

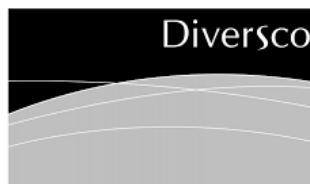
WACnGO Telemetry system

Presentation & Case Study

2016



WACnGO companies portfolio



PRIMEMAX ENERGY INC.



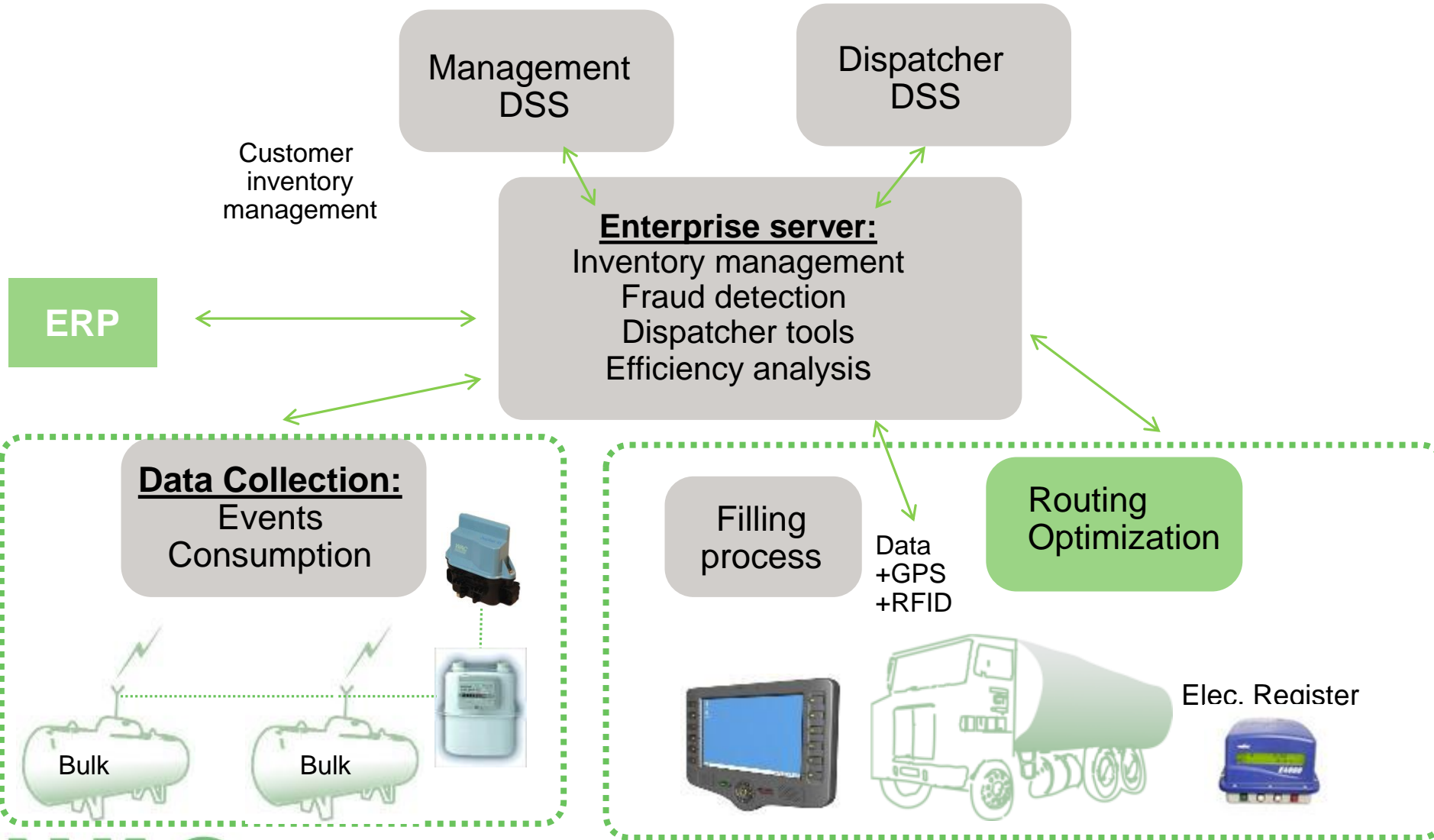
Ontario's Alternative Energy Provider. There is an Alternative...

WAC Advantages

System Targets and added values:

- Logistic optimization:
 - Drop size increase up to 35%
 - Reduce no. of trucks & deliveries
- Eliminate “Out of gas” events
- Improve company Image
- **Green and sustainable solution**
- Prevent & detect fraud

Jupiter System – End-to-End Architecture



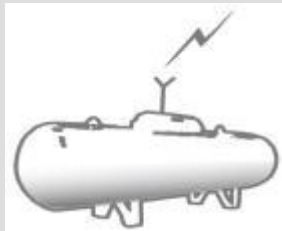
Jupiter Solution

Main Equipment

JupiterProb Unit +
Meter reading capability



Jupiter Enterprise Server



RFID technology:
Smart ring + Smart WGT



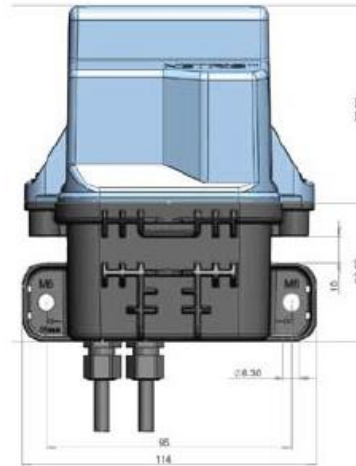
Jupiter Mobile
MDT
(Cabin computer)



WAC Telemetry advantages

Jupiter Telemetry unit:

- Reliability – More than 15,000 worldwide installations over 12 countries
- Quality & Durability – Robust, Small, Durable, LPG oriented telemetry unit
- One unit Monitor Up to 3 tanks and 1 meter.
- Cellular GSM text based with two way communications (Remote configuration)
- Battery Operated – up to 10 years (1 message a week)
- Online generated alerts
- Few minutes only to install.



Jupiter Solution

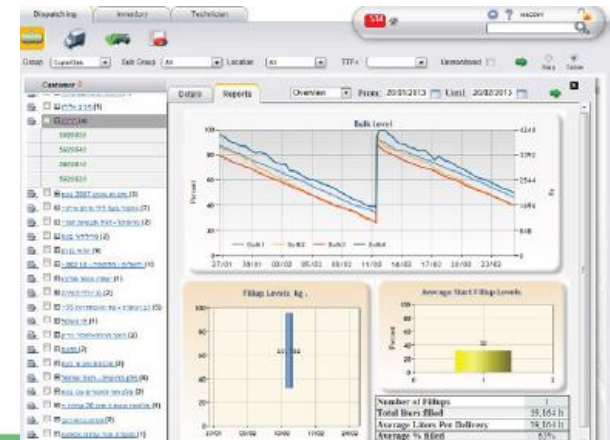
Jupiter III – Telemetry unit installation



WAC System advantages

Jupiter System:

- TTF – Time To Fill – Advanced algorithm to calculate days to threshold point
- User friendly web interface also supporting smartphones
- Unit Configuration by the company.
- Interface to any Back Office System (ERP)
- Map view – Colors per level or TTF.
- Reports generation to excel.
- Various online Email real-time alerts.
- Groups & Authorization levels per user
- Customer web interface – manage his sites only
- [Link to demo:](#)



ROI – less than 2 years return on investment

ROI - parameters:

- **At least 35% saving on logistical costs – Drop Size increase by 30% to 40%.**
- Stock savings
- Emergency trip savings
- Detecting fraud savings
- Third party filling savings
- Manpower Savings
- Benefit from smart purchasing
- Selling monthly service to end customer

System screens: Main Bulks Monitoring Screen

Dispatching | Inventory | Technician

9429

WAC Develo

Group: Maua | Sub Group: All | Location: All | TTF: | Un monitored: | Map | Table

Customer	ID	%	Last Update	TTF (Days)	Req(kg)	Present Level %	Last Fill-up kg
[Redacted]	875905-975945	62%	23/02/2012 06:07	3.6	60	61%	08/07 - 65
[Redacted]	21355-34973	46%	23/02/2012 06:06	3.8	298	45%	20/09 - 0
[Redacted]	15156-19604	66%	23/02/2012 10:09	3.9	815	65%	01/01 - 0
[Redacted]	65103-89259	24%	23/02/2012 05:54	4.2	308	24%	
[Redacted]	20297-33864	80%	21/02/2012 06:07	4.1	166	62%	27/10 - 121
[Redacted]	9475-13462	58%	23/02/2012 06:03	4.1	143	56%	24/01 - 135
[Redacted]	9123-12927	80%	23/02/2012 08:14	4.4	27	79%	17/02 - 261
[Redacted]	451279-560378	54%	23/02/2012 06:06	4.5	80	53%	11/01 - 124
[Redacted]	21902-35548	55%	23/02/2012 10:07	4.9	149	55%	17/01 - 237
[Redacted]	9123-44537	63%	21/02/2012 17:03	5.0	154	54%	14/01 - 209
[Redacted]	294986-395471	67%	23/02/2012 06:05	5.0	808	66%	04/10 - 921
[Redacted]	429483-538020	41%	23/02/2012 07:09	5.3	332	41%	22/02 - 167
[Redacted]	732820-832820	82%	22/02/2012 17:13	5.3	68	75%	01/01 - 0
[Redacted]	887741-987781	81%	22/02/2012 06:46	5.4	96	72%	14/02 - 423
[Redacted]	147259-213055	36%	23/02/2012 06:09	5.4	1109	36%	19/01 - 1,065
[Redacted]	889849-989889	9%	22/02/2012 17:08	5.5	195	8%	31/12 - 68
[Redacted]	961430-1066872	42%	23/02/2012 05:49	5.6	648	42%	13/01 - 450
[Redacted]	20643-34225	38%	20/02/2012 17:10	5.8	374	35%	06/01 - 230
[Redacted]	145717-208041	38%	23/02/2012 06:06	5.8	237	38%	18/01 - 156
[Redacted]	717289-817289	89%	23/02/2012 07:03	172.0	17	89%	27/01 - 182
[Redacted]	1054213-1153413	55%	23/02/2012 06:03	6.4	51	54%	27/01 - 51
[Redacted]	23135-3128611	58%	23/02/2012 06:00	6.9	69	57%	20/01 - 122

Showing 1..65 sites from total of 198 Sites

Send To: Erp

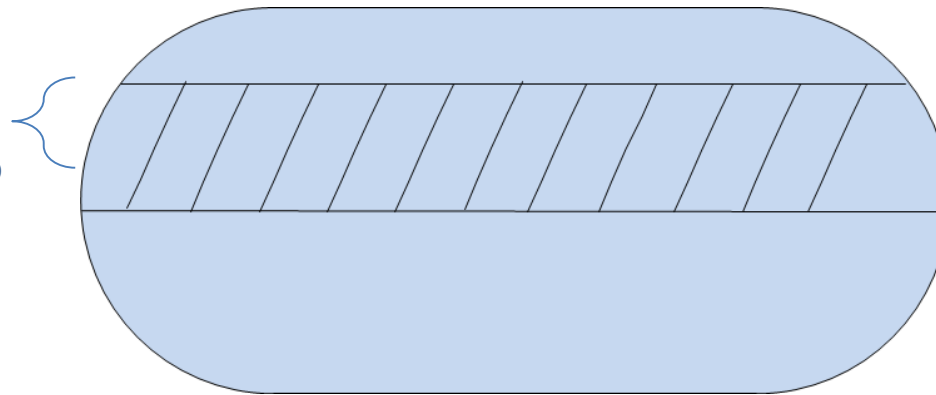
English | Version: 4.0.6.7 | WIRELESS APPLICATIONS CORPORATION WAC

System screens: Management Tools- Dashboard



Increasing Logistic Efficiency

Current situation



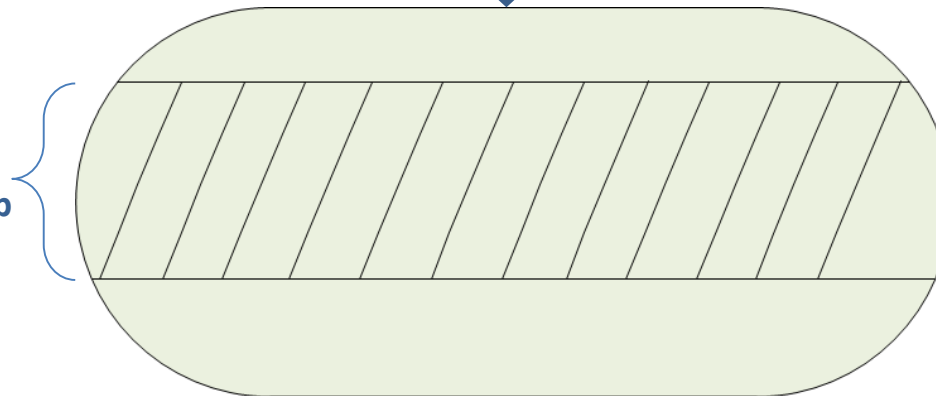
85% Max. Fill-up level

55% Current Average fill-up level

Before WACnGO System:

In Average: 30% tank fill-up
(Drop size) per delivery

Using WACnGO system



85% Max. Fill-up level

30% Using WACnGO system

Using WACnGO System:

In Average: 55% tank fill-up
(Drop Size) per delivery

From 30% Fill-up/Delivery \rightarrow 55% Fill-up/Delivery = **83% Increasing Logistic Efficiency**

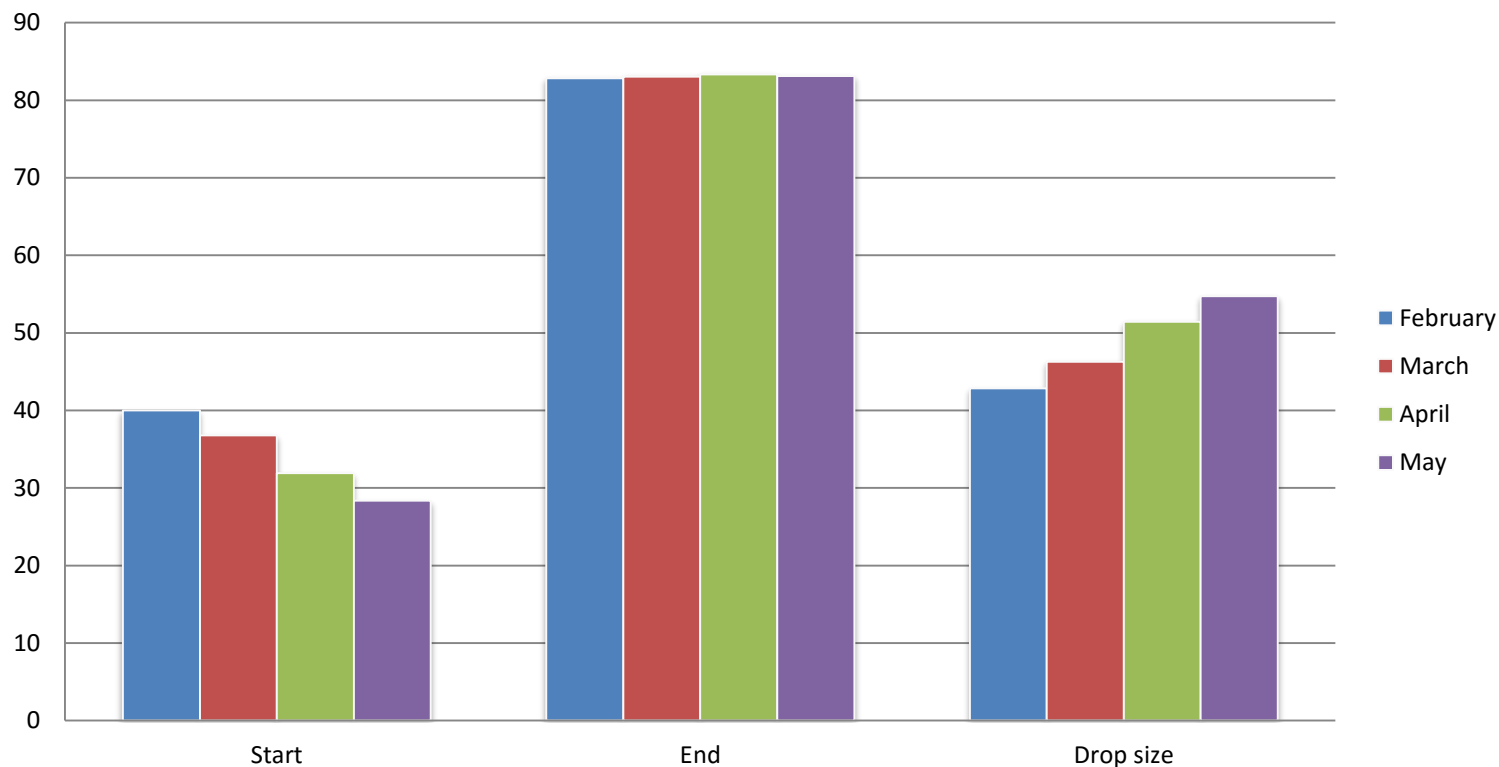
Even with 50% "Practical factor" we reach 40% Increasing in the Logistic efficiency

Case study Scope and targets

- ✓ Installation of 200 JupiterProb units pilot
- ✓ Implementation of Jupiter System and migration to standard work scheme
- ✓ Starting to work with Telemetry after 2 months – learning the system behavior
- ✓ Case studies of JupiterProb units results

Case Study of Jupiter system –pilot 2014

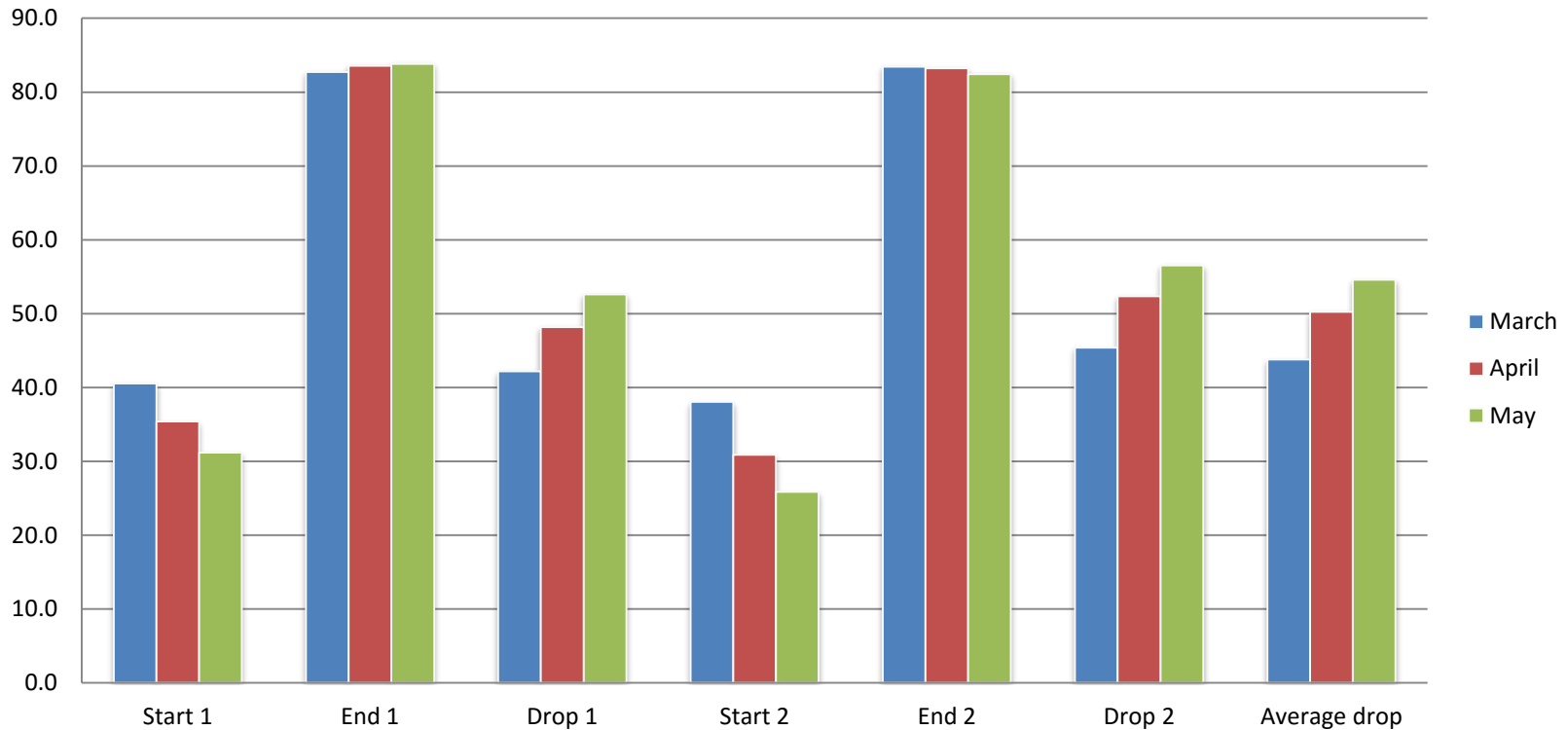
1 tank fillup by months



Average by Month			
Month	Start	End	Drop size
February	40	82.8	42.8
March	36.8	83.0	46.3
April	31.9	83.3	51.4
May	28.4	83.1	54.7

Case Study of fill-ups

>1 tank fillup by month



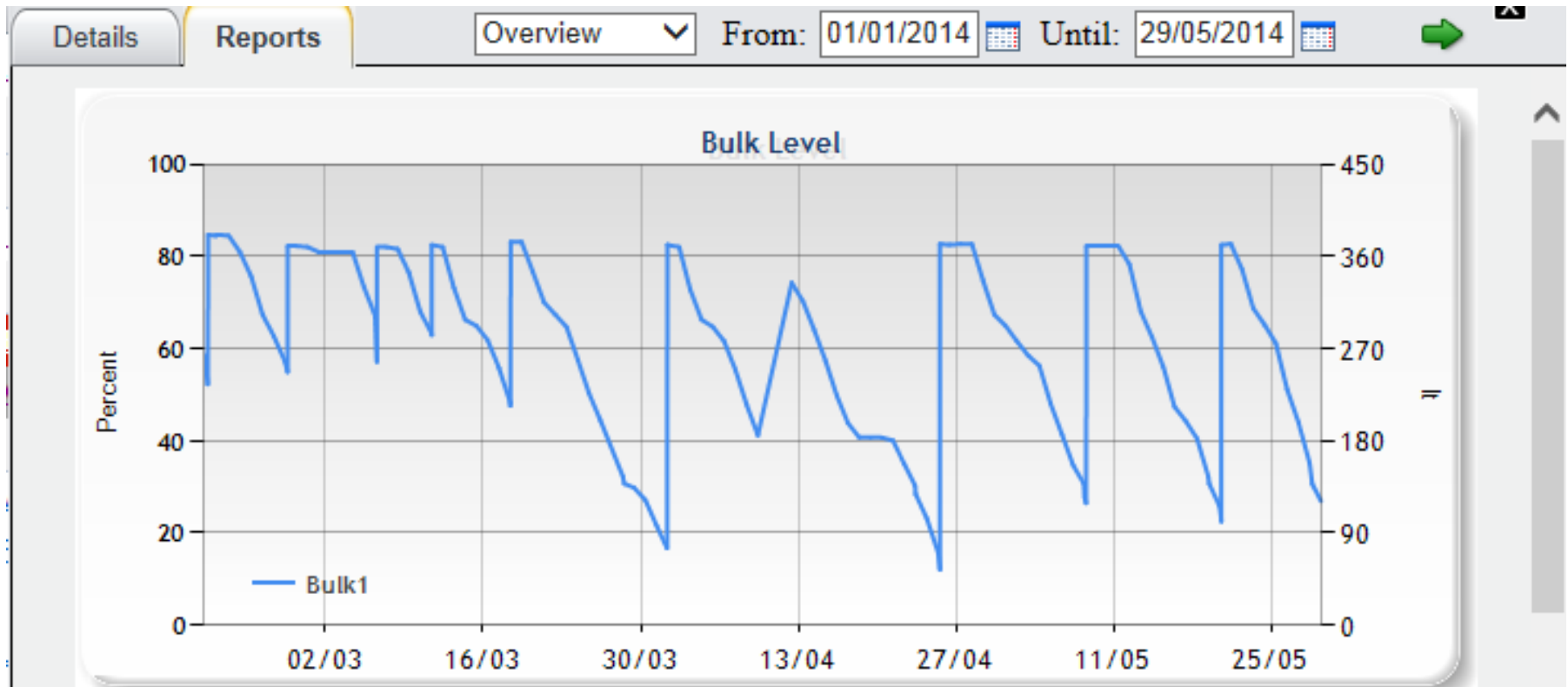
Month	Start 1	End 1	Drop 1	Start 2	End 2	Drop 2	Average drop
March	40.5	82.7	42.2	38.1	83.4	45.4	43.8
April	35.4	83.6	48.2	30.9	83.2	52.3	50.2
May	31.2	83.8	52.6	25.9	82.4	56.5	54.6

After 4 months of testing WAC system:

- **Drop Size: increase of 27.8%**
- **Sites with stuck sensors detected and fixed**
- **Improvement of logistic optimization routing due to system**

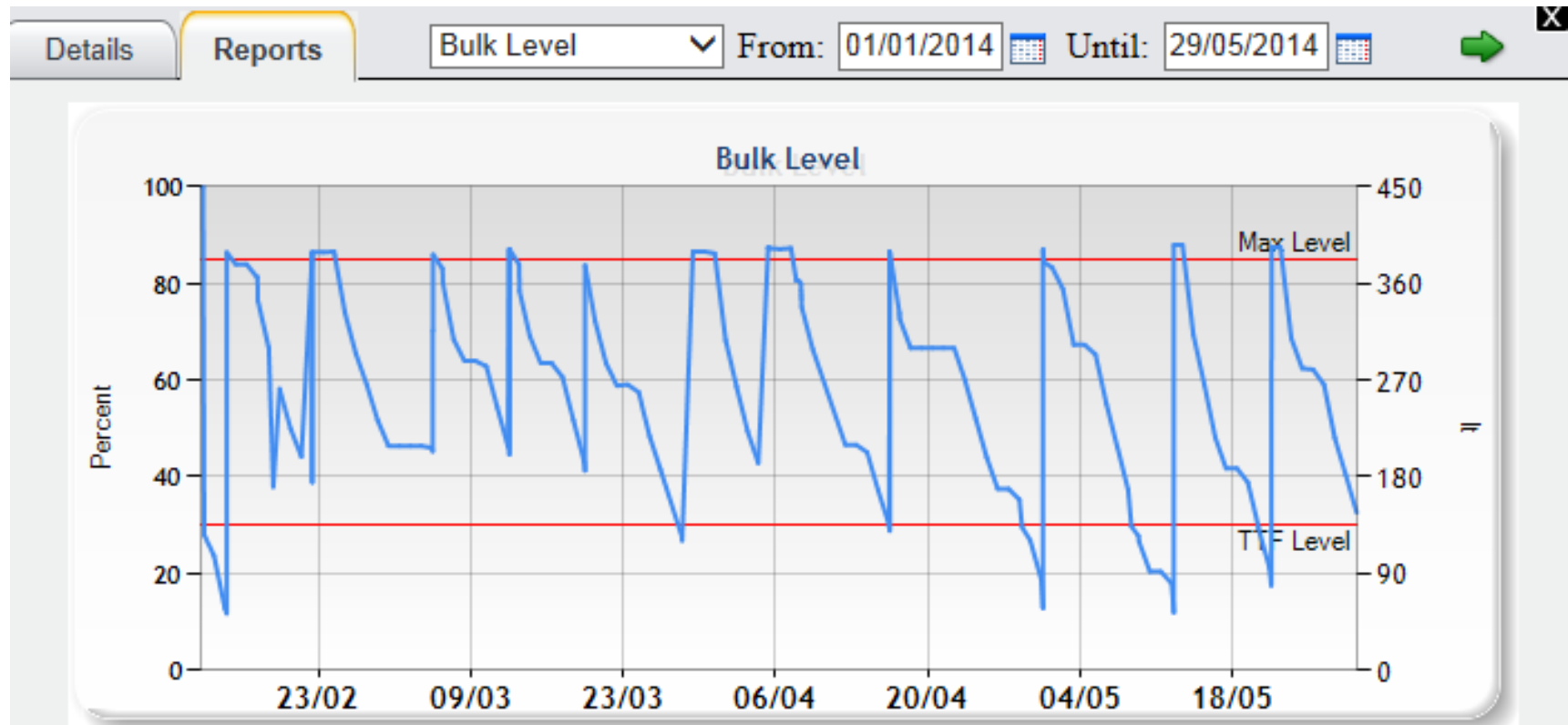
examples Improvements

Low drop size prior to using WAC system compared to larger drop sizes working with WAC system



Example Improvement

Drop size improving when using WAC system



Theoretic Example for achieving ROI

Theoretic example – Truck routing

Filling 6 sites of 2000 Gallon tanks with 10% drop size compared to filling 1 site of 2000 Gallon with 60% drop size

Option 1	Fill up %	Fill Time T	Overhead T	Drive T	Total T	Accumulated T
Site 1	10%	4.2	4	0	8.2	8.2
Site 2	10%	4.2	4	7	15.2	23.4
Site 3	10%	4.2	4	7	15.2	38.6
Site 4	10%	4.2	4	7	15.2	53.8
Site 5	10%	4.2	4	7	15.2	69
Site 6	10%	4.2	4	7	15.2	84.2
Total		25.2	24	35	84.2	
Option 2	Fill up %	Fill Time T	Overhead T	Drive T	Total T	Accumulated T
Site 1	60%	25.2	4	7	36.2	36.2
Total		25.2	4	7	36.2	

