1 DESCRIPTION

The Veeder-Root Serial Driver allows the FieldServer to transfer data to and from devices over either RS-232 or RS-485 ports using Veeder-Root protocol as defined in Veeder Root Document 576013-635 Revision J. Since the data protocol is the same for the TLS-350+ as for TL-S350, it is assumed that the driver will support the TLS350+ but this has not been tested. The Driver also successfully communicates with the TLS-450 as it has the same data protocol. Please refer to Section 6 for hardware connections.

The FieldServer emulates a Client.

The Veeder-Root Serial Driver is a poll response driver. Only one query or command can be processed at a time.

A limited set of the queries and commands defined in the protocol specification have been implemented. The reason for the limitation is two-fold. Firstly, not all commands/queries will have any meaning to a Server device as they are principally defined to configure the Veeder-Root Device. Secondly some commands return very complex data sets which cannot be processed in a method suitable for loading into the FieldServer's Data Arrays.

The driver is capable of exposing its communications statistics which allows them to be monitored using a Server device.

FieldServer Mode	Nodes	Comments
Client	1 to 8 depending on the FieldServer Type.	Only one node can be connected per port.

2 FORMAL DRIVER TYPE

Client Only

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FSx25	Yes
FS-x30	Yes
FS-x40	Yes
SlotServer	Yes
ProtoCessor FPC-FO2	Yes
ProtoNode	Yes
ProtoCessor FPC-FD2	Yes
QuickServer FS-QS-1010	Yes
QuickServer FS-QS-1011	No

4 CONNECTION INFORMATION

Connection type:	RS-232 or RS-485 (Half-Duplex)
Baud Rates:	Standard baud rates up to 9600 (TLS-350), 115200 (TLS-450)
Data Bits:	7,8
Stop Bits:	1,2
Parity:	Odd, Even, None
Multidrop Capability	No

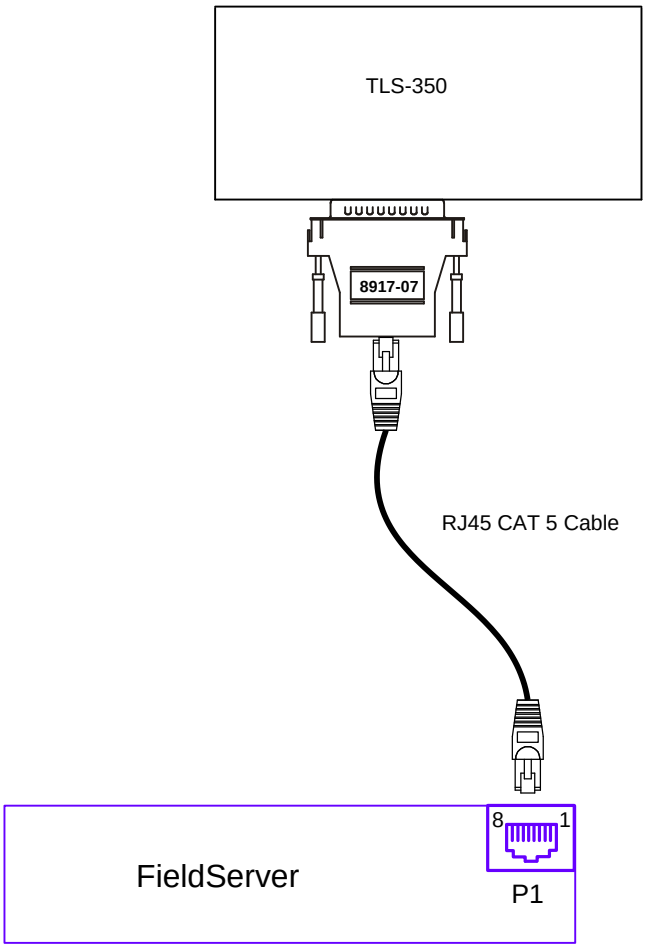
5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
TLS-350	SITE
TLS-450	SITE

6 HARDWARE CONNECTIONS

6.1 TLS-350 Connection

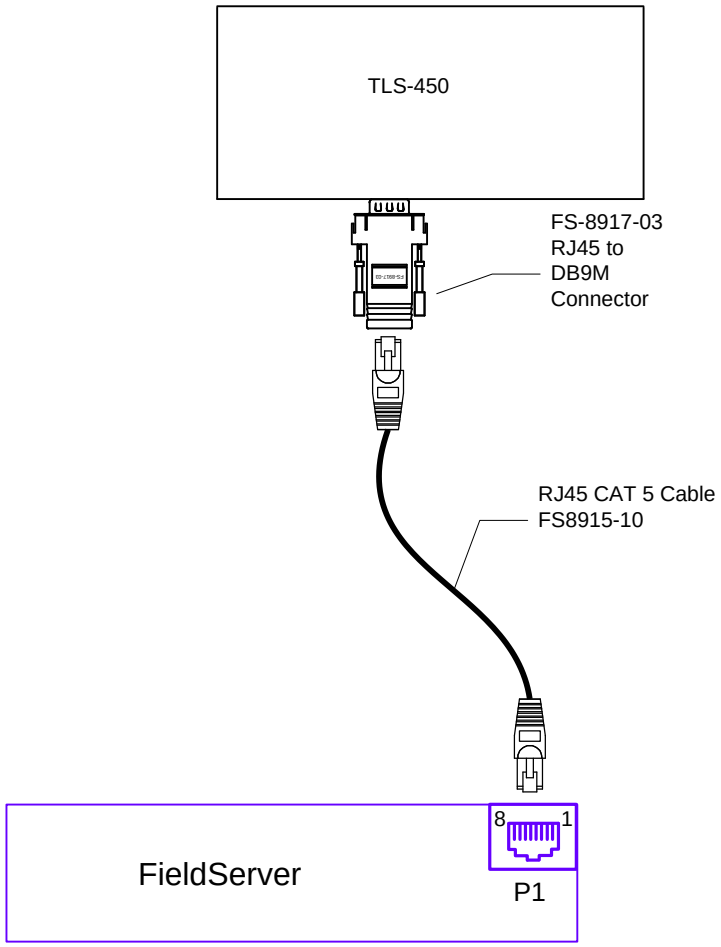
The FieldServer is connected to the Veeder-Root Panel as shown below.



Connector Pinouts

FS Function	RJ45 Pin#	DB25M Pin#	Color
RX	1	2	White
CTS	2	5	Brown
DSR	3	8	Yellow
GND	4	7	Green
DTR	6	20	Black
RTS	7	6	Orange
TX	8	3	Blue

6.2 TLS-450 Connection



Connector Pinouts

TLS450 Function	DB9F Pin	RJ45 Pin	Color
Data Carrier Detect	1		
Received Data	2	1	White
Transmitted Data	3	8	Blue
Data Terminal Ready	4	6	Black
Signal Ground	5	4	Green
Data Set Ready	6	3	Yellow
Request to Send	7	7	Orange
Clear to Send	8	2	Brown
Ring Indicator	9		

7 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

7.1 Supported Functions – TLS-350

The revision number indicates the minimum Veeder-Root firmware revision required for support of the function. The function numbers are hexadecimal numbers.

Function_	Revision_	Description
SYSTEM REPORTS (7.2.1)		
101	1	System Status Report
102	1	System Configuration Report
113	14	Active Alarm Report
114	19	Cleared Alarm Report
IN-TANK REPORTS (7.2.2)		
201	1	In-Tank Inventory Report
202	1	In-Tank Delivery Report
204	1	In-Tank Shift Inventory Report
20D	15	In-Tank Stick Height Report
SENSOR REPORTS (7.2.3)		
301	1	Liquid Sensor Status Report
306	1	Vapor Sensor Status Report
311	1	Groundwater Sensor Status Report
341	2	Type A (2 Wire CL) Sensor Status Report
346	2	Type B (3 Wire CL) Sensor Status Report
34B	4	Universal Sensor Status Report
LINE LEAK REPORTS (7.2.4)		
381	7	Pressure Line Leak Status
386	10	WPLLD Line Leak Status
I/O DEVICE REPORTS (7.2.6)		
401	1	Input Status Report
406	1	Relay Status Report
SYSTEM DIAGNOSTIC REPORTS (7.4.1)		
901	1	Self Test Results Report
902	1	System Revision Level Report
905	15	System Revision Level Report II
CONTROL FUNCTIONS (7.1)		
1	1	System Reset
2	1	Clear Power Reset Flag
3	1	Remote Alarm Reset
31	10	Confirm Clear Function
51	1	Clear In-Tank Delivery Reports
52	1	Start In-Tank Leak Detect Test

Function_	Revision_	Description
53	1	Stop In-Tank Leak Detect Test
54	5	Delete CSLD Rate Table
81	7	Start Pressure Line Leak Test (3.0 GPH only in V18)
82	7	Stop Pressure Line Leak Test
83	10	Start WPLLD Line Leak Test (3.0 GPH only in V18)
84	10	Stop WPLLD Line Leak Test

7.2 Known Functions – TLS-350

Function_	Revision_	Description
CONTROL FUNCTIONS (7.1)		
87	18	Start Pressure Line Leak Test by Type
88	18	Start WPLLD Line Leak Test by Type
89	19	Pressure Line Leak Pressure Offset Reset
90	19	WPLLD Line Leak Pressure Offset Reset
91	15	Close Current Shift
SYSTEM REPORTS (7.2.1)		
111	2	Priority Alarm History Report
112	2	Non-Priority Alarm History Report
IN-TANK REPORTS (7.2.2)		
203	1	In-Tank Leak Detect Report
205	1	In-Tank Status Report
206	1	In-Tank Alarm History Report
207	2	In-Tank Leak Test History Report
208	2	In-Tank Leak Test Results Report
20A	110	HRM Adjusted Delivery Report
20B	110	BIR Adjusted Delivery Report
20C	15	In-Tank Most Recent Delivery Report
211	14	Tank Chart Report
221	116	Ticketed Delivery Report
225	116	Periodic Delivery Variance Report
226	116	Weekly Delivery Variance Report
227	116	Daily Delivery Variance Report
251	3	CSLD Results Report
281	3	Fuel Management Report
282	119	FLS Diagnostic: Volume History Table
200	14	In-Tank Stored Inventory Report
SENSOR REPORTS (7.2.3)		
301	1	Liquid Sensor Status Report
302	1	Liquid Sensor Alarm History Report
307	1	Vapor Sensor Alarm History Report

Function_	Revision_	Description
312	1	Groundwater Sensor Alarm History Report
342	2	Type A (2 Wire CL) Sensor Alarm History Report
347	2	Type B (3 Wire CL) Sensor Alarm History Report
34C	4	Universal Sensor Alarm History Report
LINE LEAK REPORTS (7.2.4)		
351	1	Volumetric Line Leak Result Report
352	1	Volumetric Line Leak Alarm History Report
353	2	Volumetric Line Leak Pump Status
373	14	Pressure Line Leak Test Results (with 0.20 test data)
374	14	Pressure Line Leak Test History (with 0.20 test data)
382	7	Pressure Line Leak Alarm History Report
383	7	Pressure Line Leak Test Results (0.10 test data only)
384	7	Pressure Line Leak Test History (0.10 test data only)
387	10	WPLLD Line Leak Alarm History Report
388	10	WPLLD Line Leak Test Results
389	12	WPLLD Line Leak Test History
MISCELLANEOUS REPORTS (7.2.5)		
391	10	Tanker Load Report
I/O DEVICE REPORTS (7.2.6)		
402	1	Input Alarm History Report
403	5	Input/Generator Alarm History Report
SYSTEM SETUP (7.3.1)		
501	1	Set Time of day
502	1	Set Shift Start Time 1
503	1	Set Print Header Line 1
504	1	Set System RS-232 Security Code
505	1	Set System Type & Language Flags
506	2	Set Periodic Test Needed Warning
507	4	Set Days Before Periodic Test Needed Warning
508	4	Set Days Before Periodic Test Needed Alarm
509	4	Set Annual Test Needed Warning
50A	4	Set Days Before Annual Test Needed Warning
50B	4	Set Days Before Annual Test Needed Alarm
50C	5	Set Remote Printer Page Eject Flag
50D	8	Set Print Temperature Compensation Flag
50E	8	Set Temperature Compensation Value
50F	10	Set System Date/Time Display Format
511	110	Set BIR Shift Printouts Flag
512	110	Set BIR Daily Printouts Flag
513	10	Set Tanker Load Report Flag

Function_	Revision_	Description
514	10	Set H-Protocol Height/Volume format
515	110	Set HRM - QPLD Monthly Printout
516	14	Set Re-direct Local Printout Flag
517	15	Set System Type & Language Flags
518	15	Set Secondary Language Code Page Output
519	15	Set PLLD & WPLLD Duration Before Precision Retest
51A	15	Set Enable/Disable Auto Daylight Saving Time
51B	15	Set Start/End Daylight Saving Date and Time
51C	116	Set Ticketed Delivery Flag Enable
51D	116	Set Ticketed Delivery Temperature Compensation Flag
51E	116	Set Ticketed Delivery Close Day of Week
COMMUNICATIONS SETUP (7.3.2)		
521	2	Set Receiver Configuration Flag
522	2	Set Receiver Location Label
523	2	Set Receiver Telephone Number
524	2	Set Receiver Dialing Destination Type
525	2	Set Receiver Port Number to Dial
526	2	Set Receiver Retry Number
527	2	Set Receiver Retry Delay Time
528	2	Set Receiver Confirmation Report Flag
529	19	Set Fax Auto Dial Method
52A	3	Set Receiver Report List
52B	3	Set Receiver Auto Dial Type and Start Time
52C	3	Set Receiver Auto Dial On Alarms
52D	17	Autodial Alarm Status
52E	19	Set Delay for Autodial on Alarm Clear
52F	19	Set Receiver Alarm Status
531	8	Set RS-232 End of Message
WARNING ALARM & AUTO-PRINT SETUP (7.3.3)		
532	116	Set Ticketed Variance Analysis Printout Flags
533	116	Set Ticketed Delivery Book Variance Printout Flags
534	116	Set Ticketed Delivery Variance Printout Flags
546	15	Set Tank Periodic Test Needed Warning
547	15	Set Days Before Tank Periodic Test Needed Warning
548	15	Set Days Before Tank Periodic Test Needed Alarm
549	15	Set Tank Annual Test Needed Warning
54A	15	Set Days Before Tank Annual Test Needed Warning
54B	15	Set Days Before Tank Annual Test Needed Alarm
54C	19	Set CSLD Evaporation Reid Vapor Pressure Chart
553	19	Set Line Re-Enable Method

Function_	Revision_	Description
554	18	Set Periodic Line Leak Test Auto-Confirm
555	18	Set Annual Line Leak Test Auto-Confirm
556	15	Set Line Periodic Test Needed Warning
557	15	Set Days Before Line Periodic Test Needed Warning
558	15	Set Days Before Line Periodic Test Needed Alarm
559	15	Set Line Annual Test Needed Warning
55A	15	Set Days Before Line Annual Test Needed Warning
55B	15	Set Days Before Line Annual Test Needed Alarm
5BC	19	Set Receiver Auto Dial on Alarm II
500	14	Set Inventory Record Time 1
IN-TANK SETUP (7.3.4		
601	1	Set Tank Configuration
602	1	Set Tank Product Label
603	1	Set Tank Product Code
604	1	Set Tank 1 Point Full Height Volume
605	1	Set Tank 4 Point Full
606	1	Set Tank 20 Point Full
607	1	Set Tank Diameter
608	1	Set Tank Tilt
609	1	Set Tank Thermal Expansion Coefficient
60A	9	Set Tank Linear Calculated Full Volume
60B	15	Set Tank Stick Height Function Enable
60C	15	Set Tank Stick Height Offset
610	1	Set Tank Delivery Delay
611	1	Set Tank Leak Test Type & Start Time
612	1	Set Tank Manifolded Partners
613	3	Set CSLD Probability of Detection
614	5	Set CSLD Climate Factor
615	108	Set BIR Meter Data Present
616	110	Set AccuChart Update Scheduling
618	19	Set Tank CSLD Evaporation Compensation
619	19	Set Tank Stage II Vapor Recovery
621	1	Set Tank Low Level Limit
622	1	Set Tank High Level Limit
623	1	Set Tank Overfill Level Limit
624	1	Set Tank High Water Level Limit
625	1	Set Tank Sudden Loss Limit
626	1	Set Tank Leak Alarm Limit
627	2	Set Tank High Water Warning Limit
628	2	Set Tank Maximum Volume Limit

Function_	Revision_	Description
629	2	Set Tank Delivery Required Limit
62A	2	Set Tank Annual Leak Test Minimum Volume
62B	2	Set Tank Last Annual Test
62C	2	Set Tank Periodic Test Type
62D	2	Set Enable/Disable Tank Leak Test Fail Alarms
62E	3	Set CAP0 Probe Conductive Boot Flag
62F	3	Set Mag Probe Float Size
630	3	Set Tank Leak Test Notify
631	5	Set Tank Leak Test Averaging
632	5	Set Tank Test Siphon Break
633	9	Set Leak Test Report Type
634	110	Set Tank HRM Reconciliation Warning Limit
635	110	Set Tank HRM Reconciliation Alarm Limit
636	14	Set Tank Periodic Leak Test Minimum Volume
639	115	Set Tank AccuChart End Shape Type and Factor
680	6	Fuel Management General Setup Inquiry
681	6	Set Fuel Management Delivery Needed Warning
682	6	Set Fuel Management Automatic Report Print Time
683	6	Set Fuel Management Average Daily Sales
SENSOR SETUP (7.3.5)		
701	1	Set Liquid Sensor Configuration
702	1	Set Liquid Sensor Location Label
703	1	Set Liquid Sensor Type
704	2	Set Liquid Sensor Category
706	1	Set Vapor Sensor Configuration
707	1	Set Vapor Sensor Location Label
708	1	Set Vapor Sensor Alarm Threshold
709	2	Set Vapor Sensor Category
711	1	Set Groundwater Sensor Configuration
712	1	Set Groundwater Sensor Location Label
713	2	Set Groundwater Sensor Category
741	2	Set Type A (2 Wire CL) Sensor Configuration
742	2	Set Type A (2 Wire CL) Sensor Location Label
743	2	Set Type A (2 Wire CL) Sensor Type
744	2	Set Type A (2 Wire CL) Sensor Category
746	2	Set Type B (3 Wire CL) Sensor Configuration
747	2	Set Type B (3 Wire CL) Sensor Location Label
748	5	Set Type B (3 Wire CL) Sensor Type
749	2	Set Type B (3 Wire CL) Sensor Category
74B	4	Set Universal Sensor Configuration

Function_	Revision_	Description
74C	4	Set Universal Sensor Location Label
74D	4	Set Universal Sensor Type
74E	4	Set Universal Sensor Category
VOLUMETRIC LINE LEAK SETUP (7.3.6)		
751	1	Set Volumetric Line Leak Configuration
752	1	Set Volumetric Line Leak Tank Number
753	1	Set Volumetric Line Leak 2 Inch Pipe Length
754	1	Set Volumetric Line Leak 3 Inch Pipe Length
755	1	Set Volumetric Line Leak Pump PSI
756	1	Set Volumetric Line Leak Piping Material
757	1	Set Volumetric Line Leak Shutdown Rate
758	1	Set Volumetric Line Leak Pump Side Test
759	1	Set Volumetric Line Leak Test Type & Start Time
75A	1	Set Line Leak Lockout Schedule (All Types)
75B	2	Set Line Disable Alarm Assignments
75C	2	Set Volumetric Line Leak Last Annual Test
75D	4	Set Volumetric Line Leak Dispense Mode
75E	4	Set Volumetric Line Leak Fuel Type
75F	5	Set Volumetric Line Leak Wait Method
760	6	Set Volumetric Line Leak Location Label
761	7	Set Volumetric Line Leak Blend Partner
PUMP SENSOR SETUP (7.3.7)		
771	2	Set Pump Sensor Configuration
772	2	Set Pump Sensor Tank Number
773	4	Set Pump Sensor Dispense Mode
PRESSURE LINE LEAK SETUP (7.3.8)		
77C	19	Set Pressure Line Leak Low Pressure Shutoff
77D	19	Set Pressure Line Leak Altitude Pressure Offset
77F	17	Set Pressure Line Leak Secondary Pipe Length
780	7	Pressure Line Leak General Setup Inquiry
781	7	Set Pressure Line Leak Configuration
782	7	Set Pressure Line Leak Label
783	7	Set Pressure Line Leak 0.10 GPH Test Schedule
784	7	Set Pressure Line Leak Shutdown Rate
785	7	Set Pressure Line Leak Tank Number
786	7	Set Pressure Line Leak Dispense Mode
787	7	Set Pressure Line Leak Disable Alarm Assignments
788	9	Set Pressure Line Leak Piping Material
789	9	Set Pressure Line Leak Primary Pipe Length
78A	11	Set Pressure Line Leak Sensor Type

Function_	Revision_	Description
78B	16	Set Pressure Line Leak 0.10 GPH Test Schedule
78C	12	Set Pressure Line Leak 0.20 GPH Test Schedule
78E	17	Set Pressure Line Leak 0.1 GPH Auto Test Enable
78F	17	Set Pressure Line Leak Dispense Threshold
RECONCILIATION SETUP (7.3.9		
791	106	Set Mechanical Dispenser Interface String
792	106	Set Electronic Dispenser Interface String
793	106	Set Reconciliation Auto Daily Closing Time
794	106	Set Auto Shift Closing Time 1
795	106	Set Periodic Reconciliation Mode
796	106	Set Periodic Reconciliation Report Length
797	106	Set Periodic Reconciliation Alarm Flag
798	106	Set Periodic Reconciliation Alarm Threshold
799	106	Set Periodic Reconciliation Alarm Offset
79A	106	Set Remote Printer Reconciliation Report Format
79B	106	Set Shift Manual Adjustment Value
79C	106	Set Daily Manual Adjustment Value
79D	106	Close Current Reconciliation Shift
79E	106	Clear Tank Map Table
79F	108	Set BIR Temperature Compensation Flag
WIRELESS PLLD SETUP (7.3.10)		
7A0	10	WPLLD Line Leak General Setup
7A1	10	Set WPLLD Line Leak Configuration
7A2	10	Set WPLLD Line Leak Label
7A3	10	Set WPLLD Line Leak 0.20 GPH Test Schedule
7A4	10	Set WPLLD Line Leak Shutdown Rate
7A5	10	Set WPLLD Line Leak Tank Number
7A6	10	Set WPLLD Line Leak Dispense Mode
7A7	10	Set WPLLD Line Disable Alarm Assignments
7A8	10	Set WPLLD Line Leak Pipe Type
7A9	10	Set WPLLD Line Leak Pipe Length
7AA	11	Set WPLLD 0.10 GPH Test Schedule
7AC	17	Set WPLLD Line Leak 0.10 GPH Test Schedule
7AF	19	Set WPLLD Line Leak Altitude Pressure Offset
METER MAP & DELIVERY TICKET SETUP (7.3.11)		
7B1	110	Set BIR Meter/Tank mapping
7B5	116	Set Ticketed Delivery
I/O DEVICE SETUP (7.3.12)		
7BC	19	Set Line Disable Alarm Assignments II
7BD	19	Set Pressure Line Disable Alarm Assignments II

Function_	Revision_	Description
7BE	19	Set WPLLD Line Disable Alarm Assignments II
801	1	Set Input Configuration
802	1	Set Input Location Label
803	1	Set Input Type
804	4	Set Input Dispense Mode
806	1	Set Relay Configuration
807	1	Set Relay Location Label
808	1	Set Relay Alarm Assignments
809	2	Set Relay Orientation
80A	4	S et R elay T ype
80B	4	Set Relay Tank Assignment
EEPROM SETUP (7.3.13)		
851	107	Restore All Setup Data from EEPROM
852	107	Save All Setup Data to EEPROM
853	107	Clear All Setup Data from EEPROM
MISCELLANEOUS SETUP (7.3.14)		
881	9	Set Communication Port Data
882	9	Initialize Communication Port Data
885	19	Set SiteLink Modem Type
888	19	Communication Status Information
891	108	Set AccuChart Calibration Restart
8BC	19	Set Relay Alarm Assignments II
SYSTEM DIAGNOSTIC REPORTS (7.4.1)		
903	106	PC Diagnostic Report
IN-TANK DIAGNOSTIC REPORTS (7.4.2		
A01	1	Probe Type and Serial Number
A02	1	Probe Factory Dry Calibration Values
A03	1	Probe Factory Wet Calibration Values
A04	1	Probe Updated Dry Calibration Values
A05	1	Probe Updated Wet Calibration Values
A06	1	Probe Segment Sensitivity Ratios
A10	1	Probe Last Sample Buffers
A11	1	Probe Fast Average Buffers
A12	1	Probe Standard Average Buffers
A13	1	Probe Long Term Average Buffers
A20	1	Probe Leak Test Flags - Present Test
A22	2	Probe Leak Test Flags - Gross Test
A23	5	Tank Leak Test Averaging Buffers
A51	3	CSLD Diagnostics: Rate Table
A52	3	CSLD Diagnostics: Rate Test

Function_	Revision_	Description
A53	3	CSLD Diagnostics: Volume History Table
A54	3	CSLD Diagnostics: Moving Average Table
A55	3	CSLD Diagnostics: Leak Test Status
A61	110	HRM Diagnostic Report
A62	112	HRM Daily History
A81	6	Fuel Management Diagnostic Report
A91	9	Power Outage Diagnostic Report
SENSOR DIAGNOSTIC REPORTS (7.4.3)		
B01	1	Liquid Sensor Diagnostic Report
B06	1	Vapor Sensor Diagnostic Report
B07	3	Vapor Sensor Concentration (PPM) Report
B11	1	Groundwater Sensor Diagnostic Report
B21	1	Ground Temperature Sensor Diagnostic Report
B41	2	Type A Sensor (2 Wire CL) Diagnostic Report
B46	2	Type B Sensor (3 Wire CL) Diagnostic Report
B4B	4	Universal Sensor Diagnostic Report
LINE LEAK DIAGNOSTIC REPORTS (7.4.4)		
B50	1	Volumetric Line Leak Status
B51	1	Volumetric Line Leak Diagnostic Gross Test History
B52	1	Volumetric Line Leak 0.1 & 0.2 GPH Diagnostic History
B71	2	Pump Sensor Diagnostic
B7C	19	Pressure Line Leak Pressure Offset Test
B7D	19	WPPLD Line Leak Pressure Offset Test
B7E	19	Pressure Line Leak Pressure Offset Monitor Report
B7F	19	WPLLD Line Leak Pressure Offset Monitor Report
B81	7	Pressure Line Leak Diagnostic Report
B82	10	WPLLD Line Leak Diagnostic Report
B83	10	WPLLD Line Leak Communication Diagnostic Report
B87	19	Pressure Line Leak 3.0 GPH Test Diagnostic
B88	19	Pressure Line Leak Mid-range Test Diagnostic
B89	19	Pressure Line Leak 0.2 GPH Test Diagnostic
B8A	19	Pressure Line Leak 0.1 GPH Test Diagnostic
B8B	19	WPLLD Line Leak 3.0 GPH Test Diagnostic
B8C	19	WPLLD Line Leak Mid-range Test Diagnostic
B8D	19	WPLLD Line Leak 0.2 GPH Test Diagnostic
B8E	19	WPLLD Line Leak 0.1 GPH Test Diagnostic
RECONCILIATION		
B91	108	AccuChart Diagnostics Report
B93	108	AccuChart Status Report
B94	108	AccuChart Calibration History Report

Function_	Revision_	Description
BA0	110	MDIM Totalizer Report
RECONCILIATION REPORTS (7.5)		
C01	106	Basic Inventory Reconciliation Daily "Row" Report
C02	106	Basic Inventory Reconciliation Daily "Column" Report
C03	106	Basic Inventory Reconciliation Shift "Row" Report
C04	106	Basic Inventory Reconciliation Shift "Column" Report
C05	106	Basic Inventory Reconciliation Periodic "Row" Report
C06	106	Basic Inventory Reconciliation Periodic "Column" Report
C07	114	Basic Inventory Reconciliation Periodic "Row" Report
C08	114	Basic Inventory Reconciliation Periodic "Column" Report
C09	119	Individual Basic Reconciliation Daily History Diagnostic
VARIANCE ANALYSIS REPORTS (7.6)		
C10	116	Periodic Book Variance
C11	116	Weekly Book Variance
C12	116	Daily Book Variance
C20	116	Periodic Variance Analysis Report
C21	116	Weekly Variance Analysis Report
C22	116	Daily Variance Analysis Report
C25	119	Periodic Variance Analysis Daily Report

7.3 Supported Functions – TLS-450

Function_	Revision_	Description
SYSTEM REPORTS		
101	1	System Status Report
IN-TANK REPORTS		
201	1	In-Tank Inventory Report