



Overview of Veeder-Root's TLS-450PLUS

Dave Emmington
Environmental Product Manager

TU-C4
February 27, 2024



26th California Unified Program
Annual Training Conference
February 26-29, 2024

TLS-4xx Series Overview



TLS-450PLUS



TLS-4 and TLS-4B

TLS-4xx Series Overview

- Color touchscreen Graphic User Interface (GUI)
- Intuitive “Workflow Wizard” Touchscreen User Access
- Three-year memory of alarm history and compliance reports
- Universal Sensor Modules (USM)
- IoT (Internet of Things) connectivity
- Free Remote Access



TLS-4xx Series Overview

- Enhanced Performance and Memory
- Software upgrades via USB or download
- Best-in-Class security
- Web enabled with email notifications
- Role based login (Admin, Operator, Regulator)



TLS-4 Overview (8601 Series)

- 7-inch color touch screen Graphic User Interface (GUI)
- For non-retail/commercial facilities
- Supports Static tank testing, CSLD, and BIR
- No electronic line leak detection
- No In-Station-Diagnostics (ISD)
- Optional network printer



TLS-4 Overview (8601 Series)

TLS4

- ✓ Standard 12 probe capacity.
 - Expandable to 32 probes
- ✓ Standard 12 Universal Sensor inputs.
 - Expandable to 76 sensors

TLS4b

- ✓ 6 probes
- ✓ 6 Universal Sensor inputs



TLS-450PLUS Overview (8600 Series)

- 64 probes
- 99 sensors of any type
- Expandable to 256 total devices
- Supports
 - ✓ CSLD
 - ✓ Digital PLLD
 - ✓ SCVS System
 - ✓ ISD
 - ✓ IPC
 - ✓ DEF Recirculation
- 8" color LCD touchscreen
- 80 column printer



TLS-450PLUS Overview

- Universal Sensor Modules (USM)
- Universal Input Output Modules (UIOM)
- “Plug and Play” sensor interface
- Software downloads via USB



TLS-450PLUS Overview – Old vs. New



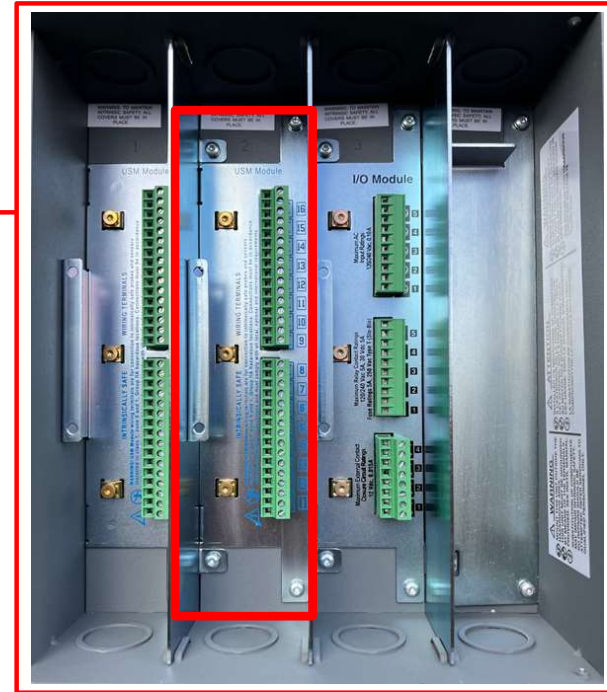
High Power Modules

- 4 Relay Output Module
- 2 Input/2 Relay Output Interface
- 4 Input Pump Sense Module
- Pump Relay
- 3 Output PLLD Controller
- Dispenser Controller Module

Low Power Modules

- Probe/Thermistor Module
- 8 Input Interstitial Module
- Type A Module
- Type B Module
- 7 Input Smart Sensor Module
- 8 Input Smart Sensor Module
- PLLD Sensor Module
- 5 Input Groundwater Sensor Module
- 5 Input Vapor Sensor Module

TLS-450PLUS Overview – USM/UIOM

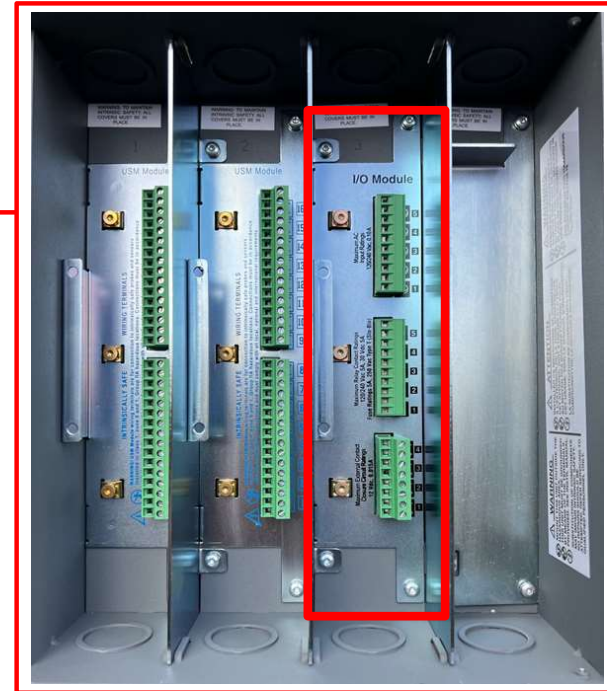


Universal Sensor Module (USM)

All Intrinsically Safe (Low Power) inputs

16 Inputs per USM

TLS-450PLUS Overview – USM/UIOM



Universal Input Output Module (UIOM)

All High-Power Inputs and Outputs

- Five High Power Inputs
- Five High Power Outputs



TLS-450PLUS Benefits



CONNECTIVITY



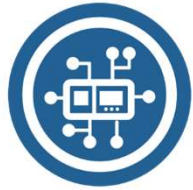
**ENHANCED
SECURITY**



**TOTAL COST
OF
OWNERSHIP**

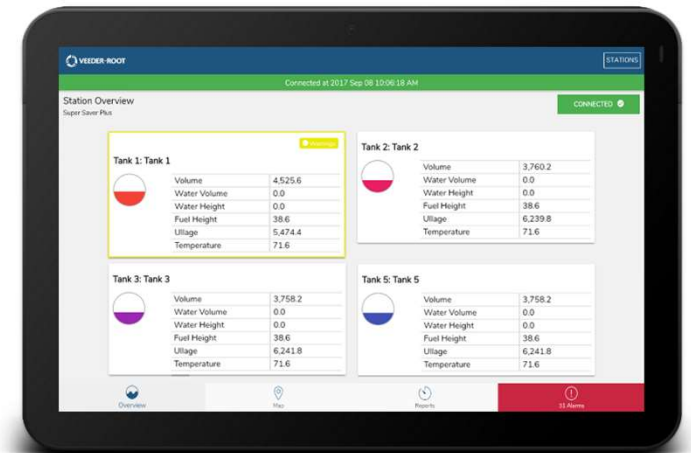


**EXPANDED
CAPABILITY**



Connectivity

- The TLS-450PLUS provides connectivity options.
- Provides remote access to manage critical data anytime, anywhere
- Ensures operators always know what is going on with their fueling facility assets.

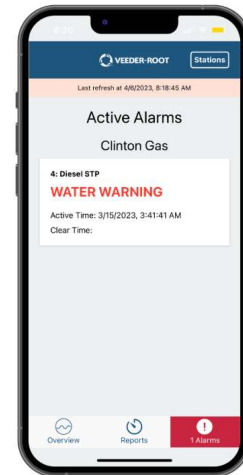
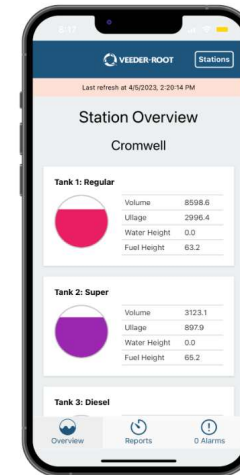
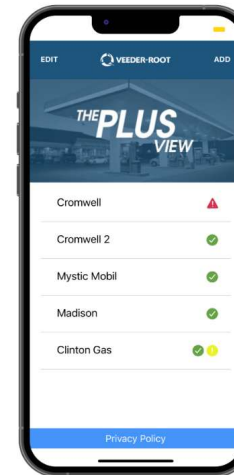




Connectivity

THE PLUS VIEW app

- Station overview for an immediate status check on tank inventory
 - ✓ Volume
 - ✓ Ullage
 - ✓ Water Height
 - ✓ Fuel Height
- Reports tab allows quick access to inventory and last delivery report
- Alarms tab gives you instant access to view active alarms at a site
- IOS and Android

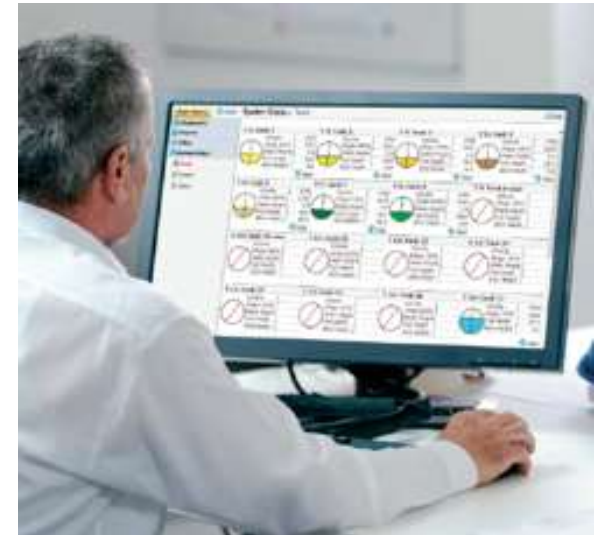




Connectivity

Web Enabled

- Accessible from any web browser. Anywhere, anytime
 - As if you're standing at gauge
 - Print compliance and wet stock reports
 - Access diagnostics
 - Email notifications
- To access the Web-enabled feature you need to have web access enabled, the IP address for the device, and active login credentials

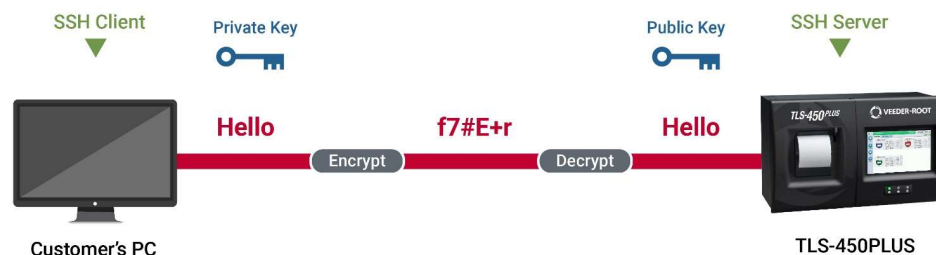




Enhanced Security

Greater Connectivity Needs Greater Protection

- **The TLS-450PLUS provides the security needed for today's connected world, supporting the following features:**
 - ✓ Isolated Networks
 - ✓ Encrypted Web Access
 - ✓ Encrypted Serial Access
 - ✓ Role-Based Access
 - ✓ Front Panel Access
 - ✓ Network Routing





Enhanced Security

Greater Connectivity Needs Greater Protection

- **What can happen if you do not take ownership of your network?**
 - Rename Tank Information
 - Resize Tanks (From 10K to 20K Gallons)
 - Shutdown Dispensing (PLLD and Relay Settings)
 - Capture Sensitive Corporate Data
 - Shutdown IP Cards / Network Services
 - Loss of Compliance Data





Enhanced Security

Greater Connectivity Needs Greater Protection



ENHANCED SECURITY FEATURES	TLS-350PLUS	TLS-450PLUS
Isolated Networks: Separation of insecure data from secure data.	---	✓
Encrypted Web Access: Using secure HTTPS connectivity with username/password.	---	✓
Encrypted Serial Access: Serial commands can run over a secure interface with SSH.	---	✓
Role-Based Access: User access to console functionality is controlled with roles.	---	✓
Front Panel Access: Control access to the console by user log in.	---	✓
Network Routing: Fully control data routing with the network including dropping data.	---	✓



Total Cost of Ownership

- The TLS-450PLUS provides an expanded, advanced feature set at a lower price point than the TLS-350 console was without needing to replace your probes or sensors
- Upgrading to a TLS-450PLUS automatically extends the warranty of your probes and sensors for the duration of the warranty on your new TLS-450PLUS.





Expanded Capability TLS-XB

- ✓ For larger retail sites
- ✓ Four module slots per XB
- ✓ Can daisy chain up to 3 XBs
- ✓ Expands TLS-450Plus inputs to 256 total devices





Why TLS-XB?



Buc-ee's – New Braunfels, TX

120 Fueling Positions



Expanded Capability

TLS-450PLUS features include:

- Digital Pressurized Line Leak Detection (DPLLD)
 - Certified line length up to 1178 gallons
- Diesel Exhaust Fluid (DEF) Recirculation
- Intelligent Pump Control (IPC)
- Biodiesel Blending
- Additive Injection System (AIS)
- HydrX
- AccuChart™
 - Calibration range increase
- Business Inventory Reconciliation (BIR)
 - Increased delivery data storage



TLS-450PLUS Overview – Software Updates

- Software updates posted on Veeder.com
- Can be downloaded to Thumb Drive for Site Upgrades
- During software update all data and reports are retained:
 - ✓ Alarm history
 - ✓ Passed/Failed tests
 - ✓ System setup
 - ✓ Inventory

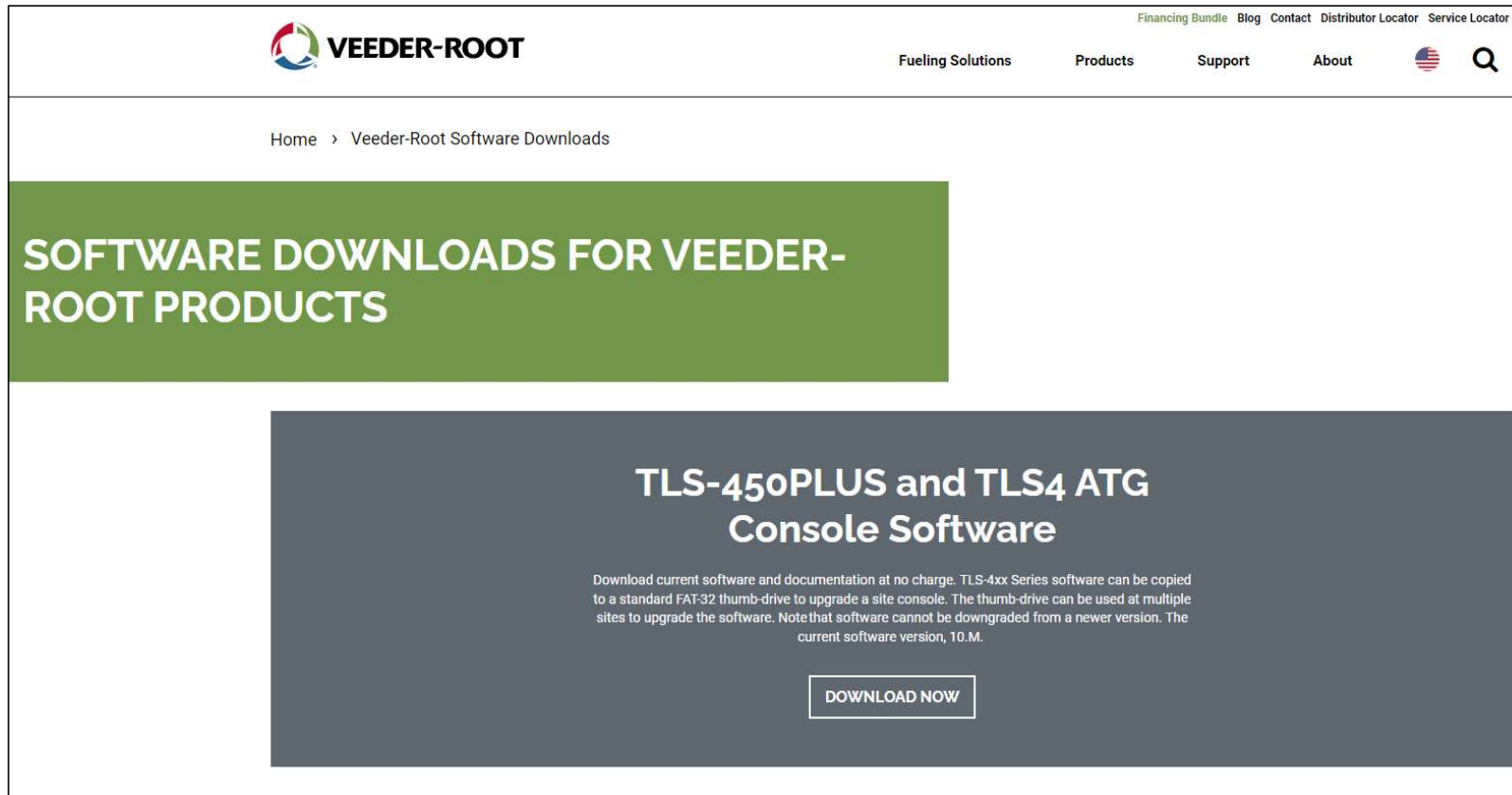


TLS-450PLUS Overview – Software Updates (TLS-350)

- TLS-350 software was embedded into Read-Only-Memory (ROM) module
- If software module was replaced, TLS-350 lost;
 - Alarm history
 - System setup
 - Passed/Failed tests
 - Inventory records





TLS-450PLUS Overview – Software Updates



The screenshot displays the Veeder-Root website's software download page. At the top, the Veeder-Root logo is on the left, and navigation links for 'Financing Bundle', 'Blog', 'Contact', 'Distributor Locator', and 'Service Locator' are on the right. Below the logo, there are links for 'Fueling Solutions', 'Products', 'Support', 'About', an American flag icon, and a search icon. A breadcrumb trail shows 'Home > Veeder-Root Software Downloads'. A large green banner contains the text 'SOFTWARE DOWNLOADS FOR VEEDER-ROOT PRODUCTS'. Below this, a dark grey box features the title 'TLS-450PLUS and TLS4 ATG Console Software' and a paragraph of text: 'Download current software and documentation at no charge. TLS-4xx Series software can be copied to a standard FAT-32 thumb-drive to upgrade a site console. The thumb-drive can be used at multiple sites to upgrade the software. Note that software cannot be downgraded from a newer version. The current software version, 10.M.' A 'DOWNLOAD NOW' button is centered at the bottom of this box.

VEEDER-ROOT

Financing Bundle Blog Contact Distributor Locator Service Locator

Fueling Solutions Products Support About  

Home > Veeder-Root Software Downloads

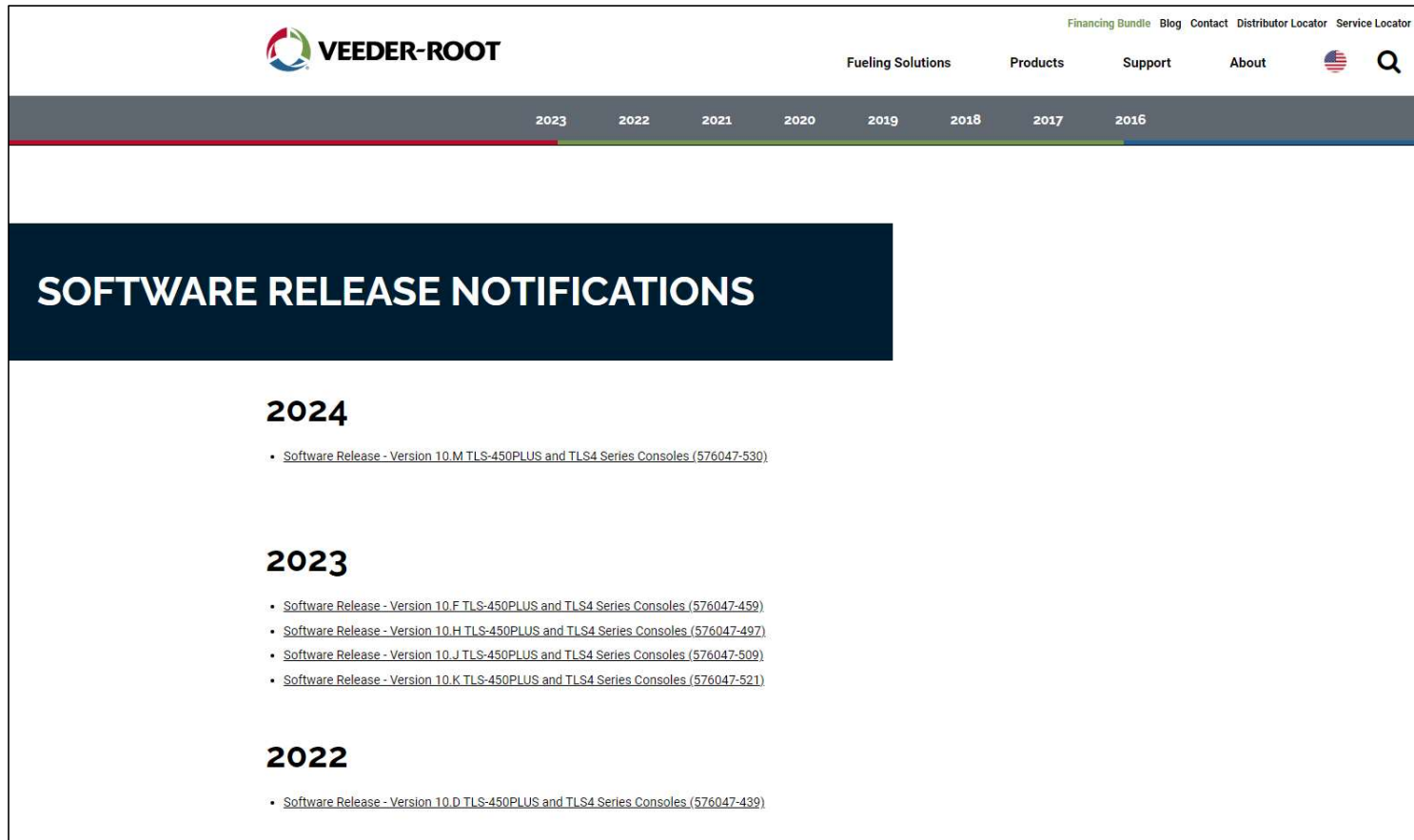
SOFTWARE DOWNLOADS FOR VEEDER-ROOT PRODUCTS

TLS-450PLUS and TLS4 ATG Console Software

Download current software and documentation at no charge. TLS-4xx Series software can be copied to a standard FAT-32 thumb-drive to upgrade a site console. The thumb-drive can be used at multiple sites to upgrade the software. Note that software cannot be downgraded from a newer version. The current software version, 10.M.

[DOWNLOAD NOW](#)



TLS-450PLUS Overview – Software Updates



The screenshot displays the Veeder-Root website's navigation and content area. At the top left is the Veeder-Root logo. The top right navigation bar includes links for Financing Bundle, Blog, Contact, Distributor Locator, and Service Locator. Below this is a secondary navigation bar with Fueling Solutions, Products, Support, About, a US flag icon, and a search icon. A year-based navigation bar highlights 2023. The main content area features a dark blue banner with the text 'SOFTWARE RELEASE NOTIFICATIONS'. Below this, the years 2024, 2023, and 2022 are listed as section headers, each followed by a bulleted list of software release links.

VEEDER-ROOT

Financing Bundle Blog Contact Distributor Locator Service Locator

Fueling Solutions Products Support About  

2023 2022 2021 2020 2019 2018 2017 2016

SOFTWARE RELEASE NOTIFICATIONS

2024

- [Software Release - Version 10.M.TLS-450PLUS and TLS4 Series Consoles \(576047-530\)](#)

2023


- [Software Release - Version 10.F.TLS-450PLUS and TLS4 Series Consoles \(576047-459\)](#)
- [Software Release - Version 10.H.TLS-450PLUS and TLS4 Series Consoles \(576047-497\)](#)
- [Software Release - Version 10.J.TLS-450PLUS and TLS4 Series Consoles \(576047-509\)](#)
- [Software Release - Version 10.K.TLS-450PLUS and TLS4 Series Consoles \(576047-521\)](#)

2022

- [Software Release - Version 10.D.TLS-450PLUS and TLS4 Series Consoles \(576047-439\)](#)



TLS-450PLUS Overview – Software Updates




Software Release Version 10.M

TLS-450PLUS and TLS4 Series Consoles

Purpose

This document announces the release of version 10.M software for the TLS-450PLUS and TLS4 series consoles.



▶ **Performance Enhancements**

Ongoing Improvements

- Version 10.M includes miscellaneous bug fixes and updates.

▶ **Software Upgrade Download – TLS-450PLUS, TLS4 Series Consoles**


Software upgrades are always free to download on our website at veeder.com/us/software-downloads.

▶ **Documentation**

For more information on the software download process, refer to [TLS-450PLUS/TLS4 Operator's Manual \(577014-110\)](#).

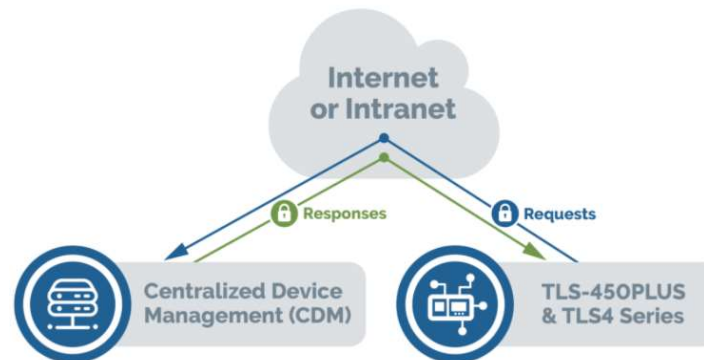
Support

- +1.814.695.4476 – Customer Service (International)
- +1.800.873.3313 – Customer Service
- +1.800.323.1799 – Technical Support
- +1.800.234.5350 – Customer Service
- customerservice@veeder.com




TLS-450PLUS Overview – Centralized Device Management (CDM)

- CDM is a server-based software suite to manage site networks
- CDM defends against catastrophic data loss and creates a secure operating environment with the latest software upgrades



TLS-450PLUS Overview – CDM Software Downloads

- Automate remote software downloads and upgrades for your entire network.
- Set software to automatically download and activate, or manually download and activate at your convenience.
- Schedule upgrades around your specific needs.
- Group consoles by location, site type, time zone, etc.



VIEW PACKAGE

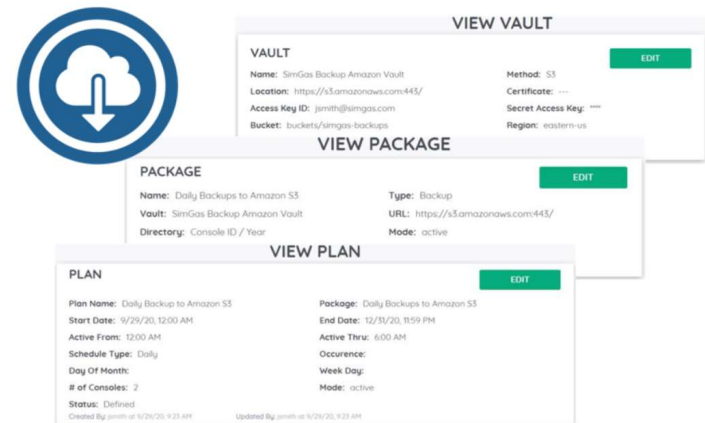
PACKAGE [EDIT](#)

Name: TLS-450PLUS 9M Software Release	Type: Software Download Package
URL: http://documents/CDM_Software_Packages	Mode: active
File Size: 338310454 Bytes	Checksum: ba5be52eb1a29b5334b5836a0360a0ad
Version: 9.M.223.21	Notes:

Updated By: tgonkirev at 9/1/2020, 11:32 AM Created By: tgonkirev at 9/1/2020, 11:32 AM

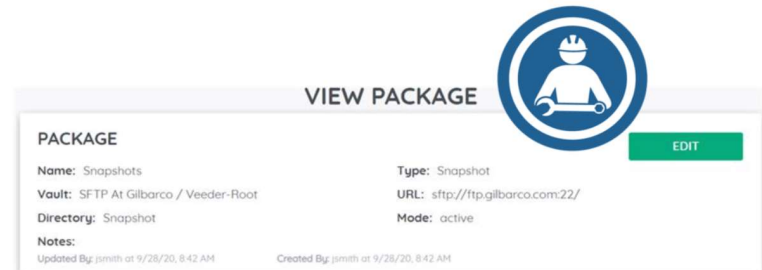
TLS-450PLUS Overview – CDM Console Backup

- Automatically backup TLS-450PLUS and TLS4 Series console data for any console in your network.
- Protect your site data to ensure proper compliance
- Use the backup file to configure new build sites



TLS-450PLUS Overview – CDM Console Snapshot

- A Console Snapshot captures the database and logs.
- Capture a Console Snapshot to provide useful information to Veeder-Root Technical Support.
- Easily troubleshoot site issues



The screenshot shows a user interface for viewing a package. At the top right, there is a circular icon of a person wearing a hard hat and holding a wrench. Below this icon is the text "VIEW PACKAGE". To the right of the icon is a green button labeled "EDIT". The main content area is titled "PACKAGE" and contains the following information:

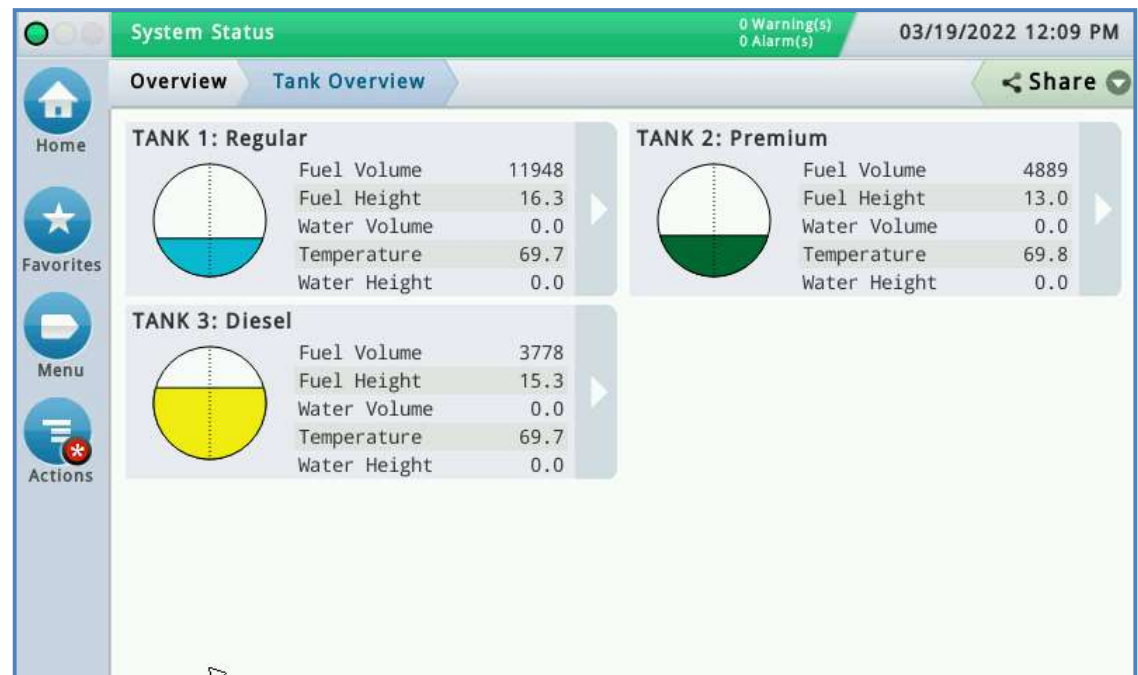
Name: Snapshots	Type: Snapshot
Vault: SFTP At Gilbarco / Veeder-Root	URL: sftp://ftp.gilbarco.com:22/
Directory: Snapshot	Mode: active
Notes:	
Updated By: jsmith at 9/28/20, 8:42 AM	Created By: jsmith at 9/28/20, 8:42 AM

TLS-450PLUS Overview – Touchscreen Navigation



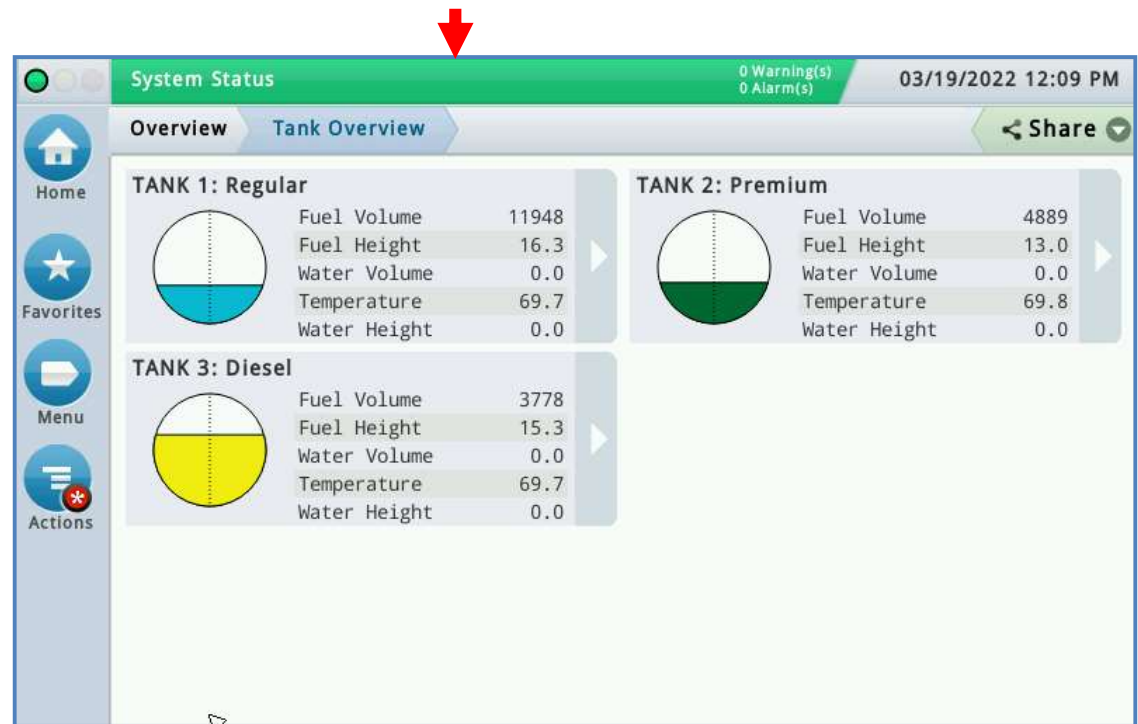
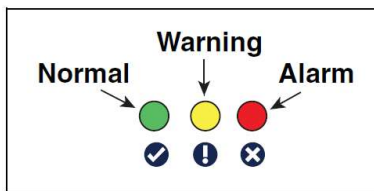
TLS-450PLUS Overview – Touchscreen Navigation

- Factory default Home Screen is Tank Overview
- Home Screen is user defined



TLS-450PLUS Overview – Touchscreen Navigation

- System Status bar displays current system status
 - ✓ Green
 - ✓ Yellow
 - ✓ Red
- Corresponds to console warning lights



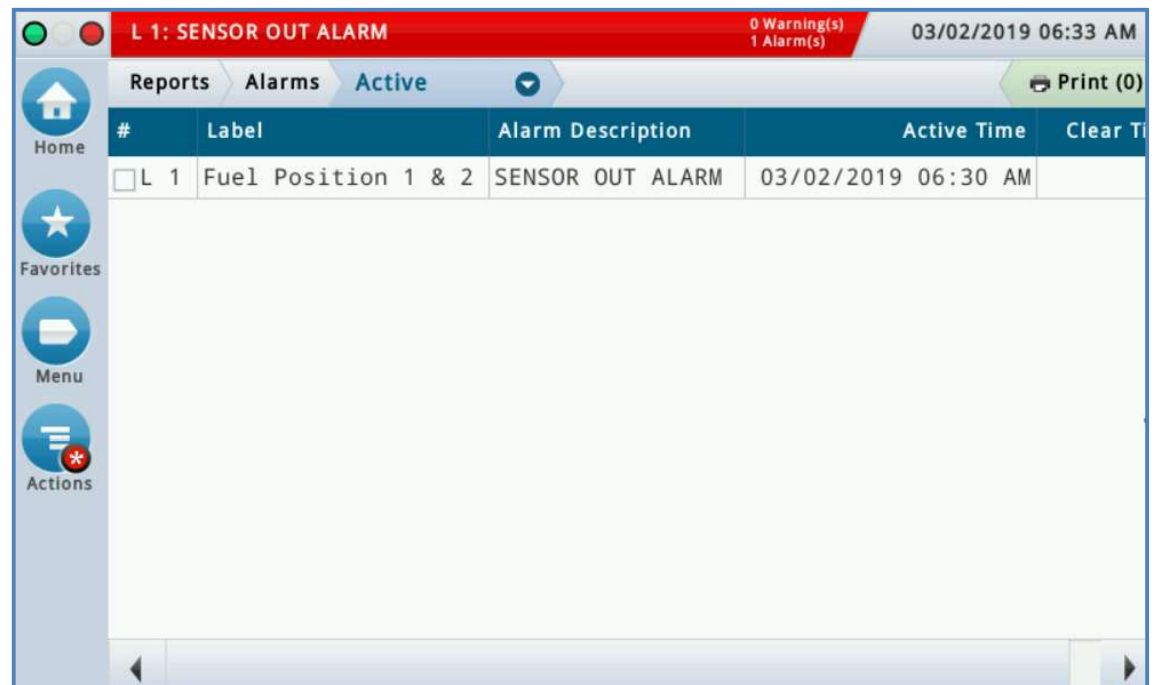
TLS-450PLUS Overview – Touchscreen Navigation

- When pressed will display Alarm and Warning History screen



TLS-450 PLUS Overview - Touchscreen

- All active Alarm and Warnings will be displayed

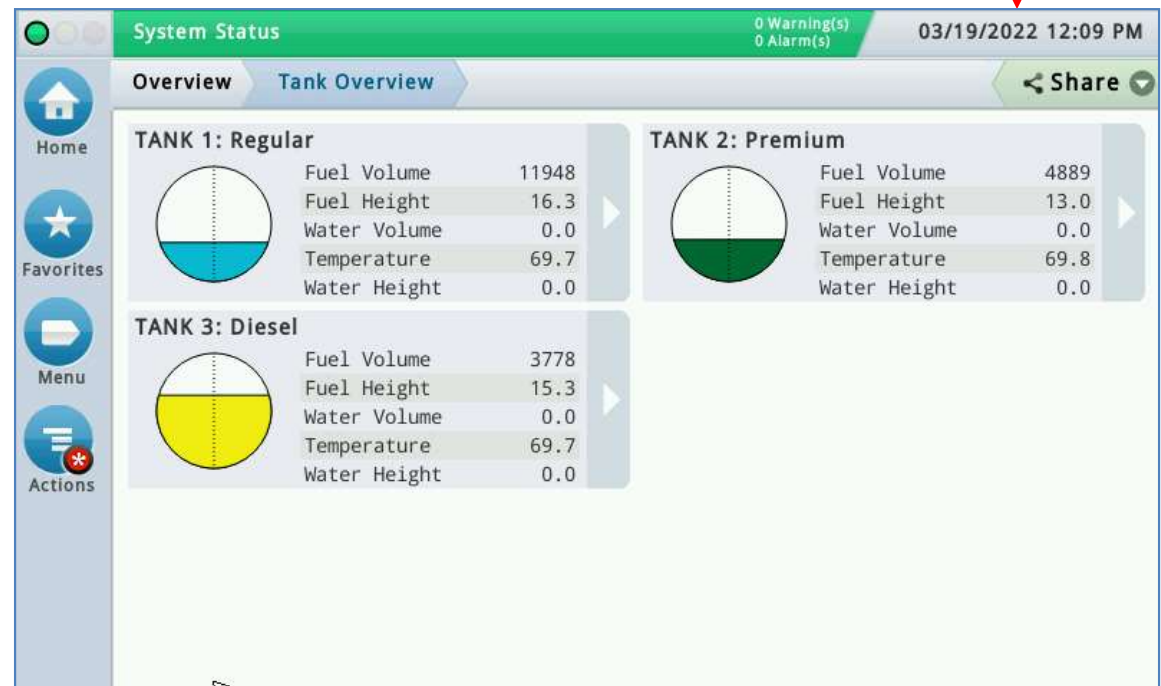


The screenshot displays the touchscreen interface for the TLS-450 PLUS. At the top, a red header bar shows "L 1: SENSOR OUT ALARM" on the left, "0 Warning(s) 1 Alarm(s)" in the center, and the date and time "03/02/2019 06:33 AM" on the right. Below the header, a navigation bar includes "Reports", "Alarms", and "Active" (selected), along with a "Print (0)" button. A sidebar on the left contains icons for "Home", "Favorites", "Menu", and "Actions". The main area features a table with the following data:

#	Label	Alarm Description	Active Time	Clear Ti
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	03/02/2019 06:30 AM	

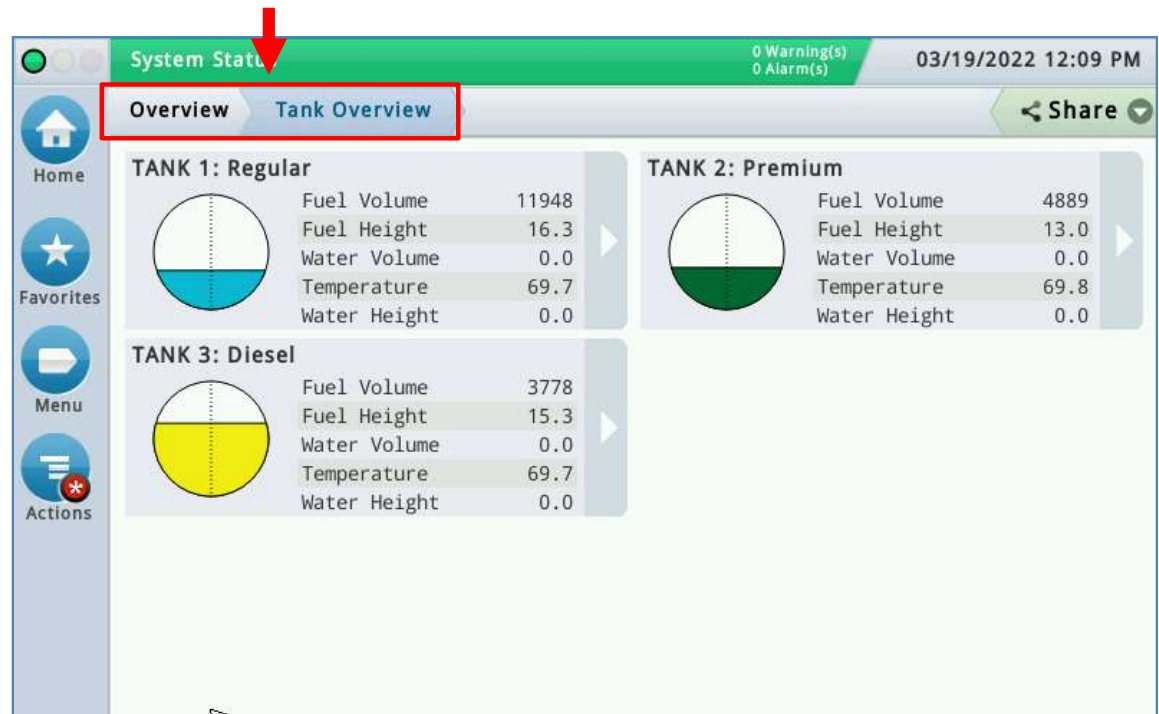
TLS-450PLUS Overview - Touchscreen

- System date and time



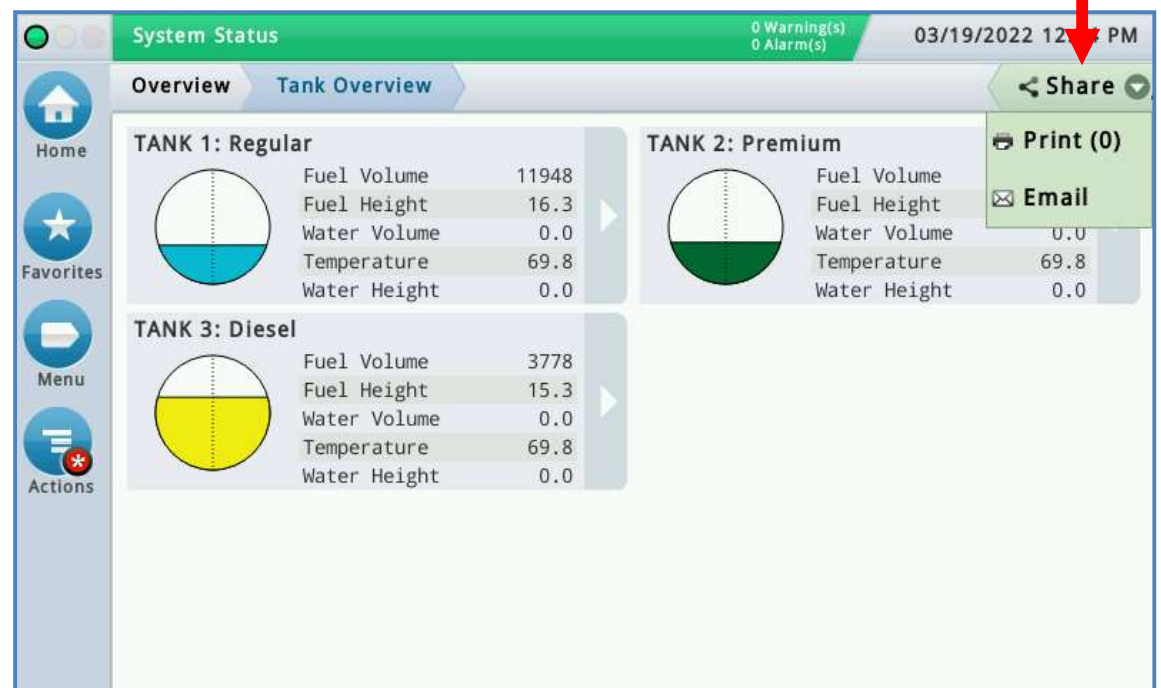
TLS-450 PLUS Overview - Touchscreen

- Breadcrumbs indicate what screen is currently displayed



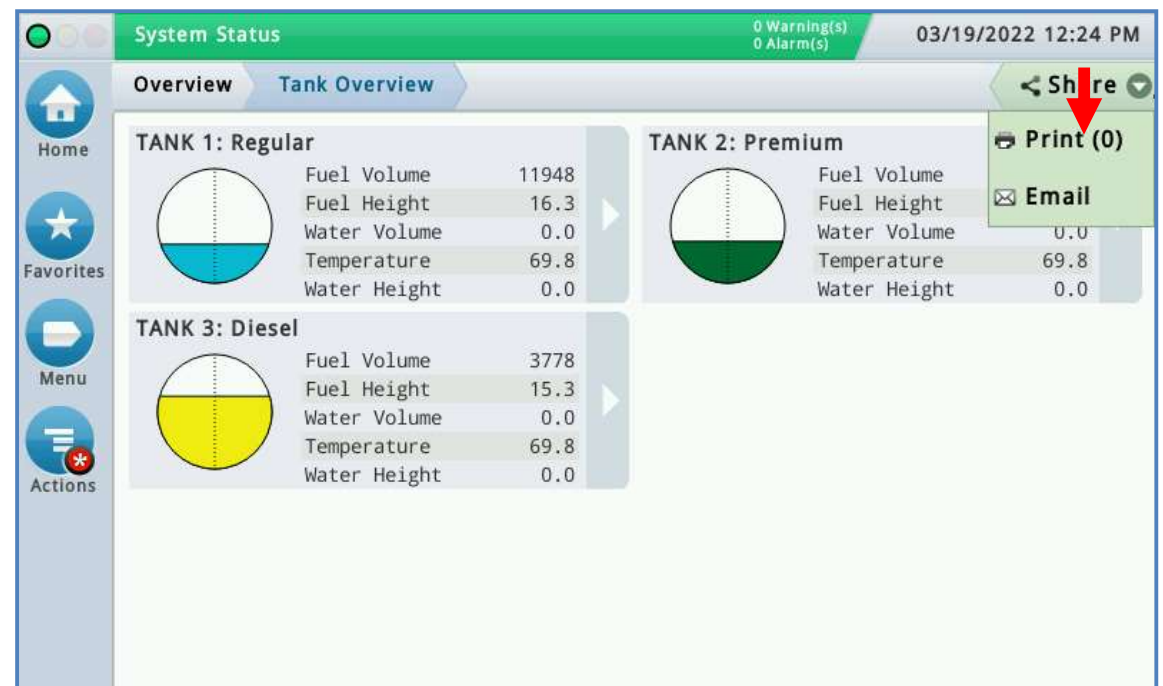
TLS-450 PLUS Overview - Touchscreen

- Share
 - Prints at console
 - Email



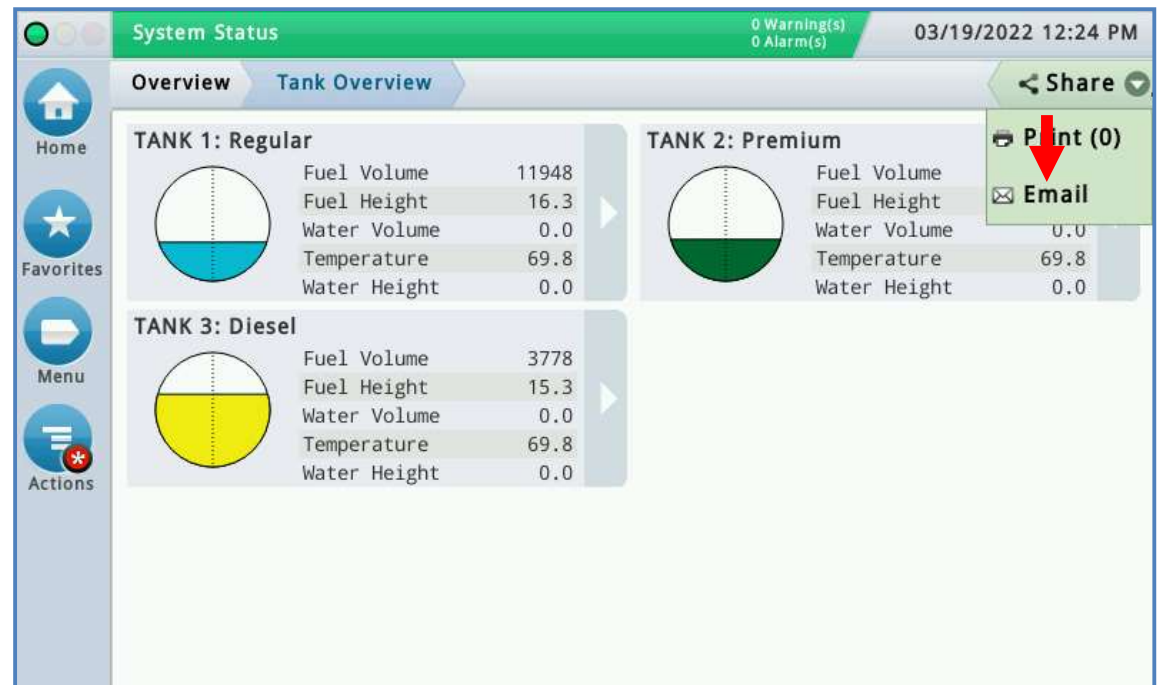
TLS-450 PLUS Overview - Touchscreen

- Share
 - Prints at console or configured network printer

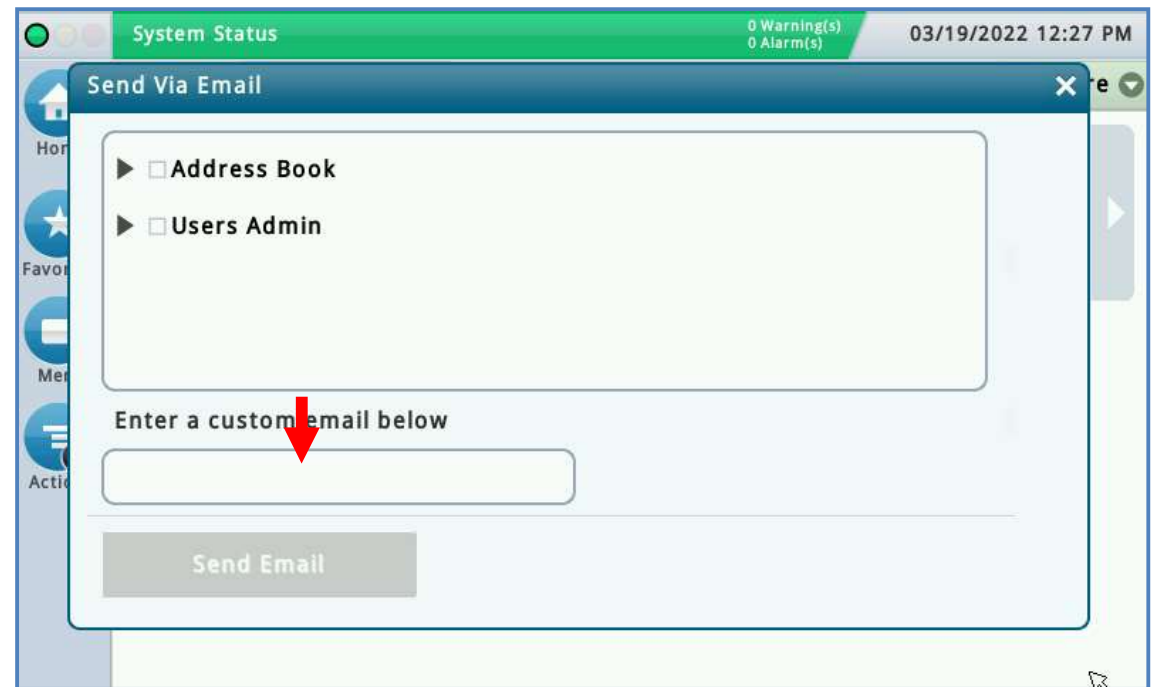


TLS-450 PLUS Overview - Touchscreen

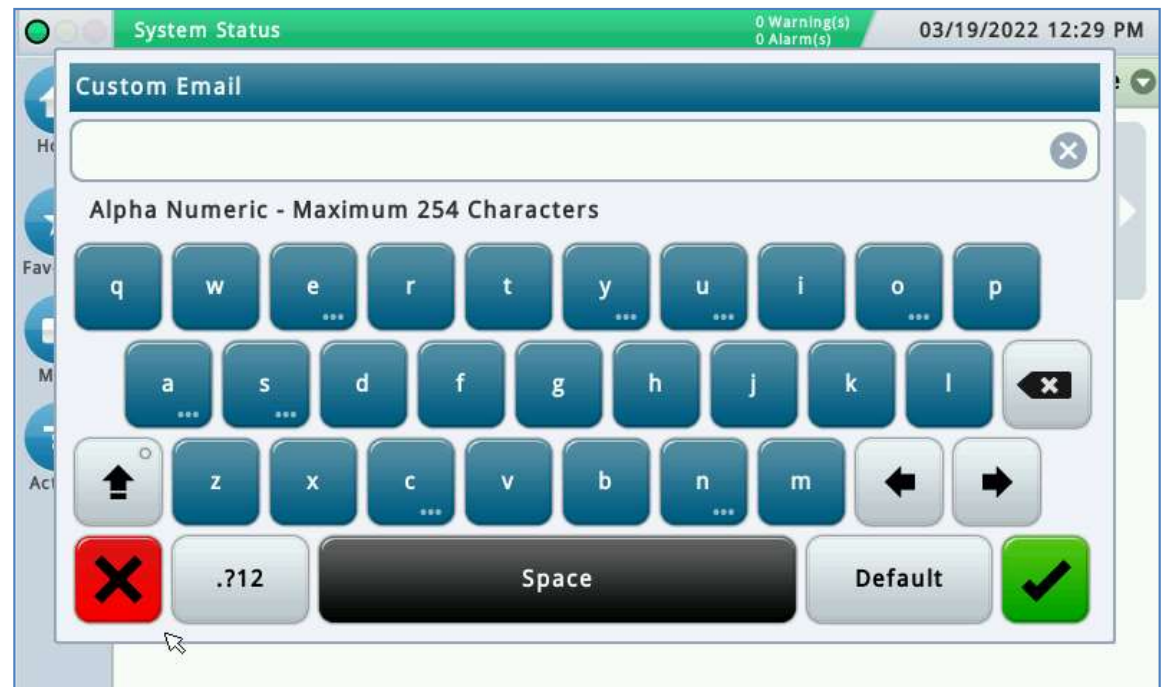
- Share
 - Email (if configured)



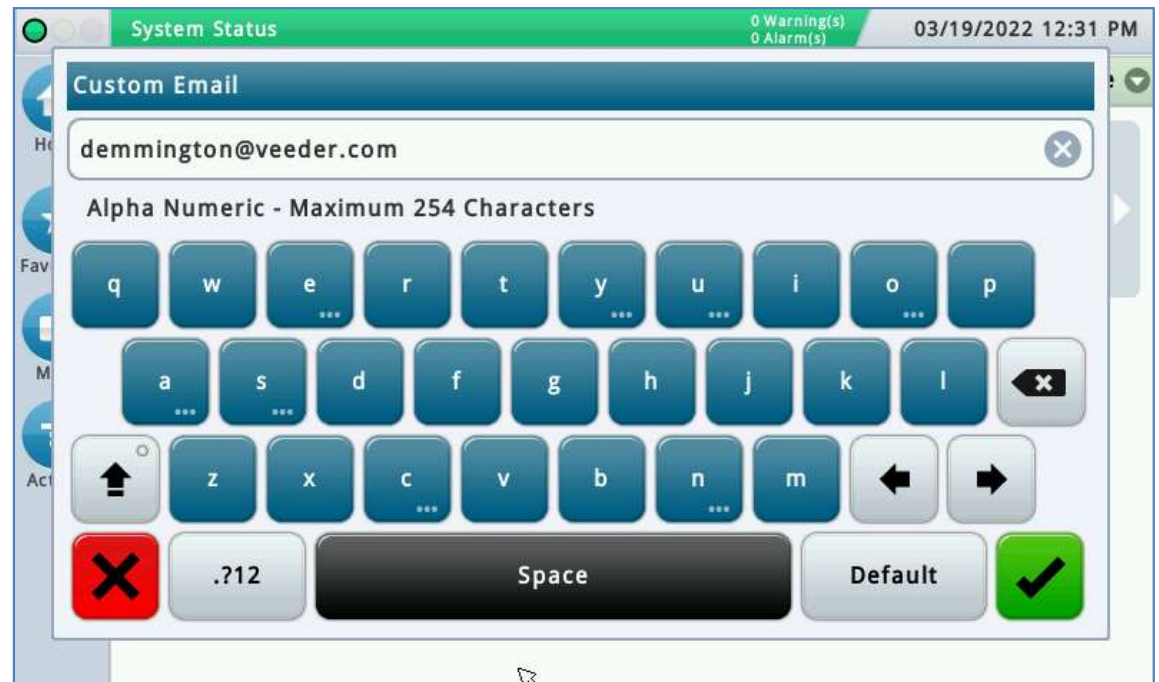
TLS-450 PLUS Overview - Touchscreen



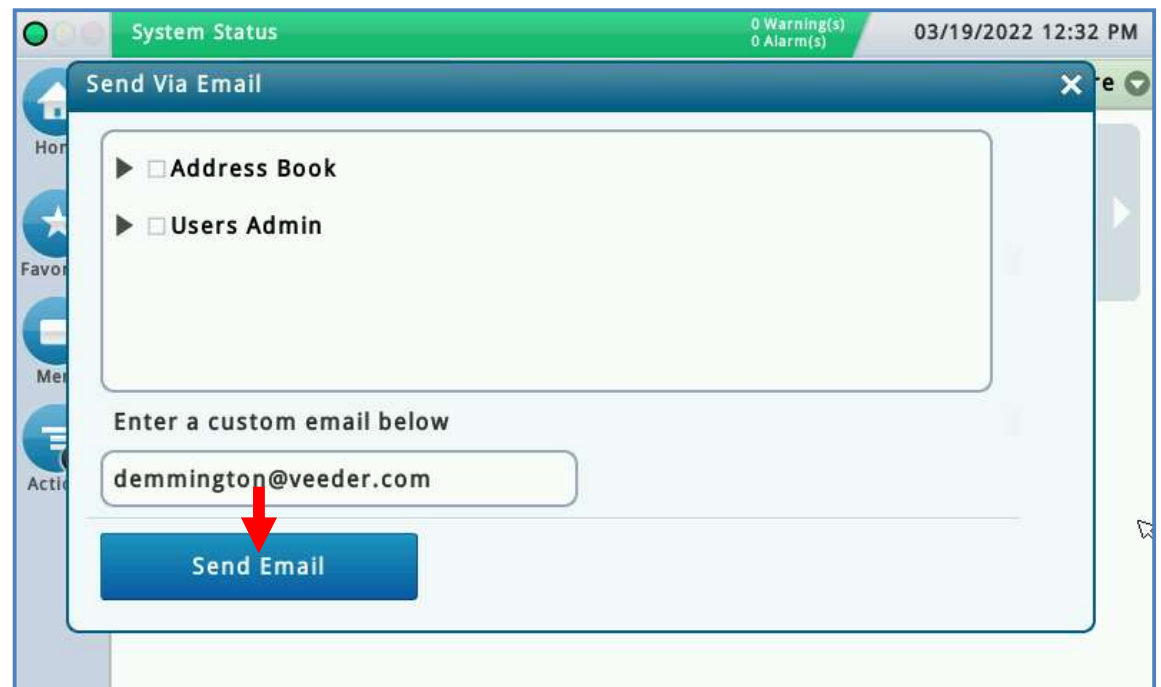
TLS-450 PLUS Overview - Touchscreen



TLS-450 PLUS Overview - Touchscreen





TLS-450 PLUS Overview - Touchscreen




TLS-450 PLUS Overview - Touchscreen

- Share
 - Email example:

[EXTERNAL] TLS-4 Share Email

 t1s105new <TLS-4@t1s105new.localdomain>
To  Emmington, David 8:26 AM

Retention Policy Junk Email (30 days) Expires 4/22/2022
 This item will expire in 30 days. To keep this item longer apply a different Retention Policy.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

MAR 23, 2022 8:26 AM

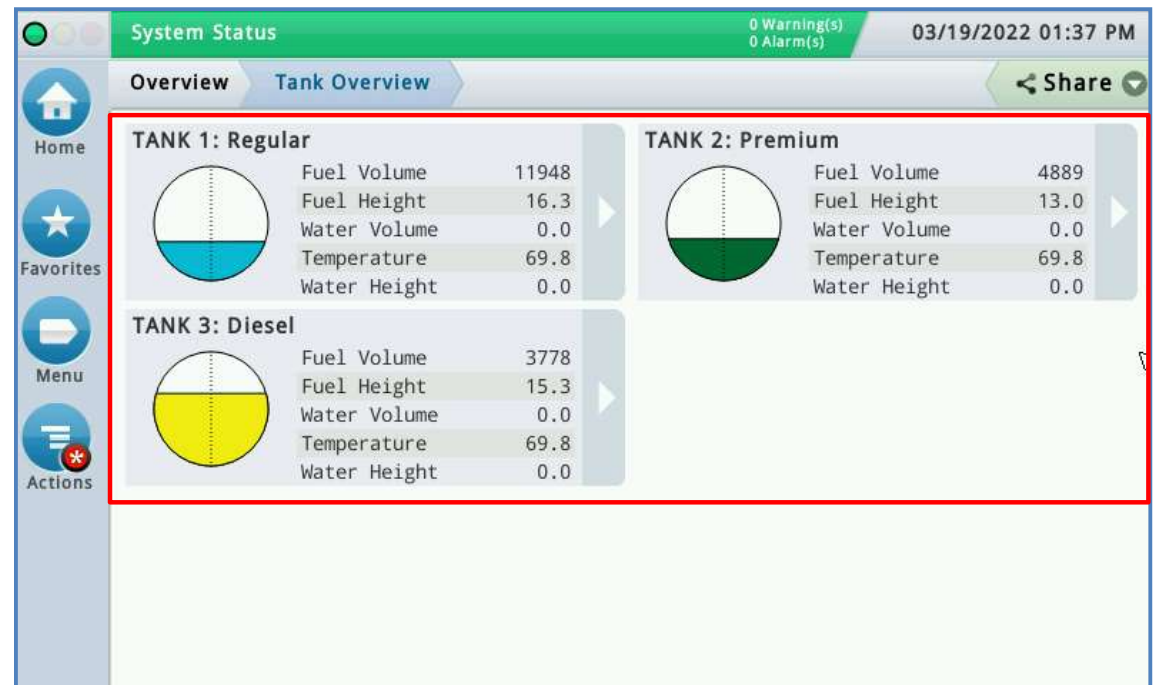
TLS_450 UST
VEEDER ROOT TEST LAB
COTATI BETA SITE
COTATI CALIFORNIA

Active Alarm Report

#	Label	Alarm Description	Active
Clear			
T	2 91 PREMIUM	DELIVERY NEEDED	03/23/22 8:15A
		ISD GROSS PRES WARN	03/20/22 11:56P

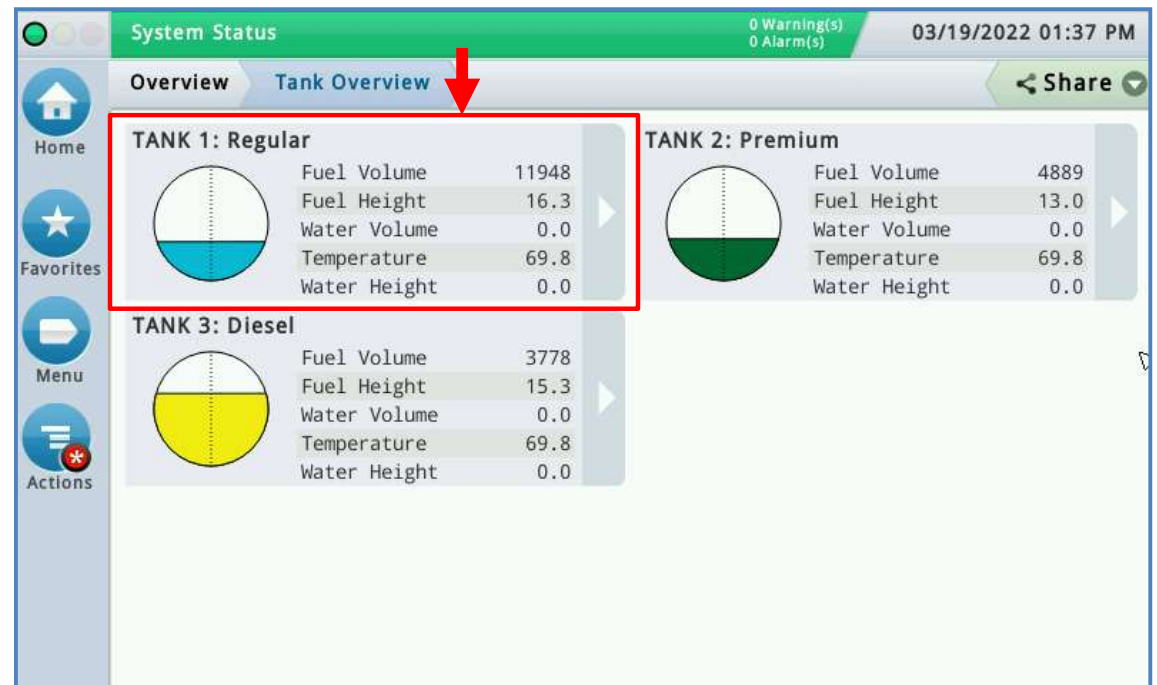
TLS-450 PLUS Overview - Touchscreen

- For all tanks, Tank Overview screen displays
 - ✓ Fuel volume and height
 - ✓ Ullage
 - ✓ Temperature
 - ✓ Water height



TLS-450 PLUS Overview - Touchscreen

- Tank Overview screen allows selection of one tank



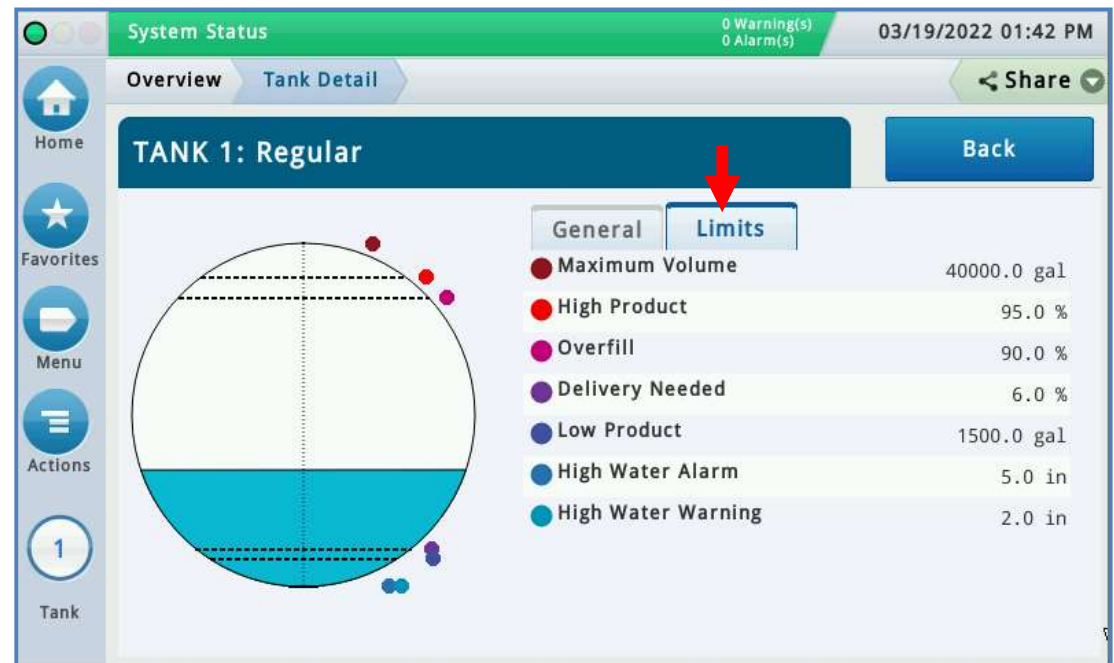
TLS-450 PLUS Overview - Touchscreen

- “General” individual tank selection displays additional tank info



TLS-450 PLUS Overview - Touchscreen

- Color coded "Limits" tank info displays programmed tank limits that will initiate warning or alarm



TLS-450 PLUS Overview - Touchscreen

- Favorites stores commonly used screens for quick access
- Similar to links in web browser
- Stores up to six Favorite screens



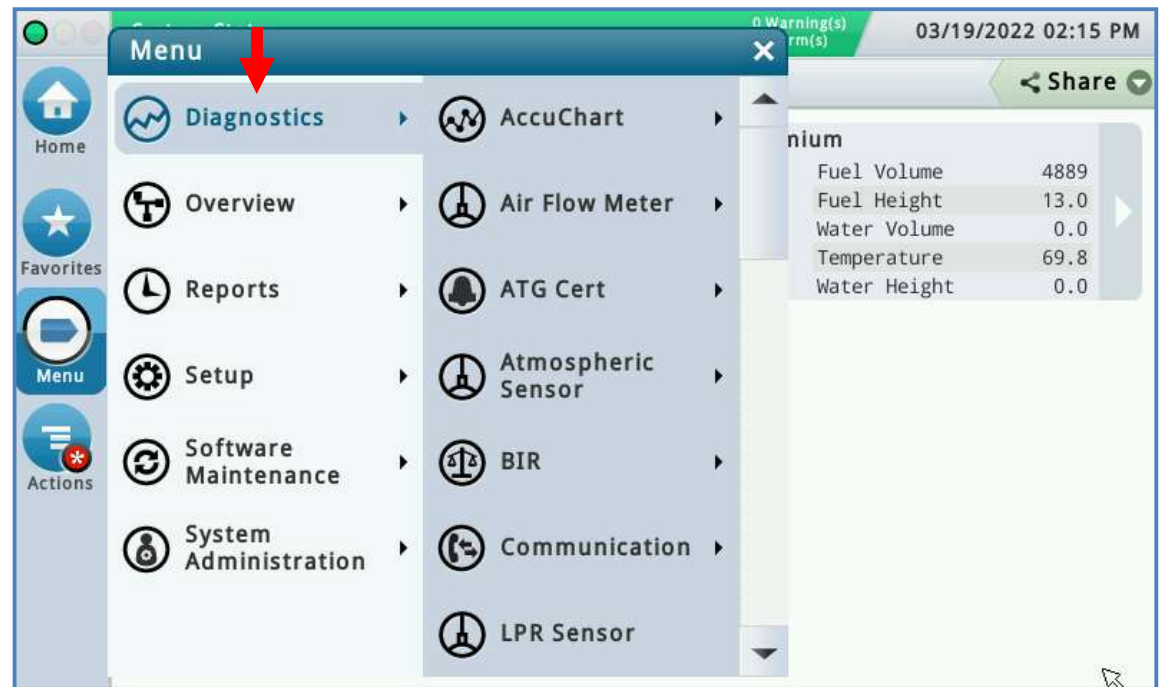
TLS-450 PLUS Overview - Touchscreen

- Menu selection provides access to:
 - ✓ System Setup Menus
 - ✓ Reports
 - ✓ Diagnostics
 - ✓ System Admin



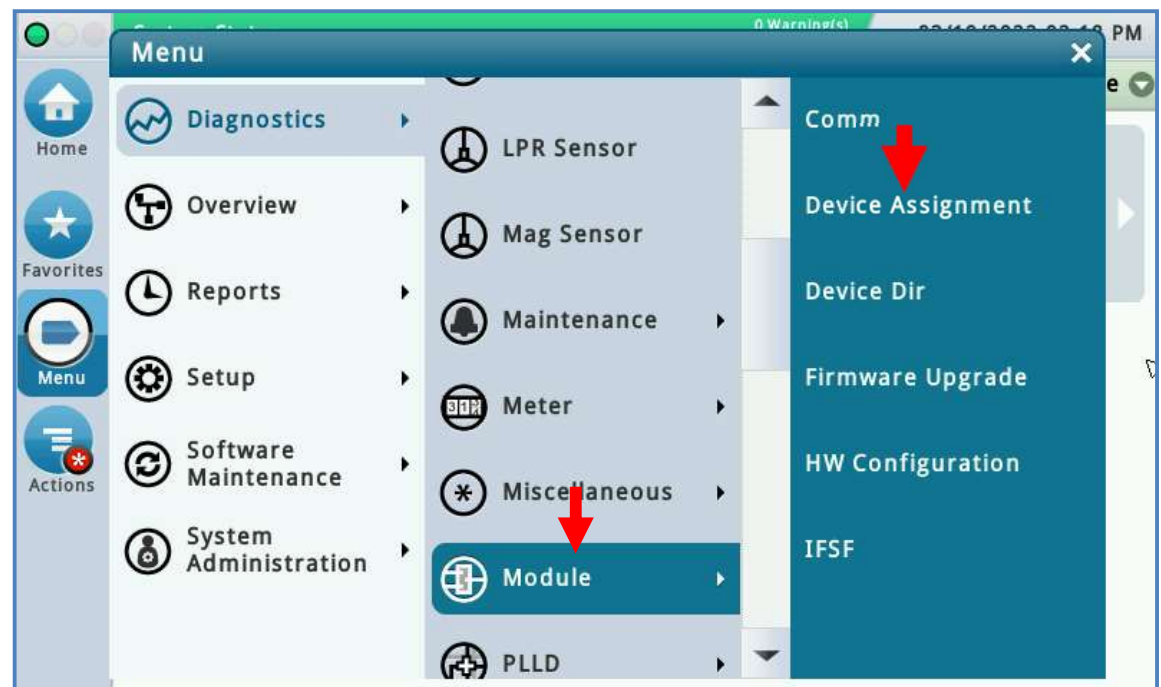
TLS-450 PLUS Overview - Touchscreen

- Diagnostics selection provides access to diagnostic overviews for:
 - ✓ Probes
 - ✓ Modules
 - ✓ Sensors
 - ✓ Relays and Inputs



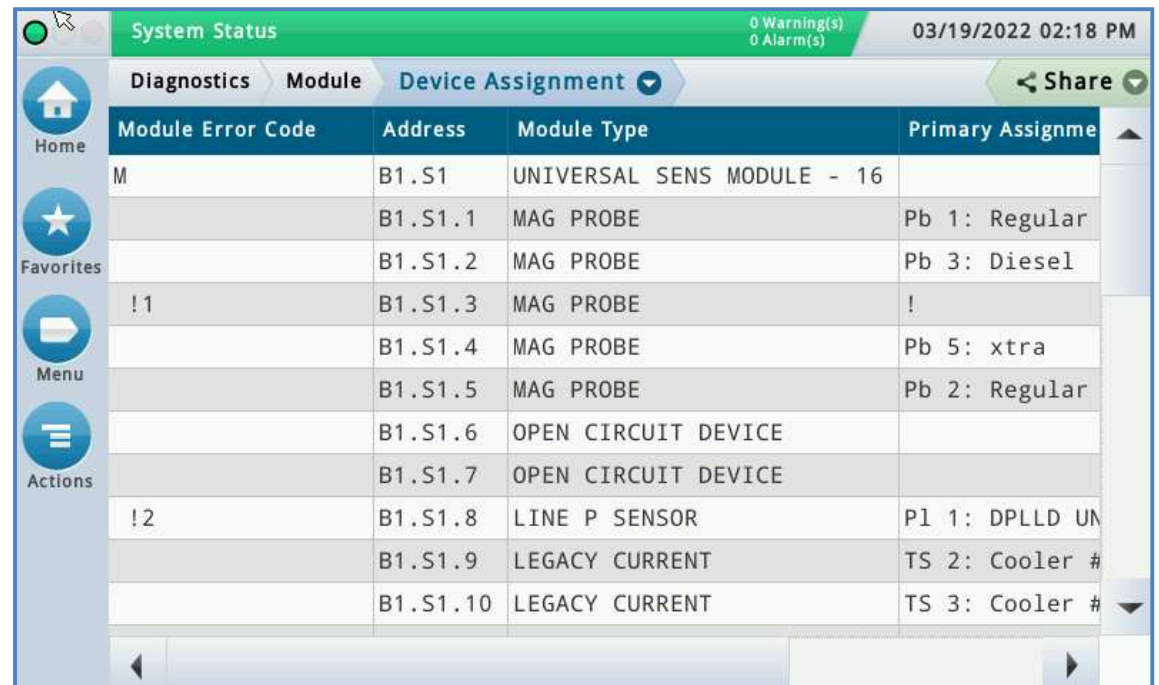
TLS-450 PLUS Overview - Touchscreen

- Diagnostics example:
 - ✓ Select Module
 - ✓ Select Device Assignment



TLS-450 PLUS Overview - Touchscreen

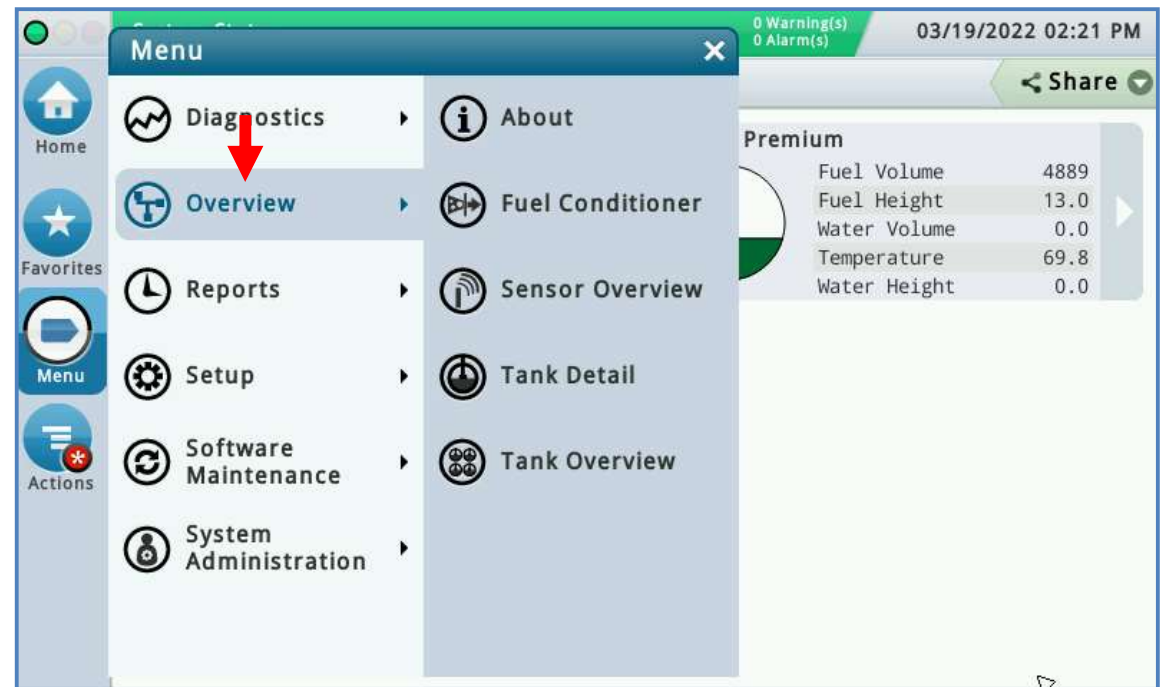
- Device Assignment example:



Module Error Code	Address	Module Type	Primary Assignme
M	B1.S1	UNIVERSAL SENS MODULE - 16	
	B1.S1.1	MAG PROBE	Pb 1: Regular
	B1.S1.2	MAG PROBE	Pb 3: Diesel
!1	B1.S1.3	MAG PROBE	!
	B1.S1.4	MAG PROBE	Pb 5: xtra
	B1.S1.5	MAG PROBE	Pb 2: Regular
	B1.S1.6	OPEN CIRCUIT DEVICE	
	B1.S1.7	OPEN CIRCUIT DEVICE	
!2	B1.S1.8	LINE P SENSOR	PI 1: DPLLD UN
	B1.S1.9	LEGACY CURRENT	TS 2: Cooler #
	B1.S1.10	LEGACY CURRENT	TS 3: Cooler #

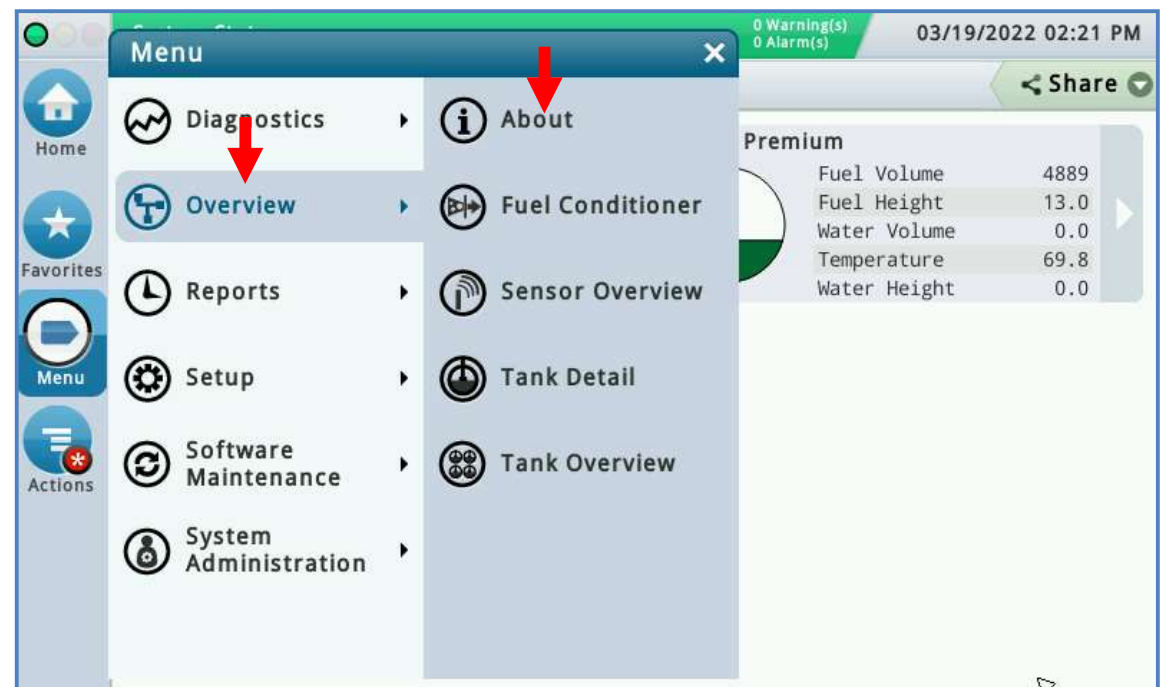
TLS-450 PLUS Overview - Touchscreen

- Overview Selection – provides general overview information



TLS-450 PLUS Overview - Touchscreen

- Overview - About



TLS-450 PLUS Overview - Touchscreen

- Overview – About Selection provides console information:
 - ✓ Series
 - ✓ Software Version
 - ✓ Installed Hardware info
 - ✓ Installed Features

System Status 0 Warning(s) 0 Alarm(s) 03/19/2022 02:22 PM

Overview About Share

Console Series # 8600 Created May 27 2021 20:17:51
Software Version #009.W.233.39.r0

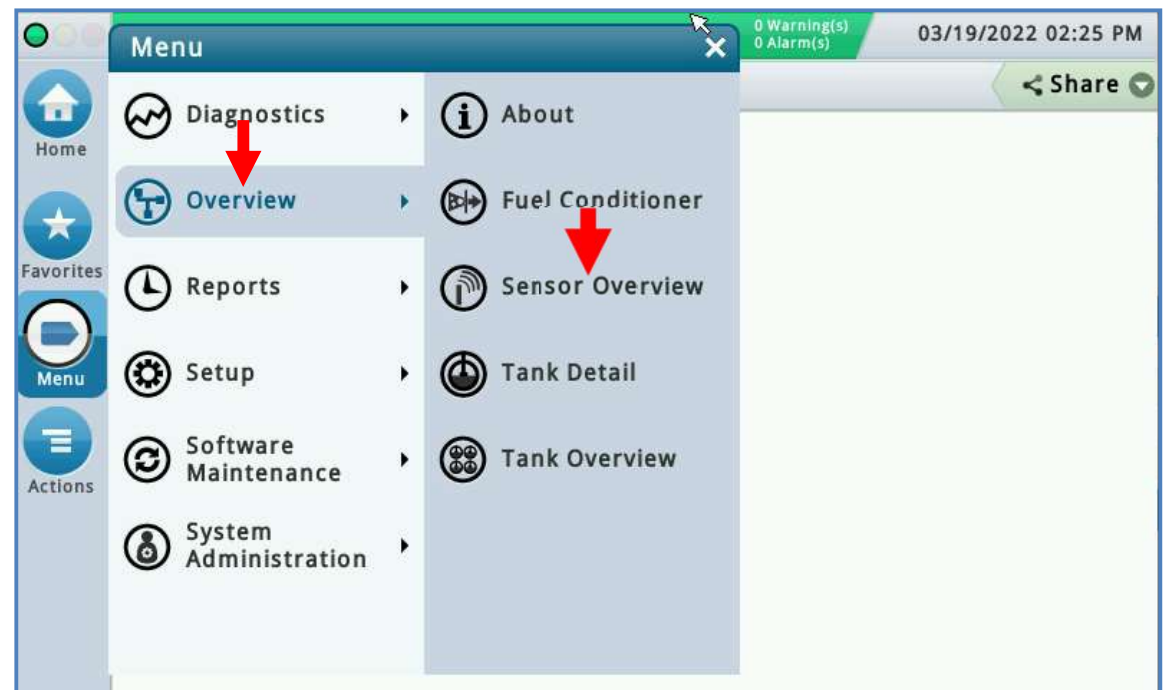
Hardware Description	Value
CPU S/N	15090099
CPU Board Type	Type 32
iButton S/N	000004680d830b
UNIVERSAL SENS MODULE (B1.S1) S/N	15090129

Installed Features

- ATG Functionality
- DataLogger Functionality
- Email Notification
- Custom On-Board Help
- Custom Alarms
- Web Enabled
- Extended Storage L2
- Business Inventory Reconciliation

TLS-450 PLUS Overview - Touchscreen

- Sensor - Overview



TLS-450 PLUS Overview - Touchscreen

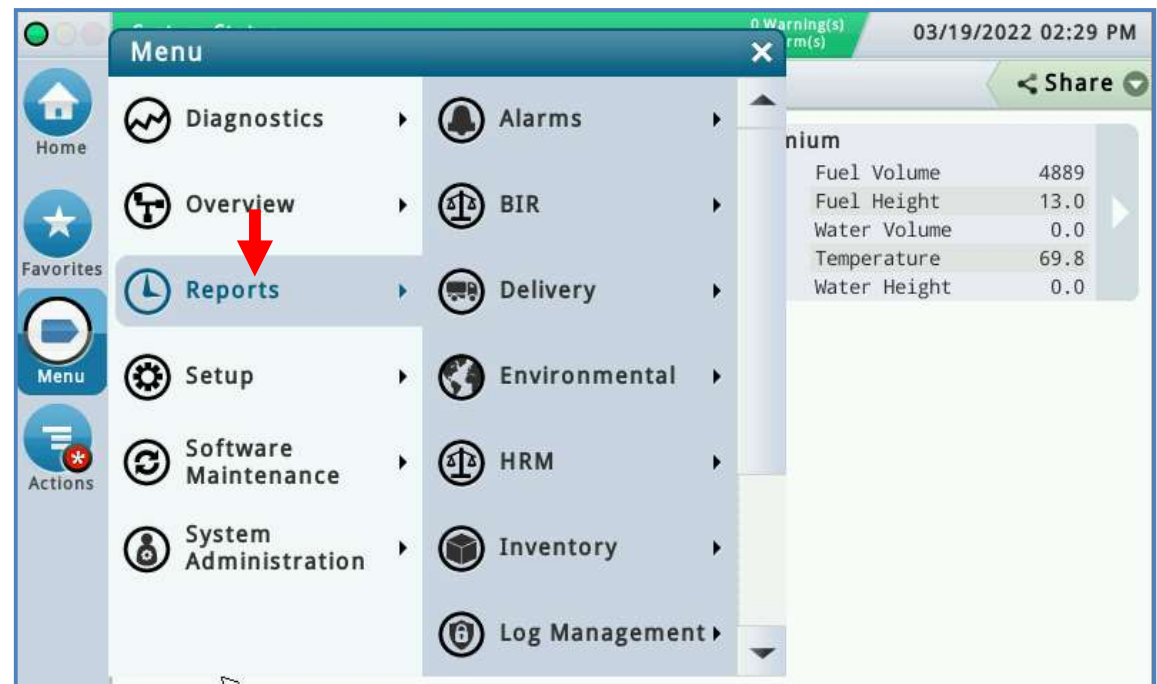
- Sensor Overview example:

The screenshot shows the 'System Status' interface on a touchscreen. The top bar indicates '0 Warning(s)' and '0 Alarm(s)' as of '03/19/2022 02:26 PM'. The main content area is titled 'Sensor Overview' and displays six liquid sensors in a 3x2 grid. Each sensor entry includes a status icon, a table with sensor details, and a share icon.

Sensor ID	Location	Status	Model	Category
LIQUID SENSOR 1	87 STP SUMP	NORMAL	Tri-State(Single Float)	STP Sump
LIQUID SENSOR 2	91 STP SUMP	NORMAL	Tri-State(Single Float)	STP Sump
LIQUID SENSOR 3	DIESEL SUMP	NORMAL	Tri-State(Single Float)	STP Sump
LIQUID SENSOR 4	87 ANNULAR	NORMAL	Tri-State(Single Float)	Annular Space
LIQUID SENSOR 5	91 ANNULAR	NORMAL	Tri-State(Single Float)	
LIQUID SENSOR 6	DIESEL ANNULAR	NORMAL	Tri-State(Single Float)	

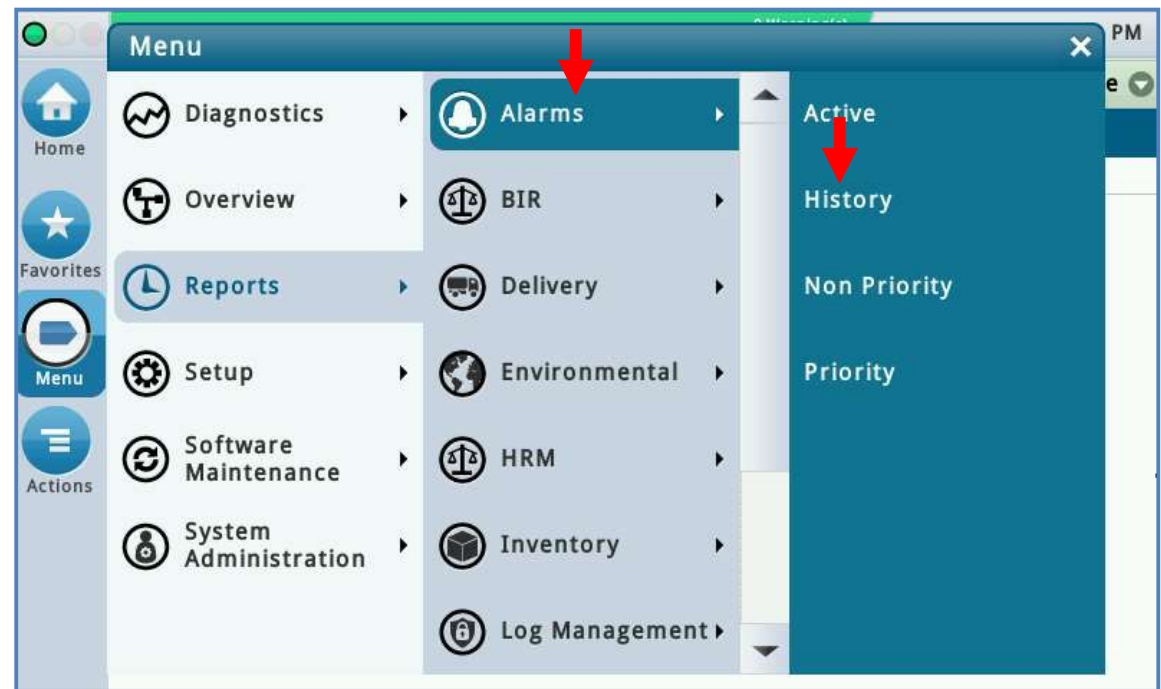
TLS-450 PLUS Overview - Touchscreen

- Reports selection provides access to report overviews for:
 - ✓ Alarms
 - ✓ Deliveries
 - ✓ Environmental
 - ✓ Inventory
 - ✓ More



TLS-450 PLUS Overview - Touchscreen

- Reports – Alarm selection provides access to report overviews for:
 - ✓ Active Alarms
 - ✓ Alarm History
 - ✓ Non Priority Alarms
 - ✓ Priority Alarms



TLS-450 PLUS Overview - Touchscreen

- Alarm History Report provides overview of all connected device alarm history:
 - ✓ Stores alarm history for 3 years

System Status 0 Warning(s) 0 Alarm(s) 02/28/2019 11:43 AM

Reports Alarms History Print (0)

33 Results » Show 25 results per page Page 1 of 2

From: 02/13/2019 11:42 AM To: 02/28/2019 11:42 AM

#	Label	Alarm Description	Active Time
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	02/27/2019 09:51 AM 02
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	02/27/2019 09:23 AM 02
<input type="checkbox"/> T 2	Diesel	OVERFILL ALARM	02/27/2019 07:17 AM 02
<input type="checkbox"/> T 1	Regular	OVERFILL ALARM	02/27/2019 07:17 AM 02
<input type="checkbox"/> T 1	Regular	HIGH PRODUCT ALARM	02/27/2019 07:17 AM 02
<input type="checkbox"/> T 2	Diesel	MAX PRODUCT ALARM	02/27/2019 07:17 AM 02
<input type="checkbox"/> T 2	Diesel	HIGH PRODUCT ALARM	02/27/2019 07:17 AM 02
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	02/27/2019 04:19 AM 02
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	02/27/2019 04:18 AM 02

TLS-450PLUS Overview - Touchscreen

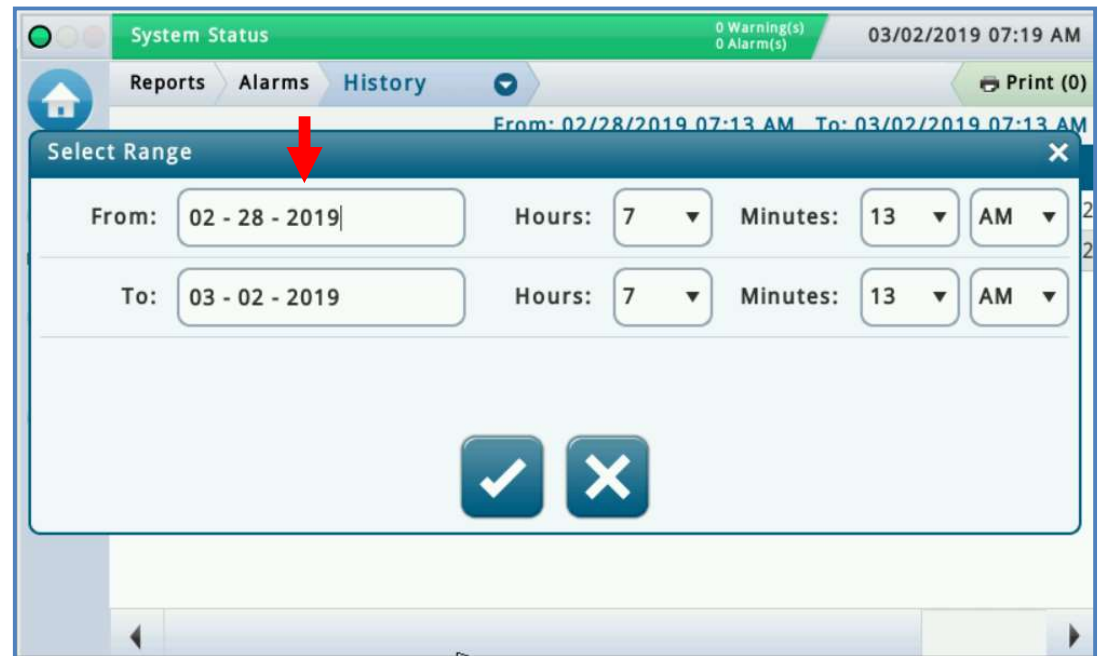
- Select Range provides date/time filter

The screenshot displays the TLS-450PLUS touchscreen interface. On the left, a vertical sidebar contains icons for Home, Favorites, Menu, and Actions. The 'Actions' menu is open, showing three options: 'Alarm Help', 'Select Range', and 'Help'. A red arrow points to the 'Select Range' option. The main display area shows a table of alarm data with columns for Alarm Description and Active Time. The table is filtered by date and time, showing results from 02/13/2019 11:42 AM to 02/28/2019 11:42 AM. The table contains several rows of alarm data, including 'SENSOR OUT ALARM' and 'OVERFILL ALARM'.

	Alarm Description	Active Time
& 2	SENSOR OUT ALARM	02/27/2019 09:51 AM 02
& 2	SENSOR OUT ALARM	02/27/2019 09:23 AM 02
	OVERFILL ALARM	02/27/2019 07:17 AM 02
	OVERFILL ALARM	02/27/2019 07:17 AM 02
	HIGH PRODUCT ALARM	02/27/2019 07:17 AM 02
	MAX PRODUCT ALARM	02/27/2019 07:17 AM 02
	HIGH PRODUCT ALARM	02/27/2019 07:17 AM 02
& 2	SENSOR OUT ALARM	02/27/2019 04:19 AM 02
& 2	SENSOR OUT ALARM	02/27/2019 04:18 AM 02

TLS-450PLUS Overview - Touchscreen

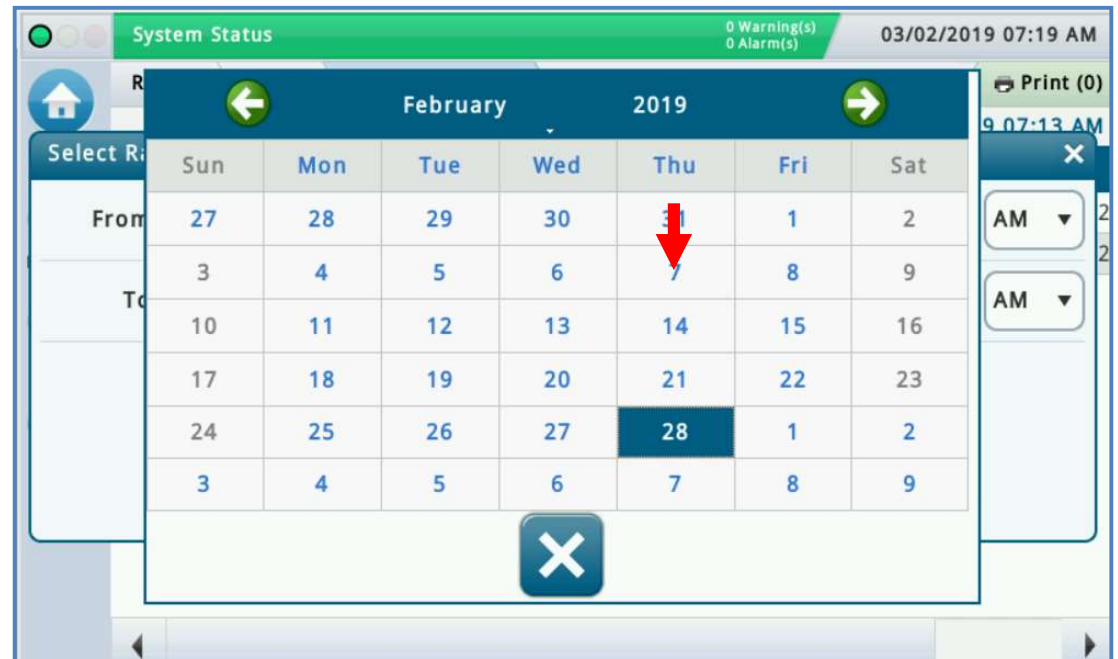
- Select date:



The screenshot displays the 'System Status' interface on a touchscreen. At the top, it shows 'System Status' with '0 Warning(s)' and '0 Alarm(s)', and the date '03/02/2019 07:19 AM'. Below this is a navigation bar with 'Reports', 'Alarms', and 'History' tabs. A 'Print (0)' button is visible on the right. A 'Select Range' dialog box is open, allowing the user to choose a date range. The 'From' field is set to '02 - 28 - 2019' and the 'To' field is set to '03 - 02 - 2019'. Both fields have dropdown menus for 'Hours' (set to 7) and 'Minutes' (set to 13), and a dropdown for 'AM' or 'PM'. A red arrow points to the 'Select Range' dialog box. At the bottom of the dialog, there are two buttons: a checkmark (confirm) and an 'X' (cancel).

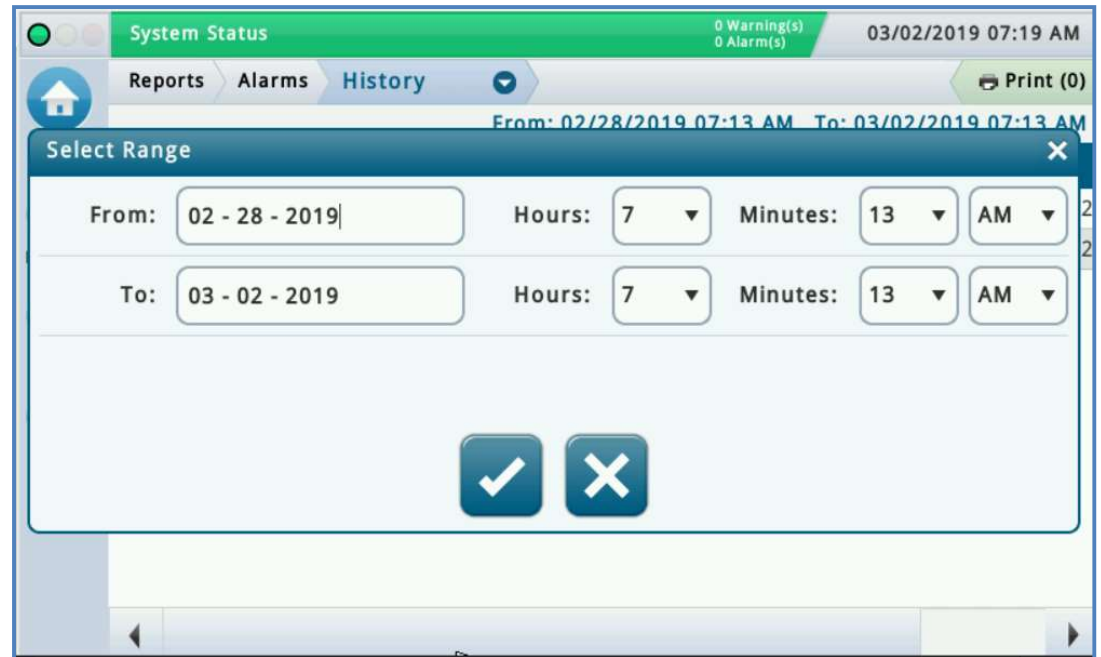
TLS-450PLUS Overview - Touchscreen

- Select Range provides date/time filter



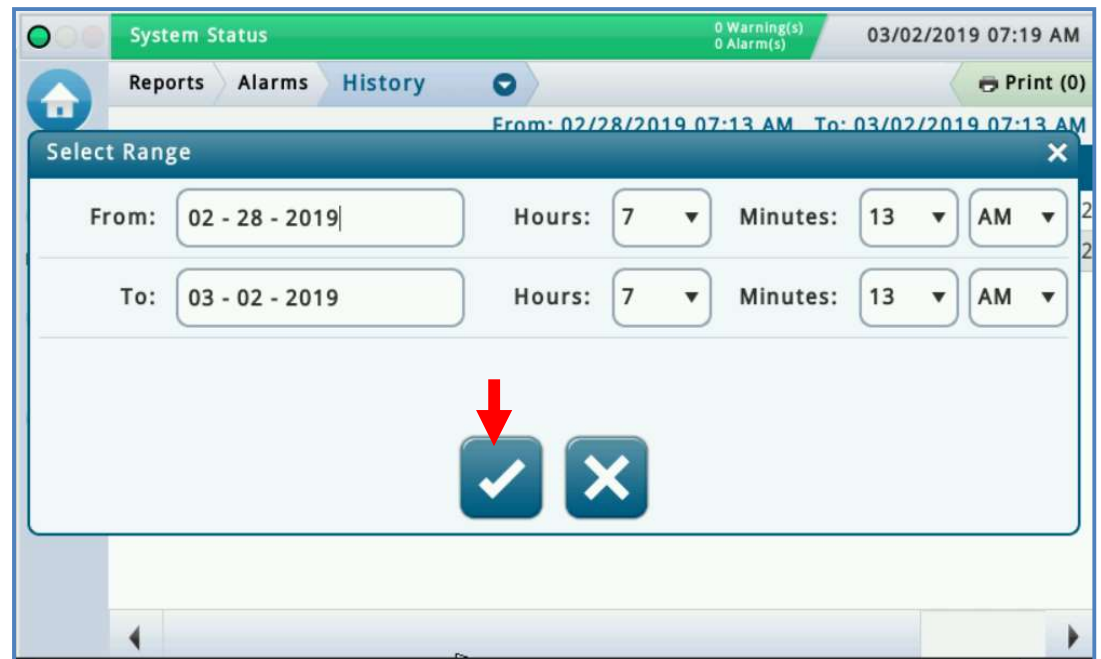
TLS-450PLUS Overview - Touchscreen

- Select time:




TLS-450PLUS Overview - Touchscreen

- Confirm:



TLS-450PLUS Overview - Touchscreen

- Filtered results:



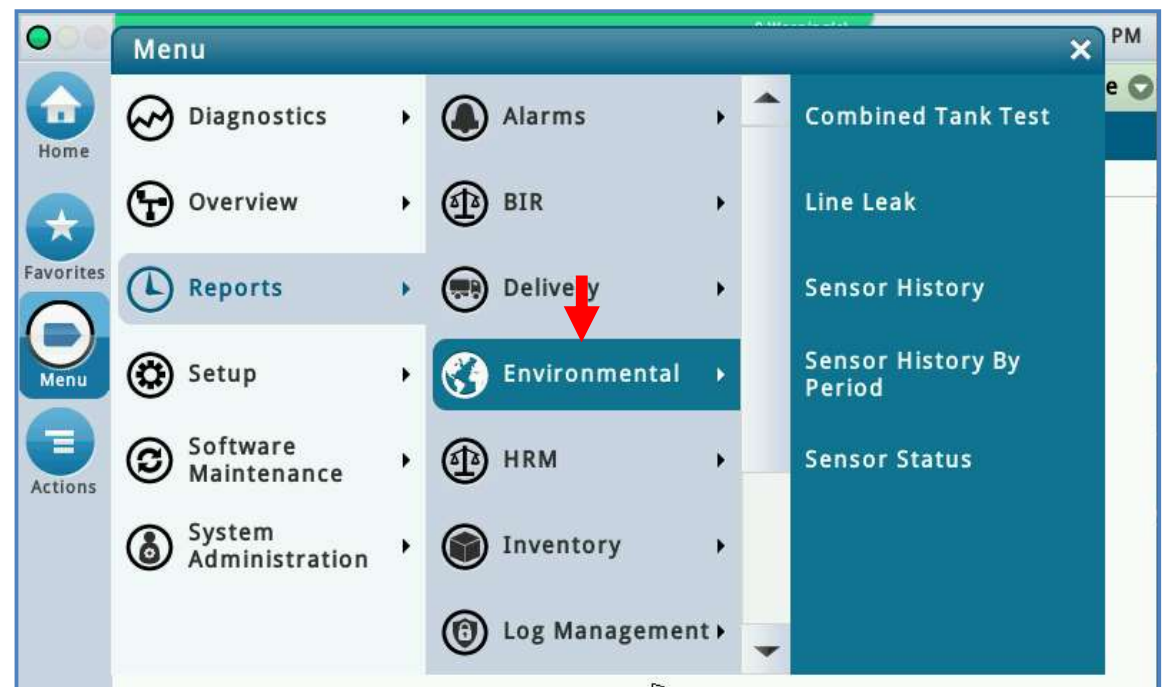
The screenshot displays the 'System Status' interface on a touchscreen. At the top, it shows 'System Status' with '0 Warning(s)' and '0 Alarm(s)' in green text, and the date and time '03/02/2019 07:20 AM'. Below this is a navigation bar with 'Reports', 'Alarms', and 'History' tabs, and a 'Print (0)' button. A date range filter is set to 'From: 02/28/2019 07:13 AM To: 03/02/2019 07:13 AM'. The main area contains a table with the following data:

#	Label	Alarm Description	Active Time
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	03/02/2019 06:30 AM
<input type="checkbox"/> L 1	Fuel Position 1 & 2	SENSOR OUT ALARM	02/28/2019 12:38 PM

The interface also features a left sidebar with icons for Home, Favorites, Menu, and Actions.

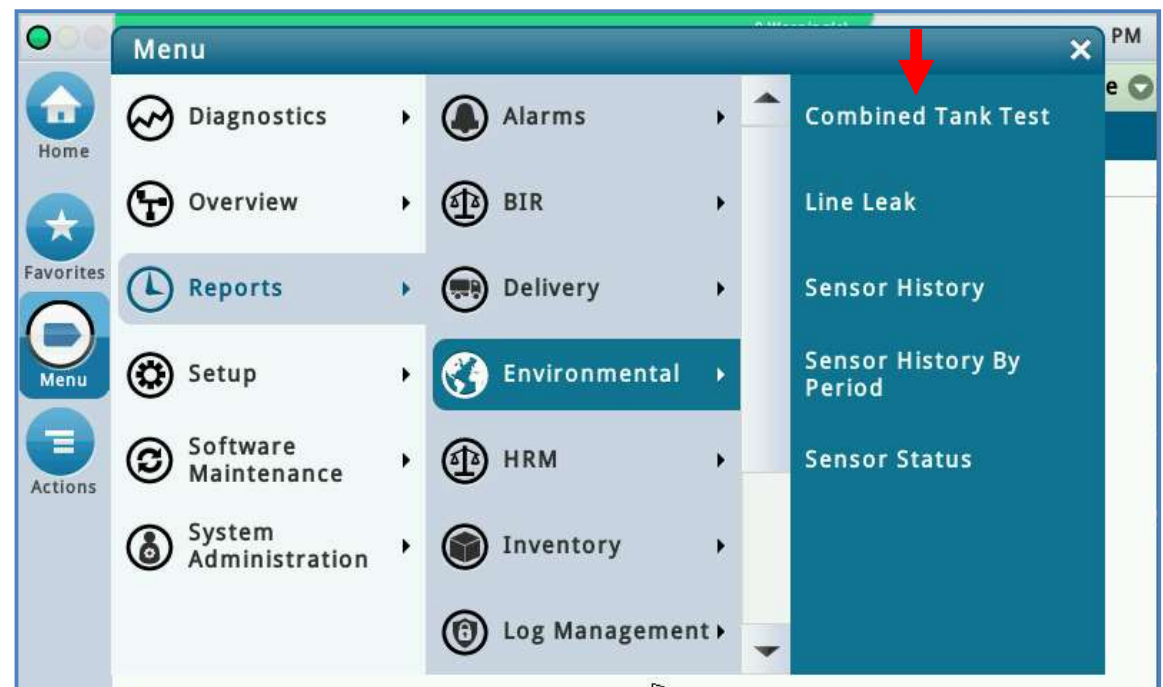
TLS-450 PLUS Overview - Touchscreen

- Environmental selection provides:
 - ✓ Tank test results
 - ✓ Line Leak test results
 - ✓ Sensor History
 - ✓ Sensor Status



TLS-450 PLUS Overview - Touchscreen

- Environmental selection provides:
 - ✓ Tank test results
 - ✓ Line Leak test results
 - ✓ Sensor History
 - ✓ Sensor Status



TLS-450 PLUS Overview - Touchscreen

- Tank Test results:

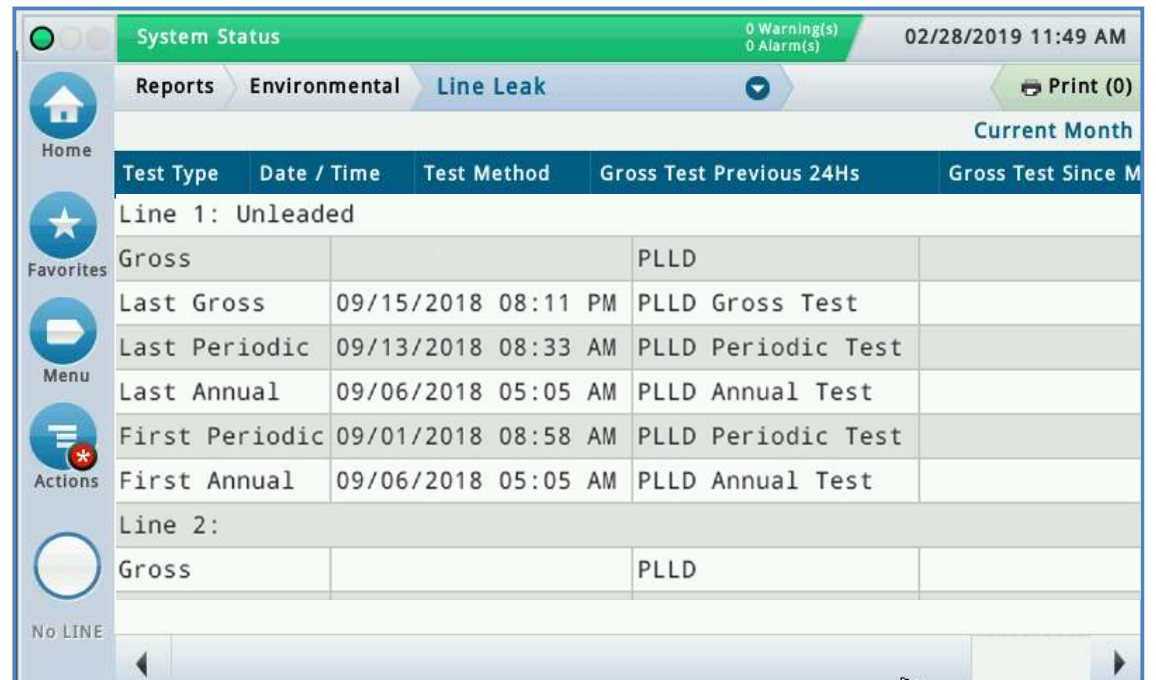
Report Type	Date & Time	Test Method	Total Hours	Ave
TANK 1: Regular				
LAST GROSS	07/07/2020 01:00 AM	SLD Gross Test		
LAST ANNUAL	05/30/2020 01:00 AM	SLD Annual Test	3	
FULLEST ANNUAL	03/22/2020 04:00 AM	SLD Annual Test	3	
LAST PERIODIC	05/30/2020 01:00 AM	SLD Periodic Test	3	
FULLEST PERIODIC	05/25/2020 01:00 AM	SLD Periodic Test	3	
FULLEST PERIODIC	04/10/2020 04:00 AM	SLD Periodic Test	3	
FULLEST PERIODIC	03/22/2020 04:00 AM	SLD Periodic Test	3	

TLS-450 PLUS Overview - Touchscreen



TLS-450PLUS Overview - Touchscreen

- Line Test results:

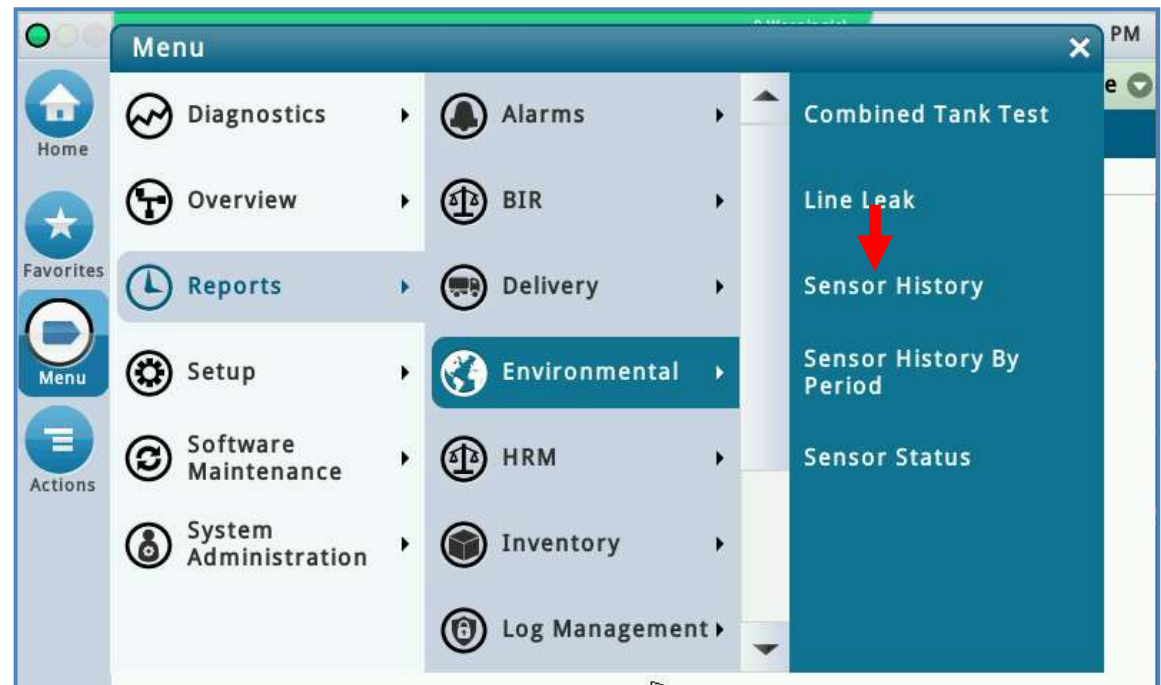


The screenshot displays the 'System Status' interface on a touchscreen. At the top, it shows 'System Status' with '0 Warning(s)' and '0 Alarm(s)', and the date/time '02/28/2019 11:49 AM'. Below this is a navigation bar with 'Reports', 'Environmental', and 'Line Leak' (selected), along with a 'Print (0)' button. A sidebar on the left contains icons for Home, Favorites, Menu, Actions, and No LINE. The main area shows a table of test results for 'Line 1: Unleaded' for the 'Current Month'. The table has columns for Test Type, Date / Time, Test Method, Gross Test Previous 24Hs, and Gross Test Since M.

Test Type	Date / Time	Test Method	Gross Test Previous 24Hs	Gross Test Since M
Line 1: Unleaded				
Gross			PLLD	
Last Gross	09/15/2018 08:11 PM	PLLD Gross Test		
Last Periodic	09/13/2018 08:33 AM	PLLD Periodic Test		
Last Annual	09/06/2018 05:05 AM	PLLD Annual Test		
First Periodic	09/01/2018 08:58 AM	PLLD Periodic Test		
First Annual	09/06/2018 05:05 AM	PLLD Annual Test		
Line 2:				
Gross			PLLD	

TLS-450 PLUS Overview - Touchscreen

- Sensor History



TLS-450 PLUS Overview - Touchscreen

- Sensor History – Current Month

T 1: DELIVERY NEEDED 4 Warning(s) 7 Alarm(s) Nov 26 2022 05:25 PM

Reports Environmental Sensor History Share

6 Results » Show 25 results per page Page 1 of 1

Current Month

#	Sensor Location	Status	Active Time	Cl
L 1	87 STP SUMP	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
L 2	91 STP SUMP	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
L 3	DIESEL SUMP	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
L 4	87 ANNULAR	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
L 5	91 ANNULAR	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
L 6	DIESEL ANNULAR	SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0

TLS-450 PLUS Overview - Touchscreen

- Results can be filtered

The screenshot displays the 'Sensor History' section of the TLS-450 PLUS touchscreen interface. A vertical sidebar on the left contains navigation icons for Home, Favorites, Menu, Actions (highlighted with a red arrow), and Sensors. An 'Actions' menu is open, showing options for 'Select Range' and 'Help', with a red arrow pointing to the 'Select Range' option. The main area shows a table of sensor history data for the current month, with columns for status, active time, and other details. The table contains six rows of 'SENSOR OUT ALARM' events, all occurring on Nov 01 2022 at 09:12 PM. The interface also shows a 'Share' button, a 'Page 1 of 1' indicator, and a '4 Warning(s) 7 Alarm(s)' notification at the top right.

Status	Active Time	Cl
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0
SENSOR OUT ALARM	Nov 01 2022 09:12 PM	Nov 01 2022 0

TLS-450 PLUS Overview - Touchscreen

The screenshot displays the TLS-450 PLUS touchscreen interface. At the top, the status bar shows 'T 1: DELIVERY NEEDED', '4 Warning(s)', '7 Alarm(s)', and the date/time 'Nov 26 2022 05:33 PM'. The main navigation bar includes 'Reports', 'Environmental', and 'Sensor History'. Below this, a summary bar indicates '6 Results', 'Show 25 results per page', and 'Page 1 of 1'. A 'Share' button is visible on the right. A left sidebar contains icons for Home, Favorites, Menu, Actions, and Sensors. The main content area shows a table of sensor data with columns for '#', 'Sensor Loc', 'Time', and 'Cl'. A 'Select Range' dialog box is overlaid on the table, with 'Period' set to 'Month' and 'Range' set to 'Previous'. The dialog box has a checkmark button and an 'X' button.

#	Sensor Loc	Time	Cl
L 1	87 STP S	:12 PM Nov 01 2022	0
L 2	91 STP S	:12 PM Nov 01 2022	0
L 3	DIESEL S	:12 PM Nov 01 2022	0
L 4	87 ANNUL	:12 PM Nov 01 2022	0
L 5	91 ANNUL	:12 PM Nov 01 2022	0
L 6	DIESEL A	:12 PM Nov 01 2022	0

TLS-450 PLUS Overview - Touchscreen

The screenshot displays the TLS-450 PLUS touchscreen interface. At the top, the status bar shows 'T 1: DELIVERY NEEDED', '4 Warning(s)', '7 Alarm(s)', and the date/time 'Nov 26 2022 05:32 PM'. The main navigation bar includes 'Reports', 'Environmental', and 'Sensor History'. Below this, there are controls for '6 Results', 'Show 25 results per page', and 'Page 1 of 1'. A 'Share' button is visible on the right. The left sidebar contains icons for Home, Favorites, Menu, Actions, and All Sensors. The main content area shows a table of sensor history data. A 'Select Range' dialog box is overlaid on the table, with 'Period' set to 'Month' and 'Range' set to 'Current'. A red arrow points to the 'Previous' option in the range dropdown menu.

#	Sensor Loc	Time	Cl
L 1	87 STP S	:12 PM Nov 01 2022 0	
L 2	91 STP S	:12 PM Nov 01 2022 0	
L 3	DIESEL S	:12 PM Nov 01 2022 0	
L 4	87 ANNUL	:12 PM Nov 01 2022 0	
L 5	91 ANNUL	:12 PM Nov 01 2022 0	
L 6	DIESEL A	:12 PM Nov 01 2022 0	

TLS-450 PLUS Overview - Touchscreen

T 2: DELIVERY NEEDED 4 Warning(s) 7 Alarm(s) Nov 26 2022 05:35 PM

Reports Environmental Sensor History Share

6 Results » Show 25 results per page Page 1 of 1

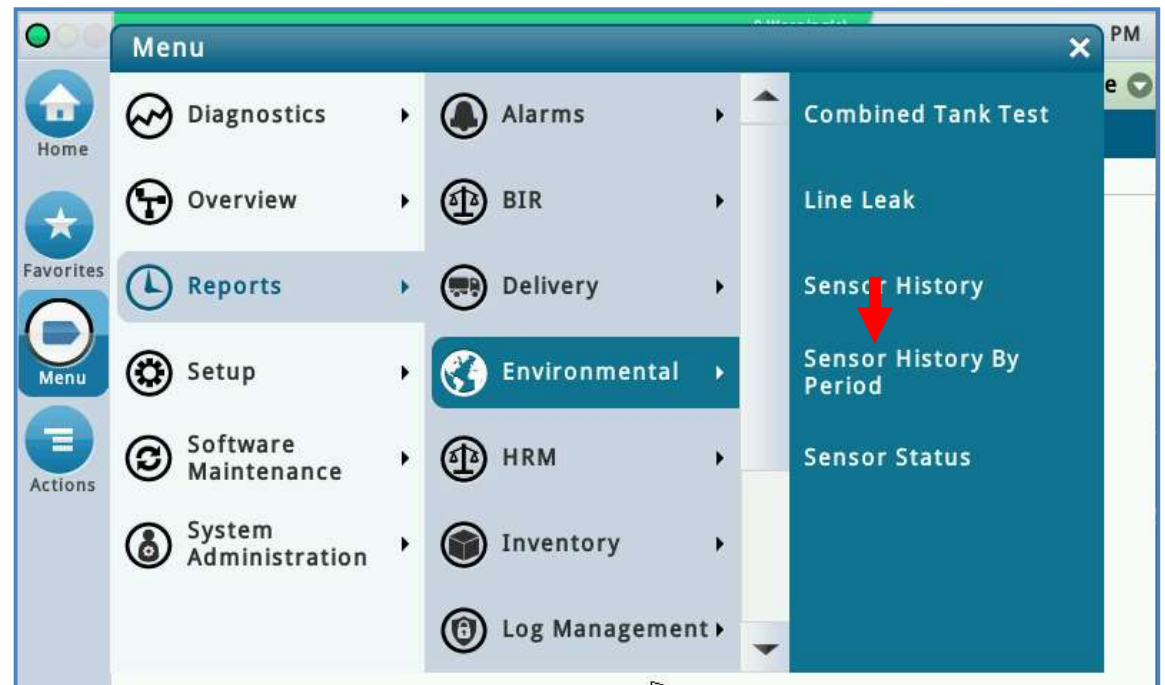
Previous Month

#	Sensor Location	Status	Active Time	Clear Time
L 1	87 STP SUMP	NORMAL		
L 2	91 STP SUMP	NORMAL		
L 3	DIESEL SUMP	NORMAL		
L 4	87 ANNULAR	NORMAL		
L 5	91 ANNULAR	NORMAL		
L 6	DIESEL ANNULAR	NORMAL		

Home Favorites Menu Actions Sensors

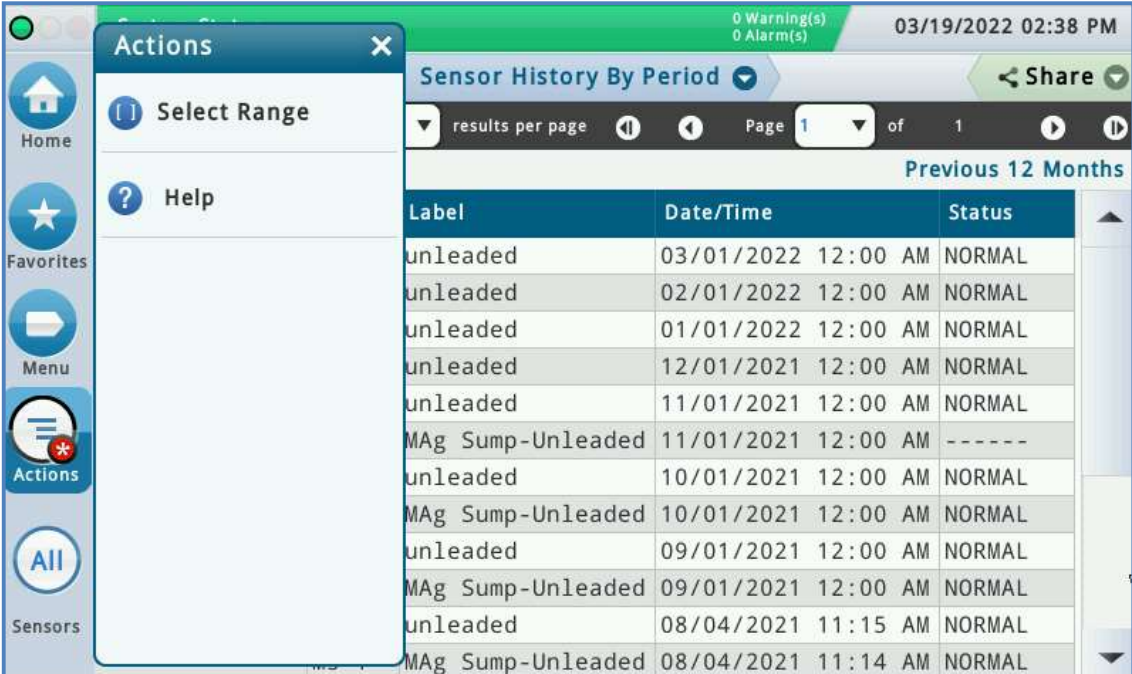
TLS-450 PLUS Overview - Touchscreen

- Sensor History by Period



TLS-450 PLUS Overview - Touchscreen

- Sensor History by Period
 - Defaults to Previous 12 Months
 - Results can be filtered



0 Warning(s)
0 Alarm(s)

03/19/2022 02:38 PM

Sensor History By Period

results per page Page 1 of 1

Previous 12 Months

Label	Date/Time	Status
unleaded	03/01/2022 12:00 AM	NORMAL
unleaded	02/01/2022 12:00 AM	NORMAL
unleaded	01/01/2022 12:00 AM	NORMAL
unleaded	12/01/2021 12:00 AM	NORMAL
unleaded	11/01/2021 12:00 AM	NORMAL
MAG Sump-Unleaded	11/01/2021 12:00 AM	-----
unleaded	10/01/2021 12:00 AM	NORMAL
MAG Sump-Unleaded	10/01/2021 12:00 AM	NORMAL
unleaded	09/01/2021 12:00 AM	NORMAL
MAG Sump-Unleaded	09/01/2021 12:00 AM	NORMAL
unleaded	08/04/2021 11:15 AM	NORMAL
MAG Sump-Unleaded	08/04/2021 11:14 AM	NORMAL

TLS-450 PLUS Overview - Touchscreen

The screenshot displays the 'System Status' interface on a touchscreen. At the top, it shows 'System Status' with '0 Warning(s)' and '0 Alarm(s)', and the date/time '03/19/2022 02:39 PM'. The navigation bar includes 'Reports', 'Environmental', and 'Sensor History By Period'. A 'Share' button is visible on the right. Below the navigation bar, there are '20 Results' and a 'Show 25 results per page' dropdown. A 'Select Range' dialog box is open in the center, allowing the user to choose a 'Period' (currently 'BY MONTH'), a 'Range' (currently 'Previous N Months'), and a 'No. of Months' (currently '12'). The dialog box has 'OK' and 'Cancel' buttons. In the background, a table titled 'Previous 12 Months' is visible, showing sensor data for various months from March 2022 to September 2021. The table has columns for 'Period', 'Sensor', 'Status', and 'Time'. The status for all entries is 'NORMAL'.

Period	Sensor	Status	Time
March 2022		NORMAL	:00 AM
February 2022		NORMAL	:00 AM
January 2022		NORMAL	:00 AM
December 2021		NORMAL	:00 AM
November 2021		NORMAL	:00 AM
October 2021		-----	:00 AM
September 2021		NORMAL	:00 AM
August 2021	L 1	unleaded	09/01/2021 12:00 AM
	Ms 1	MAG Sump-Unleaded	09/01/2021 12:00 AM
	L 1	unleaded	08/04/2021 11:15 AM
	Ms 1	MAG Sump-Unleaded	08/04/2021 11:14 AM

TLS-450 PLUS Overview - Touchscreen



TLS-450 PLUS Overview - Touchscreen

- Sensor History by Period
 - Filtered results



System Status 0 Warning(s) 0 Alarm(s) 03/19/2022 02:41 PM

Reports Environmental Sensor History By Period Share

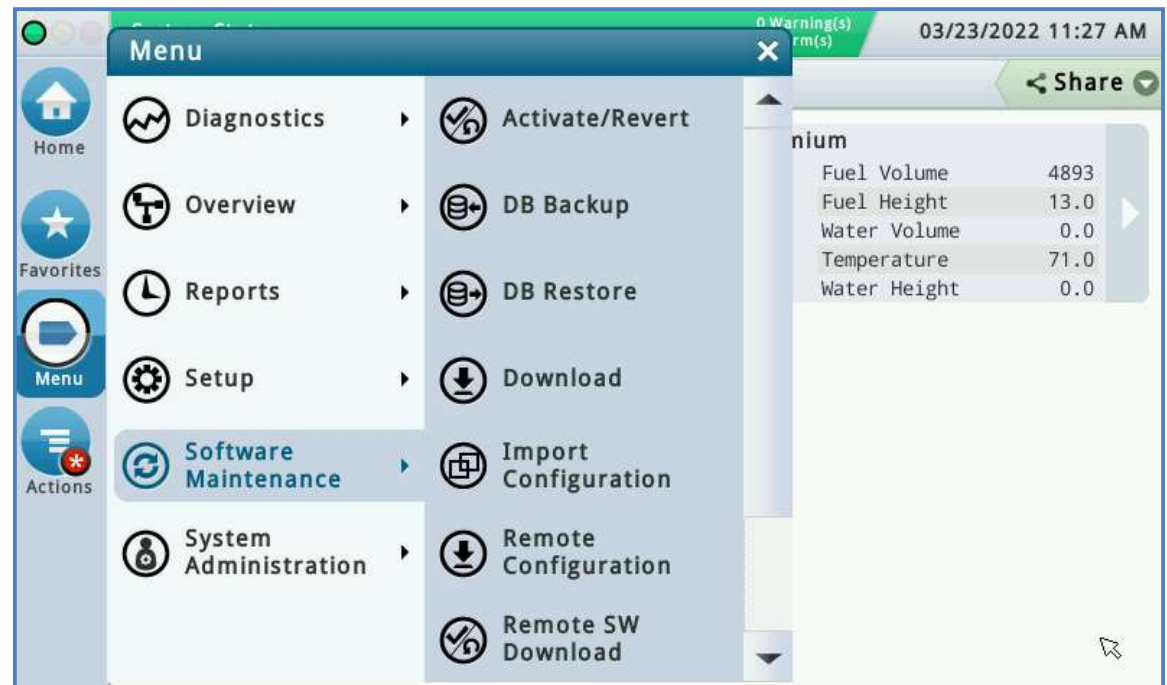
8 Results » Show 25 results per page Page 1 of 1

Previous 6 Months

Period	Sensor	Label	Date/Time	Status
March 2022	L 1	unleaded	03/01/2022 12:00 AM	NORMAL
February 2022	L 1	unleaded	02/01/2022 12:00 AM	NORMAL
January 2022	L 1	unleaded	01/01/2022 12:00 AM	NORMAL
December 2021	L 1	unleaded	12/01/2021 12:00 AM	NORMAL
November 2021	L 1	unleaded	11/01/2021 12:00 AM	NORMAL
	Ms 1	MAG Sump-Unleaded	11/01/2021 12:00 AM	-----
October 2021	L 1	unleaded	10/01/2021 12:00 AM	NORMAL
	Ms 1	MAG Sump-Unleaded	10/01/2021 12:00 AM	NORMAL

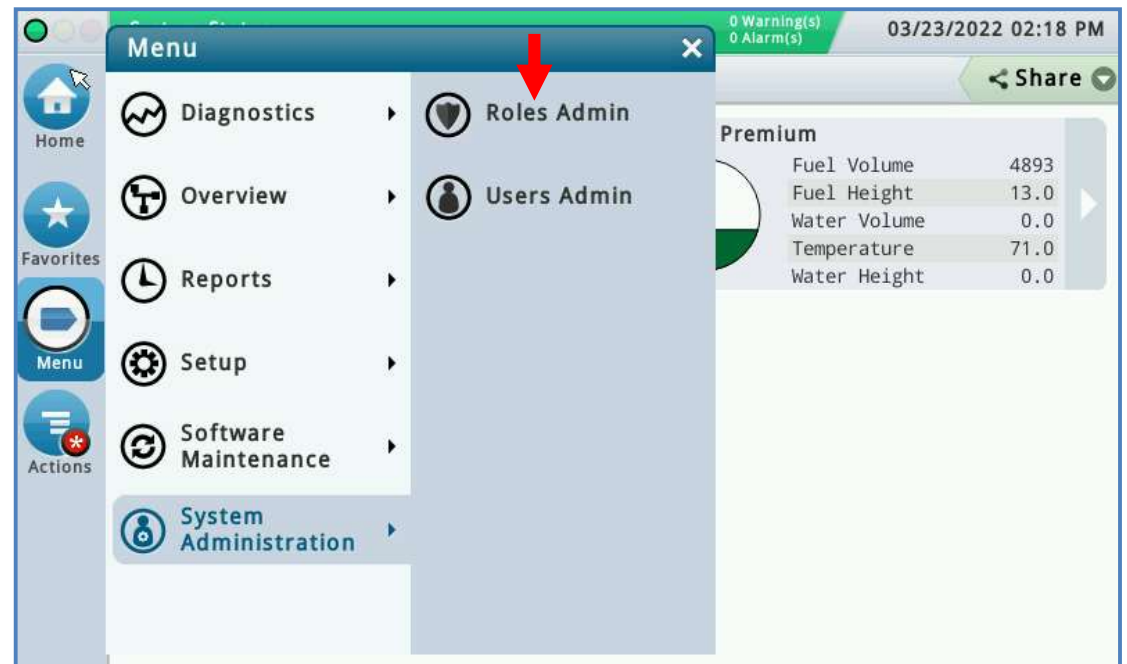
TLS-450 PLUS Overview - Touchscreen

- Software Maintenance



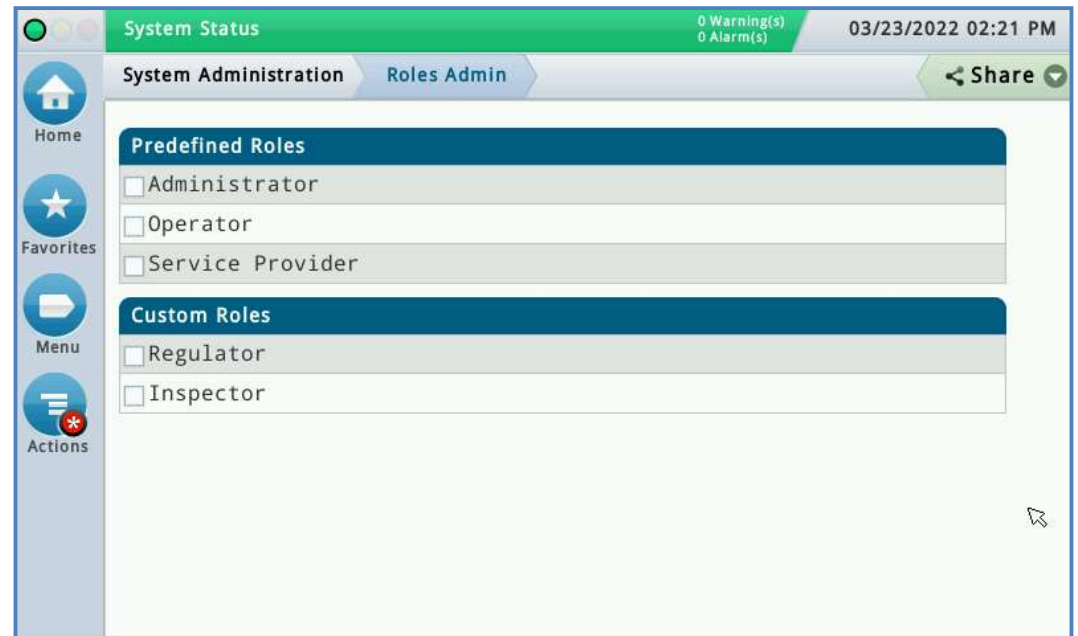
TLS-450 PLUS Overview - Touchscreen

- System Administrator
 - ✓ Establish access roles and permissions

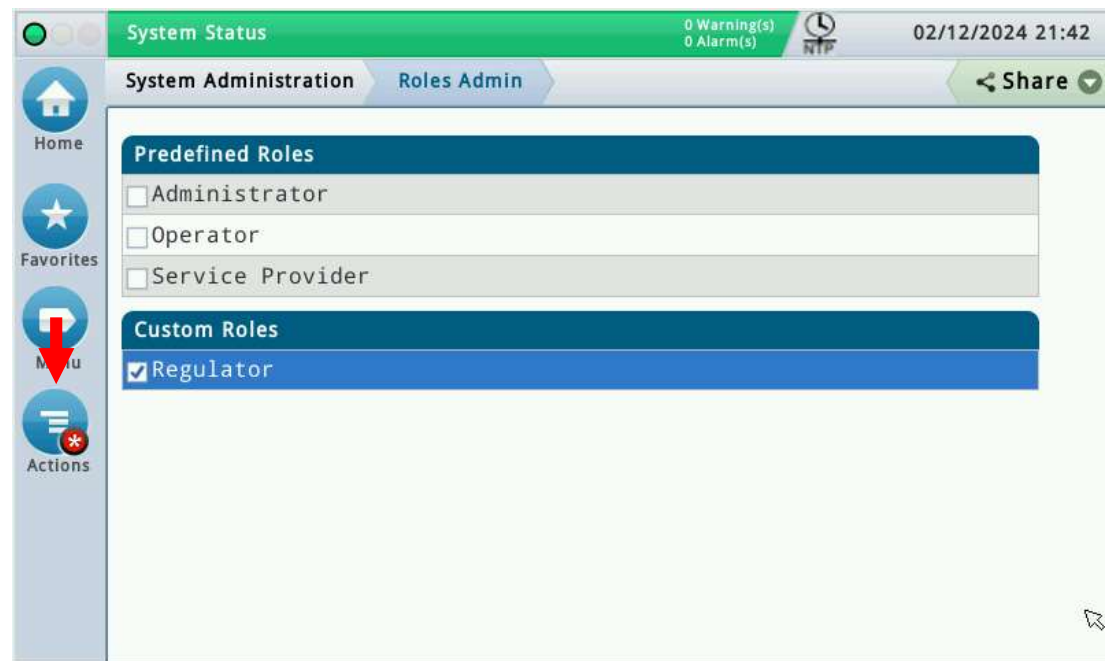


TLS-450 PLUS Overview - Touchscreen

- Roles
 - ✓ Predefined
 - ✓ Custom

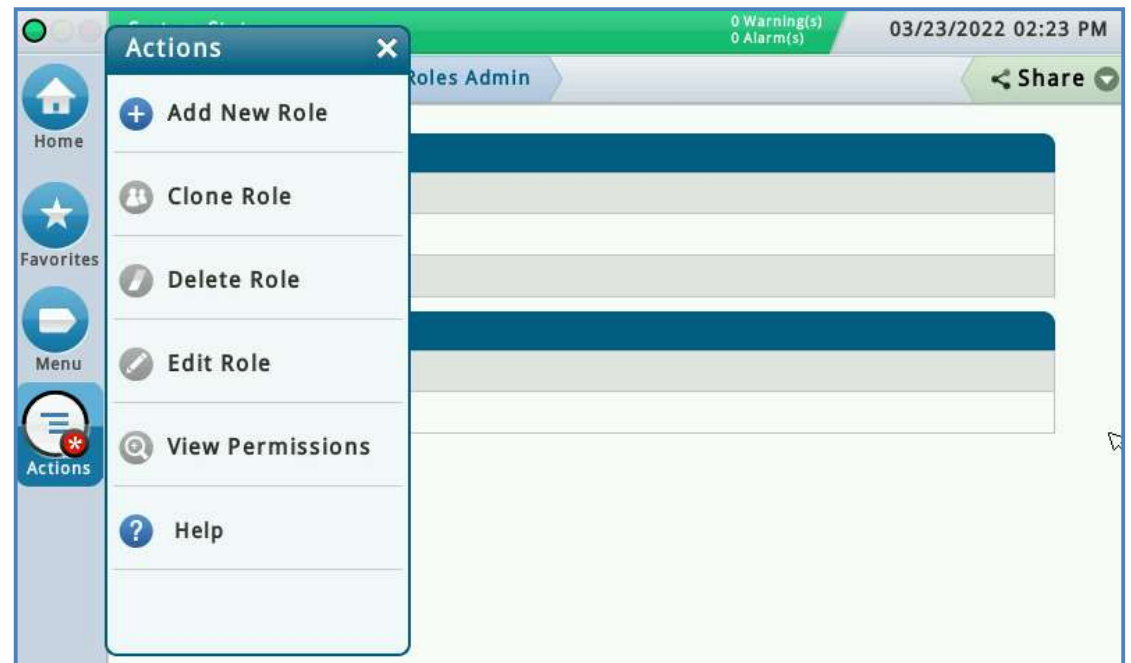


TLS-450 PLUS Overview - Touchscreen



TLS-450 PLUS Overview - Touchscreen

- Roles
 - ✓ Add/Delete Roles
 - ✓ Define Permissions

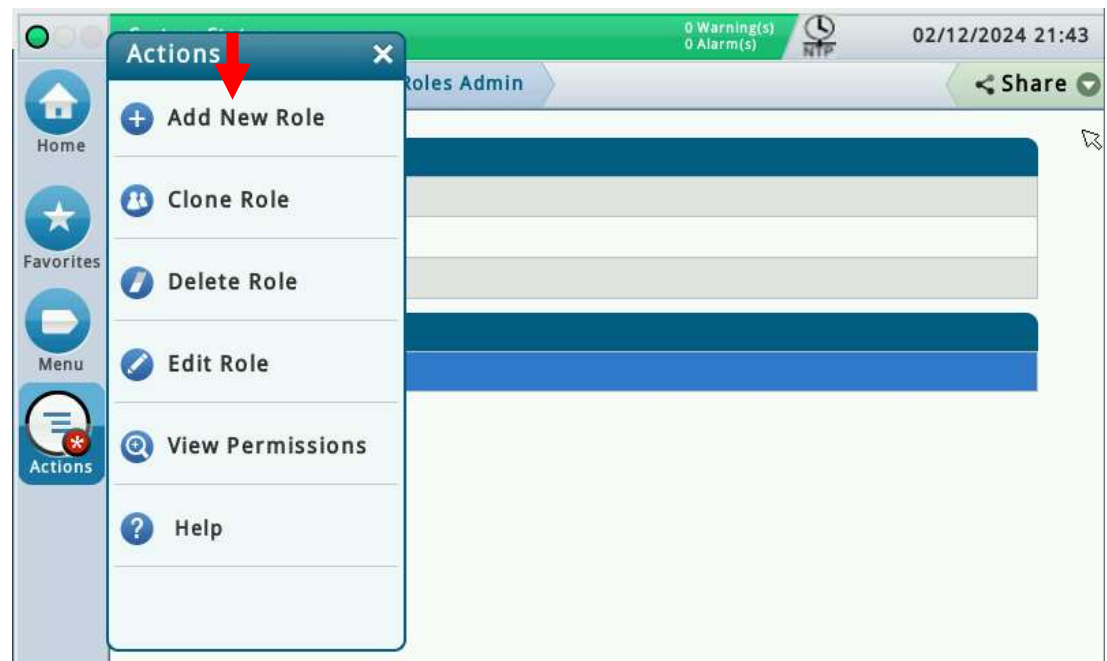


TLS-450 PLUS Overview - Touchscreen

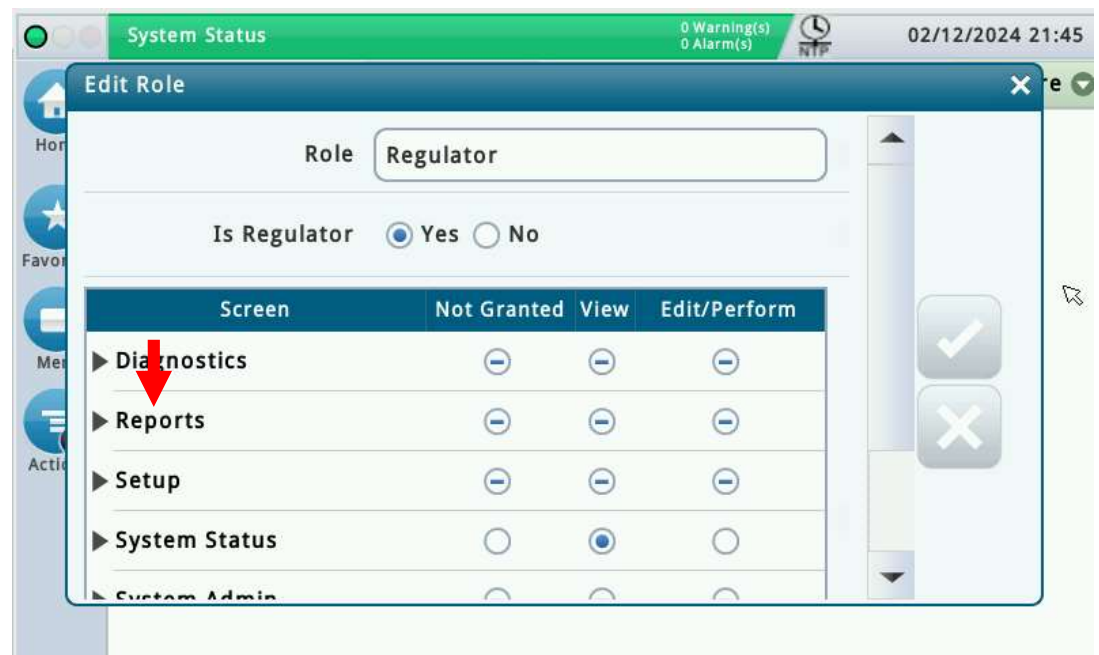
- Define Role Access



TLS-450 PLUS Overview - Touchscreen



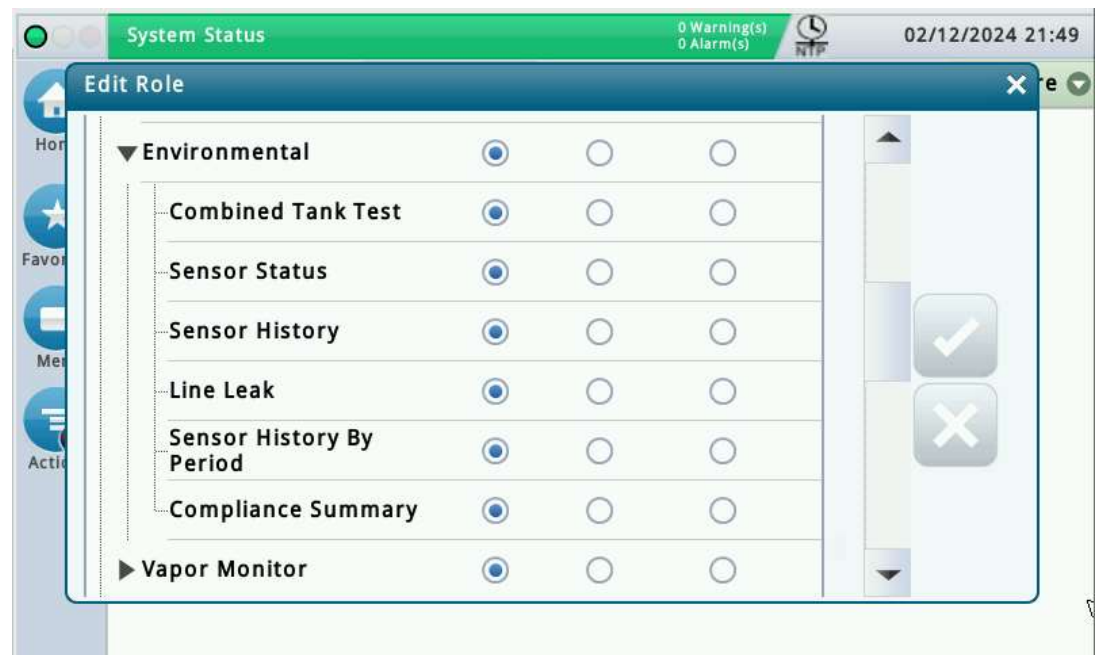
TLS-450 PLUS Overview - Touchscreen



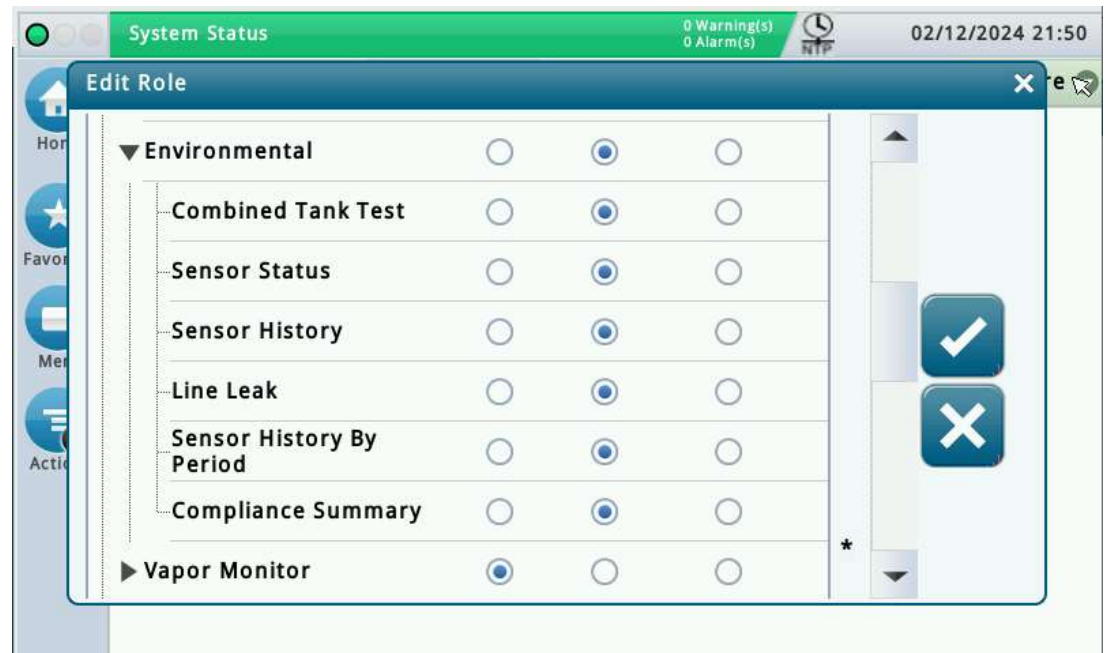
TLS-450 PLUS Overview - Touchscreen



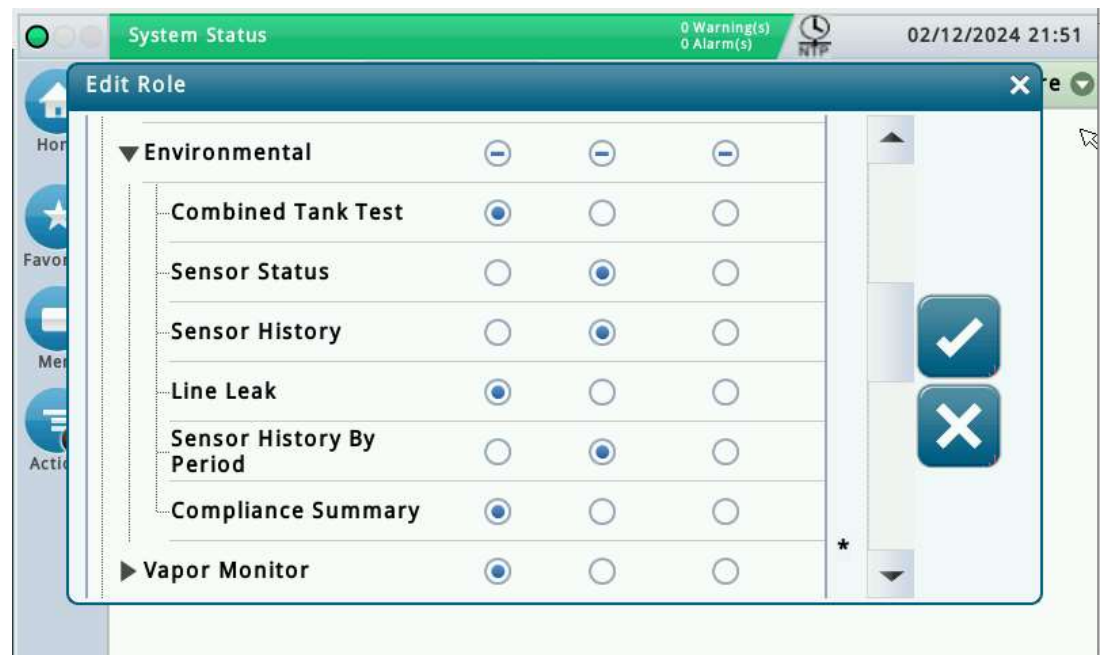
TLS-450 PLUS Overview - Touchscreen



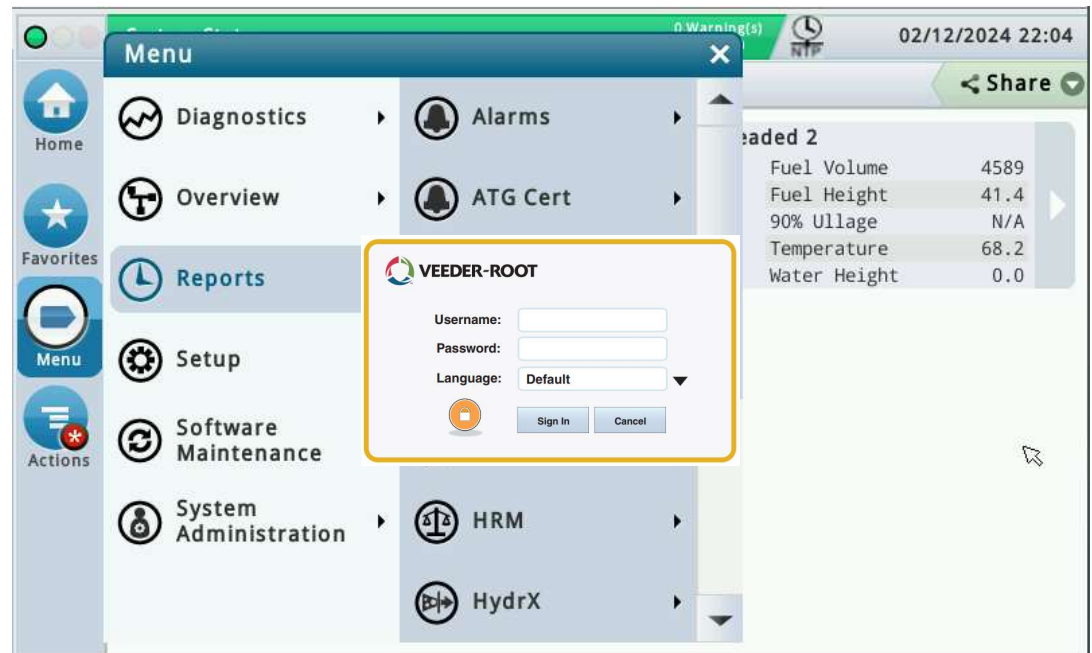
TLS-450 PLUS Overview - Touchscreen



TLS-450 PLUS Overview - Touchscreen



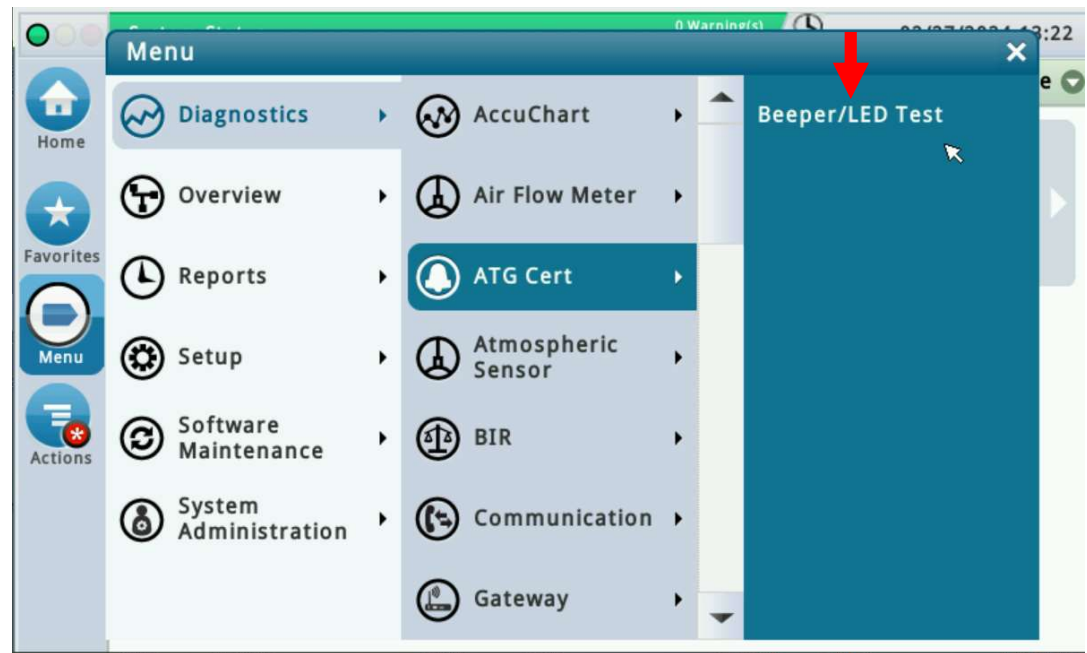
TLS-450 PLUS Overview - Touchscreen



TLS-450 PLUS Overview – ATG Certification Example

ATG Certification:

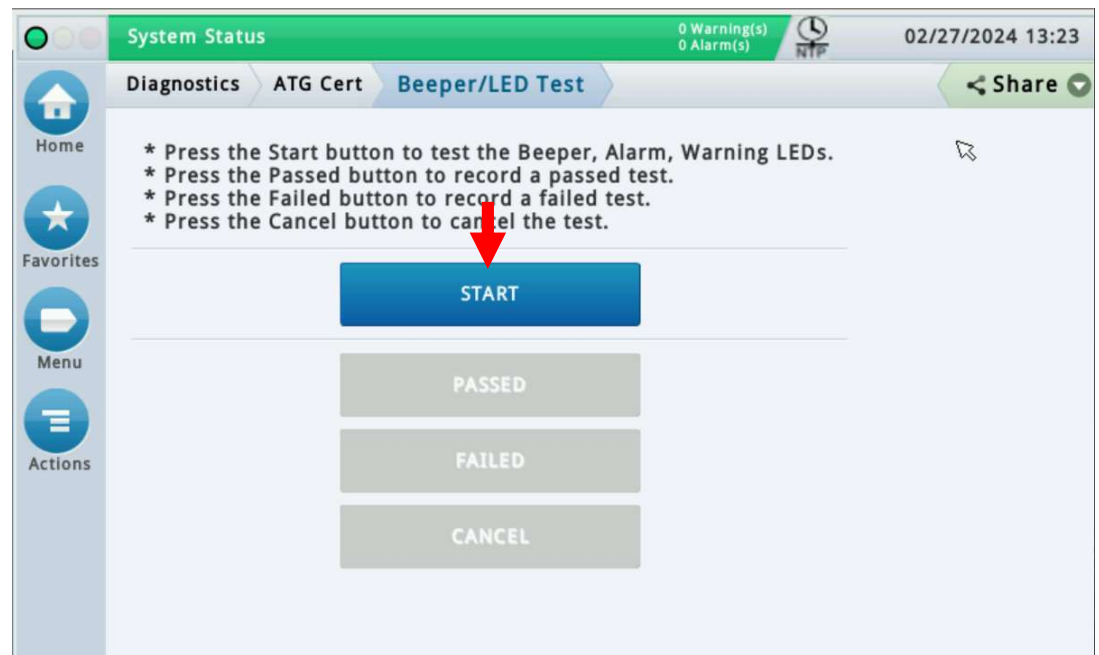
MENU > REPORTS > ATG CERT >
BEEPER/LED TEST



TLS-450 PLUS Overview – ATG Certification Example

ATG Certification:

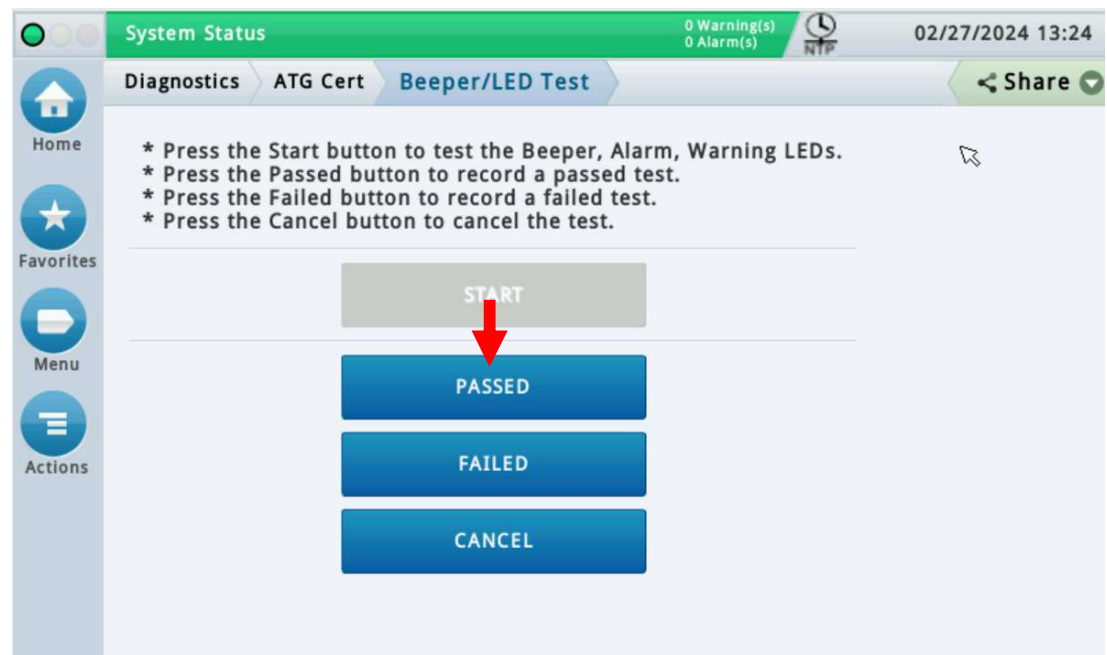
Press - START



TLS-450 PLUS Overview – ATG Certification Example

ATG Certification:

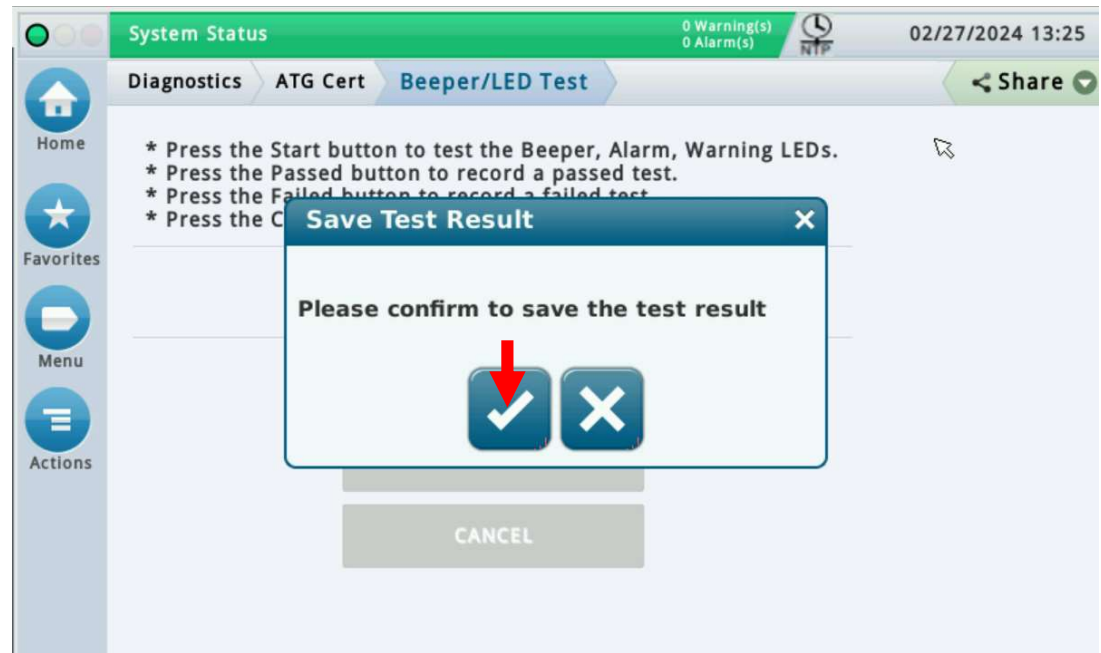
Press to verify – PASSED/FAIL



TLS-450 PLUS Overview – ATG Certification Example

ATG Certification:

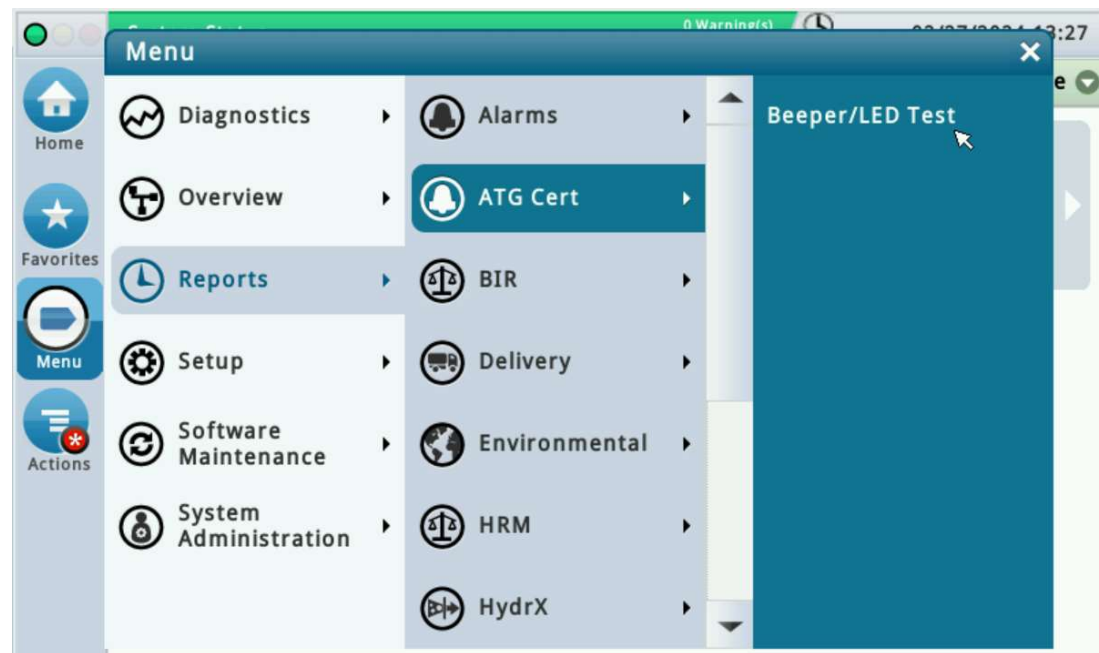
Press to confirm



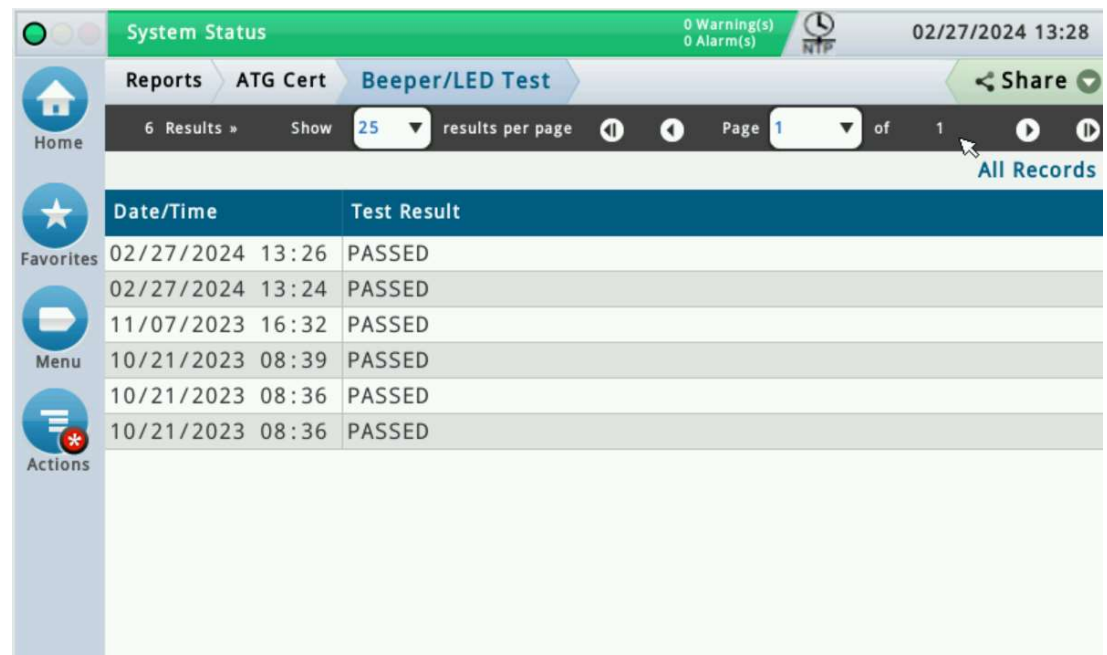
TLS-450 PLUS Overview – ATG Certification Example

ATG Certification:

Press to confirm



TLS-450 PLUS Overview – ATG Certification Example



The screenshot displays the 'System Status' interface for the ATG Certification. The top bar shows 'System Status' with '0 Warning(s)' and '0 Alarm(s)', and the date '02/27/2024 13:28'. The breadcrumb navigation is 'Reports > ATG Cert > Beeper/LED Test'. Below the navigation, there are controls for '6 Results', 'Show 25 results per page', and 'Page 1 of 1'. A table lists the test results, all of which are 'PASSED'.

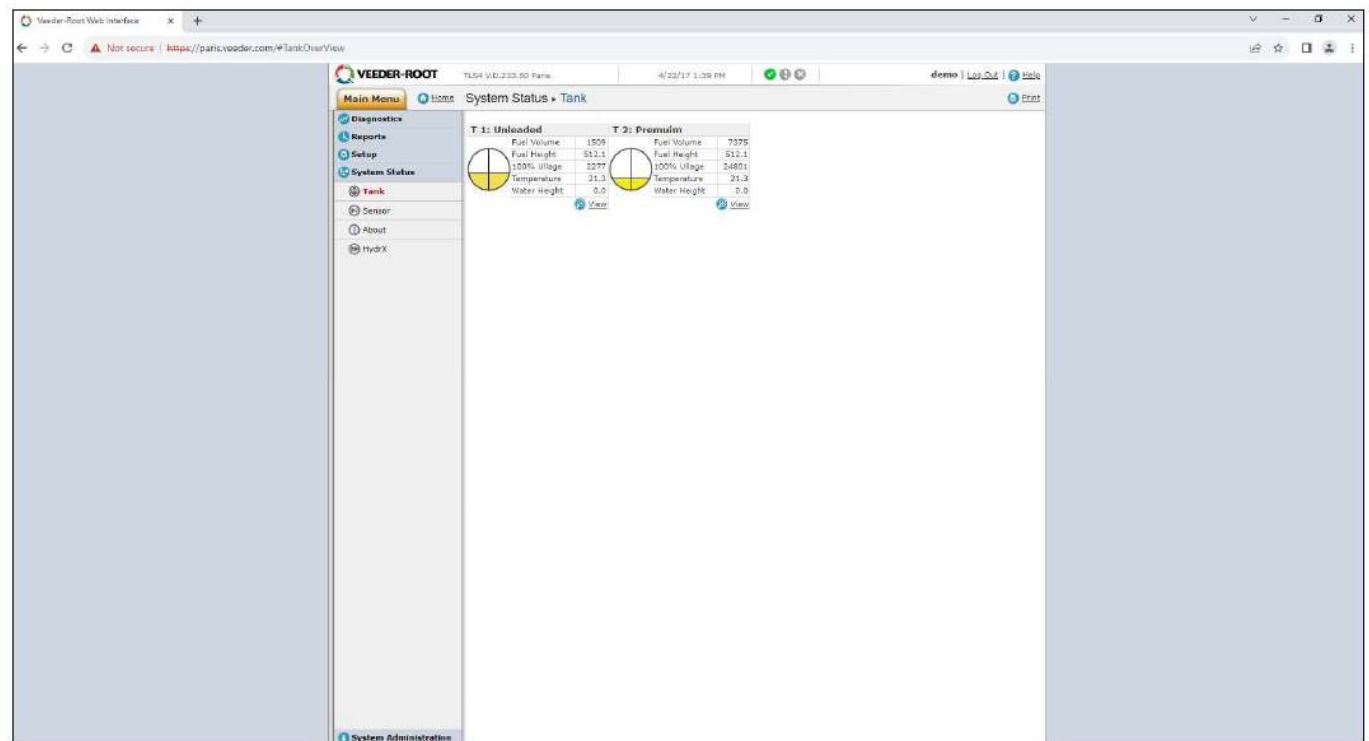
Date/Time	Test Result
02/27/2024 13:26	PASSED
02/27/2024 13:24	PASSED
11/07/2023 16:32	PASSED
10/21/2023 08:39	PASSED
10/21/2023 08:36	PASSED
10/21/2023 08:36	PASSED

TLS-450 PLUS Overview – Web Enabled

Recommend method for technicians to access console

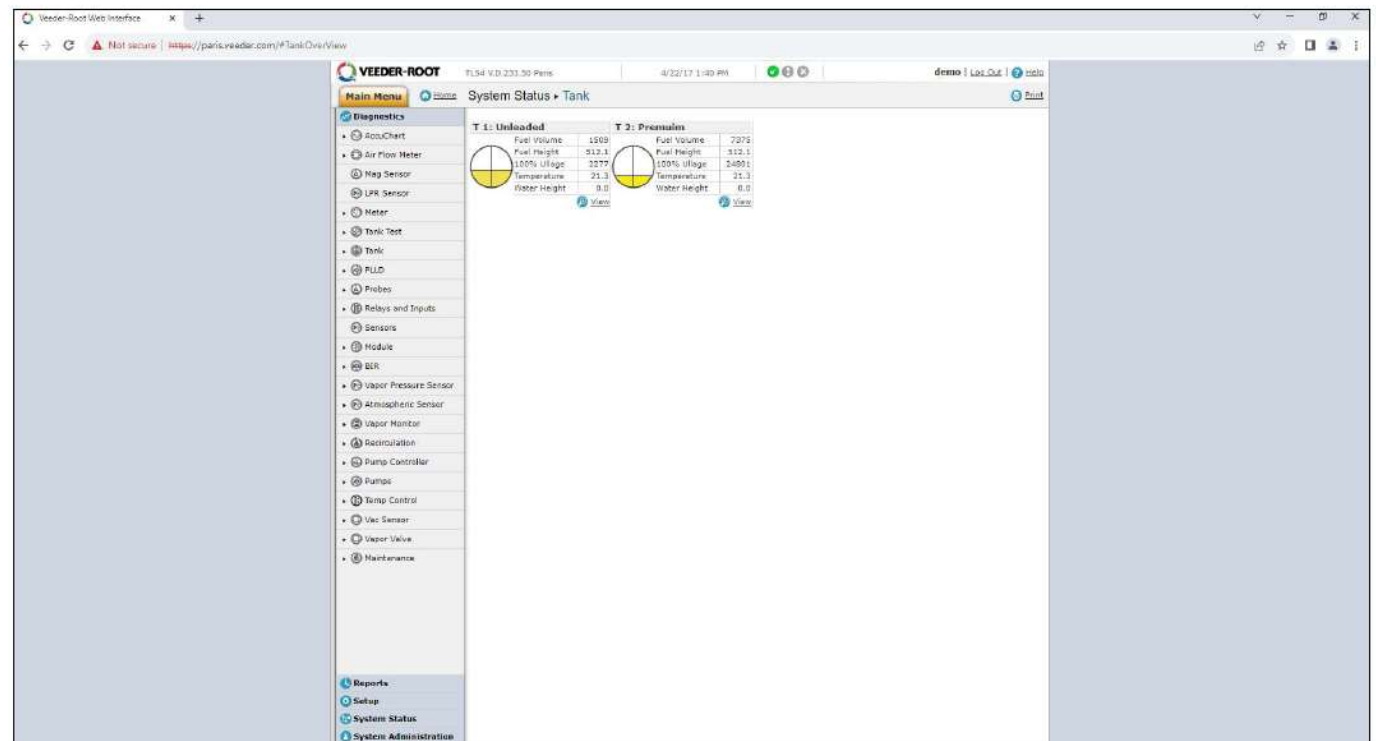
Connection via ethernet cable

All TLS-450PLUS menu areas available



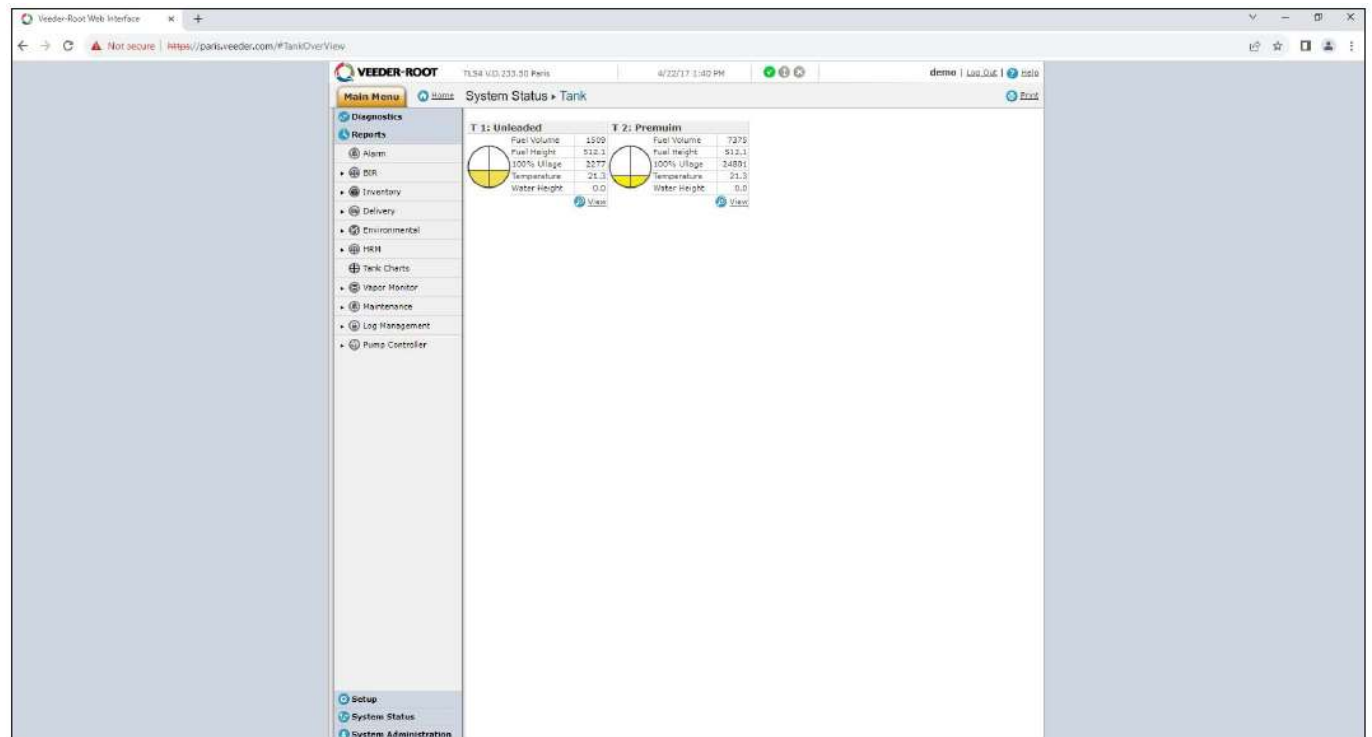
TLS-450 PLUS Overview – Web Enabled

- Diagnostics



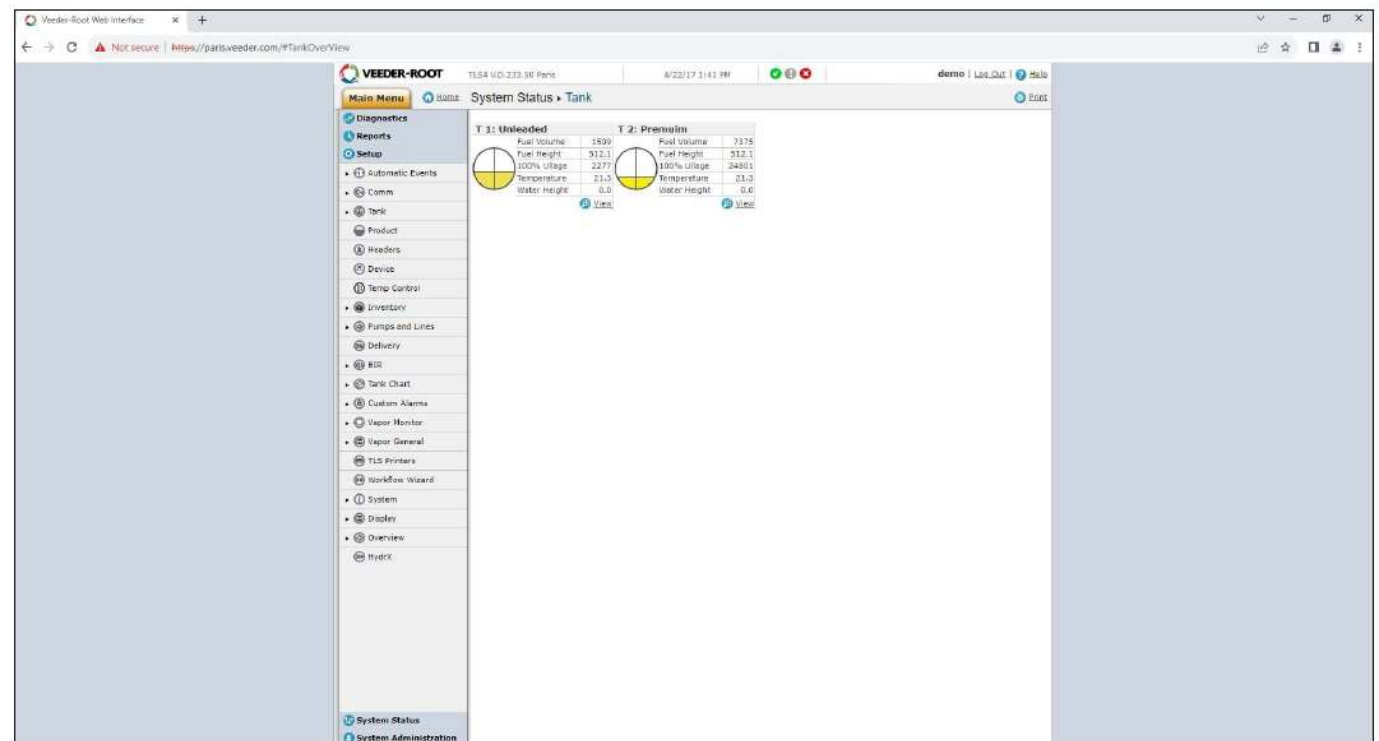
TLS-450 PLUS Overview – Web Enabled

- Reports



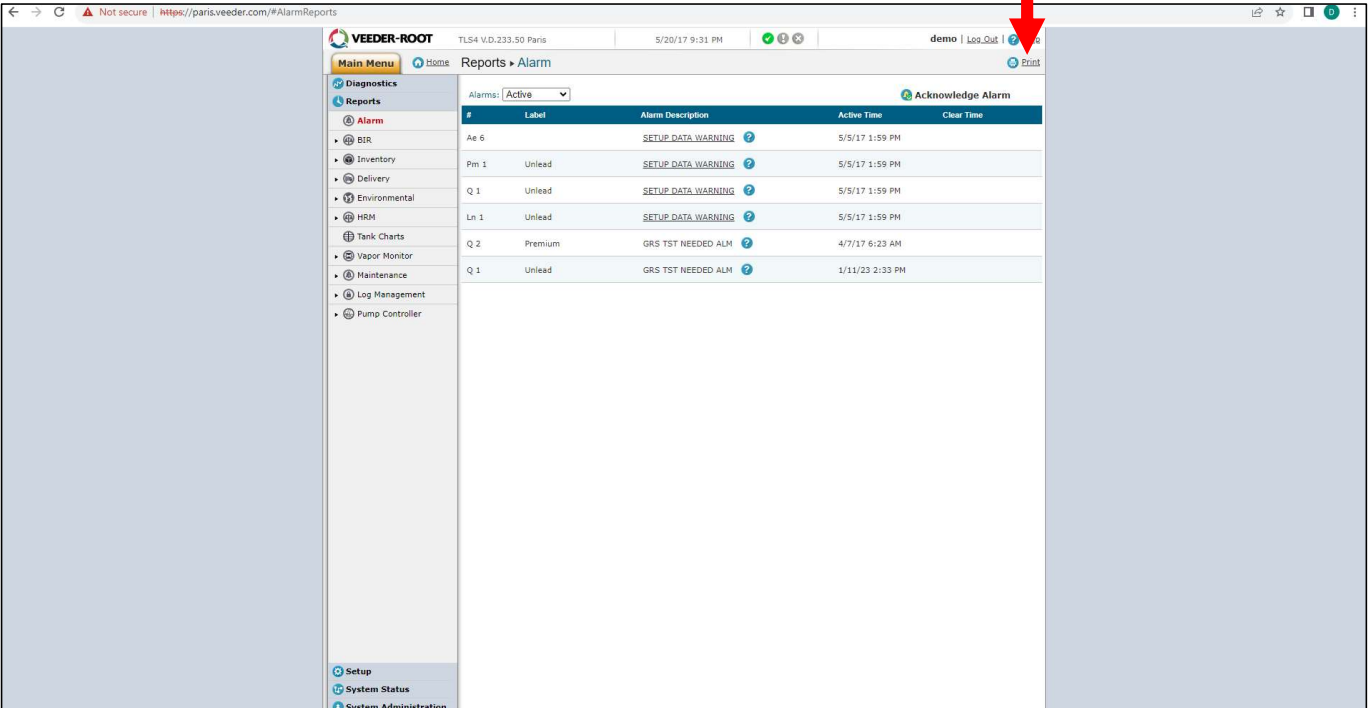
TLS-450 PLUS Overview – Web Enabled

- Setup



TLS-450 PLUS Overview – Web Enabled

- Alarm History Report
- Print

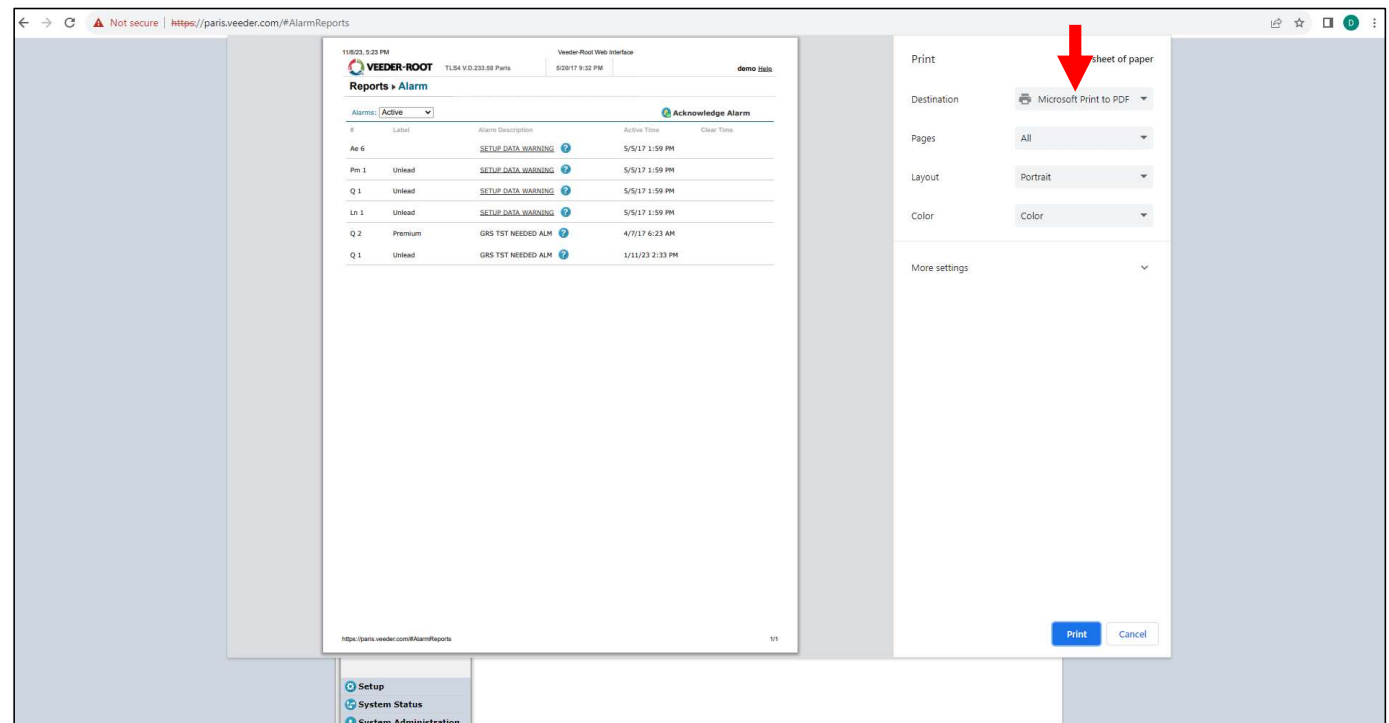


The screenshot displays the Veeder-Root web interface for the TLS-450 PLUS. The browser address bar shows the URL <https://paris.veeder.com/#AlarmReports>. The page title is "Reports • Alarm". The left sidebar contains a "Main Menu" with options: Home, Reports, Diagnostics, Alarm, BIR, Inventory, Delivery, Environmental, HRM, Tank Charts, Vapor Monitor, Maintenance, Log Management, and Pump Controller. The main content area shows a table of active alarms with columns for #, Label, Alarm Description, Active Time, and Clear Time. The table contains five rows of data. A red arrow points to the "Print" button in the top right corner of the interface.

#	Label	Alarm Description	Active Time	Clear Time
Ae 6		SETUP_DATA_WARNING	5/5/17 1:59 PM	
Pm 1	Unlead	SETUP_DATA_WARNING	5/5/17 1:59 PM	
Q 1	Unlead	SETUP_DATA_WARNING	5/5/17 1:59 PM	
Ln 1	Unlead	SETUP_DATA_WARNING	5/5/17 1:59 PM	
Q 2	Premium	GRS TST NEEDED ALM	4/7/17 6:23 AM	
Q 1	Unlead	GRS TST NEEDED ALM	1/11/23 2:33 PM	

TLS-450 PLUS Overview – Web Enabled

- Alarm History
- Print to PDF option



The screenshot displays the Veeder-Root web interface for the TLS-450 PLUS. The main content area shows the 'Reports > Alarm' section with a table of alarm history. A print menu is open on the right side of the interface, showing options for destination, pages, layout, and color. A red arrow points to the 'Microsoft Print to PDF' option in the destination dropdown, with the text 'sheet of paper' next to it. The print menu also includes 'Print' and 'Cancel' buttons at the bottom.

#	Label	Alarm Description	Active Time	Clear Time
As 6		SETUP DATA WARNING	5/5/17 1:59 PM	
Pin 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Q 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Ln 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Q 2	Premium	GRS TST NEEDED ALM	4/7/17 6:23 AM	
Q 1	Unlead	GRS TST NEEDED ALM	1/11/23 2:33 PM	

TLS-450 PLUS Overview – Web Enabled

- Alarm History Report Example

10/31/23, 6:06 PM Veeder-Root Web Interface
VEEDER-ROOT TLS4 V,D,233,50 Paris 5/12/17 9:15 PM demo Help

Reports » Alarm

Alarms: Active Acknowledge Alarm

#	Label	Alarm Description	Active Time	Clear Time
Ae 6		SETUP DATA WARNING	5/5/17 1:59 PM	
Pm 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Q 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Ln 1	Unlead	SETUP DATA WARNING	5/5/17 1:59 PM	
Q 2	Premium	GRS TST NEEDED ALM	4/7/17 6:23 AM	
Ln 2	Premium	LINE OUT	4/6/17 2:30 PM	4/6/17 2:31 PM
Q 2	Premium	PLLD SHUTDOWN ALARM	4/6/17 2:30 PM	4/6/17 2:31 PM
T 2	Premium	LOW PRODUCT ALARM	4/6/17 2:30 PM	4/6/17 2:31 PM
T 1	Unleaded	DELIVERY NEEDED	4/6/17 2:30 PM	4/6/17 2:31 PM
T 2	Premium	DELIVERY NEEDED	4/6/17 2:30 PM	4/6/17 2:31 PM
Q 1	Unlead	GRS TST NEEDED ALM	1/11/23 2:33 PM	

https://paris.veeder.com/#AlarmReports 1/1



TLS-4xx – Status in CA


- All TLS-4xx leak detection devices and methods are listed on SWRCB's LG-113
- TLS-450PLUS CARB In-Station-Diagnostics (ISD) Executive Order (EO) signed 7/28/23
- TLS-450PLUS In Station Diagnostics (ISD) CARB certifications for EVR Phase II vapor recovery systems include:
 - ✓ Balance (Veeder-Root Carbon Canister)
 - ✓ Balance (Healy CAS)
 - ✓ Assist (Healy CAS)
- Remaining certifications, in process:
 - ✓ Assist (Arid)
 - ✓ Balance (Hirt)

Combo TLS Installations in CA



TLS-350 End of Sale

- Veeder-Root announced CA TLS-350 End-of-Sale
- Effective November 15, 2023
- Spare parts supported through 2025 or when spare parts are no longer available



End of Life Notification


TLS-350 Series ATG Systems in California

Overview

ATG Series 8482
Veeder-Root is committed to providing the highest quality products and services to our customers. As the world leaders in the development of fueling system technology, we view product End of Life (EOL) as part of the natural cycle that drives technology evolution.


Now that the TLS-450PLUS ATG meets CARB requirements for VR-202-AD, VR-203-AC, and VR-204-AC, Veeder-Root will discontinue producing TLS-350 ATGs to meet the Enhanced Vapor Recovery (EVR) and In-Station Diagnostic (ISD) requirements **effective November 15, 2023**.

These systems have reached the point in their sales cycle where manufacturing the products are no longer feasible due to obsoleted components and increased costs for older technologies.



Targeted Market

North America – California



Transition Details

Product Transition Information
We recommend customers transition to the Veeder-Root TLS-450PLUS consoles with EVR/ISD capability for their tank monitoring needs. See the Product Transition Information section on the next page for more information.

Purchase Orders for TLS-350 Spare Parts
Veeder-Root will support spare parts through 2025, or when spare parts are no longer available, whichever comes first.

Please contact Customer Service at customerservice@veeder.com.

Refer to veeder.com for additional product information.

TLS-4xx (8600 and 8601 Series)

UST Programs - LG 113			
Issue Date: October 7, 2015			
Veeder-Root 8601 Series, 8600 Series, and TLS-3xx Series with Interstitial Liquid Sensor for Fiberglass Tanks 794390-409 INTERSTITIAL DETECTOR (LIQUID-PHASE)			
Detector:			
Output type:	qualitative		
Sampling frequency:	continuous		
Operating principle:	float switch		
Test Results:			
	<u>unleaded gasoline</u>	<u>diesel*</u>	<u>water</u>
8601 Series			
Response time (min)	<1	<1	<1
Recovery time (min)	<1	<1	<1
Lower detection limit (cm)	0.2767	0.2677	0.2600
8600 Series			
Response time (min)	<1	<1	<1
Recovery time (min)	<1	<1	<1
Lower detection limit (cm)	0.2770	0.2647	0.2630
TLS-3xx Series			
Response time (min)	<1	<1	<1
Recovery time (min)	<1	<1	<1
Lower detection limit (cm)	0.2782	0.2695	0.2578



Veeder-Root Technician Training -VeederTec

- **ATG Installer Certification (formerly Level 1)**
 - Covers installation of Veeder-Root's Automatic Tank Gauge console and system.
 - Topics: background knowledge, safety, hardware, installation procedures, and features of the console
- **ATG Technician Certification (formerly Level 2)**
 - Prepares trainees to setup and service Veeder-Root ATG Consoles through a self-paced format that includes simulated interaction with a TLS-4XX gauge.
 - Topics: theory, hardware, console setup, reports, diagnostics, basic troubleshooting, maintaining software, and TLS-3XX and TLS-4xx consoles troubleshooting basics
- Taking the American Petroleum Institute's WorkSafe Contractor Safety Program or the Petroleum Oriented Safety Training is a prerequisite before starting the VeederTEC program.

Veeder-Root Technician Training -Certificates

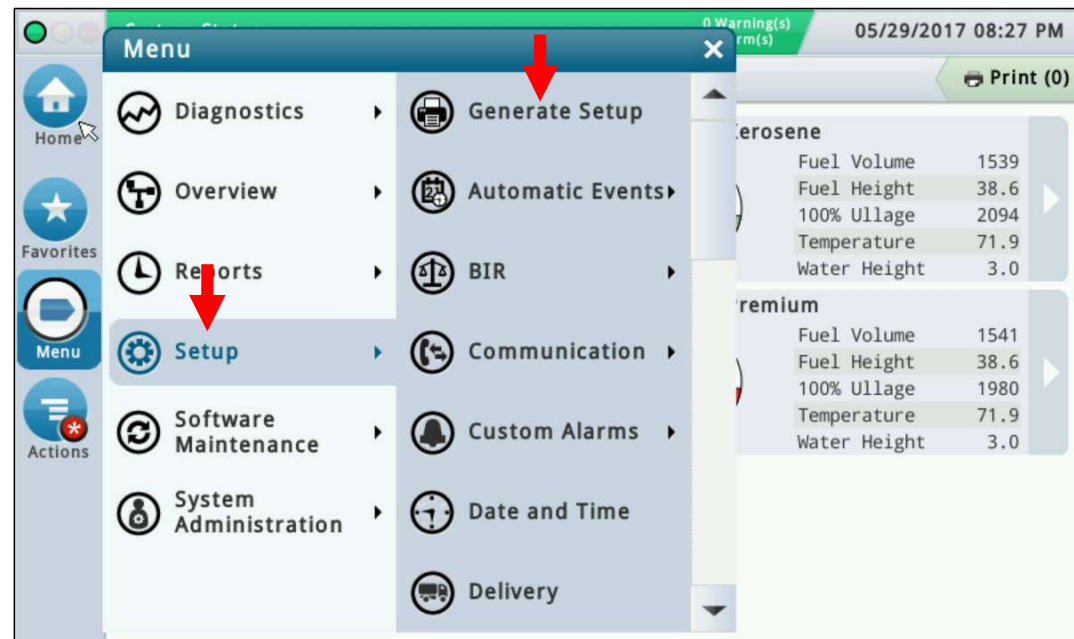


TLS-450PLUS System Setup Tape Overview



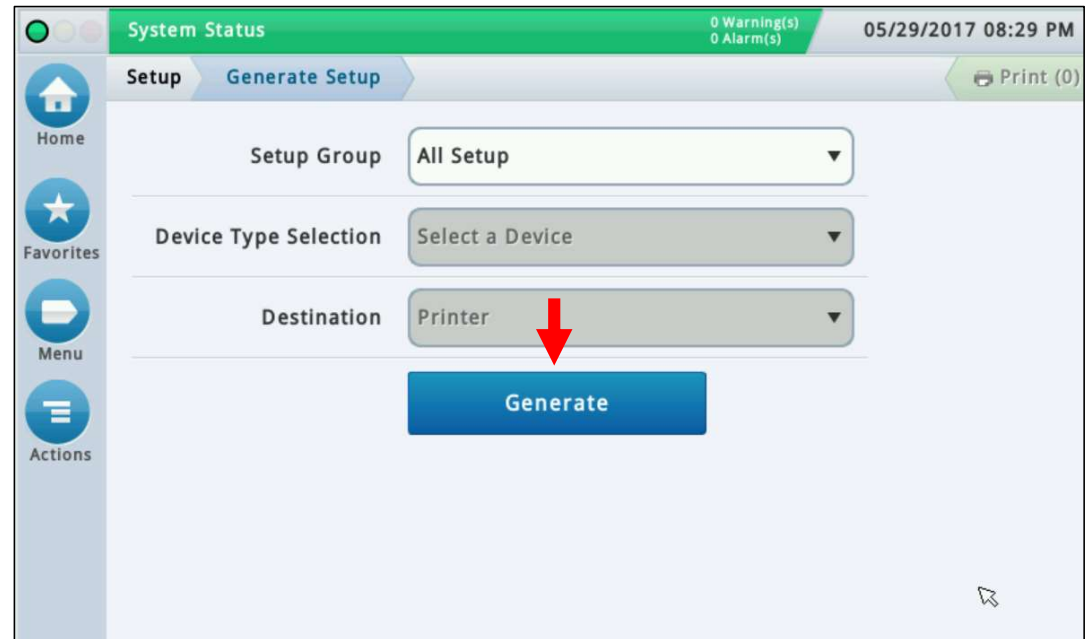
TLS-450PLUS Setup Tape

MENU > SETUP > GENERATE SETUP



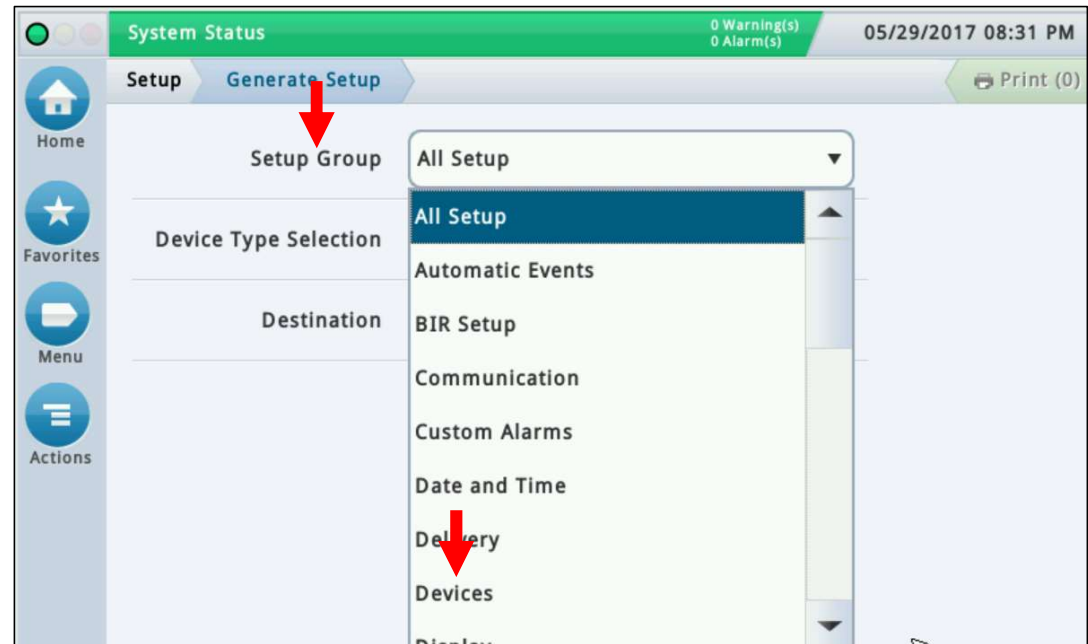
TLS-450PLUS Setup Tape

Prints complete configuration for
TLS-450PLUS



TLS-450PLUS Setup Tape

Option to select Groups



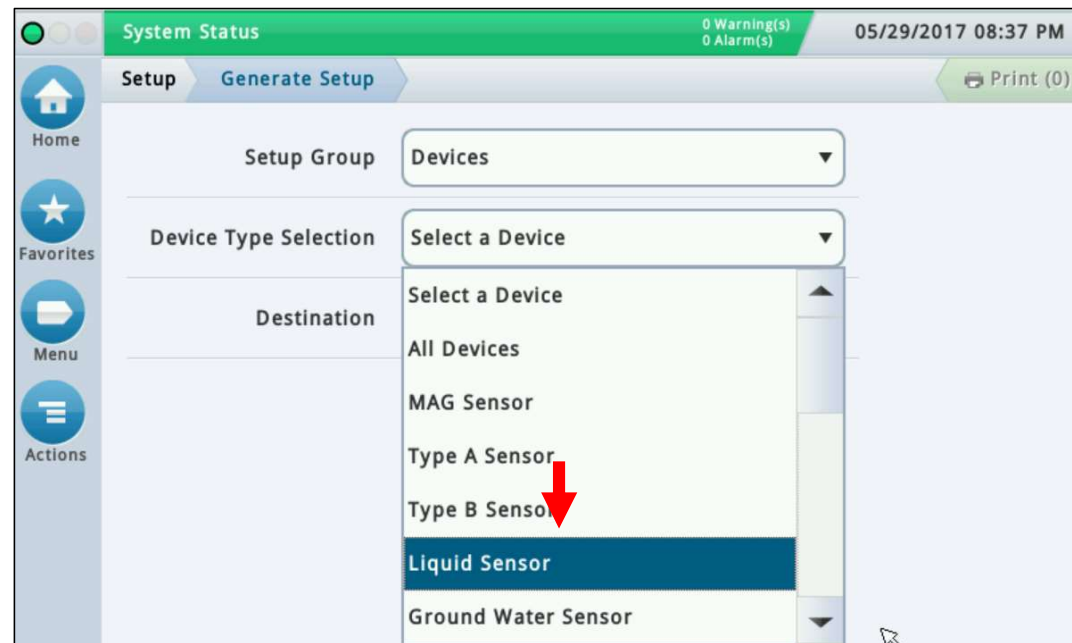
TLS-450PLUS Setup Tape

Option to select Device Type

The screenshot displays the 'Generate Setup' interface. On the left is a navigation sidebar with icons for Home, Favorites, Menu, and Actions. The main content area has a breadcrumb trail 'Setup > Generate Setup' and a 'Print (0)' button. Three dropdown menus are visible: 'Setup Group' (set to 'Devices'), 'Device Type Selection' (set to 'Select a Device'), and 'Destination' (set to 'Printer'). A 'Generate' button is positioned below these menus. A mouse cursor is visible in the bottom right corner of the interface.

TLS-450PLUS Setup Tape

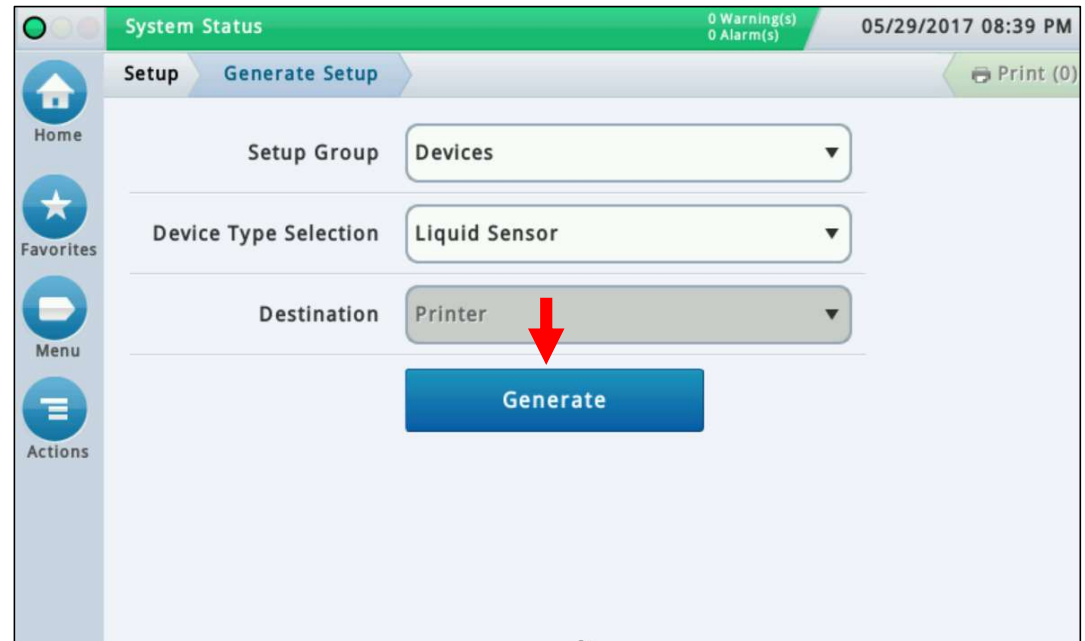
Option to select Device Type



TLS-450PLUS Setup Tape

Will print Setup for Liquid Sensors only

```
*** DEVICE SETUP - LIQUID SENSOR ***
-----
CONFIGURED:  --- LIQUID SENSOR 1 ---
              ENABLED
LABEL:       87 STP SUMP
ADDRESS:    B1.54.4
MODEL:      Tri-State(Single Float)
CATEGORY:   STP Sump
-----
CONFIGURED:  --- LIQUID SENSOR 2 ---
              ENABLED
LABEL:       91 STP SUMP
ADDRESS:    B1.54.5
MODEL:      Tri-State(Single Float)
CATEGORY:   STP Sump
-----
CONFIGURED:  --- LIQUID SENSOR 3 ---
              ENABLED
LABEL:       DIESEL STP
ADDRESS:    B1.54.6
MODEL:      Tri-State(Single Float)
CATEGORY:   STP Sump
-----
CONFIGURED:  --- LIQUID SENSOR 4 ---
              ENABLED
LABEL:       87 ANNULAR
ADDRESS:    B1.54.7
MODEL:      Tri-State(Single Float)
CATEGORY:   Annular Space
-----
CONFIGURED:  --- LIQUID SENSOR 5 ---
              ENABLED
LABEL:       91 ANNULAR
ADDRESS:    B1.54.8
MODEL:      Tri-State(Single Float)
CATEGORY:   Annular Space
-----
CONFIGURED:  --- LIQUID SENSOR 6 ---
              ENABLED
LABEL:       DIESEL ANNULAR
ADDRESS:    B1.54.9
MODEL:      Tri-State(Single Float)
CATEGORY:   Annular Space
-----
CONFIGURED:  --- LIQUID SENSOR 7 ---
              ENABLED
LABEL:       87 FILL SUMP
ADDRESS:    B1.54.10
MODEL:      Tri-State(Single Float)
CATEGORY:   Spill Bucket
-----
CONFIGURED:  --- LIQUID SENSOR 8 ---
              ENABLED
LABEL:       91 FILL SUMP
ADDRESS:    B1.54.11
MODEL:      Tri-State(Single Float)
CATEGORY:   Spill Bucket
```



TLS-450PLUS Setup Tape





BRACE YOURSELVES

**MORE POWERPOINT
SLIDES ARE COMING**



TLS-450PLUS Setup Tape



```
01/24/24  1:12 PM
877776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

*** DISPLAY SETUP - LANGUAGE AND UNITS ***
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US

-----
*** SYSTEM DATE AND TIME ***
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:           ENABLED
NTP SERVER ADDRESS:   oldfaithful.maverik.com
NTP SERVER ADDRESS:   oldfaithful.maverik.com
STRATUM:              2
OFFSET:              -4.569 ms

-----
*** DISPLAY SETUP - DATE AND TIME FORMAT ***
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:       /
TIME FORMAT:          12-hour xM

-----
*** DISPLAY SETUP - NUMBER FORMAT ***
DECIMAL SEPARATOR:    .
THOUSANDS SEPARATOR:  None

-----
*** HEADERS SETUP ***
HEADER 1:             877776 Maverik#654
HEADER 2:             3975 Lake Road
HEADER 3:             W. Sacramento, CA
HEADER 4:             95691
FAX NAME:
FAX NUMBER:

-----
*** SYSTEM SETUP - ALARM FILTERING ***
ALARM FILTERING:     DISABLED
```

16 different languages
US, Imperial, or Metric Units

TLS-450PLUS Setup Tape



```
01/24/24 1:12 PM

877776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

-----
*** DISPLAY SETUP - LANGUAGE AND UNITS ***
-----
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US
-----
*** SYSTEM DATE AND TIME ***
-----
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:           ENABLED
NTP SERVER ADDRESS:   oldfaithful.maverik.com
NTP SERVER ADDRESS:   oldfaithful.maverik.com
STRATUM:              2
OFFSET:               -4.569 ms
-----
*** DISPLAY SETUP - DATE AND TIME FORMAT ***
-----
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:       /
TIME FORMAT:          12-hour xM
-----
*** DISPLAY SETUP - NUMBER FORMAT ***
-----
DECIMAL SEPARATOR:    .
THOUSANDS SEPARATOR:  None
-----
*** HEADERS SETUP ***
-----
HEADER 1:             877776 Maverik#654
HEADER 2:             3975 Lake Road
HEADER 3:             W. Sacramento, CA
HEADER 4:             95691
FAX NAME:
FAX NUMBER:
-----
*** SYSTEM SETUP - ALARM FILTERING ***
-----
ALARM FILTERING:      DISABLED
```

Date, Time and Time Zone

TLS-450PLUS Setup Tape



```
01/24/24  1:12 PM

877776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

-----
*** DISPLAY SETUP - LANGUAGE AND UNITS ***
-----
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US
-----
*** SYSTEM DATE AND TIME ***
-----
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:           ENABLED
NTP SERVER ADDRESS:   oldfaithful.maverik.com
NTP SERVER ADDRESS:   oldfaithful.maverik.com
STRATUM:              2
OFFSET:               -4.569 ms
-----
*** DISPLAY SETUP - DATE AND TIME FORMAT ***
-----
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:       /
TIME FORMAT:          12-hour xM
-----
*** DISPLAY SETUP - NUMBER FORMAT ***
-----
DECIMAL SEPARATOR:    .
THOUSANDS SEPARATOR:  None
-----
*** HEADERS SETUP ***
-----
HEADER 1:             877776 Maverik#654
HEADER 2:             3975 Lake Road
HEADER 3:             W. Sacramento, CA
HEADER 4:             95691
FAX NAME:
FAX NUMBER:
-----
*** SYSTEM SETUP - ALARM FILTERING ***
-----
ALARM FILTERING:     DISABLED
```

Date and Time Format

TLS-450PLUS Setup Tape



```
01/24/24 1:12 PM

877776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

-----
*** DISPLAY SETUP - LANGUAGE AND UNITS ***
-----
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US
-----
*** SYSTEM DATE AND TIME ***
-----
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:           ENABLED
NTP SERVER ADDRESS:   oldfaithful.maverik.com
NTP SERVER ADDRESS:   oldfaithful.maverik.com
STRATUM:              2
OFFSET:               -4.569 ms
-----
*** DISPLAY SETUP - DATE AND TIME FORMAT ***
-----
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:       /
TIME FORMAT:          12-hour xM
-----
*** DISPLAY SETUP - NUMBER FORMAT ***
-----
DECIMAL SEPARATOR:    .
THOUSANDS SEPARATOR:  None
-----
*** HEADERS SETUP ***
-----
HEADER 1:             877776 Maverik#654
HEADER 2:             3975 Lake Road
HEADER 3:             W. Sacramento, CA
HEADER 4:             95691
FAX NAME:
FAX NUMBER:
-----
*** SYSTEM SETUP - ALARM FILTERING ***
-----
ALARM FILTERING:      DISABLED
```

Number Format

TLS-450PLUS Setup Tape



```
01/24/24 1:12 PM

87776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

-----
*** DISPLAY SETUP - LANGUAGE AND UNITS ***
-----
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US
-----
*** SYSTEM DATE AND TIME ***
-----
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:           ENABLED
NTP SERVER ADDRESS:   oldfaithful.maverik.com
NTP SERVER ADDRESS:   oldfaithful.maverik.com
STRATUM:              2
OFFSET:              -4.569 ms
-----
*** DISPLAY SETUP - DATE AND TIME FORMAT ***
-----
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:       /
TIME FORMAT:          12-hour xM
-----
*** DISPLAY SETUP - NUMBER FORMAT ***
-----
DECIMAL SEPARATOR:    .
THOUSANDS SEPARATOR: None
-----
*** HEADERS SETUP ***
-----
HEADER 1:             87776 Maverik#654
HEADER 2:             3975 Lake Road
HEADER 3:             W. Sacramento, CA
HEADER 4:             95691
FAX NAME:
FAX NUMBER:
-----
*** SYSTEM SETUP - ALARM FILTERING ***
-----
ALARM FILTERING:     DISABLED
```

Header Information Setup

TLS-450PLUS Setup Tape



```
01/24/24  1:12 PM
877776 Maverik#654
3975 Lake Road
W. Sacramento, CA
95691

*** DISPLAY SETUP - LANGUAGE AND UNITS ***
SYSTEM LANGUAGE:      ENGLISH
SYSTEM UNITS:         US

*** SYSTEM DATE AND TIME ***
DATE AND TIME:        JAN 24, 2024 13:12
TIME ZONE:            (UTC -08:00) US/Pacific
NTP STATUS:          ENABLED
NTP SERVER ADDRESS:  oldfaithful.maverik.com
NTP SERVER ADDRESS:  oldfaithful.maverik.com
STRATUM:             2
OFFSET:              -4.569 ms

*** DISPLAY SETUP - DATE AND TIME FORMAT ***
DATE FORMAT:          mm_dd_yyyy
DATE SEPARATOR:      /
TIME FORMAT:         12-hour xM

*** DISPLAY SETUP - NUMBER FORMAT ***
DECIMAL SEPARATOR:   .
THOUSANDS SEPARATOR: None

*** HEADERS SETUP ***
HEADER 1:            877776 Maverik#654
HEADER 2:            3975 Lake Road
HEADER 3:            W. Sacramento, CA
HEADER 4:            95691
FAX NAME:
FAX NUMBER:

*** SYSTEM SETUP - ALARM FILTERING ***
ALARM FILTERING:     DISABLED
```

Alarm Filtering Delay

- Enabled – Delayed Alarm Clear
- Disabled – No Delay in Alarm Clear

TLS-450PLUS Setup Tape



Communication Setup - Hostname

```
*** COMMUNICATION SETUP - HOSTNAME ***
SYSTEM HOSTNAME:          vr-654
-----
*** COMMUNICATION SETUP - ETHERNET PORT ***
-----
--- ID 13 ---
SLOT #:                   4
PORT #:                   1
IP ADDRESS TYPE:         STATIC
IP ADDRESS:               10.100.222.3
IP SUBNET MASK:          255.255.255.0
IP GATEWAY ADDRESS:      10.100.222.1
IP DEFAULT GATEWAY:      ENABLED
PRIMARY DNS SERVER:      10.7.39.14
SECONDARY DNS SERVER:    10.7.39.15
MAC ADDRESS:              00:50:83:11:F5:9b
SERIAL COMMAND PORT:     10654
SSH PORT:                 22
HTTPS PORT:               443
SERIAL COMMAND SECURITY:  DISABLED
RS232 END OF MESSAGE:    DISABLED

--- ID 14 ---
SLOT #:                   4
PORT #:                   2
IP ADDRESS TYPE:         STATIC
IP ADDRESS:               192.168.1.100
IP SUBNET MASK:          255.255.255.0
IP GATEWAY ADDRESS:      10.100.222.1
IP DEFAULT GATEWAY:      DISABLED
PRIMARY DNS SERVER:      10.7.39.14
SECONDARY DNS SERVER:    10.7.39.15
MAC ADDRESS:              00:50:83:11:F5:9c
SERIAL COMMAND PORT:     10001
SSH PORT:                 22
HTTPS PORT:               443
SERIAL COMMAND SECURITY:  DISABLED
RS232 END OF MESSAGE:    DISABLED

-----
*** COMMUNICATION SETUP - INTERNAL MODEM ***
-----
--- NO INTERNAL MODEM DEFINED ---
-----
*** COMMUNICATION SETUP - CDIM PORT ***
-----
--- NO CDIM PORT DEFINED ---
```

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - HOSTNAME ***
-----
SYSTEM HOSTNAME:          vr-654
-----
*** COMMUNICATION SETUP - ETHERNET PORT ***
-----
                                --- ID 13 ---
SLOT #:                     4
PORT #:                      1
IP ADDRESS TYPE:            STATIC
IP ADDRESS:                 10.100.222.3
IP SUBNET MASK:             255.255.255.0
IP GATEWAY ADDRESS:        10.100.222.1
IP DEFAULT GATEWAY:        ENABLED
PRIMARY DNS SERVER:        10.7.39.14
SECONDARY DNS SERVER:     10.7.39.15
MAC ADDRESS:               00:50:83:11:f5:9b
SERIAL COMMAND PORT:      10654
SSH PORT:                  22
HTTPS PORT:                443
SERIAL COMMAND SECURITY:   DISABLED
RS232 END OF MESSAGE:     DISABLED

                                --- ID 14 ---
SLOT #:                     4
PORT #:                      2
IP ADDRESS TYPE:            STATIC
IP ADDRESS:                 192.168.1.100
IP SUBNET MASK:             255.255.255.0
IP GATEWAY ADDRESS:        10.100.222.1
IP DEFAULT GATEWAY:        DISABLED
PRIMARY DNS SERVER:        10.7.39.14
SECONDARY DNS SERVER:     10.7.39.15
MAC ADDRESS:               00:50:83:11:f5:9c
SERIAL COMMAND PORT:      10001
SSH PORT:                  22
HTTPS PORT:                443
SERIAL COMMAND SECURITY:   DISABLED
RS232 END OF MESSAGE:     DISABLED

-----
*** COMMUNICATION SETUP - INTERNAL MODEM ***
-----
                                --- NO INTERNAL MODEM DEFINED ---
-----
*** COMMUNICATION SETUP - CDIM PORT ***
-----
                                --- NO CDIM PORT DEFINED ---
```

Communication Setup:
Ethernet Ports

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - HOSTNAME ***
-----
SYSTEM HOSTNAME:          vr-654
-----

*** COMMUNICATION SETUP - ETHERNET PORT ***
-----

--- ID 13 ---
SLOT #:                    4
PORT #:                    1
IP ADDRESS TYPE:          STATIC
IP ADDRESS:                10.100.222.3
IP SUBNET MASK:           255.255.255.0
IP GATEWAY ADDRESS:       10.100.222.1
IP DEFAULT GATEWAY:       ENABLED
PRIMARY DNS SERVER:       10.7.39.14
SECONDARY DNS SERVER:     10.7.39.15
MAC ADDRESS:              00:50:83:11:f5:9b
SERIAL COMMAND PORT:      10654
SSH PORT:                  22
HTTPS PORT:                443
SERIAL COMMAND SECURITY:   DISABLED
RS232 END OF MESSAGE:     DISABLED

--- ID 14 ---
SLOT #:                    4
PORT #:                    2
IP ADDRESS TYPE:          STATIC
IP ADDRESS:                192.168.1.100
IP SUBNET MASK:           255.255.255.0
IP GATEWAY ADDRESS:       10.100.222.1
IP DEFAULT GATEWAY:       DISABLED
PRIMARY DNS SERVER:       10.7.39.14
SECONDARY DNS SERVER:     10.7.39.15
MAC ADDRESS:              00:50:83:11:f5:9c
SERIAL COMMAND PORT:      10001
SSH PORT:                  22
HTTPS PORT:                443
SERIAL COMMAND SECURITY:   DISABLED
RS232 END OF MESSAGE:     DISABLED

*** COMMUNICATION SETUP - INTERNAL MODEM ***
-----

--- NO INTERNAL MODEM DEFINED ---
-----

*** COMMUNICATION SETUP - CDIM PORT ***
-----

--- NO CDIM PORT DEFINED ---
```

Communication Setup:
Modem

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - HOSTNAME ***
-----
SYSTEM HOSTNAME:          vr-654
-----

*** COMMUNICATION SETUP - ETHERNET PORT ***
-----

--- ID 13 ---
SLOT #:                   4
PORT #:                   1
IP ADDRESS TYPE:         STATIC
IP ADDRESS:               10.100.222.3
IP SUBNET MASK:          255.255.255.0
IP GATEWAY ADDRESS:      10.100.222.1
IP DEFAULT GATEWAY:      ENABLED
PRIMARY DNS SERVER:      10.7.39.14
SECONDARY DNS SERVER:    10.7.39.15
MAC ADDRESS:              00:50:83:11:f5:9b
SERIAL COMMAND PORT:     10654
SSH PORT:                 22
HTTPS PORT:               443
SERIAL COMMAND SECURITY: DISABLED
RS232 END OF MESSAGE:    DISABLED

--- ID 14 ---
SLOT #:                   4
PORT #:                   2
IP ADDRESS TYPE:         STATIC
IP ADDRESS:               192.168.1.100
IP SUBNET MASK:          255.255.255.0
IP GATEWAY ADDRESS:      10.100.222.1
IP DEFAULT GATEWAY:      DISABLED
PRIMARY DNS SERVER:      10.7.39.14
SECONDARY DNS SERVER:    10.7.39.15
MAC ADDRESS:              00:50:83:11:f5:9c
SERIAL COMMAND PORT:     10001
SSH PORT:                 22
HTTPS PORT:               443
SERIAL COMMAND SECURITY: DISABLED
RS232 END OF MESSAGE:    DISABLED

*** COMMUNICATION SETUP - INTERNAL MODEM ***
-----

--- NO INTERNAL MODEM DEFINED ---

*** COMMUNICATION SETUP - CDIM PORT ***
-----

--- NO CDIM PORT DEFINED ---
```

Communication Setup:
CDIM

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - TDIM PORT ***

--- ID 16 ---
SLOT #: 4
PORT #: 1
LABEL: VR EDIM
TDIM PORT: 35555
PROTOCOL: UNKNOWN
UNITS REPORTED: UNKNOWN

-----
*** COMMUNICATION SETUP - IFSF ***

IFSF DEVICE: ETHERNET
IFSF PROTOCOL: IFSF-CHINA1
TLG IFSF: DISABLED
TLG NODE ID: 1
LEAK DETECT IFSF: DISABLED
LEAK DETECT NODE ID: 1
IFSF UDP PORT: 3486
IFSF TCP PORT: 9000

-----
*** COMMUNICATION SETUP - SERIAL PORT ***

--- ID 1 ---
SLOT #: 1
PORT #: 1
CONFIGURED: ENABLED
LABEL:
USAGE: RS232
BAUD RATE: 9600
DATA BITS: 7
PARITY: ODD PARITY
STOP BITS: 1
USE HANDSHAKING: NO HANDSHAKING
SERIAL COMMAND SECURITY: DISABLED
RS232 END OF MESSAGE: DISABLED

--- ID 2 ---
SLOT #: 1
PORT #: 2
CONFIGURED: ENABLED
LABEL:
USAGE: RS485
BAUD RATE: 9600
DATA BITS: 7
PARITY: ODD PARITY
STOP BITS: 1
SERIAL COMMAND SECURITY: DISABLED
RS232 END OF MESSAGE: DISABLED
```

Communication Setup:
TDIM

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - TDIM PORT ***  
-----  
                --- ID 16 ---  
SLOT #:          4  
PORT #:          1  
LABEL:          VR EDIM  
TDIM PORT:      35555  
PROTOCOL:       UNKNOWN  
UNITS REPORTED: UNKNOWN  
  
*** COMMUNICATION SETUP - IFSF ***  
-----  
IFSF DEVICE:     ETHERNET  
IFSF PROTOCOL:  IFSF-CHINA1  
TLG IFSF:        DISABLED  
TLG NODE ID:    1  
LEAK DETECT IFSF: DISABLED  
LEAK DETECT NODE ID: 1  
IFSF UDP PORT:  3486  
IFSF TCP PORT:  9000  
  
-----  
*** COMMUNICATION SETUP - SERIAL PORT ***  
-----  
                --- ID 1 ---  
SLOT #:          1  
PORT #:          1  
CONFIGURED:      ENABLED  
LABEL:            
USAGE:          RS232  
BAUD RATE:      9600  
DATA BITS:      7  
PARITY:         ODD PARITY  
STOP BITS:      1  
USE HANDSHAKING: NO HANDSHAKING  
SERIAL COMMAND SECURITY: DISABLED  
RS232 END OF MESSAGE: DISABLED  
  
                --- ID 2 ---  
SLOT #:          1  
PORT #:          2  
CONFIGURED:      ENABLED  
LABEL:            
USAGE:          RS485  
BAUD RATE:      9600  
DATA BITS:      7  
PARITY:         ODD PARITY  
STOP BITS:      1  
SERIAL COMMAND SECURITY: DISABLED  
RS232 END OF MESSAGE: DISABLED
```

Communication Setup:
IFSF (International)

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - TDIM PORT ***  
-----  
                --- ID 16 ---  
SLOT #:          4  
PORT #:          1  
LABEL:          VR EDIM  
TDIM PORT:      35555  
PROTOCOL:       UNKNOWN  
UNITS REPORTED: UNKNOWN  
-----  
                *** COMMUNICATION SETUP - IFSF ***  
-----  
IFSF DEVICE:     ETHERNET  
IFSF PROTOCOL:  IFSF-CHINA1  
TLG IFSF:        DISABLED  
TLG NODE ID:    1  
LEAK DETECT IFSF:  DISABLED  
LEAK DETECT NODE ID: 1  
IFSF UDP PORT:  3486  
IFSF TCP PORT:  9000  
-----  
                *** COMMUNICATION SETUP - SERIAL PORT ***  
-----  
                --- ID 1 ---  
SLOT #:          1  
PORT #:          1  
CONFIGURED:      ENABLED  
LABEL:            
USAGE:          RS232  
BAUD RATE:      9600  
DATA BITS:      7  
PARITY:         ODD PARITY  
STOP BITS:      1  
USE HANDSHAKING: NO HANDSHAKING  
SERIAL COMMAND SECURITY: DISABLED  
RS232 END OF MESSAGE: DISABLED  
-----  
                --- ID 2 ---  
SLOT #:          1  
PORT #:          2  
CONFIGURED:      ENABLED  
LABEL:            
USAGE:          RS485  
BAUD RATE:      9600  
DATA BITS:      7  
PARITY:         ODD PARITY  
STOP BITS:      1  
SERIAL COMMAND SECURITY: DISABLED  
RS232 END OF MESSAGE: DISABLED
```

Communication Setup:
Serial Ports

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - SMTP RELAY ***
SENDER NAME:          Maverik #654
SENDER EMAIL ADDRESS: Vr654@maverik.com
USE SYSTEM HOSTNAME:  YES
EMAIL RELAY:          DISABLED
RELAY REQUIRES SSL:   NO

-----
*** GATEWAY - SETUP ***
-----
--- NO GATEWAY EXISTS ---
-----
*** DEVICE SETUP - PROBE ***
-----
--- PROBE 1 ---
CONFIGURED:           ENABLED
LABEL:                Unleaded 25k
ADDRESS:              B2.S2.8
SERIAL NUMBER:        262172
PROBE TYPE:           MAG7
FLOAT TYPE:           4.0 IN.
WATER MINIMUM:        0.000 INCHES

--- PROBE 2 ---
CONFIGURED:           ENABLED
LABEL:                Diesel 25K
ADDRESS:              B2.S2.5
SERIAL NUMBER:        284047
PROBE TYPE:           MAG7
FLOAT TYPE:           4.0 IN.
WATER MINIMUM:        0.000 INCHES

--- PROBE 3 ---
CONFIGURED:           ENABLED
LABEL:                B99 Bio Blender
ADDRESS:              B2.S2.7
SERIAL NUMBER:        395487
PROBE TYPE:           MAG7
FLOAT TYPE:           4.0 IN.
WATER MINIMUM:        0.000 INCHES

--- PROBE 4 ---
CONFIGURED:           ENABLED
LABEL:                Premium 9K
ADDRESS:              B2.S2.9
SERIAL NUMBER:        396588
PROBE TYPE:           MAG7
FLOAT TYPE:           4.0 IN.
WATER MINIMUM:        0.000 INCHES
```

Communication Setup:
SMTP (Email)

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unleaded 25k  
ADDRESS:              B2.S2.8  
SERIAL NUMBER:        262172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:        284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                B99 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:        395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:        396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----
```

Gateway Setup

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unleaded 25k  
ADDRESS:              B2.S2.8  
SERIAL NUMBER:       262172  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:       284047  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                B99 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:       395487  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:       396588  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES
```

Device Setup: Probes

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unleaded 25k  
ADDRESS:              B2.S2.0  
SERIAL NUMBER:        262172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:        284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                B99 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:        395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:        396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES
```

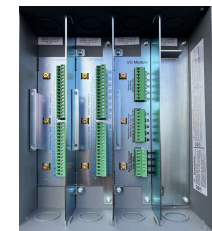
Probe Setup:
Label – User Definer

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unlabeled 25K  
ADDRESS:              B2.S2.8  
SERIAL NUMBER:       395172  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:       284047  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                899 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:       395487  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:       395588  
PROBE TYPE:          MAG7  
FLOAT TYPE:          4.0 IN.  
WATER MINIMUM:       0.000 INCHES  
-----
```

Probe Setup:
Address – TLS Connection Position



TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:           Maverik #654  
SENDER EMAIL ADDRESS:  Vr654@maverik.com  
USE SYSTEM HOSTNAME:   YES  
EMAIL RELAY:           DISABLED  
RELAY REQUIRES SSL:    NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:             ENABLED  
LABEL:                 Unleaded 25k  
ADDRESS:               B2.S2.9  
SERIAL NUMBER:         262172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:             ENABLED  
LABEL:                 Diesel 25K  
ADDRESS:               B2.S2.5  
SERIAL NUMBER:         284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:             ENABLED  
LABEL:                 B99 Bio Blender  
ADDRESS:               B2.S2.7  
SERIAL NUMBER:         395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:             ENABLED  
LABEL:                 Premium 9K  
ADDRESS:               B2.S2.9  
SERIAL NUMBER:         396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----
```

Probe Setup:
Probe Serial Number

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unleaded 25k  
ADDRESS:              B2.S2.8  
SERIAL NUMBER:        202172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:        284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                899 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:        395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:        396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----
```

Probe Setup:
Probe Type

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:          Maverik #654  
SENDER EMAIL ADDRESS: Vr654@maverik.com  
USE SYSTEM HOSTNAME:  YES  
EMAIL RELAY:          DISABLED  
RELAY REQUIRES SSL:   NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:           ENABLED  
LABEL:                Unleaded 25k  
ADDRESS:              B2.S2.8  
SERIAL NUMBER:        262172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:           ENABLED  
LABEL:                Diesel 25K  
ADDRESS:              B2.S2.5  
SERIAL NUMBER:        284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:           ENABLED  
LABEL:                899 Bio Blender  
ADDRESS:              B2.S2.7  
SERIAL NUMBER:        395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:           ENABLED  
LABEL:                Premium 9K  
ADDRESS:              B2.S2.9  
SERIAL NUMBER:        396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----
```

Probe Setup:
Float Type

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - SMTP RELAY ***  
-----  
SENDER NAME:           Maverik #654  
SENDER EMAIL ADDRESS:  Vr654@maverik.com  
USE SYSTEM HOSTNAME:   YES  
EMAIL RELAY:           DISABLED  
RELAY REQUIRES SSL:    NO  
-----  
*** GATEWAY - SETUP ***  
-----  
--- NO GATEWAY EXISTS ---  
-----  
*** DEVICE SETUP - PROBE ***  
-----  
--- PROBE 1 ---  
CONFIGURED:             ENABLED  
LABEL:                 Unleaded 25k  
ADDRESS:               B2.S2.8  
SERIAL NUMBER:         262172  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 2 ---  
CONFIGURED:             ENABLED  
LABEL:                 Diesel 25K  
ADDRESS:               B2.S2.5  
SERIAL NUMBER:         284047  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 3 ---  
CONFIGURED:             ENABLED  
LABEL:                 899 Bio Blender  
ADDRESS:               B2.S2.7  
SERIAL NUMBER:         395487  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----  
--- PROBE 4 ---  
CONFIGURED:             ENABLED  
LABEL:                 Premium 9K  
ADDRESS:               B2.S2.9  
SERIAL NUMBER:         396588  
PROBE TYPE:           MAG7  
FLOAT TYPE:           4.0 IN.  
WATER MINIMUM:        0.000 INCHES  
-----
```

Probe Setup:
Water Detection Minimum

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - RELAY ***

CONFIGURED:      --- RELAY 1 ---
LABEL:           ENABLED
ADDRESS:         87 Regular Unleaded
TYPE:           Pump Control Output
ORIENTATION:    Normally Open

CONFIGURED:      --- RELAY 2 ---
LABEL:           ENABLED
ADDRESS:         91 Premium Unleaded
TYPE:           Pump Control Output
ORIENTATION:    Normally Open

CONFIGURED:      --- RELAY 3 ---
LABEL:           ENABLED
ADDRESS:         B20 Diesel 25K
TYPE:           Pump Control Output
ORIENTATION:    Normally Open

CONFIGURED:      --- RELAY 4 ---
LABEL:           ENABLED
ADDRESS:         Def
TYPE:           Standard
ORIENTATION:    Normally Open

CONFIGURED:      --- RELAY 5 ---
LABEL:           ENABLED
ADDRESS:         Bio Blender Diesel 8
TYPE:           Pump Control Output
ORIENTATION:    Normally Open

CONFIGURED:      --- RELAY 6 ---
LABEL:           ENABLED
ADDRESS:         Overfill alarm
TYPE:           Standard
ORIENTATION:    Normally Open
```

Device Setup:
Relays

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - RELAY ***  
-----  
          --- RELAY 1 ---  
CONFIGURED:  ENABLED  
LABEL:      87 Regular Unleaded  
ADDRESS:    B2.S3.5  
TYPE:       Pump Control Output  
ORIENTATION: Normally Open  
  
          --- RELAY 2 ---  
CONFIGURED:  ENABLED  
LABEL:      91 Premium Unleaded  
ADDRESS:    B2.S3.6  
TYPE:       Pump Control Output  
ORIENTATION: Normally Open  
  
          --- RELAY 3 ---  
CONFIGURED:  ENABLED  
LABEL:      B20 Diesel 25K  
ADDRESS:    B2.S3.7  
TYPE:       Pump Control Output  
ORIENTATION: Normally Open  
  
          --- RELAY 4 ---  
CONFIGURED:  ENABLED  
LABEL:      Def  
ADDRESS:    B2.S3.8  
TYPE:       Standard  
ORIENTATION: Normally Open  
  
          --- RELAY 5 ---  
CONFIGURED:  ENABLED  
LABEL:      Bio Blender Diesel 8  
ADDRESS:    B2.S3.9  
TYPE:       Pump Control Output  
ORIENTATION: Normally Open  
  
          --- RELAY 6 ---  
CONFIGURED:  ENABLED  
LABEL:      Overfill alarm  
ADDRESS:    B1.S7.1  
TYPE:       Standard  
ORIENTATION: Normally Open
```

Relay Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - RELAY ***

--- RELAY 1 ---
CONFIGURED:      ENABLED
LABEL:           07 Regular Unleaded
ADDRESS:         B2.S3.5
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
ADDRESS:         B2.S3.6
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 3 ---
CONFIGURED:      ENABLED
LABEL:           B20 Diesel 25K
ADDRESS:         B2.S3.7
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 4 ---
CONFIGURED:      ENABLED
LABEL:           Def
ADDRESS:         B2.S3.8
TYPE:            Standard
ORIENTATION:    Normally Open

--- RELAY 5 ---
CONFIGURED:      ENABLED
LABEL:           Bio Blender Diesel 8
ADDRESS:         B2.S3.9
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 6 ---
CONFIGURED:      ENABLED
LABEL:           Overfill alarm
ADDRESS:         B1.S7.1
TYPE:            Standard
ORIENTATION:    Normally Open
```

Relay Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - RELAY ***

--- RELAY 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
ADDRESS:         B2.S3.5
TYPE:            Pump Control Output
ORIENTATION:     Normally Open

--- RELAY 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
ADDRESS:         B2.S3.6
TYPE:            Pump Control Output
ORIENTATION:     Normally Open

--- RELAY 3 ---
CONFIGURED:      ENABLED
LABEL:           B20 Diesel 25K
ADDRESS:         B2.S3.7
TYPE:            Pump Control Output
ORIENTATION:     Normally Open

--- RELAY 4 ---
CONFIGURED:      ENABLED
LABEL:           Def
ADDRESS:         B2.S3.8
TYPE:            Standard
ORIENTATION:     Normally Open

--- RELAY 5 ---
CONFIGURED:      ENABLED
LABEL:           Bio Blender Diesel 8
ADDRESS:         B2.S3.9
TYPE:            Pump Control Output
ORIENTATION:     Normally Open

--- RELAY 6 ---
CONFIGURED:      ENABLED
LABEL:           Overfill alarm
ADDRESS:         B1.S7.1
TYPE:            Standard
ORIENTATION:     Normally Open
```

Relay Setup: Type:

- Standard - On/Off state is determined by assigned alarms or warnings.
- Momentary - On/Off state is determined by the assigned alarms or warnings (relay returns to the inactive state after the alarm is acknowledged).
- Pump Control Output - Relay state is controlled by the console pump/line controller.
- Temperature Control - Relay state is controlled with temperature sensor(s)

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - RELAY ***

--- RELAY 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
ADDRESS:         B2.S3.5
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
ADDRESS:         B2.S3.6
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 3 ---
CONFIGURED:      ENABLED
LABEL:           B20 Diesel 25K
ADDRESS:         B2.S3.7
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 4 ---
CONFIGURED:      ENABLED
LABEL:           Def
ADDRESS:         B2.S3.8
TYPE:            Standard
ORIENTATION:    Normally Open

--- RELAY 5 ---
CONFIGURED:      ENABLED
LABEL:           Bio Blender Diesel 8
ADDRESS:         B2.S3.9
TYPE:            Pump Control Output
ORIENTATION:    Normally Open

--- RELAY 6 ---
CONFIGURED:      ENABLED
LABEL:           Overfill alarm
ADDRESS:         B1.S7.1
TYPE:            Standard
ORIENTATION:    Normally Open
```

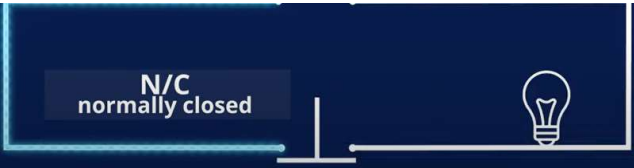
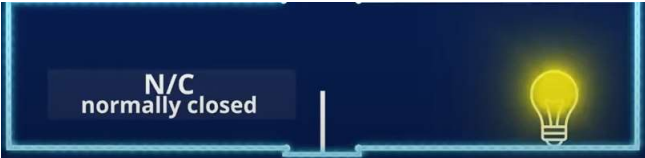
Relay Setup:
Orientation –

- Normally Open
- Normally Closed



Normally Open

Normally Closed



TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - EXTERNAL INPUT ***

--- EXTERNAL INPUT 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
ADDRESS:         B2.S3.10
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
ADDRESS:         B2.S3.11
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 3 ---
CONFIGURED:      ENABLED
LABEL:           B20 Diesel 25K
ADDRESS:         B2.S3.12
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 4 ---
CONFIGURED:      ENABLED
LABEL:           DEF
ADDRESS:         B2.S3.13
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 5 ---
CONFIGURED:      ENABLED
LABEL:           B20 Bio Blender Dsl
ADDRESS:         B2.S3.14
TYPE:            Pump Sense
ORIENTATION:     Normally Open
```

Device Setup - External Inputs

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - EXTERNAL INPUT ***  
-----  
          --- EXTERNAL INPUT 1 ---  
CONFIGURED:      ENABLED  
LABEL:           87 Regular Unleaded  
ADDRESS:         B2.S3.10  
TYPE:            Pump Sense  
ORIENTATION:    Normally Open  
  
          --- EXTERNAL INPUT 2 ---  
CONFIGURED:      ENABLED  
LABEL:           91 Premium Unleaded  
ADDRESS:         B2.S3.11  
TYPE:            Pump Sense  
ORIENTATION:    Normally Open  
  
          --- EXTERNAL INPUT 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Diesel 25K  
ADDRESS:         B2.S3.12  
TYPE:            Pump Sense  
ORIENTATION:    Normally Open  
  
          --- EXTERNAL INPUT 4 ---  
CONFIGURED:      ENABLED  
LABEL:           DEF  
ADDRESS:         B2.S3.13  
TYPE:            Pump Sense  
ORIENTATION:    Normally Open  
  
          --- EXTERNAL INPUT 5 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Bio Blender Dsl  
ADDRESS:         B2.S3.14  
TYPE:            Pump Sense  
ORIENTATION:    Normally Open
```

External Input Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - EXTERNAL INPUT ***  
-----  
          --- EXTERNAL INPUT 1 ---  
CONFIGURED:      ENABLED  
LABEL:           07 Regular Unleaded  
ADDRESS:         B2.S3.10  
TYPE:            Pump Sense  
ORIENTATION:     Normally Open  
  
          --- EXTERNAL INPUT 2 ---  
CONFIGURED:      ENABLED  
LABEL:           91 Premium Unleaded  
ADDRESS:         B2.S3.11  
TYPE:            Pump Sense  
ORIENTATION:     Normally Open  
  
          --- EXTERNAL INPUT 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Diesel 25K  
ADDRESS:         B2.S3.12  
TYPE:            Pump Sense  
ORIENTATION:     Normally Open  
  
          --- EXTERNAL INPUT 4 ---  
CONFIGURED:      ENABLED  
LABEL:           DEF  
ADDRESS:         B2.S3.13  
TYPE:            Pump Sense  
ORIENTATION:     Normally Open  
  
          --- EXTERNAL INPUT 5 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Bio Blender Dsl  
ADDRESS:         B2.S3.14  
TYPE:            Pump Sense  
ORIENTATION:     Normally Open
```

External Input Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - EXTERNAL INPUT ***
-----
--- EXTERNAL INPUT 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
ADDRESS:         B2.S3.10
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
ADDRESS:         B2.S3.11
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 3 ---
CONFIGURED:      ENABLED
LABEL:           B20 Diesel 25K
ADDRESS:         B2.S3.12
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 4 ---
CONFIGURED:      ENABLED
LABEL:           DEF
ADDRESS:         B2.S3.13
TYPE:            Pump Sense
ORIENTATION:     Normally Open

--- EXTERNAL INPUT 5 ---
CONFIGURED:      ENABLED
LABEL:           B20 Bio Blender Dsl
ADDRESS:         B2.S3.14
TYPE:            Pump Sense
ORIENTATION:     Normally Open
```

External Input Setup: Type:

- Standard - Generates an external input alarm when it is active.
- Generator - Generates the ON and OFF messages for CSLD on a generator.
- Pump Sense - Indicates the On/Off state and the state of hook signal for a dispenser and is used to configure PLLD.

TLS-450PLUS Setup Tape



```
--- ** DEVICE SETUP - EXTERNAL INPUT ** ---  
--- EXTERNAL INPUT 1 ---  
CONFIGURED:      ENABLED  
LABEL:           87 Regular Unleaded  
ADDRESS:         B2.S3.10  
TYPE:           Pump Sense  
ORIENTATION:     Normally Open  
--- EXTERNAL INPUT 2 ---  
CONFIGURED:      ENABLED  
LABEL:           91 Premium Unleaded  
ADDRESS:         B2.S3.11  
TYPE:           Pump Sense  
ORIENTATION:     Normally Open  
--- EXTERNAL INPUT 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Diesel 25K  
ADDRESS:         B2.S3.12  
TYPE:           Pump Sense  
ORIENTATION:     Normally Open  
--- EXTERNAL INPUT 4 ---  
CONFIGURED:      ENABLED  
LABEL:           DEF  
ADDRESS:         B2.S3.13  
TYPE:           Pump Sense  
ORIENTATION:     Normally Open  
--- EXTERNAL INPUT 5 ---  
CONFIGURED:      ENABLED  
LABEL:           B20 Bio Blender Dsl  
ADDRESS:         B2.S3.14  
TYPE:           Pump Sense  
ORIENTATION:     Normally Open
```

External Input Setup: Orientation

- Normally Open
- Normally Closed

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - LIQUID SENSOR ***

--- LIQUID SENSOR 1 ---
CONFIGURED:      ENABLED
LABEL:           Regular tank annular
ADDRESS:         B1.S1.1
MODEL:           Dual Point Hydrostatic
CATEGORY:        Annular Space

--- LIQUID SENSOR 2 ---
CONFIGURED:      ENABLED
LABEL:           Regular STP
ADDRESS:         B1.S1.2
MODEL:           Tri-State(Single Float)
CATEGORY:        STP Sump

--- LIQUID SENSOR 3 ---
CONFIGURED:      ENABLED
LABEL:           Regular STP Annular
ADDRESS:         B1.S1.3
MODEL:           Tri-State(Single Float)
CATEGORY:        Annular Space

--- LIQUID SENSOR 4 ---
CONFIGURED:      ENABLED
LABEL:           Reg Fill Sump Hydro
ADDRESS:         B1.S1.4
MODEL:           Tri-State(Single Float)
CATEGORY:        Piping Sump

--- LIQUID SENSOR 5 ---
CONFIGURED:      ENABLED
LABEL:           Regular Fill Sump
ADDRESS:         B1.S1.5
MODEL:           Tri-State(Single Float)
CATEGORY:        Annular Space

--- LIQUID SENSOR 6 ---
CONFIGURED:      ENABLED
LABEL:           Def 91 B20 Tank Ann.
ADDRESS:         B1.S1.6
MODEL:           Dual Point Hydrostatic
CATEGORY:        Annular Space

--- LIQUID SENSOR 7 ---
CONFIGURED:      ENABLED
LABEL:           Premium STP Sump
ADDRESS:         B1.S1.7
MODEL:           Tri-State(Single Float)
CATEGORY:        STP Sump
```

Liquid Sensor Setup

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - LIQUID SENSOR ***  
-----  
--- LIQUID SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular tank annular  
ADDRESS:         B1.S1.1  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP  
ADDRESS:         B1.S1.2  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump  
  
--- LIQUID SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP Annular  
ADDRESS:         B1.S1.3  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Reg Fill Sump Hydro  
ADDRESS:         B1.S1.4  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Piping Sump  
  
--- LIQUID SENSOR 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Fill Sump  
ADDRESS:         B1.S1.5  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Def 91 B20 Tank Ann.  
ADDRESS:         B1.S1.6  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Premium STP Sump  
ADDRESS:         B1.S1.7  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump  
-----
```

Liquid Sensor Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - LIQUID SENSOR ***  
-----  
CONFIGURED:    --- LIQUID SENSOR 1 ---  
                ENABLED  
LABEL:         Regular Tank Annular  
ADDRESS:       B1.S1.1  
MODEL:         Dual Point Hydrostatic  
CATEGORY:     Annular Space  
  
CONFIGURED:    --- LIQUID SENSOR 2 ---  
                ENABLED  
LABEL:         Regular STP  
ADDRESS:       B1.S1.2  
MODEL:         Tri-State(Single Float)  
CATEGORY:     STP Sump  
  
CONFIGURED:    --- LIQUID SENSOR 3 ---  
                ENABLED  
LABEL:         Regular STP Annular  
ADDRESS:       B1.S1.3  
MODEL:         Tri-State(Single Float)  
CATEGORY:     Annular Space  
  
CONFIGURED:    --- LIQUID SENSOR 4 ---  
                ENABLED  
LABEL:         Reg Fill Sump Hydro  
ADDRESS:       B1.S1.4  
MODEL:         Tri-State(Single Float)  
CATEGORY:     Piping Sump  
  
CONFIGURED:    --- LIQUID SENSOR 5 ---  
                ENABLED  
LABEL:         Regular Fill Sump  
ADDRESS:       B1.S1.5  
MODEL:         Tri-State(Single Float)  
CATEGORY:     Annular Space  
  
CONFIGURED:    --- LIQUID SENSOR 6 ---  
                ENABLED  
LABEL:         Def 91 B20 Tank Ann.  
ADDRESS:       B1.S1.6  
MODEL:         Dual Point Hydrostatic  
CATEGORY:     Annular Space  
  
CONFIGURED:    --- LIQUID SENSOR 7 ---  
                ENABLED  
LABEL:         Premium STP Sump  
ADDRESS:       B1.S1.7  
MODEL:         Tri-State(Single Float)  
CATEGORY:     STP Sump  
-----
```

Liquid Sensor Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - LIQUID SENSOR ***  
-----  
--- LIQUID SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular tank annular  
ADDRESS:         B1.S1.1  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP  
ADDRESS:         B1.S1.2  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump  
  
--- LIQUID SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP Annular  
ADDRESS:         B1.S1.3  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Reg Fill Sump Hydro  
ADDRESS:         B1.S1.4  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Piping Sump  
  
--- LIQUID SENSOR 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Fill Sump  
ADDRESS:         B1.S1.5  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Def 91 B20 Tank Ann.  
ADDRESS:         B1.S1.6  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
  
--- LIQUID SENSOR 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Premium STP Sump  
ADDRESS:         B1.S1.7  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump
```

Liquid Sensor Setup:
Model – Sensor Type

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - LIQUID SENSOR ***  
-----  
--- LIQUID SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular tank annular  
ADDRESS:         B1.S1.1  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
--- LIQUID SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP  
ADDRESS:         B1.S1.2  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump  
--- LIQUID SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular STP Annular  
ADDRESS:         B1.S1.3  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
--- LIQUID SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Reg Fill Sump Hydro  
ADDRESS:         B1.S1.4  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Piping Sump  
--- LIQUID SENSOR 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Fill Sump  
ADDRESS:         B1.S1.5  
MODEL:           Tri-State(Single Float)  
CATEGORY:        Annular Space  
--- LIQUID SENSOR 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Def 91 B20 Tank Ann.  
ADDRESS:         B1.S1.6  
MODEL:           Dual Point Hydrostatic  
CATEGORY:        Annular Space  
--- LIQUID SENSOR 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Premium STP Sump  
ADDRESS:         B1.S1.7  
MODEL:           Tri-State(Single Float)  
CATEGORY:        STP Sump
```

Liquid Sensor Setup:
Category – Sensor Application

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - VAPOR SENSOR ***  
  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---
```

Device Setup:
Vapor Sensor

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---
```

Device Setup:
Ground Water Sensor

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---  
-----
```

Device Setup:
Type "A" Sensor

Example:
Micro Sensor

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---
```

Device Setup:
Type "B" Sensor

Example:
Discriminating Sensor



TLS-450PLUS Setup Tape

```
-----  
*** DEVICE SETUP - VAPOR SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---  
-----
```

Device Setup:
Temperature Sensor

Used with DEF recirculation system



TLS-450PLUS Setup Tape

```
-----  
*** DEVICE SETUP - VAPOR SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - GROUND WATER SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE A SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TYPE B SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - TEMPERATURE SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LVDIM ***  
-----  
--- NO DEVICE DEFINED ---
```

Device Setup:
LVDIM

Low Voltage Dispenser Interface Module

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - AIR FLOW METER ***

--- AIR FLOW METER 1 ---
CONFIGURED:      ENABLED
LABEL:           Disp 1-2 Flowmeter
ADDRESS:         B2.S4.1
SERIAL NUMBER:   86477

--- AIR FLOW METER 2 ---
CONFIGURED:      ENABLED
LABEL:           Disp 3-4 Flowmeter
ADDRESS:         B2.S4.2
SERIAL NUMBER:   86449

--- AIR FLOW METER 3 ---
CONFIGURED:      ENABLED
LABEL:           Disp 5-6 Flowmeter
ADDRESS:         B2.S4.3
SERIAL NUMBER:   60879

--- AIR FLOW METER 4 ---
CONFIGURED:      ENABLED
LABEL:           Disp 7-8 Flowmeter
ADDRESS:         B2.S4.4
SERIAL NUMBER:   86484

--- AIR FLOW METER 5 ---
CONFIGURED:      ENABLED
LABEL:           Disp 9-10 Flowmeter
ADDRESS:         B2.S4.5
SERIAL NUMBER:   86486

--- AIR FLOW METER 6 ---
CONFIGURED:      ENABLED
LABEL:           Disp 11-12 Flowmeter
ADDRESS:         B2.S4.6
SERIAL NUMBER:   87382

--- AIR FLOW METER 7 ---
CONFIGURED:      ENABLED
LABEL:           Disp 13-14 Flowmeter
ADDRESS:         B2.S4.7
SERIAL NUMBER:   86488

--- AIR FLOW METER 8 ---
CONFIGURED:      ENABLED
LABEL:           Disp 15-16 Flowmeter
ADDRESS:         B2.S4.8
SERIAL NUMBER:   86482
```

Device Setup:
Air Flow Meters (ISD)

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - AIR FLOW METER ***  
-----  
--- AIR FLOW METER 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 1-2 Flowmeter  
ADDRESS:         B2.S4.1  
SERIAL NUMBER:   86477  
  
--- AIR FLOW METER 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 3-4 Flowmeter  
ADDRESS:         B2.S4.2  
SERIAL NUMBER:   86449  
  
--- AIR FLOW METER 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 5-6 Flowmeter  
ADDRESS:         B2.S4.3  
SERIAL NUMBER:   60879  
  
--- AIR FLOW METER 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 7-8 Flowmeter  
ADDRESS:         B2.S4.4  
SERIAL NUMBER:   86484  
  
--- AIR FLOW METER 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 9-10 Flowmeter  
ADDRESS:         B2.S4.5  
SERIAL NUMBER:   86486  
  
--- AIR FLOW METER 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 11-12 Flowmeter  
ADDRESS:         B2.S4.6  
SERIAL NUMBER:   87382  
  
--- AIR FLOW METER 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 13-14 Flowmeter  
ADDRESS:         B2.S4.7  
SERIAL NUMBER:   86488  
  
--- AIR FLOW METER 8 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 15-16 Flowmeter  
ADDRESS:         B2.S4.8  
SERIAL NUMBER:   86482  
-----
```

Air Flow Meter Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - AIR FLOW METER ***  
-----  
          --- AIR FLOW METER 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 1-2 Flowmeter  
ADDRESS:         B2.S4.1  
SERIAL NUMBER:   86477  
  
          --- AIR FLOW METER 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 3-4 Flowmeter  
ADDRESS:         B2.S4.2  
SERIAL NUMBER:   86449  
  
          --- AIR FLOW METER 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 5-6 Flowmeter  
ADDRESS:         B2.S4.3  
SERIAL NUMBER:   60879  
  
          --- AIR FLOW METER 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 7-8 Flowmeter  
ADDRESS:         B2.S4.4  
SERIAL NUMBER:   86484  
  
          --- AIR FLOW METER 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 9-10 Flowmeter  
ADDRESS:         B2.S4.5  
SERIAL NUMBER:   86486  
  
          --- AIR FLOW METER 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 11-12 Flowmeter  
ADDRESS:         B2.S4.6  
SERIAL NUMBER:   87382  
  
          --- AIR FLOW METER 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 13-14 Flowmeter  
ADDRESS:         B2.S4.7  
SERIAL NUMBER:   86488  
  
          --- AIR FLOW METER 8 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 15-16 Flowmeter  
ADDRESS:         B2.S4.8  
SERIAL NUMBER:   86482
```

Airflow Meter Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - AIR FLOW METER ***  
-----  
--- AIR FLOW METER 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 1-2 Flowmeter  
ADDRESS:         B2.S4.1  
SERIAL NUMBER:   86477  
--- AIR FLOW METER 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 3-4 Flowmeter  
ADDRESS:         B2.S4.2  
SERIAL NUMBER:   86449  
--- AIR FLOW METER 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 5-6 Flowmeter  
ADDRESS:         B2.S4.3  
SERIAL NUMBER:   60879  
--- AIR FLOW METER 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 7-8 Flowmeter  
ADDRESS:         B2.S4.4  
SERIAL NUMBER:   86484  
--- AIR FLOW METER 5 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 9-10 Flowmeter  
ADDRESS:         B2.S4.5  
SERIAL NUMBER:   86486  
--- AIR FLOW METER 6 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 11-12 Flowmeter  
ADDRESS:         B2.S4.6  
SERIAL NUMBER:   87382  
--- AIR FLOW METER 7 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 13-14 Flowmeter  
ADDRESS:         B2.S4.7  
SERIAL NUMBER:   86488  
--- AIR FLOW METER 8 ---  
CONFIGURED:      ENABLED  
LABEL:           Disp 15-16 Flowmeter  
ADDRESS:         B2.S4.8  
SERIAL NUMBER:   86482
```

Airflow Meter Setup:
Serial Number

Smart Sensor Serial Number

Smart Sensor Examples:

- Vapor Flow Meters
- Vapor Pressure Sensors
- SCVS System Sensors
- MagSump Sensor

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - VAPOR PRESS SENSOR ***

--- VAPOR PRESS SENSOR 1 ---
CONFIGURED:      ENABLED
LABEL:           Vapor PRSensor
ADDRESS:         B2.S4.15
SERIAL NUMBER:   7830436
-----
*** DEVICE SETUP - MAG SENSOR ***
-----
--- NO DEVICE DEFINED ---
-----
*** DEVICE SETUP - VACUUM SENSOR ***
-----

--- VACUUM SENSOR 1 ---
CONFIGURED:      ENABLED
LABEL:           Regular VAC 1 Vapor
ADDRESS:         B2.S1.1
SERIAL NUMBER:   21040008
PUMP:            Pm 1: 87 Regular Unleaded
VOLUME:          100.0 GALLONS
RELIEF VALVE:    NO

--- VACUUM SENSOR 2 ---
CONFIGURED:      ENABLED
LABEL:           Regular Vac-2 Vent
ADDRESS:         B2.S1.2
SERIAL NUMBER:   21040013
PUMP:            Pm 1: 87 Regular Unleaded
VOLUME:          100.0 GALLONS
RELIEF VALVE:    NO

--- VACUUM SENSOR 3 ---
CONFIGURED:      ENABLED
LABEL:           Regular Vac 3 Syphon
ADDRESS:         B2.S1.3
SERIAL NUMBER:   21240018
PUMP:            Pm 1: 87 Regular Unleaded
VOLUME:          100.0 GALLONS
RELIEF VALVE:    NO

--- VACUUM SENSOR 4 ---
CONFIGURED:      ENABLED
LABEL:           Regular Vac 4 Prod 2
ADDRESS:         B2.S1.4
SERIAL NUMBER:   21030098
PUMP:            Pm 1: 87 Regular Unleaded
VOLUME:          100.0 GALLONS
RELIEF VALVE:    NO
```

Device Setup:
Vapor Pressure Sensor (ISD)

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
--- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:          ENABLED  
LABEL:               Vapor Pressure  
ADDRESS:             B2.S4.15  
SERIAL NUMBER:      7000100  
-----  
*** DEVICE SETUP - MAG SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - VACUUM SENSOR ***  
-----  
--- VACUUM SENSOR 1 ---  
CONFIGURED:          ENABLED  
LABEL:               Regular VAC 1 Vapor  
ADDRESS:             B2.S1.1  
SERIAL NUMBER:      21040008  
PUMP:                Pm 1: 87 Regular Unleaded  
VOLUME:              100.0 GALLONS  
RELIEF VALVE:        NO  
-----  
--- VACUUM SENSOR 2 ---  
CONFIGURED:          ENABLED  
LABEL:               Regular Vac-2 Vent  
ADDRESS:             B2.S1.2  
SERIAL NUMBER:      21040013  
PUMP:                Pm 1: 87 Regular Unleaded  
VOLUME:              100.0 GALLONS  
RELIEF VALVE:        NO  
-----  
--- VACUUM SENSOR 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Regular Vac 3 Syphon  
ADDRESS:             B2.S1.3  
SERIAL NUMBER:      21240018  
PUMP:                Pm 1: 87 Regular Unleaded  
VOLUME:              100.0 GALLONS  
RELIEF VALVE:        NO  
-----  
--- VACUUM SENSOR 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Regular Vac 4 Prod 2  
ADDRESS:             B2.S1.4  
SERIAL NUMBER:      21030098  
PUMP:                Pm 1: 87 Regular Unleaded  
VOLUME:              100.0 GALLONS  
RELIEF VALVE:        NO
```

Device Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
Serial Number – Sensor Serial Number

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
  
*** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
MagSump Sensor

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
*** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
SCVS System Sensors

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----
```

Device Setup:
Label - User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21030008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----
```

Device Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   2104008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----
```

Device Setup:
Serial Number – Sensor Serial Number

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   2104008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
Pump – STP Assigned for Vacuum Source

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   21040008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:          100.0 GALLONS  
RELIEF VALVE:    NO
```

Device Setup:
Volume – Interstitial Space Volume

Secondary Containment Volumes by Manufacturer

Type	Volume
AMERON	
Dualoy 3000/L 3" over 2" piping	0.2186 Gal / Ft
Dualoy 3000/L 4" over 3" piping	0.2652 Gal / Ft
Dualoy 3000/L 6" over 4" piping	0.8398 Gal / Ft
Dualoy 3000/LCX 2" piping	0.0133 Gal / Ft
Dualoy 3000/LCX 3" piping	0.0196 Gal / Ft
Dualoy 3000/LCX 4" piping	0.0252 Gal / Ft
APT	
0.5" Double Wall Pipe	0.0031 Gal / Ft
0.75" Double Wall Pipe	0.0042 Gal / Ft
1.00" Double Wall Pipe	0.0119 Gal / Ft
1.5" Double Wall Pipe	0.0062 Gal / Ft
1.75" Double Wall Pipe	0.0182 Gal / Ft
2" Double Wall Pipe	0.0218 Gal / Ft
2.5" Double Wall Pipe	0.0104 Gal / Ft
BRAVO	
Small Foot Print Double Wall UDC	1.26 Gal / Sump
Large Foot Print Double Wall UDC	2 Gal / Sump
42" Double Wall Tank Sump	1.1429 Gal / Ft*
48" Double Wall Tank Sump	1.3061 Gal / Ft*
Small Vent Box	1.25 Gal/Sump
Large Vent Box	2.00 Gal/Sump
CONTAINMENT SOLUTIONS	
<i>Double Wall Tanks</i>	
48" Diameter 500 Gallon Capacity	5.8 Gal / Tank
48" Diameter 800 Gallon Capacity	5.9 Gal / Tank
48" Diameter 1,000 Gallon Capacity	6.1 Gal / Tank
72" Diameter 2,000 Gallon Capacity	25.1 Gal / Tank
72" Diameter 2,500 Gallon Capacity	33.4 Gal / Tank
72" Diameter 3,000 Gallon Capacity	41.7 Gal / Tank
72" Diameter 3,500 Gallon Capacity	45.8 Gal / Tank
72" Diameter 4,000 Gallon Capacity	49.9 Gal / Tank
72" Diameter 4,500 Gallon Capacity	58.1 Gal / Tank
72" Diameter 5,000 Gallon Capacity	66.4 Gal / Tank
72" Diameter 6,000 Gallon Capacity	82.9 Gal / Tank
72" Diameter 7,000 Gallon Capacity	91.2 Gal / Tank
72" Diameter 8,000 Gallon Capacity	107.7 Gal / Tank
72" Diameter 9,000 Gallon Capacity	116.1 Gal / Tank
72" Diameter 10,000 Gallon Capacity	132.4 Gal / Tank
92" Diameter 4,000 Gallon Capacity	32.2 Gal / Tank
92" Diameter 5,000 Gallon Capacity	42.7 Gal / Tank
92" Diameter 6,000 Gallon Capacity	53.2 Gal / Tank
92" Diameter 7,000 Gallon Capacity	63.7 Gal / Tank
92" Diameter 8,000 Gallon Capacity	74.2 Gal / Tank
92" Diameter 10,000 Gallon Capacity	95.2 Gal / Tank
92" Diameter 11,000 Gallon Capacity	105.7 Gal / Tank
92" Diameter 12,000 Gallon Capacity	116.2 Gal / Tank
92" Diameter 13,000 Gallon Capacity	126.7 Gal / Tank
92" Diameter 14,000 Gallon Capacity	137.2 Gal / Tank
92" Diameter 15,000 Gallon Capacity	147.7 Gal / Tank
92" Diameter 16,000 Gallon Capacity	158.2 Gal / Tank
92" Diameter 17,000 Gallon Capacity	168.8 Gal / Tank
92" Diameter 18,000 Gallon Capacity	179.4 Gal / Tank
92" Diameter 20,000 Gallon Capacity	210.7 Gal / Tank

Type	Volume
CONTAINMENT SOLUTIONS	
<i>Double Wall Tanks - continued</i>	
120" Diameter 10,000 Gallon Capacity	131 Gal / Tank
120" Diameter 12,000 Gallon Capacity	163.1 Gal / Tank
120" Diameter 15,000 Gallon Capacity	227.2 Gal / Tank
120" Diameter 16,000 Gallon Capacity	243.3 Gal / Tank
120" Diameter 17,000 Gallon Capacity	259.3 Gal / Tank
120" Diameter 18,000 Gallon Capacity	291.4 Gal / Tank
120" Diameter 19,000 Gallon Capacity	307.4 Gal / Tank
120" Diameter 20,000 Gallon Capacity	323.5 Gal / Tank
120" Diameter 21,000 Gallon Capacity	339.5 Gal / Tank
120" Diameter 22,000 Gallon Capacity	355.6 Gal / Tank
120" Diameter 23,000 Gallon Capacity	371.7 Gal / Tank
120" Diameter 24,000 Gallon Capacity	403.7 Gal / Tank
120" Diameter 25,000 Gallon Capacity	419.8 Gal / Tank
120" Diameter 26,000 Gallon Capacity	435.9 Gal / Tank
120" Diameter 28,000 Gallon Capacity	483.9 Gal / Tank
120" Diameter 30,000 Gallon Capacity	516.0 Gal / Tank
120" Diameter 31,000 Gallon Capacity	532.1 Gal / Tank
120" Diameter 32,000 Gallon Capacity	548.1 Gal / Tank
120" Diameter 35,000 Gallon Capacity	612.3 Gal / Tank
120" Diameter 40,000 Gallon Capacity	708.6 Gal / Tank
120" Diameter 45,000 Gallon Capacity	804.9 Gal / Tank
120" Diameter 50,000 Gallon Capacity	901.1 Gal / Tank
<i>Double Wall Sumps</i>	
42" Double Walled Tank Sump	0.8216 Gal / Ft*
48" Double Walled Tank Sump	0.9372 Gal / Ft*
EFS Jacketed Tanks	
500 Gallon Standard Elutron Tank	3 Gal / Tank
1,000 Gallon Standard Elutron Tank	4 Gal / Tank
2,000 Gallon Standard Elutron Tank	5 Gal / Tank
3,000 Gallon Standard Elutron Tank	6 Gal / Tank
4,000 Gallon Standard Elutron Tank	7 Gal / Tank
5,000 Gallon Standard Elutron Tank	8 Gal / Tank
6,000 Gallon Standard Elutron Tank	9 Gal / Tank
8,000 Gallon Standard Elutron Tank	10 Gal / Tank
10,000 Gallon Standard Elutron Tank	13 Gal / Tank
12,000 Gallon Standard Elutron Tank	15 Gal / Tank
15,000 Gallon Standard Elutron Tank	17 Gal / Tank
20,000 Gallon Standard Elutron Tank	22 Gal / Tank
ENVIRON	
<i>GeoFlex Piping</i>	
GeoFlex Piping 7.5" Dia. (GFP-2075)	0.0028 Gal / Ft
GeoFlex Piping 1.0" Dia. (GFP-2100)	0.0039 Gal / Ft
GeoFlex Piping 1.5" Dia. (GFP-2150)	0.0060 Gal / Ft
GeoFlex Piping 2.0" Dia. (GFP-2200)	0.0060 Gal / Ft
GeoFlex Piping 3.0" Dia. (GFP-2300)	0.0164 Gal / Ft
<i>Dispenser Sump</i>	
Dispenser Sump FDS-2014-DW	5 Gal
Dispenser Sump FDS-2414-DW	6.5 Gal
Dispenser Sump FDS-2716-DW	6.5 Gal
Dispenser Sump FDS-2922-DW	10 Gal
Dispenser Sump FDS-3215-DW	7 Gal
Dispenser Sump FDS-3621-DW	8 Gal
Dispenser Sump FDS-4021-DW	10 Gal
Dispenser Sump FDS-4319-DW	8.5 Gal
Dispenser Sump FDS-4422-DW	10.5 Gal
Dispenser Sump FDS-4614-DW	8 Gal
Dispenser Sump FDS-4714-DW	8 Gal
Dispenser Sump FDS-4715-DW	8 Gal
Dispenser Sump FDS-4721-DW	9 Gal

Type	Volume
MODERN WELDING	
<i>Steel walled tank w/ FRP exterior (Model 16):</i>	
520 Gallon Tank, 4 ft dia	41 Gal / Tank
1,000 Gallon Tank, 5 ft 4 in dia	64 Gal / Tank
2,000 Gallon Tank, 5 ft 4 in dia	75 Gal / Tank
3,000 Gallon Tank, 5 ft 4 in dia	82 Gal / Tank
4,000 Gallon Tank	120 Gal / Tank
5,000 gallon tank	142 Gal / Tank
6,000 gallon tank	150 Gal / Tank
8,000 Gallon Tank	157 Gal / Tank
10,000 Gallon Tank	172 Gal / Tank
12,000 Gallon Tank	183 Gal / Tank
15,000 Gallon Tank	239 Gal / Tank
20,000 Gallon Tank	264 Gal / Tank
25,000 Gallon Tank	284 Gal / Tank
30,000 Gallon Tank	307 Gal / Tank
35,000 gallon tank	389 Gal / Tank
40,000 Gallon Tank	426 Gal / Tank
45,000 gallon tank	471 Gal / Tank
50,000 Gallon Tank	501 Gal / Tank
<i>Steel walled composite tanks (Glassteel II, Model 13):</i>	
560 Gallon Tank	3 Gal / Tank
1,000 Gallon Tank	4 Gal / Tank
2,000 Gallon Tank	5 Gal / Tank
3,000 Gallon Tank	6 Gal / Tank
4,000 Gallon Tank	7 Gal / Tank
6,000 Gallon Tank	9 Gal / Tank
8,000 Gallon Tank	10 Gal / Tank
10,000 Gallon Tank	13 Gal / Tank
12,000 Gallon Tank	15 Gal / Tank
15,000 Gallon Tank	17 Gal / Tank
20,000 Gallon Tank	22 Gal / Tank
NUPI	
2" over 1.5" piping (2.48" OD x 1.969" OD)	0.0546 Gal / Ft
3" over 2" piping (2.953" OD x 2.480" OD)	0.0518 Gal / Ft
5" over 3" piping (4.921" OD x 3.543" OD)	0.3299 Gal / Ft
4" over 2" piping (4.3" OD x 2.48" OD)	0.401 Gal / Ft
OPW	
Double Wall Dispenser Sump, DST series	1.9 Gal / Ft*
Tank Sump 42" Dia x 42" Ht. TRFSDW-4248	0.8 Gal
Tank Sump 42" Dia x 60" Ht. TRFSDW-4260	1 Gal
Tank Sump 42" Dia x 72" Ht. TRFSDW-4272	1.3 Gal
Tank Sump 48" Dia x 42" Ht. TRFSDW-4848	0.9 Gal
Tank Sump 48" Dia x 60" Ht. TRFSDW-4860	1.2 Gal
Tank Sump 48" Dia x 72" Ht. TRFSDW-4872	1.4 Gal
Double Wall Vent Stack Sump, TST-4536	1.9 Gal
CD15DW, 1-1/2" Double Wall Pipe	0.0089 Gal / Ft
CD15RB, 1-1/2" Ribbed Double Wall Pipe	0.006 Gal / Ft
CP20RB, 2" Ribbed Double Wall Pipe	0.0086 Gal / Ft
PHIL-TITE	
42" Double wall Tank Sump	0.974 Gal / Ft*
48" Double wall Tank Sump	1.1126 Gal / Ft*
Double wall UDC	3.3866 Gal / Sump
SMITH	
3" over 2" Fiberglass piping	0.23 Gal / Ft
4" over 3" Fiberglass piping	0.276 Gal / Ft
6" over 4" Fiberglass piping	0.823 Gal / Ft
TOTAL CONTAINMENT	
OmniFlex 1.5" (CP1503)	0.0052 Gal / Ft
OmniFlex 2.5" (CP2503)	0.0079 Gal / Ft

Type	Volume
UPP	
63/75 piping	0.0762 Gal / Ft
90/100 piping	0.9824 Gal / Ft
WESTERN FIBERGLASS	
CoFlex 1.5" piping	0.0077 Gal / Ft
CoFlex 2" piping	0.0094 Gal / Ft
42" Double Walled FRP Tank Sump	2.50 Gal / Ft*
48" Double Walled FRP Tank Sump	2.75 Gal / Ft*
Double Walled Dispenser Sump DS1840	10.5 Gal
Double Walled Dispenser Sump DS1836	10 Gal
Double Walled Dispenser Sump DS1642	9 Gal
Double Walled Dispenser Sump DS1640	9 Gal
Double Walled Dispenser Sump DS1630	8 Gal
Double Walled Dispenser Sump DS1142	8 Gal
Double Walled Dispenser Sump DS1323	7 Gal
Double Walled Dispenser Sump DS1320	7 Gal
Double Walled Dispenser Sump DS1130	7 Gal
Double Walled Dispenser Sump DS1129	7 Gal
Double Walled Dispenser Sump DS1125	7 Gal
Double Walled Dispenser Sump DS1123	7 Gal
Double Walled Dispenser Sump DS1122	7 Gal
Double Walled Dispenser Sump DS1121	7 Gal
Double Walled Dispenser Sump DS1120	7 Gal
Double Walled Dispenser Sump DS1118	5 Gal
Double Walled Dispenser Sump DS1117	5 Gal
Double Walled Dispenser Sump DS1115	5 Gal
Double Walled Dispenser Sump DS1114	5 Gal
Double Walled Dispenser Sump DS1112	5 Gal
Double Walled Dispenser Sump DS0711	3 Gal
Small Vent Box (24x30x30)	3.5 Gal
Large Vent Box (24x42x29)	5.5 Gal
XERXES	
<i>Double Wall Tanks</i>	
48" Diameter 600 Gallon Capacity	8 Gal / Tank
48" Diameter 1,000 Gallon Capacity	10 Gal / Tank
72" Diameter 2,500 Gallon Capacity	48 Gal / Tank
72" Diameter 3,000 Gallon Capacity	59 Gal / Tank
72" Diameter 4,000 Gallon Capacity	78 Gal / Tank
72" Diameter 5,000 Gallon Capacity	83 Gal / Tank
72" Diameter 6,000 Gallon Capacity	110 Gal / Tank
96" Diameter 4,000 Gallon Capacity	76 Gal / Tank
96" Diameter 5,000 Gallon Capacity	95 Gal / Tank
96" Diameter 6,000 Gallon Capacity	114 Gal / Tank
96" Diameter 8,000 Gallon Capacity	152 Gal / Tank
96" Diameter 10,000 Gallon Capacity	189 Gal / Tank
96" Diameter 12,000 Gallon Capacity	227 Gal / Tank
96" Diameter 15,000 Gallon Capacity	284 Gal / Tank
120" Diameter 10,000 Gallon Capacity	144 Gal / Tank
120" Diameter 12,000 Gallon Capacity	167 Gal / Tank
120" Diameter 15,000 Gallon Capacity	213 Gal / Tank
120" Diameter 20,000 Gallon Capacity	280 Gal / Tank
120" Diameter 25,000 Gallon Capacity	325 Gal / Tank
120" Diameter 30,000 Gallon Capacity	375 Gal / Tank
120" Diameter 35,000 Gallon Capacity	408 Gal / Tank
120" Diameter 40,000 Gallon Capacity	579 Gal / Tank
<i>Double Wall Sumps</i>	
42" Double Wall Tank Sump	0.5714 Gal / Ft*
48" Double Wall Tank Sump	0.6531 Gal / Ft*

* NOTE: for sump volumes listed as XXX Gal/Ft, multiply this value by the sump's depth (in feet) for total volume.



TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR PRESS SENSOR ***  
-----  
          --- VAPOR PRESS SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor PRSensor  
ADDRESS:         B2.S4.15  
SERIAL NUMBER:   7830436  
-----  
          *** DEVICE SETUP - MAG SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - VACUUM SENSOR ***  
-----  
          --- VACUUM SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular VAC 1 Vapor  
ADDRESS:         B2.S1.1  
SERIAL NUMBER:   2104008  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac-2 Vent  
ADDRESS:         B2.S1.2  
SERIAL NUMBER:   21040013  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 3 Syphon  
ADDRESS:         B2.S1.3  
SERIAL NUMBER:   21240018  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----  
          --- VACUUM SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular Vac 4 Prod 2  
ADDRESS:         B2.S1.4  
SERIAL NUMBER:   21030098  
PUMP:            Pm 1: 87 Regular Unleaded  
VOLUME:         100.0 GALLONS  
RELIEF VALVE:    NO  
-----
```

Device Setup:
Relief Valve – Yes/No

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***

--- ATMOSPHERIC SENSOR 1 ---
CONFIGURED:      ENABLED
LABEL:           ATM pressure sensor
ADDRESS:         B2.S2.17
SERIAL NUMBER:   337444336

---
*** DEVICE SETUP - HC SENSOR ***

--- NO DEVICE DEFINED ---

---
*** DEVICE SETUP - LINE P SENSOR ***

--- LINE P SENSOR 1 ---
CONFIGURED:      ENABLED
LABEL:           Regular PLLD
ADDRESS:         B2.S2.1
SERIAL NUMBER:   21360126

--- LINE P SENSOR 2 ---
CONFIGURED:      ENABLED
LABEL:           Supreme PLLD
ADDRESS:         B2.S2.2
SERIAL NUMBER:   21360121

--- LINE P SENSOR 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel PLLD
ADDRESS:         B2.S2.3
SERIAL NUMBER:   21370389

--- LINE P SENSOR 4 ---
CONFIGURED:      ENABLED
LABEL:           Bio Diesel PLLD
ADDRESS:         B2.S2.4
SERIAL NUMBER:   21360353

--- LINE P SENSOR 5 ---
CONFIGURED:      DISABLED
LABEL:           Bio Blend dplld
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Atmospheric Sensor

Used for SCVS System

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
--- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
*** DEVICE SETUP - HC SENSOR ***  
-----  
--- NO DEVICE DEFINED ---  
-----  
*** DEVICE SETUP - LINE P SENSOR ***  
-----  
--- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
-----  
--- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
-----  
--- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
-----  
--- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
-----  
--- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Label

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:          ENABLED  
LABEL:               ATM Pressure Sensor  
ADDRESS:              B2.S2.17  
SERIAL NUMBER:       30714036  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:          ENABLED  
LABEL:               Regular PLLD  
ADDRESS:              B2.S2.1  
SERIAL NUMBER:       21360126  
-----  
          --- LINE P SENSOR 2 ---  
CONFIGURED:          ENABLED  
LABEL:               Supreme PLLD  
ADDRESS:              B2.S2.2  
SERIAL NUMBER:       21360121  
-----  
          --- LINE P SENSOR 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Diesel PLLD  
ADDRESS:              B2.S2.3  
SERIAL NUMBER:       21370389  
-----  
          --- LINE P SENSOR 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Bio Diesel PLLD  
ADDRESS:              B2.S2.4  
SERIAL NUMBER:       21360353  
-----  
          --- LINE P SENSOR 5 ---  
CONFIGURED:          DISABLED  
LABEL:               Bio Blend dplld  
ADDRESS:              NOT ASSIGNED
```

Device Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM prassure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
-----  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
-----  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
-----  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
-----  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Serial Number – Sensor Serial Number

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
  
*** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Hydrocarbon (HC) Sensor

Used for ISD Processors:

- ARID
- Hirt

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Line Pressure (P) Sensor

Used for DPLLD

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
-----  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
-----  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
-----  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
-----  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED  
-----
```

Device Setup:
Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
-----  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
-----  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
-----  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
-----  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Address – TLS Connection Position

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - ATMOSPHERIC SENSOR ***  
-----  
          --- ATMOSPHERIC SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           ATM pressure sensor  
ADDRESS:         B2.S2.17  
SERIAL NUMBER:   337444336  
-----  
          *** DEVICE SETUP - HC SENSOR ***  
-----  
          --- NO DEVICE DEFINED ---  
-----  
          *** DEVICE SETUP - LINE P SENSOR ***  
-----  
          --- LINE P SENSOR 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Regular PLLD  
ADDRESS:         B2.S2.1  
SERIAL NUMBER:   21360126  
-----  
          --- LINE P SENSOR 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Supreme PLLD  
ADDRESS:         B2.S2.2  
SERIAL NUMBER:   21360121  
-----  
          --- LINE P SENSOR 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel PLLD  
ADDRESS:         B2.S2.3  
SERIAL NUMBER:   21370389  
-----  
          --- LINE P SENSOR 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Diesel PLLD  
ADDRESS:         B2.S2.4  
SERIAL NUMBER:   21360353  
-----  
          --- LINE P SENSOR 5 ---  
CONFIGURED:      DISABLED  
LABEL:           Bio Blend dplld  
ADDRESS:         NOT ASSIGNED
```

Device Setup:
Serial Number – Sensor Serial Number

TLS-450PLUS Setup Tape



```
*** DEVICE SETUP - VAPOR VALVE ***

--- VAPOR VALVE 1 ---
CONFIGURED:      ENABLED
LABEL:           Vapor Valve CC
ADDRESS:         B2.54.16
SERIAL NUMBER:   21100004

-----
*** VAPOR COLLECTION - HOSE LABELS ***

1 UNASSIGNED
2 BLENDS
3 REGULAR
4 MID GRADE
5 PREMIUM
6 GOLD
7 BRONZE
8 SILVER
9 BLEND2
10 BLEND4

-----
*** VAPOR GENERAL - GENERAL ***

ASSESSMENT TIME: 10:00 AM
PRESSURE SENSOR: Vp 1: Vapor PRSensor

-----
*** VAPOR COLLECTION - HOSE SETTINGS ***

--- HOSE 1 ---
CONFIGURED:      ENABLED
LABEL:           BLENDS
FUEL POSITION LABEL: 1
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter

--- HOSE 2 ---
CONFIGURED:      ENABLED
LABEL:           BLENDS
FUEL POSITION LABEL: 2
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter

--- HOSE 3 ---
CONFIGURED:      ENABLED
LABEL:           BLENDS
FUEL POSITION LABEL: 3
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter

--- HOSE 4 ---
CONFIGURED:      ENABLED
LABEL:           BLENDS
FUEL POSITION LABEL: 4
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter
```

Device Setup:
Vapor Valve

Used for ISD:
Veeder-Root Carbon Canister (CC)

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR VALVE ***  
-----  
          --- VAPOR VALVE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor Valve CC  
ADDRESS:         B2.54.16  
SERIAL NUMBER:   21100004  
-----  
*** VAPOR COLLECTION - HOSE LABELS ***  
-----  
          1 UNASSIGNED  
          2 BLENDS  
          3 REGULAR  
          4 MID GRADE  
          5 PREMIUM  
          6 GOLD  
          7 BRONZE  
          8 SILVER  
          9 BLEND2  
          10 BLEND4  
-----  
*** VAPOR GENERAL - GENERAL ***  
-----  
ASSESSMENT TIME: 10:00 AM  
PRESSURE SENSOR: Vp 1: Vapor PRSensor  
-----  
*** VAPOR COLLECTION - HOSE SETTINGS ***  
-----  
          --- HOSE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 1  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 2 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 2  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 3 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 3  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
-----  
          --- HOSE 4 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 4  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
-----
```

Vapor Collection:
Hose Labels

Used for ISD

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR VALVE ***  
-----  
          --- VAPOR VALVE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor Valve CC  
ADDRESS:         B2.54.16  
SERIAL NUMBER:   21100004  
-----  
*** VAPOR COLLECTION - HOSE LABELS ***  
-----  
          1 UNASSIGNED  
          2 BLENDS  
          3 REGULAR  
          4 MID GRADE  
          5 PREMIUM  
          6 GOLD  
          7 BRONZE  
          8 SILVER  
          9 BLEND2  
         10 BLEND4  
-----  
*** VAPOR GENERAL - GENERAL ***  
ASSESSMENT TIME: 10:00 AM  
PRESSURE SENSOR: Vp 1: Vapor PRSensor  
-----  
*** VAPOR COLLECTION - HOSE SETTINGS ***  
-----  
          --- HOSE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 1  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 2 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 2  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 3 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 3  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
-----  
          --- HOSE 4 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 4  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter
```

Vapor General:
General

Used for ISD

ISD Assessment Time

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR VALVE ***  
-----  
          --- VAPOR VALVE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor Valve CC  
ADDRESS:         B2.54.16  
SERIAL NUMBER:   21100004  
-----  
*** VAPOR COLLECTION - HOSE LABELS ***  
-----  
          1 UNASSIGNED  
          2 BLENDS  
          3 REGULAR  
          4 MID GRADE  
          5 PREMIUM  
          6 GOLD  
          7 BRONZE  
          8 SILVER  
          9 BLEND2  
         10 BLEND4  
-----  
*** VAPOR GENERAL - GENERAL ***  
-----  
ASSESSMENT TIME: 10:00 AM  
PRESSURE SENSOR: Vp 1: Vapor PRSensor  
-----  
*** VAPOR COLLECTION - HOSE SETTINGS ***  
-----  
          --- HOSE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 1  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
  
          --- HOSE 2 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 2  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
  
          --- HOSE 3 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 3  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
  
          --- HOSE 4 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 4  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter
```

Vapor Collection:
Hose Settings

Used for ISD

Assigns Hose Label to Fueling Position
to Air Flow Meter

TLS-450PLUS Setup Tape



```
-----  
*** DEVICE SETUP - VAPOR VALVE ***  
-----  
          --- VAPOR VALVE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Vapor Valve CC  
ADDRESS:         B2.54.16  
SERIAL NUMBER:   21100004  
-----  
*** VAPOR COLLECTION - HOSE LABELS ***  
-----  
          1 UNASSIGNED  
          2 BLENDS  
          3 REGULAR  
          4 MID GRADE  
          5 PREMIUM  
          6 GOLD  
          7 BRONZE  
          8 SILVER  
          9 BLEND2  
         10 BLEND4  
-----  
*** VAPOR GENERAL - GENERAL ***  
-----  
ASSESSMENT TIME: 10:00 AM  
PRESSURE SENSOR: Vp 1: Vapor PRSensor  
-----  
*** VAPOR COLLECTION - HOSE SETTINGS ***  
-----  
          --- HOSE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 1  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 2 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 2  
AIR FLOW METER:  Af 1: Disp 1-2 Flowmeter  
-----  
          --- HOSE 3 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 3  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
-----  
          --- HOSE 4 ---  
CONFIGURED:      ENABLED  
LABEL:           BLENDS  
FUEL POSITION LABEL: 4  
AIR FLOW METER:  Af 2: Disp 3-4 Flowmeter  
-----
```

Vapor Collection:
Hose Settings

Used for ISD

Assigns Hose Label to Fueling Position
to Air Flow Meter

TLS-450PLUS Setup Tape



```
*** VAPOR COLLECTION - GENERAL ***
EVR TYPE: BALANCE
BALANCE TYPE: VST
ACCEPT HIGH ORVR: ENABLED
NOZZLE TYPE: VST
A/L RANGE MAX: ----
A/L RANGE MIN: ----

-----
*** VAPOR COLLECTION - HOSE MAPPING ***
-----

--- HOSE 1: BLENDS ---
FUEL POSITION: 1
FUEL POSITION LABEL: 1
METERS: 1, 4, 9
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter
LOCKED: YES

--- HOSE 2: BLENDS ---
FUEL POSITION: 2
FUEL POSITION LABEL: 2
METERS: 1, 4, 9
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter
LOCKED: YES

--- HOSE 3: BLENDS ---
FUEL POSITION: 3
FUEL POSITION LABEL: 3
METERS: 1, 4, 9
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter
LOCKED: YES

--- HOSE 4: BLENDS ---
FUEL POSITION: 4
FUEL POSITION LABEL: 4
METERS: 1, 4, 9
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter
LOCKED: YES

--- HOSE 5: BLENDS ---
FUEL POSITION: 5
FUEL POSITION LABEL: 5
METERS: 1, 4, 9
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter
LOCKED: YES

--- HOSE 6: BLENDS ---
FUEL POSITION: 6
FUEL POSITION LABEL: 6
METERS: 1, 4, 9
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter
LOCKED: YES
```

Vapor Collection:
General

Used for ISD



TLS-450PLUS Setup Tape



```
-----  
*** VAPOR COLLECTION - GENERAL ***  
-----  
EVR TYPE: BALANCE  
BALANCE TYPE: VST  
ACCEPT HIGH ORVR: ENABLED  
NOZZLE TYPE: VST  
A/L RANGE MAX: -----  
A/L RANGE MIN: -----  
-----  
*** VAPOR COLLECTION - HOSE MAPPING ***  
-----  
--- HOSE 1: BLEND3 ---  
FUEL POSITION: 1  
FUEL POSITION LABEL: 1  
METERS: 1, 4, 9  
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter  
LOCKED: YES  
--- HOSE 2: BLEND3 ---  
FUEL POSITION: 2  
FUEL POSITION LABEL: 2  
METERS: 1, 4, 9  
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter  
LOCKED: YES  
--- HOSE 3: BLEND3 ---  
FUEL POSITION: 3  
FUEL POSITION LABEL: 3  
METERS: 1, 4, 9  
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter  
LOCKED: YES  
--- HOSE 4: BLEND3 ---  
FUEL POSITION: 4  
FUEL POSITION LABEL: 4  
METERS: 1, 4, 9  
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter  
LOCKED: YES  
--- HOSE 5: BLEND3 ---  
FUEL POSITION: 5  
FUEL POSITION LABEL: 5  
METERS: 1, 4, 9  
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter  
LOCKED: YES  
--- HOSE 6: BLEND3 ---  
FUEL POSITION: 6  
FUEL POSITION LABEL: 6  
METERS: 1, 4, 9  
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter  
LOCKED: YES
```

Vapor Collection:
General

Used for ISD

Identifies EVR and Nozzle Type

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR COLLECTION - GENERAL ***  
-----  
EVR TYPE: BALANCE  
BALANCE TYPE: VST  
ACCEPT HIGH ORVR: ENABLED  
NOZZLE TYPE: VST  
A/L RANGE MAX: ----  
A/L RANGE MIN: ----  
  
*** VAPOR COLLECTION - HOSE MAPPING ***  
-----  
--- HOSE 1: BLENDS ---  
FUEL POSITION: 1  
FUEL POSITION LABEL: 1  
METERS: 1, 4, 9  
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter  
LOCKED: YES  
  
--- HOSE 2: BLENDS ---  
FUEL POSITION: 2  
FUEL POSITION LABEL: 2  
METERS: 1, 4, 9  
AIR FLOW METER: Af 1: Disp 1-2 Flowmeter  
LOCKED: YES  
  
--- HOSE 3: BLENDS ---  
FUEL POSITION: 3  
FUEL POSITION LABEL: 3  
METERS: 1, 4, 9  
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter  
LOCKED: YES  
  
--- HOSE 4: BLENDS ---  
FUEL POSITION: 4  
FUEL POSITION LABEL: 4  
METERS: 1, 4, 9  
AIR FLOW METER: Af 2: Disp 3-4 Flowmeter  
LOCKED: YES  
  
--- HOSE 5: BLENDS ---  
FUEL POSITION: 5  
FUEL POSITION LABEL: 5  
METERS: 1, 4, 9  
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter  
LOCKED: YES  
  
--- HOSE 6: BLENDS ---  
FUEL POSITION: 6  
FUEL POSITION LABEL: 6  
METERS: 1, 4, 9  
AIR FLOW METER: Af 3: Disp 5-6 Flowmeter  
LOCKED: YES  
-----
```

Vapor Collection:
Hose Mapping

Used for ISD

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR COLLECTION - GENERAL ***  
-----  
EVR TYPE:                BALANCE  
BALANCE TYPE:            VST  
ACCEPT HIGH ORVR:       ENABLED  
NOZZLE TYPE:            VST  
A/L RANGE MAX:          ----  
A/L RANGE MIN:          ----  
-----  
*** VAPOR COLLECTION - HOSE MAPPING ***  
-----  
--- HOSE 1: BLEND3 ---  
FUEL POSITION:            1  
FUEL POSITION LABEL:     1  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 1: Disp 1-2 Flowmeter  
LOCKED:                 YES  
-----  
--- HOSE 2: BLEND3 ---  
FUEL POSITION:            2  
FUEL POSITION LABEL:     2  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 1: Disp 1-2 Flowmeter  
LOCKED:                 YES  
-----  
--- HOSE 3: BLEND3 ---  
FUEL POSITION:            3  
FUEL POSITION LABEL:     3  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 2: Disp 3-4 Flowmeter  
LOCKED:                 YES  
-----  
--- HOSE 4: BLEND3 ---  
FUEL POSITION:            4  
FUEL POSITION LABEL:     4  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 2: Disp 3-4 Flowmeter  
LOCKED:                 YES  
-----  
--- HOSE 5: BLEND3 ---  
FUEL POSITION:            5  
FUEL POSITION LABEL:     5  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 3: Disp 5-6 Flowmeter  
LOCKED:                 YES  
-----  
--- HOSE 6: BLEND3 ---  
FUEL POSITION:            6  
FUEL POSITION LABEL:     6  
METERS:                 1, 4, 9  
AIR FLOW METER:         Af 3: Disp 5-6 Flowmeter  
LOCKED:                 YES  
-----
```

Vapor Collection:
Hose Mapping

Used for ISD

Identifies Fueling Position to
Fuel Position Label to Meter to
Air Flow Meter

TLS-450PLUS Setup Tape



```
*** VAPOR MANAGEMENT - PROCESSOR ***
TYPE: VEEDER-ROOT POLISHER
VAPOR VALVE: VV 1: VAPOR VALVE CC
-----
*** TANK SETUP - GENERAL SETUP ***
-----
--- TANK 1 ---
CONFIGURED: ENABLED
LABEL: Unleaded 25k
PRODUCT CODE: 1
PROBE NUMBER: Pb 1: Unleaded 25k
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.0 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000700
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED
--- TANK 2 ---
CONFIGURED: ENABLED
LABEL: Diesel 25K
PRODUCT CODE: 2
PROBE NUMBER: Pb 2: Diesel 25K
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED
--- TANK 3 ---
CONFIGURED: ENABLED
LABEL: B99 Bio Blender
PRODUCT CODE: 3
PROBE NUMBER: Pb 3: B99 Bio Blender
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 7901 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED
```

Vapor Management:
Processor

Used for ISD

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED
```

Vapor Management:
Processor

Used for ISD

Identifies Processor Type:

- Veeder-Root Polisher
- ARID
- Hirt

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Label – User Defined

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unloaded 3FL  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Product Code – Defined by site POS

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
CONFIGURED: --- TANK 1 ---  
LABEL: ENABLED  
          Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
  
CONFIGURED: --- TANK 2 ---  
LABEL: ENABLED  
          Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
  
CONFIGURED: --- TANK 3 ---  
LABEL: ENABLED  
          B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Probe Number – Assigned to Tank

Example – Tank 1 is Probe 1

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
CONFIGURED: --- TANK 1 --- ENABLED  
LABEL: Unleaded 25K  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
CONFIGURED: --- TANK 2 --- ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
CONFIGURED: --- TANK 3 --- ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup: General Setup

Probe Offset – Used for installations when probe is not resting on bottom of UST

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
CONFIGURED: --- TANK 1 --- ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
CONFIGURED: --- TANK 2 --- ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
CONFIGURED: --- TANK 3 --- ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Full Volume – Provided by tank
Manufacturer

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
          --- TANK 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Unleaded 25k  
PRODUCT CODE:   1  
PROBE NUMBER:    Pb 1: Unleaded 25k  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.0 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
PRODUCT CODE:   2  
PROBE NUMBER:    Pb 2: Diesel 25K  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
PRODUCT CODE:   3  
PROBE NUMBER:    Pb 3: B99 Bio Blender  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    7901 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Diameter – Provided by tank
manufacturer

TLS-450PLUS Setup Tape

Table 7-2.- Tank Tilt Calculation Worksheet

Tank No.	A Stick Gauge Avg. Height @ Fill Riser	B Probe's Fuel Height Reading (Probe Riser)	C (A - B = C)	D Distance Fill to Probe Risers	E Pitch (C / D = E)	F Distance from Probe Riser to Center of Tank	G Tank Tilt* (E x F = G)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

*Tank Tilt may be a positive (+) or negative (-) value. If it is a negative value, BE SURE to change the value symbol to minus (-) when entering a negative Tank Tilt value.

```

*** VAPOR MANAGEMENT - PROCESSOR ***
-----
TYPE: VEEDER-ROOT POLISHER
VAPOR VALVE: VW 1: VAPOR VALVE CC
-----

*** TANK SETUP - GENERAL SETUP ***
-----

--- TANK 1 ---
CONFIGURED: ENABLED
LABEL: Unleaded 25K
PRODUCT CODE: 1
PROBE NUMBER: Pb 1: Unleaded 25k
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.0 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED

--- TANK 2 ---
CONFIGURED: ENABLED
LABEL: Diesel 25K
PRODUCT CODE: 2
PROBE NUMBER: Pb 2: Diesel 25K
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED

--- TANK 3 ---
CONFIGURED: ENABLED
LABEL: B99 Bio Blender
PRODUCT CODE: 3
PROBE NUMBER: Pb 3: B99 Bio Blender
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 7901 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED
    
```

Tank Setup:
General Setup

Tilt – Measurement in inches that tank is not perfectly horizontal

Would be 0.00 if probe is in middle of tank



TLS-450PLUS Setup Tape

Table 7-1.- Typical Thermal Coefficients

Product	Thermal Coefficient (U.S. Units)	Thermal Coefficient (Metric Units)
AdBlue or Urea	0.00081	0.00045
Alcohol	0.00063	0.00114
Aviation Gas	0.00075	0.00135
Diesel (fuel oil #2) [DERV]	0.00045	0.00081
<Derv> Biodiesel (B20)	0.00045	0.00081
<Derv> Biodiesel (B100)	0.00044	0.00079
Ethylene Glycol	0.00037	0.00067
Fuel Oil #4	0.00047	0.00085
Gasohol	0.00069	0.00125
Gear Oil, 90W	0.00047	0.00085
Hydraulic Oil	0.00047	0.00085
Jet Fuel	0.00047	0.00085
Kerosene (fuel oil #1) [Paraffin]	0.00050	0.00090
Liquefied Petroleum Gas (LPG)	0.00160	0.00288
Leaded	0.00070	0.00126
Motor Oil	0.00047	0.00085
Premium [4 Star]	0.00070	0.00126
Regular Unleaded	0.00070	0.00126
Super Unleaded	0.00070	0.00126
Low benzene unleaded petrol	0.00070	0.00126
Transmission Fluid	0.00047	0.00085
Turbine Oil	0.00047	0.00085

```

*** VAPOR MANAGEMENT - PROCESSOR ***
-----
TYPE: VEEDER-ROOT POLISHER
VAPOR VALVE: VV 1: VAPOR VALVE CC
-----
*** TANK SETUP - GENERAL SETUP ***
-----

--- TANK 1 ---
CONFIGURED: ENABLED
LABEL: Unleaded 25K
PRODUCT CODE: 1
PROBE NUMBER: Pb 1: Unleaded 25k
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.0 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000700
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED

--- TANK 2 ---
CONFIGURED: ENABLED
LABEL: Diesel 25K
PRODUCT CODE: 2
PROBE NUMBER: Pb 2: Diesel 25K
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 25431 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED

--- TANK 3 ---
CONFIGURED: ENABLED
LABEL: B99 Bio Blender
PRODUCT CODE: 3
PROBE NUMBER: Pb 3: B99 Bio Blender
PROBE OFFSET: 0.00 INCHES
FULL VOLUME: 7901 GALLONS
DIAMETER: 118.4 INCHES
TILT: 0.00 INCHES
THERMAL COEFFICIENT: 0.000450
METER DATA PRESENT: DISABLED
DELIVERY DELAY: 5 MINUTES
GROSS TEST FAIL: ALARMS ENABLED
PERIODIC TEST FAIL: ALARMS ENABLED
ANNUAL TEST FAIL: ALARMS DISABLED
GOST VOLUME CORRECTION: DISABLED

```

Tank Setup:
General Setup

Thermal Coefficient – represents the coefficient thermal expansion of product stored in tank

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
          --- TANK 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Unleaded 25k  
PRODUCT CODE:   1  
PROBE NUMBER:    Pb 1: Unleaded 25k  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.0 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT:  DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL:  ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL:  ALARMS DISABLED  
GOST VOLUME CORRECTION:  DISABLED  
  
          --- TANK 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
PRODUCT CODE:   2  
PROBE NUMBER:    Pb 2: Diesel 25K  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT:  DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL:  ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL:  ALARMS DISABLED  
GOST VOLUME CORRECTION:  DISABLED  
  
          --- TANK 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
PRODUCT CODE:   3  
PROBE NUMBER:    Pb 3: B99 Bio Blender  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    7901 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT:  DISABLED  
DELIVERY DELAY:  5 MINUTES  
GROSS TEST FAIL:  ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL:  ALARMS DISABLED  
GOST VOLUME CORRECTION:  DISABLED  
-----
```

Tank Setup: General Setup

Meter Data Present – used to collect dispenser meter data in Business Inventory Reconciliation (BIR)

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
          --- TANK 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Unleaded 25k  
PRODUCT CODE:   1  
PROBE NUMBER:   Pb 1: Unleaded 25k  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:       118.0 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
PRODUCT CODE:   2  
PROBE NUMBER:   Pb 2: Diesel 25K  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:       118.4 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
PRODUCT CODE:   3  
PROBE NUMBER:   Pb 3: B99 Bio Blender  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    7901 GALLONS  
DIAMETER:       118.4 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Delivery Delay – allows for product
stabilization after delivery

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Gross Test Fail – enables/disables alarm
when Gross Tank Test (3 gph) fails

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VV 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
--- TANK 1 ---  
CONFIGURED: ENABLED  
LABEL: Unleaded 25k  
PRODUCT CODE: 1  
PROBE NUMBER: Pb 1: Unleaded 25k  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.0 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 2 ---  
CONFIGURED: ENABLED  
LABEL: Diesel 25K  
PRODUCT CODE: 2  
PROBE NUMBER: Pb 2: Diesel 25K  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 25431 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
--- TANK 3 ---  
CONFIGURED: ENABLED  
LABEL: B99 Bio Blender  
PRODUCT CODE: 3  
PROBE NUMBER: Pb 3: B99 Bio Blender  
PROBE OFFSET: 0.00 INCHES  
FULL VOLUME: 7901 GALLONS  
DIAMETER: 118.4 INCHES  
TILT: 0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Periodic Test Fail – enables/disables
alarm when Periodic Tank Test (.2 gph)
fails

TLS-450PLUS Setup Tape



```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
          --- TANK 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Unleaded 25k  
PRODUCT CODE:   1  
PROBE NUMBER:    Pb 1: Unleaded 25k  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.0 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
PRODUCT CODE:   2  
PROBE NUMBER:    Pb 2: Diesel 25K  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
PRODUCT CODE:   3  
PROBE NUMBER:    Pb 3: B99 Bio Blender  
PROBE OFFSET:    0.00 INCHES  
FULL VOLUME:    7901 GALLONS  
DIAMETER:        118.4 INCHES  
TILT:            0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

Annual Test Fail – enables/disables alarm
when Annual Tank Test (.1 gph) fails

TLS-450PLUS Setup Tape

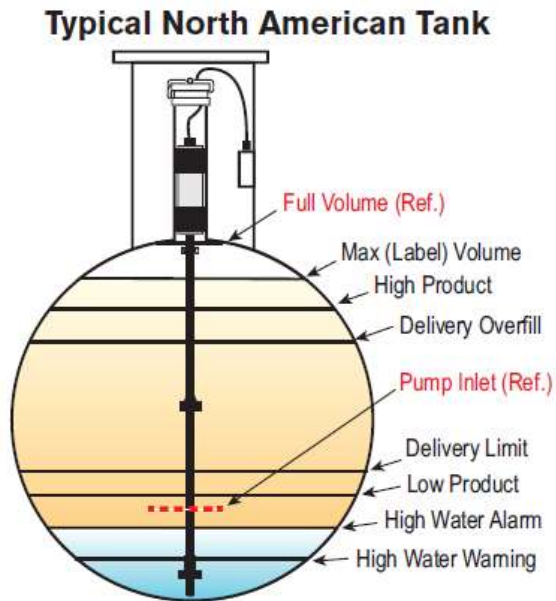


```
-----  
*** VAPOR MANAGEMENT - PROCESSOR ***  
-----  
TYPE: VEEDER-ROOT POLISHER  
VAPOR VALVE: VW 1: VAPOR VALVE CC  
-----  
*** TANK SETUP - GENERAL SETUP ***  
-----  
          --- TANK 1 ---  
CONFIGURED:      ENABLED  
LABEL:           Unleaded 25k  
PRODUCT CODE:   1  
PROBE NUMBER:   Pb 1: Unleaded 25k  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:       118.0 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000700  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 2 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
PRODUCT CODE:   2  
PROBE NUMBER:   Pb 2: Diesel 25K  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    25431 GALLONS  
DIAMETER:       118.4 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----  
          --- TANK 3 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
PRODUCT CODE:   3  
PROBE NUMBER:   Pb 3: B99 Bio Blender  
PROBE OFFSET:   0.00 INCHES  
FULL VOLUME:    7901 GALLONS  
DIAMETER:       118.4 INCHES  
TILT:           0.00 INCHES  
THERMAL COEFFICIENT: 0.000450  
METER DATA PRESENT: DISABLED  
DELIVERY DELAY: 5 MINUTES  
GROSS TEST FAIL: ALARMS ENABLED  
PERIODIC TEST FAIL: ALARMS ENABLED  
ANNUAL TEST FAIL: ALARMS DISABLED  
GOST VOLUME CORRECTION: DISABLED  
-----
```

Tank Setup:
General Setup

GOST Volume Correction - International

TLS-450PLUS Setup Tape

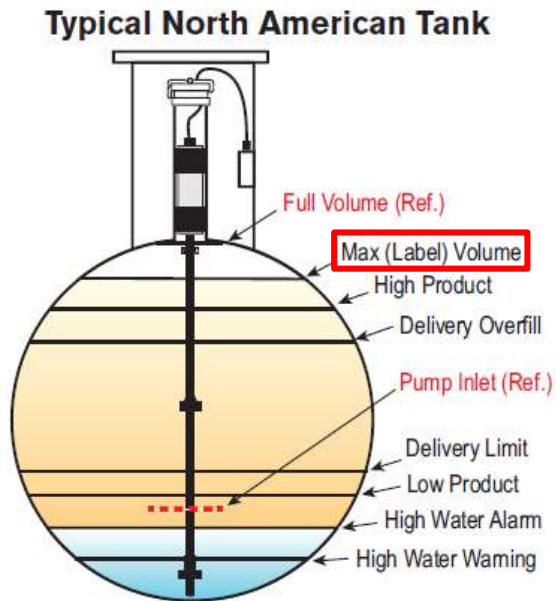


*** TANK SETUP - LIMITS ***	
--- TANK 1 ---	
MAX VOLUME:	25431 GALLONS
HIGH PRODUCT:	95%
DELIVERY OVERFILL:	90%
DELIVERY LIMIT:	0%
LOW PRODUCT:	1000 GALLONS
HIGH WATER WARNING:	1.00 INCHES
HIGH WATER ALARM:	1.50 INCHES
WATER ALARM FILTER LEVEL:	LOW
LEAK ALARM LIMIT:	99 GALLONS
SUDDEN LOSS LIMIT:	100 GALLONS
FUEL LOW TEMP LIMIT:	-58.000 DEG F
FUEL HIGH TEMP LIMIT:	140.000 DEG F
--- TANK 2 ---	
MAX VOLUME:	25431 GALLONS
HIGH PRODUCT:	95%
DELIVERY OVERFILL:	90%
DELIVERY LIMIT:	20%
LOW PRODUCT:	984 GALLONS
HIGH WATER WARNING:	2.00 INCHES
HIGH WATER ALARM:	3.00 INCHES
WATER ALARM FILTER LEVEL:	LOW
LEAK ALARM LIMIT:	99 GALLONS
SUDDEN LOSS LIMIT:	100 GALLONS
FUEL LOW TEMP LIMIT:	-58.000 DEG F
FUEL HIGH TEMP LIMIT:	140.000 DEG F
--- TANK 3 ---	
MAX VOLUME:	7901 GALLONS
HIGH PRODUCT:	95%
DELIVERY OVERFILL:	90%
DELIVERY LIMIT:	20%
LOW PRODUCT:	332 GALLONS
HIGH WATER WARNING:	2.00 INCHES
HIGH WATER ALARM:	3.00 INCHES
WATER ALARM FILTER LEVEL:	LOW
LEAK ALARM LIMIT:	99 GALLONS
SUDDEN LOSS LIMIT:	100 GALLONS
FUEL LOW TEMP LIMIT:	-58.000 DEG F
FUEL HIGH TEMP LIMIT:	140.000 DEG F
--- TANK 4 ---	
MAX VOLUME:	8841 GALLONS
HIGH PRODUCT:	95%
DELIVERY OVERFILL:	90%
DELIVERY LIMIT:	20%
LOW PRODUCT:	500 GALLONS
HIGH WATER WARNING:	1.00 INCHES
HIGH WATER ALARM:	1.50 INCHES
WATER ALARM FILTER LEVEL:	LOW
LEAK ALARM LIMIT:	99 GALLONS
SUDDEN LOSS LIMIT:	100 GALLONS
FUEL LOW TEMP LIMIT:	-58.000 DEG F
FUEL HIGH TEMP LIMIT:	140.000 DEG F

Tank Setup:
Limits

Limits = Tank Warnings and Alarms

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

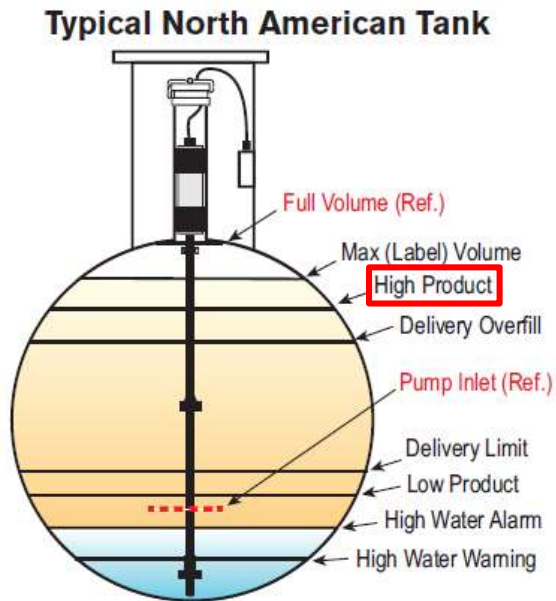
--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup: Limits

Max Volume – 100% of the tank’s
volume capacity per tank manufacturer

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 20%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

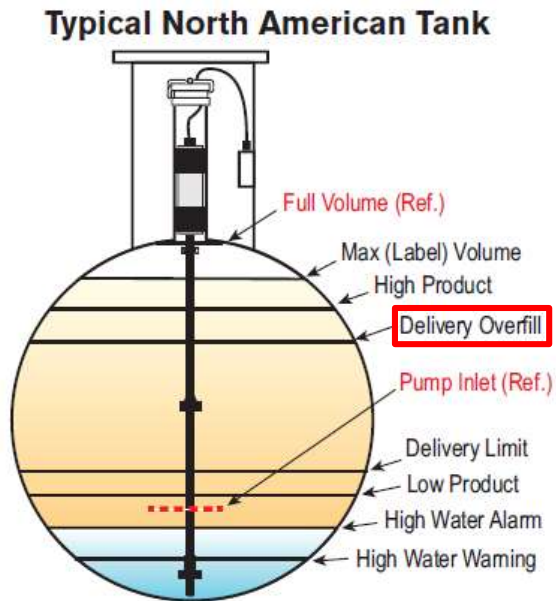
--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup:
Limits

High Product - % of Max Volume

- Typically 95%

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***
-----
--- TANK 1 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         1000 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:   100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         984 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:   100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME:          7901 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         332 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:   100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

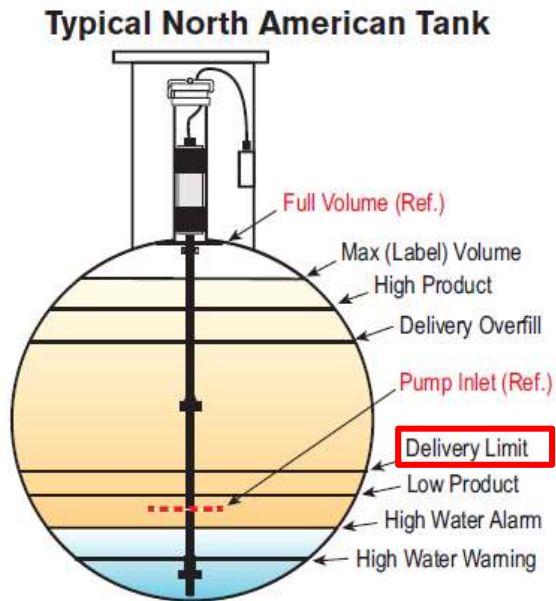
--- TANK 4 ---
MAX VOLUME:          8841 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         500 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:   100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup:
Limits

Delivery Overfill – Warns of potential
Overfill condition during delivery of fuel

Can activate on-site Overfill Alarm

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***
-----
--- TANK 1 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      0%
LOW PRODUCT:         4000 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         984 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME:          7901 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         332 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

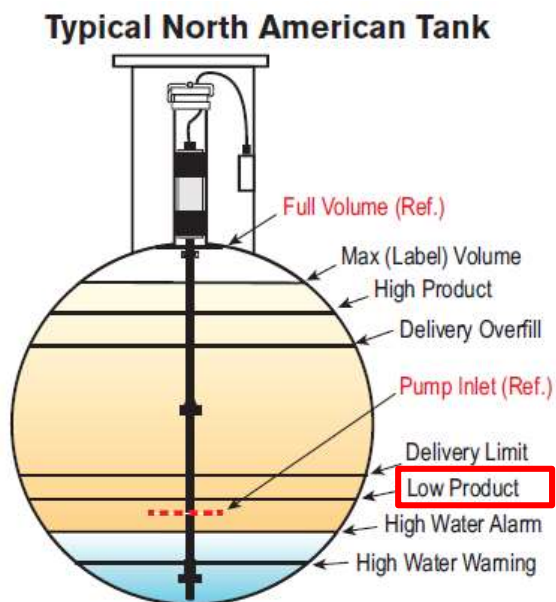
--- TANK 4 ---
MAX VOLUME:          8841 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         500 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup: Limits

Delivery Limit – Warns when level in UST reaches level to indicate that delivery is needed

Typically set to volume higher than Low Product alarm

TLS-450PLUS Setup Tape



```

    *** TANK SETUP - LIMITS ***

    --- TANK 1 ---
    MAX VOLUME:                25431 GALLONS
    HIGH PRODUCT:              95%
    DELIVERY OVERFILL:         90%
    DELIVERY LIMIT:            0%
    LOW PRODUCT:                1000 GALLONS
    HIGH WATER WARNING:        1.00 INCHES
    HIGH WATER ALARM:         1.50 INCHES
    WATER ALARM FILTER LEVEL:  LOW
    LEAK ALARM LIMIT:         99 GALLONS
    SUDDEN LOSS LIMIT:        100 GALLONS
    FUEL LOW TEMP LIMIT:      -58.000 DEG F
    FUEL HIGH TEMP LIMIT:     140.000 DEG F

    --- TANK 2 ---
    MAX VOLUME:                25431 GALLONS
    HIGH PRODUCT:              95%
    DELIVERY OVERFILL:         90%
    DELIVERY LIMIT:            20%
    LOW PRODUCT:               984 GALLONS
    HIGH WATER WARNING:        2.00 INCHES
    HIGH WATER ALARM:         3.00 INCHES
    WATER ALARM FILTER LEVEL:  LOW
    LEAK ALARM LIMIT:         99 GALLONS
    SUDDEN LOSS LIMIT:        100 GALLONS
    FUEL LOW TEMP LIMIT:      -58.000 DEG F
    FUEL HIGH TEMP LIMIT:     140.000 DEG F

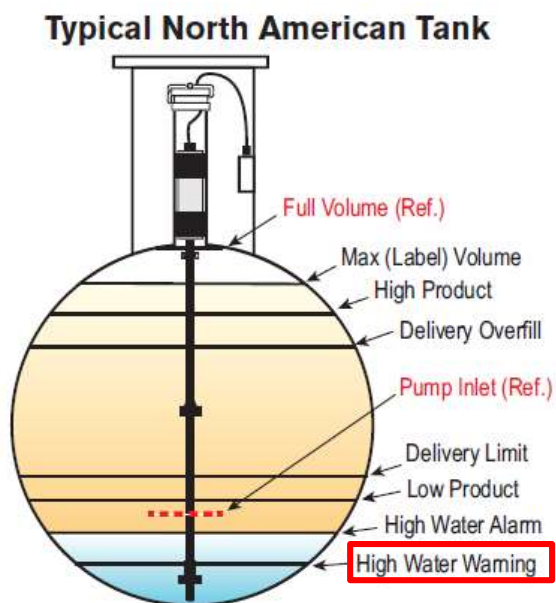
    --- TANK 3 ---
    MAX VOLUME:                7901 GALLONS
    HIGH PRODUCT:              95%
    DELIVERY OVERFILL:         90%
    DELIVERY LIMIT:            20%
    LOW PRODUCT:               332 GALLONS
    HIGH WATER WARNING:        2.00 INCHES
    HIGH WATER ALARM:         3.00 INCHES
    WATER ALARM FILTER LEVEL:  LOW
    LEAK ALARM LIMIT:         99 GALLONS
    SUDDEN LOSS LIMIT:        100 GALLONS
    FUEL LOW TEMP LIMIT:      -58.000 DEG F
    FUEL HIGH TEMP LIMIT:     140.000 DEG F

    --- TANK 4 ---
    MAX VOLUME:                8841 GALLONS
    HIGH PRODUCT:              95%
    DELIVERY OVERFILL:         90%
    DELIVERY LIMIT:            20%
    LOW PRODUCT:               500 GALLONS
    HIGH WATER WARNING:        1.00 INCHES
    HIGH WATER ALARM:         1.50 INCHES
    WATER ALARM FILTER LEVEL:  LOW
    LEAK ALARM LIMIT:         99 GALLONS
    SUDDEN LOSS LIMIT:        100 GALLONS
    FUEL LOW TEMP LIMIT:      -58.000 DEG F
    FUEL HIGH TEMP LIMIT:     140.000 DEG F
  
```

Tank Setup:
Limits

Low Product – Warns when volume of UST reaches value entered

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

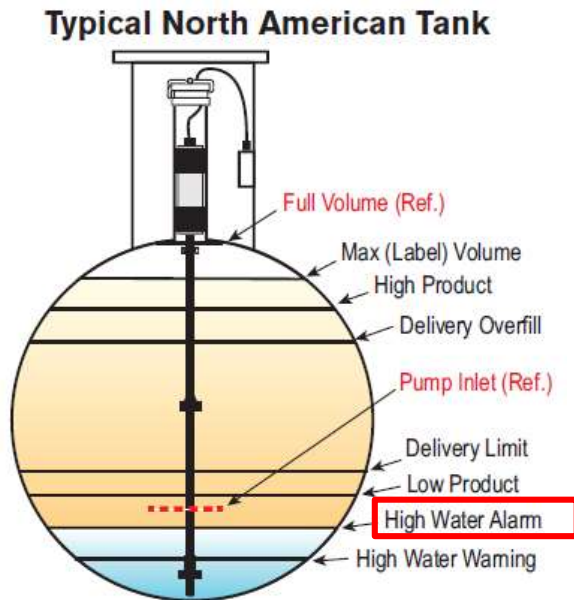
--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup:
Limits

High Water Warning – Indicates high water level in bottom of UST

Pre-warning to High Water Alarm

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

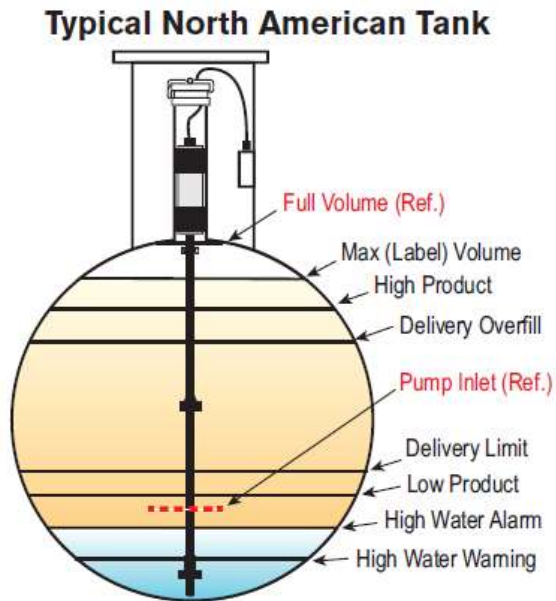
Tank Setup:
Limits

High Water Alarm – Indicates High Water limit at bottom of UST

Triggers an alarm

Value is set to level lower than pick up point of submersible turbine pump (STP)

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

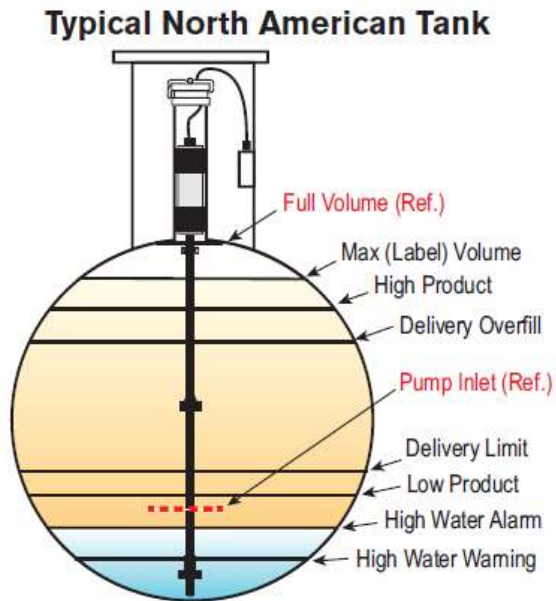
Tank Setup: Limits

High Water Filter Level - The Water Alarm Filter controls the high-water alarm response time and false alarm filtering.

The filter provides four levels of filtering: Off, Low, Medium, and High

The Low setting is optimum setting for most applications. Low setting delays the reporting of the high-water alarm by three minutes. It monitors the alarm when a delivery is in progress. This is the default.

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***
-----
--- TANK 1 ---
MAX VOLUME:                25431 GALLONS
HIGH PRODUCT:              95%
DELIVERY OVERFILL:        90%
DELIVERY LIMIT:           0%
LOW PRODUCT:              1000 GALLONS
HIGH WATER WARNING:       1.00 INCHES
HIGH WATER ALARM:         1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:         99 GALLONS
SUDDEN LOSS LIMIT:        100 GALLONS
FUEL LOW TEMP LIMIT:      -58.000 DEG F
FUEL HIGH TEMP LIMIT:     140.000 DEG F

--- TANK 2 ---
MAX VOLUME:                25431 GALLONS
HIGH PRODUCT:              95%
DELIVERY OVERFILL:        90%
DELIVERY LIMIT:           20%
LOW PRODUCT:              984 GALLONS
HIGH WATER WARNING:       2.00 INCHES
HIGH WATER ALARM:         3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:         99 GALLONS
SUDDEN LOSS LIMIT:        100 GALLONS
FUEL LOW TEMP LIMIT:      -58.000 DEG F
FUEL HIGH TEMP LIMIT:     140.000 DEG F

--- TANK 3 ---
MAX VOLUME:                7901 GALLONS
HIGH PRODUCT:              95%
DELIVERY OVERFILL:        90%
DELIVERY LIMIT:           20%
LOW PRODUCT:              332 GALLONS
HIGH WATER WARNING:       2.00 INCHES
HIGH WATER ALARM:         3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:         99 GALLONS
SUDDEN LOSS LIMIT:        100 GALLONS
FUEL LOW TEMP LIMIT:      -58.000 DEG F
FUEL HIGH TEMP LIMIT:     140.000 DEG F

--- TANK 4 ---
MAX VOLUME:                8841 GALLONS
HIGH PRODUCT:              95%
DELIVERY OVERFILL:        90%
DELIVERY LIMIT:           20%
LOW PRODUCT:              500 GALLONS
HIGH WATER WARNING:       1.00 INCHES
HIGH WATER ALARM:         1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:         99 GALLONS
SUDDEN LOSS LIMIT:        100 GALLONS
FUEL LOW TEMP LIMIT:      -58.000 DEG F
FUEL HIGH TEMP LIMIT:     140.000 DEG F
    
```

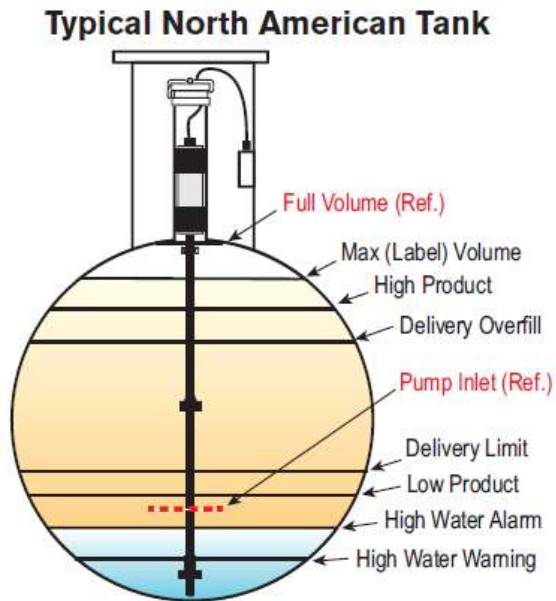
Tank Setup: Limits

Leak Alarm Limit – Applicable to Static Leak Detection (SLD) tests only.

During UST leak test, warns when the cumulative temperature compensated product loss from UST reaches limit value

Console interprets the value set as negative

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

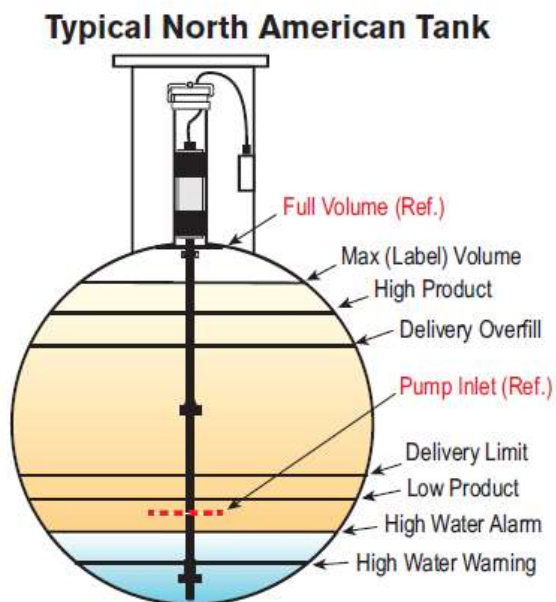
Tank Setup: Limits

Sudden Loss Limit – Applicable to Static Leak Detection (SLD) tests.

This value allows the system to look for losses during a quiet period to determine if the tank is leaking or fuel has left the tank (e.g., by bypassing the dispenser meters).

Typically, 25 gallon or higher

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      0%
LOW PRODUCT:         1000 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME:          25431 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         984 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

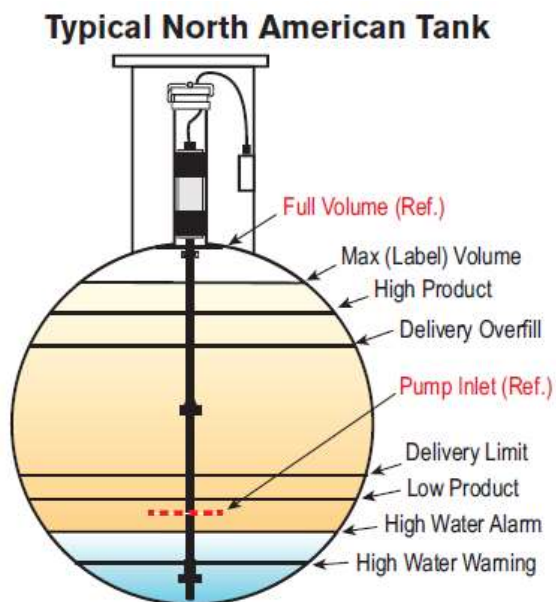
--- TANK 3 ---
MAX VOLUME:          7901 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         332 GALLONS
HIGH WATER WARNING:  2.00 INCHES
HIGH WATER ALARM:    3.00 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME:          8841 GALLONS
HIGH PRODUCT:        95%
DELIVERY OVERFILL:   90%
DELIVERY LIMIT:      20%
LOW PRODUCT:         500 GALLONS
HIGH WATER WARNING:  1.00 INCHES
HIGH WATER ALARM:    1.50 INCHES
WATER ALARM FILTER LEVEL:  LOW
LEAK ALARM LIMIT:    99 GALLONS
SUDDEN LOSS LIMIT:  100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup:
Limits

Fuel Low Temp Limit – Indicates fuel low temperature limit in UST

TLS-450PLUS Setup Tape



```

*** TANK SETUP - LIMITS ***

--- TANK 1 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 0%
LOW PRODUCT: 1000 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 2 ---
MAX VOLUME: 25431 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 984 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 3 ---
MAX VOLUME: 7901 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 332 GALLONS
HIGH WATER WARNING: 2.00 INCHES
HIGH WATER ALARM: 3.00 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F

--- TANK 4 ---
MAX VOLUME: 8841 GALLONS
HIGH PRODUCT: 95%
DELIVERY OVERFILL: 90%
DELIVERY LIMIT: 20%
LOW PRODUCT: 500 GALLONS
HIGH WATER WARNING: 1.00 INCHES
HIGH WATER ALARM: 1.50 INCHES
WATER ALARM FILTER LEVEL: LOW
LEAK ALARM LIMIT: 99 GALLONS
SUDDEN LOSS LIMIT: 100 GALLONS
FUEL LOW TEMP LIMIT: -58.000 DEG F
FUEL HIGH TEMP LIMIT: 140.000 DEG F
    
```

Tank Setup:
Limits

Fuel High Temp Limit – Indicates fuel high temperature limit in UST

TLS-450PLUS Setup Tape



```

*** TANK SETUP - ENVIRONMENTAL TESTS ***
-----
TANK TEST METHOD:  --- TANK 1 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 2 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 3 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 4 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 5 ---
                   DISABLED
-----
*** TANK SETUP - PROFILE ***
-----
TANK PROFILE:     --- TANK 1 ---
                   ONE POINT
FULL VOLUME:      25431
ENDSHAPE:         0.000
TANK PROFILE:     --- TANK 2 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 25431  003 59.2 12697
002 88.8 20608  004 29.6 4856
TANK PROFILE:     --- TANK 3 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 4395
002 88.8 7243  004 29.6 1581
TANK PROFILE:     --- TANK 4 ---
                   ONE POINT
FULL VOLUME:      8841
ENDSHAPE:         0.000
TANK PROFILE:     --- TANK 5 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 3954
002 88.8 6365  004 29.6 1560
    
```

Tank Setup: Environmental Tests

Indicates method of UST testing programmed

- SLD (Static Leak Detection)
- CSLD (Continuous Statistical Leak Detection)
- Disabled - no testing method has been enabled.

TLS-450PLUS Setup Tape



```

-----
*** TANK SETUP - ENVIRONMENTAL TESTS ***
-----
TANK TEST METHOD:  --- TANK 1 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 2 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 3 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 4 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 5 ---
                   DISABLED

-----
*** TANK SETUP - PROFILE ***
-----

TANK PROFILE:     --- TANK 1 ---
                   ONE POINT
FULL VOLUME:      25431
ENDSHAPE:         0.000

TANK PROFILE:     --- TANK 2 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 25431  003 59.2 12697
002 88.8 20608  004 29.6 4856

TANK PROFILE:     --- TANK 3 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 4395
002 88.8 7243  004 29.6 1581

TANK PROFILE:     --- TANK 4 ---
                   ONE POINT
FULL VOLUME:      8841
ENDSHAPE:         0.000

TANK PROFILE:     --- TANK 5 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 3954
002 88.8 6365  004 29.6 1560
    
```

Tank Setup: Profile

Height to Volume calculation of product in UST

- 1 Point – Flat end tanks (steel)
 - 100% full for tank profile
- 4 Point – Rounded end tanks (FRP)
 - 4 different volume to height for tank profile
- 20 Point – Rounded end tanks (FRP)
 - 20 different volume to height for tank profile

TLS-450PLUS Setup Tape



```

-----
*** TANK SETUP - ENVIRONMENTAL TESTS ***
-----
TANK TEST METHOD:  --- TANK 1 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 2 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 3 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 4 ---
                   DISABLED
TANK TEST METHOD:  --- TANK 5 ---
                   DISABLED
-----
*** TANK SETUP - PROFILE ***
-----
TANK PROFILE:     --- TANK 1 ---
                   ONE POINT
FULL VOLUME:     25431
ENDSHAPE:        0.000
-----
TANK PROFILE:     --- TANK 2 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 25431  003 59.2 12697
002 88.8 20608  004 29.6 4856
-----
TANK PROFILE:     --- TANK 3 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 4395
002 88.8 7243  004 29.6 1581
-----
TANK PROFILE:     --- TANK 4 ---
                   ONE POINT
FULL VOLUME:     8841
ENDSHAPE:        0.000
-----
TANK PROFILE:     --- TANK 5 ---
                   FOUR POINT
# HEIGHT VOLUME  # HEIGHT VOLUME
-----
001 118.4 7901  003 59.2 3954
002 88.8 6365  004 29.6 1560
-----

```

Tank Setup:
Profile

Height to Volume calculation of product
in UST

Endshape - Field only available when you
select One Point for Tank Profile

Used in dish-end USTs

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***

--- TANK 1 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME          # HEIGHT VOLUME
-----
001 118.4 25431          003 59.2 12697
002 88.8 20608          004 29.6 4856

--- TANK 3 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME          # HEIGHT VOLUME
-----
001 118.4 7901          003 59.2 4395
002 88.8 7243          004 29.6 1581

--- TANK 4 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup:
Charts

Console retains active UST tank charts

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***
-----
--- TANK 1 - CHART 1 ---
LABEL: *****
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
LABEL: *****
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 25431      003 59.2 12697
002 88.8 20608      004 29.6 4856

--- TANK 3 - CHART 1 ---
LABEL: *****
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 7901      003 59.2 4395
002 88.8 7243      004 29.6 1581

--- TANK 4 - CHART 1 ---
LABEL: *****
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup:
Charts

Console retains active UST tank charts

Type – Tank profile used

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***
-----
--- TANK 1 - CHART 1 ---
LABEL: *****
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
LABEL: *****
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 25431      003 59.2 12697
002 88.8 20608      004 29.6 4856

--- TANK 3 - CHART 1 ---
LABEL: *****
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 7901      003 59.2 4395
002 88.8 7243      004 29.6 1581

--- TANK 4 - CHART 1 ---
LABEL: *****
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup: Charts

Console retains active UST tank charts

Source – how tank chart was created

- User defined
- Automatic (requires AccuChart)
- Meter Drop
- Meter Dispensed

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***
-----
--- TANK 1 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 25431      003 59.2 12697
002 88.8 20608      004 29.6 4856

--- TANK 3 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 7901      003 59.2 4395
002 88.8 7243      004 29.6 1581

--- TANK 4 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup:
Charts

Console retains active UST tank charts

Last Change – date chart was created or changed

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***
-----
--- TANK 1 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 25431      003 59.2 12697
002 88.8 20608      004 29.6 4856

--- TANK 3 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 7901      003 59.2 4395
002 88.8 7243      004 29.6 1581

--- TANK 4 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup: Charts

Console retains active UST tank charts

Status:

- Active
- Ready
- Incomplete
- Bad Point
- Calculating

TLS-450PLUS Setup Tape



```
*** TANK CHART SETUP - CHARTS ***
-----
--- TANK 1 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 25431
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00

--- TANK 2 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 25431      003 59.2 12697
002 88.8 20608      004 29.6 4856

--- TANK 3 - CHART 1 ---
*****
LABEL:
TYPE: FOUR POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-27
STATUS: ACTIVE
VOLUME ENTRY: TOTAL VOLUME

# HEIGHT VOLUME      # HEIGHT VOLUME
-----
001 118.4 7901      003 59.2 4395
002 88.8 7243      004 29.6 1581

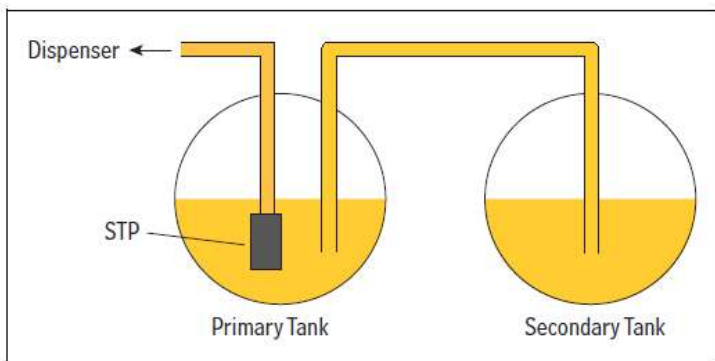
--- TANK 4 - CHART 1 ---
*****
LABEL:
TYPE: ONE POINT
SOURCE: USER ENTERED
LAST CHANGE: 2022-04-15
STATUS: ACTIVE
CAPACITY: 8841
ENDSHAPE: 0.000
OFFSET: 0.00
TILT: 0.00
DIAMETER: 118.00
```

Tank Setup: Charts

Console retains active UST tank charts

- Capacity
- Endshape
- Offset
- Tilt
- Diameter

TLS-450PLUS Setup Tape



```

*** TANK SETUP - SIPHON SETS ***

--- NO SIPHON SET DEFINED ---

-----
*** TANK SETUP - ALL TANKS ***
-----
ULLAGE DISPLAY MODE:      USER ULLAGE
FULL ULLAGE LABEL:       100% ULLAGE
USER ULLAGE:              90%
PRINT TC VOLUMES:        DISABLED
TC REFERENCE TEMPERATURE: 60 DEG F
PERIODIC TEST NEEDED
WARNINGS:                 DISABLED
DAYS BEFORE PERIODIC WARNING: 25
DAYS BEFORE PERIODIC ALARM: 30
ANNUAL TEST NEEDED WARNINGS: DISABLED
DAYS BEFORE ANNUAL WARNING: 355
DAYS BEFORE ANNUAL ALARM: 365
TC DENSITY:              DISABLED
STICK HEIGHT:            DISABLED
LEAK TEST REPORT FORMAT: STANDARD
LEAK TEST REGION:       EPA

-----
*** PRODUCT LABEL ***
-----
LABEL:      --- PRODUCT 1 ---
              Unleaded
LABEL:      --- PRODUCT 2 ---
              Premium
LABEL:      --- PRODUCT 3 ---
              B20 Diesel
LABEL:      --- PRODUCT 4 ---
              DEF

-----
*** TANK PRODUCT MAPPING ***
-----
TANK(S)      PRODUCT
T 1: Unleaded 25K      F 1: Unleaded
T 2: Diesel 25K        F 3: B20 Diesel
T 3: B99 Bio Blender   F 3: B20 Diesel
T 4: Supreme 9K        F 2: Premium
T 5: Def              F 4: DEF
    
```

Tank Setup: Siphon Sets

Defines UST siphon manifolded sets, which are two or more tanks connected by a manifold.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT:  STANDARD  
LEAK TEST REGION:         EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
-----  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

Ullage Display Mode – Determines how the Ullage field displays on Tank Overview display

- User Ullage
- Full Ullage

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:        100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:         DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT:  STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def              F 4: DEF
```

Tank Setup: All Tanks

Full Ullage Label – Determines how the label used for Full Ullage on the Tank Overview and in the Current Inventory and Shift Inventory reports.

- Ullage
- 100% Ullage

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TO VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

User Ullage – Field available only if User Ullage is enabled in Ullage Display Mode

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
-----  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:       EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

Print Temperature Compensated (TC)
Volumes

Prints TC volumes in reports

- Enabled
- Disabled

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
-----  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT:  STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

TC Reference Temperature

Temperature compensated (TC) reference temperature for all volume calculations.

- US = 60°F
- Canada = 15°C

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED     DISABLED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:       EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup: All Tanks

Periodic Test Needed Warnings – warning or an alarm after a specified number of days have passed (0 - 30 days) since the last 0.2 gph tank test was run or successfully passed

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED     DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:       EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K       F 2: Premium  
T 5: Def              F 4: DEF
```

Tank Setup: All Tanks

Days Before Periodic Warning – Posts an alarm when the test did not successfully pass after a warning, or if the test was not conducted in a specified number of days.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup: All Tanks

Days Before Periodic Alarm – Posts a warning when the test did not successfully pass, or if the test was not conducted in a specified number of days.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 365  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABLE:                    --- PRODUCT 1 ---  
                           Unleaded  
LABLE:                    --- PRODUCT 2 ---  
                           Premium  
LABLE:                    --- PRODUCT 3 ---  
                           B20 Diesel  
LABLE:                    --- PRODUCT 4 ---  
                           DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)                   PRODUCT  
T 1: Unleaded 25K         F 1: Unleaded  
T 2: Diesel 25K           F 3: B20 Diesel  
T 3: B99 Bio Blender      F 3: B20 Diesel  
T 4: Supreme 9K           F 2: Premium  
T 5: Def                  F 4: DEF
```

Tank Setup: All Tanks

Annual Test Needed Warning – posts a warning or an alarm after a specified number of days have passed (0 - 365 days) since the last 0.1 gph leak test was run or successfully passed.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 300  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup: All Tanks

Days Before Annual Warning – Posts an alarm when the test did not successfully pass after a warning, or if the test was not conducted in a specified number of days.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 365  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup: All Tanks

Days Before Annual Alarm – Posts a warning when the test did not successfully pass, or if the test was not conducted in a specified number of days.

TLS-450PLUS Setup Tape



```

-----
*** TANK SETUP - SIPHON SETS ***
-----
--- NO SIPHON SET DEFINED ---
-----
*** TANK SETUP - ALL TANKS ***
-----
ULLAGE DISPLAY MODE:      USER ULLAGE
FULL ULLAGE LABEL:       100% ULLAGE
USER ULLAGE:              90%
PRINT TC VOLUMES:        DISABLED
TC REFERENCE TEMPERATURE: 60 DEG F
PERIODIC TEST NEEDED
WARNINGS:                 DISABLED
DAYS BEFORE PERIODIC WARNING: 25
DAYS BEFORE PERIODIC ALARM: 30
ANNUAL TEST NEEDED WARNINGS: DISABLED
DAYS BEFORE ANNUAL WARNING: 355
DAYS BEFORE ANNUAL ALARM: 365
TC DENSITY:               DISABLED
STICK HEIGHT:            DISABLED
LEAK TEST REPORT FORMAT: STANDARD
LEAK TEST REGION:       EPA
-----
*** PRODUCT LABEL ***
-----
LABEL:      --- PRODUCT 1 ---
              Unleaded
LABEL:      --- PRODUCT 2 ---
              Premium
LABEL:      --- PRODUCT 3 ---
              B20 Diesel
LABEL:      --- PRODUCT 4 ---
              DEF
-----
*** TANK PRODUCT MAPPING ***
-----
TANK(S)      PRODUCT
T 1: Unleaded 25K      F 1: Unleaded
T 2: Diesel 25K        F 3: B20 Diesel
T 3: B99 Bio Blender   F 3: B20 Diesel
T 4: Supreme 9K        F 2: Premium
T 5: Def              F 4: DEF
  
```

Tank Setup:
All Tanks

TC Density – TC density readings for
inventory reports.

Only enabled if the site is equipped with a
Mag Plus Probe with a density float system.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:              DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender    F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup: All Tanks

Stick Height – Compensates for any difference between a stick measurement and the probe measurement.

The difference is due to the stick and the probe measuring slightly different locations in a tilted tank since the riser used for the stick measurement is different than the riser used for the probe.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
CHECK HEIGHT:            DISABLED  
LEAK TEST REPORT FORMAT:  STANDARD  
LEAK TEST REGION:        DEF  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Tank Setup:
All Tanks

Leak Test Report Format – The leak test report format can be set to Normal or Enhanced

Select Enhanced to comply with the California Code of Regulations.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:       EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABLE:                    --- PRODUCT 1 ---  
                           Unleaded  
LABLE:                    --- PRODUCT 2 ---  
                           Premium  
LABLE:                    --- PRODUCT 3 ---  
                           B20 Diesel  
LABLE:                    --- PRODUCT 4 ---  
                           DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)                   PRODUCT  
T 1: Unleaded 25K         F 1: Unleaded  
T 2: Diesel 25K           F 3: B20 Diesel  
T 3: B99 Bio Blender      F 3: B20 Diesel  
T 4: Supreme 9K           F 2: Premium  
T 5: Def                  F 4: DEF
```

Tank Setup: All Tanks

Leak Test Region – Determines the thresholds used in the leak test.

Regions are:

- EPA – for the US (default)
- CEN for Spain.

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K        F 2: Premium  
T 5: Def               F 4: DEF
```

Product Label – assigns Product label to Tanks

TLS-450PLUS Setup Tape



```
-----  
*** TANK SETUP - SIPHON SETS ***  
-----  
--- NO SIPHON SET DEFINED ---  
-----  
*** TANK SETUP - ALL TANKS ***  
-----  
ULLAGE DISPLAY MODE:      USER ULLAGE  
FULL ULLAGE LABEL:       100% ULLAGE  
USER ULLAGE:              90%  
PRINT TC VOLUMES:        DISABLED  
TC REFERENCE TEMPERATURE: 60 DEG F  
PERIODIC TEST NEEDED     DISABLED  
WARNINGS:                 DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST NEEDED WARNINGS: DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
TC DENSITY:               DISABLED  
STICK HEIGHT:             DISABLED  
LEAK TEST REPORT FORMAT: STANDARD  
LEAK TEST REGION:        EPA  
-----  
*** PRODUCT LABEL ***  
-----  
LABEL:      --- PRODUCT 1 ---  
              Unleaded  
LABEL:      --- PRODUCT 2 ---  
              Premium  
LABEL:      --- PRODUCT 3 ---  
              B20 Diesel  
LABEL:      --- PRODUCT 4 ---  
              DEF  
-----  
*** TANK PRODUCT MAPPING ***  
-----  
TANK(S)      PRODUCT  
T 1: Unleaded 25K      F 1: Unleaded  
T 2: Diesel 25K        F 3: B20 Diesel  
T 3: B99 Bio Blender   F 3: B20 Diesel  
T 4: Supreme 9K       F 2: Premium  
T 5: Def              F 4: DEF
```

Tank Product Mapping – maps specific product to tank

Depending on site configuration, there could be two tanks with same product

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***

--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:   R 1: 87 Regular Unleaded
                I 1: 87 Regular Unleaded
PUMP SENSE:     Ln 1: 87 Regular Unleaded
LINE:
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:   R 2: 91 Premium Unleaded
                I 2: 91 Premium Unleaded
PUMP SENSE:     Ln 2: 91 Premium Unleaded
LINE:
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:   R 3: B20 Diesel 25K
                I 3: B20 Diesel 25K
PUMP SENSE:     Ln 3: Diesel 25K
LINE:
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:   R 5: Bio Blender Diesel 8
                I 5: B20 Bio Blender Osl
PUMP SENSE:     Ln 4: Bio Blender
LINE:
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:   NOT ASSIGNED
PUMP SENSE:     I 4: DEF
LINE:           NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup - Pump

Configuration of sites STP that are controlled by the TLS

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:          ENABLED
LABEL:              87 Regular Unleaded
MODE:               TLS Pump Control
TANK:               T 1: Unleaded 25K
PUMP CONTROL:       R 1: 87 Regular Unleaded
PUMP SENSE:         I 1: 87 Regular Unleaded
LINE:               Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY:  60 SECONDS

--- PUMP 2 ---
CONFIGURED:          ENABLED
LABEL:              91 Premium Unleaded
MODE:               TLS Pump Control
TANK:               T 4: Supreme 9K
PUMP CONTROL:       R 2: 91 Premium Unleaded
PUMP SENSE:         I 2: 91 Premium Unleaded
LINE:               Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY:  60 SECONDS

--- PUMP 3 ---
CONFIGURED:          ENABLED
LABEL:              Diesel 25k
MODE:               TLS Pump Control
TANK:               T 2: Diesel 25K
PUMP CONTROL:       R 3: B20 Diesel 25K
PUMP SENSE:         I 3: B20 Diesel 25K
LINE:               Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY:  60 SECONDS

--- PUMP 4 ---
CONFIGURED:          ENABLED
LABEL:              B99 Bio Blender
MODE:               TLS Pump Control
TANK:               T 3: B99 Bio Blender
PUMP CONTROL:       R 5: Bio Blender Diesel 8
PUMP SENSE:         I 5: B20 Bio Blender Osl
LINE:               Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY:  60 SECONDS

--- PUMP 5 ---
CONFIGURED:          DISABLED
LABEL:              DEF
MODE:               TLS Pump Control
TANK:               T 5: Def
PUMP CONTROL:       NOT ASSIGNED
PUMP SENSE:         I 4: DEF
LINE:               NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY:  60 SECONDS
```

Pumps and Lines Setup – Pump
Label – User defined

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 87k
PUMP CONTROL:   R 1: 87 Regular Unleaded
                I 1: 87 Regular Unleaded
PUMP SENSE:     Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:   R 2: 91 Premium Unleaded
                I 2: 91 Premium Unleaded
PUMP SENSE:     Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:   R 3: B20 Diesel 25K
                I 3: B20 Diesel 25K
PUMP SENSE:     Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:   R 5: Bio Blender Diesel 8
                I 5: B20 Bio Blender Osl
PUMP SENSE:     Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:   NOT ASSIGNED
PUMP SENSE:     I 4: DEF
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup – Pump

Modes:

- TLS Pump Control
- Pump Sense
- External Pump Control

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:   R 1: 87 Regular Unleaded
                I 1: 87 Regular Unleaded
PUMP SENSE:     Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:   R 2: 91 Premium Unleaded
                I 2: 91 Premium Unleaded
PUMP SENSE:     Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:   R 3: B20 Diesel 25K
                I 3: B20 Diesel 25K
PUMP SENSE:     Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:   R 5: Bio Blender Diesel 8
                I 5: B20 Bio Blender Osl
PUMP SENSE:     Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:   NOT ASSIGNED
PUMP SENSE:     I 4: DEF
LINE:           NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup – Pump

Tank – Identifies the tank that is assigned to selected STP

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:    R 1: 87 Regular Unleaded
PUMP SENSE:      I 1: 87 Regular Unleaded
LINE:            Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:    R 2: 91 Premium Unleaded
PUMP SENSE:      I 2: 91 Premium Unleaded
LINE:            Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:    R 3: B20 Diesel 25K
PUMP SENSE:      I 3: B20 Diesel 25K
LINE:            Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:    R 5: Bio Blender Diesel 8
PUMP SENSE:      I 5: B20 Bio Blender Osl
LINE:            Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:    NOT ASSIGNED
PUMP SENSE:      I 4: DEF
LINE:            NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup – Pump

Pump Control – Enabled when the Mode field is set to "TLS Pump Control"

The device the TLS uses to activate the selected pump.

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:    I 1: 87 Regular Unleaded
PUMP SENSE:      I 1: 87 Regular Unleaded
LINE:            Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:    R 2: 91 Premium Unleaded
PUMP SENSE:      I 2: 91 Premium Unleaded
LINE:            Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:    R 3: B20 Diesel 25K
PUMP SENSE:      I 3: B20 Diesel 25K
LINE:            Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:    R 5: Bio Blender Diesel 8
PUMP SENSE:      I 5: B20 Bio Blender Osl
LINE:            Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:    NOT ASSIGNED
PUMP SENSE:      I 4: DEF
LINE:            NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup – Pump

Pump Sense – Enabled when the Mode field is set to "TLS Pump Control" or "Pump Sense"

The external input that tells the console when the pump is on or off.

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:    R 1: 87 Regular Unleaded
PUMP SENSE:      I 1: 87 Regular Unleaded
LINE:            Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:    R 2: 91 Premium Unleaded
PUMP SENSE:      I 2: 91 Premium Unleaded
LINE:            Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:    R 3: B20 Diesel 25K
PUMP SENSE:      I 3: B20 Diesel 25K
LINE:            Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:    R 5: Bio Blender Diesel 8
PUMP SENSE:      I 5: B20 Bio Blender Osl
LINE:            Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:    NOT ASSIGNED
PUMP SENSE:      I 4: DEF
LINE:            NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup – Pump

Line – Line identified of the selected STP

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PUMP ***
-----
--- PUMP 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
MODE:            TLS Pump Control
TANK:            T 1: Unleaded 25K
PUMP CONTROL:   R 1: 87 Regular Unleaded
PUMP SENSE:     I 1: 87 Regular Unleaded
LINE:           Ln 1: 87 Regular Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
MODE:            TLS Pump Control
TANK:            T 4: Supreme 9K
PUMP CONTROL:   R 2: 91 Premium Unleaded
PUMP SENSE:     I 2: 91 Premium Unleaded
LINE:           Ln 2: 91 Premium Unleaded
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25k
MODE:            TLS Pump Control
TANK:            T 2: Diesel 25K
PUMP CONTROL:   R 3: B20 Diesel 25K
PUMP SENSE:     I 3: B20 Diesel 25K
LINE:           Ln 3: Diesel 25K
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 4 ---
CONFIGURED:      ENABLED
LABEL:           B99 Bio Blender
MODE:            TLS Pump Control
TANK:            T 3: B99 Bio Blender
PUMP CONTROL:   R 5: Bio Blender Diesel 8
PUMP SENSE:     I 5: B20 Bio Blender Osl
LINE:           Ln 4: Bio Blender
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS

--- PUMP 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
MODE:            TLS Pump Control
TANK:            T 5: Def
PUMP CONTROL:   NOT ASSIGNED
PUMP SENSE:     I 4: DEF
LINE:           NOT ASSIGNED
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED
STUCK RELAY DELAY: 60 SECONDS
```

Pumps and Lines Setup– Pump

Pump Relay Motor Device – (DPLLD)
External input that generates a pump relay alarm when the console suspects a relay is stuck or when the pump has been running continuously for a period exceeding the Max Run time.

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PUMP ***  
-----  
--- PUMP 1 ---  
CONFIGURED:      ENABLED  
LABEL:           87 Regular Unleaded  
MODE:            TLS Pump Control  
TANK:            T 1: Unleaded 25K  
PUMP CONTROL:    R 1: 87 Regular Unleaded  
PUMP SENSE:      I 1: 87 Regular Unleaded  
LINE:            Ln 1: 87 Regular Unleaded  
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED  
STUCK RELAY DELAY: 60 SECONDS  
-----  
--- PUMP 2 ---  
CONFIGURED:      ENABLED  
LABEL:           91 Premium Unleaded  
MODE:            TLS Pump Control  
TANK:            T 4: Supreme 9K  
PUMP CONTROL:    R 2: 91 Premium Unleaded  
PUMP SENSE:      I 2: 91 Premium Unleaded  
LINE:            Ln 2: 91 Premium Unleaded  
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED  
STUCK RELAY DELAY: 60 SECONDS  
-----  
--- PUMP 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25k  
MODE:            TLS Pump Control  
TANK:            T 2: Diesel 25K  
PUMP CONTROL:    R 3: B20 Diesel 25K  
PUMP SENSE:      I 3: B20 Diesel 25K  
LINE:            Ln 3: Diesel 25K  
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED  
STUCK RELAY DELAY: 60 SECONDS  
-----  
--- PUMP 4 ---  
CONFIGURED:      ENABLED  
LABEL:           B99 Bio Blender  
MODE:            TLS Pump Control  
TANK:            T 3: B99 Bio Blender  
PUMP CONTROL:    R 5: Bio Blender Diesel 8  
PUMP SENSE:      I 5: B20 Bio Blender Osl  
LINE:            Ln 4: Bio Blender  
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED  
STUCK RELAY DELAY: 60 SECONDS  
-----  
--- PUMP 5 ---  
CONFIGURED:      DISABLED  
LABEL:           DEF  
MODE:            TLS Pump Control  
TANK:            T 5: Def  
PUMP CONTROL:    NOT ASSIGNED  
PUMP SENSE:      I 4: DEF  
LINE:            NOT ASSIGNED  
PUMP RELAY MONITOR DEVICE: NOT ASSIGNED  
STUCK RELAY DELAY: 60 SECONDS  
-----
```

Pumps and Lines Setup – Pump

Stuck Relay Delay – (DPLLD)
Identifies when a pump relay is "stuck" when the pump relay signal is inactive, but the pump monitor indicates the pump is powered.

Stuck Relay delay time from 5 to 600 seconds. The default is 60 seconds.

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - LINE ***

--- LINE 1 ---
CONFIGURED:      ENABLED
LABEL:           87 Regular Unleaded
LEAK MONITORING: Monitoring PLLD
PRESSURE SENSOR: P1 1: Regular PLLD
LINE ACTIVE RELAY: NOT ASSIGNED
MANIFOLDED:      NO
DISPENSE MODE:   Standard
ASSOCIATED PUMPS: Pm1

--- LINE 2 ---
CONFIGURED:      ENABLED
LABEL:           91 Premium Unleaded
LEAK MONITORING: Monitoring PLLD
PRESSURE SENSOR: P1 2: Supreme PLLD
LINE ACTIVE RELAY: NOT ASSIGNED
MANIFOLDED:      NO
DISPENSE MODE:   Standard
ASSOCIATED PUMPS: Pm2

--- LINE 3 ---
CONFIGURED:      ENABLED
LABEL:           Diesel 25K
LEAK MONITORING: Monitoring PLLD
PRESSURE SENSOR: P1 3: Diesel PLLD
LINE ACTIVE RELAY: NOT ASSIGNED
MANIFOLDED:      NO
DISPENSE MODE:   Standard
ASSOCIATED PUMPS: Pm3

--- LINE 4 ---
CONFIGURED:      ENABLED
LABEL:           Bio Blender
LEAK MONITORING: Monitoring PLLD
PRESSURE SENSOR: P1 4: Bio Diesel PLLD
LINE ACTIVE RELAY: NOT ASSIGNED
MANIFOLDED:      NO
DISPENSE MODE:   Standard
ASSOCIATED PUMPS: Pm4

--- LINE 5 ---
CONFIGURED:      DISABLED
LABEL:           DEF
LEAK MONITORING: Monitoring None
PRESSURE SENSOR: NOT ASSIGNED
LINE ACTIVE RELAY: NOT ASSIGNED
MANIFOLDED:      NO
DISPENSE MODE:   Standard
ASSOCIATED PUMPS: NOT ASSIGNED
```

Pumps and Lines Setup – Line

Line – Configuration of individual lines monitored by the TLS

Used with PLLD

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:               87 Regular Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 1: Regular PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm1  
  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:               91 Premium Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 2: Supreme PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm2  
  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Diesel 25K  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 3: Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm3  
  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Bio Blender  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm4  
  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:               DEF  
LEAK MONITORING:     Monitoring None  
PRESSURE SENSOR:     NOT ASSIGNED  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    NOT ASSIGNED
```

Pumps and Lines Setup – Line
Label – User defined

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:              87 Regular Unleaded  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    PS 1: Regular PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:  Pm1  
  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:              91 Premium Unleaded  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 2: Supreme PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:  Pm2  
  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:              Diesel 25K  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 3: Diesel PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:  Pm3  
  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:              Bio Blender  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:  Pm4  
  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:              DEF  
LEAK MONITORING:    Monitoring None  
PRESSURE SENSOR:    NOT ASSIGNED  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:  NOT ASSIGNED
```

Pumps and Lines Setup – Line

Leak Monitoring – Enable/Disable DPLLD

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:               87 Regular Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 1: Regular PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm1  
  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:               91 Premium Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 2: Supreme PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm2  
  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Diesel 25K  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 3: Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm3  
  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Bio Blender  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm4  
  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:               DEF  
LEAK MONITORING:     Monitoring None  
PRESSURE SENSOR:     NOT ASSIGNED  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    NOT ASSIGNED
```

Pumps and Lines Setup – Line

Pressure Sensor – Selects the line pressure sensor assigned to line

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:      ENABLED  
LABEL:           87 Regular Unleaded  
LEAK MONITORING: Monitoring PLLD  
PRESSURE SENSOR: P1 1: Regular PLLD  
LINE ACTIVE RELAY: NOT ASSIGNED  
MANIFOLDED:      NO  
DISPENSE MODE:   Standard  
ASSOCIATED PUMPS: Pm1  
  
--- LINE 2 ---  
CONFIGURED:      ENABLED  
LABEL:           91 Premium Unleaded  
LEAK MONITORING: Monitoring PLLD  
PRESSURE SENSOR: P1 2: Supreme PLLD  
LINE ACTIVE RELAY: NOT ASSIGNED  
MANIFOLDED:      NO  
DISPENSE MODE:   Standard  
ASSOCIATED PUMPS: Pm2  
  
--- LINE 3 ---  
CONFIGURED:      ENABLED  
LABEL:           Diesel 25K  
LEAK MONITORING: Monitoring PLLD  
PRESSURE SENSOR: P1 3: Diesel PLLD  
LINE ACTIVE RELAY: NOT ASSIGNED  
MANIFOLDED:      NO  
DISPENSE MODE:   Standard  
ASSOCIATED PUMPS: Pm3  
  
--- LINE 4 ---  
CONFIGURED:      ENABLED  
LABEL:           Bio Blender  
LEAK MONITORING: Monitoring PLLD  
PRESSURE SENSOR: P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY: NOT ASSIGNED  
MANIFOLDED:      NO  
DISPENSE MODE:   Standard  
ASSOCIATED PUMPS: Pm4  
  
--- LINE 5 ---  
CONFIGURED:      DISABLED  
LABEL:           DEF  
LEAK MONITORING: Monitoring None  
PRESSURE SENSOR: NOT ASSIGNED  
LINE ACTIVE RELAY: NOT ASSIGNED  
MANIFOLDED:      NO  
DISPENSE MODE:   Standard  
ASSOCIATED PUMPS: NOT ASSIGNED
```

Pumps and Lines Setup – Line

Line Active Relay – Used with Intelligent Pump Control (IPC)

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:               87 Regular Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 1: Regular PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm1  
  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:               91 Premium Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 2: Supreme PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm2  
  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Diesel 25K  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 3: Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm3  
  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Bio Blender  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm4  
  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:               DEF  
LEAK MONITORING:     Monitoring None  
PRESSURE SENSOR:     NOT ASSIGNED  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    NOT ASSIGNED
```

Pumps and Lines Setup – Line

Manifolded – Yes/No if lines are manifolded

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:               87 Regular Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 1: Regular PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm1  
  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:               91 Premium Unleaded  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 2: Supreme PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm2  
  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:               Diesel 25K  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 3: Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm3  
  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:               Bio Blender  
LEAK MONITORING:     Monitoring PLLD  
PRESSURE SENSOR:     P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    Pm4  
  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:               DEF  
LEAK MONITORING:     Monitoring None  
PRESSURE SENSOR:     NOT ASSIGNED  
LINE ACTIVE RELAY:   NOT ASSIGNED  
MANIFOLDED:          NO  
DISPENSE MODE:       Standard  
ASSOCIATED PUMPS:    NOT ASSIGNED
```

Pumps and Lines Setup – Line

Dispense Mode –

- Standard – One pump feeds the line
- Manifolded – for multiple pumps

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - LINE ***  
-----  
--- LINE 1 ---  
CONFIGURED:          ENABLED  
LABEL:              87 Regular Unleaded  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 1: Regular PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:   Pm1  
-----  
--- LINE 2 ---  
CONFIGURED:          ENABLED  
LABEL:              91 Premium Unleaded  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 2: Supreme PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:   Pm2  
-----  
--- LINE 3 ---  
CONFIGURED:          ENABLED  
LABEL:              Diesel 25K  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 3: Diesel PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:   Pm3  
-----  
--- LINE 4 ---  
CONFIGURED:          ENABLED  
LABEL:              Bio Blender  
LEAK MONITORING:    Monitoring PLLD  
PRESSURE SENSOR:    P1 4: Bio Diesel PLLD  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:   Pm4  
-----  
--- LINE 5 ---  
CONFIGURED:          DISABLED  
LABEL:              DEF  
LEAK MONITORING:    Monitoring None  
PRESSURE SENSOR:    NOT ASSIGNED  
LINE ACTIVE RELAY:  NOT ASSIGNED  
MANIFOLDED:        NO  
DISPENSE MODE:     Standard  
ASSOCIATED PUMPS:   NOT ASSIGNED
```

Pumps and Lines Setup – Line

Associated Pumps – Pump identified to line monitored

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - PLLD ***

--- LINE 1 ---
CONFIGURED:                ENABLED
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded
PIPE TYPE:                 User Defined
1ST LINE LENGTH:          850.00 FEET
1ST LINE DIAMETER:        2.00 INCHES
1ST LINE BULK MODULUS:    25000.0 psi
2ND LINE LENGTH:          0.00 FEET
2ND LINE DIAMETER:        0.00 INCHES
2ND LINE BULK MODULUS:    0.0 psi
THERMAL COEFFICIENT:      0.000700
0.2 GPH LINE LEAK:        DISABLED
0.1 GPH LINE LEAK:        AUTO
PASSIVE 0.1 GPH LINE LEAK
TEST:                      NO
SHUTDOWN RATE:            3.0 GAL/HR
LOW PRESSURE SHUTOFF:     ENABLED
LOW PRESSURE ALARM LIMIT: 5 psi
CONTINUOUS HANDLE TIMEOUT: 12 HOURS
FUEL OUT LIMIT:           10.00 INCHES
ALTITUDE PRESSURE OFFSET: 0.00 psi
PUMP COMM CONTROL RELAY:  NOT ASSIGNED

--- LINE 2 ---
CONFIGURED:                ENABLED
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded
PIPE TYPE:                 User Defined
1ST LINE LENGTH:          900.00 FEET
1ST LINE DIAMETER:        2.00 INCHES
1ST LINE BULK MODULUS:    25000.0 psi
2ND LINE LENGTH:          0.00 FEET
2ND LINE DIAMETER:        0.00 INCHES
2ND LINE BULK MODULUS:    0.0 psi
THERMAL COEFFICIENT:      0.000700
0.2 GPH LINE LEAK:        DISABLED
0.1 GPH LINE LEAK:        AUTO
PASSIVE 0.1 GPH LINE LEAK
TEST:                      NO
SHUTDOWN RATE:            3.0 GAL/HR
LOW PRESSURE SHUTOFF:     ENABLED
LOW PRESSURE ALARM LIMIT: 5 psi
CONTINUOUS HANDLE TIMEOUT: 12 HOURS
FUEL OUT LIMIT:           10.00 INCHES
ALTITUDE PRESSURE OFFSET: 0.00 psi
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

Leak Monitoring – Enable/Disable DPLLD

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

Controlling Pump – Pump controlling tank

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 82 Regular Unleaded  
PIPE TYPE:                  User Defined  
1ST LINE LENGTH:           900.00 FEET  
1ST LINE DIAMETER:         2.00 INCHES  
1ST LINE BULK MODULUS:     25000.0 psi  
2ND LINE LENGTH:           0.00 FEET  
2ND LINE DIAMETER:         0.00 INCHES  
2ND LINE BULK MODULUS:     0.0 psi  
THERMAL COEFFICIENT:       0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:             3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                  User Defined  
1ST LINE LENGTH:           900.00 FEET  
1ST LINE DIAMETER:         2.00 INCHES  
1ST LINE BULK MODULUS:     25000.0 psi  
2ND LINE LENGTH:           0.00 FEET  
2ND LINE DIAMETER:         0.00 INCHES  
2ND LINE BULK MODULUS:     0.0 psi  
THERMAL COEFFICIENT:       0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:             3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

Pipe Type – Piping used

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:   NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:   NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

1st Line Length – piping length between tank and dispenser

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          950.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

1st Line Diameter – piping diameter between tank and dispenser

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

1st Line Bulk Modulus – piping's resistance to uniform compression

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pumps and Lines Setup - PLLD

2nd Line Configuration -

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:          10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:          10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Thermal Coefficient – Coefficient thermal expansion of product stored in tank

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                  User Defined  
1ST LINE LENGTH:           850.00 FEET  
1ST LINE DIAMETER:         2.00 INCHES  
1ST LINE BULK MODULUS:     25000.0 psi  
2ND LINE LENGTH:           0.00 FEET  
2ND LINE DIAMETER:         0.00 INCHES  
2ND LINE BULK MODULUS:     0.0 psi  
THERMAL COEFFICIENT:       0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:         AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                       NO  
SHUTDOWN RATE:             3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:            10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:   NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                  User Defined  
1ST LINE LENGTH:           900.00 FEET  
1ST LINE DIAMETER:         2.00 INCHES  
1ST LINE BULK MODULUS:     25000.0 psi  
2ND LINE LENGTH:           0.00 FEET  
2ND LINE DIAMETER:         0.00 INCHES  
2ND LINE BULK MODULUS:     0.0 psi  
THERMAL COEFFICIENT:       0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:         AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                       NO  
SHUTDOWN RATE:             3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:            10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:   NOT ASSIGNED
```

0.2 GPH Line Leak – Enable/Disable to run 0.2 GPH tests

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

0.1 GPH Line Leak – Enable/Disable to run 0.1 GPH tests

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Passive 0.1GPH Line Leak Test – Performs 0.1 GPH Line test after successful passing of 0.2GPH test

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Shutdown Rate – line is shutdown if specified test fails

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Low Pressure Shutoff – Triggers Low Pressure Alarm if low pressure is detected during dispense.

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Low Pressure Alarm Limit – Programmed
Low Pressure limit

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:      ENABLED  
LOW PRESSURE ALARM LIMIT:  5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Continuous Handle Timeout – If dispenser handle remains “off hook” for period of time programmed, the line is shutdown by the console

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Fuel Out Limit – If product level in tank is below value entered, Fuel Out Alarm is triggered

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:          10.00 INCHES  
ALTIUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED  
  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:          10.00 INCHES  
ALTIUDE PRESSURE OFFSET:  0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Altitude Pressure Offset – Allows programming of altitude pressure adjustment

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - PLLD ***  
-----  
          --- LINE 1 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 1: 87 Regular Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          850.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY: NOT ASSIGNED  
          --- LINE 2 ---  
CONFIGURED:                ENABLED  
CONTROLLING PUMP:          Pm 2: 91 Premium Unleaded  
PIPE TYPE:                 User Defined  
1ST LINE LENGTH:          900.00 FEET  
1ST LINE DIAMETER:        2.00 INCHES  
1ST LINE BULK MODULUS:    25000.0 psi  
2ND LINE LENGTH:          0.00 FEET  
2ND LINE DIAMETER:        0.00 INCHES  
2ND LINE BULK MODULUS:    0.0 psi  
THERMAL COEFFICIENT:      0.000700  
0.2 GPH LINE LEAK:        DISABLED  
0.1 GPH LINE LEAK:        AUTO  
PASSIVE 0.1 GPH LINE LEAK  
TEST:                      NO  
SHUTDOWN RATE:            3.0 GAL/HR  
LOW PRESSURE SHUTOFF:     ENABLED  
LOW PRESSURE ALARM LIMIT: 5 psi  
CONTINUOUS HANDLE TIMEOUT: 12 HOURS  
FUEL OUT LIMIT:           10.00 INCHES  
ALTITUDE PRESSURE OFFSET: 0.00 psi  
PUMP COMM CONTROL RELAY:  NOT ASSIGNED
```

Pump Comm Control Relay – Used for communication if pump IQ boxes are used.

TLS-450PLUS Setup Tape



```
*** PUMPS AND LINES - ALL LINES ***
RESTART ON ALARM CLEAR:    ENABLED
LINE LOCKOUT SCHEDULE:    Disabled
-----
*** PUMPS AND LINES - ALL PLLD ***
LINE RE-ENABLE METHOD:     PASS LINE TEST
PERIODIC TEST WARNINGS:   DISABLED
DAYS BEFORE PERIODIC WARNING: 25
DAYS BEFORE PERIODIC ALARM: 30
ANNUAL TEST WARNINGS:     DISABLED
DAYS BEFORE ANNUAL WARNING: 355
DAYS BEFORE ANNUAL ALARM: 365
PRECISION TEST DELAY:     12 HOURS
0.1 GPH LINE TEST AUTO   ENABLED
CONFIRM:
0.2 GPH LINE TEST AUTO   ENABLED
CONFIRM:
-----
*** INVENTORY SETUP - REPORT TIMES ***
INVENTORY LOG TIME:       12:00 AM
INVENTORY LOG INTERVAL:   1 Minute
STORAGE LENGTH:           720
-----
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***
CLOSE METHOD:              TIMED
-----
*** INVENTORY SETUP - SHIFT TIMES ***
--- NO ACTIVE SHIFTS DEFINED ---
-----
*** DELIVERY SETUP ***
DELIVERY METHOD:           Standard Automatic
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All Lines

Leak Monitoring – Enable/Disable DPLLD

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
RESTART ON ALARM CLEAR:  ENABLED  
LINE LOCKOUT SCHEDULE:  DISABLED  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
LINE RE-ENABLE METHOD:  PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING:  25  
DAYS BEFORE PERIODIC ALARM:  30  
ANNUAL TEST WARNINGS:  DISABLED  
DAYS BEFORE ANNUAL WARNING:  355  
DAYS BEFORE ANNUAL ALARM:  365  
PRECISION TEST DELAY:  12 HOURS  
0.1 GPH LINE TEST AUTO  CONFIRM:  ENABLED  
0.2 GPH LINE TEST AUTO  CONFIRM:  ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
INVENTORY LOG TIME:  12:00 AM  
INVENTORY LOG INTERVAL:  1 Minute  
STORAGE LENGTH:  720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
CLOSE METHOD:  TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
DELIVERY METHOD:  Standard Automatic  
TANK IDLE DELIVERY:  DISABLED
```

Pumps and Lines Setup – All Lines

Restart on Alarm Clear – Determines behavior of TLS after shutdown

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All Lines

Line Lockout Schedule – Allows line(s) to be shutdown if scheduled.

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:    PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:    12 HOURS  
0.1 GPH LINE TEST AUTO  ENABLED  
CONFIRM:                  ENABLED  
0.2 GPH LINE TEST AUTO  ENABLED  
CONFIRM:                  ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:      12:00 AM  
INVENTORY LOG INTERVAL:  1 Minute  
STORAGE LENGTH:         720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:             TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:          Standard Automatic  
TANK IDLE DELIVERY:      DISABLED  
-----
```

Pumps and Lines Setup – All PLLD

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:    PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING:  25  
DAYS BEFORE PERIODIC ALARM:    30  
ANNUAL TEST WARNINGS:      DISABLED  
DAYS BEFORE ANNUAL WARNING:   355  
DAYS BEFORE ANNUAL ALARM:    365  
PRECISION TEST DELAY:      12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:          Standard Automatic  
TANK IDLE DELIVERY:     DISABLED  
-----
```

Pumps and Lines Setup – All PLLD

Line Re-Enable Method – determines behavior of PLLD after failed test

- Pass Line Test
- Alarm Acknowledge

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED  
-----
```

Pumps and Lines Setup – All PLLD

Periodic Test Warnings – Enable/Disable
Periodic Test Needed Warning/Alarm
which informs you that a line will soon
be out of compliance because a Periodic
test was not completed within the
required time.

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                  ENABLED  
0.2 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                  ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

Days Before Periodic Warning – The number of days before the Periodic Test Warning is triggered.

0 - 30 days (default is 25 days).

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

Days Before Periodic Alarm – The number of days before the Periodic Test Alarm is triggered.

0 - 30 days (default is 30 days).

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

Annual Test Warnings – Informs you that a line will soon be out of compliance because an Annual test was not completed within the required time.

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:    PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING:  25  
DAYS BEFORE PERIODIC ALARM:  30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING:  355  
DAYS BEFORE ANNUAL ALARM:    365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

Days Before Annual Warning - Number of days before the Annual Test Needed Warning is triggered.

0 - 365 days (default is 355).

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO    ENABLED  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO    ENABLED  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

Days Before Annual Alarm - Number of days before the Annual Test Needed Alarm is triggered.

0 - 365 days (default is 365).

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:          Standard Automatic  
TANK IDLE DELIVERY:      DISABLED  
-----
```

Pumps and Lines Setup – All PLLD

Precision Test Delay – The number of hours between a passed periodic or annual test and running the next line test(s).

12 to 744 hours

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECTION TEST DELAY:      12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:        12:00 AM  
INVENTORY LOG INTERVAL:    1 Minute  
STORAGE LENGTH:           720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED
```

Pumps and Lines Setup – All PLLD

0.1 GPH Line Test Auto Confirm – Enable or disable the ability of the TLS to evaluate several 0.1 gph line tests before a result is posted.

Enabling Auto Confirm reduces the risk of false test results, but it extends the time that it may take to post results.

TLS-450PLUS Setup Tape



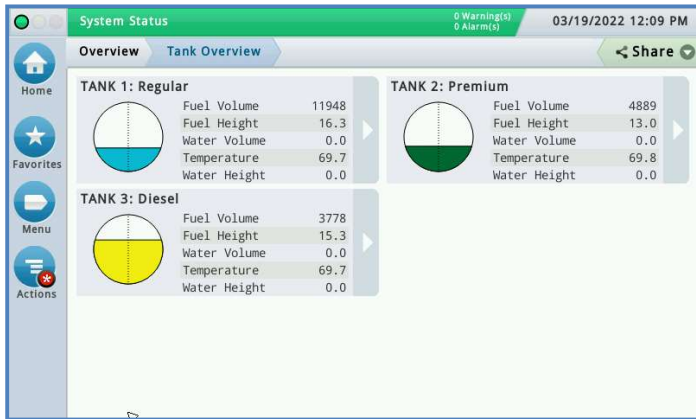
```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED  
-----
```

Pumps and Lines Setup – All PLLD

0.2 GPH Line Test Auto Confirm – Enable or disable the ability of the TLS to evaluate several 0.2 gph line tests before a result is posted.

Enabling Auto Confirm reduces the risk of false test results, but it extends the time that it may take to post results.

TLS-450PLUS Setup Tape

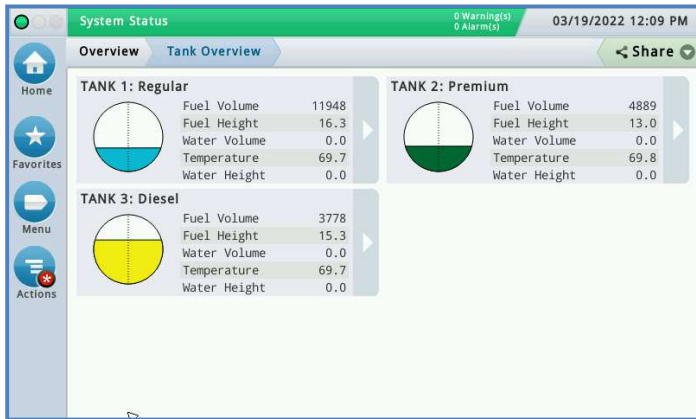


```

-----
*** PUMPS AND LINES - ALL LINES ***
-----
RESTART ON ALARM CLEAR:    ENABLED
LINE LOCKOUT SCHEDULE:    Disabled
-----
*** PUMPS AND LINES - ALL PLLD ***
-----
LINE RE-ENABLE METHOD:    PASS LINE TEST
PERIODIC TEST WARNINGS:  DISABLED
DAYS BEFORE PERIODIC WARNING:  25
DAYS BEFORE PERIODIC ALARM:  30
ANNUAL TEST WARNINGS:    DISABLED
DAYS BEFORE ANNUAL WARNING:  355
DAYS BEFORE ANNUAL ALARM:  365
PRECISION TEST DELAY:    12 HOURS
0.1 GPH LINE TEST AUTO  CONFIRM:    ENABLED
0.2 GPH LINE TEST AUTO  CONFIRM:    ENABLED
-----
*** INVENTORY SETUP - REPORT TIMES ***
-----
INVENTORY LOG TIME:      12:00 AM
INVENTORY LOG INTERVAL:  1 Minute
STORAGE LENGTH:         720
-----
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***
-----
CLOSE METHOD:            TIMED
-----
*** INVENTORY SETUP - SHIFT TIMES ***
-----
--- NO ACTIVE SHIFTS DEFINED ---
-----
*** DELIVERY SETUP ***
-----
DELIVERY METHOD:         Standard Automatic
TANK IDLE DELIVERY:    DISABLED
    
```

Inventory Setup – Report Times

TLS-450PLUS Setup Tape



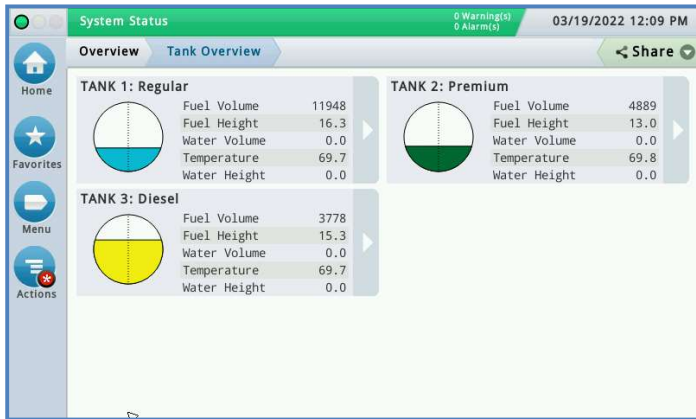
```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:    PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:    12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                  ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                  ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:             TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:          Standard Automatic  
TANK IDLE DELIVERY:     DISABLED  
-----
```

Inventory Setup – Report Times

Allows TLS to generate inventory reports based on time

5min., 10min., 1hr., 6hr., etc.

TLS-450PLUS Setup Tape

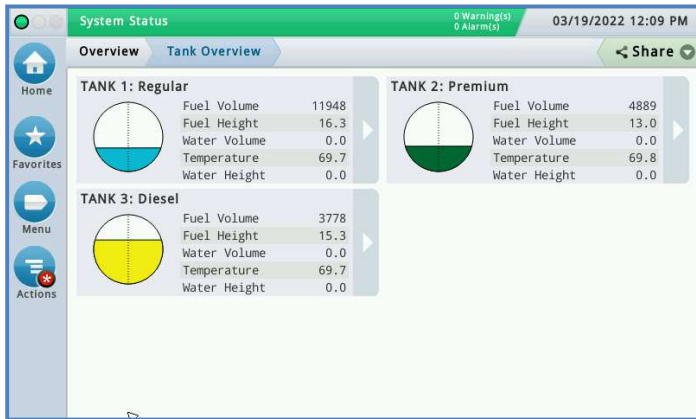


```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:      ENABLED  
LINE LOCKOUT SCHEDULE:      Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:       PASS LINE TEST  
PERIODIC TEST WARNINGS:     DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:       DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM:   365  
PRECISION TEST DELAY:       12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                     ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                     ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:         12:00 AM  
INVENTORY LOG INTERVAL:     1 Minute  
STORAGE LENGTH:            720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:                TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:             Standard Automatic  
TANK IDLE DELIVERY:         DISABLED
```

Inventory Setup – Shift Close Method

Allows TLS to generate inventory reports based on shift times

TLS-450PLUS Setup Tape



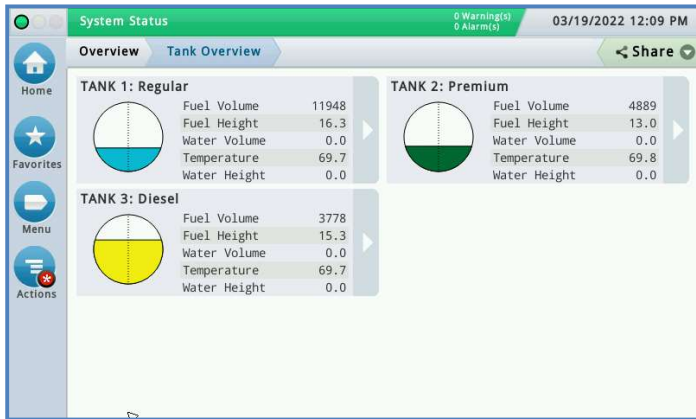
```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED  
-----
```

Inventory Setup – Shift Close Method

Allows TLS to generate inventory reports based on shift times

Timed or Manual

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:      ENABLED  
LINE LOCKOUT SCHEDULE:      Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:      PASS LINE TEST  
PERIODIC TEST WARNINGS:    DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:      DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM:  365  
PRECISION TEST DELAY:      12 HOURS  
0.1 GPH LINE TEST AUTO  
CONFIRM:                    ENABLED  
0.2 GPH LINE TEST AUTO  
CONFIRM:                    ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:         12:00 AM  
INVENTORY LOG INTERVAL:    1 Minute  
STORAGE LENGTH:           720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:               TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:            Standard Automatic  
TANK IDLE DELIVERY:        DISABLED  
-----
```

Inventory Setup – Shift Times

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:    PASS LINE TEST  
PERIODIC TEST WARNINGS:  DISABLED  
DAYS BEFORE PERIODIC WARNING:  25  
DAYS BEFORE PERIODIC ALARM:    30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING:   355  
DAYS BEFORE ANNUAL ALARM:    365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO    ENABLED  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO    ENABLED  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:      12:00 AM  
INVENTORY LOG INTERVAL:  1 Minute  
STORAGE LENGTH:         720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:             TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:         Standard Automatic  
TANK IDLE DELIVERY:    DISABLED  
-----
```

Delivery Setup

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:    DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:    12 HOURS  
0.1 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                  ENABLED  
0.2 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                  ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:      Disabled  
-----
```

Delivery Setup

Delivery Method – Standard Automatic

The TLS detects that a delivery is taking place when there is an increase in fuel height as measured by the probe.

A delivery is complete when the height no longer increases

TLS-450PLUS Setup Tape



```
-----  
*** PUMPS AND LINES - ALL LINES ***  
-----  
RESTART ON ALARM CLEAR:    ENABLED  
LINE LOCKOUT SCHEDULE:    Disabled  
-----  
*** PUMPS AND LINES - ALL PLLD ***  
-----  
LINE RE-ENABLE METHOD:     PASS LINE TEST  
PERIODIC TEST WARNINGS:   DISABLED  
DAYS BEFORE PERIODIC WARNING: 25  
DAYS BEFORE PERIODIC ALARM: 30  
ANNUAL TEST WARNINGS:     DISABLED  
DAYS BEFORE ANNUAL WARNING: 355  
DAYS BEFORE ANNUAL ALARM: 365  
PRECISION TEST DELAY:     12 HOURS  
0.1 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
0.2 GPH LINE TEST AUTO   ENABLED  
CONFIRM:                   ENABLED  
-----  
*** INVENTORY SETUP - REPORT TIMES ***  
-----  
INVENTORY LOG TIME:       12:00 AM  
INVENTORY LOG INTERVAL:   1 Minute  
STORAGE LENGTH:          720  
-----  
*** INVENTORY SETUP - SHIFT CLOSE METHOD ***  
-----  
CLOSE METHOD:              TIMED  
-----  
*** INVENTORY SETUP - SHIFT TIMES ***  
-----  
--- NO ACTIVE SHIFTS DEFINED ---  
-----  
*** DELIVERY SETUP ***  
-----  
DELIVERY METHOD:           Standard Automatic  
TANK IDLE DELIVERY:       DISABLED  
-----
```

Delivery Setup

Tank Idle Delivery – Tank Idle Delivery enables TLS to shut down dispenser activities during the delivery process.

TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - ADDRESS BOOK ***  
  
--- CONTACT 1 ---  
NAME: Veeder-Root (FMS)  
E-MAIL: ghgh@veeder.com  
E-MAIL TYPE: HTML E-MAIL  
MODEM # (COMPUTER):  
MODEM COM PORT: NOT ASSIGNED  
MODEM DIAL-OUT STRING:  
MODEM NUMBER OF RETRIES: 3  
MODEM RETRY DELAY TIME: 3  
MODEM IS HANGUP REQD: NO  
FAX # (COMPUTER):  
FAX COM PORT: NOT ASSIGNED  
FAX DIAL-OUT STRING:  
FAX NUMBER OF RETRIES: 3  
FAX RETRY DELAY TIME: 3  
REMOTE TCP / IP ADDRESS: 10.5.0.148  
REMOTE TCP / IP PORT: 8100  
LOCAL TCP/IP COM PORT: Co 13  
TCP/IP NUMBER OF RETRIES: 3  
TCP/IP RETRY DELAY TIME: 3  
TCP/IP IS HANGUP REQD: NO  
SATELLITE CONNECTION STRING:  
SATELLITE COM PORT: NOT ASSIGNED  
SATELLITE NUMBER OF RETRIES: 3  
SATELLITE RETRY DELAY TIME: 3  
SATELLITE IS HANGUP REQD: NO  
  
--- CONTACT 2 ---  
NAME: Veeder-Root(FMS)  
E-MAIL:  
E-MAIL TYPE: HTML E-MAIL  
MODEM # (COMPUTER):  
MODEM COM PORT: NOT ASSIGNED  
MODEM DIAL-OUT STRING:  
MODEM NUMBER OF RETRIES: 3  
MODEM RETRY DELAY TIME: 3  
MODEM IS HANGUP REQD: NO  
FAX # (COMPUTER):  
FAX COM PORT: NOT ASSIGNED  
FAX DIAL-OUT STRING:  
FAX NUMBER OF RETRIES: 3  
FAX RETRY DELAY TIME: 3  
REMOTE TCP / IP ADDRESS: 10.5.0.148  
REMOTE TCP / IP PORT: 8100  
LOCAL TCP/IP COM PORT: Co 13  
TCP/IP NUMBER OF RETRIES: 3  
TCP/IP RETRY DELAY TIME: 3  
TCP/IP IS HANGUP REQD: NO  
SATELLITE CONNECTION STRING:  
SATELLITE COM PORT: NOT ASSIGNED  
SATELLITE NUMBER OF RETRIES: 3  
SATELLITE RETRY DELAY TIME: 3  
SATELLITE IS HANGUP REQD: NO
```

Automatic Events

The TLS-450PLUS uses Automatic Events to initiate an action or notification of an event

Example – If a Sump Sensor (device) goes into Fuel Alarm, a programmed Automatic Event would initiate STP “positive shutdown”.

Example – After a fuel delivery, a programmed Automatic Event would initiate an Inventory Report to be printed by the TLS

TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - ADDRESS BOOK ***

--- CONTACT 1 ---
NAME: Veeder-Root (FMS)
E-MAIL: ghgh@veeder.com
E-MAIL TYPE: HTML E-MAIL
MODEM # (COMPUTER):
MODEM COM PORT: NOT ASSIGNED
MODEM DIAL-OUT STRING:
MODEM NUMBER OF RETRIES: 3
MODEM RETRY DELAY TIME: 3
MODEM IS HANGUP REQD: NO
FAX # (COMPUTER):
FAX COM PORT: NOT ASSIGNED
FAX DIAL-OUT STRING:
FAX NUMBER OF RETRIES: 3
FAX RETRY DELAY TIME: 3
REMOTE TCP / IP ADDRESS: 10.5.0.148
REMOTE TCP / IP PORT: 8100
LOCAL TCP/IP COM PORT: Co 13
TCP/IP NUMBER OF RETRIES: 3
TCP/IP RETRY DELAY TIME: 3
TCP/IP IS HANGUP REQD: NO
SATELLITE CONNECTION STRING:
SATELLITE COM PORT: NOT ASSIGNED
SATELLITE NUMBER OF RETRIES: 3
SATELLITE RETRY DELAY TIME: 3
SATELLITE IS HANGUP REQD: NO

--- CONTACT 2 ---
NAME: Veeder-Root(FMS)
E-MAIL:
E-MAIL TYPE: HTML E-MAIL
MODEM # (COMPUTER):
MODEM COM PORT: NOT ASSIGNED
MODEM DIAL-OUT STRING:
MODEM NUMBER OF RETRIES: 3
MODEM RETRY DELAY TIME: 3
MODEM IS HANGUP REQD: NO
FAX # (COMPUTER):
FAX COM PORT: NOT ASSIGNED
FAX DIAL-OUT STRING:
FAX NUMBER OF RETRIES: 3
FAX RETRY DELAY TIME: 3
REMOTE TCP / IP ADDRESS: 10.5.0.148
REMOTE TCP / IP PORT: 8100
LOCAL TCP/IP COM PORT: Co 13
TCP/IP NUMBER OF RETRIES: 3
TCP/IP RETRY DELAY TIME: 3
TCP/IP IS HANGUP REQD: NO
SATELLITE CONNECTION STRING:
SATELLITE COM PORT: NOT ASSIGNED
SATELLITE NUMBER OF RETRIES: 3
SATELLITE RETRY DELAY TIME: 3
SATELLITE IS HANGUP REQD: NO
```

Automatic Events – Address Book

Provides a list of contact names and outbound connectivity details.

TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - AUTOXMIT TASKS ***  
  
--- EVENT ID 1 ---  
EVENT - Leak Alarm: Disabled  
EVENT - High Water Alarm: Disabled  
EVENT - Overfill Alarm: Disabled  
EVENT - Low Limit Alarm: Disabled  
EVENT - Theft Alarm: Disabled  
EVENT - Delivery Start: Disabled  
EVENT - Delivery Stop: Disabled  
EVENT - External Input On: Disabled  
EVENT - External Input Off: Disabled  
EVENT - Sensor Fuel Alarm: Disabled  
EVENT - Sensor Water Alarm: Disabled  
EVENT - Sensor Out Alarm: Disabled  
ACTION: AutoXmit  
DEVICE: Co 1  
DELAY TIME: 5 SECONDS  
REPEAT TIME: 60 MINUTES
```

Automatic Events – Autoxmit Tasks

Messages that automatically transmit (AutoXmit) when alarms are posted by the console.

TLS-450PLUS Setup Tape

```
*** AUTOMATIC EVENTS - AUTOCONNECT TASKS ***

--- EVENT ID 3 ---
EVENT - SETUP DATA WARNING: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - LEAK ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - HIGH WATER ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - OVERFILL ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - LOW PRODUCT ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - SUDDEN LOSS ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - HIGH PRODUCT ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - INVALID FUEL LEVEL: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - PROBE OUT: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - HIGH WATER WARNING: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - DELIVERY NEEDED: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - MAX PRODUCT ALARM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - GROSS TEST FAIL: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - PERIODIC TEST FAIL: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - ANNUAL TEST FAIL: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - PER TST NEEDED WRN: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - ANN TST NEEDED WRN: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - PER TST NEEDED ALM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - ANN TST NEEDED ALM: T2: Diesel 25K, T3: B99
Bio Blender, T5: Def
EVENT - TANK TEST ACTIVE: T2: Diesel 25K, T3: B99
```

```
FUEL ALARM:
L1: Regular tank annular,
L2: Regular STP, L3:
Regular STP Annular, L4:
Reg Fill Sump Hydro, L5:
Regular Fill Sump, L6:
Def 91 B20 Tank Ann., L7:
Premium STP Sump, L8:
Premium STP Hydro, L9:
Premium Fill Hydro, L10:
Premium Fill Sump, L11:
Diesel Tank Annular, L12:
B20 DSL 25K STP Sump,
L13: B20 DSL25K STP
Hydro, L14: B20DSL Fill
Sump 25k, L15: B20DSL
Fill Hydro25k, L16: DEF
STP Sump, L17: DEF STP
HYDRO, L18: DEF Fill
Sump, L19: DEF Fill Hydro
, L20: B20 DSL 8K STP
Sump, L21: B20 DSL 8K STP
Hydro, L22: B20 DSL 8K
Fill Sump, L23: B20DSL 8K
Fill Hydro, L24: Vent
Sump, L25: Vent Hydro,
L28: Disp 1/2 UDC, L29:
Disp 1/2 Hydro, L30: Disp
3/4 UDC, L31: Disp 3/4
Hydro, L32: Disp 5/6 UDC,
L33: Disp 5/6 Hydro, L34:
Disp 7/8 UDC, L35: Disp
7/8 Hydro, L36: Disp 9/10
UDC, L37: Disp 9/10
Hydro, L38: Disp 11/12
UDC, L39: Disp 11/12
Hydro, L40: Disp 13/14
UDC, L41: Disp 13/14
Hydro, L42: Disp 15/16
UDC, L43: Disp 15/16
Hydro, L44: Disp 17/18
UDC, L45: Disp 17/18
Hydro, L46: Disp 19/20
UDC, L47: Disp 19/20
Hydro, L48: Disp 21/22
UDC, L49: Disp 21/22
Hydro, L50: Disp 23/24
UDC, L51: Disp 23/24
Hydro, L52: Disp 25/26
```

Automatic Events – Autoconnect Tasks

Tasks that automatically transmit information.

One task can involve many combinations of reports or actions, times, events, contacts, and connection mode

TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - DEVICE TASKS ***

--- EVENT ID 2 ---
EVENT - ISD GROSS PRES FAIL: ALL ISDS
EVENT - ISD VAPOR LEAK FAIL: ALL ISDS
EVENT - ISD VP PRES FAIL: ALL ISDS
EVENT - ISD SETUP FAIL: ALL ISDS
EVENT - ISD SENSOR OUT FAIL: ALL ISDS
EVENT - FLOW COLLECT FAIL: ALL HOSES
EVENT - ISD DEGRD PRES FAIL: ALL ISDS
EVENT - ISD VP STATUS FAIL: ALL ISDS
ACTION:
DEVICE: Pm 2: 91 Premium Unloaded

--- EVENT ID 4 ---
EVENT - FUEL ALARM: L12: B20 DSL 25K STP
Sump, L26: B20Diesel
Blend Sump, L28: Disp 1/2
UDC, L30: Disp 3/4 UDC,
L32: Disp 5/6 UDC, L34:
Disp 7/8 UDC, L36: Disp
9/10 UDC, L38: Disp 11/12
UDC, L40: Disp 13/14 UDC,
L42: Disp 15/16 UDC, L44:
Disp 17/18 UDC, L46: Disp
19/20 UDC, L48: Disp
21/22 UDC, L50: Disp
23/24 UDC, L52: Disp
25/26 UDC, L54: Disp
27/28 UDC, L56: Disp
29/30 UDC, L58: Disp 31
UDC, L60: Disp 32 UDC,
L62: Disp 33 UDC
EVENT - SENSOR OUT ALARM:
L12: B20 DSL 25K STP
Sump, L26: B20Diesel
Blend Sump, L28: Disp 1/2
UDC, L30: Disp 3/4 UDC,
L32: Disp 5/6 UDC, L34:
Disp 7/8 UDC, L36: Disp
9/10 UDC, L38: Disp 11/12
UDC, L40: Disp 13/14 UDC,
L42: Disp 15/16 UDC, L44:
Disp 17/18 UDC, L46: Disp
19/20 UDC, L48: Disp
21/22 UDC, L50: Disp
23/24 UDC, L52: Disp
25/26 UDC, L54: Disp
27/28 UDC, L56: Disp
29/30 UDC, L58: Disp 31
UDC, L60: Disp 32 UDC,
L62: Disp 33 UDC
EVENT - HIGH LIQUID ALARM:
Vs9: B20 Dsl vac 1 Prod1
, Vs10: B20Dsl vac 2 Prod
#2, Vs13: B20 Dsl Vac 5
Vent, Vs14: B20 Dsl vac 6
Syphon
```

Automatic Events – Device Tasks

TLS device action tasks

TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - PRINT TASKS ***

--- NO AUTO EVENTS DEFINED ---

-----
*** SYSTEM ADMINISTRATION - ROLES ADMIN ***
-----

--- PREDEFINED ROLES ---
      Administrator
      Operator
      Service Provider

--- CUSTOM ROLES ---
      Regulator

-----
*** SYSTEM ADMINISTRATION - USERS ADMIN ***
-----

--- USER 1 ---
USER:      helpdesk
FULL NAME: helpdesk
ROLE:      Administrator
EMAIL:     retailescalation@maverik.
           com

--- USER 2 ---
USER:      tech
FULL NAME: Tech
ROLE:      Administrator
EMAIL:     retailescalation@maverik.
           com

--- USER 3 ---
USER:      operator
FULL NAME: Operator
ROLE:      Operator
EMAIL:     retailescalation@maverik.
           com

--- USER 4 ---
USER:      environmental
FULL NAME: environmental
ROLE:      Administrator
EMAIL:     retailescalation@maverik.
           com

-----
*** SYSTEM SETUP - SECURITY ***
-----

FRONT PANEL SECURITY:  DISABLED
SERIAL COMMAND PORT:  ENABLED
SSH PORT:              ENABLED
SERIAL COMMAND OVER SSH:  DISABLED
HTTPS PORT (WEB ACCESS):  ENABLED
USER ADMIN VIA WEB:    ENABLED
```

Automatic Events – Print Tasks

TLS printer-related automatic activities currently configured for the console



TLS-450PLUS Setup Tape



```
*** AUTOMATIC EVENTS - PRINT TASKS ***

--- NO AUTO EVENTS DEFINED ---

-----
*** SYSTEM ADMINISTRATION - ROLES ADMIN ***
-----

--- PREDEFINED ROLES ---
      Administrator
      Operator
      Service Provider

--- CUSTOM ROLES ---
      Regulator

-----
*** SYSTEM ADMINISTRATION - USERS ADMIN ***
-----

--- USER 1 ---
USER:      helpdesk
FULL NAME: helpdesk
ROLE:      Administrator
EMAIL:     retailescalation@maverik.com

--- USER 2 ---
USER:      tech
FULL NAME: Tech
ROLE:      Administrator
EMAIL:     retailescalation@maverik.com

--- USER 3 ---
USER:      operator
FULL NAME: Operator
ROLE:      Operator
EMAIL:     retailescalation@maverik.com

--- USER 4 ---
USER:      environmental
FULL NAME: environmental
ROLE:      Administrator
EMAIL:     retailescalation@maverik.com

-----
*** SYSTEM SETUP - SECURITY ***
-----

FRONT PANEL SECURITY:  DISABLED
SERIAL COMMAND PORT:  ENABLED
SSH PORT:              ENABLED
SERIAL COMMAND OVER SSH:  DISABLED
HTTPS PORT (WEB ACCESS):  ENABLED
USER ADMIN VIA WEB:    ENABLED
```

Automatic Events – Print Tasks

TLS printer-related automatic activities currently configured for the console

What was the #1 complaint about the TLS-350 consoles?



Why does this thing print **everything**?!



TLS-450PLUS Setup Tape



```
-----  
*** AUTOMATIC EVENTS - PRINT TASKS ***  
-----  
--- NO AUTO EVENTS DEFINED ---  
  
*** SYSTEM ADMINISTRATION - ROLES ADMIN ***  
-----  
--- PREDEFINED ROLES ---  
Administrator  
Operator  
Service Provider  
--- CUSTOM ROLES ---  
Regulator  
-----  
*** SYSTEM ADMINISTRATION - USERS ADMIN ***  
-----  
--- USER 1 ---  
USER: helpdesk  
FULL NAME: helpdesk  
ROLE: Administrator  
EMAIL: retailescalation@maverik.  
com  
--- USER 2 ---  
USER: tech  
FULL NAME: Tech  
ROLE: Administrator  
EMAIL: retailescalation@maverik.  
com  
--- USER 3 ---  
USER: operator  
FULL NAME: Operator  
ROLE: Operator  
EMAIL: retailescalation@maverik.  
com  
--- USER 4 ---  
USER: environmental  
FULL NAME: environmental  
ROLE: Administrator  
EMAIL: retailescalation@maverik.  
com  
-----  
*** SYSTEM SETUP - SECURITY ***  
-----  
FRONT PANEL SECURITY: DISABLED  
SERIAL COMMAND PORT: ENABLED  
SSH PORT: ENABLED  
SERIAL COMMAND OVER SSH: DISABLED  
HTTPS PORT (WEB ACCESS): ENABLED  
USER ADMIN VIA WEB: ENABLED
```

System Administration – Roles Admin

Predefined roles programmed and how each role should behave for a user who is assigned to that role.

TLS-450PLUS Setup Tape



```
-----  
*** AUTOMATIC EVENTS - PRINT TASKS ***  
-----  
--- NO AUTO EVENTS DEFINED ---  
-----  
*** SYSTEM ADMINISTRATION - ROLES ADMIN ***  
-----  
--- PREDEFINED ROLES ---  
Administrator  
Operator  
Service Provider  
--- CUSTOM ROLES ---  
Regulator  
-----  
*** SYSTEM ADMINISTRATION - USERS ADMIN ***  
-----  
--- USER 1 ---  
USER: helpdesk  
FULL NAME: helpdesk  
ROLE: Administrator  
EMAIL: retailescalation@maverik.com  
--- USER 2 ---  
USER: tech  
FULL NAME: Tech  
ROLE: Administrator  
EMAIL: retailescalation@maverik.com  
--- USER 3 ---  
USER: operator  
FULL NAME: Operator  
ROLE: Operator  
EMAIL: retailescalation@maverik.com  
--- USER 4 ---  
USER: environmental  
FULL NAME: environmental  
ROLE: Administrator  
EMAIL: retailescalation@maverik.com  
-----  
*** SYSTEM SETUP - SECURITY ***  
-----  
FRONT PANEL SECURITY: DISABLED  
SERIAL COMMAND PORT: ENABLED  
SSH PORT: ENABLED  
SERIAL COMMAND OVER SSH: DISABLED  
HTTPS PORT (WEB ACCESS): ENABLED  
USER ADMIN VIA WEB: ENABLED
```

System Administration – Users Admin

Additional roles programmed (levels of security) and how each role should behave for a user who is assigned to that role.

TLS-450PLUS Setup Tape



```
-----  
*** AUTOMATIC EVENTS - PRINT TASKS ***  
-----  
--- NO AUTO EVENTS DEFINED ---  
-----  
*** SYSTEM ADMINISTRATION - ROLES ADMIN ***  
-----  
--- PREDEFINED ROLES ---  
      Administrator  
      Operator  
      Service Provider  
--- CUSTOM ROLES ---  
      Regulator  
-----  
*** SYSTEM ADMINISTRATION - USERS ADMIN ***  
-----  
--- USER 1 ---  
USER:      helpdesk  
FULL NAME: helpdesk  
ROLE:      Administrator  
EMAIL:     retailescalation@maverik.com  
-----  
--- USER 2 ---  
USER:      tech  
FULL NAME: Tech  
ROLE:      Administrator  
EMAIL:     retailescalation@maverik.com  
-----  
--- USER 3 ---  
USER:      operator  
FULL NAME: Operator  
ROLE:      Operator  
EMAIL:     retailescalation@maverik.com  
-----  
--- USER 4 ---  
USER:      environmental  
FULL NAME: environmental  
ROLE:      Administrator  
EMAIL:     retailescalation@maverik.com  
-----  
*** SYSTEM SETUP - SECURITY ***  
-----  
FRONT PANEL SECURITY:  DISABLED  
SERIAL COMMAND PORT:  ENABLED  
SSH PORT:              ENABLED  
SERIAL COMMAND OVER SSH:  DISABLED  
HTTPS PORT (WEB ACCESS):  ENABLED  
USER ADMIN VIA WEB:     ENABLED
```

System Setup – Security

Security feature which requires a password for a user to login to the console for access.

With this feature disabled all users can access all screens.

When enabled, users must login with the appropriate password to gain access.

TLS-450PLUS Setup Tape



```
*** COMMUNICATION SETUP - USB PORT ***
--- NO USB PORT DEFINED ---
-----
*** COMMUNICATION SETUP - PROTOCOLS ***
-----
EURO PROTOCOL PREFIX:      $
H-PROTOCOL DATA FORMAT:  HEIGHT
-----
*** CUSTOM ALARM LABELS ***
-----
CUSTOM ALARMS:             DISABLED
-----
*** OVERVIEW - TANK OVERVIEW ***
-----
FUEL VOLUME:               ENABLED
FULL ULLAGE:               ENABLED
USER ULLAGE:               DISABLED
FUEL TC VOLUME:            DISABLED
TEMPERATURE:               ENABLED
FUEL HEIGHT:               ENABLED
WATER VOLUME:              DISABLED
WATER HEIGHT:              ENABLED
DENSITY:                   DISABLED
TC DENSITY:                 DISABLED
MASS:                       DISABLED
STICK HEIGHT:              DISABLED
DELIVERED QTY:             DISABLED
MANIFOLD DEL.:             DISABLED
TEMPERATURE ON TANK:       DISABLED
VOLUME ON TANK:            DISABLED
-----
*** PRINTERS - SETUP ***
-----
--- PRINTER 1 ---
CONFIGURED:                ENABLED
PRINTER:                   CUSTOM_Engineering_ME015_
                           640_USB_1
IS DEFAULT:                 YES
LABEL:                     TLSIntegralPrinter
URI:                       aps:/dev/bus/usb?type=usb
                           +vid=3540+pid=594
DRIVER SELECTION:          MANUAL
DRIVER:                    APS CP324HRS, 0.16.0
```

Communication Setup – USB Port
Configuration of USB port if used

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - USB PORT ***  
-----  
--- NO USB PORT DEFINED ---  
  
*** COMMUNICATION SETUP - PROTOCOLS ***  
-----  
EURO PROTOCOL PREFIX:      $  
H-PROTOCOL DATA FORMAT:  HEIGHT  
-----  
*** CUSTOM ALARM LABELS ***  
-----  
CUSTOM ALARMS:             DISABLED  
-----  
*** OVERVIEW - TANK OVERVIEW ***  
-----  
FUEL VOLUME:                ENABLED  
FULL ULLAGE:                ENABLED  
USER ULLAGE:                DISABLED  
FUEL TC VOLUME:            DISABLED  
TEMPERATURE:               ENABLED  
FUEL HEIGHT:               ENABLED  
WATER VOLUME:              DISABLED  
WATER HEIGHT:              ENABLED  
DENSITY:                   DISABLED  
TC DENSITY:                DISABLED  
MASS:                      DISABLED  
STICK HEIGHT:              DISABLED  
DELIVERED QTY:             DISABLED  
MANIFOLD DEL.:             DISABLED  
TEMPERATURE ON TANK:       DISABLED  
VOLUME ON TANK:            DISABLED  
-----  
*** PRINTERS - SETUP ***  
-----  
--- PRINTER 1 ---  
CONFIGURED:                 ENABLED  
PRINTER:                    CUSTOM_Engineering_ME015_  
640_USB_1  
IS DEFAULT:                 YES  
LABEL:                      TLSIntegralPrinter  
URI:                        aps:/dev/bus/usb?type=usb  
+vid=3540+pid=594  
DRIVER SELECTION:          MANUAL  
DRIVER:                     APS CP324HRS, 0.16.0
```

Communication Setup – Protocols
International

TLS-450PLUS Setup Tape

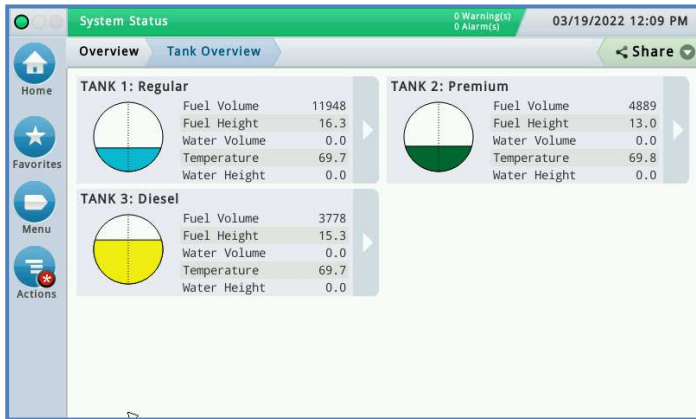


```
-----  
*** COMMUNICATION SETUP - USB PORT ***  
-----  
--- NO USB PORT DEFINED ---  
-----  
*** COMMUNICATION SETUP - PROTOCOLS ***  
-----  
EURO PROTOCOL PREFIX:      $  
H-PROTOCOL DATA FORMAT:  HEIGHT  
-----  
*** CUSTOM ALARM LABELS ***  
-----  
CUSTOM ALARMS:              DISABLED  
-----  
*** OVERVIEW - TANK OVERVIEW ***  
-----  
FUEL VOLUME:                 ENABLED  
FULL ULLAGE:                 ENABLED  
USER ULLAGE:                 DISABLED  
FUEL TC VOLUME:             DISABLED  
TEMPERATURE:                ENABLED  
FUEL HEIGHT:                ENABLED  
WATER VOLUME:               DISABLED  
WATER HEIGHT:               ENABLED  
DENSITY:                    DISABLED  
TC DENSITY:                  DISABLED  
MASS:                       DISABLED  
STICK HEIGHT:                DISABLED  
DELIVERED QTY:              DISABLED  
MANIFOLD DEL.:              DISABLED  
TEMPERATURE ON TANK:        DISABLED  
VOLUME ON TANK:              DISABLED  
-----  
*** PRINTERS - SETUP ***  
-----  
--- PRINTER 1 ---  
CONFIGURED:                  ENABLED  
PRINTER:                     CUSTOM_Engineering_ME015_640_USB_1  
IS DEFAULT:                  YES  
LABEL:                       TLSIntegralPrinter  
URI:                          aps:/dev/bus/usb?type=usb+vid=3540+pid=594  
DRIVER SELECTION:            MANUAL  
DRIVER:                       APS CP324HRS, 0.16.0
```

Custom Alarm Labels

Enabled or Disabled

TLS-450PLUS Setup Tape



```

*** COMMUNICATION SETUP - USB PORT ***

--- NO USB PORT DEFINED ---

*** COMMUNICATION SETUP - PROTOCOLS ***

EURO PROTOCOL PREFIX:      $
H-PROTOCOL DATA FORMAT:   HEIGHT

*** CUSTOM ALARM LABELS ***

CUSTOM ALARMS:              DISABLED

*** OVERVIEW - TANK OVERVIEW ***

FUEL VOLUME:                 ENABLED
FULL ULLAGE:                 ENABLED
USER ULLAGE:                 DISABLED
FUEL TC VOLUME:             DISABLED
TEMPERATURE:                ENABLED
FUEL HEIGHT:                ENABLED
WATER VOLUME:               DISABLED
WATER HEIGHT:               ENABLED
DENSITY:                    DISABLED
TC DENSITY:                 DISABLED
MASS:                       DISABLED
STICK HEIGHT:               DISABLED
DELIVERED QTY:              DISABLED
MANIFOLD DEL.:              DISABLED
TEMPERATURE ON TANK:        DISABLED
VOLUME ON TANK:              DISABLED

*** PRINTERS - SETUP ***

--- PRINTER 1 ---

CONFIGURED:                 ENABLED
PRINTER:                    CUSTOM_Engineering_ME015_
                             640_USB_1
IS DEFAULT:                 YES
LABEL:                      TLSIntegralPrinter
URI:                        aps:/dev/bus/usb?type=usb
                             +vid=3540+pid=594
DRIVER SELECTION:           MANUAL
DRIVER:                     APS CP324HRS, 0.16.0
    
```

Overview – Tank Overview

TLS-450PLUS Setup Tape



```
-----  
*** COMMUNICATION SETUP - USB PORT ***  
-----  
--- NO USB PORT DEFINED ---  
-----  
*** COMMUNICATION SETUP - PROTOCOLS ***  
-----  
EURO PROTOCOL PREFIX:      $  
H-PROTOCOL DATA FORMAT:  HEIGHT  
-----  
*** CUSTOM ALARM LABELS ***  
-----  
CUSTOM ALARMS:              DISABLED  
-----  
*** OVERVIEW - TANK OVERVIEW ***  
-----  
FUEL VOLUME:                ENABLED  
FULL ULLAGE:                ENABLED  
USER ULLAGE:                DISABLED  
FUEL TC VOLUME:            DISABLED  
TEMPERATURE:               ENABLED  
FUEL HEIGHT:               ENABLED  
WATER VOLUME:              DISABLED  
WATER HEIGHT:              ENABLED  
DENSITY:                   DISABLED  
TC DENSITY:                 DISABLED  
MASS:                       DISABLED  
STICK HEIGHT:              DISABLED  
DELIVERED QTY:             DISABLED  
MANIFOLD DEL.:             DISABLED  
TEMPERATURE ON TANK:       DISABLED  
VOLUME ON TANK:            DISABLED  
-----  
*** PRINTERS - SETUP ***  
-----  
--- PRINTER 1 ---  
CONFIGURED:                 ENABLED  
PRINTER:                    CUSTOM_Engineering_ME015_  
                             640_USB_1  
IS DEFAULT:                 YES  
LABEL:                      TLSIntegralPrinter  
URI:                        aps:/dev/bus/usb?type=usb  
                             +vid=3540+pid=594  
DRIVER SELECTION:           MANUAL  
DRIVER:                     APS CP324HRS, 0.16.0
```

Printer Setup



Thank You!

Questions?



