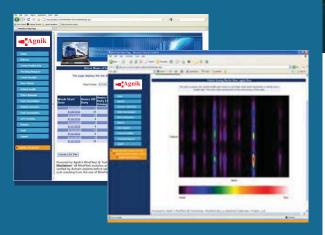


## MineFleet®

## What is MineFleet®?

Vehicle Informatics based on Advanced Data Analysis and Modeling.

MineFleet® Software is designed for commercial fleet owners and fleet management companies who want the power of advanced predictive vehicle data mining for dramatically reducing the operating costs. It offers a powerful onboard data stream mining software for modeling, benchmarking, and monitoring of vehicle health, emissions, driver behavior, fuel-consumption, and fleet characteristics.



MineFleet<sup>®</sup> Vehicle Performance Heat-map.



# AGNIK RECIPIENT OF 2010 FROST & SULLIVAN AWARD FOR ENABLING TECHNOLOGY OF THE YEAR



"Agnik,LLC is emerging as a leader in commercial vehicle telematics focused data analytics"----Frost & Sullivan" Best Practices Research Report, 2010.

Frost & Sullivan 2010 Enabling Technology of the Year Award Winning Technology.



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## What MineFleet® Offers?

- ▶ Reduce fuel cost using smart fuel consumption analytics.
- Advanced predictive vehicle health monitoring using data mining technology.
- Optimize driver behavior by quantifying the effect on vehicle performance.
- ▶ Go green by reducing emission using MineFleet® Emission Analyitcs.
- Advanced fleet analytics for comparing and contrasting vehicles.
- Advanced decision support tools for trend analysis and anomaly detection.
- ▶ Web-service-based integration of MineFleet® Analytics with your application.



MineFleet Hours of Service Reporting.

## Why Use MineFleet®?

#### **Fuel Efficiency Analytics**

- ▶ Current average fuel economy.
- ▶ Fuel economy history, trend analysis, and significant change detection.
- ▶ Total fuel consumed during a chosen time period.
- ▶ Fuel Savings Calculator: Quantify effects of speeding, acceleration, and vehicle health on fuel economy by predictive modeling.
- ▶ Policy-based fuel efficiency monitoring and alert generation.
- Fuel Tank Level Analytics for detecting fuel tank fill-ups and fuel-thefts.

#### **Health Monitoring using Predictive Data Mining**

- Vehicle health scoring.
- MineFleet fault-codes that provide specific vehicle diagnostic information with high confidence.
- Warnings generated by Agnik's proprietary library of advanced health tests running onboard the vehicle.
- Detecting vehicle health problems causing poor fuel economy.
- Extensive health reports of various types.

### **Driver Behavior Analysis**

- Driver performance scoring based on accelerometer, OBD, GPS and contextual information.
- Comparative cluster analysis for detecting unusual, anomalous driving.
- Policy-based alerts for driver behavior.
- Percent of time spent idling.
- Total drive time and distance traveled by each driver.
- PTO usage reporting.
- Policy-based speeding, acceleration, and braking behavior reporting.
- Generate various types of reports on driver behavior.

### **Fleet Analytics**

- Compare and benchmark vehicles in the fleet.
- ▶ Compare drivers across the entire fleet.
- Identify all vehicles showing specific problems.
- Identify drivers with specific driving characteristics.
- ▶ Comprehensive report for the entire fleet.

### **Onboard Emissions Analysis**

- ▶ Smog/Emission Check.
- MIL Light status.
- ▶ Checking of emissions subsystems.
- ▶ EPA Smartway Greenhouse emissions scoring.
- NOx, CO2, CO and HC monitoring.

### MineFleet® Hours of Service

- MineFleet<sup>®</sup>Onboard is an Electronic On-Board Recorder (EOBR) fully complaint with the DOT and FMCSA regulations for monitoring Hours of Service (HOS) and reporting driver status to electronic driver logs.
- MineFleet<sup>®</sup>Onboard eliminates handwritten driver logs and easily records driver duty status electronically.
- MineFleet<sup>®</sup> EOBR collects the GPS and engine diagnostic data from the vehicles data port and automatically sends the driver's status to the vehicle-onboard devices and the web server over wireless networks.
- ▶ The HOS analytics visually display the driver logs on the onboard devices or on the web for roadside inspection.



Web Interface for Emissions Monitoring.

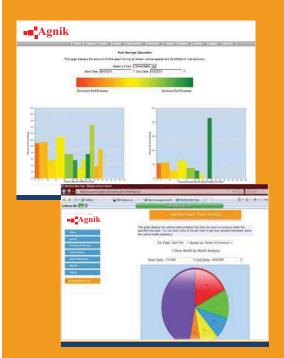


MineFleet® Scores Your Drivers, Vehicles, Fuel Consumption and Emission Performance.



## What is MineFleet® Onboard?

MineFleet<sup>®</sup> is powered by Agnik's unique patented onboard data stream mining technology---MineFleet<sup>®</sup> Onboard. It analyzes data onboard the vehicle and sends the resulting analytics to the server over the wireless networks. The onboard data analysis dramatically reduces the wireless communication cost. MineFleet<sup>®</sup> Onboard is ported to many popular third-party modems. MineFleet<sup>®</sup> Onboard can also be deployed using Agnik's DMP-platforms with many third party modems that do not come with built-in integrated MineFleet<sup>®</sup>. MineFleet<sup>®</sup> Onboard is also available on many different handsets and smartphones.



MineFleet<sup>®</sup> Web Services.



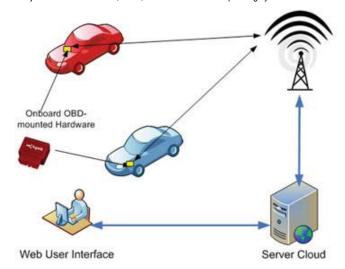
Onboard Handset or Mobile Data Terminal-Based Interface

#### **Maintenance Analytics**

- Manufacturer recall alerts.
- MineDeep<sup>™</sup> plug-in for correlating maintenance information with diagnostic information.
- Cost for maintenance per miles analysis for identifying vehicles that are expensive to maintain.
- Detecting unusual high cost maintenance operations and linking those to diagnostic information.

#### MineFleet®Architecture

- Plug-n-play Capability: MineFleet ormes as an integrated solution with many popular third party modems. MineFleet as an elug-n-play with many other modems using Agnik's DMP platform. Connect any commonly used third-party modem with the Agnik's DMP platform using a serial, USB or Ethernet cable. You are good to go in five minutes after configuring the DMP and the modem.
- Portability: MineFleet<sup>®</sup>Onboard can be run on third party hardware platform. It has already been ported to many devices with Windows, Linux, and other embedded operating systems.



#### Main Differentiating Factors

- ▶ Comprehensive decision support for vehicle health---way beyond DTC code reading.
- Advanced fuel consumption analysis---linking vehicle health and driver behavior with fuel consumption.
- ▶ Benchmarking/Depreciation Analysis: Leasing/Insurance industry needs.
- Advanced driver behavior scoring combining GPS, OBD, and accelerometer data; hours of service reporting and correlating driver behavior with maintenance data.
- Advanced emission scoring: NOx, CO, CO2, HC analysis, EPA SmartWay emission and air-pollution scoring, comprehensive carbon footprint monitoring.
- > Open architecture: Allows integration with many GPS tracking and fleet management software.
- Intellectual Property: MineFleet<sup>®</sup> is backed by strong patents on vehicle data mining for onboard and distributed fleet environments.
- Analyzes data onboard the vehicle instead of at the remote server.

### Wide Range of Hardware Choices

MineFleet<sup>®</sup> is available on many different types of hardware platforms ranging from blackbox devices to plug-n-play easy-to-install dongles. MineFleet<sup>®</sup> supports both light and heavy duty vehicles. MineFleet<sup>®</sup> is also available on Bluetooth dongles (for both light and heavy duty vehicles) that work with Bluetooth enabled Cell-phones. If the phone has a data plan then you don't need any additional data plan. Stand-alone dongles come with built-in wide-area wireless modems. MineFleet<sup>®</sup> is also available on many third-party wireless modems and tracking devices.

#### MineFleet® Web Services

MineFleet<sup>®</sup> Analytics can be viewed using the stand-alone server or client program and the web portal. Web-service API functions can also be used for embedding the analytics within your own applications.

- View summary of all alerts for your entire fleet.
- View MineFleet®generated vehicle and driver analytics alerts anytime using the web.
- The alerts are updated real-time.

