

TOYOTA

Application For Certification - Part 1 **2027 Model Year**

Durability Group : VTYXGPGNN62S
Evap/refueling Families : VTYXR0165P42
Test Group : VTYXV03.5E4A
Durability Group Description : Four Stroke, Otto Cycle, Gasoline Fueled,
Ported FI, Catalyst code : 3-IIZ56+3-IIZ56+3-IIZ57+3-IIZ57
Test Group Description : 3.5 Liter V6 LDV
Applicable Standards : Federal states : Interim Tier4-Bin50 -LDV
California : See Federal
Carlines Covered : IS 350, IS 350 AWD
Engine Series : 2GR-FKS
Vehicles Tested :

Vehicle I.D.	Config.	Test	Test Number
26-GE1A	00	FTP	TTYX10092189
26-GE1A	00	FTP (QDA*)	TTYX10092489
26-GE1A	00	HWY	TTYX10092186
26-GE1A	00	SFTP(US06)	TTYX10092190
26-GE1A	00	SFTP(SC03)	TTYX10092188
21-AC1A	00	EVAP	MTYX10064702
21-AC1A	00	Running Loss	MTYX10064706
21-AC1A	00	Refueling	MTYX10064705
26-GE1A	00	C.CO,C.HC	TTYX10092191
21-AC1A	00	Canister Bleed	MTYX10065255

*: Quick Drive-Away

EPA Response Requested By : September 11, 2026

For Questions, Contact : Lisa Florida 734-695-2697

Note :

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1. **Correspondence and Communications**

Please refer to the FOI common file.

2. **Durability Group Description**

Durability Group Name : VTYXGPGNN62S

Please refer to the common file for details.

3. **Evaporative/Refueling Family Description**

Evaporative/Refueling Family Name : VTYXR0165P42

Please refer to the FOI common file for details.

4. **Durability Procedure Description**

4.1 Exhaust Durability Test Procedure

4.2 Durability Showing

4.3 Evap/refueling Durability Test Procedure

Please refer to the CBI common file.

4.4 Exhaust Emission Deterioration Factors

4.5 Evap/refueling Emission Deterioration Factors

4.6 Equivalency Factor

Please refer to Certification Summary Information Report in Section 7 or FOI common file.

5. Test Group Description

5.1	Test group name	:	VTYXV03.5E4A
5.2	Engine displacements covered	:	3,456 cm ³ (210.9 CID)
5.3	Arrangement and number of cylinders	:	V6
5.4	Vehicle class (es) covered	:	LDV
5.5	Federal emission standards class	:	Interim Tier4 – Bin50 -LDV

5.6 Applicable emission standards

Please refer to Certification Summary Information Report in Section 7.

6. Test Vehicle Description

DDV: Utilizing good engineering judgement that considered vehicle curb weight, road load coefficients, catalyst heat stress, we judged 26MY IS 350 AWD is the representative DDV in this Durability Group. IS 350 AWD was chosen as representative DDV because it has the same engine (2GR-FKS), same ECS, and the exact same catalyst specification.

EDV: Utilizing good engineering judgement that considered vehicle curb weight, road load coefficients, catalyst heat stress, we judged 26MY IS 350 AWD is the representative EDV in this Test Group. IS 350 AWD was chosen as representative EDV because it has the same engine (2GR-FKS), same ECS, and the exact same catalyst specification.

For complete vehicle description, refer to Certification Summary Information Report Sheet, enclosed in Section 7 of this application.

Certification Summary Information Report

Manufacturer	Toyota Motor Corporation	Manufacturer Code	TYX
Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	07/10/2026 06:29:03 AM
Model Year	2027		

Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition direct & ported injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	--
Fuel Cell Indicator	--	EPA Vehicle Class	LDV
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VTYXGPGNN62S	Durability Group Equivalency Factor	1.0
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
SFTP Federal Composite Compliance Identifier	Tier 3	SFTP Tier 2 Composite CO Option	No
SFTP LEV-III Composite Compliance Indicator	Yes		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VTYXV03.5E4A
Test Group OBD Compliance Level	Full - no deficiencies	Number of Test Group OBD Deficiencies	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	07/06/2026 08:33:51 AM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	EVOH				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	--				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	165	Number of Primary Canisters	1				
Number of Bleed Canisters	1	Bleed Canister Total Working Capacity (grams)	2				
Mfr Evaporative/Refueling Family Comments	--						
Leak Family Details							
Leak Family Indicator	No						
Canister Bleed Test Indicator	Yes	Applicability of Evaporative Canister Bleed Test	50 State				
Evaporative Canister Bleed Test Comments	--						
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--				
CARB Fuel Only (Rig) Test Comments	--						
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Toyota Motor Corporation	2 - LEXUS	77 - IS 350 AWD	Federal	All Wheel Drive	Semi-Automatic	6	Yes
Toyota Motor Corporation	2 - LEXUS	75 - IS 350	Federal	2-Wheel Drive, Rear	Semi-Automatic	8	Yes
Toyota Motor Corporation	2 - LEXUS	75 - IS 350	California + CAA Section 177 states	2-Wheel Drive, Rear	Semi-Automatic	8	Yes
Toyota Motor Corporation	2 - LEXUS	77 - IS 350 AWD	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	6	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W-20				
Number of Cylinders/Rotors	6	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Platinum + Rhodium	Ceramic
3	Three-way catalyst	Palladium + Rhodium	Ceramic
4	Three-way catalyst	Platinum + Rhodium	Ceramic
Mfr After Treatment Device (ATD) Comments			
--			
Direct Ozone Reduction (DOR) Device			
Not Equipped			
Mfr Emission Control Device Comments			
--			
Engine Configuration Number 1			
Engine Displacement (liters)	3.5	Engine Rated Horsepower	311
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	--
Air Aspiration Device Configuration	--	Charge Air Cooler Type	N/A
Air Aspiration Drive Method(s)	--		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Intake and exhaust		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated air fuel	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated air fuel	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated air fuel	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated air fuel	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	--		

Certification Summary Information Report

Test Group		VTYXV03.5E4A				Evaporative/Refueling Family		VTYXR0165P42			
Official Test Numbers											
Test Group Fuel		FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Gasoline		TTYX10092189	TTYX10092190	TTYX10092188	TTYX10092191	TTYX10092186	105.2	18.1	98.0	24.6	--
SFTP LEV-III Official Test Numbers											
Test Group Fuel		FTP		US06		SC03					
Gasoline		TTYX10092189		TTYX10092190		TTYX10092188					

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Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42						
Emission Control Device Comments	--								
Manufacturer Test Vehicle Comments	Actual vehicle model is RC 300. Drive mode is SPORTS. Extra ballast of 441lbs(200kg) added to the rear axle to prevent slipping for the test. This is not included in the VI test weights.								
Test #	MTYX10064702	Test Procedure	34 - Federal fuel 3-day evap						
Exhaust Test # for this Evap Test	MTYX10064694	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	04/17/2020	Fuel	Gasoline						
Fuel Batch ID	1H9-01	Fuel Calibration Number	6						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Toyota Motor Corporation								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	3849	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.2705161</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2705161	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2705161	--							
Manufacturer Test Comments									
HSL=0.0692, 1ST DBL=0.2013, 2ND DBL=0.1731, 3RD DBL=0.1346, 1ST DBL IS ADDED KEY OFF MONITOR LOSS(0.0004GRAM)									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.2705	0.0000	0.270	0.300	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2705	0.0000	0.270	0.300	Pass	

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42						
Test #	MTYX10064705	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	MTYX10064704	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	04/22/2020	Fuel	Gasoline						
Fuel Batch ID	1H9-01	Fuel Calibration Number	6						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Toyota Motor Corporation								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	3885	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.0052895</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0052895	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0052895	--							
Manufacturer Test Comments --									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.005	0.000	0.00	0.20	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.005	0.000	0.00	0.20	Pass	

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	MTYX10064706	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	MTYX10064694	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/16/2020	Fuel	Gasoline
Fuel Batch ID	1H9-01	Fuel Calibration Number	6
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3885	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0000187	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.01	Pass

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42						
Test #	MTYX10065255	Test Procedure	65 - Evap Canister Bleed Test						
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	04/17/2020	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Toyota Motor Corporation								
E10 Evaporative Test Measurement Method	--								
Test Start Odometer Reading	3849	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	--								
Drive Cycle Speed Tolerance Criteria	--	Road Speed Fan Usage	--						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.005508</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.005508	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.005508	--							
Manufacturer Test Comments --									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.0055	0.0000	0.006	0.020	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0055	0.0000	0.006	0.020	Pass	

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42					
Emission Data Vehicle Information								
Vehicle ID / Configuration	26-GE1A / 0	Manufacturer Vehicle Configuration Number	0					
Original Test Group Name	TTYXV03.5E4A	Original Evaporative/Refueling Family	TTYXR0165P42					
Original Test Vehicle Model Year	2026							
Vehicle Model								
Represented Test Vehicle Make	LEXUS	Represented Test Vehicle Model	IS 350 AWD					
Leak Family Details								
Leak Family Identifier	--	Leak Family Name	--					
Drive Sources and Fuel System Details								
	<table border="1"> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	
Drive Source and Fuel#	Drive Source	Fuel						
1	Combustion Engine	Gasoline						
Hybrid Indicator	No							
Multiple Fuel Storage	--	Multiple Fuel Combustion	--					
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--					
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--					
Off-board charge Capable Indicator	--							
Odometer Correction -- Initial	0	Odometer Correction Factor	1					
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor							
Odometer Correction Units	Miles							
Engine Code	01	Rated Horsepower	232					
Displacement (liters)	3.456							
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--					
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear					
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)					
Curb Weight (lbs)	3980	Equivalent Test Weight (pounds)	4250					
GVWR (lbs)	--	N/V Ratio	28.9					
Axle Ratio	3.77							
Transmission Type	Automatic	# of Transmission Gears	6					
Transmission Lockup	Yes	Creep Gear	No					

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family		VTYXR0165P42	
Dynamometer Coefficients:								
Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	51.029	0.18104	0.018583	25.514	0.03621	0.018583	14.2	
Cold CO	56.131	0.19914	0.020441	29.094	-0.15369	0.021619	N/A	
US06	51.029	0.18104	0.018583	25.514	0.03621	0.018583	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		T/M mode is NORMAL.						

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092189	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/11/2025	Fuel	Gasoline
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3845	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42																																																																																				
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>394.8437645</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.2422783</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0070152</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0324966</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>374.9988226</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0018393</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>328.9511363</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.084788</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0042014</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0.0014011</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0035601</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0734725</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.41</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.13</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.81</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0039214</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0003359</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0064663</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0071207</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0005195</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0097521</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	394.8437645	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.2422783	--	FE BAG 1 (Bag 1 Fuel Economy)	999	999	CH4 BAG 1 (Bag 1 Methane)	0.0070152	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0324966	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	374.9988226	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	FE BAG 2 (Bag 2 Fuel Economy)	999	999	CH4 BAG 2 (Bag 2 Methane)	0.0018393	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	328.9511363	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.084788	--	FE BAG 3 (Bag 3 Fuel Economy)	999	999	CH4 BAG 3 (Bag 3 Methane)	0.0042014	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0014011	--	METHANE (CH4 - Methane)	0.0035601	--	CO (Carbon Monoxide)	0.0734725	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.41	--	DT-EER (Drive Trace Energy Economy Rating)	-0.13	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.81	--	MFR FE (Manufacturer Fuel Economy)	999	999	NOX (Nitrogen Oxide)	0.0039214	--	N2O (Nitrous Oxide)	0.0003359	--	HC-NM (Non-methane Hydrocarbon)	0.0064663	--	NMOG (Non-methane organic gases)	0.0071207	--	PM (Particulate Matter)	0.0005195	--	HC-TOTAL (Total Hydrocarbon)	0.0097521	--		
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Manufacturer Test Comments

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Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family					VTYXR0165P42		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	CO	0.07	--	--	--	0.07	--	0.1	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.18	--	--	--	0.07	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	366	--	--	--	0.078	--	366	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0071	1	1.10	--	0.0016	--	0.009	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0110	1	1.10	--	--	--	0.013	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0102	1	1.03	--	0.0018	--	0.010	0.080	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0039	--	--	--	0.0002	--	0.004	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0005	--	--	--	0.0000	--	0.000	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.07	--	--	--	0.07	--	0.1	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	METHANE	0.0036	--	--	--	0.0068	--	0.010	0.030	Pass
CA	150,000 miles	California LEV-IV ULEV50	N2O	0.0003	--	--	--	0.0006	--	0.001	0.010	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0071	1	1.10	--	0.0016	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0110	1	1.10	--	--	--	0.013	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0039	--	--	--	0.0002	--	0.004	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0005	--	--	--	0.0000	--	0.000	0.003	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092191	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	07/17/2025	Fuel	Gasoline
Fuel Batch ID	2M0A01	Fuel Calibration Number	53
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3933	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

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Fed	50,000 miles	Federal Tier 3 Bin 50	CO	0.69	--	--	--	0.03	--	0.7	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 50	HC-NM	0.05	--	--	--	0.00	--	0.0	0.4	Pass
CA	50,000 miles	California LEV-IV ULEV50	CO	0.69	--	--	--	0.03	--	0.7	10.0	Pass

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092489	Test Procedure	49 - Quick-Driveway (QD)
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/15/2025	Fuel	Gasoline
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3900	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42																																																																																
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>393.0428475</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.2902186</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0076634</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0378379</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>374.9988226</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0018393</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>328.9511363</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.084788</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0042014</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0.0014011</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0036944</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0834036</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.49</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.08</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.96</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0030007</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.000353</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0074689</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0082248</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0108817</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	393.0428475	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.2902186	--	FE BAG 1 (Bag 1 Fuel Economy)	999	999	CH4 BAG 1 (Bag 1 Methane)	0.0076634	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0378379	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	374.9988226	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	FE BAG 2 (Bag 2 Fuel Economy)	999	999	CH4 BAG 2 (Bag 2 Methane)	0.0018393	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	328.9511363	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.084788	--	FE BAG 3 (Bag 3 Fuel Economy)	999	999	CH4 BAG 3 (Bag 3 Methane)	0.0042014	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0014011	--	METHANE (CH4 - Methane)	0.0036944	--	CO (Carbon Monoxide)	0.0834036	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.49	--	DT-EER (Drive Trace Energy Economy Rating)	-0.08	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.96	--	MFR FE (Manufacturer Fuel Economy)	999	999	NOX (Nitrogen Oxide)	0.0030007	--	N2O (Nitrous Oxide)	0.000353	--	HC-NM (Non-methane Hydrocarbon)	0.0074689	--	NMOG (Non-methane organic gases)	0.0082248	--	HC-TOTAL (Total Hydrocarbon)	0.0108817	--	
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Certification Summary Information Report

Test Group		VTYXV03.5E4A				Evaporative/Refueling Family				VTYXR0165P42		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0082	1	1.10	--	0.0016	--	0.010	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0112	1	1.10	--	--	--	0.013	0.062	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0030	--	--	--	0.0002	--	0.003	999.999	Pass

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092186	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/11/2025	Fuel	Gasoline
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3856	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0013114	--
CO (Carbon Monoxide)	0.0067984	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.68	--
DT-EER (Drive Trace Energy Economy Rating)	-0.12	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.75	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0003116	--
N2O (Nitrous Oxide)	0.000068	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0012281	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	238

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	237.5872929	--

Manufacturer Test Comments NMOG = HC-NM x 1.03

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family					VTYXR0165P42		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	238	--	--	--	0.078	--	238	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0000	1	1.03	--	0.0016	--	0.002	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0003	1	1.03	--	--	--	0.002	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0003	--	--	--	0.0002	--	0.000	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0000	1	1.03	--	0.0016	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0003	1	1.03	--	--	--	0.002	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0003	--	--	--	0.0002	--	0.000	999.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092190	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/11/2025	Fuel	Gasoline
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3876	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42																																																																					
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>540.3391586</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.0308288</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.005314</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0086959</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>300.6319988</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0669869</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0017098</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.0024091</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0025088</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0589712</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.08</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.89</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.44</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>999</td><td>999</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0036671</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0008569</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0034533</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0035569</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0003848</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0058258</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	540.3391586	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.0308288	--	FE BAG 1 (Bag 1 Fuel Economy)	999	999	CH4 BAG 1 (Bag 1 Methane)	0.005314	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0086959	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	300.6319988	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0669869	--	FE BAG 2 (Bag 2 Fuel Economy)	999	999	CH4 BAG 2 (Bag 2 Methane)	0.0017098	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0024091	--	METHANE (CH4 - Methane)	0.0025088	--	CO (Carbon Monoxide)	0.0589712	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.08	--	DT-EER (Drive Trace Energy Economy Rating)	-0.89	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.44	--	MFR FE (Manufacturer Fuel Economy)	999	999	NOX (Nitrogen Oxide)	0.0036671	--	N2O (Nitrous Oxide)	0.0008569	--	HC-NM (Non-methane Hydrocarbon)	0.0034533	--	NMOG (Non-methane organic gases)	0.0035569	--	PM (Particulate Matter)	0.0003848	--	HC-TOTAL (Total Hydrocarbon)	0.0058258	--		
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Certification Summary Information Report

Test Group		VTYXV03.5E4A				Evaporative/Refueling Family				VTYXR0165P42		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0004	--	--	--	0.0000	--	0.000	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.06	--	--	--	0.07	--	0.1	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0036	1	1.03	--	0.0016	--	0.005	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0073	1	1.03	--	--	--	0.009	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0037	--	--	--	0.0002	--	0.004	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0004	--	--	--	0.0000	--	0.000	0.003	Pass

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Test #	TTYX10092188	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/21/2025	Fuel	Gasoline
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Toyota Motor Corporation		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3965	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0069387	--
CO (Carbon Monoxide)	0.1948568	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.88	--
DT-EER (Drive Trace Energy Economy Rating)	0.84	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.41	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0028919	--
N2O (Nitrous Oxide)	0.0009242	--
HC-NM (Non-methane Hydrocarbon)	0.0038432	--
NMOG (Non-methane organic gases)	0.0039585	--
HC-TOTAL (Total Hydrocarbon)	0.010495	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	467.3166377	--

Manufacturer Test Comments NMOG = HC-NM x 1.03

Certification Summary Information Report

Test Group		VTYXV03.5E4A				Evaporative/Refueling Family				VTYXR0165P42		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California LEV-IV ULEV50	CO	0.19	--	--	--	0.07	--	0.3	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0040	1	1.03	--	0.0016	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0069	1	1.03	--	--	--	0.009	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0029	--	--	--	0.0002	--	0.003	999.999	Pass

Certification Summary Information Report

Test Group	VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Fuel Properties			
Fuel Batch ID	1H9-01	Fuel Calibration Number	6
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	08/09/2019
Fuel Batch Calibration Effective Date	04/01/2020	Fuel Batch Calibration Ineffective Date	04/30/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.738
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17838
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	2J3A12	Fuel Calibration Number	14
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/31/2025
Fuel Batch Calibration Effective Date	07/01/2025	Fuel Batch Calibration Ineffective Date	09/29/2023
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.738
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.568	Fuel Carbon Mass Fraction (E10)	0.825
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--
Fuel Batch ID	2M0A01	Fuel Calibration Number	53
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	07/31/2025
Fuel Batch Calibration Effective Date	07/01/2025	Fuel Batch Calibration Ineffective Date	12/24/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.736
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.582	Fuel Carbon Mass Fraction (E10)	0.825
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family		VTYXR0165P42		
Consolidated List of Standards									
Exhaust Standards									
Cert Region		Federal			Cert/In-Use Code		Cert		
Vehicle Class		LDV/Passenger Car			Standard Level		Federal Tier 3 Bin 50		
Fuel		Gasoline			Test Procedure		Cold CO		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.03	10.0
120,000 miles	HC-NM	--	--	--	--	--	--	0.00	0.4
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Cert		
Vehicle Class		LDV/Passenger Car			Standard Level		California LEV-IV ULEV50		
Fuel		Gasoline			Test Procedure		US06		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	9.6
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0018	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Cert		
Vehicle Class		LDV/Passenger Car			Standard Level		California LEV-IV ULEV50		
Fuel		Gasoline			Test Procedure		CA fuel 50 Deg(F) exhaust test		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
4,000 miles	CO	--	--	--	--	--	--	--	1.7
4,000 miles	HCHO	--	--	--	--	--	--	--	0.016
4,000 miles	NMOG	--	1	1.10	--	--	--	--	999.999
4,000 miles	NMOG+NOX	--	1	1.10	--	--	1	--	0.100
4,000 miles	NOX	--	--	--	--	--	--	--	999.999

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family			VTYXR0165P42	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			US06	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.006
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV50	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0018	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	0.07	4.2
150,000 miles	CREE	--	--	--	--	--	--	0.078	999.999
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.10	--	--	--	0.0018	0.050
150,000 miles	NMOG+NOX-COMP	--	1	1.03	--	--	--	0.0018	0.080
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family			VTYXR0165P42	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV50	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	1.7
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0.0068	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0006	0.010
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.10	--	--	--	0.0018	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0.078	999.999
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0018	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV50	
Fuel		Gasoline			Test Procedure			SC03	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	1.7
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0018	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999

Certification Summary Information Report

Test Group		VTYXV03.5E4A			Evaporative/Refueling Family			VTYXR0165P42	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV50	
Fuel		Gasoline			Test Procedure			Quick-Driveway (QD)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0016	999.999
150,000 miles	NMOG+NOX	--	1	1.10	--	--	--	0.0018	0.062
150,000 miles	NOX	--	--	--	--	--	--	0.0002	999.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV50	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.03	10.0

Evaporative/Refueling Standards

Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000		

Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.000		

Evaporative/Refueling Family		VTYXR0165P42		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.000		

Certification Summary Information Report

Test Group		VTYXV03.5E4A		Evaporative/Refueling Family		VTYXR0165P42	
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0000		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Spitback					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	4,000 miles	SPITBACK	--	1.0	--		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0000		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0000		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0.0000		

Certification Summary Information Report

Test Group		VTYXV03.5E4A		Evaporative/Refueling Family		VTYXR0165P42	
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0000		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0.0000		
Evaporative/Refueling Family		VTYXR0165P42		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.01	0.000		

Certification Summary Information Report

Test Group		VTYXV03.5E4A	Evaporative/Refueling Family	VTYXR0165P42
Glossary				
Useful Life				
4	4,000 miles	120	120,000 miles	
50	50,000 miles	150	150,000 miles	
100	100,000 miles			
Emission Name				
HC-TOTAL	Total Hydrocarbon	COMB-CREE	Combined Carbon-Related Exhaust Emissions	
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions	
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only	
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only	
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only	
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)	
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)	
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only	
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS	
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane	
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane	
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane	
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane	
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide	
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide	
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide	
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide	
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases	
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases	
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases	
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases	
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance	
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance	
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance	
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance	
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon	
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon	
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon	
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon	
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours	
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours	

Certification Summary Information Report

Test Group		VTYXV03.5E4A	Evaporative/Refueling Family		VTYXR0165P42
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

Certification Summary Information Report

Test Group		VTYXV03.5E4A	Evaporative/Refueling Family		VTYXR0165P42
L2ULEV340	California LEV-II ULEV340		L4SULEV85	California LEV-IV SULEV85	
L2LEV630	California LEV-II LEV630		L4ULEV125	California LEV-IV ULEV125	
L2ULEV570	California LEV-II ULEV570		L4ULEV200	California LEV-IV ULEV200	
L3LEV160	California LEV-III LEV160		L4ULEV250	California LEV-IV ULEV250	
L3ULEV125	California LEV-III ULEV125		L4ULEV270	California LEV-IV ULEV270	
L3ULEV70	California LEV-III ULEV70		L4ULEV40	California LEV-IV ULEV40	
L3ULEV50	California LEV-III ULEV50		L4ULEV400	California LEV-IV ULEV400	
L3SULEV30	California LEV-III SULEV30		L4ULEV50	California LEV-IV ULEV50	
L3SULEV20	California LEV-III SULEV20		L4ULEV60	California LEV-IV ULEV60	
L3LEV395	California LEV-III LEV395		L4ULEV70	California LEV-IV ULEV70	
L3ULEV340	California LEV-III ULEV340		T4B170	Federal Tier 4 MDV Bin 170	
L3ULEV250	California LEV-III ULEV250		T4B150	Federal Tier 4 MDV Bin 150	
L3ULEV200	California LEV-III ULEV200		T4B125	Federal Tier 4 MDV Bin 125	
L3SULEV170	California LEV-III SULEV170		T4B100	Federal Tier 4 MDV Bin 100	
L3SULEV150	California LEV-III SULEV150		T4B85	Federal Tier 4 MDV Bin 85	
L3LEV630	California LEV-III LEV630		T4B75	Federal Tier 4 MDV Bin 75	
L3ULEV570	California LEV-III ULEV570		T4B70	Federal Tier 4 Bin 70	
L3ULEV400	California LEV-III ULEV400		T4B65	Federal Tier 4 Bin 65	
L3ULEV270	California LEV-III ULEV270		T4B60	Federal Tier 4 Bin 60	
L3SULEV230	California LEV-III SULEV230		T4B55	Federal Tier 4 Bin 55	
L3SULEV200	California LEV-III SULEV200		T4B50	Federal Tier 4 Bin 50	
T3B160	Federal Tier 3 Bin 160		T4B45	Federal Tier 4 Bin 45	
T3B125	Federal Tier 3 Bin 125		T4B40	Federal Tier 4 Bin 40	
T3B110	Federal Tier 3 Transitional Bin 110		T4B35	Federal Tier 4 Bin 35	
T3B85	Federal Tier 3 Transitional Bin 85		T4B30	Federal Tier 4 Bin 30	
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover		T4B25	Federal Tier 4 Bin 25	
T3B70	Federal Tier 3 Bin 70		T4B20	Federal Tier 4 Bin 20	
T3B50	Federal Tier 3 Bin 50		T4B15	Federal Tier 4 Bin 15	
T3B30	Federal Tier 3 Bin 30		T4B10	Federal Tier 4 Bin 10	
T3B20	Federal Tier 3 Bin 20		T4B5	Federal Tier 4 Bin 5	
T3B0	Federal Tier 3 Bin 0		T4B0	Federal Tier 4 Bin 0	
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395				
Transmission Type Code					
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual		
A	Automatic	OT	Other		
AM	Automated Manual	SA	Semi-Automatic		
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)		
Drive System Code					
4	4-Wheel Drive	P	Part-time 4-Wheel Drive		

Certification Summary Information Report

Test Group		VTYXV03.5E4A	Evaporative/Refueling Family		VTYXR0165P42
F	2-Wheel Drive, Front		A	All Wheel Drive	
R	2-Wheel Drive, Rear				
Additional Terms and Acronyms					
AFC	Alternative Fuel Converter		ICI	Independent Commercial Importer	
CSI	Certificate Summary Information		ORVR	Onboard Refueling Vapor Recovery	
DF	Deterioration Factor		SIL	Shift Indicator Light	
Evap	Evaporation, Evaporative		Trans	Transmission	

7. Test Results

Test group: VTYXV03.5E4A

1. Litmus test result

Test Group Fuel	FTP	US06	SC03	Cold CO	Highway	City Litmus Value	City Litmus Threshold	Highway Litmus Value	Highway Litmus Threshold
Gasoline	TTYX10092189	TTYX10092190	TTYX10092188	TTYX10092191	TTYX10092186	18.4	18.0	26.2	24.4

2. Interim/In-Use Standard

	Federal	California
FTP	Not applicable	Not applicable
FTP (QDA)	-	Not applicable
SFTP (Composite)	Not applicable	-
SFTP (US06)	-	Not applicable

8 Emission testing waiver statements

Please refer to the FOI common file for the following test waiver statements:

- High Altitude Exhaust Emissions
- High Altitude Evap/Refueling Emissions
- 91 RON fuel testing
- Formaldehyde (HCHO)
- 2DBL Evap Emissions
- Spitback
- Tier 4 Evaporative Leak Standard

9 **OBD System Description**

Please refer to OBD documents.

Toyota states that the OBD application meets the requirements of 40 CFR 86.1806-17 and 86.1844-01(d)(9) and is considered part of the Part 1 certification application.

10 Description of Alternate-fueled Vehicles

Please refer to the FOI common file.

11. **AECD Descriptions**

11.1 AECD and EI-AECD Descriptions

Confidential information

11.2 SFTP / Lean Best Torque (LBT) Air fuel Ratio Information

Please refer to the CBI common file.

12 Description of Vehicles Covered by Certificate and Test Parameters

- 12.1 Vehicle parameters
Durability Group : VTYXGPGNN62S
Test Group : VTYXV03.5E4A
Evap./Refueling Family : VTYXR0165P42
Emission Control System : DFI+SFI, 2WR-HO2S(2), 2TWC(2)

Carline	Model name	Model code	Engine Code	Valves/ cyl	Engine Disp. (L)	Sales Area	Trans- mission*2/ Overdrive	SIL	Tire*1	N/V	ETW (lb.)	Fuel tank vol. (L)	Rated HP
IS 350	LEXUS IS 350 F SPORT DESIGN / LEXUS IS 350 F SPORT	GSE31L-BEYLHA	02	4	3.456	50	AA81E-A (S8-3) / Yes	N/A	235/40R19 SM	28.1	4250	66.5	311@ 6600
			02	4	3.456	50	AA81E-A (S8-3) / Yes	N/A	265/35R19 AS	28.1	4250	66.5	311@ 6600
			02	4	3.456	50	AA81E-A (S8-3) / Yes	N/A	265/35R19 SM	28.1	4250	66.5	311@ 6600
IS 350 AWD	LEXUS IS 350 F SPORT DESIGN AWD / LEXUS IS 350 F SPORT AWD	GSE36L-BETLHA	01	4	3.456	50	A760H-C (S6-3) / Yes	N/A	235/40R19 AS	28.9	4250	66.5	311@ 6600
			01	4	3.456	50	A760H-C (S6-3) / Yes	N/A	265/35R19 AS	28.9	4250	66.5	311@ 6600

Note*1: AS : All-season tire
SM/SM#2 : Summer-tire

*2: The number after “-“ indicates the number of transmission mode.

12.2 Test Parameters
Please refer to the FOI common file.

13. Projected Sales and Compliance Plans

Please refer to the CBI common file.

14. **Request for Certificate**

Test group : VTYXV03.5E4A
Evap/refueling family : VTYXR0165P42

TOYOTA MOTOR CORPORATION requests that EPA/CARB issue a 2027 Model Year certificate of conformity and Executive Order for the above specified test group/evaporative family combination more fully described in this application. This combination complies with the following emission standards:

	low-altitude	high altitude	Bin No
Federal: Interim Tier4	<u>X</u>	<u>X</u>	<u>50</u>
California: See Federal			



Kevin Webber
General Manager
Regulatory Affairs & Environmental Sustainability
Toyota Motor North America, Inc.

15. Other Information

15.1 Fee filing form

Invoice No.:EPA2027MY012

US EPA Fee Form

[Help and EPA Instructions](#)

* Required Field

Tracking Information

Pay.gov Tracking ID: 283FTJ7T

Agency Tracking ID: 77427061469

General Information

Date: 06/23/2026

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

TYX

Manufacturer Name *

Toyota Motor Corporation

Contact Name *

Keisha Anderson

Contact Email Address *

keisha.anderson@toyota.com

Contact Phone *

734-995-3552

Calendar Year complete application submitted to EPA *

2026

PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2026, through December 31, 2026. The applicable fee is determined by the

Payment Information

Amount Owed

\$32,317.00

Payment Type *

Offline ACH

Comments

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 7/31/2027

The public reporting and recordkeeping burden for this collection of information is estimated to average 12 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

calendar year in which the complete certification application is received, not the model year.

Engine Family / Evaporative Family / Test Group *

VTYXV03.5E4A

Certificate Request Type (Industry Sector Code)

Certificate Request Type *

- ☒ On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- ☐ On-Highway HDE Dyno Cert (Federal) (E, H)
- ☐ On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- ☐ On-Highway Motorcycle (C)
- ☐ On-Highway HDV Evap (F)
- ☐ On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- ☐ On-Highway HDE Dyno Cert (California-Only) (E, H)
- ☐ Nonroad CI (L)
- ☐ Nonroad SI (B, S)
- ☐ Locomotive (G, K)
- ☐ All Nonroad Recreational, excluding Marine engines (X, Y)
- ☐ All Marine (Including IMO) (M, N, W)
- ☐ Component Certification for Evaporative Emissions (P)

IMO Name (Required for dual US/IMO Marine Only)

ICI VIN Number (Required for ICIs Only)

Do you qualify for a Reduced Fee? *

No

16. Confidential Information

Please refer to the CBI common file.

17.8 Emission Control Information Labels

LEXUS		VEHICLE EMISSION CONTROL INFORMATION	
		TOYOTA	TOYOTA MOTOR CORPORATION
Conforms to regulations 2027MY		TEST GROUP : VTYXV03.5E4A EVAP FAMILY : VTYXR0165P42	
U. S. EPA : IT4B50		LDV	OBD : CAII Fuel : Gasoline
This vehicle is authorized for sale in California			
No adjustments needed.		DFI+SFI, 2WR-HO2S(2), 2TWC(2)	
31M71		2GR-FKS	
			NX