MESILLA VALLEY TRANSPORTATION SOLUTIONS
CERTIFIED
Fuel Economy Experts

TEST REPORT

MVT SOLUTIONS CERTIFIED™ FUEL ECONOMY TEST FEBRUARY 2019

MICHELIN ENERGY GUARD

10.00 gal/1000 miles	0.84 MPG	8.75%

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1.0: INTRODUCTION

Mesilla Valley Transportation Solutions (MVTS) certifies the fuel savings from this product are as described in this report.

Note that this report was designed for carriers and providing information relevant to their needs. Therefore, the format varies from traditional fuel economy and technical reports.

The report Summary provides the reader a quick synopsis of the product's fuel savings. Following the Summary is the body of the report and further details on the subjects.

This fuel economy test was performed using MVTS proprietary fuel economy test methods. These test methods were developed from race car engineering and advanced vehicle test methods, which the Mesilla Valley Transportation (fleet) has relied on since 2012 to identify substantial fuel savings. The MVTS methods provide highly accurate and reliable answers on real-world fuel savings in comparison to other test methods, which enables carriers to make the best decisions for their company.

Contact MVTS with any questions regarding the product or test. As part of an MVTS Certified™ test, MVTS supports product inquiries, which we encourage carriers to utilize.

Note: blue text indicates a link to the topic. Click to follow. Alt + ← returns the reader to the initial location.

2.0: TEST SUMMARY

Michelin Energy Guard showed a fuel savings of **10.00 gal/1000 miles (8.75%)** on a modern Class-8 truck with a 53' van trailer. Repeating the same test with the tandems fully back, showed a fuel savings of **10.93 gal/1000 miles (9.36%).** Results for the Michelin Energy Guard can be found in Table 1 below. Tests were also conducted comparing the Michelin Energy Guard system to trailer skirt and boat tail configurations. Further information can be found in the Test Results section.

Table 1: Fuel Economy Test Results

	Fuel Economy Improvement		
	Gal/1000 miles	MPG	Percent
Michelin Energy Guard (Tandems at 40 ft.)	10.00	0.84	8.75%
Michelin Energy Guard (Tandems Fully Back)	10.93	0.89	9.36%

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3.0: TEST PROCEDURE

The two (2) vehicles ran simultaneously at 65 mph on the 9-mile circle track near Pecos, Texas. The vehicles were 1-minute apart, avoiding any aerodynamic influence on either vehicle during testing. The vehicles were termed “Compare Vehicle” and “Test Vehicle”. The Compare Vehicle remained unchanged throughout testing, it was used solely for comparison and included the Michelin Energy Guard system throughout testing. The Test Vehicle had modifications made during the test (*i.e.* test items changed from Michelin Energy Guard system, trailer skirts and boat tails).

The test procedure may appear similar to the SAE J1321 method traditionally used in the trucking industry; however, the MVTS methods are a much more advanced and precise form of on-road and track testing. The vehicles are equipped with sensors and data recording systems that collect data on fuel consumption, aerodynamics, rolling resistance, driver behavior and many other variables that affect fuel consumption. The data is analyzed using MVTS proprietary methods, which provide very accurate answers on fuel savings. Additionally, the test results can be scientifically translated to a carrier’s real-world daily operations and long-term savings, which is a feature unique to these methods. Overall, the MVTS test methods are a much more advanced and reliable tool for predicting fuel savings than the trucking industry has used previously.

Figure 1: Test Vehicles

3.1: TEST VEHICLES

Test vehicles were 2019 International LT's with Cummins X15 15-Liter engines and Eaton 10-Speed Automated Manual Transmissions (AMT). Trailers were 53' Hyundai dry vans. Gross Vehicle Weight (GVW) was 45,000 lbs. As mentioned above, the Compare trailer had the Michelin Energy Guard aerodynamic system installed throughout the tests, as shown in Figure 2 below. The test vehicle was changed between the Michelin Energy Guard system, trailer skirts, and boat tails. Trucks and trailers used Wide-Based-Single (WBS) tires. Vehicle and tire details can be found in the Appendix. Tractor-to-trailer gap was 36-inches from the rear of the cab extender to the front of the trailer.

Tire pressures were set at 110 psi in the morning, prior to incurring any effect of daytime heat.

Vehicles were thoroughly inspected and received regular maintenance prior to testing. It should also be noted, for the reader's piece of mind, Mesilla Valley Transportation (MVT) and MVT Solutions are 100% confident in the reliable condition of the test vehicles. MVT fleet uses the same vehicle data and test procedures for their own internal purchase decisions.

Figure 2: Test Trailers with Michelin Energy Guard Installed

3.1a: MICHELIN ENERGY GUARD KIT

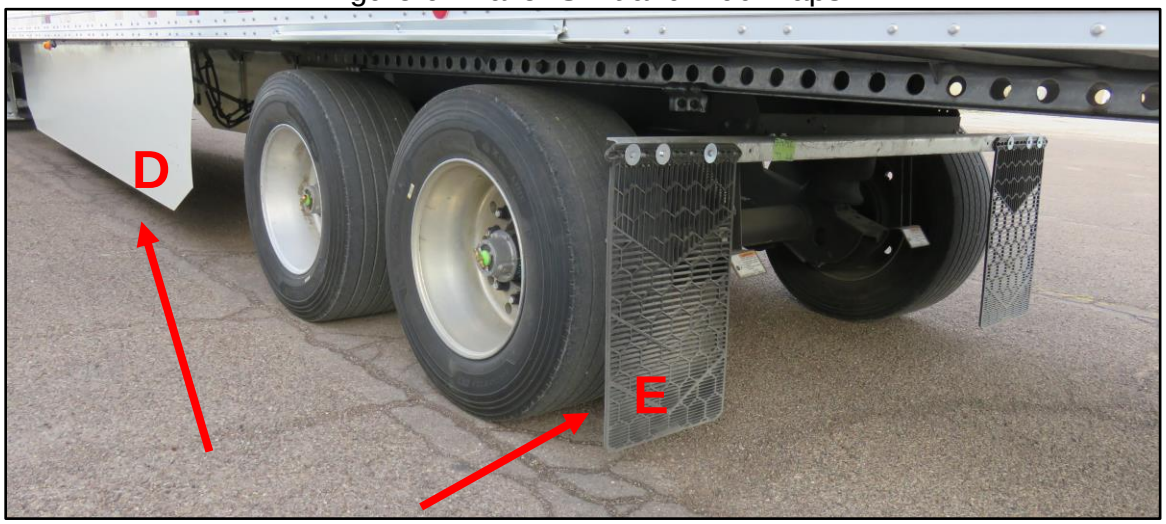
The Michelin Energy Guard kit has several components: trailer end fairing sides (A) and top (B), wake reducer (C), trailer skirts (D) and mud flaps (E) (Figure 3 - Figure 6).

Figure 3: End Fairings (Side)

Figure 4: End Fairings (Top)

Figure 5: Wake Reducer

Figure 6: Trailer Skirt and Mud Flaps



3.2: VEHICLE FUEL ECONOMY TEST EQUIPMENT

MVT Solutions fuel economy testing utilizes a data acquisition system and sensors specifically for this testing. This style of testing is derived from race car engineering where reliable sensor data is critical to understanding vehicle modifications.

MVTS test sensors include:

- Data acquisition system (records sensor data)
- Fuel flow meter (accurate to 0.2%)
- Fuel temperature sensor

- Tire temperature sensor (infrared, mounted on left-front drive tire)
- Ground/road temperature sensor (infrared, mounted ahead of left-front drive tire)
- Wind speed air pressure sensor (truck hood)
- Wind direction sensor (truck hood)
- Ambient air temperature sensor (truck hood)
- Ambient air pressure sensor (truck cab)
- High Precision GPS (latitude, longitude, altitude, time)

Click this link to see a video of MVTS sensors and testing: How We Test

Figure 7: Aerodynamic Sensors (air speed/direction/temperature)

Figure 8: Data Acquisition System

Figure 9: Fuel Flow Meter

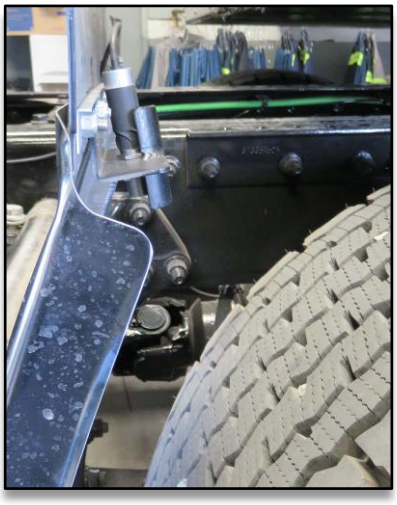
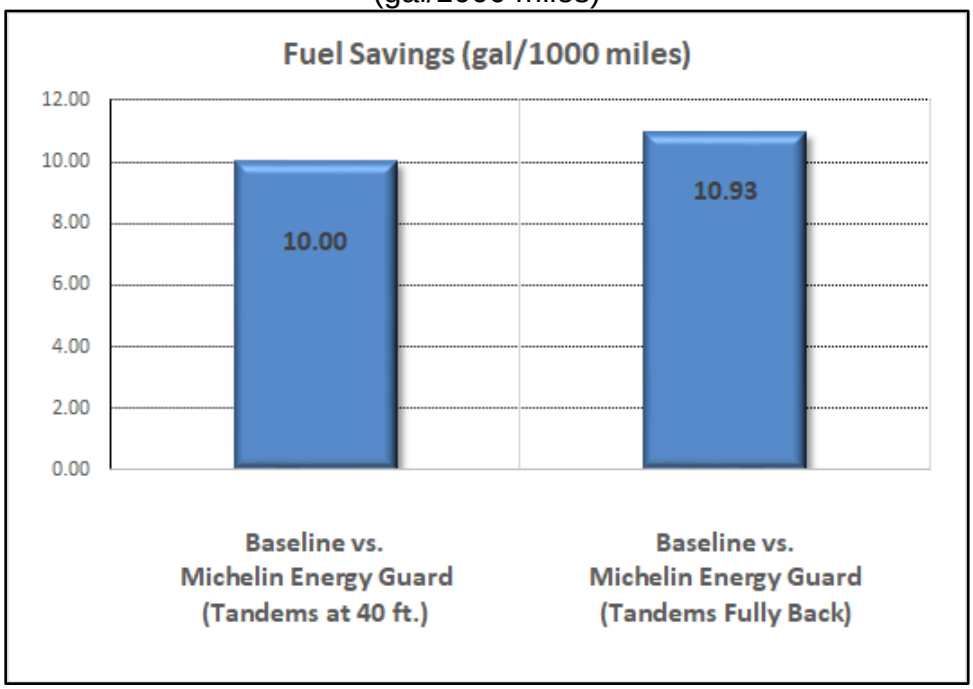


Figure 10: Tire Temp. Sensor

4.0: TEST RESULTS

As listed in the Summary, Michelin Energy Guard showed a fuel savings of 10.00 gal/1000 miles (8.75%) on a modern Class-8 truck with a 53' van trailer with tandems at the 40 ft. mark (Figure 14). Repeating the test with the tandems fully back resulted in a fuel savings of 10.93 gal/1000 miles (9.36%) (Figure 15). Results are shown below in Figure 11 and Table 2, which includes test accuracy and baseline fuel economy values.

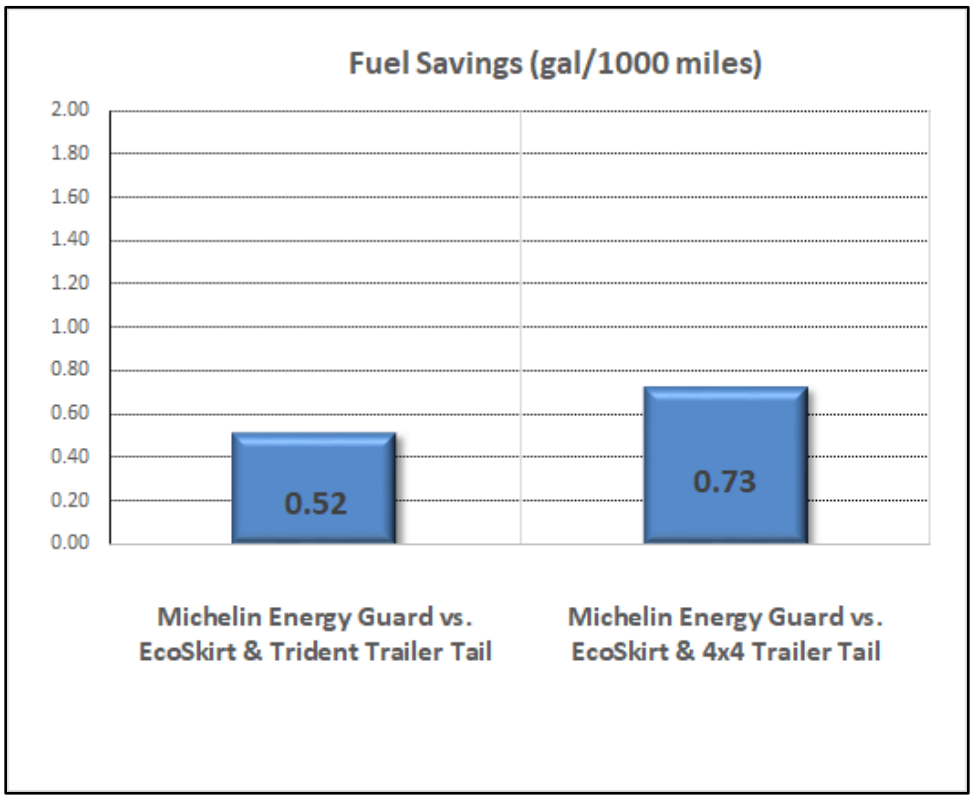
Figure 11: Michelin Energy Guard Fuel Savings with Tandems at Different Lengths (gal/1000 miles)



4.1: MICHELIN ENERGY GUARD VS. TRAILER SKIRTS & BOAT TAILS

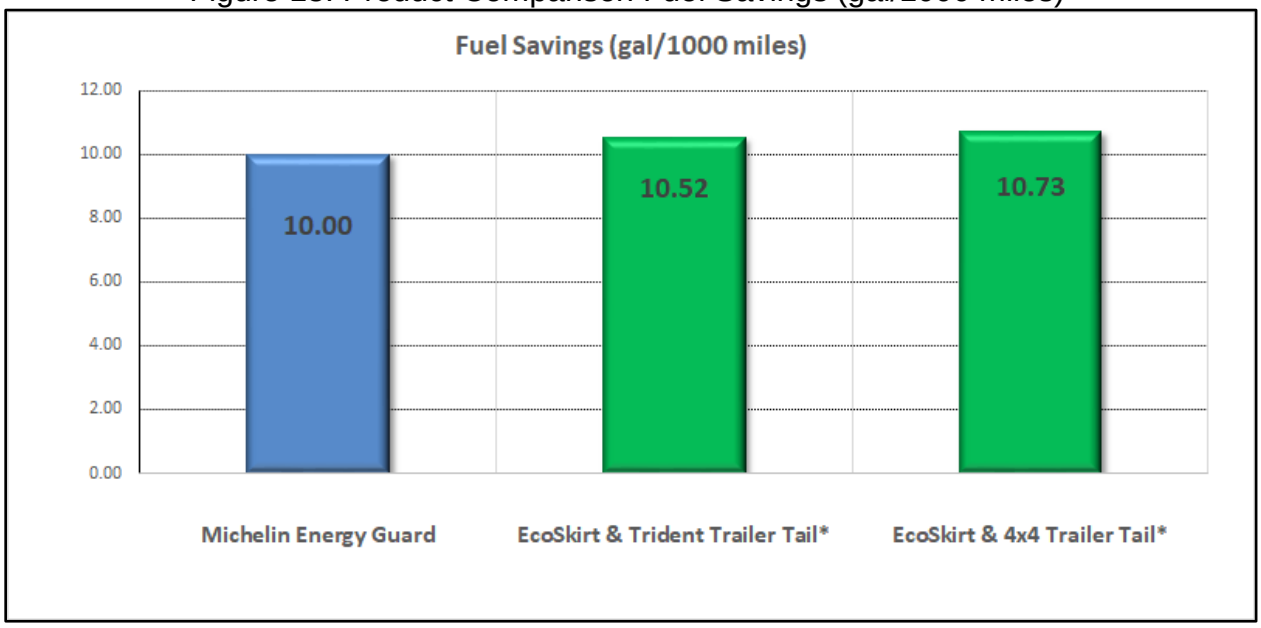
The Michelin Energy Guard system was also tested in comparison to trailer skirts and boat tail configurations. The baseline run consisted of both vehicles being equipped with Michelin Energy Guard systems; therefore, fuel savings of the skirt and boat tail configurations were measured in comparison to the Michelin system. The Michelin Energy Guard versus EcoSkirt & Trident Trailer Tail showed the latter to have a fuel saving advantage of 0.52 gal/1000 miles (0.51%) over the Michelin system. The Michelin Energy Guard versus EcoSkirt & 4x4 Trailer Tail showed the latter to have a fuel saving advantage of 0.73 gal/1000 miles (0.71%) over the Michelin system. Results are shown below in Figure 12 and Table 2, which includes test accuracy and baseline fuel economy values.

Figure 12: Relative Fuel Savings of Michelin Energy Guard vs. Trailer Skirts and Boat Tail



To compare total fuel savings of the Michelin system versus trailer skirts and boat tail configurations, the relative values shown in Figure 12 were added to the Michelin test value of 10.00 gal/1000 miles. This is shown below in Figure 13.

Figure 13: Product Comparison Fuel Savings (gal/1000 miles)



*Values shown represent total fuel savings as Michelin Energy Guard tested value (10.00 gal/1000 miles), plus relative difference to product combination listed (EcoSkirt & Trident Trailer Tail 0.52 gal/1000 miles and EcoSkirt & 4x4 Trailer Tail 0.73 gal/1000 miles).

All tests comparing Michelin Energy Guard to trailer skirts and boat tail configurations consisted of the trailer tandems set at the 40 ft. mark. **Note**: mud flaps for the trailer skirt and boat tail tests were solid 24-inch width flaps.

Table 2: Fuel Economy Test Results with Accuracy

	Fuel Economy Improvement		
	Gal/1000 miles	MPG	Percent
Michelin Energy Guard (Tandems at 40 ft.)	**10.00**	0.84	8.75%
Accuracy	**+/- 0.48**	+/- 0.04	+/- 0.42%
Baseline	**114.25**	8.75	8.75 mpg
Michelin Energy Guard (Tandems Fully Back)	**10.93**	0.89	9.36%
Accuracy	**+/- 0.30**	+/- 0.02	+/- 0.26%
Baseline	**116.68**	8.57	8.57 mpg
EcoSkirt & Trident Tail	**0.52**	0.05	0.51%
Accuracy	**+/- 0.26**	+/- 0.03	+/- 0.25%
Baseline	**101.88**	9.82	9.82 mpg
EcoSkirt & 4x4 Tail	**0.73**	0.07	0.71%
Accuracy	**+/- 0.31**	+/- 0.03	+/- 0.31%
Baseline	**101.88**	9.82	9.82 mpg

Figure 14: Michelin Energy Guard, Tandems 40 ft. Mark

Figure 15: Michelin Energy Guard, Tandems Fully Back

Figure 16: Test Vehicle with Trident Trailer Tail

Figure 17: Test Vehicle with 4x4 Trailer Tail

Figure 18: Test Vehicle with EcoSkirt & Trident Tailer Tail

4.2: UNITS OF MEASUREMENT

The reader may not be familiar with units of gal/1000 miles (gallons per 1000 miles) since it is not traditionally used in the trucking industry. The following paragraphs briefly explain the reasons for these units and how they help carriers better calculate fuel savings.

Units of gal/1000 miles more reliably calculate fuel savings when compared to other units such as miles-per-gallon (MPG) and percent (%). Those units are prone to error from changing variables such as vehicle baseline fuel economy, load, driver behavior, and duty cycle. For example, gal/1000 miles values are not affected by load for an aerodynamic product. Any empty Class-8 unit at 34,000 lbs. will save the same fuel in gal/1000 miles as one loaded to 80,000 lbs. However, when viewed in percent (%) or MPG the values change with load. This causes a carrier to experience varied results in real-world operation and difficulty predicting the financial benefits of the product unless units of gal/1000 miles are used.

Units of gal/1000 miles are the most reliable units of measurement for aerodynamic fuel savings due to their scientific and mathematical relationship to fuel consumption. Further detail is beyond the scope of this report and the reader is encouraged to contact MVT Solutions if more information is desired.

4.3: WEATHER CONDITIONS SUMMARY

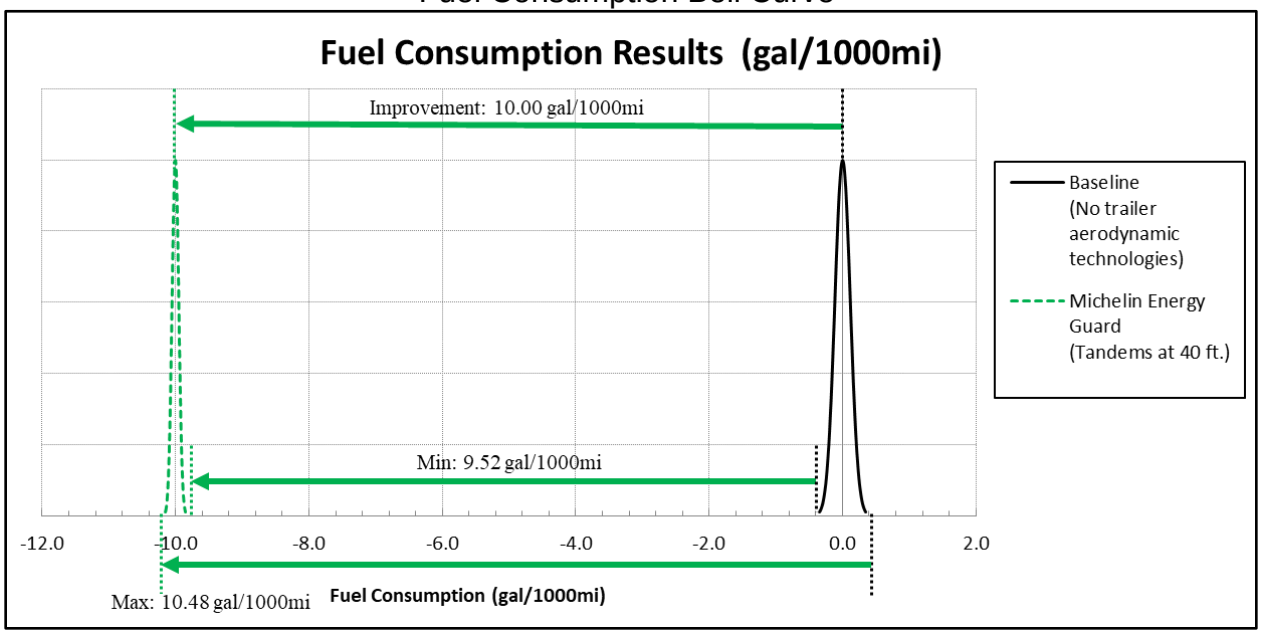
Weather during testing was relatively cool with moderate winds. Temperatures ranged from 48.0°F to 72.0°F. Winds ranged from 0 mph to 15 mph. It should be noted that the MVTS test methods account for these variables and their effects on fuel savings. Therefore, the range in climate conditions did not impede the test results shown in this report. Complete weather data can be found in the Appendix.

4.4: MEASUREMENT ACCURACY

The accuracy of fuel economy measurements is critical in determining the trustworthiness of test results. Historically, this has been a major difficulty in the trucking industry with fuel economy testing, which has led to confusion and misleading results. The MVTS test methods overcome this issue by achieving better accuracy, which is one of the ways it provides more reliable test results.

Figure 19 below shows the statistical bell curves of the Michelin Energy Guard system. The Baseline test and The Michelin Energy Guard test clearly shows two separate bell curves, indicating the test had valid accuracy and Michelin Energy Guard results were reliable. The distance between the peaks of the bell curves is the test result average fuel savings value, which in this test was 10.00 gal/1000 miles. **Note** that the Michelin Energy Guard System is on the left of the graph, illustrating less fuel used (fuel savings) and thereby an improvement as indicated by the arrow on the graph. Minimum and maximum values were calculated as the test result plus or minus the accuracy value (10.00 +/- 0.48), which were 10.48 and 9.52 gal/1000 miles.

Figure 19: Michelin Energy Guard (Tandems at 40 ft.)
Fuel Consumption Bell Curve



Accuracy for the tests was calculated using a 95% confidence interval, a common standard for testing measurement. 95% confidence interval indicates that if the test was repeated 100 times, values would fall within the range in 95 out of the 100 tests (*i.e.* the reader would be 95% confident the value would be within that range).

Figure 20 below illustrates the statistical bell curve for the Michelin Energy Guard System with tandems fully back. Similar to the previous graph, the bell curves illustrate a clear difference in fuel economy. The fuel savings at this gap was 10.93 gal/1000 miles. As shown above, the minimums and maximums are the test results plus or minus the accuracy value (10.93 +/- 0.30), which were 11.23 and 10.63 gal/1000 miles.

Figure 20: Michelin Energy Guard (Tandems Fully Back)
Fuel Consumption Bell Curve

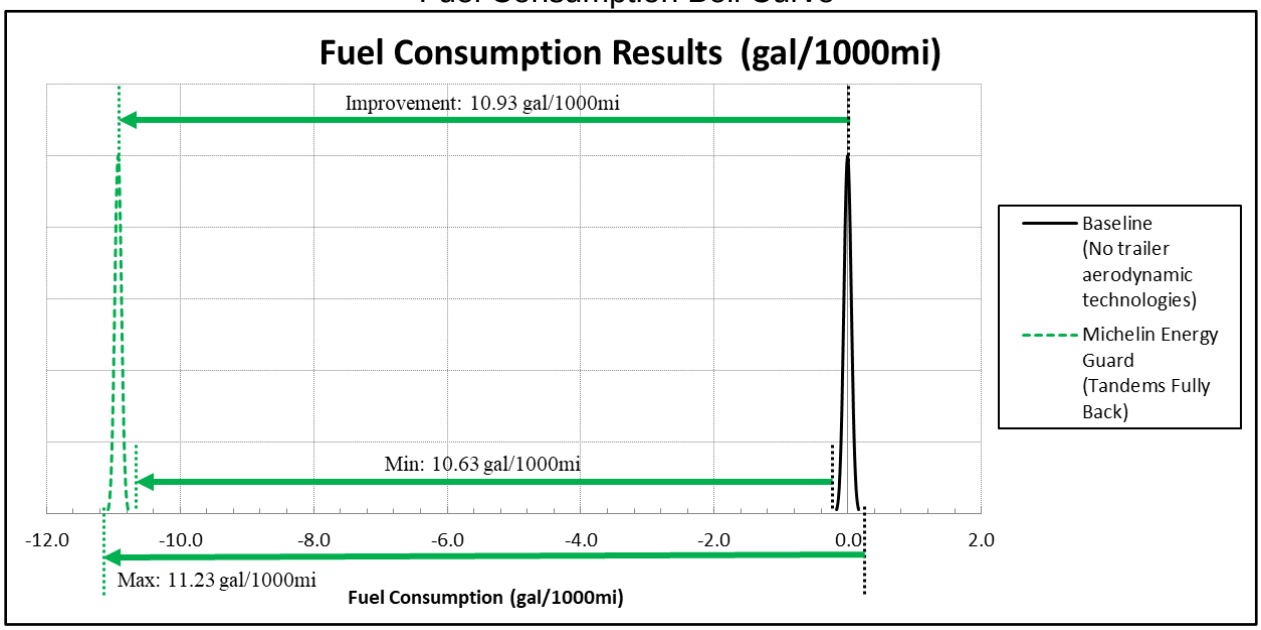


Figure 21 below illustrates the statistical bell curve for the EcoSkirt & Trident Tail. The fuel savings at this gap was 0.52 gal/1000 miles. Once again, the minimums and maximums are the test results plus or minus the accuracy value (0.52 +/- 0.26), which were 0.78 and 0.26 gal/1000 miles.

Figure 21: EcoSkirt & Trident Trailer Tail Fuel Consumption Bell Curve

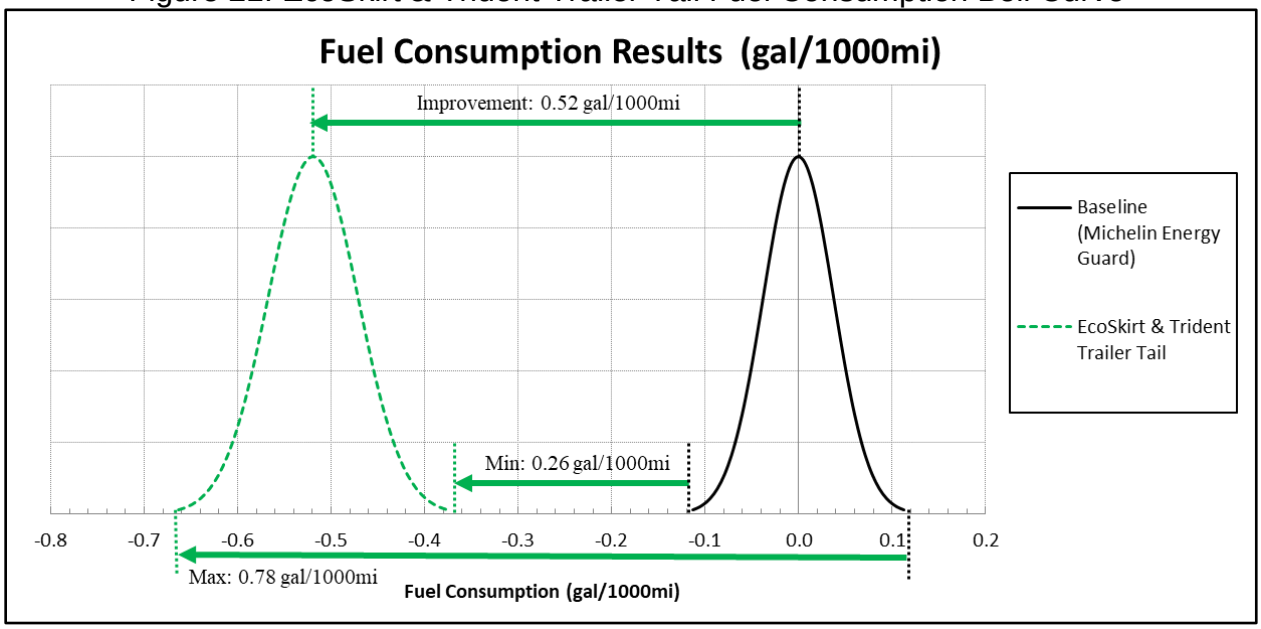
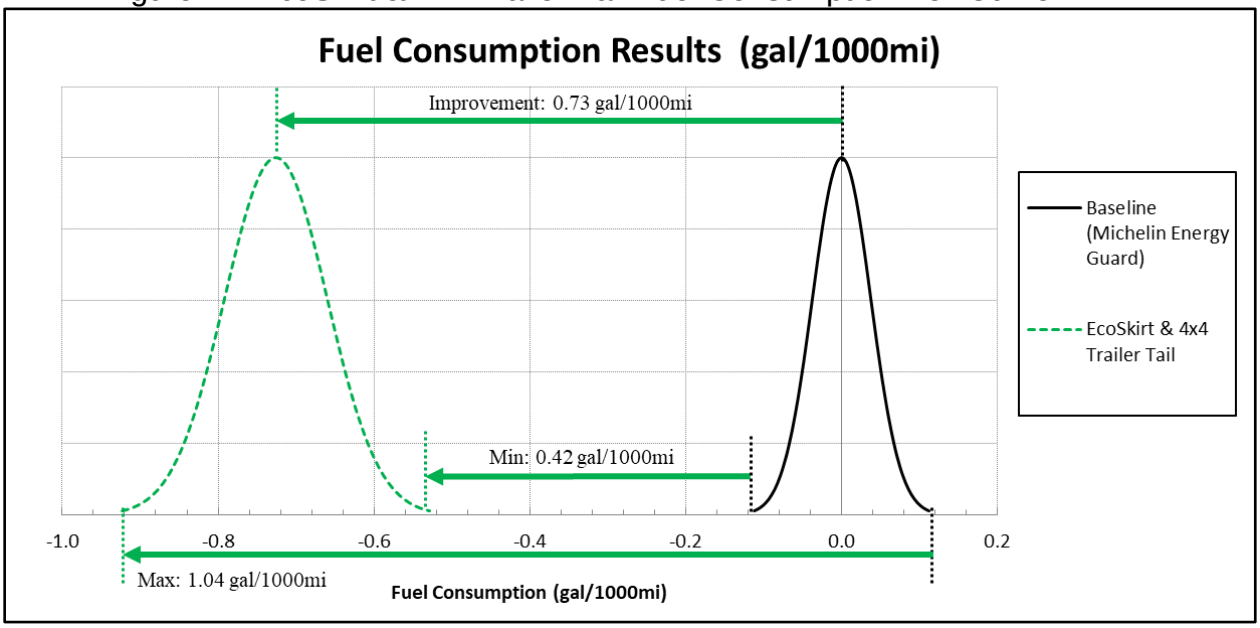


Figure 22 below illustrates the statistical bell curve for the EcoSkirt & 4x4 Tail. The fuel savings at this gap was 0.73 gal/1000 miles. Once again, the minimums and maximums

are the test results plus or minus the accuracy value (0.73 +/- 0.31), which were 1.04 and 0.42 gal/1000 miles.

Figure 22: EcoSkirt & 4x4 Trailer Tail Fuel Consumption Bell Curve



5.0: CONCLUSION

In summary, testing proved that the Michelin Energy Guard aerodynamic system provides fuel savings with answers that were clear and precise. The Energy Guard system was tested on a Class-8 tractor with a 53' dry van trailer and showed a fuel savings of 10.00 gal/1000 miles (8.75%).

Testing showed moving the tandem fully back increased the fuel savings of the Energy Guard system to 10.93 gal/1000 miles (9.36%).

The Michelin Energy Guard system showed comparable fuel savings to trailer skirt and boat tail configurations. EcoSkirts and a Trident Trailer Tail showed a fuel saving advantage of 0.52 gal/1000 miles (0.51%) over the Michelin Energy Guard system. EcoSkirts and a 4x4 Trailer Tail showed a fuel saving advantage of 0.73 gal/1000 miles (0.71%) over the Michelin Energy Guard system.

The test values shown can be used to estimate a carrier's savings in real-world operations. More precision can be obtained by using a carrier's vehicle and duty cycle information. Contact MVT Solutions for assistance or more information.

6.0: APPENDIX

6.1: COMPARE TRUCK/TRAILER VEHICLE DETAILS

Figure 23: Vehicle Info, Compare Vehicle

Date	February 14-15, 2019			
Company	Mesilla Valley Transportation			
Location	Pecos, Texas			
Test Route	Pecos 9-mile Test Track			
TRUCK ID:	**2519P**			
Brand	International			
Year	2019			
Model	LT			
Engine	Cummins X15			
VIN	3HSKZAPR0KN391080			
Mileage (miles):	120,747			
Transmission	10-Speed Eaton AMT			
Rear Gear	2.31			
Fuel Load	Full at T/A Las Cruces prior to On-Road test			
Fuel Type & Batch	No. 2 diesel			
Axle Weights	12,000	16,740	16,220	
Total weight	44,960			
Wheel covers off, solid mud flaps				
Photo/Video/Audio folder name:				
TRAILER ID:	**7224**			
Model	Hyundai			
VIN	3H3V532C4KT922005			
Year	2019			
Size	53' Dry Van			
Trailer Gap (inches)				
Add-ons				

Figure 24: Tire Info, Compare Vehicle

TIRES			
	Truck	2519P	
LF:	**Front Axle Tires**		RF: Same
Michelin X Line Energy	Type		Michelin X Line Energy
275/80R22.5	Size		275/80R22.5
11/32	Tread Depth (32nds)		11/32
110	Pressure (psi)		110
LF Drive:	**Drive Axle Tires**		RF Drive: Same
Michelin X One XDN2	Type		Michelin X One XDN2
445/50R22.5	Size		445/50R22.5
14/32	Tread Depth (32nds)		11/32
110	Pressure (psi)		110
LF Drive:	**Rear Axle Tires**		RF Drive: Same
Michelin X One Line Energy	Type		Michelin X One Line Energy
445/50R22.5	Size		445/50R22.5
10/32	Tread Depth (32nds)		9/32
110	Pressure (psi)		110
	Trailer	7224	
LF	**Tandem Front**		RF
Michelin X One Line Energy	Type		Michelin X One Line Energy
445/50R22.5	Size		445/50R22.5
13/32	Tread Depth (32nds)		13/32
110	Pressure (psi)		110
LR	**Tandem Rear**		RR
Michelin X One Line Energy	Type		Michelin X One Line Energy
445/50R22.5	Size		445/50R22.5
13/32	Tread Depth (32nds)		13/32
110	Pressure (psi)		110

6.2: MODIFIED TRUCK/TRAILER VEHICLE DETAILS

Figure 25: Vehicle Info, Modified Vehicle

Date	February 14-15, 2019					
Company	Mesilla Valley Transportation					
Location	Pecos, Texas					
Test Route	Pecos 9-mile Test Track					
TRUCK ID:	**2493P**					
Brand	International					
Year	2019					
Model	LT					
Engine	Cummins X15					
VIN	3HSKZAPRXKN391071					
Mileage (miles):	109,470					
Transmission	10-Speed Eaton AMT					
Rear Gear	2.31					
Fuel Load	Full at T/A Las Cruces prior to On-Road test					
Fuel Type & Batch	No. 2 diesel					
Axle Weights	11,900		17,060		16,080	
Total weight	45,040					
Wheel covers off, solid mud flaps.						
Photo/Video/Audio folder name:						
TRAILER ID:	**7233**					
Model	Hyundai					
VIN	3H3V532C5KT922014					
Year	2019					
Size	53' Dry Van					
Trailer Gap (inches)						
Add-ons	solid mud flaps					

Figure 26: Tire Info, Modified Vehicle

TIRES

	Truck 2493P	
LF:	**Front Axle Tires**	RF: Same
Michelin X Line Energy	Type	Michelin X Line Energy
275/80R22.5	Size	275/80R22.5
13/32	Tread Depth (32nds)	12/32
110	Pressure (psi)	110
LF Drive:	**Drive Axle Tires**	RF Drive: Same
Michelin X One XDN2	Type	Michelin X One XDN2
445/50R22.5	Size	445/50R22.5
16/32	Tread Depth (32nds)	14/32
110	Pressure (psi)	110
LF Drive:	**Rear Axle Tires**	RF Drive: Same
Michelin X One Line Energy	Type	Michelin X One Line Energy
445/50R22.5	Size	445/50R22.5
7/32	Tread Depth (32nds)	10/32
110	Pressure (psi)	110
	Trailer 7233	
LF	**Tandem Front**	RF
Michelin X One Line Energy	Type	Michelin X One Line Energy
445/50R22.5	Size	445/50R22.5
12/32	Tread Depth (32nds)	13/32
110	Pressure (psi)	110
LR	**Tandem Rear**	RR
Michelin X One Line Energy	Type	Michelin X One Line Energy
445/50R22.5	Size	445/50R22.5
13/32	Tread Depth (32nds)	13/32
110	Pressure (psi)	110

6.3: TEST ROUTE

Pecos, Texas 9-mile circle track. Counter-clockwise direction, middle lane (of 3).

Figure 27: Pecos Test Track

6.4: SAVINGS CALCULATIONS

Below is a brief outline of how to use the test results to calculate savings. For more detail or assistance contact MVT Solutions.

6.4a: Fuel Savings Calculations

Fuel savings resulting from this test can be calculated as follows:

Test result (gal/1000 miles) x Thousands of miles travelled per year, per vehicle

Example: Michelin Energy Guard fuel savings = 10 gal/1000 miles. If a vehicle travels 125,000 miles per year, fuel savings are:

10 x 125 = 1,250 gallons saved annually

6.4b: FINANCIAL SAVINGS CALCULATIONS

Financial calculations can be made by multiplying the fuel saved by the fuel price. Using the U.S. average retail price of diesel fuel in 2018, $3.178 /gal:

1,250 gallons/year x $3.178 /gal = $3,972 /year in fuel savings

To continue calculating the net financial savings requires input of the product investment, fleet trailer-to-truck ratio and other pertinent variables unique to each carrier. Contact MVTS for assistance if required.

6.4c: TECHNOLOGY PAYBACK AND RETURN-ON-INVESTMENT

Buyers of fuel economy technologies are most interested in saving money. For a technology supplier to be successful, their technology must save their potential customers money.

a) Fuel savings (per year) = (gal/1000 miles) x (vehicle miles per year) / 1000

b) Dollar savings (per year) = (Fuel savings (per year)) x (Price of fuel per gallon)

c) Payback (months) = (Product cost) / (Dollar savings per month)

6.5: WEATHER CONDITIONS

Weather during testing was relatively cool with moderate wind. Weather data was acquired from a local Weather Underground weather station. Source shown below.

The reader should be aware that MVTS methods include instantaneous and constant weather data acquisition on each vehicle, and this testing has minimal dependency on external weather data collection. MVTS test data accounts for changes in wind, temperature, and other pertinent variables instantaneously. Note, darkened rows pertain to test times.

Table 3: Test Run Times

	Begin	End
February 13, 2019		
Michelin Energy Guard (Tandems at 40 ft.)	6:43 P.M.	7:47 P.M.
Baseline Run (No trailer aerodynamic technologies)	1:37 A.M.	2:28 A.M.
Michelin Energy Guard (Tandems Fully Back)	3:45 A.M.	4:35 A.M.
February 14, 2019		
EcoSkirt & Trident Tail	6:30 P.M.	7:27 P.M.
EcoSkirt & 4x4 Tail	12:25 A.M.	1:17 A.M.
Baseline Run (Michelin Energy Guard)	3:29 A.M.	4:22 A.M.

Table 4: Weather Data, Feb. 13

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Precip Accum	Condition
12:15 AM	35 F	19 F	53 %	CALM	0 mph	0 mph	27.5 in	0.0 in	0.0 in	Fair
12:35 AM	34 F	19 F	53 %	CALM	0 mph	0 mph	27.5 in	0.0 in	0.0 in	Fair
12:55 AM	33 F	19 F	56 %	SSE	5 mph	0 mph	27.5 in	0.0 in	0.0 in	Fair
1:15 AM	31 F	19 F	59 %	S	5 mph	0 mph	27.5 in	0.0 in	0.0 in	Fair
1:35 AM	30 F	17 F	60 %	SSW	7 mph	0 mph	27.5 in	0.0 in	0.0 in	Cloudy
1:55 AM	29 F	16 F	58 %	SSW	3 mph	0 mph	27.5 in	0.0 in	0.0 in	Cloudy
2:15 AM	27 F	14 F	58 %	S	3 mph	0 mph	27.5 in	0.0 in	0.0 in	Cloudy
2:35 AM	27 F	14 F	58 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
2:55 AM	26 F	13 F	58 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
3:15 AM	27 F	15 F	59 %	W	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
3:35 AM	28 F	15 F	59 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Partly Cloudy
3:55 AM	28 F	14 F	56 %	WNW	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Partly Cloudy
4:15 AM	28 F	14 F	55 %	WNW	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Partly Cloudy
4:35 AM	28 F	15 F	57 %	WNW	6 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
4:55 AM	28 F	15 F	59 %	NNW	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
5:15 AM	28 F	16 F	61 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
5:35 AM	26 F	14 F	60 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
5:55 AM	26 F	15 F	62 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
6:15 AM	24 F	14 F	64 %	WNW	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
6:35 AM	24 F	14 F	66 %	WNW	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
6:55 AM	25 F	14 F	64 %	WNW	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
7:15 AM	27 F	16 F	63 %	NW	5 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
7:35 AM	27 F	16 F	64 %	WNW	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
7:55 AM	27 F	16 F	63 %	NW	6 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
8:15 AM	28 F	17 F	63 %	NW	6 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
8:35 AM	30 F	17 F	60 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
8:55 AM	30 F	17 F	59 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
9:15 AM	31 F	18 F	58 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
9:35 AM	33 F	19 F	56 %	WNW	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
9:55 AM	36 F	19 F	51 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
10:15 AM	39 F	20 F	46 %	W	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Cloudy
10:35 AM	43 F	21 F	42 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
10:55 AM	45 F	21 F	39 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
11:15 AM	48 F	22 F	35 %	N	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
11:35 AM	50 F	21 F	32 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
11:55 AM	52 F	20 F	28 %	CALM	0 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
12:15 PM	55 F	19 F	25 %	NE	3 mph	0 mph	27.4 in	0.0 in	0.0 in	Fair
12:35 PM	57 F	19 F	23 %	CALM	0 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
12:55 PM	59 F	19 F	21 %	E	5 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
1:15 PM	62 F	19 F	20 %	CALM	0 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
1:35 PM	64 F	20 F	19 %	E	6 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
1:55 PM	65 F	20 F	18 %	CALM	0 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
2:15 PM	66 F	20 F	17 %	E	5 mph	0 mph	27.3 in	0.0 in	0.0 in	Fair
2:35 PM	68 F	20 F	16 %	ENE	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
2:55 PM	70 F	20 F	15 %	E	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
3:15 PM	72 F	20 F	14 %	ESE	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
3:35 PM	73 F	20 F	14 %	SSE	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
3:55 PM	74 F	20 F	13 %	E	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
4:15 PM	74 F	22 F	14 %	SSE	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
4:35 PM	74 F	21 F	14 %	S	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
4:55 PM	73 F	22 F	14 %	WNW	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
5:15 PM	73 F	22 F	15 %	CALM	0 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
5:35 PM	73 F	22 F	15 %	CALM	0 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
5:55 PM	72 F	22 F	15 %	SW	3 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
6:15 PM	68 F	23 F	18 %	W	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
6:35 PM	68 F	23 F	18 %	SW	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
6:55 PM	67 F	23 F	19 %	WSW	10 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
7:15 PM	65 F	23 F	21 %	WSW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
7:35 PM	66 F	24 F	20 %	WSW	15 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
7:55 PM	65 F	24 F	21 %	SW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:15 PM	63 F	24 F	22 %	WSW	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:35 PM	62 F	24 F	24 %	WSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:55 PM	59 F	24 F	26 %	WSW	8 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:15 PM	58 F	24 F	27 %	SW	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:35 PM	58 F	24 F	27 %	WSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
9:55 PM	57 F	24 F	28 %	SW	10 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
10:15 PM	54 F	24 F	31 %	SW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
10:35 PM	53 F	24 F	32 %	SW	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
10:55 PM	51 F	24 F	34 %	WSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
11:15 PM	51 F	24 F	35 %	WSW	8 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
11:35 PM	49 F	24 F	37 %	SSW	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
11:55 PM	50 F	23 F	35 %	E	5 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair

Source: https://www.wunderground.com/history/daily/us/tx/pecos/KPEQ/date/2019-2-13

Table 5: Weather Data, Feb. 14

Time	Temperature	Dew Poir	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Precip Accum	Condition
12:15 AM	49 F	23 F	36 %	SE	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
12:35 AM	49 F	24 F	37 %	SSW	8 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
12:55 AM	51 F	24 F	34 %	SSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
1:15 AM	51 F	24 F	35 %	S	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
1:35 AM	48 F	24 F	39 %	SSW	5 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
1:55 AM	51 F	24 F	35 %	SW	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
2:15 AM	48 F	25 F	39 %	SW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
2:35 AM	53 F	25 F	34 %	SSW	3 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
2:55 AM	48 F	27 F	44 %	CALM	0 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
3:15 AM	52 F	25 F	35 %	SW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
3:35 AM	51 F	25 F	35 %	SSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
3:55 AM	52 F	26 F	36 %	S	5 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
4:15 AM	53 F	26 F	34 %	SSW	10 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
4:35 AM	57 F	26 F	30 %	SSW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
4:55 AM	56 F	26 F	31 %	SSW	12 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
5:20 AM	55 F	26 F	32 %	SSW	12 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
5:35 AM	55 F	26 F	33 %	SW	14 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
5:55 AM	58 F	26 F	29 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
6:15 AM	56 F	26 F	31 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
6:35 AM	58 F	26 F	29 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
6:55 AM	58 F	26 F	29 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
7:15 AM	59 F	26 F	28 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
7:35 AM	57 F	26 F	30 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
7:55 AM	59 F	26 F	28 %	SW	14 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:15 AM	60 F	26 F	27 %	SW	12 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:35 AM	61 F	26 F	27 %	SW	10 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
8:55 AM	63 F	26 F	25 %	WSW	14 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:15 AM	65 F	25 F	22 %	SW	14 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:35 AM	67 F	25 F	21 %	WSW	20 mph	24 mph	27.2 in	0.0 in	0.0 in	Fair
9:55 AM	69 F	25 F	19 %	WSW	23 mph	26 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
10:15 AM	68 F	24 F	19 %	WSW	16 mph	26 mph	27.2 in	0.0 in	0.0 in	Fair
10:35 AM	69 F	23 F	18 %	WSW	18 mph	23 mph	27.2 in	0.0 in	0.0 in	Fair
10:55 AM	71 F	22 F	16 %	WSW	23 mph	30 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
11:15 AM	72 F	19 F	13 %	WSW	25 mph	30 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
11:35 AM	72 F	18 F	13 %	WSW	23 mph	31 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
11:55 AM	72 F	18 F	13 %	WSW	24 mph	31 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
12:15 PM	73 F	18 F	13 %	W	25 mph	31 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
12:35 PM	73 F	18 F	12 %	W	25 mph	31 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
12:55 PM	74 F	19 F	12 %	WSW	23 mph	31 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
1:15 PM	74 F	19 F	12 %	WSW	22 mph	25 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
1:35 PM	75 F	20 F	13 %	W	21 mph	28 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
1:55 PM	76 F	23 F	14 %	W	22 mph	26 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
2:15 PM	76 F	23 F	14 %	W	24 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
2:35 PM	76 F	23 F	14 %	W	23 mph	31 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
2:55 PM	77 F	23 F	14 %	W	24 mph	29 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
3:15 PM	79 F	23 F	13 %	WSW	22 mph	28 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
3:35 PM	80 F	25 F	13 %	W	22 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy / Windy
3:55 PM	79 F	25 F	14 %	W	17 mph	24 mph	27.1 in	0.0 in	0.0 in	Cloudy
4:15 PM	78 F	25 F	14 %	WSW	21 mph	26 mph	27.1 in	0.0 in	0.0 in	Cloudy / Windy
4:35 PM	79 F	26 F	14 %	WSW	18 mph	26 mph	27.1 in	0.0 in	0.0 in	Fair
4:55 PM	78 F	26 F	15 %	WSW	18 mph	26 mph	27.1 in	0.0 in	0.0 in	Fair
5:15 PM	77 F	30 F	18 %	WSW	13 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
5:35 PM	78 F	31 F	18 %	WSW	17 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
5:55 PM	76 F	30 F	19 %	WSW	12 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
6:15 PM	74 F	32 F	21 %	W	15 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
6:35 PM	73 F	32 F	22 %	WSW	5 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
6:55 PM	72 F	31 F	22 %	W	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:15 PM	72 F	32 F	23 %	SW	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:35 PM	71 F	31 F	22 %	WSW	13 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:55 PM	71 F	32 F	23 %	WSW	14 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:15 PM	71 F	32 F	24 %	SW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:35 PM	68 F	32 F	26 %	SW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:55 PM	66 F	32 F	28 %	WSW	5 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:15 PM	66 F	32 F	28 %	CALM	0 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:35 PM	69 F	32 F	25 %	SW	13 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:55 PM	70 F	31 F	24 %	S	6 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
10:15 PM	70 F	30 F	23 %	WSW	14 mph	17 mph	27.1 in	0.0 in	0.0 in	Fair
10:35 PM	71 F	29 F	21 %	WSW	14 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
10:55 PM	69 F	29 F	23 %	WSW	13 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
11:15 PM	68 F	30 F	24 %	W	13 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
11:35 PM	66 F	30 F	26 %	W	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
11:55 PM	65 F	31 F	27 %	WSW	14 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair

Source: https://www.wunderground.com/history/daily/us/tx/pecos/KPEQ/date/2019-2-14

Table 6: Weather Data, Feb. 15

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Precip Accum	Condition
12:15 AM	63 F	31 F	30 %	WSW	12 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
12:35 AM	64 F	31 F	30 %	SW	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
12:55 AM	63 F	32 F	31 %	SW	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
1:15 AM	62 F	32 F	33 %	SW	12 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
1:35 AM	60 F	32 F	35 %	WSW	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
1:55 AM	58 F	31 F	36 %	WSW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
2:15 AM	58 F	32 F	37 %	WSW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
2:35 AM	56 F	32 F	39 %	SW	6 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
2:55 AM	57 F	32 F	39 %	SW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
3:15 AM	55 F	32 F	42 %	SW	5 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
3:35 AM	53 F	32 F	44 %	SW	6 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
3:55 AM	53 F	32 F	46 %	WSW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
4:15 AM	52 F	31 F	46 %	WNW	6 mph	0 mph	27.1 in	0.0 in	0.0 in	Partly Cloudy
4:35 AM	55 F	32 F	41 %	CALM	0 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
4:55 AM	58 F	33 F	38 %	WNW	3 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
5:15 AM	63 F	35 F	35 %	WSW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
5:35 AM	64 F	36 F	35 %	SW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
5:55 AM	61 F	35 F	38 %	WSW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
6:15 AM	60 F	36 F	41 %	WSW	12 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
6:35 AM	63 F	37 F	38 %	WSW	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
6:55 AM	61 F	37 F	41 %	WSW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
7:15 AM	57 F	37 F	47 %	NNW	3 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
7:35 AM	58 F	37 F	44 %	WNW	3 mph	0 mph	27.1 in	0.0 in	0.0 in	Partly Cloudy
7:55 AM	58 F	37 F	46 %	SW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Mostly Cloudy
8:15 AM	62 F	38 F	42 %	SW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Partly Cloudy
8:35 AM	62 F	39 F	42 %	CALM	0 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
8:55 AM	65 F	40 F	39 %	CALM	0 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
9:15 AM	68 F	40 F	36 %	WSW	9 mph	0 mph	27.2 in	0.0 in	0.0 in	Cloudy
9:35 AM	70 F	41 F	35 %	WSW	21 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy / Windy
9:55 AM	72 F	43 F	36 %	WSW	37 mph	43 mph	27.1 in	0.0 in	0.0 in	Cloudy / Windy
10:15 AM	73 F	44 F	36 %	WSW	17 mph	25 mph	27.2 in	0.0 in	0.0 in	Cloudy
10:35 AM	73 F	44 F	35 %	W	21 mph	25 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
10:55 AM	75 F	45 F	34 %	W	22 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
11:15 AM	77 F	45 F	32 %	W	31 mph	38 mph	27.2 in	0.0 in	0.0 in	Fair / Windy
11:35 AM	76 F	45 F	33 %	WSW	39 mph	44 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
11:55 AM	77 F	45 F	32 %	WSW	39 mph	47 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
12:15 PM	77 F	45 F	32 %	W	32 mph	45 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
12:35 PM	77 F	45 F	31 %	W	30 mph	39 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
12:55 PM	78 F	45 F	30 %	W	31 mph	37 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
1:15 PM	79 F	43 F	28 %	WSW	36 mph	44 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
1:35 PM	79 F	43 F	28 %	WSW	33 mph	44 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
1:55 PM	78 F	43 F	28 %	W	31 mph	40 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
2:15 PM	79 F	42 F	27 %	W	33 mph	37 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
2:35 PM	80 F	41 F	25 %	W	33 mph	41 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
2:55 PM	78 F	41 F	26 %	W	29 mph	37 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
3:15 PM	79 F	41 F	26 %	W	25 mph	38 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
3:35 PM	79 F	40 F	25 %	WSW	28 mph	39 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
3:55 PM	79 F	39 F	24 %	WSW	23 mph	35 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
4:15 PM	80 F	39 F	23 %	W	23 mph	29 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
4:35 PM	80 F	39 F	23 %	W	25 mph	32 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
4:55 PM	79 F	39 F	24 %	W	22 mph	30 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
5:15 PM	79 F	40 F	24 %	W	22 mph	25 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
5:35 PM	78 F	39 F	25 %	W	21 mph	25 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
5:55 PM	77 F	39 F	25 %	W	21 mph	28 mph	27.1 in	0.0 in	0.0 in	Fair / Windy
6:15 PM	76 F	38 F	26 %	W	20 mph	23 mph	27.1 in	0.0 in	0.0 in	Fair
6:35 PM	74 F	38 F	27 %	W	15 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
6:55 PM	73 F	38 F	28 %	W	13 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:15 PM	72 F	38 F	29 %	W	12 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:35 PM	71 F	38 F	30 %	W	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
7:55 PM	69 F	38 F	31 %	W	10 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:15 PM	69 F	38 F	32 %	W	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:35 PM	67 F	38 F	34 %	W	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
8:55 PM	69 F	38 F	32 %	W	10 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:15 PM	67 F	38 F	35 %	WNW	8 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
9:35 PM	66 F	38 F	35 %	NW	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
9:55 PM	67 F	38 F	35 %	WNW	9 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
10:15 PM	63 F	37 F	39 %	W	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
10:35 PM	63 F	38 F	40 %	W	6 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
10:55 PM	61 F	37 F	41 %	W	7 mph	0 mph	27.2 in	0.0 in	0.0 in	Fair
11:15 PM	61 F	38 F	42 %	CALM	0 mph	0 mph	27.1 in	0.0 in	0.0 in	Fair
11:35 PM	60 F	38 F	44 %	SSW	7 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy
11:55 PM	59 F	38 F	46 %	WSW	8 mph	0 mph	27.1 in	0.0 in	0.0 in	Cloudy

Source: https://www.wunderground.com/history/daily/us/tx/pecos/KPEQ/date/2019-2-15

6.6: PRODUCT DETAILS

Product Company Contact: Calvin Bradley, calvin.bradley@michelin.com
P.O. Box 19001 Greenville, SC 29602-9001
https://www.michelintruck.com/services-and-programs/aerodynamic-solutions/
michelin.energyguard@michelin.com

Test Product:

- Michelin Energy Guard Kit

6.7: TEST PERSONNEL

6.7a: MVT & MVT SOLUTIONS

- Allan Dahringer, Director of Maintenance, MVT
- Seth Knight, Shop Supervisor, MVT
- Carlos Aragon, Driver, MVT
- Jack Burchell, Driver, MVT
- Ron Knowles, Driver, MVT
- Daryl Bear, Lead Engineer, MVT Solutions
- Drew Cassidy, Test Engineer, MVT Solutions

6.7b: DRIVERS

- Allan Dahringer
- Carlos Aragon
- Jack Burchell
- Ron Knowles
- Seth Knight

6.7c: MICHELIN AERODYNAMIC SOLUTIONS

- Calvin Bradley, Technical Lead
- Lyderic Champetier, Service Operations Account Manager
- Scott Norville, Field Engineer
- Trevor Christopher, Field Engineer

6.8: MVT SOLUTIONS CONTACT INFO

Daryl Bear, Lead Engineer & COO
Daryl.Bear@m-v-t-s.com
317-603-9325
Website: www.m-v-t-s.com

Drew Cassidy, Test Engineer
Drew.Cassidy@m-v-t-s.com
575-288-3343
Website: www.m-v-t-s.com