

DCA-11-FR-002
BNSF Coal Train – Work Train Collision
Red Oak, IA
April 17, 2011

ATTACHMENT 17

Insulation Resistance Tests



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: BAANX5D
Subdivision: CRESTON	Test Date: 07/07/2004
Location / Highway Name: Mc Pherson	
County: MONTGOMERY	State: IA
Milepost (with Line Segment): 1 447.50 - 447.50	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	7	14	HOUSE	J. BOX	C
Underground	3	6	HOUSE	J. BOX	C
Underground	7	14	HOUSE	SIG.LA	C
Underground	3	9	HOUSE	SIG.LA	C
Underground	7	14	HOUSE	SIG.LB	C
Underground	3	9	HOUSE	SIG.LB	C
Underground	7	14	HOUSE	SIG.RA	C
Underground	3	9	HOUSE	SIG.RA	C
Underground	7	14	HOUSE	SIG.RB	C
Underground	3	9	HOUSE	SIG.RB	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: BAAN2UH
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: INTERMEDIATE 450 3	
County: MONTGOMERY	State: IA
Milepost (with Line Segment): 1 450.30 - 450.30	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	5	9	HOUSE	SIG.1EA	C
Underground	5	9	HOUSE	SIG.1WA	C
Underground	5	9	HOUSE	SIG.1WB	C
Underground	5	9	HOUSE	SIG.2EA	C
Underground	5	9	HOUSE	SIG.2WA	C
Underground	5	9	HOUSE	SIG.2WB	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: BAAN2WW
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: EAST EMERSON HT SWCC M2	
County: MILLS	State: IA
Milepost (with Line Segment): 1 451.70 - 451.70	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	2	9	CASE	BATT. BOX	C
Underground	2	9	CASE	BATT. BOX	C
Underground	7	14	CASE	J. BOX	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: 095256R
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: HARRIS ST	
County: MILLS	State: IA
Milepost (with Line Segment): 1 451.95 - 451.95	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	5	14	HOUSE	SIG.S1	C
Underground	3	6	HOUSE	SIG.S1	C
Underground	2	6	HOUSE	SIG.S1	C
Underground	5	14	HOUSE	SIG.S2	C
Underground	3	6	HOUSE	SIG.S2	C
Underground	2	6	HOUSE	SIG.S2	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: 095256R
Subdivision: CRESTON	Test Date: 11/04/2010
Location / Highway Name: HARRIS ST	
County: MILLS	State: IA
Milepost (with Line Segment): 1 451.95 - 451.95	
Employee's Name: Larry Cassity (lcassity)	PARS Number: SINS0199

Conditions Master Key

C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
NT = The equipment was not tested in this inspection.
N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	5	14	HOUSE	SIG.S1	NT
Underground	3	6	HOUSE	SIG.S1	C
Underground	2	6	HOUSE	SIG.S1	NT
Underground	5	14	HOUSE	SIG.S2	NT
Underground	3	6	HOUSE	SIG.S2	C
Underground	2	6	HOUSE	SIG.S2	NT



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: BAAN20S
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: CABINET WEST HT EMERSON	
County: MILLS	State: IA
Milepost (with Line Segment): 1 452.10 - 452.10	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	2	9	CASE	BATT. BOX	C
Underground	2	9	CASE	BATT. BOX	C
Underground	7	14	CASE	J. BOX	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: 095257X
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: CO RD	
County: MILLS	State: IA
Milepost (with Line Segment): 1 452.88 - 452.88	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	5	14	HOUSE	SIG.S1	C
Underground	3	6	HOUSE	SIG.S1	C
Underground	2	6	HOUSE	SIG.S1	C
Underground	5	14	HOUSE	SIG.S2	C
Underground	3	6	HOUSE	SIG.S2	C
Underground	2	6	HOUSE	SIG.S2	C



Inspection Report - Insulation Tests & Inspections

Division: NEBRASKA	Asset ID: BAANK1N
Subdivision: CRESTON	Test Date: 09/08/2003
Location / Highway Name: DBL XO 453.5	
County: MILLS	State: IA
Milepost (with Line Segment): 1 453.50 - 453.50	
Employee's Name: Tom Foxworthy (foxworth)	PARS Number: SINS0199

NOTE: This test was sent in an inordinate amount of time after the date on which it was performed. As such, this is likely a startup test. You may want to check into paper records for more accurate information about this test, or contact RailDOCS Support at CompProb@RailDOCS.net if you think this is not correct.

Conditions Master Key

- C = Test completed, condition left in compliance. Indicates that all wires in trunking and cable measured 500K Ohms and above.
- A = Annual test required; insulation resistance between 500K and 200K Ohms. Prompt action shall be taken to remedy condition.
- R = Repairs and/or Replacements made (identified in associated comments), test completed, and condition left in compliance.
- NT = The equipment was not tested in this inspection.
- N = No inspection required. This is an annual re-inspection of a different conductor.

Insulation Tests (FRA 234.267, 236.108)					
Cable Type	Conductors	Wire Size	Run From	Run To	Cond.
Underground	12	14	HOUSE	J. BOX1A	C
Underground	3	2	HOUSE	J. BOX1A	C
Underground	12	14	HOUSE	J. BOX1B	C
Underground	3	2	HOUSE	J. BOX1B	C
Underground	12	14	HOUSE	J. BOX2A	C
Underground	3	2	HOUSE	J. BOX2A	C
Underground	12	14	HOUSE	J. BOX2B	C
Underground	3	2	HOUSE	J. BOX2B	C
Underground	5	9	HOUSE	SIG.1EA	C
Underground	5	9	HOUSE	SIG.1EB	C
Underground	5	9	HOUSE	SIG.1WA	C
Underground	5	9	HOUSE	SIG.1WB	C
Underground	5	9	HOUSE	SIG.2EA	C
Underground	5	9	HOUSE	SIG.2EB	C
Underground	5	9	HOUSE	SIG.2WA	C
Underground	5	9	HOUSE	SIG.2WB	C