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16. Abstract This project was co-sponsored by the Southwest University Transportation Center (SWUTC) and Region 6 of the United States Environmental Protection Agency (EPA), and the Border Environment Cooperation Commission. The overall goal of the project was to develop a methodology and to apply this methodology to estimate emissions produced by trucks from Mexico crossing the El Paso-Ciudad Juarez border locations. The specific objectives of the study were to develop a: <ul style="list-style-type: none"> <li>• <i>border crossing fleet profile</i> - profile of the make, model, and year of trucks crossing the two main border bridges;</li> <li>• <i>border crossing travel profile</i> –profiles of the drive cycles (acceleration, deceleration, cruising, idling, and creep idling) of trucks crossing the two main border bridges; and</li> <li>• <i>border crossing emissions profile</i> –estimates of idling emissions and driving emissions of trucks crossing the two main border bridges</li> </ul> TTI used portable emissions measurement system (PEMS) equipment along with Tapered Element Oscillating Micro-balance (TEOM) equipment operated by Oak Ridge National Laboratory to measure the truck emissions. The project provided good insight into the fleet, travel, and emissions characteristics of trucks crossing the El Paso-Ciudad Juarez border locations.					
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# **Mexican Truck Idling Emissions at the El Paso - Ciudad Juarez Border Location**

By

Josias Zietsman, Ph.D., P.E.  
Associate Research Engineer  
Texas Transportation Institute

Juan C. Villa  
Associate Research Scientist  
Texas Transportation Institute

Timothy L. Forrest  
Research Associate  
Texas Transportation Institute

And

John M. Storey, Ph.D.  
Engineering Science and Technology Division  
Oak Ridge National Laboratory

Project Monitors:

Paul Bubbosh and Barry Feldman  
United States Environmental Protection Agency

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The Texas A&M University System  
College Station, Texas 77843-3135



## Disclaimer

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## Abstract

This project was co-sponsored by the South West University Transportation Center (SWUTC) and Region 6 of the United States Environmental Protection Agency (EPA) for a total amount of \$105,000. The overall goal of the project was to develop a methodology and to apply this methodology to estimate emissions produced by trucks from Mexico crossing the El Paso-Ciudad Juarez border locations. The specific objectives of the study were to develop a:

- *border crossing fleet profile* - profile of the make, model, and year of trucks crossing the two main border bridges;
- *border crossing travel profile* –profiles of the drive cycles (acceleration, deceleration, cruising, idling, and creep idling) of trucks crossing the two main border bridges; and
- *border crossing emissions profile* –estimates of idling emissions and driving emissions of trucks crossing the two main border bridges

TTI used portable emissions measurement system (PEMS) equipment along with Tapered Element Oscillating Micro-balance (TEOM) equipment operated by Oak Ridge National Laboratory to measure the truck emissions. The project provided insight into the fleet, travel, and emissions characteristics of trucks crossing the El Paso-Ciudad Juarez border locations.

## Executive Summary

The El Paso region continues to face serious air quality challenges particularly due to the large number of trucks that circulate between Ciudad Juarez and El Paso. Following the implementation of the North American Free Trade Agreement (NAFTA), trade between the U.S. and Mexico increased substantially. Northbound truck movements through Ciudad Juarez-El Paso gateways grew from less than 600,000 per year in 1994 to more than 700,000 per year in 2004, and the number of trucks crossing the U.S.-Mexico border is expected to continue growing, creating higher congestion levels and increased emissions. The northbound movements of trucks (import into the U.S.) in particular create long waiting times in the border locations due to several security and safety inspections that occur during the process.

The El Paso-Ciudad Juarez region is served by two major truck ports of entry. The Bridge of the Americas (BOTA) is located in the center of the El Paso-Ciudad Juarez metropolitan area, and in February 2004 had an average weekday volume of northbound traffic of 1,300 trucks. The Zaragoza border crossing is located on the southeast side of El Paso and processed approximately 1,160 trucks on a typical weekday in February of 2004.

The overall goal of the project was to develop a methodology and to apply this methodology to estimate emissions produced by trucks from Mexico crossing the El Paso-Ciudad Juarez border locations. The specific objectives of the study are to develop a:

- *border crossing fleet profile* - profile of the make, model, and year of trucks crossing the two main border bridges;
- *border crossing travel profile* –profiles of the drive cycles (acceleration, deceleration, cruising, idling, and creep idling) of trucks crossing the two main border bridges; and
- *border crossing emissions profile* –estimates of idling emissions and driving emissions of trucks crossing the two main border bridges.

### *Fleet Profiles*

The average northbound truck volume for the two bridges is approximately 2,500. A survey of trucks moving from Ciudad Juarez to El Paso was conducted from May 3 through May 6, 2005 covering the hours of operation of both bridges. From the approximately 1,800 trucks that were surveyed on a typical day crossing from Mexico into El Paso at both the BOTA and Zaragoza bridges, 89% were found to be Class 8 (tractor-trailer) trucks with 11% being the smaller Class 5 trucks. There were 25 different model years (stretching from 1980 to 2005) found during the survey. It was found that more than 20% of the vehicles are more than 15 years old. Of the total fleet surveyed, 75% included models from 1991 through 2002. Very few long-haul trucks were found in the sample.

BOTA and Zaragoza bridges have their unique peaking characteristics when severe traffic congestion occurs. The non-toll BOTA Bridge is used to relocate empty drayage trucks in the early hours of the day, and to cross laden trucks transporting the morning's production from around 2:30 p.m. to approximately 5:30 p.m., when the bridge closes. Zaragoza has two periods of high congestions—from the opening hour at 8:00 a.m. until around 11:00 a.m., and between 6:00 p.m. and 8:00 p.m.

### *Travel Profile*

Global Position System (GPS) technology was used to collect drive-cycle information at both the BOTA and Zaragoza bridges. The drive cycle information included travel times, idle, creep idle, acceleration, and deceleration data. Travel profiles were analyzed by dividing the northbound border crossing process into three sections. The first section stretches from the entrance of the Mexican Customs compound to the U.S. Customs primary inspection booth. (This section includes the international crossing). The second section of the trip is the one that occurs inside the U.S. federal compound, and the third section is the one that takes the commercial vehicles through the state Safety Inspection Facility.

Idling is a very important component of the drive cycle analyzed in this study. Idling can be categorized as either regular or normal idling or creep idling. Normal idling occurs when the vehicle is at a total standstill whereas creep idling occurs when the vehicle is moving at a speed less than 5 mph and has an acceleration or deceleration less than 0.5 mph/sec. This threshold for creep idling seemed to be an appropriate divider between trucks involved in creep idling and actually driving.

The analysis of the creep idling and idling times leads to the conclusion that Section 1 of the northbound trip that includes travel through Mexican Customs and the actual bridge crossing, resulted in approximately 50% of the time that trucks idle or move at a very low speed. In the second portion of the trip (Section 2) on average more than 75% of the trip is spent idling or creep idling due to low speeds as a result of congestion and various inspections. Section 3 involves the state safety inspection process, which resulted in just over 40% of creep idling and idling occurring at the BOTA crossing.

The table below shows that the average percentage idling and creep idling for both bridges is above 60%. In addition, the travel time for Zaragoza is more than that for BOTA. This can be attributed to the fact that Zaragoza has higher percentage idling and creep idling than the BOTA bridge.

Section	BOTA			Zaragoza		
	Travel Time (min)	% Normal Idle	% Creep Idle	Travel Time (min)	% Normal Idle	% Creep Idle
1	8.5	41%	18%	11.1	36%	13%
2	8.2	62%	13%	23.0	75%	8%
3	4.2	13%	29%	-	-	-
Total	21.0	45%	18%	34.2	63%	9%

The drive cycles were analyzed to identify the number of accelerations and decelerations during a typical border crossing. It was found that for both BOTA and Zaragoza approximately eight acceleration and eight deceleration events were identified during a typical border crossing. This information is useful in developing generic drive cycles that can be used for emissions estimation.



### *Emissions Profiles*

The study team tested nine trucks ranging from 1985 to 1998 with between 150,000 and more than 1.7 million accumulated. The displacement of the engines ranged from 10 liters to 14 liters. These trucks were subjected to four different idling modes including five instances of full throttle idling over a short period of time. Portable Emissions Measurement System (PEMS) units were used to test oxides of nitrogen (NO<sub>x</sub>), hydrocarbon (HC), and carbon monoxide (CO) emissions. For measuring particulate matter (PM), both PEMS and Tapered Element Oscillating Microbalance (TEOM) equipment were used.

It was found that there is no clear correlation between the age of the trucks and the NO<sub>x</sub> emissions rates. There is also no clear correlation between the accumulated miles and the NO<sub>x</sub> emissions rates. In addition, the NO<sub>x</sub> rates seem to increase with additional engine load due to the use of the air conditioner and higher idling rates. Only two of the nine trucks had NO<sub>x</sub> emission rates higher than the 135 grams per hour (g/hr) guidance by the U.S. Environmental Protection Agency (EPA). The snap NO<sub>x</sub> emissions ranged from approximately 100 to 660 g/hr.

By calculating an average exhaust mass concentration using the TEOM and then comparing these values to the optical light scattering values from the PEMS, a simple regression model could be constructed. The linear regression model applied to these two methods of PM measurement was found to indicate a high degree of correlation between the two, with an R<sup>2</sup> value of approximately 0.8. This model could then be used to estimate PM concentrations.

As in the case with NO<sub>x</sub> it was found that there is no clear correlation between the age of the trucks and the PM emissions rates. The PM rate tends to increase with the higher engine loads. The PM rate ranges from 0.7 to 3.3 g/hr, which is in-line with the results of other studies performed in the U.S. As in the case with NO<sub>x</sub>, only two trucks exceeded the EPA guidance for PM emissions during long duration idling. The snap PM emissions ranged from approximately 50 g/hr to more than 400 g/hr.

It was found that approximately 24 tons of NO<sub>x</sub> and 0.3 tons of PM are produced on an annual basis by trucks idling at the BOTA and Zaragoza bridges. These emissions are not particularly high as compared with the total on-road mobile source emissions for the El Paso region (less than 1%). However, it should be noted that these emissions can be significant for an area such as El Paso, which is seeking to remain in attainment for ozone and PM. In addition, it should be noted that these emissions are generated in a very small geographic area (two border bridges), resulting in high concentrations of pollutant emissions in these areas.

The study team found that it was possible to collect emissions from a truck during actual crossings through the U.S.-Mexico border. However, due to the extensive coordination effort and the extremely sensitive nature of the fairly new technology, numerous challenges were encountered and it is recommended to collect the emissions on either the U.S. or Mexico sides by having the trucks travel according to pre-determined drive cycles while being equipped with PEMS units.

### *Recommendation*

The research team developed and applied a methodology to estimate truck idling emissions at the El Paso-Juarez border locations. This research can be seen as a first step in developing a comprehensive Border Crossing Emissions Measurement Model (BCEMM). The model would have wide applications in determining and forecasting commercial vehicle emissions at land border crossings. The model would consist of the same three components as described above—fleet characteristics, travel profiles, and emission profiles. A detailed database of the truck fleets, a comprehensive set of drive cycles, and a comprehensive sample of emissions rates under different driving modes should be used as building blocks for developing the BCEMM.

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# 1. Introduction

## 1.1 Purpose of the Study

The overall goal of the project is to develop a methodology and to apply this methodology to estimate emissions produced by trucks from Mexico crossing the El Paso-Ciudad Juárez border locations. The specific objectives of the study are to develop a:

- *border crossing fleet profile* - profile of the make, model, and year of trucks crossing the two main border bridges;
- *border crossing travel profile* - profiles of the drive cycles (acceleration, deceleration, cruising, idling, and creep idling) of trucks crossing the two main border bridges; and
- *border crossing emissions profile* - estimates of idling emissions and driving emissions of trucks crossing the two main border bridges.

## 1.2 Background

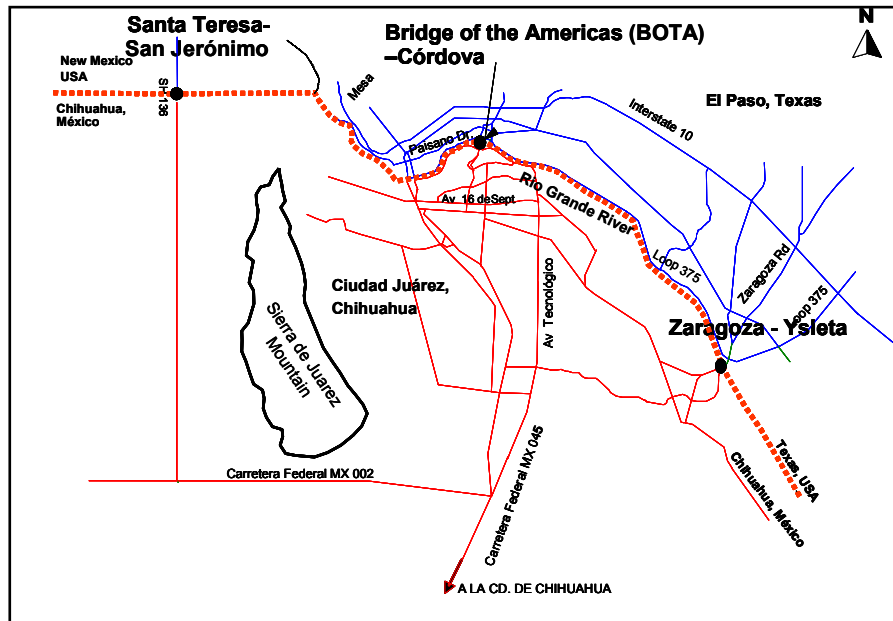
El Paso, Texas is currently the fifth largest city in Texas and the 23rd largest city in the U.S. Ciudad Juárez, El Paso's sister city across the U.S. border, is the largest city in the state of Chihuahua and the fifth largest city in all of Mexico. According to the 2000 census, El Paso's total population was approximately 680,000, and combined with Ciudad Juárez, the population of the bi-national metropolitan area is estimated at 2 million people.

The El Paso region has been designated as nonattainment of air quality standards in terms of the ozone, carbon monoxide, and particulate matter standards. In 2004 the El Paso MPO requested the Texas Commission of Environmental Quality to apply for re-designation to attainment status in terms of ozone pollution standards. Nevertheless, El Paso will continue to face serious air quality challenges particularly due to the large percentage of trucks from Mexico entering and exiting El Paso through its two major ports of entry. It is also known that the El Paso-Ciudad Juárez border crossing is one of the busiest crossings along the U.S.-Mexico border.

Following the implementation of the North American Free Trade Agreement (NAFTA), trade between the U.S. and Mexico increased substantially. Total surface trade (rail and truck) between the two countries increased at an annual average rate of approximately 10 % in the 10-year period since NAFTA started. Trade by road between the two countries reached a historical maximum in 2004 with \$195 billion. Northbound truck movements through Ciudad Juárez-El Paso gateways grew from less than 600,000 per year in 1994 to more than 700,000 per year in 2004(1). The number of trucks crossing the U.S.-Mexico border is expected to continue growing creating higher congestion levels and increased emissions.

### 1.3 Commercial Border Crossing Process

The El Paso-Ciudad Juárez metropolitan area is served by two international commercial vehicle crossings in Texas and one in New Mexico. The Santa Teresa, New Mexico gateway is a land crossing 11 miles west of El Paso. The other two commercial crossings in the region, Bridge of the Americas (BOTA) and the Ysleta-Zaragoza bridge (Zaragoza), are international bridges over the Rio Grande River. Figure 1 shows the location of the three land ports of entry.



**Figure 1. Location of International Bridges in the El Paso–Ciudad Juárez Metropolitan Area.**

The northbound movements (import into the U.S.) in particular create long waiting times in the border locations due to several security and safety inspections that occur during the process. The process is complicated because of the requirements to file shipment data with both Mexican and U.S. agencies, preparation of paper forms that are carried with the shipment, transportation of goods between the two countries, and the involvement of a large number of public and private stakeholders.

The following sections outline the preparation required before the shipment reaches the international port.

1. The shipper sends information to the Mexican and U.S. customs brokers for preparation of export/import paper documents and electronically filing of the required information with the U.S. and Mexican customs authorities and other public agencies. Included in this information are details about the shipment, conveyance, and driver that appear on two key documents: the Mexican export document (Pedimento) and the U.S. Inward Cargo Manifest.
2. If the shipment originates in the interior of Mexico, the long-haul trucking firm picks up the shipment and transports it to the customs broker or freight forwarder yard on the



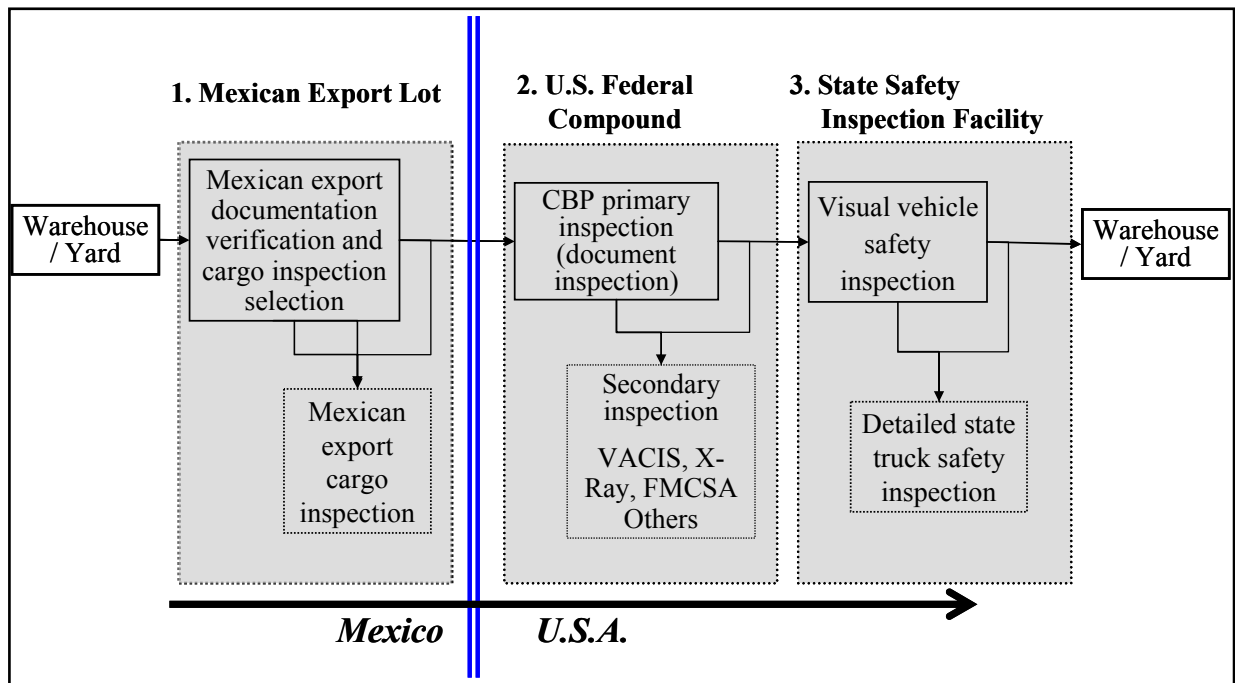
Mexico side of the border. Then a tractor and driver (drayage) that have the required documentation to cross the border pick up the trailer.

3. If the shipment originates at the assembly plant (most likely a maquiladora plant) in the U.S.-Mexico border region, the drayage truck picks up the loaded trailer and the required documentation to proceed toward the international port. This is the case for the majority of crossings in the El Paso-Ciudad Juarez area.

When the shipment with the authorized driver and truck are at the international port, the truck proceeds through the following main physical areas:

- Mexican export lot;
- U.S. federal compound; and
- state safety inspection facility.

A description of the main activities that occur in the northbound border crossing process is presented in the following sections and illustrated in Figure 2.



**Figure 2. Northbound Commercial Border Crossing Process.**

### *Mexican Export Lot*

The driver of the drayage vehicle with the required documentation proceeds into the Mexican export customs compound. Mexican Customs (Administración General de Aduana) conducts inspections consisting of a physical review of the cargo of randomly selected outbound freight prior to its export for audit and interdiction purposes. Those that are not selected proceed to the exit gate, cross the border, and continue on to the U.S. port of entry (POE).

### *U.S. Federal Compound*

At the primary inspection booth, the driver of the truck presents identification (proof of citizenship or a valid visa or laser card), a copy of the Inward Cargo Manifest, and the commercial invoice to the processing agent. The U.S. Customs and Border Protection (CBP) inspector at the primary inspection booth, using a computer terminal, cross-checks the basic information about the driver, vehicle, and load with information sent previously by the U.S. customs broker. The inspector then makes a decision to refer the truck, driver, or load for a more detailed secondary inspection of any or all of these elements or releases the truck to the exit gate.

A secondary inspection includes any inspection that the driver, freight, or conveyance undergoes between the primary inspection and the exit gate of the U.S. federal compound. Personnel from CBP usually conduct these inspections, which can be done by physically inspecting the conveyance and the cargo, or by using nonintrusive inspection equipment (such as x-ray). Within the compound, the U.S. Department of Transportation (USDOT), Federal Motor Carrier Safety Administration (FMCSA), and the Food and Drug Administration (FDA) have personnel and facilities to perform inspections when required.

### *State Safety Inspection Facility*

In the majority of the POEs, the stations are located adjacent to the federal compounds. State police personnel interview drivers and inspect conveyances to determine whether they are in compliance with U.S. safety standards and regulations. When the initial visual inspection finds any violation, the truck proceeds to a more detailed inspection at a special facility.

After leaving the state inspection facility, the driver typically drives to the freight forwarder or customs broker yard to drop off the trailer for later pickup by a long-haul tractor bound for the final destination.

The time required for a shipment to make the complete trip from the yard or the manufacturing plant in Mexico to the exit of the state inspection facility is dependent on the number of secondary inspections required, as well as the number of inspection booths in service and traffic volume at that specific time-of-day.

## **1.4 Security Programs**

Among the most recent initiatives from the U.S. government to increase security and facilitate legitimate trade at commercial POEs is the Free and Secure Trade (FAST) program implemented by CBP. The objective of FAST is to incentivize supply chain security by offering expedited clearance to carriers and importers enrolled in the Customs Trade Partnership Against Terrorism (C-TPAT) (2).

C-TPAT is a joint government-business initiative to build cooperative relationships that strengthen the overall supply chain—importers, carriers, brokers, warehouse operators, manufacturers, and border security. C-TPAT recognizes that Customs can provide the highest level of security only through close cooperation with the ultimate owners of the supply chain. Through this initiative, Customs is asking businesses to ensure the integrity of their security practices and communicate their security guidelines to their business partners within the supply chain (3).

The U.S. Customs and Border Protection Trade Act requires advance transmission of electronic cargo information, requiring information for FAST shipments to be received 30 minutes prior to the shipment reaching the U.S. Non-FAST shipments require one-hour notification.

Both the BOTA and Zaragoza bridges have dedicated FAST lanes from the exit of the Mexican export lots. FAST allows CBP agents to instantly identify designated low-risk commercial vehicles, drivers, and cargo that are compliant with C-TPAT's guidelines. As these shipments approach a FAST lane at a commercial crossing, a wireless radio frequency identification (RFID) reader recognizes the unique identification number encoded on both the truck's windshield sticker tag and the driver's identity card. It associates this information with import, carrier, and driver information previously submitted to the system electronically. (This RFID process is very similar to high-speed toll tags offered in some cities). At the inspection booth, the inspector confirms that the shipment has met all clearance requirements, including confirmation that the driver matches the digital image and biographical information that was pre-filed.

Non-FAST-enrolled commercial vehicles with traditional paper documentation take longer to process, and they are more likely to experience secondary inspections sometimes requiring unloading the truck for detailed inspection.

### **1.5 Status of Opening the Border to Trucks from Mexico**

NAFTA's original trucking provisions were designed to improve transportation efficiency by enabling more seamless cross-border trucking operations. The accord stipulated that restrictions on the movement of trucks from Mexico beyond a narrow commercial zone extending 3-20 miles into the U.S. were to be phased-out between 1995 and 2000. Enactment of this timetable was postponed by the U.S. Congress in 1995. The U.S. alleged that the inability of Mexico's regulation regime to adequately ensure the safety of its commercial drivers and carriers would pose a safety risk to the U.S. public.

Consequently, the moratorium on long-haul trucking across the U.S.-Mexico border was upheld. This situation has persisted for the past decade due to ongoing litigation and disputes regarding the safety of trucks from Mexico, emissions, and inspections. Driver-related concerns included inadequate training for the safe operation of trucks from Mexico on U.S. roads, the undercutting of U.S. driver wages, long operating hours, proficiency in English, and the ability to maintain adequate records, such as logbooks. Equipment concerns were related to truck maintenance, the impact of overloaded trucks on U.S. roads, and the age of trucks and associated emissions impacts.

In a unanimous ruling on June 8, 2004, the Supreme Court found in *Department of Transportation et al. v. Public Citizen et al.* that the USDOT lacks the authority to ban trucks from Mexico and cannot override President Bush's decision under NAFTA to lift a long-standing moratorium on their access. As a result, the USDOT is not required to study the trucks' impact on U.S. air quality, as environmentalists and a host of allied states had argued.

In recent years, many of the issues that prevented implementation of the NAFTA trucking provisions have been addressed. One outstanding hurdle is the establishment of an agreement

between the U.S. and Mexico with respect to U.S. motor carrier safety inspections to be conducted inside Mexico.

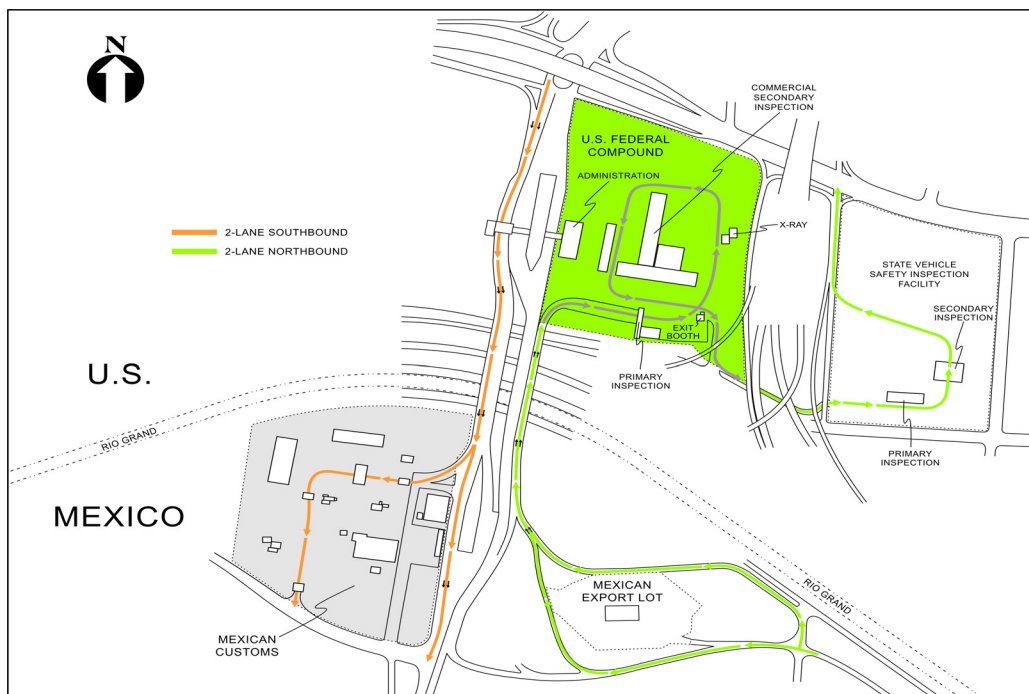
### 1.6 El Paso-Ciudad Juárez Commercial Traffic Characteristics

The majority of freight shipped through the El Paso-Ciudad Juárez port-of-entry system is maquiladora trade. This arrangement has evolved into a system of transfer stations, distribution centers and warehouses on the U.S. side of the border and manufacturing plants in Mexico. Most maquiladora assembly plants are located in the southeast portion of the El Paso-Ciudad Juárez metropolitan area.

#### *Bridge of the Americas (BOTA)*

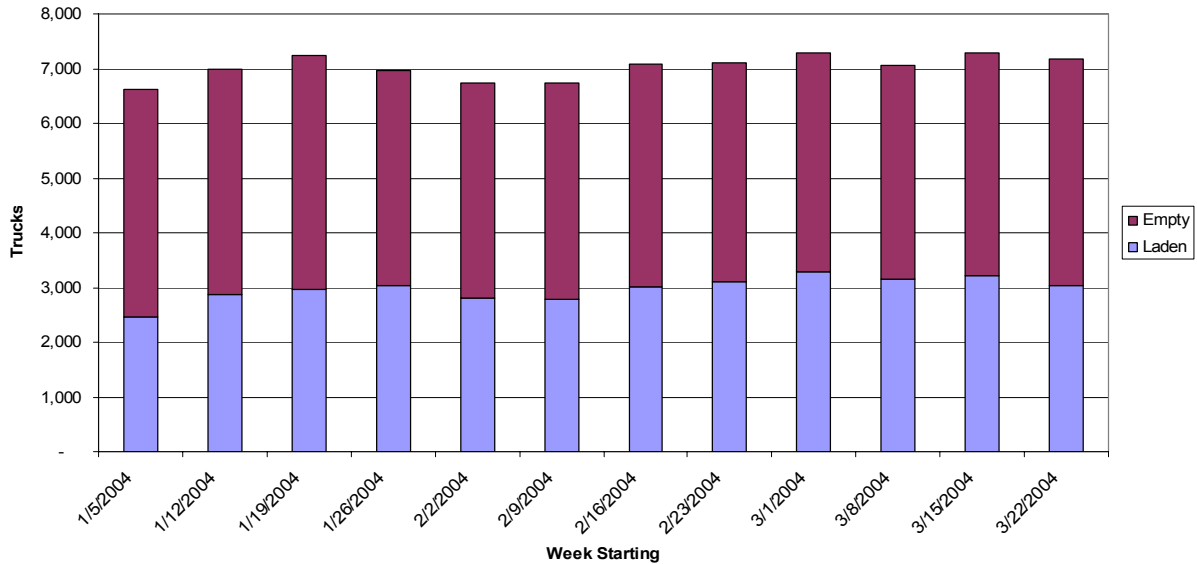
The BOTA facility is located in the center of the El Paso-Ciudad Juárez metropolitan area. The bridge is used for truck and passenger vehicle movements and includes two separate structures, one for northbound traffic and one for southbound traffic. Truck traffic is accommodated by two dedicated outside lanes on each bridge structure. Local transportation companies funded the construction of a replacement bridge capable of handling commercial traffic in 1998; and no tolls are collected at this commercial crossing.

The BOTA operates from 6 a.m. to 6 p.m. Monday through Friday and from 6 a.m. to 2 p.m. on Saturdays. Empty truck traffic prefers using this free bridge to avoid paying the toll at the Zaragoza Bridge. On October 27, 2003 one of BOTA's two northbound lanes was converted to a designated FAST lane. Approximately 15% of the total northbound truck volume at this crossing is now expedited across the border through this lane. Figure 3 shows a schematic diagram of the BOTA.



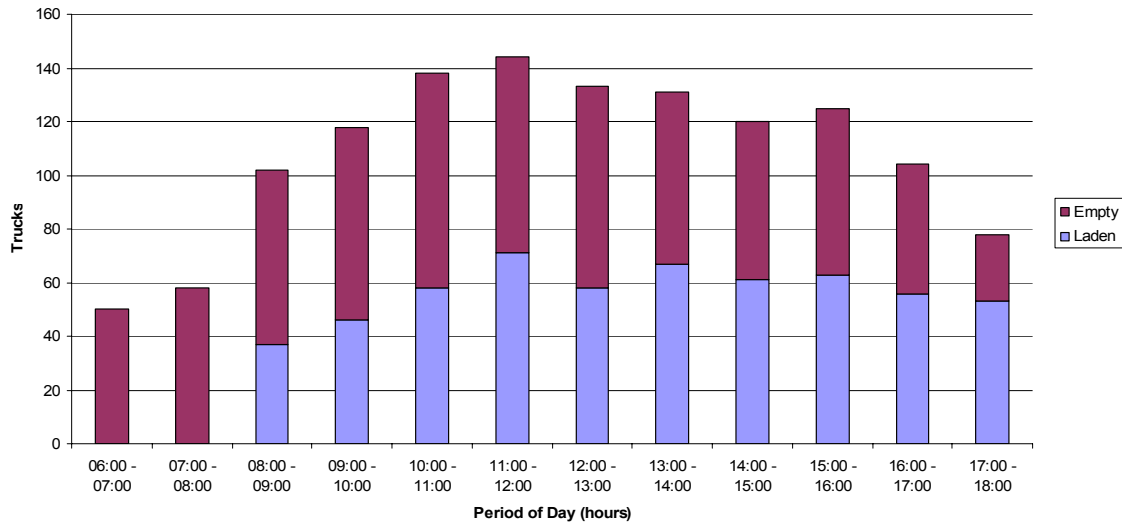
**Figure 3. Border Crossing Schematic at the Bridge of the Americas.**

The average weekly northbound volume of commercial traffic at BOTA was 6,976 trucks for the first three months of 2004, with empty trucks representing 58% of the total as shown in Figure 4 (4).



**Figure 4. BOTA Northbound Weekly Commercial Traffic Volume.**

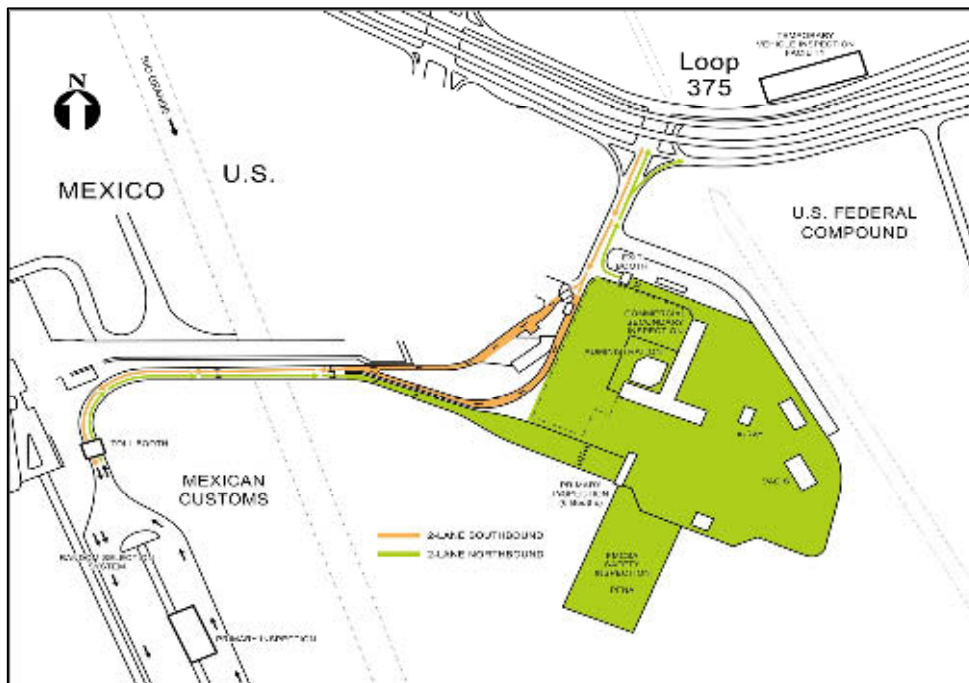
The average weekday volume of northbound traffic at BOTA was 1,311 trucks, with Thursdays being slightly busier than other days. From 6 a.m. to 8 a.m., northbound commercial crossings are restricted to empty vehicles. After 8 a.m., both laden and empty northbound trucks are permitted to cross the border at this location. Northbound commercial crossings peak between 11 a.m. and noon, and begin to decline rapidly after 4 p.m. Figure 5 presents a typical weekday traffic distribution for northbound trucks at the BOTA facility. Queues begin to form around 11 a.m. at this border crossing, suggesting that the port has a capacity of approximately 120 trucks per hour. Overall processing capacity is a function of the number of booths that are staffed and the type of trucks that are being processed - laden, empty, FAST, and non-FAST.



**Figure 5. BOTANorthbound Commercial Crossings by Time-of-Day for 2/19/2004.**

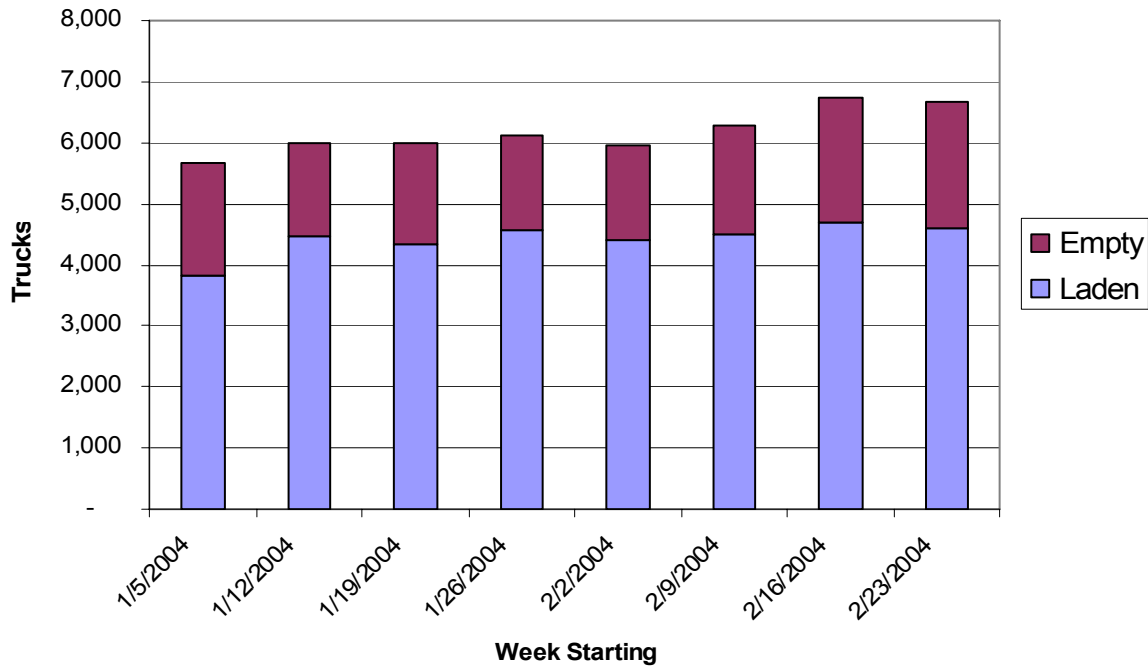
*Zaragoza*

The Zaragoza border crossing is located on the southeast side of El Paso. The crossing's bridge is comprised of two separate structures, one for commercial traffic and the other for passenger vehicles. The truck bridge is a four-lane facility with two lanes per direction. It is open from 8 a.m. to midnight, Monday to Friday, and 9 a.m. to 5 p.m. on Saturdays. The northbound toll is collected on the Mexican side of the border and is approximately \$10 for a commercial truck. Figure 6 shows a schematic diagram of the border crossing at the Zaragoza Bridge.



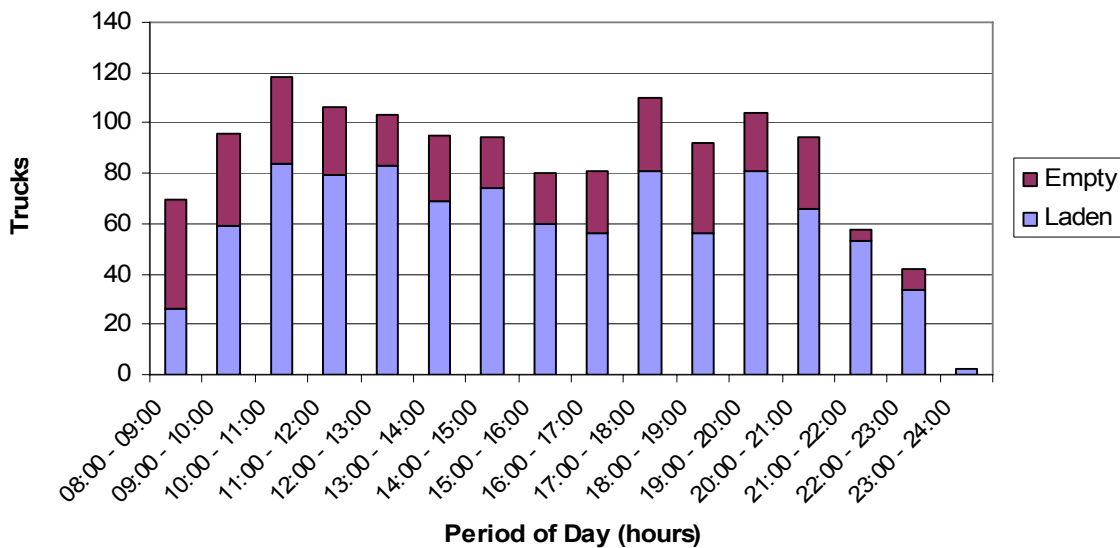
**Figure 6. Border Crossing Schematic at Zaragoza Bridge.**

FAST processing was fully implemented at the Zaragoza Bridge on August 16, 2004 and one of the northbound truck lanes. The average total weekly northbound traffic volume at Zaragoza was approximately 6,200 trucks for the first eight weeks of 2004 (4). Unlike the free bridge at BOTA, the tolled Zaragoza crossing is used predominantly by trucks that are laden with cargo. For the eight weeks of data analyzed, 72% of northbound commercial movements passing through Zaragoza were loaded (see Figure 7).



**Figure 7. Zaragoza Northbound Weekly Commercial Traffic Volume.**

The average weekday volume of northbound traffic at Zaragoza was 1,157 trucks, with Mondays being slightly lighter than the other weekdays. Laden trucks comprise the majority of traffic at this port of entry, except for the 8 a.m. to 9 a.m. period when a large number of empty vehicles cross into the U.S. Peak northbound demand at Zaragoza occurs around 10 a.m., with additional afternoon peaks occurring at 5 p.m. and 7 p.m. Figure 8 presents a typical weekday traffic distribution for northbound trucks at the Zaragoza facility. At this port of entry, queues form around 5 p.m. and continue until 9 p.m. or 10 p.m. This port has six primary inspection booths, and not all of them are staffed during the hours of service. Varying traffic demand during the course of the day dictates the number of booths that are in operation. From observation of commercial operations at Zaragoza, it appears that port capacity is reached at approximately 90 trucks per hour.



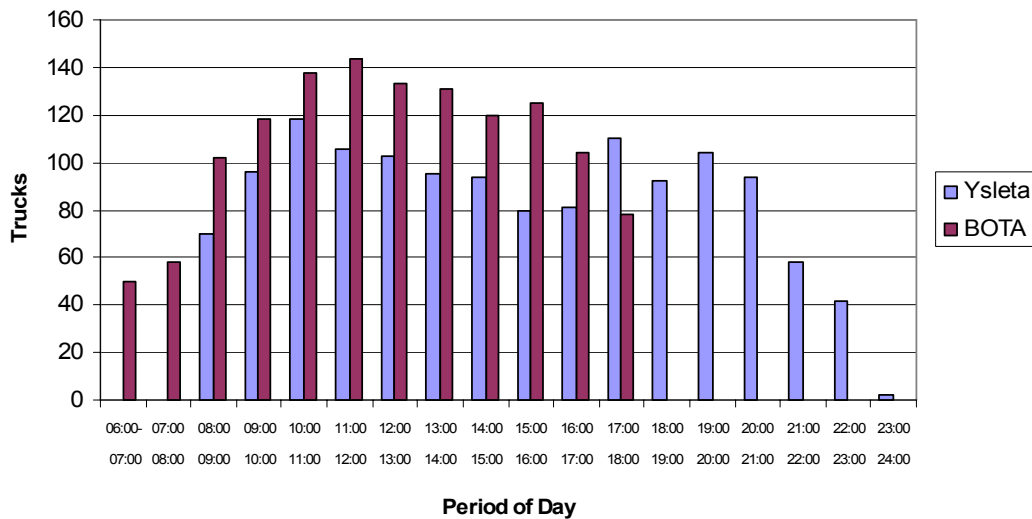
**Figure 8. Zaragoza Northbound Commercial Crossings by Time-of-Day for 2/19/2004.**



### *Combined Zaragoza and BOTA Traffic Characteristics*

Overall northbound truck traffic at both commercial crossings peaks between 10 a.m. and noon. During the early hours of the day, empty trucks cross northbound through BOTA to pick up loads for maquiladora assembly plants. Even before BOTA closes for operation, some traffic voluntarily diverts to Zaragoza, causing a period of high demand at around 5 p.m. Around 7 p.m., loaded vehicles create another period of high demand at the Zaragoza facility. These afternoon peaks result from shipments that leave Mexico's maquiladora plants at the end of the second manufacturing production shift. Figure 9 presents a comparison between BOTA and Zaragoza northbound commercial traffic flows for February 19, 2004.

Although the Zaragoza commercial crossing offers longer hours of operation, BOTA processes more trucks per day. This is due to the absence of a toll at BOTA (compared to the \$10 toll at Zaragoza) and the higher number of empty trucks, which are processed faster than the laden vehicles.



**Figure 9. Zaragoza and BOTA Northbound Commercial Traffic for 2/19/2004.**



## 2. Approach

As mentioned earlier, the study is comprised of three major parts—border crossing fleet profile, border crossing travel profile, and border crossing emissions profile. These aspects will be described in more detail below:

### 2.1 Border Crossing Fleet Profile

The focus of this study was on heavy-duty diesel tractor-trailer trucks. The following information was obtained for the border crossing fleet profile:

- total number of heavy-duty diesel tractor-trailer trucks typically crossing the two border locations by time-of-day (northbound and southbound);
- model year distribution of trucks from Mexico crossing the border at the two border locations studied;
- engine sizes and manufacturers of trucks from Mexico crossing the border; and
- fleet owners of trucks from Mexico crossing the border.

The study team performed counts and interviews at the two bridges during May 2005 and obtained additional information through the following sources:

- Mexican Trucking Association (CANACAR);
- Mexican Department of Transportation (SCT);
- Federal Motor Carrier Safety Administration (FMCSA);
- Texas Department of Public Safety (DPS); and
- Mexican trucking companies.

Students from the Universidad Autonoma de Ciudad Juarez (UACJ) were stationed on the Mexican side of the border, at the entrance of the Mexican Export Lot from May 3 through May 6, 2005 covering the hours of operation of both bridges. This information was collected for the majority of the trucks that crossed from Mexico into the U.S. through the two bridges.

The information that was collected in the field was analyzed and processed after extensive cleaning for typographical errors and formatting. With the processed information, the research team approached the Mexican Transportation Ministry (SCT) and the local Trucking Association to obtain vehicle type and model year, based on the license plate number. SCT provided a file with data on more than 2,000 vehicles in its database. The information included license plate, make, model, VIN, and carrier. After analyzing and cleaning the information presented by SCT it was found that a substantial number of vehicles that were captured in the survey were not included in this database. This is because the information captured by SCT is at the regional level and includes vehicles registered at the federal level and not in the state of Chihuahua or any other Mexican state. The research team contacted each carrier that was identified in the survey, requesting information on the vehicle make, model, and year.

## **2.2 Border Crossing Travel Profile**

The travel profile for trucks crossing the border will help determine the drive cycle patterns from which aspects such as queuing and idling can be inferred. Specifically, the border crossing travel profile refers to time and space information of the trucks as they travel through the border locations.

Global positioning system (GPS) equipment installed on board the commercial vehicles was used to take sample profiles in September 2004 and June 2005. The GPS equipment was installed in Mexico at the carrier yard and was uninstalled in El Paso once the truck finished all inspections. The GPS equipment that was used provides coordinate information on a second-by-second basis. Northbound truck drive cycles were recorded at the BOTA and Zaragoza crossings.

## **2.3 Border Crossing Emissions Profile**

### *Portable Emissions Measurement System (PEMS)*

The PEMS unit used in this study was the OEM-2100 “Montana” system manufactured by Clean Air Technologies International, Inc. The OEM-2100 system is comprised of a gas analyzer, a particulate matter (PM) measurement system, an engine diagnostic scanner, a global positioning system (GPS), and an on-board computer. The gas analyzer measures the volume percentage of nitrogen oxide (NO) (which is converted to a measurement of oxides of nitrogen [NO<sub>x</sub>]), hydrocarbons (HC), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and oxygen (O<sub>2</sub>) in the vehicle exhaust. The PM measurement capability includes a laser light scattering detector and a sample conditioning system. The engine scanner is connected to the data link of electronically controlled vehicles, from which engine and vehicle data can be downloaded during vehicle operation (5). Intake airflow, exhaust flow, and mass emissions are estimated using a method reported by Vojtisek-Lom and Cobb (6).

The CATI equipment has over the years shown great conformity with laboratory tests for pollutants such as CO and NO<sub>x</sub>. Fine particulate matter, PM<sub>2.5</sub>, is also a critical ambient air pollutant in the border region. The measurement of diesel PM is challenging and most portable emissions measurement devices do not measure PM. The laser light scattering technique used by the CATI system can never be fully comparable to a filter-based method used by the U.S. Environmental Protection Agency (EPA) to certify engines; however, it can be a valuable tool for comparative emissions rates once a correlation to gravimetric methods is established. Therefore, the research team proposes to establish the PM emissions correlation to the CATI measurement as well as characterizing the PM emissions of several heavy-duty diesel trucks from Mexico.

### *Tapered Element Oscillating Micro-balance (TEOM) and Gravimetric Filters*

The Department of Energy’s Oak Ridge National Laboratory (ORNL) is uniquely well-qualified to establish a baseline correlation between CATI particulate measurements and more conventional gravimetric measurement. At the Fuels, Engines, and Emissions Research Center (FEERC), a wide array of particulate characterization equipment is in use for studies on advanced, high-efficiency engines. ORNL partnered with TTI on this project to produce the baseline PM measurements.

ORNL provided a partial flow dilution tunnel, a Rupprecht and Patashnick Model 1105 TEOM gravimetric filter equipment and assorted sampling pumps. In addition to PM, aldehydes and ketones were also sampled. (Previous work has shown that extended idling can result in high formaldehyde emissions).

#### *Overall Approach*

A PEMS unit was placed at a stationary location to collect truck idling information in conjunction with the equipment provided by the Oak Ridge National Laboratory. A manageable sample of trucks were tested based on make, model year, and engine size as determined through the fleet profile step. Emissions data were collected under various modes of idling—high RPM, low RPM, air conditioning on, air conditioning off, and snaps (instances of full throttle engine thrusts).

In addition, PEMS units were deployed to obtain the emissions for trucks from Mexico traveling across the border at the study locations. PEMS units were installed on trucks on the Mexican side of the border and then removed on the U.S. side of the border. This activity required extensive coordination with various organizations as described in a later section.

#### **2.4 Testing Site**

The research team needed a testing location that would allow them to perform the idling tests in the most convenient and effective way. This location had to comply with the following criteria:

- conveniently located close to one of the two border bridges;
- roofed area that would provide shade and some cooling with enough ventilation;
- place where a temporary office could be installed;
- security that would help in protecting the expensive testing equipment;
- pavement to avoid dust being created by trucks entering and exiting; and
- sufficient electrical power (115V/20 amp) circuits.

The El Paso County Coliseum was identified as a location that complied with all the above-mentioned criteria. It is located on the U.S. side very close the BOTA border crossing. It has a large paved area and a roof that is tall enough so that trucks could pull in underneath the roof to prevent the trucks and the drivers from getting overly hot from the stationary idling. It is totally open on all sides so that there is ample ventilation. In addition, there was adequate electrical power and the Coliseum has a maintenance shop with two maintenance employees that could help with incidental small repairs. Figure 10 shows a photograph of a truck being tested at the Coliseum site. The figure also shows the portable office, roof, and pavement.



**Figure 10. Photograph of Coliseum Testing Site.**

## **2.5 Coordination**

To perform a field test of this magnitude and complexity required extensive coordination with multiple stakeholders. The research team organized and conducted coordination meetings in September 2004, March 2005, and June 2005. The purpose of these meetings was to explain the project, obtain buy-in, and arrange for stakeholder participation. Appendix A contains notes from the series of meetings held in March 2005. The key stakeholders of this project included:

- motor carriers;
- Mexican customs;
- U.S. Customs and Border Protection (CBP); and
- Texas Department of Public Safety (DPS).

Motor carriers played an important role in providing information to create the tractor database, and to provide trucks for emissions testing. It was found that all the drayage trucks operating at the two bridges are operated by Mexican companies.

Mexican customs assistance was obtained to temporarily import the PEMS equipment so it could be installed in Ciudad Juarez and crossed into the U.S. without flagging any additional inspections or delays. The temporary import permit was obtained with assistance from the SEMARNAT (Secretary of Environment and Natural Resources), Ciudad Juarez office.

Texas DPS officers operate the safety inspection facilities that are located near or adjacent to the CBP compound. DPS agreed to provide space for trucks to be parked while the research team uninstalled the PEMS equipment, once the truck passed through all the possible inspections.

## 2.6 Testing Plan

The Texas Transportation Institute (TTI) led the testing effort. Participating organizations were Clear Air Technologies, Inc. (CATI) and the Department of Energy's Oak Ridge National Laboratory (ORNL), members from Region 6 of EPA, and the participating trucking companies. Three teams were formed to perform the testing. The following is a description of the role of the teams whereas Figure 11 shows a graphical representation.

- *Team 1* was located at the Coliseum and was responsible for installing PEMS, TEOM, and gravimetric equipment and collecting idling data.
- *Team 2* was responsible for uninstalling PEMS equipment at the DPS location at the Zaragoza Bridge or at the Coliseum, depending on the truck route.
- *Team 3* was responsible for installing PEMS equipment at the yards of the trucking companies in Ciudad Juárez.

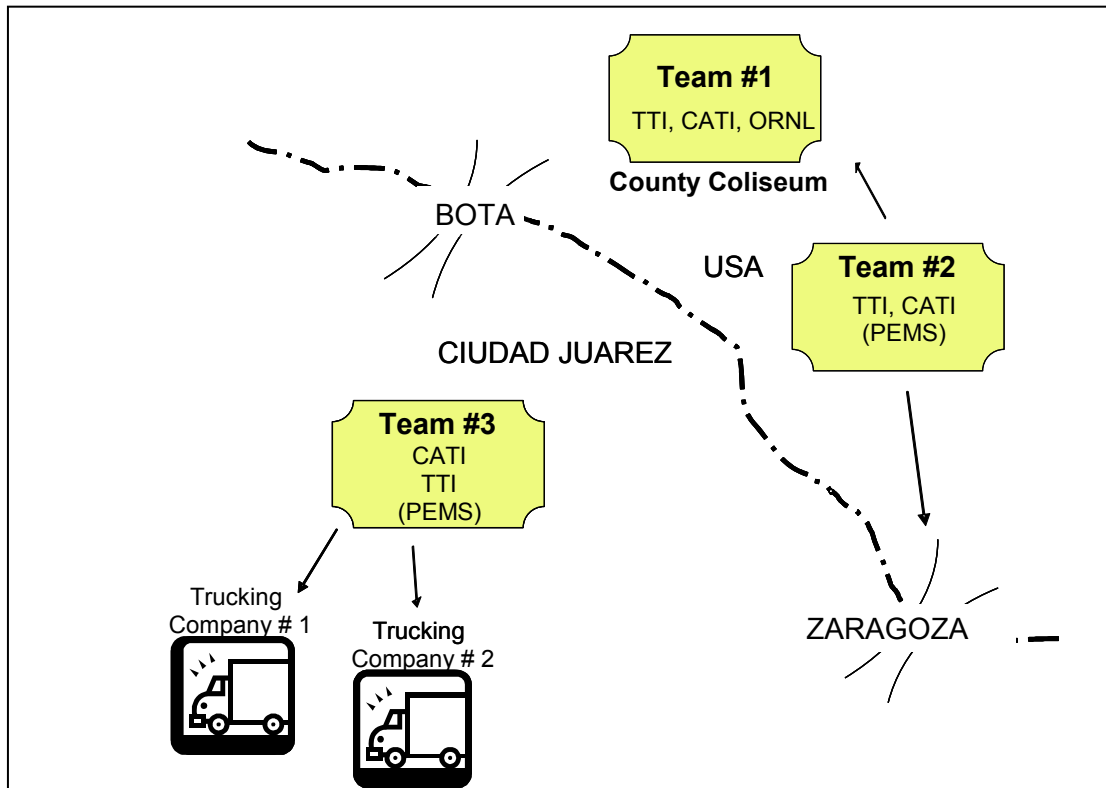


Figure 11. Set-up of Data Collection Teams.





### 3. Results

#### 3.1 Border Crossing Fleet Profile

As mentioned previously, the border crossing fleet profile was developed based on surveys performed in May 2005. Appendix B contains a full set of the fleet data collected for this project. Figure 12 shows the total number of northbound crossings (Tuesday to Friday) that were captured in the survey at both international bridges. It was found that 62% of the vehicles that crossed both bridges on May 4 circulated through the Zaragoza Bridge.

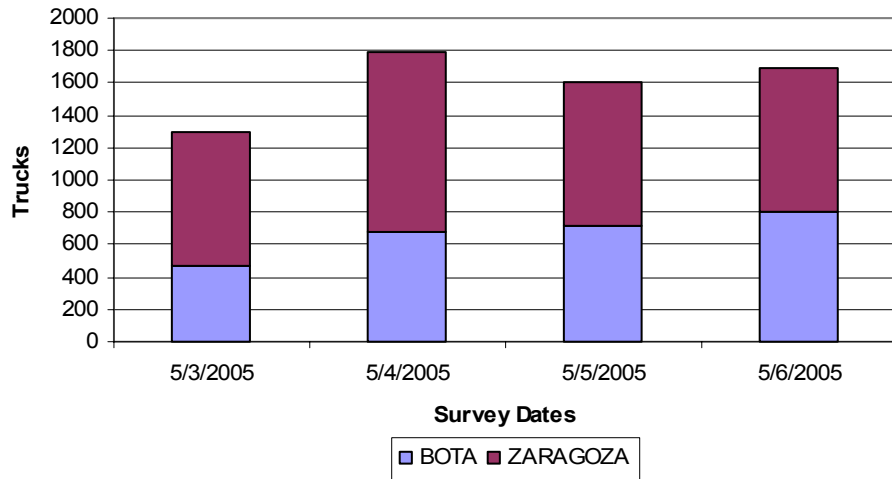
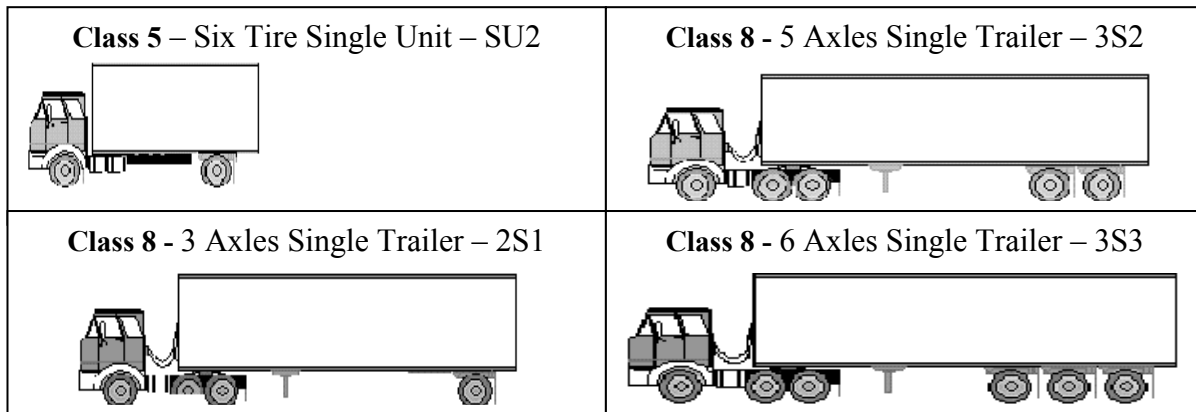


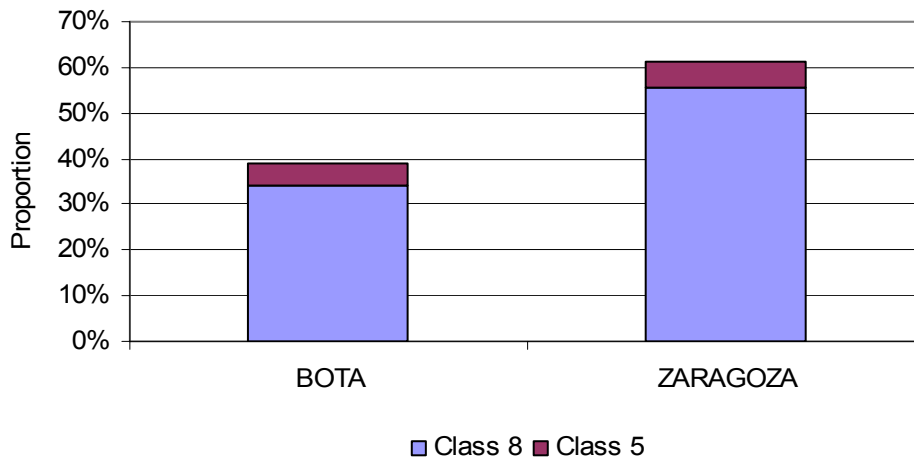
Figure 12. Survey Results Northbound Crossings.

### Vehicle Classification

There are several vehicle classifications used in practice. For example, EPA’s MOBILE6 emissions model has 28 vehicle classes and the Texas Department of Transportation (TxDOT) uses 12 vehicle classes. The classification used for this study is based on the Federal Highway Administration (FHWA) classification, of which an excerpt is shown in Figure 13. Vehicle classification information was captured for 98% of the vehicles that crossed on May 4 using both international bridges. From the vehicles from which classification information was obtained, 89% were observed to be Class 8 trucks and 11% were Class 5 trucks. Both bridges handled similar proportions of Class 5 and Class 8 trucks during the typical sample day. Figure 14 shows the proportion of commercial vehicles by class and by bridge.



**Figure 13. Vehicle Classifications.**



**Figure 14. Surveyed Vehicle Classification Proportion.**

### *Carriers*

Over 200 different carriers were detected during the survey, however, only 16 made up 50% of the total trips during a representative day. Table 1 shows the top 16 carriers or companies and proportion of the total trips for Class 8 vehicles.

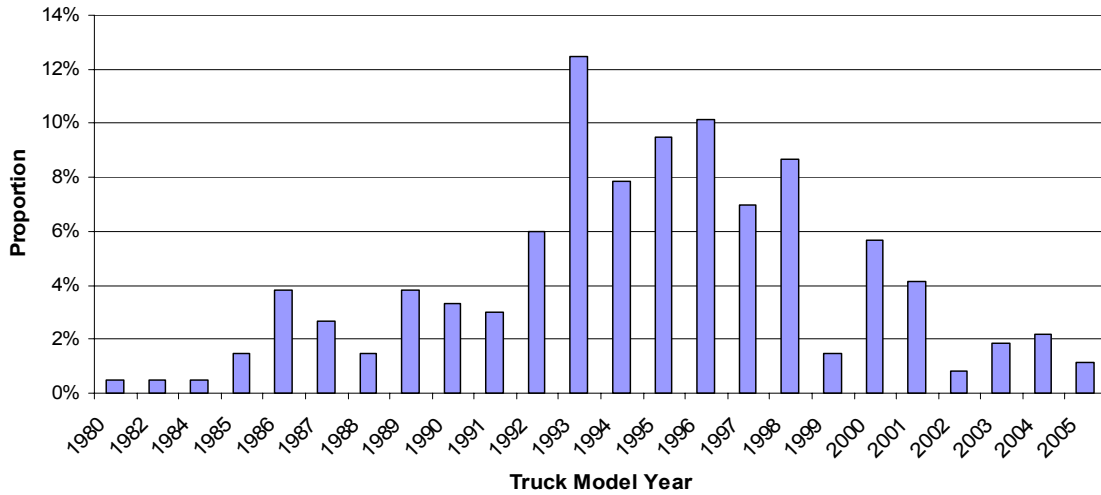
**Table 1. Principal Carriers.**

<b>Company</b>		<b>Proportion</b>
1	Stil	8.52%
2	Aguila	6.57%
3	Sotelo	5.14%
4	Lyrma	4.75%
5	Transportes Norte De Chihuahua	3.84%
6	Transportes Paso Del Norte	3.25%
7	Transservicios	2.93%
8	Silt	2.73%
9	Torres	2.67%
10	Transportes De Maquila	1.76%
11	Desierto Norte	1.43%
12	Kemsa	1.43%
13	Rio Grande	1.43%
14	Express Tres Fronteras	1.37%
15	Vargas	1.37%
16	Delfines	1.04%
Total		50%

### *Vehicle Model Year Distribution*

As mentioned earlier, commercial vehicles crossing in the El Paso-Ciudad Juarez area are primarily maquiladora traffic. Very few long-haul tractors are used at the two border crossings, except for those that travel to and from Chihuahua City, which is close enough to allow the truck to make a day trip. This peculiar traffic characteristic shows that the same tractors are the ones that are used on a daily basis. Using the information for the typical day, the research team developed a histogram of Class 8 vehicles by model year (Figure 15). The analysis of the model year information shows that 25 different model years represent the total fleet composition. From

these 25, three (1993, 1995 and 1996) represent one third of the total fleet, and 10 model years spanning from 1991 to 2002 represent almost three quarters of the total fleet spectrum. It may also be noticed that 20% of the fleet is 1990 or older (more than 15 years old).



**Figure 15. Class 8 Surveyed Fleet Proportion by Model Year.**

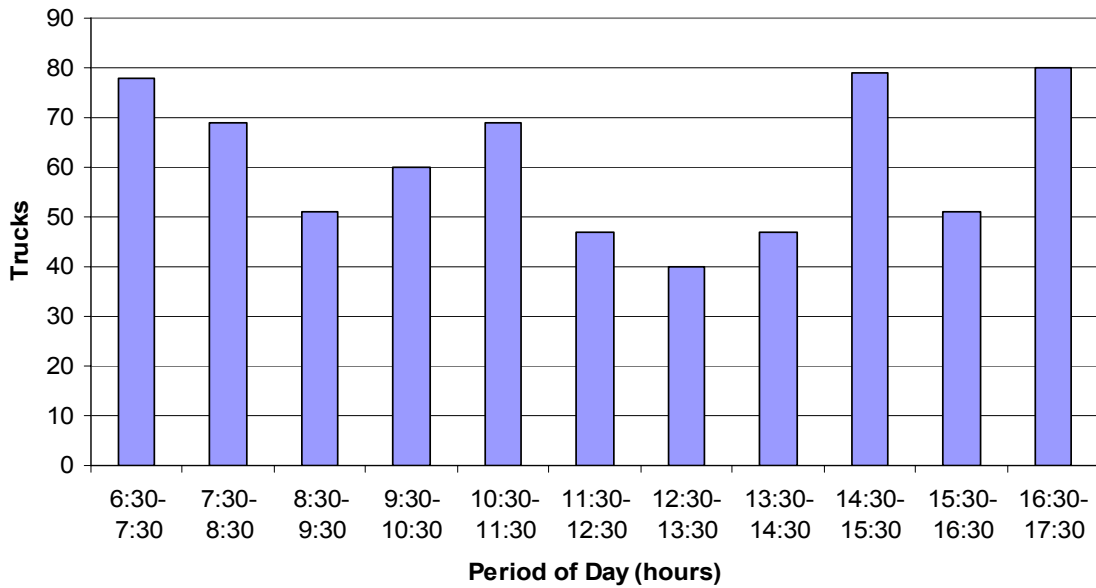
*Sample*

Based on the survey results, in which 25 different model years were found, the 20 with highest representation were identified for emissions testing.

### 3.2 Border Crossing Travel Profile

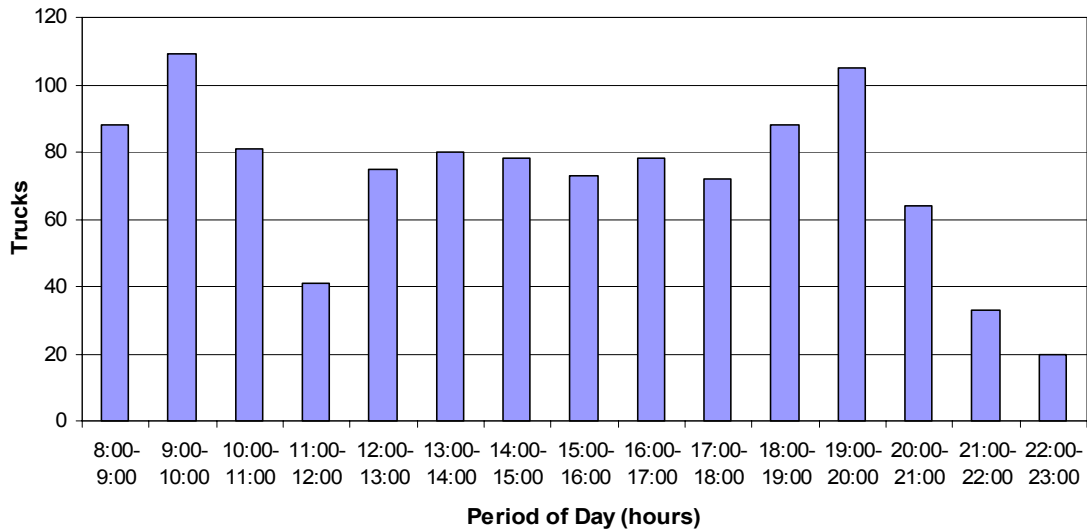
#### *Traffic Demand*

Because the BOTA border crossing is a non-toll bridge that opens earlier than the Zaragoza toll bridge, the BOTA port of entry is used to relocate transportation equipment, and most of the traffic between 6:30 a.m. and 8:30 a.m. is comprised of empty and bobtail tractors that cross from Mexico into the U.S. to pickup loads. Around 2:30 p.m., loaded traffic demand increases and it continues at a high level until just before the closure of the bridge at 5:30 p.m. Figure 16 shows the BOTA survey results on an hourly basis for May 4, 2005.



**Figure 16. BOTA Surveyed Hourly Crossings 5/4/2005.**

The Zaragoza international crossing presents a period of high demand from the opening hour at 8:00 a.m. until around 11:00 a.m. Demand is relatively steady during the day except for a period between 6:00 p.m. and 8:00 p.m. when demand increases. This early evening demand is mainly comprised of loaded vehicles that move northbound cargo from maquiladora plants that ship the production from the morning shift. Demand at this POE starts to decline around 8:00 p.m. Figure 17 presents the hourly surveyed northbound crossing data for the Zaragoza bridge for May 4, 2005.



**Figure 17. Zaragoza Surveyed Hourly Crossings 5/42005.**

### *Drive Cycles*

An important element of this research was the collection of real-world travel information during the northbound commercial crossing processes. Detailed drive-cycle information for the commercial crossings has not been reported in the past and it is of great importance for emissions estimation (7). Global Position System (GPS) technology was used to collect drive-cycle information at both BOTA and Zaragoza bridges. The drive cycle information include travel times, idle, creep idle, acceleration, and deceleration data. Ten northbound drive-cycles were collected at BOTA and seven at Zaragoza. Appendix C presents second by second graphs of distance versus speed plots and time versus distance plots for each of the drive-cycles.

### Drive Cycle Sections

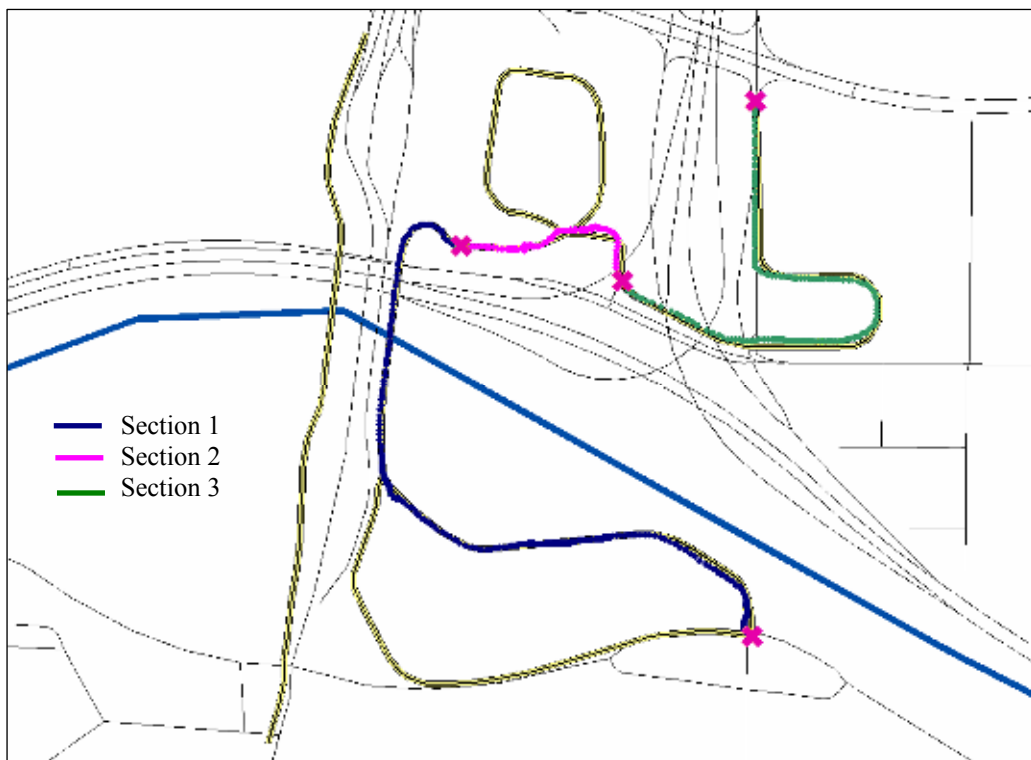
In order to effectively analyze the drive-cycles, each drive-cycle was divided into distinct sections. For both BOTA and Zaragoza bridges, the first part of the drive-cycle includes the section from the entrance to the Mexican Customs compound to the U.S. primary inspection booth. This section includes the international crossing and it should be noted that trucks travel the same distance in this section.

The second part of the drive-cycle includes the truck movements within the U.S. federal compound, from the primary inspection booth to the exit booth. Drive-cycles in this part of the international crossing could vary significantly from trip to trip. For example, a FAST truck could

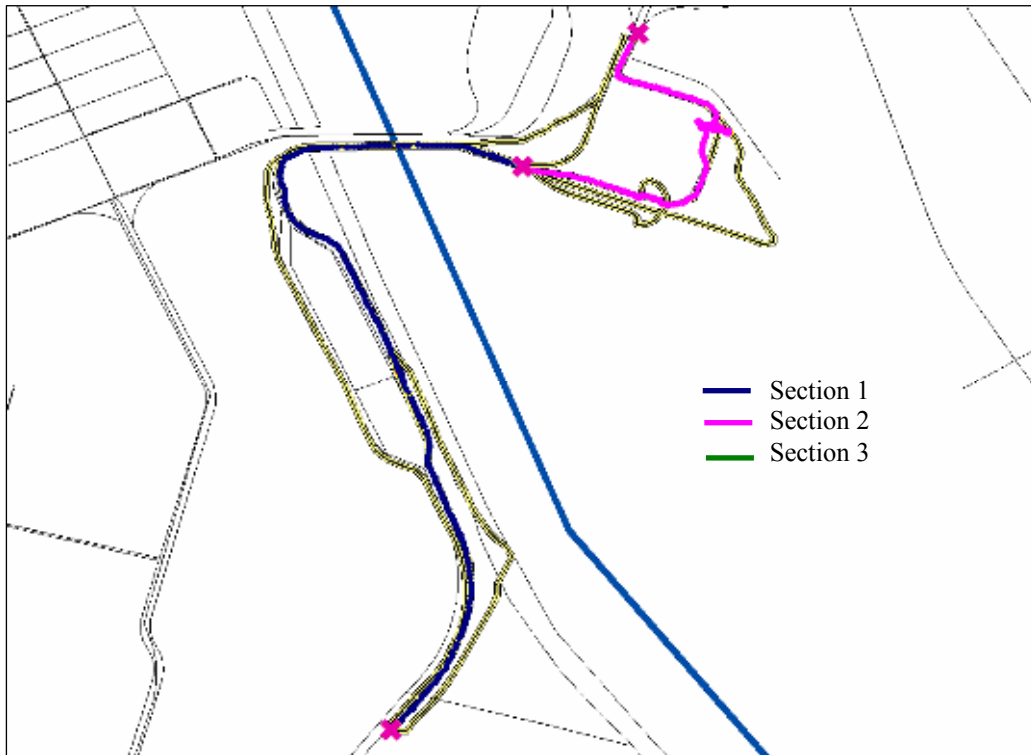
be sent directly to the exit booth after being cleared at the primary inspection booth, while a loaded truck could be required to stop at the x-ray inspection or be sent for physical inspection.

The third section of the drive-cycle stretches from the exit booth of the U.S. federal compound to the exit of the state Safety Inspection Facility (SIF). Information for this third section of the drive-cycle was only collected for the BOTA crossing, in which the SIF is adjacent to the U.S. federal compound. At the Zaragoza crossing, the SIF is located across the freeway and was not included in the comparison. At the BOTA SIF, trucks could be sent for a secondary inspection or to the exit after a primary inspection, therefore, distances could vary accordingly.

Figures 18 and 19 present the sections in each of the international crossings. The section brake points are marked with an X and each section is shown with a different color.



**Figure 18. BOTA Drive-cycle Sections.**



**Figure 19. Zaragoza Drive-Cycle Sections.**

Travel Times

Table 2 presents a summary of the drive-cycles that were collected for the BOTA and Zaragoza bridges. Drive-cycles were measured in the months of October 2004 and June 2005. The drive-cycles included FAST and non-FAST trucks as well as loaded, unloaded, and bobtail vehicles.



**Table 2. Drive-Cycle Travel Times.**

BOTA Sample #	Date	Initial Time	Travel Time per Section (hh:mm:ss)			Total Crossing Time	Shipment Type
			1	2	3		
1	10/26/2004	2:23 p.m.	0:12:54	0:32:16	<b>1:13:38</b>	1:58:48	STIL, Non-FAST, Loaded Stopped at DPS Inspection
2	10/27/2004	10:36 a.m.	0:05:53	0:10:13	0:02:04	0:18:10	STIL, FAST, Loaded
3	10/27/2004	2:32 p.m.	0:04:24	0:12:27	0:03:17	0:20:08	STIL, FAST, Loaded
4	6/27/2005	4:20 p.m.	0:06:20	0:02:47	0:03:08	0:12:15	Sotelo, FAST, Loaded
5	6/28/2005	8:34 a.m.	0:03:15	0:27:11	0:04:43	0:35:09	Sotelo, Non-FAST, Bobtail
6	6/28/2005	12:33 p.m.	0:11:52	0:06:07	0:02:06	0:20:05	Sotelo, FAST, Loaded
7	6/28/2005	5:42 p.m.	0:14:25	0:03:10	0:04:15	0:21:50	Sotelo, Non-FAST, Bobtail
8	6/29/2005	7:27 a.m.	0:08:21	0:02:31	0:04:29	0:15:21	Sotelo, FAST, Empty
9	6/29/2005	10:18 a.m.	0:12:53	0:03:22	0:02:40	0:18:55	Sotelo, FAST, Empty
10	6/30/2005	8:40 a.m.	0:09:24	0:03:54	0:04:21	0:17:39	Sotelo, FAST, Empty
Average time			0:08:58	0:10:24	0:10:28	0:29:50	
Average time w/o lengthy stops			0:08:58	0:10:24	0:03:27	0:19:57	

Zaragoza Sample #	Date	Initial Time	Travel Time per Section (hh:mm:ss)			Total Crossing Time	Shipment Type
			1	2	3		
1	10/26/2004	4:31 p.m.	0:21:28	<b>2:51:39</b>		3:13:07	STIL, Non-FAST, Loaded Stopped at US Inspection
2	10/27/2004	3:25 p.m.	0:11:47	0:36:36		0:48:23	STIL, Non-FAST, Loaded
3	10/27/2004	7:37 p.m.	0:07:03	0:25:19		0:32:22	STIL, FAST, Loaded
4	6/25/2005	10:59 a.m.	<b>1:50:39</b>	<b>0:58:47</b>		<b>2:49:26</b>	Sotelo, Non-FAST, Loaded Stopped at MX and U.S. Inspection
5	6/25/2005	12:00 p.m.	0:07:10	0:12:24		0:19:34	Sotelo, non-FAST, Empty
6	6/27/2005	8:23 a.m.	0:16:00	0:29:20		0:45:20	Sotelo, Non-FAST, Loaded
7	6/27/2005	8:49 a.m.	0:10:44	0:07:03		0:17:47	Sotelo, FAST, Loaded
Average time			0:26:24	0:48:44		1:15:08	
Average time w/o lengthy stops			0:12:22	0:22:08		0:32:41	

Table 2 shows that at BOTA, the average crossing time for the first section of the drive-cycle was approximately nine minutes. The shortest travel time in the first section of the trip was 3.25 minutes for a bobtail truck that crossed during the morning. The longest time at this first section of the cycle was 14.5 minutes for a bobtail truck that crossed at the end of the day (5:40 p.m.), before that bridge closed at 6:00 p.m.

For the second leg of the cycle at BOTA, the average crossing time for the ten drive-cycles was approximately 10 minutes, with the shortest time in this section at less than three minutes and the longest at more than 30 minutes. Two of the longest travel times on this section were for non-FAST trucks at 27 and 32 minutes, respectively.

The third section of the crossing through BOTA, which includes the DPS inspection also averaged approximately 10 minutes. The shortest time was two minutes and the longest one hour and 13 minutes for a truck that underwent a detailed safety inspection (Sample 1). The average crossing time without this particular truck was 3.5 minutes.

As mentioned earlier, at Zaragoza the drive-cycles were divided into two sections, because the SIF is not adjacent to the border crossing compound and was therefore excluded. The first section of the cycle had an average duration of 26.5 minutes. However, it should be noted that this reflects one particular case where one of the trucks was stopped at Mexican Customs for almost two hours. The average crossing time without that particular trip was approximately 12.5 minutes. The shortest crossing time in this initial portion of the trip was approximately 7 minutes occurring around noon and the longest was 21.5 minutes occurring around 4:30 p.m.

In the second leg of the cycle (through the U.S. federal compound), two of the seven trucks sampled underwent thorough inspections, one was stopped for one hour and the other was stopped for almost three hours, resulting in an average duration of 48 minutes. Without these two trucks included in the sample, the average crossing time was 22 minutes, with the shortest time of seven minutes for a FAST truck in the morning hours (Sample 7) and the longest time (without considering the two long inspections) was 36 minutes for a non-FAST truck at 3:30 p.m. (Sample 2).

The analysis of the crossing times by section for the seventeen drive-cycles that were collected provides important information. For example, the travel time during the first section of the trip at BOTA and at Zaragoza depends on the level of traffic and associated congestion levels, while the time at the second and third sections of the trip depend on whether inspections are required or whether the truck is on a FAST or non-FAST trip.

#### Idling and Creep Idling times

Table 3 presents the percentage of idling and creep idling that occurred during the border crossing for each section of the trip. Idling occurs when the vehicle is at a total standstill whereas creep idling occurs when the vehicle is moving at a speed less than 5 mph and has an acceleration or deceleration less than 0.5 mph/sec. This threshold for creep idling seemed to be an appropriate divider between trucks involved in creep idling and actually driving.

**Table 3. Idling and Creep Idling Proportion.**

Sample #	BOTA			Zaragoza		
	1	2	3	1	2	3
1	77%	85%	96%	76%	98%	-
2	39%	61%	44%	63%	82%	-
3	19%	72%	39%	18%	84%	-
4	34%	44%	38%	99%	96%	-
5	28%	85%	65%	31%	82%	-
6	71%	91%	7%	63%	91%	-
7	70%	55%	33%	45%	64%	-
8	55%	65%	43%	-	-	-
9	76%	74%	0%	-	-	-
10	66%	81%	63%	-	-	-
Average	54%	71%	43%	56%	85%	-

It was found that at BOTA the average time proportion for idle or creep idle was 54% for Section 1, 71% for Section 2, and 43% for Section 3. In Section 1, which covers the entrance to the Mexican federal compound to the U.S. primary inspection booth and includes the actual border crossing, four of the 10 samples were idling or creep idling for more than 75% of the time. These four trips were made during times of the day when the crossing was congested. The lowest proportion of idling and creep idling in this section was 19% for Sample 3 that corresponds to a FAST truck that traveled at an average speed of 7.8 mph on that section.

Section 2 at BOTA has a higher average percentage of idling and creep idling than Section 1 at 71%. Section 2 includes travel within the U.S. federal compound that requires trucks to move at slow speeds and stop at gates and inspection facilities. There were six of the 10 samples in this section that had a 75% or higher percentage idling and creep idling time.

Section 3 at BOTA comprises of the state safety inspection process. For this section the average proportion of idling and creep idling time was 43%, with one sample that had no idle or creep idle and another one that had only 7% of idle and creep idle time. Sample 1 was idling or creep idling for 96% of the time, which implies that this vehicle was stopped for detailed inspection.

At Zaragoza the proportion of idling and creep idling for Section 1 was found to be 56%, which is similar to that at BOTA for the same section. The lowest percentage was observed for Sample

5, which idled or creep idled for 51% of the time. This was an empty truck traveling around noon.

For the second portion of the trip that includes traveling through the U.S. federal compound. Two trucks had idling and creep idling proportions of more than 95% and the average idling and creep idling proportion was 85%. This high percentage was due to inspections occurring in this section of the cycle.

The analysis of the creep idling and idling times leads to the conclusion that Section 1 of the northbound trip that includes travel through Mexican Customs and the actual bridge crossing, result in approximately 50% of the time that trucks idle or move at a very low speed. In the second portion of the trip (Section 2) on average more than 75% of the trip is spent idling or creep idling due to low speeds as a result of congestion and various inspections. Section 3 involves the state safety inspection process, which resulted in just over 40% of creep idling and idling occurring at BOTA.

Table 4 shows a summary of the travel times, idling, and creep idling percentages for the two bridges. The travel times are estimated by allocating probabilities to the extremely long travel times observed during the surveys. It may be seen that the average percentage idling and creep idling for both bridges are above 60%. In addition, the travel time for Zaragoza is more than that for BOTA. This can be ascribed to the fact that Zaragoza has higher percentage idling and creep idling than the BOTA bridge.

**Table 4. Summary of Travel Time, Idling and, Creep Idling.**

Section	BOTA			Zaragoza		
	Travel Time (min)	% Normal Idle	% Creep Idle	Travel Time (min)	% Normal Idle	% Creep Idle
1	8.5	41%	18%	11.1	36%	13%
2	8.2	62%	13%	23.0	75%	8%
3	4.2	13%	29%	-	-	-
Total	21.0	45%	18%	34.2	63%	9%

Acceleration/Deceleration by Section

Table 5 shows the number of acceleration and decelerations occurring in the various sections. The drive-cycle information was used to calculate the number of times that the truck accelerated and decelerated during each section of the northbound trip. Acceleration and deceleration were defined as an acceleration or deceleration rate averaging at least 0.5 mph/sec for five seconds. This is based on a visual analysis of the speed profiles and the fact that the maximum acceleration for a Class 8 truck from 0 to 30 mph is 1 mph/sec (8). Accelerations and decelerations are important components of drive cycles because they are generally associated with high emission rates.

**Table 5. Acceleration/Decelerations per Section.**

Sample #	BOTA			Zaragoza		
	1	2	3	1	2	3
1	3/2	3/3	2/2	5/5	4/3	-
2	3/3	5/5	2/1	3/3	6/6	-
3	2/2	2/2	1/1	6/5	5/5	-
4	3/3	3/3	2/1	5/5	4/4	-
5	3/3	3/3	1/1	4/4	2/2	-
6	4/4	2/1	1/1	3/4	3/3	-
7	3/3	1/1	2/2	5/5	4/3	-
8	3/3	2/2	2/3	-	-	-
9	3/3	2/2	3/3	-	-	-
10	3/4	3/3	1/2	-	-	-
Average	3/4	2.6/2.5	1.7/1.7	4.4/4.4	4/3.7	-

Table 5 shows that the number of accelerations/decelerations at the BOTA averaged 3/4 in Section 1, 2.6/2.5 in Section 2 and 1.7/1.7 in Section 3. This implies that in Section 1, vehicles are subjected to more accelerations and decelerations than in the other sections. In Section 2 one truck had only one event of acceleration and deceleration (Sample 7). This bobtail truck only required to stop once within the federal compound. The number of events in Section 3 is the lowest. This is a result of the inspection process at the SIF in which trucks that are empty or bobtailing with no apparent safety issues are required to stop only once at the primary inspection booth and are then allowed to leave the compound.

At Zaragoza, the number of acceleration/deceleration events was higher than the ones encountered at BOTA. In Section 1 the average was 4.4/4.4 and Section 2 it was 4/3.7, with some crossings experiencing as much as six events in Sections 1 and 2.

### 3.3 Border Crossing Emissions Profile

#### *Idling*

The main focus of the emissions data collection was on idling because it is anticipated that this is the mode that can most effectively be addressed with possible emissions reduction strategies.

The idling data was collected for nine trucks using the following five test modes.

- Air Conditioning Off – Low Idle (600-700 rpm)
- Air Conditioning Off – High Idle (~1000 rpm)
- Air Conditioning On – Low Idle (600-700 rpm)
- Air Conditioning On – High Idle (~1000 rpm)
- Snap idle test

The first four tests were performed for at least a 15-minute period. The snap idle tests consisted of five consecutive ramps to full throttle from the idle position for a period of five seconds each.

Table 6 shows engine data for each of the nine trucks tested for idling. The table shows that the ages of the trucks range from 1985 to 1998, covering the bulk of the ages identified during the survey shown in Figure 15. Also, note that the miles accumulated are not necessarily in relation to the age of the trucks, indicating that rebuilding of engines might have occurred. This sample of trucks is not intended to be a statistically significant sample, instead it provides a good indication of the emissions impact of trucks crossing the border.

**Table 6. Trucks Tested for Idling Emissions.**

<b>Truck No.</b>	<b>Year</b>	<b>Vehicle Make</b>	<b>Engine Model</b>	<b>Engine Displacement (L)</b>	<b>Miles Accumulated</b>
1	1998	International	Cummins M11-370E	10.82	712,590
2	1989	International	Cummins 350	14.00	1,720,000
3	1996	International	Cummins 350 BICAM3	14.00	151,848
4	1987	International	Cummins 350	14.00	1,283,536
5	1985	International	Cummins 350	14.00	Unknown
6	1996	Volvo	Cummins M11	10.82	1,118,896
7	1994	International	Detroit Diesel Series 60	12.70	694,878
8	1992	Unknown	Cummins L10	10.02	501,178
9	1998	Dina	Cummins M11 Plus	10.82	1,088,931

Table 7 shows the tests that were successfully performed for each truck. The table shows that all trucks were tested with their air conditioners off at low idle mode and most of the trucks were subjected to the snap tests, whereas the other tests produced usable results in selected cases due

to the following factors: 1) the trucks did not have air conditioning or functional air conditioning; and 2) the older trucks were not equipped with an idle adjustment to allow idle operation at different speeds. In some cases, the driver was able to hold a specified rpm for the duration of the test with the accelerator pedal.

**Table 7. Tests Performed.**

Truck No.	Year	A/C Off – Low Idle	A/C On – Low Idle	A/C Off – High Idle	A/C On – High Idle	Snaps
1	1998	✓				
2	1989	✓	✓			✓
3	1996	✓		✓		✓
4	1987	✓	✓		✓	✓
5	1985	✓		✓		✓
6	1996	✓	✓		✓	✓
7	1994	✓	✓	✓	✓	✓
8	1992	✓		✓		✓
9	1998	✓	✓		✓	✓

The PEMS equipment was used to collect emissions data for four pollutants — NO<sub>x</sub>, HC, CO, and PM. In the case of NO<sub>x</sub>, the PEMS equipment actually measures NO and uses a conversion factor for converting to NO<sub>x</sub>. The results for these pollutants will be discussed in more detail in the following sections.

#### NO<sub>x</sub> Emissions

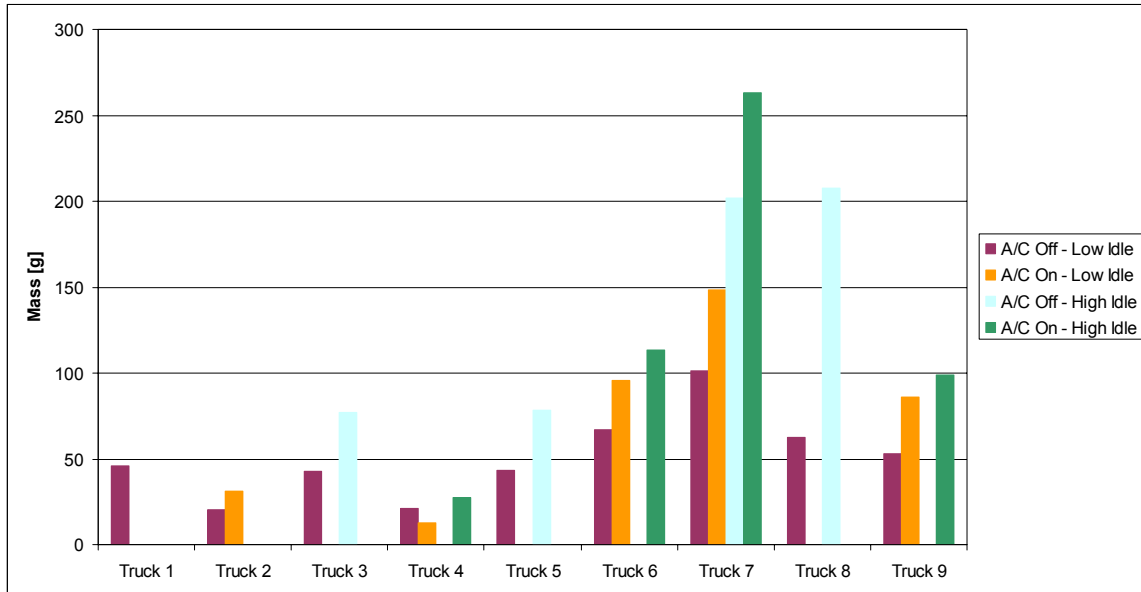
Table 8 shows the average mass rate (grams per hour [g/hr]) for NO<sub>x</sub> for each test. Additionally, “A/C Off – Low Idle” is used as the baseline for comparing the other three tests. Table 8 shows the percent difference between the baseline test and the three remaining idle tests for each of the trucks. The table shows that there is no clear correlation between the age of the trucks and the NO<sub>x</sub> emissions rates. There is also no clear correlation between the miles accumulated and the NO<sub>x</sub> emissions rates. In addition, the NO<sub>x</sub> rates seem to increase with additional engine load due to the use of the air conditioner and higher idling rates.

**Table 8. NOx Mass Rate (g/hr) and Percent Difference vs. A/C Off – Low Idle.**

<b>Truck No.</b>	<b>Year</b>	<b>A/C Off - Low Idle (baseline)</b>	<b>A/C On - Low Idle</b>	<b>A/C Off - High Idle</b>	<b>A/C On - High Idle</b>
1	1998	46	-	-	-
2	1989	20	30 (50%)	-	-
3	1996	42	-	78 (84%)	-
4	1987	20	14 (-33%)	-	27 (33%)
5	1985	44	-	78 (77%)	-
6	1996	67	95 (42%)	-	114 (70%)
7	1994	101	149 (48%)	203 (101%)	263 (161%)
8	1992	62	-	207 (234%)	-
9	1998	53	86 (62%)	-	98 (85%)
Average % Difference vs. baseline			43%	127%	108%

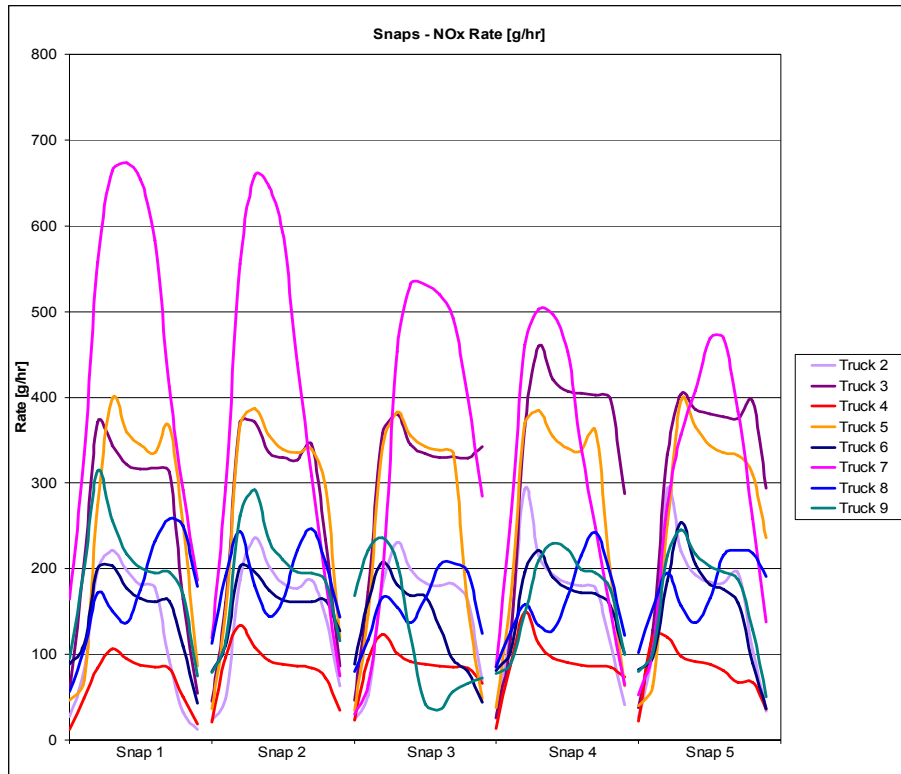


Figure 20 shows the accumulated NOx emissions for the various trucks under the various idling modes. Note that EPA’s current guidance on extended idling emissions for Class 8 trucks is 135 g/hr (9). Figure 20 shows that the EPA recommended 135 g/hr is only exceeded by Trucks 7 and 8 and mostly in the high-idle mode. In addition, the range of NOx emissions shown in Figure 20 are also in line (even slightly lower) than results of previous studies that showed a range of 50 to 350 g/hr for more than 40 trucks that were tested under various idling modes (10, 11).



**Figure 20. NOx Simulated 1-hour Mass Accumulation (g).**

Figure 21 shows the NO<sub>x</sub> emissions results for the various snap tests. The data is shown for a five-second period for eight of the nine trucks. The figure shows that there is consistency in emissions between individual snaps for the specific trucks. Truck 7, which had the highest idling emissions, had the highest snap emissions. Note that the snap NO<sub>x</sub> emissions range from approximately 100 to 660 g/hr.



**Figure 21. NO<sub>x</sub> Snap Tests.**

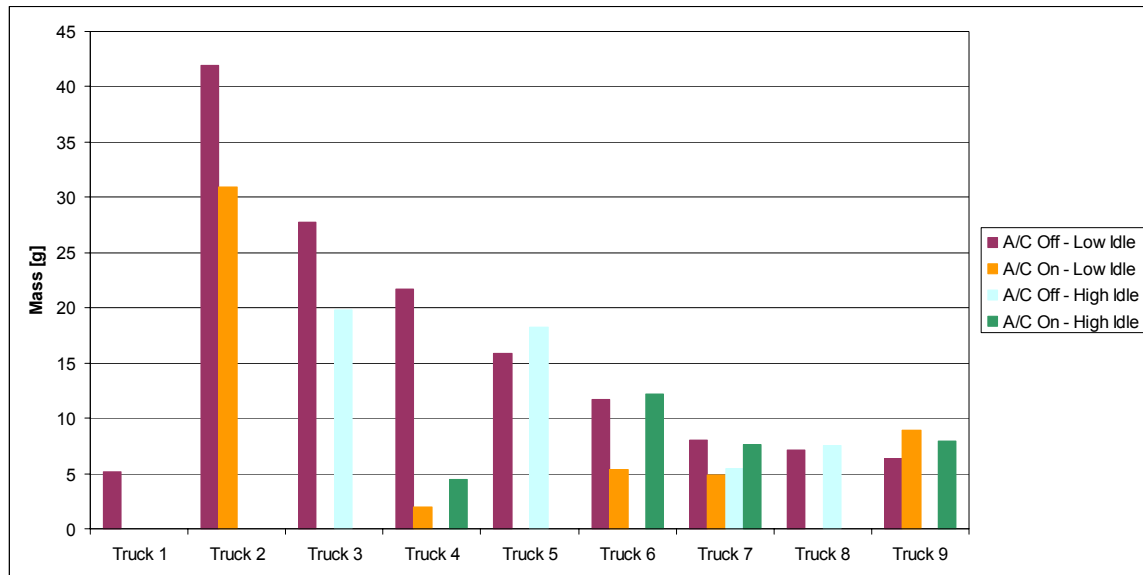
### HC Emissions

Table 9 shows the average mass rate (g/hr) for HC for each test. This table shows that the truck with the highest miles accumulated (Truck 2) produced the highest HC emissions. This table also shows that the HC rates do not show any clear patterns between the different modes of idling.

**Table 9. HC Mass Rate (g/hr) and Percent Difference vs. A/C Off – Low Idle.**

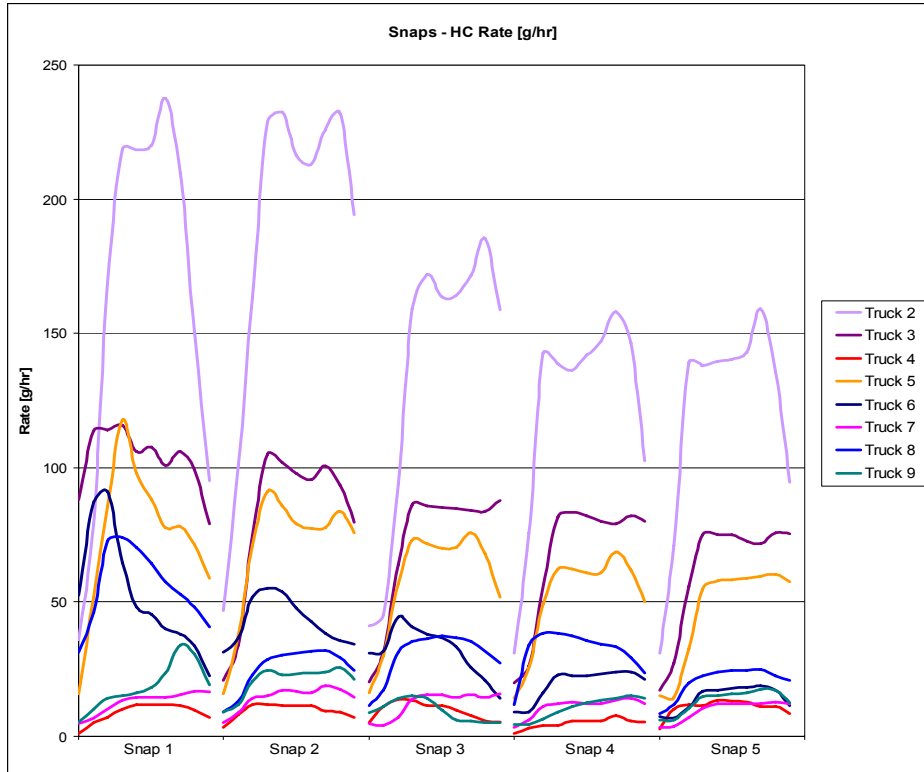
<b>Truck No.</b>	<b>Year</b>	<b>A/C Off - Low Idle (baseline)</b>	<b>A/C On - Low Idle</b>	<b>A/C Off - High Idle</b>	<b>A/C On - High Idle</b>
1	1998	5	-	-	-
2	1989	42	30 (-28%)	-	-
3	1996	27	-	20 (-25%)	-
4	1987	22	2 (-92%)	-	5 (-77%)
5	1985	15	-	19 (22%)	-
6	1996	12	5 (-58%)	-	12 (0%)
7	1994	8	5 (-43%)	6 (-29%)	8 (0%)
8	1992	7	-	8 (14%)	-
9	1998	6	9 (50%)	-	8 (33%)
Average % Difference vs. baseline			-44%	-8%	-31%

Figure 22 shows the accumulated HC emissions for the various trucks under the various idling modes.



**Figure 22. HC Simulated 1-hour Mass Accumulation (g).**

Figure 23 shows the HC emissions results for the various snap tests. This figure shows that there is some consistency in emissions for the specific trucks between individual snaps. Truck 2, which had the highest idling emissions, had the highest snap emissions. Also note that the snap HC emissions range from approximately 20 to 230 g/hr.



**Figure 23. HC Snap Tests.**

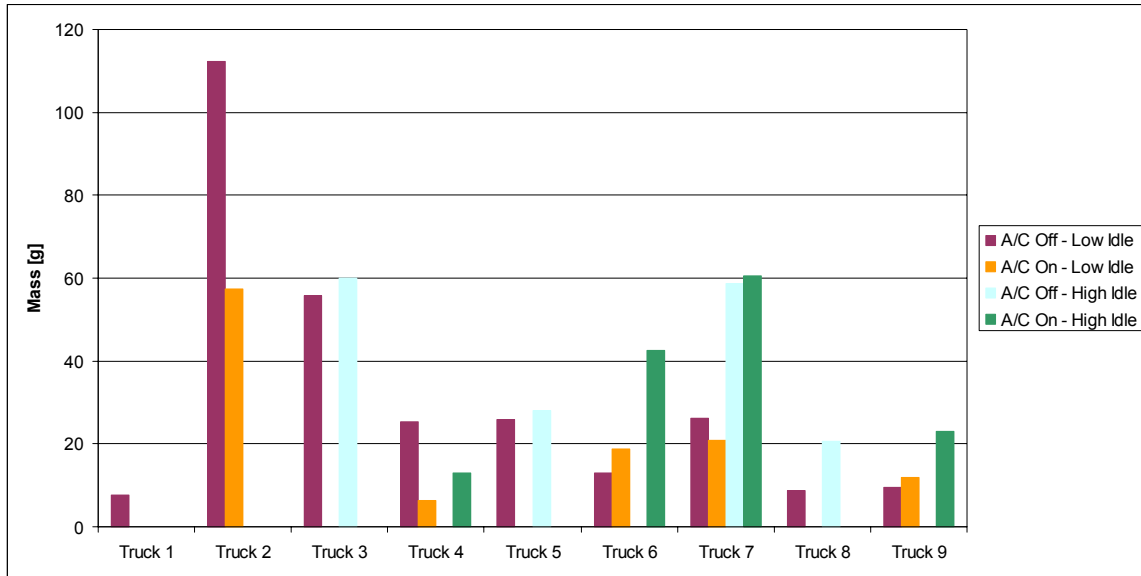
### CO Emissions

Table 10 shows the average mass rate (g/hr) for CO for each test. This table shows that there is no clear correlation between the age of the trucks and the CO emissions rates. The table also shows that the CO rate tends to increase with the higher engine loads due to the application of the air conditioner and higher idling rates.

**Table 10. CO Mass Rate (g/hr) and Percent Difference vs. Baseline.**

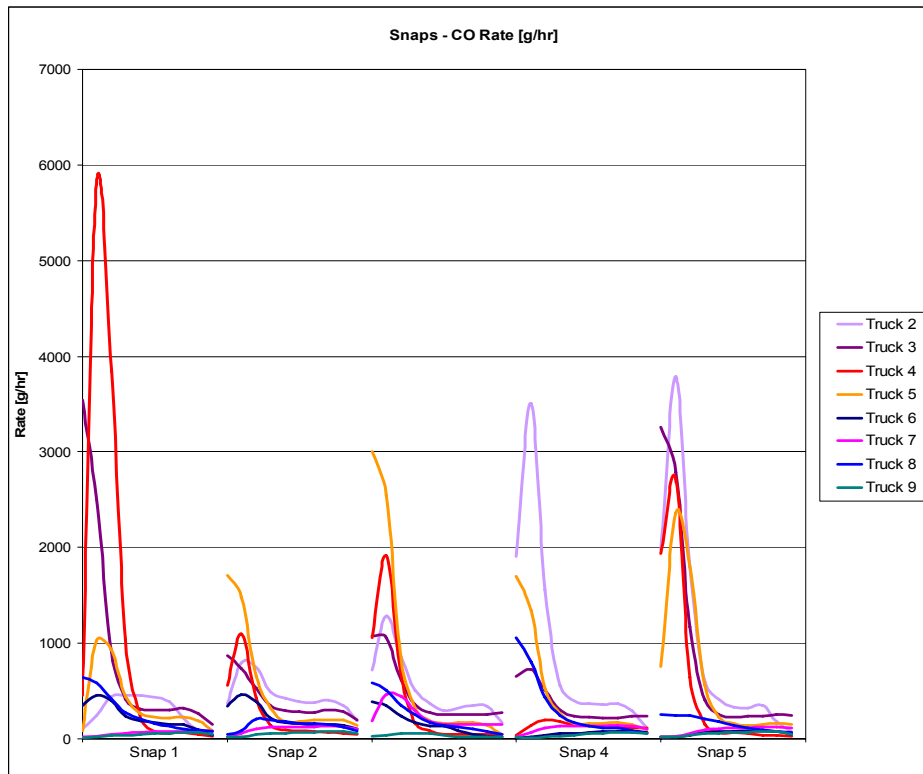
<b>Truck No.</b>	<b>Year</b>	<b>A/C Off - Low Idle (baseline)</b>	<b>A/C On - Low Idle</b>	<b>A/C Off - High Idle</b>	<b>A/C On - High Idle</b>
1	1998	8	-	-	-
2	1989	112	58 (-48%)	-	-
3	1996	56	-	59 (6%)	-
4	1987	25	7 (-73%)	-	3 (-87%)
5	1985	25	-	29 (13%)	-
6	1996	13	19 (46%)	-	42 (223%)
7	1994	26	21 (-22%)	58 (122%)	61 (130%)
8	1992	9	-	21 (133%)	-
9	1998	10	12 (20%)	-	23 (130%)
Average % Difference vs. baseline			-38%	44%	73%

Figure 24 shows the accumulated CO emissions for the various trucks under the various idling modes.



**Figure 24. CO Simulated 1-hour Mass Accumulation (g).**

Figure 25 shows the CO emissions results for the various snap tests. This figure shows that there is little consistency in emissions for the specific trucks between individual snaps. Truck 4, the second oldest truck and had the second highest miles accumulated, had the highest snap emissions, which occurred during the first snap. No clear pattern could be identified during the subsequent snaps. Additionally, note that the snap CO emissions show a very wide range.



**Figure 25. CO Snap Tests.**

#### PM Comparison between PEMS and TEOM

As mentioned previously, the measurement of diesel PM is challenging and most portable emissions measurement devices do not measure PM. To measure the diesel PM, ORNL used a microdilution tunnel fed by compressed, HEPA-filtered ambient air, based on a University of Minnesota design (12). A TEOM, as well as a 70mm gravimetric filter (Pallflex TX40 media) sampler were used to collect PM data. The TEOM data was compared with the PEMS measurement to determine if it was possible to relate the optical light scattering measurement to concentration.

For the PEMS, the “Percent Full Scale” (FS) value was used. The FS values measured in the PEMS uses a method of laser light scattering to estimate the PM in the sample, and ranges from 0% to 100%. For the TEOM data, an overall concentration for each steady-state point was determined. The TEOM data consistently showed a linear increase in mass with time, so a linear regression of the accumulated mass versus time was used to calculate an average mass rate for each steady-state point. By dividing by the TEOM flow rate and correcting for dilution, an average exhaust mass concentration could be calculated. By comparing these values to the



optical scattering values from the PEMS, a simple model could be constructed to relate the percent of full-scale scattering values to exhaust concentration. If the relationship is strong, it can be used to determine mass emissions rates during driving with the PEMS, especially at low loads. It was found that the PEMS unit failed to correctly measure FS values for trucks 7, 8, and 9. This was because the sensor used to measure optical scattering began to fail, and the unit began to give a constant FS value, regardless of the truck and testing condition. These trucks were removed from the correlation test to improve the quality of the model.

The linear regression model applied to these two methods of PM measurement was found to indicate a correlation between the two, with an  $R^2$  value of approximately 0.8. Figure 26 shows a plot of the sampled values and regression line. Equations 1 and 2 show the regression functions.

$$FS = 0.1503 [TEOM] \tag{1}$$

or

$$TEOM = 6.653 [FS] \tag{2}$$

Where:

FS = Percentage full scale measured with PEMS equipment; and  
 TEOM = PM concentration from the TEOM ( $\text{mg}/\text{m}^3$ ).

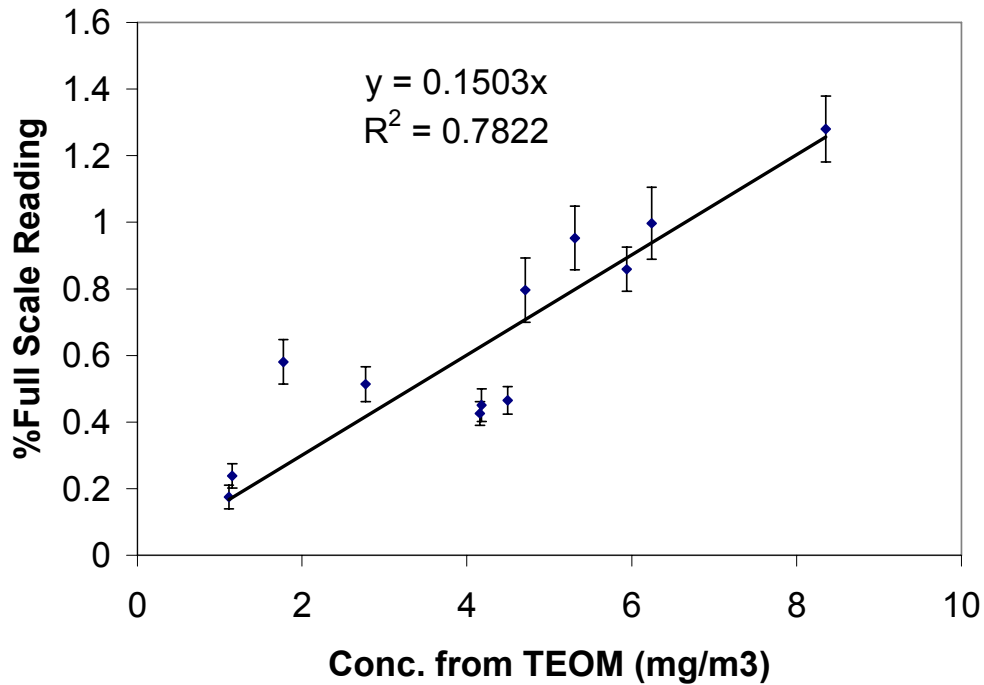


Figure 26. Plot of Sample PM Measurements.

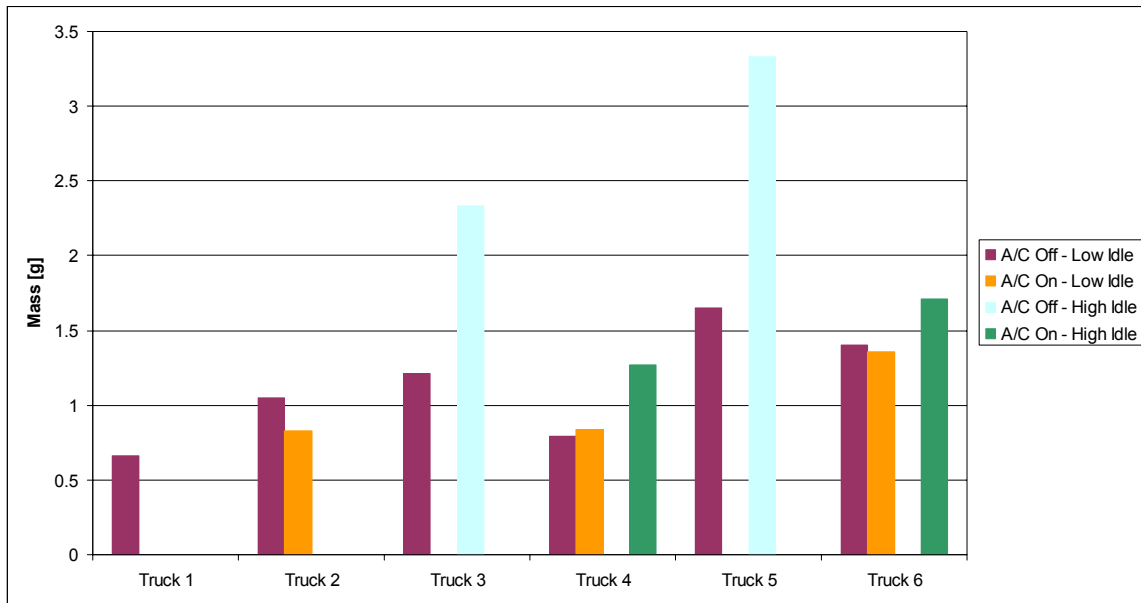
### PM Emissions

Table 11 shows the average mass rate (g/hr) for PM for each test. The mass rate was determined by calculating using Equation 1 to convert FS to the TEOM mass rate. This table shows that there is no clear correlation between the age of the trucks and the PM emissions rates. The table also shows that the PM rate tends to increase with the higher engine loads.

**Table 11. PM Mass Rate (g/hr) and Percent Difference vs. Baseline.**

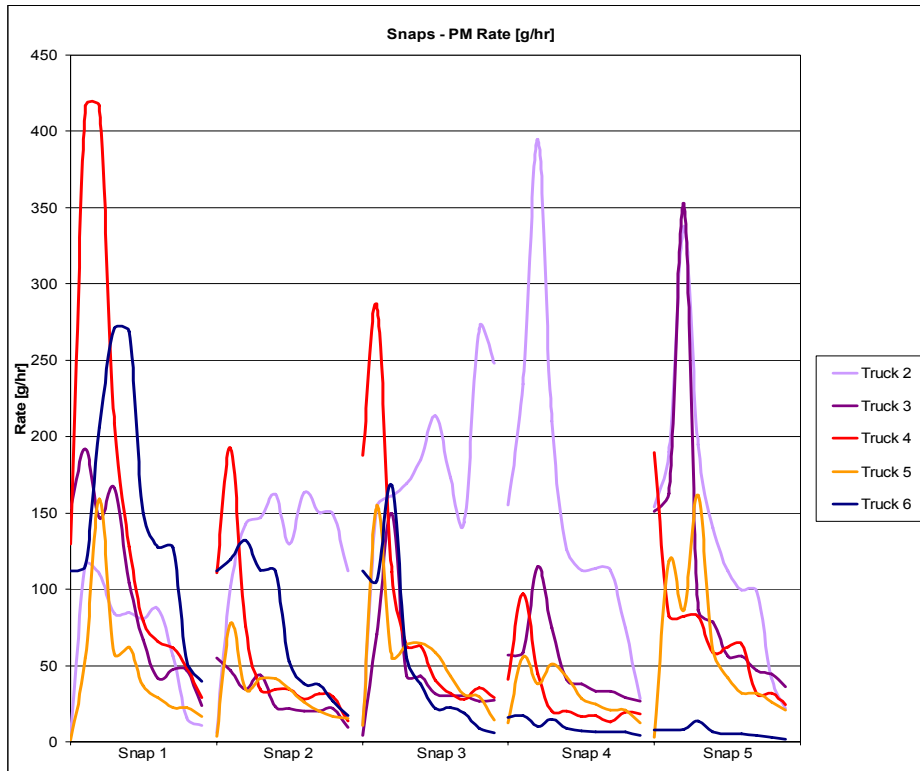
<b>Truck No.</b>	<b>Year</b>	<b>A/C Off - Low Idle (baseline)</b>	<b>A/C On - Low Idle</b>	<b>A/C Off - High Idle</b>	<b>A/C On - High Idle</b>
1	1998	0.66	-	-	-
2	1989	1.05	0.83 (-21%)	-	-
3	1996	1.21	-	2.33 (93%)	-
4	1987	0.79	0.84 (6%)	-	1.27 (61%)
5	1985	1.65	-	3.33 (102%)	-
6	1996	1.40	1.36 (-3%)	-	1.71 (22%)
Average % Difference vs. baseline			-6%	98%	36%

Figure 27 shows the accumulated PM emissions for the various trucks under the various idling modes. This figure shows that the PM rate ranges from 0.7 to 3.3 g/hr. This rate, based on the TEOM, is typically 30% to 40% lower than what could be measured with a pure filter-based method. The range is also similar to previous studies such as the DOE-EPA idling study performed in Aberdeen, MD that produced a very similar range of values. It can, therefore, be concluded that the trucks from Mexico sampled in El Paso do not have higher PM rates than U.S. trucks tested in Aberdeen (13).



**Figure 27. PM Simulated 1-hour Mass Accumulation (g).**

Figure 28 shows the PM emissions results for the various snap tests. This figure shows that there is little consistency in emissions for the specific trucks between individual snaps. Truck 4, the second oldest truck with the second highest miles accumulated, had the highest snap emissions, which occurred during its first snap. No clear pattern could be identified during the subsequent snaps. Additionally, note that the snap PM emissions ranged from approximately 50 g/hr to more than 400 g/hr.



**Figure 28. PM Snap Tests.**

### Total Idling Emissions

Idling and creep idling times could be combined with idling emissions rates to estimate the total idling emissions for trucks crossing the two bridges. To improve the accuracy of the calculation, the analysis was performed for peak and off-peak periods as well as the FAST and non-FAST lanes. In addition, emissions rates were determined for both the Class 8 trucks as well as the Class 5 trucks.

Table 12 shows the emission rates used in this analysis. The rates for Class 8 trucks were based on the PEMS and TEOM tests performed during this study whereas the rates for the Class 5 trucks were determined from data produced in a previous study that used the same PEMS units. The rates used for normal idling was based on the rates observed during low idling (600 – 700 rpm) and the rates for creep idling was based on the rates observed during high idling rates (1,000 rpm).

**Table 12. Emissions Rates for Idling and Creep Idling.**

<b>Truck Type</b>	<b>Idling mode</b>	<b>NOx (g/hr)</b>	<b>HC (g/hr)</b>	<b>CO (g/hr)</b>	<b>PM (g/hr)</b>
HDDV 8	Normal	72.29	8.96	19.56	1.06
	Creep	105.16	11.04	54.59	1.53
HDDV 6	Normal	54.85	15.05	48.44	0.65
	Creep	94.32	12.92	32.44	0.81

Table 13 shows the average normal idling and creep idling times as well as the volumes for the two bridges during the various travel modes. It should be noted that adjustments were made to the travel times of trucks that were selected for secondary inspections. Only about 1% of the trucks crossing the two bridges are called for lengthy secondary inspections. Adjustments were, therefore, made to the observed travel times to incorporate this proportion. These adjustments are shown by asterisks in Table 13.

**Table 13. Idling, Creep Idling, and Volumes Per Travel Mode.**

<b>Travel Mode</b>	<b>BOTA</b>			<b>Zaragoza</b>		
	<b>Volume (veh/day)</b>	<b>Normal idle time (min)</b>	<b>Creep idle time (min)</b>	<b>Volume (veh/day)</b>	<b>Normal idle time (min)</b>	<b>Creep idle time (min)</b>
Off-peak/FAST	90	4.1	4.2	89	7.1	2.3
Off-peak/Non-FAST	420	16.5	3.7	432	33.9*	5.1
Peak/FAST	140	8.5	3.2	141	20.8	1.7
Peak/Non-FAST	651	9.5*	5.2	683	11.4*	2.4*

\* These values are adjusted by providing different weights because only 1% of the cases represent extensively long crossing times.

Table 14 shows the daily, weekly, monthly, and yearly emissions due to idling and creep idling for the two bridges. It may be seen in Table 14 that the total emissions for Zaragoza is slightly higher than that for BOTA. The reason is because the travel time for Zaragoza is slightly longer. In addition, it may be noticed that the annual emissions are not particularly high as compared with the total on-road mobile source emissions for the El Paso region (less than 1%). However, it should be noted that the approximately 24 tons of NOx and 0.3 tons of PM emissions at the two bridges can be significant for an area such as El Paso wanting to stay in attainment for ozone and PM. In addition, it should be noted that these emissions are generated in a very small geographic area (two border bridges), resulting in high concentrations of pollutant emissions in these areas.

**Table 14. Total Emissions Due to Idling and Creep Idling.**

Period	BOTA				Zaragoza			
	NO <sub>x</sub>	HC	CO	PM	NO <sub>x</sub>	HC	CO	PM
Daily (kg/day)	27.2	3.4	10.6	0.4	38.0	5.0	13.6	0.5
Weekly (kg/week)	190.6	24.1	74.1	2.7	265.7	34.9	95.2	3.8
Monthly (kg/month)	817.0	103.2	317.7	11.6	1138.9	149.4	407.9	16.3
Yearly (ton/year)	9.9	1.3	3.9	0.1	13.9	1.8	5.0	0.2

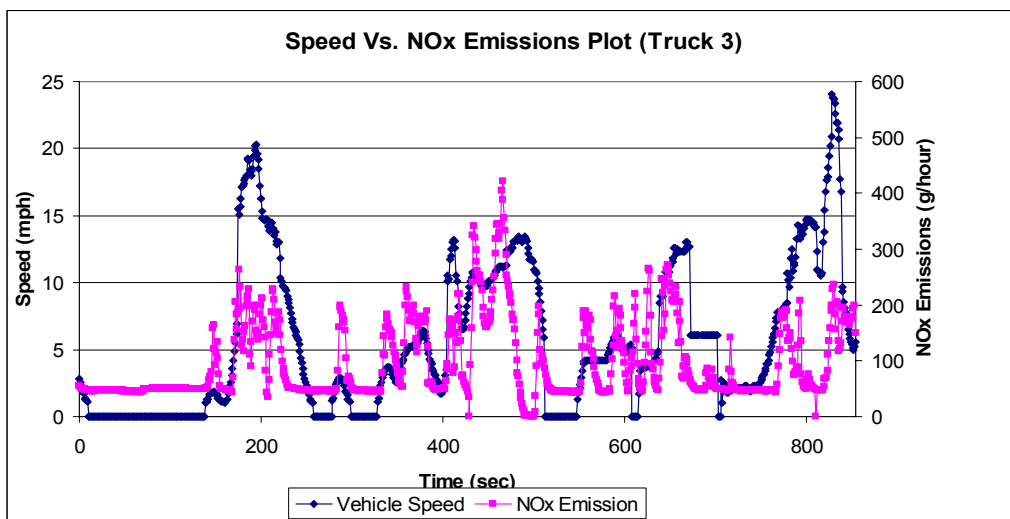
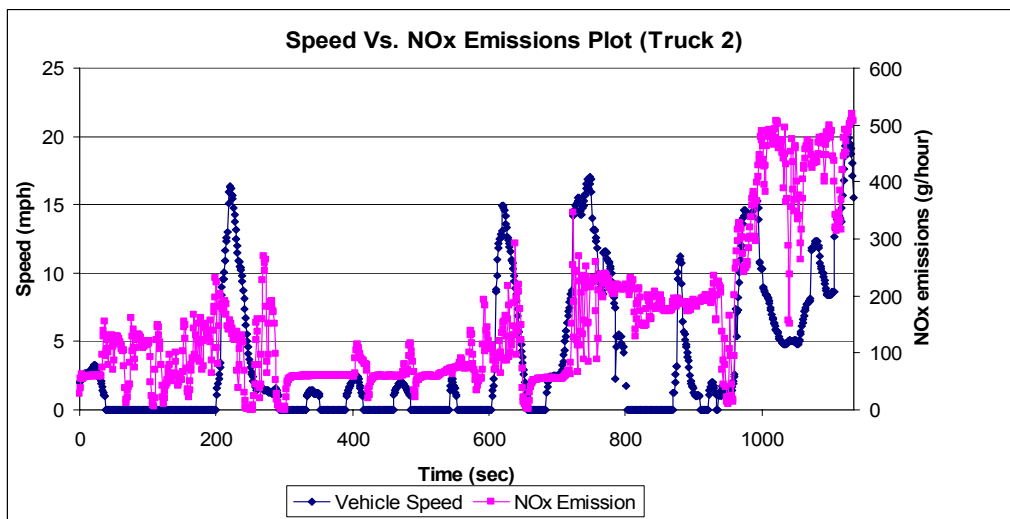
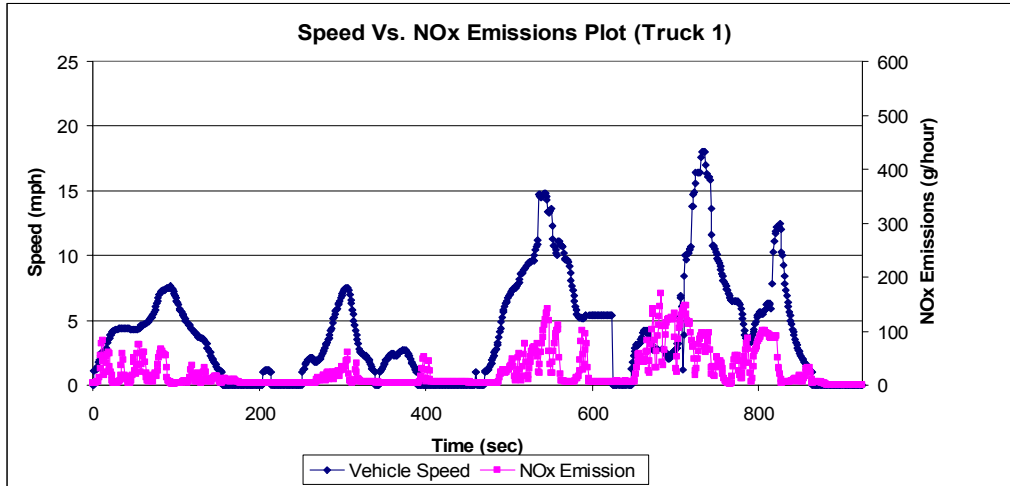
*Crossing Data*

In addition to developing idling emissions rates, the research team also investigated the feasibility of collecting truck emissions during actual crossings from Mexico into the U.S. As described earlier, several teams were deployed to handle the logistics of this complicated task.

A team was stationed on the Mexican side to install the PEMS and GPS equipment on a truck selected from the pre-determined sample. For security reasons members of the study team were not given permission by U.S. Customs to accompany the PEMS unit during a trip across the border. However, the truck driver was in radio contact with his distribution manager and when the truck reached the Mexican Customs the driver would notify the manager about its progress. This message would be conveyed to members of the study team who would phone the appropriate U.S. Customs official informing him that a truck with a certain description is carrying a PEMS unit and is about to enter the U.S. federal compound. After the truck passed through all the inspections, another team would meet the truck at either the County Coliseum or the DPS facility at Zaragoza bridge (depending whether the truck crossed at BOTA or Zaragoza) and take both the PEMS and GPS units off the truck. A member of the team would then transport the units back into Mexico to install the units in the next truck.

The study team found that this process was workable, but due to the extremely sensitive nature of the fairly new technology, numerous challenges were encountered. PEMS technology in general is an emerging science and will experience some growing pains before it can be considered fully robust. The fact that no technician was allowed to accompany the equipment resulted in several cases where data was lost due to loss of power or other causes. For example, the extremely hot temperature in El Paso during the end of June, 2005 (sometimes in excess of 105 degrees Fahrenheit) caused the equipment to regularly overheat resulting in data losses. In addition, power losses were caused due to the equipment bouncing around.

Regardless, the study team was still able to collect data for five crossings. For illustration purposes, Figure 29 shows the NO<sub>x</sub> emissions and speeds for three crossings at BOTA. These plots show that there is some correlation between speed and NO<sub>x</sub> emissions and that NO<sub>x</sub> emissions rise considerably with an increase in speed. In addition, the plots show that there is a clear pattern between the different speed profiles, illustrating the importance of developing generic drive cycles that can be used to develop emissions estimation.



**Figure 29. Speed and NOx Emissions for Three Crossings.**





## 4. Conclusions

### 4.1 Fleet Profiles

Based on the information that was collected during the study, the following conclusion could be drawn from developing a fleet profile of trucks crossing the El Paso-Ciudad Juarez border location.

#### Majority of Trucks Class 8

From the approximately 1,800 trucks that were surveyed on a typical day crossing from Mexico into El Paso at both the BOTA and Zaragoza bridges, 89% were found to Class 8 (tractor-trailer) trucks with 11% being the smaller Class 5 trucks.

#### Fleet Age

There were 25 different model years (stretching from 1980 to 2005) found during the survey. It was found that more than 20% of the vehicles are more than 15 years old. Three quarters of the total surveyed fleet includes models from 1991 through 2002. Very few long-haul trucks were found in the sample. This is probably due to the long and unreliable crossing times at this border.

#### Abundance of Small Drayage Carriers

Over 200 different carriers were detected during the survey, although only 16 make up 50% of the total trips.

#### Crossing Congestion at Peak Periods

BOTA and Zaragoza bridges have their unique peaking characteristics when severe traffic congestion occurs. The non-toll BOTA Bridge is used to relocate empty drayage trucks in the early hours of the day, and to cross laden trucks transporting the morning's production from around 2:30 p.m. to approximately 5:30 p.m., when the bridge closes. Zaragoza has two periods of high congestions—from the opening hour at 8:00 a.m. until around 11:00 a.m., and between 6:00 p.m. and 8:00 p.m.

### 4.2 Travel Profile

Travel profiles were analyzed by dividing the northbound border crossing process into three sections. The first one stretches from the entrance of the Mexican Customs compound to the U.S. Customs primary inspection booth. (This section includes the international crossing). The second section of the trip is the one that occurs inside the U.S. federal compound and the third section is the one that takes the commercial vehicles through the state Safety Inspection Facility.

#### Relative Crossing Times

The average crossing time at the Zaragoza Bridge was longer than that for BOTA. During the first section of the trip, that includes the crossing from Mexico into the U.S., the crossing time is a function of the traffic congestion at the bridge. From the sample, average crossing times at both bridges in this first section of the trip were fairly similar (9 and 12 minutes). Crossing through the second section of the trip is a function of number of inspections and congestion at inspection stations. The average crossing time at BOTA for Section 2 was found to be approximately half of that of Zaragoza (12 and 22 minutes, respectively). The average crossing time for Section 3 (through the safety inspection area) was relatively low (3.5 minutes) for BOTA.

### Longer Periods of Idle and Creep Idle Inside Federal Compound

From the drive cycle samples it was found that vehicles idle or creep idle for more than 60% of the time during the typical border crossing process (50% in Section 1 and 75% while inside the federal compound).

### Fairly consistent acceleration and decelerations

The drive cycles could be analyzed to identify the number of accelerations and decelerations during a typical border crossing. It was found that for both BOTA and Zaragoza approximately eight acceleration and eight deceleration events were identified during a typical border crossing. This information is useful in developing generic drive cycles that can be used for emissions estimation.

## **4.3 Emissions Profiles**

### Testing protocol

Nine trucks were tested ranging from 1985 to 1998 with between 150,000 and more than 1.7 million miles accumulated. The displacement of the engines ranged from 10 liters to 14 liters. These trucks were subjected to four different idling modes including five instances of full throttle idling over a short period of time. PEMS units were used to test NO<sub>x</sub>, HC, and CO emissions. For measuring PM, both PEMS and TEOM equipment were used.

### NO<sub>x</sub> Emissions

It was found that there is no clear correlation between the age of the trucks and the NO<sub>x</sub> emissions rates. There is also no clear correlation between the miles accumulated and the NO<sub>x</sub> emissions rates. In addition, the NO<sub>x</sub> rates seem to increase with additional engine load due to the use of the air conditioner and higher idling rates. Only two of the nine trucks had NO<sub>x</sub> emission rates higher than the 135 g/hr guidance by the EPA. The snap NO<sub>x</sub> emissions ranged from approximately 100 to 660 g/hr.

### HC emissions

It was found that the truck with the highest miles accumulated had the highest HC emissions rate. In addition, the HC rates do not show any clear patterns between the different modes of idling. The snap HC emissions ranged from approximately 20 to 230 g/hr.

### CO emissions

It was found that there is no clear correlation between the age of the trucks and the CO emissions rates. The CO rates tend to increase with the higher engine loads due to the application of the air conditioner and higher idling rates. The snap CO emissions showed a very wide range.

### PM Correlation between PEMS and TEOM

An average exhaust mass concentration could be calculated using the TEOM and by comparing these values to the optical light scattering values from the PEMS, a simple regression model could be constructed. The linear regression model applied to these two methods of PM measurement was found to indicate a high degree of correlation between the two, with an R<sup>2</sup> value of approximately 0.8. This model could then be used to estimate PM concentrations.

### PM Emissions

It was found that there is no clear correlation between the age of the trucks and the PM emissions rates. The PM rate tends to increase with the higher engine loads. The PM rate ranges from 0.7 to 3.3 g/hr, which is inline with the results of other studies performed in the U.S. As in the case with NOx, only two trucks exceeded the EPA guidance for PM emissions during long duration idling. The snap PM emissions ranged from approximately 50 g/hr to more than 400 g/hr.

### Total Idling Emissions

It was found that approximately 24 tons on NOx and 0.3 tons of PM are produced on an annual basis by trucks idling at BOTA and Zaragoza bridges. These emissions are not particularly high as compared with the total on-road mobile source emissions for the El Paso region (less than 1%). However, it should be noted that these emissions can be significant for an area such as El Paso wanting to stay in attainment for ozone and PM. In addition, it should be noted that these emissions are generated in a very small geographic area (two border bridges), resulting in high concentrations of pollutant emissions in these areas.

### Emissions During Crossings

The study team found that it was possible to collect emissions of a truck during actual crossings through the U.S.-Mexico border. However, due to the extensive coordination effort and the extremely sensitive nature of the fairly new technology, numerous challenges were encountered. PEMS technology in general is an emerging technology and will experience some growing pains before it can be considered fully robust. Regardless, the study team was still able to collect emissions data for five crossings.



## 5. Recommendations

The research team developed and applied a methodology to estimate truck idling emissions at the El Paso-Juarez border locations. This research is a first step in developing a Border Crossing Emissions Measurement Model (BCEMM). The model would be useful in determining and forecasting commercial vehicle emissions at land border crossings. The model would consist of three main components:

1. Fleet Characteristics;
2. Travel Profiles; and
3. Emission Rates.

The first two modules of the BCEMM are crossing specific, while the emissions rates could be developed for a series of commercial vehicles operating under various characteristics. The recommended strategy to develop the three modules of the BCEMM includes the following.

### *Fleet Characteristics*

It was found from the research that the fleet information is challenging to obtain and to maintain. However, various federal and state agencies that operate at the border collect commercial vehicle information. The proposed approach in developing the Fleet Characteristics module of the BCEMM is to work closely with these agencies to develop a database of drayage vehicles that cross regularly from Mexico into the U.S. For example, CBP has information on trucks that are registered with the FAST program. The DPS also collects truck information for safety purposes and is developing a program similar to CBP's FAST to expedite the crossing of certified vehicles. Working with these U.S. agencies and their Mexican counterparts, a detailed database that includes all relevant vehicle information could be developed and maintained as part of the model. Once collected and organized, this information would be useful not only for emissions estimation but also for transportation planning, traffic safety planning, traffic operations, and other applications.

The following is an example of the information required for the Fleet Characteristics module of the BCEMM:

- Carrier;
- license plate;
- truck classification;
- US DOT number;
- TxDOT number;
- make of truck;
- model year;
- fuel type;
- accumulated miles;
- whether engine has been retrofitted or replaced; and
- type of service (long-haul/drayage).

### *Travel Profiles*

Travel patterns (drive cycles) across the border are very dynamic and vary from crossing to crossing and from time to time. U.S. and Mexican public and private sector stakeholders involved in the international border crossing process are interested in having real-time or close to real-time information on border crossing operations. The FHWA is undertaking a Freight Performance Measurement (FPM) initiative aimed at measuring travel times at major U.S. land border crossings using commercial technologies, such as satellite and global positioning technology that would enable border travel and wait times to be measured more accurately.

Working with FHWA and other agencies in Mexico and the U.S., a system could be developed to collect travel time and travel profile information at major border crossings on a real time basis. With a large enough sample it is possible to develop generic (statistically significant) drive-cycle profiles for each crossing. These profiles could be updated regularly as traffic patterns change due to new inspection practices, seasonal changes in commodity movements, or other conditions that impact the border crossing process.

### *Emissions Rates*

PEMS was found to be a suitable technology for developing idling emissions rates for Mexican drayage trucks. The use of TEOM in conjunction with the PEMS equipment proved invaluable to develop a fairly accurate PM estimates. It is proposed to continue using PEMS equipment during various idling modes to develop a comprehensive sample of emissions rates for Mexican drayage trucks. It is further proposed to perform some baseline measurements involving TEOM to develop accurate PM estimates. After an adequate sample of idling emissions rates for drayage trucks has been developed, it would be possible to use these rates in conjunction with the fleet characteristics and idling rates from the travel profiles to develop accurate idling emissions for the U.S.-Mexico border locations.

With regard to the remainder of the border crossing drive cycle, it is proposed to perform the tests on either the U.S. or Mexico side at convenient test tracks. PEMS units will be used onboard a large sample of trucks to measure emissions during the various components of the generic drive cycles. These components include acceleration, deceleration, cruising, and idling. It is proposed to use driver-aided software that allows the driver to track, on a laptop computer, a pre-determined drive cycle. The key components of the drive cycle—acceleration, deceleration, cruising, and idling—will be measured during these tests. These basic building blocks can then be extrapolated to represent any of the pre-determined generic drive cycles.

The fleet characteristics, travel profiles, and emissions rates for the components of the drive cycles can be combined to calculate the total emissions from trucks crossing the various border locations. The model will be sensitive to the time-of-day, day-of-week, as well as seasonal differences. In addition, the model will be able to predict changes in emissions due to the implementation of various programs such as the implementation of intelligent transportation systems, FAST program, congestion pricing, additional lanes, EPA's Smartway Program, and retrofit and replacement programs.

A final phase of the BCEMM would be to repeat the process for light-duty vehicles so that the total mobile source emissions can be estimated at border locations.

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## **Appendix A: Meeting Summaries**



# Mexico Truck Emissions at Major Texas Border Locations

## Meeting 1: Project Participants Meeting

**Date:** May 03, 2005

**Location:** EPA Offices, El Paso

### Attendance

Maria Sisneros	EPA Region 6: El Paso
Norma Duran	EPA Region 6: El Paso
Joe Areola	BECC
Gonzalo Bravo	BECC
Myriam Cruz	BECC
Juan Villa	TTI
Joe Zietsman	TTI

### *Per telephone:*

Paul Bubosh	EPA OTAQ: Washington DC
Barry Feldman	EPA Region 6: Dallas
John Storey	ORNL
Sam Lewis	ORNL

### Key points from meeting

- EPA Region 6 has finalized the initial contract to expand the sample size of trucks that TTI would test and to allocate funds for two planned conferences to follow the completion of this project.
- BECC will work with TTI to ensure that this contract can be executed as soon as possible.
- The extension of the contract (to pay for the PM testing to be performed by ORNL) is currently being done. Funding was transferred from OTAQ to Region 6. It is anticipated that this contract amendment should move very swiftly and will be completed before the scheduled testing.
- BECC has a copy of the changed of scope and will be ready to execute the contract with ORNL once the money is allocated from Region 6.
- A combined stakeholder meeting is planned for Friday, June 24. This will involve key participants in the testing to ensure everybody is “on the same page” with regard to the testing. Potential stakeholders include – EPA, TTI, ORNL, TxDOT, US Customs, Mexican Customs, DPS, Fleet owners, TCEQ, El Paso MPO, and City of El Paso. TTI will work with EPA El Paso and BECC to identify the stakeholders and to setup the logistics for this meeting.
- The actual emission testing will take place from Monday, June 27 to Friday, July 1.
- It is anticipated that three PEMS units will be used (one for each bridge and one at a stationary location working with the PM equipment).

- OTAQ will accept the PM measurements performed by the ORNL team.
- A press release should be sent out to inform the local community and stakeholders about the project and the upcoming testing. TTI will draft the press release and work with Barry and Paul to have it finalized.
- TTI is looking for a suitable site on the US side to perform the PM and stationary PEMS testing. TTI will work with fleet owners and other stakeholders to identify the facility.
- TTI has contracted with the University of Juarez to collect truck fleet information at BOTA and Zaragoza bridges. This data collection effort is taking place between May 03 and May 06.
- Gonzalo Bravo provided TTI with contact names of Mexican stakeholders. He also offered to setup meetings with these stakeholders from May 3 to May 6.

## **Meeting 2: Verify Truck Survey Status with Universidad Autonoma de Ciudad Juarez**

**Date: May 04, 2005**

**Location: Bridge of the Americas, Ciudad Juarez**

### **Attendance**

Alma Figueroa	Universidad Autonoma de Ciudad Juárez
Gerardo Tarin	Truck Survey project manager
Juan Villa	TTI

### **Key points from meeting**

- The survey was initiated as originally planned on Tuesday at 6 am at the Bridge of the Americas
- Mexican Customs Port Director did not allowed the surveying students to be inside the Mexican Federal Compound, therefore, data is being collected at the point of entrance into the Federal Compound.
- Data regarding model and year is not being collected because drivers do not always have that information available or do not know the details.
- Gerardo Tarin mentioned that the University performed a field study and obtained truck age information by range in 1991. TTI will analyze this information.
- Survey results will be processed and delivered to TTI May 12<sup>th</sup>, 2005.
- Alma Figueroa will contact the Mexican Ministry of Transport (SCT) locally to find out if truck age information is available.

### **Meeting 3: Meeting with Trucking Firms to Discuss Study Scope and Schedule**

**Date: May 05, 2005**

**Location: Embassy Suites Hotel, El Paso**

#### **Attendance**

Manuel Sotelo	Transportes Sotelo and President of the Ciudad Juarez Trucking Association
Sergio A. Lastra	Free Trade Business Coalition
Gonzalo Bravo	BECC
Juan Villa	TTI
Joe Zietsman	TTI

#### **Key points from meeting**

- Mr. Sotelo is working with the SCT to obtain the truck fleet profile information from the SCT. He mentioned that the information will be ready by May 6, 2005
- Mr. Sotelo offered his truck yards in El Paso and Ciudad Juarez to perform the PM tests.
- The truckers would prefer to have the PM tests performed on Saturdays and Sundays when the border crossings are closed. This will minimize the interference with their normal operation.
- Mr. Sotelo mentioned that he thinks trucking firms will be willing to participate at no-cost in the study assuming the interference with their normal operations will be minimized.
- As soon as the truck fleet sample is approved, TTI will develop a detailed PM and PEMS schedule and send it to the trucking companies through Mr. Sotelo.
- Sergio Lastra and Gonzalo Bravo will work with Mexican Customs, through the head of the Free Trade Business Coalition, Mr. Guardiola to obtain permission to use the PEMS equipment during the southbound trips.
- TTI will prepare a Spanish version of the presentation to show to Mexican customs.

### **Meeting 4: Obtaining Permission from US Customs**

**Date: May 05, 2005**

**Location: US Customs Office (BOTA), El Paso**

#### **Attendance**

Barry Millar	US Customs and Border Protection, Assistant Port Director
Frank Fuentes	US Customs and Border Protection
Kevin Cleere	US Customs and Border Protection
Maria Sisneros	EPA Region 6: El Paso
Juan Villa	TTI
Joe Zietsman	TTI

### **Key points from meeting**

- The study was briefly described to the US Customs officials. They were also briefed on the approximate crossing frequency with PEMS units.
- The PEMS equipment was described to the Customs officials using photos and a brochure from CATI.
- Misters Millar, Fuentes, and Kevin Cleere indicated that they had no problem with the equipment crossing the border as described.
- Mr. Fuentes indicated that he would appreciate it if one of his staff members can be informed when a truck is about to cross with the PEMS equipment. The truck's registration number and approximate crossing time will be phoned in to this official. Mr. Fuentes will provide TTI with the appropriate phone numbers.
- TTI left two brochures of the CATI equipment. One brochure will be kept by Mr. Fuentes who is in charge of the BOTA Bridge. He undertook to brief his counterpart at the Zaragoza Bridge - Mr. Lopez and to also give him a brochure.
- TTI undertook to take the unit to US Customs the Friday before testing so that the key officials can inspect the equipment.
- The study team is allowed to take pictures of the trucks equipped with the PEMS units. They may, however, not take any pictures of the custom officials.

### **Meeting 5: Define Conference Stakeholder List**

**Date: May 05, 2005**

**Location: Ciudad Juarez**

#### **Attendance**

Gonzalo Bravo	BECC
Juan Villa	TTI

### **Key points from meeting**

- Mr. Bravo has already developed a list of key stakeholders. The list was discussed and it was agreed that Mr. Bravo will coordinate the Mexican stakeholders and TTI the ones in the U.S.
- The initial list of Mexican stakeholders include:
  - The City of Ciudad Juarez (Rosario Diaz)
  - Transportation Association (Manuel Sotelo)
  - Free Trade Business Coalition (Carlos Guardiola)
  - SEMARNAP –Mexican EPA- (Sergio Sanchez)
  - Ciudad Juarez Strategic Plan (Lucinda Vargas)
  - Mexican Transport Institute -IMT-
  - Dr. M. Molina, Mexican Nobel Prize laureate
  - State of Chihuahua Environmental Department
  - SCT- Bridge Operators (CAPUFE)
  - Mexican Customs

## **Meeting 6: Inform World Trade Center About Study Objectives and Obtain Input**

**Date: May 05, 2005**

**Location: 123 Mills, Suite 200, El Paso**

### **Attendance**

Carolina Vela	World Trade Center El Paso/Juarez
Erika Martinez	World Trade Center El Paso/Juarez
Juan Villa	TTI

### **Key points from meeting**

- WTC promotes trade in the El Paso – Ciudad Juarez area.
- WTC has several committees and the logistics committee will be interested in the proposed study. Customs brokers and shippers participate in this committee.
- WTC offered to promote the conferences that the BECC will organize through their website and monthly member news letter.

## **Meeting 7: Finalizing Location for Stationary PM Testing**

**Date: May 05, 2005**

**Location: El Paso County Coliseum, El Paso**

### **Attendance**

Corey Heon	Coliseum: VP of Operations
2 maintenance workers	Coliseum
Joe Zietsman	TTI

### **Key points from meeting**

- The purpose of the study and the needs regarding a location to perform the stationary testing was explained to the employees of the Coliseum.
- The Coliseum is very conveniently located in El Paso within half a mile from the BOTA border location.
- The group toured the facilities and it was clear that it complies with the needs for the stationary testing.
- The Coliseum will provide the study team with a large open roofed area located next to the rodeo stadium.
- The fenced-in facility has a gate which is kept open on a 24-hour basis. There is a booth where a guard is placed on a 24-hour basis.
- The Coliseum will provide a secure location where equipment can be locked up overnight.
- The whole area is paved and dust as a result of driving will, therefore, not be a concern.
- The roofed area has lighting and sufficient power with several (115V/20 Amp) circuits.

- The roof is tall enough so that trucks will be able to pull in underneath the roof so that the trucks and the drivers do not get overly hot from the stationary idling. It is totally open on all sides so that there is ample ventilation.
- The Coliseum has a very sturdy metal table that is used as a work-bench. They will lend this table to the study team for the week of the study.
- There are no events scheduled for the week of June 27 – July 1 and the facility is available.
- The Coliseum will charge a small fee to cover electricity and other expenses.
- They do not have a refrigerator or compressor that they can lend to the team. (A visit to the large Home Depot along I-10 showed that there is a 26 gallon Husky Compressor at 6.5 cfm and a maximum pressure of 150 PSI for a cost of \$259, whereas the 17 gallon model is \$200. A 4 cu ft. refrigerator costs \$140.)
- There is also an air-conditioned temporary office located approximately 30 meters from the roofed area where the testing will be conducted. This office will be made available to the testing team as a place where they can setup their computers, place the refrigerator, and have room to work.
- The Coliseum has a maintenance shop with two maintenance employees. This shop can potentially be helpful to assist the team in performing small emergency repairs of equipment.

## **Meeting 8: Inform SEMARNAP and City of Juarez about Study**

**Date: May 06, 2005**

**Location: Ciudad Juarez**

### **Attendance**

Ives Figueroa	City of Ciudad Juarez
Mario Duarte M.	SEMARNAT
Gonzalo Bravo	BECC
Juan Villa	TTI

### **Key points from meeting**

- SEMARNAT is required to issue licenses to trucks that move hazardous materials. Mr. Duarte offered to obtain the local database and will share it with the study members.
- In case that the trucker association can not obtain the truck database from the SCT, SEMARNAP, at the federal level will contact SCT to try to obtain the information emphasizing the importance of the study
- Gonzalo Bravo and Mario Duarte will coordinate with SCT and SEMARNAP to obtain the truck fleet information.
- The City of Ciudad Juarez is very interested in the study results and would like to perform a similar analysis for private vehicles operating in the region.



## **Appendix B: Fleet Data**



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	6:26:00	T3S2										
B	6:26:00	T3S2	E				CHEVROLET					
B	6:28:00	T3S2	L	SOTELO		L56	INTERNATIONAL		D			
B	6:30:00	T3S2	L	SILT	186SP1	689929Z	INTERNATIONAL	1988	D	827234		
B	6:30:00	T3S2	E	SILT								
B	6:30:00	T3S2	E	STIL		712293						
B	6:30:00	T3S2	E	TPN		164						
B	6:31:00	T3S2	E	STIL								
B	6:31:00	T3S2	E	STIL								
B	6:33:00	T3S2	E	AGUILA			INTERNATIONAL					
B	6:35:00	SU2	L	NAD DE MEXICO	DN04086	77A108Z	CHEVROLET	2001	G	141828		N
B	6:35:00	T3S2	E	SOTELO			GMC					
B	6:37:00	T3S2	L	ARRSA	655EM7	638911Z	FREIGHTLINER	1996	D	477517		N
B	6:38:00	T3S2	E	STIL		712295						
B	6:39:00	T3S2	E	TRANS MACK		28	FREIGHTLINER					
B	6:40:00	T3S2	E	DIAZ	294SP1	774355	INTERNATIONAL	1992	D	771		
B	6:42:00	T3S2	L	RECICLADORES LG		805871Z	FREIGHTLINER	1991	D			
B	6:42:00	T3S2	E	STIL								
B	6:43:00	T3S2	E	STIL								
B	6:43:00	T3S2	E	STIL								
B	6:44:00	T3S2	E	STIL								
B	6:45:00	T3S2	L	ARRSA	814EM7	638911Z	FREIGHTLINER	1993				
B	6:45:00	T3S2	E	BOUCHE								
B	6:47:00	T3S2	E	TPN	228EM3	880805Z	INTERNATIONAL	1994				
B	6:48:00	T3S2	E	SOTELO								
B	6:48:00	T3S2	E	STIL		0557341Z						
B	6:50:00	T3S2	E	TPN	867SN9	880805Z	INTERNATIONAL	1992				
B	6:51:00	T3	E	TPN	870SN9	880805Z	INTERNATIONAL					
B	6:51:00	T3	E	STIL			INTERNATIONAL					

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	6:53:00	T3	E	DELFINES	256SP1	683624Z	INTERNATIONAL					
B	6:54:00	T3S2	E	SOTELO	721SP1		INTERNATIONAL	1987	D			
B	6:54:00	T3	E	STIL								
B	6:55:00	T3	E	TRANSISA	698SCA	698						
B	6:55:00	T3S2	E	AGUILA								
B	6:57:00	T3	E	STIL	605FA7	557341	FREIGHTLINER	1998				
B	6:58:00	SU2	E	LYRMA								
B	6:59:00	T3	E	TPN	750SP1	880805Z						
B	6:59:00	T3	E	DEL ANGEL								
B	6:59:00	T3	E	STIL		294						
B	6:59:00	T3	E	VARGAS								
B	7:01:00	T3	E									
B	7:01:00	T3	E	REYNA								
B	7:04:00	T3S2	E	PREMIER	61ZSN9	109167ZZ						
B	7:04:00	T3S2	E	DEHESA	Z13SPL	677106Z	INTERNATIONAL					
B	7:05:00	T3S2	E	DELFINES								
B	7:05:00	SU2	E	LR								
B	7:05:00	T3S2	E	VARGAS			FREIGHTLINER					
B	7:06:00	T3	E	SILT		689929	FREIGHTLINER					
B	7:06:00	T3	E	VARGAS								
B	7:07:00	T3	E	VARGAS	648EM3							
B	7:08:00	T3S2	E	PREMIER		215						
B	7:11:00	SU2	E	TPN	Z001157	880805Z	GMC					
B	7:12:00	T3	E	CAMPOS								
B	7:13:00	T3S2	E	AGUILA								
B	7:13:00	T3S2	E	ROFRA								
B	7:14:00	T3S2	E	STIL	367SPL			1996				
B	7:14:00	T3S2	E	ROFRA	750EM3							
B	7:14:00	T3	E	DEHESA								

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	7:16:00	T3S2	E	TNCH	073SP1	272	FREIGHTLINER					
B	7:17:00	T3S2	E	STIL	372SPL		FREIGHTLINER	1996				
B	7:17:00	T3S2	E	PREMIER	8010AB							
B	7:18:00	T3	E	LYRMA	715DZ4		KENWORTH	2005				
B	7:19:00	T3	E	STIL	339SP1			1993				
B	7:19:00	T3	E	STIL		303						
B	7:19:00	T3	E	TNCH		226						
B	7:20:00	T3	E	TNCH	47ISP1							
B	7:21:00	T3	E	KIKI	604EM3		FREIGHTLINER					
B	7:21:00	T3	E	TNCH		228						
B	7:22:00	T3	E	TNCH	737EM7							
B	7:22:00	T3	E	TNCH		282						
B	7:23:00	T3S2	E	VARGAS	9925N9	861806Z	INTERNATIONAL					
B	7:24:00		E	TNCH	036SP1			1995				
B	7:25:00	SU2	E	TORRES	286SNL	557177						
B	7:26:00	SU2	E	TRANS MAQ	692CA6	710383Z	FORD					
B	7:27:00	T3	BT	E.P. TRANSP.	628EM3	633056	INTERNATIONAL	1992				
B	7:27:00	T3S2	E	ROFRA	802EM8	1175007Z	KENWORTH					
B	7:28:00	T3S2	E	COMERCIAL BEL	7325N9	555092	INTERNATIONAL					
B	7:29:00	T3	E	STIL		830666Z						
B	7:30:00	T3	BT	GALLARDO		890182Z						
B	7:30:00	SU2	L	TARAHUMARA	ZUR9860	823509	FORD	1971	G			
B	7:30:00	T3	BT	TRANSVAR								
B	7:31:00	T3S2	L	CYR	210EM3	911556Z	KENWORTH	1998				
B	7:32:00	SU2	L	TRANS MAQ	399CA6	710383Z	KENWORTH	1999	D	133729		
B	7:32:00	T3	BT	MARQUEZ	740SN9							
B	7:32:00	T3S2	L	PDN	751SP1	880835Z	INTERNATIONAL	1992	D			
B	7:32:00	T3	BT	VRP			INTERNATIONAL					
B	7:33:00	SU2	E	DEL NORTE	3695ZVR	0634569Z	GMC					

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	7:33:00	T3S2	L	TPN	631SN9	880835Z	INTERNATIONAL	1990	D			
B	7:33:00	T3S2	L	MARQUEZ	739SN9	825641Z	INTERNATIONAL	1992	D			
B	7:33:00	SU2	E	J. MENA	ZUR9Z58	557308						
B	7:33:00	T3	BT	STIL								
B	7:34:00	T3S2	L	MARQUEZ	738SN9	825641Z	INTERNATIONAL	1992	D	385540		
B	7:34:00	T3S2	E	TRANSVAR		830633						
B	7:35:00	T3S2	L	GALLARDO	974SN9	890182Z	PETERBILT	1993	D	820687		
B	7:35:00	SU2	L	MARQUEZ	ZUR9093	825641Z	GMC	1979				
B	7:36:00	T3	BT	DELFINES	485EM3	683624Z	INTERNATIONAL					
B	7:36:00	T3S2	E	TPN	639SN9	880805Z	INTERNATIONAL					
B	7:37:00	T3	BT	ETF	94SN9		INTERNATIONAL					
B	7:38:00	T3S2	E	SOTELO	746EM7		VOLVO	1996				
B	7:39:00	SU2	E	RIO GRANDE	ZUR9745							
B	7:39:00	T3S2	E	STIL			INTERNATIONAL					
B	7:40:00	T3S2	L	LYRMA	267CA7	650990Z	VOLVO	2000	D	283301		
B	7:40:00	T3	BT	VRP	849SN9		INTERNATIONAL					
B	7:41:00	T3S2	L	AUTOPARTES MENDEZ	790SN9		FREIGHTLINER					
B	7:41:00	T3S2	E	STIL	982SN9		INTERNATIONAL					
B	7:42:00	T3S2	E	CONTRERAS	490CA7							
B	7:42:00	T3S2	L	LYRMA	791CA7	650990Z	VOLVO	2001	D	198297		
B	7:43:00	T3S2	L	GALLARDO	288EM3	890182Z	FREIGHTLINER	1996	D	743		
B	7:44:00	SU2	E	TORRES	699SN1	557177	INTERNATIONAL					
B	7:44:00	T3S2	L	CYR	772SN9	911556Z	KENWORTH	1991	D			
B	7:45:00		BT	VRP	534EM7	662058Z	INTERNATIONAL					
B	7:47:00	T3S2	E	GRUPO HERNANDEZ	875SM9	1170268Z	INTERNATIONAL	1990	D			
B	7:50:00	T3S2	E	VRP	119SP1	662058Z	INTERNATIONAL	1985				
B	7:50:00	T3S2	L	LYRMA	704CA7	650990Z	VOLVO	2001	D			
B	7:50:00	SU2	E	STIL	883CW8		INTERNATIONAL	2001				
B	7:51:00	T3S2	E	DELFINES	627EM3	683624Z	INTERNATIONAL					

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	7:51:00	SU2	E	STIL	728DZ4	557341Z	INTERNATIONAL	2004				
B	7:51:00	T3S2	E	DELFINES	967EM7							
B	7:52:00	T3S2	E	STIL	373SP1	557341	INTERNATIONAL	1996				
B	7:52:00	SU2	E	SOTELO	ZUS9973	258923Z						
B	7:53:00	T3S2	L	MENDEZ	907EM7	1218989Z	FREIGHTLINER	1993	D			
B	7:54:00	SU2	E	SERVIFLETES	ZUS8733				G			
B	7:55:00	T3S2	E	JORSA	418EM3	1304392Z	VOLVO	1994				
B	7:55:00	T3S2	L	TPN	632SN9	880805Z	INTERNATIONAL		D	65740		
B	7:56:00	T3	BT	TORRES	588SN9	557177Z	INTERNATIONAL	1997				
B	7:56:00	T3S2	E	VARGAS	881SP1	861806Z	INTERNATIONAL					
B	7:56:00	T3S2	L	AGUILA	960SP1	555365Z	INTERNATIONAL	1993	D	8045401		
B	7:57:00	T3S2	E	SOTELO		258923Z						
B	7:59:00	SU2	E	ECO	86CA6	558117Z						
B	7:59:00	SU2	E	ECO								
B	7:59:00	T3	BT	QUIROZ		0557889Z	FREIGHTLINER					
B	8:00:00	T3	BT	STIL	365SP1		INTERNATIONAL	1996				
B	8:00:00	T3S2	E	GRUPO HERNANDEZ			KENWORTH					
B	8:01:00	T3S2	E	SOTELO	556SN9	258923Z	INTERNATIONAL	1992				
B	8:04:00	T3S2	E	TNCH	071SP1		INTERNATIONAL					
B	8:07:00	T3	BT	STIL	784SN9			1997				
B	8:10:00	T3	BT	ROFRA								
B	8:11:00	T3S2	E	RED INT. DE TRANSP.	609SN9	716999	INTERNATIONAL					
B	8:13:00	T3S2	E	SMART	190SP1	676075	INTERNATIONAL	1998	D			
B	8:16:00	T3S2	E	OTI	354EM3	683428Z	VOLVO	1994	D	1018757	2005	
B	8:17:00		BT	TRANS AC	618SP1	629243Z	INTERNATIONAL		D			
B	8:20:00	SU2	E	TRANSP EP	ZUS7888	633056Z	GMC		D			
B	8:21:00	T3S2		VRP	488EM3	662058Z	INTERNATIONAL		D			
B	8:25:00	T3S2	E	PADILLA	844SP1	677177Z			D			
B	8:40:00	T3S2	L	TPN	542EM7	880805Z	INTERNATIONAL		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	8:42:00	T3S2	L	MENDEZ	886EM7	128989Z	INTERNATIONAL	1992	D			
B	8:43:00	T3S2	L	MENDEZ	675SP1	1218989Z	INTERNATIONAL					
B	8:43:00	T2S1	L	MARSA	726EM7	66090Z	FORD		D			
B	8:43:00	T3	BT	AGUILA	812SP1		INTERNATIONAL		D			
B	8:44:00	T3S2	L	AUSA	110SP1	540635C	INTERNATIONAL		D			
B	8:45:00	T3	BT	CONVOY DE MEX	529EM7	555864Z	FREIGHTLINER	1986	D	142716	2005	
B	8:45:00	T3S2	L	AUSA	953EM7	638911Z	FREIGHTLINER		D			
B	8:45:00	SU2	L	TNCH	DN76131	681258Z	DODGE		D			
B	8:46:00	T3S2	L	SOTELO	696SP1	258923Z	INTERNATIONAL	1994	D	715427		
B	8:46:00	SU2	L	TRANS MAQ	ZUS1076	786840Z	GMC		D			
B	8:47:00	T3S2	L	SILT	329EM3	689929Z	FREIGHTLINER	1992	D	138205		
B	8:47:00	T3S2	L	CARDENAL EXP	ZUT6417	84739	GMC		G			
B	8:49:00	T3S2	E	LYRMA	268CA7	650990Z	VOLVO	2000	D	215585	2005	
B	8:50:00	T3S2	L	SILT	167SP1	689929Z	INTERNATIONAL	1989	D	102154		
B	8:50:00	T3S2	L	GALLARDO	383EM3	890182Z	KENWORTH		D			
B	8:51:00	T3S2	E	PADILLA	123SP1	677177Z	FREIGHTLINER	1987	D	216082		
B	8:51:00	T3S2	L	PONY EXP	686SN9	119112Z	INTERNATIONAL	1984	D			
B	8:52:00	T3S2	L	SILT	173SP1	689929	INTERNATIONAL	1994	D	213324		
B	8:52:00	T3S2	L	TRANS AC	665SP1	629243Z	INTERNATIONAL	1992	D	906011		
B	8:53:00	T3S2	L	GALLARDO	674CB4	890182Z	PETERBILT	1980	D			
B	8:53:00	SU2	E	TRANS AC	ZUR7017	629243Z	GMC	1987	PG	1400702		
B	8:54:00	T3S2	L	CONTINENTAL	669CA7	65090Z	INTERNATIONAL	1993	D			
B	8:54:00	T3S2	E	LYRMA	843SP1	677177Z	FREIGHTLINER	1994	D	539257	2005	
B	8:57:00	T3	BT	SETI	822SN9	1190965Z	FREIGHTLINER	1991	D			
B	9:00:00	SU2	L	AGUILA	871DZ4	555365Z	INTERNATIONAL		D			
B	9:00:00	SU2	E	SERVIFLETES	ZUS8732	696818	GMC	1992	PG	222146		
B	9:01:00	T3S2	L	GALLARDO	289EM3	89182Z	INTERNATIONAL		D			
B	9:02:00	T3S2	E	AGUILA	959SP1	55365Z	INTERNATIONAL	1993	D	735058		
B	9:03:00	T3S2	L	TORRES	596SN9	557177Z	INTERNATIONAL	1991	D			



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	9:03:00	T3	BT	SETI	821SN9	1190965Z	FREIGHTLINER					
B	9:05:00	T3S2	L	LYRMA	526CA7	650990Z	VOLVO	2001	D			
B	9:06:00	T3S2	E	FLETES JUAREZ	610SP1	556599Z	INTERNATIONAL					
B	9:06:00	T3S2	L	LYRMA	846CA7	650990Z	VOLVO	2001	D			
B	9:07:00	T3S2	L	LYRMA	265CA7	650990Z	VOLVO	2000	D			
B	9:08:00	T3S2	L	TORRES	375SN1	557177Z	INTERNATIONAL		D			
B	9:09:00	T3S2	L	TNCH	969SP1	711125Z	FREIGHTLINER	1994	D	99843		
B	9:13:00	T3S2	E	AGUILA	521EM7	55365	INTERNATIONAL	1987	D			
B	9:17:00	T3	BT	TRANSVAR	058SP1	860366Z	INTERNATIONAL	1993	D			
B	9:20:00	T3	BT	TARAHUMARA	133SP1	822640Z	FREIGHTLINER	1989	D			
B	9:20:00	T3S2	L	LYRMA	529CA6	650990Z	FREIGHTLINER		D			
B	9:20:00	T3	BT	SETI	685EM7	1190965Z	KENWORTH	2000	D			
B	9:21:00	T3S2	E	OROZCO	685SN9	558628	FREIGHTLINER	1988	D	300055		
B	9:21:00	T3S2	L	LYRMA	850DZ4	650990Z	KENWORTH	2005	D			
B	9:23:00	T3S2	E	T. MARTIN	782SP1	113223	FREIGHTLINER	1989	D			
B	9:24:00	T3S2	L	LYRMA	154CA7	650990Z	VOLVO	2000	D			
B	9:25:00	T3S2	E	EMP. LOS MOLINOS	906SA7	697052Z	VOLVO	1987	D			
B	9:26:00	T3S2	E	TRANSISA	251SP1	890170	INTERNATIONAL					
B	9:30:00	T3S2	L	TRANFER	865SP1	793555	INTERNATIONAL		D	19031		
B	9:30:00	T3	BT	SETI		1190965						
B	9:30:00	SU2	L		ZUP4027	557314	CHEVY		G			
B	9:31:00	T3S2	E	SOTELO	807EM7	258923	INTERNATIONAL	1995	D	150232		
B	9:31:00	T3	BT	LYRMA		786840Z	VOLVO					
B	9:32:00	T3S2	L	LYRMA	844DZ4	650990	FREIGHTLINER	1998	D	354765		
B	9:33:00	T3S2	L	SIITSA	659EM3	604862Z	INTERNATIONAL		D	465511		
B	9:33:00	SU2	E	INMOB. CHAVEZ	ZU73370		GMC	1988	PG			
B	9:34:00	T3S2	E	PADILLA	125SP1	677177Z	INTERNATIONAL	1990	D	271466	2005	
B	9:34:00	T3S2	E	PADILLA	838SP1	677177Z	FREIGHTLINER	1991	D	793897	2005	
B	9:35:00	T3S2	L	NORZA	755SP1	1261136Z	INTERNATIONAL		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	9:36:00	T3S2	L	TORRES	142SN9	557177	INTERNATIONAL	1994	D			
B	9:36:00	T3S2	L	TPN	865SN9	880805Z	INTERNATIONAL		D	838855		
B	9:37:00	T3S2	E	OROZCO	082SN9	558628	INTERNATIONAL	1989	D			
B	9:37:00	T3S2	L	STIL	605FA1	55734Z	FREIGHTLINER	1998	D	927923		
B	9:40:00	T3S2	L	AGUILA	024SP1	555365Z	INTERNATIONAL	1993	D			
B	9:40:00	T3S2	L	AGUILA	805SP1	555365Z	INTERNATIONAL		D	7562068		
B	9:42:00	T3S2	E	TRANS Y SERV ESPECIALES	294EM3	822640Z	INTERNATIONAL	1987	D			
B	9:42:00	T3S2	E	OROZCO	680SN9	558628	INTERNATIONAL	1990	D	7315		
B	9:42:00	T3S2	L	SOTELO	705SP1	258923Z	INTERNATIONAL	1994	D	74330		
B	9:45:00	T3S2	L	AGUILA	022SP1	555365Z	INTERNATIONAL	1993	D			
B	9:45:00	T3S2	L	AGUILA	887SP1	555365Z	INTERNATIONAL		D			
B	9:46:00	T3S2	L	TNCH	061SP1	880805Z	INTERNATIONAL	1995	D	84278		
B	9:46:00	T3S2	E	GRUPO HERNANDEZ	878SN9	1170268Z	KENWORTH	1990	D	241133	2005	
B	9:47:00	T3S2	L	TNCH	033SP1	711125Z	INTERNATIONAL		D	89817		
B	9:48:00	T3S2	L	DELFINES	689M7	683624Z	INTERNATIONAL		D			
B	9:50:00	T3S2	L	ALFA	003EM8	604745	INTERNATIONAL	1990	D			
B	9:50:00	T3S2	L	STIL	286FA2	557341	FREIGHTLINER	1997	D			
B	9:51:00	T3S2	E	DRAGON	790SP1	634569Z	INTERNATIONAL	1991	D	644755	2005	
B	9:52:00	T3S2	E	SILT	348EM3			1995				
B	9:52:00	T3S2	L	TRANS MAQ	391EM3	786840Z	INTERNATIONAL	1986	D			
B	9:53:00	T3S2	L	ARRSA	725EM7	638911Z	FREIGHTLINER	1990	D			
B	9:53:00	T3S2	L	TNCH	919EM7	911125Z	FREIGHTLINER		D	42334		
B	9:54:00	T3S2	L	RIO GRANDE	579SP1	626472	INTERNATIONAL		D			
B	9:55:00	T3	BT	BALMEX EXPRESS	109SP1	554860Z	INTERNATIONAL	1990	D	1132643	2005	
B	9:57:00	T3S2	L	TNCH	417SP1	71125Z	INTERNATIONAL	1993	D	214885		
B	9:57:00	T3S2	L	LYRMA	736DZ4	650990Z	KENWORTH	2003	D			
B	9:57:00	SU2	E	ENVIMEX	ZUU5650	789655Z	GMC	2002	PG			
B	9:58:00	T3	BT	BALMEX EXPRESS	226SP1	554860Z	WHITE GMC	1993	D	9324695	2005	
B	10:00:00	T3S2	L	ROFRA	826SN9	1175007Z	FREIGHTLINER	1989	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	10:00:00	T3S2	L	TNCH	914EM7	700025Z	FREIGHTLINER	1996	D	180132		
B	10:00:00	SU2	E	RIO GRANDE	ZUR9744	62647Z	GMC	1997	PG	162634		
B	10:02:00	T3S2	E	DELFINES	290SP1	683624Z	INTERNATIONAL	1992	D			
B	10:02:00	T3S2	L	TRANS MAQ	734SN9	710383Z	INTERNATIONAL	1988	D			
B	10:03:00	T3S2	L	TNCH	962SP1	71125Z	INTERNATIONAL	1995	D			
B	10:04:00	T3S2	E	RODRIGUEZ	630EM3	1347130Z	FREIGHTLINER	1989	D	170425	2005	
B	10:04:00	T3S2	L	RAMOS	660SN9	624695Z	INTERNATIONAL		D			
B	10:06:00	T3	E	RIO GRANDE	568SP1	62642Z	INTERNATIONAL	1989	D	1042048	2005	
B	10:07:00	T3	BT	TNCH	739EM7	711125Z	FREIGHTLINER	1999	D	647051	2005	
B	10:10:00	T3S2	E	TNCH	567EM3	711125Z	KENWORTH	2002	D	94424	2005	
B	10:20:00	T3S2	L	TRANS Y SERV ESPECIALES	314EM3	822640Z	FREIGHTLINER		D			
B	10:23:00	T3S2	L	SIETE	647SP1	818175	WHITE	1994	D			
B	10:24:00	T3S2	L	TPN	867SN9	880805Z	INTERNATIONAL	1992	D	98397		
B	10:25:00	T3S2	L	TPN	228EM3	880805Z	INTERNATIONAL	1994	D			
B	10:25:00	T3S2	L	TPN	870SN9	880805Z	INTERNATIONAL		D			
B	10:26:00	T3S2	L		ZUS4778	556013	INTERNATIONAL		G			
B	10:27:00	SU2	E	FIQUIN	528EMN7	1214051Z	INTERNATIONAL	1993	D	468608	2005	
B	10:30:00	T3S2	L	LYRMA	739DZ4	650990Z	KENWORTH	2004	D	49019		
B	10:30:00	T3S2	E	ALVELAIS ALARCON	ZUT8502	827913Z	FORD	1996	G	153862		
B	10:30:00	SU2	L			667492			G			
B	10:32:00	T3S2	E	PADILLA	122SP1	77177Z	INTERNATIONAL	1993	D	159737	1998	
B	10:32:00	T3S2	L	MUÑOZ	216SP1	677502	KENWORTH		D			
B	10:33:00	T3S2	L	RAMOS	452SP1	624695	INTERNATIONAL		D	186720		
B	10:33:00	T3S2	L	RIO GRANDE	590SP1	626472	INTERNATIONAL		D			
B	10:34:00	SU2	E	PADILLA	124SP1	77177Z	INTERNATIONAL	1994	D	379765	2005	
B	10:34:00	T3S2	E	TAFI	ZUT6973	1122379Z	GMC	1997	G			
B	10:35:00	T3S2	L	DELFINES	201SP1	683624Z	KENWORTH		D			
B	10:35:00	T3S2	L	CONTRERAS	488CA7	650950Z	KENWORTH		D	147737		
B	10:35:00	T3S2	L	GALLARDO	675CB4	890182	KENWORTH	1980	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	10:36:00	T3S2	E	T. REY	497SP1	776901	FREIGHTLINER	1974	D			
B	10:40:00	T3S2	L	ANDUJO	704SN9	667366	INTERNATIONAL	1992	D			
B	10:40:00	T3S2	E	AGUILA	893SN9		INTERNATIONAL	1990	D			
B	10:42:00	T3S2	L	RIELEROS DEL NORTE	83890DN	626971	KENWORTH		D			
B	10:43:00	T3S2	L	PREMIER	793DA8	1091672Z	INTERNATIONAL	1986	D	3968		
B	10:44:00	T3S2	E	DESERTO NORTE	445EM3		INTERNATIONAL	1987	D			
B	10:45:00	T3S2	L	TNCH	032SP1	7111257	INTERNATIONAL	1995	D	645699		
B	10:45:00	T3S3	E	TAC	840EM7	629243Z	INTERNATIONAL	1992	D			
B	10:46:00	T3S2	L	RAMOS	498EM3	624695Z	INTERNATIONAL		D			
B	10:46:00	T3S2	E	ANGELES AZULES	757SP1	0557540Z		1997	D			
B	10:46:00	T3S2	E	REYHER	ZU51035		GMC	1989	PG		2005	
B	10:47:00	T3S2	E	TRASA	336CA5	555266Z	FREIGHTLINER	1980	D	918390		
B	10:47:00	T3S2	L	JOHNSON CONTROLS	DL73493	632813	KENWORTH	1993	D	284620	NF	
B	10:50:00	T3S2	E	TRANS MAQ	678EM7	786840Z	INTERNATIONAL	1990	D			
B	10:52:00	T3S2	E	RIO GRANDE	601SP1	62647Z	INTERNATIONAL					
B	10:53:00	T3S2	E	DRAGON	510EM3	634569Z	INTERNATIONAL					
B	10:54:00	T3	BT	RIO GRANDE	841SN9		INTERNATIONAL					
B	10:57:00	T3S2	E	GONZALEZ	616SN9	621647Z	INTERNATIONAL					
B	10:58:00	T3S2	E	ANGELES AZULES	758SP1	0557540Z	WHITE GMC	1990	D	960478	2005	
B	10:58:00	T3S2	L	AGUILA	821SP1	55365Z	INTERNATIONAL		D			
B	10:59:00	T3	BT	FLETES RARAMURI	9485N9	0556964Z	INTERNATIONAL	1989	D			
B	11:00:00	T3S2	L	AGUILA	808SP1	555365Z	INTERNATIONAL	1995	D			
B	11:00:00	T3S2	L	SISTS. CONECTION	ZUR3291	667492	GMC	1997	G	151310		
B	11:02:00	T3S2	L	UTCJAC	792SP1	555709	FREIGHTLINER	1992	D	210806	NF	
B	11:04:00	T3S2	E	ALANIS	007SP2	555056Z	INTERNATIONAL	1992	D	9678687	2005	
B	11:05:00	T3S2	L	CYR	210EM3	911551	KENWORTH	1998	D			
B	11:05:00	T3S2	L	TRANS JD	282SP1	606698Z			D			
B	11:05:00	T3S2	E	TAC	670SP1	629243Z	FREIGHTLINER	1995	D			
B	11:05:00	T3S2	L	CYR	762SN9	911556Z	KENWORTH		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	11:06:00	T3S2	E	TORRES	553EM7		KENWORTH					
B	11:06:00	T3S2	L	LYRMA	835DZ4	650990	FREIGHTLINER	1999	D	49809		
B	11:06:00	T3S2	L	TPN		880835	INTERNATIONAL		D			
B	11:07:00	T3S2	L	LYRMA	842SA7	650990	VOLVO	2001	D	612000		
B	11:10:00	T3S2	L	DRAGON	798SP1	634569Z	INTERNATIONAL		D			
B	11:12:00	T3S2	L	TRANS AC	667SP1	629243Z	INTERNATIONAL	1995	D			
B	11:12:00	T3S2	L	CONTRERAS	ZUT2977	650950	GMC	1992	G			
B	11:15:00	T3S2	E	TORRES	310EM3							
B	11:15:00	T3S2	L	VARGAS	664SP1	861801	INTERNATIONAL	1993	D		NF	
B	11:15:00	T3S2	L	TRANFER	866SP1	793559	INTERNATIONAL	1996	D	49189		
B	11:16:00	T3S2	L	LYRMA	847CA7	650990Z	VOLVO	2001	D	566644		
B	11:16:00	T3S2	E	AGUILA		555365Z	INTERNATIONAL					
B	11:16:00	T3S2	L	OP MAQUILA DE JRZ	DNZ2945	558520	FORD	2001	G	83156		
B	11:17:00	T3S2	E	ROFRA	750EM7		1993					
B	11:18:00	SU2	L	DESIERTO NORTE	462EM3		INTERNATIONAL					
B	11:18:00	T3S2	L	T.J. MENA		557308	INTERNATIONAL					
B	11:19:00	T3S2	L	STIL	276EM7	557341Z	INTERNATIONAL	1998	D	24486		
B	11:19:00	T3S2	L	TPN	625SN9	880805Z	INTERNATIONAL	1993	D	173888		
B	11:19:00	T3S2	L	VARGAS	994SN9	1103957Z	FREIGHTLINER	1995	D			
B	11:21:00	T3S2	E	TRES CASTILLOS	221SP1	50543285	INTERNATIONAL					
B	11:21:00	T3S2	E	STIL	368SP1		INTERNATIONAL	1996				
B	11:22:00	T3S2	L	TORRES	860SN7	557177	INTERNATIONAL		D			
B	11:23:00	T3	BT	NORZA	753SP1	1261138Z	INTERNATIONAL	1993	D			
B	11:25:00	T3	BT	TORRES	131SN1	517777	INTERNATIONAL	1990	D	8679422		
B	11:26:00	T3S2	E	TEN	092AB8		FREIGHTLINER					
B	11:30:00	T3S2	L	MENDEZ	990SN4	1218989Z	FREIGHTLINER		D			
B	11:30:00	T3S2	L	YOLANDA KUCHLE	ZUS7195	12611382	CHEVROLET		G			
B	11:32:00	T3S2	E	AGUILA	025SP1							
B	11:35:00	T3S2	L	TRANS JD	540EM3	606698Z	KENWORTH	1994	D	135100	NF	

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	11:37:00	T3S2	L	PREMIER	611SN9	1191672Z	INTERNATIONAL	1986	D	51886		
B	11:37:00	SU2	E	REYHER	ZUS1040							
B	11:38:00	T3S2	L	TORRES		557177	INTERNATIONAL	1989	D			
B	11:40:00	T3S2	L	T. CD. J. CHIH.		1276390Z	INTERNATIONAL	1986	D			
B	11:43:00	T3S2	L	SILT	335EM3	689929Z	INTERNATIONAL	1995	D	21653		
B	11:44:00	T3S2	L	MONARCA	650CD7		INTERNATIONAL					
B	11:45:00	T3S2	L	STIL	761EM7	804800Z	INTERNATIONAL	1998	D			
B	11:48:00	T3S2	L	TPN	DK90306	848900Z	FORD	2001	G	157326		
B	11:48:00	T3S2	E	REYNA	356EM3	60428Z	WHITE GMC	1994				
B	11:48:00	T3S2	L	TORRES	587SN9	557177Z	INTERNATIONAL		D			
B	11:52:00	T3S2	L	RIO GRANDE	580SP1	62647Z	INTERNATIONAL		D	132474		
B	11:58:00	T3S2	E	GALLARDO	377EM3							
B	12:05:00	T3S2	L	PADILLA	250EM3	677177	FREIGHTLINER	1993	D	77986		
B	12:06:00	T3S2	L	SOTELO	724SP1	258923Z	FREIGHTLINER	1987	D	2241379	N	
B	12:08:00	T3S2	L	MENDEZ	886EM7	1218989Z	INTERNATIONAL	1992	D	615529	N	
B	12:10:00	T3S2	L	TORRES	019SN7	557177Z	INTERNATIONAL	1997	D	562789		
B	12:11:00	T3S2	L	TPN	6395N9	880805Z	INTERNATIONAL	1992	D	122053		
B	12:15:00	T3S2	L	NORZA	756EM7	1261138Z	INTERNATIONAL	1995	D	929491		
B	12:15:00	T3S2	E	ANGELES AZULES	994EM7	0557540Z	INTERNATIONAL	1995	D	814315		
B	12:16:00	T3S2	E	TPN	731SP1	848900Z	INTERNATIONAL	1990	D			
B	12:16:00	T3S2	L		799SP1	634569Z	INTERNATIONAL	1995	D	702584	2	
B	12:17:00	T3S2	L	TPN	748SP1	880805Z	INTERNATIONAL	1992	D			
B	12:17:00	T3S2	E	MONARCA								
B	12:17:00	T3S2	E	SOTELO								
B	12:20:00	T3S2	L	STIL	662FA1	6557391	FREIGHTLINER	1998	D	424234		
B	12:20:00	T3S2	E	HERCA								
B	12:20:00	T3S2	L	TPN								
B	12:22:00	T3S2	L	TPN	625SP1	848900Z	INTERNATIONAL	1993	D	779260		
B	12:23:00	T3S2	L	SILT	168SP1		INTERNATIONAL	1989				

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	12:23:00	T3S2	L	CONVOY DE MEX	530EM7	555864	INTERNATIONAL	1986	D			
B	12:24:00	T3S2	L	AUTOS USADOS MENDEZ	574EM3	12189897	FREIGHTLINER	1992				
B	12:24:00	T3S2	L	INDIO								
B	12:25:00	T3S2	L	CARDENAL	466SP1	847349	INTERNATIONAL	1995	D			
B	12:25:00	SU2	L	COMP-VENTA MENDEZ	ZUR9093	825641Z	CHEVROLET	1999	G	129497	3	
B	12:25:00	T3S2	L									
B	12:27:00	T3S2	L	TNCH	066SP1	711125Z	FREIGHTLINER	1993	D	538353		
B	12:27:00	T3S2	L	SOTELO	412SP1	899640Z	INTERNATIONAL	1984	D	235164	N	
B	12:28:00	T3S2	L	TNCH	029SP1	711125Z	INTERNATIONAL	1995	D	148650		
B	12:28:00	T3S2	L		765SP1	711125Z	FREIGHTLINER	1997	D	638999		
B	12:29:00	T3S2	L	TNCH	070SP1	711125Z	INTERNATIONAL	1995	D	221773		
B	12:30:00	T3S2	L	SIETE	271SP1	818175Z	INTERNATIONAL	1994	D	947942		
B	12:30:00	T3S2	E	TPN	732SP1	848900Z	FREIGHTLINER	1994				
B	12:32:00	SU2	L		ZUS6761	667366Z	GMC	1998	G			
B	12:33:00	T3S2	L	SI TSD			INTERNATIONAL	1996	D	97000		
B	12:35:00	T3S2	L	LYRMA	B43CA7	650990Z	VOLVO	2004	D			
B	12:35:00	T3S2	L	ANGELES AZULES								
B	12:35:00	T3S2	L	LYRMA	B43CA7	650990Z	VOLVO	2004	D			
B	12:36:00	T3S2	L	NORZA	264EM3	666090Z	FORD	1987	D	9223238		
B	12:37:00	T3S2	L	GALLARDO	291EM3		INTERNATIONAL	1995				
B	12:38:00	T3S2	L	MUÑOZ	092SP1							
B	12:40:00	T3S2	L	DESIERTO NORTE	455EM3	161732Z	INTERNATIONAL	1992	D	77675		
B	12:41:00	T3S2	L	SOTELO	556SN9	258923Z	INTERNATIONAL	1992				
B	12:45:00	T3S2	L	TRANS AC	669SP1	629243	FREIGHTLINER		D			
B	12:46:00	T3S2	L	VRP	489EM3	662058Z	INTERNATIONAL					
B	12:47:00	SU2	L	MARQUEZ BCO								
B	12:47:00	T3S2	L	STIL								
B	12:53:00	T3S2	E	TPN	749SP1	880805Z						
B	12:54:00	SU2	E	EP	ZUS7871	633056Z						

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	12:56:00	T3S2	E	TPN								
B	12:57:00	T3S2	L	TPN								
B	12:57:00	T3S2	L	TPN								
B	12:58:00	T3S2	L	TRANS MEXICANOS	045N1		FREIGHTLINER					
B	12:59:00	T3S2	L	AGUILA	005SP1	555365	INTERNATIONAL	1993	D	393120		
B	13:06:00	T3S2	L	SOTELO								
B	13:06:00	T1S2	L	AGUILA	951SN9	555365	INTERNATIONAL	1993	D	766750		
B	13:07:00	T3S2	L	MENDEZ	907EM7	1218989Z	FREIGHTLINER	1993	D			
B	13:09:00	T3S2	L	TPN	542EM7	880805Z	INTERNATIONAL					
B	13:12:00	T3S2	L	INTERFLETES	638EM3	1337175Z	INTERNATIONAL	1985	D	174476		
B	13:22:00	T3S2	E	GRUPO HERNANDEZ								
B	13:22:00	T3S2	L	TPN	631SN9	880805Z	INTERNATIONAL			121222		
B	13:24:00	T3S2	E	SOTELO								
B	13:27:00	T3S2	E	AGUILA								
B	13:27:00	T3S2	L	ZOTIS	178SP1							
B	13:29:00	T3S2	E	ALGOZA DEL NTE								
B	13:29:00	T3S2	L	STIL	363SP1			1996				
B	13:29:00	T3S2	L	STIL	381SP1			1996				
B	13:29:00	T3S2	L	SOTELO	554SN9			1993				
B	13:29:00	T3S2	E	SOTELO	562SN9	2589232	INTERNATIONAL	1997	D	656858		
B	13:31:00	T3S2	L	SOTELO								
B	13:31:00	T3S2	L	STIL								
B	13:32:00	T3S2	L	TRES CASTILLOS	220SP1		INTERNATIONAL					
B	13:33:00	T3S2	L	STIL	275EM3		INTERNATIONAL	1998				
B	13:34:00	T3S2	E	GRUPO HERNANDEZ	882SM9	84738						
B	13:36:00	T3S2	L	AGUILA	535EM3		INTERNATIONAL					
B	13:37:00	SU2	L									
B	13:40:00	T3S2	L	AGUILA			INTERNATIONAL					
B	13:40:00	T3S2	L	AGUILA	828SP1	5553657	INTERNATIONAL	1995	D	10326		



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	13:41:00	T3S2	L	AGUILA			INTERNATIONAL					
B	13:42:00	T3S2	L		915EM1	711125Z	VOLVO	1998	D	754292		
B	13:42:00	T3S2	L	AGUILA	947SP1	555365Z	INTERNATIONAL	1993	D	424030		
B	13:45:00		BT	PREMIER								
B	13:45:00	T3S2	E	TNCH	039SP1	711125Z	FREIGHTLINER	1995	D	49939		
B	13:52:00	SU2	L	TRANSVAR	ZUR7473	860366Z	FORD	1977	G			
B	13:55:00	SU2	E	SOTELO		258923Z						
B	13:55:00	T3S2	L	FMCH	569EM3	711125Z	KENWORTH	1998	D			
B	13:55:00	T3S2	L	MARQUEZ	740SN9	825641Z	INTERNATIONAL	1989	D	8551563		
B	13:55:00	T3S2	L	VARGAS	883SP1			1989				
B	13:57:00	T3S2	L	AGUILA	957SP1	555365Z	INTERNATIONAL					
B	13:58:00	T3S1	L	TNCH								
B	13:58:00	T3S2	E	AGUILA	902SN9	555365Z	INTERNATIONAL					
B	14:00:00	T3S2	L	PADILLA	126SP1	677177Z	INTERNATIONAL	1988	D	85677		
B	14:02:00	T3S2	E	TNCH	970SP1			1996				
B	14:03:00	SU2	L	SOTELO	696SP1		INTERNATIONAL	1994				
B	14:03:00	T3S2	L	ANDUJO	704SN9	667366	INTERNATIONAL	1992				
B	14:03:00	T3S2	L	CYR	772SN9		KENWORTH	1991				
B	14:04:00	T3S2	L	JOSE FCO. CAUTLE	626SP1	848900Z						
B	14:05:00	T3S2	L	JAIIME ALVAREZ QUEZADA	796C05		PETERBILT					
B	14:05:00	T3S2	L	TPN	867SN1	880805Z						
B	14:06:00	T3S2	L	ARRSA	739SP1	638911		1988	D			
B	14:10:00	SU2	E	CAMPOS	ZUR2101				G			
B	14:10:00	SU2	E	SILT		689929	GMC		G			
B	14:10:00	T3S2	L	RODRIGUEZ	569SP1							
B	14:10:00	T3S2	L	TPN	870SN9	880805Z						
B	14:12:00	T3S2	L	TRANS MAQ	567EM7	786840Z		1992				
B	14:13:00	T3S2	L	SILT	179SP1	689929	INTERNATIONAL	1993	D	85		
B	14:13:00	T3S2	L	TORRES	273SN1							

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	14:15:00	T3S2	L	C.M. MARQUEZ								
B	14:20:00	T3S2	L	KIKI								
B	14:22:00	T3S2	E	TNCH	567EM3			2002	D			
B	14:22:00	T3S2	L	AGUILA	912SP1	40555365Z	INTERNATIONAL					
B	14:24:00	T3S2	L	SERV. PREMIER								
B	14:27:00	T3S2		SIGLO			KENWORTH		D			
B	14:27:00	T3S2	L	TRANS Y SERV ESPECIALES	294EM3	822640Z	INTERNATIONAL	1987	D			
B	14:30:00	T3S2	L	R. EXPRESS								
B	14:30:00	T3S2	E	DELFINES	409EM3	6836242		1995	D			
B	14:30:00	T3S2	E	NORZA	657SN9		INTERNATIONAL		D			
B	14:30:00	SU2	E	AGUILA	874DZ4	555365Z	INTERNATIONAL	2001	D			
B	14:30:00	T3S2	L	AGUILA	954SP1	555365Z	INTERNATIONAL		D			
B	14:31:00	T3S2	L	MONARCA	484SP1	726031	INTERNATIONAL		D			
B	14:32:00	T3S2	L	VARGAS	992SN9	861806Z	INTERNATIONAL					
B	14:33:00	T3S2		TRANSFER	844EM7		INTERNATIONAL		D			
B	14:33:00	T3S2	L	TNCH	964SP1	711125Z	FREIGHTLINER	1999	D	293188		
B	14:33:00	SU2	L	MONARCH LITHO	DM37201	1846935Z						
B	14:33:00	SU2		BOUCHE	ZUT2858							
B	14:34:00	SU2	L	NORZA	ZUU4193	1261138Z	GMC	1986	G			
B	14:35:00	T3S2	L	GALLARDO								
B	14:35:00	T3S2	L	STIL								
B	14:35:00		L	STIL								
B	14:35:00	T3S2	L	STIL								
B	14:35:00	T3S2	L	STIL								
B	14:35:00	T3S2	L	STIL								
B	14:35:00	T3S2	E	TRANS MAQ	390EM3	786840Z		1995	D			
B	14:35:00	T3S2		DEL ANGEL	835SP1	677177Z	FREIGHTLINER		D			
B	14:35:00	T3S2	L	ZOTIS	J87SP1	683428Z						
B	14:38:00	T3S2	L	BRP		662058Z	KENWORTH		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	14:38:00	T3S2	L	NORZA		1261138Z						
B	14:38:00	T3S2	L	SOTELO								
B	14:38:00	T3S2	E	STIL								
B	14:38:00	T3S2	L	VELIZ		22838Z						
B	14:39:00	T3S2	L	TRANS. TORRES		650950Z						
B	14:39:00	T3S2		GALLARDO	288EM3	590182Z	FREIGHTLINER					
B	14:40:00	T3S2	L	DELFINES								
B	14:40:00	T1S2	E	TRANSERVICIOS	267SP1	822640Z			D			
B	14:41:00	T3S2	E	AVANTI		666762Z			D			
B	14:43:00	T3S2	L	MONARCA								
B	14:44:00	T3S2	L	RAMOS								
B	14:45:00	T3S2	E	ETL								
B	14:46:00	T3S2	L	TPN								
B	14:48:00	T3S2	E	ARREOLA								
B	14:48:00	T3S2	E	RAMOS								
B	14:50:00	T3S2	L	TRANS JD	550EM3	606698Z						
B	14:55:00	T3S2		SPAT MAILS	00580Z3		KENWORTH					
B	14:55:00	T3S2	L	TRANS AC	667SP1	629243Z	INTERNATIONAL	1995	D	191936		
B	14:56:00	SU2	E	ENVIMEX	ZUT6330	787655Z	FORD	1985	G			
B	14:57:00	T3S2	E	RAMOS	970CB3	696803	KENWORTH	1982	D			
B	14:58:00	T3S2	L	TRANS MAQ	601SN9	710383Z						
B	15:00:00	T3S2		AGUILA								
B	15:00:00	T3S2		T. CONTRERAS								
B	15:00:00	T3S2	L	R. EXPRESS	112SP1	1162107Z	INTERNATIONAL	1996	D			
B	15:00:00	T3S2		ENVIMEX	ZUT830							
B	15:02:00	T3S2	L	SILT	173SP1			1994				
B	15:02:00	T3S2	L	GUERRERO ESP	235C18		KENWORTH					
B	15:02:00	T3S2	L	TRANS JD	288SP1	606698Z	KENWORTH					
B	15:02:00	T3S2	L	KIKI	605EM3		FREIGHTLINER	1994				

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	15:02:00	T3S2	L	GRUPO MEXICO	800SNP	632830	INTERNATIONAL	1986	D	6472580		
B	15:02:00	T3S2	L	TRANSVAR	878SP1	860366Z	INTERNATIONAL	1991	D			
B	15:02:00	T3S2	E	AGUILA	903SN9	555365Z	INTERNATIONAL					
B	15:08:00	T3S2	L	MONARCA	478SP1		INTERNATIONAL	1993				
B	15:09:00	SU2	L	AVIO EXCELENTE	ZUS4778			1983				
B	15:10:00	T3S2	L	MARSA	921SN9	666090	INTERNATIONAL					
B	15:11:00	T3S2	L	TPN	750SP1	880805Z	INTERNATIONAL					
B	15:12:00	T3S2	L	CARDENAL	471SP1	847349	INTERNATIONAL	1989				
B	15:12:00	T3S2	L	CONVOY DE MEX	529EM7			1986				
B	15:13:00	T3S2	L	AGUILA	819SP1	555365Z	INTERNATIONAL	1995	D	233385		
B	15:13:00	T3S2	L	TRANSVAR	876SP1	860366Z	INTERNATIONAL	1987	D	45943		
B	15:13:00	SU2	L	ANDUJO	DK90702	667366Z						
B	15:15:00	T3S2	L	TPN	ZUU1137	880805Z						
B	15:16:00	SU2	L		ZUU6298	923047Z	GMC					
B	15:17:00	SU2		STIL								
B	15:17:00	SU2		STIL								
B	15:17:00	SU2		STIL								
B	15:17:00	SU2		STIL								
B	15:20:00	T3S2	L	AGUILA	010SP1	555365Z	INTERNATIONAL	1993	D	5002000		
B	15:20:00	T3S2	L	SITSA	639EM3	604862Z	INTERNATIONAL	1994	D	487573		
B	15:20:00	T3S2	L	AGUILA	950SP1	556365Z	INTERNATIONAL					
B	15:20:00	T3S2	L	JOHNSON CONTROLS	DL73493	632813	KENWORTH	1993				
B	15:25:00	T3S2	L	ZOTIS	176SP1	683428Z	INTERNATIONAL					
B	15:26:00	T3S2	L	TRANS MAQ	559EM3	786840	FREIGHTLINER		D	235256		
B	15:30:00	T3S2	BT	MARSA	729EM7							
B	15:30:00	T3S2	L	JOHNSON CONTROLS	DL73493	632813	KENWORTH	1993	D	284679		
B	15:32:00	T3S2	L	L.G. RECICLADOS	672EM7	805178Z	FREIGHTLINER	1991	D			
B	15:33:00	T3S2	E	VRP	119SP1	662058Z	INTERNATIONAL	1985	D	9947835		
B	15:35:00	T3S2	L	SITSA	664862Z	664862Z	INTERNATIONAL	1992	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	15:35:00	T3S2	E	ALFREDO GONZALEZ	327CA6	558301	KENWORTH	1986	D	4176537		
B	15:36:00	SU2	L	SERV. DE LAS MAQ.	DN21171	55699Z	FORD	1983	D			
B	15:37:00	T3S2	L	TRANS JD	283SP1	606698Z	INTERNATIONAL					
B	15:39:00	T3S2	L	NORZA	755SP1	1261138Z	INTERNATIONAL					
B	15:40:00	SU2	L	TRANS MAQ	ZUS1076	786840Z	GMC	1987	G	190307		
B	15:41:00	T3S2	L	SIETE	269SP1	818	INTERNATIONAL					
B	15:42:00	SU2	L	SITSA	ZUS18865	604862Z	GMC	1988	G			
B	15:42:00	SU2	L	NORZA	ZUS7200		GMC					
B	15:43:00	T3S2	L	SIETE	791SN9		INTERNATIONAL	1997				
B	15:43:00	SU2	L	JESAB	ZUT6967	845471	GMC	1983		384632		
B	15:45:00	T3S2	L		108SP1		KENWORTH					
B	15:45:00	T3S2	L		965SP1	711125Z	FREIGHTLINER					
B	15:48:00	T3S2	L	AGUILA	806SP1	555365Z		1995	D			
B	15:49:00	T3S2	E	VARGAS	664SP1		INTERNATIONAL	1993	D			
B	15:49:00	T3S2	L	AGUILA	905SN9		INTERNATIONAL	1997	D			
B	15:50:00	T3S2	L	LYRMA								
B	15:50:00	T3	BT	SOTELO	561SN9		INTERNATIONAL	1993				
B	15:51:00	T3	BT	DELFINES	25SP1		INTERNATIONAL		D			
B	15:52:00	T3S2	L	SILT	327EM3		FREIGHTLINER	1993				
B	15:53:00	T3S2		TRANS MAQ								
B	15:53:00	T3S2	E			711125Z						
B	15:53:00	T3S2										
B	15:55:00	T3S2	L	TNCH	962SP1		INTERNATIONAL	1995	D			
B	15:58:00	SU2	L	ANDUJO		667366Z	GMC	1992	G			
B	16:00:00	T3S2	L	AGUILA					D			
B	16:00:00	T3S2		RGX			INTERNATIONAL					
B	16:01:00	T3S2	L	VRP	488EM3	662058Z	INTERNATIONAL		D			
B	16:03:00	T3S2	E	SOTELO		258923Z	INTERNATIONAL		D			
B	16:04:00	SU2		ACS		997401Z	GMC		G			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	16:04:00	T3S2		STIL								
B	16:06:00	T3	BT	SMART	416EM3	677075	INTERNATIONAL	1995	D			
B	16:08:00	T3S2	L	AGUILA	953SP1		INTERNATIONAL	1993	D			
B	16:09:00	T3S2	L	NORZA		666090Z						
B	16:09:00	T3S2		SILT								
B	16:10:00	T3S2		RODRIGUEZ	670EM3							
B	16:11:00	SU2	E	FLETES MOLINA		556599Z	KODAK					
B	16:12:00	T3S2		TPN								
B	16:13:00	T3S2		TPN								
B	16:13:00	T3	BT	CAMPOS	805EM7	643366Z		1997				
B	16:14:00	T3S2	L	AGUILA	908SN9		INTERNATIONAL					
B	16:19:00	SU2	E	R Y JC BARRON	DN5910							
B	16:22:00	SU2	L	CHICO ARTS.	FYA423	1284199			G			
B	16:23:00	T3S2	L	CYR	210EM3	91	KENWORTH	1998	D	911000		
B	16:30:00	SU2	L	INTEGRADORA MAX		12831542	GMC		G			
B	16:30:00	T3S2	L	TPN	54ZEM7	880805Z	INTERNATIONAL		D			
B	16:31:00	T3S2	L	OTI		6834282						
B	16:31:00	T3S2	L	TRANS MAQ	734SN9	7103832	INTERNATIONAL	1988	D			
B	16:31:00	SU2	L	OLVERA	DXY3452	5573142	FORD					
B	16:32:00	T3S2	L	GALLARDO		890482Z	KENWORTH		D			
B	16:32:00	T3S2	L	GALLARDO	379EM3		KENWORTH		D			
B	16:32:00	T3S2	L	TRES CASTILLOS	554EM3	556987Z	INTERNATIONAL	1990	D			
B	16:33:00	T3S2	L	KIKI		804800Z	INTERNATIONAL		D			
B	16:33:00	T3S2	L	TRANS MEXICANOS	213SN9				D			
B	16:34:00	T3S2	E	DRAGON DEL NORTE		683624Z			D			
B	16:35:00	T3S2	E	SOTELO					D			
B	16:35:00	T3S2	L	AGUILA	816SP1		INTERNATIONAL	1995	D			
B	16:35:00	SU2	L	DELFINES	ZUU4082		INTERNATIONAL	1990	D			
B	16:36:00	T3S2	E	TPN								

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	16:37:00	T3S2	L	DELFINES			KENWORTH					
B	16:37:00					666082Z			D			
B	16:40:00	SU2	L	INDIO	ZUS8559		GMC					
B	16:42:00	SU2	L	A.C.		629243Z	GMC		G			
B	16:44:00	SU2		TPN	867SN9		INTERNATIONAL	1992				
B	16:44:00	SU2		TRANS OROZCO	ZUU8628		KENWORTH	1975				
B	16:45:00	SU2	L	TRANSP. OROZCO	ZUU86213				G			
B	16:46:00	T3S2	L	TRANSFER	766SP1				D			
B	16:47:00	T3S2	L	TPN	870SN9	880805Z	GMC		D			
B	16:48:00	SU2	L	DRAGON DEL NORTE	ZUS4472				PROP			
B	16:48:00	T3S2		TPN			INTERNATIONAL		D			
B	16:48:00	T3S2	E	TRANSISA	152CB4		INTERNATIONAL		D			
B	16:49:00	T3S2	E	SOTELO			DINA		D			
B	16:49:00	T3S2	L	TRANSP. VARGAS			FREIGHTLINER		D			
B	16:50:00	T3S2	E	PADILLA			INTERNATIONAL		D			
B	16:51:00	T3S2	L	TORRES	015SN1		INTERNATIONAL		D			
B	16:51:00	T3S2	L	TPN	129751SPN	880805Z	INTERNATIONAL		D			
B	16:51:00	T3	BT	DELFINES	267EM3				D			
B	16:52:00	T3S2	E	DELFINES	486EM3		INTERNATIONAL		D			
B	16:52:00	T3S2	E	INTERFLETES	638EM3			1985	D			
B	16:53:00	SU2	E	UPS	TH0753		FORD		D			
B	16:55:00	T3	BT	PADILLA					D			
B	16:55:00	T3S2	E	VRP	ZUS94		GMC		G			
B	16:56:00	T3S2	L		545SN9		INTERNATIONAL		D			
B	16:56:00	T3S2	L	CYR	772SN9		KENWORTH	1991	D			
B	16:57:00	T3	BT	SOTELO								
B	16:57:00	T3S2	L	VARGAS	496EM3		INTERNATIONAL	1997	D			
B	16:58:00	SU2	L	SIST. Y CONEXIONES INTEGRADAS	ZUR3291	667492	GMC	1997	G	151343 KM		
B	16:59:00	T3S2	E	AGUILA								

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	17:00:00	T3S2	E	AGUILA	621EM3			1997				
B	17:00:00	T3S2	L	VARGAS	667EM3		INTERNATIONAL	1992	D			
B	17:05:00	T3S2	E	SIETE								
B	17:05:00	T3S2	L	SIETE	960SP1			1993				
B	17:08:00	T3S2	L	RIO GRANDE	596SP1	62647Z	INTERNATIONAL	1993				
B	17:10:00	T3	BT	MARIO ALFREDO REYES HERRERA 6			INTERNATIONAL					
B	17:10:00	T3	BT	TNCH								
B	17:10:00	T3	BT	SOTELO	398CA7		INTERNATIONAL	1986				
B	17:11:00	T3S2	L	AGUILA	008SP1	555365Z	INTERNATIONAL	1993				
B	17:11:00	T3S2	L	AGUILA	532EM2							
B	17:11:00	T3	BT	ALVELAIS ALARCON	692EM7		FREIGHTLINER	1990				
B	17:12:00	T3S2	L	ARRSA	667SN9	638911	FREIGHTLINER					
B	17:13:00	T3S2	L	CARDENAL	466SP1		INTERNATIONAL	1995				
B	17:15:00	T3S2	L	SIETE	271SP1	818175Z	INTERNATIONAL	1994				
B	17:15:00	T3S2	L	SIETE	273SP1	818175Z	INTERNATIONAL	1993				
B	17:16:00	T3S2	E	DESIERTO NORTE	128CA6		INTERNATIONAL					
B	17:17:00	T3S2	L	AGUILA	417SP1		INTERNATIONAL					
B	17:18:00	T3S2	L	STIL	314SP1		INTERNATIONAL	1994				
B	17:20:00	T3S2	E	AGUILA								
B	17:20:00	T3S2	E	CONTRERAS								
B	17:20:00	T3S2	L	DELFINES								
B	17:20:00	T3	BT	PADILLA								
B	17:20:00	T3S2	L	TPN	ZUR9744				PROPANO			
B	17:20:00	T3S2	E	AGUILA	218SP1			1994				
B	17:20:00	T3S2	L		254SP1							
B	17:20:00	T3S2	E	AGUILA	897SP1							
B	17:20:00	T3S2	L	DELFINES	941SP1			1992				
B	17:20:00	T3	BT	LYRMA	956DZ4	650990Z	VOLVO					
B	17:27:00	T3S2	L	PADILLA	338CA6		KENWORTH					



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
B	17:27:00	T3S2	L	RAMOS	455SP1		INTERNATIONAL	1989		823233		
B	17:30:00	T3S2	L	GALLARDO								
B	17:30:00	T3S2	L	TPN	228EM3			1994				
Z	8:00:00	T3S2	E	ING. RAFAEL GARCIA TRANSPORTES	231CB3	658179	KENWORTH		D			
Z	8:00:00	T3	BT	RIOS RUBIO	640CB3	1176321Z	KENWORTH		D			
Z	8:01:00	T3	BT	RIOS RUBIO	220CE2	1176321Z	KENWORTH		D			
Z	8:01:00	T3S2	E	ACH	734CB5	7750402	INTERNATIONAL		D			
Z	8:02:00	T3S2	L	PRAXAIR	PS60507	640568	KENWORTH		D			
Z	8:02:00	SU2	E	MONARCA	ZUS7498	726031	FORD		D			
Z	8:03:00	T3S2	E	ECO	849CW8	558117	KENWORTH		D			
Z	8:05:00	T3S2	L	TRANS MEXICANOS	041SN1	7103812	FREIGHTLINER		D			
Z	8:05:00	T3S2	L	TLM	434DJ4		KENWORTH		D			N
Z	8:07:00	T3S2	L	RIOS RUBIO	561CZ3	557729	KENWORTH		D			
Z	8:07:00	T3S2	L	DRAGON	798SP1	634569Z	INTERNATIONAL		D			N
Z	8:09:00	T3S2	L	PRAXAIR	PT85027		KENWORTH		D			N
Z	8:09:00	SU2	L	CAMPOS	ZUR2101	683366	GMC	1978	D			
Z	8:10:00	T3S2	L	ECO	160CA6				D			N
Z	8:11:00	T3S2	E	BELTRAN	177CB5		KENWORTH		D			N
Z	8:12:00	T3	E	DE LOS RIO RUBIO	S2SCB5		KENWORTH		D			N
Z	8:14:00	T3S2	E	DEL NORTE	436EM3		INTERNATIONAL	1994	D			N
Z	8:14:00	T3S2	E	DESIERTO NORTE	463EM3	116173Z	INTERNATIONAL		D			
Z	8:16:00	T2S1	E	MONARCA	ZUT6736		FORD		D			N
Z	8:18:00	T3S2	E	TRACSO	114SP1		INTERNATIONAL		D			N F
Z	8:18:00	T2S1	E	STIL	345SP1		INTERNATIONAL	1997	D			N F
Z	8:20:00	T3S2	L	TRACSO	402SP1		INTERNATIONAL		D			N F
Z	8:21:00	SU2	E	ECO	707CA7		FORD		D			N
Z	8:22:00	T3S2	L	ESCALANTE	466SN9	12	KENWORTH		D			
Z	8:22:00	T3S2	E	TRAMESA	960EM7		INTERNATIONAL		D			
Z	8:23:00	T3	BT	TORRES	441EM3	0557177Z	INTERNATIONAL		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	8:24:00	T3	BT	TRANS MEXICANOS	213SN9		INTERNATIONAL		D			N
Z	8:24:00	T3S2	E	ESCALANTE	223EM3		KENWORTH		D			N
Z	8:24:00	T3S2	L	TX INTER GAS	784EM7	417	INTERNATIONAL		D			
Z	8:25:00	SU2	E	TPN	ZUP9044	880805Z	GMC		D			
Z	8:26:00	T3S2	E	HUGO	TS4CB5		INTERNATIONAL		D			
Z	8:27:00	T3S2	E	AGUILA	912SN9	277	INTERNATIONAL	1997	D			
Z	8:27:00	T3S2	L	KEMSA	958SN9		INTERNATIONAL		D			F
Z	8:28:00	T3S2	E	TX LPG STORAGE	941EM7	143	PETERBILT		D			
Z	8:29:00	T3S2	E	TRANSERVICIOS	643EM7	72L	KENWORTH		D			
Z	8:31:00	T3S2	L	TX INTER GAS	086SP1	420	PETERBILT		D			
Z	8:31:00	T2	E	STIL	855CW8		KENWORTH	2004	D			N
Z	8:33:00	T3	BT	TPN	628SN9	880805Z	INTERNATIONAL		D			
Z	8:34:00	T3	BT	SILT	326EM3	68929Z	FREIGHTLINER	1993	D			
Z	8:34:00	T3S2	E	ASFALTOS DE LA FRONTERA	DN97618		FREIGHTLINER		D			N
Z	8:35:00	T3	BT	SILT	172SP1	623	INTERNATIONAL	1994	D			
Z	8:36:00		E	SILT			FREIGHTLINER		D			N
Z	8:37:00	T3S2	L	ECO	848SW8	38	KENWORTH		D			
Z	8:38:00	T3	E	TRAMESA	903EM7		FREIGHTLINER		D			N
Z	8:39:00	T3S2	L	RIOS RUBIO	360CB3	80			D			
Z	8:39:00	T3S2	E	KEMSA	957SN5		FREIGHTLINER		D			N
Z	8:40:00	T3	BT	TPN	638SN9	880805Z	INTERNATIONAL		D			
Z	8:40:00	SU2	E	RAMOS	ZUR2764		GMC		D			N
Z	8:41:00	T3	BT	KEMSA	012SN5	47	FREIGHTLINER		D			
Z	8:41:00	T3S2	L	A8M	390SP1				D			N
Z	8:42:00	T3S2	E	COMERCIAL INDUSTRIA	037DZ3	9	VOLVO		D			
Z	8:43:00	T3S2	L	CARRASCO	4D4EM3		FREIGHTLINER		D			N
Z	8:44:00	T3S2	E	ZOTIS	629EM7	18	KENWORTH		D			
Z	8:44:00	T3S2	E	TRANS MAQ	857SP1		INTERNATIONAL		D			N
Z	8:44:00	T3S2	E	ASFALTOS DE LA FRONTERA	DN97394	523	KENWORTH		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	8:45:00	T3S2	L	BRP	649SP1		INTERNATIONAL	1998	D			N
Z	8:46:00	SU2	E	EP	ZUS7885		GMC		D			N
Z	8:47:00	T3S2	E	RAMOS	457SP1	709	INTERNATIONAL		D			
Z	8:48:00	T2S2	E	STIL	893SP1		FREIGHTLINER	1997	D			N
Z	8:49:00	T3S2	E	STIL	205FA1	201	KENWORTH	1996	D			
Z	8:49:00	T3S	E	RAMOS	453SP1		INTERNATIONAL		D			N
Z	8:49:00	T3S2	E	STIL	960FA2	384	FREIGHTLINER	2000	D			
Z	8:50:00	T3S2	E	TRACSO	128SP1	7799732	FREIGHTLINER		D			
Z	8:50:00	T3S2	E	AGUILA	893SP1		INTERNATIONAL	1997				N
Z	8:50:00											
Z	8:51:00	T3S2	E	DEHESA	279SP1		INTERNATIONAL		D			N
Z	8:51:00	T3S2	E	RAMOS	454SP1		INTERNATIONAL		D			N
Z	8:52:00	T3S2	L	RAMOS	456SP1	237	INTERNATIONAL		D			
Z	8:52:00	T3	E	ETF	482CW5		INTERNATIONAL		D			N
Z	8:52:00	T3S2	L	TRANSERVICIOS	787SN9	602	INTERNATIONAL	1997	D			
Z	8:53:00	T3S2	E	VARGAS	662SP1	17	KENWORTH		D			
Z	8:54:00	T3S2	E	TRAGASA	200SP1		KENWORTH		D			N
Z	8:55:00	T3S2	E	SOTELO	718SP1	L58	INTERNATIONAL	1989	D			
Z	8:55:00	T3S2	L	FLETES JUAREZ	898DZ4	4	KENWORTH		D			
Z	8:55:00			EXPRESS	ZU5				D			N
Z	8:56:00	T3S2	L	TRANS JD	401SP1		INTERNATIONAL		D			N
Z	8:56:00	T3S2	E	LYRMA	612CA7		VOLVO	2000				N
Z	8:57:00	T3S2	E	TRANSERVICIOS	241SP1		INTERNATIONAL		D			N
Z	8:58:00	T3S2	L	CARDENAL	607EM7	C-27	INTERNATIONAL		D			
Z	8:58:00	T3S2	L	BOUCHE	627SP1	7	INTERNATIONAL		D			
Z	8:58:00		E		952SN9		FREIGHTLINER		D			N
Z	8:58:00	T3S2	L	KEMSA	954SN9	37	INTERNATIONAL		D			
Z	8:59:00	T3S2	L	DESERTO NORTE	435EM3	571	INTERNATIONAL		D			
Z	8:59:00	T3S2	E	KEMSA	966SN5		FREIGHTLINER					N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	9:00:00	T3S2	L	DESERTO NORTE	433EM3	98	KENWORTH		D			
Z	9:00:00	T3S2	E	KEMSA	955SN9		INTERNATIONAL	1996	D			N
Z	9:01:00	T3S2	E	SOTELO	729SP1		INTERNATIONAL	1989	D			N
Z	9:02:00	T3S2	E	DELFINES	223CA5	45	INTERNATIONAL	1986	D			
Z	9:02:00	T3S2	E	STIL	459FA2		INTERNATIONAL	2002	D			N
Z	9:02:00	T3S2	L	MONARCA	491SP1	ML05	INTERNATIONAL	1993	D			
Z	9:03:00	T3S2	E	AGUILA	952SP1	19	INTERNATIONAL		D			
Z	9:03:00	SU2	E	TPN	ZUP9046	880805Z	GMC		D			N
Z	9:04:00	T3S2	L	MENA	189EB3	7	KENWORTH		D			
Z	9:05:00	T3S2	E	ESCALANTE	557EM7		FREIGHTLINER		D			N
Z	9:05:00	T3S2	L	KENA	957SN9	8	INTERNATIONAL		D			
Z	9:06:00	T3S2	E	TRANSERVICIOS	232SP1		INTERNATIONAL		D			N
Z	9:07:00	T3S2	L	TRANS JD	285SP1		INTERNATIONAL		D			N
Z	9:07:00	T3S2	BT	PATRICIO RUBIO LOZOYA	691EW8	1	KENWORTH		D			
Z	9:09:00	T3S2	L	PATRICIA ROBLES	529CB5		KENWORTH		D			N
Z	9:09:00	T3S2	E	JOSE LUIS MENDOZA	643CB2		FREIGHTLINER		D			
Z	9:09:00	T3	E	TORRES	696SN9		FREIGHTLINER	1995	D			
Z	9:10:00	T3S2	E		545549		INTERNATIONAL		D			N
Z	9:11:00	T3S2	E	TRL	8710Z		FREIGHTLINER					N
Z	9:12:00	T3S2	E	LYRMA	387CA7	650990Z	VOLVO	2000	D			N
Z	9:12:00	T3	E	TORRES	440SN1				D			N
Z	9:12:00	T3S2	L	SOTELO		128			D			
Z	9:13:00	T3S2	E	SILT	185SP1	15	INTERNATIONAL	1991	D			
Z	9:13:00	T3S2	L	TX INTER GAS	590EM7	392	PETERBILT		D			
Z	9:13:00	T3S2	E	MENDOZA	752CV5		INTERNATIONAL	2001	D			N
Z	9:15:00	T3S2	E	FLETES JUAREZ	511SP1		INTERNATIONAL		D			N
Z	9:15:00	T3S2	L	TRANS MAQ	873SP1		INTERNATIONAL		D			N
Z	9:15:00	T3S2	L	KEMSA	956SN9	10	FREIGHTLINER		D			
Z	9:16:00	T3S2	E	SOTELO	261CA5		DINA	1998	D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	9:17:00	T3S2	E	HALCONES	053CA9		INTERNATIONAL		D			N
Z	9:17:00	T3S2	E	SOTELO	551SN9	L-35	INTERNATIONAL	1986	D			
Z	9:19:00	T3S2	BT	FMCH	984SP1	384	INTERNATIONAL		D			
Z	9:20:00	T3S2	E	CARDENAL	606EM7		INTERNATIONAL		D			N
Z	9:21:00	T3S2	E	SIETE	647SP1		INTERNATIONAL	1994	D			N
Z	9:22:00	T3S2	E	RIOS RUBIO	047D23		INTERNATIONAL		D			N
Z	9:22:00			AGUILA	892SP1	76	INTERNATIONAL		D			
Z	9:23:00	T3S2	E	SOTO	937DZ2		KENWORTH	2000	D			N
Z	9:24:00	T3S2	L	LYRMA	793CA7		KENWORTH	2001	D			N
Z	9:25:00	T3S2	L	ETF	438CW5		INTERNATIONAL		D			N
Z	9:25:00			IBCA	DN90442		KENWORTH		D			
Z	9:26:00			TRANSERVICIOS	248SP1	91	INTERNATIONAL		D			
Z	9:26:00			TV	610EM3	35			D			
Z	9:26:00	T3S2	E	TM	735SN9			1989	D			N
Z	9:26:00	T3S2	E	TRANSERVICIOS	916EM7		FREIGHTLINER		D			NO
Z	9:26:00			SOTO	946DZ2		KENWORTH	1997	D			
Z	9:27:00	T3S2	E	SALCI			INTERNATIONAL		D			NO
Z	9:28:00	T3S2	E	LYRMA	736DZ4	6509902	KENWORTH	2003	D			F
Z	9:28:00			TRANS QUIROZ	ZUP2538	216			D			
Z	9:29:00		L	SOTELO	611EM7	L12	INTERNATIONAL	1997	D			
Z	9:29:00	T3	BT	TRAMESA	845EM7	12	INTERNATIONAL		D			
Z	9:30:00	T3S2	E	QUIROZ	591SN9	1	INTERNATIONAL		D			
Z	9:31:00	T3S2	L	DIAZ	296SP1	19	INTERNATIONAL		D			
Z	9:31:00	T3	E	ZOTIS	465SP1				D			N
Z	9:32:00	T3S2	L	MENDOZA	442SP1	113	KENWORTH		D			
Z	9:32:00	T3S2	E	RIO GRANDE	595SP1		INTERNATIONAL		D			
Z	9:32:00	T3S2	E	SIETE	645EM3		FORD		D			N
Z	9:33:00	T3S2	E	CARRASCO	403EM3	16	INTERNATIONAL		D			
Z	9:34:00	T3S2	L	SOTELO	703SP1		INTERNATIONAL	1994	D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	9:35:00	T3	BT	TBS	812CA5				D			
Z	9:36:00	T3		TRANS MEXICANOS	566SP2	374	FREIGHTLINER		D			
Z	9:36:00	T3S2	L	TNCH	819EM7				D			N
Z	9:38:00	SU2		AGUILA	558CA7	C-25	CHEVROLET		D			
Z	9:40:00	T3S2	E	TNCH	419SP1		INTERNATIONAL		D			N
Z	9:40:00	T3S2	L	CARDENAL	604EM7	33	INTERNATIONAL		D			
Z	9:40:00	T3S2	L	TRANS MAQ	858SP1		INTERNATIONAL		D			
Z	9:41:00	SU2	E	AGUILA			CHEVROLET		D			N
Z	9:42:00	T3S2	E	INDIO	641SP9		KENWORTH		D			
Z	9:42:00	T3S2	L	TRANS MAQ	645EM7		INTERNATIONAL		D			N
Z	9:42:00	T3S2	E	LYRMA	741DZ4	4	KENWORTH	2004	D			
Z	9:43:00	T3S2	L	EXPRESS REFRIGERADORES DEL NTE.	163CB2	L07	KENWORTH		D			
Z	9:43:00	T3S2	E	TRANS MAQ	859SP1		INTERNATIONAL		D			N
Z	9:44:00	T3S2	E	AGUILA	886DZ4	1	INTERNATIONAL		D			
Z	9:44:00	T3S2	E	TRAMESA	959EM7		INTERNATIONAL		D			
Z	9:46:00	T3S2		SOTELO	541SN9		INTERNATIONAL	1989	D			
Z	9:46:00	T3S2	E	RIO GRANDE	593SP1		INTERNATIONAL	1993	D			N
Z	9:46:00	T3		YAZA TRANSFER	769SN5	L66	INTERNATIONAL		D			
Z	9:48:00	T3		EIS	342CA7				D			
Z	9:48:00	T3S2	L	CONTRERAS	673CA7		INTERNATIONAL		D			N
Z	9:48:00	T3S2		TRANS MAQ	929CA6		CHEVROLET		D			
Z	9:49:00	T3S2		FMCH	139SP1	CI-022	INTERNATIONAL		D			
Z	9:49:00	T3S2	E	TRANS MAQ	367EM7		INTERNATIONAL		D			N
Z	9:49:00	SU2	E	CAMPOS	ZUR2102		GMC	1978	D			N
Z	9:50:00	T3S2	E	AGUILA	012SP1		INTERNATIONAL		D			N
Z	9:50:00	T3S2	E	STIL	285FA2	347	INTERNATIONAL		D			
Z	9:50:00	T3S2	E	DEL NORTE	442EM3		INTERNATIONAL	1992	D			N
Z	9:51:00	T3	E	EXPRESS HALCHISA	601EM3		FREIGHTLINER		D			N
Z	9:51:00	SU2	E	SOTELO	ZUT1082		FORD		D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	9:52:00	T3S2	L	TNCH	740EM7	303	FREIGHTLINER		D			
Z	9:52:00	T3S2	L	SOTELO	992EM7	288923	VOLVO	1997	D			N
Z	9:53:00	T3S2		STIL	358SP1		INTERNATIONAL	1996	D			N
Z	9:54:00	T3S2	E	DEHESA	227SP1	65	INTERNATIONAL	1992	D			
Z	9:54:00	T3S2	E	SOTELO	748EM7		VOLVO	1996	D			N
Z	9:55:00	T3S2	E	TRACSO	402SP1	87L	INTERNATIONAL		D			
Z	9:55:00	T3S2	E	DESIERTO NORTE	453EM3	622	INTERNATIONAL		D			
Z	9:55:00	T3S2	E	DEL NORTE	454EM3		INTERNATIONAL		D			N
Z	9:56:00	T3S2	E	TPN	622SN9	880805Z	INTERNATIONAL		D			N
Z	9:57:00	T3S2	L	SILT	338EM3	58	INTERNATIONAL	1998	D			
Z	9:57:00	T3S2	L	HERRERA	804EM7	4	FREIGHTLINER		D			
Z	9:57:00	T3S2	E	TNCH	966SP1		FREIGHTLINER		D			N
Z	9:58:00	T3S2	L	QUIROZ	410EM3		INTERNATIONAL	1986	D			N
Z	9:58:00	T3S2	E	SOTO	939DZ2	33	KENWORTH	2000	D			
Z	9:59:00	T3S2	E	TNCH	068SP1				D			N
Z	9:59:00	T3S2	L	EXPRESS HALCHISA	484EM3	82	FREIGHTLINER		D			
Z	9:59:00	T3S2	E	TSE	738CB5	38	EAGLE		D			
Z	10:00:00		E	DEHESA	208SP1		INTERNATIONAL		D			F
Z	10:00:00	T3	BT	TRANS MEXICANOS	553SP2	TM-173	FREIGHTLINER		D			
Z	10:00:00	SU2	E	TRANS MAQ	693CA6		CHEVROLET		D			N
Z	10:01:00	T3S2	E	AGUILA	918SN9	918SN9	INTERNATIONAL		D			
Z	10:02:00	T3S2	E	TRANS MEXICANOS	047SN1	733	FREIGHTLINER		D			
Z	10:02:00	T3S2	L	DESIERTO NORTE	463EM3	46	INTERNATIONAL		D			
Z	10:02:00	T3S2	E	VARGAS	918SP1		INTERNATIONAL	1992	D			
Z	10:03:00	SU2	E	HERCA	212CA5		KENWORTH		D			N
Z	10:03:00	T3S2	E	BOUCHE	280EM3	2	PETERBILT		D			
Z	10:05:00	T3S2	E	SOTELO	518EM7	252983	INTERNATIONAL	1994	D			N
Z	10:05:00	T3	BT	RINCHEM	896CW8	H55	KENWORTH		D			
Z	10:06:00	T3S2	E	TNCH	069SP1		INTERNATIONAL		D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	10:09:00	T3S2	E	SOTELO	322CA7	632798	INTERNATIONAL	1985	D			N
Z	10:09:00	SU2	L	INDIO	ZUS5798		GMC		D			
Z	10:10:00	T3	BT	TPN	634SN9	880805Z	INTERNATIONAL		D			N
Z	10:10:00	T3S2	L	ETF	938SN9	P-29	KENWORTH	1991	D			
Z	10:10:00	T3S2	E	FMCH	978SN9	C1036	INTERNATIONAL		D			
Z	10:11:00	T3S2	L	SOTELO	744EM7	25-8923	VOLVO	1996	D			
Z	10:12:00	T3S2	L	STIL	769EM7		INTERNATIONAL	1998	D			N
Z	10:13:00	T3S2	L	TRAMESA	963EM7	1000875	INTERNATIONAL		D			
Z	10:15:00	T3S2	E	SOTELO	207EM3	L003	INTERNATIONAL	1995	D			
Z	10:15:00	SU2	E	HERCA	277CA5				D			N
Z	10:16:00	T3S2	L	CARDENAL	203SP1		INTERNATIONAL		D			N
Z	10:17:00	T3S2	L	DRAGON	785SP1	634569Z	INTERNATIONAL		D			
Z	10:17:00	SU2	L	RIO GRANDE	ZUR9813	5	INTERNATIONAL		D			
Z	10:19:00	T3S2	L	KEMSA	958SN9	6	KENWORTH		D			
Z	10:19:00	SU2	E	OPTRON	DL39956		INTERNATIONAL		D			F
Z	10:20:00	T3S2	E	SALCI	20058	T16	INTERNATIONAL		D			
Z	10:20:00	T3S2	L	DEL NORTE	438EM9		INTERNATIONAL		D			N
Z	10:20:00	T3S2	L	RIO GRANDE	747SN9	35		1993	D			
Z	10:21:00	T3S2	L	ESCALANTE	223EM3		KENWORTH		D			
Z	10:22:00	T3	E	TRANS JD	288SP1		KENWORTH		D			F
Z	10:22:00	T3	BT	HERRERA	666C25	691659Z	INTERNATIONAL		D			
Z	10:23:00	T3S2	E	ELSA MENDOZA	888CB3		KENWORTH		D			F
Z	10:24:00	T3S2	E	DEL NORTE	456EM3		INTERNATIONAL		D			N
Z	10:25:00	T3S2	E	TRANS MAQ	612SN9	118	INTERNATIONAL	1986	D			
Z	10:26:00	T3S2	E	STIL	278EM3	356	INTERNATIONAL	1998	D			
Z	10:26:00	T3S2	E	ETF	462CW5	P63	INTERNATIONAL		D			
Z	10:27:00	SU2	E	TNCH	ZUT7093		GMC		D			F
Z	10:28:00	T3S2		DRAGON	800SP1	634569Z			D			
Z	10:29:00	T3S2	L	AGUILA	830SP1		FREIGHTLINER		D			N



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	10:30:00	T3S2	E	STIL	379SP1		INTERNATIONAL	1996	D			F
Z	10:30:00	T3S2		STIL	965FA2	389	PETERBILT	2000	D			
Z	10:32:00	T3S2	E	PADILLA	839SP1		FREIGHTLINER	1991	D			N
Z	10:33:00	T3S2	L	TX INTER GAS	059SP1	409	VOLVO		D			
Z	10:33:00	T3S2	E	LYRMA	790CA7	650990Z	VOLVO	2001	D			
Z	10:35:00	SU2	E	ANDUJO	ZUR7003		GMC		D			N
Z	10:36:00	T3S2	E	SOTELO	706SP1	L75	INTERNATIONAL	1994	D			
Z	10:38:00	T3S2	E	AGUILA	903SN9		INTERNATIONAL		D			N
Z	10:40:00	T3S2		SETI	253EM3	2016	INTERNATIONAL		D			
Z	10:40:00	T3S2	E	TRANSERVICIOS	406SP1		VOLVO		D			N
Z	10:40:00	SU2			ZUS2300	12	FREIGHTLINER		D			
Z	10:41:00	T3S2	L	SOTO	928DZ2		KENWORTH	1997	D			N
Z	10:42:00	T3S2	E	DEL NORTE	452EM3		INTERNATIONAL		D			N
Z	10:42:00	T3S2		ZOTIS	625EM7	19	FREIGHTLINER	1997	D			
Z	10:43:00	T3S2	E	LYRMA	530CA7		VOLVO	2001	D			N
Z	10:43:00	T3S2		ETF	937SN9	P28	KENWORTH	1991	D			
Z	10:45:00	T3S2	L	RAMOS	449EM3		INTERNATIONAL		D			N
Z	10:45:00	T3S2		LYRMA	730DZ4		KENWORTH	2003	D			
Z	10:46:00	T3S2	E	TRANSERVICIOS	246SP1		INTERNATIONAL		D			N
Z	10:47:00	T3S2	E	AGUILA	016SP1		INTERNATIONAL		D			
Z	10:48:00	T3S2		AGUILA	895SP1	81	FREIGHTLINER		D			
Z	10:49:00	T3S2		ARTURO GARCIA	145CB5		FREIGHTLINER		D			
Z	10:49:00	SU2	E	CARDENAL	ZW4143		GMC		D			
Z	10:51:00	T3S2	L	SOTELO	549SN9		INTERNATIONAL	1986	D			
Z	10:51:00	T3S2	E	KEMSA	954SN9	37	INTERNATIONAL		D			
Z	10:52:00	SU2	E	RAMOS	878CW8		KENWORTH	1999	D			
Z	10:52:00	SU2	E	RODEO	ZW3516		GMC		D			
Z	10:53:00	T3S2	E	ESCALANTE	466EM3		FREIGHTLINER		D			
Z	10:54:00	T3S2	L	TRUCK	541EM3		INTERNATIONAL		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	10:55:00	T3S2	E	KEMSA	952SN9	49	WHITE GMC	1992	D			
Z	10:56:00	T3S2	E	YONKE EL PITUFO	658EM7		KENWORTH		D			
Z	10:56:00	SU2	E	LYRMA	692CA7		VOLVO	2001	D			
Z	10:56:00	T3S2	E	IMPERIAL	805SN9		INTERNATIONAL		D			
Z	10:58:00	T3S2	E	FMCH	569EM7	C1007	FREIGHTLINER	1998	D			
Z	10:58:00	SU2	L	JBCA	608CB5	14C	FREIGHTLINER		D			
Z	11:00:00	T3S2	E	TRANS MEXICANOS	041SN1	751	INTERNATIONAL		D			
Z	11:00:00	T3S2	L	QUIROZ	599SN9		KENWORTH		D			N
Z	11:05:00	T3S2	E	SILT	166SP1	8	INTERNATIONAL	1989	D			
Z	11:06:00	T3S2	E	GALLARDO	376EM3	27	INTERNATIONAL		D			
Z	11:08:00	T3S2		TRANSERVICIOS	403SP1	85L	INTERNATIONAL		D			
Z	11:09:00	T3S2		TRANSERVICIOS	245SP1	79L	INTERNATIONAL		D			
Z	11:10:00	T3S2	E	ZOTIS	006SP2	14	INTERNATIONAL		D			
Z	11:10:00	T3S2		RODRIGUEZ	671EM7	RG03	INTERNATIONAL		D			
Z	11:15:00	T3S2	E	TRANSP EP	445SP1		INTERNATIONAL		D			N
Z	11:16:00	T3S2	E	ORDEL	130SP1		INTERNATIONAL		D			N
Z	11:17:00	T3S2		DEHESA	207SP1	53	INTERNATIONAL		D			
Z	11:17:00	T3S2	E	ZOTIS	626EM7		INTERNATIONAL		D			N
Z	11:18:00	T3	BT	DEHESA	210SP1		INTERNATIONAL		D			N
Z	11:20:00	T3S2	E	LYRMA	387CA7		VOLVO	2000	D			N
Z	11:20:00	T3	BT	DEHESA	607SP1	138	INTERNATIONAL		D			
Z	11:21:00	T3S2		TRACSO	425SP1	SOL04	KENWORTH		D			
Z	11:21:00	T3S2	L	DEL ANGEL	835SP1		INTERNATIONAL					N
Z	11:45:00	T3S2		TLM	435DJ4	159			D			
Z	11:46:00	T3S2	E	SITSA	982EM7		INTERNATIONAL		D			N
Z	11:46:00	SU2					INTERNATIONAL		D			
Z	11:47:00	T3S2	E	FMCH	141SP1	S1055	INTERNATIONAL		D			
Z	11:47:00	T3S2	E	DEL NORTE	436EM3		INTERNATIONAL	1994	D			N
Z	11:48:00	T3S2		MONARCA	491SP1	ML05	INTERNATIONAL	1993	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	11:49:00	SU2	E	AUTOTRANSPORTES	DM47547		FORD		D			N
Z	11:50:00	T3S2	L	PRAXAIR	PT84971		KENWORTH		D			N
Z	12:00:00	SU2	E	SOTELO	ZUS7232		GMC		D			N
Z	12:02:00	SU2	E	AGUILA	876DZ4		KENWORTH		D			N
Z	12:02:00	T3S2	L	ASFALTOS DE LA FRONTERA	DN97394	543	INTERNATIONAL		D			
Z	12:04:00	T3S2	E		528SP1	1237	INTERNATIONAL		D			
Z	12:04:00	T3S2	E	ZOTIS	681EM7		INTERNATIONAL		D			N
Z	12:05:00	T3S2	L	SILT	187SP1	17	INTERNATIONAL	1989	D			
Z	12:06:00	T3S2	L	GUAYHANOS	620CB5	80	EAGLE		D			
Z	12:07:00	T3S2	L	RS	718CB3		VOLVO		D			N
Z	12:08:00	T3	BT	ETF	192CW6		INTERNATIONAL		D			N
Z	12:08:00	T3S2	L	SILT	319EM3	70	INTERNATIONAL	1996	D			
Z	12:08:00	T3S2	L	RENE SIQUEIROS	818D22	5	INTERNATIONAL		D			
Z	12:09:00	T3S2	E	TRANS MAQ	852SP1	6	INTERNATIONAL		D			
Z	12:10:00	T3S2	BT	5 HERMANOS	036CB5	4	KENWORTH		D			
Z	12:10:00	SU2	E	TORRES	699SN1				D			N
Z	12:11:00	T3S2	E	STIL	274EM3		INTERNATIONAL	1998	D			F
Z	12:11:00	T3S2	E	ECO	502CA7	30	KENWORTH		D			
Z	12:12:00	SU2	L	HERCA	220CA5	4	KENWORTH		D			
Z	12:13:00	T3S2	E	RAZA	688SP1		INTERNATIONAL		D			F
Z	12:13:00	T3S2	E	AUTO LINEAS DEL SOL	833CA8	3	INTERNATIONAL		D			
Z	12:14:00	T3S2	E	VARGAS	212EM3				D			N
Z	12:15:00	SU2	E	DEHESA	DN83989		RAM		D			N
Z	12:16:00	T3S2	L	DESIERTO NORTE	458EM3	912	INTERNATIONAL		D			
Z	12:17:00	T3S2	E	DESIERTO NORTE	457EM3	911	INTERNATIONAL		D			
Z	12:17:00	T3S2	L	VARELA SERGIO	471EM3		INTERNATIONAL		D			
Z	12:18:00	T3S2	E	RAMOS	659SN9	236	INTERNATIONAL		D			
Z	12:20:00	T3S2	E	AGUILA	948SP1		INTERNATIONAL		D			
Z	12:20:00	T3S2	E	STIL	961FA2		INTERNATIONAL	2000	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	12:21:00	T3S2	E	TRANS MEXICANOS	603SN9		INTERNATIONAL		D			
Z	12:21:00	T3S2	E	RESINAS SINTETICAS			INTERNATIONAL		D			
Z	12:22:00	T3S2	L	RESINAS SINTETICAS	NF89081	1	KENWORTH		D			
Z	12:25:00	T3S2	L	ORDEL	284EM3		INTERNATIONAL		D			
Z	12:25:00	T3S2	L	VARGAS	86CA6	10	INTERNATIONAL		D			
Z	12:25:00	SU2	E	TRANSP BOUCHE	ZUT3905		GMC		D			
Z	12:26:00	T3S2	L	CAMPOS	805EM7		INTERNATIONAL		D			
Z	12:26:00	T3		TRES GUERRAS	940ER3	457	EAGLE		D			
Z	12:27:00	T3S2	E	QUINTA RUEDA	199SP1	3	FREIGHTLINER		D			
Z	12:29:00	T3S2	L	LYRMA	794CA7		VOLVO	2001	D			
Z	12:31:00	T3S2	E	VARGAS	667EM3	861806Z	INTERNATIONAL		D			
Z	12:31:00	T3S2	L	LYRMA	841CA7		VOLVO	2001	D			
Z	12:32:00	SU2	L	STIL	854CW8			2004	D			
Z	12:35:00	T3S2	E	SILT	183SP1		INTERNATIONAL	1994	D			
Z	12:38:00	T3S2	E	ZOTIS	627EM7	683428Z	INTERNATIONAL		D			
Z	12:39:00	T3S2	E	LYRMA	265CA7		VOLVO	2000	D			
Z	12:39:00	T3S2	L		307SP1	27	INTERNATIONAL		D			
Z	12:40:00	T3S2	L	STIL	361SP1		INTERNATIONAL	1996	D			
Z	12:40:00	T3S2	E	RIO RUBIO	856CB3	60	KENWORTH		D			
Z	12:41:00	T3S2	L	TRANSP EP	443SP1	37	INTERNATIONAL		D			
Z	12:41:00	T3S2	L	KEMSA	955SN9		INTERNATIONAL	1996	D			F
Z	12:42:00	T3S2	L	LYRMA	793CA7		VOLVO	2001	D			N
Z	12:42:00	SU2	L	AGUILA	877DZ4	311	KENWORTH		D			
Z	12:45:00	T3S2	L	TAURUS SMART	634SP1		INTERNATIONAL		D			F
Z	12:45:00	SU2	E	TERMOTEC (TC)	DK95257		MERCEDEZ		D			
Z	12:47:00	T3S2	L	AVALOS	262SP1		INTERNATIONAL		D			
Z	12:47:00	T3S2	E	DEL ANGEL	832SP1	1	FREIGHTLINER		D			
Z	12:48:00	T3	BT	TRES GUERRAS	112BYZ		KENWORTH		D			
Z	12:48:00	SU2	E	LYRMA	849DZ4	350	KENWORTH	2005	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	12:49:00	T3	BT	TRES GUERRAS	419BZ		KENWORTH		D			
Z	12:49:00	SU2	L	TRANS MAQ	692CA6	710383Z	CHEVROLET		D			
Z	12:50:00	T3S2	L	ANGELES AZULES	115SP1		INTERNATIONAL		D			
Z	12:50:00	T3S2	L	TRANSERVICIOS	407SP1	43-L	INTERNATIONAL		D			
Z	12:51:00	T3S2	E	VARGAS	522EM3		FREIGHTLINER		D			
Z	12:53:00	T3S2	L	TEXAS LP STORAGE	503CA6		PETERBILT		D			
Z	12:53:00	T3S2	L	ELSA MENDOZA	735D22	5	KENWORTH		D			
Z	12:53:00	T3S2	E	PADILLA	837SP1	84	FREIGHTLINER		D			
Z	12:55:00	T3S2	E	SIETE	386EM3	TH-11	INTERNATIONAL	1982	D			
Z	12:55:00	T3S2	L	ELSA MENDOZA	583CL5	17	KENWORTH		D			
Z	12:56:00	T3		TRANS JD	285SP1		INTERNATIONAL		D			
Z	12:57:00	T3	E	TRES GUERRAS	079EX4		FREIGHTLINER		D			N
Z	12:57:00	T3S2	L	LYRMA	267CA7		VOLVO	2000	D			
Z	12:58:00	T3S2	E	STIL	982SN9		INTERNATIONAL		D			N
Z	12:59:00	SU2	L	TNCH	ZUT7094		GMC	1992	D			N
Z	13:00:00	T3S2	L	ORDEL	098SP1		INTERNATIONAL		D			N
Z	13:00:00	T3S2	E	TRACSO	423SP1	SOL-10	INTERNATIONAL		D			
Z	13:00:00	T3S2	E	STIL	960FA2	38A	INTERNATIONAL	2000	D			
Z	13:02:00	T3S2	E	QUIROZ	595SN9	9	INTERNATIONAL		D			
Z	13:02:00	T3S2	L	SALCI	928SN9		KENWORTH		D			N
Z	13:03:00	T3S2	L	TRUCKING	207CB5		KENWORTH		D			N
Z	13:03:00	T3S2	E	INDIO	645SN9	27	INTERNATIONAL		D			
Z	13:05:00	T3S2	L	STIL	376SP1	304	INTERNATIONAL	1996	D			
Z	13:05:00	T3S2	E	SOTELO	707SP1	L 46	INTERNATIONAL	1987	D			
Z	13:05:00	SU2	E	FLETES MOLINA	945D24	38	INTERNATIONAL		D			
Z	13:06:00	T3S2	L	RAZA	685SP1		INTERNATIONAL		D			N
Z	13:07:00	T3S2	E	DESIERTO NORTE	456EM3	900	INTERNATIONAL		D			
Z	13:07:00	T3S2	L	RAZA	690SP1		INTERNATIONAL		D			N
Z	13:08:00	T3S2	E	CARDENAL	603EM7		INTERNATIONAL		D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	13:09:00	T3S2	E	SOTELO	543SN9		INTERNATIONAL	1994	D			N
Z	13:09:00	T3S2	E	LYRMA	715DZ4	75	KENWORTH	2005	D			
Z	13:10:00	T3S2	L	ZOTIS	628EM7		INTERNATIONAL	1992	D			N
Z	13:10:00	T3S2	L	KEMSA	954SN9	37	FREIGHTLINER		D			
Z	13:11:00	T3S2	E	TNCH	419SP1		INTERNATIONAL		D			N
Z	13:12:00	T3	BT	TRES GUERRAS	093DY9		KENWORTH		D			N
Z	13:14:00	T3S2	L	BOUCHE	880EM7	7	FREIGHTLINER		D			
Z	13:15:00	T3S2	E	TNCH	819EM7		EAGLE		D			N
Z	13:16:00	T3S2	E	TRANS MAQ	632EM3	26	FREIGHTLINER		D			
Z	13:16:00	T3S2	E	RIO GRANDE	ZUR9814		GMC		D			N
Z	13:17:00	T3S2	L	TRANS JD	287SP1	5	KENWORTH		D			
Z	13:17:00	T3S2	E	PRAXAIR	PS60510	640568	KENWORTH		D			
Z	13:18:00	T3S2	L	SILT	324EM3	689929Z	FREIGHTLINER	1993	D			
Z	13:18:00	T3S2	E	TRAGASA	566CU8		KENWORTH		D			N
Z	13:20:00	T3S2	BT	QUIROZ	5985N9	10	FREIGHTLINER		D			
Z	13:20:00	T3S2	E	TRANS MAQ	633EM3		INTERNATIONAL		D			F
Z	13:22:00	SU2	L	ECO	707CA7		FORD		D			
Z	13:22:00	T3S2	L	TRANSP EP	749EM7	6330562	INTERNATIONAL		D			
Z	13:24:00	T3S2	L	DIAZ	293SP1		INTERNATIONAL		D			
Z	13:25:00	T3S2	E	AGUILA	900SP1		INTERNATIONAL		D			
Z	13:26:00	T3S2	L	TRANSPORTES. GERONIMO	449SP1		FREIGHTLINER		D			
Z	13:26:00	T3S2	E	LYRMA	741DZ4		KENWORTH	2004	D			
Z	13:27:00	T3S1	E	AUTOEXPRESS TLC	464CA7		FREIGHTLINER					
Z	13:27:00	T3S2	E	TRANS MAQ	772EM7	132	INTERNATIONAL		D			
Z	13:28:00	T3S2	L	STAGE COACH	132SN1	282628	INTERNATIONAL		D			
Z	13:28:00	SU2	L	STIL	862CA6		INTERNATIONAL	1998	D			
Z	13:30:00	T3S2	L	ESCALANTE	677SP1		KENWORTH		D			N
Z	13:30:00	T3S2	E	SOTELO	746CA6	F-59	INTERNATIONAL	1985	D			
Z	13:30:00	SU2	E	ANDUJO	ZUU6007	14			D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	13:32:00	T3	BT	HERCA	552SP1	L-13	INTERNATIONAL		D			
Z	13:32:00	T3S2	E	KEMSA	957SN9		INTERNATIONAL		D			N
Z	13:34:00	T3S2	L	KEMSA	958SN9		INTERNATIONAL		D			N
Z	13:36:00	T3S2	E	SOTELO	323CA7	693	INTERNATIONAL	1985	D			
Z	13:36:00	T3S2	E	KEMSA	405CX6		FREIGHTLINER					N
Z	13:37:00	T3S2	E	LYRMA	730DZ4		KENWORTH	2003	D			N
Z	13:38:00	T3S2	E	TRANSERVICIOS	242SP1	105 L	INTERNATIONAL		D			
Z	13:39:00	T3S2	L	VARGAS	882SP1	105 L	EAGLE		D			
Z	13:39:00	SU2	E	STIL	883CW8		INTERNATIONAL	2001	D			N
Z	13:40:00	T3S2	E	STIL	395SP1		INTERNATIONAL	1998	D			N
Z	13:40:00	T3S2	E	TRANSERVICIOS	405SP1	66 L	KENWORTH		D			
Z	13:40:00	T3S2	E	TPN	623SN9	74	INTERNATIONAL		D			
Z	13:40:00	T3	BT	KEMSA	952SN9	604849	FREIGHTLINER		D			
Z	13:45:00	T3S2	L	LYRMA	790CA7		VOLVO	2001	D			N
Z	13:48:00	T3S2	L	TRANSERVICIOS	229SP1		KENWORTH		D			N
Z	13:49:00	SU2	E	AGUILA	873DZ4		INTERNATIONAL		D			
Z	13:50:00	T3S2	E	TRANSERVICIOS	399SP1	992	INTERNATIONAL		D			
Z	13:50:00	T3S2	E	VRP	651SP1	6620582	INTERNATIONAL		D			
Z	13:50:00	T3S2	L	KEMSA	966SN5		FREIGHTLINER		D			N
Z	13:52:00	T3S2	E	ESCALANTE	223EM3		KENWORTH		D			N
Z	13:53:00	T3S2	BT	VARELA	713SN9	1	FREIGHTLINER		D			
Z	13:53:00	T3S2	E	AGUILA	952SP1	19	INTERNATIONAL		D			
Z	13:54:00	SU2	E		ZUT7824				D			N
Z	13:55:00	SU2	E	HERCA	271CA5	RI 10	KENWORTH		D			
Z	13:55:00	T3S2	E		ZUP9074		GMC		D			N
Z	13:56:00	T3S2	E	SOTELO	396CA7		INTERNATIONAL	1986	D			N
Z	13:57:00	T3S2	L	SILT	175SP1	36	INTERNATIONAL	1993	D			
Z	13:58:00	SU2	E	AGUILA	555CA7		CHEVROLET		D			
Z	13:58:00	T3S1	L	STIL	762EM7	342	INTERNATIONAL	1998	D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	13:58:00	T3S1	E	ANDUJO	898EM7	667366	VOLVO	1998	D			
Z	13:58:00	SU2	E	RAMOS	ZUR2763		FORD		D			N
Z	14:00:00	T3S2	E	RAMOS	453SP1		INTERNATIONAL		D			N
Z	14:00:00	T3S1	E	KEMSA	956SN9		FREIGHTLINER		D			
Z	14:03:00	T3S2	E	STIL	981SN9		INTERNATIONAL	1997	D			N
Z	14:05:00	T3S2	E	STIL	515FA2		FREIGHTLINER	1998	D			N
Z	14:05:00	T3S1	L	SOTELO	728SP1	L 129	INTERNATIONAL	1990	D			
Z	14:06:00	T3S2	L	STIL	286FA2		FREIGHTLINER	1997	D			N
Z	14:07:00	T3S2	E	TNCH	068SP1		INTERNATIONAL		D			N
Z	14:07:00	SU2	L	SOTELO	ZUS7229	24	GMC		D			
Z	14:08:00	T3S2	L	ENRI	311CA7		FREIGHTLINER		D			N
Z	14:10:00	T3S2	L	VARGAS	516CA7		INTERNATIONAL		D			
Z	14:10:00	T3S2	L	T R G	793SN9	43	INTERNATIONAL		D			
Z	14:10:00	T3S2	L	FMCH	977SP1		INTERNATIONAL		D			N
Z	14:12:00	T2	E	DE LOS RIO RUBIO	DM78939		NISAN		D			
Z	14:13:00	T3S2	E	SOTELO	397CA7		INTERNATIONAL	1986	D			
Z	14:15:00	T3S2	E	TRANSERVICIOS	666EM7	86	INTERNATIONAL	1996	D			
Z	14:15:00	SU2	L	IBCA	DM49979		NISAN		D			
Z	14:16:00	T3S2	E	SILT	337EM3	57	INTERNATIONAL	1997	D			
Z	14:17:00	SU2	E	AGUILA	852DZ4	235	INTERNATIONAL		D			
Z	14:17:00	SU2	L	IBCA	DM49478		NISAN		D			
Z	14:19:00	T3S2	L	LYRMA	529CA7		VOLVO	2001	D			
Z	14:20:00	SU2	E	AGUILA	881024		INTERNATIONAL		D			
Z	14:21:00	T3S2	L	SILT	169SP1		INTERNATIONAL	1993	D			
Z	14:21:00	T3	BT	TBS	816CA5	23	KENWORTH		D			
Z	14:23:00	T3S2	L	TEXAS LP STORAGE	948EM7		KENWORTH		D			
Z	14:24:00	T3S2	L	SOTELO	743EM7		VOLVO	1996	D			
Z	14:25:00	T3S2	E	ESCALANTE	557EM7	804391	FREIGHTLINER		D			
Z	14:25:00	T3S2	L	VARELA SERGIO	647EM7		INTERNATIONAL		D			



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	14:26:00	T3S2	L	CALIFORNIA GAS TRANS	811EM7		VOLVO		D			
Z	14:27:00	T3S2	E	SILT	339EM3	44	INTERNATIONAL	1995	D			
Z	14:27:00	T3S2	L	ASPA	DK82691		INTERNATIONAL		D			
Z	14:28:00	T3S2	L	SETI	822SN9			1991	D			
Z	14:29:00	T3S2	L	SCHNEIDER	566SP1		INTERNATIONAL		D			
Z	14:30:00	T3S2	L	HERRERA	458CB5	2	KENWORTH		D			
Z	14:30:00	T3S2	L	TEMILIANO ZAPATA EL TULE	669CB1		INTERNATIONAL		D			
Z	14:30:00	T3S2	E	TRAMESA	904EM7	L15	KENWORTH		D			
Z	14:31:00	T3S2	E	TNCH	740EM7		INTERNATIONAL		D			
Z	14:32:00	SU2	L	DRAGON	ZUS4439	634569Z	GMC		D			
Z	14:33:00	T3S2	L	DESERTO NORTE	464EM3	916	INTERNATIONAL		D			
Z	14:33:00	SU2	E	ECO	706CA7				D			
Z	14:34:00	T3S2	E	TNCH	379SP1	288	FREIGHTLINER		D			
Z	14:34:00	SU2	E	RIO GRANDE	911CW8				D			
Z	14:35:00	T3S2	E	TRANSERVICIOS	241SP1		INTERNATIONAL		D			
Z	14:35:00	T3S2	L	STIL	379SP1	306	INTERNATIONAL	1996	D			
Z	14:35:00	T3S2	E	SIETE	644EM3	TH16	FORD		D			
Z	14:35:00	T3S2	L	DEHESA	647EM7	777	INTERNATIONAL		D			
Z	14:36:00	T3S2	E	SOTELO	549SN9		INTERNATIONAL	1986	D			
Z	14:36:00	T3S2	L	TNCH	916EM7		FREIGHTLINER		D			
Z	14:37:00	T3S2	L	STIL	375SP1	302	INTERNATIONAL	1996	D			
Z	14:37:00	T3S2	E	5 HERMANOS	542EM3		FREIGHTLINER		D			
Z	14:38:00	T3S2	E	STAGE COACH	130SN1				D			
Z	14:39:00	T3S2	E	DIAZ	294SP1		INTERNATIONAL		D			
Z	14:39:00	SU2	E	T P N	ZUT4830	L52	GMC		D			
Z	14:40:00	T3S3	E	TM	229SN9	TM-170	FREIGHTLINER		D			
Z	14:40:00	T3S2	E	SOTELO	940CA6		INTERNATIONAL	1986	D			
Z	14:41:00	T3S2	L	TRAMESA	902EM7		FREIGHTLINER		D			
Z	14:42:00	T3S2	L	TNCH	069SP1		INTERNATIONAL		D			

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	14:43:00	T3S3	E	DEHESA	211SP1	60	INTERNATIONAL		D			
Z	14:43:00	T3S2	E	MENA	793SP1		INTERNATIONAL		D			
Z	14:44:00	T3S2	E	CARRASCO	409EM3		FREIGHTLINER	1995	D			
Z	14:45:00	T3S2	E	ZOTIS	006SP2				D			
Z	14:46:00	T3S2	E	TRACSO	129SP1		INTERNATIONAL		D			
Z	14:47:00	T3S2	L	EXPRESS HALCHISA	495EM3		FREIGHTLINER		D			
Z	14:48:00	T3S3	E	STIL	205FA1		KENWORTH	1996	D			
Z	14:49:00	T3S2	L	CALIFORNIA GAS TRANS	813EM7		VOLVO		D			
Z	14:50:00	T3S2		CARDENAL	604EM7				D			
Z	14:51:00	T3S2	L	STIL					D			
Z	14:52:00	T3S2	E	TORRES	018SN7		INTERNATIONAL	1998	D			
Z	14:53:00	T3S2	E	DESIERTO NORTE	438EM3		INTERNATIONAL		D			
Z	14:54:00	T3S2	L	TM	226SN9		FREIGHTLINER		D			
Z	14:55:00	T3S2	L	TRANSEP	ZUS7888		GMC		D			
Z	14:56:00	T3S2	L	RODRIGUEZ	671EM7		INTERNATIONAL		D			
Z	14:57:00	T3S2	E	STIL	358SP1		INTERNATIONAL	1996	D			
Z	14:58:00	T3S2	E	RIO RUBIO	912DZ2		INTERNATIONAL		D			
Z	14:59:00	T3S2	E		260SP1		INTERNATIONAL		D			
Z	15:00:00	SU2	E	AGUILA	870DZ4		INTERNATIONAL	2001	D			
Z	15:00:00	T3S3	E	TX LPG STORAGE	922EM7	109	KENWORTH		D			
Z	15:01:00	T3S3	E	LYRMA	842DZ4		KENWORTH	2003	D			
Z	15:02:00	T3	BT	TRES GUERRAS	217BY9		INTERNATIONAL		D			N
Z	15:03:00	T3	BT	TRES GUERRAS	079BY6		KENWORTH		D			N
Z	15:03:00	T3S3	E	IBD	DM18888	80	KENWORTH		D			
Z	15:04:00	T3S2	E	ECO	500CA7		KENWORTH		D			N
Z	15:06:00	T3S2	L	LYRMA	530CA7		VOLVO	2001	D			N
Z	15:08:00	T3S2	L	SILT	320EM3	69	INTERNATIONAL	1996	D			
Z	15:08:00	T3S2	E	SOTELO	702SP1	L-86	INTERNATIONAL	1994	D			
Z	15:08:00	SU2	E	TPN	ZUP9096	880805Z	GMC		D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	15:09:00	T3S2	E	LYRMA	265CA7		VOLVO	2000	D			N
Z	15:10:00	T3S2	E	KEMSA	955SN9		INTERNATIONAL	1996	D			N
Z	15:11:00	T3	E	ZOTIS	465SP1		INTERNATIONAL		D			N
Z	15:13:00	T3S2	E	SOTO	746DZ2		KENWORTH	2005	D			N
Z	15:14:00	SU2	L	SILT	ZUU8484		FORD	1995	D			N
Z	15:15:00	T3S2	L	HERCA	546SP1		INTERNATIONAL		D			N
Z	15:15:00	T3	BT	RODRIGUEZ	630EM3		FREIGHTLINER	1989	D			
Z	15:16:00	T3S2	L	LYRMA	692CA7		VOLVO	2001	D			
Z	15:17:00	T3S2	L	VRP	120SP1	662058Z	INTERNATIONAL	1985	D			N
Z	15:17:00	SU2	E	RUZZY	DN83989	482	RAM		D			
Z	15:18:00	T3S2	L	STIL	315SP1		INTERNATIONAL	1994	D			N
Z	15:18:00	T3S2	E	TRANS PACALD	322CY6	9	KENWORTH		D			
Z	15:18:00	T3S2	E	TRACSO	795CA7	SOL-02	VOLVO		D			
Z	15:19:00	T3S2	E	STIL	278EM3	356	INTERNATIONAL	1998	D			
Z	15:19:00	T3	BT	ECO	720D24		KENWORTH		D			
Z	15:20:00	T3S2	L	MONARCA	491SP1	ML05	INTERNATIONAL	1993	D			
Z	15:20:00	T3S2	E	SERVICIOS MONTES EXPRESS	690CW8		FREIGHTLINER		D			N
Z	15:22:00	T3	BT	TRES GUERRAS	092EK4		FREIGHTLINER		D			N
Z	15:22:00	T3S2	E	LYRMA	949DZ4		INTERNATIONAL	1999	D			
Z	15:23:00	T3S2	E	LYRMA	736DZ4	6509902	KENWORTH	2003	D			N
Z	15:25:00	T3S2	E	STIL	758EM7		INTERNATIONAL	2004	D			N
Z	15:26:00	T3S2	E		728EM7		INTERNATIONAL		D			N
Z	15:27:00	T3S2	E	TORRES	016SN7		INTERNATIONAL		D			N
Z	15:28:00	T3S2	E	TORRES	020SN7		INTERNATIONAL	1995	D			N
Z	15:28:00	T3S2	E	BOUCHE	627SP1	3	VOLVO		D			
Z	15:29:00	T3S2	E	SINDICATO STA. ROSA	879SP1		INTERNATIONAL		D			N
Z	15:30:00	T3S2	E	TORRES	6983N1	T-11	INTERNATIONAL		D			
Z	15:32:00	SU2	E	TRANS MAQ	ZUP8512				D			N
Z	15:33:00	T3	BT	TK	454SN9				D			N

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	15:34:00	SU2	L	HERCA	277CA5				D			N
Z	15:35:00	T3S2	E	TORRES	131SN1	T-45	INTERNATIONAL	1990	D			
Z	15:36:00	T3S1	L	STIL	374SP1		INTERNATIONAL	1998	D			N
Z	15:36:00	T3S2	E	RODRIGUEZ	670EM7	RG04	INTERNATIONAL		D			
Z	15:40:00	T3S2	E	STIL	357SP1	283	INTERNATIONAL	1996	D			
Z	15:40:00	T3S2	E	STIL	370SP1		INTERNATIONAL	1996	D			
Z	15:41:00	T3S2	L	RIOS RUBIO	939CB1	77	INTERNATIONAL		D			
Z	15:41:00	T3S2	E	KEMSA	952SN9	49	FREIGHTLINER		D			
Z	15:41:00	SU2	E	TPN	ZUP8377	880805Z	GMC		D			
Z	15:42:00	T3S2	E	STIL	368SP1	295	INTERNATIONAL	1996	D			
Z	15:42:00	T3S2	E	SOTELO	412SP1		INTERNATIONAL	1984	D			
Z	15:42:00	T3S2	E	STIL	447FA6		FREIGHTLINER	2002	D			
Z	15:43:00	T3S2	E	STIL					D			
Z	15:44:00	T3S2	E	TRANSERVICIOS	248SP1		INTERNATIONAL		D			
Z	15:45:00	T3S2	L	STIL	607FA1	293	FREIGHTLINER	1998	D			
Z	15:45:00	T3S2	E	VRP	950EM7		INTERNATIONAL		D			F
Z	15:46:00	T3S2	E	STIL	281FA2		FREIGHTLINER	1998	D			
Z	15:47:00	T3S2	E	CARDENAL	203SP1		INTERNATIONAL		D			
Z	15:48:00	SU2	E	STIL	881CW8		INTERNATIONAL	2000	D			
Z	15:48:00	T3S2	E	TPN	ZUR9091	880805Z	GMC		D			
Z	15:49:00	T3S2	E	TRANSERVICIOS	634EM7		KENWORTH		D			
Z	15:50:00	T3S2	E	SOTO	942D22		KENWORTH	2004	D			
Z	15:51:00	SU2	E	TPN	ZUT4826	880805Z	GMC		D			
Z	15:52:00	T3S2	E	TRANS JD	227CA8	606698Z	KENWORTH		D			
Z	15:53:00	SU2	L	EDT	DL00530		RAM	2001	D			
Z	15:54:00	T3S2	E	RIO GRANDE	843SN9				D			
Z	15:55:00	T3S2	E	ECO	843CW8		KENWORTH		D			
Z	15:56:00	T3S2	E	OPTRON	DL39956		INTERNATIONAL		D			
Z	15:57:00	T3S2	E	TRANSERVICIOS	401SP1							

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	16:00:00	T3S2	L	KEMSA	956SN9		FREIGHTLINER					
Z	16:01:00	T3S2	E	TRANSERVICIOS	232SP1		INTERNATIONAL					
Z	16:02:00	T3	E		685EM3		INTERNATIONAL					
Z	16:02:00	T3S2	E		ZUS4690	6679912			D			NF
Z	16:03:00	T3S2		HERRERA	101CB5	710383Z						
Z	16:05:00	T3S2		ZOTIS	629EM7	557870Z	INTERNATIONAL					
Z	16:05:00	T3S2	E	TM	735SN9	683428Z	INTERNATIONAL	1989				
Z	16:06:00	T3S2		ETF	462CW5		INTERNATIONAL					
Z	16:06:00	SU2	L		DM08452		FORD					
Z	16:10:00	T3S2	L	TRANSERVICIOS	422SP1	779973Z	INTERNATIONAL					
Z	16:10:00	T3S2	E	T TEXAS	778SP1		KENWORTH					
Z	16:12:00	T3S2	E	AGUILA	262SP1	258273	INTERNATIONAL		D			F
Z	16:13:00	T25		DIABLO	75CB4		INTERNATIONAL		D			NF
Z	16:13:00	T3S2	L	LECHUGA	845CA4		KENWORTH		D			F
Z	16:14:00	T3S2		ETF	034Z9	557870	KENWORTH		D			NF
Z	16:14:00	T3S2		TRANSERVICIOS	2465P1	5587902	INTERNATIONAL		D			NF
Z	16:14:00	T3S2			750LS	7822072	FREIGHTLINER		D			NF
Z	16:15:00	T3S2		AGUILA	892SP1	555365	INTERNATIONAL		D			NF
Z	16:16:00	T3S2		PACIFIC	338SN1	517587	FREIGHTLINER		D			NF
Z	16:16:00	T3S2		RAMOS	499EM3	624695Z	INTERNATIONAL	1999	D			NF
Z	16:17:00	T3S2		LYRMA	526CA7		VOLVO	2001	D			NF
Z	16:17:00	T3	E	OSDEL	548EM3	606698Z	KENWORTH					
Z	16:17:00	T2	E		DM65208	797400	FORD					
Z	16:18:00			ORDEL	130SP1	838490Z	INTERNATIONAL					
Z	16:18:00	T3S2			767SP9		KENWORTH		D			NF
Z	16:20:00	T3S2	E	AGUILA	335CA9	669480	INTERNATIONAL					
Z	16:20:00	T3S2		TRANS MEXICANOS	557SN2	52371110	FREIGHTLINER		D			NF
Z	16:20:00	T3S2	L	TRANSERVICIOS	895SP1	555365Z	INTERNATIONAL					
Z	16:21:00	T3S2	L		665CM2	691659Z	KENWORTH					

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	16:22:00	SU2			SU778870	789655	GMC					
Z	16:23:00	T3S2	L	SILT	182SP1	689929	INTERNATIONAL	1994				
Z	16:24:00	T3S2	L	ETF	44CW5	557870Z	INTERNATIONAL					
Z	16:25:00			TNCH	063SP1		INTERNATIONAL					
Z	16:25:00	T3S2	L	TPN	622SN9	880805Z	INTERNATIONAL		D			NF
Z	16:26:00	T3S2	L	STAR	592SD9	00557889Z	INTERNATIONAL					
Z	16:26:00	T3S2	L	LYRMA	791CA7	650990Z	VOLVO	2001	D			NF
Z	16:27:00	T3S2	L	TRANS PUBLICO FEDERAL	552		DINA		D			NF
Z	16:27:00	T3S2	E	LOZOYA	578CB5	811381Z	KENWORTH					
Z	16:29:00	T3S2	L	TRANS MEXICANOS	556SP2	710381Z	FREIGHTLINER		D			NF
Z	16:30:00		L	TDL	918CF4		KENWORTH					
Z	16:30:00	T3S2	L	SOTELO	ZUTS	458270	GMC		D			NF
Z	16:35:00	T3S2	L	SOTO	44EM3		INTERNATIONAL		D			NF
Z	16:35:00	SU2	E	SOTO	ZUU1420	632798	GMC	1998				
Z	16:37:00	T3S2	L	TRANS MEXICANOS	603SN9							
Z	16:37:00	T3S2	L		927DZ2		KENWORTH		D			NF
Z	16:37:00	T3S2	E	STIL	958FA2	0557341Z	INTERNATIONAL	2000				
Z	16:38:00	T3S2		TRANS MEXICANOS	555SP2		FREIGHTLINER					
Z	16:40:00	T3S2	L	TRASCO	114SP1		INTERNATIONAL		D			F
Z	16:40:00	T3S2		ANDUJO	898EM7	667366	VOLVO	1998				
Z	16:41:00	T3S2	L		440SN9	958923			D			
Z	16:42:00	T3S2	L	TORRES	665SN9	055717Z	INTERNATIONAL		D			NF
Z	16:42:00	T3	E	KEMSA	957SN9	604849	INTERNATIONAL		D			NF
Z	16:42:00	T3S2	E	STIL	962FA2	557341		2000	D			F
Z	16:42:00		E	TPN	SUP9095	880805Z	GMC					
Z	16:43:00	SU2	E	TPN	634SN9	880805Z	INTERNATIONAL					
Z	16:44:00	T3S2	L	SILT	328EM3	689929Z	FREIGHTLINER	1993				
Z	16:45:00	T3S2	L	RIO GRANDE	595SP1		INTERNATIONAL					
Z	16:46:00	T3	E	TORRES	385EM3	322199Z	INTERNATIONAL		D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	16:47:00	T3S2	L	RIO GRANDE	654CB5				D			NF
Z	16:48:00	T3S2	L	DEHESA	213SP1		INTERNATIONAL		D			NF
Z	16:48:00	T3S2	L	TM	552SP2	710381Z	FREIGHTLINER	1999	D			NF
Z	16:49:00	T3S2	L	FLETES JUAREZ	938D24				D			NF
Z	16:50:00	T3S2	L	TNCH	962SP1		FREIGHTLINER	1995	D			NF
Z	16:53:00	T3S2	L		439EM3				D			NF
Z	16:54:00	T3S2	L	STIL	605FA1		FREIGHTLINER	1998	D			F
Z	16:55:00	T3S2	L	STIL	274EM3		INTERNATIONAL	1998	D			NF
Z	16:56:00	T3S2	L	M. MOLINA	611SP1				D			NF
Z	16:56:00	T3S2	L		836CB5		KENWORTH		D			NF
Z	16:57:00	T3	E	FMCH	569EM7	1053118	INTERNATIONAL	1998	D			NF
Z	16:58:00	T3S2	L	OSDEL	098SP1	8384902			D			NF
Z	16:58:00	T3S2	L	FMCH	571EM7				D			NF
Z	16:59:00	T3S2	L	TNCH	062SP1		INTERNATIONAL	1995	D			NF
Z	16:59:00	T3S2	L	CE	606EM7		INTERNATIONAL		D			NF
Z	17:00:00	T3S2	L	TRANSP CALIF	859EM1	589266			D			NF
Z	17:00:00	T3S2	L	SOTO	932DZ2			1998	D			NF
Z	17:01:00	T3S2	L	FMCH	984SP1				D			NF
Z	17:02:00	T3S2	L	SILT	318EM3	689929Z	INTERNATIONAL	1996	D			NF
Z	17:03:00	T3S2	L	SILT	335EM3	689924Z	INTERNATIONAL	1995	D			NF
Z	17:04:00	T3S2	L	SILT	334EM3	689929Z	INTERNATIONAL	1995	D			NF
Z	17:05:00	T3S2	L	QUINTA RUEDA	199SP1		FREIGHTLINER		D			NF
Z	17:05:00	T3S2	L	STIL	280FA2		FREIGHTLINER	1997	D			F
Z	17:05:00	T3S2	L	TNCH	810EM7		KENWORTH		D			NF
Z	17:06:00	T3S2	L	QUIROZ	543SN9		INTERNATIONAL		D			NF
Z	17:06:00	T3S2	L		901SP1	158923Z	INTERNATIONAL		D			NF
Z	17:10:00	T3S2	L	STIL	326SP1			1993	D			F
Z	17:10:00	T3S2	L	STIL	964FA2		FREIGHTLINER	2000	D			NF
Z	17:11:00	T3S2	L	TRANSERVICIOS	233SP1		FREIGHTLINER		D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	17:13:00	T3S2	L	TX INTER GAS	086SP1		INTERNATIONAL		D			NF
Z	17:13:00	T3S2	L	VARGAS	800SP1		INTERNATIONAL		D			NF
Z	17:14:00	T3S2	L	TX	214001		FREIGHTLINER		D			NF
Z	17:15:00	T3S2	E	TM	341SN1		FREIGHTLINER		D			F
Z	17:15:00	T3S2	L	VARGAS	816EM7		INTERNATIONAL		D			NF
Z	17:16:00	T3S2	L	SOTELO	541SN9		INTERNATIONAL	1989				NF
Z	17:17:00	T3S2	L	CONIN	117SP1		INTERNATIONAL					NF
Z	17:18:00	SU2	E	THC	220CA5				D			NF
Z	17:18:00	T3S2	E	DEL NORTE	456EM3				D			NF
Z	17:19:00	T3S2	L	STAGE COACH	274SN7		FREIGHTLINER		D			F
Z	17:19:00	T3S2	L	TRES CASTILLOS	555EM3				D			NF
Z	17:20:00	T3S2	L	AGUILA	890SP1		INTERNATIONAL		D			F
Z	17:21:00	T3S2	L	STAGE COACH	132SN1		INTERNATIONAL		D			F
Z	17:21:00	T3S2	L	LYRMA	715DZ4		KENWORTH	2005	D			NF
Z	17:24:00	T3S2	L	TNCH	036SP1		FREIGHTLINER	1995	D			NF
Z	17:25:00	T3S2	L	DESIERTO NORTE	441EM3	116173Z	INTERNATIONAL	1993	D			NF
Z	17:25:00	T3S2	E	BKT	656SP1	62668Z	INTERNATIONAL		D			NF
Z	17:26:00	T3S2	E	STIL	285FA2		FREIGHTLINER					
Z	17:26:00	T3S2	E	RIOS RUBIO	526CB5		FREIGHTLINER					
Z	17:26:00	T3S2	L	SOTELO	543SN9	258923Z	INTERNATIONAL	1994	D			NF
Z	17:27:00	T3S2		TSCH	520EM3		KENWORTH					
Z	17:28:00	T3S2	L	DESIERTO NORTE	442EM3		INTERNATIONAL	1992				
Z	17:28:00	T3S2	E	DESIERTO NORTE	460EM3		INTERNATIONAL					
Z	17:29:00	SU2		HERCA	212CA5		KENWORTH					
Z	17:30:00			DESIERTO NORTE	452EM3		INTERNATIONAL					
Z	17:30:00	T3S2	E	FMCH	570EM7	556899	INTERNATIONAL		D			NF
Z	17:30:00	T3S2	E	TRANS MAQ	678EM7		INTERNATIONAL		D			NF
Z	17:31:00	T3	E	TSCH	419SP1		INTERNATIONAL		D			NF
Z	17:32:00	T3S2	L	RIO GRANDE	593SP1		INTERNATIONAL	1993	D			NF



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	17:33:00	T3S2	L	FROCH	973SP1	1053018Z	INTERNATIONAL		D			NF
Z	17:40:00	T3S2	L	TM	250DD1	710381			D			NF
Z	17:41:00	T3S2	L	STIL	212SP1	557341		1998	D			F
Z	17:42:00	T3S2	L	DEL ANGEL	832SP1	712221Z	FREIGHTLINER		D			NF
Z	17:43:00	T3S2	L	AGUILA	830SP1	5553652			D			F
Z	17:44:00	T3S2		LYRMA	724DZ4	650990Z	KENWORTH	2005				
Z	17:45:00	T3S2	E	RODRIGUEZ	668EM7	1207678Z						
Z	17:45:00	T3S2	BT	SOTO	941DZ2		KENWORTH	2004				
Z	17:46:00	T3S2	L	AGUILA	805SP1	555365Z	INTERNATIONAL					
Z	17:46:00	T3S2	BT	SOTO	940DZ2	555365Z	KENWORTH	2000				
Z	17:47:00	T3S2	L	PADILLA	536SP1	711125Z	FREIGHTLINER					
Z	17:48:00	T3S2	L	TNCH	418SP1	258790Z	INTERNATIONAL	1993				
Z	17:48:00	T3S2	L	SOTELO	746EM7		VOLVO	1996				
Z	17:49:00	T3S2	L	TRANSERVICIOS	239SP1	767991	INTERNATIONAL					
Z	17:50:00	T3S2	L	ETF	577CK8	832973Z	INTERNATIONAL					
Z	17:51:00	T3S2	L	STIL	514EM3		INTERNATIONAL	1998	D			NF
Z	17:51:00	T3S2	L	STIL	985SP9		INTERNATIONAL		D			NF
Z	17:52:00	T3S2	L	CONIN	SUS4708	767 991	INTERNATIONAL					
Z	17:54:00	T3S2	L	STAR	7805N9	832973Z	FREIGHTLINER					
Z	17:56:00	T3S2	L	STIL	372SP1		INTERNATIONAL	1996	D			NF
Z	17:57:00	T3S2	L	TNCH	066SP1		FREIGHTLINER	1993	D			NF
Z	17:57:00	T3S2	L	TORRES	860SN7		INTERNATIONAL					
Z	17:58:00	T3S2	L	ETF	438CW5		INTERNATIONAL		D			NF
Z	17:59:00	T3S2	L	STIL	284FAZ			1997	D			F
Z	17:59:00	T3S2	L	VARGAS	882SP1		INTERNATIONAL		D			NF
Z	18:00:00	T3S2	L	YAZA TRANSFER	769SN5		INTERNATIONAL		D			NF
Z	18:00:00	T3S2	L	T. CALIF	R4NJ04	559 266	KENWORTH					
Z	18:01:00			PADILLA	125SP1		INTERNATIONAL	1990				
Z	18:02:00	T3S2	L	STIL	361SP1		INTERNATIONAL	1996	D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	18:02:00	T3S2	E	STIL	632SP1	0557341Z	INTERNATIONAL	1998	D			F
Z	18:03:00	T3S2	E	TRANSP EP	443SP1		INTERNATIONAL		D			NF
Z	18:03:00			RODRIGUEZ	669EM7		INTERNATIONAL					
Z	18:04:00	T3S2	L	TRANSERVICIOS	406SP1		KENWORTH		D			NF
Z	18:04:00			T. CALIF	856EM7	589266	KENWORTH					
Z	18:05:00	T3S2	L	LYRMA	739DZ4	650990	KENWORTH	2004	D			NF
Z	18:05:00	T3S2	L	DRAGON	798SP1	634569Z	INTERNATIONAL		D			NF
Z	18:05:00	T3S2	L	LYRMA	834DZ4	650990Z	FREIGHTLINER	1999				NF
Z	18:06:00	T3S2	L	TNCH	029SP1	711125Z	INTERNATIONAL	1995				NF
Z	18:06:00	T3	L	ZOTIS	177SP1		INTERNATIONAL		D			F
Z	18:07:00	T3S2	L	STIL	368SP1		INTERNATIONAL	1996	D			F
Z	18:14:00	T3S2	L	5 HERMANOS	543EM3	682998Z	FREIGHTLINER		D			NF
Z	18:14:00	T3S2	E	STIL	767EM7		INTERNATIONAL	1998				F
Z	18:14:00	T3S2	E	STIL	788SN9		INTERNATIONAL	1997				F
Z	18:15:00	T3S2	E	STIL	761EM7		INTERNATIONAL	1998				F
Z	18:15:00		L	LYRMA	838DZ4		VOLVO	1998	D			NF
Z	18:16:00	T3S2	L	STIL	339SP1		INTERNATIONAL		D			NF
Z	18:17:00	T3S2	E	IMPERIAL	806SN9	1166910	VOLVO		D			NF
Z	18:18:00	T3S2	E	OTI	702SN9		INTERNATIONAL	1997				
Z	18:18:00	T3S2	L	LYRMA	792CA7	650940Z	VOLVO	2001	D			NF
Z	18:18:00	T3S2	E	AGUILA	881DZ4							
Z	18:19:00	T3S2	L	ETF	442CW5		INTERNATIONAL		D			NF
Z	18:20:00	T3S2	L	TRANSERVICIOS	666EM7		INTERNATIONAL	1996				
Z	18:20:00	SU2	L	BOUCHE	ZUU1892	676421Z	GMC					
Z	18:21:00	T3S2	L	RGX	1207672		FREIGHTLINER		D			NF
Z	18:21:00	T3S2	E	ETF	700C16		KENWORTH					
Z	18:22:00	T3S2	L	AGUILA	887SP1		INTERNATIONAL		D			NF
Z	18:23:00	T3S2	L	TPN	632SN9	880805Z	INTERNATIONAL		D			NF
Z	18:23:00	T3S2	L	TRANSP CALIF	868EM7	589266	KENWORTH					

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	18:24:00	T3	E	MONACO	482SP1		KENWORTH		D			NF
Z	18:24:00	T3S2	L	THC	541SP1		INTERNATIONAL		D			NF
Z	18:25:00	T3S2	E	TNCH	037SP1		INTERNATIONAL	1995				
Z	18:26:00	T3S2	L	RAMOS	498EM3	624695Z	INTERNATIONAL					
Z	18:26:00	T3S2	L	SOTELO	992EM7		VOLVO	1997				
Z	18:26:00	SU2	E	SOTELO	ZU59979	258923			D			NF
Z	18:27:00	T3S2	L	STIL	358SP1		INTERNATIONAL	1996	D			NF
Z	18:27:00	SU2		TORRES	ZUT5382		GMC					
Z	18:28:00	T3S2	L	STIL	513EM3		INTERNATIONAL	1998	D			NF
Z	18:29:00	T3S2	E	AGUILA	024SP1		INTERNATIONAL	1993	D			F
Z	18:29:00	T3S2	L	TRANSERVICIOS	407SP1		INTERNATIONAL					NF
Z	18:30:00	T3S2	L	AGUILA	557CA7		CHEVI		D			NF
Z	18:30:00	T3S2	L	TRANSERVICIOS	766SN9		KENWORTH					
Z	18:31:00	T3S2	L	SOTELO	546SN9		INTERNATIONAL	1987				
Z	18:32:00	T3S2	L	VRP	111SP1		INTERNATIONAL		D			NF
Z	18:32:00	T3S2	E	DEHESA	608SP1		INTERNATIONAL					
Z	18:33:00	T3S2	E	AGUILA	027SP1		INTERNATIONAL	1993				
Z	18:33:00	T3S2	E	LYRMA	268CA7		VOLVO	2000	D			NF
Z	18:33:00			RAMOS	660SN9		INTERNATIONAL					
Z	18:33:00	T3	E	TNCH	916EM7		FREIGHTLINER		D			NF
Z	18:34:00	T3S2	L	TRANS JD	281SP1	606698Z	KENWORTH		D			NF
Z	18:35:00	T3S2	L	STIL	602FA1			1998	D			F
Z	18:36:00	T3S2	E	AGUILA	895SN9		INTERNATIONAL		D			NF
Z	18:37:00	T3S2	L	AGUILA	829SP1		INTERNATIONAL		D			NF
Z	18:38:00	T3S2	E	AGUILA	934SP1		INTERNATIONAL	1993	D			NF
Z	18:39:00	T3S2	E	SOTELO	552SN9		INTERNATIONAL	1987	D			NF
Z	18:42:00	T3S2	L	GALLARDO	289EM3		INTERNATIONAL					NF
Z	18:42:00	T3S2	L	SILT	350EM3		INTERNATIONAL	1995				NF
Z	18:44:00	T3S2	E	STIL	310SP1		INTERNATIONAL	1994	D			F

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	18:44:00	T3S2	L	TORRES	597SN7		INTERNATIONAL					NF
Z	18:45:00	T3S2	E	TORRES	191SN9	557177Z	INTERNATIONAL		D			NF
Z	18:45:00	T3S2	BT	SOTO	939DZ2		KENWORTH	2000				NF
Z	18:46:00	T3S2	L	SILT	179SP1		INTERNATIONAL	1993				NF
Z	18:47:00	T3S2	E	OLVERA	509SN9	557314Z	INTERNATIONAL					NF
Z	18:48:00	T3S2	L	STIL	276EM3	0557341Z	INTERNATIONAL	1998	D			NF
Z	18:49:00	T3S2	E	SIETE	644EM3	818175Z	FORD		D			F
Z	18:52:00	T3S2	L	TORRES	588SN9		INTERNATIONAL	1997	D			NF
Z	18:53:00	T3S2	L	TNCH	032SP1	711125Z	INTERNATIONAL	1995	D			NF
Z	18:53:00	T3S2	L	SOTELO	742CA6		INTERNATIONAL	1985				
Z	18:54:00	T3S2	L	TORRES	587SN9		INTERNATIONAL		D			NF
Z	18:54:00	T3S2	L	SOTELO	58EM7		INTERNATIONAL					
Z	18:55:00	T3S2	L	OTI	353EM3	685428Z	WHITE GMC		D			NF
Z	18:56:00	T3S2	L	TORRES	017SN7		INTERNATIONAL	1990				
Z	18:56:00	T3S2	L	TORRES	589SN9		INTERNATIONAL	1995				
Z	18:56:00	T3S2	E	STIL	961FA2		FREIGHTLINER	2000	D			NF
Z	18:57:00	T3S2	E	RAMOS	452SP1	624695Z	INTERNATIONAL		D			NF
Z	18:57:00	T3S2	L	TORRES	655SN9		INTERNATIONAL		D			NF
Z	18:58:00	T3S2	E	TORRES	015SN7		INTERNATIONAL		D			NF
Z	18:58:00	SU2	L		DM50729	292602Z	INTERNATIONAL		D			NF
Z	18:59:00	T3	E	LYRMA	526CA7	650990Z	VOLVO	2001	D			NF
Z	19:00:00	T3S2	L	TORRES	858SNT		INTERNATIONAL					
Z	19:00:00	T3S2	L	STIL	928CW8			2000	D			F
Z	19:00:00	T3S2	L	TORRES	999SNT		INTERNATIONAL					
Z	19:01:00	T3S2	E	STIL	379SP1		INTERNATIONAL	1996				
Z	19:02:00	T3S2	L	GALLARDO	382EM3		KENWORTH		D			NF
Z	19:02:00	T3S2	L	LYRMA	736DZ4	650990Z	KENWORTH	2003				NF
Z	19:03:00	T3S2	L	STIL	366SP1		INTERNATIONAL	1996	D			NF
Z	19:03:00	T3S2	L	STIL	371SP1		INTERNATIONAL	1996	D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	19:03:00	T3S2	L	GALLARDO	892CY3		KENWORTH	1993				NF
Z	19:04:00	T3S2	E	DEHESA	208SP1		INTERNATIONAL		D			NF
Z	19:05:00	T3S2		TM	045SN1	203812	FREIGHTLINER		D			NF
Z	19:05:00	T3S2	E	STIL	760EM7		INTERNATIONAL	2004	D			F
Z	19:08:00	T3	E	TNCH	069SP1		INTERNATIONAL		D			NF
Z	19:10:00	T3S2	L	STIL	383SP1		INTERNATIONAL	1996	D			NF
Z	19:10:00	T3S2	L	SOTELO	991EM7		VOLVO	1996	D			NF
Z	19:11:00	T3S2	L	STIL	365SP1		INTERNATIONAL	1996	D			NF
Z	19:14:00	T3S2	E	STIL	341SP1			1993				F
Z	19:15:00	T3S2	E	TNCH	073SP1		INTERNATIONAL					F
Z	19:15:00	T3S2	E	STIL	380SP1		INTERNATIONAL	1996				F
Z	19:15:00	T3S2	E	STIL	482SN9		INTERNATIONAL	1999	D			NF
Z	19:15:00	T3S2	E	TNCH	965FA2		FREIGHTLINER					F
Z	19:16:00	T3S2	E	DEHESA	607SP1		INTERNATIONAL					F
Z	19:16:00	T3	E		ZU4A8		GMC					F
Z	19:17:00	T3S2	L	TNCH	071SP1				D			NF
Z	19:17:00	T3S2	L	TM	601SN9		INTERNATIONAL	1991	D			NF
Z	19:17:00	T3S2	E	TPN	748SP1	880805Z	INTERNATIONAL	1992	D			NF
Z	19:17:00	T3S2	E	STIL	768EM7		INTERNATIONAL	1998				F
Z	19:18:00	T3S2	L	TPN	633SN9	880805Z	INTERNATIONAL		D			NF
Z	19:18:00	T3S2	E	STIL	979SN9		INTERNATIONAL	1997				
Z	19:20:00	T3S2	L	MUÑOZ	216SP1	677502	KENWORTH		D			NF
Z	19:21:00	T3S2	L	TPN	750SP1	880805Z	INTERNATIONAL					
Z	19:21:00	T2	L	CONIN	ZUS1407	262941	CHEVI		D			NF
Z	19:22:00	T3S2	L	DRAGON	797SP1	634569Z	INTERNATIONAL					
Z	19:22:00	T3S2	E	SOTELO	807EM7		INTERNATIONAL	1995				
Z	19:23:00	T3S2	E	DRAGON	511EM3	634569Z	INTERNATIONAL		D			NF
Z	19:23:00	T3S2	L	LYRMA	837DZ4		FREIGHTLINER					
Z	19:24:00	SU2	L	ANGEL	ZW7641		GMC		D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	19:25:00	T3S2	L	RIOS RUBIO	157CB3	557229	VOLVO		D			NF
Z	19:30:00	T3S2	E	STIL	203FA1		KENWORTH	1996				
Z	19:31:00		E	DEL REAL	149LB3		FREIGHTLINER					
Z	19:31:00	T3S2	L	STIL	348SP1		INTERNATIONAL	1997	D			NF
Z	19:31:00	T3S2	L	RIOS RUBIO	858D22		KENWORTH					NF
Z	19:32:00	T3S2	L		493EM7		VOLVO		D			NF
Z	19:32:00	T3S2	E	SOTELO	706SP1		INTERNATIONAL	1994	D			NF
Z	19:33:00	T3S2	E	TM	2107SM9		INTERNATIONAL		D			NF
Z	19:33:00	T3S2	L	MENDOZA	442SP1	6333056Z	INTERNATIONAL		D			NF
Z	19:33:00	T3S2	L	LTE	9415N9		INTERNATIONAL		D			NF
Z	19:33:00	T3S2	E	PREMIER	982SN9		FREIGHTLINER	1997	D			NF
Z	19:34:00	T3S2	E	SOTO	924DZ2		KENWORTH	2003	D			NF
Z	19:35:00	T3S2	L	TX LPG STORAGE	941EMZ	583221			D			NF
Z	19:36:00	T3S2	L	TNCH	418SP1		INTERNATIONAL	1993	D			NF
Z	19:36:00	T3S2	L	STIL	984SN9		INTERNATIONAL	1997	D			F
Z	19:37:00	T3S2	L		211SP9		INTERNATIONAL		D			F
Z	19:37:00	T3	E	TORRES	273SN1		INTERNATIONAL		D			NF
Z	19:37:00	T3S2	L	CARRASCO	404EM3	655171	FREIGHTLINER		D			NF
Z	19:37:00	T3S2	L	TRANSERVICIOS	405SP1		KENWORTH		D			NF
Z	19:37:00	T3S2	L	TORRES	693SN1		INTERNATIONAL		D			NF
Z	19:38:00	T3S2	L	TRANSERVICIOS	348SP1		INTERNATIONAL		D			NF
Z	19:38:00	T3S2	E	AGUILA	949SP1		INTERNATIONAL		D			F
Z	19:39:00	T3S2	L	STIL	347SP1		INTERNATIONAL	1997	D			F
Z	19:39:00	T3S2	E	STIL	980SN9		INTERNATIONAL	1997	D			F
Z	19:40:00	T3	E	RODRIGUEZ	671EM3		INTERNATIONAL		D			NF
Z	19:41:00	T3S2	L	CARRASCO	403EM3		INTERNATIONAL		D			NF
Z	19:41:00		E	TRANSERVICIOS	DK977171		RPM		D			F
Z	19:42:00	T3S2	L	TRANSERVICIOS	245SP1		INTERNATIONAL		D			NF
Z	19:42:00	T3S2	L	RGX	395EM3	120Z678	FREIGHTLINER		D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	19:42:00	T3S2	L	DESERTO NORTE	433EM3		KENWORTH		D			NF
Z	19:43:00	T3S2	L	TRANSERVICIOS	399SP1		INTERNATIONAL		D			F
Z	19:43:00	T3S2	E	AGUILA	889SP1		INTERNATIONAL	1993	D			NF
Z	19:44:00	SU2	E	AGUILA	888DZ4		INTERNATIONAL		D			F
Z	19:45:00	T3S2	E	AGUILA	846024		INTERNATIONAL		D			NF
Z	19:45:00	T3S2		DESERTO NORTE	447EM3		INTERNATIONAL	1994	D			NF
Z	19:45:00	T3S2	L	ETF	937SN9		FREIGHTLINER	1991	D			NF
Z	19:46:00	T3S2	L	TRANSERVICIOS	237SP1		INTERNATIONAL		D			NF
Z	19:46:00	T3S2	L	STIL	847DZ4		KENWORTH	2004	D			NF
Z	19:47:00	SU2	L	STIL	121CA6	557341	INTERNATIONAL	1998	D			NF
Z	19:49:00	T3S2	L	TPN	635SN9	880805Z	INTERNATIONAL	1993	D			NF
Z	19:49:00	T3S2	L	TPN	865SN9	880805Z	INTERNATIONAL		D			NF
Z	19:50:00	T3S2	L	STIL	286FA2		FREIGHTLINER	1997	D			NF
Z	19:51:00	T3S2	E	PADILLA	122SP1		INTERNATIONAL	1993	D			NF
Z	19:52:00	T3S2	L	RIOS RUBIO	069D23	1Z63212	VOLVO		D			NF
Z	19:52:00	SU2	L	IBCA	961EM7	656378	KENWORTH		D			NF
Z	19:53:00	T3	E	RED	385EM3		INTERNATIONAL		D			NF
Z	19:53:00	T3S2	E	AGUILA	889SP1		INTERNATIONAL	1993				
Z	19:54:00	T3S2	L	OZAETA	470EM3	909186	INTERNATIONAL		D			NF
Z	19:55:00	T3S2	L	DELFINES	255SP1	683624Z	INTERNATIONAL		D			NF
Z	19:55:00	T3S2	L	LYRMA	530CA7		VOLVO	2001	D			NF
Z	19:56:00	T3S2	L	SIETE	272SP1		INTERNATIONAL		D			NF
Z	19:56:00	T3S2	L	STIL	275EM3		INTERNATIONAL	1998	D			
Z	19:56:00	T3S2	E	LYRMA	612CA7		VOLVO	2000	D			NF
Z	19:56:00	T3S2	E	STIL	791SN9	818175Z	INTERNATIONAL	1997	D			
Z	19:56:00	T3S2	L	STIL	960FA2			2000	D			F
Z	19:57:00	T3	E	TNCH	063SP1		INTERNATIONAL		D			NF
Z	19:57:00	T3S2	L	SIETE	645EM3	818175Z	FORD		D			NF
Z	19:58:00	T3S2	L	SILT	317EM3		INTERNATIONAL	1993	D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	19:58:00	T3S2	L	STIL	340EM3		INTERNATIONAL	1995	D			NF
Z	19:59:00	T3S2	E	SIETE	386EM3		INTERNATIONAL	1982	D			NF
Z	19:59:00	T3S2	L	AGUILA	957SP1		INTERNATIONAL		D			NF
Z	20:00:00	T3S2	L	PUDSA	791CB4	782207			D			NF
Z	20:00:00	T3S2	L	STIL	963FA2		INTERNATIONAL	2000	D			F
Z	20:01:00	T3S2	L	APACHE	541EM3	3829982	INTERNATIONAL		D			NF
Z	20:02:00	T3S2	L	5 HERMANOS	542EM3		FREIGHTLINER		D			NF
Z	20:02:00	T3S2	E	TPN	542EM7	880805Z	INTERNATIONAL		D			F
Z	20:05:00	T3S2	L	LYRMA	692CA7		VOLVO	2001	D			NF
Z	20:05:00	SU2	L	NORZA	ZUS7195	1261138Z	CHEVI		D			NF
Z	20:06:00	T3S2	E	AGUILA	817SN9		INTERNATIONAL					F
Z	20:07:00	T3S2	L	TPN	639SN9		INTERNATIONAL					
Z	20:07:00	T3	E	LYRMA	791CA7	650990Z	VOLVO	2001	D			NF
Z	20:08:00	T3S2	E	STIL	783SN9		INTERNATIONAL	1988	D			F
Z	20:08:00	T3	E	LYRMA	793CA7		VOLVO	2001	D			NF
Z	20:12:00	T3S2	E	TRANSERVICIOS	634EM7		FREIGHTLINER		D			NF
Z	20:12:00	T3S2	L	SOTELO	707SP1		INTERNATIONAL	1987	D			F
Z	20:13:00	T3S2	BT	SOTO	933DZ2		KENWORTH	1999				
Z	20:14:00	T3S2	E	TM	735SN9		INTERNATIONAL	1989				
Z	20:15:00	T3S2	L	LYRMA	201SP1		KENWORTH					
Z	20:15:00	T3S2	E	TRANSERVICIOS	236SP1		INTERNATIONAL		D			F
Z	20:15:00	T3S2	L	AGUILA	532EM2		INTERNATIONAL		D			NF
Z	20:15:00	T3S2	E	SOTELO	549SN9		INTERNATIONAL	1986	D			NF
Z	20:15:00	T3S2	L	LYRMA	741DZ4		KENWORTH	2004				
Z	20:16:00	T3S2	E	SOTELO	704SP1		INTERNATIONAL	1994				
Z	20:20:00	T3S2	E	AGUILA	897SN9		INTERNATIONAL		D			F
Z	20:21:00	T3S2	L	AGUILA	008SP1		INTERNATIONAL	1993				
Z	20:22:00	T3	E	LYRMA	387CA7	650990Z	VOLVO	2000	D			NF
Z	20:22:00	T3S2	L	CARDENAL	471SP1		INTERNATIONAL					



BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	20:22:00	T3S2	L	AGUILA	816SP1		INTERNATIONAL	1995				
Z	20:23:00	T3S2	L	CONIN	116SP1		INTERNATIONAL					
Z	20:23:00	T3S2	L	RODRIGUEZ	670EM7	1207678	INTERNATIONAL		D			NF
Z	20:24:00	T3S2	L	TNCH	061SP1	880805Z	INTERNATIONAL	1995	D			NF
Z	20:24:00	T3S2	E	ETF	75CA7		KENWORTH		D			F
Z	20:25:00	T3S2	E	STIL	228FA2		INTERNATIONAL	1994	D			F
Z	20:25:00	T3S2	E	MONARCA	450CD2	726031	INTERNATIONAL		D			NF
Z	20:25:00	T3S2	L	SOTELO	721SP1	158923Z	INTERNATIONAL	1987	D			NF
Z	20:27:00	SU2	E	AGUILA	885DZ4		INTERNATIONAL		D			F
Z	20:28:00	T3S2	L	ZOTIS	465SP1		INTERNATIONAL		D			NF
Z	20:29:00	T3S2	L	TPN	623SN9	880805Z	INTERNATIONAL		D			NF
Z	20:30:00	T3S2	E	EMCH	984SD1		INTERNATIONAL		D			NF
Z	20:31:00	T3S2		FMCH	140SP1		INTERNATIONAL					NF
Z	20:31:00	T3S2	L	TM	234SN9		INTERNATIONAL					NF
Z	20:31:00	SU2			ZU04082		INTERNATIONAL					NF
Z	20:36:00	T3S2	E	TPN	871SN9	880805Z	INTERNATIONAL	1995	D			NF
Z	20:37:00	T3S2	E	TNCH	740EM7		FREIGHTLINER		D			NF
Z	20:38:00			PNCH	ZUU1157		GMC					NF
Z	20:39:00	T3S2	E	STIL	762EM7		INTERNATIONAL	1998				NF
Z	20:40:00	T3S2	E	SOTELO	561SN9		INTERNATIONAL	1993	D			F
Z	20:40:00	T3S2	L	BOUCHE	880EM7		FREIGHTLINER					NF
Z	20:41:00	T3S2	L	STIL	2F1FA2		FREIGHTLINER	1998	D			F
Z	20:41:00	T3S2	E	TRPMESA	959EM7							NF
Z	20:42:00	T3S2	E	TRAMESA	960EM7		INTERNATIONAL					NF
Z	20:43:00	T3S2	E	STIL	613FA3		INTERNATIONAL	1998				NF
Z	20:43:00	T3S2	E	AGUILA	813SP1		INTERNATIONAL					NF
Z	20:45:00	T3S2	E	ALFREDO GONZALEZ	327CA6			1986	D			NF
Z	20:48:00	T3S2	E	AGUILA	016SP1		INTERNATIONAL		D			F
Z	20:48:00	T3S2	L	LYRMA	736DZ4	6509902	KENWORTH	2003	D			NF

BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	20:49:00	T3S2	E	TRPMESA	845EM7		INTERNATIONAL		D			NF
Z	20:50:00	T3S2	E	STIL	274EM3		INTERNATIONAL	1998	D			F
Z	20:50:00	T3S2	E	SILT	335EM3		INTERNATIONAL	1995				
Z	20:50:00	T3S2	L	GALLARDO	970SN9		INTERNATIONAL	1995				
Z	20:53:00	SU2	E	AGUILA	852DZ4		INTERNATIONAL		D			F
Z	21:04:00	T3S2	E	AGUILA	009SP1		INTERNATIONAL	1993	D			F
Z	21:11:00	T3S2	E	LYRMA	070CA7		VOLVO		D			NF
Z	21:11:00	T3S2	E	ETF	440CW5		INTERNATIONAL		D			F
Z	21:14:00	T3S2	E	SILT	351EM3		INTERNATIONAL	1995	D			NF
Z	21:15:00	T3S2	E	SOTELO	728SP1		INTERNATIONAL	1990	D			NF
Z	21:18:00	T3S2	L	SOTELO	555SN9		INTERNATIONAL	1992	D			NF
Z	21:18:00	T3S2	E	TRANS MAQ	852SP1		INTERNATIONAL		D			NF
Z	21:20:00	T3S2	E	REINER	215SP1		INTERNATIONAL		D			F
Z	21:21:00	T3S2	E	AGUILA	901SP1		INTERNATIONAL		D			F
Z	21:24:00	T3S2	E	ZOTIS	545SP1		INTERNATIONAL		D			NF
Z	21:24:00	T3S2	E	SOTELO	720SP1		INTERNATIONAL	1993	D			NF
Z	21:27:00	T3S2	E	STIL	359SP1		INTERNATIONAL	1996	D			NF
Z	21:27:00	T3S2	E	LYRMA	715DZ4		KENWORTH	2005				NF
Z	21:28:00	T3S2	E	STIL	789SN9		INTERNATIONAL	1997	D			NF
Z	21:32:00			AGUILA	535EM3		INTERNATIONAL		D			F
Z	21:33:00			TRANSERVICIOS	229SP1		INTERNATIONAL					NF
Z	21:35:00	T3S2	E	SILT	170SP1		INTERNATIONAL	1993	D			NF
Z	21:36:00	T3S2	E	RODRIGUEZ	669EM7		INTERNATIONAL		D			F
Z	21:36:00	T3S2	E	STIL	958SA1		FREIGHTLINER	2000	D			NF
Z	21:37:00	T3S2	E	TRANS MEXICANOS	047SN1		FREIGHTLINER		D			F
Z	21:40:00	T3S2	E	STIL	447FA6		KENWORTH	2002	D			F
Z	21:42:00	T3S2	E	AGUILA	549CA7		CHEVI		D			F
Z	21:46:00	T3S2	E	KIKI	202SP1		INTERNATIONAL	1986	D			NF
Z	21:46:00	T3S2	E	TRANSERVICIOS	401SP1		INTERNATIONAL		D			NF

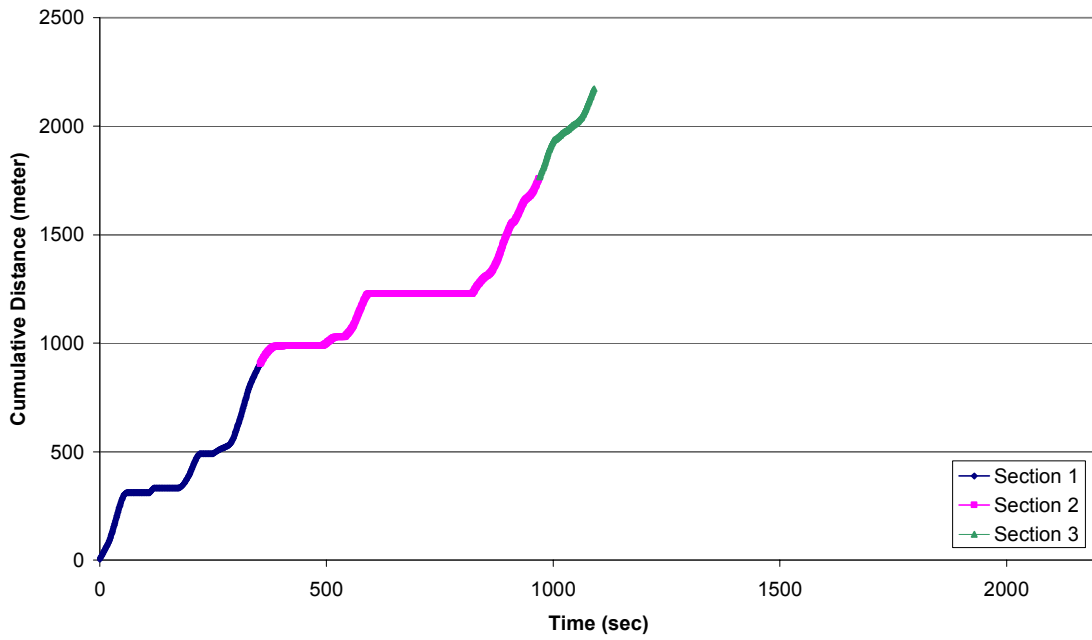
BRIDGE	HOUR	VEH. TYPE	LOADED / EMPTY	COMPANY	PLATES	DOT	MAKE	YEAR	FUEL	MILES	RETROFIT	FAST/ NF
Z	21:46:00	T3S2	E	KIKI	605EM3		FREIGHTLINER	1994	D			NF
Z	21:46:00	T3S2	E	STIL	607FA1		INTERNATIONAL	1998	D			NF
Z	21:47:00	T3S2	E	LYRMA	730DZ4		KENWORTH	2003	D			NF
Z	21:48:00	T3S2	E	ALFREDO GONZALEZ	320CA6	558301	KENWORTH		D			NF
Z	21:55:00	T3S2	E	STIL	278EM3		INTERNATIONAL	1998	D			F
Z	21:55:00	T3S2	E	ETF	47CW5		VOLVO		D			F
Z	21:56:00	T3S2	E	ETF	938SN9		FREIGHTLINER	1991	D			F
Z	22:01:00	SU2	E	STIL	728D24		KENWORTH	2004	D			NF
Z	22:04:48	T3S2	L	PRAXAIR	PT85027		KENWORTH		D			N
Z	22:05:00	T3S2	E	STIL	205FA1		KENWORTH	1996	D			F
Z	22:05:00	T3S2	E	STIL	310SP1		INTERNATIONAL	1994	D			F
Z	22:06:00	T3S2	E	TRANSERVICIOS	666EM7		INTERNATIONAL	1996	D			
Z	22:07:00	T3S2	E	GARDEA	418CA7							
Z	22:10:00	T3S2	E	JD	227CA8		KENWORTH					
Z	22:15:00	T3S2	E	OSDEL	098SP1	8384907	FREIGHTLINER		D			NF
Z	22:18:00	T3S2	E	SILT	343EM3		INTERNATIONAL	1995	D			F
Z	22:18:00	T3S2	E	STIL	372SP1		INTERNATIONAL	1996	D			F
Z	22:22:00	T3S2	E	ETF	090CW7		FREIGHTLINER		D			F
Z	22:22:00	T3S2	E	STIL	206FA1		KENWORTH	1996	D			F
Z	22:22:00	T3S2	E	SILT	318EM3		INTERNATIONAL	1996	D			NF
Z	22:23:00	SU2	E	FMCH	545CA3		INTERNATIONAL		D			NF
Z	22:25:00	SU2	E	AGUILA	878DZ4		INTERNATIONAL		D			NF
Z	22:26:00	T3S2	E	SOTELO	700SP1		INTERNATIONAL	1994	D			NF
Z	22:28:00	T3S2	E	SILT	322EM3		FREIGHTLINER	1993	D			NF
Z	22:29:00	T3S2	E	SILT	334EM3		INTERNATIONAL	1995	D			NF
Z	22:31:00	T3S2	E	AGUILA	947SP1		INTERNATIONAL	1993	D			F



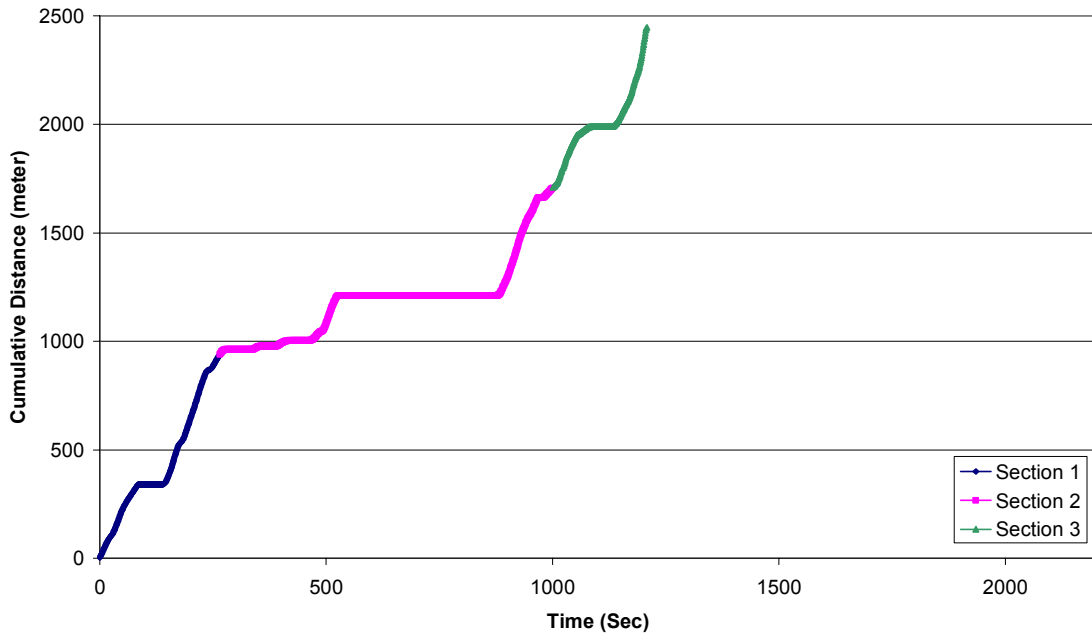
## **Appendix C: Time-Cumulative Distance Plots and Distance-Speed Plots of Drive Cycles**



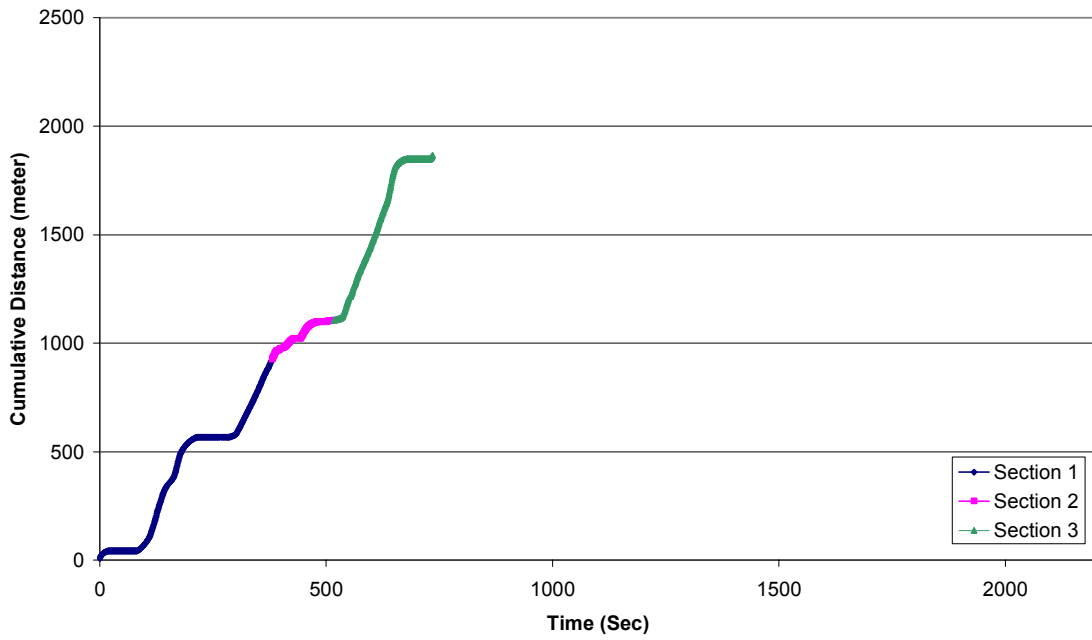
**Time-cumulative Distance Plot  
BOTA2 (BCS1-NB3)**



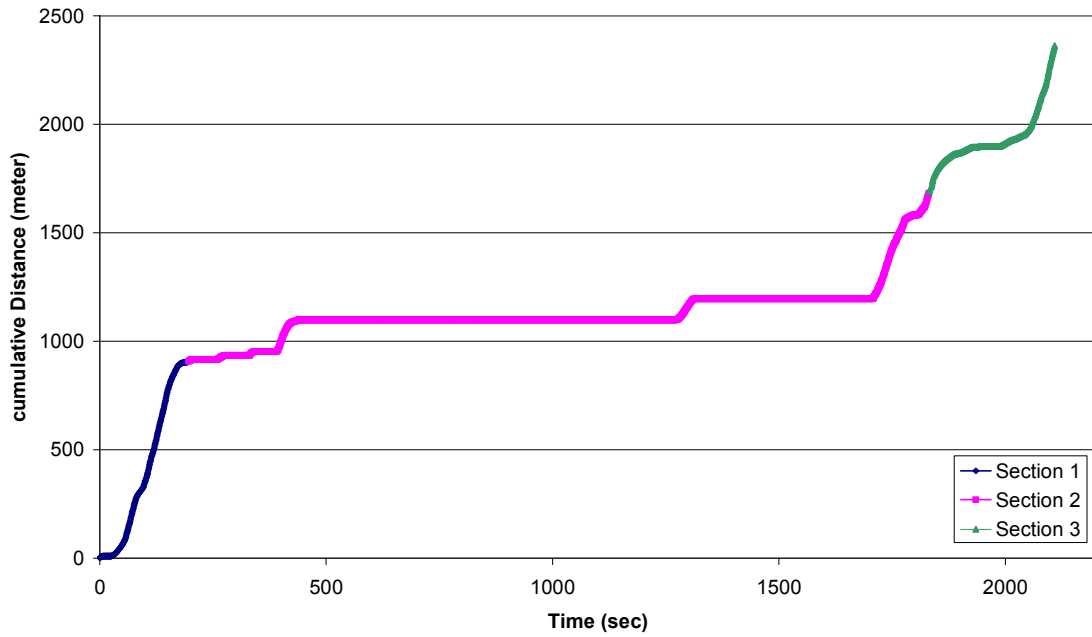
**Time-cumulative Distance Plot  
BOTA 3 (BCS1-NB2)**



**Time-cumulative Distance Plot  
BOTA 4 (707SP1-NB3)**

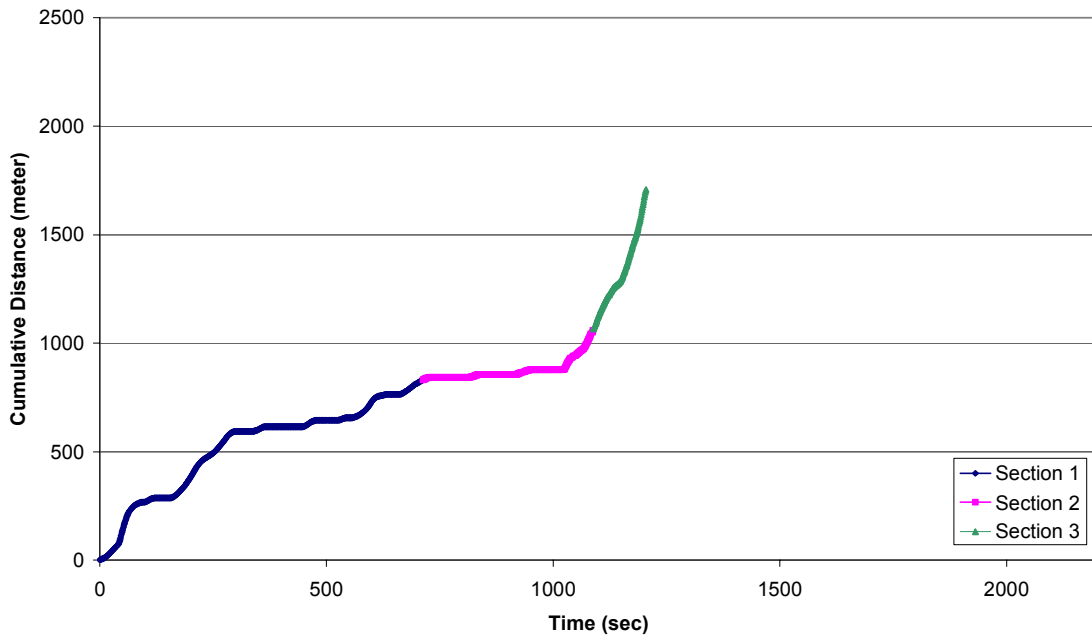


**Time-cumulative Distance Plot  
BOTA 5 (707SP1-NB1)**

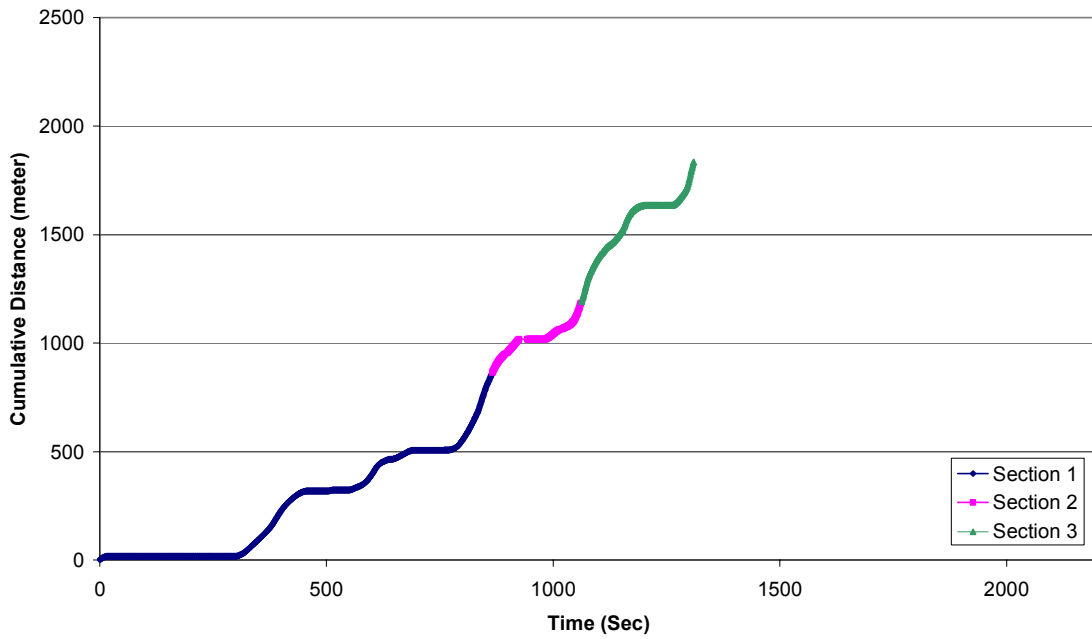




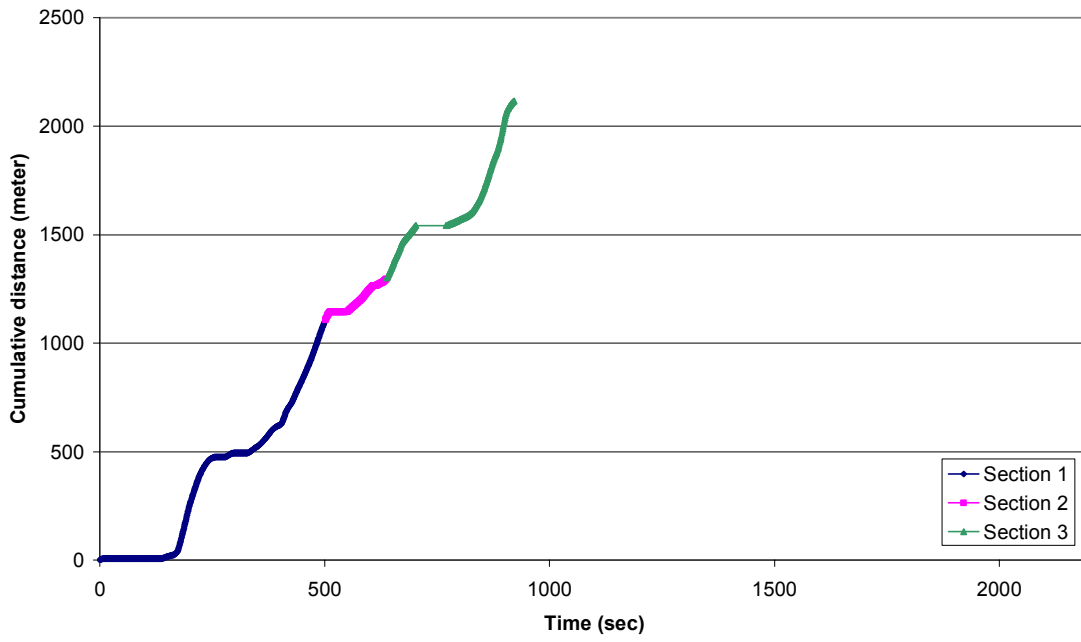
**Time-cumulative Distance  
BOTA 6 (707SP1-NB2)**



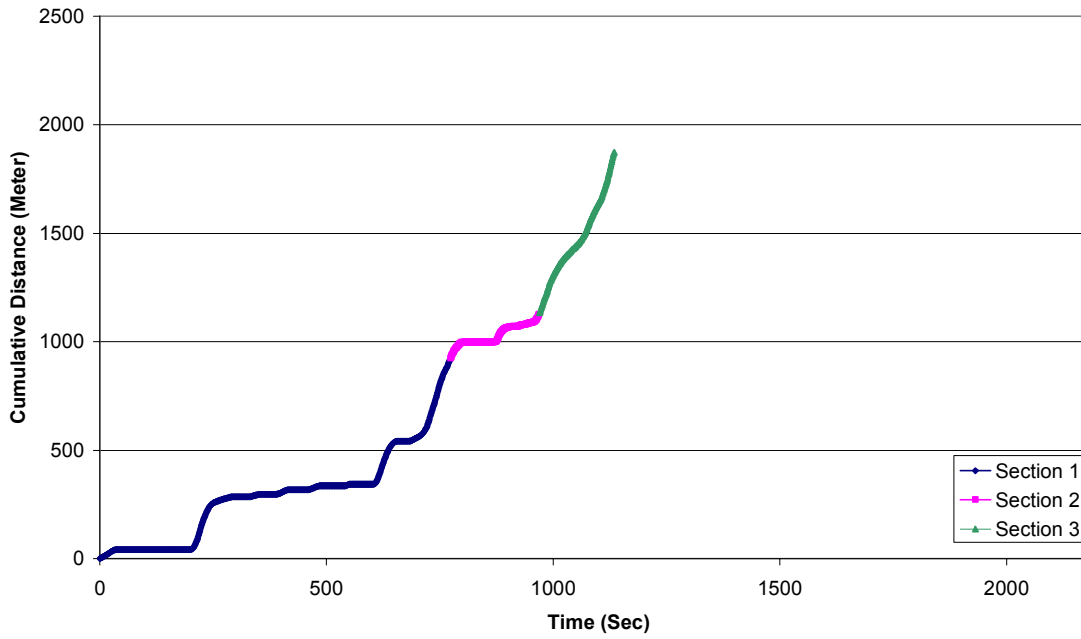
**Time-cumulative Distance Plot  
BOTA 7 (726CA6)**



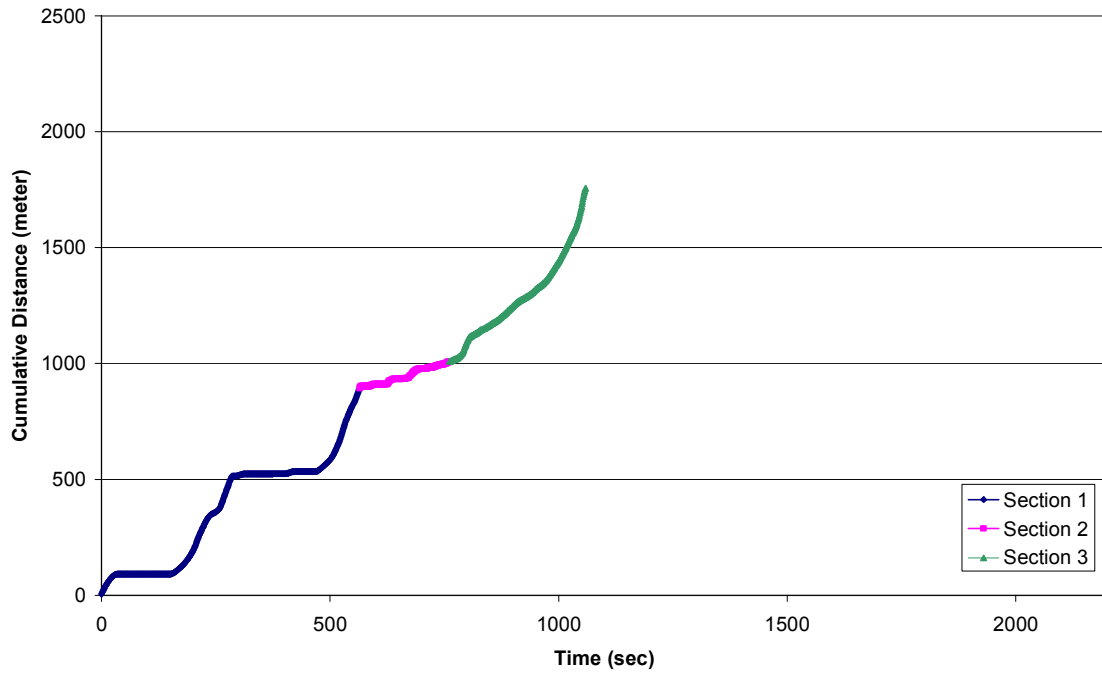
**Time-cumulative Distance Plot  
BOTA 8 (697SP1-NB1)**



**Time-cumulative Distance Plot  
BOTA 9 (697SP1-NB2)**

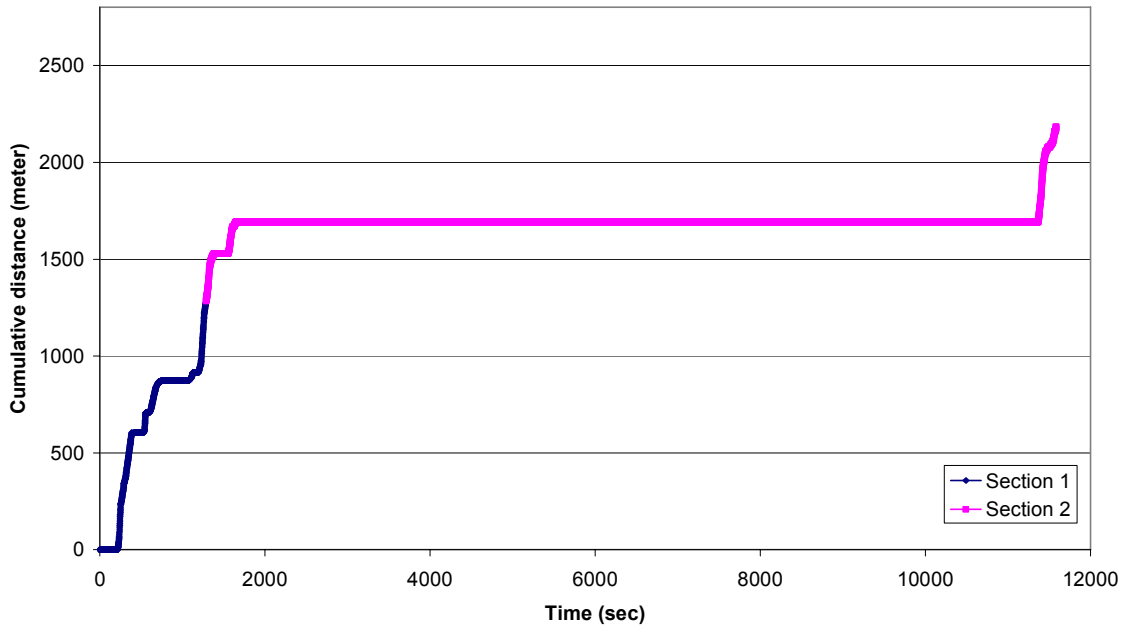


**Time-Cumulative Distance  
BOTA 10 (555SN9)**

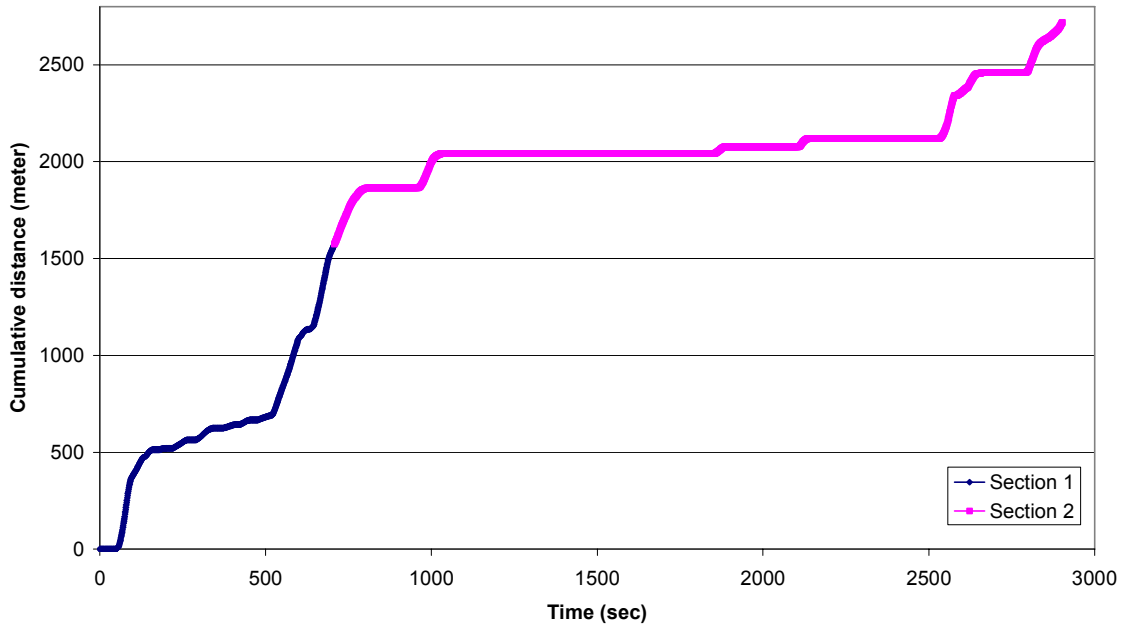


**Time-Cumulative Distance Plot  
Zaragosa (BCS2-NB1)**

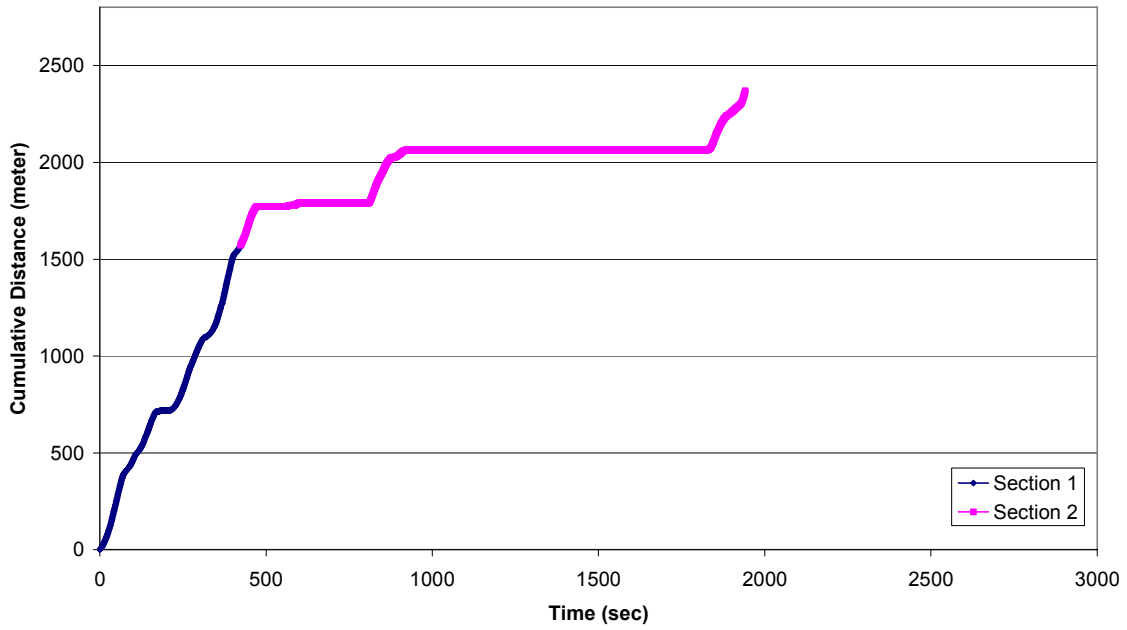
\*Different Scale\*



**Time-Cumulative Distance Plot  
Zaragosa 2 (BCS2-NB2)**

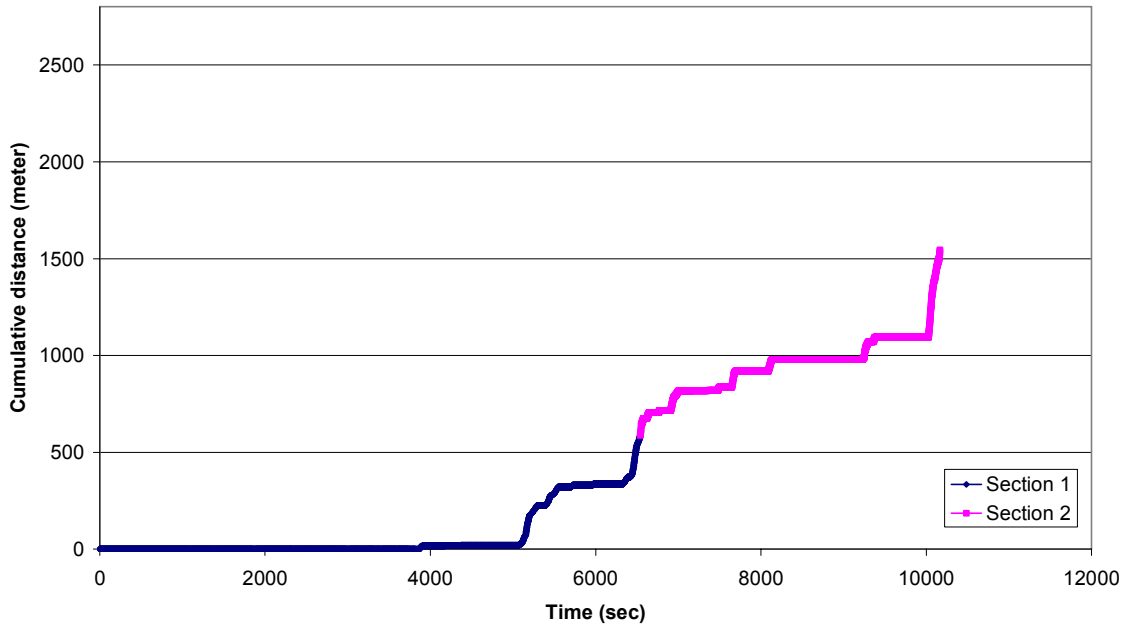


**Time-Cumulative Distance Plot  
Zaragosa 3 (BCS2-NB3)**

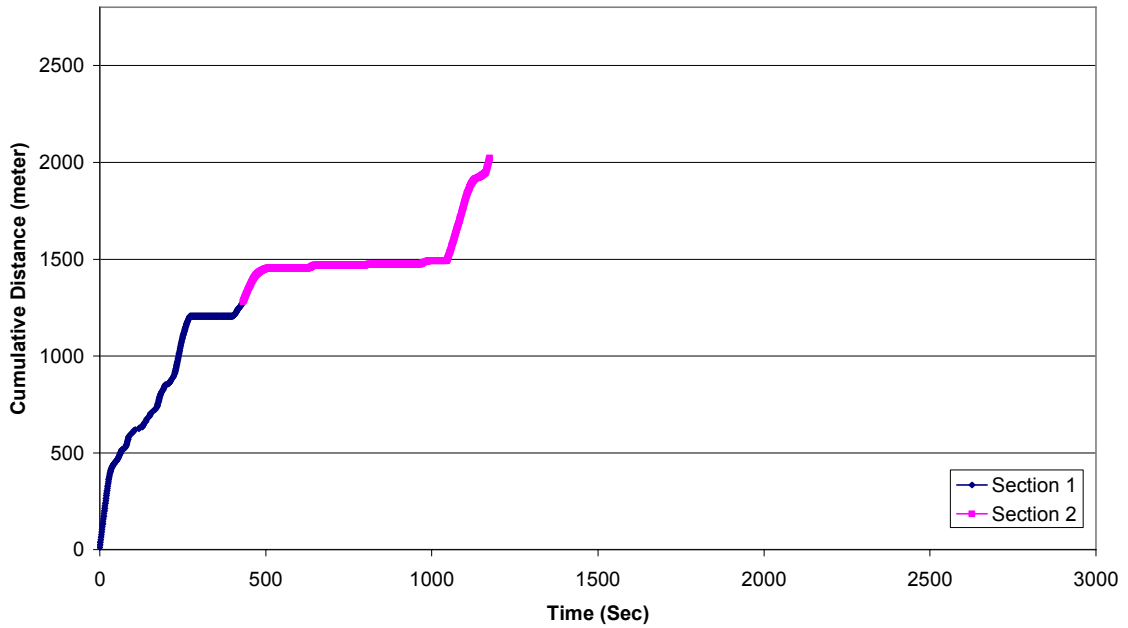


**Time-Cumulative Distance Plot  
Zaragoza 4 (714SP1)**

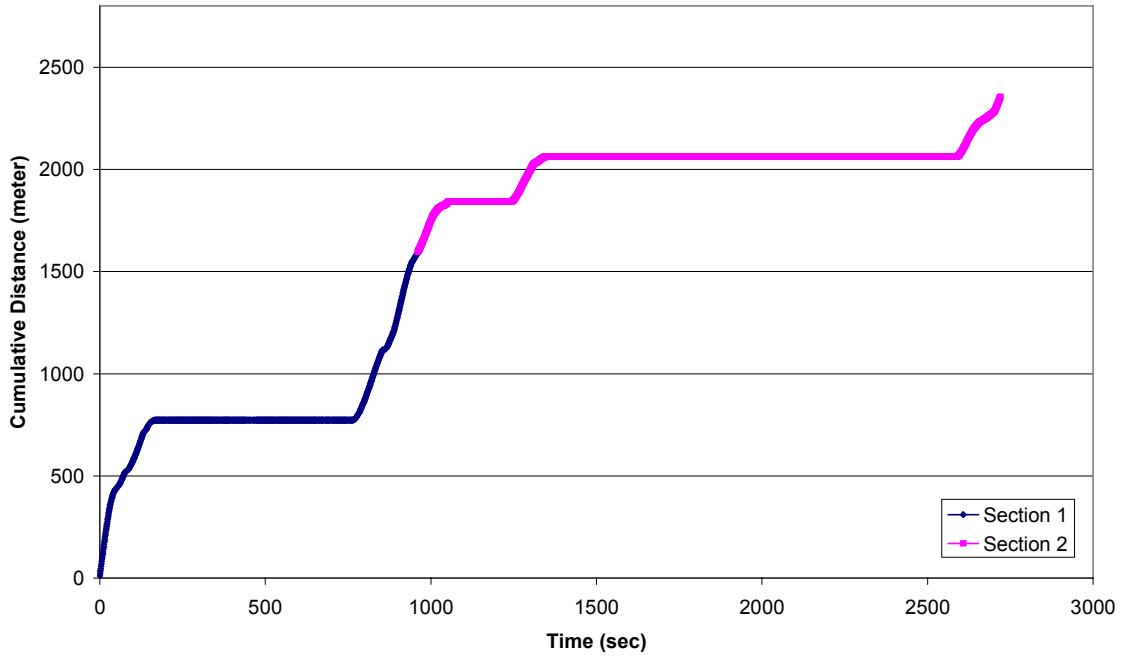
\*Different Scale\*



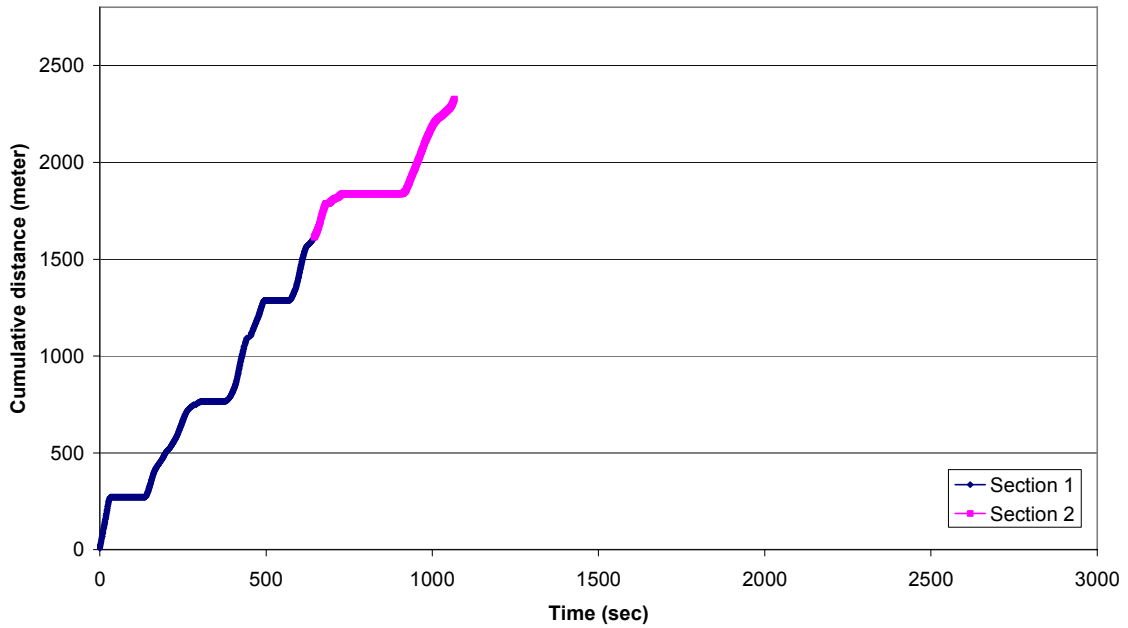
**Time-Cumulative Distance Plot  
Zaragoza 5 (611EM7)**



**Time-Cumulative Distance Plot  
Zaragosa 6 (726SP1)**



**Time-Cumulative Distance Plot  
Zaragosa 7 (261CA5)**

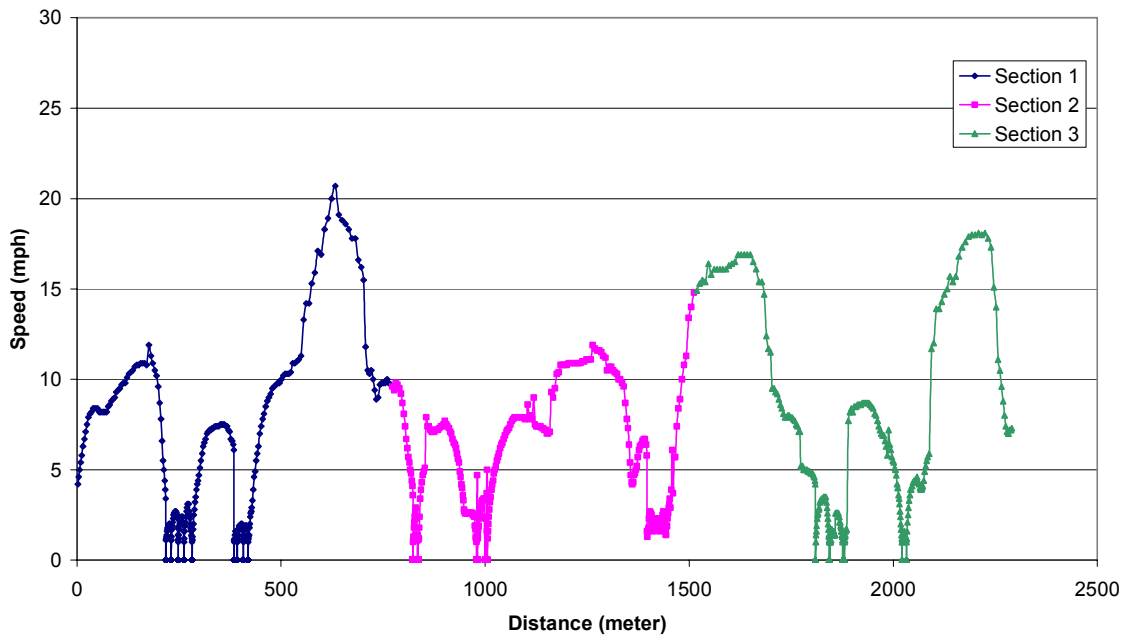


## **Appendix D: Distance-Speed Plots**

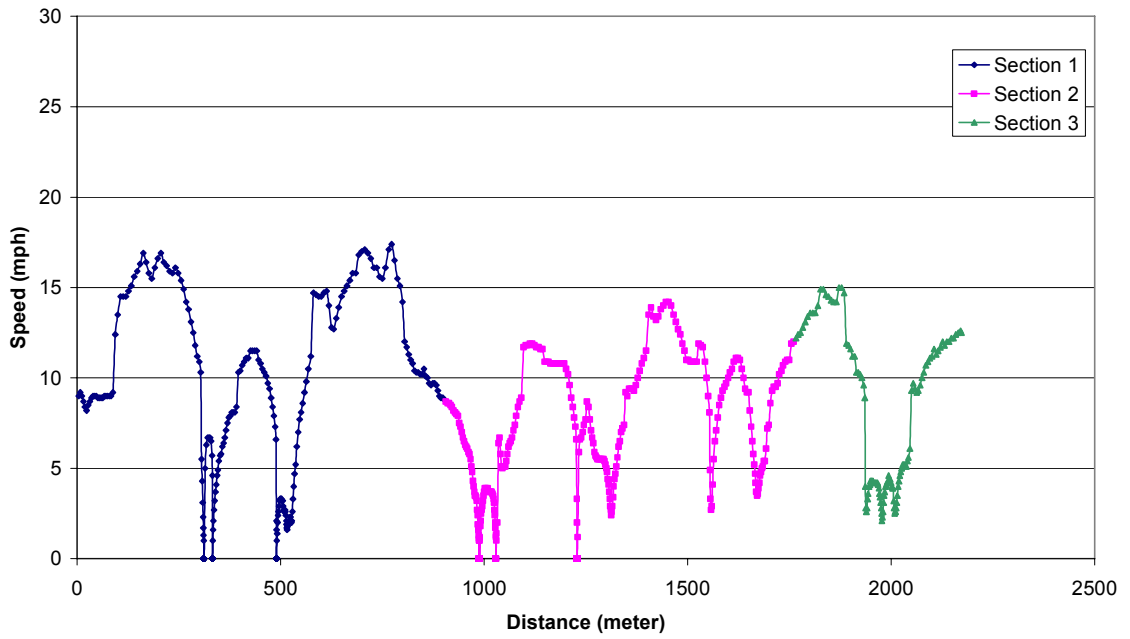




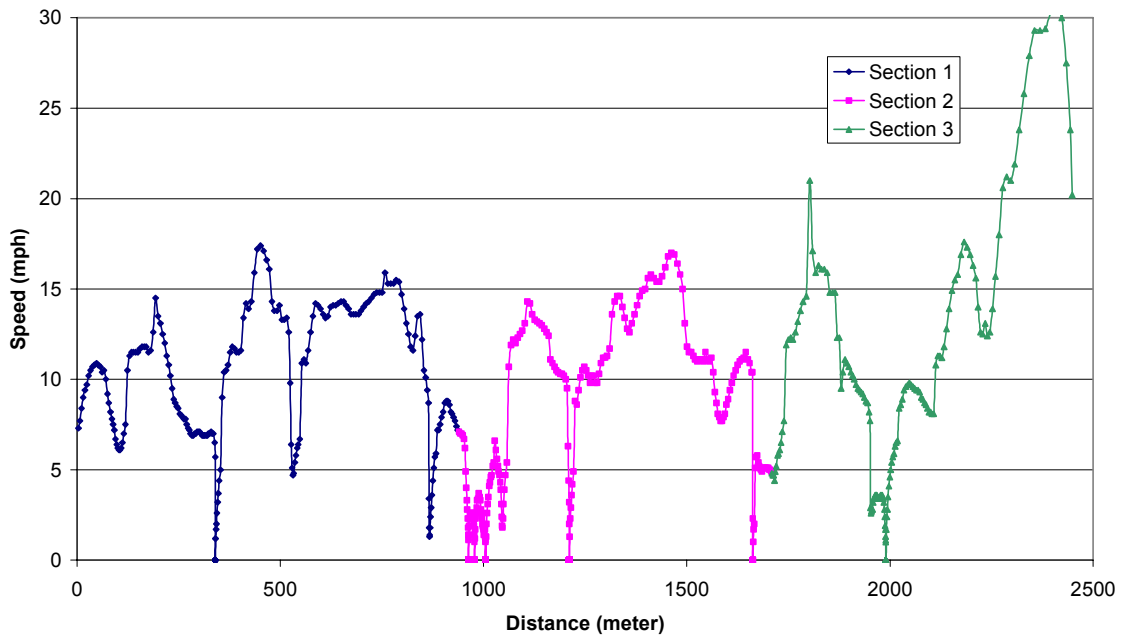
**Distance-Speed Plot  
BOTA 1 (BCS1-NB1)**



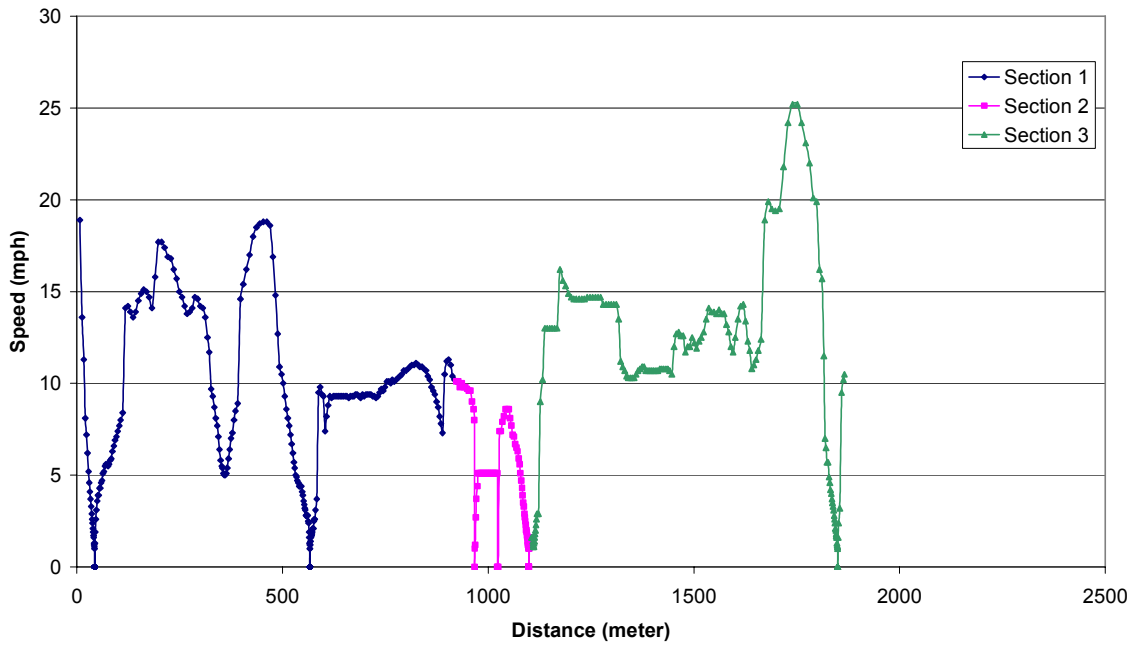
**Distance-Speed Plot  
BOTA 2 (BCS1-NB3)**



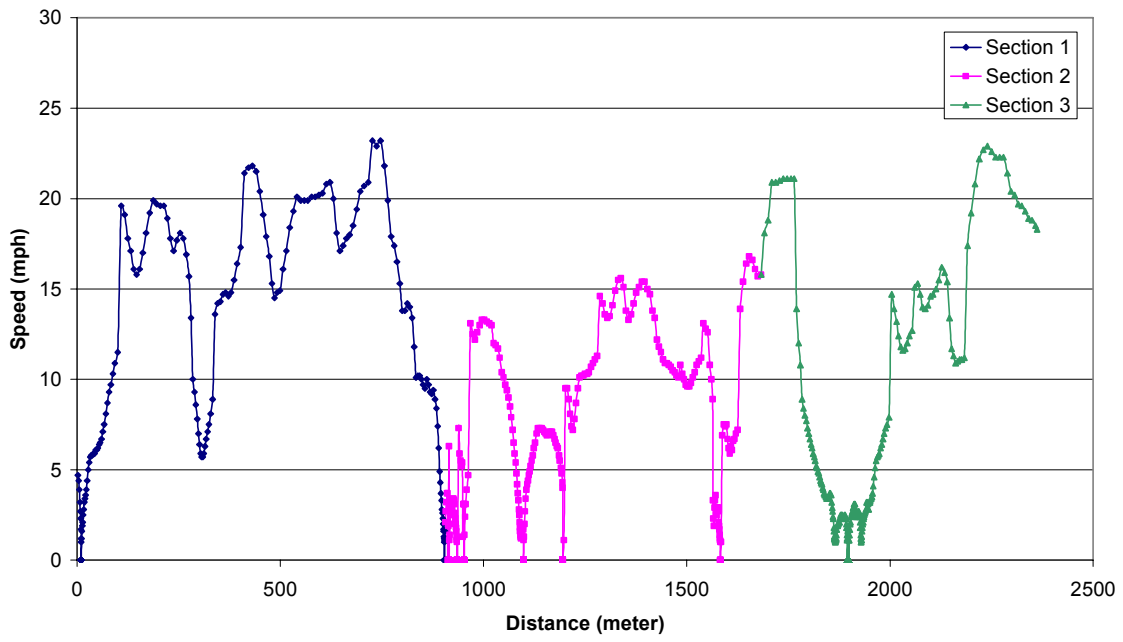
**Distance-Speed Plot  
BOTA3 (BCS1-NB2)**



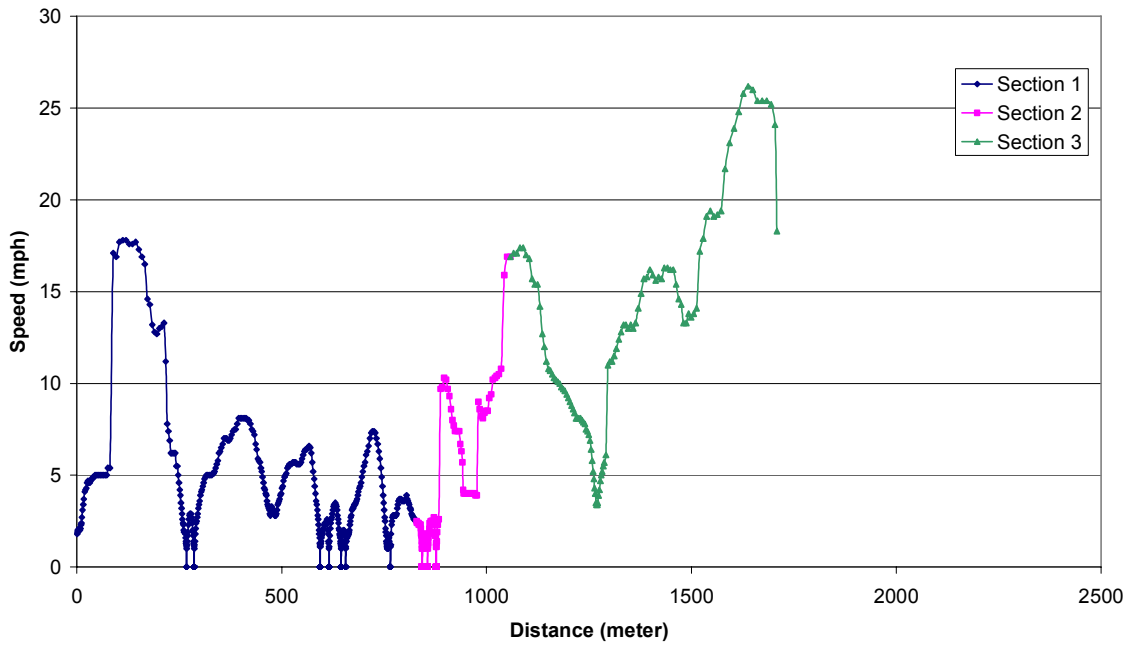
**Distance-Speed Plot  
BOTA 4 (707SP1-NB3)**



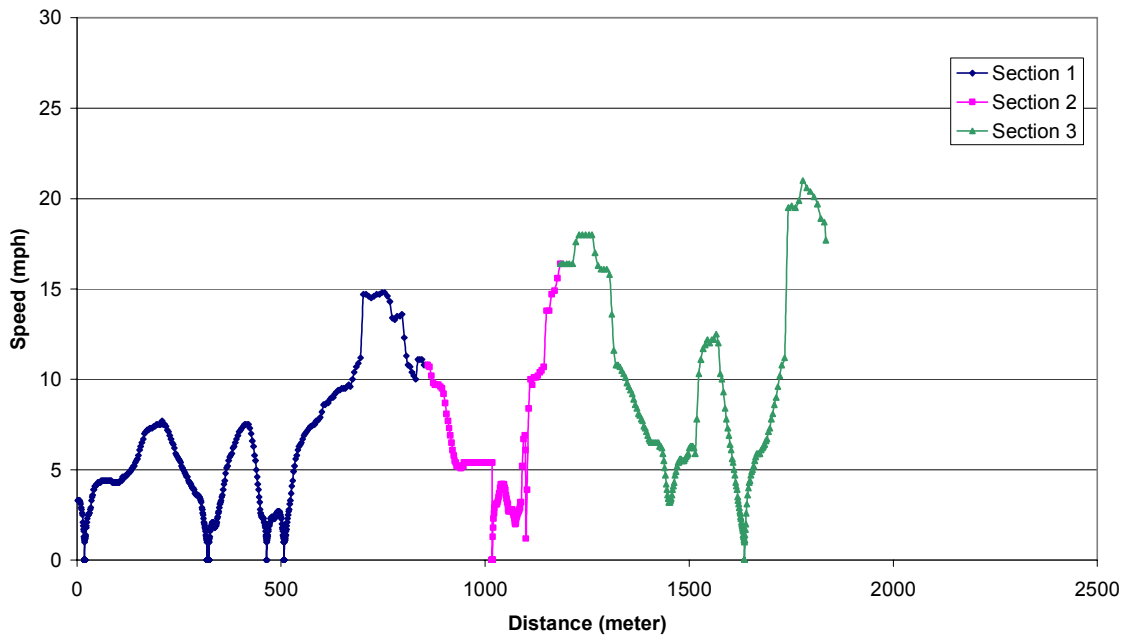
**Distance-Speed Plot  
BOTA 5 (707SP1-NB1)**



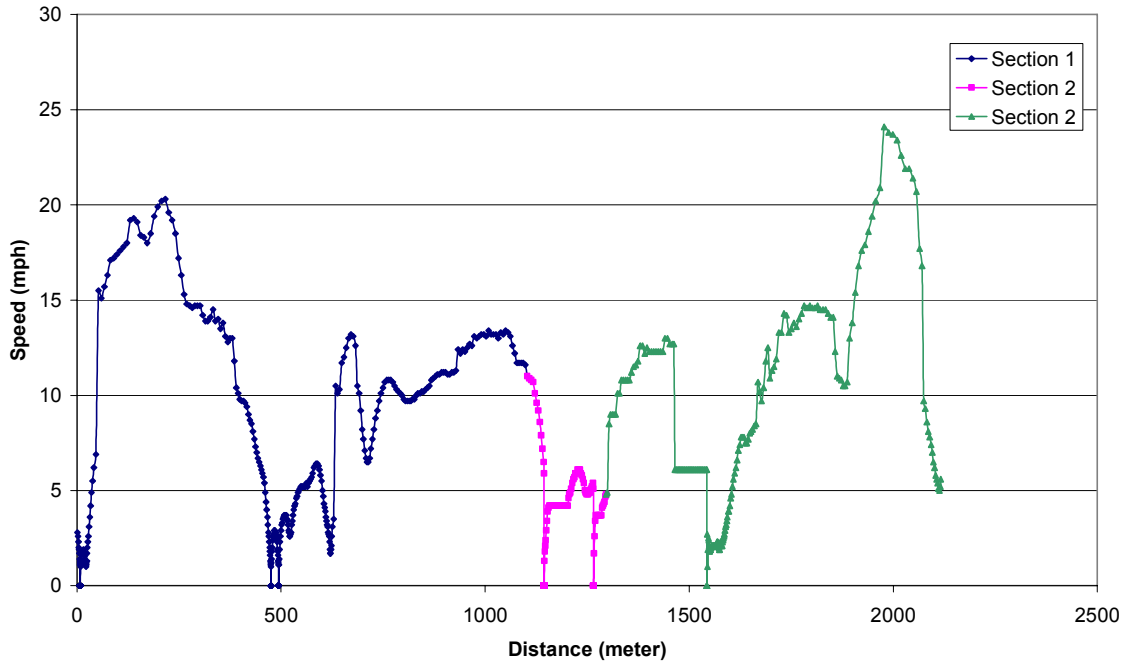
**Distance-Speed Plot  
BOTA 6 (707SP1-NB2)**



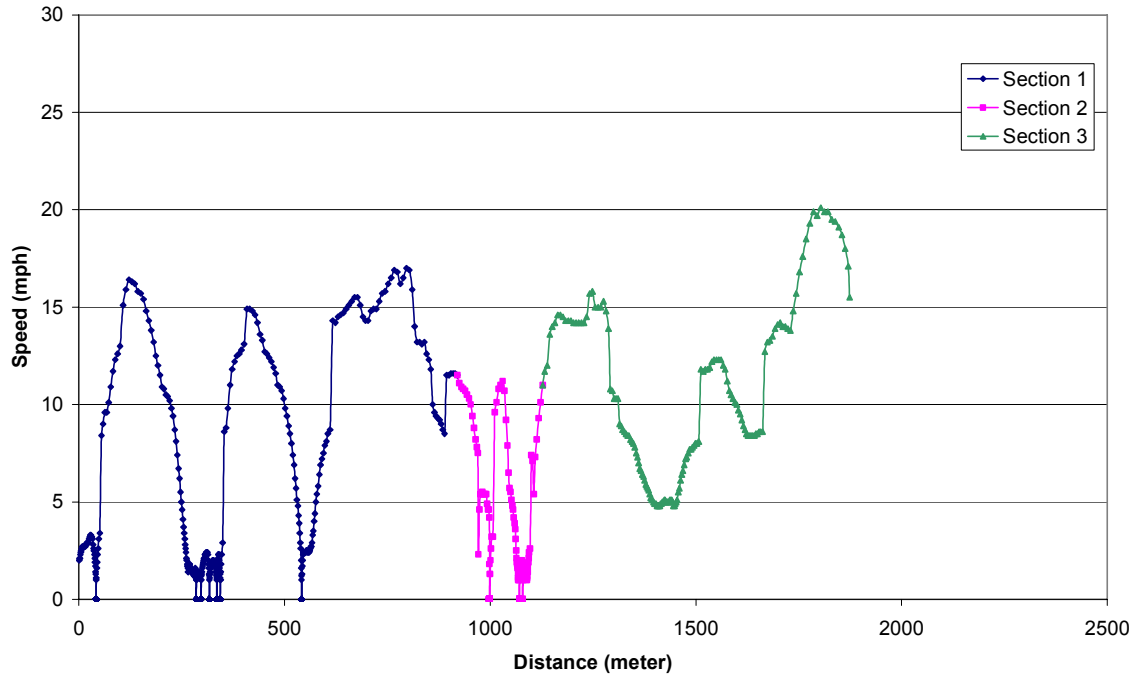
**Distance-Speed Plot  
BOTA 7 (726CA6)**



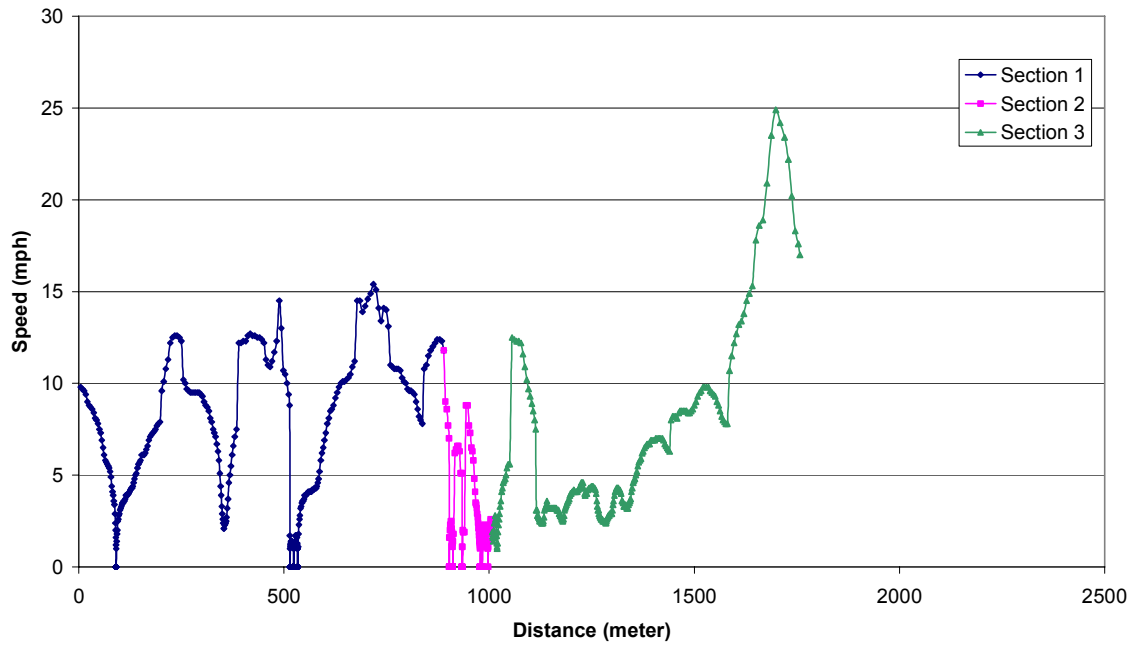
**Distance-Speed Plot  
BOTA 8 (697SP1-NB1)**



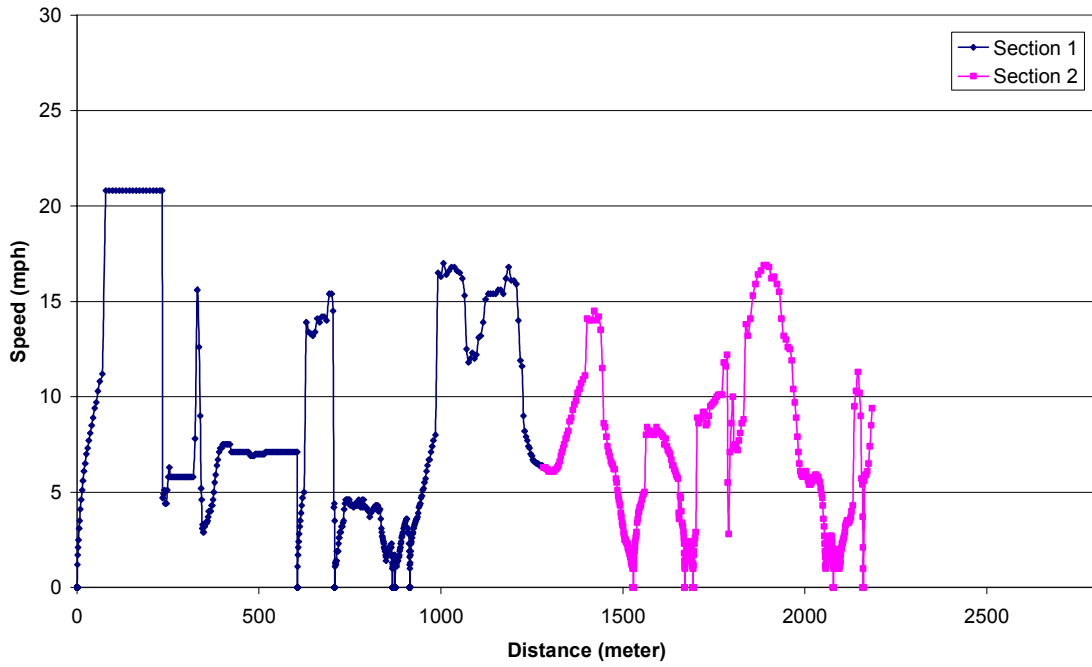
**Distance-Speed Plot  
BOTA 9 (697SP1-NB2)**



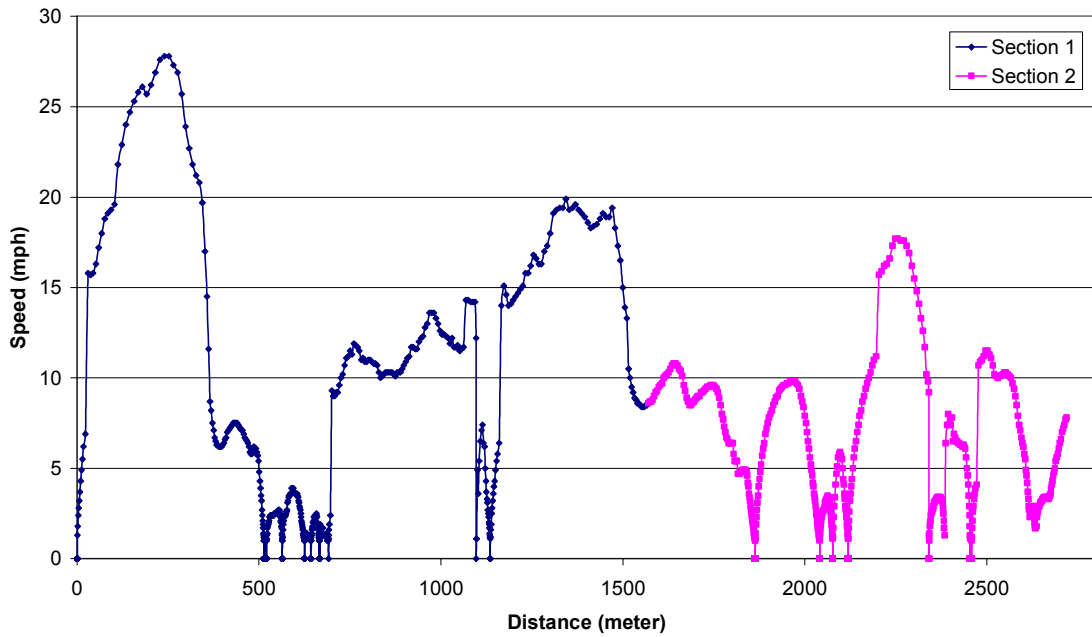
**Distance-Speed Plot  
BOTA 10 (555SN9)**



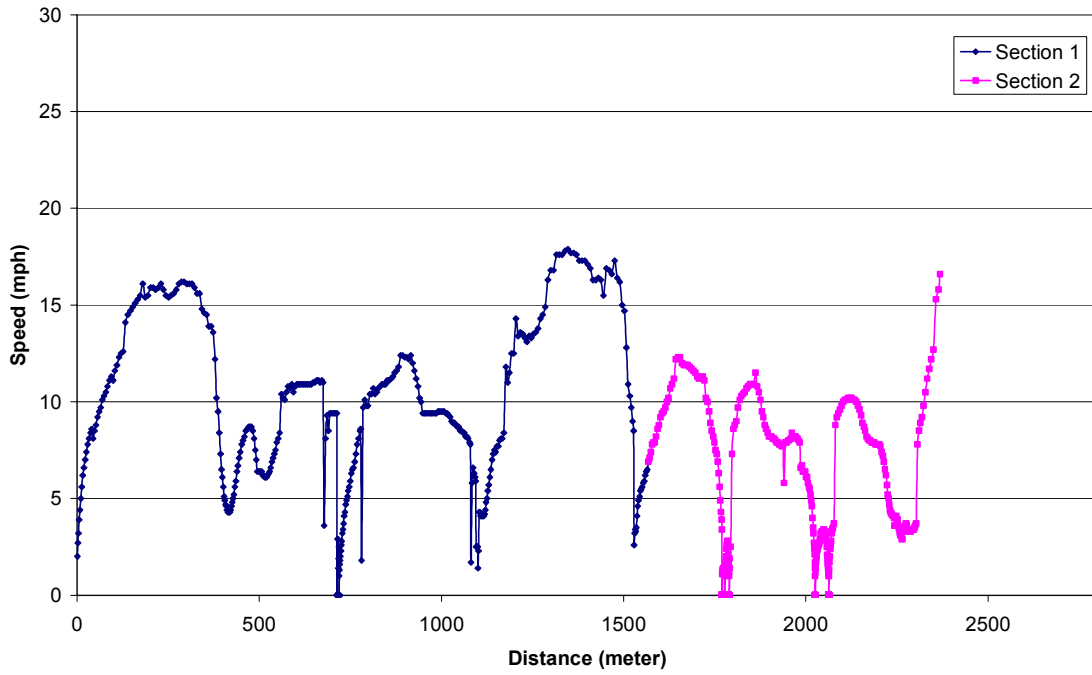
**Distance-Speed Plot  
Zaragosa 1 (BCS2-NB1)**



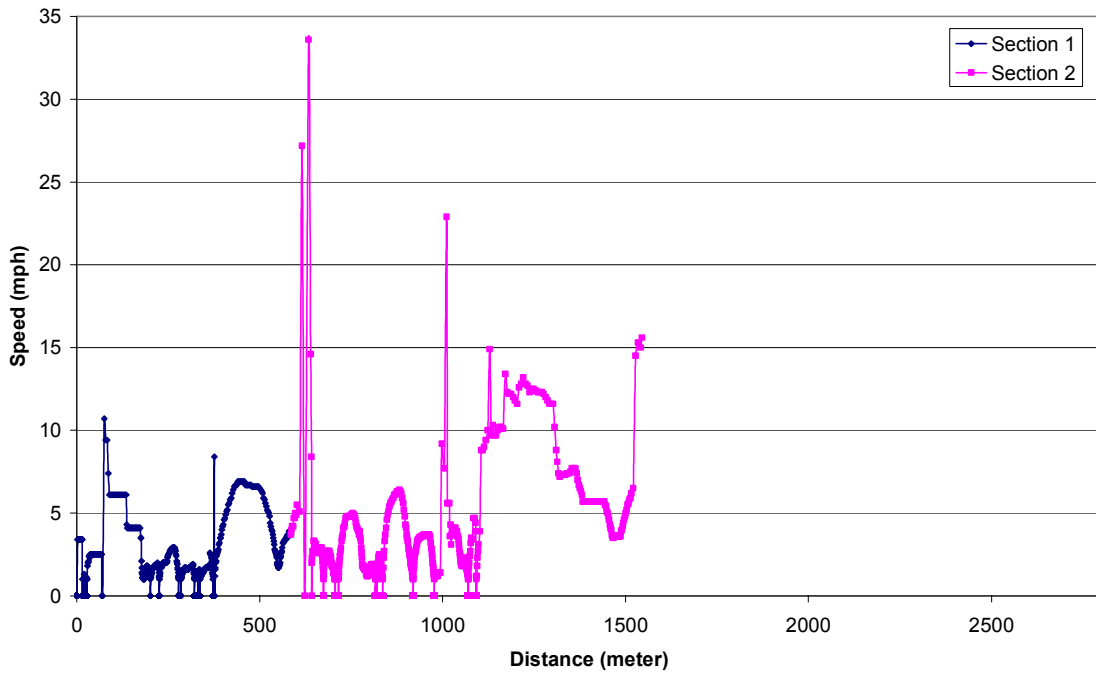
**Distance-Speed Plot  
Zaragosa 2 (BCS2-NB2)**



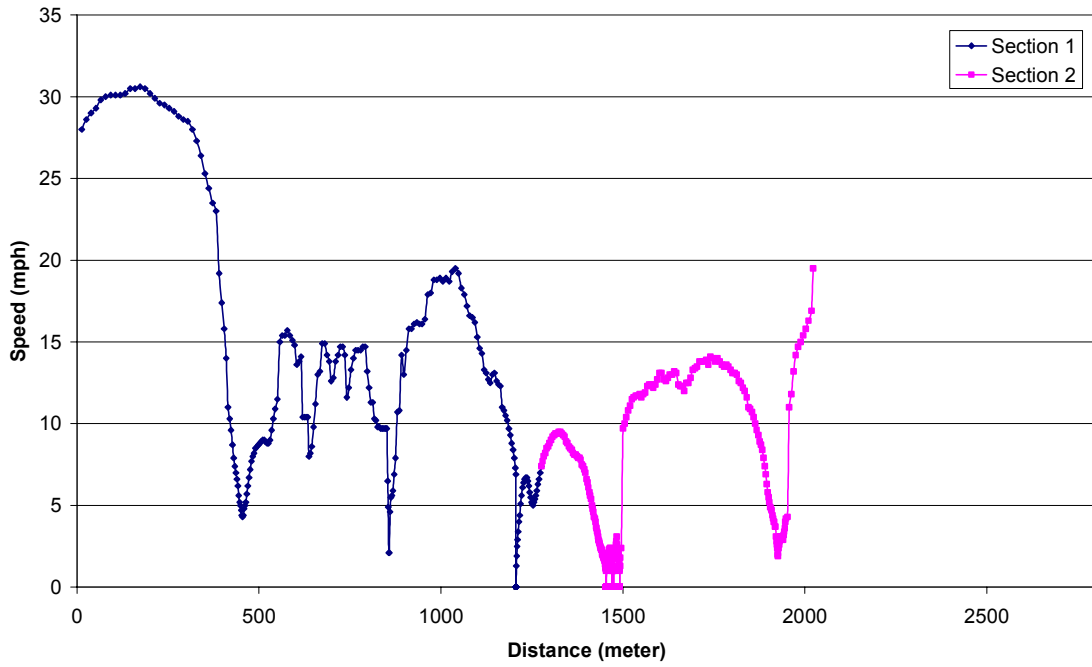
**Distance-Speed Plot  
Zaragosa 3 (BCS2-NB3)**



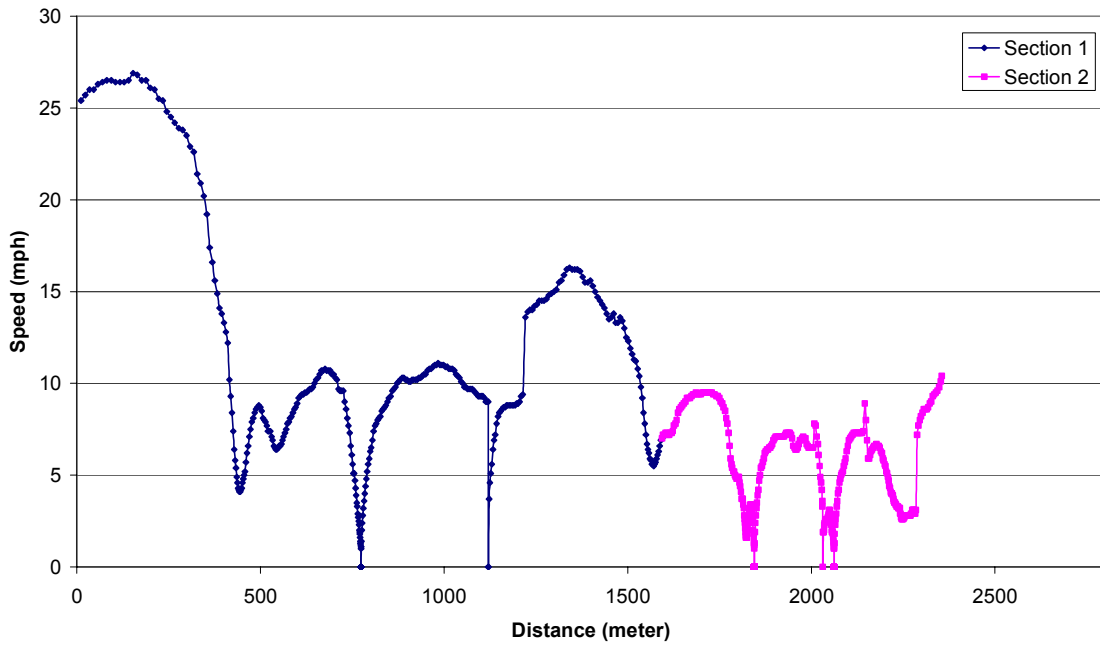
**Distance-Speed Plot  
Zaragosa 4 (714SP1)**



**Distance-Speed Plot  
Zaragosa 5 (611EM7)**



**Distance-Speed Plot  
Zaragosa 6 (726SP1)**





Distance-Speed Plot  
Zaragosa 7 (261CA5)

