Chapter 7

INTRODUCTION

The five options of the User Initiated Operations Menu were developed to help increase the efficiency of your cable pressurization management. The first three options enable you to update your MAP System after data entry or office changes have been made, by placing a call to the PressureMAP office to acquire new readings, and to regenerate the PressureMAP Dispatch Priorities and System Indexes. The fourth User Initiated Operation function allows you to browse files created by AlarmMAP whenever an alarm is not properly received. These files include office associated alarm error files, the "unrecognizable" office alarm error files, and any "mailed" alarms that could not be sent. The last option generates custom reports that utilize the data gathered by the MAP System. Additional reports will be added to the MAP software as the need arises.

UPDATING OFFICE INFORMATION

Placing a call to a PressureMAP office monitor after adding or changing device data is a proven way to verify the accuracy of the data. Now, instead of waiting for the office to be called by the MAP Program's schedule, you can force a call to the office, which updates the reading in the "Current" column for all of the devices in the office. After the office has acquired new readings, you can complete the office information update by regenerating Dispatch Priorities and System Indexes.

Updating Device Readings

To update the device readings, follow the procedures outlined below. Please note that since the call procedure uses the interactive modem pool to place the call, it will not conflict with or delay the scheduled MAP Program call cycle.

The procedures begin at the System Options Menu. However, if your login takes you directly to the MAP Programs Menu, you may begin at Step 2. If you do not have access at the System Options or MAP Programs levels, you cannot access this feature.

Procedure:

- From the System Options Menu, choose Item 1, Select MAP Program, and follow your selection with <*Return>*. You should see the MAP Programs Menu.
- 2. From the MAP Programs Menu, select Item **7**, User Initiated Operations, and follow your choice with *Return>*. The User Initiated Operations Menu, SCREEN 7-1, will be displayed.

User Initiated Operations 12/02/2010 10:41	MAP Series XX.XX.XX System Studies Incorporated
User Initiated Operations	
 Acquire New Current Readings Regenerate Dispatch Priorities Regenerate System Indexes View MAP Data Files Custom Reports Reset 289 Phone Tables Quit 	
Choice?	

SCREEN 7-1: USER INITIATED OPERATIONS MENU

3. At the User Initiated Operations Menu select Item **1**, Acquire New Current Readings, and follow your selection with *<Return>*. The program will respond with the prompt:

```
Acquire New Current Readings for which office?
```

4. Enter either the number, name or name abbreviation for the desired office at the prompt. Entering a ? and <*Return>* will bring up a listing of all offices in a selection spreadsheet format. Please note that the spreadsheet selection mode allows you to choose only one office at a time. For more information on how to enter office names, please refer to the Preface section of this manual.

After the desired PressureMAP office has been selected, the MAP System will place a call to the office. During the call, the output of the MAP CALL program will appear on the screen. This output differs slightly, depending upon whether the call is placed to a network connected monitor or to a monitor using a modem. Samples of what can be displayed are shown below:

```
Calling <OFFICE NAME> (IP=XXX.XXX.XXX.XXX:####)
Acquiring Data [13:48].
Saving data..[13:50].
```

In the network connected example above, the IP address of the monitor is displayed with the last four digits representing the port number. In modem example below, the monitor's baudrate is displayed.

```
Calling <OFFICE NAME> (9600 baud)
Acquiring Data [13:48].
Saving data..[13:50].
```

After the data is gathered, the program will return to the User Initiated Operations Menu. You can select another option or quit. To view the new readings, access the Device Histories option in the PressureMAP Master Menu.

Regenerating Dispatch Priorities

Dispatch Priorities are automatically generated once each day, after the first call of the day is placed. If a dispatch condition has improved, or has been corrected, you can manually regenerate the Dispatch Priorities for a PressureMAP office. Before manually generating new dispatches, you should verify that the readings in the office are current, by either calling the office using Option 1 from the User Initiated Operations Menu, or by viewing the Office Status Display which is seen on Alternate Console 12. To regenerate dispatches, follow the procedures outlined below.

The procedures begin at the User Initiated Operations Menu (SCREEN 7-1). However, if you need help getting to this menu, follow the procedures for Acquiring New Readings, which start on page 7-1.

Procedure:

1. At the User Initiated Operations Menu select Item **2**, Regenerate Dispatch Priorities, and follow your selection with *<Return>*. The program will respond with the prompt:

Regenerate Dispatch Priorities for which office?

Enter the number, name or name abbreviation for the desired office at the prompt. You
may also type a ? followed by <*Return>* to see a listing of all of the available offices. Simply
highlight your selection and hit <*Return>*.

After selecting the PressureMAP, the program responds with the following output:

Developing Dispatch Priorities for <OFFICE NAME>..... Developing Dispatch Alarms for <OFFICE NAME>.....

After Dispatch Priorities and Alarms have been regenerated, the program will return to the User Initiated Operations Menu. You can select another option, or quit. To view the new dispatches, access the Dispatch Priorities option in the PressureMAP Master Menu.

Regenerating System Indexes

The MAP Program automatically generates new indexes for each office after the first call of the day is placed, usually at 3:00 A.M. In addition to the daily index, an index for an office is automatically regenerated if the flow or pressure standards in the Office Information Screen have been edited, or if entries in the following device data fields are changed: Type, OAU, SAU, Pipe name, or PSI. If you wish to manually regenerate indexes, follow the procedures outlined below.

The procedures begin at the User Initiated Operations Menu (SCREEN 7-1). If you need help getting to this menu, follow the procedures for Acquiring New Readings, which start on page one.

Procedure:

1. At the User Initiated Operations Menu select Item **3**, Regenerate System Indexes, and follow your selection with *Return*. The program will respond with the prompt:

Regenerate System Indexes for which office?

 Enter the number, name or name abbreviation for the desired office at the prompt. Typing ? followed by *<Return>* produces a listing of all the available offices. Simply highlight your selection and hit *<Return>*. After entering a valid PressureMAP office name or number, the program responds with the following output:

```
Developing System Index for <OFFICE NAME>.....
```

After the System Index is regenerated, the program will return to the User Initiated Operations Menu. You can select another option, or quit. To view the new index, access the System Index option in the PressureMAP Master Menu.

VIEWING MAP DATA FILES

The next option of the User Initiated Operations menu gives you the ability to view the error files created by AlarmMAP or the SMTP mail server. The AlarmMAP files include those generated for office-associated alarm errors, as well as the error file generated for unrecognizable CPAMS or "unknown" alarms. With the information included in these files, you should be able to diagnose any current problems the MAP Program may be having in receiving alarms. You can quickly see which office is sending out alarms that are not properly received and correct any problems associated with these "bad" alarms (such as an incorrect office name in the CPAMS).

The MAP Schedule checks and logs all mail that is undeliverable (returned), unexpected (mail to a local user), or unable to be sent (network or mail server turned off), to one of three types of log files. Mail that is returned is logged to the "Returned Mail Log File." All other mail that is sent to the MAP System and cannot be recognized as "returned mail" is logged to the "Unexpected Mail Log File." The "Mail Messages Not Sent" log file is used when high priority mail cannot be sent due to a network or mail server problem. All of these logs can be accessed and viewed using this option of the User Initiated Operations Menu.

Depending upon the capabilities of the terminal you are using, the program will display the files that are available for viewing in either a menu or a selector format. If your terminal is not "browser capable" (i.e., most hard-copy terminals), the file contents will simply be printed. However, if you can utilize the browser function of the MAP Program, you will be able to search the file contents, move through the file a page at a time, view an alarm analysis information screen, or erase the entire alarm error file. The examples shown in this section are from a "browser capable" terminal.

Accessing the View MAP Data Files Menu

The procedures to View MAP Data Files begin at the System Options Menu (Screen 7-2). However, if your login takes you directly to the MAP Programs Menu (Screen 7-3), you may begin at Step 2. If you do not have access at the System Options or MAP Programs level, you cannot access this feature.

System Options	MAP Series XX.XX.XX
12/02/2010 10:32	System Studies Incorporated
System Options 1. Select MAP Program 2. Select MAP Data Entry 3. System Administration 4. Language Selection Q. Quit Choice?	

SCREEN 7-2: SYSTEM OPTIONS MENU

Procedure:

1. From the System Options Menu (SCREEN 7-2), choose Item **1** and follow your selection with *<Return>*. You should see the MAP Programs Menu.

AP Programs	
1. PressureMAP	
2. ReportMAP	
3. CableMAP	
4. AlarmMAP	
5. DryerMAP	
6. CPAMS Diagnostics	
7. User Initiated Operations	
Q. Quit	

SCREEN 7-3: MAP PROGRAMS MENU

- 2. From the MAP Programs Menu select Item **7**, User Initiated Operations, followed with *<Return>*. The User Initiated Operations Menu (SCREEN 7-1) will be displayed.
- 3. At the User Initiated Operations Menu select Item **4**, View MAP Data Files, followed by *Return>. The menu options in SCREEN 7-4 display.*

View MAP Data Files 12/02/2010 10:50	MAP Series XX.XX.XX System Studies Incorporated
View MAP Data Files	
 Incomplete CPAMS Alarms Unrecognizable CPAMS Alarms Returned Mail Messages Unexpected Mail Messages Mail Messages Not Sent Quit Choice? 	

SCREEN 7-4: VIEW MAP DATA FILES MENU

This menu offers you two types of alarm error files to view and three types of mail log files to view. The procedures for viewing and analyzing the alarm error files are explained below, while the procedures for viewing the mail logs start on page 7-15.

Viewing Alarm Error Files

The menu offers you two types of alarm error files to view, Incomplete CPAMS Alarms and Unrecognizable CPAMS Alarms. Since both options of the menu operate identically, the following procedures will only reference the first option, Incomplete CPAMS Alarms. If you wish to view data presented in the second option, simply select option 2.

Procedures:

 From the View MAP Data Files Menu (SCREEN 7-4) select option 1, Incomplete CPAMS Alarms, followed by <*Return>*. You will see a screen similar to SCREEN 7-5, with the offices in your MAP System listed.

SCREEN 7-5: INCOMPLETE CPAMS ALARMS MENU

Depending upon the capabilities of the terminal you are using, the program will display the files that are available for viewing in either a menu or a selector format. If your terminal is not "browser capable" (i.e., most hard-copy terminals), the file contents will simply be printed. However, if you can utilize the browser function of the MAP Program, you will be able to search the file contents, move through the file a page at a time, view an alarm analysis information screen, or erase the entire alarm error file.

2. Select the alarm file you wish to view by moving the selector bar and pressing the *Return*> key. A sample bad alarm file is shown in SCREEN 7-6.

The top two lines of the screen list the keystrokes and options that are available for the terminal type you are using. An extended help menu will "pop-up" after you enter the *H* key. This menu is shown in SCREEN 7-7. In addition to the browser keys shown in the pop-up menu, the keys listed on the top two lines will help to move about the alarm error file, give you information about a typical error alarm, and let you erase the alarm file that you are currently viewing.

```
Keystrokes: [Quit <Esc>] [Down 'J'] [Up 'K'] [Help 'H'] [Print 'P'] [Info 'I']
        [Search Forward 'F'] [Search Back 'B'] [Search Next 'N'] [Erase 'E']
Incomplete CPAMS Alarms for <OFFICE NAME>
(syntax error found in alarm)
G****** ALARM ^G****** ALARM ^G****** ALARM ^G******
UNIT # 1 979 WEST AIR PRESSURE MONITOR
DATE: WED - JAN 26 2010
TIME: 1238
  - TRANSDUCERS -
NO. LOCATION
                       ~
########### ALARM-IN-ERROR ######## 01/27/10:59:54 ttyA1 #########################
(syntax error found in alarm)
^G****** ALARM ^G****** ALARM ^G****** ALARM ^G******
UNIT # 1 979 WEST AIR PRESSURE MONITOR
DATE: THU - JAN 27 2010
TTME: 0954
  - TRANSDUCERS -
NO. LOCATION
```

SCREEN 7-6: SAMPLE ALARMS

Entering the letter **J** will move the cursor down one line and entering **K** will move the cursor up one line. To print the entire alarm file that you are viewing, enter **P** and follow the information that appears on your screen. To search for a key word or phrase, enter **F** or **B** to search either forward or backward through the file. To view an alarm analysis information screen, enter **I**.

You need to be viewing the file with a "Browser" capable terminal to access the information or erase options of the keystroke menu.

```
The following keys can be used while browsing:
Type <Esc> to return to the previous menu.
Type 'G' to group lines.
Type 'B' to search back.
Type 'F' to search ahead.
Type 'N' to search again.
Type 'J', <Tab>, <Down Arrow>, <Ctrl J> to scroll down one line.
Type 'K', <Up Arrow> to scroll up one line.
Type '.', '>', <End> to scroll to the bottom.
Type ',', '<', <Home> to scroll to the top.
Type 'D', <Page Down> to scroll down one screen.
Type 'U', <Page Up> to scroll up one screen.
Type 'P' to print the report.
Type 'X' to export the report to a DOS floppy disk.
Type 'H', '?', <Ctrl Z> to see this help message.
Type 'I' to see information on the current browse topic.
Type 'E' to erase the current browse file and exit.
Type <Ctrl L> to clear and redraw the screen.
```

SCREEN 7-7: KEYSTROKE HELP MENU

Analyzing Alarm Error Files

Each separate alarm that the MAP Program receives and stores in these files will be displayed between two lines of "#" characters. Within the top line of "#" characters is the message "ALARM-IN-ERROR", followed by the time and date that the alarm originated, as well as the port on which the alarm was received. Knowing the port can be useful in determining which Alarm Receiver is having problems (if your system has multiple Alarm Receivers running). The bottom line of "#" characters signifies the end of the alarm data and contains the message "END-BAD-ALARM". Refer to SCREEN 7-6 to view a typical bad alarm file.

To help you in analyzing the problem with each bad alarm, a line of text within parenthesis is placed at the top of the bad alarm information, just below the top line of "#" characters. This message describes what PressureMAP thinks is wrong with the alarm and is usually very brief, such as "syntax error found in alarm." If the message is unclear and you are unable to determine what is wrong with the alarm, call System Studies Technical Support for assistance.

When analyzing a bad alarm, it is helpful to be familiar with the format of a normal alarm for the CPAMS you are using. This allows you to compare the format of a good alarm to the bad alarm contained in the alarm error file. At the end of this section, there are examples of alarms from different CPAMS which can be used for this comparison. Comparing the alarm in the error file with a "good" alarm from your CPAMS will also help you find any problems in the alarm.

To find the reason that PressureMAP was unable to fully recognize an alarm, you need to ask yourself these questions:

- Is the office name correct?
- Is the baudrate correct?
- Is the alarm complete?
- Is the alarm garbled?

Is the office name correct?

PressureMAP will place an alarm in the Unrecognizable CPAMS Alarms file if it finds that the office name appearing in the alarm does not exist in PressureMAP. Verify that the name of the office in the alarm exactly matches a PressureMAP office name (close is not good enough). If there is no PressureMAP office matching the name as displayed, you need to modify your CPAMS or PressureMAP office information to make the names identical. The office name must also appear in the correct place in the alarm header. Refer to the sample alarms in the back of this section to determine where the office name should appear in an alarm from the CPAMS you are using.

Is the baudrate correct?

If you see nothing but "garbage" characters, often composed of "x" and "{" characters, then chances are that the CPAMS is sending the alarm at a different baudrate than PressureMAP is using. You can either set the CPAMS to use the baud rate the PressureMAP Alarm Receiver is using or you need to have Technical Support at System Studies change the Alarm Receiver to the baudrate your CPAMS is using. Remember, if you have the baud rate changed on the Alarm Receiver, all of the CPAMS will need to be checked to verify that they are sending alarms at the new baudrate.

Is the alarm complete?

It is possible that the CPAMS only sent a partial alarm to PressureMAP. What usually occurs is that the CPAMS will call the Alarm Receiver and start sending an alarm. Part way through the process (before the office name is sent for Unrecognizable CPAMS Alarms errors) the connection will be lost due to line problems, noise, or a modem error. In the world of data communications, this is not an uncommon problem. As long as it doesn't occur very often, you probably don't need to worry about it. However, if you see a large number of incomplete alarms, you may want to check your phone lines for noise. If they are clear, the problem may be with your CPAMS or the modem at either the CPAMS or PressureMAP.

Is the alarm garbled?

Check a bad alarm for a series of characters that don't look like they belong in the alarm. Check for control characters (characters preceded by a "^" character) and text, usually in groups, that were inserted into the communications stream during the receipt of the alarm. This is another common data communications problem that can occur usually due to noise on the phone line or an interruption in phone service. If it occurs you can usually see it because the alarm simply looks wrong.

Note: It is normal for a small number of "garbage" characters to appear at the very beginning and end of alarms. This is caused by making a modem connection and by dropping a modem connection. What you need to look for are "garbage" characters in the alarm itself.

Erasing Alarm Error Files

In addition to the cursor movement keys, ERASE is also an option of the keystroke menu. To erase a file you need to actually be viewing the file.

Procedure:

 At the Incomplete CPAMS Alarms or Unrecognizable CPAMS Alarms Menu (SCREEN 7-5), select the alarm file you wish to erase by moving the selector bar and pressing the *<Return>* key. You will now see the alarm error file (Screen 7-7), with the two line keystroke menu above the alarm.

2. To erase the alarm file, enter the letter *E*. You will see the following prompt.

Are you sure you wish to erase the file you are viewing? Y[es], N[o]

If you do wish to delete the file, enter Y and press <*Return>*. You will see the following information, and be returned to the View MAP Data Files Menu.

```
Deleting the current file and terminating the browser..
```

Examples Of "Good" Alarms

The following alarms are examples of "good" alarms—that is, alarms that can be correctly processed by PressureMAP's Alarm Receiver. They can be used to make comparisons with the alarms you view in the error files, and they should help you identify any format problems you may have with your alarms. (A list of incoming alarm activity in your system can be viewed by pressing the <Alt> <F10> keys.)

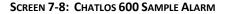
```
      600-PR
      <OFFICE NAME>
      06:37
      10/06/10
      NGT
      263
      8877
      ALARM

      REPORT ALL ALARMS TO
      555
      5555
      OR
      800
      555
      5131

      SENSOR
      TP
      CRKT PR
      LVL
      DAY-2
      DAY-1
      RDG
      STATUS
      ADDRESS

      ST-005
      A
      CA1N 3
      1.0
      (
      8.0)
      1.5
      *
      P405
      N.CULPEPPER

      600-PR
      <OFFICE NAME>
      06:37
      10/06/10
      NGT
      263
      8877
      LOGOFF
```



```
640 pr.02 753 <OFFICE NAME> 045 12:01 F A
SS-015 1 N.G. *
```

640 PR.02 753 <OFFICE NAME> 045 12:01 F X

SCREEN 7-9: CHATLOS L1 SAMPLE ALARM

SCREEN 7-10: HERCULES 740 SAMPLE ALARM

 640-CP12
 <OFFICE NAME>
 15:35 06/13/10 Day C 800 5557590
 ALARM

 SENSOR
 TP CKT PR
 LVL
 DAY-2
 DAY-1
 RDG
 STATUS
 ADDRESS

 MA-012
 D
 A 7
 N/O
 (O.K.)
 (O.K.)
 N.G.
 *
 DRYER #2

 P -283
 X
 W2F4
 7 15.0
 (15.0)
 16.0
 *
 M4011STCHLSEGERLDEMF

 P -292
 U
 WCPO
 3 5.0
 (9.0)
 (9.0)
 2.0
 *
 M4006STCHSRK&COLE36

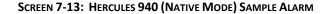
 640-CP12
 <office NAME>
 15:35 06/13/2010 Day C 800 5557590
 ALARM



640-MPU	Z <office 1<="" th=""><th>NAME> 00:3</th><th>9 02/22/10 D.</th><th>AY 555-</th><th>9940 ALARM</th></office>	NAME> 00:3	9 02/22/10 D.	AY 555-	9940 ALARM
SENSOR	TP CKT PR	LVL DAY-2	DAY-1 RDG	STATUS	ADDRESS
					628 N OSPREY AVE
			(7.5) 7.0 (OPEN) OPEN		SUNSET DR&GULFSTREAM MH1101 TUTTLE SS12
640-MPU	Z <office 1<="" td=""><td>NAME> 00:4</td><td>0 02/22/10 D</td><td>AY 555-</td><td>9940 LOG OFF</td></office>	NAME> 00:4	0 02/22/10 D	AY 555-	9940 LOG OFF

SCREEN 7-12: CHATLOS L2 SAMPLE ALARM

940HS-P01A <OFFICENAME>15:17 03/02/10 DAY C <PHONE #>
RESTORED BY PRESSUREMAP ON 02/29/09. VERIFY LOCKOUTS.ALARMSensorTP Circt PR Alrm Esc Day2 Dayl Curr StatusAddressST-0014X MANF1 18.0 0/20 9.0 9.0 9.0 9.0MH4940HS-P01A <OFFICE NAME>15:17 03/02/10 DAY C <PHONE #>END ALARM



```
******-ALARM-ALARM-ALARM-ALARM-ALARM-ALARM-ALARM-ALARM******
<OFFICE NAME> SPARTON SYSTEM
UNIT: 1 MUSCARINE CONTACT ALARMS
DATE: 91410
DAY: TUE
TIME: 1255
-- CONTACT ALARMS --
NO. LOC. STAT DATE TIME
2 002-DRY-TALRS-CORNER LOCK 91410 1254
```

SCREEN 7-14: SPARTON (5300 MODE) SAMPLE ALARM

```
^G****** ALARM ****** ALARM ****** ALARM ****** ^G
UNIT # 1 <OFFICE NAME> ARSB-174 - CPSS II SATELLITE
DATE: THU - FEB 15, 2010 TIME: 1214
-- TRANSDUCERS --
NO. READ LOCATION THR# REF ALARM ALMRD DATE TIME
90 4.0 016 MH82-140 BOUNDEN/MARTIN 3 5.0 LOW 4.0 2/15 1210
EOT
```

SCREEN 7-15: SPARTON SATELLITE (5300 MODE) SAMPLE ALARM

SCREEN 7-16: SPARTON 5300B (5500 MODE) SAMPLE ALARM

onday Oct 5, 2010 11:57 ransducers o. Inp# Location	Read Typ			Ta			
	Read Typ						
		pe I	Ref			1: 10/05/10 Rd Date	
12 15 014 74 IC 1405 DOUGLAS	7.0 PRE	s	7.0	1			
13 17 016 FLOW C.O.FLOW TRANSDUCER	MF	50	2.9	7	Open	09/06/09	18:16
14 18 017 5 ICP237DOUGLAS	PRE	S	8.9	1	Open	09/06/09	18:16
16 10 Point added by remote.	8.0 PRE	IS	8.0	1			
17 16 Point added by remote.	PRE	S	6.6	1	Open	9/06/09	18:16
inary Alarms	Last	Scanned:	10/	04/10	11:57		
o. Inp# Location S	Status Ev	vent Alarm		Date	Time		

SCREEN 7-17: SPARTON 5318 MMU SAMPLE ALARM

<OFFICE NAME> <SERVICE AREA> 08/31/10 09:25:47 555-9118
Ind Inpt Adr Ty Gr Circ Thrsh Trend Esc Alarm Time Prsnt Stat Identifier
1 1 BI 2 2 N/O 0 09:24:43 (NG) T Bin Pt 1
2 2 BI AB N/O 0 09:24:43 (NG) T Bin Pt 2

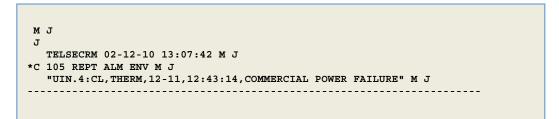


LANCIER DW101 E - 1.21 DATE: FR.11.06.10 LOGTIME: 11:46 N EXCHANGE MONITOR SSI-LANCIER TEL: 477-8980 ALARM REPORT C CH-UNI TY-K A CIRC LVL1 LVL2 SSH RDG STATE DY L O C A T I O N Q+02+001 P3-A A C101 1000 957 958 ALARM 00 MH302-SOQUEL-AVE RESTORED ALARM REPORT C CH-UNI TY-K A CIRC LVL1 LVL2 SSH RDG STATE DY L O C A T I O N LANCIER DW101 E - 1.21 DATE: FR.11.06.10 LOGOFFTIME: 11:46 N EXCHANGE MONITOR SSI-LANCIER TEL: 477-8980

SCREEN 7-19: LANCIER 101 SAMPLE ALARM

```
LANCIER DW1005E - 1.26 DATE: FR.07.03.10
                                  LOGTIME: 09:14 N
EXCHANGE MONITOR SPARVEN
                              TEL:
ALARM REPORT
C-SL-CH-UNI TY-K A CIRC LVL1 LVL2 SSH RDG STATE DY L O C A T I O N
     ------
                                          ------
Q+03+02+002 P3-A A BZ 1200 1183 1186 ALARM 99 SPF 64
CLEAR REPORT
C-SL-CH-UNI TY-K A CIRC LVL1 LVL2 SSH RDG STATE DY L O C A T I O N
Q+03+01+001 P3-A A DI 1200 1443 1445 00 SPLv.116 F 21
LANCIER DW1005E - 1.26 DATE: FR.07.03.10
LOGOFFTIME: 09:15 N
EXCHANGE MONITOR
             SPARVEN
                              TEL:
```

SCREEN 7-20: LANCIER 1005 SAMPLE ALARM



SCREEN 7-21: QUEST TELSEC SAMPLE ALARM (DIGITAL)

289H ALERTS

The System Studies 289H and 289H-M LSS monitors are capable of sending a special type of alarm, which is referred to as an ALERT. shows what a typical alert from a 289H monitor looks like, and has a text description of each field in a typical 289H alert. Incoming alerts can be viewed on the incoming alarm activity screen, which is accessed by pressing the **<***Alt***> <***F10***>** keys. Alert sensitivity, which filters the alerts sent in, is set through the Office Information screen.

```
        289H
        ALERT
        Thu May 19
        12:05:22
        2010
        LOG

        0666
        ttyA5
        <OFFICE>
        001-03
        (001-03)
        MF
        RF

        CURR RDG:
        7864
        (90.2)
        OLD THRESH:
        7231
        (85.8)
        NEW THRESH:
        0
        (DISABLED)
```

SCREEN 7-22: 289H TYPICAL ALERT

```
289H ALERT <timestamp> <log entry description>
<sys#> <port> <office> <device#> (<mimicked cpams#><native cpams#>) <typ>
<tdty>
CURR RDG: <count>(<rdg>) OLD THRESH: <count>(<rdg>) NEW THRESH: <count>(<rdg>)
```

SCREEN 7-23: 289H TYPICAL ALERT (FIELD DESCRIPTIONS)

USAM ALARM FORMAT

The System Studies Universal Stand-alone Modules (USAM) send alarms to PressureMAP from their serially-connected 289H or 289H-M LSS monitors. Since the USAM does not have alerting capabilities, as does the 289H, the alarms generated are somewhat different. For example, they do not contain the same header as 289H Alert, nor do they include the user-defined threshold information that defines the alerting criteria. SCREEN 7-24 displays the type of information sent to PressureMAP, and SCREEN 7-25 includes a text description of each field in a typical USAM Alarm.

USAM,USAM ENGINE,MAIN,001-02,200 USAM,USAM ENGINE,MAIN,001-02

SCREEN 7-24: TYPICAL USAM ALARM

USAM <alarm label>,USAM ENGINE <USAM Center name>, MAIN <office name>,001-02 <device number>,200 <unformatted reading>

SCREEN 7-25: TYPICAL USAM ALARM (FIELD DESCRIPTIONS)

Viewing Mail Log Files

The MAP Schedule checks and logs all Network circulated mail that is undeliverable (returned), unexpected (mail to a local user), or unable to be sent (network or mail server turned off), to one of three types of log files. Mail that is returned is be logged to the "Returned Mail Log File." All other mail that is sent to the MAP System and cannot be recognized as "returned mail" is logged to the "Unexpected Mail Log File." The "Mail Messages Not Sent" log file is used when high priority mail cannot be sent due to a network or mail server problem. All of these logs can be accessed and viewed using this option of the User Initiated Operations Menu.

When the mail server is off, all new alarms that fail to be sent will cause a Four Star System Alarm to be created. The contents of the mail message will be logged to the "Mail Messages Not Sent" log file, which can be accessed and viewed using the View MAP Data Files option of the User Initiated Operations Menu. The logged alarms will have an ID, and by using the System Dispatch in combination with the Log File created by View MAP Data Files, any undelivered alarm can be located and read.

When undelivered mail is returned, or considered by the MAP System to be corrupted or bad, one of the following System Alarms/Dispatches will be posted for 26 hours. An explanation for each error number can be found in Appendix 3 (System Error List) of this manual.

ERROR 844	Priority mail (ALARM) returned, delivery failed	****
ERROR 845	Returned mail found (To:login name)	* *
ERROR 846	Unexpected mail detected (From:name@machine)	* *
ERROR 847	Priority mail (ALARM) not sent, mail/network off	****
ERROR 848	Low priority mail waiting, mail/network turned off	*

The three mail log files, Returned Mail Log File, Unexpected Mail Log File, and Mail Messages Not Sent, all operate identically. They can be accessed from the View MAP Data Files Menu (SCREEN 7-26) by selecting the appropriate option. The following procedures will only reference the first mail log option, Returned Mail Log File. If you wish to view data presented in one of the other options, simply select 4 or 5 in place of option 3.

View MAP Data Files	MAP Series XX.XX.XX
12/02/2010 10:50	System Studies Incorporated
View MAP Data Files 1. Incomplete CPAMS Alarms 2. Unrecognizable CPAMS Alarms 3. Returned Mail Messages 4. Unexpected Mail Messages 5. Mail Messages Not Sent Q. Quit Choice?	

SCREEN 7-26: VIEW MAP DATA FILES MENU

Procedures:

1. From the View MAP Data Files Menu select option **3**, Returned Mail Log File, followed by *Return>*. You will see a screen similar to SCREEN 7-27.

SCREEN 7-27: RETURNED MAIL LOG

Depending upon the capabilities of the terminal you are using, the program will display the files that are available for viewing in either a menu or a selector format. If your terminal is not "browser capable" (i.e., most hard-copy terminals), the file contents will simply be printed. However, if you can utilize the browser function of the MAP Program, you will be able to search the file contents, move through the file a page at a time, view an alarm analysis information screen, or erase the entire alarm error file.

The extended help menu that will "pop up" after you enter the H key is shown in Screen 7-28.

```
The following keys can be used while browsing:
Type <Esc> to return to the previous menu.
Type 'G' to group lines.
Type 'B' to search back.
Type 'F' to search ahead.
Type 'N' to search again.
Type 'J', <Tab>, <Down Arrow>, <Ctrl J> to scroll down one line.
Type 'K', <Up Arrow> to scroll up one line.
Type '.', '>', <End> to scroll to the bottom.
Type ',', '<', <Home> to scroll to the top.
Type 'D', <Page Down> to scroll down one screen.
Type 'U', <Page Up> to scroll up one screen.
Type 'P' to print the report.
Type 'X' to export the report to a DOS floppy disk.
Type 'H', '?', <Ctrl Z> to see this help message.
Type 'I' to see information on the current browse topic.
Type <Ctrl L> to clear and redraw the screen.
```



2. Select the mail log file you wish to view by moving the selector bar and pressing the *<Return>* key.

For explanations of the three mail log files, refer to the following sections:

- The Returned Mail Log
- Unexpected Mail Log
- Mail Messages Not Sent

Using all the given information, you will know the exact contents of the message that was not sent, who it failed to be sent to, and why it was being sent. There may also be a message informing you of why the message failed to be sent. With this information, you can do whatever is necessary to correct what is causing the error condition presented in the message.

Returned Mail Message Log File

This file contains all mail messages that the mail server considers to be undeliverable. Any mail that is sent to a user who either does not exist, or who could not be reached due to the network being down, is logged to this file.

Each entry stored in this file is displayed between two lines of pound (#) characters. Within the top line of "#" characters is the message, "MAIL - RETURNED," followed by the time and date when the entry was logged to the file. Most of the returned mail messages will contain a **To**: field and a **PMAP Msg To**: field in them. Using these fields, you can determine who the returned mail was intended for.

If you are looking in this file because a "returned mail" System Dispatch was posted, the contents of the **To**: field in the System Dispatch can be used to match it to the **PMAP Msg To**: field contents in the file, which will allow you to find the message that could not be delivered. If you still need more information to locate the message, you can check the time that the System Dispatch was created using Dispatch Histories, and then locate a log entry made to the same user/center at approximately the same time listed in the Dispatch Histories entry.

There can be a number of different reasons why mail is marked as undelivered and returned to the MAP System. Many times the information you need is in the text of the returned mail itself. If the mail server cannot deliver mail for some reason, it will usually place an error message in the mail message before it is returned. While some of these error messages can be cryptic, most are clear enough to give you some idea of what the problem is. You can usually find fields in the returned message that will help you identify where the message was returned from (i.e., the Return path: field).

Listed below are some general reasons for mail being returned to the MAP System as undeliverable:

- If the mail server doesn't "know" about the given user, it will return the mail as undeliverable. This could occur if the PMAP Msg To: field contains a user or login name that is not on the routing path of the mail server.
- If the mail server system has malfunctioned, mail can come back as undeliverable.
- If the information about a user on the mail server machine is incorrect, the mail will be returned.
- If the user's machine is down when the message is being delivered, the message may time out and be returned as undeliverable.
- If the network is down somewhere along the routing path to the destination user, the mail will eventually exceed the maximum number of delivery retry attempts and be returned. This is also true if the network is down between the MAP System and the mail server machine.

Unexpected Mail Message Log File

This file contains all of the mail messages the MAP System does not recognize. Each entry stored in this file is displayed between two lines of pound (#) characters. Within the top line of "#" characters is the message, "MAIL - UNEXPECTED," followed by the time and date when the entry was logged to the file. The contents of the unknown mail message itself is what will be most useful to you in determining exactly where a message came from.

There will usually be a From: field in the message that will list where the message originated. Using this information, you can determine what MAP System process or user sent the message, and correct the problem.

Listed below are some general reasons for mail being logged to the Unexpected Mail File:

- It is possible that some MAP System functions, such as canceling a print job, will automatically send mail to a system user. If the message appears to be system related (not from an outside user), please inform System Studies Technical Support so the MAP System can be modified to ignore the message in the future. If a System Dispatch was posted, it will clear within a day unless the problem continues to occur.
- Currently, the MAP System is not designed to handle mail to local users, although it will
 receive it. If the MAP System receives mail and finds a local user that matches the user
 name in the mail, the mail will be saved in that user's mailbox. The mail will also be logged in

the Unexpected Mail Log File. The user who sent the mail will need to be informed that the MAP System currently does not allow mail to be received by PressureMAP users.

Mail Messages Not Sent Log File

This file contains all of the alarms that could not be sent by the MAP System due to the SMTP mail server being inactive or the MAP System being disconnected from the network (using the Network Administration option of MAP System Administration). For example, if an alarm is sent via mail and the mail server is currently turned off, the alarm is logged in this file and a System Alarm is posted.

Each entry stored in this file is displayed between two lines of pound (#) characters. Within the top line of "#" characters is the message, "MAIL - NOT SENT," followed by the time and date when the entry was logged to the file. Alarms will not have a standard SMTP mail server header, but will instead have a few lines at the top of each message with MAP System specific information for that message. A sample of what information will be included in an alarm is shown in SCREEN 7-29.

```
Keystrokes: [Quit <Esc>] [Down 'J'] [Up 'K'] [Help 'H'] [Print 'P'] [Info 'I']
[Search Forward 'F'] [Search Back 'B'] [Search Next 'N']
Mail Messages Not Sent (UNSENT.ERR)
ERROR 843 Mail not sent to CENTER A, mail system not on
PMAP Msg To: jdough
PMAP Subject: PMAP ALARM 0380010 [0999]
PMAP System: SSI TEST SYSTEM [0999]
PMAP Office: ONE ALARM
PMAP Device: 001-01
PMAP Task #: 0380010
PMAP Center: CENTER A
Dispatch Alarm for ONE ALARM
                                                AlarmMAP XX.XX.XX
02/09/10 16:26
                                        System Studies Incorporated
PMAP System: SSI TEST SYSTEM [0999]
PMAP Office: ONE ALARM
PMAP Device: 001-01
PMAP Task #: 0380010
PMAP Center: CENTER A
Dispatch Alarm for ONE ALARM
                                                AlarmMAP XX.XX.XX
02/09/10 16:26
                                        System Studies Incorporated
_____
Task # Device # Condition
                                                         Level
0380010 001-01 UG Cable PTD lost 6.0 psi in < 24 hr****
                                                         ALRM
```

SCREEN 7-29: SAMPLE MAIL ALARM

Not all messages will have all of the information in the example, but they will have the first three lines. Using the first three lines, you can determine who the message is for, information on the

contents of the message, and MAP System identification information. The rest of the information in the example is specific to an alarm, and can be used to further identify the contents of a message.

The information in the PMAP Task # field is useful for tracking an alarm. If a System Alarm is posted, indicating that priority ALARM mail was not sent, the first three characters of the task number for the System Alarm can be used to find all matching entries in the "Mail Messages Not Sent" file. By searching forward for the string "PMAP Task #: XXX" (where XXX represents the first three numbers in the system alarm's task number), you will see a list of alarms that were created and not sent on the same day that the Four Star System Alarm was created.

CUSTOM REPORTS

The last option of the User Initiated Operations Menu gives you the ability to generate reports that utilize the data gathered by the MAP System, but are not offered through any of the MAP software modules. These "custom" reports are created by System Studies per customer request, with additional reports added to the MAP software as the need arises. The following section describes both the procedures for accessing this option of the User Initiated Operations Menu, and the types of reports that appear on the Custom Reports Menu.

Depending upon the capabilities of the terminal you are using, the program will display the report in either a standard report or a browser format. If your terminal is not "browser capable" (i.e., most hard-copy terminals), the report will simply be printed. However, if you can utilize the browser function of the MAP Program, you will be able to search the report contents, move through the report a page at a time, print the report, or export the report to a DOS formatted floppy disk. The examples shown in this section are from a "browser capable" terminal.

Custom Reports Menu

The procedures to access the Custom Reports Menu begin at the System Options Menu (Screen 7-30). However, if your login takes you directly to the MAP Programs Menu (Screen 7-31), you may begin at Step 2. If you do not have access at the System Options or MAP Programs level, you cannot access this feature.

System Options 12/02/2010 10:32	MAP Series XX.XX.XX System Studies Incorporated
System Options	
 Select MAP Program Select MAP Data Entry System Administration Language Selection Quit 	

SCREEN 7-30: SYSTEM OPTIONS MENU

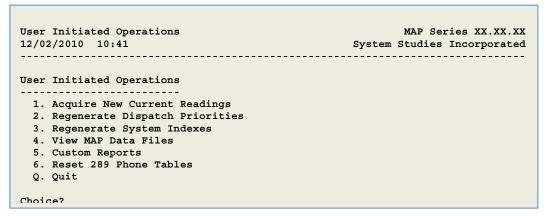
Procedure:

 From the System Options Menu above, choose Item 1, Select MAP Program, and follow your selection with <*Return>*. You should see the MAP Programs Menu.

MAP Programs 12/02/2010 10:35	MAP Series XX.XX.XX System Studies Incorporated
MAP Programs	
 PressureMAP ReportMAP CableMAP AlarmMAP DryerMAP CPAMS Diagnostics User Initiated Operations Quit Choice? 	

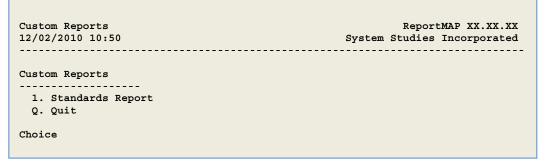
SCREEN 7-31: MAP PROGRAMS MENU

 From the MAP Programs Menu select Item 7, User Initiated Operations, and follow your choice with <*Return>*. The User Initiated Operations Menu will be displayed.



SCREEN 7-32: USER INITIATED OPERATIONS MENU

 At the User Initiated Operations Menu select Item 5, Custom Reports, followed by <Return>. You will see the Custom Reports Menu with a listing for the Standards Report as option #1 (SCREEN 7-33).



SCREEN 7-33 CUSTOM REPORTS MENU

Additional Custom Reports are available as supplemental updates to the MAP System. Descriptions of these reports appear following the sub-section on the Standards Report, and also in our Release Notes. You may view the Release Notes at www.airtalk.com or request hard copies from System Studies. For information on installing Supplemental Updates, please refer to the MAP System Installation Manual.

Standards Report

This report lists the number and percentage, by transducer type, of devices in a specified office or group of offices that are not to standard on the selected day. The reading data is based on devices that are currently in the PressureMAP database, and will not reflect devices that have been deleted. The report does not include devices disabled from indexing and/or dispatching, and no report will be produced for a disabled office. The standard for each device type may be changed by accessing the Office Information Screen of PressureMAP Data Entry.

A report can be generated using device data for any day within the last five weeks. For the current date, readings are derived from the Today (Tdy) column in PressureMAP. If the Tdy column is blank, it is considered to be a verbose reading. (For information on verbose readings, see Appendix 1of this manual.) Please also note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, history older than seven days may not be available for verbose readings.

Effective with Version 20.01, the report was modified to display the total number of devices with valid and verbose readings for each device type, as well as the totals for devices with verbose (non-valid) readings. In addition, you may enter a "Group Heading" to describe the contents of the report.

If more than one office is selected, a device total and percentage for the selected offices will follow the last office report. If the System Office (Office 0) is selected, the report will consist of only the system total and averages.

Procedure:

1. At the Custom Reports Menu select Item **1**, Standards Report, and follow your selection with *<Return>*. The program will respond with the prompt:

Standards Report for which office?

 Enter the name or number of the office for which you wish to generate a report, followed by a *<Return>*. If you do not want to generate a report, press *<Return>* to exit to the Custom Reports Menu.

You may enter a zero (**0**) for a full system report (of all offices in PressureMAP), a specific office name or number (for an individual office report), or a list of offices separated with commas (to generate reports for several offices). For more information on how to enter office names, please refer to the Preface section of this manual.

If you are unsure of the offices available, enter a question mark (?) for a list of all PressureMAP offices displayed in selection spreadsheet format. Note that in spreadsheet selection mode, you can select only one office at a time.

After entering the office(s), you will see the following prompt:

Date to list (<CR> for today):

3. Enter the date that corresponds to the day you wish to generate the report for. Follow your entry with *<Return>*.

You may enter any date within the five week window of stored device readings. The date is entered in the format of MM/DD/YYYY or MM/DD (which assumes the current year). If you wish to generate a report for the current day, press *Return*.

After entering the date, you will see the following prompt:

Enter group heading (<CR> for none):

4. Enter the desired heading for the report, followed by *<Return>*. For example, if you request several offices in a geographic area, you might want to enter a heading that indicates the area. If you do not want a heading, press *<Return>*.

REPORT FIELDS

The Standards Report consists of six columns of data, which contain the following information for the selected office and date. Data is compiled for the most common PressureMAP device types (excluding contact alarms, contactors, etc.). Please note that the example, SCREEN 7-34, displays the group heading "EAST SIDE."

SCREEN 7-34: STANDARDS REPORT

Type of TD's

This field indicates the device type the information line pertains to. The following device types can appear under this column: Aerial PTD, Aerial Single-feed PTD, Buried PTD, Buried Single-feed PTD, Underground PTD, Underground Single-feed PTD, Mid/End Pipe PTD, Delivery PTD, High Priority PTD, Source FTD, Distribution Panel FTD, Manifold FTD, and High Priority FTD.

Std

The Office Standard for the pressure device type designated in the information line. This standard is set in the Office Information screen through PressureMAP data entry.

Total TD Count

The total number of devices with either a valid reading or a verbose reading for the report date, excluding devices disabled for indexing and/or dispatching. Please note that reading data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

Non-Rdg (verbose) Count

The total number of devices with verbose readings (not including disabled devices).

TD Count Not Std/Over OAU

This field indicates number of devices with a valid reading (excluding disabled devices) that are below the Office Standard for pressure, or above the individual flow device's OAU value. For flow devices that do not have an OAU value entered in data entry, an OAU value of 0.0 is used to calculate this report section.

Percent Not Std/Over OAU

This field contains the averaged percentage of devices that are either Not Std, Over OAU, or Non-Rdg. This value is generated by adding columns four and five, and dividing this number by the total number of devices from column three.

Office Totals

This row of data provides key information in four categories: Total TD Count (total number of transducers entered in the PressureMAP database for the office), Non-Reading (verbose) Count (total number of transducers with verbose readings for the office), TD Count–Not Standard/Over OAU (valuable for targeting offices with high numbers of devices that deviate from the standard), and Percentage of Non-Standard/Over OAU devices in the office (provides an indication of which offices would benefit most from concentrated maintenance efforts).

Depending upon the capabilities of the terminal you are using, the program will display the report in either a browser or standard report format. If your terminal is not "browser capable" (i.e., most hard-copy terminals), the report will simply be printed. However, if you can utilize the browser function of the MAP Program, you will be able to search the report contents, move through the report a page at a time, print the report, or export the report to a DOS formatted floppy disk. Refer to the Preface section of this manual for more information on the browser function.

5. To exit from the report screen, press the *<Esc>* key. You will see the prompt:

Standards Report for which office?

- 6. Enter the name or number of another office, followed by a *<Return>*. If you do not want to generate a report, press *<Return>* to exit to the Custom Reports Menu.
- 7. To exit the Custom Reports Menu, enter *Q <Return>*.

Additional Custom Reports

The following Custom Reports will appear on the Custom Reports Menu after they have been loaded onto the MAP system via Incremental update. The reports can be generated using device data for any day within the last five weeks. Please note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current.

Since non-numeric (verbose) reading output cannot be averaged, history older than seven days may not be available for verbose readings.

SQI Report

The SQI Report, which can be generated for an individual office, a selected group of offices, or all of the offices in your MAP System, provides a variety of information about individual pipes routes and the quality of the air pressure system. A report can be generated for any day within the last five weeks. Please note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not reflect the same reading values it would have used to calculate the SQI when that date was more current. Since non-valid (verbose) reading output cannot be averaged, an SQI older than seven days may not be available.

The SQI Report consists of eight data columns which contain the information for the selected offices. The first five columns list information entered into the PressureMAP database for each selected office on the day the report is generated. The next two columns contain information for the selected day. The last column of the report, office SQI, indicates the weekly average office SQI for the week prior to the selected report date. If more than one office is selected, a total of each report field for the selected offices will follow the last office report. Notice that both office totals and system totals are provided. If an office has been disabled, a report will not be generated.

SQI Report (page 1) 05/21/2010 15:08				Syst		eportMAP lies Inco	
OFFICE	PIPE COUNT	SHEATH	# OF	DISABLED DEVICES	# OF	PIPES	OFFICE
16. FOXWORTH	16	127	255	0	0	16	78
17. JUNCTION	15	84	171	0	6	15	N/A
18. CROCKETT	2	N/A	6	1	2	2	64
Above Office Totals	33	211	432	1	8	33	71
System Totals	45	433	572	2	16	45	70

SCREEN 7-35: SQI REPORT

Pipe Count

This field indicates the current total number of air pipes or routes for the office.

Sheath Miles

This field contains the current total calculated sheath miles for the office.

of Devices

This field shows the current number of non-disabled devices.

Disabled Devices

The current total number of devices disabled.

of Alarms

The total number of alarms for each office that occurred on the report date. A value of "N/A" will appear when there is no dispatch log file for the day selected.

Pipes <80 SQI

This field contains the number of pipes below the SQI threshold of 80 on the selected report date.

Office SQI

This field provides the weekly average office SQI for the seven days ending on the date listed. If the date specified is older than one week, the weekly SQI averages (week-1, week-2, etc.) are used to calculate this value.

OAU Report

The OAU Report lists the total number of MF devices in each selected office on the day the report is generated. It also sorts the MF devices into seven different categories: below OAU, under 10% of OAU, 10% over OAU, 20% over OAU, 50% over OAU, number of flow devices with verbose readings, and the percentage of flow devices <= 20% over OAU. Disabled devices are not included in the OAU calculations.

A report can be generated using device data for any day within the last five weeks. Please note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not reflect the same reading values it would have used for the OAU breakdown when that date was more current.

Effective with Version 20.01, the OAU Report was extended to include specific device information in up to five distinct categories. This additional capability is available when you request the report for an individual office, for a date within the last six days (SCREEN 7-36). The enhanced detail is not shown if you select multiple offices or a report date older than six days (SCREEN 7-37).

OAU Report 05/21/2010	(page 1) 13:25	* [Schedule	e Off*		Syst			orporate
Pressure re	adings from	n 05/11,	/10						
OFFI		Below OAU	10%	10% Over	20% Over	50% Over	Read Prob	Total	<= 20% Over
26. Liveoa	ak		0						0.0
-	20% over OA	\U 							
		AU 			Loc	Pipe	OAU	Rdg	
 Device #		·- ·					OAU 6.3		
Device # 	Address								
Device # 	Address 400 HYDE 50% over OA				01	A		9.3	

SCREEN 7-36: OAU REPORT FOR SINGLE OFFICE WITH ENHANCED DEVICE DETAIL

eadings from 08/0	4/10						
F % MF		# MF	# MF	# MF	# MF	# MF	# MF
OFFICE	Below Und OAU 1	ler 10% .0% Over			Read Prob	Total	<= 20% Over
16. FOXWORTH	126	3 2	0	0	1	133	98.5
17. JUNCTION	30	1 0	4	1	1	50	62.0
18. CROCKETT	84 1	.4 8	7	1	5	131	80.9
21. WESTSIDE	46	9 2	6	4	1	71	80.2

SCREEN 7-37: OAU REPORT

If more than one office is selected, a total of each report field for the selected offices will follow the last office report (excluding any disabled offices).

MF Below OAU

This field contains the total number of MF devices for the office (not including disabled devices), that were reading below their individual OAU value on the day selected for the report. Also included in this field are the devices reading 0 SCFH.

MF Under 10%

The total number of MF devices for the office (not including disabled devices), that had readings that were above OAU but less than 10% above the OAU on the day selected for the report.

The next three fields list the number of MF devices for the office that were reading the indicated percentage above their individual OAU value on the day selected for the report. The percentage values that are included in the report are: 10% over, 20% over, and 50% over.

MF Read Prob

The sixth column contains the number of MF devices with verbose readings (e.g., OPEN, SHRT, PAIR), excluding devices that are disabled.

MF Total

The seventh column contains the total number of MF devices in the office, not including devices that are disabled.

% MF <= 20% Over

This field indicates the percentage of MF devices reading equal to or below 20% over their OAU value (not including disabled devices). This value is generated by adding the first three columns and dividing this number by the total number of devices from column seven.

The definitions for the additional specific device information fields shown in the first sample OAU Report (SCREEN 7-36) are as follows:

Device

The device number of each device in the selected OAU reading category. The device type for all of these devices is MF.

Address

The address for the device being reported.

Loc

The PressureMAP location number for the device.

Pipe

The pipe with which the device is associated.

OAU

The OAU for the device being reported.

Rdg

This field corresponds to the Tdy reading on the Specific Device Information screen.

Alarm Report

The Alarm Report, which can be generated for an individual office, a selected group of offices, or all of the offices in your MAP System, provides important information concerning the distribution of

four star alarms. A report can be generated for any day within the last five weeks. However, if an office has been disabled, a report will not be generated.

Displayed information includes the office(s) name, date selected, task number, time of day the alarm was created, time sent and destination (Alarm Center). If no alarms were generated for a selected office(s) on the date specified, PressureMAP will generate an appropriate message.

Alarm Report (page 1) ReportMAP XX.XX.XX 08/10/2010 15:08 System Studies Incorporated SENT TO TASK # CREATED ACKNOWLEDGED BY ----- ------------ 14. MTVERNON (08/05/10) --34800B9 07:59 07:59 PRINTER 07:59 PRINTER 07:59 PRINTER 3480D32 08:26 08:26 PRINTER 08:26 PRINTER -- 15. UHRADD92 (08/05/10) --Sorry, No Data Available. -- 16. FOXWORTH (08/05/10) --No Four Star Alarms. -- 17. JUNCTION (08/05/10) --3480056 08:40 09:00 D PAWSON 09:05 CORY 09:05 aa CORY 3480057 08:41 09:01 D PAWSON 09:05 CORY 09:05 aa CORY 3480058 08:41 09:03 D PAWSON 09:05 aa CORY 09:05 CORY -- System (08/05/10) --No Four Star Alarms.

SCREEN 7-38: ALARM REPORT

Task

The seven-digit number generated by PressureMAP that identifies the specific alarm listed in the report. This number can be cross-referenced to the Task # that originally appeared on the Dispatch Priorities list or the Detailed Task Report.

Created

This field indicates the time of day that each of the listed alarms in an office originally occurred.

Sent to

This field identifies the Alarm Center or person who received the alarm identified in the task number, as well as the time of day that the alarm was sent. Typically, the time listed is the same or very close to the time listed in the CREATED data field.

Acknowledged by

This field lists the name of the printer, device or person who acknowledged the alarm, and the time of day that the alarm was acknowledged.

Flat Cable Report

The Flat Cable Report can be generated for an individual office, a selected group of offices, or all of the offices in your MAP System. The report lists all devices that have a verbose reading or a pressure reading of 1.0 PSI or less on the specified date. The "trigger" date can be any day within the last five weeks. Please note that for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, history older than seven days may not be available for verbose readings.

Devices are grouped by offices (if more than one office is requested), and then by reading category (e.g., <= 1.0). Displayed information includes the selected report date, office(s) name, type of reading, device #, device type, and the current device reading history. Disabled devices are included in the report; however, a report will not be generated for a disabled office.

Flat Cable, Verbose Readings Report ReportMAP XX.XX.XX 04/06/2010 12:16 *Schedule Off* System Studies Incorporated .. READING.SETTLED READINGS.....AVERAGES..... Device # TP Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-1 Wk-1 Wk-1 -- ---- -------- ---- ---- ---- ------ 3. ROSEVILLE (04/04/10) -- ALL OPEN Readings -- 23. SUNNYVALE (04/04/10) -- ALL <= 1.0 Readings -- 23. SUNNYVALE (04/04/10) -- ALL NSE Readings -- 38. SW289 (04/06/10) -- ALL SHRT Readings -- 38. Sw289 (04/06/10) -- ALL VOLT Readings -- 58. TRAINING (04/06/10) -- ALL <= 1.0 Readings -- 58. TRAINING (04/06/10) -- ALL OPEN Readings

SCREEN 7-39: FLAT CABLE REPORT

Standards - B Report

The Standards -B Report lists the number and percentage, by transducer type, of devices in a specified office or group of offices that are not to standard on the selected day. The reading data is based on devices that are currently in the PressureMAP database, and will not reflect devices that have been deleted. The report does not include devices disabled from indexing and/or dispatching, and no report will be produced for a disabled office. The standard for each device type may be changed by accessing the Office Information Screen of PressureMAP Data Entry. The Standards -B

Report is almost exactly like the Standards report except that the readings over OAU are not counted and do not contribute to Percent Not Std.

A report can be generated using device data for any day within the last five weeks. For the current date, readings are derived from the Today (Tdy) column in PressureMAP. If the **Tdy** column is blank, it is considered to be a verbose reading. (For information on verbose readings, see Appendix 1 of this manual.) Please also note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, history older than seven days may not be available for verbose readings.

The report's six columns of data contain the following information for the selected office and date. Data is compiled for the most common PressureMAP device types (excluding contact alarms, contactors, etc.). If more than one office is selected, a device total and percentage for the selected offices will follow the last office report. (Please note that the sample screen, SCREEN 7-40, displays the group heading "EAST SIDE.") If the System Office (Office 0) is selected, the report will consist of only the system total and averages.

Standards -B Rep 05/21/2010 13:1			(page I)		-	ortMAP XX.XX.XX es Incorporated
		Total TD	Non-Rdg (verbose)	TD Count	Percent	
Type of TD's	Std	Count	Count	Not Std	Not Std	
		2.	. <east sid<="" td=""><td>DE> (05/18/</td><td>10)</td><td></td></east>	DE> (05/18/	10)	
Aerial PTD's	2.0	2	1	0	50.0	
Buried PTD's	3.0	4	2	0	50.0	
Mid/End PTD's	7.5	1	0	1	100.0	
High Prio PTD's	6.0	1	0	1	100.0	
Manifold FTD's		5	1	-	20.0	
Office Totals		13	4	2	46.2	

SCREEN 7-40: STANDARDS - B REPORT

Type of TD's

This field indicates the device type the information line pertains to. The following device types can appear under this column: Aerial PTD, Aerial Single-feed PTD, Buried PTD, Buried Single-feed PTD, Underground PTD, Underground Single-feed PTD, Mid/End Pipe PTD, Delivery PTD, High Priority PTD, Source FTD, Distribution Panel FTD, Manifold FTD, and High Priority FTD.

Std

The Office Standard for the pressure device type designated in the information line. This standard is set in the Office Information screen through PressureMAP data entry.

Total TD Count

The total number of devices with either a valid reading or a verbose reading for the report date, excluding devices disabled from indexing and/or dispatching. Please note that reading

data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

Non-Rdg (verbose) Count

The total number of devices with verbose readings (not including disabled devices).

TD Count Not Std

This field indicates the number of devices with a valid reading (excluding disabled devices) that are under the Office Standard for pressure. No count is made for flow devices, regardless of the reading.

Percent Not Std

This field contains the averaged percentage of devices that are either Not Std or Non-Rdg. For flow devices, the percentage includes Non-Rdg devices only. This value is generated by adding columns four and five, and dividing this number by the total number of devices from column three.

Office Totals

This row of data provides key information in four categories: Total TD Count (total number of transducers entered in the PressureMAP database for the office), Non-Reading (verbose) Count (total number of transducers with verbose readings for the office), TD Count–Not Standard (valuable for targeting offices with high numbers of devices that deviate from the standard), and Percentage of Non-Standard devices in the office (provides an indication of which offices would benefit most from concentrated maintenance efforts).

Standards Report (Rev. C)

The Standards Report (Rev. C) lists the number and percentage, by type, of devices in a specified office or group of offices that are not to standard on the selected day. The reading data is based on devices that are currently in the PressureMAP database, and will not reflect devices that have been deleted. The report does not include devices disabled from indexing and/or dispatching, and no report will be produced for a disabled office. The Standards Report (Rev. C) is similar to the Standards Report; but it includes contactors and contact alarms, and readings over OAU are not counted and do not contribute to Percent Not Std. The standard for each pressure device type may be changed by accessing the Office Information Screen of PressureMAP Data Entry.

A report can be generated using device data for any day within the last five weeks. For the current date, readings are derived from the Today (Tdy) column in PressureMAP. If the Tdy column is blank, it is considered to be a verbose reading. (For information on verbose readings, see Appendix 1 of this manual.) Please also note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, no history older than seven days is available for verbose readings, such as those for contactors and contact alarms.

The report's six columns of data contain the following information for the selected office and date. Data is compiled for the most common PressureMAP device types (including contact alarms, contactors, etc.). If more than one office is selected, a device total and percentage for the selected offices will follow the last office report. (Please note that the sample screen, SCREEN 7-41, displays the group heading "EAST SIDE.") If the System Office (Office 0) is selected, the report will consist of only the system total and averages.

SCREEN 7-41: STANDARDS REPORT (REV. C)

Type of Device

This field indicates the device type the information line pertains to. The following device types can appear under this column: Contactor, Contact Alarm, Aerial PTD, Aerial Single-feed PTD, Buried PTD, Buried Single-feed PTD, Underground PTD, Underground Single-feed PTD, Mid/End Pipe PTD, Delivery PTD, High Priority PTD, Source FTD, Distribution Panel FTD, Manifold FTD, and High Priority FTD.

Std

The Office Standard for the pressure device type designated in the information line. This standard is set in the Office Information screen through PressureMAP data entry. The value **OK** is displayed for contactors and contact alarms.

Total Device Count

The total number of devices with either a valid reading or a verbose reading for the report date, excluding devices disabled for indexing and/or dispatching. Please note that reading data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

Non-Rdg (verbose) Count

The total number of devices with with verbose readings, and of contactors and contact alarms whose readings are *not* **OK** or **ALRM**. (The count does not include disabled devices.)

Device Count Not Std

This field indicates the number of devices with a valid reading (excluding disabled devices) that are under the Office Standard for pressure and of contactor or contact alarm devices that are reading **ALRM**. No count is made for flow devices, regardless of the reading. Disabled devices are not included in the count.

Percent Not Std

This field contains the averaged percentage of devices that are either Not Std or Non-Rdg. This value is generated by adding columns four and five, and dividing this number by the total number of devices from column three. For flow devices, the percentage includes Non-Rdg devices only.

Office Totals

This row of data provides key information in four categories:

- Total Device Count—total number of transducers, contactors and contact alarms entered in the PressureMAP database for the office.
- Non-Reading (verbose) Count—total number of transducers, contactors and contact alarms with non-valid readings for the office.
- Device Count Not Standard—valuable for targeting offices with high numbers of devices that deviate from the standard.
- Percentage of Non-Standard devices in the office—indicates which offices would benefit most from concentrated maintenance efforts.

Standards Report (Rev. D)

The Standards Report (Rev. D) lists the number and percentage, by type, of devices in a specified office or group of offices that are not to standard on the selected day. The reading data is based on devices that are currently in the PressureMAP database, and will not reflect devices that have been deleted. The report does not include devices disabled from indexing and/or dispatching, and no report will be produced for a disabled office. The Standards Report (Rev. D) is similar to the Standards Report, but it includes contactors and contact alarms. A line displaying statistics for underground pressure devices below 3.0 PSI has been added, and the flow standards have been customized to values defined by Verizon. The standard for each pressure device type may be changed by accessing the Office Information Screen of PressureMAP Data Entry.

A report can be generated using device data for any day within the last five weeks. For the current date, readings are derived from the Today (Tdy) column in PressureMAP. If the Tdy column is blank, it is considered to be a verbose reading. (For information on verbose readings, see Appendix 1 of this manual.) Please also note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, no history older than seven days is available for verbose readings.

The report's six columns of data contain the following information for the selected office and date. Data is compiled for the most common PressureMAP device types. If more than one office is selected, a device total and percentage for the selected offices will follow the last office report. (Please note that the example, SCREEN 7-42, displays the group heading "EAST SIDE.") If the System Office (Office 0) is selected, the report will consist of only the system totals and averages.

Standards Report 06/05/2010 12:3		D) EAST	SIDE (page	: 1)	ReportMAP XX.XX.XX System Studies Incorporated
Type of Device	Std	Device	Non-Rdg (verbose) Count	Count	
		4	. <east sid<="" td=""><td>DE> (06/05/</td><td>(10)</td></east>	DE> (06/05/	(10)
Aerial PTD's	2.0	2	2	0	100.0
Undgnd PTD's	<3.0	78	72	0	92.3
Undgnd PTD's	5.0	78	78	0	100.0
Mid/End PTD's	7.5	12	12	0	100.0
50.0 SCFH FTD's	31.0	7	7	-	100.0
19.0 SCFH FTD's	17.0	21	21	-	100.0
Office Totals	0.0	120	120	4	100.0

SCREEN 7-42: STANDARDS REPORT (REV. D)

Type of Device

This field indicates the device type the information line pertains to. The following device types can appear under this column: Contactor, Contact Alarm, Aerial PTD, Aerial Single-feed PTD, Buried PTD, Buried Single-feed PTD, Underground PTD (UP, TP, WP), Underground Single-feed PTD, Mid/End Pipe PTD (EP, PP), Delivery PTD (CP, DP, SP, RP, FP), High Priority PTD, and flow devices in the ranges listed below.

Std

The standard for the device type designated in the information line. For pressure devices this value is the Office Standard that is set in the Office Information screen through PressureMAP data entry. For flow devices the standard values are:

Device Range	<u>Standard</u>
950.0	846.0
475.0	425.0
200.0	178.0
190.0	178.0
100.0	76.0
95.0	76.0
50.0	31.0
47.5	31.0
20.0	17.0
19.0	17.0
9.5	7.0

The message **<3.0** is displayed in the special statistics line for UP devices below 3.0 PSI.

Total Device Count

The total number of devices with either a valid or a non-valid (verbose) reading for the report date, excluding devices disabled for indexing and/or dispatching. Please note that

reading data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

Non-Rdg (verbose) Count

The total number of pressure and flow devices with verbose readings. (The count does not include disabled devices.)

Device Count Not Std

This field indicates the number of devices with a valid reading that are under the Office Standard for pressure or over the flow standard configured for this report. Disabled devices are not included in the count.

Percent Not Std

This field contains the averaged percentage of devices that are either Not Std or Non-Rdg. This value is generated by adding columns four and five, and dividing this number by the total number of devices from column three.

Office Totals

This row of data provides key information in four categories:

- Total Device Count—total number of transducers entered in the PressureMAP database for the office.
- Non-Reading (verbose) Count—total number of transducers with non-valid readings for the office.
- Device Count Not Standard—valuable for targeting offices with high numbers of devices that deviate from the standard.
- Percentage of Non-Standard devices in the office—indicates which offices would benefit most from concentrated maintenance efforts.

Note that the special statistics for UP devices below 3 PSI are not added into the Office Totals.

SBC Standards Report

The SBC Standards Report lists the number and percentage, by type, of devices in a specified office or group of offices that are not to standard on the selected day. The reading data is based on devices that are currently in the PressureMAP database, and will not reflect devices that have been deleted. The report does not include devices disabled from indexing and/or dispatching, and no report will be produced for a disabled office. The standard for each device type may be changed by accessing the Office Information Screen of PressureMAP Data Entry.

A report can be generated using device data for any day within the last five weeks. For the current date, readings are derived from the Today (Tdy) column in PressureMAP. If the **Tdy** column is blank, it is considered to be a verbose reading. (For information on verbose readings, see Appendix 1 in this manual.) Please also note: for dates more than a week previous to the current date, the report is looking at weekly averages rather than daily readings. Therefore, if a report is run for a date older than seven days, it may not show the same readings it would have displayed when that date was more current. Since non-numeric (verbose) reading output cannot be averaged, history older than seven days may not be available for verbose readings.

The report's eight columns of data contain the following information for the selected office and date. Data is compiled for the most common PressureMAP device types (excluding contact alarms, contactors, etc.). If more than one office is selected, a device total and percentage for the selected offices will follow the last office report. If the System Office (Office 0) is selected, the report will consist of only the system total and averages.

SBC Standards R 06/04/2010 15:	-	(page 1)		ReportMAP XX.XX.XX System Studies Incorporated						
Type of TD's	Std		Total Pres/Flow		-	TD Count Not Std/ Over OAU	Not Std/			
	##.	<office 1<="" td=""><td>NAME> (<repo< td=""><td>RT INFC</td><td>RMATION DAT</td><td>E>)</td><td></td></repo<></td></office>	NAME> (<repo< td=""><td>RT INFC</td><td>RMATION DAT</td><td>E>)</td><td></td></repo<>	RT INFC	RMATION DAT	E>)				
Undgnd PTD's	6.0		109.6	13	8.4	0	0.0			
Mid/End PTD's	10.0		26.1	3	8.7	3	100.0			
Delivery PTD's	10.0		31.4	3	10.5	0	0.0			
High Prio PTD's	6.5		6.6	1	6.6	0	0.0			
Source FTD's		15.0	16.0	3	5.3	1	33.3			
Manifold FTD's		50.0	13.8	7	2.0	0	0.0			

SCREEN 7-43: SBC STANDARDS REPORT

Type of TD's

This field indicates the device type the information line pertains to. The following device types can appear under this column: Aerial PTD, Aerial Single-feed PTD, Buried PTD, Buried Single-feed PTD, Underground PTD, Underground Single-feed PTD, Mid/End Pipe PTD, Delivery PTD, High Priority PTD, Source FTD, Distribution Panel FTD, Manifold FTD, and High Priority FTD.

Std

The Office Standard for the pressure device type designated in the information line. This standard is set in the Office Information screen through PressureMAP data entry.

Total OAU

This field contains the total OAU value of all flow devices that have a valid reading on the report date (not including disabled devices). For flow devices that do not have an OAU value entered in data entry, an OAU value of 0.0 is used when this report section is calculated.

Total Pres/Flow

This field contains the combined value for the device type the information line pertains to. This column will contain the total flow or pressure readings for devices that have a valid reading on the report date.

TD Count

The total number of devices with either a valid reading or a verbose reading for the report date, excluding devices disabled for indexing and/or dispatching. Please note that reading data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

Average Pres/Flow

This field contains the averaged pressure or flow value for devices with valid readings.

TD Count Not Std/Over OAU

This field indicates the number of devices with a valid reading (excluding disabled devices) that are below the Office Standard for pressure, or above the individual flow device's OAU value. For flow devices that do not have an OAU value entered in data entry, an OAU value of 0.0 is used to calculate this report section.

Percent Not Std/Over OAU

This field contains the averaged percentage of devices with a valid reading that are over the Office Standard for pressure, or above the individual flow device's OAU value. For flow devices that do not have an OAU value entered in data entry, an OAU value of 0.0 is used to calculate this report section.

Office Totals

Provides key information in four categories:

- Total OAU—total of the OAU values entered in the PressureMAP database for the office.
- TD Count—total number of transducers entered in the PressureMAP database for the office.
- Device Count Not Standard—valuable for targeting offices with high numbers of devices that deviate from the standard.
- Percentage of Non-Standard devices in the office—indicates which offices would benefit most from concentrated maintenance efforts.

BellSouth Standards Report

Another version of the 8-column SBC Standards Report is also available for BellSouth PressureMAP users. This report contains the same information as described above, but the report heading information at the top of the screen indicates that it is a BellSouth Standards Report (see below). Like the other PressureMAP custom reports, this new BellSouth Standards Report is available for your system in the form of an incremental update.

BellSouth Stand 06/04/2010 15		eport (pa	ge 1)		System S	ReportMAP	
Type of TD's	Std	Total OAU	Total Pres/Flow		Average Pres/Flow	TD Count Not Std/ Over OAU	Not Std/
	##.	<office< td=""><td>NAME> (<rep< td=""><td>ORT INF</td><td>ORMATION DA</td><td>.TE>)</td><td></td></rep<></td></office<>	NAME> (<rep< td=""><td>ORT INF</td><td>ORMATION DA</td><td>.TE>)</td><td></td></rep<>	ORT INF	ORMATION DA	.TE>)	
Undgnd PTD's	6.0		109.6	13	8.4	0	0.0
Mid/End PTD's	10.0		26.1	3	8.7	3	100.0
Delivery PTD's	10.0		31.4	3	10.5	0	0.0
High Prio PTD's	s 6.5		6.6	1	6.6	0	0.0
Source FTD's		15.0	16.0	3	5.3	1	33.3

SCREEN 7-44: BELLSOUTH STANDARDS REPORT

Quality Report

A new Quality Report, available starting with PressureMAP Version 25, combines data from several PressureMAP reports into a format that represents more inclusive office quality information than the SQI report. When this custom report is enabled for a system, two report formats are provided: a menu-based PressureMAP report (verbose mode) and a comma delimited format (CDF) file that is generated daily by the MAP Scheduler and available for uploading to a remote computer via file transport protocol (FTP). The verbose mode is intended for an interactive user who wants to access report information from PressureMAP, and not just see the data in CDF format.

Note: The Quality Report must be installed on your system as a supplemental update, similar to the Flat Cable Report, the SQI Report, Standards Report, etc.

VERBOSE MODE

Г

The Quality Report in verbose mode is shown below. In this mode the report assumes the look of other PressureMAP Standards Reports. It includes eight columns of data as shown in SCREEN 7-45 below:

Quality Report (page 11/23/2010 15:08	1)	ReportMAP XX.XX.XX System Studies Incorporated							
OFFICE	DISABLED	- 11/23/1 VERBOSE	.0 ALARM A				FLAT		
52. QUALITY	8.3%	8.3%	0.0%	84.4	0.0%	36.4%	8.3%		
57. TUESDAY	0.0%	12.5%	0.0%	93.0	50.0%	37.5%	12.5%		

SCREEN 7-45: QUALITY REPORT

When you select the option number for the Quality Report (typically option #2) from the Custom Reports Menu, you can enter a single office, a range of offices or "ALL." Report data for each office is displayed on a single row with the office name identified in the first column. Following is a description of the other data field columns.

Disabled

This column contains the percentage of monitoring devices in the office that are entered in the PressureMAP database, but have been selectively disabled in the Office Information section of the PressureMAP editor.

Verbose

Indicates the percentage of devices in the office that generate a verbose, non-numerical reading (excluding disabled devices). Devices reading OK and CLR are not included.

Alarm

Displays the percentage of devices in four star alarm status for the day on which the report was generated.

Ave SQI

This column indicates the seven day SQI average for the office.

No SQI

Lists the percentage of devices that have no SQI value for the current day.

Not Std

The entry in this column represents the percentage of devices that are not standard for the current day.

Flat

Identifies the percentage of devices that are verbose or are reading between 0.0 and 1.0 PSI for the current day. Devices reading OK and CLR are not included.

CHARACTER DELIMITED MODE

There are two ways to access and view the Quality Report in comma delimited format: 1) within PressureMAP after the display of data in the verbose mode, and 2) by uploading the CDF file that is generated daily by the PressureMAP Scheduler and then importing it into a spreadsheet application or text editor. Please note that the type of data provided differs slightly from the verbose mode Quality Report, as explained below.

Viewing CDF Data in PressureMAP

After the Quality Report is generated for the selected office or offices, a prompt displays which enables you also to view the report output for the selected office(s) in comma delimited format without leaving PressureMAP. If you type Y and *<Return>* in response to the Send the CDF file to the screen: Y(es), N(o)? prompt, you will see data similar to what is shown in SCREEN 7-46 below.

```
Send the CDF file to the screen: Y(es), N(o) ? y
office.
                office, tot, num, num, num, tot, num, tot, num, ave, num
number,
                 name, dev, disa, verb, alrm, std, !std, pipe, no sqi, sqi, flat
              QUALITY, 12, 1, 1, 0, 11, 3, 2, 0, 84.4,
TUESDAY, 8, 0, 1, 0, 8, 2, 2, 1, 93.0,
 52,
                                                                       1
 57,
                                                                       1
                                                         ReportMAP XX.XX.XX
Custom Reports
11/23/2010 09:24
                        *Schedule Off*
                                             System Studies Incorporated
          -----
Custom Reports
 1. Standards Report
 2. Quality Report
 Q. Quit
Choice? q
```

SCREEN 7-46: CDF FILE IN PRESSUREMAP MENU

Notice that the Custom Reports Menu re-displays after the CDF data, so you can exit Custom Reports and access other PressureMAP menus. Notice also that CDF data is supplied only for the offices you selected when you launched the Quality Report in the verbose mode.

Uploading CDF Data via File Transport Protocol (FTP)

When the Custom Report has been enabled for your system via an incremental update, and the PressureMAP Scheduler has been modified by the System Studies Technical Support Department to include instructions to write the report in CDF mode, it will then be possible to upload the CDF file. This file, named *quality.txt*, is located in the directory, */usr1/reports/Quality/*. Unlike the CDF data that is sent to the PressureMAP screen after answering **Y(es)** to the **Send the CDF file to the screen: Y(es), N(o)** prompt, the CDF file contains report information for all of the offices in the PressureMAP system, rather than just the selected offices. The file is different from a similar file written for the verbose mode, named *user_quality.txt*. Separate files are created to prevent the overwriting of the scheduled CDF report.

The primary advantage of making the Quality Report available in comma delimited format is that it can be used to assist you in creating custom spreadsheets of the PressureMAP data. Once it has been uploaded, the CDF file can then be imported into a spreadsheet, such as Microsoft Excel, and customized to produce a variety of desired spreadsheet possibilities. To access the CDF file for use in other applications, follow the steps below.

Procedure:

- 1. Run FTP using one of the many FTP clients available
- 2. Log onto the PressureMAP system as cpams.
- 3. Enter the appropriate password. (Contact your System Administrator if you do not know the password for the *cpams* login.)
- 4. Change the directory (cd) to /usr1/reports/Quality/.
- 5. Issue the command, get quality.txt, and wait for the file to transfer to your PC.
- 6. Type *quit* to end the session.

For additional help in accessing the *quality.txt* file via FTP, contact the System Studies Technical Support Department.

CDF Data Field Descriptions

The CDF Quality Report data generated by PressureMAP differs from the verbose report. For one thing, it does not include data as percent value. It also contains more data fields as described below. The format of the CDF quality.txt files is shown below:

office,	office,	tot,	num,	num,	num,	tot,	num,	tot,	num,	ave,	num
number,	name,	dev,	disa,	erb,	alrm	td,	!std,	pipe,	no sqi,	sqi,	flat
52, 57,	QUALITY, TUESDAY,	12, 8,	1, 0,	1, 1,	, 0, 0,	11, 8,	3, 2,	2, 2,	0, 1,	84.4, 93.0,	1 1

office number

Designates the office number.

office name

Designates the office name.

tot dev

Indicates the total number of devices in the each office selected

num disa

Lists the number of disabled devices in each office.

num verb

Lists the number of verbose devices in each office, except OK and CLR.

num alrm

Indicates the number of 4 star alarms for today.

tot std

Lists the total number of pressure and flow devices used to determine the pressure and flow standards.

num !std

Represents the number of pressure and flow devices that are not reading standard or better.

tot pipe

Lists the total number of pipe routes.

num no sqi

Indicates the number of pipes that do not have an System Quality Index (SQI) value.

ave sqi

Lists the seven day SQI average.

num flat

Indicates the number of devices that are reading verbose or, for pressure transducers, those that are reading between 0.0 and 1.0 PSI.

RESET 289 PHONE TABLES

The final User Initiated Operations Menu option makes it possible for users with 289H LSS monitors to initiate a command to clear any old phone number/IP address entries from the 289 phone tables. This function pertains specifically to the MAP Alert # that was programmed into the Office Information Screen. When a 289H office is moved to a new system or a system-wide consolidation takes place, a second entry gets added to the 289 phone table for the office. This phone number duplication causes the 289H to generate an error code for the office in the form of a System Dispatch.

A PressureMAP system can become inundated with System Dispatches that reference a local dialing/communications error, such as ERROR 572. These messages will be generated until the duplicate (old) MAP Alert # is removed. Prior to PressureMAP Version 28, it was necessary for a System Studies Technical Support specialist to manually clear old numbers from the phone tables. Now, exercising Option 6 of the User Initiated Operations Menu performs this function. The option will call all offices in the system, and reset the phone table for any 289H offices.

Procedure:

1. Access the User Initiated Operations Menu. If necessary, please refer to steps 1 and 2 on page 7-1 of this document.

SCREEN 7-47: USER INITIATED OPERATIONS MENU

2. Select option *6*, "Reset 289 Phone Tables," and press <**Return>**. The program prompts you for the office designation, as shown below:

Reset 289 Phone Tables for which office?

3. Enter the *name* or *number* of the desired 289H LSS office, or type a ? to display a list of the offices in the system. If you choose to list the offices, use the down-arrow key to highlight the desired office, then press <*Return>*. After you have made your selection, the following prompt displays:

Reset 289 phone tables for <OFFICE NUMBER>. Do you wish to continue? Y[es], N[o]

4. If the correct office number is listed, press *Y* <*Return>*. Once PressureMAP resets the phone number table for the office, this message appears:

*** Office <NUMBER NAME> *** -- 289H Phone Table Reset OK

At this point the User Initiated Operations Menu redisplays. You can reset the phone tables for additional 289H monitors by repeating the procedure above, perform other user initiated operations, or select *Q* <*Return>* to access the MAP Programs Menu.