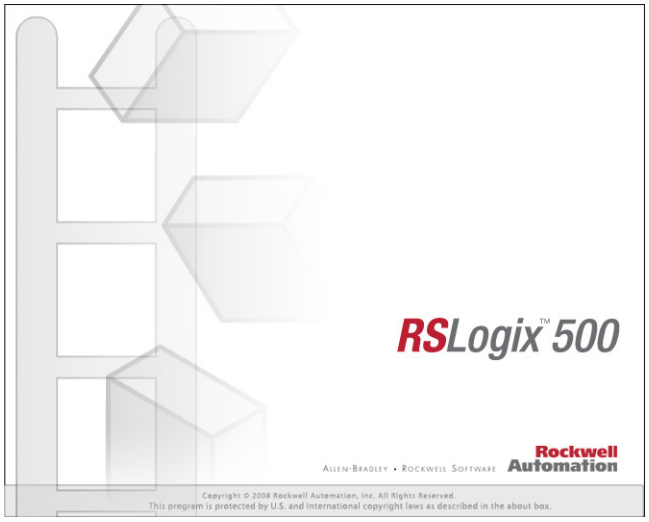
RSLogix Micro Project Report



Processor Information

Processor Type: Bul.1763 MicroLogix 1100 Series B

Processor Name: UNTITLED

Total Memory Used: *

Total Memory Left: *

Program Files: 13

Data Files: 11

Program ID: 0

I/O Configuration

0	Bul.1763	MicroLogix 1100 Series B
1		
2		
3		
4		

Channel Configuration

CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Edit Resource/Owner Timeout: 60
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Passthru Link ID: 1
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Write Protected: No
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Comms Servicing Selection: Yes
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Message Servicing Selection: Yes
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex 1st AWA Append Character: \d
CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex 2nd AWA Append Character: \a

Source ID: 1 (decimal)
Baud: 19200
Parity: NONE
Control Line : No Handshaking
Error Detection: CRC
Embedded Responses: Auto Detect
Duplicate Packet Detect: Yes
ACK Timeout(x20 ms): 50
NAK Retries: 3
ENQ Retries: 3

CHANNEL 1 (SYSTEM) - Driver: Ethernet
CHANNEL 1 (SYSTEM) - Driver: Ethernet Edit Resource/Owner Timeout: 60
CHANNEL 1 (SYSTEM) - Driver: Ethernet Passthru Link ID: 1
CHANNEL 1 (SYSTEM) - Driver: Ethernet Write Protected: No
CHANNEL 1 (SYSTEM) - Driver: Ethernet Comms Servicing Selection: Yes
CHANNEL 1 (SYSTEM) - Driver: Ethernet Message Servicing Selection: Yes

Hardware Address: 00:00:00:00:00:00
IP Address: 0.0.0.0
Subnet Mask: 0.0.0.0
Gateway Address: 0.0.0.0
Msg Connection Timeout (x 1mS): 15000
Msg Reply Timeout (x mS): 3000
Inactivity Timeout (x Min): 30
Bootp Enable: Yes
Dhcp Enable No
SNMP Enable: No
HTTP Enable: Yes
Auto Negotiate Enable: Yes
Port Speed Enable: 10/100 Mbps Full Duplex/Half Duplex
Contact:
Location:

Program File List

Name	Number	Type	Rungs	Debug	Bytes
[SYSTEM]	0	SYS	0	No	0
	1	SYS	0	No	0
	2	LADDER	12	No	102
IO	3	LADDER	13	No	468
ALARMS	4	LADDER	18	No	576
CTRL	5	LADDER	8	No	325
HOA	6	LADDER	23	No	803
SIM	7	LADDER	7	No	476
MODE	8	LADDER	4	No	112
BACKWASH	9	LADDER	16	No	455
LEVEL	10	LADDER	5	No	113
HOURMETER	11	LADDER	8	No	323
REVIEW	12	LADDER	7	No	466

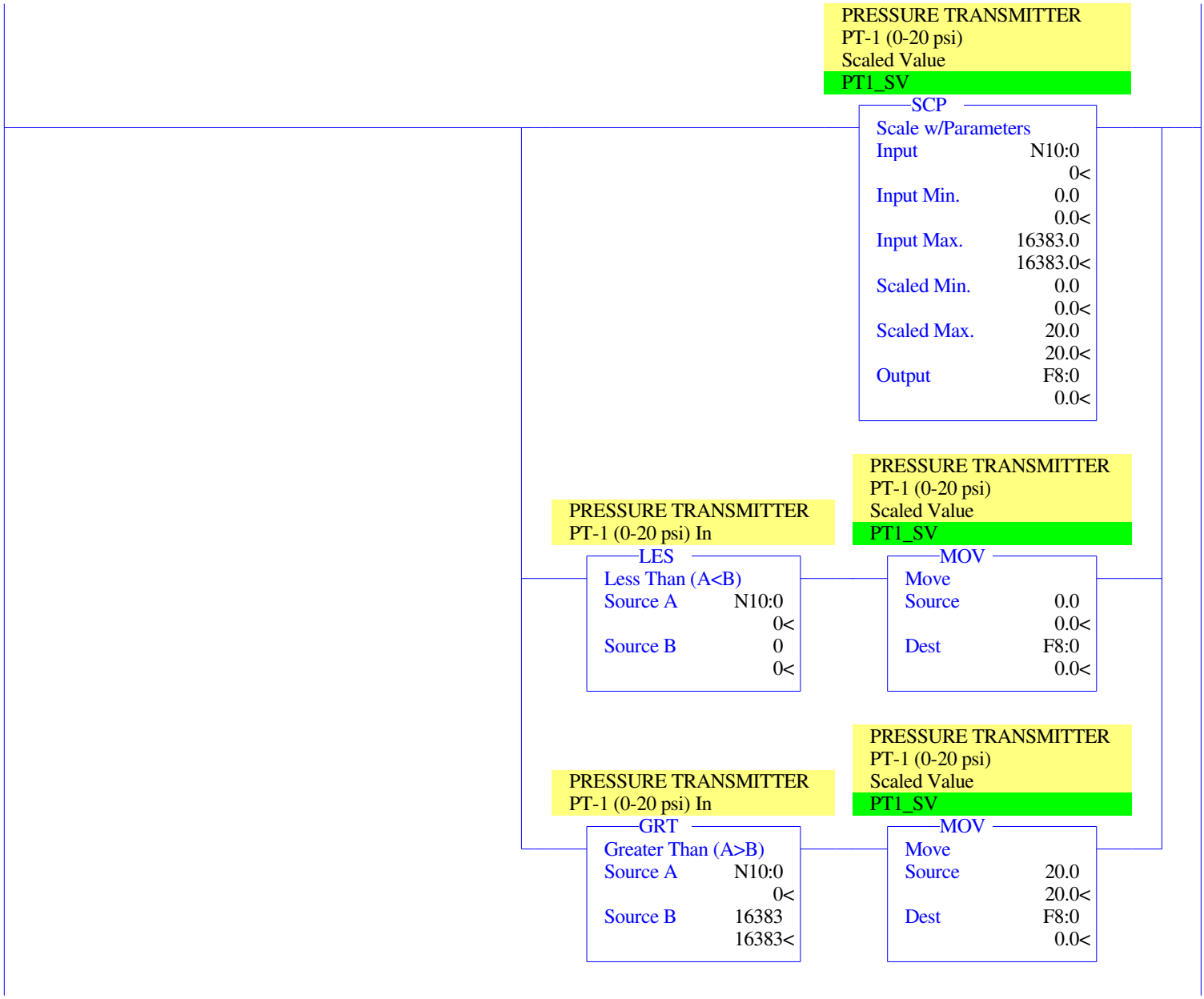
Data File List

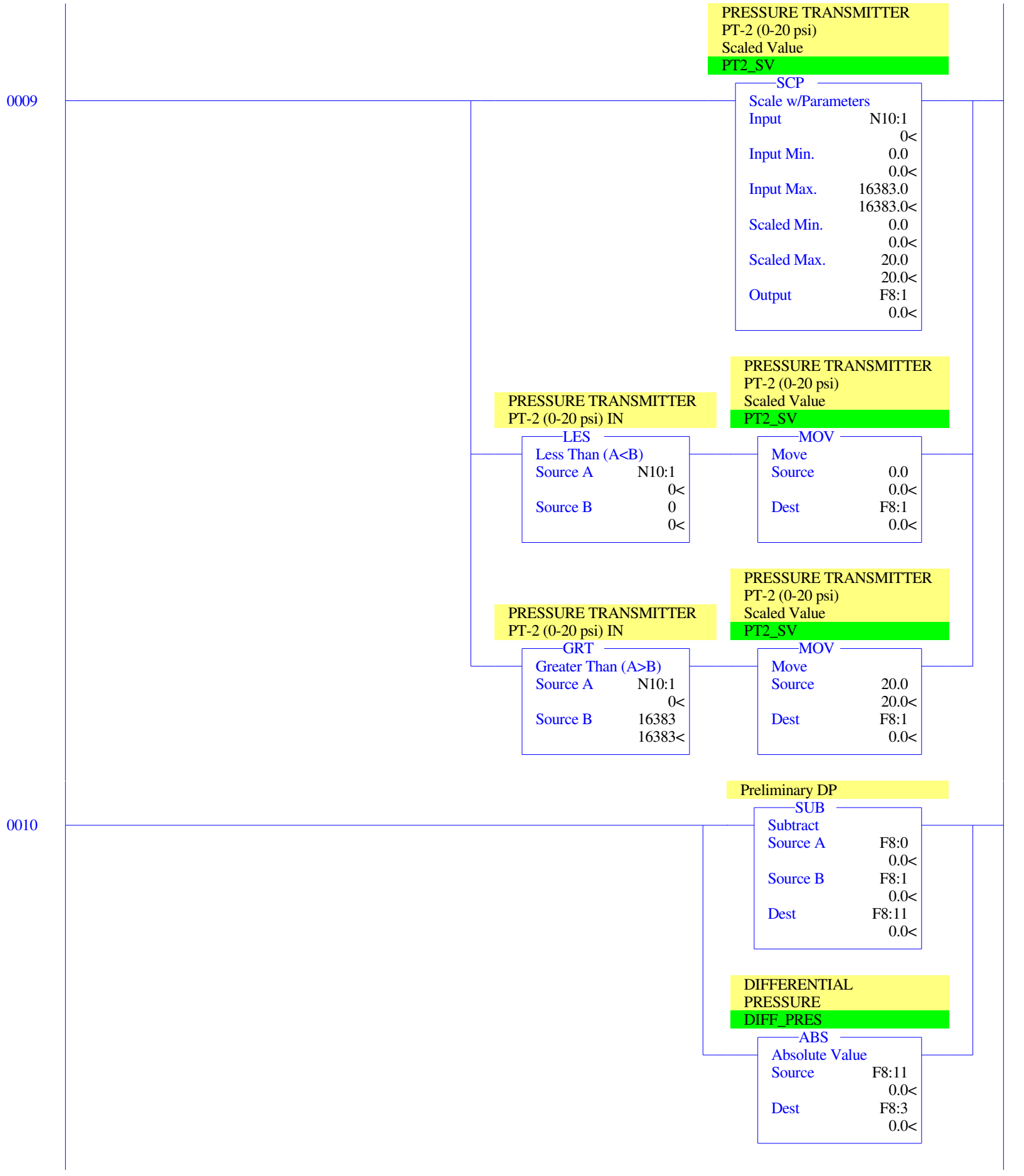
Name	Number	Type	Scope	Debug	Words	Elements	Last
OUTPUT	0	O	Global	No	12	4	O:3
INPUT	1	I	Global	No	18	6	I:5
STATUS	2	S	Global	No	0	66	S:65
BINARY	3	B	Global	No	7	7	B3:6
TIMER	4	T	Global	No	45	15	T4:14
COUNTER	5	C	Global	No	3	1	C5:0
CONTROL	6	R	Global	No	3	1	R6:0
INTEGER	7	N	Global	No	13	13	N7:12
FLOAT	8	F	Global	No	24	12	F8:11
DIGITAL IO	9	B	Global	No	1	1	B9:0
ANALOG IO	10	N	Global	No	3	3	N10:2

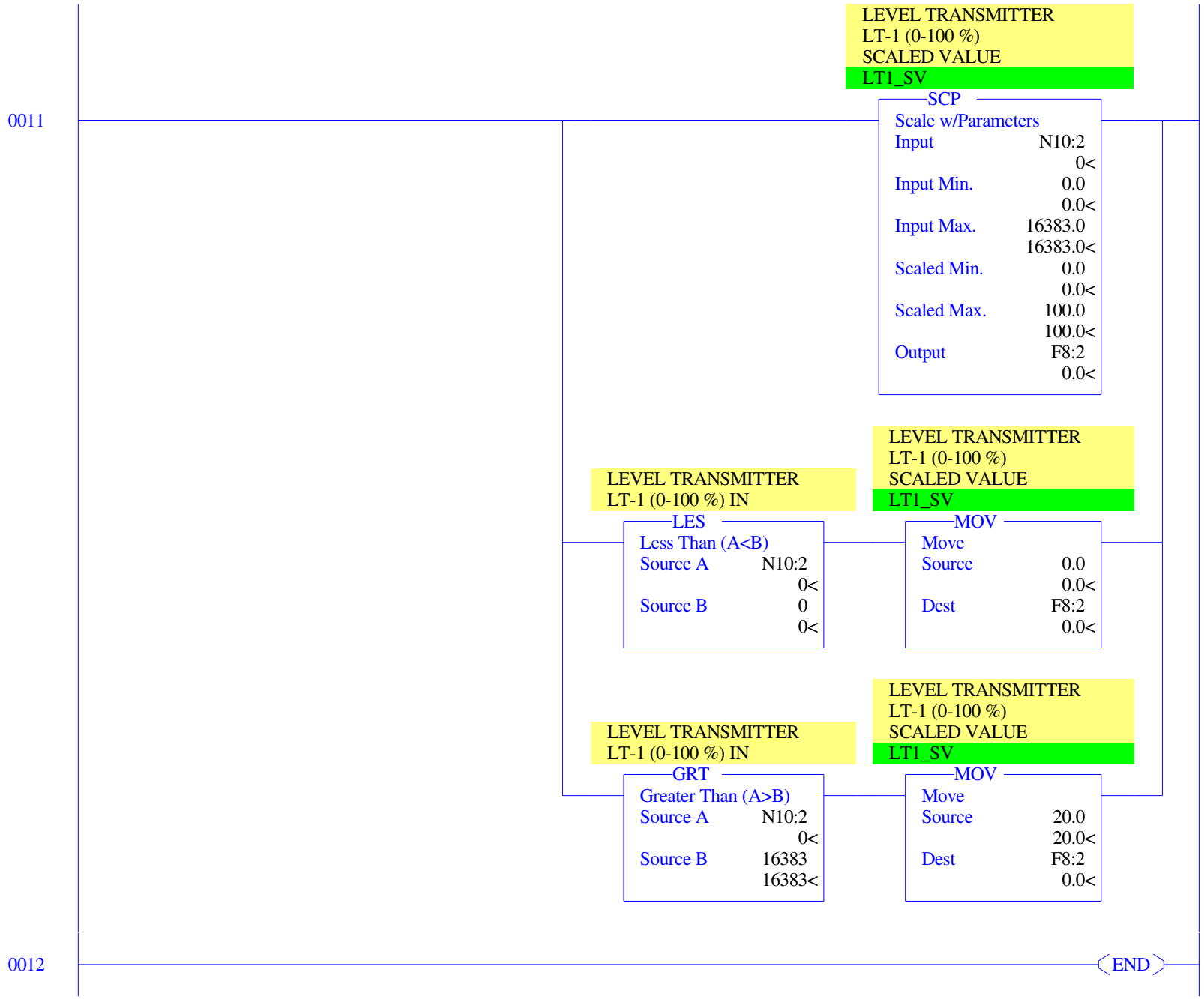

IO
0000
JSR
Jump To Subroutine
SBR File Number U:3
Alarms
0001
JSR
Jump To Subroutine
SBR File Number U:4
Control Logic
0002
JSR
Jump To Subroutine
SBR File Number U:5
HOA
0003
JSR
Jump To Subroutine
SBR File Number U:6
Simulation
0004
JSR
Jump To Subroutine
SBR File Number U:7
System Mode
0005
JSR
Jump To Subroutine
SBR File Number U:8
Backwash Cycle
0006
JSR
Jump To Subroutine
SBR File Number U:9
Level Control
0007
JSR
Jump To Subroutine
SBR File Number U:10
Hourmeter
0008
JSR
Jump To Subroutine
SBR File Number U:11
Review Ladder
0009
JSR
Jump To Subroutine
SBR File Number U:12
Overflow Trap
0010
S:5
U
0
0011
END

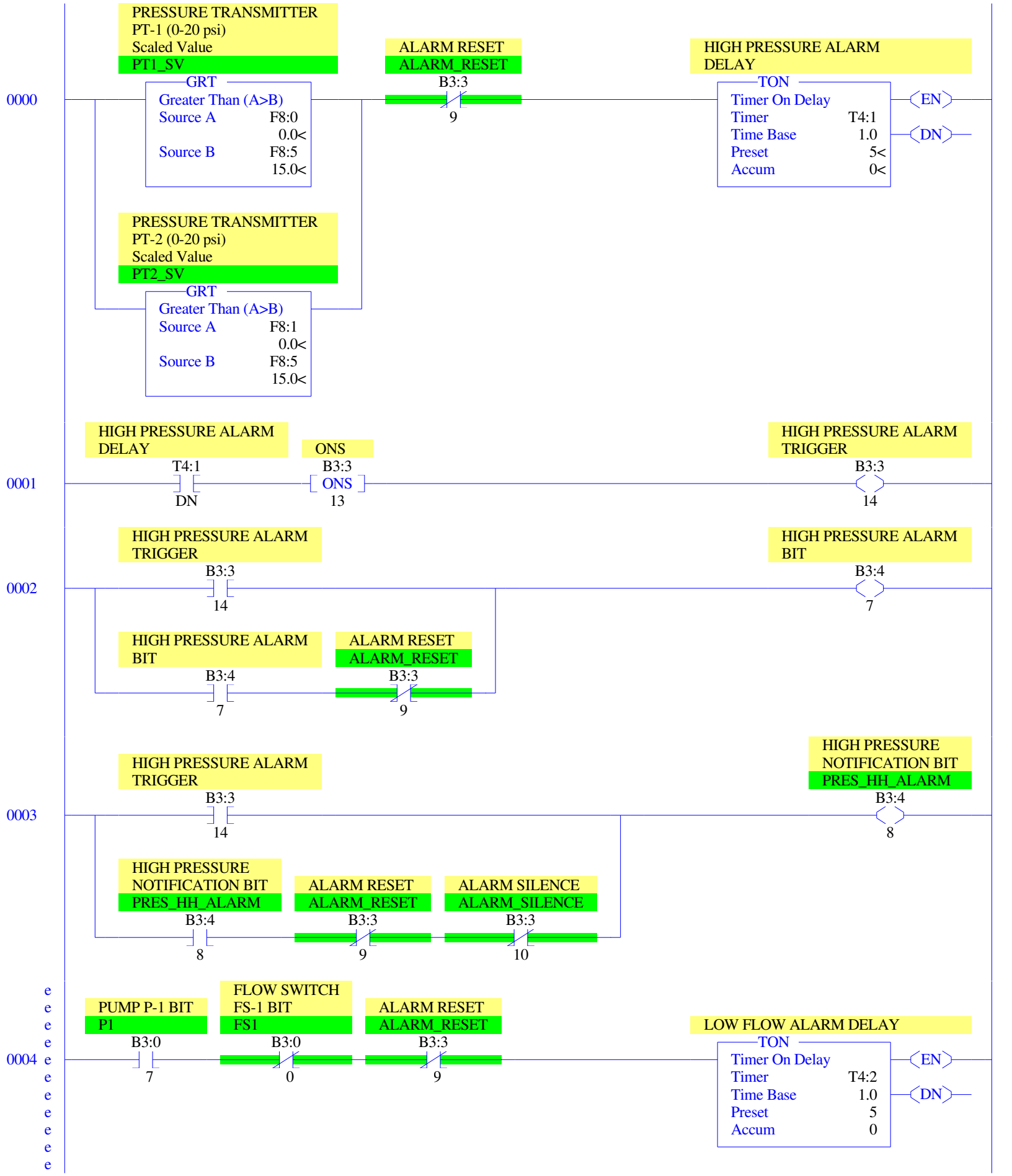

FLOW SWITCH
FS-1
B9:0
0
FLOW SWITCH
FS-1 BIT
FS1
B3:0
0
0000
SOLENOID VALVE
SV-1 BIT
SV1
B3:0
1
Solenoid Valve
SV-1
B9:0
1
0001
SOLENOID VALVE
SV-2 BIT
SV2
B3:0
2
Solenoid Valve
SV-2
B9:0
2
0002
SOLENOID VALVE
SV-3 BIT
SV3
B3:0
3
Solenoid Valve
SV-3
B9:0
3
0003
SOLENOID VALVE
SV-4 BIT
SV4
B3:0
4
Solenoid Valve
SV-4
B9:0
4
0004
SOLENOID VALVE
SV-5 BIT
SV5
B3:0
5
Solenoid Valve
SV-5
B9:0
5
0005
SOLENOID VALVE
SV-6 BIT
SV6
B3:0
6
Solenoid Valve
SV-6
B9:0
6
0006
PUMP P-1 BIT
P1
B3:0
7
Pump P-1
B9:0
7
0007

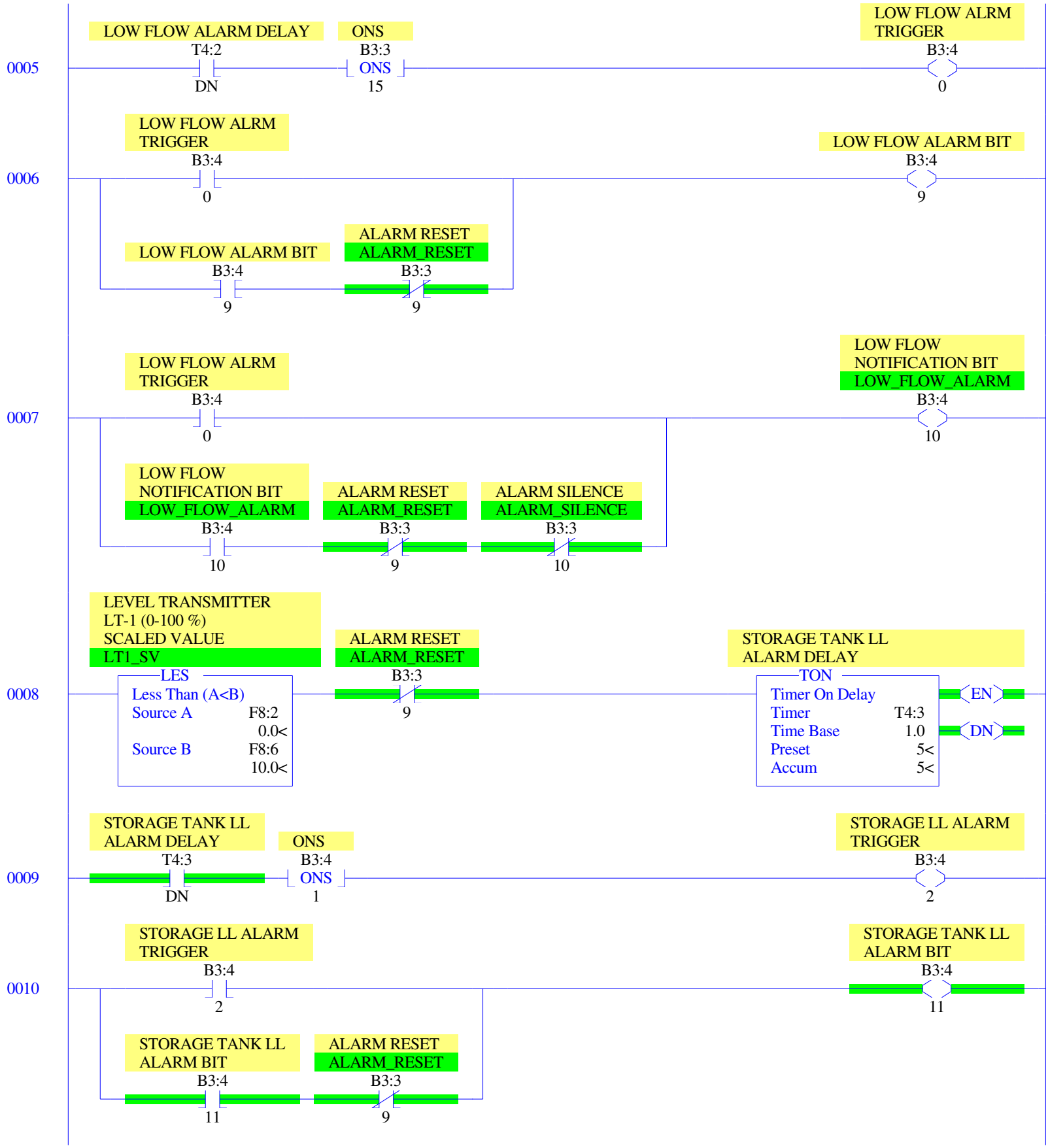
0008

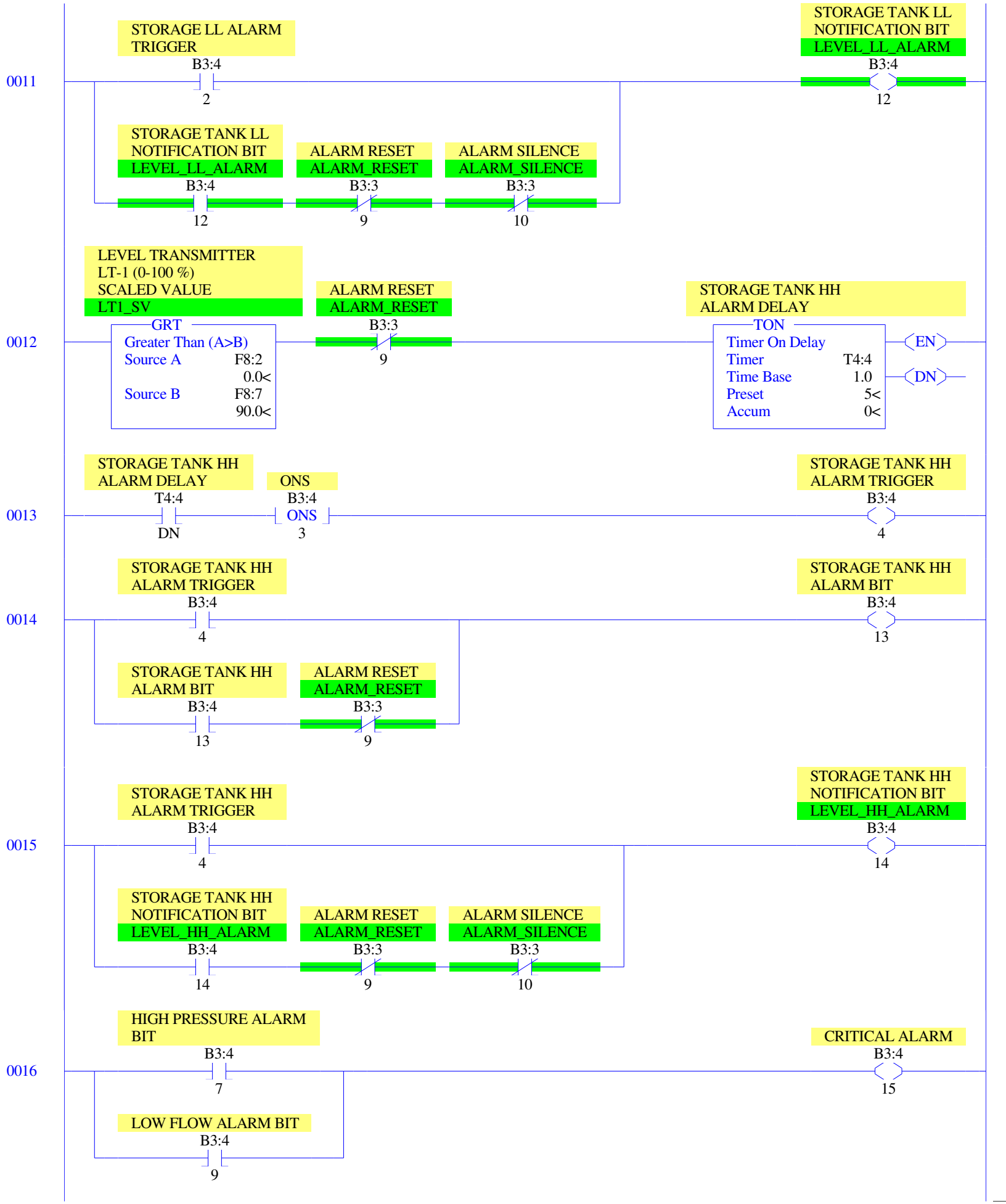

PRESSURE TRANSMITTER
PT-1 (0-20 psi)
Scaled Value
PT1_SV
SCP
Scale w/Parameters
Input N10:0
0<
Input Min. 0.0
0.0<
Input Max. 16383.0
16383.0<
Scaled Min. 0.0
0.0<
Scaled Max. 20.0
20.0<
Output F8:0
0.0<
PRESSURE TRANSMITTER
PT-1 (0-20 psi) In
LES
Less Than (A<B)
Source A N10:0
0<
Source B 0
0<
PRESSURE TRANSMITTER
PT-1 (0-20 psi)
Scaled Value
PT1_SV
MOV
Move
Source 0.0
0.0<
Dest F8:0
0.0<
PRESSURE TRANSMITTER
PT-1 (0-20 psi) In
GRT
Greater Than (A>B)
Source A N10:0
0<
Source B 16383
16383<
PRESSURE TRANSMITTER
PT-1 (0-20 psi)
Scaled Value
PT1_SV
MOV
Move
Source 20.0
20.0<
Dest F8:0
0.0<


PRESSURE TRANSMITTER
PT-2 (0-20 psi)
Scaled Value
PT2_SV
0009
SCP
Scale w/Parameters
Input N10:1
0<
Input Min. 0.0
0.0<
Input Max. 16383.0
16383.0<
Scaled Min. 0.0
0.0<
Scaled Max. 20.0
20.0<
Output F8:1
0.0<
PRESSURE TRANSMITTER
PT-2 (0-20 psi) IN
LES
Less Than (A<B)
Source A N10:1
0<
Source B 0
0<
PRESSURE TRANSMITTER
PT-2 (0-20 psi)
Scaled Value
PT2_SV
MOV
Move
Source 0.0
0.0<
Dest F8:1
0.0<
PRESSURE TRANSMITTER
PT-2 (0-20 psi) IN
GRT
Greater Than (A>B)
Source A N10:1
0<
Source B 16383
16383<
PRESSURE TRANSMITTER
PT-2 (0-20 psi)
Scaled Value
PT2_SV
MOV
Move
Source 20.0
20.0<
Dest F8:1
0.0<
0010
Preliminary DP
SUB
Subtract
Source A F8:0
0.0<
Source B F8:1
0.0<
Dest F8:11
0.0<
DIFFERENTIAL
PRESSURE
DIFF_PRES
ABS
Absolute Value
Source F8:11
0.0<
Dest F8:3
0.0<

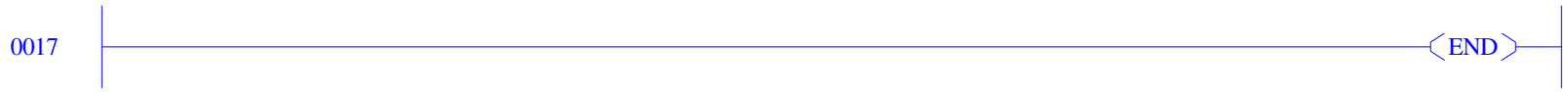

0011
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
SCP
Scale w/Parameters
Input N10:2
0<
Input Min. 0.0
0.0<
Input Max. 16383.0
16383.0<
Scaled Min. 0.0
0.0<
Scaled Max. 100.0
100.0<
Output F8:2
0.0<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
LES
Less Than (A<B)
Source A N10:2
0<
Source B 0
0<
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
MOV
Move
Source 0.0
0.0<
Dest F8:2
0.0<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
GRT
Greater Than (A>B)
Source A N10:2
0<
Source B 16383
16383<
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
MOV
Move
Source 20.0
20.0<
Dest F8:2
0.0<
0012
END

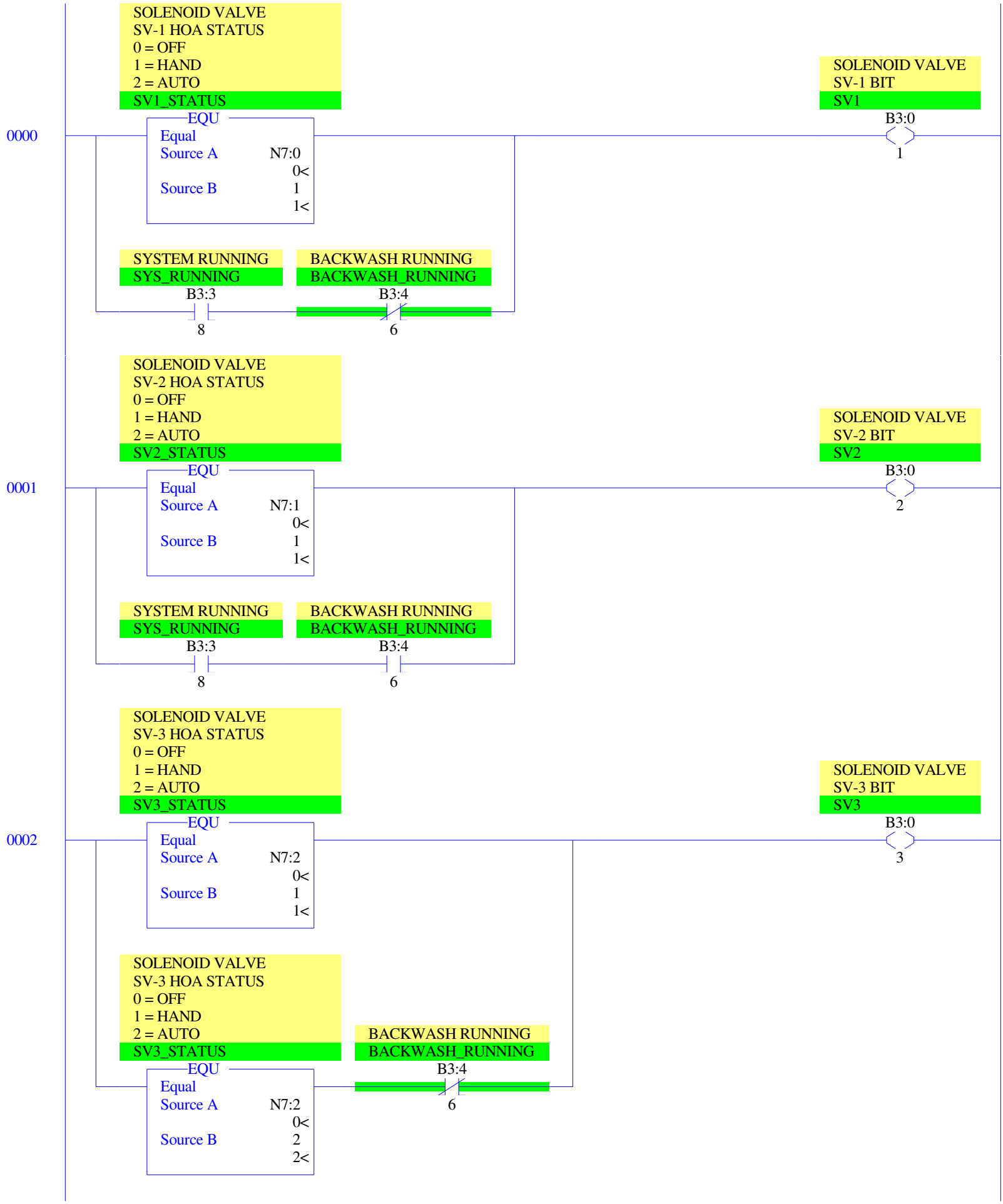

PRESSURE TRANSMITTER
PT-1 (0-20 psi)
Scaled Value
PT1_SV
GRT
Greater Than (A>B)
Source A F8:0 0.0<
Source B F8:5 15.0<
ALARM RESET
ALARM_RESET
B3:3
9
HIGH PRESSURE ALARM
DELAY
TON
Timer On Delay
Timer T4:1
Time Base 1.0
Preset 5<
Accum 0<
EN
DN
0000
PRESSURE TRANSMITTER
PT-2 (0-20 psi)
Scaled Value
PT2_SV
GRT
Greater Than (A>B)
Source A F8:1 0.0<
Source B F8:5 15.0<
HIGH PRESSURE ALARM
DELAY
T4:1
DN
ONS
B3:3
ONS
13
HIGH PRESSURE ALARM
TRIGGER
B3:3
14
0001
HIGH PRESSURE ALARM
TRIGGER
B3:3
14
HIGH PRESSURE ALARM
BIT
B3:4
7
0002
HIGH PRESSURE ALARM
BIT
B3:4
7
ALARM RESET
ALARM_RESET
B3:3
9
HIGH PRESSURE ALARM
TRIGGER
B3:3
14
HIGH PRESSURE
NOTIFICATION BIT
PRES_HH_ALARM
B3:4
8
0003
HIGH PRESSURE
NOTIFICATION BIT
PRES_HH_ALARM
B3:4
8
ALARM RESET
ALARM_RESET
B3:3
9
ALARM SILENCE
ALARM_SILENCE
B3:3
10
PUMP P-1 BIT
P1
B3:0
7
FLOW SWITCH
FS-1 BIT
FS1
B3:0
0
ALARM RESET
ALARM_RESET
B3:3
9
LOW FLOW ALARM DELAY
TON
Timer On Delay
Timer T4:2
Time Base 1.0
Preset 5
Accum 0
EN
DN
0004

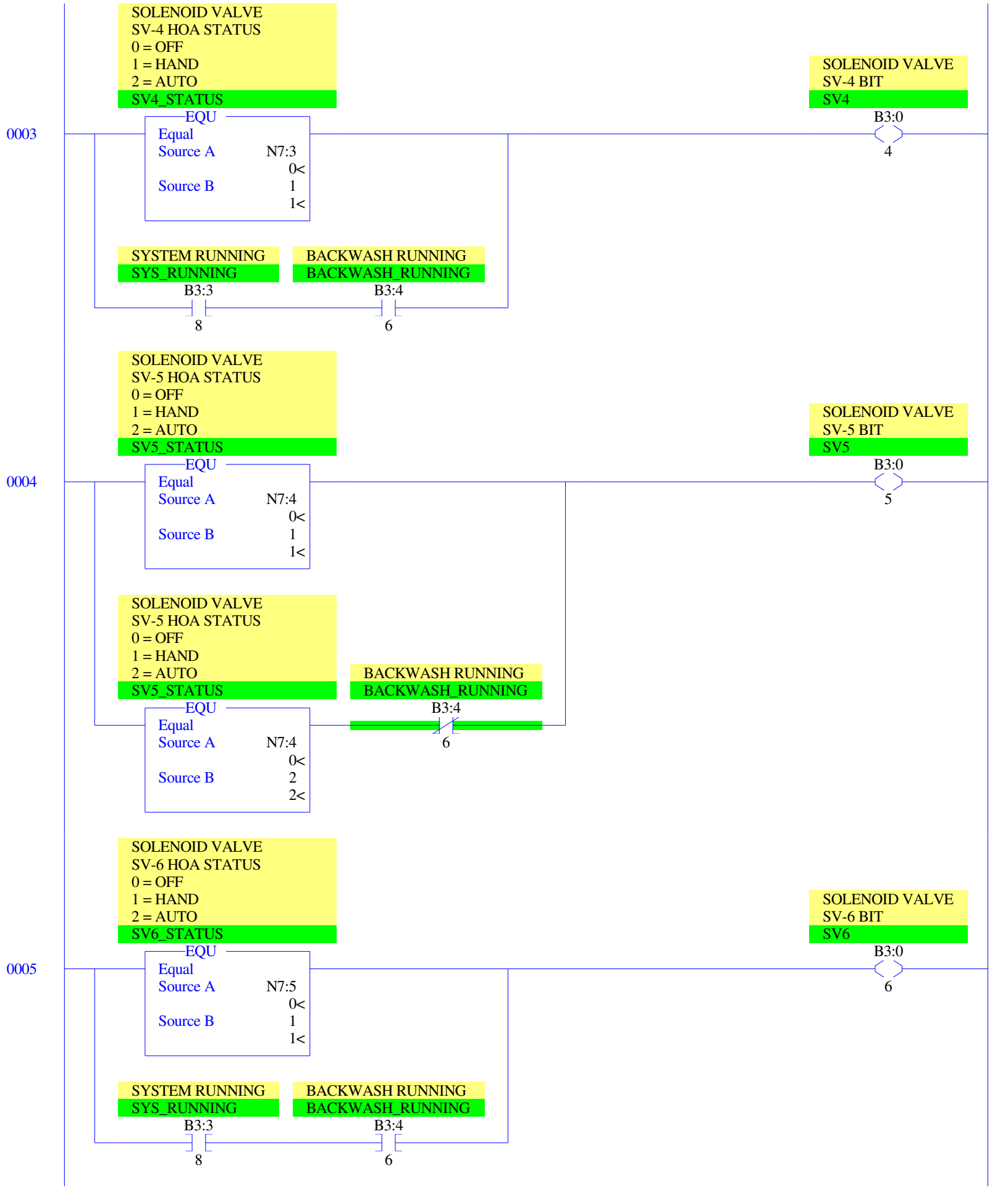

0005
LOW FLOW ALARM DELAY
T4:2
DN
ONS
B3:3
ONS
15
LOW FLOW ALRM TRIGGER
B3:4
0
0006
LOW FLOW ALRM TRIGGER
B3:4
0
LOW FLOW ALARM BIT
B3:4
9
LOW FLOW ALARM BIT
B3:4
9
ALARM RESET
ALARM_RESET
B3:3
9
0007
LOW FLOW ALRM TRIGGER
B3:4
0
LOW FLOW NOTIFICATION BIT
LOW_FLOW_ALARM
B3:4
10
LOW FLOW NOTIFICATION BIT
LOW_FLOW_ALARM
B3:4
10
ALARM RESET
ALARM_RESET
B3:3
9
ALARM SILENCE
ALARM_SILENCE
B3:3
10
0008
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
LES
Less Than (A<B)
Source A F8:2 0.0<
Source B F8:6 10.0<
ALARM RESET
ALARM_RESET
B3:3
9
STORAGE TANK LL ALARM DELAY
TON
Timer On Delay
Timer T4:3
Time Base 1.0
Preset 5<
Accum 5<
EN
DN
0009
STORAGE TANK LL ALARM DELAY
T4:3
DN
ONS
B3:4
ONS
1
STORAGE LL ALARM TRIGGER
B3:4
2
0010
STORAGE LL ALARM TRIGGER
B3:4
2
STORAGE TANK LL ALARM BIT
B3:4
11
STORAGE TANK LL ALARM BIT
B3:4
11
ALARM RESET
ALARM_RESET
B3:3
9

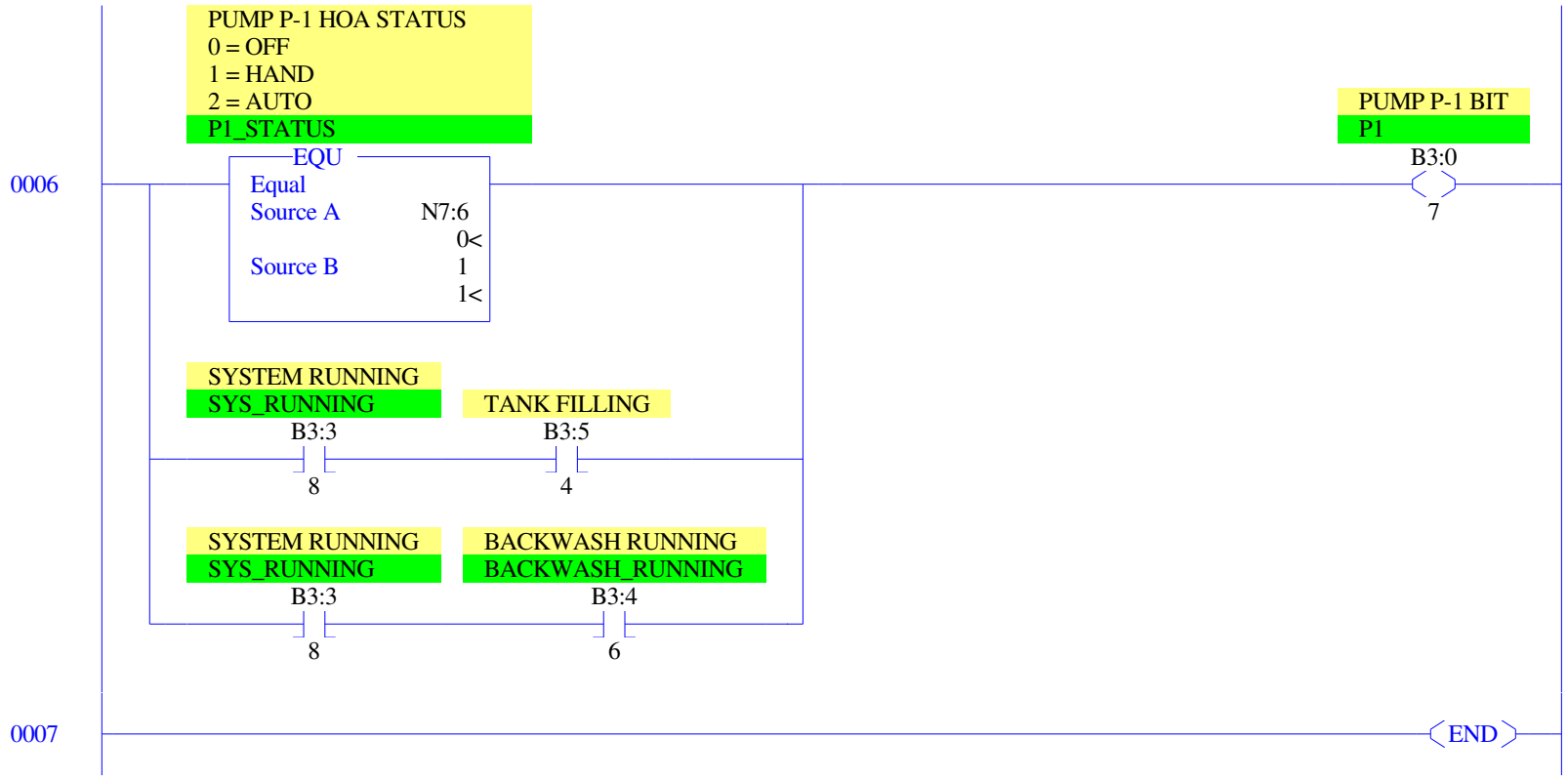

0011
STORAGE LL ALARM TRIGGER
B3:4
2
STORAGE TANK LL NOTIFICATION BIT
LEVEL_LL_ALARM
B3:4
12
STORAGE TANK LL NOTIFICATION BIT
LEVEL_LL_ALARM
B3:4
12
ALARM RESET
ALARM_RESET
B3:3
9
ALARM SILENCE
ALARM_SILENCE
B3:3
10
0012
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
GRT
Greater Than (A>B)
Source A F8:2 0.0<
Source B F8:7 90.0<
ALARM RESET
ALARM_RESET
B3:3
9
STORAGE TANK HH ALARM DELAY
TON
Timer On Delay
Timer T4:4
Time Base 1.0
Preset 5<
Accum 0<
EN
DN
0013
STORAGE TANK HH ALARM DELAY
T4:4
DN
ONS
B3:4
ONS
3
STORAGE TANK HH ALARM TRIGGER
B3:4
4
0014
STORAGE TANK HH ALARM TRIGGER
B3:4
4
STORAGE TANK HH ALARM BIT
B3:4
13
STORAGE TANK HH ALARM BIT
B3:4
13
ALARM RESET
ALARM_RESET
B3:3
9
0015
STORAGE TANK HH ALARM TRIGGER
B3:4
4
STORAGE TANK HH NOTIFICATION BIT
LEVEL_HH_ALARM
B3:4
14
STORAGE TANK HH NOTIFICATION BIT
LEVEL_HH_ALARM
B3:4
14
ALARM RESET
ALARM_RESET
B3:3
9
ALARM SILENCE
ALARM_SILENCE
B3:3
10
0016
HIGH PRESSURE ALARM BIT
B3:4
7
LOW FLOW ALARM BIT
B3:4
9
CRITICAL ALARM
B3:4
15

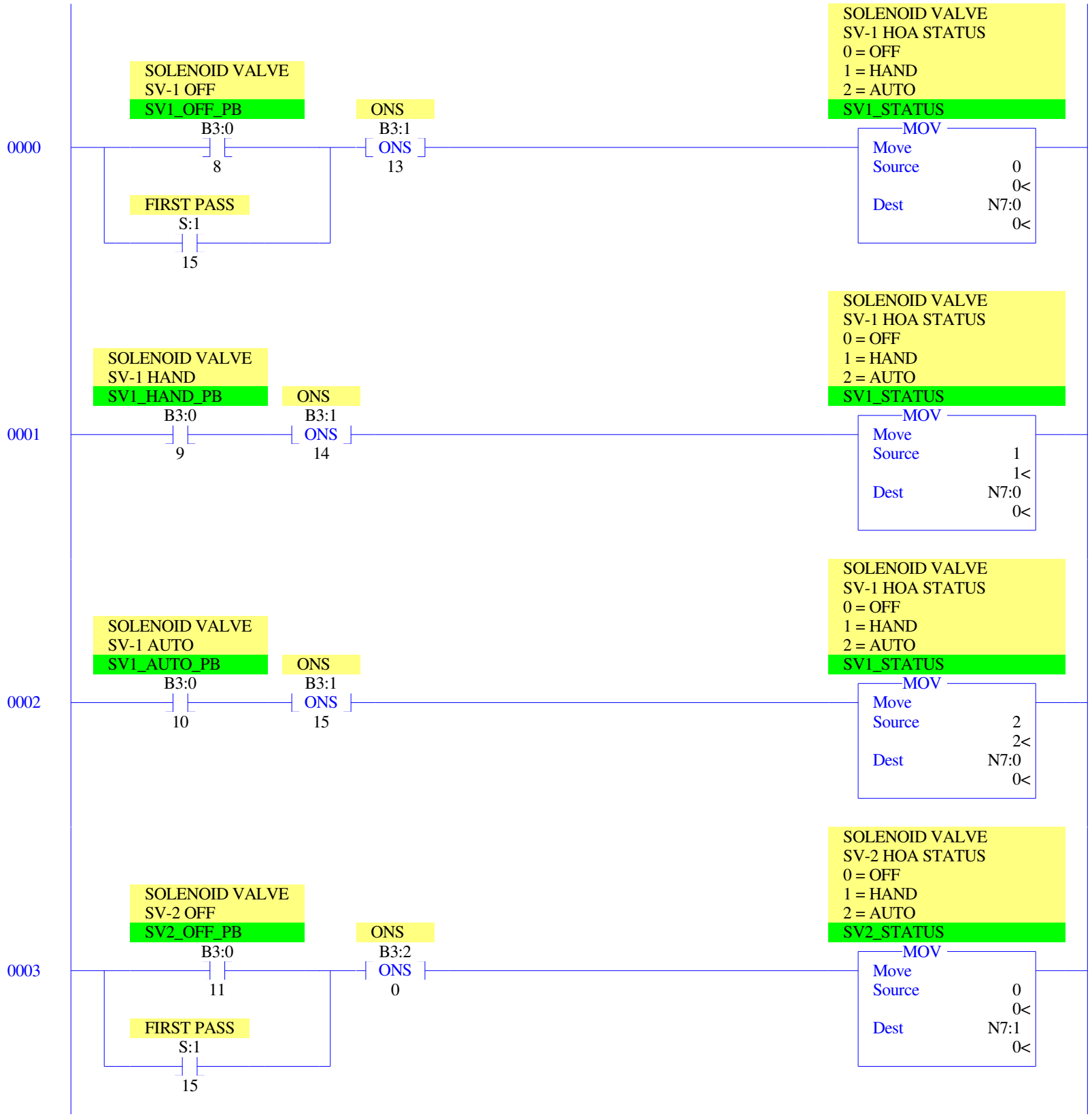
LAD 4 - ALARMS --- Total Rungs in File = 18

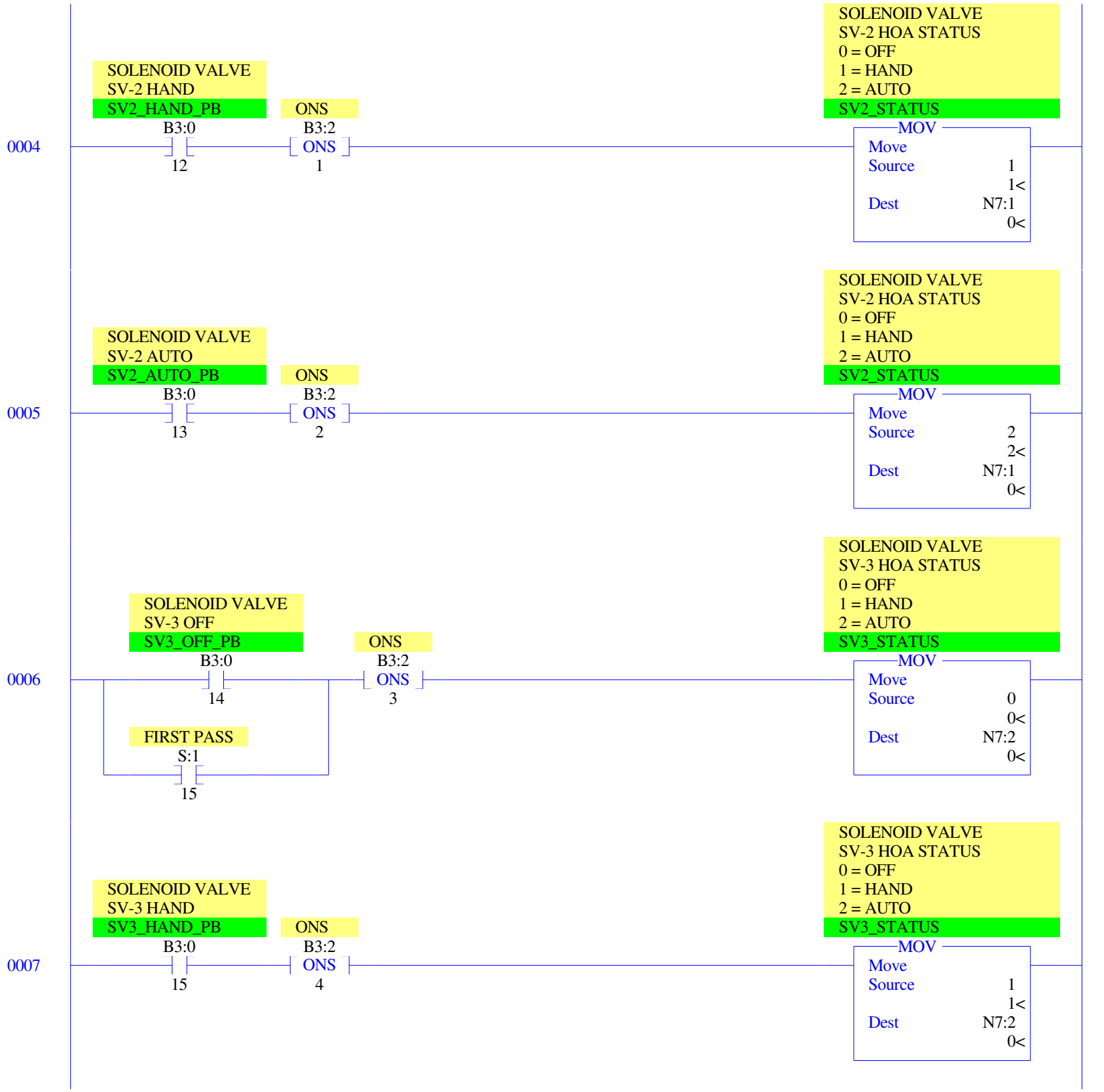


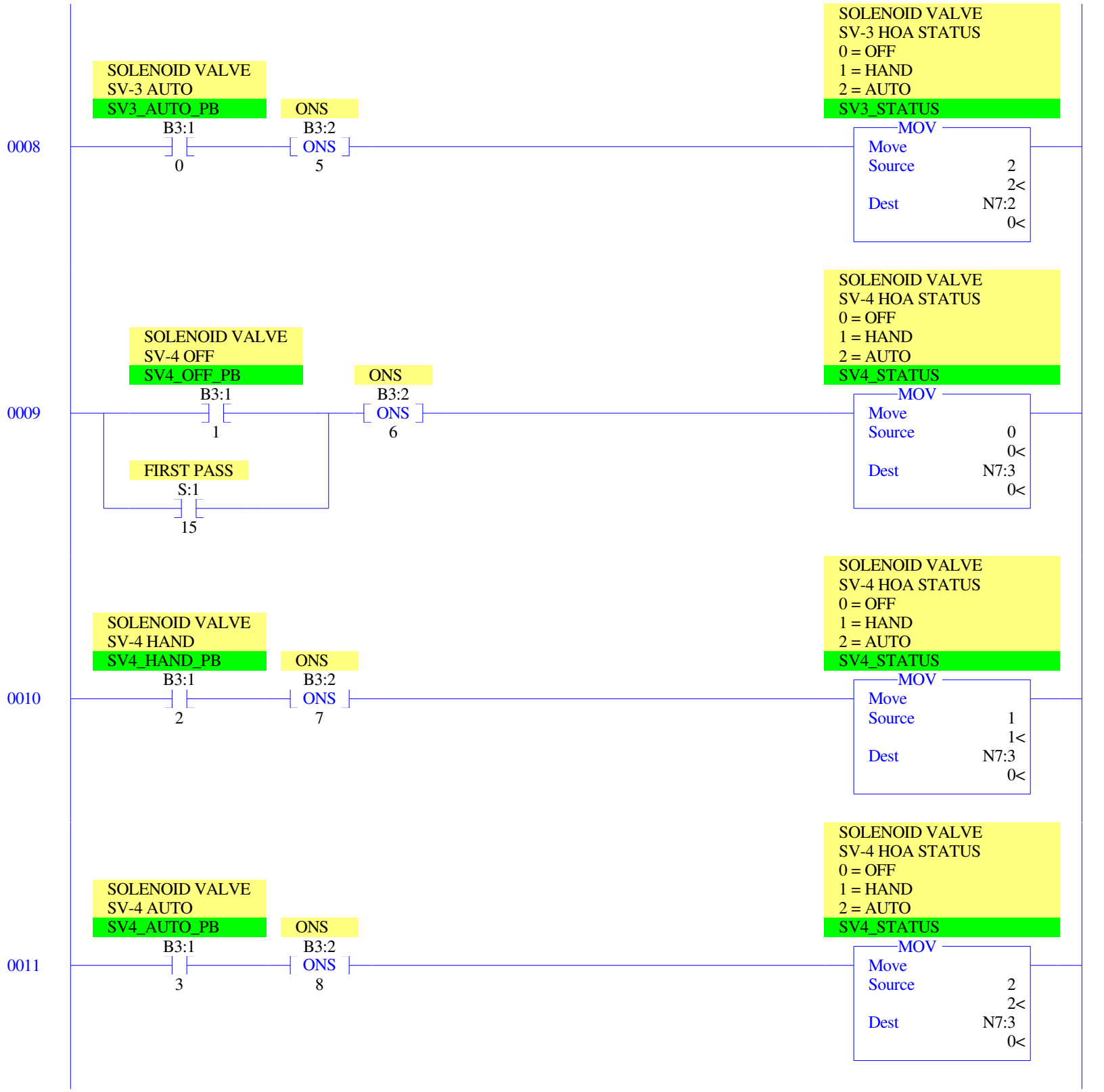

SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
EQU
Equal
Source A N7:0
0<
Source B 1
1<
SOLENOID VALVE
SV-1 BIT
SV1
B3:0
1
0000
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
EQU
Equal
Source A N7:1
0<
Source B 1
1<
SOLENOID VALVE
SV-2 BIT
SV2
B3:0
2
0001
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
EQU
Equal
Source A N7:2
0<
Source B 1
1<
SOLENOID VALVE
SV-3 BIT
SV3
B3:0
3
0002
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
EQU
Equal
Source A N7:2
0<
Source B 2
2<
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6

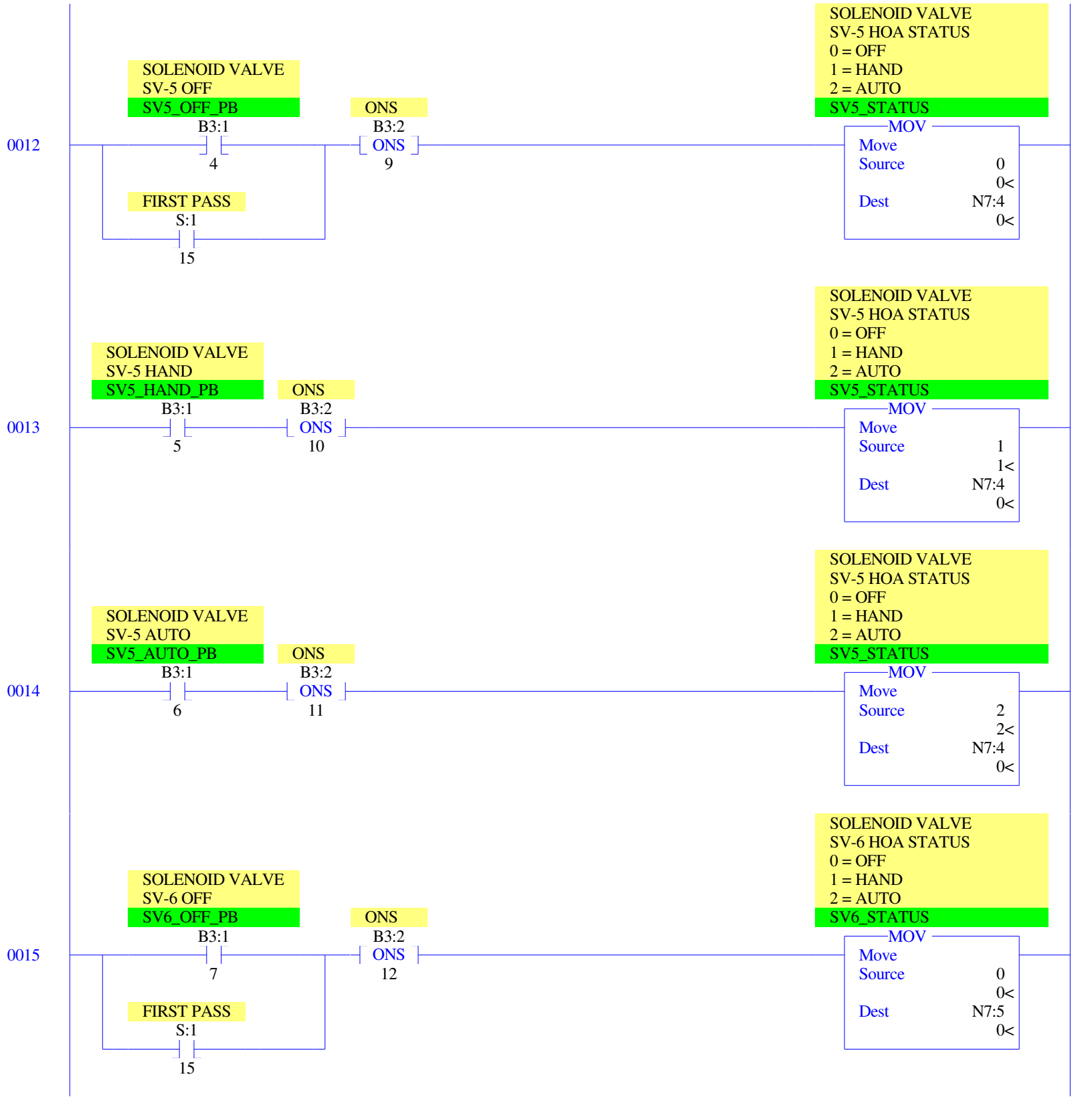

SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
EQU
Equal
Source A N7:3
Source B 0<
1
1<
SOLENOID VALVE
SV-4 BIT
SV4
B3:0
4
0003
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
EQU
Equal
Source A N7:4
Source B 0<
1
1<
SOLENOID VALVE
SV-5 BIT
SV5
B3:0
5
0004
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
EQU
Equal
Source A N7:4
Source B 0<
2
2<
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
EQU
Equal
Source A N7:5
Source B 0<
1
1<
SOLENOID VALVE
SV-6 BIT
SV6
B3:0
6
0005
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6

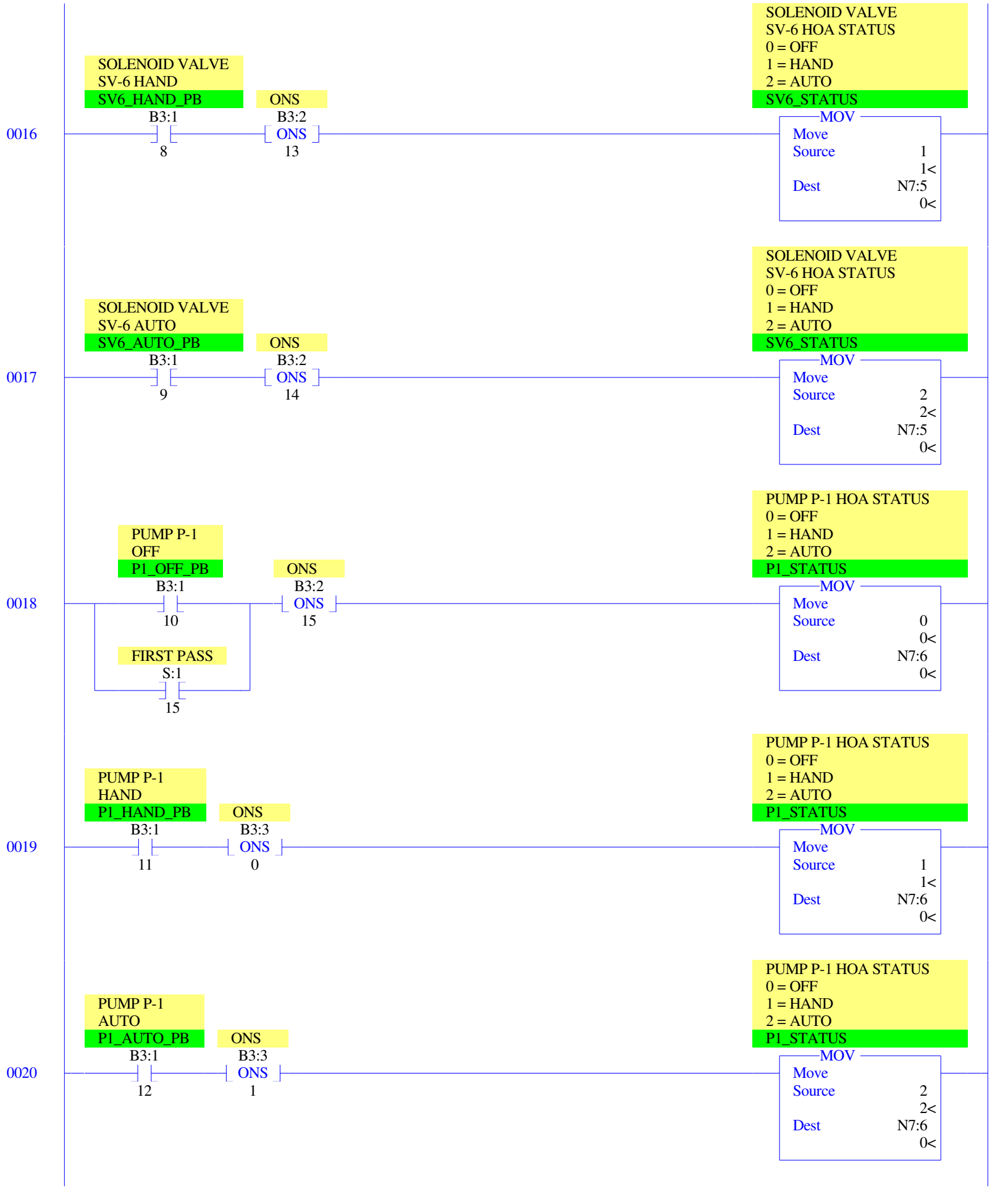

PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
EQU
Equal
Source A
N7:6
0<
Source B
1
1<
PUMP P-1 BIT
P1
B3:0
7
0006
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
TANK FILLING
B3:5
4
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
0007
END

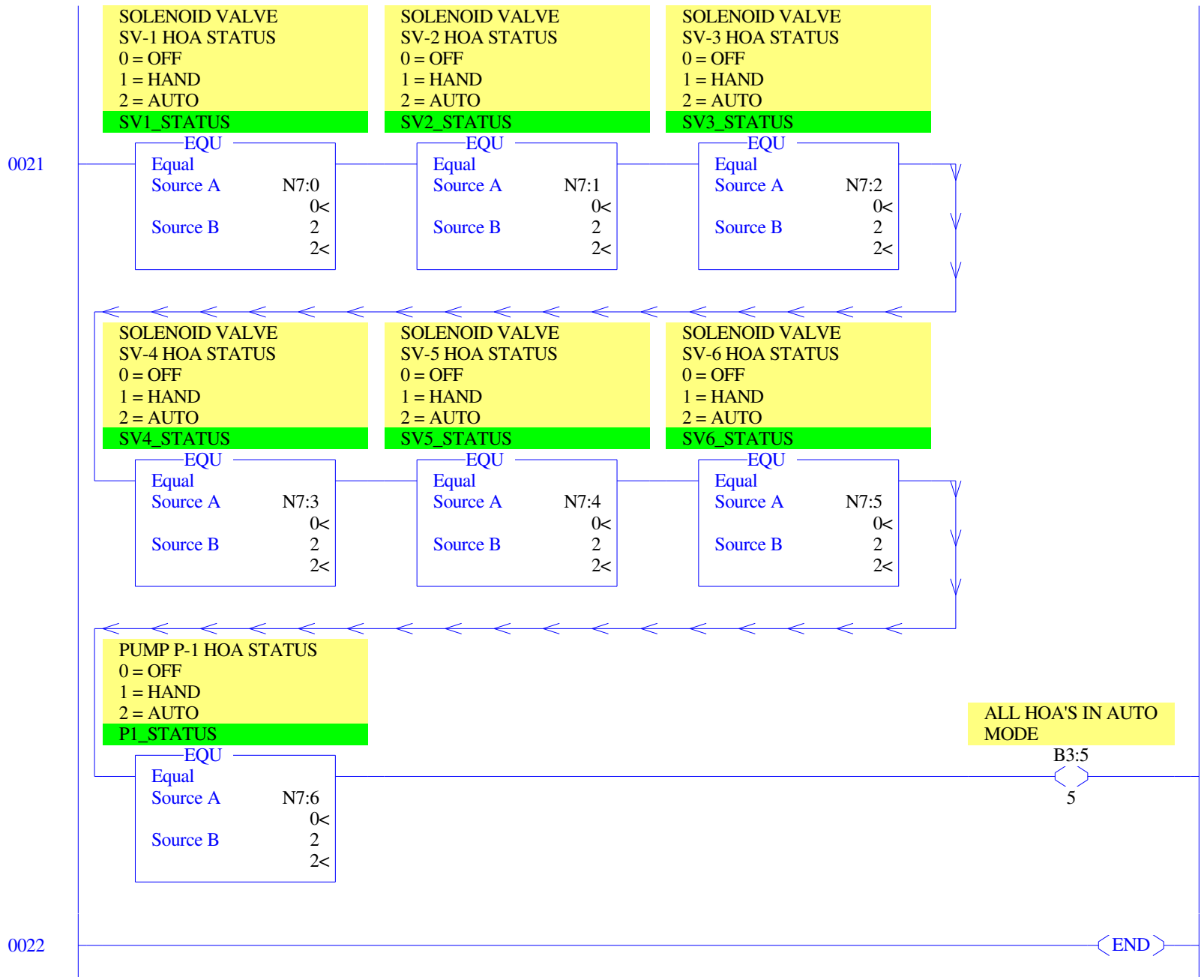

0000
SOLENOID VALVE
SV-1 OFF
SV1_OFF_PB
B3:0
8
ONS
B3:1
ONS
13
FIRST PASS
S:1
15
SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
MOV
Move
Source 0
0<
Dest N7:0
0<
0001
SOLENOID VALVE
SV-1 HAND
SV1_HAND_PB
B3:0
9
ONS
B3:1
ONS
14
SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
MOV
Move
Source 1
1<
Dest N7:0
0<
0002
SOLENOID VALVE
SV-1 AUTO
SV1_AUTO_PB
B3:0
10
ONS
B3:1
ONS
15
SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
MOV
Move
Source 2
2<
Dest N7:0
0<
0003
SOLENOID VALVE
SV-2 OFF
SV2_OFF_PB
B3:0
11
ONS
B3:2
ONS
0
FIRST PASS
S:1
15
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
MOV
Move
Source 0
0<
Dest N7:1
0<


0004
SOLENOID VALVE
SV-2 HAND
SV2_HAND_PB
B3:0
12
ONS
B3:2
ONS
1
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
MOV
Move
Source
1
1<
Dest
N7:1
0<
0005
SOLENOID VALVE
SV-2 AUTO
SV2_AUTO_PB
B3:0
13
ONS
B3:2
ONS
2
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
MOV
Move
Source
2
2<
Dest
N7:1
0<
0006
SOLENOID VALVE
SV-3 OFF
SV3_OFF_PB
B3:0
14
ONS
B3:2
ONS
3
FIRST PASS
S:1
15
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
MOV
Move
Source
0
0<
Dest
N7:2
0<
0007
SOLENOID VALVE
SV-3 HAND
SV3_HAND_PB
B3:0
15
ONS
B3:2
ONS
4
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
MOV
Move
Source
1
1<
Dest
N7:2
0<

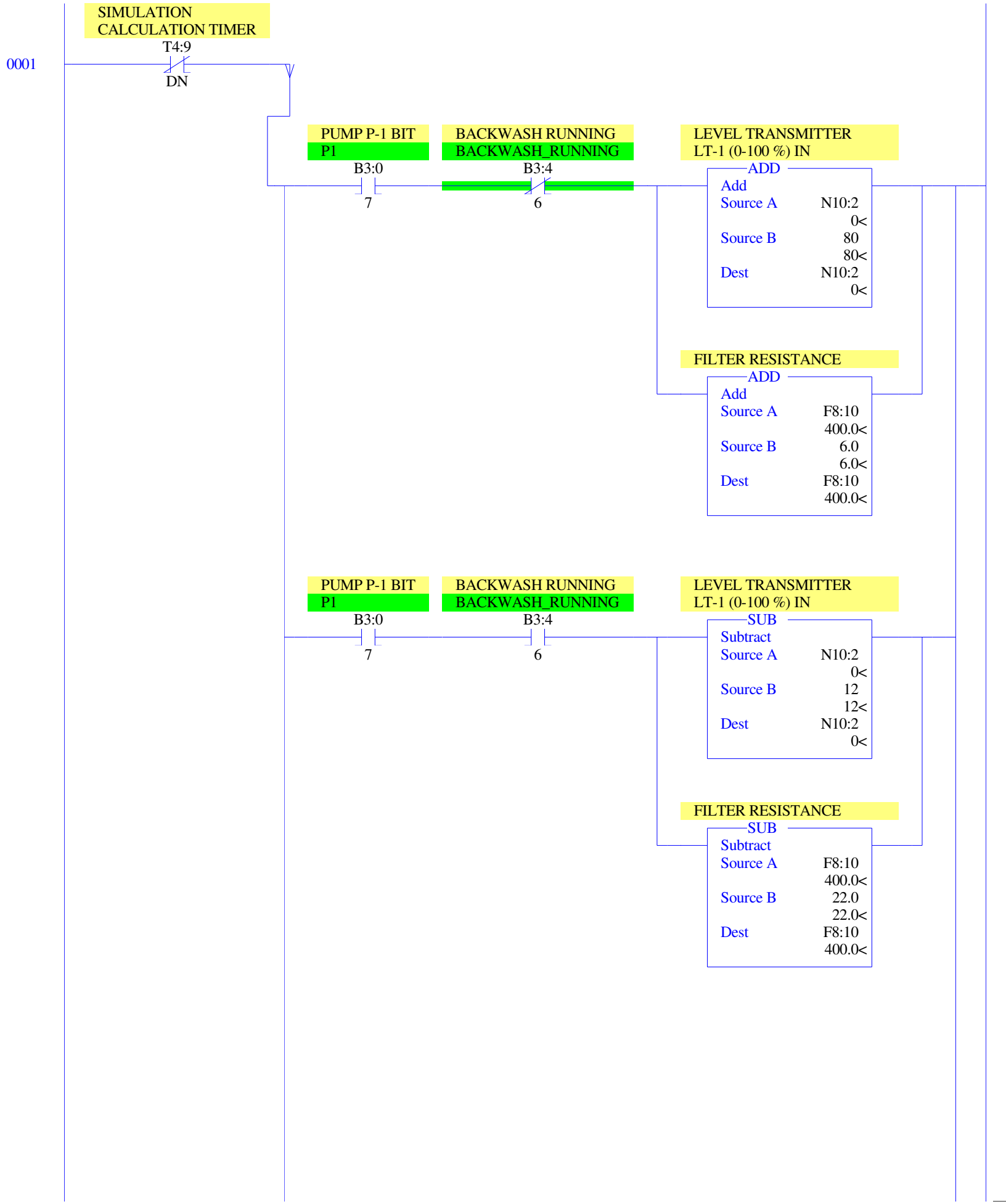

0008
SOLENOID VALVE
SV-3 AUTO
SV3_AUTO_PB
B3:1
0
ONS
B3:2
ONS
5
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
MOV
Move
Source 2
2<
Dest N7:2
0<
0009
SOLENOID VALVE
SV-4 OFF
SV4_OFF_PB
B3:1
1
ONS
B3:2
ONS
6
FIRST PASS
S:1
15
SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
MOV
Move
Source 0
0<
Dest N7:3
0<
0010
SOLENOID VALVE
SV-4 HAND
SV4_HAND_PB
B3:1
2
ONS
B3:2
ONS
7
SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
MOV
Move
Source 1
1<
Dest N7:3
0<
0011
SOLENOID VALVE
SV-4 AUTO
SV4_AUTO_PB
B3:1
3
ONS
B3:2
ONS
8
SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
MOV
Move
Source 2
2<
Dest N7:3
0<

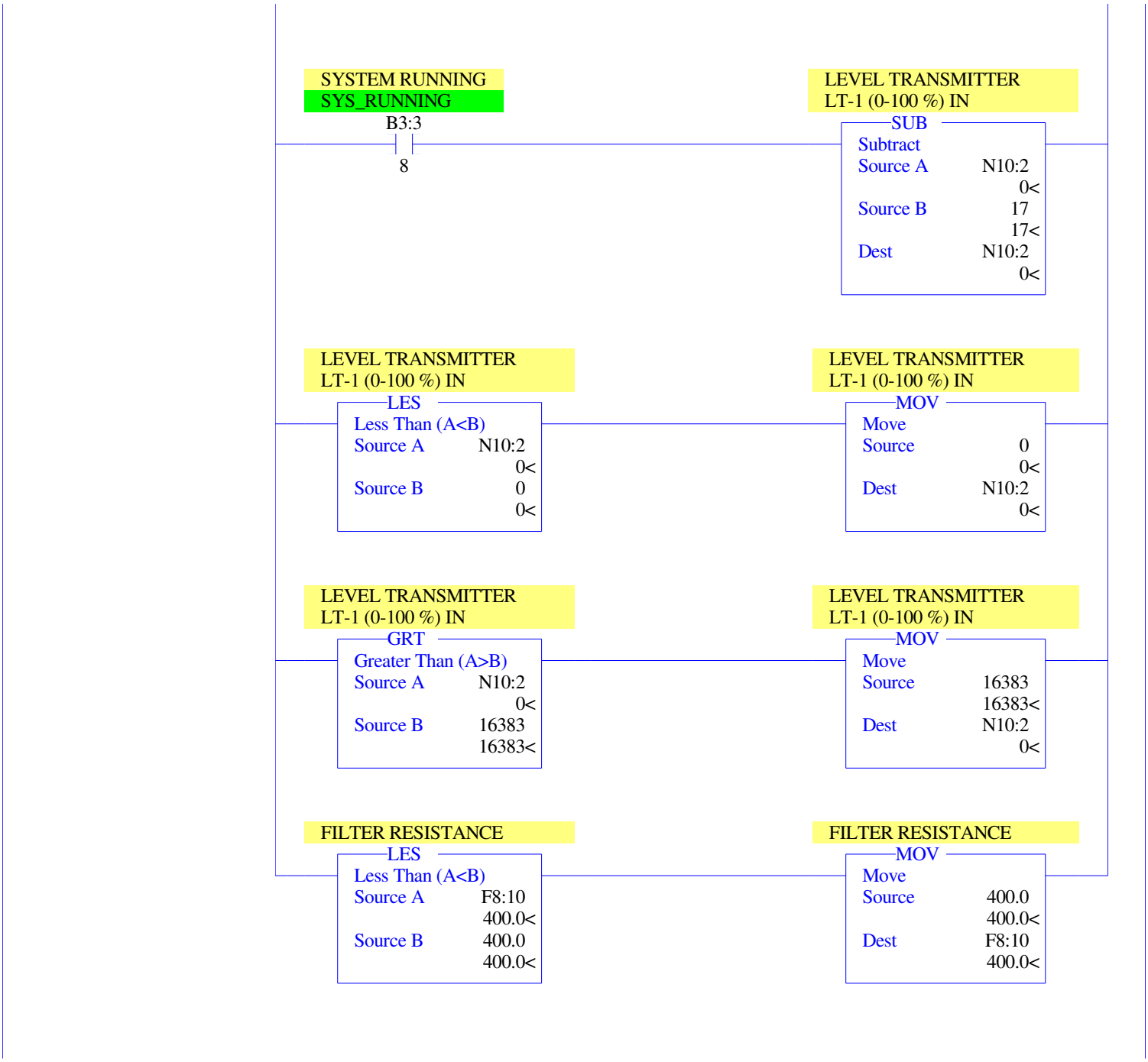

0012
SOLENOID VALVE
SV-5 OFF
SV5_OFF_PB
B3:1
4
FIRST PASS
S:1
15
ONS
B3:2
ONS
9
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
MOV
Move
Source 0
0<
Dest N7:4
0<
0013
SOLENOID VALVE
SV-5 HAND
SV5_HAND_PB
B3:1
5
ONS
B3:2
ONS
10
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
MOV
Move
Source 1
1<
Dest N7:4
0<
0014
SOLENOID VALVE
SV-5 AUTO
SV5_AUTO_PB
B3:1
6
ONS
B3:2
ONS
11
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
MOV
Move
Source 2
2<
Dest N7:4
0<
0015
SOLENOID VALVE
SV-6 OFF
SV6_OFF_PB
B3:1
7
FIRST PASS
S:1
15
ONS
B3:2
ONS
12
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
MOV
Move
Source 0
0<
Dest N7:5
0<

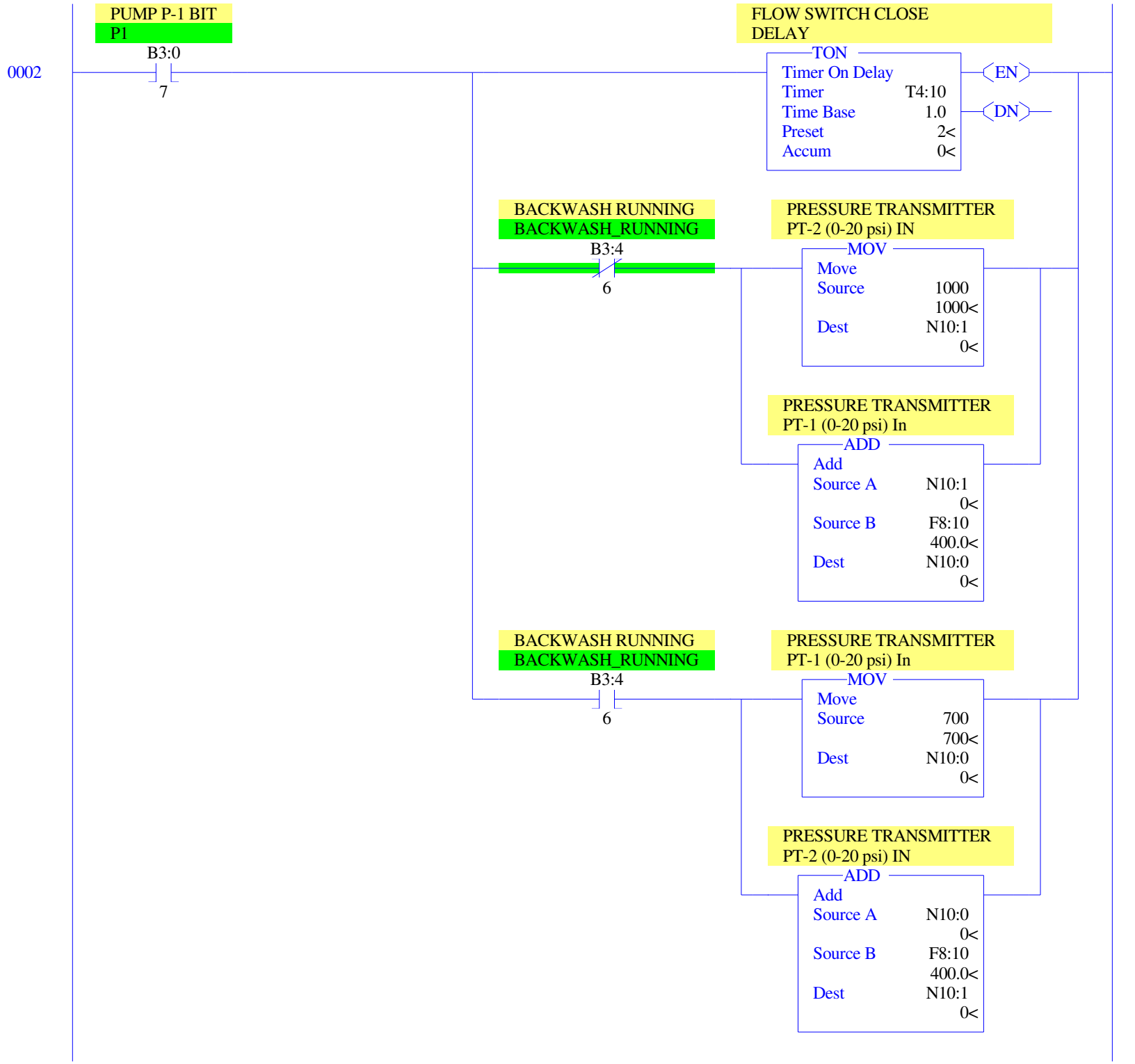

0016
SOLENOID VALVE
SV-6 HAND
SV6_HAND_PB
B3:1
8
ONS
B3:2
ONS
13
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
MOV
Move
Source 1
1<
Dest N7:5
0<
0017
SOLENOID VALVE
SV-6 AUTO
SV6_AUTO_PB
B3:1
9
ONS
B3:2
ONS
14
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
MOV
Move
Source 2
2<
Dest N7:5
0<
0018
PUMP P-1
OFF
P1_OFF_PB
B3:1
10
ONS
B3:2
ONS
15
FIRST PASS
S:1
15
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
MOV
Move
Source 0
0<
Dest N7:6
0<
0019
PUMP P-1
HAND
P1_HAND_PB
B3:1
11
ONS
B3:3
ONS
0
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
MOV
Move
Source 1
1<
Dest N7:6
0<
0020
PUMP P-1
AUTO
P1_AUTO_PB
B3:1
12
ONS
B3:3
ONS
1
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
MOV
Move
Source 2
2<
Dest N7:6
0<

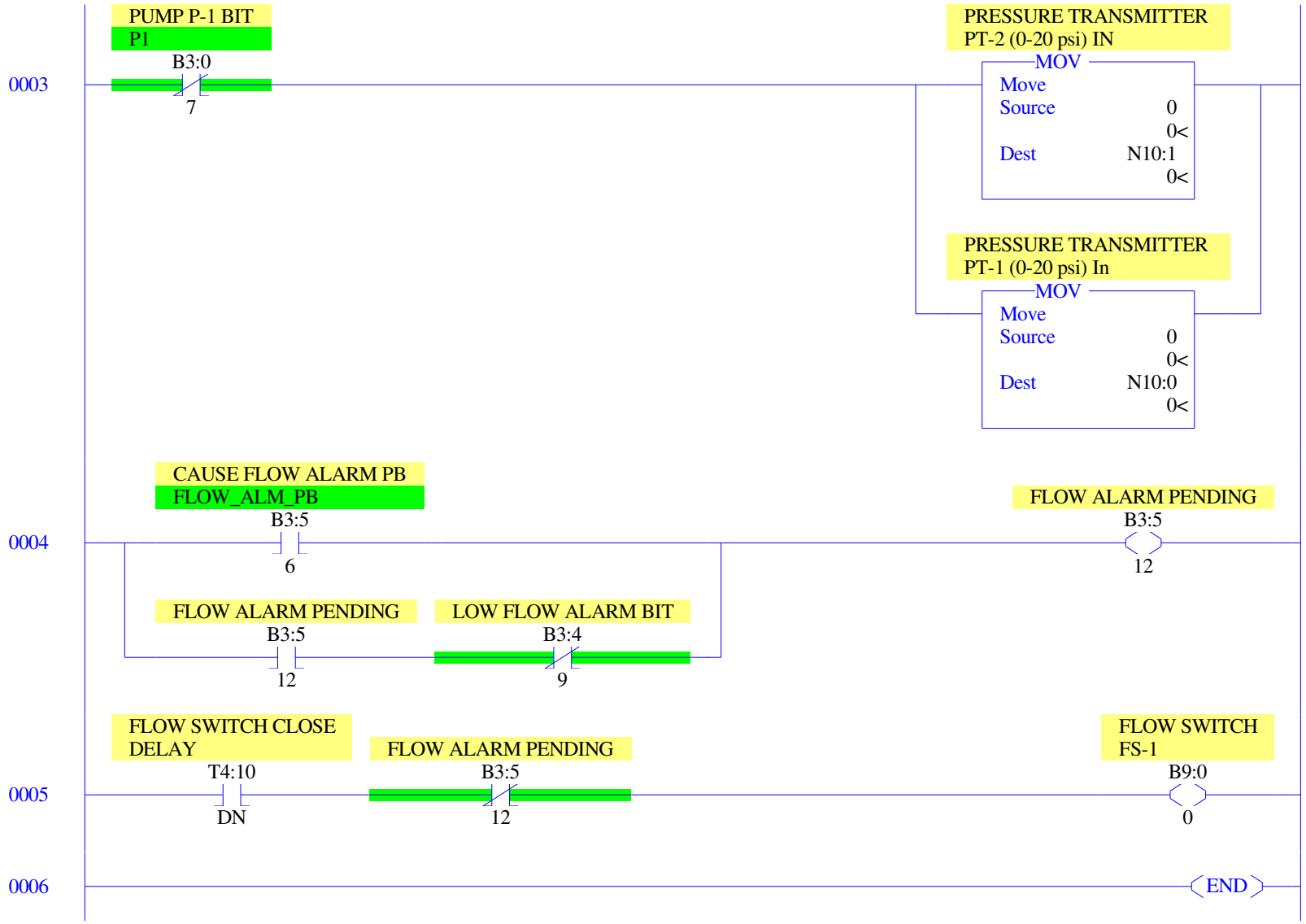

SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
0021
EQU
Equal
Source A N7:0
Source B 0<
2
2<
EQU
Equal
Source A N7:1
Source B 0<
2
2<
EQU
Equal
Source A N7:2
Source B 0<
2
2<
SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
EQU
Equal
Source A N7:3
Source B 0<
2
2<
EQU
Equal
Source A N7:4
Source B 0<
2
2<
EQU
Equal
Source A N7:5
Source B 0<
2
2<
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
EQU
Equal
Source A N7:6
Source B 0<
2
2<
ALL HOA'S IN AUTO MODE
B3:5
5
0022
END


SIMULATION
CALCULATION TIMER
T4:9
DN
0000
Simulation
Calculation Timer
TON
Timer On Delay
Timer T4:9
Time Base 0.001
Preset 500<
Accum 500<
EN
DN

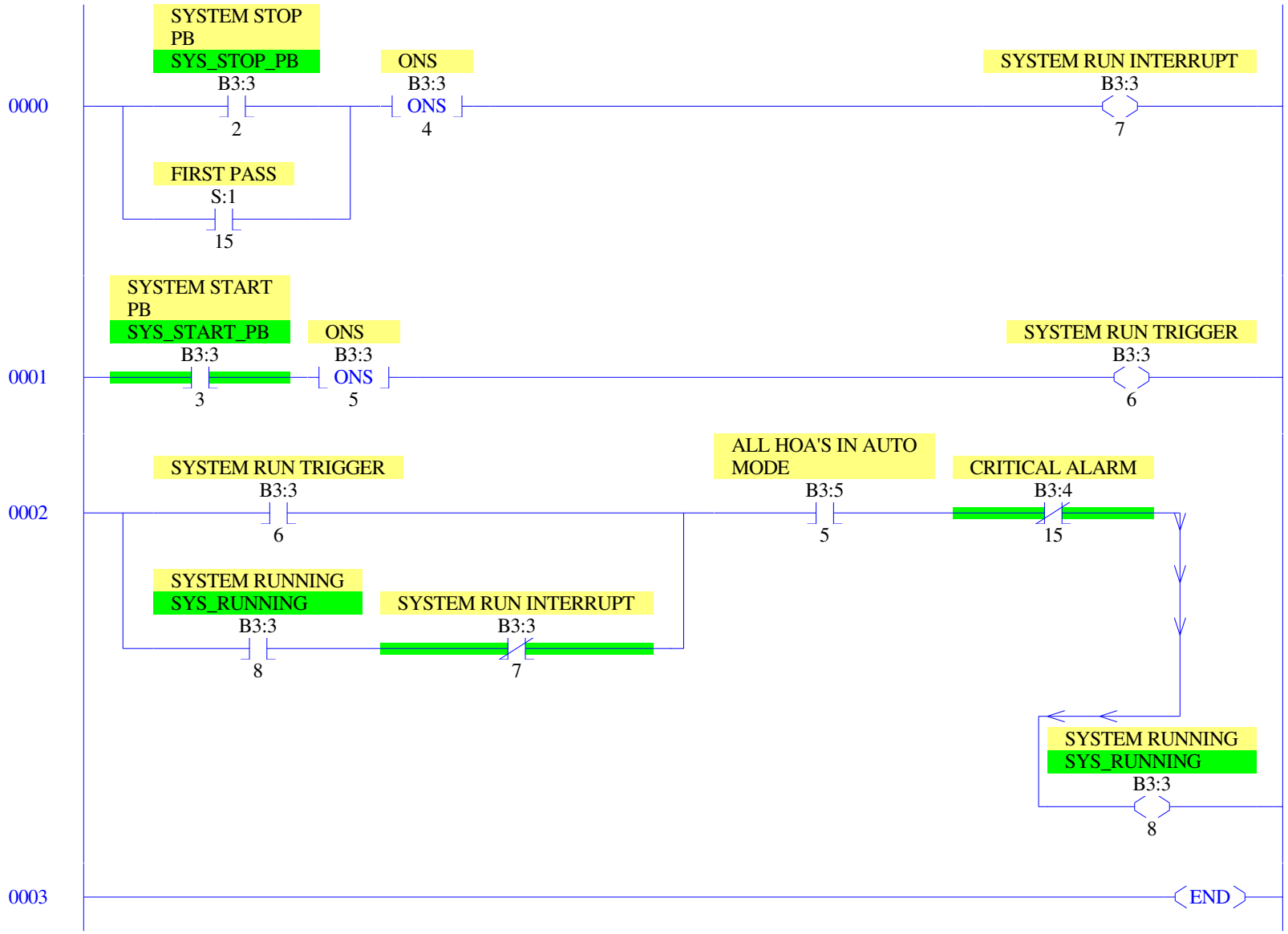

SIMULATION
CALCULATION TIMER
T4:9
DN
0001
PUMP P-1 BIT
P1
B3:0
7
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
ADD
Add
Source A N10:2
0<
Source B 80
80<
Dest N10:2
0<
FILTER RESISTANCE
ADD
Add
Source A F8:10
400.0<
Source B 6.0
6.0<
Dest F8:10
400.0<
PUMP P-1 BIT
P1
B3:0
7
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
SUB
Subtract
Source A N10:2
0<
Source B 12
12<
Dest N10:2
0<
FILTER RESISTANCE
SUB
Subtract
Source A F8:10
400.0<
Source B 22.0
22.0<
Dest F8:10
400.0<

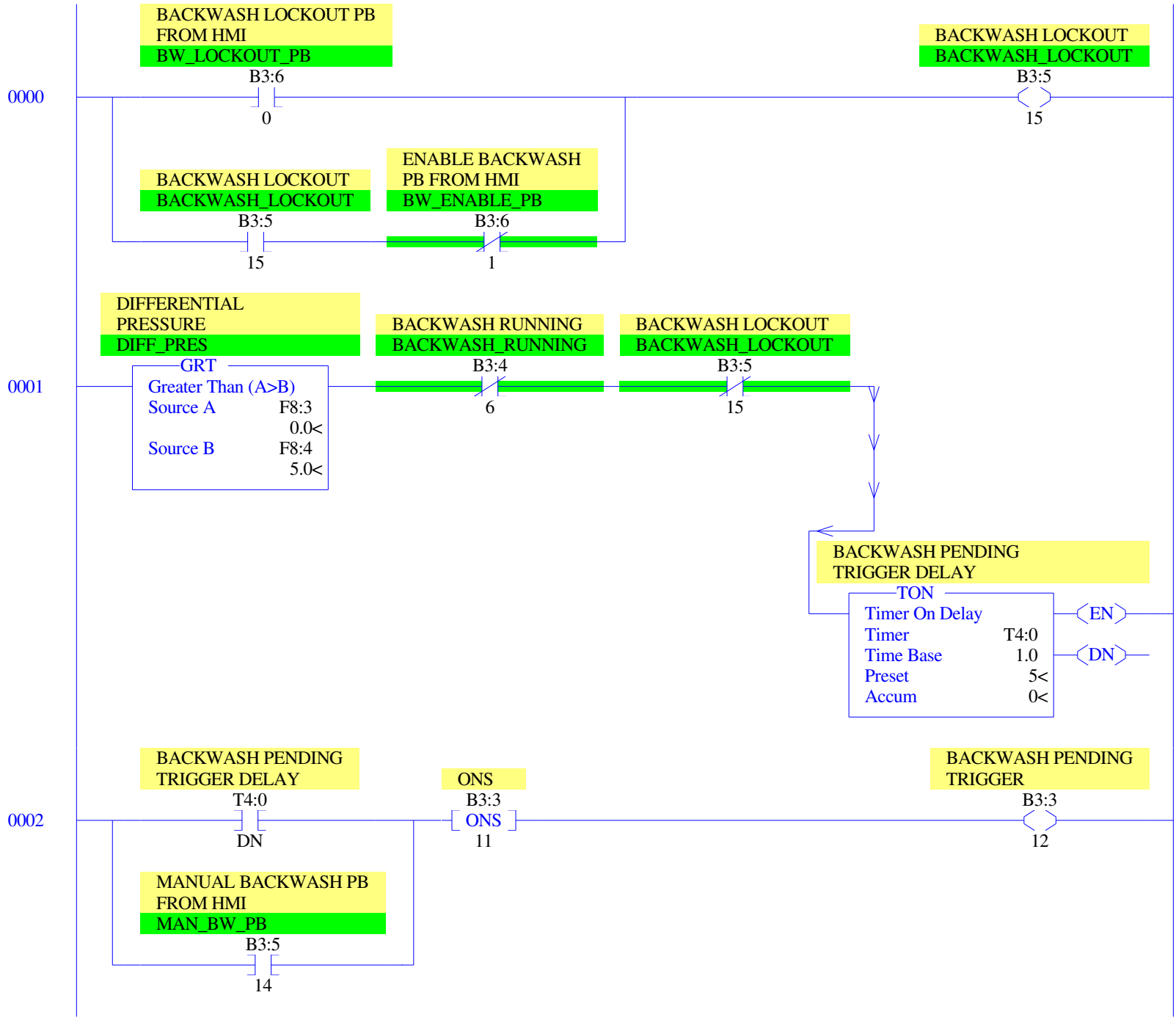

SYSTEM RUNNING
SYS_RUNNING
B3:3
8
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
SUB
Subtract
Source A N10:2
0<
Source B 17
17<
Dest N10:2
0<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
LES
Less Than (A<B)
Source A N10:2
0<
Source B 0
0<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
MOV
Move
Source 0
0<
Dest N10:2
0<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
GRT
Greater Than (A>B)
Source A N10:2
0<
Source B 16383
16383<
LEVEL TRANSMITTER
LT-1 (0-100 %) IN
MOV
Move
Source 16383
16383<
Dest N10:2
0<
FILTER RESISTANCE
LES
Less Than (A<B)
Source A F8:10
400.0<
Source B 400.0
400.0<
FILTER RESISTANCE
MOV
Move
Source 400.0
400.0<
Dest F8:10
400.0<

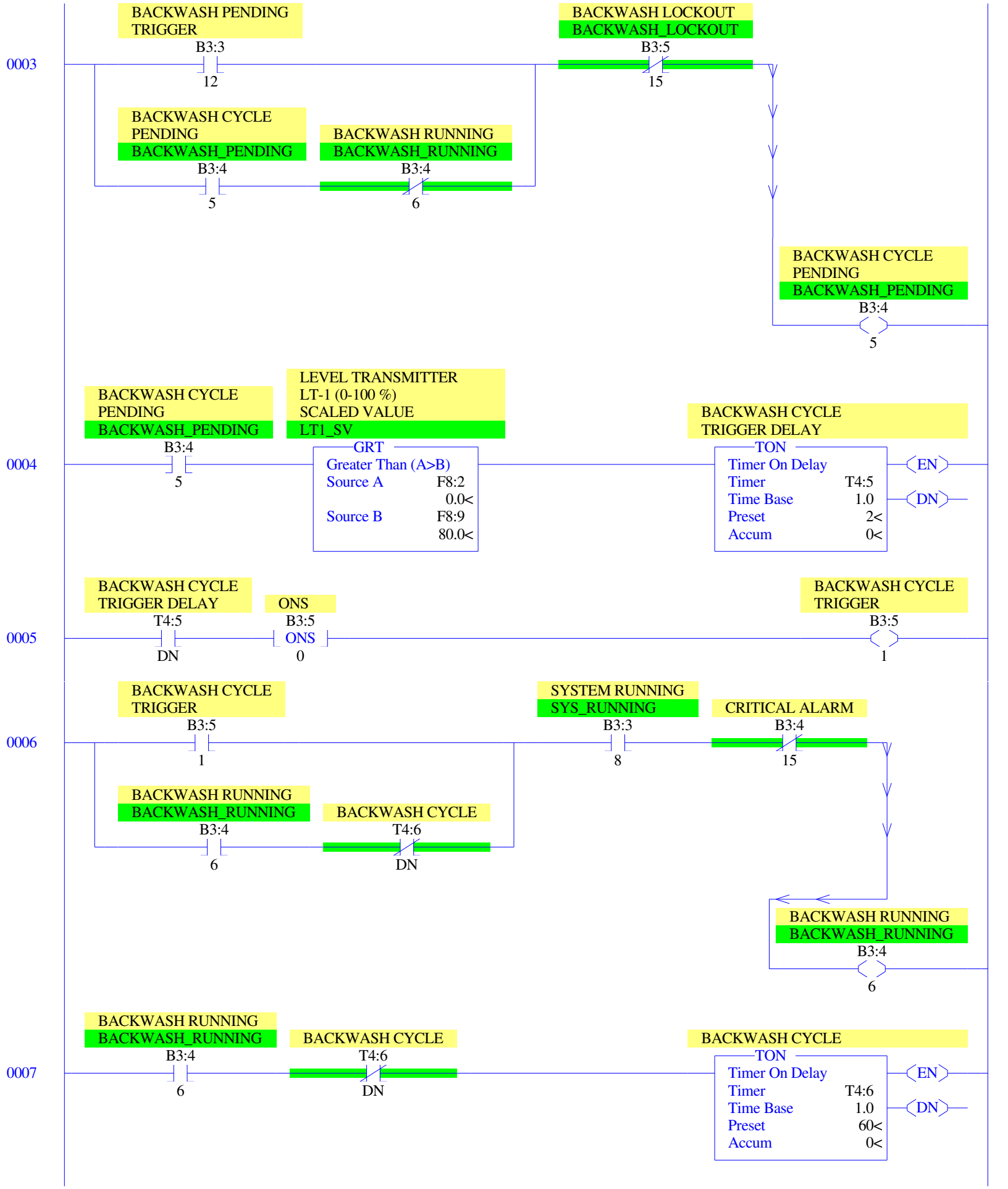

0002
PUMP P-1 BIT
P1
B3:0
7
FLOW SWITCH CLOSE DELAY
TON
Timer On Delay
Timer T4:10
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
PRESSURE TRANSMITTER
PT-2 (0-20 psi) IN
MOV
Move
Source 1000
1000<
Dest N10:1
0<
PRESSURE TRANSMITTER
PT-1 (0-20 psi) In
ADD
Add
Source A N10:1
0<
Source B F8:10
400.0<
Dest N10:0
0<
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
PRESSURE TRANSMITTER
PT-1 (0-20 psi) In
MOV
Move
Source 700
700<
Dest N10:0
0<
PRESSURE TRANSMITTER
PT-2 (0-20 psi) IN
ADD
Add
Source A N10:0
0<
Source B F8:10
400.0<
Dest N10:1
0<

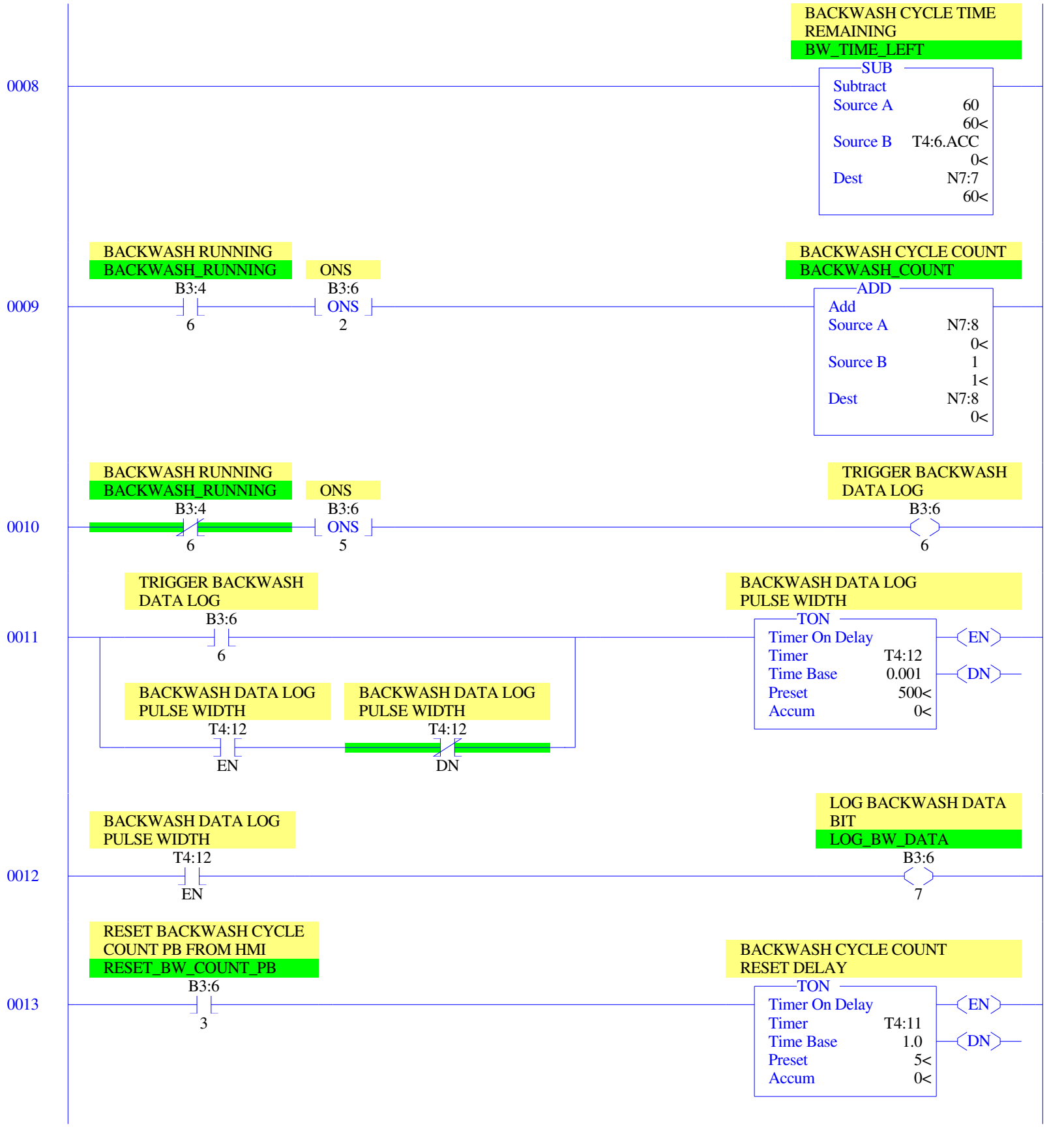

PUMP P-1 BIT
P1
B3:0
7
PRESSURE TRANSMITTER
PT-2 (0-20 psi) IN
MOV
Move
Source 0
0<
Dest N10:1
0<
PRESSURE TRANSMITTER
PT-1 (0-20 psi) In
MOV
Move
Source 0
0<
Dest N10:0
0<
0003
CAUSE FLOW ALARM PB
FLOW_ALM_PB
B3:5
6
FLOW ALARM PENDING
B3:5
12
FLOW ALARM PENDING
B3:5
12
LOW FLOW ALARM BIT
B3:4
9
0004
FLOW SWITCH CLOSE
DELAY
T4:10
DN
FLOW ALARM PENDING
B3:5
12
FLOW SWITCH
FS-1
B9:0
0
0005
END
0006

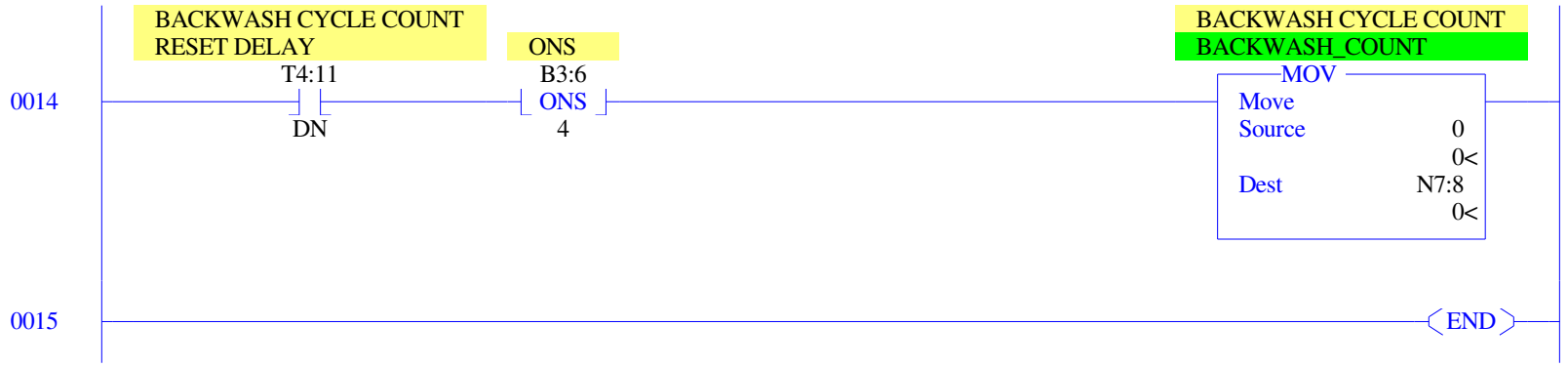
LAD 8 - MODE --- Total Rungs in File = 4



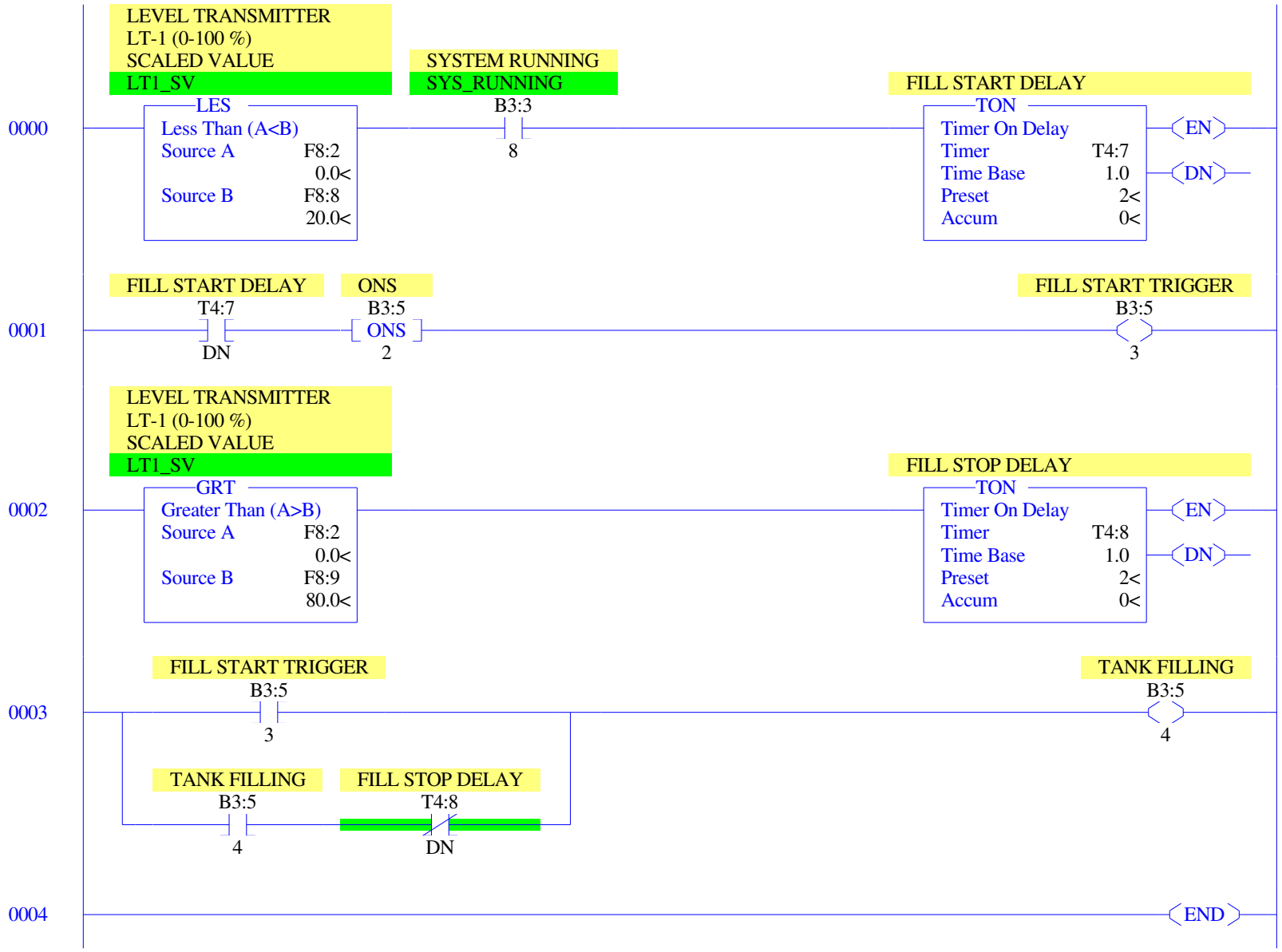

BACKWASH LOCKOUT PB FROM HMI
BW_LOCKOUT_PB
B3:6
0
BACKWASH LOCKOUT
BACKWASH_LOCKOUT
B3:5
15
0000
BACKWASH LOCKOUT
BACKWASH_LOCKOUT
B3:5
15
ENABLE BACKWASH PB FROM HMI
BW_ENABLE_PB
B3:6
1
DIFFERENTIAL PRESSURE
DIFF_PRES
GRT
Greater Than (A>B)
Source A F8:3 0.0<
Source B F8:4 5.0<
0001
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
BACKWASH LOCKOUT
BACKWASH_LOCKOUT
B3:5
15
BACKWASH PENDING TRIGGER DELAY
TON
Timer On Delay
Timer T4:0
Time Base 1.0
Preset 5<
Accum 0<
EN
DN
BACKWASH PENDING TRIGGER DELAY
T4:0
DN
0002
ONS
B3:3
ONS
11
BACKWASH PENDING TRIGGER
B3:3
12
MANUAL BACKWASH PB FROM HMI
MAN_BW_PB
B3:5
14

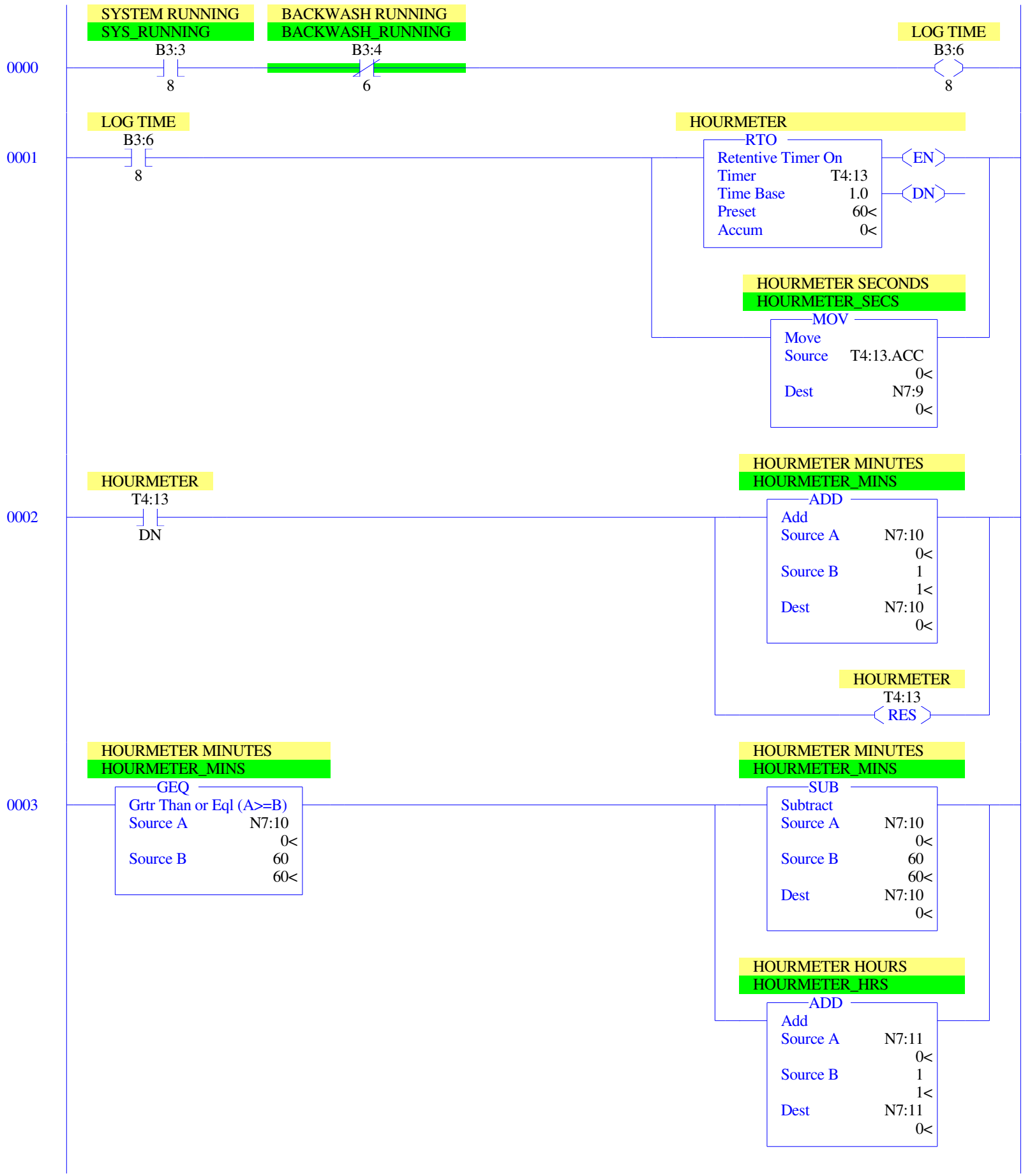

0003
BACKWASH PENDING TRIGGER
B3:3
12
BACKWASH LOCKOUT
BACKWASH_LOCKOUT
B3:5
15
BACKWASH CYCLE PENDING
BACKWASH_PENDING
B3:4
5
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
BACKWASH CYCLE PENDING
BACKWASH_PENDING
B3:4
5
0004
BACKWASH CYCLE PENDING
BACKWASH_PENDING
B3:4
5
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
GRT
Greater Than (A>B)
Source A F8:2 0.0<
Source B F8:9 80.0<
BACKWASH CYCLE TRIGGER DELAY
TON
Timer On Delay
Timer T4:5
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
0005
BACKWASH CYCLE TRIGGER DELAY
T4:5
DN
ONS
B3:5
ONS
0
BACKWASH CYCLE TRIGGER
B3:5
1
0006
BACKWASH CYCLE TRIGGER
B3:5
1
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
CRITICAL ALARM
B3:4
15
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
BACKWASH CYCLE
T4:6
DN
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
0007
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
BACKWASH CYCLE
T4:6
DN
BACKWASH CYCLE
TON
Timer On Delay
Timer T4:6
Time Base 1.0
Preset 60<
Accum 0<
EN
DN

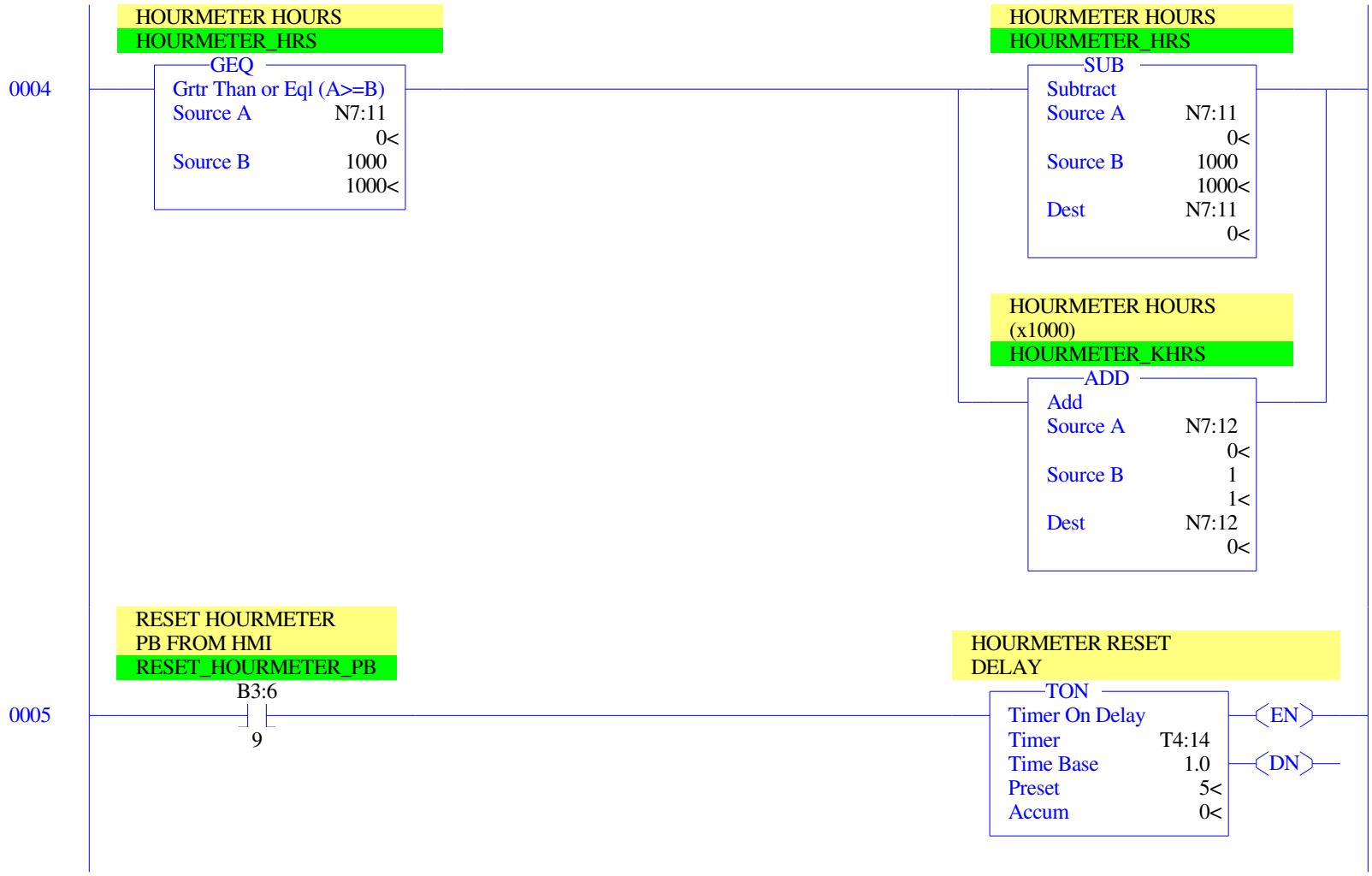

BACKWASH CYCLE TIME REMAINING
BW_TIME_LEFT
SUB
Subtract
Source A 60
60<
Source B T4:6.ACC
0<
Dest N7:7
60<
0008
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
ONS
B3:6
ONS
2
BACKWASH CYCLE COUNT
BACKWASH_COUNT
ADD
Add
Source A N7:8
0<
Source B 1
1<
Dest N7:8
0<
0009
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
ONS
B3:6
ONS
5
TRIGGER BACKWASH DATA LOG
B3:6
6
0010
TRIGGER BACKWASH DATA LOG
B3:6
6
BACKWASH DATA LOG PULSE WIDTH
TON
Timer On Delay
Timer T4:12
Time Base 0.001
Preset 500<
Accum 0<
EN
DN
BACKWASH DATA LOG PULSE WIDTH
T4:12
EN
BACKWASH DATA LOG PULSE WIDTH
T4:12
DN
0011
BACKWASH DATA LOG PULSE WIDTH
T4:12
EN
LOG BACKWASH DATA BIT
LOG_BW_DATA
B3:6
7
0012
RESET BACKWASH CYCLE COUNT PB FROM HMI
RESET_BW_COUNT_PB
B3:6
3
BACKWASH CYCLE COUNT RESET DELAY
TON
Timer On Delay
Timer T4:11
Time Base 1.0
Preset 5<
Accum 0<
EN
DN
0013

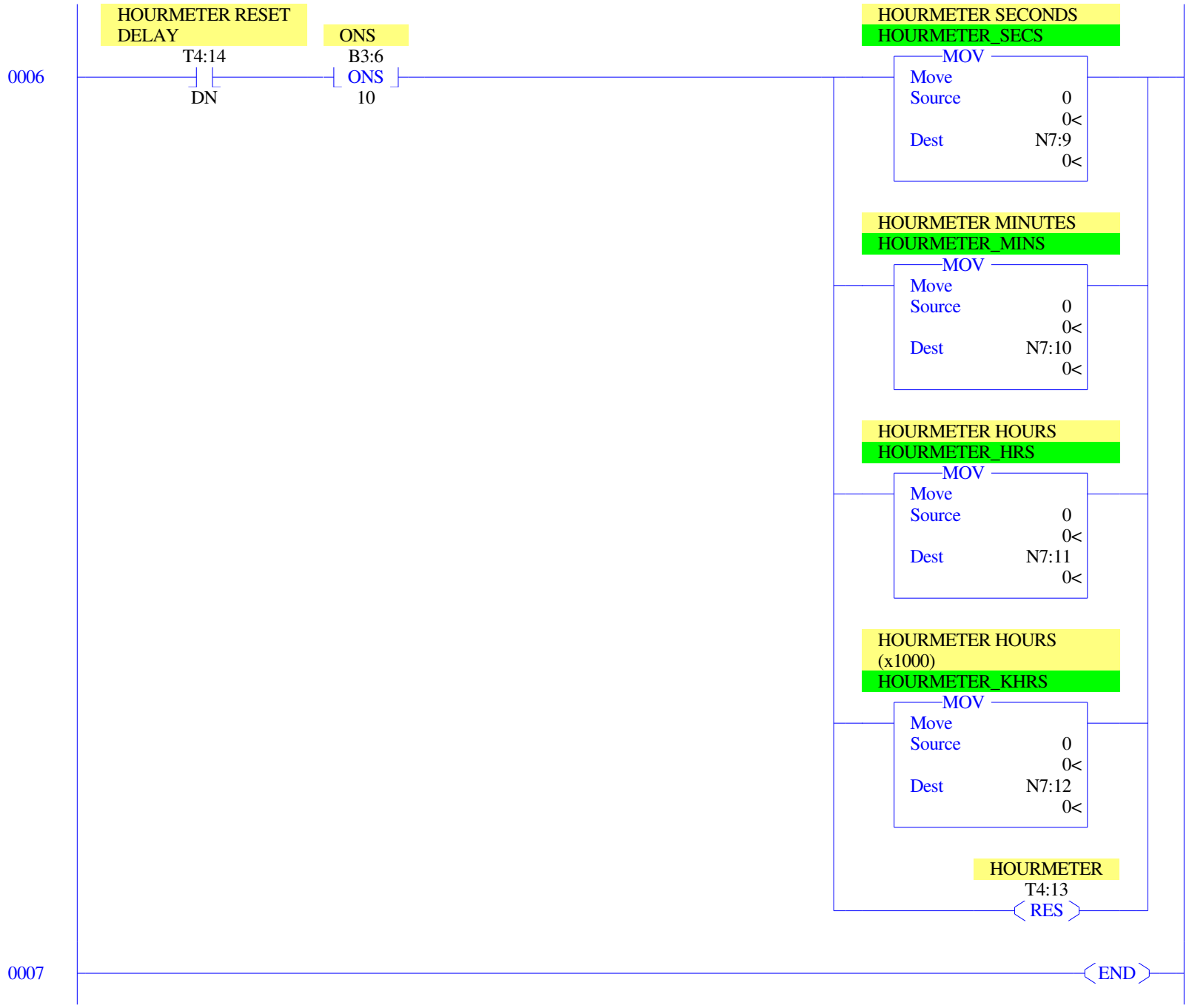

BACKWASH CYCLE COUNT
RESET DELAY
T4:11
DN
ONS
B3:6
ONS
4
BACKWASH CYCLE COUNT
BACKWASH_COUNT
MOV
Move
Source
0
0<
Dest
N7:8
0<
0014
0015
END

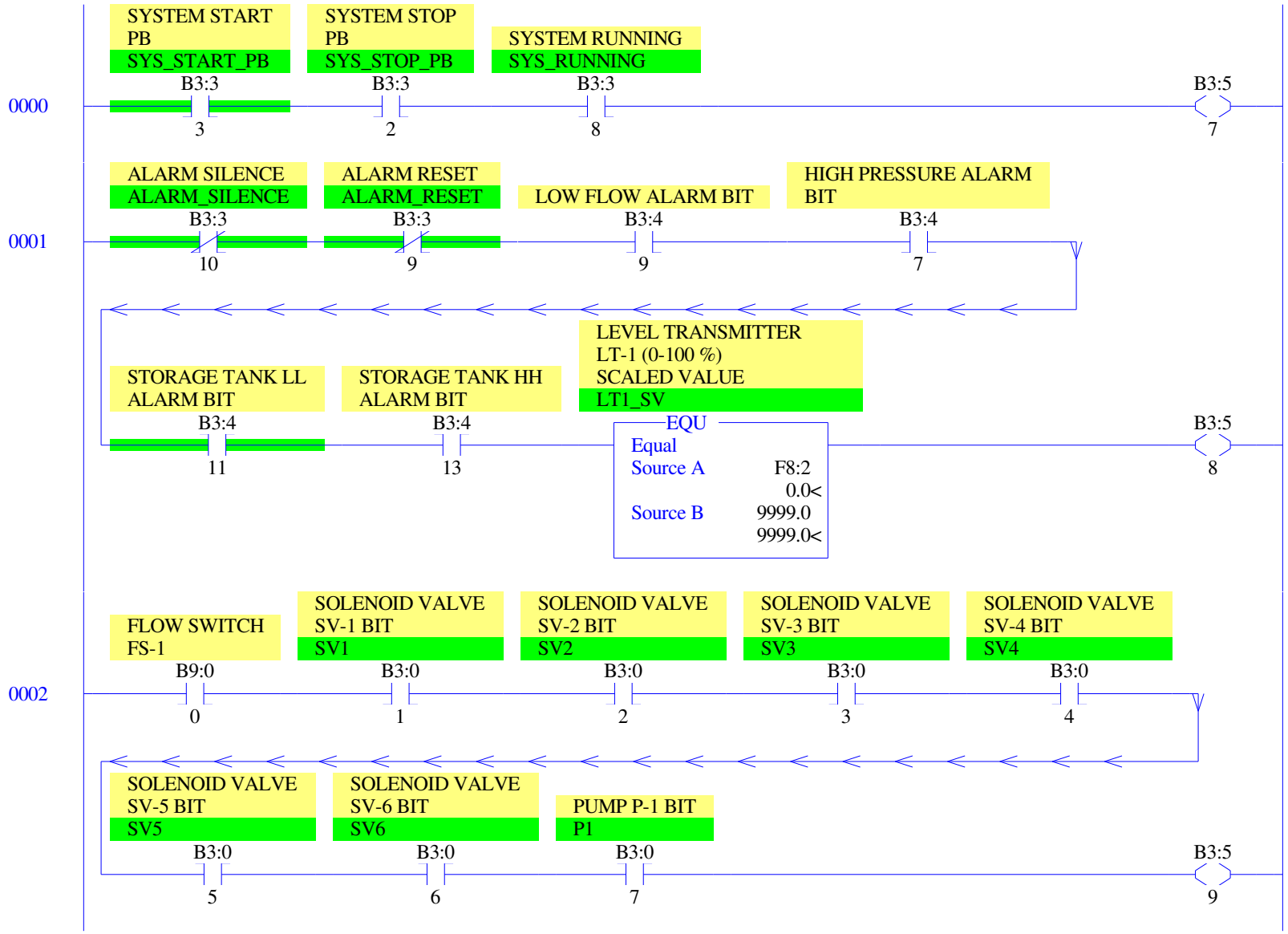
LAD 10 - LEVEL --- Total Rungs in File = 5

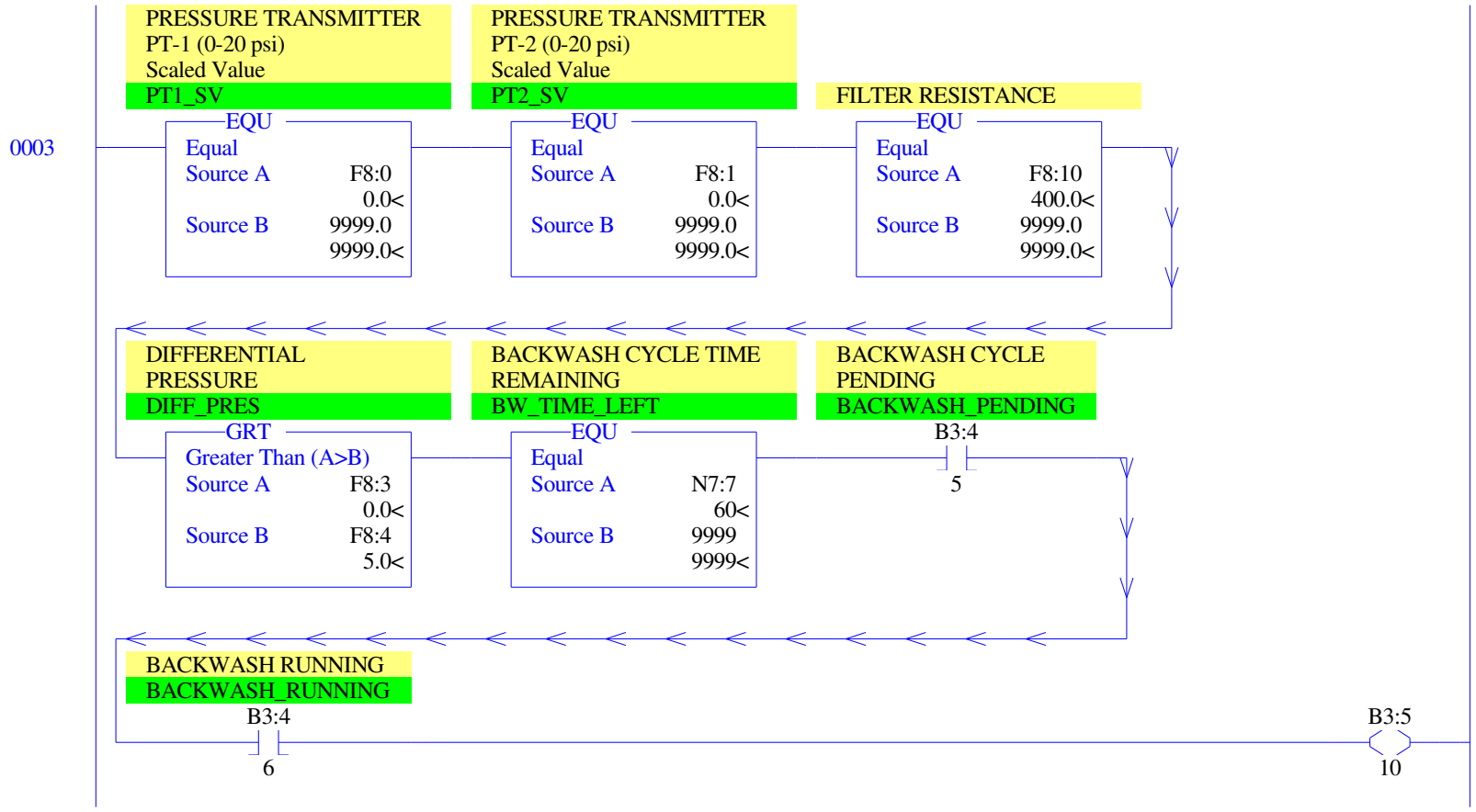


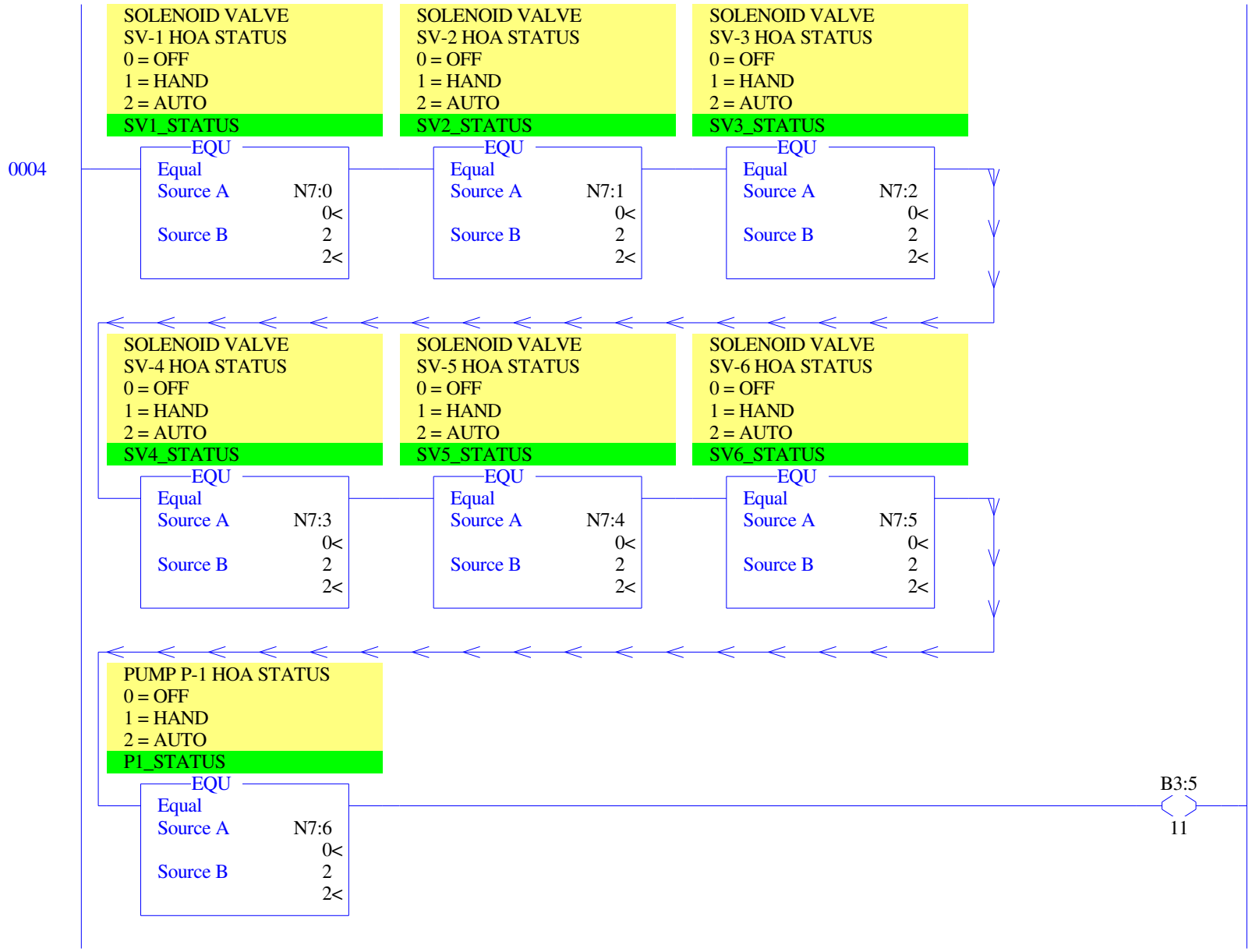

SYSTEM RUNNING
SYS_RUNNING
B3:3
8
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
LOG TIME
B3:6
8
0000
LOG TIME
B3:6
8
0001
HOURMETER
RTO
Retentive Timer On
Timer T4:13
Time Base 1.0
Preset 60<
Accum 0<
EN
DN
HOURMETER SECONDS
HOURMETER_SECS
MOV
Move
Source T4:13.ACC
0<
Dest N7:9
0<
HOURMETER
T4:13
DN
0002
HOURMETER MINUTES
HOURMETER_MINS
ADD
Add
Source A N7:10
0<
Source B 1
1<
Dest N7:10
0<
HOURMETER
T4:13
RES
HOURMETER MINUTES
HOURMETER_MINS
GEQ
Grtr Than or Eql (A>=B)
Source A N7:10
0<
Source B 60
60<
0003
HOURMETER MINUTES
HOURMETER_MINS
SUB
Subtract
Source A N7:10
0<
Source B 60
60<
Dest N7:10
0<
HOURMETER HOURS
HOURMETER_HRS
ADD
Add
Source A N7:11
0<
Source B 1
1<
Dest N7:11
0<


HOURMETER HOURS
HOURMETER_HRS
0004
GEQ
Grtr Than or Eql (A>=B)
Source A N7:11
0<
Source B 1000
1000<
HOURMETER HOURS
HOURMETER_HRS
SUB
Subtract
Source A N7:11
0<
Source B 1000
1000<
Dest N7:11
0<
HOURMETER HOURS
(x1000)
HOURMETER_KHRS
ADD
Add
Source A N7:12
0<
Source B 1
1<
Dest N7:12
0<
RESET HOURMETER
PB FROM HMI
RESET_HOURMETER_PB
B3:6
9
0005
HOURMETER RESET
DELAY
TON
Timer On Delay
Timer T4:14
Time Base 1.0
Preset 5<
Accum 0<
EN
DN


HOURMETER RESET DELAY
T4:14
DN
ONS
B3:6
ONS
10
HOURMETER SECONDS
HOURMETER_SECS
MOV
Move
Source
0
0<
Dest
N7:9
0<
HOURMETER MINUTES
HOURMETER_MINS
MOV
Move
Source
0
0<
Dest
N7:10
0<
HOURMETER HOURS
HOURMETER_HRS
MOV
Move
Source
0
0<
Dest
N7:11
0<
HOURMETER HOURS (x1000)
HOURMETER_KHRS
MOV
Move
Source
0
0<
Dest
N7:12
0<
HOURMETER
T4:13
RES
0006
0007
END


SYSTEM START PB
SYS_START_PB
B3:3
3
SYSTEM STOP PB
SYS_STOP_PB
B3:3
2
SYSTEM RUNNING
SYS_RUNNING
B3:3
8
B3:5
7
0000
ALARM SILENCE
ALARM_SILENCE
B3:3
10
ALARM RESET
ALARM_RESET
B3:3
9
LOW FLOW ALARM BIT
B3:4
9
HIGH PRESSURE ALARM BIT
B3:4
7
0001
LEVEL TRANSMITTER
LT-1 (0-100 %)
SCALED VALUE
LT1_SV
STORAGE TANK LL ALARM BIT
B3:4
11
STORAGE TANK HH ALARM BIT
B3:4
13
EQU
Equal
Source A
F8:2
0.0<
Source B
9999.0
9999.0<
B3:5
8
FLOW SWITCH FS-1
B9:0
0
SOLENOID VALVE SV-1 BIT
SV1
B3:0
1
SOLENOID VALVE SV-2 BIT
SV2
B3:0
2
SOLENOID VALVE SV-3 BIT
SV3
B3:0
3
SOLENOID VALVE SV-4 BIT
SV4
B3:0
4
0002
SOLENOID VALVE SV-5 BIT
SV5
B3:0
5
SOLENOID VALVE SV-6 BIT
SV6
B3:0
6
PUMP P-1 BIT
P1
B3:0
7
B3:5
9


0003
PRESSURE TRANSMITTER
PT-1 (0-20 psi)
Scaled Value
PT1_SV
EQU
Equal
Source A F8:0
0.0<
Source B 9999.0
9999.0<
PRESSURE TRANSMITTER
PT-2 (0-20 psi)
Scaled Value
PT2_SV
EQU
Equal
Source A F8:1
0.0<
Source B 9999.0
9999.0<
FILTER RESISTANCE
EQU
Equal
Source A F8:10
400.0<
Source B 9999.0
9999.0<
DIFFERENTIAL
PRESSURE
DIFF_PRES
GRT
Greater Than (A>B)
Source A F8:3
0.0<
Source B F8:4
5.0<
BACKWASH CYCLE TIME
REMAINING
BW_TIME_LEFT
EQU
Equal
Source A N7:7
60<
Source B 9999
9999<
BACKWASH CYCLE
PENDING
BACKWASH_PENDING
B3:4
5
BACKWASH RUNNING
BACKWASH_RUNNING
B3:4
6
B3:5
10


0004
SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS
EQU
Equal
Source A N7:0
Source B 2
SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS
EQU
Equal
Source A N7:1
Source B 2
SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS
EQU
Equal
Source A N7:2
Source B 2
SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS
EQU
Equal
Source A N7:3
Source B 2
SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
EQU
Equal
Source A N7:4
Source B 2
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
EQU
Equal
Source A N7:5
Source B 2
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
EQU
Equal
Source A N7:6
Source B 2
B3:5
11

0005

PUT ALL DEVICES INTO AUTO

B3:5
13

SOLENOID VALVE
SV-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV1_STATUS

MOV
Move
Source 2
2<
Dest N7:0
0<

SOLENOID VALVE
SV-2 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV2_STATUS

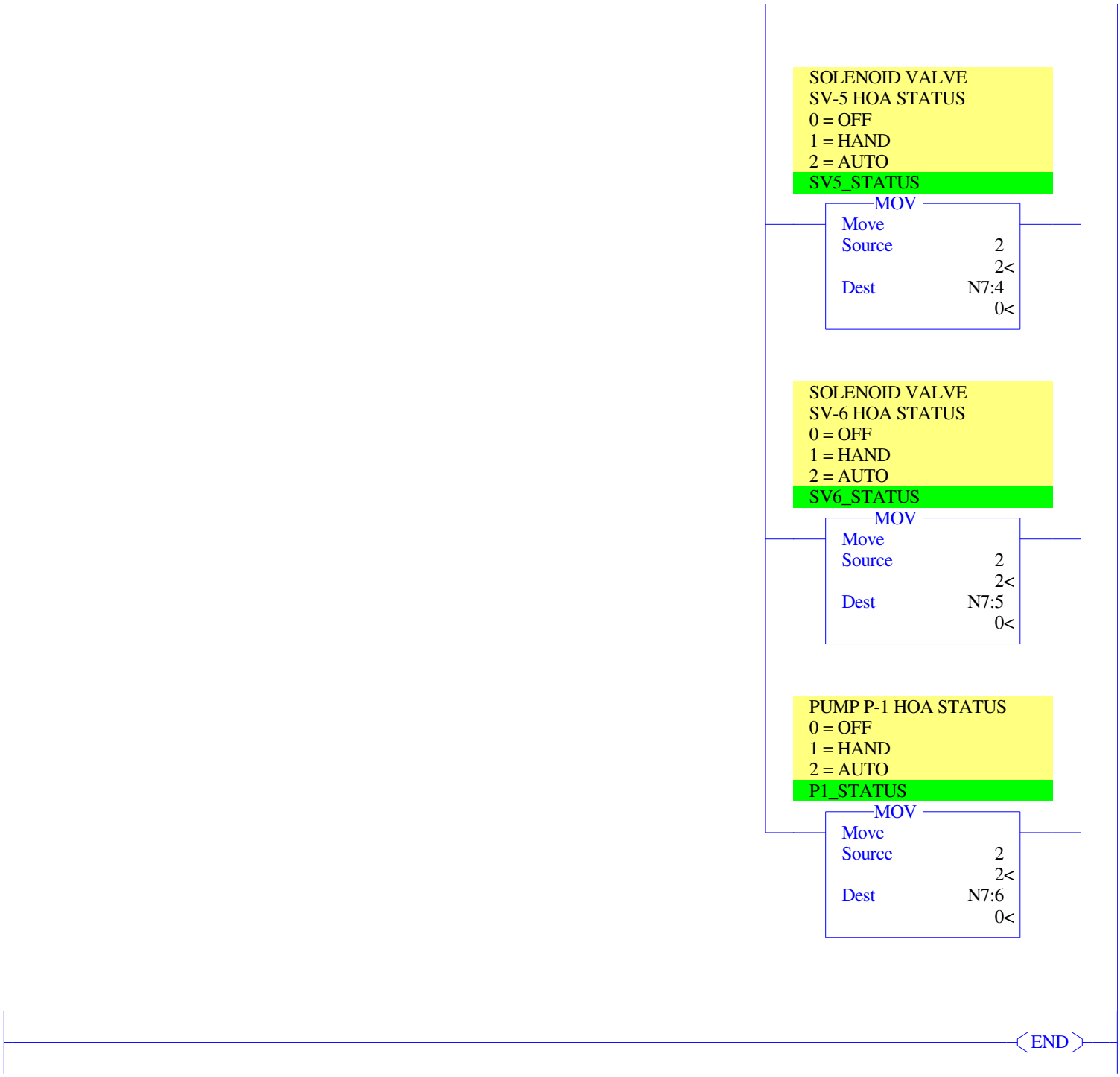
MOV
Move
Source 2
2<
Dest N7:1
0<

SOLENOID VALVE
SV-3 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV3_STATUS

MOV
Move
Source 2
2<
Dest N7:2
0<

SOLENOID VALVE
SV-4 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV4_STATUS

MOV
Move
Source 2
2<
Dest N7:3
0<


SOLENOID VALVE
SV-5 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV5_STATUS
MOV
Move
Source
2
2<
Dest
N7:4
0<
SOLENOID VALVE
SV-6 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
SV6_STATUS
MOV
Move
Source
2
2<
Dest
N7:5
0<
PUMP P-1 HOA STATUS
0 = OFF
1 = HAND
2 = AUTO
P1_STATUS
MOV
Move
Source
2
2<
Dest
N7:6
0<
0006
END

Data File O0 (bin) -- OUTPUT

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
O:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
O:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
O:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
O:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B

Data File I1 (bin) -- INPUT

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
I:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B-Analog
I:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B-Analog

Data File S2 (hex) -- STATUS

Main

Processor Mode S:1/0 - S:1/4 = Remote Program Mode
On Power up Go To Run (Mode Behavior) S:1/12 = 0
First Pass S:1/15 = No
Free Running Clock S:4 = 0101-0000-1100-0110

Proc

OS Catalog Number S:57 = 1100
OS Series S:58 = B
OS FRS S:59 =
Processor Catalog Number S:60 =
Processor Series S:61 = A
Processor FRN S:62 =
User Program Type S:63 = 8001h
Compiler Revision Number S:64 =

Scan Times

Maximum (x10 ms) S:22 = 18
Watchdog (x10 ms) S:3 (high byte) = 10
Last 100 uSec Scan Time S:35 = 0
Scan Toggle Bit S:33/9 = 0

Math

Math Overflow Selected S:2/14 = 0
Overflow Trap S:5/0 = 0
Carry S:0/0 = 0
Overflow S:0/1 = 0
Zero Bit S:0/2 = 1
Sign Bit S:0/3 = 0
Math Register (lo word) S:13 = 0
Math Register (high word) S:14-S:13 = 0
Math Register (32 Bit) S:14-S:13 = 0

Chan 0

Processor Mode S:1/0- S:1/4 = Remote Program Mode
Node Address S:15 (low byte) = 0
Baud Rate S:15 (high byte) = ?
Channel Mode S:33/3 = 0
Comms Active S:33/4 = 0
Incoming Cmd Pending S:33/0 = 0
Msg Reply Pending S:33/1 = 0
Outgoing Msg Cmd Pending S:33/2 = 0

Debug

Suspend Code S:7 = 0
Suspend File S:8 = 0

Errors

Fault Override At Power Up S:1/8 = 0
Startup Protection Fault S:1/9 = 0
Major Error Halt S:1/13 = 0
Overflow Trap S:5/0 = 0
Control Register Error S:5/2 = 0
Major Error Executing User Fault Rtn. S:5/3 = 0
Battery Low S:5/11 = 0
Input Filter Selection Modified S:5/13 = 0
ASCII String Manipulation error S:5/15 = 0
Fault Routine S:29 = 0
Major Error S:6 = 0h
Error Description:

Protection

Deny Future Access S:1/14 = No
Data File Overwrite Protection Lost S:36/10 = False

Mem Module

Memory Module Loaded On Boot S:5/8 = 0
Password Mismatch S:5/9 = 0
Load Memory Module On Memory Error S:1/10 = 0
Load Memory Module Always S:1/11 = 0
On Power up Go To Run (Mode Behavior) S:1/12 = 0
Program Compare S:2/9 = 0
Data File Overwrite Protection Lost S:36/10 = 0

Forces

Forces Enabled S:1/5 = Yes
Forces Installed S:1/6 = No

Data File B3 (bin) -- BINARY

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	(Symbol) Description
B3:0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	
B3:4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	
B3:5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	

Data File T4 -- TIMER

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol) Description
T4:0	0	0	0	1.0 sec	5	0	BACKWASH PENDING TRIGGER DELAY
T4:1	0	0	0	1.0 sec	5	0	HIGH PRESSURE ALARM DELAY
T4:2	0	0	0	1.0 sec	5	0	LOW FLOW ALARM DELAY
T4:3	1	0	1	1.0 sec	5	5	STORAGE TANK LL ALARM DELAY
T4:4	0	0	0	1.0 sec	5	0	STORAGE TANK HH ALARM DELAY
T4:5	0	0	0	1.0 sec	2	0	BACKWASH CYCLE TRIGGER DELAY
T4:6	0	0	0	1.0 sec	60	0	BACKWASH CYCLE
T4:7	0	0	0	1.0 sec	2	0	FILL START DELAY
T4:8	0	0	0	1.0 sec	2	0	FILL STOP DELAY
T4:9	1	0	1	.001 sec	500	500	Simulation Calculation Timer
T4:10	0	0	0	1.0 sec	2	0	FLOW SWITCH CLOSE DELAY
T4:11	0	0	0	1.0 sec	5	0	BACKWASH CYCLE COUNT RESET DELAY
T4:12	0	0	0	.001 sec	500	0	BACKWASH DATA LOG PULSE WIDTH
T4:13	0	0	0	1.0 sec	60	0	HOURMETER
T4:14	0	0	0	1.0 sec	5	0	HOURMETER RESET DELAY

Data File C5 -- COUNTER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol)	Description
C5:0	0	0	0	0	0	0	0	0		

Data File R6 -- CONTROL

Offset	EN	EU	DN	EM	ER	UL	IN	FD	LEN	POS	(Symbol)	Description
R6:0	0	0	0	0	0	0	0	0	0	0		

Data File N7 (dec) -- INTEGER

Offset	0	1	2	3	4	5	6	7	8	9
N7:0	0	0	0	0	0	0	0	60	0	0
N7:10	0	0	0							

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	0	0	0	0	5
F8:5	15	10	90	20	80
F8:10	400	0			

Data File B9 (bin) -- DIGITAL IO

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	(Symbol) Description
B9:0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Data File N10 (dec) -- ANALOG IO

Offset	0	1	2	3	4	5	6	7	8	9
N10:0	0	0	0							

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
B3:0/0	FS1	Global	FLOW SWITCH FS-1 BIT		
B3:0/1	SV1	Global	SOLENOID VALVE SV-1 BIT		
B3:0/2	SV2	Global	SOLENOID VALVE SV-2 BIT		
B3:0/3	SV3	Global	SOLENOID VALVE SV-3 BIT		
B3:0/4	SV4	Global	SOLENOID VALVE SV-4 BIT		
B3:0/5	SV5	Global	SOLENOID VALVE SV-5 BIT		
B3:0/6	SV6	Global	SOLENOID VALVE SV-6 BIT		
B3:0/7	P1	Global	PUMP P-1 BIT		
B3:0/8	SV1_OFF_PB	Global	SOLENOID VALVE SV-1 OFF		
B3:0/9	SV1_HAND_PB	Global	SOLENOID VALVE SV-1 HAND		
B3:0/10	SV1_AUTO_PB	Global	SOLENOID VALVE SV-1 AUTO		
B3:0/11	SV2_OFF_PB	Global	SOLENOID VALVE SV-2 OFF		
B3:0/12	SV2_HAND_PB	Global	SOLENOID VALVE SV-2 HAND		
B3:0/13	SV2_AUTO_PB	Global	SOLENOID VALVE SV-2 AUTO		
B3:0/14	SV3_OFF_PB	Global	SOLENOID VALVE SV-3 OFF		
B3:0/15	SV3_HAND_PB	Global	SOLENOID VALVE SV-3 HAND		
B3:1/0	SV3_AUTO_PB	Global	SOLENOID VALVE SV-3 AUTO		
B3:1/1	SV4_OFF_PB	Global	SOLENOID VALVE SV-4 OFF		
B3:1/2	SV4_HAND_PB	Global	SOLENOID VALVE SV-4 HAND		
B3:1/3	SV4_AUTO_PB	Global	SOLENOID VALVE SV-4 AUTO		
B3:1/4	SV5_OFF_PB	Global	SOLENOID VALVE SV-5 OFF		
B3:1/5	SV5_HAND_PB	Global	SOLENOID VALVE SV-5 HAND		
B3:1/6	SV5_AUTO_PB	Global	SOLENOID VALVE SV-5 AUTO		
B3:1/7	SV6_OFF_PB	Global	SOLENOID VALVE SV-6 OFF		
B3:1/8	SV6_HAND_PB	Global	SOLENOID VALVE SV-6 HAND		
B3:1/9	SV6_AUTO_PB	Global	SOLENOID VALVE SV-6 AUTO		
B3:1/10	P1_OFF_PB	Global	PUMP P-1 OFF		
B3:1/11	P1_HAND_PB	Global	PUMP P-1 HAND		
B3:1/12	P1_AUTO_PB	Global	PUMP P-1 AUTO		
B3:1/13			ONS		
B3:1/14			ONS		
B3:1/15			ONS		
B3:2/0			ONS		
B3:2/1			ONS		
B3:2/2			ONS		
B3:2/3			ONS		
B3:2/4			ONS		
B3:2/5			ONS		
B3:2/6			ONS		
B3:2/7			ONS		
B3:2/8			ONS		
B3:2/9			ONS		
B3:2/10			ONS		
B3:2/11			ONS		
B3:2/12			ONS		
B3:2/13			ONS		
B3:2/14			ONS		
B3:2/15			ONS		
B3:3/0			ONS		
B3:3/1			ONS		
B3:3/2	SYS_STOP_PB	Global	SYSTEM STOP PB		
B3:3/3	SYS_START_PB	Global	SYSTEM START PB		
B3:3/4			ONS		
B3:3/5			ONS		
B3:3/6			SYSTEM RUN TRIGGER		
B3:3/7			SYSTEM RUN INTERRUPT		
B3:3/8	SYS_RUNNING	Global	SYSTEM RUNNING		
B3:3/9	ALARM_RESET	Global	ALARM RESET		
B3:3/10	ALARM_SILENCE	Global	ALARM SILENCE		
B3:3/11			ONS		
B3:3/12			BACKWASH PENDING TRIGGER		
B3:3/13			ONS		
B3:3/14			HIGH PRESSURE ALARM TRIGGER		
B3:3/15			ONS		
B3:4/0			LOW FLOW ALRM TRIGGER		
B3:4/1			ONS		
B3:4/2			STORAGE LL ALARM TRIGGER		
B3:4/3			ONS		
B3:4/4			STORAGE TANK HH ALARM TRIGGER		
B3:4/5	BACKWASH_PENDING	Global	BACKWASH CYCLE PENDING		
B3:4/6	BACKWASH_RUNNING	Global	BACKWASH RUNNING		
B3:4/7			HIGH PRESSURE ALARM BIT		
B3:4/8	PRES_HH_ALARM	Global	HIGH PRESSURE NOTIFICATION BIT		
B3:4/9			LOW FLOW ALARM BIT		
B3:4/10	LOW_FLOW_ALARM	Global	LOW FLOW NOTIFICATION BIT		
B3:4/11			STORAGE TANK LL ALARM BIT		
B3:4/12	LEVEL_LL_ALARM	Global	STORAGE TANK LL NOTIFICATION BIT		
B3:4/13			STORAGE TANK HH ALARM BIT		
B3:4/14	LEVEL_HH_ALARM	Global	STORAGE TANK HH NOTIFICATION BIT		
B3:4/15			CRITICAL ALARM		
B3:5/0			ONS		
B3:5/1			BACKWASH CYCLE TRIGGER		
B3:5/2			ONS		
B3:5/3			FILL START TRIGGER		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
B3:5/4			TANK FILLING		
B3:5/5			ALL HOA'S IN AUTO MODE		
B3:5/6	FLOW_ALM_PB	Global	CAUSE FLOW ALARM PB		
B3:5/7					
B3:5/8					
B3:5/9					
B3:5/10					
B3:5/11					
B3:5/12			FLOW ALARM PENDING		
B3:5/13			PUT ALL DEVICES INTO AUTO		
B3:5/14	MAN_BW_PB	Global	MANUAL BACKWASH PB FROM HMI		
B3:5/15	BACKWASH_LOCKOUT	Global	BACKWASH LOCKOUT		
B3:6/0	BW_LOCKOUT_PB	Global	BACKWASH LOCKOUT PB FROM HMI		
B3:6/1	BW_ENABLE_PB	Global	ENABLE BACKWASH PB FROM HMI		
B3:6/2			ONS		
B3:6/3	RESET_BW_COUNT_PB	Global	RESET BACKWASH CYCLE COUNT PB FROM HMI		
B3:6/4			ONS		
B3:6/5			ONS		
B3:6/6			TRIGGER BACKWASH DATA LOG		
B3:6/7	LOG_BW_DATA	Global	LOG BACKWASH DATA BIT		
B3:6/8			LOG TIME		
B3:6/9	RESET_HOURMETER_PB	Global	RESET HOURMETER PB FROM HMI		
B3:6/10			ONS		
B9:0/0			FLOW SWITCH FS-1		
B9:0/1			Solenoid Valve SV-1		
B9:0/2			Solenoid Valve SV-2		
B9:0/3			Solenoid Valve SV-3		
B9:0/4			Solenoid Valve SV-4		
B9:0/5			Solenoid Valve SV-5		
B9:0/6			Solenoid Valve SV-6		
B9:0/7			Pump P-1		
C5:0					
F8:0	PT1_SV	Global	PRESSURE TRANSMITTER PT-1 (0-20 psi) Scaled Value		
F8:1	PT2_SV	Global	PRESSURE TRANSMITTER PT-2 (0-20 psi) Scaled Value		
F8:2	LT1_SV	Global	LEVEL TRANSMITTER LT-1 (0-100 %) SCALED VALUE		
F8:3	DIFF_PRES	Global	DIFFERENTIAL PRESSURE		
F8:4	BACKWASH_SP	Global	Backwash Cycle Trigger Setpoint		
F8:5	PRESSURE_HH_SP	Global	Pressure HH Alarm Setpoint		
F8:6	LEVEL_LL_SP	Global	Storage Tank LL Alarm Setpoint		
F8:7	LEVEL_HH_SP	Global	Storage Tank HH Alarm Setpoint		
F8:8	LEVEL_L_SP	Global	Storage Tank Low Level Setpoint		
F8:9	LEVEL_H_SP	Global	Storage Tank High Level Setpoint		
F8:10			FILTER RESISTANCE		
F8:11			Preliminary DP		
N7:0	SV1_STATUS	Global	SOLENOID VALVE SV-1 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:1	SV2_STATUS	Global	SOLENOID VALVE SV-2 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:2	SV3_STATUS	Global	SOLENOID VALVE SV-3 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:3	SV4_STATUS	Global	SOLENOID VALVE SV-4 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:4	SV5_STATUS	Global	SOLENOID VALVE SV-5 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:5	SV6_STATUS	Global	SOLENOID VALVE SV-6 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:6	P1_STATUS	Global	PUMP P-1 HOA STATUS 0 = OFF 1 = HAND 2 = AUTO		
N7:7	BW_TIME_LEFT	Global	BACKWASH CYCLE TIME REMAINING		
N7:8	BACKWASH_COUNT	Global	BACKWASH CYCLE COUNT		
N7:9	HOURMETER_SECS	Global	HOURMETER SECONDS		
N7:10	HOURMETER_MINS	Global	HOURMETER MINUTES		
N7:11	HOURMETER_HRS	Global	HOURMETER HOURS		
N7:12	HOURMETER_KHRS	Global	HOURMETER HOURS (x1000)		
N10:0			PRESSURE TRANSMITTER PT-1 (0-20 psi) In		
N10:1			PRESSURE TRANSMITTER PT-2 (0-20 psi) IN		
N10:2			LEVEL TRANSMITTER LT-1 (0-100 %) IN		
S:0			Arithmetic Flags		
S:0/0			Processor Arithmetic Carry Flag		
S:0/1			Processor Arithmetic Underflow/ Overflow Flag		
S:0/2			Processor Arithmetic Zero Flag		
S:0/3			Processor Arithmetic Sign Flag		
S:1			Processor Mode Status/ Control		
S:1/0			Processor Mode Bit 0		
S:1/1			Processor Mode Bit 1		
S:1/2			Processor Mode Bit 2		
S:1/3			Processor Mode Bit 3		
S:1/4			Processor Mode Bit 4		
S:1/5			Forces Enabled		
S:1/6			Forces Present		
S:1/7			Comms Active		
S:1/8			Fault Override at Powerup		
S:1/9			Startup Protection Fault		
S:1/10			Load Memory Module on Memory Error		
S:1/11			Load Memory Module Always		
S:1/12			Load Memory Module and RUN		
S:1/13			Major Error Halted		
S:1/14			Access Denied		
S:1/15			FIRST PASS		
S:2/0			STI Pending		
S:2/1			STI Enabled		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
S:2/2			STI Executing		
S:2/3			Index Addressing File Range		
S:2/4			Saved with Debug Single Step		
S:2/5			DH-485 Incoming Command Pending		
S:2/6			DH-485 Message Reply Pending		
S:2/7			DH-485 Outgoing Message Command Pending		
S:2/15			Comms Servicing Selection		
S:3			Current Scan Time/ Watchdog Scan Time		
S:4			Time Base		
S:5/0			Overflow Trap		
S:5/2			Control Register Error		
S:5/3			Major Err Detected Executing UserFault Routine		
S:5/4			M0-M1 Referenced on Disabled Slot		
S:5/8			Memory Module Boot		
S:5/9			Memory Module Password Mismatch		
S:5/10			STI Overflow		
S:5/11			Battery Low		
S:6			Major Error Fault Code		
S:7			Suspend Code		
S:8			Suspend File		
S:9			Active Nodes		
S:10			Active Nodes		
S:11			I/O Slot Enables		
S:12			I/O Slot Enables		
S:13			Math Register		
S:14			Math Register		
S:15			Node Address/ Baud Rate		
S:16			Debug Single Step Rung		
S:17			Debug Single Step File		
S:18			Debug Single Step Breakpoint Rung		
S:19			Debug Single Step Breakpoint File		
S:20			Debug Fault/ Powerdown Rung		
S:21			Debug Fault/ Powerdown File		
S:22			Maximum Observed Scan Time		
S:23			Average Scan Time		
S:24			Index Register		
S:25			I/O Interrupt Pending		
S:26			I/O Interrupt Pending		
S:27			I/O Interrupt Enabled		
S:28			I/O Interrupt Enabled		
S:29			User Fault Routine File Number		
S:30			STI Setpoint		
S:31			STI File Number		
S:32			I/O Interrupt Executing		
S:33			Extended Proc Status Control Word		
S:33/0			Incoming Command Pending		
S:33/1			Message Reply Pending		
S:33/2			Outgoing Message Command Pending		
S:33/3			Selection Status User/DF1		
S:33/4			Communicat Active		
S:33/5			Communicat Servicing Selection		
S:33/6			Message Servicing Selection Channel 0		
S:33/7			Message Servicing Selection Channel 1		
S:33/8			Interrupt Latency Control Flag		
S:33/9			Scan Toggle Flag		
S:33/10			Discrete Input Interrupt Reconfigur Flag		
S:33/11			Online Edit Status		
S:33/12			Online Edit Status		
S:33/13			Scan Time Timebase Selection		
S:33/14			DTR Control Bit		
S:33/15			DTR Force Bit		
S:34			Pass-thru Disabled		
S:34/0			Pass-Thru Disabled Flag		
S:34/1			DH+ Active Node Table Enable Flag		
S:34/2			Floating Point Math Flag Disable,Fl		
S:35			Last 1 ms Scan Time		
S:36			Extended Minor Error Bits		
S:36/8			DII Lost		
S:36/9			STI Lost		
S:36/10			Memory Module Data File Overwrite Protection		
S:37			Clock Calendar Year		
S:38			Clock Calendar Month		
S:39			Clock Calendar Day		
S:40			Clock Calendar Hours		
S:41			Clock Calendar Minutes		
S:42			Clock Calendar Seconds		
S:43			STI Interrupt Time		
S:44			I/O Event Interrupt Time		
S:45			DII Interrupt Time		
S:46			Discrete Input Interrupt- File Number		
S:47			Discrete Input Interrupt- Slot Number		
S:48			Discrete Input Interrupt- Bit Mask		
S:49			Discrete Input Interrupt- Compare Value		
S:50			Processor Catalog Number		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
S:51			Discrete Input Interrupt- Return Number		
S:52			Discrete Input Interrupt- Accumulat		
S:53			Reserved/ Clock Calendar Day of the Week		
S:55			Last DII Scan Time		
S:56			Maximum Observed DII Scan Time		
S:57			Operating System Catalog Number		
S:58			Operating System Series		
S:59			Operating System FRN		
S:61			Processor Series		
S:62			Processor Revision		
S:63			User Program Type		
S:64			User Program Functional Index		
S:65			User RAM Size		
S:66			Flash EEPROM Size		
S:67			Channel 0 Active Nodes		
S:68			Channel 0 Active Nodes		
S:69			Channel 0 Active Nodes		
S:70			Channel 0 Active Nodes		
S:71			Channel 0 Active Nodes		
S:72			Channel 0 Active Nodes		
S:73			Channel 0 Active Nodes		
S:74			Channel 0 Active Nodes		
S:75			Channel 0 Active Nodes		
S:76			Channel 0 Active Nodes		
S:77			Channel 0 Active Nodes		
S:78			Channel 0 Active Nodes		
S:79			Channel 0 Active Nodes		
S:80			Channel 0 Active Nodes		
S:81			Channel 0 Active Nodes		
S:82			Channel 0 Active Nodes		
S:83			DH+ Active Nodes		
S:84			DH+ Active Nodes		
S:85			DH+ Active Nodes		
S:86			DH+ Active Nodes		
T4:0			BACKWASH PENDING TRIGGER DELAY		
T4:0/DN					
T4:1			HIGH PRESSURE ALARM DELAY		
T4:2			LOW FLOW ALARM DELAY		
T4:3			STORAGE TANK LL ALARM DELAY		
T4:4			STORAGE TANK HH ALARM DELAY		
T4:5			BACKWASH CYCLE TRIGGER DELAY		
T4:6			BACKWASH CYCLE		
T4:6.ACC					
T4:6/DN			BACKWASH CYCLE		
T4:7			FILL START DELAY		
T4:8			FILL STOP DELAY		
T4:9			Simulation Calculation Timer		
T4:9/DN			SIMULATION CALCULATION TIMER		
T4:10			FLOW SWITCH CLOSE DELAY		
T4:10/DN					
T4:11			BACKWASH CYCLE COUNT RESET DELAY		
T4:12			BACKWASH DATA LOG PULSE WIDTH		
T4:13			HOURMETER		
T4:13.ACC					
T4:14			HOURMETER RESET DELAY		
U:3			IO		
U:4			Alarms		
U:5			Control Logic		
U:6			HOA		
U:7			Simulation		
U:8			System Mode		
U:9			Backwash Cycle		
U:10			Level Control		
U:11			Hourmeter		
U:12			Review Ladder		

Instruction Comment Database

Address	Instruction	Description

Symbol Group Database

Group_Name	Description