Executive Orders VR-203-R and VR-204-R
Balance Phase II EVR Systems

EXHIBIT 18

Accessing PMC and ISD Parameters at Gasoline Dispensing Facilities (GDFs) with Veeder-Root "Maintenance Tracker" Security Feature Installed & Enabled

Definitions common to all certification and test procedures are in:

D-200 Definitions for Vapor Recovery Procedures

For the purpose of this procedure the term "ARB" refers to the California Air Resources Board, and the term "Executive Officer" refers to the ARB Executive Officer or his or her authorized representative or designate.

1. PURPOSE AND APPLICABILITY

The Maintenance Tracker is an optional security device produced and marketed by Veeder Root (VR) as a means to control and record access to their tank monitoring and ISD systems. Unless a specialized "technician key" is made available, the Maintenance Tracker prevents unauthorized personnel from gaining access to tank monitoring system diagnostic and setup modes which are necessary to clear system alarms. The technician key is a physical chip device, similar to a flash memory stick, which plugs into a companion RS232 card installed on the TLS Console.

Because the Veeder-Root In-Station Diagnostics (ISD) system resides within the TLS Console, the Maintenance Tracker also restricts access to PMC and ISD related parameters such as vapor pressure sensor values and the ability to turn on or turn off the vapor processor. When Maintenance Tracker is installed and enabled, the parameters listed in Table 1 (see below) are not accessible through the TLS Console unless a technician key is made available. An alternative way to access these parameters without a technician key is available through the RS232 interface by using a software program developed by Veeder-Root called "ISD Setup Tool" Version 1.09 or higher.

The purpose of this procedure is to provide instructions on how to access PMC and ISD parameters specified in Table 1 when Maintenance Tracker is installed and enabled. This procedure only applies to GDFs equipped with Veeder-Root PMC and ISD systems. This procedure shall be used in conjunction with the appropriate or applicable procedure listed in Table 1.

The term "TLS Console" used throughout this Exhibit includes but is not limited to TLS-350, TLS-350 Plus, TLS-350-R, Red Jacket ProMax, and Gilbarco EMC consoles, which are also referenced in Exhibit 1.

Table 1: Description of PMC and ISD Parameters Restricted By Maintenance Tracker

Executive Order	Exhibit	Description of Parameter
VR-203, VR-204	Exhibit 4: Required Items in Conducting TP-201.3	Manually close/open vapor polisher processor vapor valve
VR-203, VR-204	Exhibit 8: VST ECS Hydrocarbon Sensor Verification Test Procedure	Manually turn off/on the VST ECS processor
VR-203, VR-204	Exhibit 10: VST ECS/ VST Green Machine, Veeder-Root Vapor Polisher Vapor Pressure Sensor Verification Test Procedure	1. Disable/Enable Processor 2. ISD Pressure Sensor Value
VR-203, VR-204	Exhibit 11: Veeder-Root Vapor Polisher Operability Test Procedure	1. Vapor Valve setting-Auto/Manual 2. Manually close/open processor vapor valve 3. Vapor Polisher ambient and outlet temperature values 4. Gasoline tank temperature values 5. Atmospheric pressure
VR-203, VR-204	Exhibit 12: Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification	Manually close/open vapor valve
VR-203, VR-204	Exhibit 16. Liquid Condensate Trap Compliance Test Procedure	Liquid Sensor Alarm History Report
VR-204	Exhibit 17. Veeder-Root ISD Vapor Flow Meter Operability Test Procedure	ISD Setup Report
VR-204	IOM Section 12: Figure 48 & 50: Clear Test After Repair	Diagnostic Mode, ability to perform a CTAR

2. PRINCIPLE AND SUMMARY OF PROCEDURE

As indicated in section one, there are two ways to access PMC and ISD parameters when Maintenance Tracker is installed and enabled; directly from the TLS Console using a key or indirectly through the RS232 interface using a specialized software program developed by Veeder-Root. This procedure provides access instructions for both methods. Option 1 provides instructions on how access the ISD and PMC parameters directly from the TLS Console when a Maintenance Tracker key is available. Option 2 provides instructions on how to access the ISD and PMC parameters through the RS232 interface by using the software program called “ISD Setup Tool Version 1.09” (or higher).

3. BIASES AND INTERFERENCES

3.1 This procedure shall be used in conjunction with the applicable procedure listed in Table 1. All biases and interferences must be followed for each test procedure (or Exhibit) within ARB Executive Orders VR-203 and VR-204 and any subsequent amendments or revisions.

3.2 If the GDF is equipped with a wireless vapor pressure sensor (Veeder-Root part number 861190-201), the only way to access the parameters in Table 1 is to use Veeder-Root ISD Setup Tool version 1.10 or higher.

4. EQUIPMENT

4.1 Option 1: Maintenance Tracker Key, see Figure 3. To acquire a Maintenance Tracker key contact Veeder-Root Technical Support at 1-800-323-1799 M-F 8am-7pm ET or technicalsupport@veeder.com .

4.2 Option 2: RS232 interface (standard on all ISD systems), laptop computer, cables, and Veeder-Root ISD Setup Tool Version 1.09 (or higher) software. To acquire a copy of ISD Setup Tool Version 1.09 contact Veeder-Root Technical Support at 1-800-323-1799 M-F 8am-7pm ET or technicalsupport@veeder.com .

5. PRE ACCESS PROCEDURE

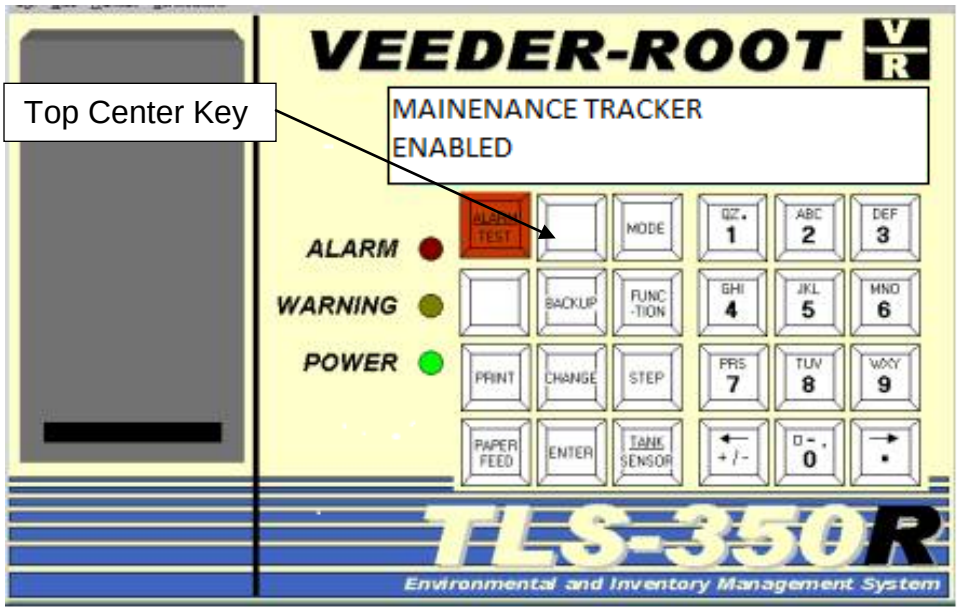
This procedure shall be used in conjunction with the applicable procedure listed in Table 1. All pretest procedures must be followed for each test procedure (Exhibit) within ARB Executive Orders VR-203 and VR-204 and any subsequent amendments or revisions.

6. ACCESS PROCEDURE

6.1. Option 1: Accessing PMC and ISD parameters through the TLS Console when Maintenance Tracker is enabled and key is available:

6.1.1. When the top center key on the Veeder-Root ISD TLS Console is pressed, “MAINTENANCE TRACKER ENABLED” is displayed. See Figure 1.

Figure 1: Maintenance Tracker Enabled on ISD TLS Console



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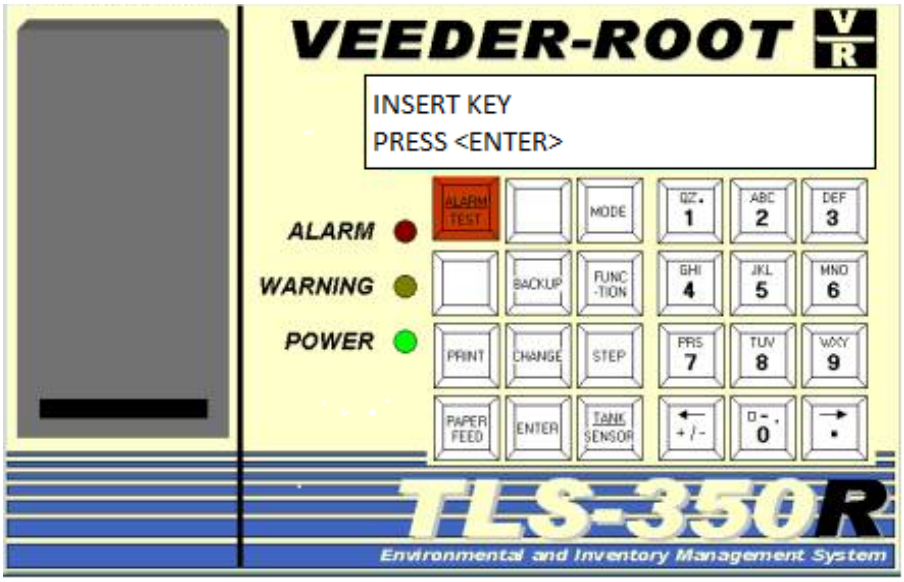
6.1.2. In order to gain access to the diagnostic and setup menus, the user would then press the step key. The display will now read: “INSERT KEY PRESS <ENTER>”. See Figure 2.

Figure 2: Maintenance Tracker Enabled on ISD TLS Console



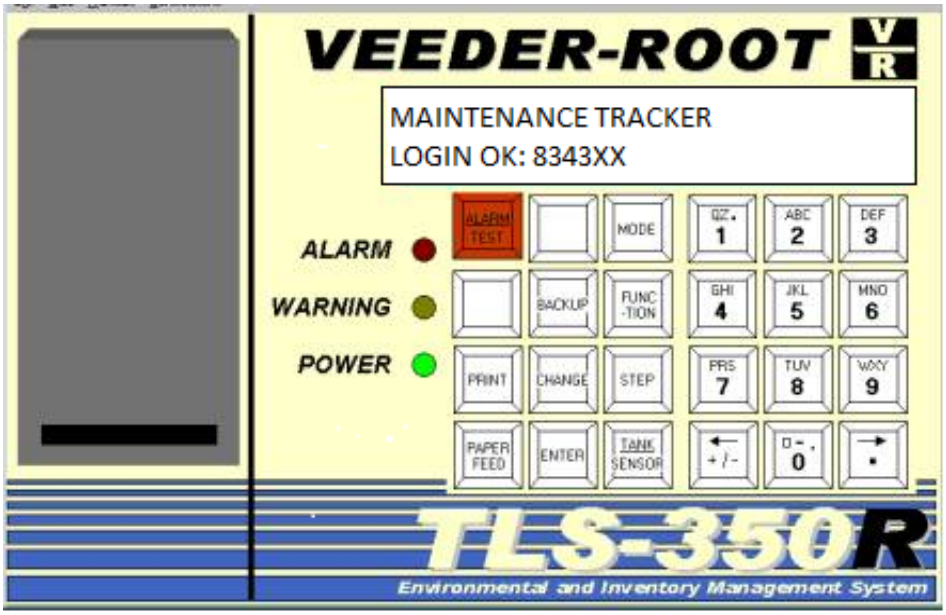
6.1.3. The Maintenance Tracker key (see Figure 3) must be plugged into a RS-232 port underneath the TLS Console within one minute or system will timeout. See Figure 4.

Figure 3: Maintenance Tracker Key

Figure 4: Maintenance Tracker Key Plugged Into TLS Console

6.1.4. Once the Key is inserted and recognized, the TLS Console display will now display “MAINTENANCE TRACKER LOGIN OK: XXXXXX”. The XXXXXX is the Technician Identification Number. See Figure 5. The feature has now been temporarily disabled. Any key pressed will now display “ALL FUNCTIONS NORMAL”.

Figure 5: Maintenance Tracker Temporarily Disabled



6.1.5. Return to the Exhibit listed in Table 1 to continue the test (Exhibit) in progress.

6.2. Option 2: Accessing PMC and ISD parameters through the RS232 interface when Maintenance Tracker is enabled yet key is not available:

6.2.1. Connect a PC or Laptop equipped with Veeder-Root “ISD Setup Tool Version 1.09” software per instructions in IOM 12 of VR-204.

6.2.2. Start the ISD Setup Tool Version 1.09 software on the laptop or PC.

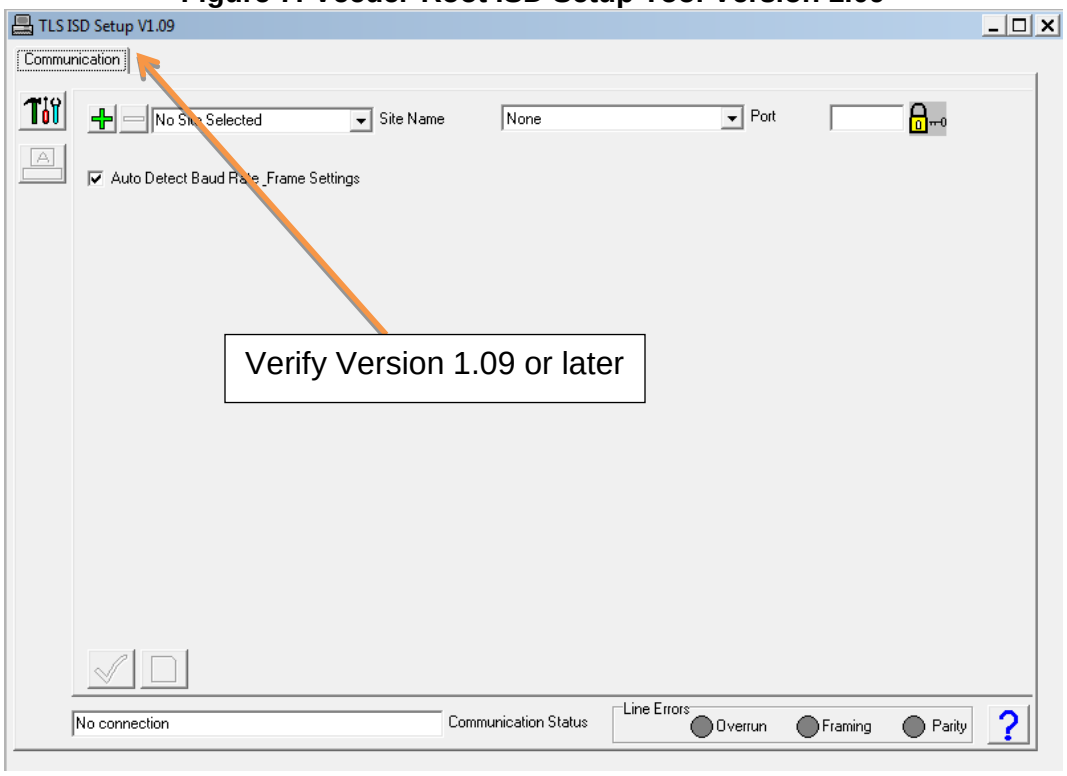
6.2.3. Click the check mark when prompted to “Enter Password”. See Figure 6.

Figure 6: Veeder-Root Setup Tool-Enter Password

6.2.4. Verify that Veeder-Root ISD Setup Tool Version 1.09 or later is being used. See Figure 7.

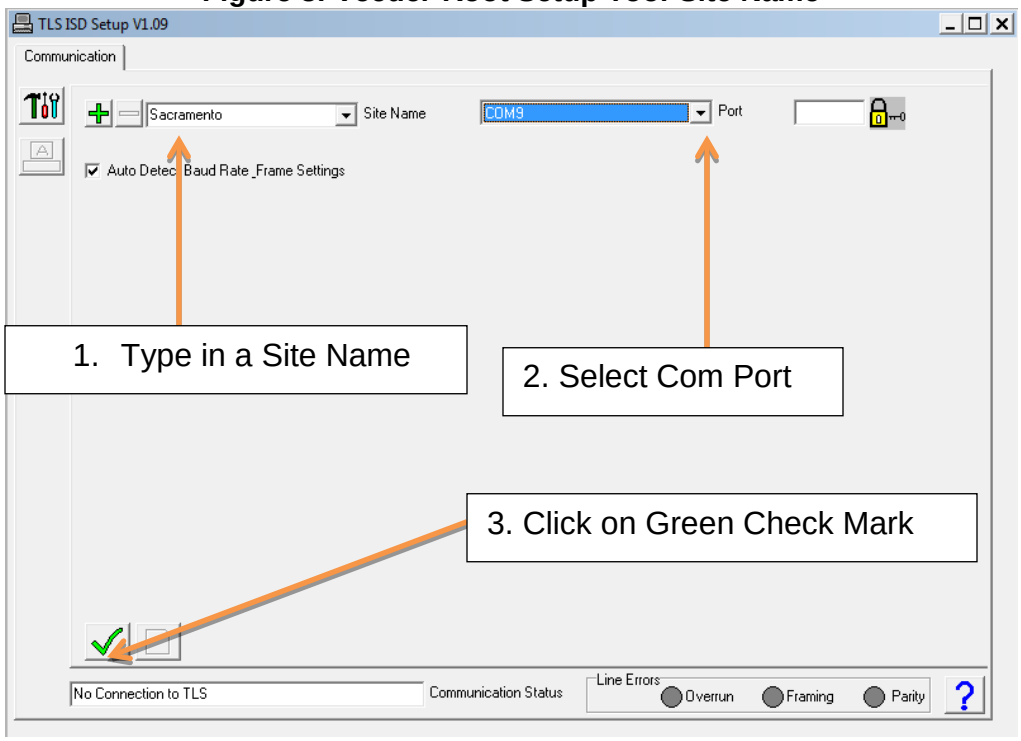
Note: Figures 7 through 24 are typical views of the laptop screen that may differ for different versions of ISD Setup Tool Version 1.09 and later.

Figure 7: Veeder-Root ISD Setup Tool Version 1.09



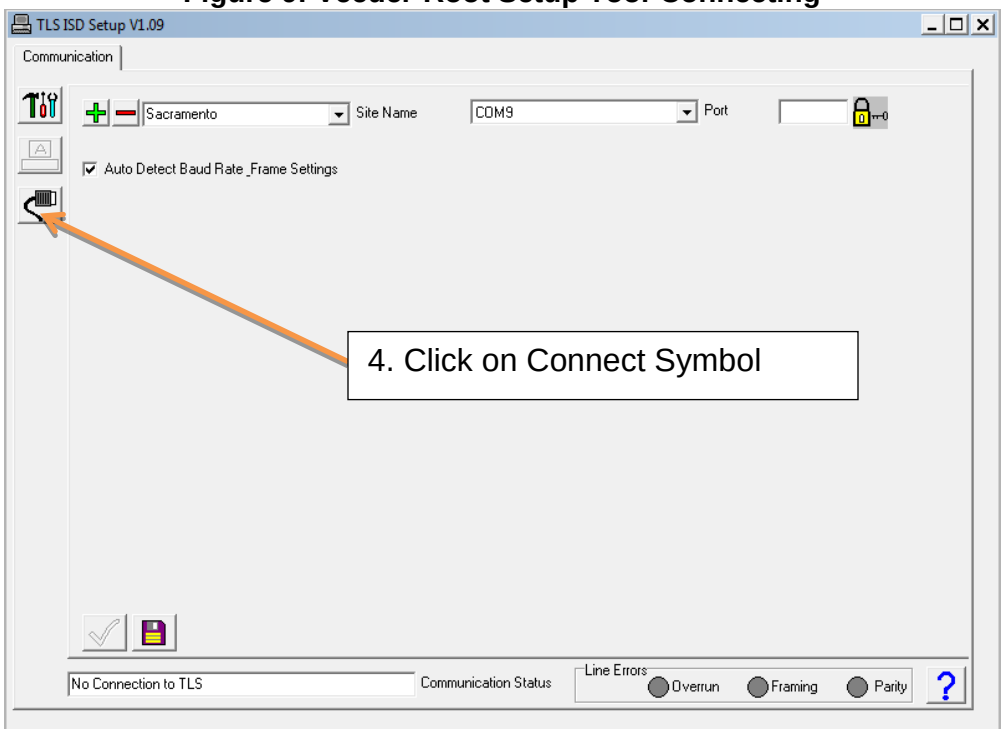
6.2.5. Type in the site name. Then select the communication port and click on the green check mark. See Figure 8.

Figure 8: Veeder-Root Setup Tool-Site Name



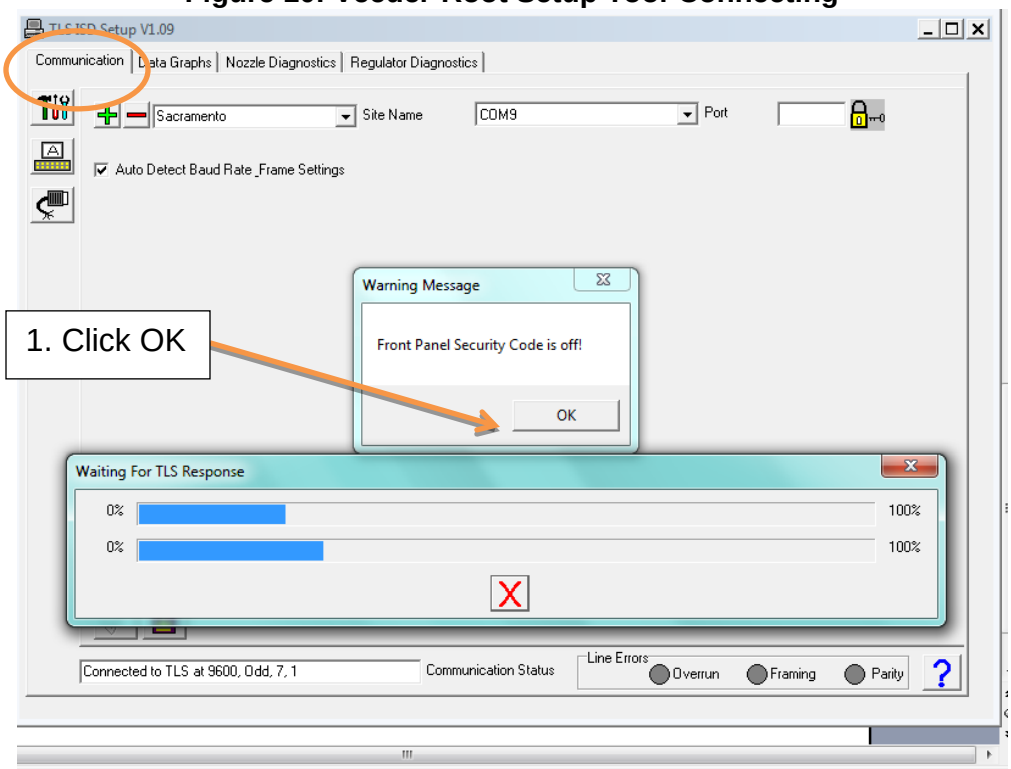
6.2.6. Click on the connect symbol. See Figure 9.

Figure 9: Veeder-Root Setup Tool-Connecting



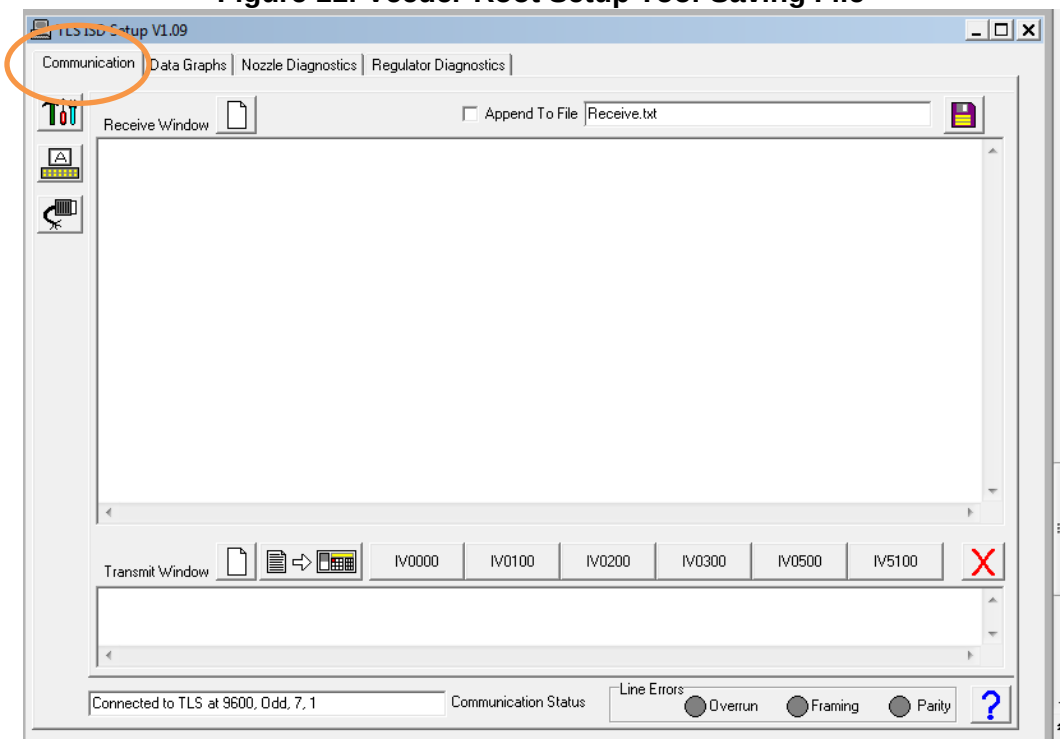
6.2.7. Click OK on the "Warning Message" and then click on the Computer Icon. Software will now connect to the TLS Console. See Figure 10.

Figure 10: Veeder-Root Setup Tool-Connecting



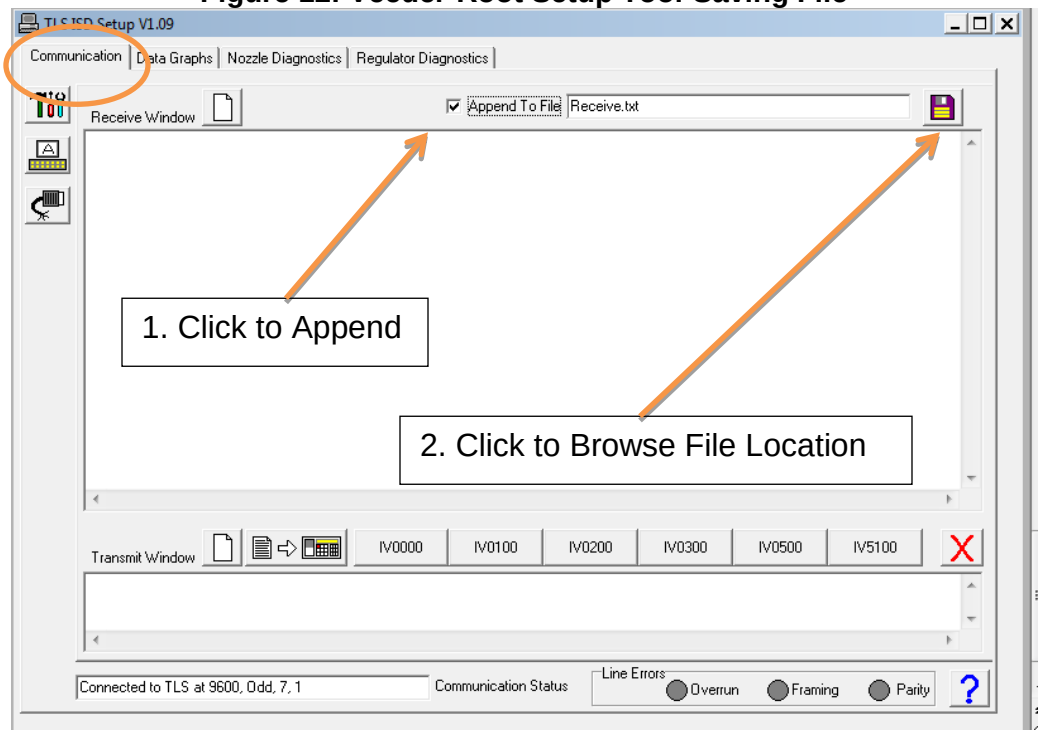
6.2.8. Once connected. Select the “Communication” Tab from the top of the screen. See Figure 11.

Figure 11: Veeder-Root Setup Tool-Saving File



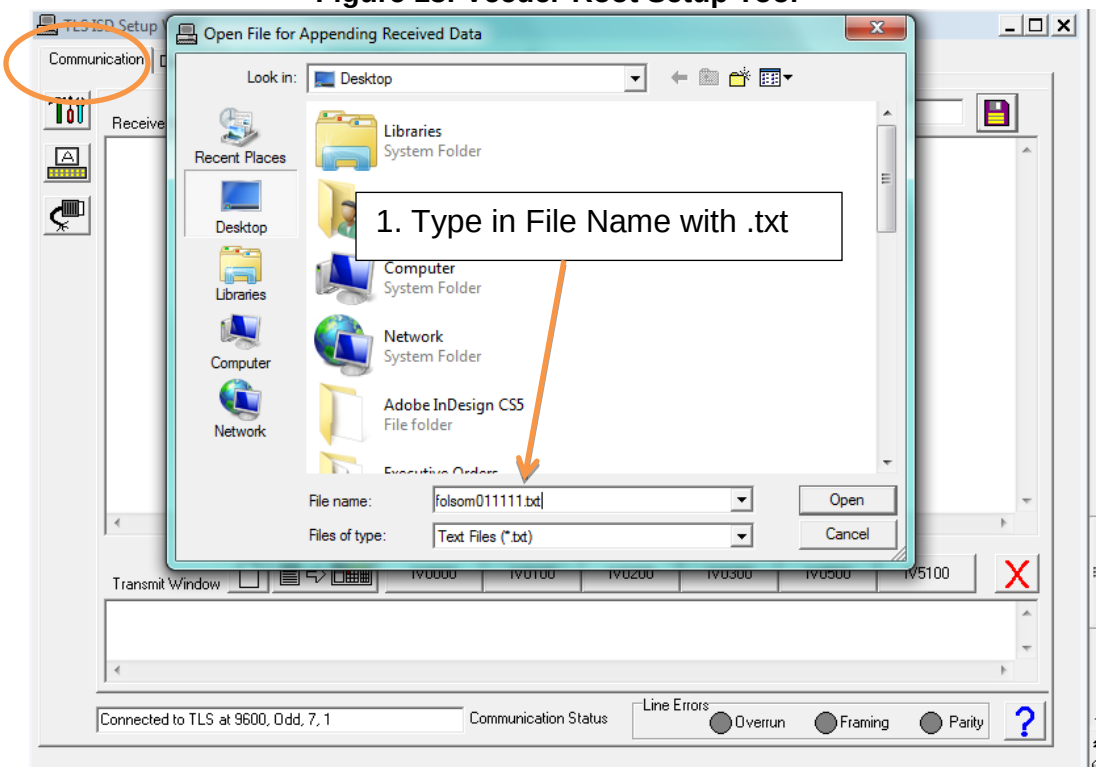
6.2.9. To save reports to a file, click on box to “Append to File”. Then click to browse file location. See Figure 12.

Figure 12: Veeder-Root Setup Tool-Saving File



6.2.10. To save reports type in a file name with a .txt extension. See Figure 13.

Figure 13: Veeder-Root Setup Tool-



6.2.11. Serial commands can now be entered and results will be saved in file selected above. See Figure 14. The Liquid Sensor Alarm History Report parameters for VR-203 (Exhibit 16) and VR-204 (Exhibit 16) can be accessed by using the following serial command: **I302SS**

The ISD Setup Report for VR-204 (Exhibit 17) can be accessed by using the following serial command for the Hose Table Data: IV4A00. The vapor flow meter serial numbers can be accessed with the following serial command: IV8300.

The PMC version can be accessed by using the following serial command: IV8200.

6.2.12. The parameters are listed in Table 2 (see below) can be accessed by selecting the “Regulator Diagnostics” tab from the top of the menu. See Figure 15.

Table 2: Parameters Accessible Via Regulator Diagnostics Tab

Parameter
Ullage Pressure
Assessment Time
Probe Temperature
Automatic Vapor Valve Control
Manual Vapor Valve Control-Open/Close
Vapor Valve Diagnostics
Atmospheric Pressure
Canister Load %

Figure 14: Veeder-Root Setup Tool-Serial Commands

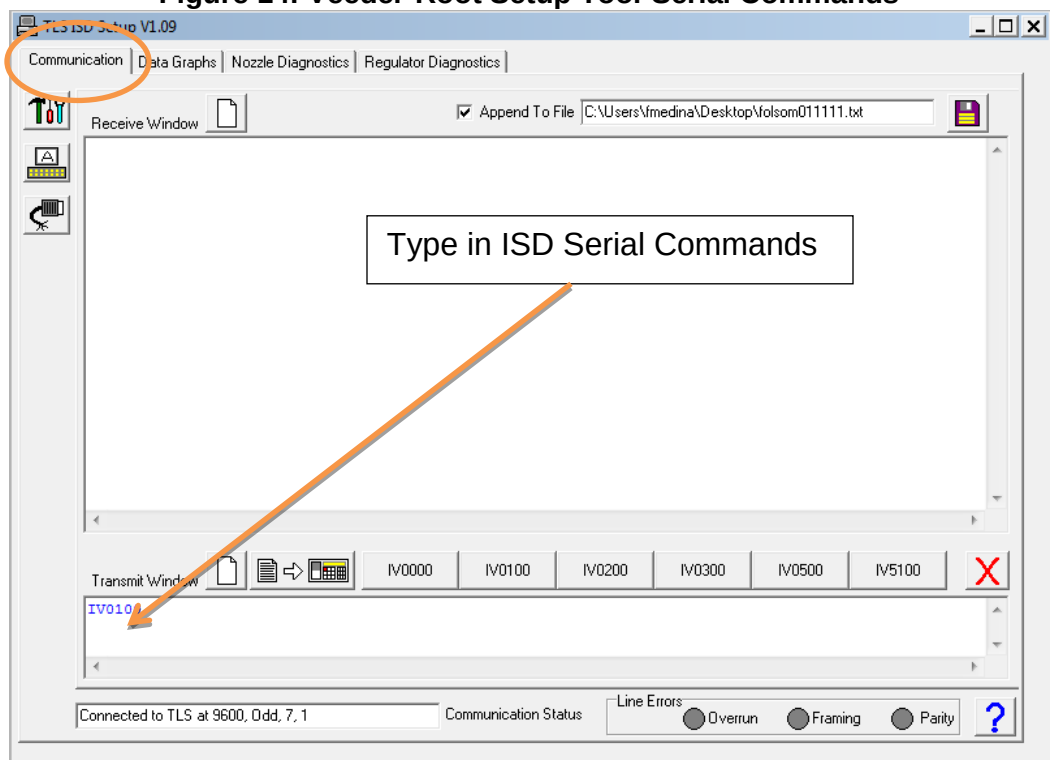
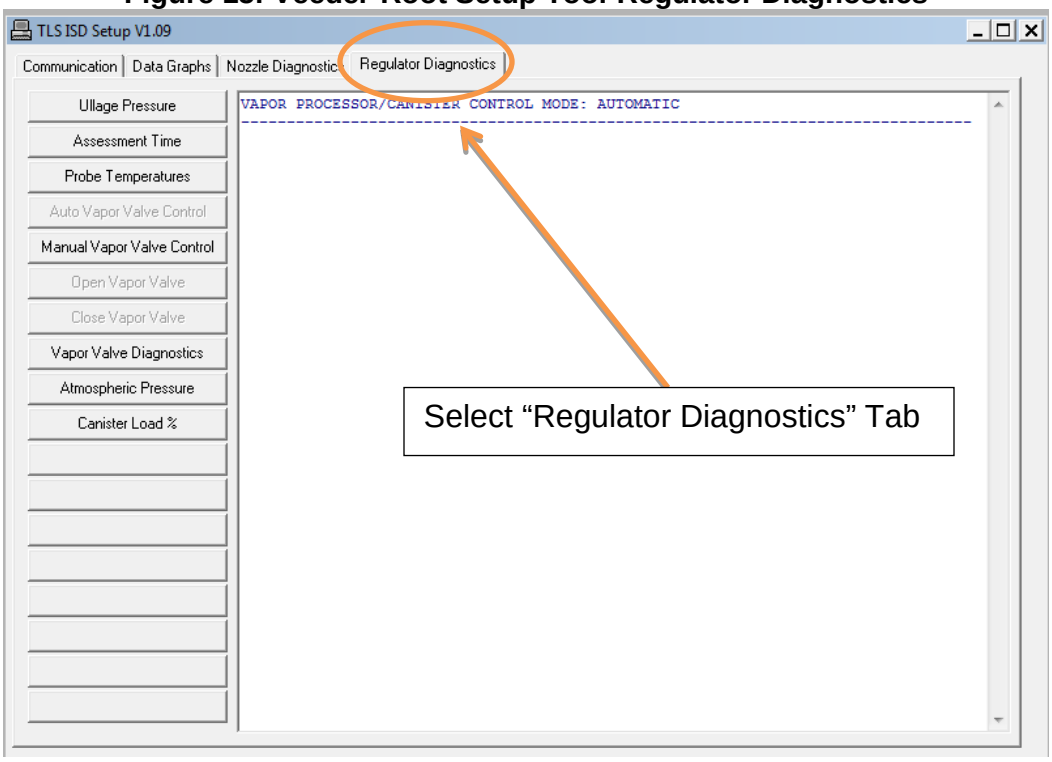
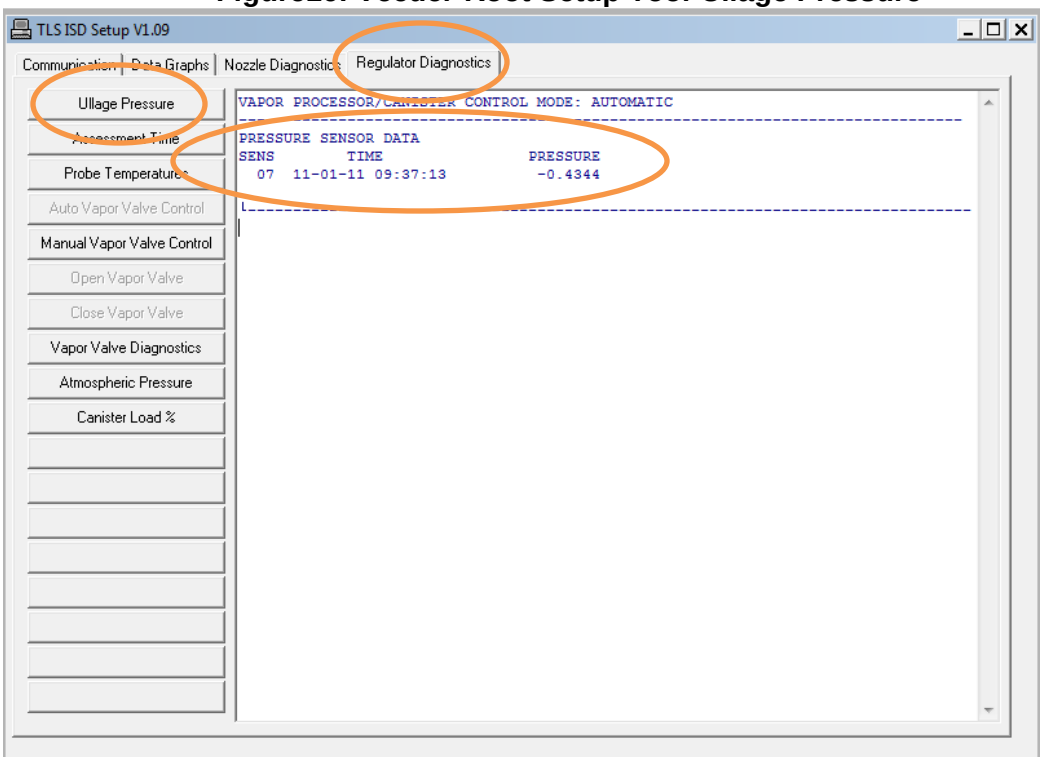


Figure 15: Veeder-Root Setup Tool-Regulator Diagnostics



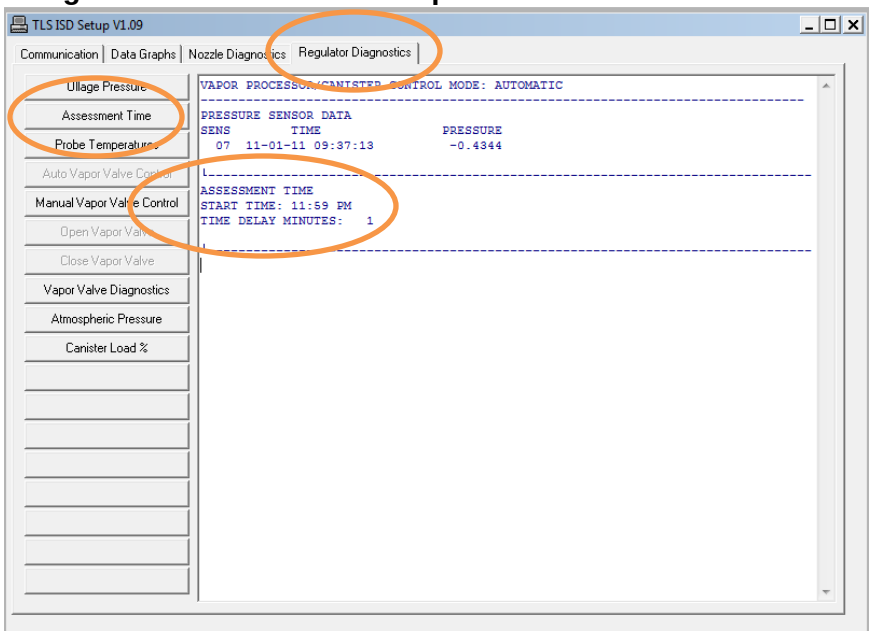
6.2.13. To access the current ullage pressure reading, select the "Regulator Diagnostics" tab at the top of the screen and select "Ullage Pressure" on the left side of the screen. See Figure 16.

Figure16: Veeder-Root Setup Tool-Ullage Pressure



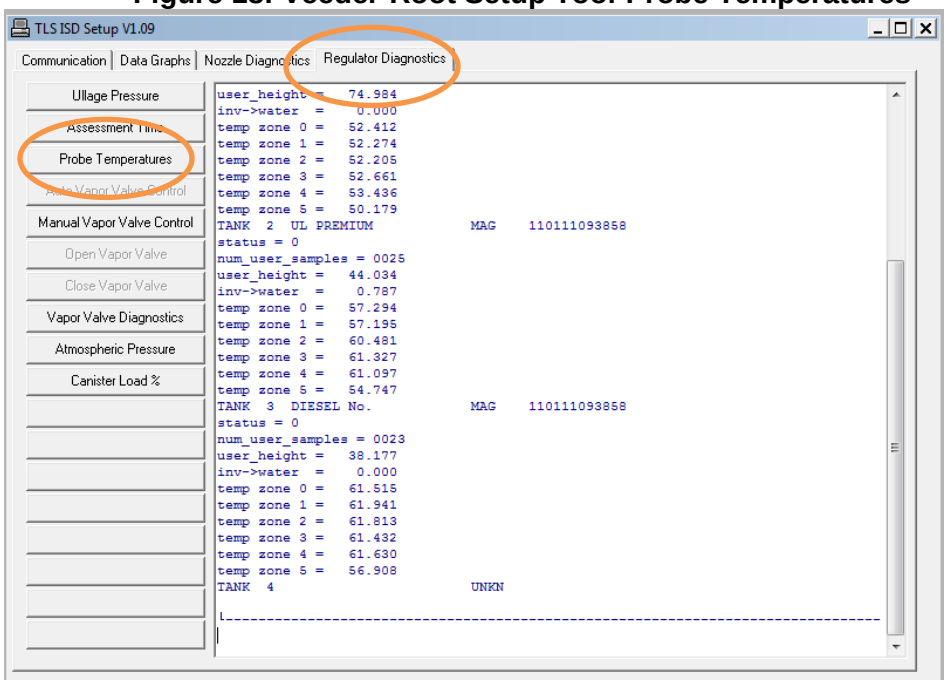
6.2.14. To access current ISD assessment time, select the “Regulator Diagnostics” tab at the top of the screen and select “Assessment Time” on the left side of the screen. See Figure 17.

Figure 17: Veeder-Root Setup Tool-ISD Assessment Time



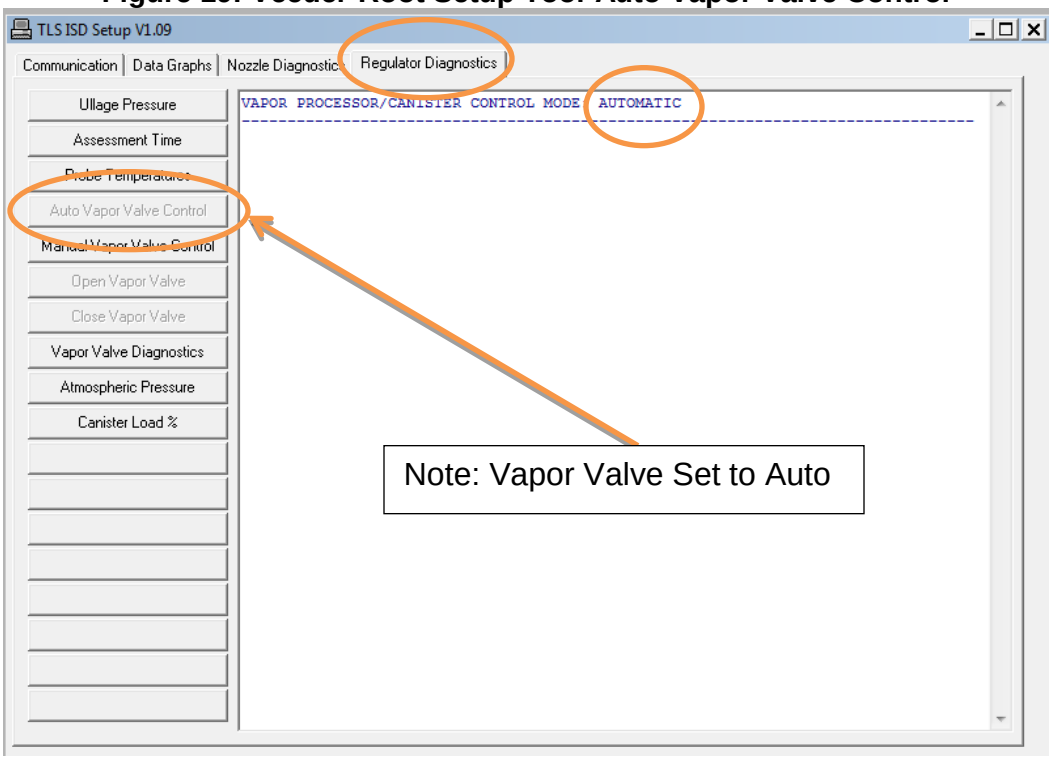
6.2.15. To access the probe temperatures, select the “Regulator Diagnostics” tab at the top of the screen and select “Probe Temperature” on the left side of the screen. See Figure 18.

Figure 18: Veeder-Root Setup Tool-Probe Temperatures



6.2.16. To switch the vapor valve from automatic to manual control or visa versa, select the “Regulator Diagnostics” tab at the top of the screen and select “Auto Vapor Valve Control” or “Manual Vapor Valve Control” to toggle between these two options. See Figure 19 and Figure 20. If “Manual Vapor Valve Control” is selected then “Open Vapor Valve” or “Close Vapor Valve” can be selected. See Figure 21 and Figure 22.

Figure 19: Veeder-Root Setup Tool-Auto Vapor Valve Control



6.2.17. To access the vapor valve diagnostics data, select the “Regulator Diagnostics” tab at the top of the screen and select “Vapor Valve Diagnostics” on the left side of the screen. See Figure 23.

6.2.18. To access the current atmospheric pressure reading, select the “Regulator Diagnostics” tab at the top of the screen and select “Atmospheric Pressure” on the left side of the screen. See Figure 24.

6.2.19. To access the load on the canister as a percentage, select the “Regulator Diagnostics” tab at the top of the screen and select “Canister Load %” on the left side of the screen. See Figure 25.

Figure 20: Veeder-Root Setup Tool-Manual Vapor Valve Control

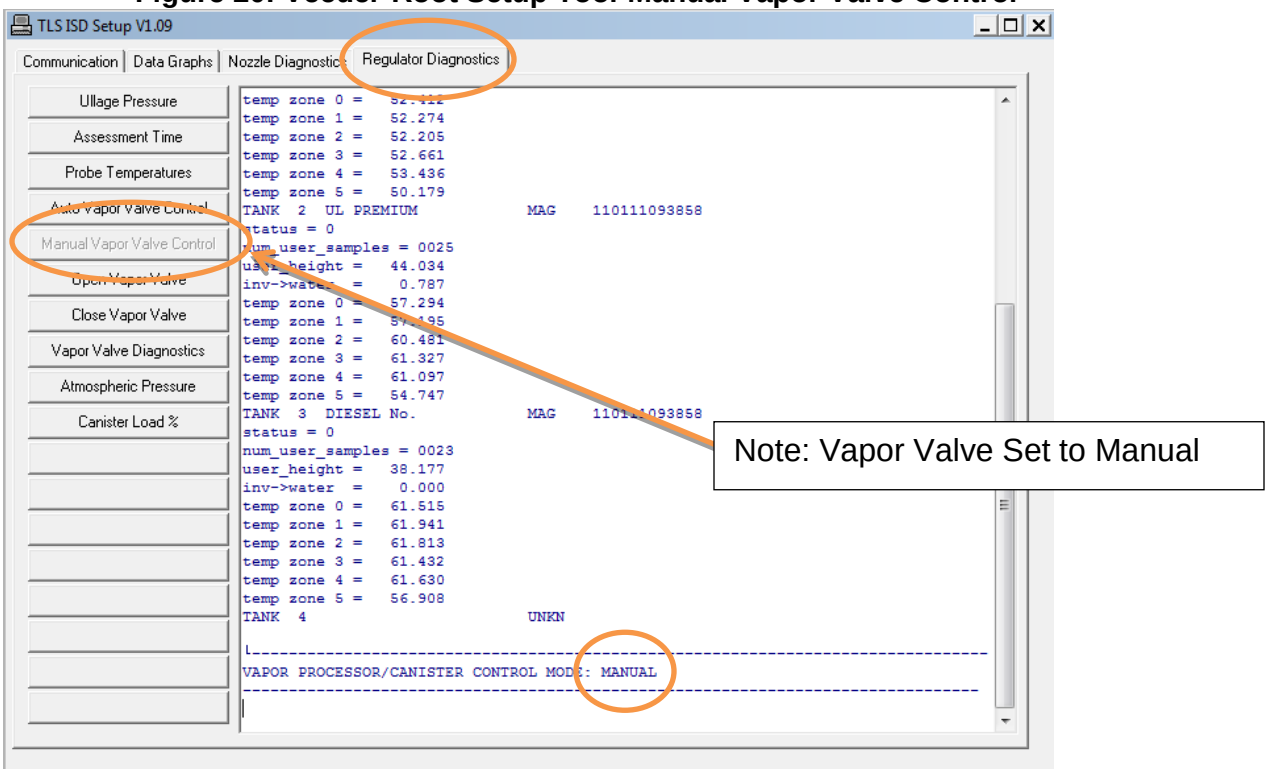


Figure 21: Veeder-Root Setup Tool-Open Vapor Valve

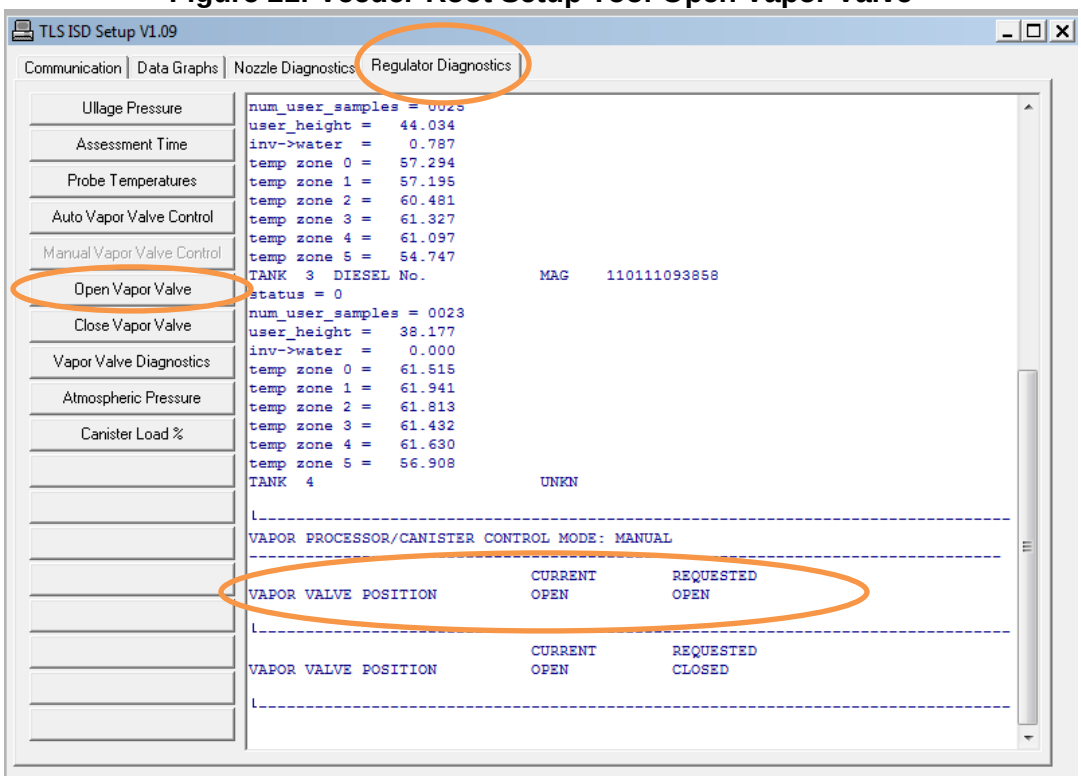


Figure 22: Veeder-Root Setup Tool-Close vapor Valve

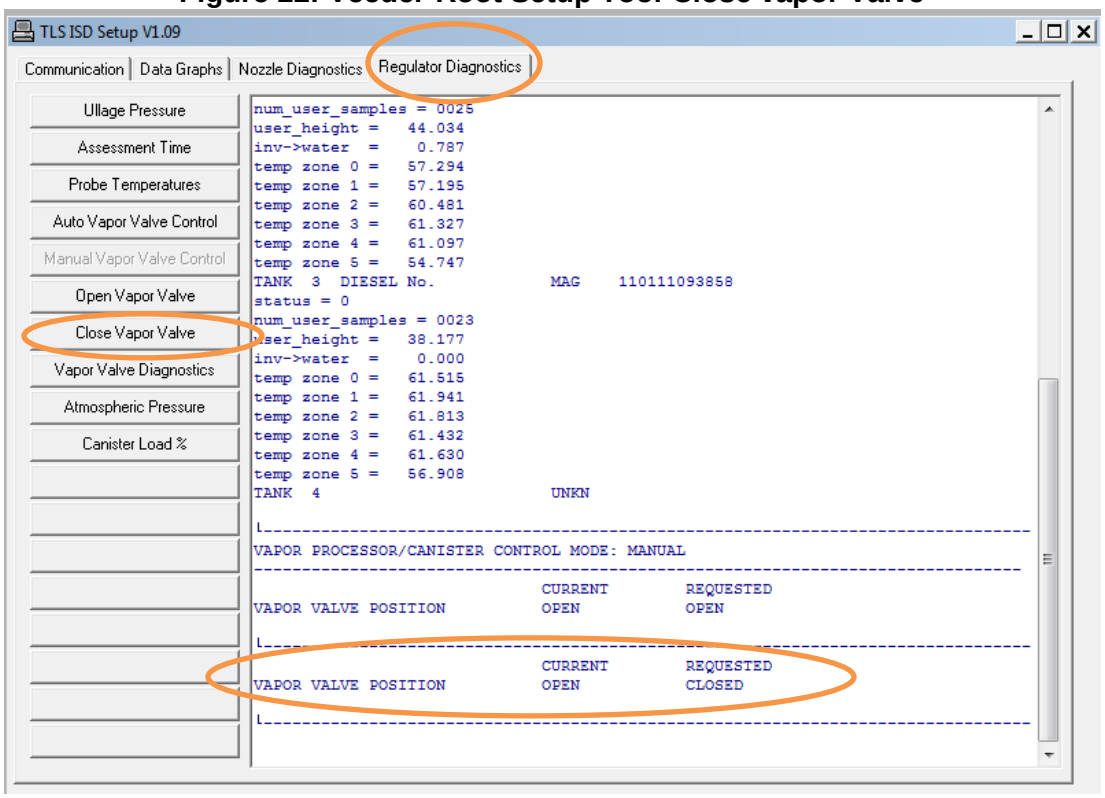


Figure 23: Veeder-Root Setup Tool-Vapor Valve Diagnostics

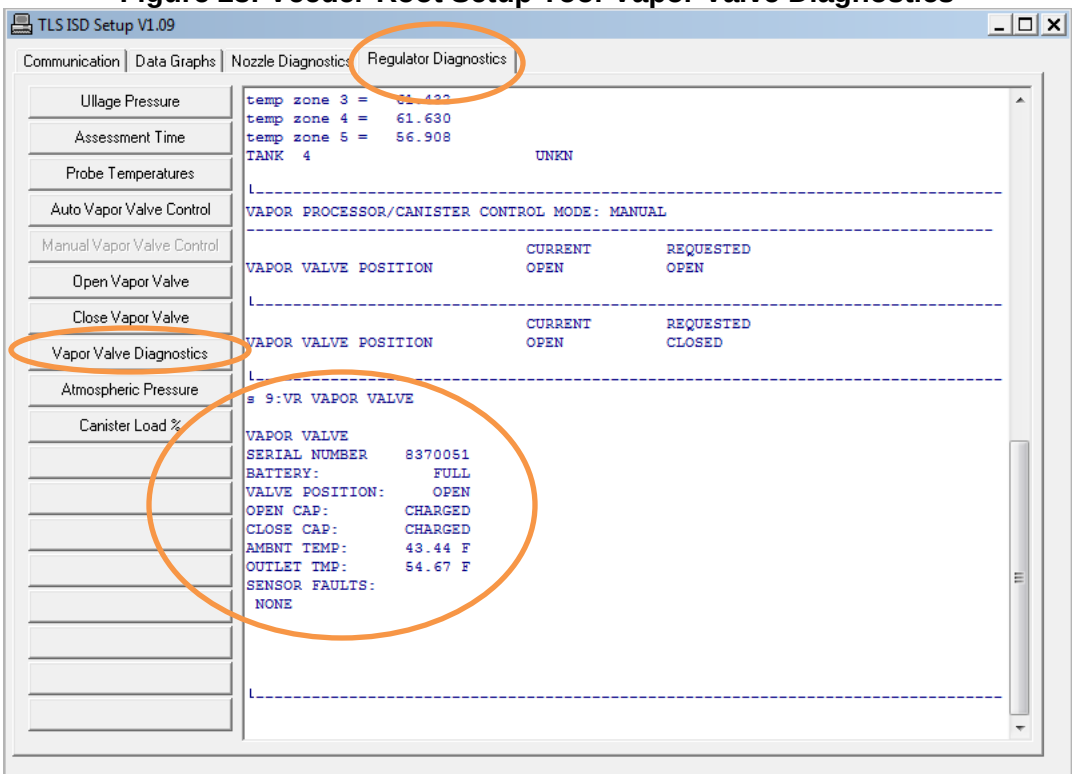


Figure 24: Veeder-Root Setup Tool-Atmospheric Pressure

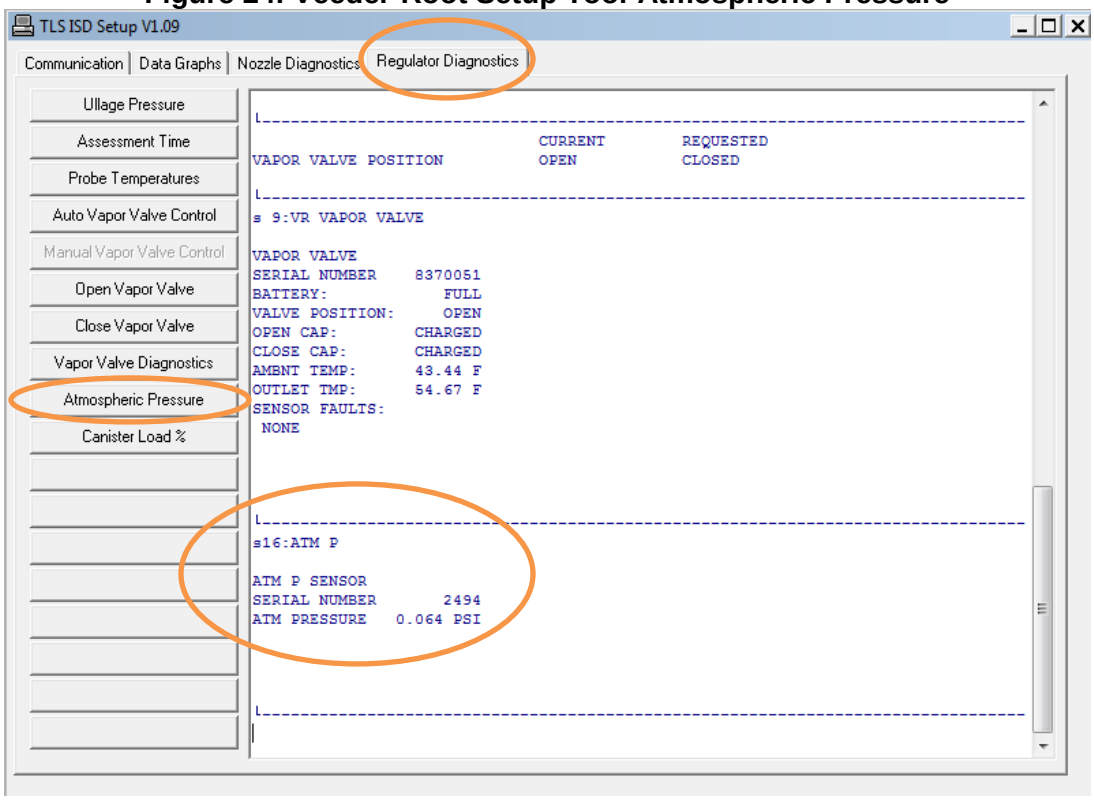
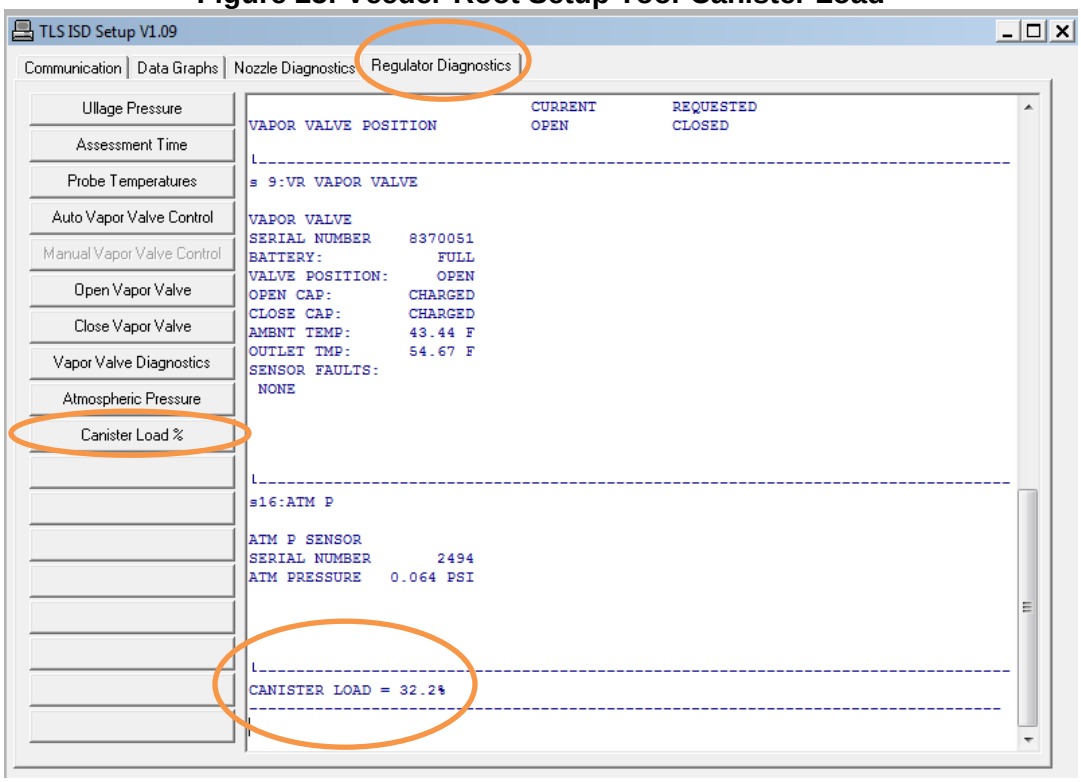



Figure 25: Veeder-Root Setup Tool-Canister Load