

Chapter 4

INTRODUCTION

The CopperWATCH™ software provides two options for viewing office device data and alarms. First, you can log onto CopperWATCH directly and use the text menu interface to view Dispatch Priorities, Device Histories, Specific Device Information and other CopperWATCH Master Menu options. You can also look at similar CopperWATCH information via the PressureWEB™ browser interface. Both methods provide access to important system information and reports.

To help you get started with the software, the information below describes how to find several of the important reports generated by CopperWATCH. Once you become familiar with the menu or web browser interface, you will be able to find other information quickly on your own.

TEXT MENU INTERFACE

CopperWATCH's menu structure is virtually identical to the PressureMAP software, but it includes only the menu options that are pertinent to CopperWATCH.

Getting Started

This subsection describes how to use the CopperWATCH text menu system to find important information about your monitored CopperWATCH offices. Before you can view information about your offices, you will need to install the software on your computer system, as described in Section 2, and perform the data entry requirements specified in Section 3.

Once CopperWATCH is up and running on your designated computer—meaning the software is installed, office and monitor communications equipment have been configured, and data entry requirements have been met—you can begin using CopperWATCH. To do so you will need to boot the system (if you are at the CopperWATCH computer) or remotely log onto the system using telnet or one of the available communications programs. Please consult you IT personnel, if necessary, for help logging on to CopperWATCH.

Procedures:

- 1) When you see:

PressureMAP XX.XX Login:

Type ***cpams*** and press **<Return>**.

- 2) When you see:

Password:

Type ***cpams1*** or your designated password. Then press **<Return>**.

Please note that a User Management utility is available via the System Administration Menu to assist with assigning user accounts for CopperWATCH. The primary benefit of this account management ability is vastly improved system security. With User Management, an

individual, such as a System Administrator, can assign each potential user of the software a unique name, user ID, and password. If desired, the password can be programmed to expire after a fixed period.

For additional information on User Management controls, please refer to section 6 of the *Version 28 PressureMAP System Administration Manual*. This documentation is available at http://www.airtalk.com/map28_sys_man.html.

After you enter the login and password, the System Options Menu displays, as shown in SCREEN 4-1 below.

```
System Options                                     MAP Series XX.XX.XX
09/07/2012  11:03                               System Studies Incorporated
-----

System Options
-----
  1. Select MAP Program
  2. Select MAP Data Entry
  3. System Administration
  4. Language Selection
  Q. Quit

Choice?
```

SCREEN 4-1: SYSTEM OPTIONS MENU

- 3) Select *MAP Program* by entering **1** and pressing **<Return>**. The MAP Programs Menu will be displayed as illustrated below.

```
MAP Programs                                     MAP Series XX.XX.XX
09/07/2012  11:03                               System Studies Incorporated
-----

MAP Programs
-----
  1. CopperWATCH
  2. ReportMAP
  3. AlarmMAP
  4. CPAMS Diagnostics
  Q. Quit

Choice?
```

SCREEN 4-2: MAP PROGRAMS MENU

Much of the primary data for the application is available by selecting item 1, CopperWATCH. The other options allow you to view dispatch and alarm information (ReportMAP and AlarmMAP), and request realtime readings, specific device information, etc. (CPAMS Diagnostics).

CopperWATCH Master Menu Options

Most of the key information available in CopperWATCH can be found at the Master Menu. The procedure below describes how to view Device History information for your monitoring pairs. The other options provide additional CopperWATCH information.

Procedure:

- To obtain a listing of the device readings (monitoring pair status) for a particular CopperWATCH office, you will need to select option 1 from the MAP Programs Menu. Press **1** and **<Return>**. The CopperWATCH Master Menu (SCREEN 4-3) displays, as shown below.

```

CopperWATCH Master Menu                                PressureMAP XX.XX.XX
09/07/2012  11:03                                     System Studies Incorporated
-----
CopperWATCH Master Menu
-----
  1. Dispatch Priorities
  2. Device Histories
  3. Specific Device Information
  4. CPAMS Information
  5. User Support
  Q. Quit

Choice?

```

SCREEN 4-3: COPPERWATCH MASTER MENU

- Select *Device Histories*, option **2**, followed by **<Return>**. This produces a scrollable report similar to what is shown in SCREEN 4-4. Notice, in this example, that device readings are displayed for the current day and the last six consecutive days. Weekly reading averages are also displayed for the past month. All of the data displayed in the report was obtained from the uM260 Micro Monitor during the two daily scheduled calls (8:00 a.m. and 8:00 p.m.).

Device #	.READING.		SETTLED READINGSAVERAGES				
	TP	Curr	Last	Tdy	-1	-2	-3	-4	-5	-6	Wk-1	Wk-2	Wk-3	Wk-4
002-01.0	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.1	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.2	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.3	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.4	XC	ALRM	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.5	XC	----	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.6	XC	----	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-01.7	XC	----	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-02.0	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-02.1	XC	ALRM	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.0	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.1	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.2	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.3	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.4	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.5	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-03.6	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-04.0	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
002-04.1	XC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

SCREEN 4-4: DEVICE HISTORY REPORT

Notice in this example that two of the monitoring pairs are currently in alarm Device (Device #s 002-01.4 and 002-02.1). Device #s 002-01.0 through 002-01.7 represent the first Detection Pair installed in the office; Device #s 002-02.0 and 002-02.1 monitor the correlating Verification Pair. The other devices in this office are all reading OK and have been for the prior five weeks.

In this case an alert would have been generated by the office monitor, and CopperWATCH would have distributed alarm information to the designated Alarm Centers that were set up to receive alarms during that particular time period.

Sample Alarm Report

The screen sample below represents an email alarm format for the cut cable indicated in the Device History Report (as in SCREEN 4-4) shown above. Notice that even though both the Detection Pair and the correlating Verification Pair are in alarm, CopperWATCH issues a single alarm for the cable theft in progress.

```
COPPER TELEPHONE CABLE THEFT IN PROGRESS / VERIFIED ALARM
CREATED: 07:37 03/12/2013
CONTACT: CONTACT (831) 555-0911 SANTA CRUZ PD, CALIFORNIA

CABLE CUT BETWEEN TWO LOCATIONS:
LOCATION 1: EAST CLIFF DR @ PROSPECT ST
LOCATION 2: EAST CLIFF DR @ 7TH AV

REMARKS: AERIAL CABLE RUNS NORTH OF EAST DRIVE, SOUTH OF SCHWAN LAKE

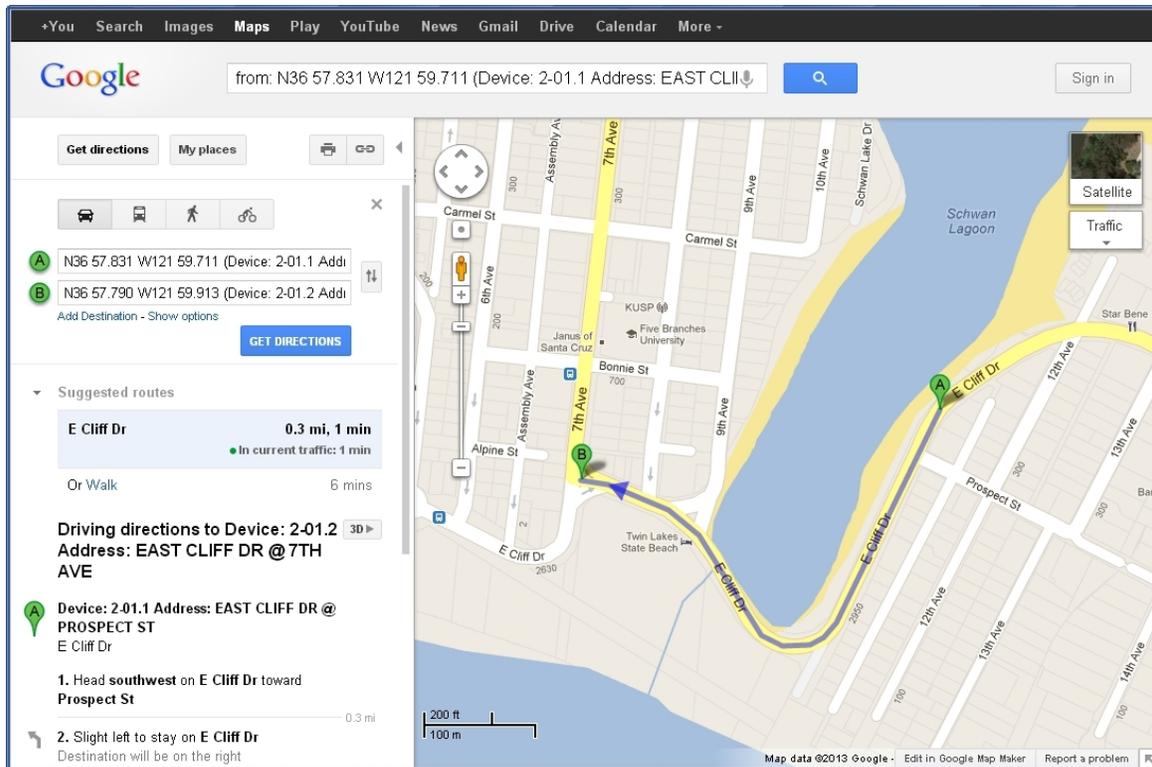
MAP_LINK:
https://maps.google.com/maps?saddr=N36+57.831+W121+59.711+\(Device:+2-01.1+Address:+EAST+CLIFF+DR+@+PROSPECT+ST\)&daddr=N36+57.790+W121+59.913+\(Device:+2-01.2+Address:+EAST+CLIFF+DR+@+7TH+AVE\)&hl=en
```

SCREEN 4-5: COPPERWATCH ALARM FORMAT

Notice that the alarm format contains only the specific information needed by law enforcement personnel to respond to the cable theft in progress. The first line indicates that the alarm has been verified (by correlating the simultaneous alarms on corresponding Detection and Verification Pairs). The second line specifies when the alarm was created, including time and date, and the third line lists the direct contact information for the emergency responder agency who has jurisdiction for the specified alarm locations.

The next three lines of information help to identify where the cut cable section is located. Locations 1 and 2 represent the addresses of the XC devices that define the cable section in alarm. These locations display the information that was entered in the *Address* data fields during data entry.

One of the most important lines of data on the CopperWATCH alarm is the *Remarks* information. This note helps to assist emergency responders, who may not be familiar with an area, to more quickly locate and/or access the section of cable in alarm. Finally the *MAP Link* information provided at the bottom of the alarm produces a Google map which highlights the section of cable where the cut occurred (SCREEN 4-6). Effective mapping of cable sections requires that latitude and longitude information be entered for each CSL device during data entry.



SCREEN 4-6: GOOGLE MAP WITH SECTION OF CABLE IN ALARM

PressureWEB INTERFACE

The second method of accessing CopperWATCH information is through the PressureWEB application. PressureWEB provides a number of Device Status View reports, plus Specific Device Information reports, and alarm information. Once the application is installed on your company's server-grade computer along with CopperWATCH, you will be able to launch your favorite web browser from any computer or mobile device that can access the Internet and configure PressureWEB with your preferences.

Note: Complete PressureWEB setup instructions are provided on the System Studies AirTalk website (<http://www.airtalk.com/reference14.html>). Select *Software Documents* and look for *PressureWEB Setup and Operation Instructions*.

The *PressureWEB Setup and Operation Instructions* describe the initial process of logging onto PressureWEB, setting up the browser to accept cookies, and specifying that pop-up windows are allowed to display. Those procedures assume that you have access to the IP address or domain name assigned for your PressureWEB server. If not, please contact your IT personnel to obtain this information.

The following simple procedure describes how to launch PressureWEB, select your CopperWATCH office(s), and view two of the important reports from one of the offices.

Procedure:

1. Type the IP address or DNS name of the CopperWATCH computer into your web browser's address line and press **<Return>**. The first time PressureWEB is launched in your browser, or

the first time after you delete your browser's cache and reload PressureWEB, an introductory (splash) page will appear in the center of the browser. This screen displays for three or four seconds, followed by the *All Offices* display (SCREEN 4-7).

No.	Name	SQL	Remarks	# of Devices	# of Alarms (All Alarms)	# of Disabled Devices	# of TDs Not Reading	Last Connection
1	CA SANTA CRUZ	No SQL	T10.1.2.18:3002T	8	1	0	0	56 mins ago.
2	AGSTGATH HILL	No SQL	422 37 SSI 289H LSS LANC	148	133	0	144	15797 days, 22 hrs, 9 mins ago.
3	NV TAHOE	No SQL		0	0	0	0	54 days, 23 hrs, 27 mins ago.
4	CA OAKLAND	No SQL		11	5	0	5	Phone #: NONE
5	CA PEBBLE BEACH	No SQL		0	0	0	0	5 days, 5 hrs, 11 mins ago.
6	CA LIVE OAK	No SQL		7	2	0	0	24 mins ago.
Totals				174	141	0	149	

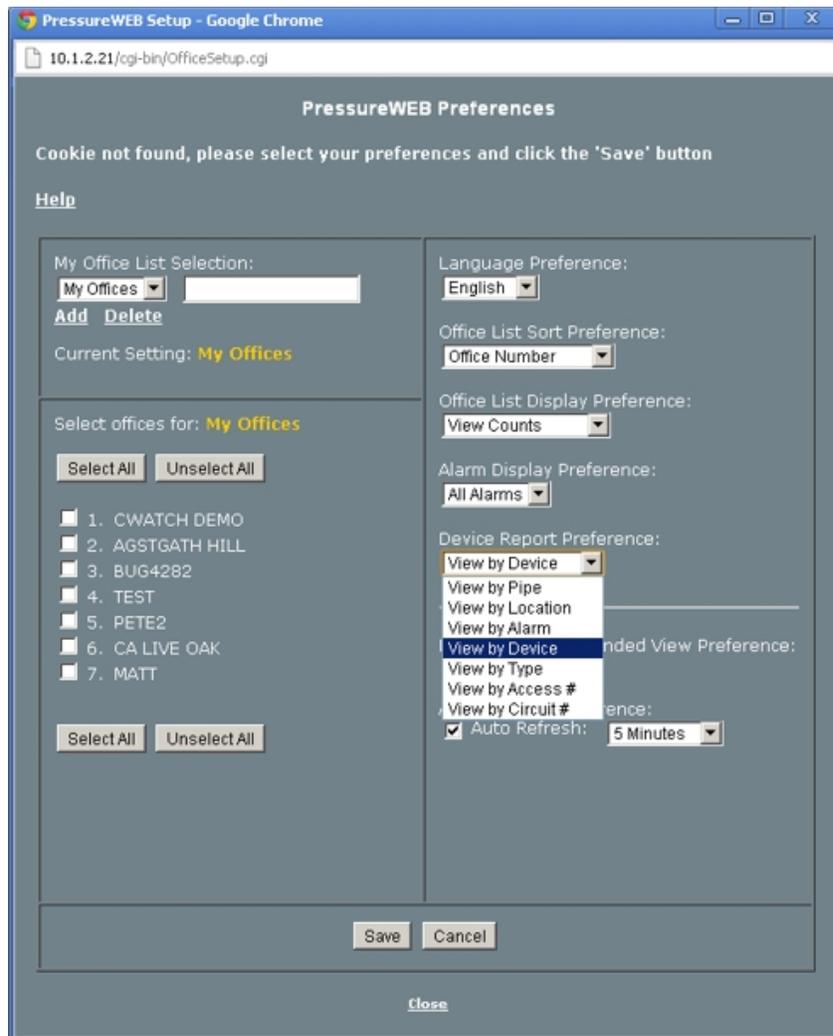
System CW2

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SCREEN 4-7: ALL OFFICES DISPLAY

Notice at the top of the *All Offices* display that there are six links: *All Offices*, *My Offices*, *View Options*, *System Errors*, *Setup* and *Tools*. If you are not interested in viewing all of the offices—or more specifically, all the individual uM260 monitors—in your CopperWATCH system each time you launch PressureWEB, you can select specific offices for viewing. These settings are initiated from the *Setup* link located at the top of the display. Your selections are saved as web browser cookies on your computer, which PressureWEB identifies and uses to generate the desired display(s) each time you access the application.

- When you click on one of the office name links from the *All Offices* or *My Offices* display, PressureWEB initially displays a *Device Status by Pipe View* for the office. For CopperWATCH, it is generally preferable to view your device status information by device (numeric listing). To set this display preference as your default Device Status View, click the **Setup** link on the navigation bar. This generates an office *Setup* popup window (SCREEN 4-8).



SCREEN 4-8: SETUP PREFERENCES POPUP WINDOW

3. Located in the right column of the window are several drop-down menus. Press the down-arrow button on the *Device Report Preference* menu, and select **View by Device**. Then press the **Save** button located near the bottom of the popup window.

With your selection saved, you can now close the window using the link on the bottom of the window. Each time you click on an office name from either the *All Offices* or *My Offices* display, PressureWEB will load a Device Status View of all the devices in your office, as shown in SCREEN 4-9.

PressureWEB 3.0 from System Studies Incorporated

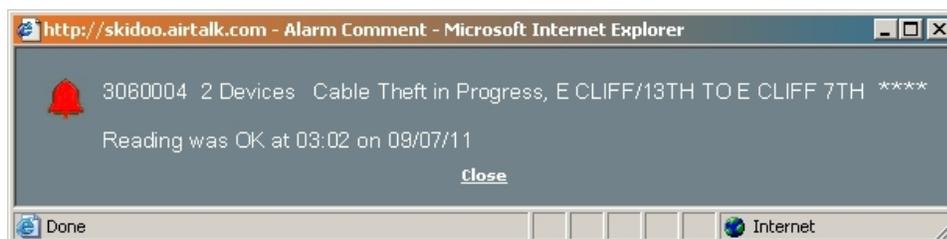
CA LIVE OAK System CW2

Device #	Access #	Address	TP	Curr	Tdy	Wk-1	Alarm	In
Pipe Route								
2-01.0	002-01	EAST CLIFF DR @ 14TH AVE	XC	OK	OK	OK		
2-01.1	002-01	EAST CLIFF DR @ PROSPECT ST	XC	ALRM	ALRM	OK	****	1
2-01.2	002-01	EAST CLIFF DR @ 7TH AVE	XC	----	----	OK		
2-01.3	002-01	7TH AVE @ CARMEL ST	XC	----	----	OK		
2-01.4	002-01	7TH AVE @ EATON ST	XC	----	----	OK		
2-02.0	002-02	EAST CLIFF DR @ 14TH AV	XC	ALRM	ALRM	OK	****	1
2-02.1	002-02	7TH AVE @ EASTON ST	XC	----	----	OK		

SCREEN 4-9: DEVICE STATUS BY DEVICE VIEW

As you can see from this report, the two four-star alarms on devices 2-01.1 and 2-02.0 indicate that the cable monitored by these two pairs has been cut. In this case an alarm would have been distributed to all of the Alarm Centers (or individuals) defined to receive alarm information during the calling time in which the alarm was generated.

- In PressureWEB’s Device Status View report you can click on the red stars in the *Alarm* column to view the type of alarm information generated. Because CopperWATCH generates a single alarm for a confirmed cable cut (as represented in the Device Status Report above), clicking on either of the two groups of red stars will produce a popup window with the same alarm information (SCREEN 4-10).



SCREEN 4-10: ALARM SUMMARY (DETECTION PAIR)

When you have finished viewing the alarm summary information, you can delete the popup window(s) by clicking the *Close* link at the bottom or the box with the *X* located on the top right corner.

5. PressureWEB's Specific Device Information Display (SCREEN 4-11) includes even more details about the devices on the Device Status by Device Report. To view this information, click on a device number in column 1 of the report. The example below shows Specific Device Information for the Cable Section Locator (CSL) designated as Device # 2-01.1.

PressureWEB 3.0 from System Studies Incorporated

Legend About PressureWEB

All Offices My Offices Actions Device Links System Errors Setup Tools PressureMAP 02.00.00

Specific Device Information

CA LIVE OAK System CW2

Device #:	2-01.1	Access #:	002-01	Type:	XC								
Address:	EAST CLIFF DR @ PROSPECT ST			Loc:	1								
TD Type:	CL/THEFT												
Sheath(s):													
Cable:	45X263	Prim Pair:	002-01	Sec Pair:									
Plat:		Stickmap:		Sort Key:									
Latitude:	36.963300	Longitude:	-121.995183										
Office 1 Loc:		Distance 1 (kft):		Field 1 Loc:									
Office 2 Loc:		Distance 2 (kft):		Field 2 Loc:									
Remarks:	AERIAL CABLE RUNS NORTH OF E CLIFF DR, SOUTH OF SCHWAN LAKE (831) 555-0911 SANTA CRUZ PD, CALIFORNIA												
Readings:	Curr	Last	Tdy	-1	-2	-3	-4	-5	-6	Wk-1	Wk-2	Wk-3	Wk-4
	ALRM	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

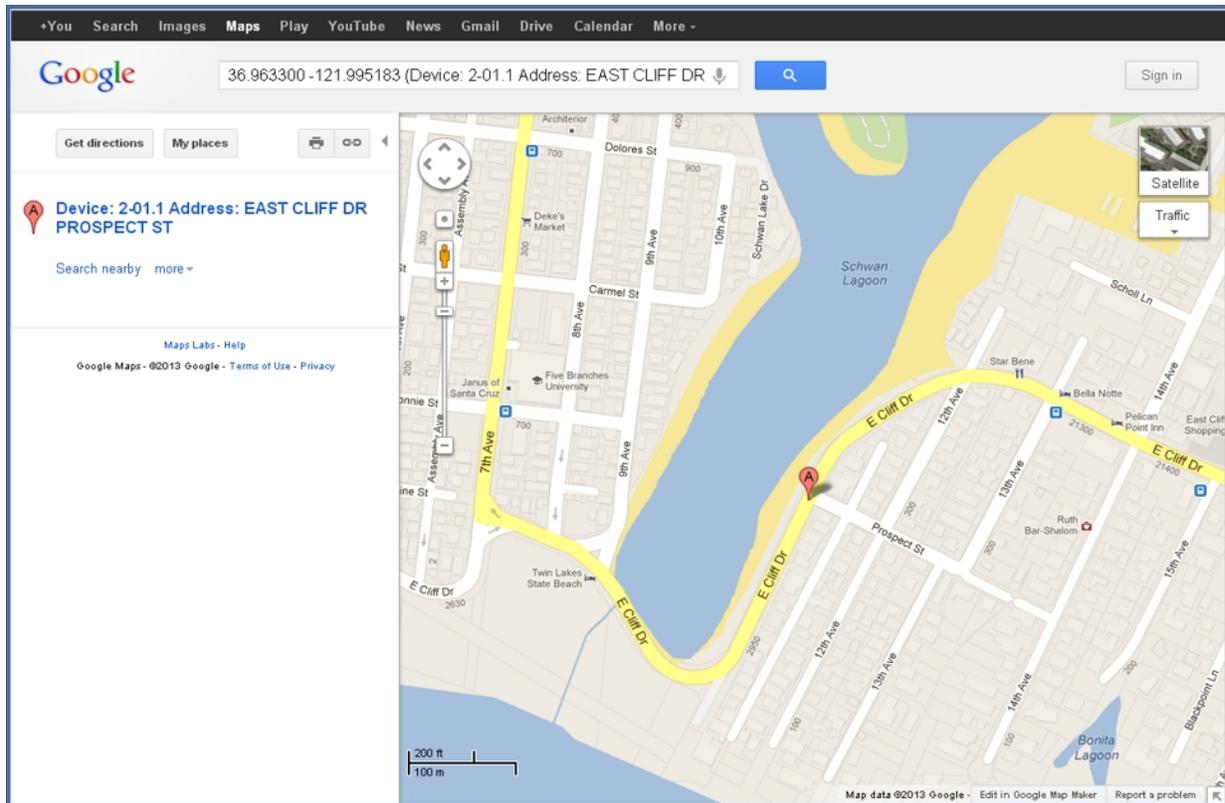
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SCREEN 4-11: SPECIFIC DEVICE INFORMATION SCREEN

Notice that there are numerous data fields that contain important information for the device. This information was entered into the CopperWATCH database during the data entry process. The first line of data in the *Remarks* field, for example, displays on the Dispatch Alarm (SCREEN 4-5). It provides important information for emergency responders about the location of the alarming device. The second line provides Asset Protection personnel with direct access to the local law enforcement agency who has jurisdiction for the area identified in the alarm.

The sample above also shows the GPS coordinates (Latitude and Longitude data) that were entered into the office database. As explained previously, they can be used in a web-based mapping application, such as Google Map, to provide visual location identification of the

device in question. For example, when viewing Specific Device Information in PressureWEB, you can click the *Actions* link on the main navigation bar and then choose *Map Device*. This displays a Google Map which identifies the location of the device (Cable Section Locator) on the monitored cable section (SCREEN 4-12).



SCREEN 4-13: MAPPED DEVICE LOCATION

The PressureWEB screen samples above represent the most commonly accessed displays for CopperWATCH. A more detailed explanation of how to configure PressureWEB for your system and access desired information can be found on the System Studies website by clicking the *PDF Library* link in the *Reference* section (<http://www.airtalk.com/reference14.html>). Choose *Software Documents* and select the *PressureWEB Setup & Operations Instructions* link.