# **ODOT PROFILOGRAPH MACHINE CERTIFICATION**

**Date:** October 22, 2019

Company or Residency: Haskell Lemon
Operator Name: Jacob Roush
Operator Email:
Supervisor Name: Jay Lemon  Supervisor Email: Jemon Phaskellemon. (on  (For future notifications)
Machine Manufacturer and Type 55T (\$9100
Machine Serial Number 6009 - 6147
RESULT
(39.95, 39.51, 31.15) (47.11, 66.66, 68.31)
Trace No. 1 (East Bound) 39.53 Trace No. 2 (West Bound) 67.36
Signature Jak Roush

Machine Ordinal \_\_\_\_

Data File: EB1 2023.rsd **Stations:** Run 1 - 0+00.0 to 5+28.0 Start GPS: N:4009575.26506103 E:244579.084935418 Z:15S End GPS: N:4009570.05651439 E:244739.539122234 Z:15S Run Speed (Avg, Max, Min): Run 1 - 19.8, 22.6, 13.1 mph Total Distance: 5+28.0 Date [Paved/Corrected]: Run 1 - 7/5/2023 11:57:17 AM Date Tested: Run 1 - 7/6/2023 11:57:17 AM File Modifications: Run 1 - Run Out Changed to 2+93.2 ft Project Parameters Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: EB Highway: Front Entry Number of Lanes: 1 Operator: Jacob Roush Driver: JR Calibration Settings Distance: 160504 encoder counts in 250.0 ft Track 1: Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.72 in. Accelerometer Constant: 8644.1205 Track 2: Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.39 in. Accelerometer Constant: 8719.5385 Filter Settings Filter Type: Moving Average Filter Width: 2.200 ft Filter Gain: 1.00 Scallop Parameters Minimum Height: 0.035 in (Inclusive) Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

### Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis

Excluding Defects Less than: 2.0 ft

Bump Height: 0.60 in Bump Width: 25.00 ft

No ruts found for Run 1

No user events found for  $\mathop{\rm Run}\nolimits \ 1$ 

					Summary -	Run 1				
Track 1						Track 2				
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
<u>1</u>	0+00.0 5+28.0	0	4.20	42.01	1	0+00.0 5+28.0	0	3.70	37.01	39.51
	0+00.0 5+28.0	0	4.20	42.01		0+00.0 5+28.0	0	3.70	37.01	39.51

Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	0+00.0 5+28.0	0	4.20	42.01	1	0+00.0 5+28.0	0	3.70	37.01	39.51
	0+00.0 5+28.0	0	4.20	42.01		0+00.0 5+28.0	0	3.70	37.01	39.51
No defects	found for Run	1								

Certified by: \_\_\_ Title: Organization: \_

Data File: EB2 2023.rsd Stations: Run 1 - 0+00.0 to 5+28.2 Start GPS: N:4009577.87428541 E:244582.347889352 Z:15S End GPS: N:4009568.38120552 E:244743.608384784 Z:15S Run Speed (Avg, Max, Min): Run 1 - 24.6, 25.5, 22.3 mph Total Distance: 5+28.2 Date [Paved/Corrected]: Run 1 - 7/5/2023 12:08:29 PM Date Tested: Run 1 - 7/6/2023 12:08:29 PM File Modifications: Run 1 - No Modifications Found Project Parameters Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: EB Highway: Front Entry Number of Lanes: 1 Operator: Jacob Roush Driver: JR Calibration Settings Distance: 160504 encoder counts in 250.0 ft Track 1: Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.72 in.

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

## Accelerometer Constant: 8719.5385

Track 2:

Filter Settings Filter Type: Moving Average Filter Width: 2.200 ft Filter Gain: 1.00

## Scallop Parameters

Minimum Height: 0.035 in (Inclusive) Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

Accelerometer Constant: 8644.1205

Height Sensor Level Reading: 4.39 in.

### Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis Excluding Defects Less than: 2.0 ft

Bump Height: 0.60 in

Bump Width: 25.00 ft

No ruts found for Run 1

No user events found for  $\mathop{\rm Run}\nolimits \ 1$ 

					Summary -	Run 1				
Track 1							Track 2			Average
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	0+00.0 5+28.0	0	4.11	41.10	1	0+00.0 5+28.0	0	3.72	37.20	39.15
	0+00.0 5+28.0	0	4.11	41.10		0+00.0 5+28.0	0	3.72	37.20	39.15

Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	0+00.0 5+28.0	0	4.11	41.10	1	0+00.0 5+28.0	0	3.72	37.20	39.15
	0+00.0 5+28.0	0	4.11	41.10		0+00.0 5+28.0	0	3.72	37.20	39.15
No defects	found for Run 1	1								

Certified by:	

Title:

Organization:

Data File: EB 3 2023.rsd Stations: Run 1 - 0+00.0 to 5+28.4 Start GPS: N:4009576.15022769 E:244580.687986237 Z:15S End GPS: N:4009570.87400925 E:244741.750928366 Z:15S Run Speed (Avg, Max, Min): Run 1 - 23, 25.1, 19.3 mph Total Distance: 5+28.4 Date [Paved/Corrected]: Run 1 - 7/5/2023 12:19:46 PM Date Tested: Run 1 - 7/6/2023 12:19:46 PM File Modifications: Run 1 - No Modifications Found Project Parameters Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: EB Highway: Front Entry Number of Lanes: 1 Operator: Jacob Roush Driver: JR

#### Calibration Settings

Distance: 160504 encoder counts in 250.0 ft Track 1: Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.72 in. Accelerometer Constant: 8644.1205 Track 2: Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.39 in. Accelerometer Constant: 8719.5385

### Filter Settings

Filter Type: Moving Average Filter Width: 2.200 ft Filter Gain: 1.00

## Scallop Parameters

Minimum Height: 0.035 in (Inclusive) Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

### Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis

Excluding Defects Less than: 2.0 ft

Bump Height: 0.60 in Bump Width: 25.00 ft

No ruts found for Run 1

No user events found for  $\mathop{\rm Run}\nolimits \ 1$ 

	Summary - Run 1									
Track 1						Track 2				Average
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	0+00.0 5+28.0	0	4.05	40.50	1	0+00.0 5+28.0	0	3.94	39.40	39.95
	0+00.0 5+28.0	0	4.05	40.50		0+00.0 5+28.0	0	3.94	39.40	39.95

Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	0+00.0 5+28.0	0	4.05	40.50	1	0+00.0 5+28.0	0	3.94	39.40	39.95
	0+00.0 5+28.0	0	4.05	40.50		0+00.0 5+28.0	0	3.94	39.40	39.95
No defects	found for Run	1								

Certified by:	
Title:	
Organization:	

Data File: WB 1 2023.rsd

**Stations:** Run 1 - 5+28.0 to 0+00.0

Start GPS: N:4009578.172297 E:244907.04182715 Z:15S End GPS: N:4009583.38070178 E:244746.346006584 Z:15S

Run Speed (Avg, Max, Min):

Run 1 - 29.8, 30.3, 28.3 mph

Total Distance: 5+28.0

Date [Paved/Corrected]:

Run 1 - 7/5/2023 12:27:31 PM

Date Tested:

Run 1 - 7/6/2023 12:27:31 PM

File Modifications:

Run 1 - Run Out Changed to 3+34.3 ft

Project Parameters

Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: WB Highway: Front Entry

Number of Lanes: 1 Operator: Jacob Roush Driver: JR

Calibration Settings

Distance: 160504 encoder counts in 250.0 ft

Track 1:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

Height Sensor Level Reading: 4.72 in. Accelerometer Constant: 8644.1205

Track 2:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

Height Sensor Level Reading: 4.39 in. Accelerometer Constant: 8719.5385

Filter Settings

Filter Type: Moving Average Filter Width: 2.200 ft

Filter Gain: 1.00

Scallop Parameters

Minimum Height: 0.035 in (Inclusive)

Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis

Excluding Defects Less than: 2.0 ft

Bump Height: 0.60 in Bump Width: 25.00 ft

	Summary - Run 1									
Track 1							Track 2			Average
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	5+28.0 0+00.0	3	7.50	75.01	1	5+28.0 0+00.0	2	6.16	61.61	68.31
	5+28.0 0+00.0	3	7.50	75.01		5+28.0 0+00.0	2	6.16	61.61	68.31

			Defect Loca	ations - Run 1 - By Station	n	
Defect	Type	Track	Segment	Start (ft)	End (ft)	Length (ft)
1	Bump	2	1	1+64.1	1+54.0	10.1
2	Bump	1	1	3+48.6	3+43.9	4.7
3	Bump	1	1	3+82.0	3+75.8	6.2
4	Bump	2	1	3+82.5	3+76.5	6.0
5	Bump	1	1	4+60.7	4+54.0	6.7

Track 1 defects: 3 Track 2 defects: 2

Total defects: 5

No ruts found for Run 1

No user events found for Run 1

Certified by:	
Title:	
Organization:	

Data File: WB 2 2023.rsd

Stations: Run 1 - 5+28.0 to -0+00.0

Start GPS: N:4009577.14653653 E:244906.29045118 Z:15S End GPS: N:4009583.26973968 E:244745.727666646 Z:15S

Run Speed (Avg, Max, Min):

Run 1 - 27.9, 29.8, 22.6 mph

Total Distance: 5+28.0

Date [Paved/Corrected]:

Run 1 - 7/5/2023 12:32:43 PM

Date Tested:

Run 1 - 7/6/2023 12:32:43 PM

File Modifications:

Run 1 - Run Out Changed to 3+43.0 ft

Project Parameters

Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: WB Highway: Front Entry Number of Lanes: 1

Operator: Jacob Roush Driver: JR

Calibration Settings

Distance: 160504 encoder counts in 250.0 ft

Track 1:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

Height Sensor Level Reading: 4.72 in. Accelerometer Constant: 8644.1205

Track 2:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

Height Sensor Level Reading: 4.39 in. Accelerometer Constant: 8719.5385

Filter Settings

Filter Type: Moving Average Filter Width: 2.200 ft

Filter Gain: 1.00

Scallop Parameters

Minimum Height: 0.035 in (Inclusive)

Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis Excluding Defects Less than: 2.0 ft

Excluding Defects Less than: 2.0 it Bump Height: 0.60 in

Bump Height: 0.60 in Bump Width: 25.00 ft

Summary - Run 1										
Track 1					Track 2				Average	
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	5+28.0 0+00.0	3	7.10	71.01	1	5+28.0 0+00.0	2	6.23	62.31	66.66
	5+28.0 0+00.0	3	7.10	71.01		5+28.0 0+00.0	2	6.23	62.31	66.66

Defect Locations - Run 1 - By Station							
Defect	Type	Track	Segment	Start (ft)	End (ft)	Length (ft)	
1	Bump	2	1	1+61.5	1+55.6	5.9	
2	Bump	1	1	3+47.7	3+43.8	3.8	
3	Bump	1	1	3+81.3	3+76.9	4.4	
4	Bump	2	1	3+84.6	3+76.1	8.5	
5	Bump	1	1	4+63.5	4+54.2	9.3	

Track 1 defects: 3
Track 2 defects: 2

Total defects: 5

No ruts found for  $\ensuremath{\mathrm{Run}}\ 1$ 

No user events found for Run 1

Certified by:	
Title:	
Organization:	

Data File: WB 3 2023.rsd

**Stations:** Run 1 - 5+28.0 to 0+00.0

Start GPS: N:4009578.00288385 E:244906.873095099 Z:15S End GPS: N:4009583.29390054 E:244745.850692173 Z:15S

Run Speed (Avg, Max, Min):

Run 1 - 28.7, 29.8, 25.7 mph

Total Distance: 5+28.0

Date [Paved/Corrected]:

Run 1 - 7/5/2023 12:35:02 PM

Date Tested:

Run 1 - 7/6/2023 12:35:02 PM

File Modifications:

Run 1 - Run Out Changed to 3+36.9 ft

Project Parameters

Project Number: Tulsa Race Way Certification State: Oklahoma Contractor: HLG Traffic Direction: WB Highway: Front Entry Number of Lanes: 1 Operator: Jacob Roush

Driver: JR

Calibration Settings

Distance: 160504 encoder counts in 250.0 ft

Track 1:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350 Height Sensor Level Reading: 4.72 in.

Accelerometer Constant: 8644.1205

Track 2:

Height Sensor Type: RoLine 1145, Gocator 2342/1150/1350

Height Sensor Level Reading: 4.39 in. Accelerometer Constant: 8719.5385

Filter Settings

Filter Type: Moving Average Filter Width: 2.200 ft

Filter Gain: 1.00

Scallop Parameters

Minimum Height: 0.035 in (Inclusive)

Minimum Length: 2.000 ft Resolution: 0.010 in Blanking Band: 0.000 in

Localized Roughness Settings

Simulated Profilograph Data Used for Defects Analysis Excluding Defects Less than: 2.0 ft

Excluding Defects Less than: 2.0 it Bump Height: 0.60 in

Bump Height: 0.60 in Bump Width: 25.00 ft

Summary - Run 1										
Track 1					Track 2				Average	
Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	Segment	Station (ft)	Defects	Rough (in)	PRI (in/mi)	PRI (in/mi)
1	5+28.0 0+00.0	3	7.27	72.71	1	5+28.0 0+00.0	2	6.15	61.51	67.11
	5+28.0 0+00.0	3	7.27	72.71		5+28.0 0+00.0	2	6.15	61.51	67.11

Defect Locations - Run 1 - By Station							
Defect	Type	Track	Segment	Start (ft)	End (ft)	Length (ft)	
1	Bump	2	1	1+60.0	1+55.6	4.4	
2	Bump	1	1	3+47.5	3+43.8	3.8	
3	Bump	1	1	3+81.8	3+76.2	5.7	
4	Bump	2	1	3+83.8	3+76.2	7.7	
5	Bump	1	1	4+63.4	4+53.8	9.6	

Track 1 defects: 3 Track 2 defects: 2

Total defects: 5

No ruts found for Run 1

No user events found for Run 1

Certified by:	
Title:	
Organization:	