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**Honeywell**

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# **PlantScape Process Operations**

## **Lesson 1**

### **Review Exercises**

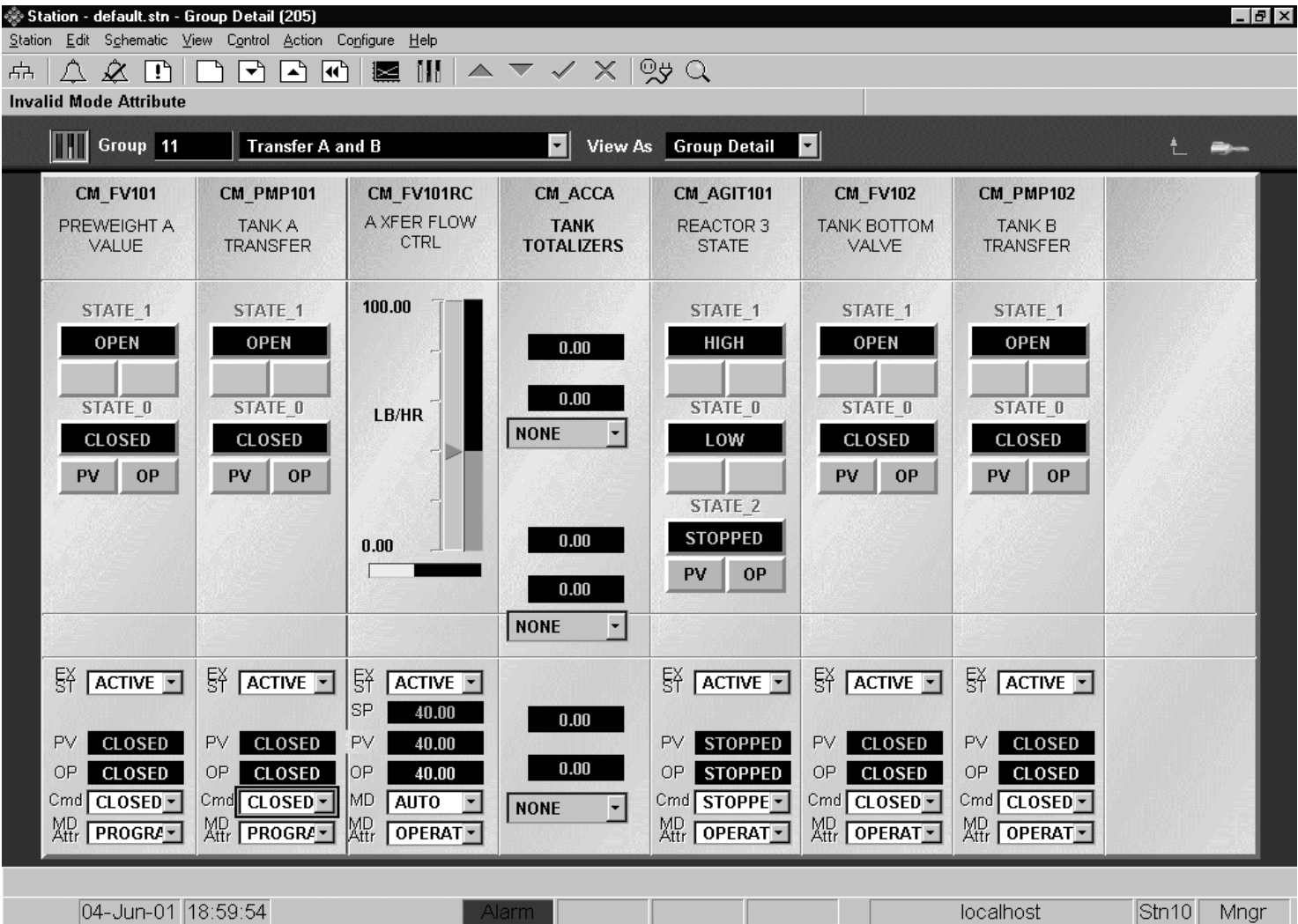
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6-1

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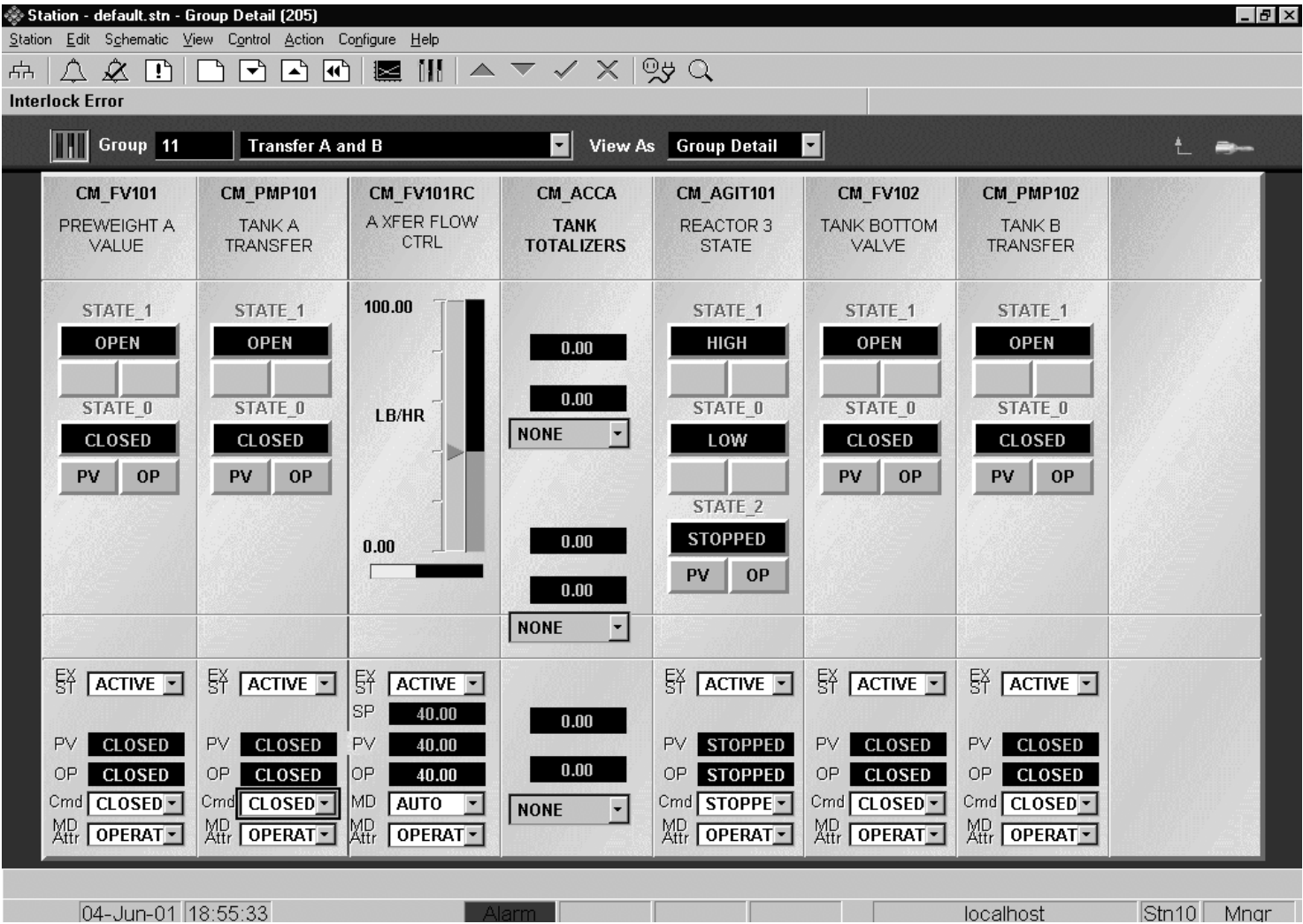
This section is designed to review some important hybrid controller operations concepts. IT IS NOT A TEST!!! It is just a tool for review and extra reinforcement of key information.

Answer the questions to the best of your knowledge and then we will discuss them as a class. You can correct your own book if you desire. The main goal is to understand the concepts!



The operator tries to start pump CM\_PMP101. It does not accept the command. Why? \_\_\_\_\_

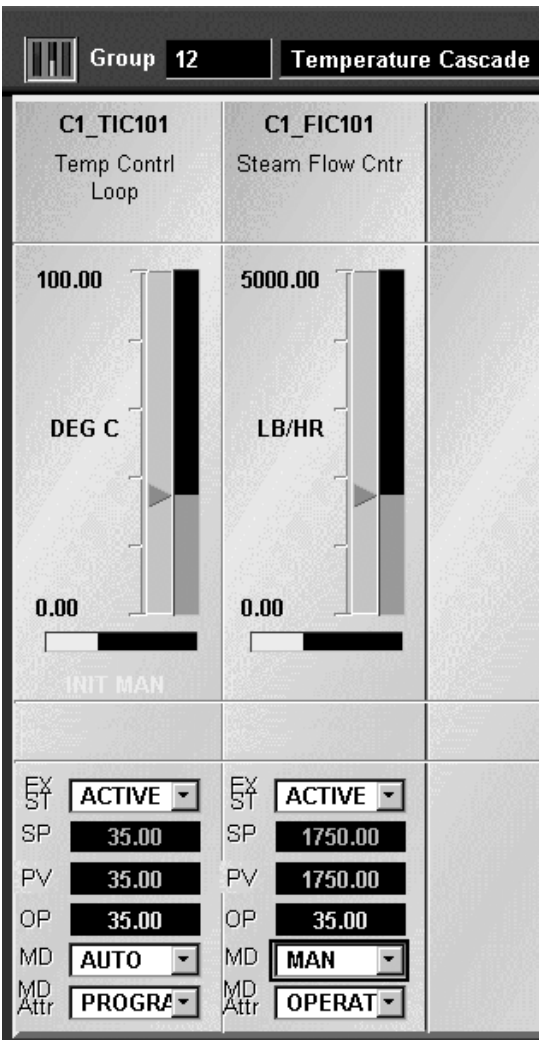
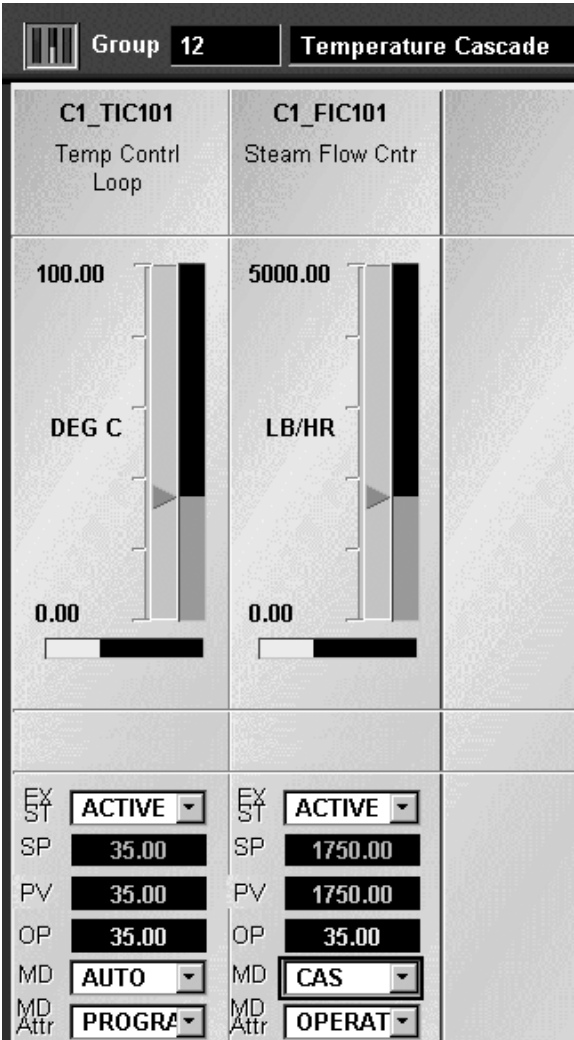
What should be done to fix the problem? \_\_\_\_\_



The operator tries to start pump CM\_PMP101. It does not accept the command. Why? \_\_\_\_\_

What should be done to fix the problem? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



In the screen capture on the left, C1\_TIC101 is cascaded to C1\_FIC101 and both are in proper modes. What would you do in this case to increase temperature to 40 degrees F.? \_\_\_\_\_

In the screen capture on the right, C1\_TIC is in Initialization Manual Mode. Why? \_\_\_\_\_

What would you do in this case to increase temperature to 40 degrees F.? \_\_\_\_\_

PlantScape Process Operations  
Review Exercises

Unit 6  
Lesson1

Group 11

Transfer A and B

View As

Group Detail

CM_FV101 PREWEIGHT A VALUE	CM_PMP101 TANK A TRANSFER	CM_FV101RC A XFER FLOW CTRL	CM_ACCA TANK TOTALIZERS	CM_AGIT101 REACTOR 3 STATE	CM_FV102 TANK BOTTOM VALVE	CM_FV103 TANK TOP VALVE
STATE_1 OPEN STATE_0 CLOSED PV OP	STATE_1 OPEN STATE_0 CLOSED PV OP	100.00 LB/HR 0.00	0.00 0.00 NONE 0.00 0.00 NONE	STATE_1 HIGH STATE_0 LOW STATE_2 STOPPED PV OP	STATE_1 OPEN STATE_0 CLOSED PV OP	STATE_1 STOPPED STATE_0 CLOSED PV OP
EX ST ACTIVE	EX ST ACTIVE	EX ST INACTIV		EX ST ACTIVE	EX ST ACTIVE	EX ST ACTIVE
PV CLOSED	PV CLOSED	PV NaN	0.00	PV STOPPED	PV CLOSED	PV STOPPED
OP CLOSED	OP CLOSED	OP 40.00	0.00	OP STOPPED	OP CLOSED	OP STOPPED
Cmd CLOSED	Cmd CLOSED	MD AUTO	NONE	Cmd STOPPED	Cmd CLOSED	Cmd STOPPED
MD Attr OPERAT	MD Attr OPERAT	MD Attr OPERAT		MD Attr OPERAT	MD Attr OPERAT	MD Attr OPERAT

CM\_FV101RC has a PV reading of NaN (Not a Number). Why?

What should be done to fix the problem?

Group 11

CM1 Transfer A and B

View As

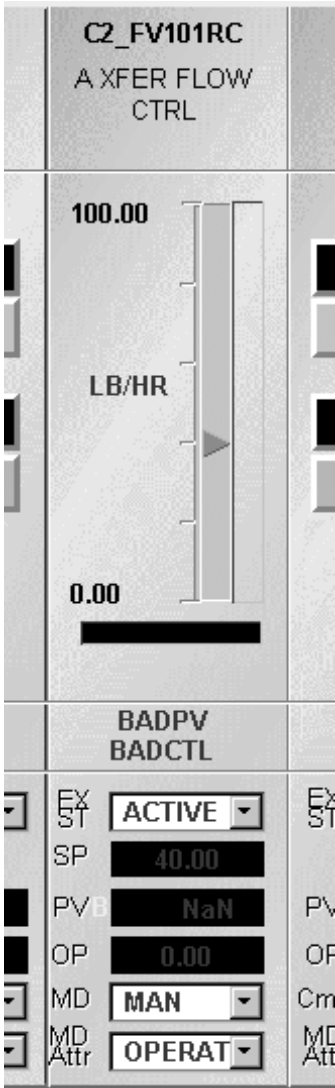
Group Detail

<div>CM1_FV101</div> <div>TANK A BOTTOM</div> <div>STATE_1</div> <div>OPEN</div> <div>STATE_0</div> <div>CLOSED</div> <div>OP</div> <div>INIT MAN</div>	<div>CM1_PMP101</div> <div>TANK A TRANSFER</div> <div>STATE_1</div> <div>ON</div> <div>STATE_0</div> <div>OFF</div> <div>OP</div> <div>INIT MAN</div>	<div>CM1_FV101RC</div> <div>A XFER FLOW CTRL</div> <div>100.00</div> <div>LB/HR</div> <div>0.00</div>	<div>CM1_ACCA</div> <div>TANK TOTALIZERS</div> <div>A</div> <div>Target</div> <div>30.00</div> <div>Total</div> <div>NaN</div> <div>NONE</div> <div>B</div> <div>Target</div> <div>0.00</div> <div>Total</div> <div>NaN</div> <div>NONE</div>	<div>CM1_AGIT101</div> <div>REACTOR 3 STATE</div> <div>STATE_1</div> <div>HIGH</div> <div>STATE_0</div> <div>LOW</div> <div>STATE_2</div> <div>STOPPED</div> <div>OP</div> <div>INIT MAN</div>	<div>CM1_FV102</div> <div>TANK B BOTTOM</div> <div>STATE_1</div> <div>OPEN</div> <div>STATE_0</div> <div>CLOSED</div> <div>OP</div> <div>INIT MAN</div>	<div>CM1_PMP102</div> <div>TANK B TRANSFER</div> <div>STATE_1</div> <div>ON</div> <div>STATE_0</div> <div>OFF</div> <div>OP</div> <div>INIT MAN</div>
<div>EX ST</div> <div>ACTIVE</div> <div>PV</div> <div>Bad</div> <div>OP</div> <div>CLOSED</div> <div>Cmd</div> <div>CLOSED</div> <div>MD Attr</div> <div>OPERAT</div>	<div>EX ST</div> <div>ACTIVE</div> <div>PV</div> <div>Bad</div> <div>OP</div> <div>OFF</div> <div>Cmd</div> <div>OFF</div> <div>MD Attr</div> <div>OPERAT</div>	<div>EX ST</div> <div>ACTIVE</div> <div>SP</div> <div>80.00</div> <div>PV</div> <div>NaN</div> <div>OP</div> <div>0.00</div> <div>MD</div> <div>MAN</div> <div>MD Attr</div> <div>OPERAT</div>	<div>Reactor</div> <div>Target</div> <div>0.00</div> <div>Total</div> <div>NaN</div> <div>NONE</div>	<div>EX ST</div> <div>ACTIVE</div> <div>PV</div> <div>Bad</div> <div>OP</div> <div>STOPPED</div> <div>Cmd</div> <div>STOPPE</div> <div>MD Attr</div> <div>OPERAT</div>	<div>EX ST</div> <div>ACTIVE</div> <div>PV</div> <div>Bad</div> <div>OP</div> <div>CLOSED</div> <div>Cmd</div> <div>CLOSED</div> <div>MD Attr</div> <div>OPERAT</div>	<div>EX ST</div> <div>ACTIVE</div> <div>PV</div> <div>Bad</div> <div>OP</div> <div>OFF</div> <div>Cmd</div> <div>OFF</div> <div>MD Attr</div> <div>OPERAT</div>

The controller for the points in the above group is in the IDLE state. How is this situation shown in the group display? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



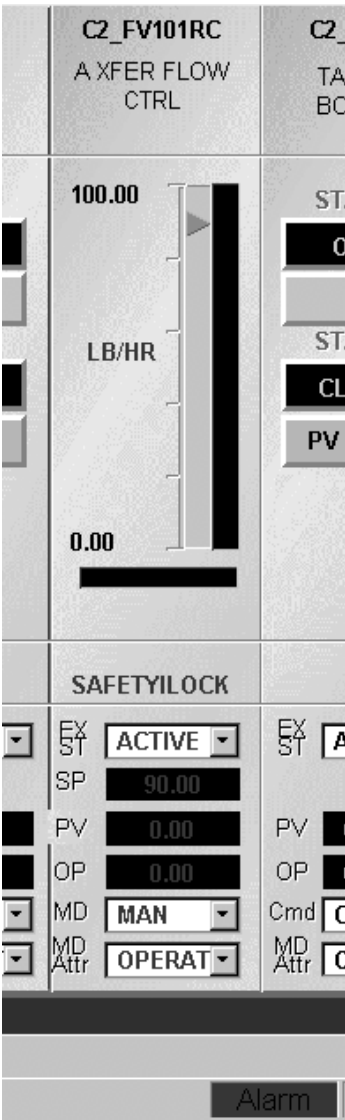
C2\_FV101RV has NaN (Not a Number) for its PV as well as BADCTL and BADPV alarms. What is a possible cause for this situation?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



C2\_FV101RC has a safety interlock which is now in effect. What is the evidence of this situation? \_\_\_\_\_

\_\_\_\_\_

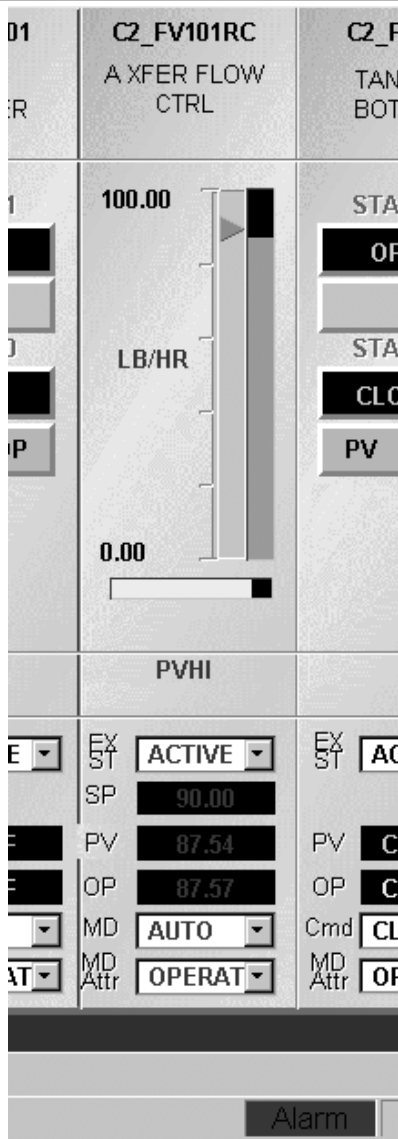
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\_\_\_\_\_

\_\_\_\_\_





What is the status of C2\_FV101RC in the above screen capture?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Can you tell the alarm trip point or priority from the group display?

\_\_\_\_\_

Where can this information be viewed? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PlantScape Process Operations  
Review Exercises

Unit 6  
Lesson1

Station - default.stn - Alarms (5)

Station Edit Schematic View Control Action Configure Help

Alarms

Priorities 

All

Area 

All Areas

☐ Unacknowledged only

Date	Time	Area	Point ID	Alarm	Priority	Description	Value
* 19-Jan-01	11:49:43	A2	VLV1102	ALARM	H 00	TANK 2 OUTLET VALVE	CLOSED
* 19-Jan-01	11:48:59	C2	C2_FIC101	PVLOW	L 00		
* 19-Jan-01	11:47:20	C2	C2_FV101RC	PVHIGH	H 00		
* 19-Jan-01	11:39:49	plant	CPM0101	DIAG	H 00	Battery Not OK	

1 Total Unacknowledged

3 Total Acknowledged & still in alarm

\* Unacknowledged & in alarm

\* Acknowledged & in alarm

\* Unacknowledged & returned to normal

- Unacknowledged & disabled

✓ Acknowledge page

19-Jan-01 11:49:43

A2

VLV1102

ALARM

H 00

TANK 2 OUTLET VALVE

CLOSED

19-Jan-01

11:50:07

Alarm

Message

localhost

Strn10

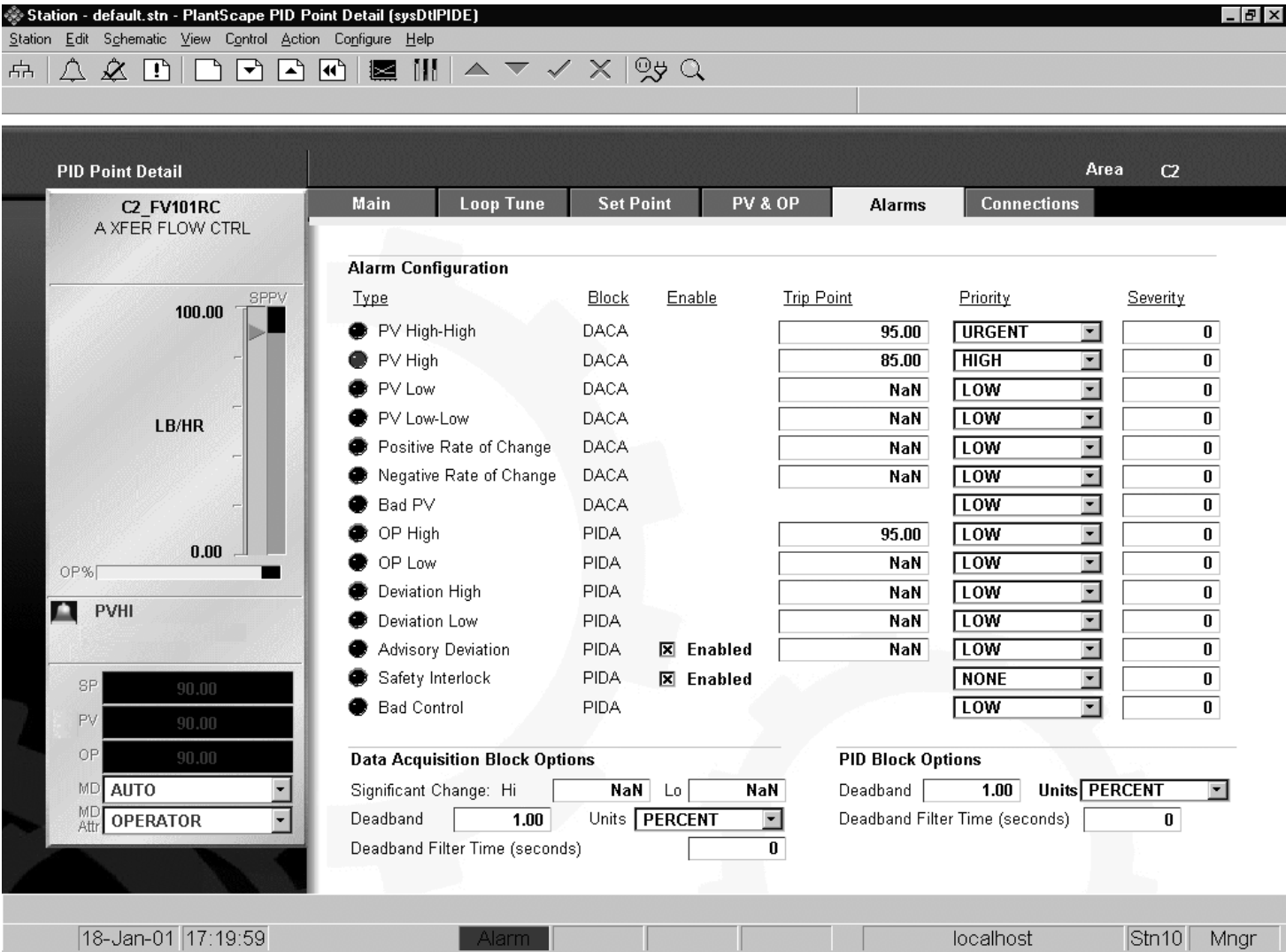
Mngr

C2\_FV101RC is in still alarm as shown on the previous page. In the alarm summary shown, which entry is for this point?

What is its alarm priority? \_\_\_\_\_

How can you see the point’s current PV and alarm trip points? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



The alarms page of the point detail display for C2\_FV101RC is shown. The point is still in PVHI alarm. What is the current PV?

What is the alarm priority for PVHI? \_\_\_\_\_

What is the PVHI trip point? \_\_\_\_\_



**This completes....**

**PlantScape Process Operations**

**Lesson 1**

**Review Exercises**
