REPORT FIELDS & SAMPLE REPORTS

This section contains a glossary of terms that pertains to the fields in many reports generated by the MAP System, followed by sample reports. These samples include the Detailed Task Report, the Specific Device Report, the CPAMS Configuration Report and the Device Histories Report. The newer AlarmMAP reports and Custom Reports are also shown.

The sample reports are presented in the order of the options on the MAP System master menus. (See the menu flowcharts in the first section of this guide.) Following the CableMAP screen samples are brief instructions for using the Hand-Held Terminal login to log, edit, view and close cable openings from the field.

A

For Lancier devices, the one-character assignment designation is entered in this field.

Access

The Access Number field appears only if "User Defined Devices" are turned on. This field holds the actual access number as defined by the monitoring unit.

- 289H: the relay card and pin number where the device is connected, and the address number and channel designator (if the device is an addressable transducer)
- E2A: the LARP pin identification number to which a device is wired
- Chatlos: the pin numbers
- Sparton: the device number (the first three numbers in the location field)
- TMACS: the Index Number
- Lancier: the specific card type, slot number (for the Lancier 1005), two digit channel
 - number, and unit number (for addressable transducers)
- Nicotra: the cable number and transducer number (for transducers), or contact number (for

contact alarms)

Address

The device location (utility hole #, street address, central office panel location, etc.). PressureMAP uses the information in this data field in the programming of Sparton 5300B, 5318, Chatlos L3 and Hercules 940 monitors.

Aerial std, Buried std, Undgnd std

These three fields determine the cable pressurization standards used by the office. PressureMAP automatically defaults to these minimum pressure standards:

- Aerial cable—2 PSI or 10.0 KPA
- Buried cable—3 PSI or 30.0 KPA
- Underground cable—5 PSI or 30.0 KPA

If your minimum cable pressure standards differ from the ones listed above, then you will need to enter the pressure standards appropriate to your area into these data fields.

MAP SYSTEM QUICK REFERENCE

Alert Sensitivity

This field of the Office Information Screen holds the 289H alert sensitivity level, which is a number between 1 and 5. The number 1 is the least sensitive alert detection setting and 5 is the most sensitive. Since the higher sensitivity settings will cause the 289H monitor to send out a greater number of alert calls, it is recommended that 3 be used until you can determine which level will work best with your pressure system.

ALRM

One of the fields located on the *Device Status by Pipe Route Report*, this field contains the PressureMAP-assigned star rating (level) for any alarm conditions displayed in the report.

Alrm Priority

This field is used to identify one of three possible Sparton alarm classifications: "N" for none, "M" for minor, and "J" for major. These designations are used by PressureMAP when programming a Sparton 5300B or 5318 monitor.

Averages

The Averages section of the Device History Report has four columns that represent weekly averages for the past four weeks of readings.

Baudrate

The speed at which the monitoring unit communicates with another device, such as PressureMAP.

Buried std

See Aerial std, Buried std, Undgnd std.

Cable

The "read" cable which contains the transducer conductor pairs.

Cable Readings

The cable readings screen is only accessible if the device has defined at least one sheath in the Sheath field of the primary device screen. When full, it can contain six sets of manually input cable readings, with each set of readings containing a date stamp and a manual flow reading for each sheath. The sheaths match the sheaths entered on the primary device screen and the single manually input Manifold/PSI reading applies to all of the cable readings.

Calculated

The "Calculated" row of data contains the device readings for the current day as well as the past 6 days. **Tdy** represents the reading taken during the daily poll of devices; "-1" lists yesterday's reading, "-2" the reading taken the day before, and so on through "-6." In addition, the last four columns of this section represent weekly averages for the past four weeks of readings.

Chg

This field appears only for single feed pressure device types GP, HP, and JP, along with the **THR** field. The **CHG** field is the amount of change that can be tolerated before the device goes into alarm.

Chng

This field is used in conjunction with the \$F, \$V, and \$P devices, as well as the **STD** and **SAU** fields. The **CHNG**, or change, field is the amount of change (either in pressure or flow, depending on the type of high priority device) that can be tolerated before the device goes into alarm. For pressure

devices, the CHNG value is how many PSI can drop from the value indicated in the **STD** field before an alarm condition is acknowledged. For flow devices, the CHNG value indicates how many SCFH the device increases before an alarm is given.

CIRC

For Lancier systems, the circuit (cable designation) identity of the device is entered in this field. This cable designation **must** be entered for each device in both the Lancier monitor and PressureMAP to enable PressureMAP to obtain "realtime" readings.

CKT#

For Chatlos/Hercules and TMACS systems, the circuit number of the device is displayed in this position. PressureMAP uses the information in this data field when programming Chatlos L3 and Hercules 940 monitors.

Condition

This data field on the Dispatch Report and Detailed Task Report provides a summary explanation of the condition causing the dispatch or alarm.

Contact Type

This field appears only for Nicotra contact alarms. It designates either the value NC (normally closed) or NO (normally open).

Curr

The column of data appearing on several PressureMAP reports which contains the most current reading obtained from a device (see also *Last* and *Tdy*). This could be the last polled reading taken within the two hour call cycle, a realtime reading for the device, or a monitor-generated alarm/alert reading.

Debounce

For Nicotra systems, this field specifies the "debounce" time for contact alarms, entered in seconds using a decimal point. When the contact alarm relays are activated, there may be a momentary "chatter" (on/off). The debounce time is the period of time to wait while the relay settles to a final value. The default value for this field is 8.0 (seconds).

Delay

The Sparton CPAMS **DELAY** field works in conjunction with the **TRIGGER** field, and needs to be completed only if the device in question is a Contact Alarm. DELAY represents the delay time, in seconds, after which the Sparton CPAMS repeats its scan to confirm or deny the alarm condition reported by the device. The following key should be used to enter the delay time:

- **0** No Delay
- 1 3 Second Delay
- **2** 6 Second Delay
- **3** 9 Second Delay

PressureMAP uses the information in this data field when programming Sparton 5300B and 5318 monitors. There is also a Delay field in the device records for Chatlos and Hercules monitors. This information is also used, if applicable, when programming these monitors.

MAP SYSTEM QUICK REFERENCE

Delivery std

Enter the source delivery pressure standard for your office into this field. PressureMAP uses a default value of 7.5 Pounds per Square Inch (PSI). Note that you will not have to make an entry if this standard applies to your office. For an air pipe system, this value should be the desired delivery pressure at the end of the air pipe. However, this field is also used for the distribution panel delivery pressure standard for a single feed office (typically 10 PSI in this application). If you do change the default setting, the delivery pressure standard must be entered in tenths of a PSI, and the value must be between 0.0 and 10.0.

Device

This field lists the Device Number, indicating the actual monitoring device being represented in the report. For detailed information on the letter-coding method used on Chatlos and Sparton systems, please consult Table A2-1, titled "CPAMS Letter Coding" in Appendix 2.

Device Comments

This screen gives field craftsmen the ability to input device related remarks. These remarks, which can be entered from the PressureMAP Specific Device Information menu selection as well as from data entry, are date/time stamped when entered and can contain up to two lines of text, which equals 124 characters.

Distance

This Office Information field will accept either S-M (Sheath Mile), TUBE-M (Tube Mile) or , if the International capability is enabled, S-K (Sheath Kilometer) or TUBE-K (Tube Kilometers) as the unit of measure.

Distance 1

The distance in kilofeet (thousands of feet) between the reporting device and Office 1 Location.

Distance 2

The distance in kilofeet (thousands of feet) between the reporting device and Office 2 Location.

Enabled

This Nicotra contact alarm field may be set to Y or N.

Error

Beginning with PressureMAP Version 27, the Dispatch Priorities Report includes System Alarm information that pertains to the individual office(s). The **Condition** field describes the type of System Error (if applicable), and the **Error** # is a three digit reference designation.

Escalation

The **Escalation** field indicates the number of times that the device has gone in and out of alarm before the Chatlos or Hercules issues an escalation alarm. PressureMAP uses the entry (a number between 1 and 99) for its Chatlos programming utility.

Field 1 Loc (FLD)

The PressureMAP Location Number for the first device to the field side of the reporting device.

Field 2 Loc

The PressureMAP Location Number for the second device to the field side of the reporting device, if there is a second pipe route extending from the reporting device into the field.

Flow

This field will only appear on the Office Information Screen if the International capability has been enabled. The units of measure for this field can be LPH (Liters per Hour) or SCFH (Standard Cubic Feet per Hour).

Flow std

This field holds the office air flow standard, measured in Standard Cubic Feet per Hour (SCFH). The program default setting is 1.25 SCFH. This standard is based on the OAU figure per sheath mile of cable. If this standard applies to your office, then you will not need to change the field value. However, if the air flow standard that you use in your office differs from the default value, then you will need to set the Flow standard. Values entered are in units of hundredths of SCFH, and can be between 0.50 and 9.99 SCFH.

In

A data field contained on the *Device Status by Pipe Report*, which indicates how many days a device has been in alarm.

Input # (Inp #)

The designation number used in Sparton systems that designates the Frame Interconnect Block pin where the device pair terminates. PressureMAP uses the information in this data field in the programming of Sparton 5300B and 5318 monitors.

Last

The column of data that contains the last recorded device reading—the one obtained prior to the current (*Curr*) reading. As devices are polled during the scheduled calling cycle, the newest reading is placed in the *Curr* column and the reading that previously occupied this position is shifted to the *Last* column.

Last backed up

Date of last successful manual or automatic CPAMS backup procedure.

Last restored

Date of the last successful manual or automatic CPAMS restoration procedure.

Latitude

This text field has the following format: ldd+mm.mmm, with l designating which hemisphere the latitude applies to (one of the single letters: N or S); dd is an integer between 00 and 90 that indicates the degrees of latitude; and mm.mmm is an integer between 0.0 and 59.999 that designates the minutes of latitude.

When adding new devices, the **Latitude** field is carried over to the new device, so the default value for this field will be derived from the last device added.

Level

This field represents the alarm level of the Chatlos monitor. PressureMAP uses the information in this data field when programming Chatlos L3 and Hercules 940 monitors.

Level 1, Level 2

These two fields hold the alarm levels from the Lancier printout's LVL1 and LVL2 columns. For flow measuring devices, these values are the flow rate at which the device will go into alarm. For

MAP SYSTEM QUICK REFERENCE

pressure measuring devices, the level values represent the minimum pressure levels of the device. PressureMAP does not alarm on these input from these two fields; they are for record keeping purposes only.

Line # (Lin No.)

This device data form entry field indicates the line position on the Sparton printout where the device appears. PressureMAP uses the information in this data field in the programming of Sparton 5300B and 5318 monitors.

Loc (Location)

The unique PressureMAP location number for all devices at a particular location in the pressurization system. This number is designated during data entry and shall not be duplicated within an office.

Location

The column of data on the *Device Status by Pipe Report* which contains the address or physical location of a device. *Location* reflects the associated column heading on a Sparton device status report.

Longitude

This text field has the following format: hfff+mm.mmm, with h designating which hemisphere the longitude applies to (one of the following single letters: E or W); fff is an integer between 000 and 180 that indicates the degrees of longitude; and mm.mmm is an integer between 0.0 and 59.999 that designates the minutes of longitude.

When adding new devices, the **Longitude** field is carried over to the new device, so the default value for this field will be derived from the last device added.

Loop

This field must be filled in for all contactors, to specify the loop resistance value for an alarm reading. This value is the total loop resistance in kilohms from the central office to an operated contactor (a contactor in an alarm state) and back to the office.

Manifold/PSI

This field in the Cable Readings Screen contains the single, manually input Manifold/PSI reading. This reading applies to all of the cable readings.

MAP Alert

This field of the Office Information Screen is used for 289H and 289H-M monitors ONLY. The phone number or IP address that the 289H will use to send out alerts to PressureMAP is recorded here.

Map Alert Baudrate

In this data field you can designate the baud rate of the PressureMAP modem that receives 289H LSS alert information. The default setting is 2400 baud, although 300, 1200, 4800 and 9600 baud are also supported depending on which EPROM version is installed in the 289H. It is important to note, however, that if other CPAMS equipment (such as a Sparton or Chatlos) is also being monitored by the PressureMAP system, the baudrate entered in this field must be appropriate for all monitor types. For example, if a Sparton office sends alert information to PressureMAP at 1200

baud maximum, you cannot enter a higher baudrate in this field even if your 289H modem capability is 2400 baud or greater.

For 289H/H-M monitors using a network connection to PressureMAP, the required value for this field is 9600.

Modem Site

This field is only for offices using the Digi PortServer II serial port concentrator. The field must be filled out to select which PortServer the office will use for outgoing and incoming calls. The name must be eight characters or less.

Module

The designated module type to which the device is wired. Valid module types are as follows: Chatlos/Hercules Monitors

Chatlos L1: DT (dedicated), ST (subscriber), SS (status alarm), VF (volume

counter), RC (contactor)

Chatlos L2: DT (dedicated), ST (subscriber), MA (status alarm), MF (volume

counter), MC (contactor), TT (addressable)

Chatlos 600: DT (dedicated), ST (subscriber), MA (status alarm), MF (volume

counter), MC (contactor), TT (addressable), SA (high priority status

alarm)

Chatlos MPUZ: DT (dedicated), ST (subscriber), SS (status alarm), MF (volume

counter), RC (contactor)

Chatlos L3: DT (dedicated), ST (subscriber), MA (status alarm), MF (volume

counter), MC (contactor), TT (addressable)

Hercules 740/940: DT (dedicated), ST (subscriber), MA (status alarm), MF (volume

counter), MC (contactor), TT (addressable), SA (high priority status

alarm)

Sparton (all): DED (dedicated), SUB (subscriber), BIN (status alarm/volume

counter), ADD (addressable), D (long haul)

Please note that PressureMAP uses the information in the Module data field in the programming of Sparton 5300B and 5318 monitors.

Monitor Type

The make (or type) of CPAMS monitoring system in use.

Nicotra Type

This field contains the Nicotra identifier for the pressure transducer hardware. It may be a number from 0-128. The field is initialized to 8 (for a standard device type); it may also be 12 (long distance device type).

Norm

This field needs to be completed for all contactors and contact alarms. The value entered should reflect what the device reads in its normal, non-alarm state.

Number of Devices

The number of devices entered in the CPAMS database.

OFF

Office. The location code of the neighboring device location on the office side of a device. Also listed is the number of kilofeet (KF) between the two locations.

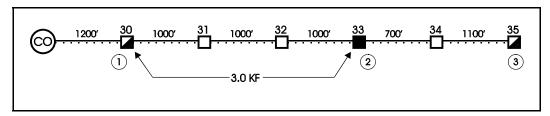


FIGURE 1

In Figure 1, Location 1 would be the Office 1 location compared to Location 2, and Location 3 would be the Field 1 location when compared to Location 2.

Office 1 Loc (OFF)

The PressureMAP Location Number for the first device to the office side of the reporting device. Also listed is the number of kilofeet (KF) between the two locations (Device Log Report only).

Office 2 Loc

The PressureMAP Location Number for the second device to the office side of the reporting device, if there is a second pipe route between the reporting device and the office.

Office Mode

This field allows you to "Enable" or "Disable" an entire PressureMAP office. If you are in the process of entering data for a new office, and the monitor and devices are not yet wired, the entire database may be disabled from normal MAP functions, and enabled whenever you wish. The default is set to Enable.

Office Name

The name of the central office or wire center is entered in this field. PressureMAP office names may be composed of up to 20 alphanumeric characters, with the first 8 characters being unique to each office.

Optimum Air Usage (OAU, OAU/Shth)

1.25 SCFH (or 30 SCFD) per sheath mile of cable; 2 or 5 SCFH per tube mile (depending on office type). Based on sheath or tube mileage, the OAU figure represents the calculated air consumption a pressurized cable network should use under standard operating conditions. (OAU is also known as the "allowable leak rate.") This information is reported only for flow or volume devices (device types ending with the letters "F" or "V").

Password 1

This password allows a user access to the CPAMS monitor, for viewing CPAMS data and commanding reports.

Password 2

Password 2 is the CPAMS higher level access code (used for editing CPAMS data).

Phone

The subscriber telephone number assigned to the pair on which the monitoring device is wired. If the device is connected to a dedicated or addressable module, no value will appear in this field.

Phone Number

The telephone number used by PressureMAP to access information from the CPAMS computer. For 289H/H-M monitors using a network connection to PressureMAP, this field contains the IP address for the 289H.

Pipe

The air pipe, central office sector, or remote dryer with which the device is associated. For sorting purposes, all PressureMAP devices must have a pipe designation.

Plat

Plat number. The reference number for the telco-generated record of pressure/flow transducer placement.

Pressure

This field will only appear on the Office Information Screen if the International capability has been enabled. It controls the type of pressure device that can be entered into an office. The two units of measure that can be entered are KPA (Kilo-Pascals) or PSI (Pounds per Square Inch).

Prim Cable

The primary "read" cable which contains the transducer conductor pairs.

Prim Pair

The designation of the primary conductor pair to which the device is connected.

Priority (PR)

Chatlos systems use this data field to provide one of eight possible priority numbers. PressureMAP uses the information in this data field when programming Chatlos L3 and Hercules 940 monitors.

Program Flag

This field is used with PressureMAP's CPAMS Programming utility. A "Y" designation indicates that you wish to have certain monitor-specific fields programmed into the Sparton, Chatlos or Hercules CPAMS when Option 8 of the CPAMS Information Menu is selected. The default or "N" entry indicates that you do not want the device record programmed into the CPAMS. The designation in this field is ignored if you select Option 9 (Program All Devices) from the CPAMS Information Menu. (Note that the CPAMS Programming utility is available only for Sparton 5300B and 5318 monitors, Chatlos L3s and Hercules 940s.)

PSI

For contactors (all device types ending with a "C" in the device type code), this field displays the minimum air pressure standard for which the contactor is set. For a pressure device, this is an offset field that shifts the device reading by the value entered in the field. Note that in Dial-a-Ducer applications this field's value does not affect the pressure readings in PressureMAP.

Range (Ran)

Flow transducers display a number that signifies the maximum reading capacity of the device. For

MAP SYSTEM QUICK REFERENCE

example, a common flow range for a type "SF" ("source flow") transducer is 0-50 SCFH. The value that appears in the **Range** data field is "50.0."

Reading

The two columns Curr and Last contain the current and last pressure or flow readings. If you are not using AlarmMAP (which acquires data every two hours), the Last column will remain blank and the Curr and Tdy readings will be the same.

Reading Times

Dates and times of the current, last, and today readings PressureMAP has gathered from the CPAMS unit.

Reference (Ref)

The calibrated air pressure of a flow transducer in a Positive Air Flow (PAF) system.

Relay

For Nicotra devices, this number designates the alarm relay number (0-3).

Remarks

This line displays a 70-character message pertinent to the device. Remarks are placed in this field during data entry, and saved with the office data until removed or edited.

Recognition

The "alarm recognition delay" field represents the number of seconds (between 1 and 999) that an alarm condition must persist before it is recognized as a genuine alarm by the Chatlos or Hercules. PressureMAP does NOT use this information to process or generate alarms. The entry in this field is used only for the programming of the Chatlos L3 or Hercules monitors via PressureMAP.

SAU

The Standard Air Usage of high priority flow devices (\$F and \$V). The value in this field should be the normal, stable flow of the device.

Scan Option

One of five possible values that identifies the number of retries, the scan interval and the average number or readings expected by the Sparton when polling for device readings. The information in this field is used by PressureMAP when programming devices into a Sparton 5300B or 5318 monitor.

Sec Pair

A pre-assigned backup pair of conductors available for use if the primary pair becomes defective.

Settled Readings

The Settled Readings section of the Device History Report has seven columns of data: one for each day of the week. **Tdy** represents the reading taken during the normal early morning calling cycle. The other six columns (labeled from -1 to -6) list the readings obtained over the past six days.

Sharp Sign Ratings

A sharp sign (#) displayed in the level column on a dispatch report indicates that more than one device at the same location is in alarm. When more than one dispatch condition is found at a specific location, all dispatches will be grouped into one dispatch listing, and will be given a Sharp Sign Rating.

Sheath(s)

For a pressure device, the value(s) given identifies the cable being monitored. For a flow device, the number(s) indicates the cables being fed by the monitored air pipe manifold, Flow Finder Manifold or distribution panel.

S-M

The Sheath Mile (S-M) field only applies to devices that monitor air flow. If the device in question is a flow monitoring device, the calculated Sheath Miles are entered into this field. The Sheath Miles for a Source FTD is equal to the sum of the manifold Sheath Miles. (This includes the distribution panel Sheath Miles if it is fed by the pipe panel.)

Although Sheath Miles for each flow device should be recorded on the respective stickmaps, this information is sometimes not present. Be sure to enter all calculated Sheath Miles on stickmaps which lack this information.

Sort Kev

This field is for user-defined device sorting. Sort Key designations may hold a maximum of four alphanumeric characters. Option 10 of the Device Histories Menu uses this field to generate reports for all devices with the same Sort Key designation.

STD

This field will be displayed only for high priority pressure transducers (\$P devices). This value is the standard, normal PSI value of the transducer.

Stickmap

The primary pressure record for an office. The stickmap is a graphic layout of a route showing all cables, utility holes transducers, air pipes, etc. The stickmap number is the reference number for pressure and flow transducer placement.

Summary Information

"Summary Information" is a one-line description of a problem. The daily dispatches describe the five worst problems for each office in a summary information section. That line includes a task number, a device number, a brief description of the nature of the problem, and the level of dispatch that PressureMAP has assigned to it. Additional information about the problem is available in Detailed Task Reports.

Tdy

During PressureMAP's midnight data shift, the reading in the *Last* column is shifted to the *Tdy* column. At 3:00 a.m. another scheduled call is made to determine the Tdy stablized reading. This reading is used for alarm, priority and SQI calculations.

Threshold (Th)

A programmed setting in the CPAMS that determines when a device comes into alarm, (e.g. recordings that drop below the threshold generate an alarm as do flow readings above the

MAP SYSTEM QUICK REFERENCE

programmed threshold). The name of a data entry field. For a Sparton device, it contains the programmed Sparton threshold for the specific monitoring device. PressureMAP uses the information in this data field when it is instructed by a user to program a Sparton 5300B or 5318 monitor.

THR

This field appears only for single feed pressure device types GP, HP, and JP, along with the **CHG** field. If the pressure drops below the threshold value (THR) at any time, a four star dispatch alarm will be issued.

Thr 1, Thr 2

These two fields hold the threshold values programmed into the Nicotra for pressure transducers. Each value is a number from 800-2000 (hertz). PressureMAP does not alarm on the input from these two fields; they are for record keeping purposes only.

TP

This is the single letter Chatlos/Hercules device type designation on the Chatlos or Hercules printout. PressureMAP uses the information in this data field when programming a Chatlos or Hercules monitor.

Trigger +/-

This field needs to be completed for Contact Alarm device types only. TRIGGER describes the operational condition selected when the device is in an alarm state. The following codes should be used to describe the device:

- + A FAULT alarm is reported when normally open contacts close.
- A FAULT alarm is reported when normally closed contacts open.
- +/- A FAULT alarm is reported when a normally open contacts close and a CLEAR alarm is reported when they open after being closed.
- -/+ A FAULT alarm is reported when normally closed contacts open and a CLEAR alarm is reported when they close after being open.

PressureMAP uses the information in this data field when programming Sparton 5300B and 5318 monitors.

Trunk/Toll Tolerance

This office information field specifies a give-or-take value (in ohms) for contactor readings. In the field, several contactors are normally wired to a single pair. Because of this, when a contactor goes into alarm, PressureMAP must have some way to determine which contactor on the pair is in an alarm state. To facilitate the searching procedure, PressureMAP keeps a table of values, listing the loop resistance value of each contactor if it should go into alarm. If a contactor does goes into alarm, PressureMAP is able to compare the current reading of the pair with the table of contactor resistance values. When PressureMAP finds a value in the table that equals the pair reading, then the contactor that is in alarm has been found.

However, the exact resistance value of an operated contactor cannot normally be predicted. Because of this, when PressureMAP reads a loop resistance value, it must allow for some give-or-take of the

value read in order to match a value in the contactor table. The Trunk/Toll Tolerance data field specifies the give-or-take value that is allowed when attempting to match a loop resistance reading against the table of operated contactor values.

PressureMAP gives this data field a default value of 80 ohms. This means that a contactor is considered to be in an alarm state if the reading received by PressureMAP falls within 80 ohms, give-or-take, of the listed loop resistance value of the contactor.

Tube Miles (TUBE-M)

An alternative to calculating sheath miles when determining an air source's Optimum Air Usage (OAU). To calculate the Tube Miles for a flow device, the number of tubes that feed cables from the monitored air source need to be counted. Depending upon office type, either a value of 2 or 5 SCFH per tube mile is used in calculating OAUs. The Tube-M value (flow per tube) is entered in the Office Information Screen. PressureMAP then automatically generates an OAU based on the number of tubes entered for each monitored air source during device data entry.

TY-K

For Lancier systems, this four-character field contains the sensor type and kind, separated by a dash.

Type(T)

A two letter device type identification denoting the type of device and its application in the pressurization system (see Table 3-2, "PressureMAP Device Types" in this guide). Typically, the first letter pertains to the location or application of the device, and the second letter represents the device type. For example, "UP" describes an underground pressure transducer.

Undgnd std

See Aerial std, Buried std, Undgnd std.

Unit # (Un, Units)

This data entry field pertains only to Sparton monitoring systems. It represents the grouping or category of data which contains the device in question. For example, all flow transducers may be assigned the same Unit Number. Similarly, all of the devices on a specific route could be grouped together and given the same Unit Number. PressureMAP uses the information in this data field in the programming of Sparton 5300B and 5318 monitors.

User Defined Devices

This field allows you to turn "on" or "off" the user defined device number feature for a particular office. By default, PressureMAP will turn user-defined device numbers to OFF, and scrutinize each device number as it is entered into the data editor to make sure that the device code and number conform to the CPAMS type designation and numbering system. However, with user-defined device numbering in effect (ON), customized device codes can be used to help identify the device.

SAMPLE PRESSUREMAP REPORTS

The preceding glossary of terms pertains to the fields in many of the reports PressureMAP can generate. Examples of most of these reports are provided in this section.

Dispatch Priorities Report

PressureMAP Dispatch Priorities not only analyzes, prioritizes and specifies the day's five most critical dispatches, but it also tells you how to correct the problem causing each dispatch.

With each dispatch reported, a task number, device number, alarm condition and priority level is displayed. A more detailed report can be obtained for any of the noted dispatches by selecting one of the task numbers listed in the Dispatch Report. Please note that beginning with PressureMAP Version 26 seven digit hexadecimal task numbering is used. The first three digits represent the numeric Julian date, where January 1 equals 001. The four alphanumeric characters listed after the Julian date represent a hexadecimal base 16 order number assigned by the system. With hexadecimal numbering up to 65,535 unique task numbers are represented by unique four-character alphanumeric designations.

1. SCRU	Z 7		
Task #	Device #	Condition	Level
0020760	T -010	UG Cable PSI TD dropped 6.0 psi in under 24 hrs	
002012A		ALRM Manifold flow increased 8.0 scfh in under 24 hrs ALRM ACKN	ACKN **** MNTC
00201FA	Т -044	Manifold flow increased 7.9 scfh in under 24 hrs	**** ALRM
0020614	T -126	Aerial Cable PSI TD dropped 3.0 psi in under 24 hrs	**
002C801	T -030	Underground PSI TD came into error (OPEN) in 48 hrs	**
System .	Alarms for	SCRUZ7	CONS
Task #	Error #	Condition	Level
	375	Can't connect to socket (SCRUZ7)	****

DISPATCH PRIORITIES

Detailed Task Report

The Detailed Task Report provides you with data concerning the device signaling a dispatch and a list of devices that have been affected by the dispatch condition. In addition to this information, a recommended leak locating procedure and graphic is given to help minimize the time spent correcting the problem.

```
Task Dispatching Info for <OFFICE, TASK#, DEVICE>
                                                   PressureMAP XX.XX.XX
07/02/2006 17:29
                                           System Studies Incorporated
Task # Device # Condition
002001B T -069 Manifold/meter panel flow increased 5.0 scfh in 24 hrs ****
               Reading was 11.0 scfh at 17:18 on 07/02/98 VALIDATED
Task Dispatch Procedure #3
Probable Cause: Leak Close to Flow Device, Construction
    Intervention, Pair Trouble.
Procedure: Use Worksheets B or C to Determine Area of Search /
    Locate Trouble / Check the Cable Pair.
Device #: T -069
Address: MH-5, CENTER AVE
                                      Type: MF Range: 20.0 S-M: 15.0
                                      Loc: 26 Pipe: A OAU: 18.7
Sheath(s): 01
               Prim Pair:
                                      Sec Pair: R Sort Key:
Plat #:
               Stickmap:
                                      Phone:
Latitude: N36+25.999 Longitude: E122+15.000
                   Distance 1 (kf): 3.0
Distance 2 (kf):
Office 1 Loc: 25
                                            Field 1 Loc: 27
Office 2 Loc:
                                            Field 2 Loc:
Remarks:
Readings Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
     11.0 11.0 11.0 6.0 5.5 6.0 6.0 5.5 6.0 6.0 6.0 6.0
ASSOCIATED DEVICES TOWARD THE OFFICE
Device #: T -068
Address: MH-4, CENTER AVE
                                         Type: UP
                                               25 Pipe:
Sheath(s): 01
Readings: Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
            6.5 6.5 6.5 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0
************************ PROJECTED LEAK LOCATION ********************
                                  LOC
                                       26
         <- OFFICE
                           MH-5, CENTER AVE
                                                         FIELD ->
                          TD T -069 TYPE MF
  MH-4, CENTER AVE
                                  11.0 SCFH
*< 25>----[ LEAK ]
           <- 3.0KF ->
```

DETAILED TASK REPORT

Device History Report

The Device History Menu gives nine report options: history of the entire office, history of all devices on a pipe/sector, at a location code, at a manhole/address, on a cable/sheath, by type, all devices disabled, by current reading, and a Non-Variance Report ("Stuck" TDs).

Selecting *History of all devices by current reading*, and then entering device type *UP* and a reading <3.0 from the Device History Menu will display a report similar to the one below.

```
Device History of COWTOWN, UP <3.0 Readings
                                  PressureMAP XX.XX.XX
07/02/2006 11:41
                             System Studies Incorporated
.....AVERAGES...
 Pipe: A
         Location: 601
                            MH-601 6TH & OAK PPE PTD
 00\overline{2}-13 UP 1.5 1.5 1.5 1.5 1.5 2.0 2.0 2.0 2.0 2.2 2.2 2.0 2.5
  Pipe: E
         Location: 226
                           MH-226 C/O 6TH & YUBA BHAA-4
      UP 1.0 1.0 1.0
                 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
 002-27
  Pipe: D
          Location: 262
                           MH 262 RAMIREZ & 11TH KDAC-6
 MH 262 RAMIREZ & 11TH ADTC-6
 Pipe: D
         Location: 262
                           MH 262 RAMIREZ & 11TH PPD
```

HISTORY OF ALL UP DEVICES WITH A READING OF < 3.0

Selecting device type *ALL* and a reading of *OPEN* from the Device History Menu will display a report similar to the one below.

HISTORY OF ALL DEVICES WITH A READING OF OPEN

The following examples show device histories in "Browser" and extended (X) formats for PIPE AC in the APTOS2 office. Listing by device number (as shown in the first example) is the default version of the report generated. A listing by access number is generated by using the # command function—for example, 2#, as shown in the sample screen that follows.

DEVICE HISTORY LISTINGS (by Device Number)

```
Keystrokes: [Quit <Esc>] [Down 'J'] [Up 'K'] [Help 'H'] [Print 'P']
[Search Forward 'F'] [Search Back 'B'] [Search Next 'N']
                 Device History of APTOS2, Pipe AC
         .READING. .....AVERAGES....
Access # TP Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
          ---- ---- ----
013-17
      UΡ
          8.0 8.0 8.0 8.5 8.5 8.5 8.5 8.5 8.4 8.3 8.5 8.5
           8.0 8.0 8.0
                                                8.0 8.0 8.0
013-18
       ΠP
                      8.0
                           8.0 8.0 8.0 8.0
                                           8.0
                                                            8.0
          7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 8.5 8.5 8.5 8.5 8.5 8.5 8.5
013-19
       UΡ
                                       7.0 7.0 7.0 7.0 7.0
                                                            7.0
013-22
       EΡ
                                        8.5
                                            8.5
                                                8.5
                                                    8.5
                                                        8.5
                                                            8.5
      016-36
 -- More Below ---
```

DEVICE HISTORY LISTINGS (by Access Number)

```
Device History of APTOS2, Pipe S1
                                                     PressureMAP XX.XX.XX
07/02/2006 09:53
                                              System Studies Incorporated
           .READING. .....AVERAGES...
Device # TP Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
        SF 39.0 39.0 37.0 37.0 39.0 39.0 39.0 42.0 42.0 31.7 27.7 23.7 18.4
          Pipe: S1 Location: 0
             pe: S1 Location: 0 OAU: 5.7 CO PIPE PANEL-5 2.2 2.2 2.2 3.0 3.0 3.0 3.0 2.2 2.2 2.1 2.2
                                                  CO PIPE PANEL-S1
T -009
                   Location: 2
                                     OAU: 4.2
                                                  L0004 MH-9 7TH-WALNUT
         Pipe: S1
T -038
         UP 6.5 6.5 6.5 6.5 6.5 6.5 6.0 6.0 5.5 7.3 7.5 7.9 8.2
         Pipe: S1
                   Location: 4
                                                  L0004 MH-16 7H-MONTANA
```

2X (EXTENDED PIPE/SECTOR) DEVICE HISTORY REPORT

Specific Device Reports

In each report example shown below, data from a different type of monitoring system is presented. Each Specific Device Report outlines a device's "statistics" through the various fields in the report.

```
Specific Device Information for <OFFICE>
                                                        PressureMAP XX.XX.XX
                                          System Studies Incorporated
07/02/2006 14:33
                  Access #: 001-06 Type: SF Range: 19.0 S-M: 2.2
Loc: 0 Pipe: A OAU: 2.8
Device #: APP
Address: A PIPE
TD Type: RF/19.0
Sheath(s): MAW
         63 Prim Pair: 1225 Sec Pair:
Cable:
                                                          Sort Key:
Plat #:
                  Stickmap:
Phone:
                      Longitude: E122+15.000
Latitude: N36+25.999
Office 1 Loc: Distance 1 (kft): Field 1 Loc: Office 2 Loc: Distance 2 (kft): Field 2 Loc:
Remarks: SF READS 1.2 SCFH HIGHER THAN ACTUAL/TER
         Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
            3.4 3.4 3.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 2.6 1.9 0.1
```

SPECIFIC DEVICE INFORMATION FOR A 289H LSS

```
Specific Device Information for <OFFICE>
                                                                PressureMAP XX.XX.XX
07/02/2006 13:03
                                                         System Studies Incorporated
Device #: P -007
Address: MH-23 RIVER ST.
                                             Type: BP
Loc: 145
                                                           Pipe: B
Sheath(s): 04
Cable: 14 Prim Pair: 2435
Plat #: C-8 Stick Map: 40F7
Module: ST Phone #: 475-1278
Priority: 2 Level: 7.0
Latitude: Longitude:
                                            Sec Pair:
                                                                 Sort Key:
                                                         B CKT #:
                                             TP:
                                                                                T444
Latitude:
                           Longitude:
                     Distance 1 (kft) 2.8
Distance 2 (kft)
                                                        Field 1 Loc:
Field 2 Loc:
Office 1 Loc: 144
Office 2 Loc:
Remarks:
             Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
               7.0 7.0 7.0 7.0 7.0 6.5 6.5 6.5 6.5 7.4 8.5 8.8 8.4
```

SPECIFIC DEVICE INFORMATION FOR A CHATLOS SYSTEM

```
Specific Device Information for <OFFICE>
                                                       PressureMAP XX.XX.XX
                                           System Studies Incorporated
07/02/2006 14:33
Device #: T -006
Address: MH-93,RIO DEL MAR
                                      Type: EP
                                     Loc: 10 Pipe:
                                                           Α
Sheath(s): 05
           PP Prim Pair: 73

1A-3 Stick Map: 2

1 Line #. 4
                                                 R Sort Key:
Cable:
                                  Sec Pair:
                                                                   WEST
Plat #:
             1 Line #:
2 Phone #:
                                    Module:
Unit #:
           1
                              4
                                                 SUB Input #:
                                                                      6
Threshold:
                    Longitude:
Latitude:
                 Distance 1 (kft) 3.1
Distance 2 (kft)
                                            Field 1 Loc:
Office 1 Loc: 9
Office 2 Loc:
                                              Field 2 Loc:
Remarks:
           Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
            9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.3 9.4 9.3
```

SPECIFIC DEVICE INFORMATION FOR A SPARTON SYSTEM

```
Specific Device Information for <OFFICE>
                                                 PressureMAP XX.XX.XX
07/02/2006 12:46
                                           System Studies Incorporated
Device #: BAA03
Address: MH-20 SOQUEL
Sheath(s): 02
                   Access #: 007A Type: UP
                                            15 Pipe:
                                       Loc:
Cable: 02 Prim Pair: 704 Sec Pair: Sort Key: Plat #: UG-7 Stick Map: 5
Phone: 555-1278
Latitude:
                  Longitude:
                      Distance 1 (kft) 2.9 Field 1
Office 1 Loc: 14
                                              Field 1 Loc: 16
                 Distance 2 (kft)
Office 2 Loc:
Remarks:
          Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
```

SPECIFIC DEVICE INFORMATION FOR AN E2A SYSTEM

```
PressureMAP XX.XX.XX
Specific Device Information for <OFFICE>
                                                                System Studies Incorporated
07/02/2006 12:46
           #: A-035 Type: MF Range: 19.0 S-M: 2.2
: MH 58 EAST HIGH AVE Loc: 21 Pipe: A OAU: 2.8
Device #: A-035
Address: MH 58 EAST HIGH AVE
Sheath(s): 07 13

      Cable:
      14
      Prim Pair:
      73
      Sec Pair:

      Plat #:
      A-48
      Stickmap:
      5

      Callouts:
      Priority:
      Ty:

      Input #:
      Addr #:
      Escalator:

      Delay:
      Phone #:
      Low Thrsh:

                                                                                    Sort Key: EAST
                                                                                    CKT #:
                                                        Escalator:
                                                                                    Settle Tm:
                                                        Low Thrsh: High Thish.
TD Steps: 20 Monitor Leg: T-R
                           Phone #:
Delay:
                           Trend Signed: N
Trend:
Latitude: N30+15.456 Longitude: E130+25.789
Office 1 Loc: 20 Distance 1 (kft): 2.7 Field 1 Loc: Office 2 Loc: Distance 2 (kft): Field 2 Loc:
                                                                       Field 1 Loc:
Remarks:
Readings
                Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
                 1.5 1.4 1.4 1.6 1.5 1.5 2.0 2.0 2.0 2.0 2.0 2.5 2.5
06/29/94 15:11 DEVICE WILL BE WIRED BY JIM ON TUESDAY, CALL JULIE TO ENABLE
                       IT PHONE HER AT 555-5555
Manifold/PSI:
                      2.2
                   07/05/06
            07
            13
                       1.4
```

TMACS 1000 Information With Manually Entered Comments and Cable Readings

```
Specific Device Information for <OFFICE>
                                              PressureMAP XX.XX.XX
07/02/2006 13:03
                                        System Studies Incorporated
Device #:Q=01+02+127 Access #:Q+01+02+127 Type: MF Range: 270.0 S-K: 35.0
Address: LOCATION 1
                                   Loc: 1 Pipe: B
                                                    OAU: 1225
Sheath(s): 1234
Cable:
         1234
               Prim Pair:
                                 Sec Pair: 1 Sort Key:
                                                             1
              Stick Map:
Plat #: UG5677
                           1/1
TY-K:
        XXXX
                                 CIRC:
                                          XXXX
               A:
               A: X
Level 2: XXXX
Level 1:
         XXXX
Latitude:
                Longitude:
Office 1 Loc:
                      Distance 1 (km)
                                            Field 1 Loc:
Office 2 Loc:
                     Distance 2 (km)
                                            Field 2 Loc:
Remarks:
         Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
```

SPECIFIC DEVICE INFORMATION FOR A LANCIER SYSTEM

```
Specific Device Information for <OFFICE>
                                                         PressureMAP XX.XX.XX
07/02/2006 13:03
                                                  System Studies Incorporated
Device #:01-001
                     Access #:01-001
                                              Type: UP
Address: PIAZZA 1
                                             Loc: 1 Pipe:
Sheath(s): 135
                                                          Sort Key:
            7911
                   Prim Pair:
                                        Sec Pair:
                                                                          1
Plat #: UG4439 Stick Map:
Nicotra Type: XXX Relay:
                                 1/1
Thr 1:
          XXXX Thr 2:
                         XXXX
Latitude:
                           Longitude:
Office 1 Loc:
                           Distance 1 (km):
                                                      Field 1 Loc:
Office 2 Loc:
                           Distance 2 (km):
Remarks:
            Curr Last Tdy -1 -2 -3 -4 -5
                                                    -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
            48.2 48.2 48.2 48.2 48.2 48.3 48.1 48.2 48.1 48.2 48.2 48.3 48.2
```

SPECIFIC DEVICE INFORMATION FOR A NICOTRA SYSTEM

Cable Readings Display

The Cable Readings portion of the Specific Device Information screen is only accessible if there is at least one sheath designation in the Sheath(s) field of the primary device screen. The sheaths displayed are pulled from device data information, and the Manifold/PSI and cable readings are manually entered from the PressureMAP Specific Device Information Menu or PressureMAP Data Entry. (Please refer to the TMACS sample screen above.)

Field Accessible Device Comments

The field accessible device comment section of the Specific Device Information screen, which can be accessed from the PressureMAP Specific Device Information Menu or PressureMAP Data Entry, gives field maintenance technicians the ability to input device-related notes. These comments are date/time stamped when entered and can contain up to two lines of text, which equals 124 characters. Comments are displayed below the Readings history fields. An example is shown above in the TMACS 1000 Specific Device Information screen. (The Remarks field above the Readings is reserved for notes input by office Data Entry.)

System Indexing

The reports produced by this option will list individual indexes for each pipe route, remote dryer and central office sector in an office. To obtain an index, a route must have at least one flow device, one pressure device, a calculated OAU value, and at least 80% of the office's non-disabled devices must have valid readings. In addition to the individual route indexes, a consolidated index is calculated for the entire office. For each pipe in the office, a report will be generated which displays the total sheath mileage, the last seven daily indexes and the last four weekly index averages.

				INDEX	ES					AVERA	GES	
Office		Today					-5					
 COEURDA	LENE	78	78	77	77	77	75	75	81	82	84	86
HAYDEN	LAKE	88	88	88	88	94	88	87	88	88	88	88
KENNEWI	CK	72	72	72	69	71	70	70	76	65	62	62
POST FA	LLS	85	85	84	82	82	80	80	91	91	91	92
NORTH R	ICHLA	78	77	78	78	78	78	77	81	82	82	82
RICHLAN	D	60	63	63	69	69	69	65	70	67	71	68
MEADOW	SPRIN	70	72	70	70	66	66	65	70	63	60	56
I. COEU	RDALENI	3 -										
	RDALENI	3 - 		.INDE	XES					. AVER	AGES.	
Pipe	S/Mi	-					· · · · · · · · - 5					
Pipe	s/Mi	Today	-1 	-2	-3 	-4 	-5 	-6 	Wk-1	Wk-2	Wk-3	Wk-4
Pipe 	S/Mi 5.5	Today	-1 84	-2 84	-3 84	-4 84	-5 82	-6 84	Wk-1 85	Wk-2 85	Wk-3 86	Wk-4 86
Pipe CO N1	S/Mi 5.5 2.2	Today	-1 84 86	-2 84	-3 	-4 	-5 	-6 	Wk-1	Wk-2 85	Wk-3	Wk-4
Pipe CO N1 N2	S/Mi 5.5	Today 84 84	-1 84 86 92	-2 84 86	-3 84 86	-4 84 86	-5 82 86	-6 84 86	Wk-1 85 87	Wk-2 85 88	Wk-3 86 88	Wk-4 86 88
Pipe	S/Mi 5.5 2.2 1.6	Today 84 84 92 40	-1 84 86 92	-2 84 86 92	-3 84 86 92	-4 84 86 92	-5 82 86 92	-6 84 86 92	Wk-1 85 87 92	Wk-2 85 88 92	Wk-3 86 88 90	Wk-4 86 88 88
Pipe CO N1 N2 N3	S/Mi 5.5 2.2 1.6 0.8	Today 84 84 92 40	-1 84 86 92 40	-2 84 86 92 40	-3 84 86 92 40	-4 84 86 92 40	-5 82 86 92 40	-6 84 86 92 40	Wk-1 85 87 92 40	Wk-2 85 88 92 40	Wk-3 86 88 90 40	Wk-4 86 88 88 40

SYSTEM INDEX REPORTS

CPAMS INFORMATION

Device Log Report

The Device Log Report lists comprehensive information about each device located in an office. Once printed, the Device Log can be saved and used as a valuable reference, showing the actual data contained in your PressureMAP database.

CPAMS Information varies the report format slightly from one CPAMS type to the next. For example, on Chatlos systems, the Device Log Report is sorted by Device Number; but for Sparton systems, the report sorts devices first by Unit Number, then by Line Number, and then by Device Number. The 289H LSS lists devices by access number (card/chassis position, then sequential device number).

The Extended Device Log Report is obtained by entering the letter X after you have selected the Device Log option from the CPAMS Info Menu (for example, at the CPAMS Info Menu Choice? prompt, enter 2x < Return >). The extended data contains sheath information (cables fed by flow-monitored devices), a remarks line, a location code listing, and office and field footage information.

07/02/2006		ce Log (page	e 1)			System			XX.XX.X orporate
	Device	Information	last	edited	on 0	6/26/06			
Device #	T	TD Type		Sheath	Pipe		Pair	Pair	Addr#
001-01	SF F CO P-PF Latitud	RF/100.0 ANEL #1 le: N39+20.0	100	36.0	1A Pla Lon	HC t#: gitude:	47 W123+5	Stickma	ap: 2
001-02	DF CO P-PA Latitud	RF/47.5 ANEL #1 de: N39+20.0	47.5 000	13.8	C0- Pla Lon	1 HC t#: gitude:	31 W123+5	Stickma	ap: 2
001-03	UP C MH-45 Latitud	PA/30.0 de: N39+26.0	020	34	1A Pla Lon	42 t#: 5 gitude:	1119 W123+5	1121 Stickma 52.000	ap: 2
001-04	MH-27A,	CPA/30.0 BLEEKER&PI de: N39+42.0	NE	09	Pla	42 t#: 5 gitude:		Stickma	ap: 2
001-05	MF MH-31, Latitud	CF/19 ELM/4TH AVE le: N39+05.0	19.5 000	8.5	Pla Lon	37 it#: 4 igitude:	617 W123+3	621 Stickma 38.000	ap: 2
01-A1-001A	UP BACKALI Latitud	APA LEY WY. & 6T le: N39+15.0	:н)00	04	Pla	112: t#: 5 gitude:		Stickma	ap: 1
01-A1-002A	MH-17,	APA LINDEN WY. le: N39+10.0		1414	Pla	1110 t#: 7		Stickma	ap: 1

STANDARD DEVICE LOG (289H LSS CPAMS)

Device Log by Location Report

The Device Log by Location Report groups information regarding the devices found at a specified location. To determine a specific location code, you must reference the stickmap(s) which pertain to the particular office in question.

In contrast to the Device Log Report, the Device Log by Location Report always sorts its data in the same fashion, regardless of the type of CPAMS. In this report, data is sorted first by the stickmap number, then by the Location Code and finally by the Device Number.

A Device Log by Location Report will automatically be generated when you select the item from the CPAMS Info Menu. Once the report is completed, you will be returned to this menu.

01/02/2	2007	16:42	og (St:							System	Pres Studie	sureMAP s Incorp	XX.XX orated
			Devi	ce Inf	ormat	ion :	last	t ed	ited o	n 12/2	26/06		
Device	• T	Ran	OAU/ Shth	Pipe	Inp#	Mod	Un 	Th	Cabl	Pair	Pair	Phone#/ Addr#	no.
** 0 *													
-001 -004 -005	SF	50	6.0	A	4	DED	02	05					4
-004	SF DF	50 20	1.4 6.4	CO	7	DED	02	05 02					7 8
-006	DF	20	6.4	CO	9	DED	02	02					9
*** 1 *	*** 1	MH-89	OCEAN	ST./J	ENNY	1	Plat	t #:	1A-44				
									09	1787			19
*** 2 *													
-007	UΡ		15-73	CO	10	DED	02	04	01 01 01 01 01 01 01 01	1907			10
-008	UP		15-79	CO	11	DED	02	03	01	1910			11 12
-010	UP		9-84	CO	13	DED	02	03	01	1912			13
-011	UP		9-67	CO	14	DED	02	03	01	1917			14
-012	UP		75-67	CO	15	DED	02	03	01	1920			15 16
-013	PP		31-37	A	17	DED	02	03	01	1922			17
-015	EP			D	18	DED	02	03	01	1925			18
*** 3 *	*** 1	MH-49	мітсні	ELL ST	٠.								
-105							02	02					
*** 11													
-102						DED	02	02					
*** 12	***	5202	PACIF	IC STR	EET M	ALL]	Plat	#: 1A	2-A			
									05 05				35
-033	BP		6-73	RD-D	36	DED	02	01	05	496			36
** 13					_								
-103						DED	02	02					
*** 14													
-035 -036 -037	UP		3-67	RD-D	38	DED	02	04	06	376			38
: -036 : -037	UP EP		4-/4	RD-D	39 40	DED	02	01 04	06 06	380 387			39 40

DEVICE LOG BY LOCATION

Device Status Report

Option #4 of the CPAMS Info Menu enables you to access key information for the devices in an office in a report format similar to what is provided in a Sparton Status Report. Reports can be generated to show the alarm status for all of the devices in an office, or filtered according to Priority Level. The Device Status Report consolidates information located on other PressureMAP reports such as Dispatch Priorities, extended Device Histories and Device Logs. It provides concise data for making comparisons of recent

device readings and evaluating alarmed devices. Devices in the report are ordered according to the same sorting criteria used for the Device Log.

The format of the report varies slightly depending upon what type of monitor you have: 289H LSS, Sparton or Chatlos. Notice that the principal difference in format among these three reports is the column(s) of data located after the Address column. The Sparton report includes Mod (Module) and Inp (Input #) columns; the Chatlos report displays a CKT (Circuit #) column; and the 289H LSS report excludes these additional columns, displaying TP (Type) as the first column of information after the Address information.

Reports can be generated to show the alarm "status" for all of the devices in an office, or filtered according to Priority Level. (Priority levels are described in the PressureMAP section of the Operations manual.)

01/02/2007	tus for <office name=""> (12:46</office>	page 1	, 		Sys				X.XX.XX porated
	Device Information	last e	edit	ed o	n 12/2	6/06			
Device #	Address	Mod	Inp	TP	Pipe	Curr	Tdy	TD-1	Status
T -006	MH-42, Spruce St./Goo	se DED	3	UP	1A	4.5	7.5	7.5	****
T -007	MH-47, Linden & Moyer	DED	4	UΡ	1A	3.0	6.5	6.5	***
T -010	MH-112, Richardson &	Gr SUB	7	MF	2A	17.2	17.4	11.6	***
	MI F C- D 40 C D	At DIM	116	CA	4 A	2.5	2.5		**
B -021	MH-5, So. B-40 & Broa	IOM DIN	T T U						

DEVICE STATUS REPORT (Sparton Monitor)

01/11/2007	tus for <office name=""> (pag 12:46</office>	C 1/		Sy				XX.XX.XX rporated
	Device Information la	st edi	ted	on 10/	11/06			
Device #	Address	CKT	TP	Pipe	Curr	Tdy	TD-1	Status
ST-0006	MH-42, Spruce St./Goose	NW-89	UP	1A	4.5	7.5	7.5	****
ST-0006	MH-47, Linden & Moyer	NW-90	UΡ	1A	3.0	6.5	6.5	****
ST-0006	MH-112, Richardson & Gr	NW111	MF	2A	17.2	17.4	11.6	****
ST-0006	MH-5, So. B-40 & Broadw	SW-06	UΡ	3A	2.5	2.5		**
ST-0006	MH-11, Broadway & Ocean	SW-07	UΡ	4 A	3.6	3.6		**

DEVICE STATUS REPORT (Chatlos Monitor)

01/22/2007	us for <office name=""> (page 1) 12:46</office>		PressureMAP XX.XX.X System Studies Incorporate							
Device Info	rmation last edited on 11/26/09	5								
Device #	Address	TP	Pipe	Curr To	dy TD-1	Status				
001-11	MH-42, Spruce St./Goose Ave.	UP	1A	4.5 7	.5 7.5	****				
	MH-42, Spruce St./Goose Ave. MH-47, Linden & Moyer	UP UP		4.5 7 3.0 6		****				
001-12				3.0 6	.5 6.5					
001-12 002-13	MH-47, Linden & Moyer	UP	1A 2A	3.0 6	.5 6.5 .4 11.6	****				

DEVICE STATUS REPORT (289H Monitor)

Device Status by Pipe Report

The next option on the CPAMS Info Menu (Option #5) produces a report similar to the ones shown above, except that the format of the information presented even more closely resembles an actual Sparton device status report. Also, as the name implies, report data is organized by pipe route, beginning with the CO and working numerically outward.

Three report variations are provided, one each for the Sparton, Chatlos and 289H LSS monitors. For the most part, the data presented on these three reports is identical, except for the first few columns on the left that appear before the *Location* column. Reports for the 289H LSS and the Chatlos monitors contain two leading columns of data (*Device* # and *Access* # for the 289H, and *Device* # and *Circuit* # for the Chatlos). The Sparton report contains four leading columns (*No.*, *Device* #, *Mod*, and *Inp*).

The remaining seven columns of data that are common to all three reports are *Location*, *TP*, *Curr*, *Tdy*, *Wk-1*, *Alrm* and *In*. This last column, *In*, pertains to the number of days that a device has been in alarm. The three reports shown below illustrate the format variations and type of data presented on the Device Status by Pipe Route Report for each of the three primary monitor types.

1/23/2007	09:21	Report for <office name=""> Page 1 S</office>	yste	em Sti	idies	Inco	xx.xx rporat	ed
Pipe Rout	e CO							
Device #	Access #	Location	TР	Curr	Tdy	Wk-1	Alrm	In
	003-23 003-24	DRYER A FAILURE DRYER B FAILURE		OK	OK			
Pipe Rout								
	Access #	Location	TP	Curr	Tdy	Wk-1	Alrm	In
001	001 02	GO AD HIND DIE 13					*	
	001-02	CO AP FTD RT 1A					•	Т8
002	003-03	CO AP PTD RT 1A W HWRD/ELAKE FTD MH GG107 1/2	ME	10.5	10.5	0.8		
003	002-A3-100	2115 FACTIAKE FID MR GGIU/ I/2	HE	2.5	2.6	2.6		
005	001 A3 001	2115 EASTLAKE DR MH K52	TTD		4.5			
007	001-A3-002	2115 EASTLAKE DR MH K52 2115 EASTLAKE DR MH K52 2115 EASTLAKE DR MH K52	UP		3.7			
008	001-A3-004	373	EP		6.8		R	0
009	001-15	S PDL/E PDL FTD 1A02 MH K45		6.6	6.5	6.6	- 1	٠
010	001-A3-008	SPDL/FAIRVIEW 1APP A3-8 MH K38	EP		3.0		*	94
011	001-A3-005	SPDL/FAIRVIEW 1AC A3-5 MH K38	UP			4.1		
012	001-A3-006	SPDL/FAIRVIEW 1AB A3-6 MH K38	UP	3.9	3.8	4.0		
ipe Route	2A							
Device #	Access #	Location			Tdy		Alrm	In
013	001-03	CO AP FTD RT 2A					*	11
014	001 03	CO AP PTD RT 2A			10.0			
015	001-05	RASC/HOWARD FTD MH FG017 1/2	MF	2.4	2.4 2	2.2		

DEVICE STATUS BY PIPE REPORT (289H Monitor)

Pipe Rou								
	Ckt#	Location		Curr				
		DRYER RUNTIME SYS1		OK				
MA-0002	MA0002	DRYER RUNTIME SYS2	DC	OK	OK	OK		
MA-0003	MA0003	DRYER HI FLOW ALARM	DC	OK	OK	OK		
		DRYER HI OUTPUT PRES	DC	OK	OK	OK		
		DRYER LO OUTPUT PRES	DC					
		DRYER HUMIDITY SYS 1	DC					
		DRYER HUMIDITY SYS 2	DC					
		DRYER COMPRESOR TEMP	DC					
MA-0009		DRYER CABINET TEMP	DC					
		DRYER COMP1 SHUTDOWN	DC					
		DRYER COMP SHUTDOWN	DC DC			OK OK		
		DRYER COMP MAINT DRYER POWER ALARM		OK				
MA-0014	MACCI T	ANSON-PIPE FLOW CA1A	DF				R	46
ST-0009	CA01	R1315 S COMMEP	AP			5.2		40
Pipe Rou	te 1							
evice #	Ckt#	Location		Curr :				
ST-003	SW-03	CO AP FTD RT 1	SF :	31.5	31.2	29.8		
ST-004	SW-22	CO AP PTD RT 1	SP UP	10.2	L0.2	10.3		
ST-021	SW-21	BROADWAY & OCEAN ST.	UP	3.5	3.2	7.2	***	3
ST-022	SW-22	BRIXBY & KELP	UP	7.2	7.0	7.0		
		WILSHIRE & FREDERICK	ME	10.4	10.4	10 2		

DEVICE STATUS BY PIPE REPORT (CHATLOS MONITOR)

	25/2007 11:			Page 1 S	-				rporat	
-	e Route CO	_								
No.	Device #	Mod	Inp	Location	TP	Curr	Tdy	Wk-1	Alrm	In
				-48 VOLT FUSE ALARM			CLR			
	(B -002)			DRYER FAILURE ALARM UNIT A		CLR				
3	(B -007)			DRYER FAILURE ALARM UNIT B		CLR				
	(B -012)			DRYER FAILURE ALARM UNIT C		CLR				
	(B -017)			DRYER FAILURE ALARM UNIT D		CLR				
	(B -004)			SYSTEM PRESSURE EMERGENCY		CLR	CLR CLR			
,	(B -003)	BIN	9	BONAVENTURE/PONCE DE LEON PMT	CA	CLR	CLR	CLR		
-	e Route 0									
	Device #						_		Alrm	
1	T -490	DED	66	C O AIR PIPE FLOW TD MH ES4	SF	99.0	99.0	99.0	R	22
2	T -491	DED	76	C O AIR PIPE PRESSURE TD MHES4	SP	10.5	11.3	11.2		
3	T -492	DED	61	CO AIR PIPE FLW RT SMF2 MHPM28	SF	99.2	99.2	99.2		
4	T -493	SUB	277	CO AIR PIPE PRS RT SMF2 MHPM28	SP	9.5	9.5	9.3		
-	e Route 1A									
No.	Device #		_	Location					Alrm	
1	T -190			C O AIR PIPE FLOW TD RT 1A1			89.5			
2	T -191	SUB		C O AIR PIPE PRESSURE TD RT 1A			9.5			
5	T -194	DED		C O DIST FLOW TD RT 1A		54.1	54.2	51.6	R	0
6	T -195	SUB	72	12-70-AT 1100 SPRING ST	UP	3.6	3.6	4.4	*	1
7	T -197	SUB		COX-51-AB W PTREE/14TH ST MH J	UP	1.7	1.6	2.8	**	8
8	T -199	SUB	80	09-40-AD W PTREE/14TH ST MH	UP	6.0	6.0	6.0		
9	T -200	SUB	81	21-57-AE W PTREE/14TH ST MH	UP	3.1	3.1	2.8	*	8
10	T -201	SUB		18-57-AG W PTREE/14TH ST MH	UP	4.5	4.5		*	8
11	T -202	SUB		09-71-AH W PTREE/14TH ST MH	UP					
	T -204	SUB		24-71-AL W PTREE/14TH ST MH	UP				*	8
12 13	T -207	SUB		21-83-AQ W PTREE/14TH ST MH	UΡ		7.0	7.0		

DEVICE STATUS BY PIPE REPORT (SPARTON MONITOR)

Device Discrepancy Report

For certain monitor types (Chatlos L3, Hercules 740 and 940, Sparton 5300B and 5318) PressureMAP provides a way to show the differences between a PressureMAP device record (what has been programmed into PressureMAP during data entry) and the device information that has been programmed into the CPAMS monitor. This information is presented in a Device Discrepancy Report, which displays two lines of data for each device where a discrepancy has been detected.

It is important to note that the report provides device differences relative to PressureMAP. That is, for every PressureMAP device in an office, the CPAMS monitor is checked to compare the differences in

data between the monitor and PressureMAP. This report **does not** show devices which are programmed into the CPAMS monitor, but are not in the PressureMAP device record.

Because the monitor types from which this report are generated differ in data format structure, the contents of the Device Discrepancy Report for Chatlos/Hercules monitors and for Sparton monitors are also slightly different. The following screen samples illustrate these differences.

11/28/2006	11:0	2 ⁻	*5	chedul	e Off* System Studies Incorporated
		Device	Info	rmatio	n last edited on 11/28/06
Device #	TP	Circuit	PR	Alrm	Address
	-		-		
MA-0001	D	ADRY	1	N/C	CO AIR DRYER NO 1
MA-0001	D	ADRY	1	N/O	CO AIR DRYER NO 1
ST-0011	В	AD2	2	3.0	SHED @ 1378 SEIS LAG
ST-0011	В	AD2	1	3.0	SHED @ 1378 SEIS LAG
ST-0012	В	AD3N	1	3.0	PED28 1378N/SEIS LAG
ST-0012	В	AD2N	1	3.0	PED28 1378N/SEIS LAG

DEVICE DISCREPANCY REPORT (CHATLOS/HERCULES)

								PressureMAP XX.XX.XX System Studies Incorporated
Device #	Unit	Line	Inp	Mod	Thr	Prio	Loca	ation
						MAJOR ARTON 5		ROYAL GORGE STREET
T -002 T -002		2 2				MAJOR MAJOR		TWO ST 100 EAST MAIN STREET
T -003 T -003		3 3						THREE ST THREE ST
T -005 T -005	1 1	3 4		DED DED				EAST MAIN
В -027 В -027		1 1	7 8					TWENTYSEVEN TWENTYSEVEN

DEVICE DISCREPANCY REPORT (SPARTON)

CableMAP REPORTS

CableMAP, using the information stored in its database, is capable of producing reports using two format types, the Summary Activity Log and Complete Activity Log, which are selected from the CableMAP Master Menu. The Summary Activity Logs option prints summary reports so that you can examine current construction and maintenance activities, recent closures, and the recent activity of all technicians logged into the system. Complete Activity Logs allow you to view or print activity records in a format that duplicates the CableMAP data entry screen.

Both options have the ability to create eleven different types of cable activity reports. Reports generated can be sorted into the following categories:

- All Cable Activity in the Cable Activity Log
- Activity by an Opening Number
- All Activity for a given Day, Week or Month
- All Activity by a Specified Technician
- All Activity by Job/Task Number
- All Activity by an Address or Manhole
- All Activity by PressureMAP Location Code
- All Activity on a Pipe
- All Activity for a Cable/Count
- All Activity Not Yet Closed
- Recent Activities for all Technicians (TechFinder)

Effective with Version 20.01, CableMAP allows for "advance closings" of cable activities to streamline the database maintenance process. An advance closing date and time may be manually entered when an activity is opened, or the Standard Closing Time option may be set so that CableMAP automatically fills in the Closing Date and Closing Time fields whenever a new activity is opened. The automatic closing date and time may be accepted or changed, or blanked out to prevent automatic closing. (For more information, please refer to the CableMAP section of the Data Entry manual.)

After the advance closing date and time have passed, the system will automatically close the activity, log the closing date and time, and issue a Closing Number with the identifying prefix AUT. This daily function is coordinated with the MAP System's schedule to ensure that open activities are automatically closed in a timely manner and do not interfere with detection and delivery of alarms.

```
Activities on File (page 1)
                                                                    CableMAP XX.XX.XX
04/28/2005 11:38
                                                        System Studies Incorporated
SIMMSBY
CON1631746 04/12/2005 08:49 CLOSED
                                                        CON1750482 04/25/2005 15:45
                                                          Job/Task #: 1492
Loc(s): 2 3
L.C. GREEN
 MH-10, SUTTER/E CLIFF
 555-4848
                                                           Time on Job: 12:45
                                                          Travel Time: 1:00
 Field Rpt Code:
                    123A Dsp/Cause: 1234-567
 02:1201-1300
 TROUBLE ON PAIR, POSSIBLE SHORT
 CLEARED SHORT
At AERIAL RISER, CRN SUTTER/E CLIFF
MNT1810460 04/26/2005 13:19
                                 TEMP CLOSED
                                                        AUT1857457 04/27/2005 11:30
NORM RUNWOOD
                                                           Job/Task #: 181046
Loc(s): 2 4
 MH-3, LANDING/E CLIFF
                                                           Loc(s): 2
Field Rpt Code: 321B Dsp/Cause: 1234-555 Travel Time: 1:30 181046 ST-0002 UG Cable PSI TD dropped 4.0 psi in 24 hrs TASK ASSIGNMENT BY VICKKI
MNT1850489 04/05/2005 09:45 *OPEN*
                                                           Job/Task #: 185795
CP OAKES
MH-8, BRONSON/WOODS 555-5777
                                                           Loc(s): 5
                                                           Loc(s): 5 6
Time on Job: 01:53
                    399B
                             Dsp/Cause: 1234-599
 Field Rpt Code:
                                                          Travel Time:
185795 ST-0003 UG Cable PSI TD dropped 3.0 psi in 24 hrs
TASK ASSIGNMENT BY DONNA, HEAVY TRAFFIC AT 5:00 PM
 TOTAL TIME FOR ACTIVITIES LISTED
                                                                               24:39
```

SUMMARY CABLE ACTIVITIES LOG

```
Activities on File (page 1) 04/28/2005 12:41
                                                                             CableMAP XX.XX.XX
                                                              System Studies Incorporated
Opening #: CON1550812 Opening Date: 04/05/2005 (094) Closing #: Closing Date:
                                                                           Opening Time: 12:07 Closing Time:
                                                                           Time on Job: 4:12
Travel Time: 0:00
Fld Rpt Code: 1234
Office name: SANTA CRUZ
                                           Job/Task #: 12345
Technician: CRAIG
Address: 2-1340 E (
Phone: 555-1212
                2-1340 E CLIFF DR
                                                                           Dsp/Cause: 1234-123
                                           Pipe(s): A
Location(s): A
Cable/Count: 1234:1233-1234
Trouble Rpt/Test: CUTOVER 50 PAIRS
Remark/Work Done:
Trouble Site:
                      MH-21
_ _ _ _ _ _ _ _ _ _
Opening #: RPR1550999 Opening Date: 04/05/2005 (094) Closing #: Closing Date:
                                                                           Opening Time: 12:07
                                                                           Closing Time:
Office name: APTOS
Technician: BILL WALL
Address: MH 58 CLIFF AVE
Phone: 555-2233
                                                                           Time on Job: 6:28
Travel Time: 0:00
Fld Rpt Code: 3488
                                           Job/Task #:12346
                                                                           Dsp/Cause: 1234-889
Location(s): 21 22 35
                                         Pipe(s): A
Cable/Count:
Trouble Rpt/Test:
Remark/Work Done:
Trouble Site:
```

COMPLETE CABLE ACTIVITIES LOG

CableMAP Screens on a Hand-Held Terminal

By using the Hand-Held Terminal login, you are able to log, edit, view and close cable openings from the field. The following section shows CableMAP screens similar to what is displayed on a hand-held terminal, and describes the fields included in each screen.

```
Open # CON2018517
04/28/2005
            14:09
Close #
04/28/2005
            17:30
              0:03 Travel Time: 0:00
Jobtime:
Job/Task # <JOB NUM>
<TECHNICIAN>
<ADDRESS>
< PHONE>
Fld Rpt Code: <XX> Dsp/Cause: <DSP/CA>
Loc # <XX>
Pipe: <XX>
<CABLE: COUNT-COUNT>
Trouble Rpt/Test: <TROUBLE RPT OR TEST>
Remarks/Work Done: <REMARKS>
Trouble Site: <TROUBLE SITE>
VIEW ACTIVITY
```

VIEW OPEN CONSTRUCTION LOG

```
Open # MNT2018417
04/28/2005
Close # MNT2018708
04/28/2005
             14:12
Jobtime:
              0:05
                    Travel Time: 0:00
Job/Task # <TASK NUM>
<TECHNICIAN NAME>
<ADDRESS>
<PHONE>
Fld Rpt Code: <XX> Dsp/Cause: <DSP/CAU>
Loc # <XX>
Pipe: <XX>
<DISPATCH CONDITION>
Trouble Rpt/Test: <TROUBLE RPT OR TEST>
Remarks/Work Done: <REMARKS>
Trouble Site: <TROUBLE SITE>
```

MAINTENANCE ACTIVITY DATA SCREEN

When logging an opening, the following information must be entered: office name, activity type, technician's name, job or task number, address, phone, location code, pipe, and cable/count. If a maintenance activity is to be logged, the job/task number should be the same 6 digit number as the Dispatch Task which is being worked on.

Although the hand-held terminal user has wide data access and input privileges, there are some limitations to using this equipment. For example, to keep important data from being corrupted by unauthorized access, some of the data input fields, such as opening and times and dates, are locked on the hand-held screen. These fields can be edited on the full-sized CableMAP screen.

MAP SYSTEM QUICK REFERENCE

Open#

The Opening (or Activity) Number can be a maximum of fourteen characters in length. This number always has CON, MNT, RPR, or MSC for the first three characters. It can be automatically assigned by CableMAP, or the last eleven characters can be changed to conform to an individual numbering method. CableMAP will not generate a Closing Number until the Closing Time has passed.

Numbers automatically assigned by CableMAP are three characters and eleven digits in length. The first three characters in a Cable Opening Number represent construction or maintenance activity. The next three digits represent the current day, displayed as a Julian date. The last eight digits are random, as chosen by the program.

Close

The Closing Number is similar to the Opening Number in that both are a maximum of fourteen characters in length, and both can be customized or automatically chosen by CableMAP. System-generated Closing Numbers conform to the same numbering method as the automatic Opening Numbers. However, if an advance closing time has been entered for an activity, the system will automatically close the activity after that time has passed and issue a Closing Number with AUT for its first three characters.

Opening Date

The **Opening Date** data field displays both a MM/DD/YYYY format and a Julian date format.

Closing Date

Like the Opening Date, the Closing Date is expressed in two formats: the MM/DD/YYYY format and the Julian date format. If a Standard Closing Time has been set in CableMAP Configuration, CableMAP will assign a real date value, according to how the activity's Opening Time relates to the Standard Closing Time.

Opening Time

All times in CableMAP are written in a 24-hour clock format, with 13:00 representing 1:00 p.m. Times are written to the nearest minute.

Closing Time

Like the Opening Time, the Closing Time is written in a 24-hour clock format. If a Standard Closing Time has been set in CableMAP Configuration, that default time value will be displayed.

Jobtime

The **Jobtime** data field contains the hours and minutes spent working on the particular activity. This field is calculated by CableMAP from the opening and closing times and cannot be modified. The time clock will stop when the activity is temporarily closed and restart when the activity is reopened.

Technician

The name of the technician logging the cable opening. A maximum of 20 characters is allowed. When logging and opening the program will not advance until a name is typed in.

Job/Task

A Job/Task Number entry is also mandatory when logging an opening. All Maintenance Activity Task Numbers should be the same 6 digit number as the Dispatch Task which is being worked on.

Address

The address can be a maximum of 30 characters long and must be entered when logging an opening. Many telcos include a street address and a manhole number.

Phone

The phone number field contains the number where the technician can be reached. This field is 20 characters long, and can contain an area code, extension, or pager number.

Pipe

In this field, you can enter the name of up to six pipes, which can be up to four characters long.

Location

The location field contains the PressureMAP Location Codes for all of the Locations that may be affected by the cable opening. Any location within the pneumatic section in which this cable opening is located should be included in this list. Up to 4 location codes can be entered.

Cable/Count

This field appears in Construction Activity screens. It may include only alphanumeric characters and the following entries, ":", "-", "/", "". The entry must be formatted like the following example:

9999:9999-9999

Trouble Rpt/Test

At this prompt, enter the reported condition or test that justifies the logging of a new activity. Up to 60 characters may be entered.

Remarks/Work Done

Remarks/Work Done data field allows you to enter special remarks of up to 70 alphanumeric characters.

Logging a Cable Closing with a Hand-Held Terminal

When closing a cable activity, you will be prompted to enter information into the following fields:

Travel Time

This field is used to track the amount of time the technician spends traveling to and from the work site.

Fld Rpt Code

The field **Report** Code is a five character alphanumeric field that corresponds to the code entered on a technician's time report, creating a audit link from the activity to the reported time.

Dsp/Cause

This eight character field corresponds to the "Status/Disposition/Cause Code" used by many Telco forms. The entry in this field is usually a four digit number and a three digit number, separated by a dash.

Remarks/Work Done

The Remarks/Work Done data field allows special remarks of up to 70 alphanumeric characters to be noted with a specific cable activity.

Trouble Site

This 60-character field describes the actual work site/location and corresponds to the "Trouble Location" field used by auditors for quality inspections of completed work.

AlarmMAP REPORTS

Dispatch Histories Reports

The Dispatch Histories function searches for dispatches and assembles a report which lists all alarms associated with any of these characteristics: a particular task number, device number, pipe route, PressureMAP location number, and dispatch log entry type. Dispatch Histories enables the PressureMAP user to trace the history of a particular alarm to determine whether it was dispatched to the correct report centers, acknowledged (and by whom), and corrected or aged according to the PressureMAP aging system. Beginning with PressureMAP Version 27 reading histories (Last Rdg, Tdy Rdg, -1 Rdg, etc.) were added to the report.

```
View Dispatch Histories for (office name) (page 1)
                                                          AlarmMAP XX.XX.XX
8/05/2008 15:55
                                                System Studies Incorporated
Task Number: 2180001
                                       Device Number: 002-01
                                                     5/27, 15:38
Entry Type: CREATED
                                       Entry Time:
Level.
                                       Location:
Dispatch:
            UG Cable PTD lost 3.0 psi in 72 hr
Disp. Code: 2700
Rdq. Time: 5/27, 7:00:02
                                       Device Type:
                                                     UΡ
                                       Reading:
                                                     3.0 psi
Last Rdg:
            2.0
                                       Tdy Rdg:
                                                     3.0
-1 Rdg:
            4.0
                                       -2 Rdg:
                                                      5.0
-3 Rdg:
            6.0
                                       -4 Rdg:
                                                     7.0
Task Number: 2180003
                                       Device Number: 002-01
Entry Type: CHANGED DISPATCH CODE
                                       Entry Time:
                                                     5/27, 15:38
                                      Location:
Dispatch:
            UG Cable PTD lost 3.0 psi in < 48 hr
                           Device Type:
Disp. Code: 8580
Rdg. Time: 5/27, 15:37:26
                                       Reading:
                                                     1.0 psi
Last Rdg:
            2.0
                                       Tdy Rdg:
                                                     3.0
-1 Rdg:
            4.0
                                       -2 Rdg:
                                                     5.0
-3 Rdg:
            6.0
                                       -4 Rda:
                                                      7.0
Old Level:
           UG Cable PTD lost 3.0 psi in 72 hr
Old Disp.:
```

DISPATCH HISTORIES REPORT

Alarm vs Time of Day Report

The Alarm vs Time of Day Report option enables you to view all of the devices that have come into alarm during each of the twelve daily calling cycles so that you can analyze the daily occurrences of alarms in a given office (by device type), compare them with alarms in other offices, and identify general trends in alarming.

<office< th=""><th>NAME> -</th><th>Date</th><th>s 7/</th><th>4 th</th><th>roug</th><th>jh 8/</th><th>/3, I</th><th>Perio</th><th>d 00</th><th>:00</th><th>to 2</th><th>3:59</th><th>Hou</th><th>ırs</th></office<>	NAME> -	Date	s 7/	4 th	roug	jh 8/	/3, I	Perio	d 00	:00	to 2	3:59	Hou	ırs
		Mid	niah	ıt	6AI	ſ		Noo	n		6PM	ī		
Device Number	Type			04						16	18	20	22	Total
01-A1-001A	UP	3	2	2				1						8
002-A1-001A	MF				1	12			1					14
001-10	CA	30		1										31
001-11	UP		4											4
001-12	UP							6			1			7
002-13	MF	5								1			2	8
Etc.														

ALARM VS TIME OF DAY REPORT

Daily Alarm Summary Report

This report displays the number of alarms as a function of day of the week. It allows you to identify the number of alarms that have been generated for each device in the selected office for the current day and for the past seven consecutive days, and the weekly totals for each of the previous four weeks.

08/12/2006 	10:5									Syst	tem St	udie:	s Inc	orporate
<off< th=""><th>'ICE N</th><th>IAME> -</th><th>Date</th><th>es 6,</th><th>/29</th><th>to 8,</th><th>/3, 1</th><th>Perio</th><th>od 0</th><th>0:00 1</th><th>to 23:</th><th>:59 H</th><th>ours</th><th></th></off<>	'ICE N	IAME> -	Date	es 6,	/29	to 8,	/3, 1	Perio	od 0	0:00 1	to 23:	:59 H	ours	
Device	Туре	Today	-1	-2	-3	-4	-5	-6	-7	Wk-1	Wk-2	Wk-3	Wk-4	Total
001-A1-001A	UP		3	2	1				1					7
002-A1-001A						1	10			1		2		14
	CA	•		11			1							12
001-11 001-12		2		4					6			1		6 7
002-13			5						·		1	_	2	8
001-07 etc.	\$P				2			1		1				4
Tot	als	2		17	3		11	1	7	2	1	3	2	58

DAILY ALARM SUMMARY REPORT

Alarm Summary Report

The Alarm Summary Report offers you quick access to dispatch alarm totals in three categories for each device in an office: normal alarms (those "created" during the program's scheduled calling cycle); filtered alarms (those alarm conditions that have been designated for filtering during specified time periods and/or days); and inflated alarms (those alarm conditions that continued to worsen before the original alarms were cleared or aged).

The report consists of the six columns shown below. Device numbers and device types are listed in the first two columns, while the next three columns indicate how many of the three alarm types occurred for each device during the viewing period. The last column on the right provides individual alarm totals for each of the devices in the office, and the total number of each type of alarm is provided at the bottom of the report.

08/12/2006 	10:59			Syste	em Studies Incorporate
<off< th=""><th>ICE NA</th><th>ME> - Dates</th><th>7/4 to 8/3,</th><th>Period 00:00 to</th><th>23:59 Hours</th></off<>	ICE NA	ME> - Dates	7/4 to 8/3,	Period 00:00 to	23:59 Hours
Device	Туре			Alarms Inflated	
 001-A1-001A	UP	3	1	1	5
002-A1-001A	MF	1	0	0	1
001-10	CA	6	0	0	6
001-11	UP	4	2	3	9
001-12	UP	0	1	0	1
002-13	MF	3	2	1	6
001-07	\$P	1	0	0	1
etc.					
Tot	als	18	6	5	29

ALARM SUMMARY REPORT

Alarm vs Device Type Report

The Alarm vs Device Type Report enables you to view the total number of Four Star Alarms created for each device type for a specified time period. You can also view the total number of alarms for **all** offices (by office) in a summary format, and compare the offices' totals to identify the office(s) that you wish to examine in more detail. Beginning with PressureMAP Version 25, it is also possible to generate an expanded report when ALL offices are selected by entering 4x from the Alarm vs Device Type Report Menu. This expanded output is the detail shown for an individual office, but it includes each of the offices in the system. Following are examples of an individual office's report, a summary report comparing all offices, and expanded report for all of the offices in the PressureMAP system.

8/12, Pe	riod 00:	00 to 23:5	9 Hours
1	1		1
1	1		1
6	3	2	3
	Total Devices 1 1	Total Number Devices Alarms 1 1 1 1	

ALARM VS DEVICE TYPE REPORT FOR ONE OFFICE

Notice that alarm occurrences are listed in the report for each of the device types represented in the Device Type column. The second column on the report shows the total **current** number of devices of each type, regardless of the alarm state and independent of the time period selected. The third column lists how many Four Star Alarms have been generated for the device type during the viewing period. The fourth column displays the **current** number of disabled devices of the indicated type (independent of the time period selected). The last column lists the total number of alarms for each type during the viewing

period for which the reading was OPEN or SHRT. The totals for the four numeric value columns are displayed at the bottom of the report.

ALL OFFICES - 7/13 through 08/12	2, Period 00):00 to 2	3:59 Hours	
Office Name				Number Open/Short
SIMOFF	15	10		4
NEWOFF CEDAR CITY	7	3		
RC MAIN	-	4	3	1
WESTWOOD	17	11	2	

ALARM VS DEVICE TYPE SUMMARY REPORT FOR ALL OFFICES

Notice that alarm occurrences are listed in the report for each of the offices shown in the Office Name column. The second column on the report shows the total **current** total number of devices for each office, regardless of their alarm state and independent of the time period selected. The third column lists how many Four Star Alarms have been generated for all device types in the office during the viewing period. The fourth column displays the **current** total number of disabled devices for the entire office, independent of the time period selected. The last column lists the total number of alarms for all device types during the viewing period for which the reading was OPEN or SHRT. The totals for the four numeric value columns are displayed at the bottom of the report.

	m vs Device Type Report 3/2006 09:53			Studies I	MAP XX.XX.XX
	SIMOFF - Dates 11/3 to 12	/3, Perio	d 00:00	to 23:59 H	īrs
	Device Type	Devices	Alarms		Open/Short
	High Priority Contact Alarm	1	2		
	High Priority Pressure TD	8	4		2
BP CA	Buried Cable Pressure TD Compressor/Dryer Contact Alarm	5 1	2		2
	Totals	15	10		4
	NEWOFF - Dates 11/3 to 12/				
	Device Type	Devices	Alarms		Open/Short
	No alarms for this office.				
	Totals				
	CEDAR CITY - Dates 11/3 to	12/3, Pe Total	riod 00: Number	00 to 23:5	9 Hrs
	High Priority Pressure TD Source Flow TD	4 1	1		
	Underground Cable Pressure TD	2	1		
	Totals	7	3		
====	RC MAIN - Dates 11/3 to 12/				
	Device Type		Alarms		Open/Short
 \$F	High Priority Flow TD	1	1		1
\$P	High Priority Pressure TD	2	_		-
UP	Underground Cable Pressure TD	2	2	3	
	Totals	5	4	3	1
====	WESTWOOD - Dates 11/3 to 12/				
		Total	Number	Number	Number
	Device Type	Devices	Alarms	Disabled	Open/Short
\$P	High Priority Pressure TD	17		2	
	Totals	17		2	
Hit	<enter> to continue</enter>				
Hit		17	11		2

ALARM VS DEVICE TYPE DETAILED REPORT FOR ALL OFFICES

Alarm Reports on Alphanumeric Pagers

When an alphanumeric pager is a designated alarm center, the output of the alarm is condensed to fit the pager's limited display space, which is typically 4 lines by 20 characters. Because only the essential alarm information is sent, you should log into the MAP System to see the complete Alarm Information Report before proceeding to the alarm location. The alarm information sent to the pager includes the office name, task number and any related cable activity information, device number, device type, device reading and dispatch condition. Report 1 shows possible Alarm Dispatches received on an alphanumeric pager with a 4 line by 20 character display screen, and Report 2 contains an example of a Cleared Alarm display.

DISPLAY	DESCRIPTION
CULVER CITY Alarm 277010 001-01 UP @ 1.0 Dropped 4.0 psi	Office name Task number Device number/type/reading Dispatch condition
or	
CULVER CITY Alarm 277010(CONS) 001-01 UP @ 1.0 Dropped 4.0 psi	Office name Task number (Activity) Device number/type/reading Dispatch condition

REPORT 1: POSSIBLE ALPHANUMERIC PAGER ALARM REPORT

DISPLAY	DESCRIPTION
CULVER CITY Alarm 277010 001-01 UP Cleared	Office name Task number Device number/type Current status

REPORT 2: POSSIBLE ALPHANUMERIC PAGER CLEARED ALARM DISPLAY

Brief Report

The MAIL alarm report format is preceded by a brief alarm data "header" that includes the system number and name. When the BRIEF REPORT email alarm option is selected from the AlarmMAP editor, the alarm report information is abbreviated to fit the pager screen display (see REPORT 3). Notice that the office name and system number appear in the Subject line. To accommodate the special formatting by some pager companies, the office name is also displayed in the main body of the alarm below the Subject line. In the example below, the office name is "Hasalarms" and the system number is 3366.

```
Subject: PMAP ALARM- HASALARMS [3366]

Office: HASALARMS
PMAP Device: 001-01
PMAP Reading: 2.2 psi
PMAP Task #: 2070103
Lost 4.4 psi
----- Dispatch Alarm NOT Auto-Ack'd -----
```

REPORT 3: BRIEF REPORT ALARM (EMAIL FOR PAGER DISPLAY)

Condensed Report

Beginning with Version 26, alphanumeric pagers can also receive emailed notification for multiple alarms in a single report (REPORT 4). The format of this report is similar to the Brief Report described above, but its content is much different. Rather than provide device number, reading and task number information, it identifies the PressureMAP System number, the office designation, the number of alarms generated, and a message requesting that you refer to the PressureMAP System to obtain more details about the alarms.

Please note that in order to receive Condensed Reports on your pager, you will first need to set the One Report Regular Alarm Threshold in the AlarmMAP editor. (See "Alarm Filtering" in the AlarmMAP Data Entry section of the *MAP System Data Entry Manual*.) This filter identifies how many alarms must be generated in an office before the Condensed Report is emailed. A similar type of Condensed Report is also provided for cleared alarms.

```
Subject: PMAP ALARM- HASALARMS [3366]

PMAP System: 3366

PMAP Office: HASALARMS

PMAP Alarms: 4

Consult the MAP System for Details

----- Dispatch Alarm -----
```

REPORT 4: CONDENSED REPORT ALARM (EMAIL FOR PAGER DISPLAY)

Viewing Alarm Error Files

Option 4 of the User Initiated Operations Menu gives you the ability to view the error files created by AlarmMAP, offering you two types of alarm error files to view, Incomplete CPAMS Alarms and Unrecognizable CPAMS Alarms. 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.

```
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>
######### ALARM-IN-ERROR ######## 01/26/04 12:40:38 ttyA1 #####################
(syntax error found in alarm)
^G****** ALARM ^G****** ALARM ^G******
 UNIT # 1 979 WEST AIR PRESSURE MONITOR
 DATE: WED - JAN 26 2004
TIME: 1238
   - TRANSDUCERS -
 NO. LOCATION
######### ALARM-IN-ERROR ######## 01/27/04 09:59:54 ttyA1 #####################
(syntax error found in alarm)
 G****** ALARM G****** ALARM G****** ALARM G*******
UNIT # 1 979 WEST AIR PRESSURE MONITOR
 DATE: THU - JAN 27 2004
 TIME: 0954
   - TRANSDUCERS -
NO. LOCATION
########## END-BAD-ALARM ###############
```

ALARM ERROR REPORT

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 Standards Report option in the Custom Reports Menu comes with the PressureMAP software. The SQI Report, OAU Report, Alarm Report, Flat Cable Report, Standards -B Report, Standards Report (Rev. C) and Standards Report (Rev. D) are available for your PressureMAP system in the form of an incremental update. Before you can access one of these reports, you must install the Incremental Update Disk supplied by System Studies; procedures are located in the MAP System Installation Manual.

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.

Standards Report

The Standards 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 report does not include disabled devices, 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. 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.

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, and the totals for devices with verbose (non-valid) readings. In addition, you may enter a "Group Heading" to describe the contents of the report.

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 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 Report 05/21/2004 15:0					ReportMAP X System Studies Incor	
Type of TD's	Std	Total TD Count	(verbose)	TD Count Not Std/ Over OAU	Not Std/	
		2	. <office n<="" td=""><td>Tame> (05/1</td><td>8/04)</td><td></td></office>	Tame> (05/1	8/04)	
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		1	0	0	0.0	
Office Totals		9	3	2	55.6	

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 disabled devices). For information on verbose readings, see Section 6 of this guide.

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 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 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).

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.

Displayed information includes the selected report date, office(s) name, pipe count, sheath miles, number of devices, disabled devices, number of alarms, number of pipes with an SQI of less than 80, and the office SQI average.

SQI Report (page 1) 02/18/2006 15:08				Sys			XX.XX.XX rporated
OFFICE	PIPE COUNT	SHEATH	# OF	DISABLED DEVICES	# OF	PIPES	02/06 OFFICE SQI
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

SQI REPORT

Pipe Count

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

MAP SYSTEM QUICK REFERENCE

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 devices with Four Star Alarm conditions for the report date.

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. This date is one week prior to the selected report date.

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. The enhanced detail is not shown if you select multiple offices or a report date older than six days.

05/11/2005			Schedule	Off*		Syst	em Stud	portMA lies In	corporat	ec
Pressure re	adings fro		/05							
OFFI	CE	Below	Under	10%	20%	50%	Read	Total	% MF <= 20% Over	,
26. Liveoa	k	0	0	0	1	2	0	3	0.0)
					Log	Pino	ONII	Pda		
Reading is	20% over	OAU 								
Reading is Device # 001-15	Address						OAU 6.3			
Device # 	Address 400 HYDI	 								
Device # 	Address 400 HYDI	 								
Device #	Address 400 HYDD	OAU				A	6.3			
Device # 001-15 Reading is	Address 400 HYDE 50% over Address 200 BROA	OAU 			Loc	Pipe	6.3	9.3 Rdg		

OAU REPORT FOR SINGLE OFFICE WITH ENHANCED DEVICE DETAIL

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).

OAU Report (page 1) 09/10/2005 15:08					System			XX.XX.XX rporated
Readings from 09/10/	# MF	# MF Under 10%	# MF 10% Over	# MF 20% Over	# MF 50% Over	# MF Read Prob	# MF Total	% MF <= 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	14	8	7	1	5	131	80.9
21. WESTSIDE	46	9	2	6	4	1	71	80.2
Totals	286	27	12	17	6	8	385	84.4

OAU REPORT

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 then 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 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 and acknowledgment 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, destination (Alarm Center), time the alarm was acknowledged, and acknowledging person or equipment. If no alarms were generated for a selected office(s) on the date specified, PressureMAP will generate an appropriate message.

```
ReportMAP XX.XX.XX
Alarm Report (page 1)
08/10/2006 15:08
                                                     System Studies Incorporated
 TASK #
          CREATED
                             SENT TO
                                                         ACKNOWLEDGED BY
                          -- 14. MTVERNON (08/05/06) --
           07:59
08:26
                    07:59 PRINTER 08:26 PRINTER
34802A9
                                                  07:59
                                                            PRINTER
348032C
                                                            PRINTER
                          -- 15. UHRADD92 (08/05/06) --
                             Sorry, No Data Available.
                          -- 16. FOXWORTH (08/05/06) --
                               No Four Star Alarms.
                          -- 17. JUNCTION (08/05/06) --
3480566
             08:40
                     09:00 D PAWSON
                    09:05 CORY
                                                  09:05 aa CORY
                     09:01 D PAWSON
            08:41
34805BB
                    09:05 CORY
09:03 D PAWSON
                                                 09:05 aa CORY
34805BB
             08:41
                    09:05 CORY
                                                  09:05 aa CORY
                             -- System (08/05/06) --
                              No Four Star Alarms.
```

ALARM REPORT

Task

The six-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 are providing a verbose reading (e.g. OPEN, SHRT, NSE, etc.) or that are reading a pressure of 1.0 PSI or less on the specified date. The "trigger" date can be 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.

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 Report 04/06/2006 12:16 *Schedule Off* System Studies
                               ReportMAP XX.XX.XX
                          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 (04/04/06) --
                 ALL OPEN Readings
 -- 23. SUNNYVALE (04/04/06) --
                  ALL NSE Readings
 - 38. SW289 (04/06/06) --
                ALL SHRT Readings
 ALL VOLT Readings
  38. Sw289 (04/06/03) --
```

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 report does not include disabled devices, 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. 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.

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 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.

05/28/2005 13:1 	.3 ·				System St	udies Incorporated
Type of TD's	Std	TD		TD Count Not Std		
		2.	<office n<="" td=""><td>Tame> (05/1</td><td>8/05)</td><td></td></office>	Tame> (05/1	8/05)	
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	

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 disabled devices). For information on verbose readings, see Section 6 of this guide.

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.

MAP SYSTEM QUICK REFERENCE

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 report does not include disabled devices, 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. 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, 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 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 Report 12/28/2005 12:3		C) EAST	SIDE (page	1)		ReportMAP XX.XX.XX cudies Incorporated
Type of Device	Std	Device	Non-Rdg (verbose) Count	Count		
		4	. <office n<="" td=""><td>ame> (12/2</td><td>28/05)</td><td></td></office>	ame> (12/2	28/05)	
Contactor's	OK	1	0	1	100.0	
Contact Alarm's	OK	24	0	0	0.0	
Undgnd PTD's	5.2	1	0	0	0.0	
Mid/End PTD's	5.2	196	0	0	0.0	
High Prio PTD's		87		3	3.4	
Distribut FTD's		134	0	_	0.0	
Manifold FTD's		203	0	_	0.0	
High Prio FTD's		9	0	-	0.0	
			0	4	0.6	

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 disabled devices). For information on verbose readings, see Section 6 of this guide.

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.

MAP SYSTEM QUICK REFERENCE

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. Please note also: 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 2, 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 12/29/2006 12:3		D) EAST	SIDE (page	: 1)	System S	ReportMAP XX.XX.XX tudies Incorporated
Type of Device	Std	Device	Non-Rdg (verbose) Count			
		4	. <office n<="" td=""><td>Tame> (12/2</td><td>29/06)</td><td></td></office>	Tame> (12/2	29/06)	
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	

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	Standard
950.0	846.0
475.0	425.0
200.0*	178.0 (* implemented in Version 22)
190.0*	178.0 (* implemented in Version 22)
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 disabled devices). Please note that the reading data is only available for devices that are currently in the PressureMAP database; the report will not reflect devices that have been deleted.

MAP SYSTEM QUICK REFERENCE

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 report does not include disabled devices or devices with BLANK readings (""), 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. 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.

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.

Please note that an identical report is available for BellSouth. It contains identical information, except that the report name in on the top line of the header specifies BellSouth.

SBC Standards F 06/04/2006 15:		(page 1)			System S	ReportMAP Studies Inc	xx.xx.xx corporated
Type of TD's	Std		Total Pres/Flow				Not Std/
	##.	<office 1<="" td=""><td>NAME> (<repo< td=""><td>RT INFO</td><td>RMATION DAT</td><td>E>)</td><td></td></repo<></td></office>	NAME> (<repo< td=""><td>RT INFO</td><td>RMATION DAT</td><td>E>)</td><td></td></repo<>	RT INFO	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

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 disabled devices and devices reading BLANK). For information on verbose readings, see Appendix 1 of the MAP Operations Manual.

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 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.

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.

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.

Verbose Mode

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 the screen below.

uality Report (pag 1/23/2006				Sys		portMAP X lies Incor	
OFFICE	DISABLED					NOT STD	 FLAT
2. QUALITY	8.3%	8.3%	0.0%	84.4	0.0%	36.4%	8.3%
7. TUESDAY	0.0%	12.5%	0.0%	93.0	50.0%	37.5%	12.5%

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 the screen example 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, TUESDAY, 8, 0, 1, 0, 8, 2, 2,
 52,
                                                             0, 84.4,
                                                               1, 93.0,
 57,
                TUESDAY, 8,
Custom Reports
                                                             ReportMAP XX.XX.XX
                    *Schedule Off*
11/23/2006 09:24
                                                    System Studies Incorporated
Custom Reports
  1. Standards Report
  2. Quality Report
 Q. Quit
Choice? q
```

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.

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
         QUALITY, 12, 1,
                           1, 0,
                                    11, 3, 2, 0,
52.
                                                         84.4,
                 8, 0,
                                                         93.0,
57.
        TUESDAY,
                          1,
                               Ο,
                                   8,
                                         2,
                                               2,
                                                    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.