

How to Integrate Tank Monitors into your Delivery System

March 6, 2017



Your Hosts



Aaron Gress
Sr. Director of Biz Dev
Tank Utility



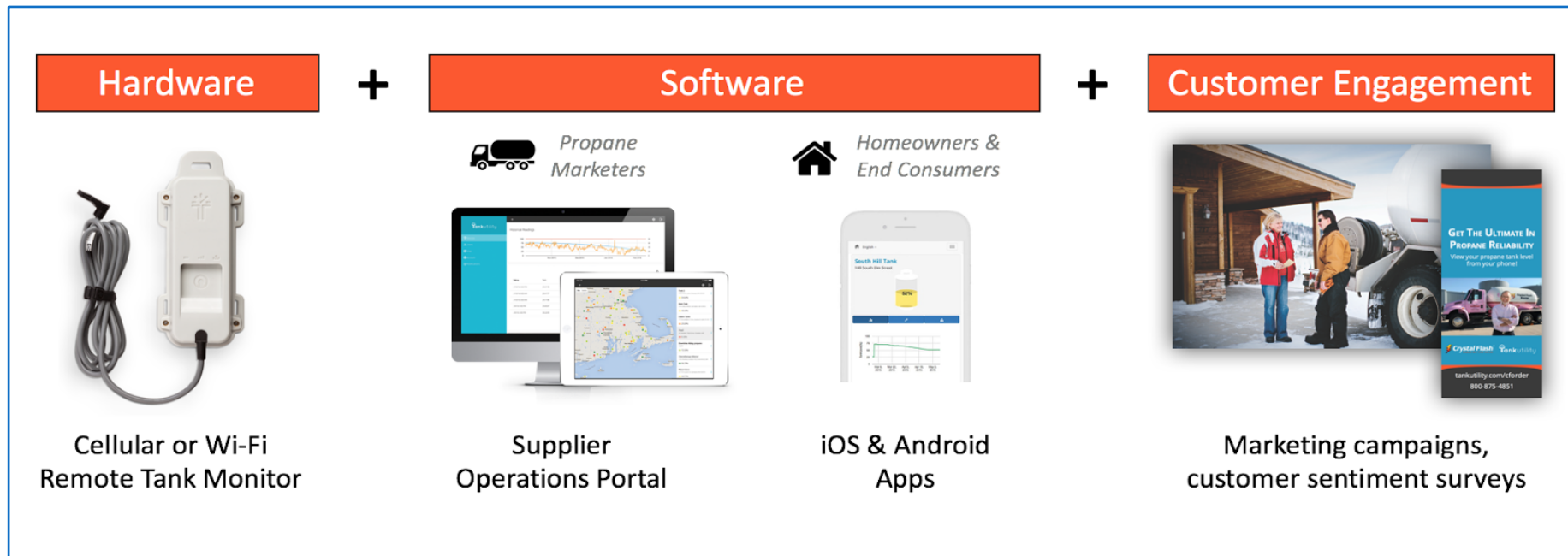
Roger Keyser
VP of Customer Success
ADD Systems



Phil Mirabito
Special Project Coordinator
Mirabito Energy Products

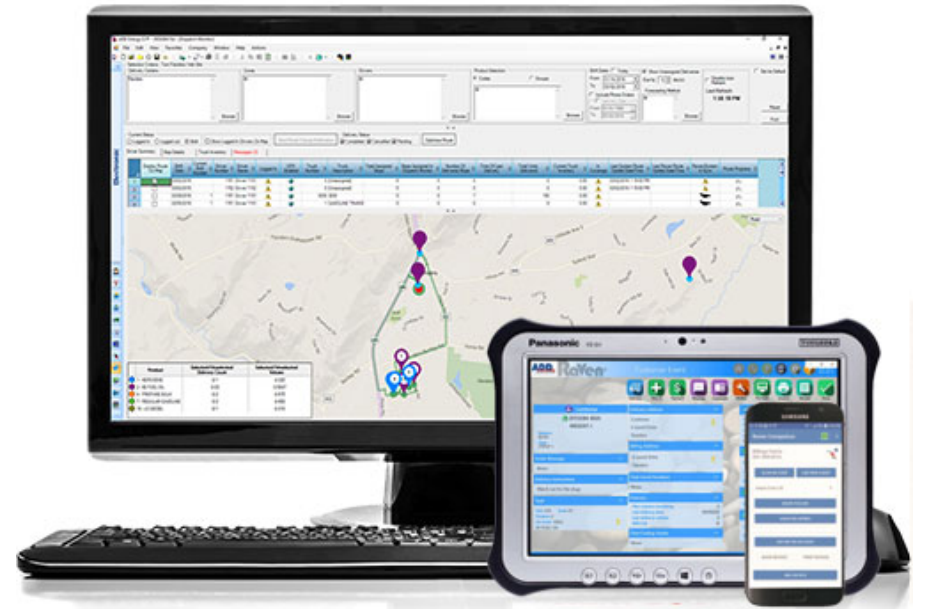
Tank Utility Story

- 220+ fuel supplier partners; >250% growth 2017
- Total Monitoring Solution = Easy to install + actionable insights + customer engagement
- Many ADD Systems integrations!



ADD Systems Overview

- Proudly in business since 1973
- 18,000+ users, with 6,000+ Raven® mobile delivery devices deployed across North America
- Software solutions for Heating Oil, Propane, HVAC, Wholesale Petroleum, Lubricants Distribution, and Convenience Store industries
- Focused on client relationships & continuous software development



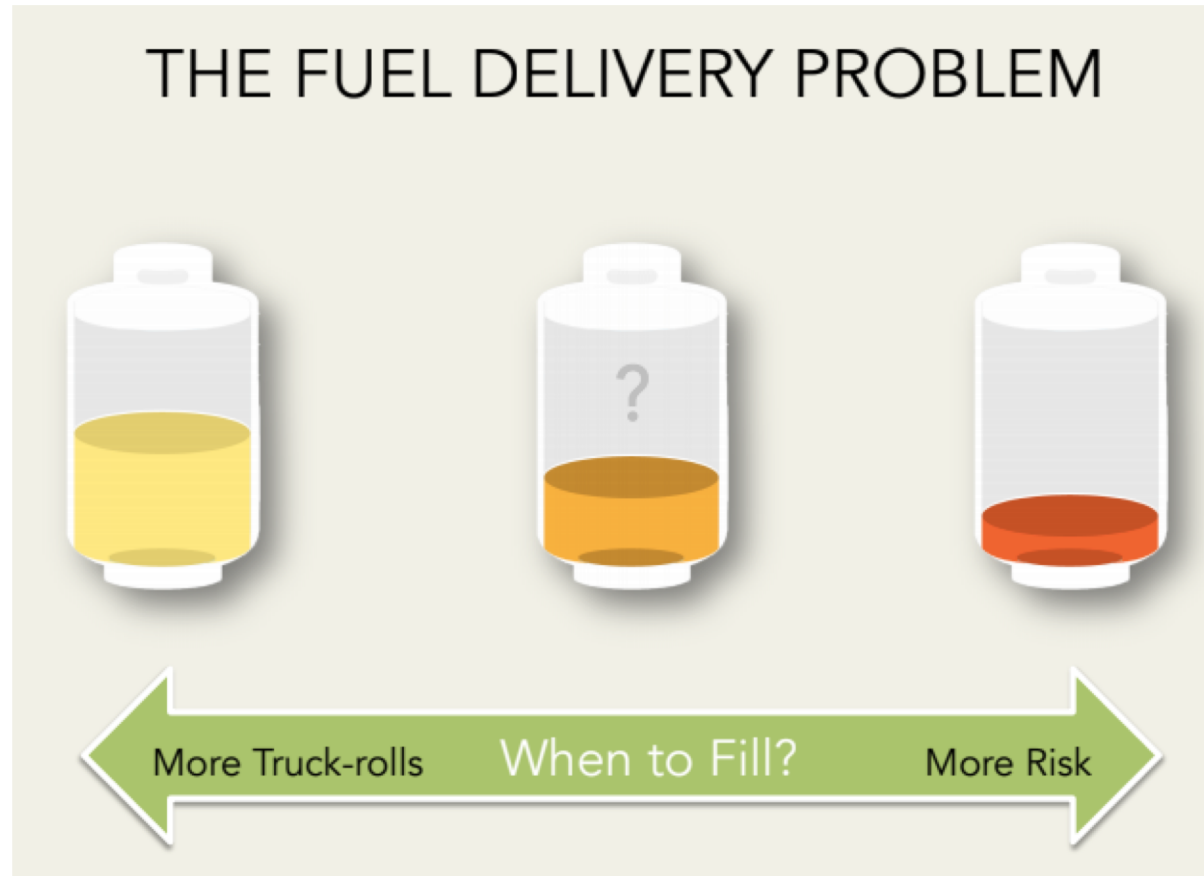
Roadmap

1. Why add tank monitors to your delivery system?
2. How to find accounts that will achieve +ROI?
3. Integration Options
4. Integration Best Practices
5. Measuring your Return on Tank Monitor Investment
6. User Experience -> Phil Mirabito, Mirabito Energy Products

Today's Challenge with Fuel Delivery

Costly Deliveries

Smaller Drop Size
Increase in Yearly Deliveries
More Labor Hours

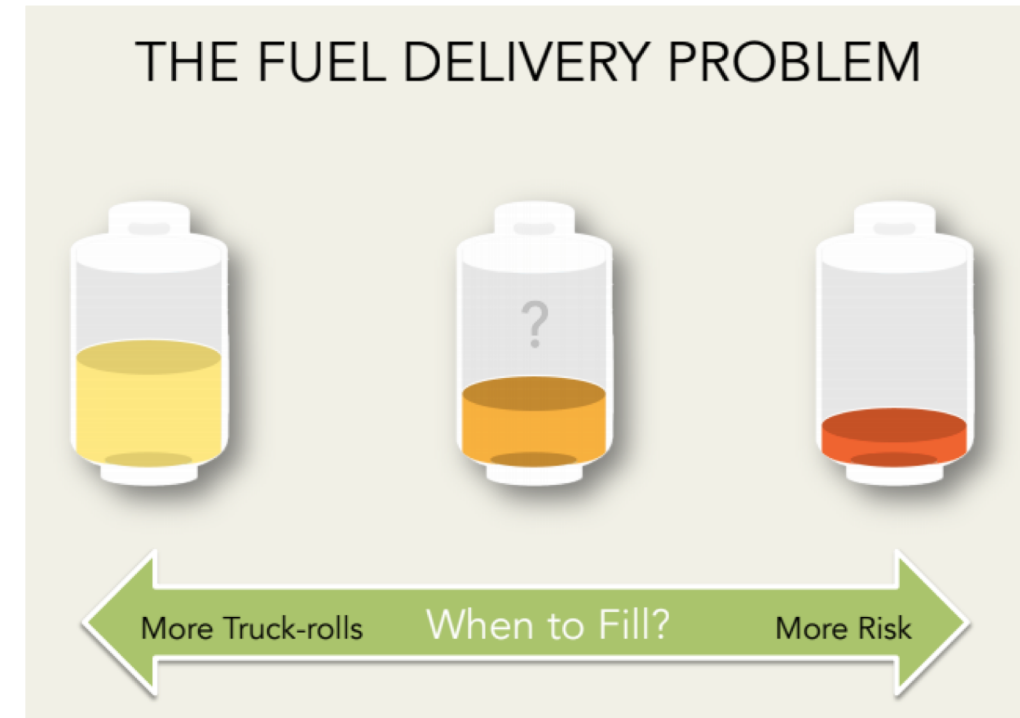


Customer Run-outs

Lose Customers
Damaged Brand Reputation
Unhappy Customer Calls

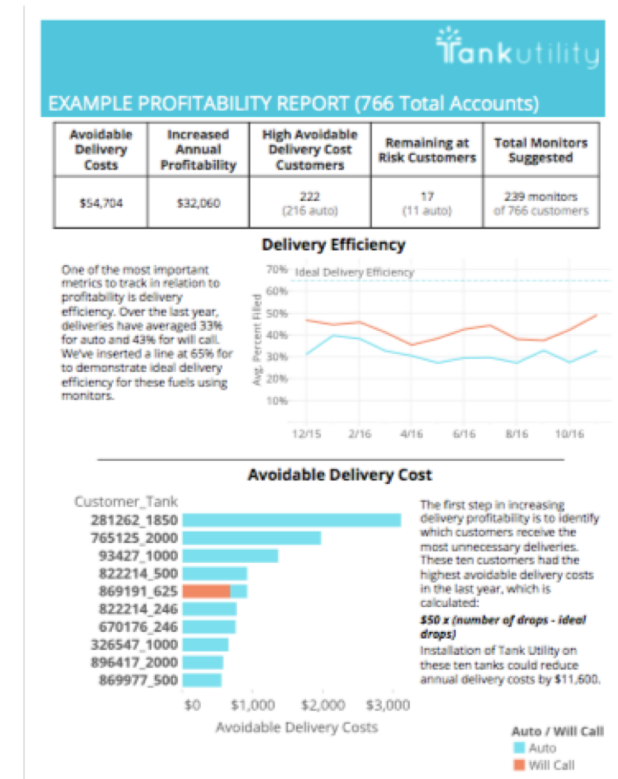
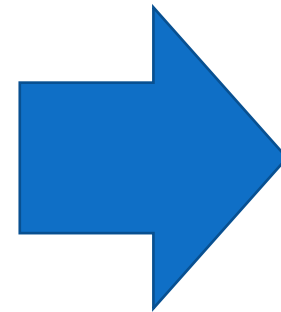
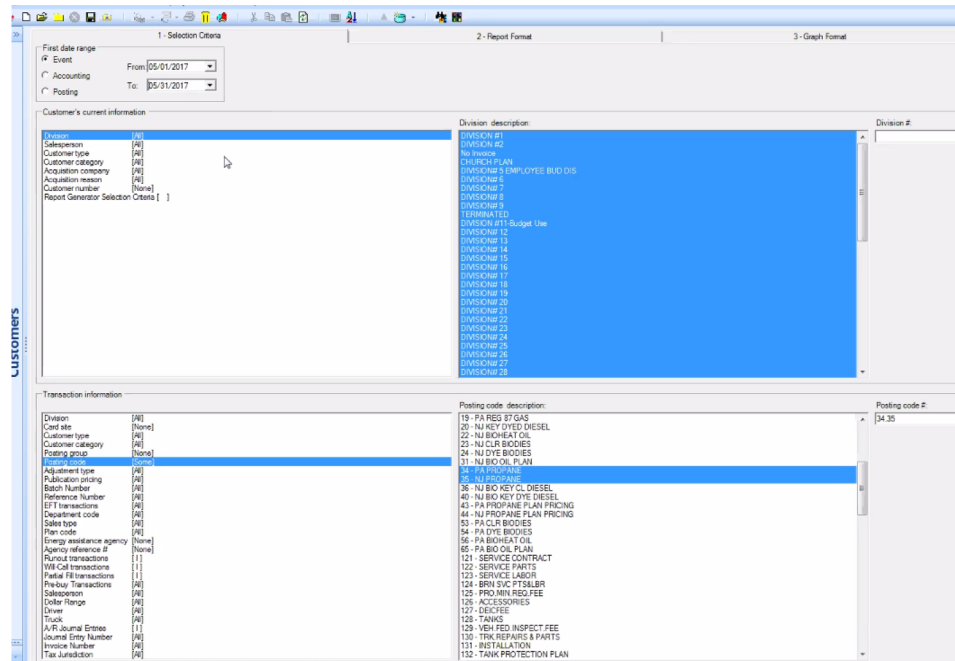
Why add tank monitors to your delivery system?

- Not all customers follow predictable usage!
- A monitor on these customers can improve efficiency and avoid run-out
- Suggested accounts for tank monitors
 - Agriculture – greenhouses, chicken and hog houses
 - Restaurants - often seasonal demand,
 - Propane “Luxury Use” – generators, pool heaters, gas log
 - Vacation/Second homes
 - Temp Heat/construction
 - Geographically dispersed accounts
 - New Customers



How to find accounts that will achieve +ROI?

1. Transaction Analysis in ADDs -> Tank Utility Delivery History Analysis



Integration Options

- An Electronic Tank Reading = driver going on site to check gauge and reporting reading to office
 - Good: Using that data alone, a phone order can be manually created in ADD Energy E3 to make a delivery on time.
 - Better: manually update the tank level in ADD Energy E3 Delivery Maintenance module and a new Degree Day Next will be calculated to be used by Select Tickets to pull a new ticket as needed
 - **Best: Use Add Systems Smart Connect API integration to automate Tank Monitor Readings directly into ADD Energy E3**

Integration Best Practices

1. Account IDs mismatch; Capacity mismatch
 - Please double check account ID matches in Tank Utility Portal and ADDs; <AccountID"- "location#>

Integration Best Practices

1. Account IDs mismatch; Capacity mismatch
 - Please double check account ID matches in Tank Utility Portal and ADDs; <AccountID”-”location#>
2. Tank Reading not allowed on this tank
 - ADDs recommends using monitors with customer type “Degree Day Next”; for period or route table tanks one can switch to DDN and forecast using hot water gallons

Integration Best Practices

1. Account IDs mismatch; Capacity mismatch
 - Please double check account ID matches in Tank Utility Portal and ADDs; <AccountID”-”location#>
2. Tank Reading not allowed on this tank
 - ADDs recommends using monitors with customer type “Degree Day Next”; for period or route table tanks one can switch to DDN and forecast using hot water gallons
3. Days to Show Electronic Tank Reading; default is = 0
 - Recommend setting to 2 days, if reading is older than suggest check TU portal or set up offline device alerts in TU portal

Integration Best Practices

1. Account IDs mismatch; Capacity mismatch
 - Please double check account ID matches in Tank Utility Portal and ADDs; <AccountID”-”location#>
2. Tank Reading not allowed on this tank
 - ADDs recommends using monitors with customer type “Degree Day Next”; for period or route table tanks one can switch to DDN and forecast using hot water gallons
3. Days to Show Electronic Tank Reading; default is = 0
 - Recommend setting to 2 days, if reading is older than suggest check TU portal or set up offline device alerts in TU portal
4. Next delivery date less than or equal to last delivery date. Cannot forecast.
 - Check to make sure multiple monitors aren’t reporting to the same Account ID

Integration Best Practices

1. Account IDs mismatch; Capacity mismatch
 - Please double check account ID matches in Tank Utility Portal and ADDs; <AccountID>"->location#>
2. Tank Reading not allowed on this tank
 - ADDs recommends using monitors with customer type "Degree Day Next"; for period or route table tanks one can switch to DDN and forecast using hot water gallons
3. Days to Show Electronic Tank Reading; default is = 0
 - Recommend setting to 2 days, if reading is older than suggest check TU portal or set up offline device alerts in TU portal
4. Next delivery date less than or equal to last delivery date. Cannot forecast.
 - Check to make sure multiple monitors aren't reporting to the same Account ID
5. Delivery – Tank Size % Difference for Potential Delivery - Default = 10%
 - If a Delivery is done today, but not yet posted, tomorrow morning's tank reading will be higher than today. If the new reading is 10% higher than the day before, an "unposted" delivery is assumed and that new tank reading is ignored for re-forecasting purposes

Measuring your Return on Investment

- Tank Utility Portal -> Efficiency Dashboard

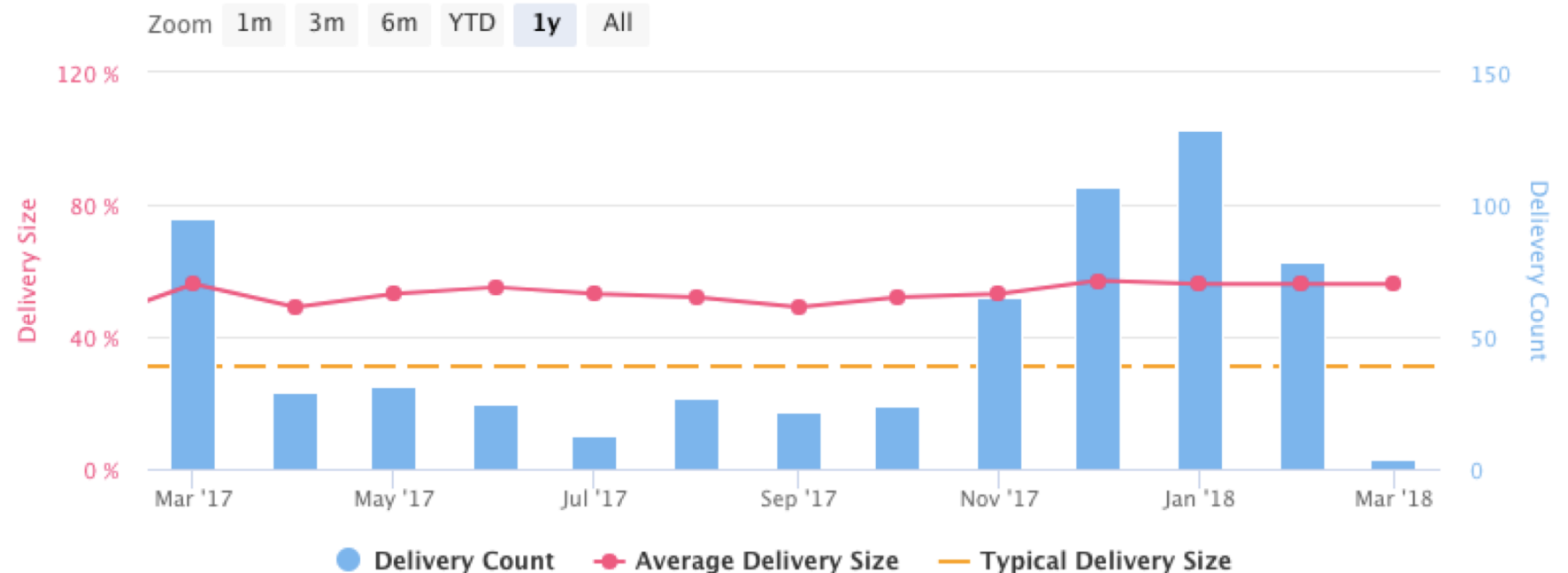
In these 12 months, you made
648 deliveries to 131 tanks

On average, you delivered 55% of
a tank's capacity

That means you are earning 76%
more revenue per delivery than if
you delivered a more typical 31%
of tank capacity

Another way to look at it is that
you've avoided 492 deliveries

At an operating cost of
\$60/delivery that means you're
saving \$2,462 per month or
\$226 per tank per year



User Experience

Phil Mirabito, Mirabito Energy Products



Featured Panelist: Phil Mirabito



Phil Mirabito

Special Project Coordinator at Mirabito Energy



Headquarters: Binghamton, New York
13 Branches
Propane, Fuel Oil, Nat Gas Utility,
Commercial Fuel, C-stores

- Why ADDs & Tank Utility?
- What customers are you monitoring?
- Which integration option did you use?

Viewing Tank Monitor info in ADDs - Customer Log

- Each Tank Monitor Reading that is accepted into ADD Energy E3 will create a Customer Log Entry that shows the reading and the newly calculated Degree Day

Customer #

Location type: Location:

Date

Created: By:

Modified: By:

Label	Old Value	New Value
Electronic Tank Reading Date	05/02/2017	05/04/2017
Last Electronic Percent Reading	28.61	27.64
Last Electronic In Tank Units	143	138.00
Degree Day Next	18604	18632

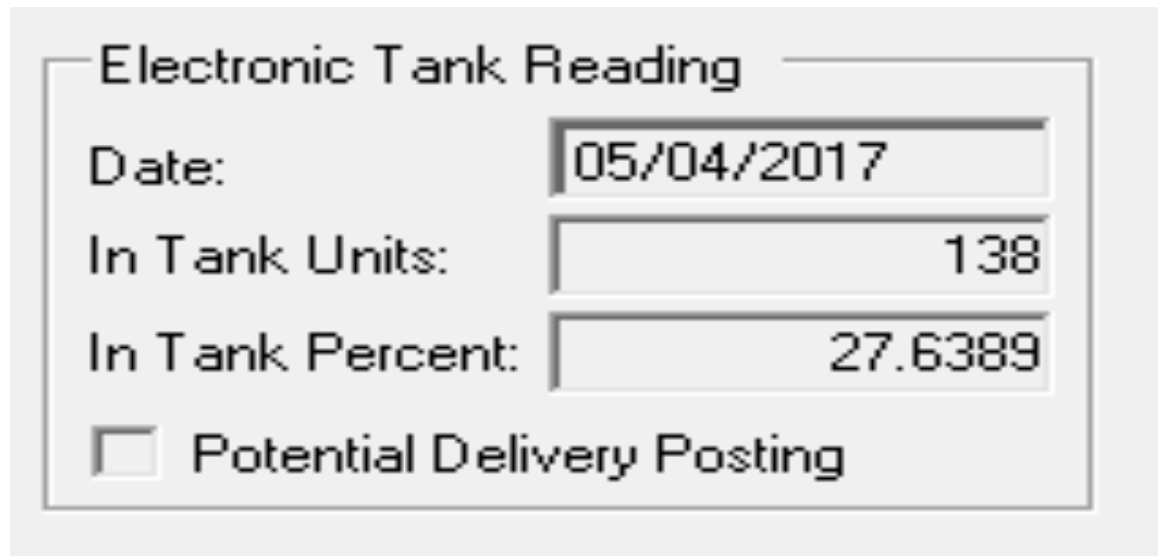
Verifying the Tank Monitor is Connected - Lightning Bolt

- Each Tank Monitor Reading that is accepted into ADD Energy E3 will show a Lightning Bolt next to the tank gauge bar graph on the Delivery Screen for that Customer



Additional Tank Monitor Reading Verification - More Info Tab

- Each Tank Monitor Reading that is accepted into ADD Energy E3 updates the information in the Delivery Display Screen “More Info” Tab for the most recent reading



The screenshot shows a web-based form titled "Electronic Tank Reading". It contains the following fields and controls:

- Date:** A text input field containing the date "05/04/2017".
- In Tank Units:** A text input field containing the value "138".
- In Tank Percent:** A text input field containing the value "27.6389".
- Potential Delivery Posting:** A checkbox that is currently unchecked, followed by the text "Potential Delivery Posting".

Using Tank Monitor Readings with Period Accounts

- When adding monitors to period accounts - Utilize “hot water units per month” as the forecast unit

To make this change:

1) Delivery Maintenance -> change forecasting method to Automatic – DD

2) Click “Calculate From History”

Exception Resolution | Delivery Maintenance

Customer: 810102

Tank: 1 - 631 STATE RTE 11

Miscellaneous information

Customer Type: 2 - Commercial

Product: 7 - PROPANE

Category:

Forecast Method: Automatic - Degree Day

Current DD: 24902 on 03/05/2018

Fill Location:

Last Maintenance Date: 02/19/2018 10:01:00 AM

Actions

Calculations	Description	Current Values	New Values	Related Default Values	Calculated Value
Calculate From History	Tank Size	4000			4
Calculate Entered Values	Usable Units	3200			3
Reset	Reserve Units	896			
Change Forecast Method	Ideal Delivery	2304			
Delivery Stop	K-Factor	0.26	1.00		
Warning Messages	Hot Water Units per Month	3045	3041		3
Schedules	Degree Day of Next Delivery	25397			26
	Last in Tank Units	0.00			
	Units Last Delivery	803			
	Last Delivery Date	02/28/2018			

Using Tank Monitor Readings with Period Accounts

3) Basic Delivery -> check that Hot water units have changed

The screenshot displays the 'Basic Delivery' tab in the Tank Utility software. The interface includes several sections:

- Tank Info:** Size (4000), Usable (3200), Reserve (896), Ideal (2304), Product (7 - PROPANE), Fill Location, Del. Stop, Reinstatement, Price Effective (03/05/2018), Current Price (1.455600), Last Price (1.455600), Del. Center (VESTAL), Zone (Zone/Driver), Sequence # (0).
- Location Information:** Delivery Address (redacted), Show Map, Delivery Instructions (SELKIRK + .30 4-1000 UG, SN#29268,30340,29275,29328).
- Forecasting - Delivery Maintenance:** Lock K-Factor, Must Pull Related, Will Call, Variable HW, Separate HW Heater, Period Scheduling, Route Table, Forecast Method (Automatic - Degree Day), Delivery Group, Day Of Week Schedule, Current Schedule (Su, Mo, Tu, We, Th, Fr, Sa), Selected Through, K-Factor (1.00), Last K-Factor (0.25), Prev. Last K-Factor (0.00), HW Units (3041), Delivery Interval (DRI) (0), Daily Usage Rate (0), Route Table (0).
- Estimations:** Today (03/05/2018), DD Today (24902), Due (03/17/2018), DD Due (26540), Run Out (03/24/2018), DD Run Out (27436), Est. Inventory (2800), Est. Days (19), Calc. Days (0), Tank Gauge (5/8, 70%).
- Order Info:** Status (N - None), Created By, Delivery Units (0), Must Do, Phone Order, Due By, Created On, Ticket #, Driver (0 - [Unassigned]), Ticket delivery date, Text.

A blue box with the number '3' and an arrow points to the 'HW Units' field in the Forecasting section.

Let's get started!

- Don't have Tank Utility?
 - Claim your 60 day free-trial tank monitor from Tank Utility
 - email aaron@tankutility.com with subject "send me a trial monitor!"
- Don't have ADDs?
 - Email Keyser@addsys.com
- Have ADDs and Tank Utility?
 - Reach out to either Aaron or Roger to start working on the integration
 - Use ADD Systems Smart Connect API integration to automate Tank Monitor Readings directly into ADD Energy E3

Q&A



Aaron Gress
Sr. Director of Biz Dev
Tank Utility



Roger Keyser
VP of Customer Success
ADD Systems



Phil Mirabito
Special Project Coordinator
Mirabito Energy Products