DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FALSE PROCEED SIGNAL REPORT

DATE 11/4/2002

MAIL TO

Mr. James Drake
Signal & Train Control Specialist
Federal Railroad Administration
901 Locust Street - Suite 464
Kansas City, MO 64106

james.drake@fra.dot.gov

REPORTING CARRIER (railroad & region or division)

Burlington Northern Santa Fe Railway

Powder River Division
Orin Subdivision

REPORTING OFFICER (signature/title)

– AVP Signal

A failure should not be counted more than one time in items 1, 2, 3, and 4; the failure should be classified under the basic system or appliance of which it forms an essential part. E.g.: assume grounds cause a block signal to indicate a false proceed causing corresponding indications of a cab signal system on each train approaching this point, such failure should be included in Item 1. Block System

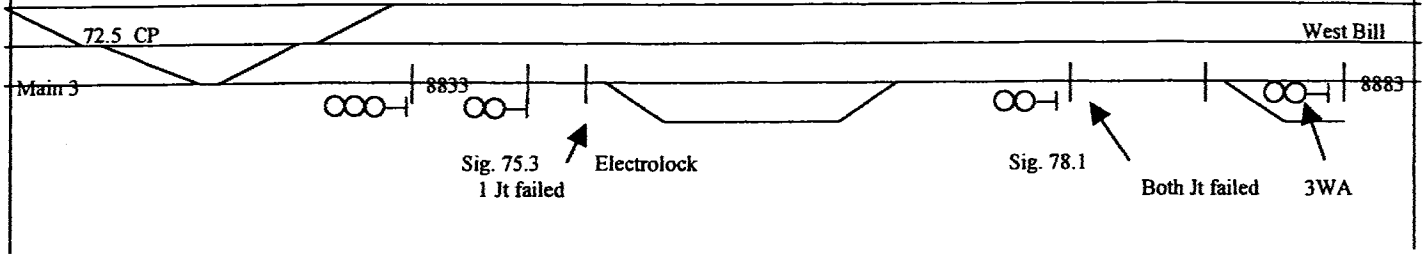
A false proceed failure is a failure of a system device or appliance to indicate or function as intended which results in less restriction than intended.

The following abbreviations may be used in the report

A	-Automatic	EM	-Electromechanical
AB	-Automatic block	EP	-Electropneumatic
ACS	-Automatic cab signal	FP	-False proceed
APB	-Absolute permissive block	MP	-Manual block
ATC	-Automatic train control	M	-Mechanical
ATS	-Automatic train stop	P	-Pneumatic
CL	-Color light	PL	-Position light
CPL-	Color position light	SA	-Semiautomatic
E	-Electric	TC	-Traffic Control

TYPE OF SYSTEM	DATE	LOCOMOTIVE OR TRAIN NUMBER	DEVICE THAT FAILED	LOCATION (City and State)
1 BLOCK SYSTEMS ☐ AB ☐ APB ☒ TC	10/30/02	E-CDJJRM0-05A BNSF 8883	2-Insulated Joints 1-Insulated Joint	MP 78.0 MT3 Bill, Wy. MP 77.8 MT3
2 INTERLOCKING ☐ ☐ ☐ AUTO MATIC				
3 AUTOMATIC SYSTEMS ☐ ATS ☐ ATC ☐ ACS				
4 OTHER (specify)				

E-IOGCDM0-71A BNSF 8833 with 0-118-2584 tons, Engineer , Conductor , westbound MT3 between intermediate 3-75.3 and CP 72.5 with a diverging clear aspect at 72.5 CP. Following train E-CDJJRM0-05A BNSF 8883 with 0-136-3406 tons, Engineer , Conductor , westbound MT3 West Bill CP received an yellow/red aspect on the 3WA West Bill at 18:31:15 for 27 seconds, dropped to a red/red for 9 seconds, changed to green/red for 8 seconds, changed to red/red for 17 seconds, and then to flashing yellow/red for 4min. 25 seconds with the BNSF 8883 taking the OS at West Bill at 18:37:46. The first train BNSF 8833 entered the OS at CP 72.5 at 18:36:49. A track indication came in behind the BNSF 8833 at 18:32:03 and picked up at 18:32:16 . 3WA West Bill should not have upgraded to green/red, it should have displayed flashing yellow/red. Track circuits are Electrocode 4+, with 1 Electrolock at MP 77.8 with VHLC controls at 72.5 and West Bill. During tests and re-enactment, both insulated joints at intermediate 78.1 joints were found to be fully shorted on main track 3, and 1 insulated joint was failing at Electrolock MP 77.8. From this find, the probable cause of the 3WA displaying green/red was due to intermixing of codes from the intermediate signal 78.1 combined with codes from the Electrolock at MP 77.8. Insulated joints were replaced October 31st, unable to duplicate the green/red with shunts around the new insulated joints. Grounds and megging tests revealed no exceptions. Track wires were cross megged to all 3 tracks at intermediate signal 78.1 and no exceptions were taken.



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