# Cal/Amp<sup>®</sup>

CalAmp 15635 Alton Parkway, Ste 250 Irvine, CA 92618 calamp.com

**CalAmp iOn Light duty standard Bundle** with **WIFI** and 3240 hardware is a complete **allinclusive** bundle used for tracking **Light Duty vehicles**, with zero upfront cost and simple pricing per vehicle, per month.

The system includes CalAmp's award winning iOn software with industry leading mapping, reporting, alerts and integration to most CAD systems and a host of law enforcement applications.

Benefits include improving deputy safety and reducing vehicle operating costs.

# Highlights of our <u>all-inclusive</u> offers:

- Industry-leading LTE CalAmp AVL devices with diagnostic connections
- CalAmp iOn Telematics software platform
- Free on-site spare devices
- Free Unlimited live online training
- Life of contract hardware warranty
- Dedicated customer service and 24/7 support
- CalAmp initial installation included
- Integration with most law enforcement software included

# Our Commitment

CalAmp has provided Automatic Vehicle Location (AVL) and telematics systems that work to the highest levels of performance, reliability, and scalability since 1990. We are one of the most experienced GPS vehicle tracking system providers in the industry and have manufactured millions of GPS units fielded throughout the world. **CalAmp has notable experience with government, almost every county in North Carolina currently uses CalAmp solutions in their school bus fleet and maintenance vehicles. One NC School district saves over one million per year using our solution.** CalAmp stands ready to continue to support our services and products for sophisticated government agencies with the high standards expected of the industry's leading manufacturer and provider of telematics technology.

# **CalAmp iOn Telematics Solution**

CalAmp's iOn Telematics application incorporates mapping technology using Esri ArcGIS and is a hosted Web browser-based software as a service. Engineered and designed as an enterprise-level AVL solution, the CalAmp iOn Telematics system is a powerful tool for fleet managers and is uniquely effective for specific end-user departments (such as Public Safety). The CalAmp in-vehicle mobile units and CalAmp Telematics Cloud (CTC) are linked via two-way LTE wireless communications, allowing for timely data transmission between the field and software.

# CalAmp Mobile Units

The CalAmp iOn Telematics solution provides valuable AVL Management tools:

- Vehicle Utilization
- Identifying Vehicle Misuse, Unit Tampering and Fraud
- Real-Time Vehicle Tracking (map-based)
- Custom Reporting (breadcrumbing, tabular, scheduled, exportable)
- Real-Time Alerts (e-mail and text)
- Dashboarding (KPIs and trends)

The assignment of user-permission levels allows access to appropriate sub-sets of the installed functionality.

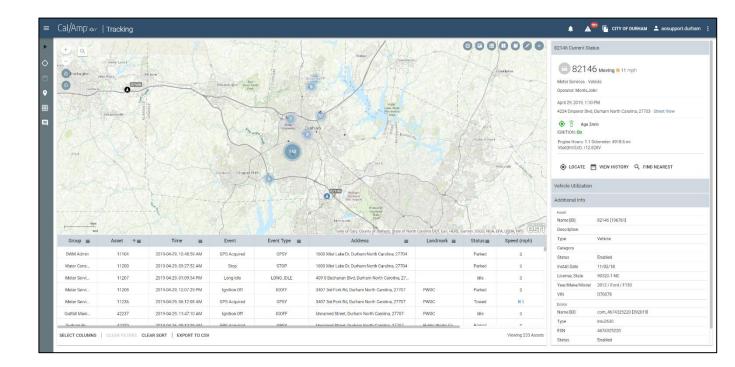


Note: Your user interface may differ from screen shots provided.

# **Real-Time Vehicle Tracking**

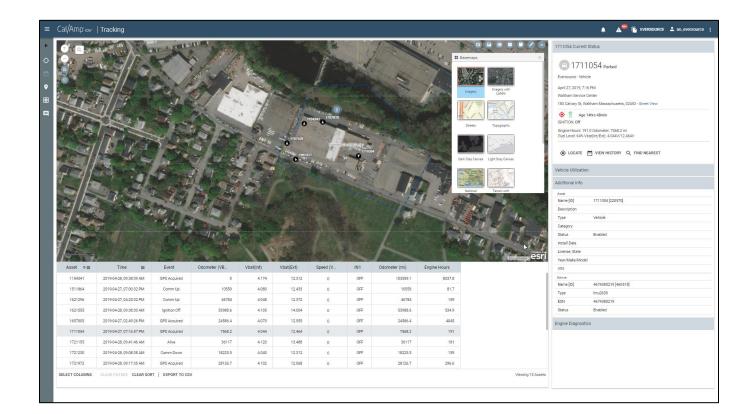
The CalAmp iOn Telematics application displays the current location and status of the vehicle fleet, along with address, landmark, and other attribute information, over your proprietary and publicly available Esri GIS map data. The use of a powerful Esri ArcGIS Server mapping along with the incorporation of vector map data allows for almost endless display and analysis possibilities.

The vehicle icons indicate (using colors, directional symbols, and labels) various vehicle attributes (such as ID, status, ignition, heading, etc.). All of the vehicle attribute data may be instantly queried and displayed in a pop-up box with a simple click. Further, collapsible information windows show in-depth data on the selected vehicle including usage, diagnostics, background info, and actionable tools.



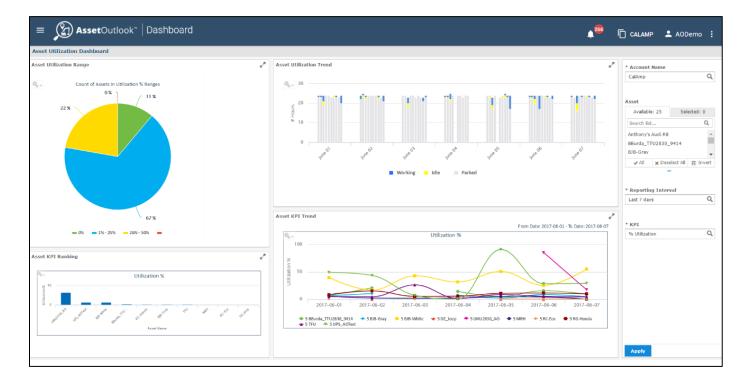
## **Map Viewing Features**

The CalAmp iOn Telematics Application displays the vehicle data in a "map window." The map window can be set to display a particular area, region, or address, or to track a specific sub-set of the entire fleet (from the entire fleet to an individual vehicle). In CalAmp iOn Telematics the map display window possesses a full set of map manipulation and query functionality. Map manipulation tools and buttons are available to zoom, pan, and center the display on a particular vehicle or address. Additional tools are available to enable or disable labeling, and to adjust the map display according to user needs or preferences. Map query options include the ability to locate an address, vehicle, or landmark.



# Dashboard

CalAmp iOn Telematics' Dashboard provides a quick view into the real-time status and trending of the utilization of your assets. The Dashboard presents Asset Utilization Range, Asset Utilization Trend, Asset Key Performance Indicator Ranking and Asset Key Performance Indicator Trend. The various dashboard charts can be configured to display data based on the user-defined criteria and updates automatically.



# **Reporting Functions**

The Reporting module can generate both extensive tabular and detailed graphical map breadcrumb reports using archived vehicle location and status data. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. The **breadcrumb reports** allow users to visually display or re-trace a vehicle's route and status and include the same map manipulation and query functionality as the real-time vehicle tracking displays. **Tabular reports** display unit location and activity in configurable, sortable, and filterable tables. Reports can be configured, saved, scheduled, etc. Such reports may be exported into virtually any format including .CSV and MS Excel files as well as scheduled and sent to any recipients.

# <u>Reports</u>

CalAmp iOn Telematics provides a highly customizable and flexible report module for generating reports to help you monitor asset operations and performance. The CalAmp iOn Telematics system comes with a suite of standard graphical and tabular reports that cover all the main vehicle activities that one would expect from an industry leading AVL system. After you generate a report, you can customize the look and feel, save, and schedule. You may want to filter or remove columns from the report, change the sort order or highlight actionable data. Once finalized, you may opt to display report data directly within CalAmp iOn Telematics or export to standard file formats such as PDF, Excel, or CSV.

We have spent years working with hundreds of fleet customers to refine our report offerings to encompass the most useful and important reports.

Some of the data in our standard reports are:

- Vehicle Activity, Travel & Stop
- Driver Performance, Over Speed
- Harsh braking/acceleration, Idle Reports
- Geo-fences
   Vehicle Inactivity
- Vehicle Usage (Mileage, Idle Time & Engine Hours)
- Sensor Reports (lights, sirens, emergency, etc.)
- Diagnostic Trouble Codes (if equipped)

### Sample Report List

#### Asset Usage Reports

Asset Daily View Basic utilization and usage data for selected assets for each day

Asset Summary View Basic utilization and usage data for selected assets over a date range

Idle Detail Report Details and duration of each idle event that occurred for assets over a date range

Idle Summary Report Summary of all idle events over a date range for assets/operators

Maintenance Management Interface Generate data for integration with maintenance management software

Vehicle Daily View Basic vehicle usage data for selected vehicles for each day

Vehicle Metrics Analytics View Report In-depth vehicle usage data for export to user pivot software

Vehicle Metrics Detail Report In-depth vehicle usage data for each day

Vehicle Metrics Summary Report In-depth vehicle usage data over a date range

Vehicle Summary View Basic vehicle usage data over a date range

| Dashboard Charts   | ^           |
|--|-------------|
| Asset KPI Ranking<br>Asset KPI bar chart                       | 0<br>0<br>0 |
| Asset KPI Trend<br>Asset KPI trend line                        | 0<br>0<br>0 |
| Asset Utilization Range<br>Asset Utilization pie chart         | •           |
| Asset Utilization Trend<br>Asset Utilization grouped bar chart | •           |
| Engine Diagnostic Reports                                      | ^           |
| J1939 DTC View<br>DTC alerts for J1939 assets                  | 0<br>0<br>0 |
| J1939 Fault Lamp View<br>Fault lamp status for J1939 assets    | •<br>•<br>• |
| OBD-II DTC View<br>DTC alerts for OBD-II assets                | •           |

**OBD-II MIL View** 

MIL status for OBD-II assets

#### Overview of alert notifications received

**Device Communication** Device details and communication status

Alert Notifications Report

Exception Reports

Device Input Report Device input event details

Device Installation Report Installation/configuration details for devices and their associated assets

Driver Vehicle History Report History of operator assignment to assets over a date range

Invalid Keyfob Report Displays usage of unregistered key fobs over a date range

Posted Speed Violation Detail View Details of each posted speed violation that occurred

Posted Speed Violation Summary View Summary of all posted speed violations over a date range for assets/operators

Tag Inventory Report Associations and status of iOn tags

Towing Report Towing Report

Unauthorized Usage Detail Details of asset usage events outside of scheduled hours

Unauthorized Usage Summary Summary of asset events and usage outside of scheduled hours

User Login Detail Report Each user login attempt by iOn users

User Login Summary Report User login count and latest login for iOn users

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#### Geofence Reports

Geofence Detail Report Usage data for assets that passed through a geofence

Geofence Equipment Count Report Snapshot of number of assets located in geofences by asset category/type

Geofence Event Report Details of each geofence event

Jobsite/Landmark Summary Report Usage data for assets that passed through a geofence over a date range and shown on a day-by-day basis

| Maintenance | Reports |
|-------------|---------|
|             |         |

Maintenance History Report Record of logged maintenance

Periodic Scheduled Maint Due

Report Record of upcoming scheduled maintenance

#### Trip, Stop, Location Reports ~

Asset History Report Details of each event that occurred for assets over a date range

Driver Scorecard Detail Report Driver Scorecard Detail Report over a date range

Driver Scorecard Summary Report Driver Scorecard Summary Report over a date range

Fuel Efficiency Detail View Fuel efficiency over a date range by asset

Fuel Efficiency Summary View Fuel efficiency over a date range by group

Input Usage Detail Details for each instance of input usage over a date range

Input Usage Summary Input usage data aggregated over a date range

Location Activity Asset List Vehicles that have been to a location during a date range

Location Activity Event Details Events that occurred in a location

Operator Performance Detail View Operator performance metrics for

**Operator Performance** a date range

Distance traveled in each state by asset

View Distance traveled in each state for

State Mileage Vehicle Summary Report Distance traveled by each asset by state over a date range

Stop Detail View Data for each stop event by assets/operators/routes

Stop event data for each asset/operator/route over a date range

Trip Detail View Data for each trip by assets/operators

during a date range

each day

Operator performance metrics over

Summary View

State Mileage Detail View

State Mileage State Summary

all assets in group

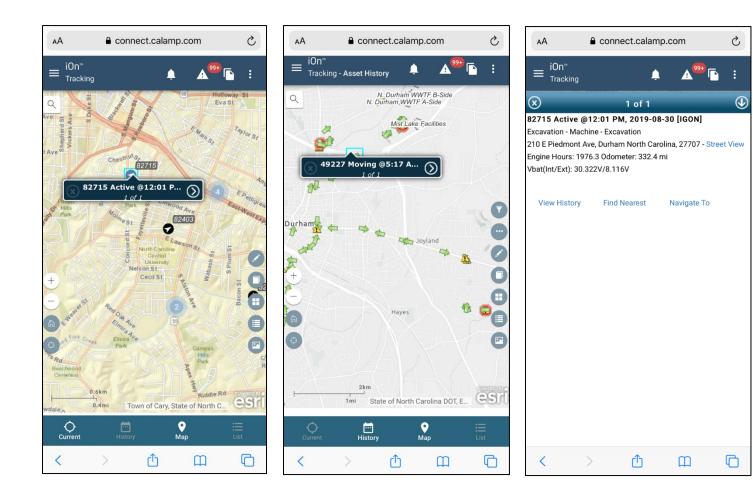
Stop Summary View

# Mobile App- Mobile Device Compatible

The standard CalAmp iOn Telematics application can be accessed in any web browser including mobile phones and tablets.

Using the latest web programming technology (HTML5 Javascript) allows the application to automatically configure its menus, buttons, orientation, and font size to be user-friendly and navigated with any mobile device, screen size, or operating system.

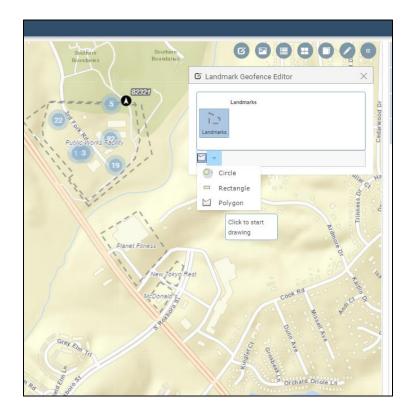
- No cumbersome apps to download and constantly update.
- No compatibility or functionality issues between operating systems or device types.
- Major tracking functions of the system on any mobile device.



## **Geo-Fencing**

The CalAmp iOn Telematics Solution allows the user to set geo-fences on the map display. The geo-fences will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Geo-fences can be created as polygons or a configurable radius from a specific point, as well as created from existing boundaries, landmarks or zones within your GIS.

|         | Free Freets            |   |       |   |         |      |            |                      |        | GeoFence Events   |          | T        |
|---------|------------------------|---|-------|---|---------|------|------------|----------------------|--------|---|----------|----------|
| eo<br>J | oFence Events<br>Group | = | Asset | = | Туре 🔳  |      | Landmark = |                      | Time = | Exited - PWOC<br>82149   10/10/2019, 4:34:08 PM<br>Active | <b>A</b> | ns       |
|         | Large Meter Testing    |   | 82149 |   | Exited  | PWOC |            | 2019-10-10, 04:34 PM |        | Entered - PWOC  |          |          |
| 1       | WSM Mechanic Shop      |   | 82201 |   | Entered | PWOC |            | 2019-10-10, 04:31 PM |        | 82201   10/10/2019, 4:31:52 PM<br>Active                  | ▲        |          |
|         | WSM Mechanic Shop      |   | 82201 |   | Exited  | PWOC |            | 2019-10-10, 04:03 PM |        | Exited - PWOC<br>82201   10/10/2019, 4:03:50 PM           |          |          |
| 1       | Excavation             |   | 82849 |   | Entered | PWOC |            | 2019-10-10, 03:34 PM |        | Active  | A<br>C   |          |
| ]       | Excervation            |   | 82845 |   | Entered | PWOC |            | 2019-10-10, 03:21 PM |        | No  |          | A        |
| 1       | Meter Services         |   | 82124 |   | Entered | PWOC |            | 2019-10-10, 03:16 PM |        | No  |          | <b>A</b> |
| 1       | Meter Services         |   | 82124 |   | Exited  | PWOC |            | 2019-10-10, 03:12 PM |        | No  |          | <b>A</b> |
| 1       | Excavation             |   | 82250 |   | Entered | PWOC |            | 2019-10-10, 02:52 PM |        | No  |          | ▲        |
|         | Excevation             |   | 82342 |   | Entered | PWOC |            | 2019-10-10, 02:50 PM |        | No  |          | ▲        |
| ב       | Excevation             |   | 82405 |   | Entered | PWOC |            | 2019-10-10, 02:50 PM |        | No  |          | <b>A</b> |



# **Real-Time Alerts**

The CalAmp iOn Telematics system allows authorized administrators extensive control over system features including alerts and alarms. The system can be configured to notify selected users when specific events occur with any of the vehicles. This includes geofences, idle, panic buttons, speeding, harsh driving, etc. Notifications can be sent as an email, SMS, or to the alert screen on the software.

|             | -     |       |                           |                      |   | -        |                              |         |
|-------------|-------|-------|---------------------------|----------------------|---|----------|------------------------------|---------|
|             | Group | Asset | ≡ Alert                   | ≡ Time               | = | Severity | ■ Acknowledged \(\approx\) = | Actions |
| Developme   | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 07:57 PM |   | LOW      | No                           | A       |
| ] Developme | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 07:57 PM |   | LOW      | No                           | A       |
| Developme   | nt    | MRH   | MRH Office Geofence Alert | 2018-09-16, 07:02 PM |   | LOW      | No                           | A       |
| Developme   | nt    | MRH   | MRH Office Geofence Alert | 2018-09-16, 07:02 PM |   | LOW      | No                           |         |
| ] Developme | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 07:01 PM |   | LOW      | No                           |         |
| ] Developme | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 07:01 PM |   | LOW      | No                           | ▲       |
| Developme   | nt    | MRH   | MRH Office Geofence Alert | 2018-09-16, 11:04 AM |   | LOW      | No                           | ▲       |
| Developme   | nt    | MRH   | MRH Office Geofence Alert | 2018-09-16, 11:04 AM |   | LOW      | No                           |         |
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| Developme   | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 11:01 AM |   | LOW      | No                           | ▲       |
| ] Developme | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 10:38 AM |   | LOW      | No                           | ▲       |
| ] Developme | nt    | MRH   | MRH Ignition On Alert     | 2018-09-16, 10:38 AM |   | LOW      | No                           |         |
| Developme   | nt    | MRH   | MRH Office Geofence Alert | 2018-09-16, 09:38 AM |   | LOW      | No                           | ▲       |
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# Esri GIS Mapping

The CalAmp iOn Telematics mapping application is compatible with Esri ArcGIS Server, the mapping and GIS engine from Esri, the largest GIS software vendor in the world, and a pioneer of the technology. Their systems are in use throughout the world by utilities, governments, and large companies, in thousands of applications, which rely on analysis of spatially referenced data.



# Using YOUR Map Data

The CalAmp iOn Telematics system can use virtually any type of map data, and we provide updated worldwide maps, but our software can overlay our AVL information on your own Esri GIS maps WITHIN our application. CalAmp allows you to utilize your existing investment of time and labor that went into your Esri map data. The CalAmp iOn Telematics system displays real-time vehicle location and status data in relation to the infrastructure, assets, boundaries, updates, routes, parcels, landmarks, and other critical elements of your constantly changing GIS map data. CalAmp has extensive experience working with Esri data and environments in all forms (.shp files, SDE, etc.). As an option,

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| CSC         999997672         2018 64:13.103.42 MPM         Begin Speeding         SPEED         VA267, Vienna Virginia, 22182         Towed         WS         Vasc/Mate/Model           CSC         999997672         2018 66:13, 103.42 OPM         Bathey Power         BPMLP         603 NEmwood 51, Anahem California, 92805         Parked         0         Desixet           CSC         99999767474         2018-06:13, 103.42 OPM         Ignition Off         IOGEF         Unmand Street, Brockton Massachusetts, 02302         Towed         0         Name IDI         AOTest, 06 (00391)           CSC         9999987474         2018-06:13, 103.42 OPM         Ignition Off         IOGEF         Towed Street, Brockton Massachusetts, 02302         Towed         0         Name IDI         AOTest, 06 (00391)           CSC         9999987474         2018-06:13, 103.24 OPM         Ignition Dim         IODEF         Towed Street, Blacegin Inversion Street, Blacegin Inversin Street, Blacegin Inversion Street, Blacegin Inve   | <sup>K</sup> ashine az<br><sup>K</sup> ashine az<br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u>asser</u><br><u></u> | Asset 1 =<br>9999987651  | 2018-11-09, 11:13:50 PM  | Ignition Off   | IGOFF  | V 2014 11<br>V 2014 10<br>City of Tormace, Barries of La<br>Address   | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wednesday_Rou<br>Thursday_Rou<br>fic<br>E, Garmin, INCREMEN<br>Status =<br>Parked   | outes<br>tee<br>NT P NCA USCS COSTO<br>Speed (GPS<br>0  | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status   | BJB-Gray (3539)<br>Vehicle<br>Enabled   |
| CSC         9999987673         2018-06-13, 10.34-20 PM         Battery Power _         BPWLP         600 N Emwood SL Anaheim California, 92805         Parked         0         Deloce           CSC         9999987674         2018-06-13, 10.34-20 PM         Battery Power _         BPWLP         600 N Emwood SL Anaheim California, 92805         Parked         0         Deloce           CSC         9999987674         2018-06-13, 10.34-20 PM         Ignition Off         IGOFF         Unnamed Street, Brockton Massachusetts, 02302         Towed         0         Name [D0]         AOTest_06 [030391]           CSC         9809887475         2018-06-13, 10.32-45 PM         Immition Dm         ICOM         7/Vir Antonio dt Bacowster, Million 1 comburstile, 2         Inc.         n         Type         Imu3030           CSC         9809887475         2018-06-13, 10.32-45 PM         Immition Dm         ICOM         7/Vir Antonio dt Bacowster, Million 1 comburstile, 2         Inc.         n         Type         Imu3030   | Калария 52<br>(4-37 соон<br>Group =<br>A001<br>A001   | Asset 7=<br>9999987651<br>9999987652   | 2018-11-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM   | Ignition Off   | IGOFF<br>IGON  | A Addess<br>Unamed Street, Brockton Massachusetts. 02302<br>7 Via Antonio da Recanate, Miano Lombarda, 2  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wednesday, Ru<br>Thureday, Rou<br>fic<br>Carmin, INCREMEN<br>Status =<br>Parked<br>Idle   | AVT P NGA USCS COST<br>Speed (GPS<br>0<br>0   | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status<br>Install Date   | BJB-Gray (3539)<br>Vehicle<br>Enabled   |
| CSC         9999987674         2018-06-13, 10:38:05 PM         Ignition Off         IGOFF         Unnamed Street, Brockton Massachusetts, 02302         Towed         0         Name [D]         AOTest, 06 [30391]           CSC         9009087675         2018-06-13, 10:38:05 PM         Ignition Off         IGOFF         Unnamed Street, Brockton Massachusetts, 02302         Towed         0         Name [D]         AOTest, 06 [30391]           CSC         9005087675         2018-06-13, 10:38:05 PM         Ignition Off         IGOFF         Unnamed Street, Brockton Massachusetts, 02302         Towed         0         Name [D]         AOTest, 06 [30391]           CSC         9005087675         2018-06-13         10:00 M         7/07 Antonio dis Decomber Marco         Esi         4562/175148  | Kashiya ay<br>(4.37 soor<br>Group ≡<br>A001<br>A001<br>CSC  | Asset 1=<br>9999967651<br>9999967652<br>9999967671   | 2018-11-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM<br>2018-06-13, 10:34:59 PM  | Ignition Off<br>Ignition On<br>Begin Speeding  | IGOFF<br>IGON<br>SPEED   | A 2014 BI<br>V 2014 BI  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wednesday, Rr Thursday, Rou fic  C, Garmin, INCREMEN Status Parked Idle Towed   | outes<br>tes<br>WTP NGA USOS COSTI<br>Speed (GPS<br>0<br>0<br>0<br>0<br>0<br>W 80             | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status<br>Install Date<br>License, State   | BJB-Gray (3659)<br>Vehicle<br>Enabled<br>03/03/17   |
| CSC         000000070,75         00110-01 (1-3) (2-5) (2-1)         000000000000000000000000000000000000   | Croup =<br>A001<br>A001<br>CSC<br>CSC   | Asset 1 =<br>9999987651<br>9999987652<br>9999987671<br>9999987672  | 2018-11-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM<br>2018-06-13, 10:34:59 PM<br>2018-06-13, 10:34:40 PM   | Ignition Off<br>Ignition On<br>Begin Speeding<br>Begin Speeding                                  | IGOFF<br>IGON<br>SPEED<br>SPEED  | Addes<br>Unname Street Rocking Market (2022)<br>7 Via Antonio da Recanate, Milano Lombardia, 2.<br>Via 267, Vienna Virginia, 22182  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wedneeday, Rav<br>Thursday, Rav<br>fic<br>E, Garmin, INCREMEN<br>Status =<br>Parked<br>Idle<br>Towed<br>Towed                   | vrr P. NGA. USCS. C.S.M.<br>Speed (GPS<br>0<br>0<br>W 80<br>W 58                              | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status<br>Install Date<br>License, State<br>Year/Make/Mod                              | BJB-Gray (3659)<br>Vehicle<br>Enabled<br>03/03/17   |
| CSP 0000087475 2015/04.13 10.32.45.5M Institute On UGON Z.Via Antonio As Reconstate Allano I unified On ESN 4552/175148  | Croup =<br>A001<br>A001<br>CSC<br>CSC   | Asset 1 =<br>9999987651<br>9999987652<br>9999987671<br>9999987672  | 2018-11-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM<br>2018-06-13, 10:34:59 PM<br>2018-06-13, 10:34:40 PM   | Ignition Off<br>Ignition On<br>Begin Speeding<br>Begin Speeding                                  | IGOFF<br>IGON<br>SPEED<br>SPEED  | Addes<br>Unname Street Rocking Market (2022)<br>7 Via Antonio da Recanate, Milano Lombardia, 2.<br>Via 267, Vienna Virginia, 22182  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wedneeday, Rav<br>Thursday, Rav<br>fic<br>E, Garmin, INCREMEN<br>Status =<br>Parked<br>Idle<br>Towed<br>Towed                   | vrr P. NGA. USCS. C.S.M.<br>Speed (GPS<br>0<br>0<br>W 80<br>W 58                              | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status<br>Install Date<br>License, State<br>Year/Make/Mod<br>VIN                       | BJB-Gray (3559)<br>Vehicle<br>Enabled<br>03/03/17   |
| ESN 4562175148   | Croup ≡<br>A001<br>A001<br>CSC<br>CSC   | Asset <b>†=</b><br>999997651<br>999997652<br>999997672<br>999997672<br>999997672   | 2018-01-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM<br>2018-06-13, 10:34:59 PM<br>2018-06-13, 10:34:40 PM<br>2018-06-13, 10:34:40 PM  | Ignition Off<br>Ignition On<br>Begin Speeding<br>Begin Speeding<br>Battery Power                 | IGOFF<br>IGON<br>SPEED<br>SPEED<br>BPWUP   | A 2014 Al<br>V 2014 Al  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wedneeday, Rav<br>Thureday, Rav<br>fic<br>E, Garmin, INCREMEN<br>Status =<br>Parked<br>Idle<br>Towed<br>Towed<br>Parked         | oxites<br>tee<br>YFP NGA USOS<br>0<br>0<br>W 80<br>W 90<br>W 90<br>0<br>V 99<br>0             | Additional Info<br>Asset<br>Name [ID]<br>Description<br>Type<br>Category<br>Status<br>Install Date<br>License, Stale<br>Year/Make/Mod<br>VIN<br>Desice             | BJB-Gray (3559)<br>Vehicle<br>Enabled<br>03/03/17<br>Ref  |
|  | Croup ≡<br>A001<br>A001<br>CSC<br>CSC<br>CSC  | Asset *=<br>9999967651<br>9999967652<br>9999987672<br>9999987672<br>9999987672   | 2018-01-09, 11:13:50 PM<br>2018-08-30, 07:17:13 PM<br>2018-06-13, 10:34:59 PM<br>2018-06-13, 10:34:40 PM<br>2018-06-13, 10:34:40 PM<br>2018-06-13, 10:34:20 PM   | Ignition Off<br>Ignition On<br>Begin Speeding<br>Begin Speeding<br>Battery Power<br>Ignition Off | IGOFF<br>IGON<br>SPEED<br>SPEED<br>BPWUP<br>IGOFF  | N. 2014 Bit     Dig of Tommes, Barras of U       N. 2014 Bit     Dig of Tommes, Barras of U       Dig of Tommes, Barras of U     Dig of Tommes, Barras of U       O'La Artonio da Recanate. Milano Lombardia. 2.     Dig of Tommes, Barras of U       VA 267, Vienna Virginia, 22182     VA 267, Vienna Virginia, 22182       VA 267, Vienna Virginia, 22182     Dig of Dig of U       VA 267, Vienna Virginia, 22182     Dig of Dig  | Traff<br>and Management, Esr. HERE<br>Landmark E<br>Brockton | Wedneaday,Rx<br>▼ Thursday,Rour<br>fic<br>E Garmen, INCREMEN<br>Status ■<br>Parked<br>Idle<br>Towed<br>Parked<br>Towed<br>Towed | outes<br>tee<br>YIT P NAA USS CSTI<br>Speed (GPS_<br>0<br>W 80<br>W 90<br>W 90<br>0<br>0<br>0 | Additional Info<br>Asset<br>Name (ID)<br>Description<br>Type<br>Category<br>Status<br>Install Date<br>License, State<br>Vear/Make/Mod<br>VIN<br>Dence<br>Name (ID) | BJB-Gray (3530)           Vehicle           Enabled           03/03/17           tel           AOTest, 06 (30391) |

CalAmp can actually access your GIS map data in real time via Map Services.

Example Zone and Turn by Turn Route Overlays

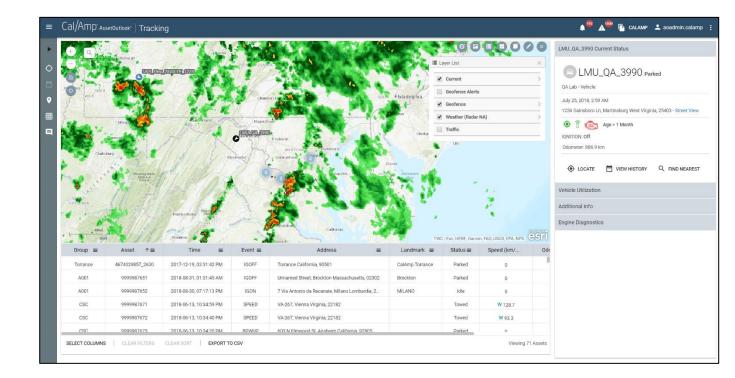
# **Exchanging Data with GIS**

In addition to bringing your GIS data into our AVL application in real-time, we can also provide AVL data outward to your GIS, or any Esri GIS based application using a variety of interface protocols such as Map Services and Esri GeoEvent Server.

# **External Data Overlays**

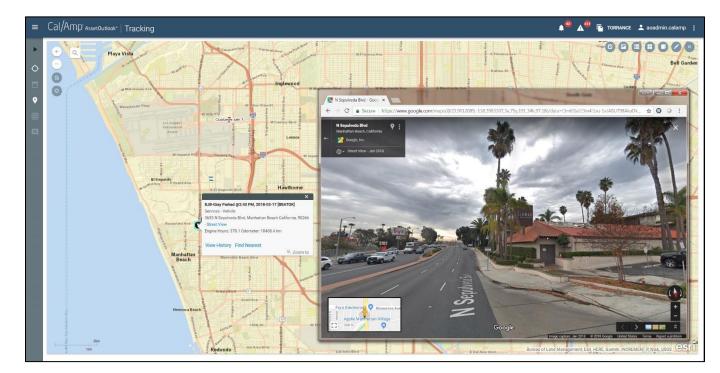
Because of our powerful universally used Esri GIS mapping technology, we can display external data from other map data sources as an option. Data can come from your own GIS sources or external sources and used as a layer in our AVL mapping. Some examples of these sources/feeds are:

- Real-Time Weather
- Real-Time Radar
- Real-Time Traffic



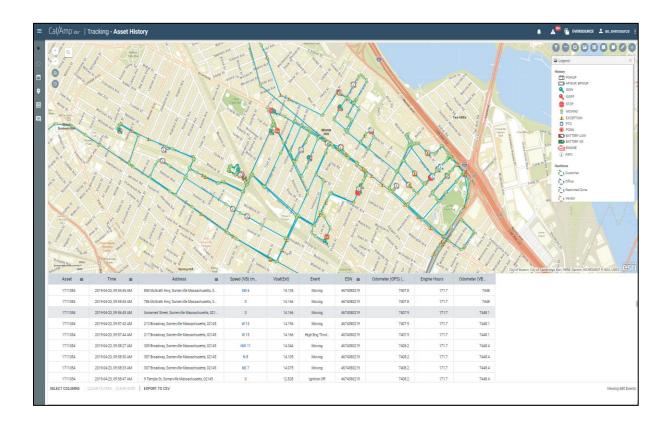
# **Google Maps Street View Tool**

The CalAmp iOn Telematics system has a feature that leverages the highly useful Google Maps Street View tool from the CalAmp iOn Telematics system interface. This CalAmp Google Street View Tool allows the user to click anywhere on the GIS map data within the CalAmp iOn Telematics Map window, and CalAmp iOn Telematics will hyperlink that location to a new pop-up window showing the Google Maps Street View of that exact location. This function allows the CalAmp iOn Telematics user to see the typical real world surroundings of a specific place from their GIS. The Google Maps Street View shows images of the area recently captured (not real-time) by Google's mobile cameras. It allows the users to see things like buildings, road signs, lanes, businesses and other permanent structures that exist at that location that their GIS data does not have.



# Historical Breadcrumb Replay Feature

The CalAmp iOn Telematics system allows you to see a historical breadcrumb and replay of any portion of a vehicle, or group of vehicles, activity history. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles' movement and behavior including location, device activities, alerts, status changes, events, etc. Each breadcrumb icon represents a vehicle position/event and all its underlying data including address, direction, speed, and status. Breadcrumb icons can represent various statuses and events, such as ignition off/on, or a device is activated (broom, plow, armature, PTO, etc.).



# **Report Examples**

| Cal/Amp <sup>*</sup> AssetOutlook*   Repo  |   |  |  |  |   |  |              |                                 |   |                           |                        |   |                            |                                   |
|--|---|--|--|--|---|--|--------------|---------------------------------|---|---------------------------|------------------------|---|----------------------------|-----------------------------------|
| © Options  | Vehicle Daily View  |  | 0-17 at 19:26:47   |  |   |  |              |                                 |   |                           |                        |   |                            |                                   |
| Assets   | B. 4 4 0  |  |  |  |   |  |              |                                 |   |                           |                        | - + 100%  | <ul> <li>search</li> </ul> | h report Q +                      |
|  | Vehicle Daily   | View<br>00 - To Date: 2018-09-16   | 33.53.50   |  |   |  |              |                                 |   |                           |                        |   |                            |                                   |
| Available: 10 Selected: 1 Search list Q  | Group Name  | Date   | Asset Name   | Asset Type   | Asset Category Di   | istance Driven Tot<br>(Miles) Tot                                | al Stops Eng | jine On Time                    | Total Idle Time Id                            | e % of Engine             | Initial On Time        | Stomp Last Off  | Time Stamp                 | Asset Time Zor                    |
| BIB-Grav   |   |  |  |  | Asset Category  |  | ai otopa     | (Hrs)                           | (Hrs)   | Time                      | initial on Time.       | Stamp Last On   | Time stamp                 |                                   |
| BIB-White  | Development   | 2018-09-10   | MRH  | Vehicle  |   | 0.0  | O            | 0.0                             | 0.0   | 0.0                       |                        |   |                            | America/Los_Ang                   |
| BJB_TAN<br>BNCH  | Development   | 2018-09-11   | MRH  | Vehicle  |   | 4.2  | 4            | 0.2                             | 0.1   |                           | 2018-09-11 12:24       |   |                            | America/Los_Ang                   |
| DS-Tech  | Development   | 2018-09-12   | MRH  | Vehicle  |   | 87.6   | 4            | 2.5                             | 0.5   |                           | 2018-09-12 11:58       |   | 2 08:50:40 PM              |                                   |
| KCT<br>LMU3640_1918  | Development   | 2018-09-13   | MRH  | Vehicle  |   | 91.7   | 4            | 1.8                             | 0.3   |                           | 2018-09-13 11:23       |   |                            | America/Los_Ang                   |
| MRH<br>RC-Eco  | Development   | 2018-09-14   | MRH  | Vehicle  |   | 0.0  | 0            | 0.0                             | 0.0   |                           | 2018-09-14 07:34       |   |                            | America/Los_Ang                   |
| RG-ECO<br>RG-Honda   | Development   | 2018-09-15   | MRH  | Vehicle  |   | 3.9  | 2            | 0.2                             | 0.0   | 27.6                      | 2018-09-15 06:52       |   |                            | America/Los_Ang                   |
| ✓ All X None 🖾 Invert  | Development   | 2018-09-16   | MRH  | Vehicle  |   | 11.6   | 7            | 0.9                             | 0.5   | 35.9                      | 2018-09-16 09:36       | 5:40 AM 2018-09-1   | 16 08:01:58 PM             | America/Los_Ang                   |
| Include Inactive Assets Cal/Amp <sup>*</sup> Asset0utlook <sup>∞</sup>   Report  | rte   |  |  |  |   |  |              |                                 |   |                           |                        | A <sup>49</sup> 🕞 TORR/   | ANCE 💄 a                   | ioadmin.calamp                    |
| Options  |   |  | 6  |  |   |  |              |                                 |   |                           |                        |   |                            |                                   |
|  | Trip Detail View Data   |  | at 19:41:28 *7   |  |   |  |              |                                 |   |                           |                        | - + 100%  |                            |                                   |
|  |   |  |  |  |   |  |              |                                 |   |                           |                        | - + 100 +   | search                     | report Q •                        |
| Available: 2 Selected: 0 Search list   | Trip Detail View<br>From Date: 2018-09-13 00:00 0   | 0 - To Date: 2018-09-14  | 3-59-69  |  |   |  |              |                                 |   |                           |                        |   |                            |                                   |
| Search list Q  | Group   | Asset Name   | Asset Type   | Asset Categ  | ory Trip  | Start Location   | Starting Lo  |                                 | Starting Landmark<br>Category                 | Start Tim                 | ne                     | Trip End Location   | De                         | estination Landmark               |
| N/A<br>N/A   | Development   | MRH  | Vehicle  |  |   | LSt. S Irena Ave. Los<br>fornia. Redondo Beach.                  | Landh        |                                 | category                                      | 2018-09-13 11:2           | 8:23 AM 87 P           | acifica, Alton Pkwy, O<br>alifornia, Irvine, 92618                              |                            |                                   |
| ✓ All X None 🖾 Invert  | Development   | MRH  | Vehicle  |  | 2050 W 1901   | h St. Gramercy Pl. Los   |              |                                 |   | 2018-09-13 11 2           |                        | alifornia, Irvine, 92618<br>Sacifica, Alton Pkwy, 0<br>alifornia, Irvine, 92618 |                            |                                   |
| - on A more EN invert  | Development   | MRH  | Vehicle  |  | 1-405, 27, Lo   | California. Torrance.<br>Is Angeles. California.                 |              |                                 |   | 2018-09-13 11:4           |                        | alifornia, Irvine, 92615<br>*acifica, Alton Pkwy, 0<br>alifornia, Irvine, 92615 |                            |                                   |
| Names  | Development   | MRH  | Vehicle  |  | Long E  | leach. 90815. US<br>. Orange, California.<br>in Beach, 92647. US |              |                                 |   | 2018-09-13 11:5           |                        | alifornia, Irvine, 92618<br>Pacifica, Alton Pkwy, 0<br>alifornia, Irvine, 92618 |                            |                                   |
| Available: 20 Selected: 1  | Development   | MRH  | Vehicle  |  | 1-405, 4, Ora   | nge. California. Irvine,   |              |                                 |   | 2018-09-13 12:0           | 9-20 DAL 300 S F       | Prospect Ave, S Maria   | Ave. Los                   |                                   |
| Search list Q  | Development   | MRH  | Vehicle  |  | 85 Pacifica   | 92612, US<br>Gateway Blvd. Orange.                               |              |                                 |   |                           | Angele                 | es, California, Redond<br>Prospect Ave, S Maria<br>es, California, Redond       | o Beach,                   |                                   |
| B)B-White  | Development   | MRH  | Vehicle  |  | Californi   | a. Irvine. 92618. US<br>nge. California. Irvine.                 |              |                                 |   |                           |                        | es, California. Redond<br>Prospect Ave, S Maria                                 |                            |                                   |
| Cal/Amp <sup>*</sup> AssetOutlook <sup>*</sup>   Repor   | Development   | MBH  | venicie  |  |   |  |              |                                 |   | 2018-09-13 07:4           | <b>A</b>               |   |                            | aoadmin.calamp                    |
| IRC OPERATOR TYPE<br>MRH OPERATOR TYPE<br>RG OPERATOR TYPE<br>V All X None 🗹 Invert  | Coperator Performance:     Coperator Performance:     Fram Date: 2019-01-15 00:00     First Name Last N     Mark Holzw  | ance Summary<br>00 - To Date: 2018-05-16<br>lame Active<br>Days  | 23.59.59<br>Work Total Total<br>Stops Stops Tir  | Stop Total Idle  | Engine Distar<br>Hours (Mile<br>1h:41m 2                                | ice #Speeding R<br>s) Events<br>(5.1 0                           | Events       | on Hard Brai<br>Event           |   | 10.0                      | e Zone<br>'Los_Angeles | - + 100%  | * searc                    | th report 🔍 💌                     |
| RC OPERATOR TYPE<br>MIN OFBATOR TYPE<br>OF ANI X None E Invert<br>Operator Category<br>Available: 3 Selected: 0<br>Secondary   | B. A P O<br>Operator Performa<br>From Dak. 2016/0-10 0000<br>First Name Last N<br>Mark Holzw  | ance Summary<br>00 - To Date: 2018-06-16<br>Jame Active<br>Days  | View<br>23 59 59<br>Work Total Total<br>Stops Stops Tir  | Stop Total Idle<br>ne Time                                 | Hours (Mile   |  | Events       | Event                           | s Events                                      | 10.0                      | 'Los. Angeles          |   | * searc                    | threport Q +                      |
| RC OPERATOR TYPE<br>MRI O DEBATOR TYPE<br>RO OPERATOR TYPE<br>All X None E Invert<br>Operator Category   | B. A P O<br>Operator Performa<br>From Dak. 2016/0-10 0000<br>First Name Last N<br>Mark Holzw  | ance Summary<br>00 - To Date: 2018-06-16<br>Jame Active<br>Days  | View<br>23 59 59<br>Work Total Total<br>Stops Stops Tir  | Stop Total Idle<br>ne Time                                 | Hours (Mile   |  | Events       | Event                           | s Events                                      | 10.0                      | 'Los. Angeles          |   |                            |                                   |
| RC OPERATOR TYPE<br>MIN OFBATOR TYPE<br>OF ANI X None E Invert<br>Operator Category<br>Available: 3 Selected: 0<br>Secondary   | B. A P O<br>Operator Performa<br>From Dak. 2016/0-10 0000<br>First Name Last N<br>Mark Holzw  | ance Summary<br>30 - To Date: 2018-49-10<br>Name Active<br>Days<br>orth 7.   | View<br>23 59 59<br>Work Total Total<br>Stops Stops Tir  | Stop Total Idle<br>ne Time<br>53m Oh:49m                   | Hours (Mile   |  | Events       | Event                           | s Events                                      | 10.0                      | 'Los. Angeles          |   |                            |                                   |
| AC OPERATOR TYPE<br>MSH OFBATOR TYPE<br>AND OFBATOR TYPE<br>AND AND TYPE<br>Call X None B2 Invert<br>Operator Category<br>Call/AMD()' Asset0utlook*   Repo<br>Copions  | B. A POP  | ance Summary<br>20 - To Date: 2019-09-10<br>hame Active<br>Days<br>orth 7.   | View<br>255959<br>Work Total Total<br>Stops Stops Tir<br>7 16 11h  | Stop Total Idle<br>ne Time<br>53m Oh:49m                   | Hours (Mile   |  | Events       | Event                           | s Events                                      | 10.0                      | 'Los. Angeles          |   | RRANCE                     | aoadmin.calam                     |
| AC OPERATOR TYPE<br>MSH OFBATOR TYPE<br>AND OFBATOR TYPE<br>AND AND TYPE<br>Call X None B2 Invert<br>Operator Category<br>Call/AMD()' Asset0utlook*   Repo<br>Copions  | Coperator Performs     Frem Care 2019 06-18 00 001     Frem Care 2019 06-18 00 001     First Name Last N     Mark Holze  Vehicle Summary View   | ance Summary<br>20 - To Date: 2019-09-10<br>Name Active<br>Days<br>north 7.  | View<br>255959<br>Work Total Total<br>Stops Stops Tir<br>7 16 11h  | Stop Total Idle<br>ne Time<br>53m Oh:49m                   | Hours (Mile   |  | Events       | Event                           | s Events                                      | 10.0                      | 'Los. Angeles          | A <sup>100</sup> To Tos   | RRANCE                     | aoadmin.calam                     |
| RE OPERATOR TYPE<br>MSH OFBATOR TYPE<br>WSH OFBATOR TYPE<br>WAI & None B Invert<br>Operator Category<br>Available: 3 Selected: 0<br>Cal/Amp' Asset0utlook* Repo  | B. • • • • • • • • • • • • • • • • • • •  | ance Summary<br>20-19 Data 2018-20-19<br>lame Active<br>Data<br>orth 7.  | View<br>2009 000 100 100 100 100 100 100 100 100   | Stop Total kile<br>ne Time<br>53m Dh:49m                   | Hours (Mile<br>1h:41m 2   | 5.1 0  | Events       | Event                           | s Events                                      | 1 America/                | Los.Angeles            | A <sup>100</sup> To Tos   | RRANCE                     | aoadmin.calam                     |
| RC OPERATOR TYPE<br>MSH OFBATOR TYPE<br>WSH OFBATOR TYPE<br>W All X Hone & Invert<br>Coperator Category<br>Available: 3 Selected: 0<br>Cal/Amp' Asset0utlook* Repo<br>Options<br>Assets<br>Available: 20 Selected: 20<br>Search Ist. Q   | Coperator Performs Frem Case 201900-100000 Frist Name Last N Mark Holze   Vehicle Summary View      L, 4 0 0  Vehicle Summary View  | ance Summary<br>20-19 Data 2018-20-19<br>lame Active<br>Data<br>orth 7.  | View<br>25555<br>Work Total Total<br>Stops Stops Tir<br>7 16 11h<br>116-09-17 at 20:46:25 47                         | Stop Total Idle<br>ne Time<br>53m Dh.49m                   | Hours (Mile   | 5.1 0  | Events       | Event<br>3                      | s Events                                      | 10.0                      | Los_Angeles            | A <sup>100</sup> To Tos   |                            | aoadmin.calam                     |
| ALC OPERATOR TYPE<br>MICH OPERATOR TYPE<br>AND OPERATOR TYPE<br>AND ADDRESS<br>AND ADDRESS<br>AVAILABLE: 3 Selected: 0<br>Call/AMDP: Asset0utlook* Repo<br>Call/AMDP: Asset0utlook* Repo<br>Coptons<br>Assets<br>Assets<br>Assets<br>Assets<br>Assets<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>Asset5<br>A                               | Coperator Performs From Cate 2019/01/10/000 First Name Last N Mark Holze  | ance Summary<br>20 - 16 Date: 2016-26-10<br>Date: 2016-26-10<br>Date: 2016-26-10<br>Outline The Second Second Second Second<br>View<br>View<br>View  | View 25555 Work Total Stops Total Stops Total 1011   | Stop Total Idle<br>ne Time<br>53m Dh.49m                   | Hours (Mile<br>1h:41m 2<br>Engine On Total In<br>Time Tim               | 5.1 0  | Events       | Event<br>3                      | o Events                                      | Ending Od                 | Los_Angeles            | ▲ <sup>43</sup> ि TOS   |                            | , soadmin.calam<br>rch.report Q = |
| RECOVERATION TYPE<br>MICH ORBATION TYPE<br>MICH ORBATION TYPE<br>All X None E Invert<br>Operator Category<br>Available: 3 Selected: 0<br>Call/AMDP Asset0utlook* Repo<br>Coptons<br>Assets<br>Available: 20 Selected: 20<br>Bach Nat. Q<br>Bach Nat. Q   | Coperator Performs<br>Francises 20190/01/00/01<br>Francises 20190/01/00/01<br>First Name Last N<br>Mark Holzx<br>Vehicle Summary View<br>E - 4 - 0 - 0<br>Francises 2019/01/01<br>Group Name  | ance Summary<br>2- 15 bas: 2019/01-16<br>lame Cays<br>forth 7<br>Data refrected<br>View<br>Asset Name  | View 2009<br>2009 Stops Total Time<br>7 16 11h<br>118-09-17 at 20-96:00 97<br>2019-09 Distant<br>Active Days Distant | Stop Total Idle<br>Time<br>52m 0r.49m<br>Steen Total Stops | Hours (Mile<br>1h:41m 2<br>Engine On Total II<br>Time Time<br>0.0       | 5.1 0  | Events       | Event<br>3                      | S Events 0 Asset Time Zone                    | Ending Od<br>(Mile<br>s 1 | Los_Angeles            | ▲ <sup>43</sup> ि TOS   |                            | , soadmin.calam<br>rch.report Q = |
| AC OPERATOR TYPE<br>MSH OFBATOR TYPE<br>WSH OFBATOR TYPE<br>WSH OFBATOR TYPE<br>WAILADE: 3<br>Operator Category<br>Available: 3<br>Cal/AMD <sup>2</sup> Asset0utlook*<br>Repo<br>Options<br>Assets<br>Available: 20<br>Search Int.<br>Querth Int.<br>Search Int.<br>Querth Int.<br>Quert | Coperator Performs Franches 20190/11 0001 Franches 20190/11 0001 Frist Name Last N Mark Holze  Cfts Vehicle Summary View  Coperator State State Coperator Sta | Ance Summary<br>24 - brans 20140-16<br>Imame Address<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outper<br>Outp | View<br>2009<br>Stop Stop Tim<br>7 16 11h<br>138-09-17 at 20:06:25 47<br>2184-8<br>Active Days Distant               | Stop Total Idle<br>Time<br>S3m 00.49m<br>0.0 0             | Hours (Mile<br>1h:41m 2<br>Engine On Total I<br>Time Time<br>0.0<br>5.8 | S:1 0<br>Bie Avg. Initial On 7<br>0.0                            | Events       | Event<br>3<br>coff Time<br>0 PM | s Events 0 Asset Time Zone America/Los_Angele | Ending Od<br>s 1          | Los. Angeles           | ▲ <sup>43</sup> ि TOS   |                            | , aoadmin.calam<br>rch.report Q   |

CalAmp is happy to offer an in-depth analysis of your organization and provide a comprehensive solution that best meets your needs. Please reach out to me directly for any other information.

Peter Nemeth SE Regional Manager Municipal Government

Cal/Amp<sup>•</sup>

954 907 1493- Mobile PNemeth@CalAmp.com