/01/1988	04/01/2017	04/01/2020

Eye Examination Record

Last Test Date: 02/03/2016 Correction: Required Expiration: 02/03/2016

The individual named above has satisfactorily demonstrated the ability to read five J-19 letters on a standard Jaeger test chart, and the capacity to distinguish and differentiate colors used in the NDE methods for which the individual is qualified.

The individual named above is certified in the indicated NDE Method(s) and Level(s). The certification(s) will expire on the date(s) listed above, or upon termination of employment.

I hereby certify that, to the best of my knowledge, the information listed above is true and correct.

Claude D. Davis

Name

Claude D. Davis
Signature

Certification Program
 Manager, Level III

Title

14 MAR 2018
Date

FOR VERIFICATION OF CERTIFICATION
CONTACT 208-938-3313



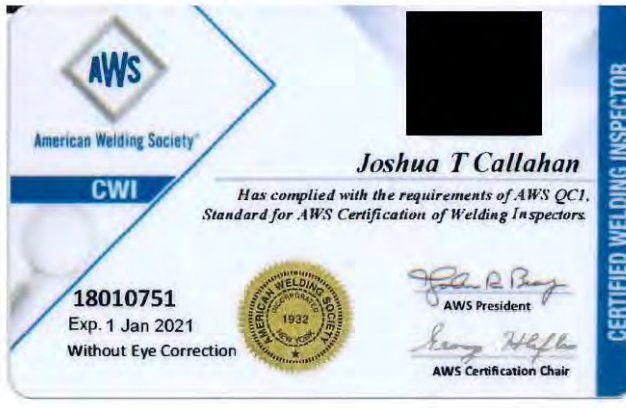
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Wednesday, February 22, 2019

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

Orano Federal Services				
DATA TRANSMITTAL FORM				
Supplier: KASGRO RAIL CORP., INC.	DTF No: 038 Page <u>1</u> of <u>1</u>			
P.O./SC No: 15C3011916	KLEIN Slade <small>Date: 2019.02.27 14:12:31 -08'00'</small> Date: 2/19/2019			
Type of Submittal: <input checked="" type="checkbox"/> First <input type="checkbox"/> Re-Submittal	SDRL List Item No: 24			
Submitted for: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review <input type="checkbox"/> Information	Number of Copies Submitted: 1			
Submitted By: RICK FORD	Rick Ford <small>Digitally signed by Rick Ford Date: 2019.02.19 13:31:27 -05'00'</small> PROJECT MANAGER			
<small>(Name) (Signature) (Title)</small>				
ITEM NUMBER	DOCUMENT NUMBER	REVISION NUMBER	DOCUMENT DESCRIPTION	FS DISPOSITION
1	KAS 127		ATLAS CASK CAR CMS LASER DIMENSIONS FOR PIN BLOCK ATTACHMENT BLOCKS	<input type="checkbox"/> AP <input checked="" type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
2	KAS 128		FRA S-2044 INSPECTION FOR BUFFER CARS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
3	KAS 129		AAR S-488 BRAKE TEST CERTIFICATION	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
4	KAS 130		TRACK SCALE CALIBRATION RECORDS	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
5	KAS 131		TUV UT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
6	KAS 132		TUV PT NDE REPORT CASK CAR	<input checked="" type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input type="checkbox"/> DS <input type="checkbox"/> RSA
7	KAS 133		TUV MT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
8	KAS 143 134		TUV VT NDE REPORT CASK CAR	<input type="checkbox"/> AP <input type="checkbox"/> AWC <input type="checkbox"/> REV <input type="checkbox"/> RWC <input checked="" type="checkbox"/> DS <input type="checkbox"/> RSA
Comments:			Technical Reviewer (i.e., RE, PTL, SME, QA, etc.)	
1) NOTE: KAS 127 provides as-built railcar dimensions. Kasgro rework modified some of these. Kasgro to submit final dimensions separately. 2) KAS 133 does not include the shear block or outer pin block weld MT. 3) KAS 134 does not include VT of the shear block welds.			KLEIN Slade Date: 2019.02.27 13:47:33 -08'00'	
			Date: 2/27/2019	
FS DISPOSITION CODES AND DEFINITIONS				
AP	Approved	Work may proceed.		Resubmittal is not required
AWC	Approved with Comment	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required
REV	Reviewed	Work may proceed; comments provided for Supplier's consideration only.		Resubmittal is not required
RWC	Reviewed with Comment	Work may proceed; subject to incorporation and compliance w/ Buyer comments.		Correct and resubmit
DS	Disapproved	Work may <u>not</u> proceed.		Correct and resubmit
RSA	Receipt Submittal Acknowledged	No other action required.		
If, in the judgment of the Supplier, the incorporation of FS' comments will result in a change to the Purchase Order/Subcontract, <u>work shall not proceed and the Supplier shall immediately provide a written notice to FS' C&P Representative describing the change.</u>				
Project Manager (PM) / Engineering Manager (EM) or Designated Individual (DI) Approval			Digitally signed by Mark A. Denton DN: cn=Mark A. Denton, o=Orano Federal Services, email=mark.denton@orano.gov, ou=ORF Date: 2019.02.27 17:04:03 -08'00'	
			Date: 02/27/2019	

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



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	Orano Federal Services	
	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 038
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 038	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
KAS 133 does not include the required MT inspection of the shear blocks and outer pin blocks. This was required by Kasgro drawing 1155-41.		
Technical Reviewer(s) (Sign/Date): KLEIN Slade		Date: 2019.02.26 07:23:43 -08'00'
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
Only potential question was regarding missing signature by the technician on the UT report. Discussed with TUV Rheinland Level III (Randy @ 616-818-8188). The technician signature is not required provided the report is signed by his supervisor. This report is signed by the individuals supervisor.		
QA Reviewer(s) (Sign/Date):		Digitally signed by COUNTERMAN Bernard Date: 2019.02.25 09:29:24 -08'00'
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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TRACK SCALE - TEST AND INSPECTION REPORT

As per NIST Handbook 44 Testing Standards

DATE OF TEST

05/16/2018

Location Information	
Railroad	CSX
City/State	New Castle, PA
Owner/Industry Name	Kasgro Rail Corp. (Plt 1)

Location Information	
House Condition	Good
Pit Condition	Good
Pit Foundation Type	Concrete
Pit Drainage Type	Drain

Location Information			
Manufacturer	Length of Weight Rail	Date of Last RSI Test	
Fairbanks Scale	10'	05/17/2017	
Instrument Serial Number	# of Sections	Total Capacity	Sectional Capacity
100470050013	2	125 Tons	85 Tons
Type/Condition of Scale			
Operation Type	Static	Display Type	Digital
Control Type	Digital	Dead Rail	No
Girder Type	Continuous	Girder Condition	Good
Deck Type	Live	Deck Condition	Good
Condition of Pivots and Bearings or Load Cells			Good
Condition of Approach Rail Right End			Good
Condition of Approach Rail Left End			Good

Test Vehicle Information				
Test Car(t) #	Nominal Weight	Wheel Base	Jacks	Calibration Date
WC 210500	80000	5'3"	N/A	2017-10-02
Balance as Found		S.R. Test (Beam Scale Only)		
Indicator Reading (lbs.)	-200	SR at Zero Load	SR at M Load	
		SR Meets Requirements?	N/A	
Master Scale Location				
State of Minnesota W & M				

Strain/Buildup Test	
Sub. Weight	
Cal. Weight	80000
Total Weight	0
Disp. Weight	
Error	0
Complies?	No Power Available

TEST RESULTS

First 2 Runs As Found		Sections									
Run Info	Test Load	Zero	1	2	Zero						
→	80,000 lbs.	0	80000	80000	0						
←	80,000 lbs.	0	80000	80000	0						

Weather Conditions: Wind Factor: Temperature:

REMARKS

Test is billable by RSI to: Industry PO #: This test is:

UNDER CONDITIONS STATED ABOVE THIS TEST HAS BEEN LEFT Weighing Within Tolerance

Bill Baker
 Owner/Industry Representative
 Bill Baker

N/A
 State Representative
 N/A

FR Spencer
 Scale Company Representative
 Frank Spencer

Keith Pearce
 RSI Representative
 Keith Pearce



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	SUPPLIER DOCUMENT SUBMITTAL REVIEW	
Supplier / PO No.:	KASGRO / 15C3011916	DTF No. / Rev: 039
Charge No:	00225.03.0050.02.00001	Due Date: 3/8/2019
Document(s):	See DTF No.: 039	
REVIEW INSTRUCTIONS: (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/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
No comments		
Technical Reviewer(s) (Sign/Date):		Date: 2019.02.25 15:52:04 -08'00'
KLEIN Slade		
Quality Assurance Review (As Applicable)		
Comments/Markup Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Technical Reviewer Comments:		
KAS 142 Cask Car Form 36 Brake Test - Why is the Gross Shoe Force = 0		
QA Reviewer(s) (Sign/Date):		Date: 2019.02.25 10:22:16 -08'00'
		Digitally signed by COUNTERMAN Bernard
COMMENT DISPOSITION (If Applicable. Attached further comments and disposition correspondence as necessary)		

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



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High-Level Radioactive Material Phase 3 – Prototype Fabrication and Delivery
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February 15, 2019

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

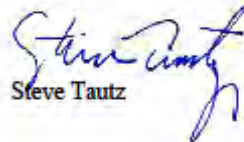
Dear Rick,

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,


Steve Tautz



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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)