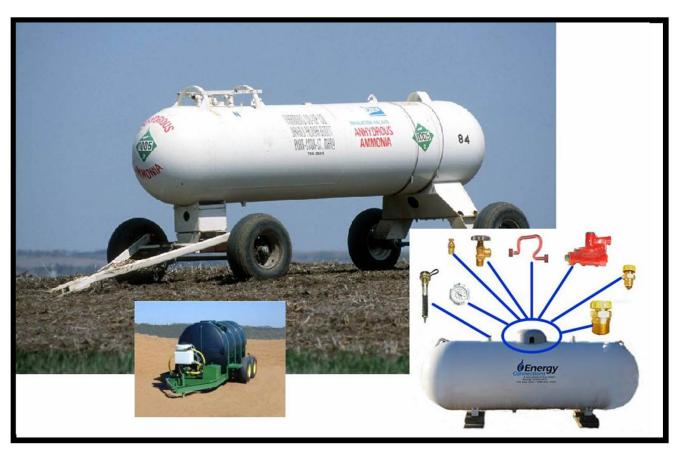
25 Tracking in Agriculture

Adam Ogle, Brett Summers, Danny Haberlin April 19th, 2007

Objective:

Providing the agribusiness industry with a solution to monitor stationary and mobile liquid tank levels and their respective locations.

- Tracking rented equipment
- ·Monitoring fluid levels remotely
- ·Alerting businesses when their tanks need to be filled
- ·Recovering stolen equipment
- Decreasing response times to accidents or leaks
- ·Eliminating costly downtime searching for tanks
- ·Helping new employees find equipment on routes
- ·Saving time by viewing tank level alerts over the internet or cell phone







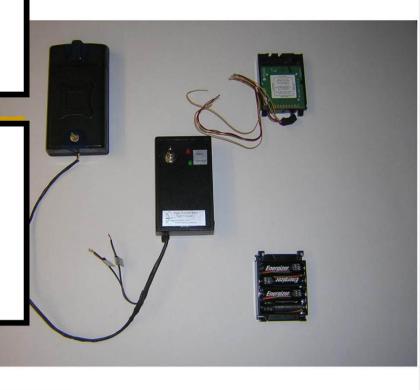


The Center Piece:

Trimble TrimTrac GPS unit from www.SageTracker.com

The Unit came with:

- ·60 Day 12V Battery Pack
- ·12VDC adaptor to hook up directly to vehicle battery
- ·High Priority Alert Test Fixture
- ·Instructions





Our Tools and Supplies:

- ✓Basic Wiring Terminals and Tools
- ✓ Liquid Level Switch from Innovative Components
- ✓12V Power Supply to simulate a vehicle's electrical system during assembly
- ✓Wire, looming, tape
- ✓Switches, indicator lights

Normally Open Manual Alert Switch

✓ Multi meter

Wiring Diagram:

- ·Two Switches-
 - ·Manual Override
 - ·Fluid Level
- ·Indicator Light
- ·Fuse
- ·Resistor



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Normally Open Fluid Level Alert Switch

9-12VDC

Indicator Light

4.7k Ohm resistor

Trim

Trac

Unit

High Priority Alert Circuit Built into TrimTrac Unit

FINAL RESULTS!



What you get:

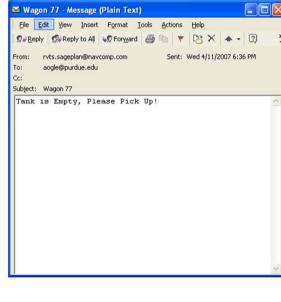
- ·Instant email or text message notification of an alert
- ·Precise locations on all tanks
- ·Easy access from any computer with internet
- ·Entirely customizable webbased interface and alerts

Multiple Uses:

- *Units can be switched from one type of tank to another as seasons change.
- ·Several types of switches or sensors can be used for various applications
- Built-in medium and low priority circuits allow for future system expansion with more advanced alert systems
- ·Ability to organize groups by tank type







- Safe
- Reliable
- Accurate
- Convenient
- Effective

With this system, monitoring tank levels could not be easier. Our system will reduce the time it takes for routes to be generated and eliminate checking fluid levels the old fashioned way. With the automatic alerts, multiple individuals can be simultaneously notified of an alert. Implementing this system into your business will not only save you money, but provide your team a safe and effective way to serve your customers.







