

Warren Rogers Overview SIRA, CITLDS, 2015 UST Regulations

November 7, 2016



Warren Rogers Background and Customers

1979 Formed (API Corrosion Study)

1982 Developed SIRA

1990 Use of SIRA as a Certified Monitoring Alternative

1996 SIRA Concepts Integrated Into Hardware

2004 CITLDS Continual Reconciliation Certification

2009 Advanced Flow Diagnostics

2014 Advanced Delivery Audit

2016 PCI 3.1 and Data Security Initiatives



Loves

Pilot



TRAVEL CENTERS
LLC

QT QuikTrip



PETRO
Stopping Centers



WILCO

HESS

Continuous ATGS Methods (CITLDS)

- ATGS Collects Probe Data Continuously
- ATGS Identifies Time Periods when There is No Activity in the Tank(s)
- Data Collected During Dormant Periods is Subjected to Analysis to Identify Evidence of Tank Losses
- Works in Conjunction with Independent Monitoring of Associated Lines

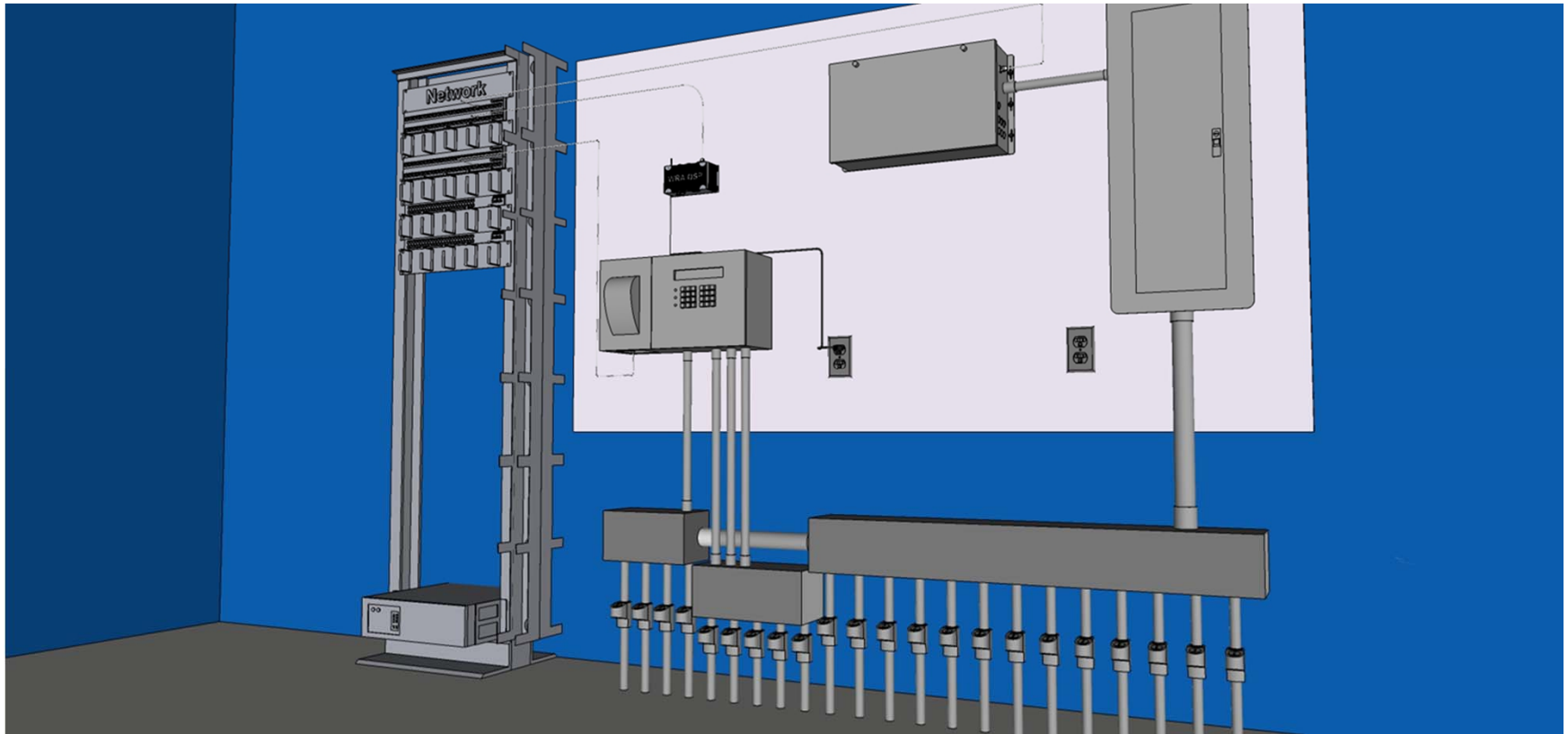
Continual Reconciliation (CITLDS)

- Relies Upon Continuous Product Level and Temperature Measurements and Data from Pump Controllers
- Analyzes Data Continuously During Dormant and Active Periods
- Monitors Tanks and Associated Lines
- 3 gph Leak Detection must also be Performed

PetroNetwork S3 Continual Reconciliation

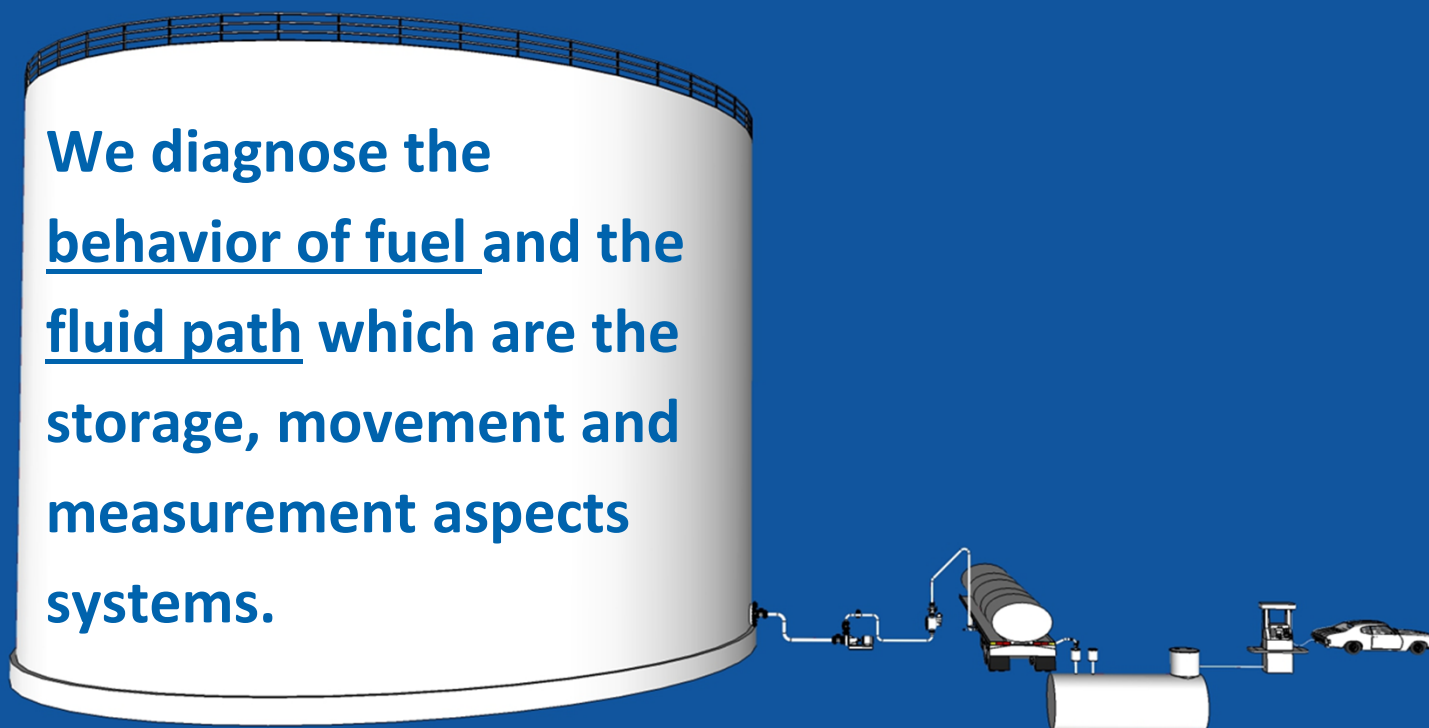
- CITLDS Method Certified for Tank Systems up to 100,000 Gallons in Capacity (5 Tank Manifolds)
- Monitors Tanks and Associated Lines
- Monthly Throughputs up to 2,718,000 Gallons
- Used with Magnetostrictive ATGS Systems
- Adjusts for Temperature
- Calculates Delivery Amounts
- Six Days of Data or more

How Does it Work?



How Does This Technology Work?

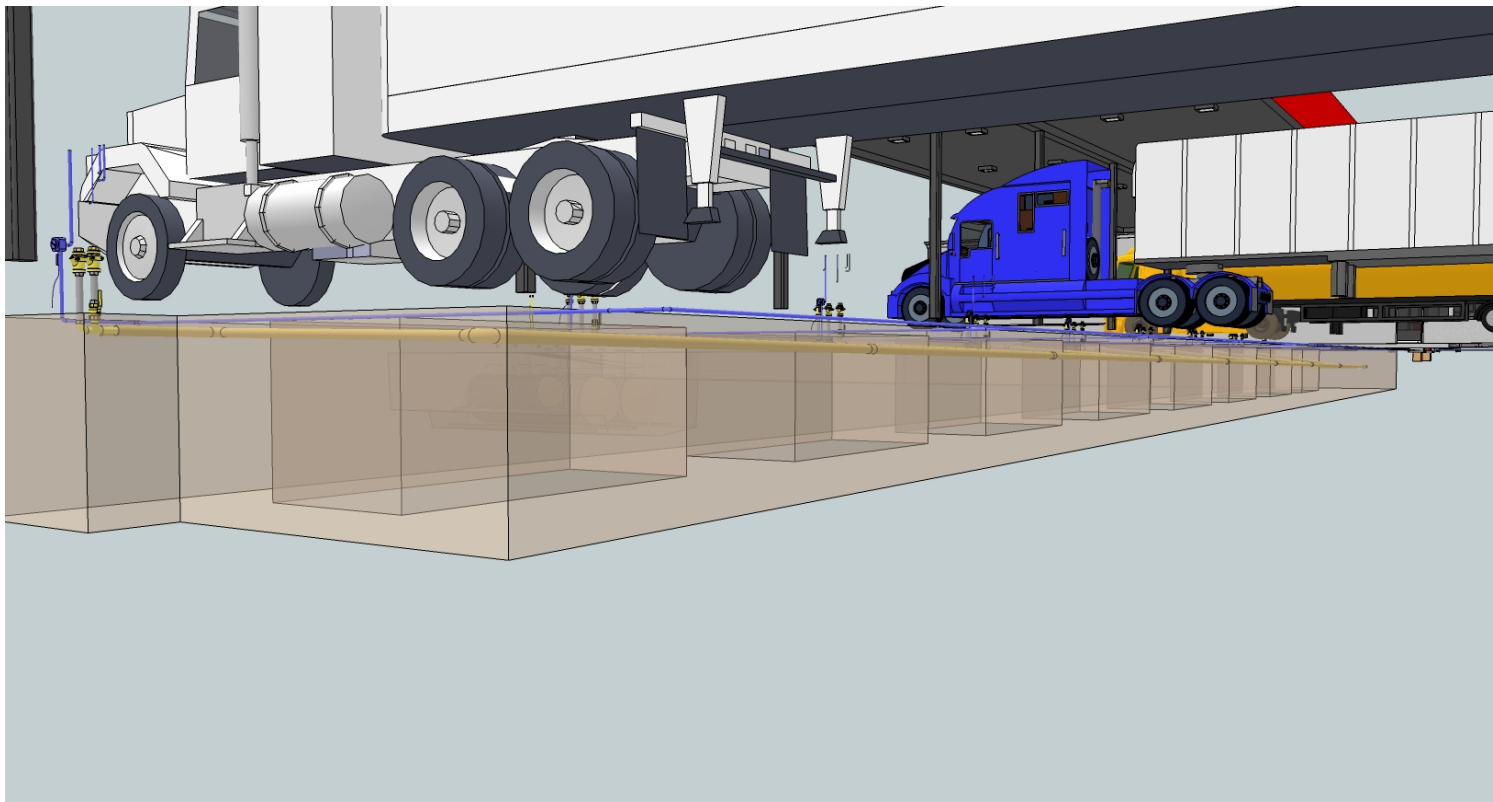
We diagnose the behavior of fuel and the fluid path which are the storage, movement and measurement aspects systems.



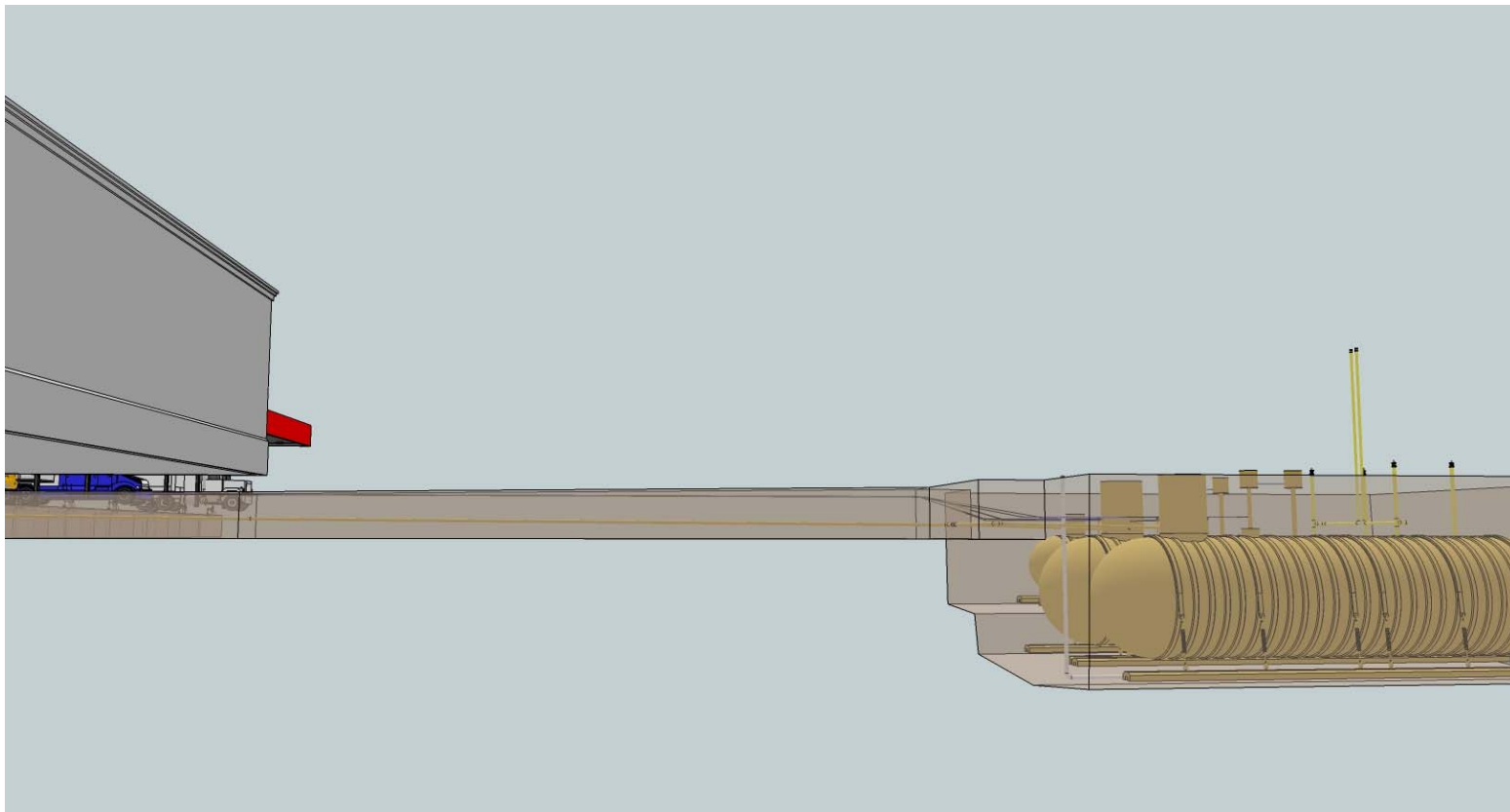
Characteristics of High Throughput Sites

- . 2 to 5 tank Manifolds
- . Up to 40K in gas sales and 80K in Diesel Sales Daily
- . Multiple Deliveries
- . Large Tank Sizes
- . Complex Configurations

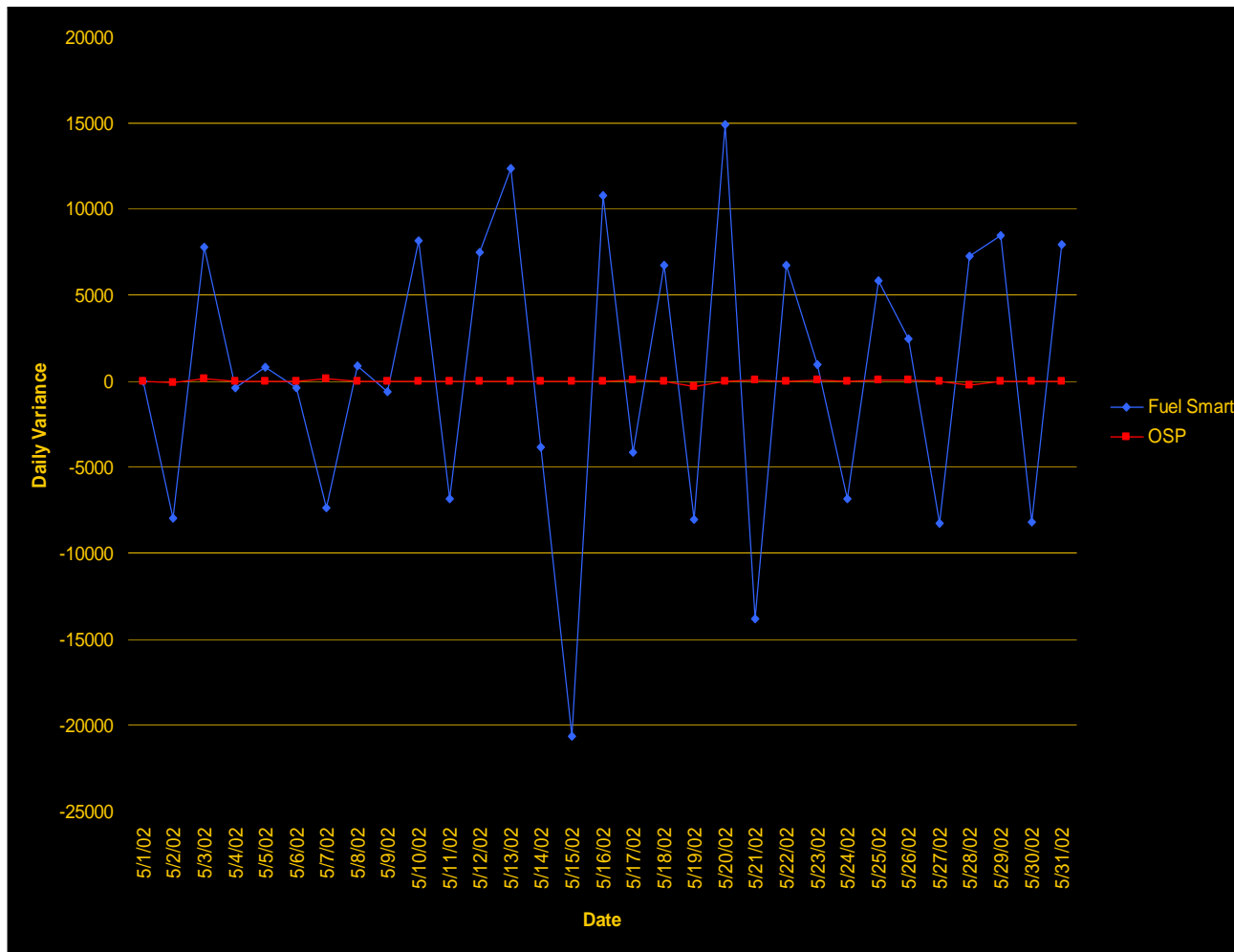
High Throughput Truck Diesel Lanes



High Throughput Tank System Layout



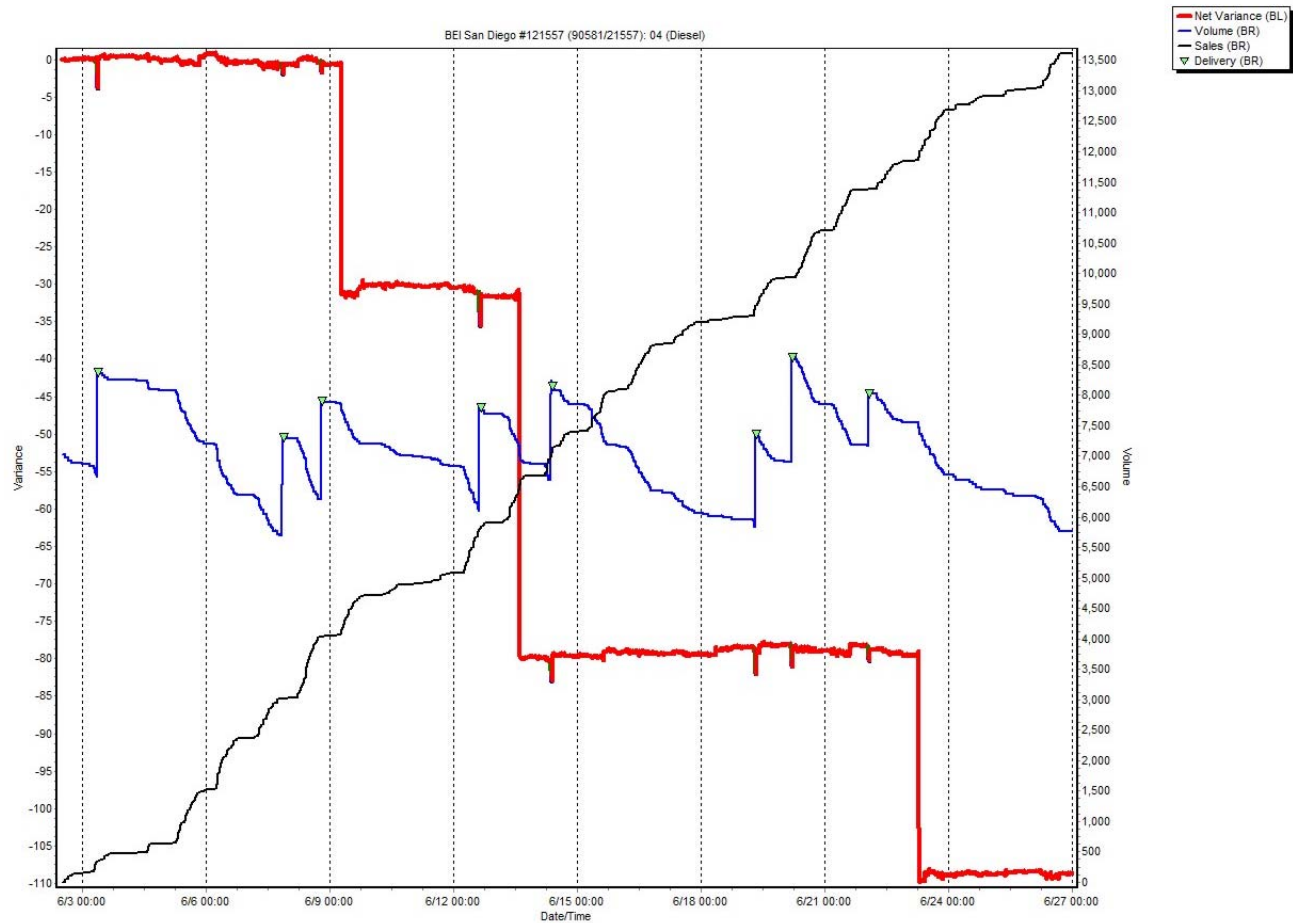
Daily Versus Continuous Inventory Data



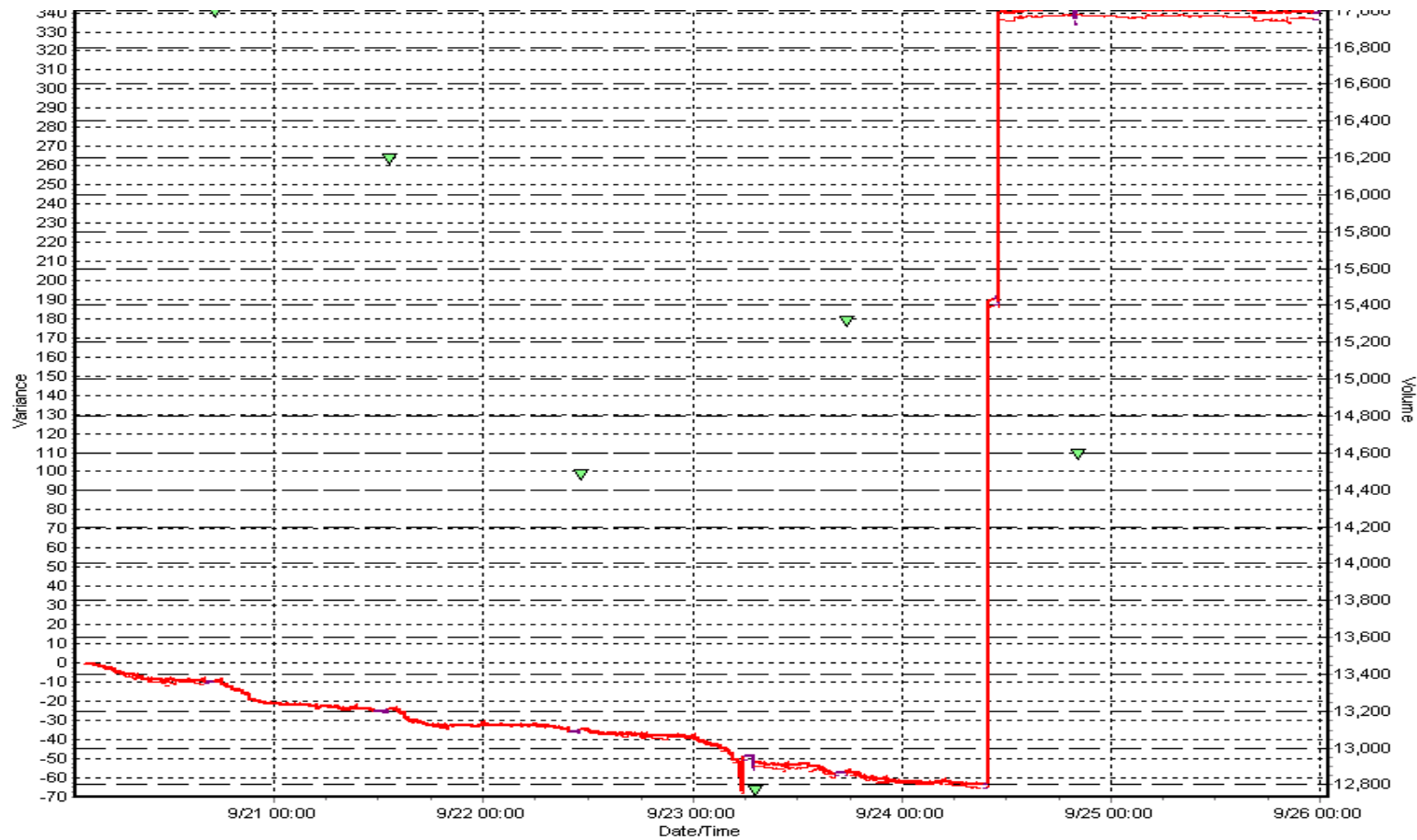
Dispenser Theft



Visibility on Theft



Meter Drift Effects



Determining Leak Status Monthly Using SIRA

Methods for Meeting the Monthly Requirement

- More Frequent Analysis
- Sending Data Electronically
- Rolling Data Collection

Vendor and Customer Considerations

- States with and without SPA
- State Inventory Data Review Requirements

SIRA Cloud Data Entry

Enter inventory data

websira.wr-cloud.com

Enter Data For Test Site -- Location 00001

Date of Data Time of Data (HH:MM):

Fuel Summary

	1 - Regular	2 - P	3 - Mid
Total Sales (gal)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Gross deliveries (gal)	<input type="text"/>	<input type="text"/>	
Product height (in)	1 <input type="text"/>	2 <input type="text"/>	
Product volume (gal)	1 <input type="text"/>	2 <input type="text"/>	
Water height (in)	1 <input type="text"/>	2 <input type="text"/>	

CITLDS and SIRA

Questions and Comments

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