



Implementation Guide Rail Carrier Shipment Information

EDI 404

**Carload Bill of Lading
Empty Residue
Non Dangerous and
Dangerous Goods**

Version 008030

Connection to CN

CN has a secure MFT server <https://mftedi.cn.ca/> or we can push to an FTP server if you require. CN also connects with all major VAN's (Value Added Networks) and interconnects can be made available.

CN Contact

The **EDI Onboarding team** email address is EDIMGR@cn.ca. You can also visit us at www.cn.ca.

Canadian National Railway - Electronic Commerce Basic EDI 404 (Rail Bill of Lading) Requirements

The enclosed documentation covers information required to handle empty residue carload traffic for domestic and cross border destinations for both hazardous and non-hazardous commodities.

On this version 8030, there is a new requirement in the R2 segment that when there are multiple R2 segments present, the R203 (junction) is required on each, except for the final R2 segment.

Canadian National Railway - Electronic Commerce Empty Residue EDI 404 (Rail Bill of Lading) Requirements

CN recommends EDI shippers to be within 2 versions of the current EDI Standard X12 Standard
Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue
non dangerous carload traffic originating in Canada to a Canadian destination.**

All empty residue shipments will require a residue weight value to be provided in the N703/N704
of the EDI transmission.

**The only exception will be tank car equipment that has been cleaned and purged and
the L503 value (Commodity Code) is 3742263.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P*^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E
BNX*S**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*1500*E*****RR
F9**WATSON*SK
D9**VANCOUVER*BC
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA
R2*CN*S
LX*1
L5*1*DRY SUGAR*2062110*T
L0*1***1500*E***1*CLD
SE*24*00920001
GE*1*0092
IEA*1*000054913

ISA Segment: Interchange Control Header

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454*U*00803*000054913*0*P*^A

Ref. Des.	Name	Data Element	Attributes
ISA01	Authorization Information Qualifier	I01	ID 2/2
ISA02	Authorization Information (Ten spaces)	I02	AN 10/10
ISA03	Security Information Qualifier	I03	ID 2/2
ISA04	Security Information (Ten spaces)	I04	AN 10/10
ISA05	Interchange ID Qualifier	I05	ID 2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN 15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID 2/2
ISA08	Interchange Receiver ID (CN- fill out field with spaces)	I07	AN 15/15
ISA09	Interchange Date (YYMMDD)	I08	DT 6/6
ISA10	Interchange Time (HHMM)	I09	TM 4/4
ISA11	Repetition Separator (Suggest “^”)	I65	1/1
ISA12	Interchange Control Version Number (Value 00803)	I11	ID 5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0 9/9
ISA14	Acknowledgment Requested (0 = none requested) (1= requested)	I13	ID 1/1
ISA15	Usage Indicator (P = Production) (T = Test)	I14	ID 1/1
ISA16	Component Element Separator (Suggest “.”)	I15	1/1

GS Segment: Functional Group Header

GS*SR*GENERIC*CN*20230912*1454*0092*X*008030

Ref. Des.	Name	Data Element	Attributes
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID 2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN 2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN 2/15
GS04	Date (CCYYMMDD)	373	DT 8/8
GS05	Time (HHMM)	337	TM 4/6
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0 1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID 1/2
GS08	Version / Release / Industry Identity	480	AN 1/12

ST Segment: Transaction Set Header

To indicate the start of a transaction set and to assign a control number.

ST*404*00920001

Ref. Des.	Name	Data Element	Attributes
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID 3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN 4/9

BX Segment: General Shipment Information

BX*00*R*NRCN*L*E**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)	91	ID 1/2
BX03	Shipment Method of Payment (NR = non-revenue)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (E = empty equipment billing (non-revenue))	147	ID 1/1

BNX Segment: Rail Shipment Information

BNX*SS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20230912*1454

Ref. Des.	Name	Data Element	Attributes	
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM	4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*49503323020230912*1454**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N7 Segment: Equipment Details**N7*CRDX*8962*1500*E*****RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/10
N704	Weight Qualifier (E = Estimated Weight) (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar)	40	ID	2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from where it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9WATSON*SK**

Ref. Des.	Name	Data Element	Attributes	
F902	Origin Station	19	AN	2/30
F903	State or Province Code	156	ID	2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9VANCOUVER*BC**

Ref. Des.	Name	Data Element	Attributes	
D902	Destination Station	19	AN	2/30
D903	State or Province Code	156	ID	2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are required for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA**

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee)	98	ID 2/3
N102	Name	93	AN 1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes	
PER01	Contact function code (IC = Information contact)	366	ID	2/2
PER02	Name	93	AN	1/35
PER03	Communication number qualifier (TE=telephone)	365	ID	2/2
PER04	Communication number	364	AN	1/80
PER05	Communication number qualifier (EM=email address)	365	ID	2/2
PER06	Communication number	364	AN	1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC)	140	ID	2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID	1/2
R203	Junction Name (Contains R260 junction)	19	AN	2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref.	Name	Data Element	Attributes	
Des.				
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*DRY SUGAR*2062110*T

Ref.	Name	Data Element	Attributes	
Des.				
L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN	1/30
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*1500*E***1*CLD**

Ref.	Name	Data Element	Attributes	
Des.				
L001	Lading Line Item Number	213	N0	1/6
L004	Weight	81	R	1/10
L005	Weight Qualifier (E = Estimated Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

SE Segment: Transaction Set Trailer

SE*24*00920001

Ref. Des.	Name	Data Element	Attributes
SE01	Number of Included Segments (Includes ST and SE segments)	96	N0 1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN 4/9

GE Segment: Functional Group Trailer

GE*1*0092

Ref. Des.	Name	Data Element	Attributes
GE01	Number of Transaction Sets Included	97	N0 1/6
GE02	Group Control Number (Repeated from GS segment GS06)	28	N0 1/9

IEA Segment: Interchange Control Trailer

IEA*1*000054913

Ref. Des.	Name	Data Element	Attributes
IEA01	Number of included Functional Groups	I16	N0 1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0 9/9

Canadian National Railway - Electronic Commerce Empty Residue EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue non dangerous carload traffic for traffic originating in the United States to a US destination.**

All empty residue shipments will require a residue weight value to be provided in the N703/N704 of the EDI transmission.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P*^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E
BNX*S**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*1500*E*****RR
F9**DECATUR*IL
D9**DESTREHAN*LA
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*DECATUR*IL*62526*US
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*123 MAIN STREET
N4*DESTREHAN*LA*70047*US
R2*CN*S
LX*1
L5*1*DRY SUGAR*2062110*T
L0*1***1500*E***1*CLD
SE*24*00920001
GE*1*0092
IEA*1*000054913

Canadian National Railway - Electronic Commerce Empty Residue EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue non dangerous carload traffic originating in Canada and destined to the United States**. All empty residue shipments crossing the border will require a residue weight value to be provided in the N703/N704 of the EDI transmission.

The only exception will be equipment that has been cleaned and purged, STCC 3742263.

Empty shipments with residue weight less than 7% of the loaded capacity of the equipment will require full commodity description (STCC), the residue weight (N703/N704) value as well as civic address information for all parties to the shipment.

Empty shipments with residue weight equal to or in excess of 7% of the loaded capacity of the equipment will require full commodity description (STCC), complete civic address information for each party to the shipment as well as a customs broker.

EDI 404 with mandatory transborder data highlighted in bold red.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E*N***30*N*2
BNX*R**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*15000*E*****RR
F9**WATSON*SK
D9**CEDAR RAPIDS*IA
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*CEDAR RAPIDS*IA*52402*US
N1*XU*CUSTOMS BROKER INC
N3*123 MAIN STREET
N4*RANIER*MN*56649*US
R2*CN*S*SUPER
R2*UP*1
LX*1
L5*1*DRY SUGAR*2062110*T
L5*1*THIS SHIPMENT OF MERCHANDISE IS VALUED BELOW
L5*1*\$200 AND MEETS THE REQUIREMENTS OF 19 U.S.C.
L5*1*1321(A)(2) TO QUALIFY FOR INFORMAL ENTRY
L0*1***15000*E***1*CLD
SE*31*00920001
GE*1*0092
IEA*1*000054913

BX Segment: General Shipment Information

BX*00*R*NRCN*L*E*N***30*N*2**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)}	91	ID 1/2
BX03	Shipment Method of Payment (NR = non-revenue)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (E = empty equipment billing (non-revenue))	147	ID 1/1
BX08	Section Seven Code (N=not in effect) (S=in effect)	226	ID 1/1
BX11	Customs Documentation handling code (30 = Proforma with Broker, no B13 required)	501	ID 2/2
BX12	Confidential Billing Request Code (N=not applicable)	199	ID 1/1
BX13	Goods and Services Tax Reason Code (2 = No GST to apply)	714	ID 1/1

BNX Segment: Rail Shipment Information

BNX*SS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released at a future time.

M3*R*20230912*0728

Ref. Des.	Name	Data Element	Attributes
M301	Release Code (R = Release with Shipment Information)	132	ID 1/1
M302	Release Date (CCYYMMDD)	373	DT 8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM 4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*49503323020230912*1454**

Ref. Des.	Name	Data Element	Attributes
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID 2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN 1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT 8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM 4/8

N7 Segment: Equipment Details

N7*CRDX*8962*15000*E***RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/10
N704	Weight Qualifier (E = Estimated Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar }	40	ID	2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. The spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9WATSON*SK**

Ref. Des.	Name	Data Element	Attributes	
F902	Origin Station	19	AN	2/30
F903	State or Province Code	156	ID	2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9CEDAR RAPIDS*IA**

Ref. Des.	Name	Data Element	Attributes	
D902	Destination Station	19	AN	2/30
D903	State or Province Code	156	ID	2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*CEDAR RAPIDS*IA*52402*US
N1*XU*CUSTOMS BROKER INC
N3*123 MAIN STREET
N4*RANIER*MN*56649*US

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N101	Entity Identifier Code (CN = Consignee) (SH = Shipper) (XU =US Customs Broker)	98	ID	2/3
N102	Name	93	AN	1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes	
PER01	Contact function code (IC = Information contact)	366	ID	2/2
PER02	Name	93	AN	1/35
PER03	Communication number qualifier (TE=telephone)	365	ID	2/2
PER04	Communication number	364	AN	1/80
PER05	Communication number qualifier (EM=email address)	365	ID	2/2
PER06	Communication number	364	AN	1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

**R2*CN*S*SUPER
R2*UP*1**

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC) (CN=Canadian National)	140	ID	2/4
R202	Routing Sequence Code (S=Origin Carrier, Shipper's Routing (Rail) (1=1st Carrier After Origin Carrier)	133	ID	1/2
R203	Junction Name (Contains R260 junction)	19	AN	2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref. Des.	Name	Data Element	Attributes
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0 1/6

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

**L5*1*DRY SUGAR*2062110*T
L5*1*THIS SHIPMENT OF MERCHANDISE IS VALUED BELOW
L5*1*\$200 AND MEETS THE REQUIREMENTS OF 19 U.S.C.
L5*1*1321(A)(2) TO QUALIFY FOR INFORMAL ENTRY**

Ref. Des.	Name	Data Element	Attributes
L501	Line Number	213	N0 1/6
L502	Commodity Description	79	AN 1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN 1/30
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID 1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*15000*E***1*CLD**

Ref. Des.	Name	Data Element	Attributes
L001	Lading Line Item Number	213	N0 1/6
L004	Weight	81	R 1/10
L005	Weight Qualifier (E = Estimated Weight)	187	ID 1/2
L008	Lading Quantity	80	N0 1/7
L009	Packaging Form Code (CLD = Carload)	211	ID 3/3

Canadian National Railway - Electronic Commerce Hazardous Empty Residue EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue hazardous carload traffic originating in Canada to a Canadian destination.**

The Canadian Transportation of Dangerous Goods regulations will apply.

All empty residue shipments will require a residue weight value to be provided in the N703/N704 of the EDI transmission.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P*^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E
BNX*S**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*0*N*****RR
F9**WATSON*SK
D9**VANCOUVER*BC
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA
R2*CN*S
LX*1
L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L
L5*1*GASOLINE*4908175*L
L0*1**0*N***1*TKR
LS*LH1
LH1*TK*1*UN1203**4908175****R*II
LH2*3*P
LH3*GASOLINE*C
LH4*2-1928*1 555 555 1234
PER*HM*offeror company name or contract number*TE*1 800 424 9300
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*RP**TE*123-123-1234
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA
LE*LH1
LH6*JOHN Q SHIPPER
SE*40*00920001
GE*1*0092
IEA*1*000054913

BX Segment: General Shipment Information

BX*00*R*NRCN*L*E**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)	91	ID 1/2
BX03	Shipment Method of Payment (NR = non-revenue)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (E = empty equipment billing (non-revenue))	147	ID 1/1

BNX Segment: Rail Shipment Information

BNX*SS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S=Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20230912*1454

Ref. Des.	Name	Data Element	Attributes
M301	Release Code (R = Release with Shipment Information)	132	ID 1/1
M302	Release Date (CCYYMMDD)	373	DT 8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM 4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*49503323020230912*1454**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N7 Segment: Equipment Details

N7*CRDX*8962*0*N***RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/10
N704	Weight Qualifier (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar }	40	ID	2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from where it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9WATSON*SK**

Ref. Des.	Name	Data Element	Attributes
F902	Origin Station	19	AN 2/30
F903	State or Province Code		

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9VANCOUVER*BC**

Ref. Des.	Name	Data Element	Attributes
D902	Destination Station	19	AN 2/30
D903	State or Province Code	156	ID 2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are required for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA**

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee) (PF = Payer of Freight)	98	ID 2/3
N102	Name	93	AN 1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (IC = Information contact)	366	ID 2/2
PER02	Name	93	AN 1/35
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80
PER05	Communication number qualifier (EM=email address)	365	ID 2/2
PER06	Communication number	364	AN 1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC)	140	ID	2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID	1/2
R203	Junction Name (Contains R260 junction)	19	AN	2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref. Des.	Name	Data Element	Attributes	
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L L5*1*GASOLINE*4908175*L

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN	1/30
L504	Commodity Code Qualifier (L= last contained contents (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*0*N***1*TKR**

Ref. Des.	Name	Data Element	Attributes
L001	Lading Line Item Number	213	N0 1/6
L004	Weight	81	R 1/10
L005	Weight Qualifier (N=net weight)	187	ID 1/2
L008	Lading Quantity	80	N0 1/7
L009	Packaging Form Code (TKR = tank car)	211	ID 3/3

LS Segment: Loop Header

LS*LH1

Ref. Des.	Name	Data Element	Attributes
LS01	Loop Identifier Code To indicate that the next segment begins a loop.	447	AN 1/6

LH1 Segment: Hazardous Identification Information

LH1*TK*1*UN12034908175****R*II**

Ref. Des.	Name	Data Element	Attributes
LH101	Unit or Basis for Measurement Code (TK=Tank)	355	ID 2/2
LH102	Lading Quantity	80	N0 1/7
LH103	UN or NA Identification Code	277	ID 6/6
LH105	Commodity Code	22	AN 1/30
LH107	Quantity	380	R 1/15
LH109	Residue Indicator Code (R=residue)	665	ID 1/1
LH110	Packing Group Code (Code indicating degree of danger in terms of Roman number I, II or III)	254	ID 1/3

LH2 Segment: Hazardous Classification Information

LH2*3*P

Ref. Des.	Name	Data Element	Attributes
LH201	Hazardous Placard Notation	215	ID 1/30
LH202	Hazardous Class Qualifier (P=Primary)	983	ID 1/1

LH3 Segment: Hazardous Material Shipping Name Information

LH3*GASOLINE*C

Ref. Des.	Name	Data Element	Attributes
LH301	Hazardous Material Shipping Name	224	AN 1/25
LH302	Hazardous Material Shipping Name Qualifier Qualifier indicating the source (regulatory) of the proper shipping name. (C = Canadian Shipping Name)	984	ID 1/1

LH4 Segment: Canadian Dangerous Requirements

LH4*2-1928*1 555 555 1234

Ref. Des.	Name	Data Element	Attributes
LH401	Emergency Response Plan Number (Identity number of a specific hazardous Emergency Response Plan that is assigned by the Director General of Canada)	238	AN 1/12
LH402	Communication Number (Phone number including country or area code when applicable)	364	AN 1/80

PER Segment: Administrative Communications Contact

PER*HM*offeror company name or contract number*TE*1 800 424 9300

Ref. Des.	Name	Data Element	Attributes
PER01	Contact Function Code (HM=primary 24-hour Hazardous Material Contact emergency phone number)	366	ID 2/2
PER02	Name If the emergency response telephone number shown in PER04 is an emergency provider, (e.g., Chemtrec), the PER02 must identify the company(offeror) by name or contract number.	93	AN 1/35
PER03	Communication Number Qualifier (TE=Telephone)	365	ID 2/2
PER04	Communication Number	364	AN 1/80

N1 Segment: Party Identification

Within the LH1 Loop

Used to identify the **Canadian** 'consignor' ('SH' shipper or 'CN' consignee) as required by Transport Canada regulations (TDG 3.5 (1)(a)).

N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*ca
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*VANCOUVER*BC*V5K 1P7*CA

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee)	98	ID 2/3
N102	Name	93	AN 1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

PER Segment: Administrative Communications Contact

PER*RPTE*123-123-1234**

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (RP=responsible person)	366	ID 2/2
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number		

LE Segments: Loop Trailer

LE*LH1

Ref. Des.	Name	Data Element	Attributes
LE01	Loop Identifier Code	447	AN 1/6

LH6 Segment: Hazardous Certification

Provides the name of the person who prepared, and certifies to its accuracy, the documentation of the regulated commodity.

LH6*JOHN Q SHIPPER

Ref. Des.	Name	Data Element	Attributes
LH601	Name	93	AN 1/60

**Canadian National Railway - Electronic Commerce
Hazardous Empty Residue EDI 404 (Rail Bill of Lading) Requirements**

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue hazardous carload traffic originating in the United States to a US destination.**

The United States CFR49 Regulations will apply.

All empty residue shipments will require a residue weight value to be provided in the N703/N704 of the EDI transmission.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P*^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E
BNX*S**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*0*N*****RR
F9**DECATUR*IL
D9**DESTREHAN*LA
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*DECATUR*IL*62526*US
PER*IC*CONTACT NAME*TE*123-123-1234*EM* JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*DESTREHAN*LA*70047*US
R2*CN*S
LX*1
L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L
L0*1***0*N***1*TKR
LS*LH1
LH1*TK*1*UN1203**4908175****R*II
LH2*3*P
LH3*GASOLINE*D
PER*HM*offeror company name or contract number*TE*1 800 424 9300
LE*LH1
SE*30*00920001
GE*1*0092
IEA*1*000054913

BX Segment: General Shipment Information

BX*00*R*NRCN*L*E**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)	91	ID 1/2
BX03	Shipment Method of Payment (NR = non-revenue)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds) (K= Kilograms)	188	ID 1/1
BX07	Shipment Qualifier (E = empty equipment billing (non-revenue))	147	ID 1/1

BNX Segment: Rail Shipment Information

BNX*SS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S=Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20230912*1454

Ref. Des.	Name	Data Element	Attributes
M301	Release Code (R = Release with Shipment Information)	132	ID 1/1
M302	Release Date (CCYYMMDD)	373	DT 8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM 4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*49503323020230912*1454**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N7 Segment: Equipment Details

N7*CRDX*8962*0*N***RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/10
N704	Weight Qualifier (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar }	40	ID	2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9DECATUR*IL**

Ref. Des.	Name	Data Element	Attributes	
F902	Origin Station	19	AN	2/30
F903	State or Province Code	156	ID	2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9DESTREHAN*LA**

Ref. Des.	Name	Data Element	Attributes	
D902	Destination Station	19	AN	2/30
D903	State or Province Code	156	ID	2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*DECATUR*IL*62526*US
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*DESTREHAN*LA*70047*US**

Ref. Des.	Name	Data Element	Attributes	
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee)	98	ID	2/3
N102	Name	93	AN	1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (IC = Information contact)	366	ID 2/2
PER02	Name	93	AN 1/35
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80
PER05	Communication number qualifier (EM=email address)	365	ID 2/2
PER06	Communication number	364	AN 1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC)	140	ID	2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID	1/2
R203	Junction Name (Contains R260 junction)	19	AN	2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref. Des.	Name	Data Element	Attributes	
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN	1/30
L504	Commodity Code Qualifier (L= last contained contents (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*0*N***1*TKR**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/6
L004	Weight	81	R	1/10
L005	Weight Qualifier (N=net weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (TKR=tank car)	211	ID	3/3

LS Segment: Loop Header

LS*LH1

Ref. Des.	Name	Data Element	Attributes	
LS01	Loop Identifier Code To indicate that the next segment begins a loop.	447	AN	1/6

LH1 Segment: Hazardous Identification Information

LH1*TK*1*UN12034908175****R*II**

Ref. Des.	Name	Data Element	Attributes	
LH101	Unit or Basis for Measurement Code (TK=Tank)	355	ID	2/2
LH102	Lading Quantity	80	N0	1/7
LH103	UN or NA Identification Code	277	ID	6/6
LH105	Commodity Code	22	AN	1/30
LH107	Quantity	380	R	1/15
LH109	Residue Indicator Code (R=residue)	665	ID	1/1
LH110	Packing Group Code (Code indicating degree of danger in terms of Roman number I, II or III)	254	ID	1/3

LH2 Segment: Hazardous Classification Information

LH2*3*P

Ref. Des.	Name	Data Element	Attributes
LH201	Hazardous Placard Notation	215	ID 1/30
LH202	Hazardous Class Qualifier (P=Primary)	983	ID 1/1

LH3 Segment: Hazardous Material Shipping Name Information

LH3*GASOLINE*D

Ref. Des.	Name	Data Element	Attributes
LH301	Hazardous Material Shipping Name	224	AN 1/25
LH302	Hazardous Material Shipping Name Qualifier Qualifier indicating the source (regulatory) of the proper shipping name. (D = USA Shipping Name)	984	ID 1/1

PER Segment: Administrative Communications Contact

PER*HM*offeror company name or contract number*TE*1 800 424 9300

Ref. Des.	Name	Data Element	Attributes
PER01	Contact Function Code (HM=primary 24-hour Hazardous Material Contact emergency phone number)	366	ID 2/2
PER02	Name If the emergency response telephone number shown in PER04 is an emergency provider (e.g Chemtrec) the PER02 must identify the company(offeror) by name or contract number.	93	AN 1/35
PER03	Communication Number Qualifier (TE=Telephone)	365	ID 2/2
PER04	Communication Number	364	AN 1/80

LE Segments: Loop Trailer

LE*LH1

Ref. Des.	Name	Data Element	Attributes
LE01	Loop Identifier Code	447	AN 1/6

Canadian National Railway - Electronic Commerce Hazardous Empty Residue EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set on **empty residue hazardous carload traffic originating in Canada to a US destination.**

All empty hazardous residue shipments crossing the border will require a residue weight value to be provided in the N703/N704 of the EDI transmission.

Empty shipments with residue weight less than 7% of the loaded capacity of the equipment will require full commodity description (STCC), the residue weight (N703/N704) value as well as civic address information for all parties to the shipment.

Since the shipment originates in Canada, the Canadian Transportation of Dangerous Goods regulations will apply. By virtue of the reciprocity that exists between the two countries, the United States will accept these shipments with TDG regulations.

EDI 404 with mandatory transborder data highlighted in bold red.

ISA*00* *00* *ZZ*GENERIC *02*CN *230912*1454* U*00803*000054913*0*P*^
GS*SR*GENERIC*CN*20230912*1454*0092*X*008030
ST*404*00920001
BX*00*R*NR**CN*L*E*N***30*N*2
BNX*S**S
M3*R*20230912*1454
N9*BM*495033230**20230912*1454
N7*CRDX*8962*15000*E*****RR
F9**WATSON*SK
D9**CEDAR RAPIDS*IA
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*CEDAR RAPIDS*IA*52402*US
N1*XU*CUSTOMS BROKER INC
N3*123 MAIN STREET
N4*RANIER*MN*56649*US
R2*CN*S*SUPER
R2*UP*1
LX*1
L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L
L5*1*THIS SHIPMENT OF MERCHANDISE IS VALUED BELOW
L5*1*\$200 AND MEETS THE REQUIREMENTS OF 19 U.S.C.
L5*1*1321(A)(2) TO QUALIFY FOR INFORMAL ENTRY
L0*1***15000*E***1*TKR
LS*LH1
LH1*TK*1*UN12034908175****R*II**
LH2*3*P
LH3*GASOLINE*D
LH4*2-1111*1 555 555 1234
PER*HM*offeror company name or contract number*TE*1 8004249300
N1*SH*GENERIC CARLOAD INC
N3*123 ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*RPTE*123-123-1234**

LE*LH1

LH6*JOHN Q SHIPPER

SE*43*00920001

GE*1*0092

IEA*1*000054913

Reciprocity of documentation

In general, regulated commodities in the US are also regulated in Canada and vice versa. Most of these commodities can ship under the documentation requirements of the origin country. There are, however, exceptions. As a shipper you are responsible for ensuring that your shipment is documented under the requirements of CFR49 (US regulations) and Transportation of Dangerous Goods (TDG) regulations (Canada).

Notable exceptions are Asphalt (regulated in US), Poison Inhalation Hazard (requires Canadian documentation), Waste products, and Emergency Response Plan information.

CN has an expert team who can help you if you have specific questions about how to document your shipment.

Additional items required for regulated shipments:

All telephone numbers must be available in Canada, or a Canadian number must be provided.

Emergency Response Plan numbers and activation phone numbers (valid in Canadian locations)

BX Segment: General Shipment Information**BX*00*R*NR**CN*L*E*N***30*N*2**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)}	91	ID 1/2
BX03	Shipment Method of Payment (NR = non-revenue)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (E = empty equipment billing (non-revenue))	147	ID 1/1
BX08	Section Seven Code (N=not in effect)	226	ID 1/1
BX11	Customs Documentation handling code (30 = Proforma with Broker, no B13 required)	501	ID 2/2
BX12	Confidential Billing Request Code (N=not applicable)	199	ID 1/1
BX13	Goods and Services Tax Reason Code (2 = No GST to apply)	714	ID 1/1

BNX Segment: Rail Shipment Information**BNX*S**S**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20230912*1454

Ref. Des.	Name	Data Element	Attributes	
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM	4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*49503323020230912*1454**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N7 Segment: Equipment Details

N7*CRDX*8962*15000*E***RR**

Ref. Des.	Name	Data Element	Attributes
N701	Equipment Initial	206	AN 1/4
N702	Equipment Number	207	AN 1/15
N703	Weight	81	R 1/10
N704	Weight Qualifier (E = estimated Net Weight)	187	ID 1/2
N711	Equipment Description Code (RR = Railcar }	40	ID 2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9WATSON*SK**

Ref. Des.	Name	Data Element	Attributes
F902	Origin Station	19	AN 2/30
F903	State or Province Code		

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9CEDAR RAPIDS*IA**

Ref. Des.	Name	Data Element	Attributes
D902	Destination Station	19	AN 2/30
D903	State or Province Code	156	ID 2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*CEDAR RAPIDS*IA*52402*US
N1*XU*CUSTOMS BROKER INC
N3*123 MAIN STREET
N4*RANIER*MN*56649*US

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee) (PF = payer of freight) (XU= customs broker)	98	ID 2/3
N102	Name	93	AN 1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (IC = Information contact)	366	ID 2/2
PER02	Name	93	AN 1/35
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80
PER05	Communication number qualifier (EM=email address)	365	ID 2/2
PER06	Communication number	364	AN 1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

**R2*CN*S*SUPER
R2*UP*1**

Ref. Des.	Name	Data Element	Attributes
R201	Standard Carrier Alpha Code (SCAC) (CN = Canadian National)	140	ID 2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail)) (1=1 st carrier after origin carrier)	133	ID 1/2
R203	Junction Name (Contains R260 junction)	19	AN 2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref. Des.	Name	Data Element	Attributes	
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

**L5*1*RESIDUE: LAST CONTAINED GASOLINE*4908175*L
L5*1*GASOLINE*4908175*L
L5*1*THIS SHIPMENT OF MERCHANDISE IS VALUED BELOW
L5*1*\$200 AND MEETS THE REQUIREMENTS OF 19 U.S.C.
L5*1*1321(A)(2) TO QUALIFY FOR INFORMAL ENTRY**

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN	1/30
L504	Commodity Code Qualifier (L= last contained contents (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*15000*E***1*TKR**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/6
L004	Weight	81	R	1/10
L005	Weight Qualifier (E = Estimated Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (TKR = tank car)	211	ID	3/3

LS Segment: Loop Header

LS*LH1

Ref. Des.	Name	Data Element	Attributes	
LS01	Loop Identifier Code To indicate that the next segment begins a loop.	447	AN	1/6

LH1 Segment: Hazardous Identification Information

LH1*TK*1*UN1203**4908175****R*II

Ref. Des.	Name	Data Element	Attributes	
LH101	Unit or Basis for Measurement Code (TK=Tank)	355	ID	2/2
LH102	Lading Quantity	80	N0	1/7
LH103	UN or NA Identification Code	277	ID	6/6
LH105	Commodity Code	22	AN	1/30
LH107	Quantity	380	R	1/15
LH109	Residue Indicator Code (R=residue)	665	ID	1/1
LH110	Packing Group Code (Code indicating degree of danger in terms of Roman number I, II or III)	254	ID	1/3

LH2 Segment: Hazardous Classification Information

LH2*3*P

Ref. Des.	Name	Data Element	Attributes	
LH201	Hazardous Placard Notation	215	ID	1/30
LH202	Hazardous Class Qualifier (P=Primary)	983	ID	1/1

LH3 Segment: Hazardous Material Shipping Name Information

LH3*GASOLINE*D

Ref. Des.	Name	Data Element	Attributes
LH301	Hazardous Material Shipping Name	224	AN 1/25
LH302	Hazardous Material Shipping Name Qualifier	984	AN 1/1
	Qualifier indicating the source (regulatory) of the proper shipping name (D = USA Shipping Name)		

LH4 Segment: Canadian Dangerous Requirements

LH4*2-1111*1 555 555 1234

Ref. Des.	Name	Data Element	Attributes
LH401	Emergency Response Plan Number (Identity number of a specific hazardous Emergency Response Plan that is assigned by the Director General of Canada)	238	AN 1/12
LH402	Communication Number (Phone number including country or area code when applicable)	364	AN 1/80

PER Segment: Administrative Communications Contact

PER*HM*offeror company name or contract number*TE*1 800 424 9300

Ref. Des.	Name	Data Element	Attributes
PER01	Contact Function Code (HM=primary 24-hour Hazardous Material Contact emergency phone number)	366	ID 2/2
PER02	Name If the emergency response telephone number shown in PER04 is an emergency provider (e.g., Chemtrec) the PER02 must identify the company(offeror) by name or contract number.	93	AN 1/35
PER03	Communication Number Qualifier (TE=Telephone)	365	ID 2/2
PER04	Communication Number	364	AN 1/80

N1 Segment: Party Identification

Within the LH1 Loop

Used to identify the **Canadian** 'consignor' ('SH' shipper or 'CN' consignee) as required by Transport Canada regulations (TDG 3.5 (1)(a)).

**N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA**

Ref. Des.	Name	Data Element	Attributes	
N101	Entity Identifier Code (SH = Shipper)	98	ID	2/3
N102	Name	93	AN	1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes	
N301	Address Information	166	AN	1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes	
N401	City Name	19	AN	2/30
N402	State or Province Code	156	ID	2/2
N403	Postal Code	116	ID	3/15
N404	Country Code	26	ID	2/3

PER Segment: Administrative Communications Contact

PER*RPTE*123-123-1234**

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (RP=responsible person)	366	ID 2/2
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80

LE Segments: Loop Trailer

LE*LH1

Ref. Des.	Name	Data Element	Attributes
LE01	Loop Identifier Code	447	AN 1/6

LH6 Segment: Hazardous Certification

Provides the name of the person who prepared, and certifies to its accuracy, the documentation of the regulated commodity.

LH6*JOHN Q SHIPPER

Ref. Des.	Name	Data Element	Attributes
LH601	Name	93	AN 1/60