



**Motor Carrier Factors
Group Chairman's
Factual Report
Boise, Idaho**

HWY18FH015
(21 pages)



**NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF HIGHWAY SAFETY
WASHINGTON, D.C.**

**MOTOR CARRIER FACTORS GROUP CHAIRMAN'S
FACTUAL REPORT**

A. CRASH INFORMATION

Location: Eastbound Interstate 84 (I-84) near mile post 47, in Boise, Ada County, Idaho

Vehicle #1: 2019 Volvo truck in combination with a 2015 Great Dane semi-trailer

Operator #1: Krux Freight Transport Corporation

Vehicle #2: 2009 Jeep Wrangler, private operator

Vehicle #3: 2003 Volvo truck in combination with a 2008 Great Dane semi-trailer

Operator #3: Zhuk Express LLC

Vehicle #4: 2010 Ford Focus, private operator

Vehicle #5: 2014 Ford F-150, private operator

Vehicle #6: 2006 Ford Fusion, private operator

Vehicle #7: 2015 Ford Escape, private operator

Date: June 16, 2018

Time: Approximately 11:32 p.m. Mountain Time (MT)

Fatalities: 2 Jeep Passengers, 1 Jeep Driver and 1 2019 Volvo Driver

NTSB #: **HWY18FH015**

B. MOTOR CARRIER FACTORS GROUP

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C. CRASH SUMMARY

For a summary of the crash, refer to the *Crash Summary Report* in the docket for this investigation.

D. DETAILS OF THE MOTOR CARRIER FACTORS INVESTIGATION

This investigative report addresses the motor carrier history and operations of the two commercial vehicles involved in this crash, a 2019 Volvo, leased and operated by Krujex Freight Transport Company of Gresham, Oregon and a 2003 Volvo owned and operated by Zhuk Express LLC of Vancouver, Washington. This report also details the employment history of the drivers of both vehicles, safety culture and regulatory oversight of both motor carriers' operations.

1. Krujex Freight Transportation Company's History and Operations

The first motor carrier involved in this crash was Krujex Freight Transport Company (Krujex). According to the Federal Motor Carrier Safety Administration (FMCSA) Motor Carrier Management Information System (MCMIS), the carrier was issued United States Department of Transportation (USDOT) number 2314662. The carrier was registered as an Interstate "For-Hire" motor carrier with a primary place of business in Gresham, Oregon. The carrier had an active operating authority and had been issued Motor Carrier (MC) # 790202. Krujex was a "for-hire" carrier of freight. Per the carrier's latest MCS-150¹, the carrier stated they had two straight trucks, two truck-tractors and two semi-trailers and one driver in its employ². During this investigation, it was discovered Krujex operated four truck tractors and employed four drivers. Krujex's business is primarily transporting produce from Washington state.

Krujex began operations in 2012 and the company was gifted to the current owner in 2015. The carrier's structure is the President and one bookkeeper who work in the office and four truck drivers.

¹ Motor Carrier Identification Report

² MCS -150 dated April 20, 2017, see Motor Carrier Factors Attachment – MCS-150 Krujex

1.1. Driver Hiring Process

Krujex's owner was interviewed and asked to relate the carrier's hiring process for drivers. The owner stated they did not advertise openings and that drivers were referred by "word of mouth". Once a perspective employee was interested in a position, the person would fill out an application. That application would be reviewed. The owner preferred applicants with 2-3 years commercial driving experience and no controlled substance or alcohol issues. The applicant would then be screened by Krujex's insurance carrier to ensure they were insurable. If the candidate was approved by the insurance company, they were then subject to a pre-employment-controlled substance and alcohol test. Upon receipt of a negative test result, the driver was given a road test and then became an employed driver.

During the interview, the owner was asked to further describe the hiring process for the driver involved in this crash. He stated the driver was hired on May 21, 2018 and began driving for Krujex on the 22nd. He stated the driver had not filled out an application and did not go through the normal process described earlier as the driver had worked for the company before. The driver was screened by the insurance company and provided a pre-employment-controlled substance and alcohol test. The driver had previously been employed by Krujex, so the owner did not use the steps he had described, he only had the driver take a pre-employment-controlled substance and alcohol test and vetted the driver with the insurance company.

1.2. Carrier's Safety Culture

Krujex's owner was also asked about any written policies dealing with safety or discipline. The owner stated that other than the controlled substance and alcohol policy that was regulatorily required by the FMCSA, the carrier had no written policies. The owner stated he relied upon the drivers to know what was and was not against the rules and regulations. The owner stated that since 2015 he had not disciplined a driver for any reason.

1.3. FMCSA Oversight

1.3.1. CSA and SMS

In 2010, the FMCSA introduced the Compliance, Safety, Accountability (CSA) system as an initiative to improve large truck and bus safety and ultimately reduce crashes, injuries, and fatalities that are related to CMVs. It introduced a new enforcement and compliance model that allows the FMCSA and its state partners to contact a larger number of carriers earlier to address safety problems before crashes occur. Along with CSA, the FMCSA also rolled out a new operational model called the Safety Measurement System (SMS), which replaced its predecessor, known as the SAFESTAT model. SMS uses a motor carrier's data from roadside inspections, (including all safety-based violations), state-reported crashes, and the Federal Motor Carrier Census to quantify performance in the following Behavior Analysis and Safety Improvement Categories (BASICS).

1.3.2. CSA BASICS³

- **Unsafe Driving** — Operation of CMVs by drivers in a dangerous or careless manner. *Example violations:* Speeding, reckless driving, improper lane change, and inattention. (FMCSR Parts 392 and 397)
- **Hours-of-Service (HOS) Compliance** — Operation of CMVs by drivers who are ill, fatigued, or in non-compliance with the HOS regulations. This BASIC includes violations of regulations pertaining to records of duty status (RODS) as they relate to HOS requirements and the management of CMV driver fatigue. *Example violations:* false HOS RODS, and operating a CMV while ill or fatigued. (FMCSR Parts 392 and 395)
- **Driver Fitness** — Operation of CMVs by drivers who are unfit to operate a CMV due to lack of training, experience, or medical qualifications. *Example violations:* Failure to have a valid and appropriate commercial driver’s license (CDL) and being medically unqualified to operate a CMV. (FMCSR Parts 383 and 391)
- **Controlled Substances and Alcohol** — Operation of CMVs by drivers who are impaired due to alcohol, illegal drugs, and misuse of prescription or over-the-counter medications. *Example violations:* Use or possession of controlled substances/alcohol. (FMCSR Parts 382 and 392)
- **Vehicle Maintenance** — Failure to properly maintain a CMV and/or properly prevent shifting loads. *Example violations:* Brakes, lights, and other mechanical defects, failure to make required repairs, and improper load securement. (FMCSR Parts 392, 393, and 396)
- **Hazardous Materials (HM) Compliance** — Unsafe handling of HM on a CMV. *Example violations:* Release of HM from package, no shipping papers (carrier), and no placards/markings when required. (FMCSR Part 397 and Hazardous Materials Regulations Parts 171, 172, 173, 177, 178, 179, and 180)
- **Crash Indicator** — Histories or patterns of high crash involvement, including frequency and severity based on information from state-reported crashes

A carrier’s measurement for each BASIC depends on the following:

- The number of adverse safety events (violations related to that BASIC or crashes).
- The severity of violations or crashes.
- When the adverse safety events occurred (more recent events are weighted more heavily).

³ CSA Methodology retrieved from www.fmcsa.dot.gov

After a measurement is determined, the carrier is then placed in a peer group (i.e., other carriers with similar numbers of inspections and carrier size). Percentiles from 0 to 100 are then determined by comparing the BASIC measurements of the carrier to the measurements of other carriers in the peer group. A percentile of “100” indicates the worst performance.

The FMCSA established threshold levels that would require agency action. Unsafe Driving, HOS, and Crash BASICs were set at lower thresholds because of their inherent risk. Additionally, passenger and hazmat carriers have lower thresholds than all other carriers because of their inherent risk. **Table 1** represents the thresholds set by the FMCSA that help prioritize agency intervention and resource management.⁴

Table 1. BASIC thresholds.⁵

BASIC	Passenger Carrier	HM Carrier	All Other Motor Carriers
Unsafe Driving, HOS, Crash	50%	60%	65%
Driver Fitness, Drug & Alcohol, Maintenance	65%	75%	80%
Hazardous Materials	80%	80%	80%

On a carrier’s SMS profile, which is publicly available on the SAFER website for only passenger carriers, an alert symbol is displayed in any designated BASIC where the carrier has exceeded the corresponding threshold.⁶ This is also referred to as having an “alert” in a BASIC. At the time of the crash, the carrier displayed no alerts. The SMS profile also shows that at the time of the crash, the carrier’s vehicle out of service rate was 20 percent. The carrier’s driver out of service rate was 16.7 percent, compared to the national average of 20.7 percent and 5.5 percent respectively. This information was based upon roadside inspection data discussed below.

Since obtaining its USDOT number in 2012, the carrier has not had a compliance review (CR) prior to the crash. There are two types of CR’s. A focused CR is used when two or fewer BASICs have exceeded their thresholds or when only certain portions of the Code of Federal Regulations (CFR’s) relate to the carrier’s operations. A focused CR normally does not result in a safety rating and is classified as “non-rated” when completed, however it may result in an adverse safety rating (conditional or unsatisfactory)⁷. A comprehensive CR is used when three or more BASICs have exceeded their thresholds. A comprehensive CR may also be used if the carrier was involved in a crash or there has been a complaint made. A comprehensive CR addresses all aspects

⁴Retrieved from www.fmcsa.dot.gov

⁵Retrieved from <http://csa.fmcsa.dot.gov/FAQs.aspx>.

⁶FMCSA BASIC information publicly available for Passenger and Hazardous Material carriers only. See additional information at the FMCSA Safer website: <http://safer.fmcsa.dot.gov/CompanySnapshot.aspx>.

⁷ Safety rating or rating means a rating of “satisfactory”, “conditional”, or “unsatisfactory” using the factors prescribed in 49CFR385.7 as computed under the Safety Fitness Methodology. **Safety Ratings:** (1) **Satisfactory** means a motor carrier has in place, functioning safety management controls to meet the safety fitness standards prescribed in 49CFR385.5. (2) **Conditional** means a motor carrier does not have adequate safety management controls in place to ensure compliance with the safety fitness standards that could result in occurrences listed in §385.5 (a) through (k). (3) **Unsatisfactory** means a motor carrier does not have adequate safety management controls in place to ensure compliance with the safety fitness standard which has resulted in occurrences listed in §385.5 (a) through (k). (4) **Unrated** means that a safety rating has not been assigned to the motor carrier by FMCSA.

of the carrier's operation and normally results in a safety rating. The safety rating is determined by FMCSA using safety rating methodology outlined in 49CFR385.5 which evaluates patterns of critical and acute violations⁸.

A comprehensive post-crash compliance review⁹ was conducted by FMCSA. As a result, the following violations were noted:

Driver qualification files violations

- Using drivers who have not completed an application
- Failing to conduct driver record inquiries
- Failing to maintain a copy of the driver's medical certificate

Hours of service violations

- Not installing an electronic logging device when required
- False records of duty status
- Failing to preserve driver's record of duty status for six months

Controlled substance and alcohol testing violations

- Failure to ensure drivers are tested within the selection period
- Failure to maintain records for 5 years
- Failure to provide educational materials explain the requirements of part 382.

Miscellaneous violations

- Failure to keep an accident register
- Using a driver not medically examined or certified
- Numerous inspection and maintenance record keeping issues

⁸ Acute violations are those identified where non-compliance is so severe as to require immediate corrective action by the motor carrier regardless of the overall safety posture of the carrier. Critical violations relate to management and/or operational controls that show a pattern of non-compliance. A list of acute and critical violations is listed in Appendix B of 49CFR385.

⁹ See Motor Carrier Factors Attachment – Krujex post-crash CR

As a result of this CR, the FMCSA proposed an unsatisfactory rating on July 19, 2018 for Krujex. On August 21, 2018, the carrier submitted a request and was granted an upgrade to a conditional rating after providing a corrective action plan.

1.4. Roadside Inspections

According to the MCMIS carrier profile, Krujex had 8 roadside inspections between November 5, 2017 and May 22, 2018.¹⁰ As a result of these inspections no drivers were placed out-of-service (OOS) and 1 vehicle was placed OOS. The vehicle (not the 2019 Volvo) was placed out of service due to a brake hose that had a hole worn through it. The MCMIS profile also indicated the carrier had no prior DOT reportable¹¹ crashes.

1.5. Controlled Substance and Alcohol Testing Program

Under 49 CFR 382.305, motor carriers are required to randomly test all subject drivers to random drug and alcohol testing. The carrier had met the testing requirements for the motorcoach driver involved in the crash. A post-crash toxicology test was performed and was negative for tested drugs and alcohol, for further information refer to the *Medical Factual Report*.

As cited in the post-crash compliance review, Krujex's controlled substance and alcohol testing program had several issues. Krujex had failed to have a random testing done in the required period. Krujex also had failed to provide employees with a copy of the written policy on misuse of alcohol and controlled substances.

1.6. Hours of Service/Electronic Logging Device

As of December 18, 2017, 49 CFR 395¹² required carriers to install and maintain an Electronic Logging Device (ELD) to track the driver's hours of service. An ELD is a device or technology that automatically records a driver's driving time and facilitates the accurate recording of the driver's hours of service. There are certain parameters that would allow carriers to be exempt from the ELD requirements. These parameters include operating a commercial vehicle in a manner requiring completion of a record of duty status on not more than 8 days within any 30-day period; in a driveaway-towaway operation in which the vehicle being driven is part of the shipment being delivered; in a driveaway-towaway operation in which the vehicle being transported is a motor home or a recreation vehicle trailer; or in a commercial vehicle manufactured before model year 2000.

Neither the 2019 Volvo operated by Krujex or the schedule of its driver met any of those parameters and both were required to utilize an ELD to track the driver's hours of service. When investigators interviewed the owner, he stated that the carrier did not have an ELD for the 2019 Volvo. The owner further stated the driver was to have supplied his own ELD, but it was not

¹⁰ Motor Carrier Factors Attachment - Krujex MCMIS Profile (excerpts),

¹¹ 49CFR390.5 defines a reportable crash as any CMV crash resulting in a fatality, injury or tow away due to disabling damage

¹² <https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395>

working properly, and the driver had been utilizing paper logs to track his hours. This practice as described was not permitted under Part 395.

Investigators determined, TEC leasing¹³ had installed an ELD¹⁴ in the 2019 Volvo as part of its initial maintenance, prior to the delivery to Krujex, by examining records provided by the leasing company. The carrier stated they were unaware of the ELD being installed and available. Investigators determined the ELD was functional by examining data from the day the carrier took delivery until shortly after the crash. Investigators were able to obtain detailed records from the leasing company¹⁵.

1.7. Agricultural 150-Air Mile Exemption

Current FMCSA guidance allows drivers to utilize an exemption when traveling to or from the source of agricultural products, better defines what is considered “the source”, and clarifies that drivers may use the exemption during the first 150 air-miles (172 statute or “road” miles) of a trip that delivers outside of the 150 air-mile radius.

This exception applies to transportation during the initial 150 air-miles from the source of the commodity, regardless of the driving distance or time required to travel to or from the destination.

Once a driver operates beyond the 150 air-mile radius of the source, 49 CFR Part 395 (hours of service) applies. The driver would then be subject to the limits under the hours-of-service rules and must record those hours. Once the hours-of-service rules begin to apply on a given trip, they continue to apply for the duration of that trip, until the driver crosses back into the area within 150 air-miles of the original source of the commodities or source of other agricultural commodities.

The guidance does not change the requirement for agricultural commodity haulers to be subject to the hours-of-service regulations and the electronic logging requirements when outside of the 150 air-mile radius. An electronic logging device (ELD), or automatic onboard recording device (AOBRD) until December 16, 2019, is required to log when hauling agricultural commodities outside of the 150 air-mile radius if the driver has logged more than 8 times in any rolling 30-day period.

Krujex was transporting a load of apples from Yakima, Washington to Methuen, Massachusetts. Apples are classified as an agricultural commodity¹⁶. By hauling an agricultural commodity, Krujex and its driver were allowed the 150 air-mile exemption¹⁷ to the hours of service requirements described above. Basically, the driver was able to drive from Portland, Oregon to Yakima, Washington, load his vehicle and driver 150 air-miles from Yakima east without having to log his hours. **Figure 1** depicts the area covered by the 150 air-mile exemption. While operating within the 150 air-mile radius, time that would normally be recorded as on-duty or driving it is to

¹³ Owner of the 2019 Volvo leased to Krujex

¹⁴ Manufactured by GeoTab

¹⁵ See Appendix A

¹⁶ 49CFR395.2

¹⁷ <https://www.fmcsa.dot.gov/hours-service/elds/agricultural-exceptions-and-exemptions-fmcsa-safety>

be listed as off-duty as per FMCSA's guidance. This time not only does not count against the driver's hours of service but allows the driver to utilize this time as off-duty and extend the driver's hours of service beyond the normal property carrying hours allowed under §395.8. The 2019 Volvo driver's hours of service will be further discussed further in the Driver's Hours of Service section later in this report.

Figure 1 150 Air-Mile radius from Yakima, Washington



2. 2019 Volvo Driver

2.1. Driver's License History

The driver of the 2019 Volvo involved in this crash was a 42-year-old-male. At the time of the crash the driver held a valid New York Class A Commercial Driver's License (CDL) with an endorsement for double and triple trailers. The driver's New York CDL was due to expire in October 2021. There were no restrictions on the driver's CDL.

A Commercial Vehicle Driver's License Information System (CDLIS) check on the driver showed numerous convictions from 2009 to 2016 and several withdrawals from 2009 to 2017. **Table 2** shows a summary of the violations. The driver had been subject to two withdrawals from New York: one beginning February 1 and the other April 3, 2017. Both were reinstated on August 2, 2017. These withdrawals were for having 2 and 3 serious violations within 3 years, respectively.

Table 2. Summary of convictions

Date	State	Violation
June 3, 2009	Idaho	Driving while license suspended
January 31, 2012	Oregon	Driving while license suspended
January 12, 2015	Oregon	Failure to obey traffic signal
April 27, 2015	Colorado	Speeding
June 20, 2015	Washington	Speeding
October 20, 2015	Ohio	Failure to obey a barrier
April 21, 2016	California	Speeding
June 27, 2016	California	Improper HOV lane usage

2.2. Medical Certification

At the time of the crash, the driver held a valid two-year DOT medical certificate with an issue date of December 29, 2016 and an expiration date of December 12, 2018. There were no restrictions on the medical certificate.

Effective May 21, 2014, medical examiners conducting DOT medical examinations must be listed on the National Registry of Certified Medical Examiners.¹⁸ The driver's DOT medical certificate indicated National Registry number 2012278540, as the medical professional who performed the DOT physical. According to the FMCSA National Registry, this medical professional holds the proper certifications under the federal regulations.

¹⁸ 49CFR§391.42 Schedule for use of medical examiners listed on the National Registry of Certified Medical Examiners

2.3. Driver's Crash History

A review of the driver's CDLIS file shows no prior crashes listed. A search of FMCSA's database showed a prior crash on November 14, 2014 on I-84 in Idaho. Investigators obtained a copy of the crash. In the crash the driver was involved in a multi-vehicle collision on icy road conditions, Idaho State Police did not find the driver at fault.

2.4. Driver's Controlled Substance and Alcohol Testing

Investigators were able to obtain numerous records for the driver's-controlled substance and alcohol testing. Since March 6, 2009, the driver has had 10 pre-employment and 2 random tests. All had negative results. The latest test was a pre-employment test completed on May 4, 2018. **Table 3** provides a summary of the test and dates.

Table 3 Controlled substance and alcohol tests

Date	Type of test
May 4, 2018	Pre-employment
January 31, 2018	Pre-employment
January 29, 2018	Pre-employment
March 6, 2015	Pre-employment
April 3, 2014	Pre-employment
December 28, 2012	Pre-employment
October 12, 2012	Pre-employment
March 15, 2012	Pre-employment
September 13, 2011	Pre-employment
January 20, 2011	Pre-employment

March 3, 2010	Random
March 6, 2009	Random

2.5. Employment History

Developing a true history for the driver was difficult with the lack of application or ability to interview the driver. By utilizing previous inspection data obtained from FMCSA’s database, revealed the driver had been employed or leased to at least 6 carriers, including Krujex since November 14, 2014. **Table 4** is a summary of the previous inspections, listing dates, names and USDOT numbers of the inspections. The driver emigrated to the United States from the Ukraine in 2004. Investigators also determined that the driver had operated his own company, TIT Transportation, USDOT 1725754, from May 30, 2008 to 2015. This information was determined by a CR conducted by the Oregon Department of Transportation on March 24, 2015. As a result of that CR, the carrier was placed out of service for having an unsatisfactory safety rating. Numerous violations were cited during this CR to include operating with a suspended Oregon license on March 4, 2015, logbook issues and numerous record keeping violations.¹⁹

Table 4. Previous work experience from roadside inspections

DATE	CARRIER	USDOT
November 14, 2014	Gold Star Way LLC	2008402
October 3, 2015	Logic Inc	2638392
August 9, 2016	Gabriel Transport LLC	2493616
November 12, 2016	Dallas Logistics Inc	2352364
September 7, 2017	Orange Transportation Services Inc	1563493

¹⁹ See Motor Carrier Attachment – TIT Transportation CR

2.6. Driver's Hours of Service

The driver had been utilizing paper logbook pages to track his hours of service. Investigators were able to recover the log pages from the remnants of the 2019 Volvo's cab. There were two separate paper logbooks recovered. The first covered the periods from June 8th to June 16th. It showed the driver having June 8th to June 14th off-duty. The second group of logbook pages were from May 27th to June 11th. This logbook showed the driver driving for 11 hours on the 9th, 10th and 4 hours on the 11th. In addition, investigators were able to collect the historical data from the ELD. Data from the ELD was utilized as it presented not only a date and time but accurate location data. **Table 5** is a summary of the driver's hours of service for the previous 7 days as indicated by the ELD data.

Table 5. Driver's time driving by ELD data

Date	Source Document	Total Hours
June 16 2018	ELD Data	8.75 Hours
June 15, 2018	ELD Data	9.25 Hours
June 14, 2018	ELD Data	.25 Hours
June 13, 2018	ELD Data	None
June 12, 2018	ELD Data	4.75 Hours
June 11, 2018	ELD Data	7.5 Hours
June 10, 2018	ELD Data	10.75 Hours

Beginning on June 15, 2018 at 6:00am (all times are pacific) the driver started driving in Troutdale, Oregon. The driver travelled to Auburn, Washington and returned to Troutdale, Oregon at approximately 8:15pm. The distance of this trip was approximate 320 miles. The ELD shows several times where there was no movement of the truck, the longest was 2 hours in duration, the total time not moving was 6.75 hours with a total of 6.5 hours driving. After approximately an hour in Troutdale, the driver drove to Union Gap, Washington, 165 miles distance. The truck was stationary in Union Gap from 1:15am on June 16, 2018 to 7:15am. The truck then continued to Yakima, Washington where it was loaded with fruit leaving at approximately 9:00am. The truck then continued to the crash location approximately 462 away. The truck had two periods where it was stopped for 2 hours; 10:30am-12:30pm in Zillah, Washington and 12:45pm to 3:15pm also in Zillah.

Normally the driver would have been restricted to the property carrying hours of service allowed in 49CFR395.8, allowing 11 hours of drive time and a combination of 14 hours on-duty and driving. However as previously mention in Section 2.6, the driver was allowed the agricultural exemption. All the hours of service activity described above, except for the approximately 147 miles and 2 hours and 15 minutes prior to the crash (approximately North Powder, OR to Boise, ID), would not have been subject to the hours of service and would be logged as off-duty according to FMCSA guidance and interpretation. The driver had approximately 19.5 hours driving time on the 11-hour rule and approximately 40 hours on the 14-hour rule at the time of the crash. As stated above, the normal hours of service rules did not apply to this driver.

2.7. Pre-crash Driver Performance

During the post-crash examination of the 2019 Volvo, a Garmin GPS was discovered in the remains of the cab. Upon examination, it was determined that the GPS also included a forward-facing video camera had recorded numerous videos up to and including the impact with stopped traffic.

After examining the video, there were numerous times during the eastbound travel when the 2019 Volvo driver was drifting from lane to lane. For a more detailed description of these recorded incidents refer to the *Video Analysis Group Chairman’s Report*. The video segments conclude with impact and show that the 2019 Volvo was traveling at approximately 62 Mph.

3. Sleep Opportunities

In order to determine what opportunities, the driver had for sleep in the days leading up to the crash, staff considered the ELD information reflecting driving.

The cumulative information shows that the driver’s opportunity for rest was sporadic in the 48 hours leading up to the crash. The 2019 Volvo driver’s work/rest activity is displayed graphically below in **Table 3**.

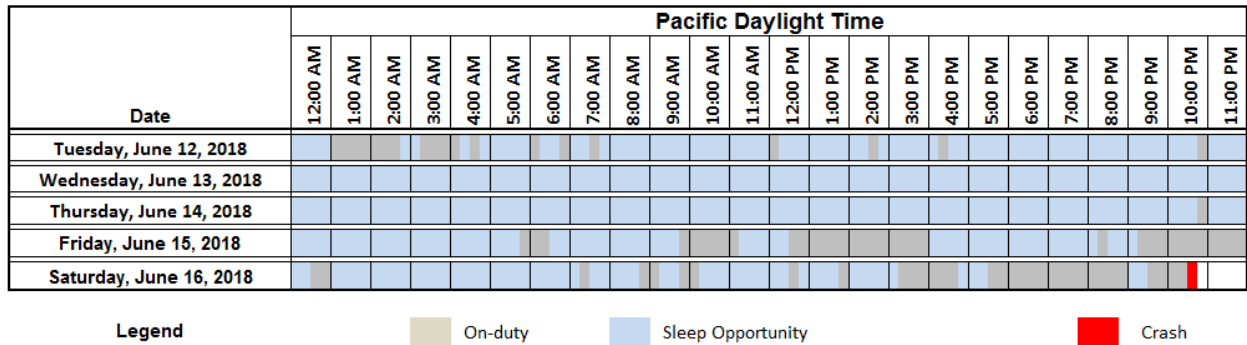


Table 3 2019 Volvo driver’s opportunity for rest

The day prior to the crash, the driver began work around 5:45 a.m. after driving for 45 minutes, the truck was then stopped for approximately 3.25 hours. The driver continued this fractured pattern of driving and stopping with the longest time stopped being 6.25 hours from 1:00 a.m. on June 16th to 7:15 a.m. The driver had been on-duty approximately 15.25 hours at the time of the crash. Due to a lack of additional information as to the driver’s activities, there was no way for investigators to narrow down the driver’s activities and actual rest time during the hours the 2019 Volvo was not in motion.

4. Zhuk Express LLC Company History and Operations

The second motor carrier involved in this crash was Zhuk Express LLC (Zhuk). According to FMCSA's MCMIS, the carrier was issued USDOT number 2888227. The carrier was registered as an Interstate "for-hire" motor carrier with a primary place of business in Vancouver, WA. The carrier had an active operating authority and had been issued MC number 969860. Zhuk was a "for-hire" carrier of freight. Per the carrier's latest MCS-150 and an interview with the owner, the carrier stated the carrier operated one truck-tractor and semi-trailer and only had one driver in its employ²⁰. Zhuk's business primarily transports produce from Washington state.

4.1. Hiring Process

There was no hiring process. The owner was the driver.

4.2. Carrier Safety Culture

The owner was interviewed and asked about the carrier's safety culture and any policies or additional safety training. The owner stated that all he did was "drive the truck" he was unaware that even though he was the only employee he had other obligations being the operator of the carrier. During the owner interview, it was determined that Zhuk had no training beyond his initial CDL training, the carrier lacked any safety policies, and did not maintain any of the required records beyond the regulatorily required controlled substance and alcohol policy required by CFR.

4.3. FMCSA Oversight

Zhuk had no alerts in any of the FMCSA's BASICs described in Section 1.3.2.

4.4. Compliance Review and SMS History

Zhuk had been in the New Entrant Program. FMCSA records indicated Zhuk entered the program on July 7, 2016 and exited the program on January 8, 2018 with a safety audit. The safety audit was an offsite audit²¹ conducted on April 20, 2017 by the Washington State Patrol at their offices in Vancouver, Washington. Prior to the crash, there had been no other FMCSA interaction with the carrier.

4.5. Roadside Inspections

The carrier had been subject to one roadside inspection prior to the crash. This inspection was on January 20, 2018 in Nebraska. The inspection was a Commercial Vehicle Safety Alliance (CVSA), Level 2-walk around inspection. As a result, the driver was cited for false records of duty status and operating without an ELD.

²⁰ See Motor Carrier Factors Attachment – MCS-150 Zhuk

²¹ In Washington an offsite audit is when the motor carrier brings all their documents to a location set by the Washington State Patrol. The investigator does not go to the carrier's PPOB (Principal Place of Business) to conduct the audit.

4.6. Controlled Substance and Alcohol Testing

The carrier's-controlled substance and alcohol policy met the requirements set forth in the CFR.

4.7. Hours of Service/Electronic Logging Device

As previously stated, a regulatory change effective December 18, 2017, under 49 CFR 395²² required carriers to install and maintain an Electronic Logging Device (ELD) to track the driver's hours of service. An ELD is a device or technology that automatically records a driver's driving time and facilitates the accurate recording of the driver's hours of service. There are certain parameters that would allow carriers to be exempt from the ELD requirements. These parameters include operating a commercial vehicle in a manner requiring completion of a record of duty status on not more than 8 days within any 30-day period; in a driveaway-towaway operation in which the vehicle being driven is part of the shipment being delivered; in a driveaway-towaway operation in which the vehicle being transported is a motor home or a recreation vehicle trailer; or in a commercial vehicle manufactured before model year 2000.

Neither the 2003 Volvo operated by Zhuk or the schedule of the driver met any of those parameters and was required to have an ELD to track the driver's hours of service. When investigators interviewed the owner, he stated that the carrier did not have an ELD installed in the 2003 Volvo. The owner state he had not equipped his truck with an ELD because his intent was to swap the engine to a year that did not require an ELD. He further stated that he had not changed the engine but was running paper logs contrary to 49CFR395.

5. 2003 Volvo Driver's History

The driver of the 2003 Volvo involved in this crash was a 35-year-old-male. At the time of the crash the driver held a valid Washington Class A CDL with an endorsement for double and triple trailers. The driver's Washington CDL was due to expire in October 2021. There were no restrictions on the driver's CDL.

A Commercial Vehicle Driver's License Information System (CDLIS) check on the driver showed 19 convictions from 2007 to 2017 and several withdrawals from 2009 to 2017. **Table 5** shows a summary of the violations. The driver had been subject to seven withdrawals. Five from Washington: four for Failing to make required payments of fines and one for an unsatisfied judgement. The remaining two were from Oregon: for failing to comply (fines) and for failing to file a medical certification. All withdrawals had been restored before the time of the crash.

²² <https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395>

Table 5. Summary of 2003 Volvo driver’s convictions

Date	State	Violation
November 5, 2012	Oregon	Failure to obey traffic signal
October 21, 2013	Kentucky	Failure to comply (fines/penalties)
February 28, 2014	Oregon	Failure to use snow chains
March 30, 2015	Oregon	Speeding
June 26, 2015	Oregon	Failure to comply (fines/penalties)
May 6, 2011	Washington	Speeding
October 21, 2010	Washington	Expired driver’s license
October 21, 2010	Washington	Speeding
October 21, 2010	Washington	Failure to show driver’s license
October 21, 2010	Washington	Expired driver’s license
September 16, 2010	Washington	Failure to maintain liability insurance
September 16, 2010	Washington	Failure to yield right of way
November 6, 2009	Washington	Speeding
May 26, 2005	Washington	Speeding
November 27, 2007	Oregon	Unsafe lane change
September 4, 2007	Washington	Speeding
January 8, 2007	Washington	Violation of driver’s permit
January 19, 2017	Washington	Failure to obey a traffic sign
April 12, 2017	Washington	Seatbelt not used

A copy of the driver’s Washington State Department of Licensing report was also obtained. It coincided with the violations listed in CDLIS and showed an additional violation on October 26, 2015 with an unspecified logbook violation in Clark County, Washington.

5.1. 2003 Volvo Driver’s Roadside Inspection History

While employed by Zhuk the driver was subject to two roadside inspections.

- On January 20, 2018 conducted by the Nebraska State Patrol at North Platte Highway 30. This was a CVSA level three (Driver Only Inspection).²³ The driver had three violations. Two violations were for false record of duty status (RODS) The driver was put Out of Service (OOS) for these violations in addition the driver was issue a citation. The third violation which was not an OOS violation was for operating without an ELD.
- On June 17, 2018 conducted by the Idaho State Police Commercial Vehicle Unit. This was a post-crash inspection listed as a CVSA level two (Walk Around) inspection. The driver had four violations, and the vehicle had thirteen violations.

²³ See CVSA.org for descriptions of the levels of CVSA Inspections.

5.2. 2003 Volvo Driver Controlled Substance and Alcohol Testing

The 2003 Volvo driver was subject to the requirements Title 49 CFR §382. The driver had a pre-employment test on July 11, 2016, this test was negative. The driver had one random drug test performed on March 18, 2017. The negative results were verified by the MRO on March 21, 2017. The carrier is part of the Clean Fleet DOT drug testing pool. This pool is for single owner/operators and small fleets that cannot be in a proprietary drug testing pool as required by Title 49 CFR Parts 40 and 382.²⁴

5.3. 2003 Volvo Driver's Hours of Service

In the seven days prior to crash the accident driver had been on duty for a total of 24:50 hours.²⁵ The record of duty status (logbook) for June 16, 2018 had been falsified per the driver's admission. When asked why he was falsifying his logs the driver stated he was driving to Mountain Home, ID to get his brother out of jail. **Table 6** is a summary of the 2003 Volvo Driver's recorded driving activity for 7 days prior to the crash

Table 6

Date	Times worked	Source Document	Total Hours
June 16, 2018	600 a.m. To 10:30 p.m. PDT: Crash occurs at 11:30 p.m. MDT	Paper Rods Driver's Statement	16.30 hours
June 15, 2018	Off Duty	Driver's Rods	None
June 14, 2018	Off Duty	Driver's Rods	None
June 13, 2018	Off Duty	Driver's Rods	None
June 12, 2018	Off Duty	Driver's Rods	None
June 11, 2018	Noon To 1:00 p.m.	Driver's Rods	1.00 Hour
June 10, 2018	12:00 p.m. to 7:00 a.m.	Driver's Rods	7.00 Hours

5.4. The Crash Trip

The crash trip started on June 16, 2018 at 0600 a.m. PDT. The crash happened at approximately 10:33pm PDT (11:33pm MDT) which meant he was at approximately 16.5 hours when the crash happened. He was currently in a 14-hour rule violation when the crash happened. The 2003 Volvo driver would have also been in violation of the 11-hour rule, but he was hauling pears, an agricultural commodity. Due to recent FMCSA interpretations both driver and carrier were exempt from hours of service when he got within 150 air miles of his pickup location. They were then exempt for 150 air miles when he left his pickup location. This potentially gave them approximately 300 air miles where the 2003 Volvo driver did not have to log driving time and should have listed it as off-duty time.

²⁴ See Motor Carrier Attachment- Clean Fleet Testing notice

²⁵ See Motor Carrier Attachment- Driver's Records of Duty Status.

The image below shows the 150-air mile exemption as it applies to the pick-up location of the pears that Zhuk was transporting. The pears were loaded in Peshatin, WA²⁶

Figure 2. 150 air-mile radius from Peshatin, WA



As the image shows the entire trip that Zhuk made from the start at 6:00am until approximately Meacham, OR was in the 150-air mile exemption. The distance from Meacham OR to the crash site is 187 miles and takes approximately 3.30 hours to drive. When interviewed the Zhuk driver was unaware of the agricultural exemption.

6. LIST OF ATTACHMENTS

- Motor Carrier Attachment - MCS-150 Krujex
- Motor Carrier Attachment - Krujex Post-crash Compliance Review
- Motor Carrier Attachment - Krujex MCMIS profile
- Motor Carrier Attachment - TIT Transportation Compliance Review
- Motor Carrier Attachment - MCS-150 Zhuk
- Motor Carrier Attachment - Clean Fleet Testing notice
- Motor Carrier Attachment - Driver's record of duty status
- Motor Carrier Attachment - Bill of lading for the pears

²⁶ See Motor Carrier Attachment- Bill of Lading for pears.

END OF REPORT

Shawn Currie
Highway Accident Investigator