# Reports

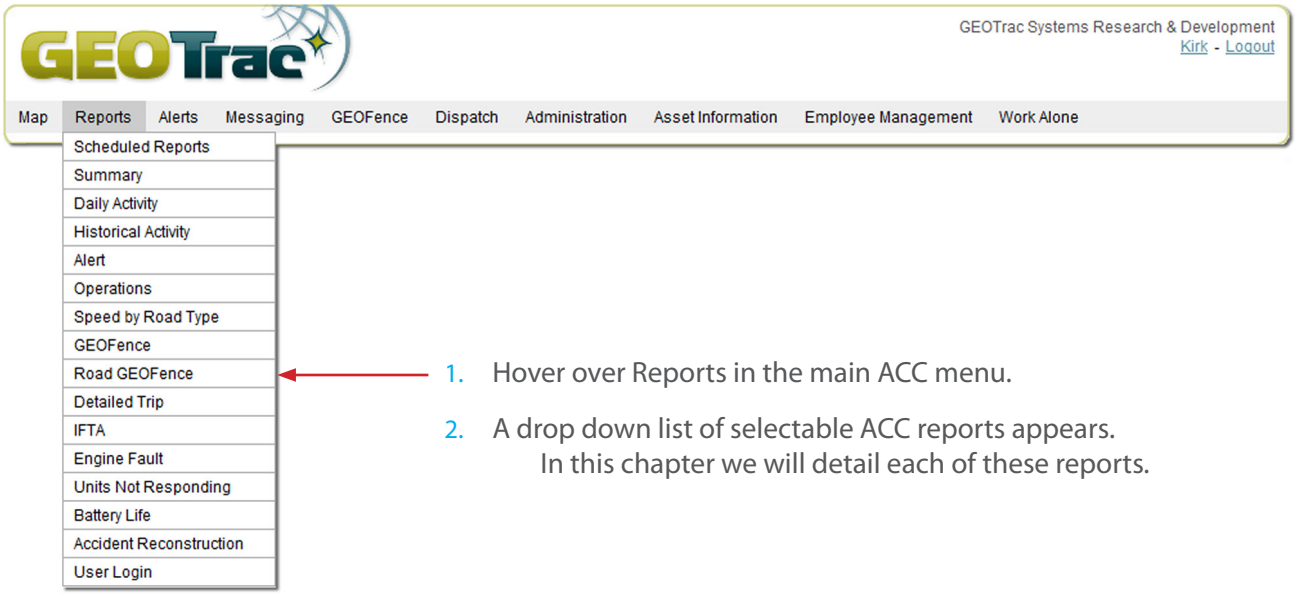
## Introduction

GEOTrac's Asset Control Center provides comprehensive reporting facilities. You can view detailed reports including:

- activity
- accident reconstruction
- idle
- alert
- transit (includes odometer)
- IFTA
- maintenance
- operation (includes Worker's Compensation)

Reports may be printed from the web interface or automatically delivered to your email .

## Getting Started




1. Hover over Reports in the main ACC menu.
2. A drop down list of selectable ACC reports appears.
   In this chapter we will detail each of these reports.

**Save Report:**

1. Select "Report Format" from the drop down list or accept the default report type.
2. Choose "SAVE REPORT" from the dialog box.
   A prompt will be displayed in your browser asking you for a location in which to save the report.

**Delete Report:**

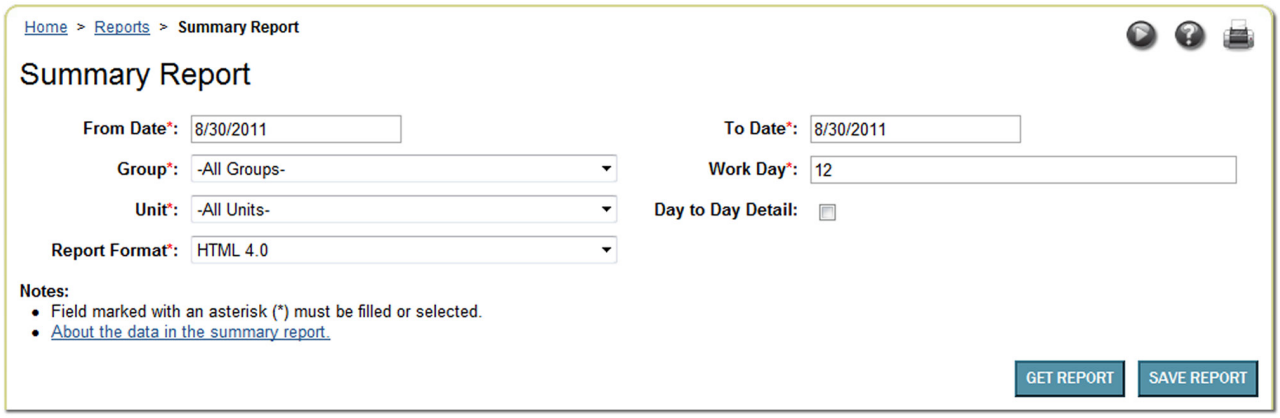
1. Select one or more reports from the grid of existing reports, (reports grid may be empty if no reports exist).
2. Choose "DELETE SELECTED REPORTS".

# Summary Report

**Description:**
Operations and fleet managers can quickly and easily determine the productivity of their entire fleet. Fleet utilization percentages are key performance indicators to determine how well each vehicle or group of vehicles are increasing revenue or decreasing costs. Included in the report is the amount of time a vehicle is operating, idling, driving and parking. Amount of distance travelled for the period is also provided. Important information on safety such as a vehicle's maximum speed and average speed and the number of speeding infractions is critical to overall driving safety. All information is listed by group with subtotals for each report period.

**Get Report:**

1. On the top menu bar, choose "Reports" then "Summary".
   The "Summary Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen in your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span
- Work Day: is the daily 'accepted' (i.e. chosen by branch/company manager) operation hours resulting in a 100% utilization of the vehicle. It is a factor by which the daily operation rate is multiplied to yield a Utilization value. This Work Day incorporates a subjective number of holidays, vehicle repair days, sick days, and downtime days per year for a branch, group, or company
- Day to Day Detail: a more detailed version of this report will be produced when selected
- About the data in the summary report: see what and how data is used to make the Summary Report calculations

## Report Output Sample:

**Summary Report** Page 1 of 1

**GEOTrac Systems Research & Development**

**10/25/2011 12:00:00 am ~ 10/25/2011 11:59:59 pm** **Utilization based on a 12 hrs Work Day**

| Group / Unit# | Vehicle Operation | | | | | Utilization | | | | | | Safety Record | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oper. | Idle | Drive | Park | Tran. | %Util. | %Oper. | %Idle | %Drive | %Park | Av. Dist | Max Speed | Av. Speed | # of Infra. |
| 2 | | | | | | | | | | | | | | |
| 1 | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| 5800U | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| Amr-ST2 | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| Amy | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| Maxima | 0:19:20 | 0:0:9 | 0:19:11 | 23:40:40 | 9 km | 2.69 % | 1.34 % | 0.01 % | 1.33 % | 98.66 % | 9 km | 83 km | 33 km | 0 |
| RyTy440 | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| UNIT112 | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| z123 | 0:0:0 | 0:0:0 | 0:0:0 | 24:0:0 | 0 km | 0.00 % | 0.00 % | 0.00 % | 0.00 % | 100.00 % | 0 km | 0 km | 0 km | 0 |
| 2 Totals | 0:19:20 | 0:0:9 | 0:19:11 | 191:40:40 | 9 km | 0.34 % | 0.17 % | 0.00 % | 0.17 % | 99.83 % | 1.1 km | 83 km | 4.1 km | 0 |

## About the Data in the Summary Report

**Operation Time:** The Operation Hours variable for a vehicle is defined as the total number of hours the engine of the vehicle was running. In other words, it is calculated as the time difference between the Ignition On and Ignition Off messages.

**Idle Time:** The Idle Hours variable is defined as the total number of hours spent while the vehicle is not in motion. Specifically, it is calculated as the time spent while the engine is running but the vehicle is stationary.

**Driving Time:** The Driving Time variable is defined as the total number of hours the vehicle spent in motion. In other words, it is computed by subtracting the idle time from the operation time.

**Park Time:** Park Time is defined as the total number of hours the engine is turned off. As such, it keeps track of how long the vehicle has been parked.

**Transit:** The Transit value is defined as the total distance driven by a vehicle, branch, or fleet, for the selected Date Range.

**Work Day:** The Work Day is defined as the daily 'accepted' (i.e. chosen by branch/company manager) operation hours resulting in a 100% utilization of the vehicle. It is a factor by which the daily operation rate is multiplied to yield a Utilization value. This Work Day incorporates a subjective number of holidays, vehicle repair days, sick days, and downtime days per year for a branch, group, or company.

Work Day Value Calculation (This is to be us only as an example, your variables will be different depending on your company standards):

Assume Employee Typical Work Day:

---

12 hrs / day

### Assume Non Productive Days / Year:

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( holidays ) 28 days
( sick time ) 6 days
( vehicle repair time ) 10 days
( downtime due to no work available) 20 days
( days off) 30 days
or 94 days total non productive days

### Productive Days for Year Calculation:

---

(Total Days / Year) - (Non Productive Days / Year) = Productive Days
365 days - 94 days = 271 days
* therefore at this point we have calculated that in our example that the employee is productive 271 days / year

### Productivity Ratio for Year Calculation:

---

(Day Productive / Total Days per Year) = Productivity Ratio
271 / 365 = .724

### Work Day Hours / Day Calculation:

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Therefore if our employee works 12 hrs / day then
12 * .742 = 8.9 hrs / day
Work Day is 8.9 hrs.

**Utilization:** The Utilization Value provides a look at the utilization rate for any given vehicle, group of vehicles, or an entire fleet of vehicles. It is defined as the total number of Operation Hours divided by the Expected Utilization for the selected Date Range, where the Expected Utilization is the product of the selected Date Range and the Work Day, as follows: Utilization = Operation Hours / (Date Range * Work Day) Note: if a user is running a Summary Report for the period from April 1st 2009 to May 1st 2009 for instance, and unit 101 happens to get equipped with a GEOTrac system on April 15th, then this might impact the Utilization rate for this unit for the selected period, since there would not be any data for this unit prior to its installation on April 15th.

**% Operation:** Every day, an operation percentage is calculated by taking the operation time for the day and dividing it by 24 hours. In the Summary Report, the % Operation variable corresponds to the percentage of the total operation time divided by the entire selected Date Range. While a vehicle is in operation, it is either idling or driving. Therefore, % operation is equal to the sum of %Idle and %Driving: %Oper = %Idle + %Driving Similarly, at any point in time, a vehicle is either in operation or parked. Therefore, the sum of %Operation and % Park should always equal 100%: %Oper + %Park = 100%

**Max Speed:** Max Speed is defined as the highest speed value reported by a vehicle, branch, or fleet, for the selected Date Range.

**Av. Speed:** Av. Speed is the average speed per vehicle, branch, or fleet, for the selected Date Range.

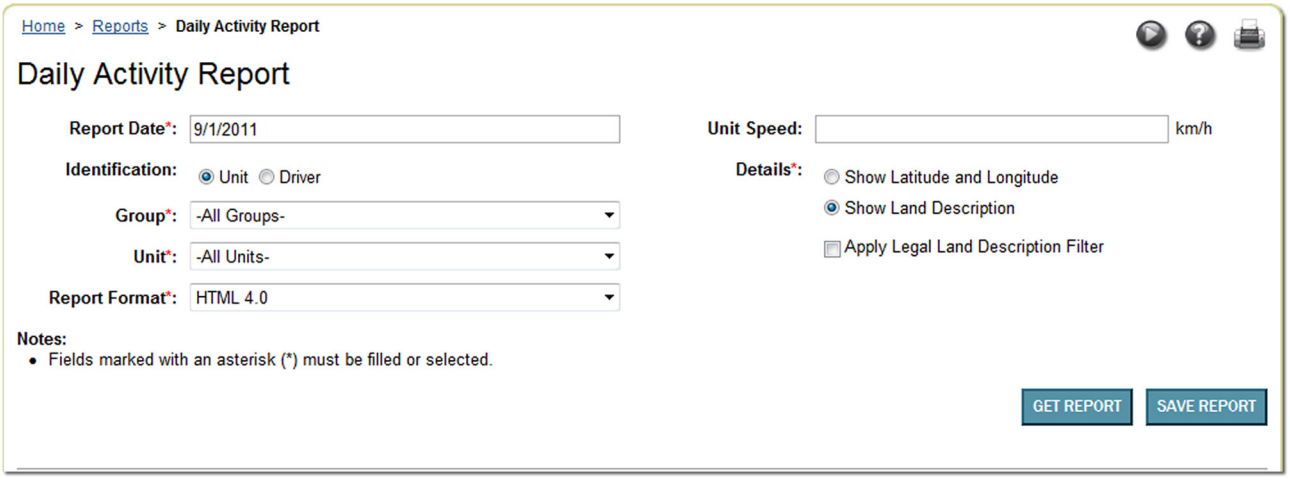
**# of infractions:** This is the total number of speed infractions reported by vehicle, branch, or fleet, for the selected Date Range . It is equivalent to the total number of "Speed Limit Exceeded" messages sent by the GEOTrac modem. In other words, this represents the number of times the speed goes over the SPEED SETTING ON THE MODEM (typically 111km/h) and does NOT represent the number of speed infractions generated by the Speed By Road Type report.

# Daily Activity Report

**Description:**
Daily activity of a vehicle or piece of equipment. Includes: longitude and latitude, start and stop times, speeding alerts, number of mobile data terminal messages and any GEOAlert messages from drivers. The Daily Activity Report provides users with a complete view of all of the messages sent by the vehicle. A user would use this report to understand all of the activity by vehicle. Many of the other reports focus on a specific message type.

**Get Report:**

1. On the top menu bar, choose "Reports" then "Daily Activity".
   The "Daily Activity Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- Report Date: the start of the report time span
- Identification: the report can be filtered by either unit or driver
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- Unit Speed: filter allowing the report to show only units with a speed equal or greater than the input value
- Details: allows report to be filtered to show by Latitude/Longitude or Legal Land Description
- Apply Legal Land Description Filter: see section of this manual Apply Legal Land Description Filter

Report Output Sample:

## Activity Report



**GEOTrac Systems Research & Development**
**10/26/2011 ~ 10/26/2011**

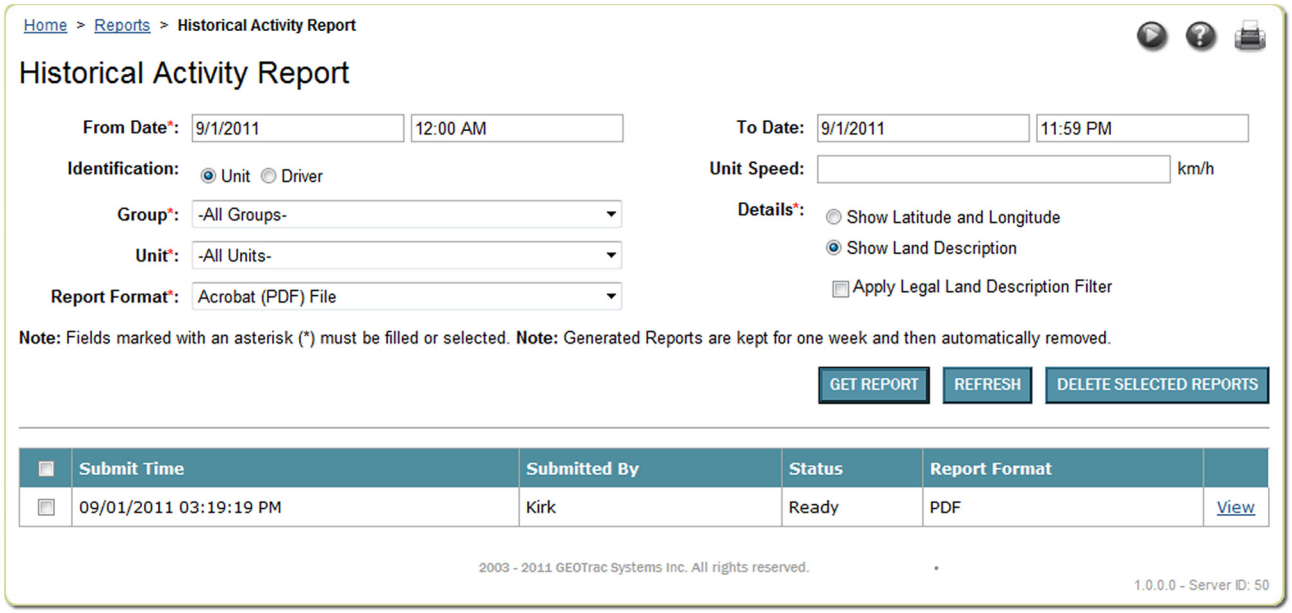
| Unit# | Date | Time | Activity | Speed km/h | Land Desc. |
|---|---|---|---|---|---|
| Maxima | 10/26/2011 | 8:42:23 AM | Ignition On | - | 6-23-24-2W5 |
| **Q7** | | | | | |
| Q7 | 10/26/2011 | 8:15:53 AM | Ignition Off | - | 4-18-24-1W5 |
| Q7 | 10/26/2011 | 8:04:52 AM | No GPS Signal | - | N/A |
| **Sherif** | | | | | |
| Sherif | 10/26/2011 | 12:01:35 PM | No Driver Assigned | - | 10-23-24-2W5 |
| Sherif | 10/26/2011 | 11:59:14 AM | Ignition On | - | 11-23-24-2W5 |

# Historical Activity Report

**Description:**
The Historical Activity Report allows users to set a date range for monitoring the activity of a vehicle over a period of time. Users can begin to see trending of activity for any given vehicle. The standard Daily Activity Report only provides a snapshot of the activity for a vehicle or group of vehicles for one day.

**Get Report:**

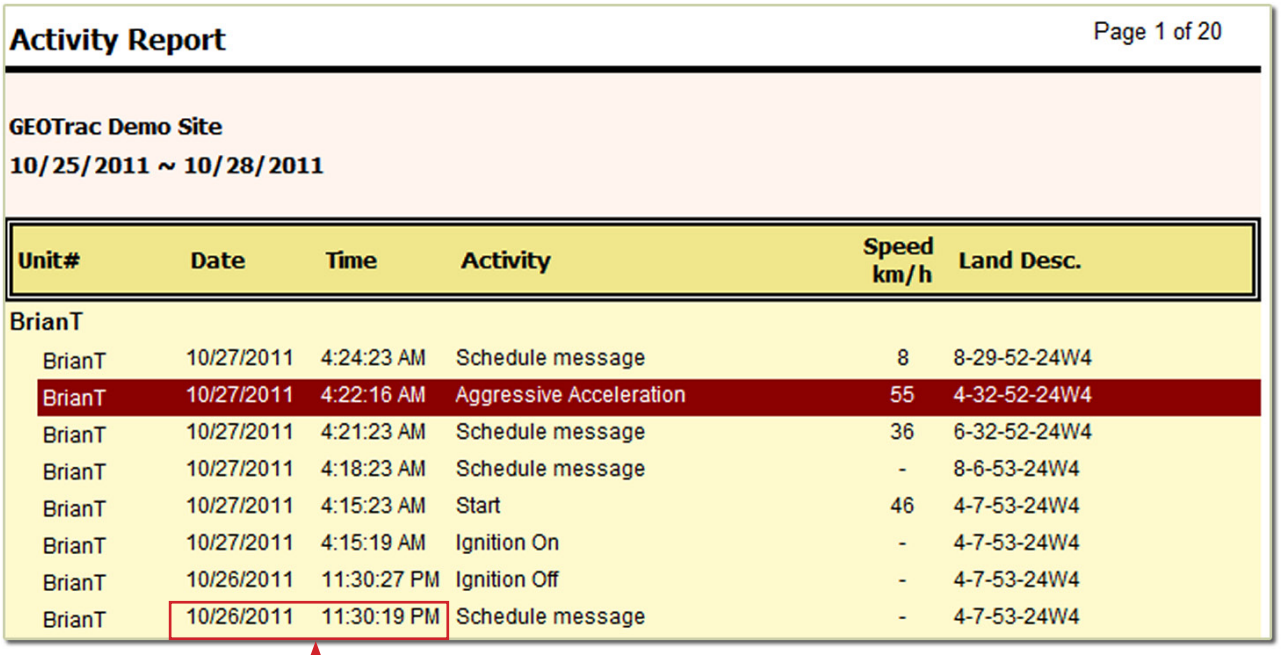
1. On the top menu bar, choose "Reports" then "Historical Activity".
   The "Historical Activity Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span, you may include time in the adjacent field
- Identification: Unit or Driver to report on
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span, you may include time in the adjacent field
- Unit Speed: filter allowing the report to show only units with a speed equal to or greater than the input value
- Details: allows report to be filtered to show by Latitude/Longitude or Legal Land Description
- Apply Legal Land Description Filter: see section of this manual Apply Legal Land Description Filter

Report Output Sample:



**Activity Report** Page 1 of 20

**GEOTrac Demo Site**
**10/25/2011 ~ 10/28/2011**

| Unit# | Date | Time | Activity | Speed km/h | Land Desc. |
|---|---|---|---|---|---|
| BrianT | | | | | |
| BrianT | 10/27/2011 | 4:24:23 AM | Schedule message | 8 | 8-29-52-24W4 |
| BrianT | 10/27/2011 | 4:22:16 AM | Aggressive Acceleration | 55 | 4-32-52-24W4 |
| BrianT | 10/27/2011 | 4:21:23 AM | Schedule message | 36 | 6-32-52-24W4 |
| BrianT | 10/27/2011 | 4:18:23 AM | Schedule message | - | 8-6-53-24W4 |
| BrianT | 10/27/2011 | 4:15:23 AM | Start | 46 | 4-7-53-24W4 |
| BrianT | 10/27/2011 | 4:15:19 AM | Ignition On | - | 4-7-53-24W4 |
| BrianT | 10/26/2011 | 11:30:27 PM | Ignition Off | - | 4-7-53-24W4 |
| BrianT | 10/26/2011 | 11:30:19 PM | Schedule message | - | 4-7-53-24W4 |

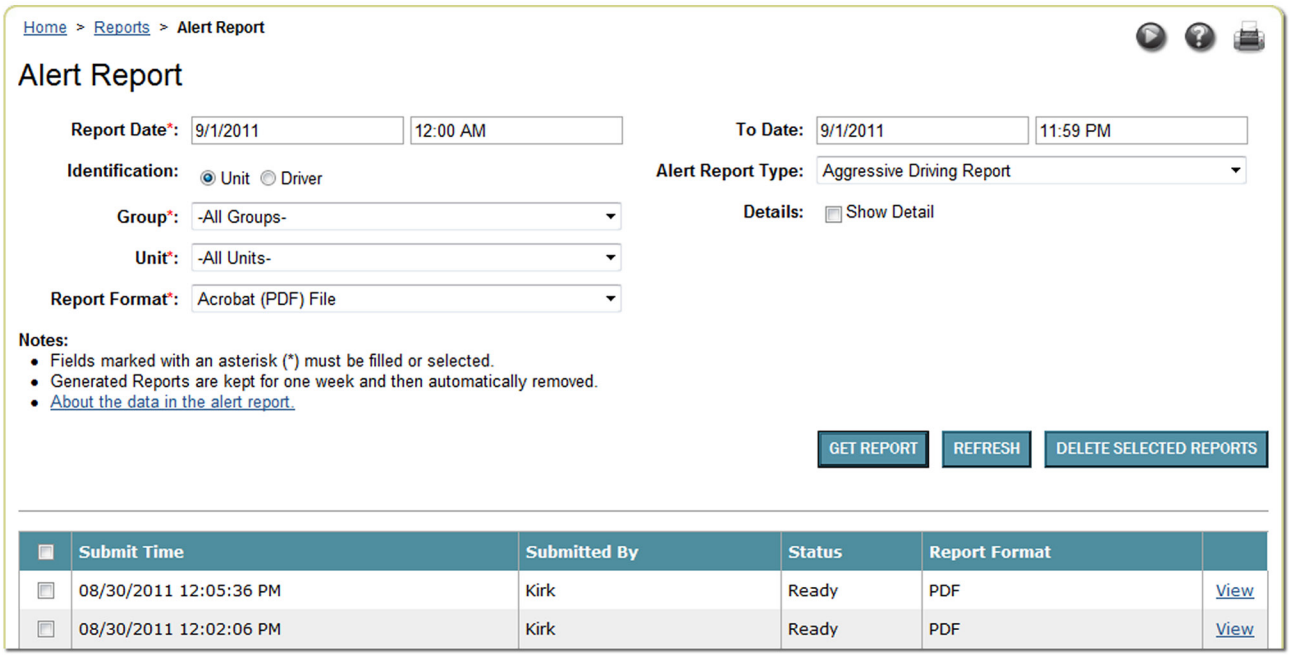
Activity of a vehicle is reported across a specified date range.

# Alert Report

**Description:**
The alert report provides customers with several key indicators or warnings. The "Aggressive Driving" report indicates excessive acceleration. The general "Alert" report summarizes excessive speeding, speed limit exceeded and aggressive acceleration. "GPS Fault" report (formerly Tamper Report), provides speed, LSD and view of where GPS was lost. "Seatbelt" report indicates when the status of the seatbelt has changed and the location. "Speed" report indicates when and where a speed limit was exceeded. "Work Alone" report provides status of GEOAlert from either a personal safety monitor or the expiration of a Out Of Truck Notification. Users sometimes confuse the Alert Report with an Alert Notification. The Alert Report captures and stores Alerts that have been triggered. Users can look at these Alerts after they have occurred. An Alert Notification occurs at the time of the Alert and is sent to a customer contact to action or acknowledge. The administrator of the account will set up alert notifications (GEOAlerts) which are active. The Alert Report will show these GEOAlerts and are passive. See GEOAlert section in this guide for more information.

**Get Report:**

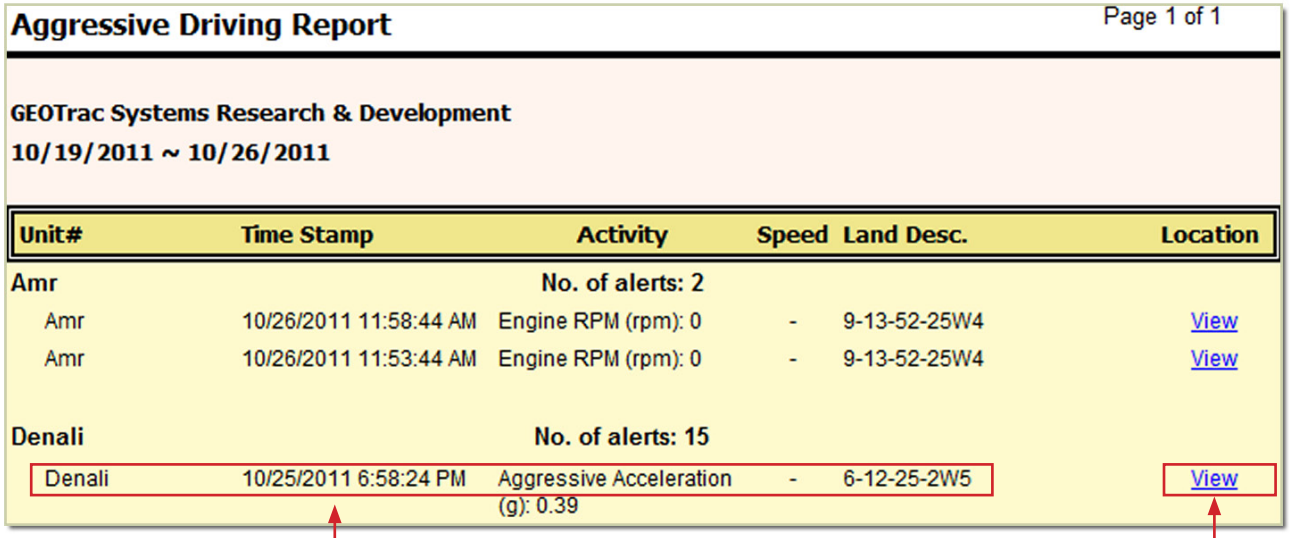
1. On the top menu bar, choose "Reports" then "Alert".
   The "Alert Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- Report Date: the start of the report time span, you may include time in the adjacent field
- Identification: the report can be filtered by either unit or driver
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span, you may include time in the adjacent field
- Alert Report Type: choose a report type here including, Aggressive Driving, Alert Report, GPS Fault, Seatbelt, Speed, Work Alone
- Details: a more detailed version of this report will be produced when selected
- About the data in the alert report: see what and how data is used to make the Alert Report calculations

Report Output Sample:



**Aggressive Driving Report** Page 1 of 1

**GEOTrac Systems Research & Development**
**10/19/2011 ~ 10/26/2011**

| Unit# | Time Stamp | Activity | Speed | Land Desc. | Location |
|---|---|---|---|---|---|
| **Amr** | | **No. of alerts: 2** | | | |
| Amr | 10/26/2011 11:58:44 AM | Engine RPM (rpm): 0 | - | 9-13-52-25W4 | View |
| Amr | 10/26/2011 11:53:44 AM | Engine RPM (rpm): 0 | - | 9-13-52-25W4 | View |
| **Denali** | | **No. of alerts: 15** | | | |
| Denali | 10/25/2011 6:58:24 PM | Aggressive Acceleration (g): 0.39 | - | 6-12-25-2W5 | View |

Details of the aggressive driving.

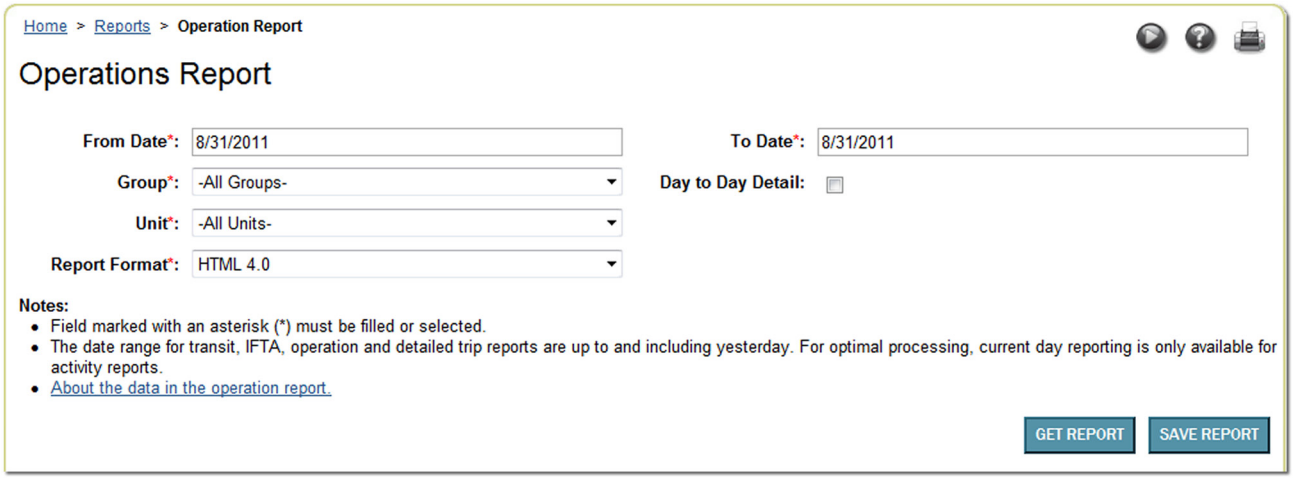
**View:** Clicking here shows where the vehicle was on a map, when it triggered the GEOFence. The GEOFence itself also shows on the map.

# Operations Report

**Description:**
This report is the result of customer demand to provide Operations Time (total time the vehicle is on); Idle Time (time the vehicle is on but not moving); Driving Time (Operations time - Idle Time) all on the same report. This information is critical for fleet managers to monitor fuel consumption from idling and employee work day. Information is provided not only by each vehicle but also by group or branch including subtotals.

**Get Report:**

1. On the top menu bar, choose "Reports" then "Operations".
   The "Operations Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span
- Day to Day Detail: a more detailed version of this report will be produced when selected
- About the data in the operations report: see what and how data is used to make the Operations Report calculations

Report Output Sample:

## Operations Report



**GEOTrac Systems Research & Development**
**10/20/2011 ~ 10/25/2011**

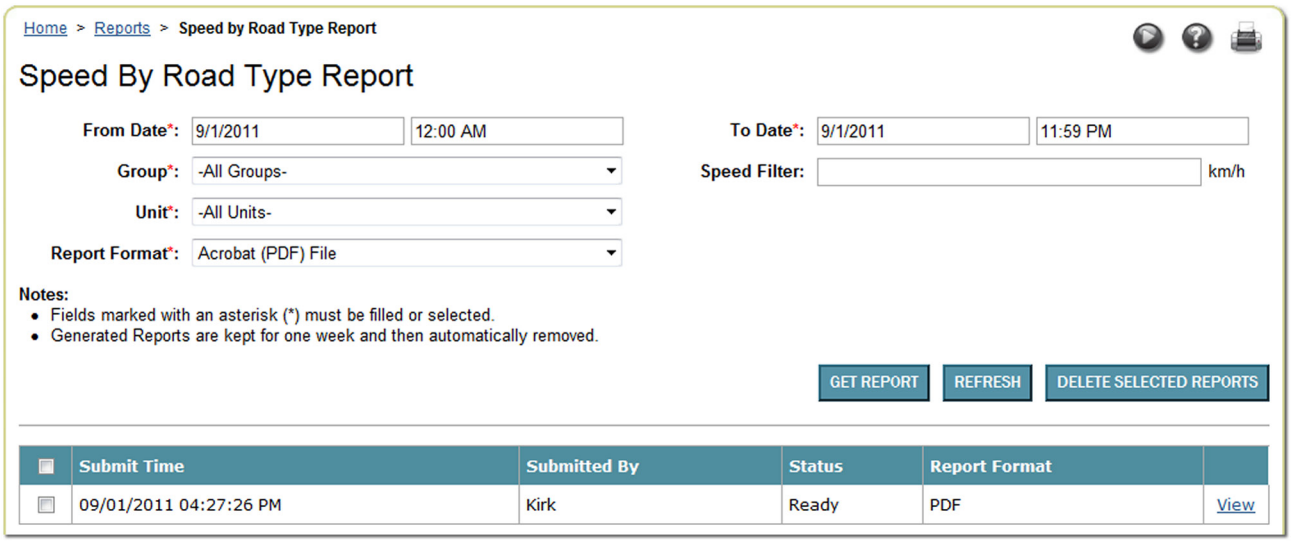
| Group<br>Unit | Operation Time<br>(HH:MM:SS) | Idle Time<br>(HH:MM:SS) | Driving Time<br>(HH:MM:SS) |
|---|---|---|---|
| Cubex | | | |
| Cubex1 | 00:00:00 | 00:00:00 | 00:00:00 |
| Cubex2 | 00:00:00 | 00:00:00 | 00:00:00 |
| Cubex Totals | 00:00:00 | 00:00:00 | 00:00:00 |
| Any | | | |
| demoUnit1 | 00:00:00 | 00:00:00 | 00:00:00 |
| TMurano | 08:07:43 | 00:37:01 | 07:30:42 |
| Any Totals | 08:07:43 | 00:37:01 | 07:30:42 |
| R and D | | | |
| JBell | 00:00:00 | 00:00:00 | 00:00:00 |
| SX-01 | 00:00:00 | 00:00:00 | 00:00:00 |
| R and D Totals | 00:00:00 | 00:00:00 | 00:00:00 |
| **Fleet Totals** | **121:16:30** | **61:18:31** | **59:57:59** |

# Speed by Road Type Report

**Description:**
Speed by Road Type Report is unique to GEOTrac. It allows safety managers to manage driver behavior by monitoring speeds according to the road types their vehicles are driving on. It provides a breakdown by all road types (highways, municipal roads, and lease roads), the set speed, actual speed, and delta between the two. The report allows customers to easily view the exact map location of each speeding message. Determining speed based on road type rather than only posted speed allows customers to set a broader speeding policy such as private lease roads.

**Get Report:**

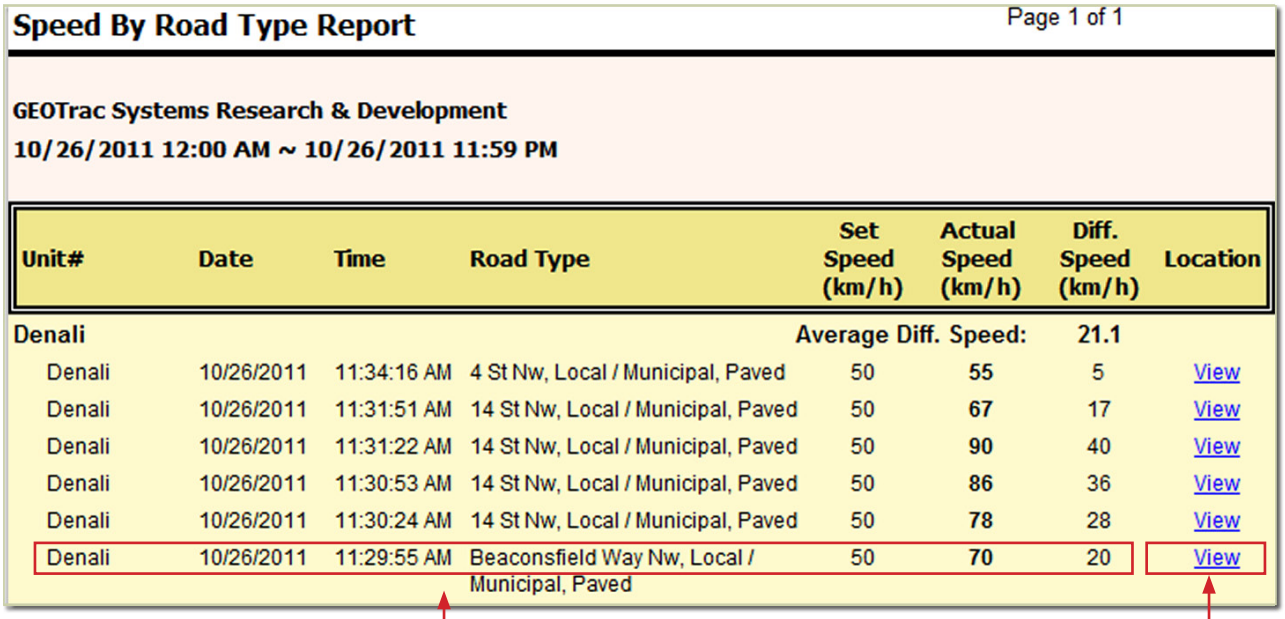
1. On the top menu bar, choose "Reports" then "Speed by Road Type".
   The "Speed By Road Type" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span , you may include time in the adjacent field
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span , you may include time in the adjacent field
- Speed Filter: filter out alerts where the difference between the Set Speed and the Actual Speed is less than the number entered in this field

Report Output Sample:



**Speed By Road Type Report** Page 1 of 1

**GEOTrac Systems Research & Development**

**10/26/2011 12:00 AM ~ 10/26/2011 11:59 PM**

| Unit# | Date | Time | Road Type | Set Speed (km/h) | Actual Speed (km/h) | Diff. Speed (km/h) | Location |
|---|---|---|---|---|---|---|---|
| Denali | | | | Average Diff. Speed: | | 21.1 | |
| Denali | 10/26/2011 | 11:34:16 AM | 4 St Nw, Local / Municipal, Paved | 50 | 55 | 5 | View |
| Denali | 10/26/2011 | 11:31:51 AM | 14 St Nw, Local / Municipal, Paved | 50 | 67 | 17 | View |
| Denali | 10/26/2011 | 11:31:22 AM | 14 St Nw, Local / Municipal, Paved | 50 | 90 | 40 | View |
| Denali | 10/26/2011 | 11:30:53 AM | 14 St Nw, Local / Municipal, Paved | 50 | 86 | 36 | View |
| Denali | 10/26/2011 | 11:30:24 AM | 14 St Nw, Local / Municipal, Paved | 50 | 78 | 28 | View |
| Denali | 10/26/2011 | 11:29:55 AM | Beaconsfield Way Nw, Local / Municipal, Paved | 50 | 70 | 20 | View |

Details of the Speed by Road Type report.

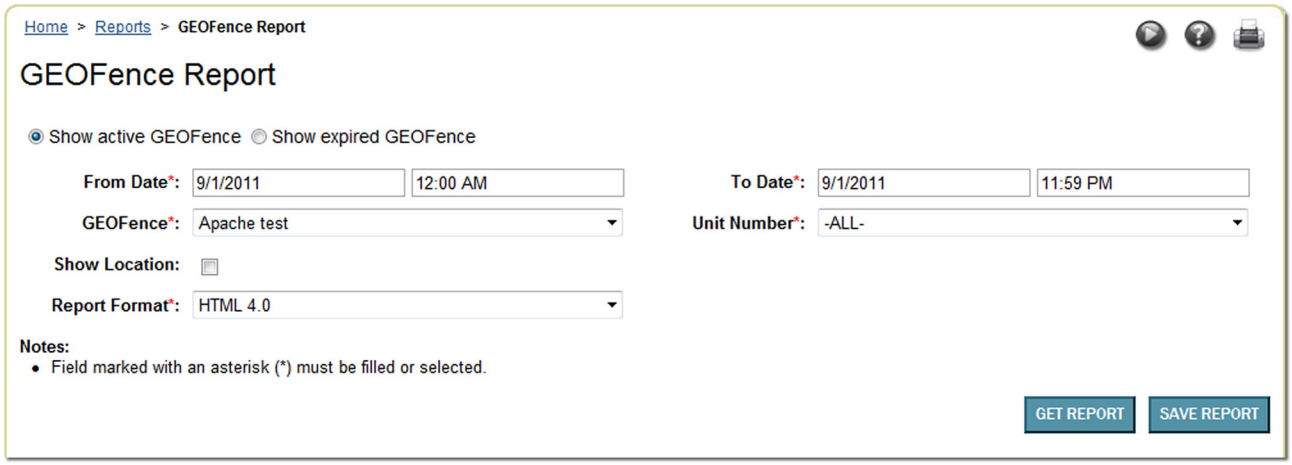
**View:** Clicking here shows where the vehicle was on a map, when it triggered the GEOFence. The GEOFence itself also shows on the map.

# GEOFence Report

**Description:**
The GEOFence Report provides a list of either active or expired GEOFences for a particular date range. The report details the activity of the vehicle within a geofence or outside of a geofenced area. The list includes the name of the geofence, the unit number that is being monitored on that geofence, date, time, activity and finally the activity of the vehicle within the geofence. This report is ideal for location-based billing. It can confirm the location of a vehicle within a work site. Customers may also set working conditions for a particular area. The report will detail the activity within these set conditions.

**Get Report:**

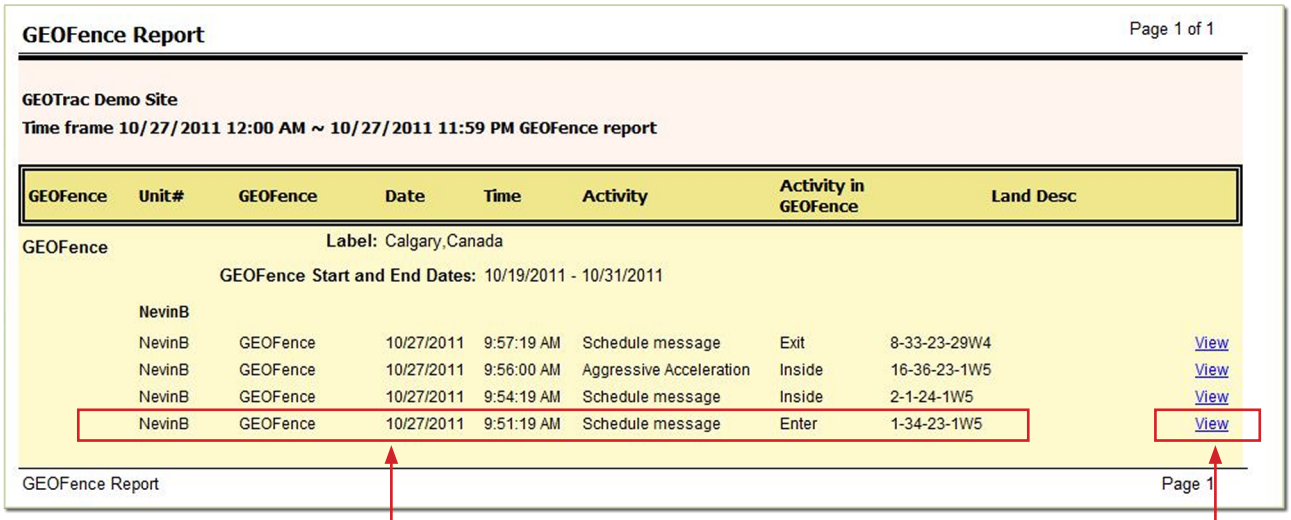
1. On the top menu bar, choose "Reports" then "GEOFence Report".
   The "GEOFence Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- Show active GEOFence | Show expired GEOFence: filter by expired or active GEOFence
- From Date: the start of the report time span , you may include time in the adjacent field
- GEOFence: a virtual perimeter for a real-world geographic area that has been generated within GEOTrac ACC (see GEOFence in this manual)
- Show Location: will add either Lat./Lng. or LSD description to the report output depending on your sub selection within Show Location
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span , you may include time in the adjacent field
- Unit Number: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)

## Report Output Sample:



**GEOFence Report** Page 1 of 1

**GEOTrac Demo Site**

**Time frame 10/27/2011 12:00 AM ~ 10/27/2011 11:59 PM GEOFence report**

| GEOFence | Unit# | GEOFence | Date | Time | Activity | Activity in GEOFence | Land Desc | |
|---|---|---|---|---|---|---|---|---|
| GEOFence | | **Label:** Calgary,Canada | | | | | | |
| | | **GEOFence Start and End Dates:** 10/19/2011 - 10/31/2011 | | | | | | |
| | **NevinB** | | | | | | | |
| | NevinB | GEOFence | 10/27/2011 | 9:57:19 AM | Schedule message | Exit | 8-33-23-29W4 | View |
| | NevinB | GEOFence | 10/27/2011 | 9:56:00 AM | Aggressive Acceleration | Inside | 16-36-23-1W5 | View |
| | NevinB | GEOFence | 10/27/2011 | 9:54:19 AM | Schedule message | Inside | 2-1-24-1W5 | View |
| | NevinB | GEOFence | 10/27/2011 | 9:51:19 AM | Schedule message | Enter | 1-34-23-1W5 | View |

GEOFence Report Page 1

Details of the GEOFence report.

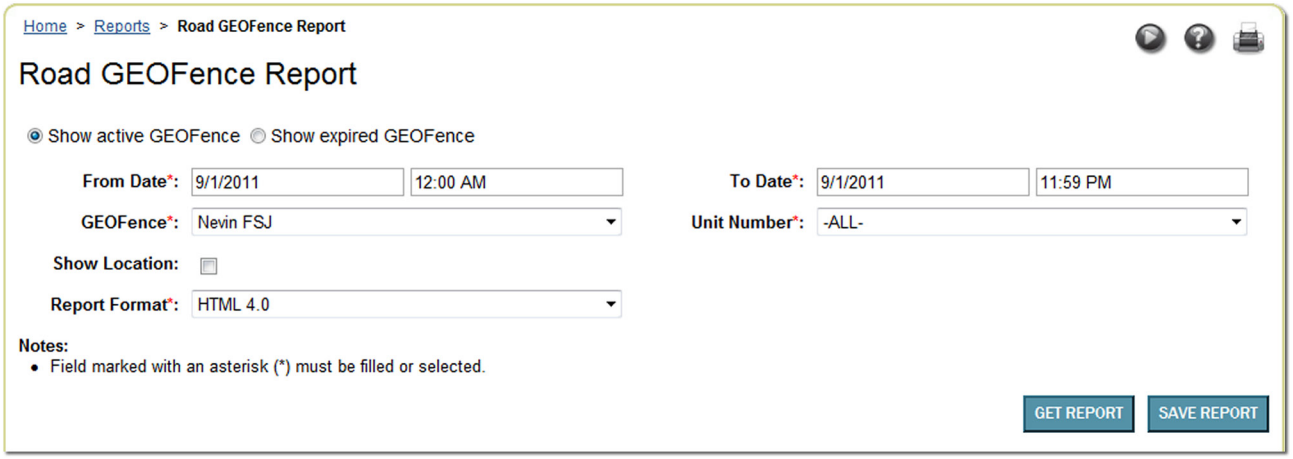
**View:** Clicking here shows where the vehicle was on a map, when it triggered the GEOFence. The GEOFence itself also shows on the map.

# Road GEOFence Report

**Description:**
GEOFence information, filtered by unit and time frame (this report is focused on road based geofences).

**Get Report:**

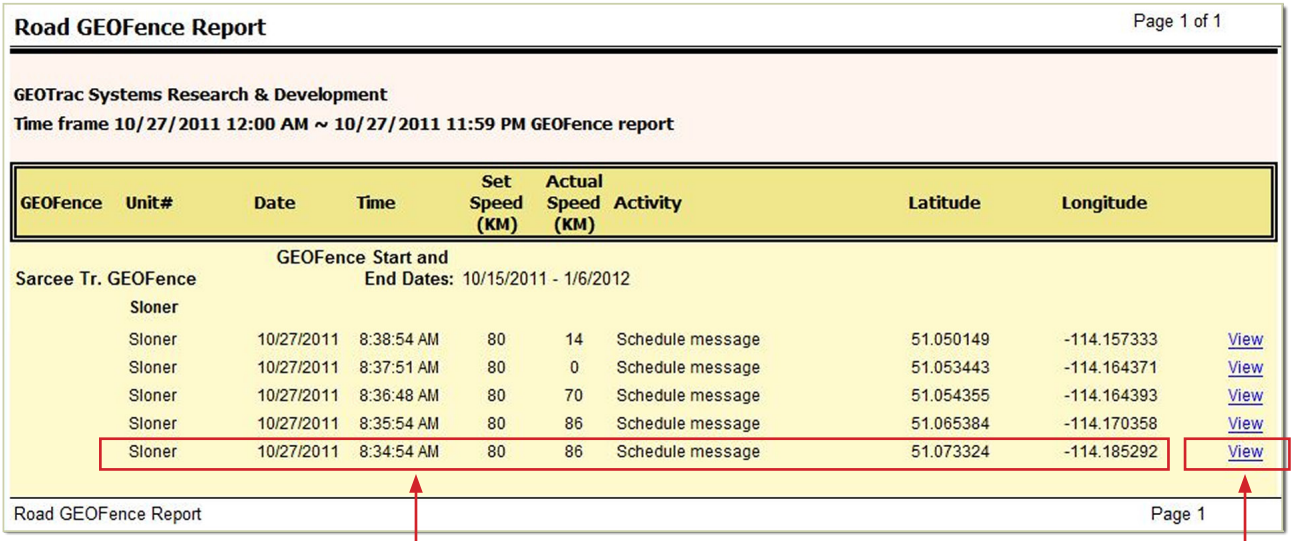
1. On the top menu bar, choose "Reports" then "Road GEOFence" Report.
   The "Road GEOFence Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- Show active GEOFence | Show expired GEOFence: filter by expired or active GEOFence
- From Date: the start of the report time span , you may include time in the adjacent field
- GEOFence: a virtual perimeter for a real-world geographic area that has been generated within GEOTrac ACC (see GEOFence in this manual)
- Show Location: will add either Lat./Lng. or LSD description to the report output depending on your sub selection within Show Location
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span , you may include time in the adjacent field
- Unit Number: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)

## Report Output Sample:



**Road GEOFence Report** Page 1 of 1

**GEOTrac Systems Research & Development**

**Time frame 10/27/2011 12:00 AM ~ 10/27/2011 11:59 PM GEOFence report**

| GEOFence | Unit# | Date | Time | Set Speed (KM) | Actual Speed (KM) | Activity | Latitude | Longitude | |
|---|---|---|---|---|---|---|---|---|---|
| | | GEOFence Start and | | | | | | | |
| Sarcee Tr. GEOFence | | End Dates: | 10/15/2011 - 1/6/2012 | | | | | | |
| | Sloner | | | | | | | | |
| | Sloner | 10/27/2011 | 8:38:54 AM | 80 | 14 | Schedule message | 51.050149 | -114.157333 | View |
| | Sloner | 10/27/2011 | 8:37:51 AM | 80 | 0 | Schedule message | 51.053443 | -114.164371 | View |
| | Sloner | 10/27/2011 | 8:36:48 AM | 80 | 70 | Schedule message | 51.054355 | -114.164393 | View |
| | Sloner | 10/27/2011 | 8:35:54 AM | 80 | 86 | Schedule message | 51.065384 | -114.170358 | View |
| | Sloner | 10/27/2011 | 8:34:54 AM | 80 | 86 | Schedule message | 51.073324 | -114.185292 | View |

Road GEOFence Report Page 1

Details of the Road GEOFence report.

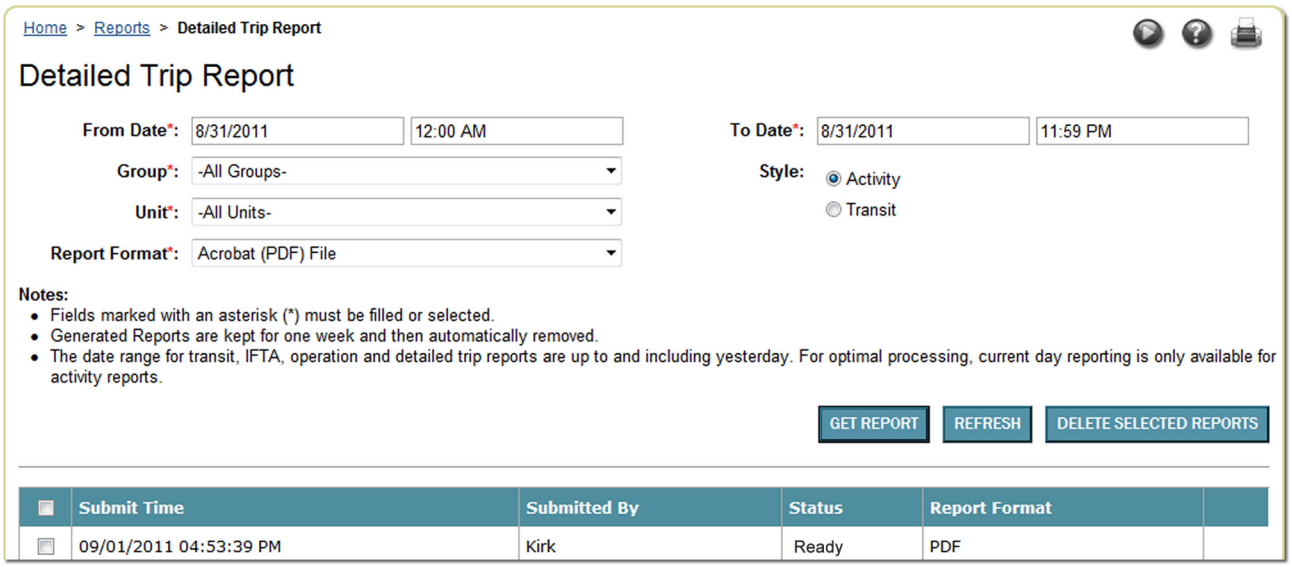
**View:** Clicking here shows where the vehicle was on a map, when it triggered the GEOFence. The GEOFence itself also shows on the map.

# Detailed Trip Report

**Description:**
Detailed trip information (see sample report below).

**Get Report:**

1. On the top menu bar, choose "Reports" then "Detailed Trip".
   The "Detail Trip Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span , you may include time in the adjacent field
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span , you may include time in the adjacent field
- Style: choose "Activity" for details about activity or "Transit" for details about transit

Report Output Sample:

## Detailed Trip Report



**GEOTrac Systems Research & Development**

1/4/2012 ~ 1/4/2012

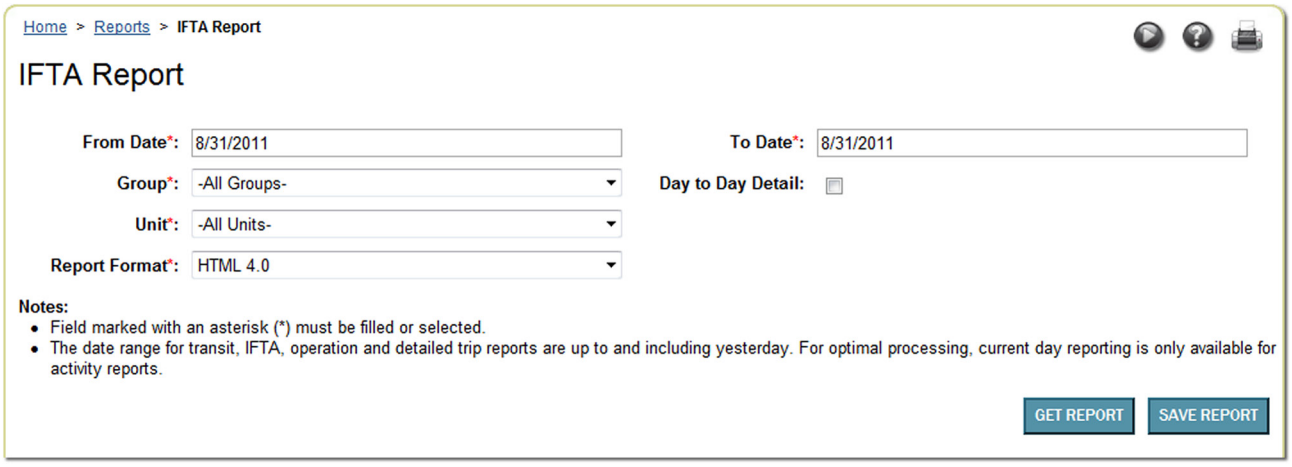
| Unit# | Time Stamp | Activity | Odometer (KM) |
|---|---|---|---|
| **Christin** | | **Total Distance Travelled: 59 KM** | |
| Christin | 1/4/2012 10:12:31 PM | Ignition Off | 32830 |
| Christin | 1/4/2012 10:10:45 PM | Schedule message | 32830 |
| Christin | 1/4/2012 10:07:45 PM | Schedule message | 32826 |
| Christin | 1/4/2012 10:04:45 PM | Schedule message | 32821 |
| Christin | 1/4/2012 10:01:45 PM | Schedule message | 32816 |
| Christin | 1/4/2012 9:58:45 PM | Schedule message | 32811 |
| Christin | 1/4/2012 9:55:45 PM | Schedule message | 32806 |
| Christin | 1/4/2012 9:52:45 PM | Schedule message | 32802 |
| Christin | 1/4/2012 9:49:45 PM | Start | 32800 |
| Christin | 1/4/2012 9:49:17 PM | Ignition On | 32800 |

# IFTA Report

**Description:**
Companies concerned about the IFTA ( International Fuel Tax Agreement ) payments can use the information from this report to determine the distance traveled by province. The mileage for each vehicle has detail about total distance travelled and operation time as well as distance and operation time by province. Customers can use this information for completing the rebate program to validate distance and time spent in each jurisdiction.

**Get Report:**

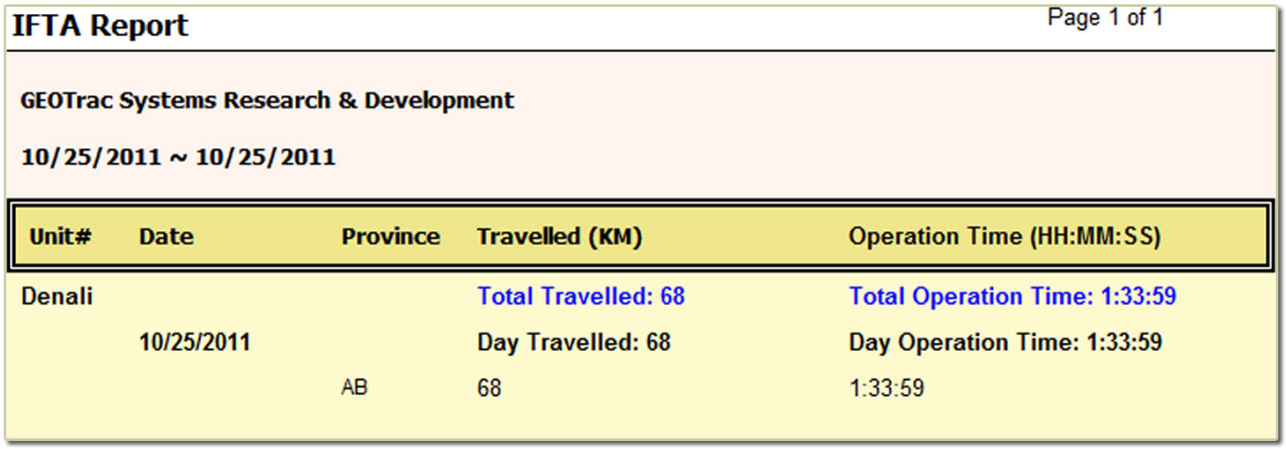
1. On the top menu bar, choose "Reports" then "IFTA".
   The "IFTA Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span
- Day to Day Detail: a more detailed version of this report will be produced when selected

Report Output Sample:



**IFTA Report** Page 1 of 1

**GEOTrac Systems Research & Development**

**10/25/2011 ~ 10/25/2011**

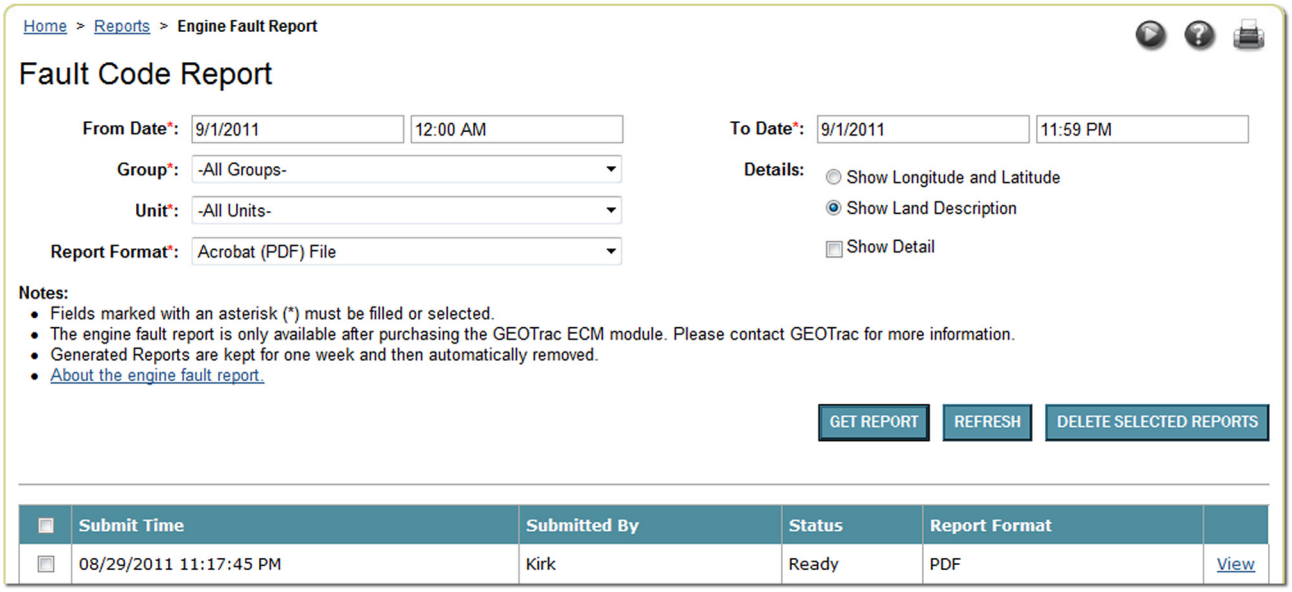
| Unit# | Date | Province | Travelled (KM) | Operation Time (HH:MM:SS) |
|---|---|---|---|---|
| Denali | | | Total Travelled: 68 | Total Operation Time: 1:33:59 |
| | 10/25/2011 | | Day Travelled: 68 | Day Operation Time: 1:33:59 |
| | | AB | 68 | 1:33:59 |

# Engine Fault Report

**Description:**
Detailed diagnostic trouble codes as provided on the engine diagnostic bus. Includes: type of fault triggered (CAN or J1708 protocol), location of triggered engine fault, as well as a list of the actual fault codes as triggered by the engine computer. This report is ideal for maintenance managers or safety managers that need insight into a repair, maintenance or safety issue with the vehicle.

**Get Report:**

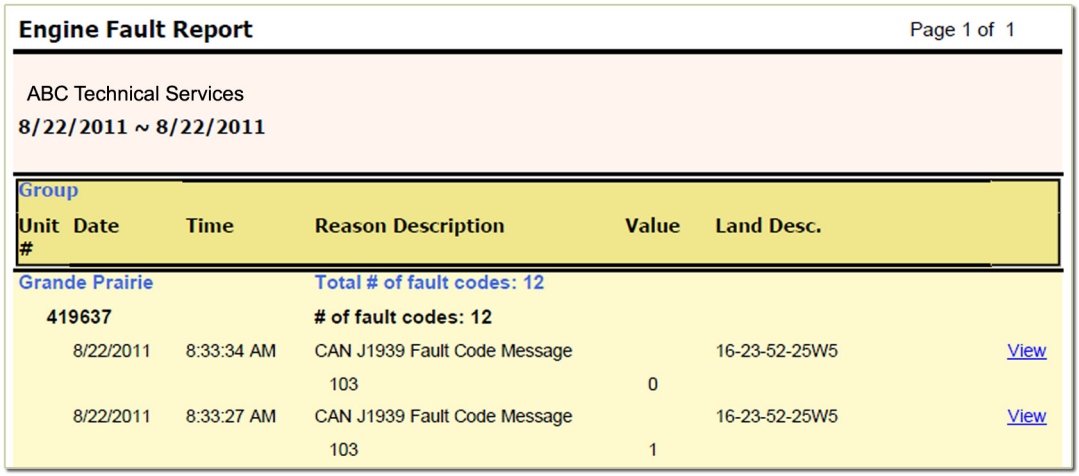
1. On the top menu bar, choose "Reports" then "Engine Fault".
   The "Fault Code Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- From Date: the start of the report time span , you may include time in the adjacent field
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- To Date: the end of the reports time span , you may include time in the adjacent field
- Details: report contains Lat./Lng or LSD descriptions
- Show Detail: report contains more details of engine fault conditions
- About the engine fault report: see what and how data is used to make the Engine Fault Report calculations

## Report Output Sample:



**Engine Fault Report** Page 1 of 1

ABC Technical Services

**8/22/2011 ~ 8/22/2011**

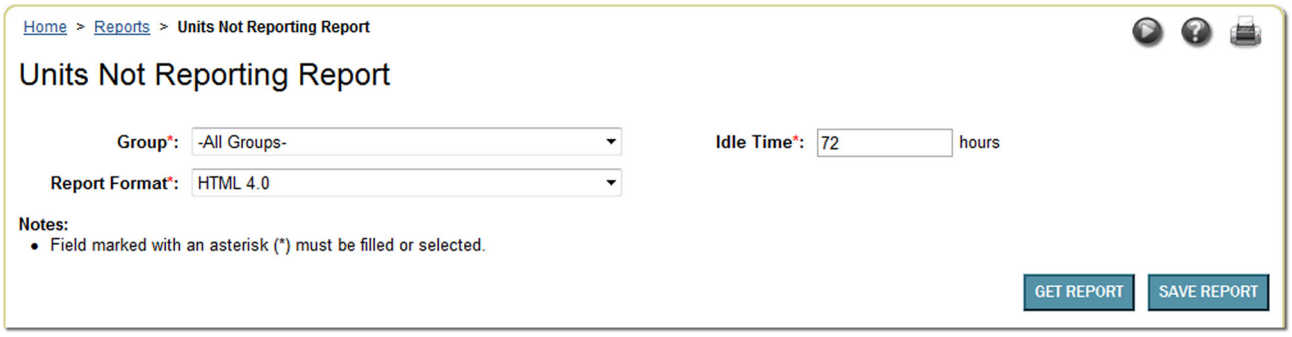
| Group Unit # | Date | Time | Reason Description | Value | Land Desc. | |
|---|---|---|---|---|---|---|
| Grande Prairie | | | Total # of fault codes: 12 | | | |
| **419637** | | | **# of fault codes: 12** | | | |
| | 8/22/2011 | 8:33:34 AM | CAN J1939 Fault Code Message | | 16-23-52-25W5 | View |
| | | | 103 | 0 | | |
| | 8/22/2011 | 8:33:27 AM | CAN J1939 Fault Code Message | | 16-23-52-25W5 | View |
| | | | 103 | 1 | | |

# Units Not Responding Report

**Description:**
Determine if there are any vehicles in the fleet that have not reported through the fleet management system within a specified amount of time. Reasons for not reporting are determined initially at the vehicle's location such as kill switch, antenna disconnected or vehicle parked without line of sight to the sky (for satellite modems). The fleet manager should run this report on a regular basis and ensure that if any units are not reporting for reasons other than normal operations, it is reported to the company that installed the modem.

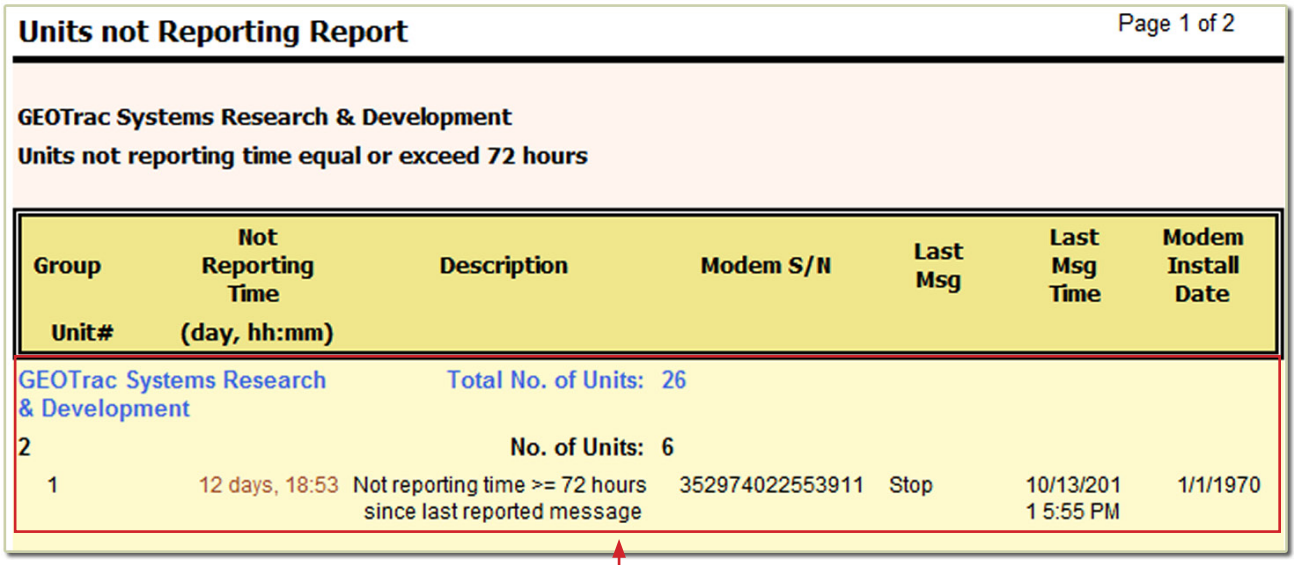
**Get Report:**

1. On the top menu bar, choose "Reports" then "Units Not Responding".
   The "Units Not Responding Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- Idle Time: how many hours has the unit not been responding for

Report Output Sample:



**Units not Reporting Report** Page 1 of 2

**GEOTrac Systems Research & Development**

**Units not reporting time equal or exceed 72 hours**

| Group / Unit# | Not Reporting Time (day, hh:mm) | Description | Modem S/N | Last Msg | Last Msg Time | Modem Install Date |
|---|---|---|---|---|---|---|
| GEOTrac Systems Research & Development | | Total No. of Units: 26 | | | | |
| 2 | | No. of Units: 6 | | | | |
| 1 | 12 days, 18:53 | Not reporting time >= 72 hours since last reported message | 352974022553911 | Stop | 10/13/201 1 5:55 PM | 1/1/1970 |

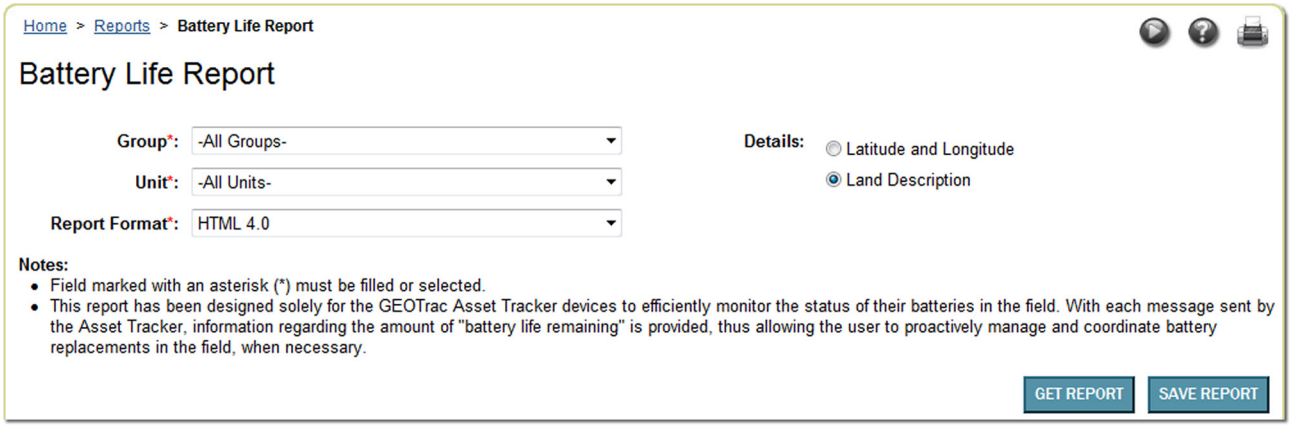
Review the total number of units not reporting for the specified period. Number of units by group also provided. If unit is operating within normal operations but modem is not reporting, contact support@geotracinternational.com and provide the modem serial number found on the bottom of the modem or provide the unit number of the vehicle.

# Battery Life Report

**Description:**
For customers with GEOTrac Asset Trackers only. This report efficiently monitors the status of their batteries in the field. With each message sent by the Asset Tracker, information regarding the amount of "battery life remaining" is provided, thus allowing the user to proactively manage and coordinate battery replacements in the field, when necessary.

**Get Report:**

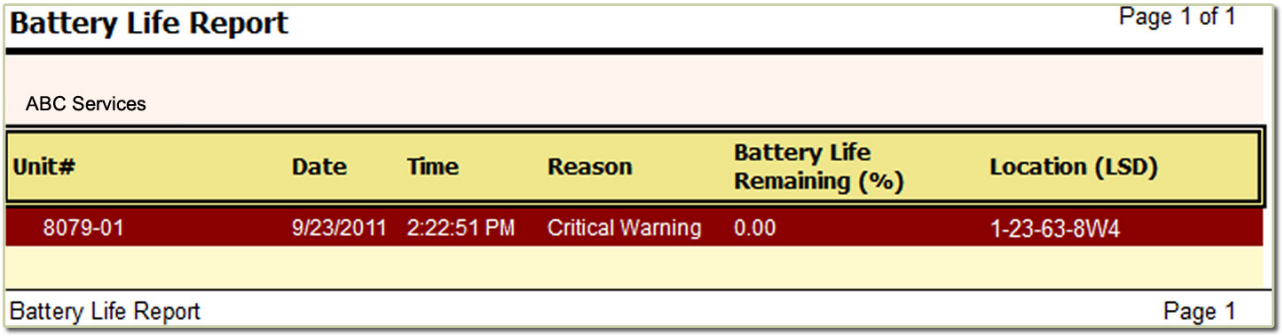
1. On the top menu bar, choose "Reports" then "Battery Life".
   The "Battery Life Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Parameters:**

- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- Report Format: choose between HTML 4.0, PDF, CSV, Excel, XML
- Details: report contains either Lat./Lng or LSD descriptions

**Report Output Sample:**



**Battery Life Report** Page 1 of 1

ABC Services

| Unit# | Date | Time | Reason | Battery Life Remaining (%) | Location (LSD) |
|---|---|---|---|---|---|
| 8079-01 | 9/23/2011 | 2:22:51 PM | Critical Warning | 0.00 | 1-23-63-8W4 |

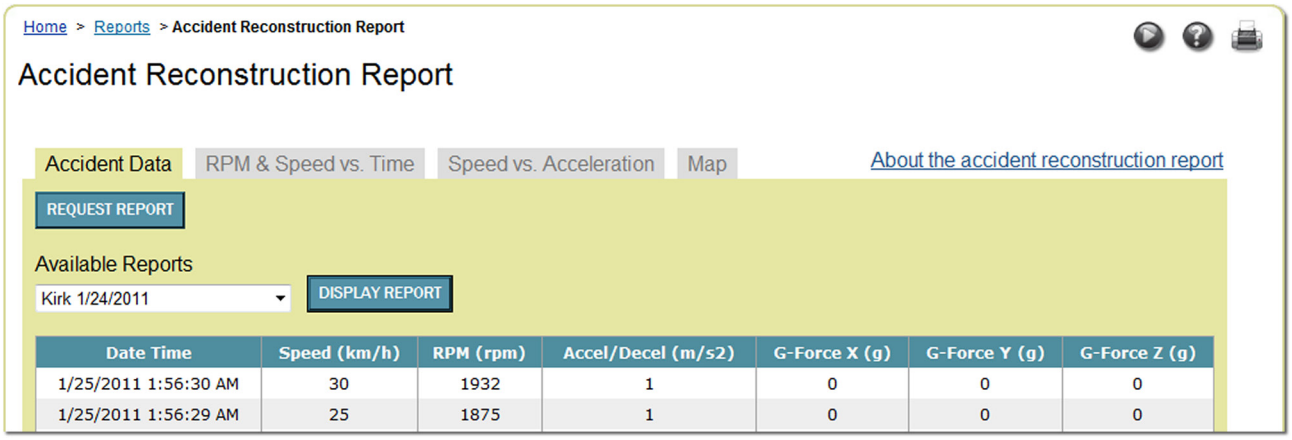
Battery Life Report Page 1

# Accident Reconstruction Report

**Description:**
The Accident Reconstruction Report contains detailed charts comparing Speed, Acceleration and RPM. The CDM or Collision Detection Message is generated when a collision is detected using the three-dimensional accelerometer contained in the Engine Control Module (ECM). The reports include detailed driving information for 80 seconds prior to the CDM and 20 seconds after the CDM. The Accident Reconstruction Report is available only if an accident has been detected. The Accident Reconstruction Report will be generated through an email request to GEOTrac Support with the specific details that are needed to connect to the modem and extract the accident reconstruction report data. GEOTrac Tech support will start the collision extraction log process.

**Get Report:**

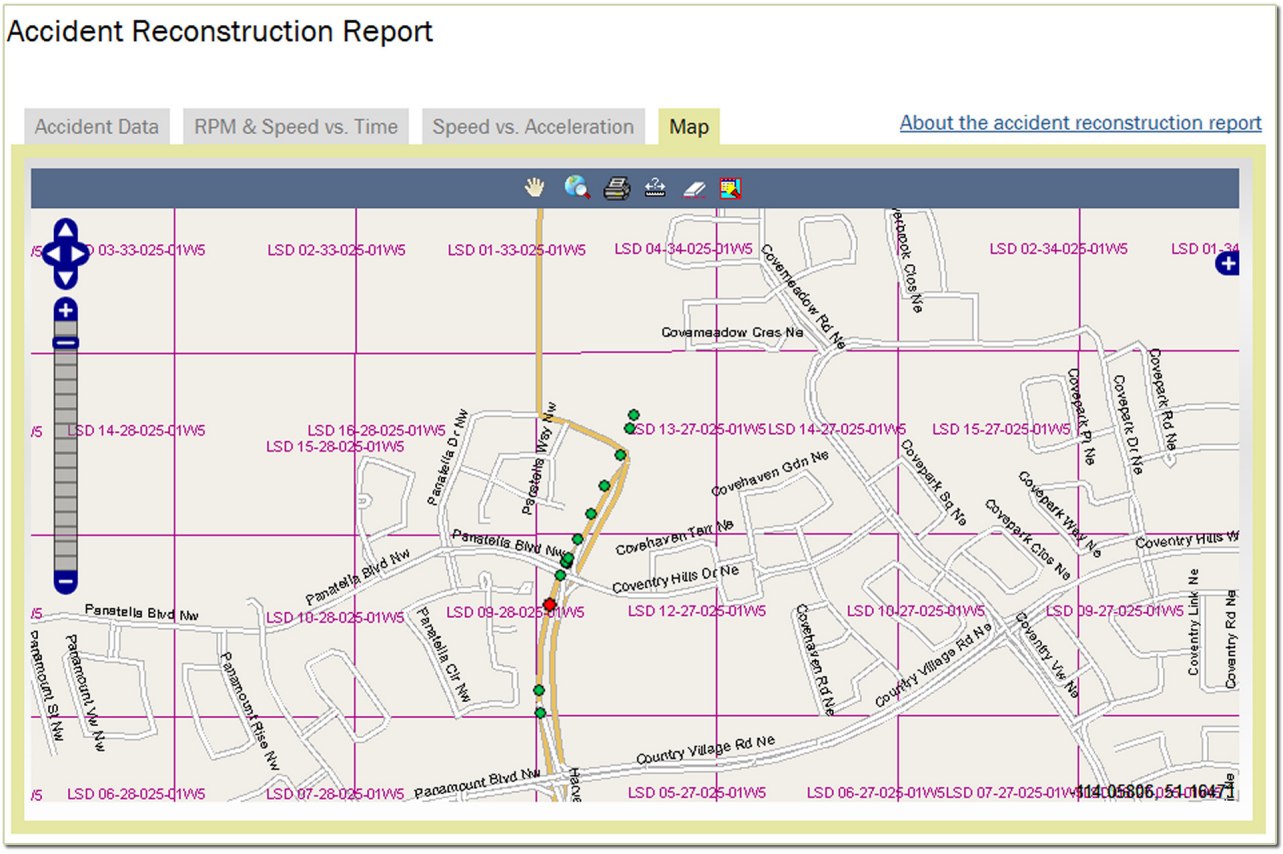
1. On the top menu bar, choose "Reports" then "Accident Reconstruction".
   The "Accident Reconstruction Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.

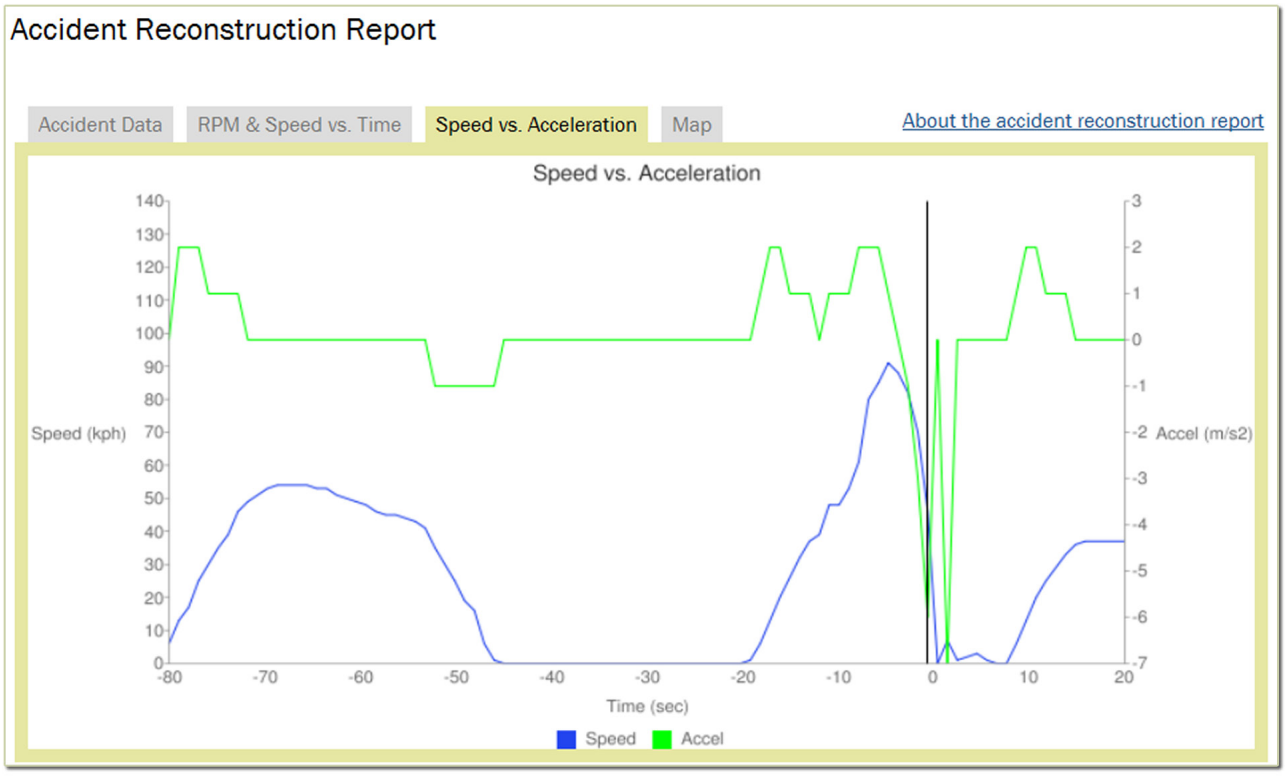


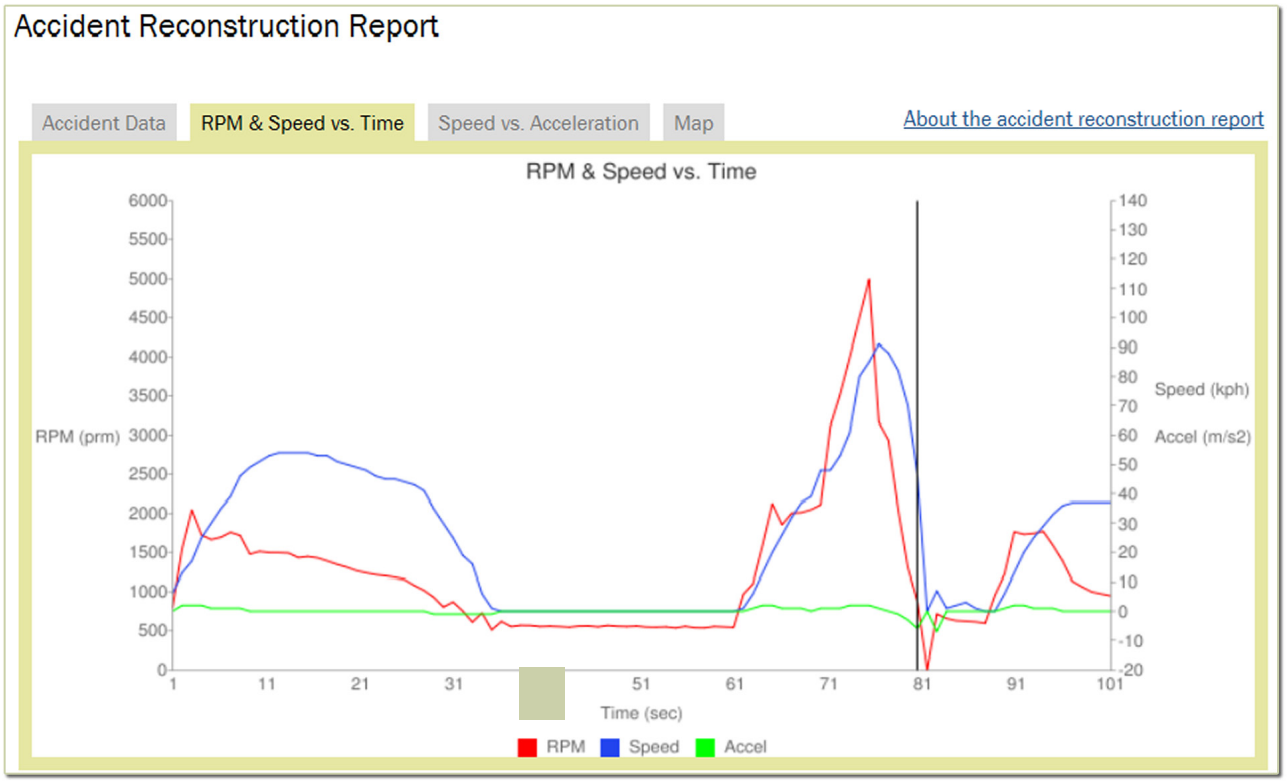

**Parameters:**

- Available Reports: is a drop down list of reports that have been created previously
- RPM & Speed vs Time: displays a graph of RPM & Speed vs. Time for the accident
- Speed vs. Acceleration: displays a graph of Speed vs. Acceleration for the accident
- Map: graphic map showing points within route of accident reconstruction
- About the accident reconstruction report: see what and how data is used to make the Accident Reconstruction Report calculations

**Report Output Sample:**



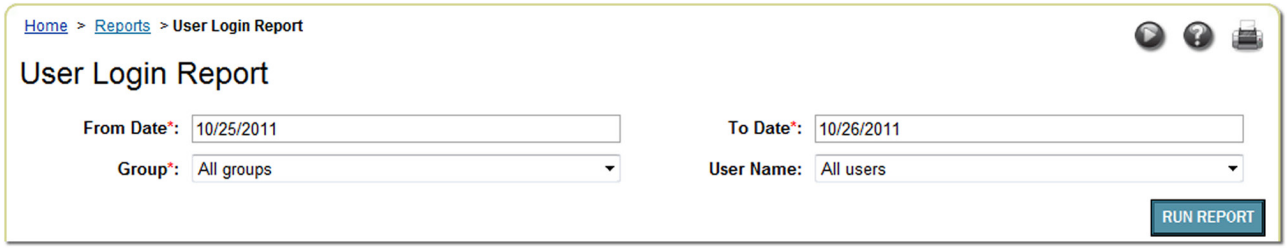

Accident Reconstruction Report
Accident Data
RPM & Speed vs. Time
Speed vs. Acceleration
Map
About the accident reconstruction report
RPM & Speed vs. Time
RPM (prm)
Speed (kph)
Accel (m/s2)
Time (sec)
RPM
Speed
Accel

# User Login Report

**Description:**
This information is useful for administrators or general managers to determine who was "on duty" at the time of an emergency or whether fleet operations are being actively monitored.

**Get Report:**

1. On the top menu bar, choose "Reports" then "User Login".
   The "User Login Report" dialog is displayed.
2. Change the report parameters to suit your needs for this report.
3. In the dialog choose "GET REPORT" to show the screen on your browser.
   The report output is displayed.




**Report Parameters:**

- From Date: the start of the report time span
- Group: companies often divide themselves into groups, for example by geographic areas such as Edmonton and Calgary
- Unit: denotes an asset, usually a vehicle of some type (ie: Truck, Pumper, Barge etc.)
- To Date: the end of the report's time span
- User Name: the name that the user logs in to the ACC by

**Report Output Sample:**

| User Name | Group | Login Time |
|---|---|---|
| Kirk | Maintenance | 10/26/2011 10:58:46 AM |
| chris | 2 | 10/26/2011 9:11:53 AM |

# Report Scheduling Description

Reports may be scheduled and output to a variety of formats, including PDF, CSV, Excel, HTML 4.0, XML file with report data. Existing scheduled reports may be edited, deleted, or toggled between active and inactive status. By toggling report "ON" or "OFF" you can keep all your existing reports and use them only as required.

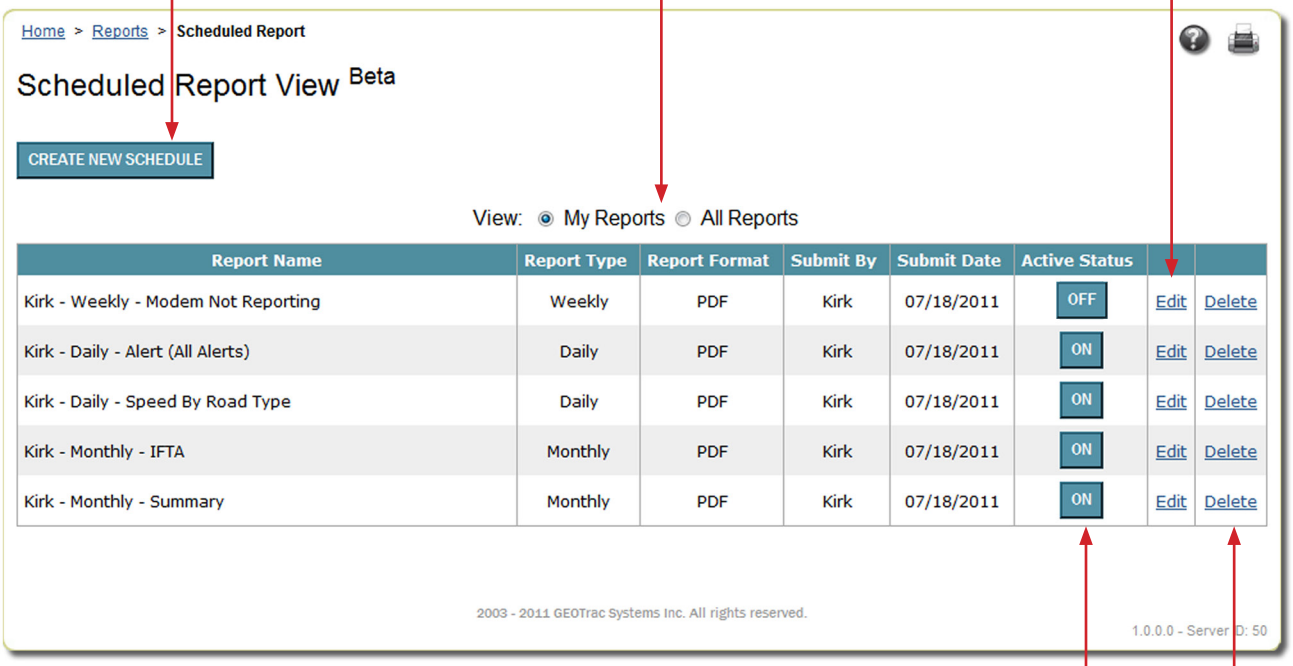
# Scheduling Existing Reports

1. On the top menu bar, choose "Reports" then "Scheduled Reports".
   The "Scheduled Report View Dialog" is displayed.
2. Choose between the options displayed here to control your scheduled report items.

**CREATE NEW SCHEDULE:** Creates a new Schedule Report.

**View:** Toggle view between only your own reports or all scheduled reports. All Reports are only available to ACC users with Admin privileges.

**Edit:** Enables you to change the parameters of an existing report. Different reports have both common and unique parameters, that can be modified.



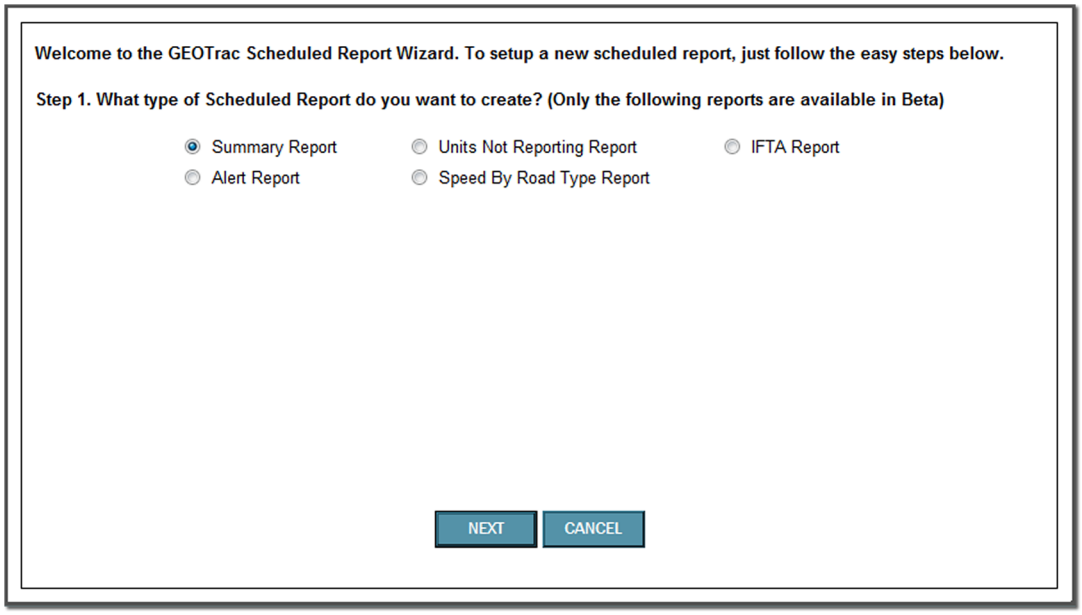

**Active Status:** Toggle reports Active Status between ON and OFF. Reports with ON will be submitted on the schedule you have set for them, reports with OFF are not scheduled.

**Delete:** Remove a single report from your schedule.

# Create New Scheduled Report

1. On the top menu bar, choose "Reports" then "Scheduled Reports".
   The "Scheduled Report View" dialog is displayed.

2. Choose "CREATE NEW SCHEDULE" button.
   The "Scheduled Report" wizard is displayed



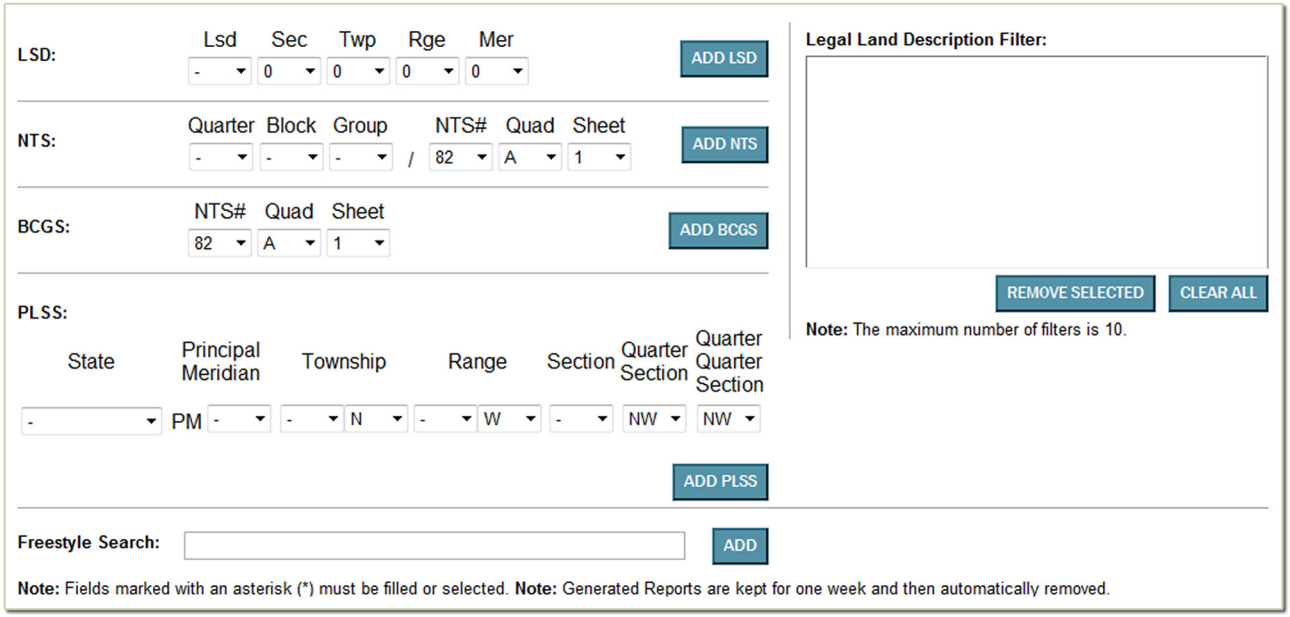

3. Choose the type of report you would like to schedule.

4. Click NEXT.

5. Depending on the report type you choose the wizard will prompt you for a series of report parameters particular to the report. Details of each report's parameters can be found in this chapter.

# Apply Legal Land Description Filter

A Legal Land Description, is a grid system used in many resource based industries to determine location without knowing civic address or latitude and longitude. The grid system in Alberta, Saskatchewan and Manitoba is known as the Dominion Land Survey (DLS) or Legal SubDivision (LSD). In the Northwest Territories, customers use NTS. In British Columbia, customers primarily use the BCGS. In many U.S. states, customers can use the Public Land Survey System (PLSS). Applying the Legal Land Description filter to a report such as the Activity Report, allows customers to filter out any activity outside of the area indicated by the grid filter. This is important when customers want to determine what work is being conducted within a certain known grid. (Often oil and gas companies will describe a work site by the grid system.) Note: In northeastern B.C. many resource based industries will use either the BCGS or the LSD. GEOTrac reporting provides for filtering within Legal Land Descriptions. GEOTrac can filter by 5 different popular systems for Legal Land Description, LSD, NTS, BCGS, PLSS and Freestyle.




**Parameters:**

- LSD: Legal Land Location has the following parameters
  - Lsd: legal subdivision
  - Sec: section
  - Twp: township
  - Rge: range
  - Mer: meridian

- NTS: National Topographic System has the following parameters
  - Quarter:
  - Block:
  - Group
  - NTS#:
  - Quad Sheet:

- BCGS: British Columbia Geographic System has the following parameters
  - NTS#: National Topographic System
  - Quad:
  - Sheet:

- PLSS: Public Land Survey System for describing land in the United States has the following parameters
  - State: A U.S state
  - Principal Meridian: a meridian line running through an arbitrary point chosen as a starting point for all sectionalized land within a given area
  - Township: PLSS typically divides land into 6-mile-square townships

Range: a vertical column of townships in the PLSS
Section: a one-square-mile block of land, containing 640 acres, or approximately one thirty-sixth of a township. Due to the curvature of the Earth, sections may occasionally be slightly smaller than one square mile
Quarter Section: a section divided into 4 sub sections
Quarter Quarter Section: a section divided into 16 sub sections

Freestyle Search: Enables entry of all or a partial grid address for LSD, BCGS, PLSS or NTS to quickly locate an area.
Example: B-1-B/94-A-1