DCA-15-MR-010 Passenger Train Derailment Philadelphia, PA May 12, 2015

SIGNAL ATTACHMENT 42

Shore WBA Insulation Resistance (2) 236.108



Record of Insulation Resistance C&S 2.0

NOTE: Use 8 1/2 "x 14" legal size paper when printing out this form! Division: Location: To: MAD SHORE WRE Date Installed: Manufacturer. Year Manufactured: Specification: 1988 ROCKBESTIS 57C COMPOSITE List Insulation List Insulation Cable Designation Resistance Values Resistance Values CDR Circuit Nomenclature to Cround of Ciuss Kemmaa 01 W100BX110ER INF INF űZ WINEXILOR E PE ALVE 03 100BX110WR ii vir INF 100WY110WR 1.2.0 Heli 4144 05 SPARE Thus: INF .06 SPARE 414 INF 07 4WAR INF 08 3WAR IN INF SPARE m INF 10 IDS POS IVE INF TES NEG 1 THE 12 1TM POS INF INF 13 | 1TM NEG I NE INF 14 2DS POS IN INF 2 DS NEG 15 Fre INF 16 2TM POS IWINF 17 TILL DEC #1 VE Po to 18 ZWCC INF INF ĮQ. MINNEC IMP INF 20 41111 IIV INF NAWBDE INF INF SPARE 22 IN INF 23 3DS POS HVE INF 24 3DS NEG Mi INF 3TM POS IN INF 25 3TM NEG 5.4 IN. 27 3WCC INF INF Œ INSWCC INE INF 29 SPARE H INF 30 2727 L-17 3055.F 31 BRE INF. TAUF. 20 MANDE H INF IJ SPARE IN LINE 14. 4DS POS IN INF 35 4DS NEG <u>iv</u> IN. 36 4TM POS IN INF 4TM NEG 1 1月至 38 4WCC IN INF 39 NAWCC H INF 40 SPARE IN INF 41 SPARE FFE FFF 42 SPARE I INF ij STANE 1145 91 V 6 SPARE 44 INF INF 44. CZ This. His 46 47. 45 49 50 51 52 53 эÀ 55 ĩć 37 -25 59 69. 61Signature Date-Meggered: 8-08 Signature: Date Meggered: 8-08

komencier

1. List circuit nomenclature for each working conductor.

 Document working conductors Luces or below on form NBPC 3081, C&S 2.3, and list 500,000 or below on form NRPC 2935, C&S 2A.

- 3. Indicate conductors that are spare.
- L Two signatures required.



Record of Insulation Resistance C&S 2.0

NOTE: Use 8 1/2 "x 14" legal size paper when printing out this form! Division: Location: From: To: MAD SHORE WBA WBB Date Installed: Manufacturer: Year Manufactured: Specification; 2008 OKINITE 2006 37C List Insulation List Insulation Cable Designation Resistance Values Resistance Values CDR Circuit Nomenclature to Ground of Cross Remarks ĵÜ SPARE INF INF 02 SPARE IN IWF 03 SPARE inf LVF 0 +SPARE INF INE 05EIDP IW 06 NIEDP INE INF 97IEIT29 INF Five: 08N1E1T2P INF INF (K) SPARE FNF UF 10 SPARE INF INF H IWAHP ME FILE 12 N1WAHP INF INF 13 1WBHAFP NE 頁年 14 NIWBHAFP INF INF 15 **IWBHAP** INF INE 16 NIWBHAP IW INF 17 1WADP INE LVE ľ NIWADP INF INF ĮĢ IWEDP INF IN 20 NIWEER INF HVP 21 1WBNP INF INF 22 NIWBNP IN INF 23 1WHD2P INF IMP 24 NI WHD2P INE IN EX 25 1WRG2P INF INF 26 NIWRG2P INF IVE 27 ELB12 INF INF 28 ELB12 IN INF 29 INF INF Livi 30 ELN12 INF H 31ELN12 INF THE 32. FI.N12 IME INF 30 SPARE IN INK 34 SPARE INF INF 35 SPARE INF 100 36 **SPARE** INF INF 37 SPARE INF INF 38 39 40 4] 42 43 44 45 ÆG. 47 48 49 50 51 52 53 54 55 56 57 58 ξü 60 Ó. Signature: Date Meggered: Signature Date Meggered: Linstructions List circuit nomenclature for each working conductor. Indicate conductors that are spare ment working conductors I meg or below on form NRPC 3081, Two signatures required. C&S 2.3, and list 500,000 or below on form NRPC 2935, C&S 2A.

DIVISON MID-ATLANTIC		LOCATION FRÓM: SHORE WBA LOC			TO		
DATE INSTALLED:					814 LOC		
AIC	INSTALLED;	MANUFACTURER	YEAR MANUFACTURED:		SPECIFICATION		
		LIST	LICT		37c/14		
		INSULATION	LIST INSULATION			N.	
		RESISTANCE	RESISTANCE	CABLI		*	
		VALUES TO	VALUES OF	DESIG	NATION:	•	
		GROUND	CROSS	1			
DR	CRT. NOMENCLATURE			REMA	RKS:	· .	
	1WDEDP	INF	INF			·····	
2	N1WDEDP	INF	INF				
3	SP	INF	INF				
4	SP	INF	INF				
5	2WDEDP	INF	INF				
6	N2WDEDP	INF	INF	-	- 12/10 1		
	SP	INF	INF				
_	SP	INF	INF				
	3WDEDP	INF	INF			The state of the s	
	N3WDEDP	INF	INF				
	SP	INF	INF			1	
	SP	INF	INF				
	4WDEDP	INF	INF				
	N4WDEDP	INF	INF				
15		INF	. ÍNF				
	SP	INF	INF				
	SP	INF	inf				
	SP	INF	INF			·	
19		INF	INF				
	SP	INF	INF				
	SP	INF	INF				
	SP	INF	INF				
	SP	INF	INF				
	ŚP	INF	INF	_		<u> </u>	
	SP	INF	INF				
	SP	INF	INF				
	SP	1NF	INF				
	SP	INF	INF				
	SP	INF	INF				
	EMERG 110+	INF	INF				
	EMERG 110+	INF	INF				
	EMERG 110+	INF	INF				
	EMERG 110+	INF	INF			 	
	EMERG 110 NEG	INF	INF				
	EMERG 110 NEG	INF	INF				
	EMERG 110 NEG	INF	INF	-			
	EMERG 110 NEG	INF	INF				
38						· k	
39						**	
40							
41		-					
42 43							
44		-					
44							
46							
47							
48							
49							
50							
51							
52							
53							
54						*	
55							
56							
57							
58							
59							
60							
61							
					- 4/00/0040		
SIG	NATURE		T. SMITH DATE	MEGGERE	D: 4/26/2012		
			D NAOLE	wr.~~	D. AIDEIDO40		
SIC	SNATU		R. NAGLE DATE	VIEGGERE	DICATE CONT.	ICTORS THAT ARE SPARE	
1	NOT	R EACH	WORKING CONDUCTOR.	3, IN	DICATE CONDU	CIURS INAT ARE SPARE	
i	V		ORS 1 MEG OR BELOW IN R				

DIVIS		LOCATION	PROW:		10:
	ATLANTIC	SHORE	LOC WBA		LOC B
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED:		
		THE PROPERTY OF THE PARTY OF TH	TEAR MANOT ACTORED.		
					37C/14
		LIST	LIST		
		INSULATION	INSULATION		
		RESISTANCE	RESISTANCE	CABLE	
		VALUES TO	VALUES OF	DESIG	NATION:
ODD	ODT NOMENO, ATUBE	GROUND	CROSS		
	CRT. NOMENCLATURE			REMAR	RKS:
1	SP	INF	INF		
2	SP	INF	INF		
3	SP	INF	INF	ļ	
4	SP	INF	INF	 	
				ļ	*
5	SP	INF	INF		<u>.</u>
6	SP	INF	INF		
7	SP	INF	INF		
8	SP	INF	INF		
1				ļ	
9	SP	INF	1111		
10	SP	INF	INF		
11	SP	INF	INF	 	
	SP	INF	INF	 	
				ļ	
	SP	INF	INF	<u> </u>	
	SP	INF	INF		
15	SP	INF	INF		
	SP	INF	INF	 	
				 	
17	SP	INF	INF	ļ	
18	SP	INF	. INF		
	SP	INF	INF		No.
20	SP	INF	INF	 	***
				 	
21	SP	INF	INF		·
22	SP	INF	INF		
23	SP	INF	INF		
24	SP	INF	INF	 	
				-	
25	SP	INF	INF		
26	SP	INF	INF		
27	SP	INF	INF		
28	SP	INF	INF	 	·
29	SP	INF	INF .		
30	SP	INF	INF		
31	SP	INF	INF		
32	SP	INF	INF		
				ļ	
33		INF	INF		
34	SP	INF	INF		**
35	SP -	INF	INF		
36	SP	INF	. INF		
37	SP	INF	" INF		
38					•
39	*				
40		<u> </u>			
41		 	1	1	
42					
43			1	1	
44					
45			<u> </u>	+-	
			· · · · · · · · · · · · · · · · · · ·		
46					
47		<u> </u>			
48					
49		†			
50	2			1	
		1	1		
51					
52			9		
53		1		1	
54					
		 			
55					
56			<u> </u>		
57				1	
58	 	<u> </u>			
		-		+	
59					
60					<u> </u>
61					
<u> </u>	I				
SIG	NATURE:	R. NAGLE	DATE MEC	CEDEN	: 7/24/2012
SIGI	MIUNE.	IN INTOLL	DATE MEG	יפבעבט	. 112412VIZ
l	IATUDE.	TOMETH			. 7/24/2012
SIG	NATURE:	T SMITH			: 1124/2012
	NOTES: 1. LIST NOMEN	ICLATURE FOR EACH WO	RKING CONDUCTOR.	3. INDI	CATE CONDUCTORS THAT ARE SPARE.
		(/			
	2. UNDERLINE	WURKING CONDUCTORS	1 MEG OR BELOW IN RED,	4. TW	O SIGNATURES REQUIRED.
1	AND LIST 50	0,000 OR BELOW ON FOR	M C.&S. 2A.		

DIVIS	SION	LOCATION	FROIVI:		10:
MID-	ATLANTIC	SHORE	WBA	1	2W (A ARM)
		MANUFACTURER	YEAR MANUFACTURED:		SPECIFICATION
DATE INSTALLED:		WANUFACTURER	TEAR MANUFACTURED:		
					7c9
		LIST	LIST		
		INSULATION	INSULATION	CABLE	
		RESISTANCE	RESISTANCE		NATION:
		VALUES TO	VALUES OF	וטבטוטו	VATION.
		GROUND	CROSS		·
		GROUND	CROSS	DE1145	N.C.
	CRT. NOMENCLATURE	·		REMAR	(KS:
1	2WADE	INF.	INF.		
2	2WAHAE	INF.	INF.		
				 	
	2WAHBE	INF.	INF.		
4	2WSAE	INF.	INF,		
	2WSBE	INF.	INF.		
			INF.	-	
	ENX1-2W	INF.		<u> </u>	
7	ENX2-2W	INF.	INF.	1	
8					
					
9					
10				l	
11					
12				 	
				ļ	
13					
14			· — —		
15				1	
			<u> </u>	+	
16					
17				I	
18				T	
				 	
19			-	 	
20					<u> </u>
21				1	
22		· · · · · · · · · · · · · · · · · · ·		 	
				 	
23					
24				i	
25			1		
				+	
26					
27				I	
28					
29				1	
				 	
30					
31					
32				 	
32					
33	<u> </u>				
34			*		
35					
1	<u></u>			-	
36					
37	l .				
38					
				-	
39					
40				,	
41					
42	 	 		1	
			.	-	
43				1	
44					
45				1	
	1	 		+	
46		<u> </u>		-	
47					· · · · · · · · · · · · · · · · · · ·
48					
49		1	· · · · · · · · · · · · · · · · · · ·	·	
			<u> </u>	+	
50				-	
51			.	1	
52					
53			1	1	
		<u> </u>		 	
54					
55	<u> </u>			<u> </u>	
56					
57	1				
			 		
58			ļ		<u> </u>
59					
60					
61	.1	<u></u>	<u> </u>		
		F 0 1 1 1 1			0/40/0040
SIG	NATURE:	R. GAVIN	DATE MEG	GERED	: 2/16/2013
SIG	NATURE:	E. TURNER	E MEG	GERED	: 2/16/2013
٣.5					CATE CONDUCTORS THAT ARE SPARE.
1	MOTES: 1. LIST NOME	ICLATURE FOR EXCHANGE	TATALING CONDUCTOR.	J. HILL	OATE CONDUCTORS THAT ARE SPARE.
	a mores or	WORKING CONTRICTORS	A MEG OD BELOW IN DED	/ T1A	O CIGNATUDES DECUDED
			1 MEG OR BELOW IN RED,	4. IVV	O SIGNATURES KEQUIKED.
	AND LIST 50	0,000 OR BELOW ON FOR	M C.&S. 2A.		

DIVISION		LOCATION	FROM:			TO:
MID-ATLANTIC		SHORE	WBA			2W (B ARM)
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED:			SPECIFICATION
		:			5c9	
	·	LIST	LIST	······································		
		INSULATION	INSULATION		<u> </u>	
		RESISTANCE	RESISTANCE		CABLE	
	•	VALUES TO	VALUES OF		DESIG	NATION:
		GROUND	CROSS			
CDB	CRT. NOMENCLATURE	CITCOND	CKOOO		REMAR	RKS:
	2WBDE	3M	3M		7 (1-7017-(1-	aro.
	2WBHAE	3M	3M			
	2WBHBE	3M	3M		 	
4	2WBNE	10M	10M		ļ	
5	SPARE	10M	101/			
6	OF AIRL	TOTAL	1012		ļ	
7						
8						
9						
10						
11						
12						
13				·	l	
14					·	
15						
16					<u> </u>	
17					<u></u>	
18	-				 	
19						·
20						
21					<u> </u>	
22					 -	
23						
24		*.				
25						
26						
27						
28						
29						
30						
31						
32					<u> </u>	
33					<u> </u>	
34					-	
35						
36 37						
38					ļ	
39						
40						
41	<u> </u>				 -	
42			···		 	
43					† 	
44				•		
45					 	
46			1			
47						
48						
49						
50					I	
51						
52						
53						
54					<u> </u>	
55					ļ	
56					ļ	
57					1	
58			 			<u> </u>
59 60			ļ	•••		
61			 			
H-	1		<u></u>	 	1	
SIGI	NATURE:	R. GAVIN		DATE MEGO	GERED:	2/16/2013
SIG	NATURE:	T. ANNUNZIO		DATE MEG	GERED:	2/16/2013
	2. UNDERLINE	WORKING CONDUCTORS	1 MEG OR BELC	OW IN RED,	4. TWO	SIGNATURES REQUIRED.
		0,000 OR BELOW ON FORI				•
F		William Control of the Control of th				

DIVISION		LOCATION	FROM:		10:		
MID-/	ATLANTIC	SHORE	WBA Loc.		3W (A ARM)		
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED:		SPECIFICATION		
					7c9		
ļ <u>.</u>		LICT	LICT	1	709		
		LIST	LIST				
		INSULATION	INSULATION	CABLE			
		RESISTANCE	RESISTANCE		NATION:		
		VALUES TO	VALUES OF	DESIG	NATION.		
	•	GROUND	CROSS	i			
CDR	CRT, NOMENCLATURE			REMAR	RKS:		
	3WADE	55M	55M	1			
				 			
	3WAHE	40M	40M	ļ			
	3WAHBE	INF.	INF.	ļ			
	3WSAE	30M	30M	<u> </u>			
5	3WSBE	30M	30M				
6	ENX1-3W	30M	30M				
	ENX2-3W	30M	30M	1			
8				 			
9			· · · · · · · · · · · · · · · · · · ·	 			
			<u></u>	ļ			
10	<u> </u>						
11							
12							
13							
14							
15	The state of the s			1			
16							
			 		· · · · · · · · · · · · · · · · · · ·		
17			· · · · · · · · · · · · · · · · · · ·	_			
18				1			
19				1	·		
20							
21							
22				·			
23				·			
				 			
24				 			
25				<u> </u>			
26							
27				1			
28				1			
. 29				 			
30				 			
				· 			
31							
32				<u> </u>			
33			<u> </u>				
34							
35							
36							
37				+			
38		-					
39			1				
40				<u> </u>			
41							
42					'		
43							
44				†			
45		 	1	1			
			 	+			
46		 	-	+			
47	-			-			
48		ļ		_			
49							
50							
51							
52			1	 			
53		 	1	+			
				-			
54							
55		1.	1	1			
56							
57							
58							
59	····			1			
60		1		-			
		 		-			
61	l	.l <u></u>	1				
	HATIDE.	D CAVIN	1		- 3/46/3043		
SIGI	NATURE:	R. GAVIN	DATE MEG	GERED	: 2/16/2013		
					0/40/0040		
SIG	NATURE:	E. TURNER		GERED	: 2/16/2013		
					1		
1	0 1010-01		*	,	O CIONATUDEO DECUBED		
1			1 MEG OR BELOW IN RED,	4. TW	O SIGNATURES REQUIRED.		
	AND LIST 500,000 OR BELOW ON FORM C.&S. 2A.						

DIVISION		LOCATION	FROM:		TO:		
MID-ATLANTIC		SHORE	WBA Loc.		3W (B ARM)		
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED	:	SPECIFICATION		
				·	· · · · · · · · · · · · · · · · · · ·		
		LIOT	LIAT	i	5c9 ·		
		LIST	LìST	ŀ			
		INSULATION	INSULATION	CABLE			
		RESISTANCE	RESISTANCE				
		VALUES TO	VALUES OF	DESIG	NATION:		
		GROUND	CROSS				
CDR	CRT. NOMENCLATURE	31(30)13	5,1000	REMAR	oke.		
	3WBDE	30M	30M	INGINIA	wo.		
	3WBHAE	. 30M	30M				
	3WBNE	30M	30M				
4	SPARE	INF.	INF.				
5	SPARE	INF.	INF.				
6							
7							
			· · · · · · · · · · · · · · · · · · ·				
8					· · · · · · · · · · · · · · · · · · ·		
9							
10							
11							
12				 "			
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28		<u> </u>					
29		·					
30	·						
31							
32				<u> </u>			
33							
34							
35							
36							
37							
38							
39							
40				-			
41							
42	<u> </u>						
43							
44	'						
45							
46							
47							
48							
_	<u> </u>						
49							
50							
51							
52							
53							
54			· · · · · · · · · · · · · · · · · · ·				
55	-	 					
_							
56							
57							
58							
59							
60							
61							
	<u> </u>						
SIGN	IATURE:	R. GAVIN	DATE	IECCEPED.	2/16/2013		
2101	IAIUNE.	IX. OAVIIV	DATEN	ILGGERED:	Z1 101Z0 T0		
SIC	IATURE:	T. ANNUNZIO	DATE	MECCEPER.	2/16/2013		
0101			VINC COVERNATOR				
	MOTES: T. LIST NOMEN	CLATURE FOR EACH WOR	TRING COMPRETOR.	3. INDI	CATE CONDUCTORS THAT ARE SPARE.		
	2. UNDERLINE	WORKING CONDUCTORS	1 MEG OR BELOW IN PE	D. 4 T\A	O SIGNATURES REQUIRED.		
				,			
	AND LIST 500,000 OR BELOW ON FORM C.&S. 2A.						

DIVE			FROM:		TO:
MID-	ATLANTIC	SHORE	WBA Loc.		4W (A ARM)
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED:		SPECIFICATION
OATE INGUALED.		MANO! ACTORER	TEAR WANDFACTURED.		
					7c9
		LIST	LIST		
			INSULATION		
				CABLE	·
			RESISTANCE	DESIG	NATION:
			VALUES OF	1	
		GROUND	CROSS		•
CDR	CRT. NOMENCLATURE			REMAR	oke.
	4WADE	35M	3514	TOMA	110.
			35M		
	4WAHAE	35M	35M		
3	4WAHBE	INF.	INF.		
4	4WSAE	30M	30M		
	4WSBE				
		30M	30M		
	ENX1-4W	30M	30M	ŀ	
7	ENX2-4W	30M	30M		
8					· · · · · · · · · · · · · · · · · · ·
9					
10					
11				_	
12					
13					
14					
15				 	
16			·		
17				_l	
18					
19					
			 	-	
20					
21		· .			
22				<u> </u>	
23				 -	
24			•	-	•
25					
26					
27					
28					
29					
30					
31					
32		· ·	-	1	
33					
34					
35				ļ	
36					
37				 	
38					
39					
40				 	
41				 	
42					
43					
44				—	
45				 	
				_	
46					
47					
48				1	
49	· · · · · · · · · · · · · · · · · · ·			 	
50					
51					
52				1	
53					
54					
55					
56				1	
57				 	
				_	
58					
59					
60					
		[+	
61		<u></u>			
SIGN	ATURE:	R. GAVIN	DATE ME	GERED:	2/16/2013
			V// - E		
SIGN	ATURE:	E. TURNER	DATE ME	GERFD.	2/16/2013
		CLATURE FOR EACH WOR			
	I. LIOI NOMEN	SETTIONE FOR EMOIT WOR	TANG CONDUCTOR.	A'-HADIC	ATE CONDUCTORS THAT ARE SPARE.
		WORKING CONDUCTORS 1 0,000 OR BELOW ON FORM		4. TWC	SIGNATURES REQUIRED.
	マスカ しょうしゅんか	JUDU OIL DELONY ON FURN	. U.UU. 4M.		

DIVIS		LOCATION	FROW:		10.
MID-ATLANTIC		SHORE	WBA Loc.		4W (B ARM)
DATE INSTALLED:		MANUFACTURER	YEAR MANUFACTURED:		SPECIFICATION
erije jive i Alekebr		MIX. NOT ON EN			
					5c9
		LIST	LIST		
		INSULATION	INSULATION		
		RESISTANCE	RESISTANCE	CABLE	
				DESIG	NATION:
		VALUES TO	VALUES OF		
		GROUND	CROSS		
CDR	CRT, NOMENCLATURE			REMAR	RKS:
	4WBHAE	30M	30M	 	
					
	4WBNE	INF.	INF.	L	
3	SPARE	INF.	INF.	1	
	SPARE	30M	30M		
	SPARE	INF.	INF.	· · · · ·	
	SPARE	INI .	HAL.	 	
6					
7				ł	
8					
9					
10					
11					
12				ļ	
				·	·
13				ļ	
14				1	
15					
16					
			 	 	
17				1	
18	<u> </u>		<u> </u>		
19					
20	<u> </u>			1	
				· 	
21		,			
22			1	İ	
23					
24		·		1	
			ļ 	 	
25					
26					
27					
_					
28					
29					
30					
31					
32		/			
33	1			_	
34					· · · · · · · · · · · · · · · · · · ·
35					
				+	
36					
37					
38					
	. 	-		_	
39				-	
40	j				
41			<u> </u>		
42				1	
	·	-			
43			-	1	
44		•		_	
45	1				
46				1	
47				1	
				+	
48					
49					
50					
51				1	
		<u> </u>			
52				+	
53		<u> </u>	<u> </u>		
54					
55					
-		 	 		
56			<u> </u>		
57					
58		1			<u></u>
59					
				+	
60					
61					
Sic	NATURE:	R. GAVI	DATE ME	GERE	o: 2/16/2013
15.0		Tr. O/WI			
610	NATURE.	T. ANNUNZIO		CEPE	o: 2/16/2013
SIG	NATURE:				
1	NOTES: 1. LIST NOME	NCLATURE FOR EACH WO	ORKING CONDUCTOR.	s. IND	ICATE CONDUCTORS THAT ARE SPARE.
1	A 11515.	WODUNG CONTRICTOR	A MEG OF BELOWIN DED	4 714	AO SIGNATURES REQUIRED
				4. IV	O SIGNATURES REQUIRED.
1	AND UST 5	00.000 OR BELOW ON FOR	PM C &S 2A		