

Certification Summary Information Report

Manufacturer	Toyota Motor Corporation	Manufacturer Code	TYX
Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Certificate Number	VTYXV02.0E4B-003	CARB Executive Order #	--
Certificate Issue Date	05/14/2026	Certificate Revision Date	--
Certificate Effective Date	05/14/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	04/06/2026 02:30:16 AM
Model Year	2027		

Test Group Information

CSI Type	New	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	VTYXGPGNN627	Durability Group Equivalency Factor	0.6
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	07/01/2026	CAP2000 Conditional Certificate?	No
Independent Commercial Importer?	No	Alternative Fuel Converter Certificate?	No
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	VTYXT02.4H3A
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	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	03/16/2026 05:40:50 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)	130	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	1 - TOYOTA	314 - COROLLA HATCHBACK XSE	Federal	2-Wheel Drive, Front	Selectable Continuously Variable (e.g. CVT with paddles)	10	Yes
Toyota Motor Corporation	1 - TOYOTA	314 - COROLLA HATCHBACK XSE	California + CAA Section 177 states	2-Wheel Drive, Front	Selectable Continuously Variable (e.g. CVT with paddles)	10	Yes
Toyota Motor Corporation	1 - TOYOTA	310 - COROLLA HATCHBACK	California + CAA Section 177 states	2-Wheel Drive, Front	Selectable Continuously Variable (e.g. CVT with paddles)	10	Yes
Toyota Motor Corporation	1 - TOYOTA	310 - COROLLA HATCHBACK	Federal	2-Wheel Drive, Front	Selectable Continuously Variable (e.g. CVT with paddles)	10	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	Inline	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W-8				
Number of Cylinders/Rotors	4	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42								
After Treatment Device(s) (ATD)											
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction							
1	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith							
2	Three-way catalyst	Platinum + Rhodium	Ceramic	Monolith							
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)	2.0	Engine Rated Horsepower	169								
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	1	Number of Air/Fuel Sensors	2								
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	--								
Mfr Air/Fuel Sensor Comments	--										
Exhaust Gas Recirculation	Yes	Cooled Exhaust Gas Recirculation	Yes								
EGR Type	Electronic/Electric	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	--										
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	PTYX91005267	PTYX91005265	PTYX10077134	PTYX10077130	PTYX91005266	999.9	228.2	999.9	286.1	--	

Certification Summary Information Report

Test Group		VTYXV02.0E4B		Evaporative/Refueling Family		VTYXR0130P42	
SFTP LEV-III Official Test Numbers							
Test Group Fuel		FTP		US06		SC03	
Gasoline		PTYX91005267		PTYX91005265		PTYX10077134	

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	18-AV1A / 1	Manufacturer Vehicle Configuration Number	1
Original Test Group Name	JTYXV02.5P3A	Original Evaporative/Refueling Family	JTYXR0130P72
Original Test Vehicle Model Year	2018		
Vehicle Model			
Represented Test Vehicle Make	TOYOTA	Represented Test Vehicle Model	CAMRY XLE/XSE

Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
-------------------------------	----	-------------------------	----

Drive Sources and Fuel System Details

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	11	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	02	Rated Horsepower	206
Displacement (liters)	2.487		
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, Front
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	3415	Equivalent Test Weight (pounds)	3750
GVWR (lbs)	--	N/V Ratio	24.7
Axle Ratio	2.8		
Transmission Type	Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creep Gear	No

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	32.527	0.22484	0.017128	12.884	0.07426	0.017856	11.5
US06	32.527	0.22484	0.017128	12.884	0.07426	0.017856	N/A

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42						
Emission Control Device Comments	--								
Manufacturer Test Vehicle Comments	POWER SHIFT PATTERN								
Test #	JTYX10046255	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	JTYX10046251	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	01/07/2016	Fuel	Gasoline						
Fuel Batch ID	1L6-07	Fuel Calibration Number	1						
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	4013	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									
<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>0.0029655</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)	0.0029655	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0029655	--							
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	0.003	0	0	0.2	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.003	0	0	0.2	Pass	

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	JTYX10046336	Test Procedure	65 - Evap Canister Bleed Test
Exhaust Test # for this Evap Test	--	Test Fuel Type	46 - CARB LEV3 E10 Regular
Test Date	12/23/2016	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	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3969	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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.012096	--

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	0.0121	0	0.012	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0121	0	0.012	0.02	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	18-AV1A / 2	Manufacturer Vehicle Configuration Number	2
Original Test Group Name	NTYXV02.5P3A	Original Evaporative/Refueling Family	NTYXR0130P72
Original Test Vehicle Model Year	2022		

Vehicle Model

Represented Test Vehicle Make	TOYOTA	Represented Test Vehicle Model	CAMRY
--------------------------------------	--------	---------------------------------------	-------

Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
-------------------------------	----	-------------------------	----

Drive Sources and Fuel System Details

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	11	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	02	Rated Horsepower	206
Displacement (liters)	2.487		
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, Front
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	3425	Equivalent Test Weight (pounds)	3750
GVWR (lbs)	--	N/V Ratio	24.7
Axle Ratio	2.8		
Transmission Type	Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creep Gear	No

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	30.095	0.21026	0.017605	10.685	-0.00157	0.019215	11.3
US06	30.095	0.21026	0.017605	10.685	-0.00157	0.019215	N/A

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Emission Control Device Comments	--		
Manufacturer Test Vehicle Comments	Drive mode is SPORTS.		

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	NTYX10068444	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	NTYX10068428	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	02/04/2021	Fuel	Gasoline
Fuel Batch ID	2G0-04	Fuel Calibration Number	3
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	5109	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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	0	--
FE BAG 1 (Bag 1 Fuel Economy)	999	999
CO2 BAG 2 (Bag 2 Carbon Dioxide)	0	--
FE BAG 2 (Bag 2 Fuel Economy)	999	999
CO2 BAG 3 (Bag 3 Carbon Dioxide)	0	--
FE BAG 3 (Bag 3 Fuel Economy)	999	999
MFR FE (Manufacturer Fuel Economy)	999	999
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2688435	--

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	0	--

Manufacturer Test Comments HSL=0.0514, 1ST DBL=0.2175, 2ND DBL=0.1459, 3RD DBL=0.1372, 1ST DBL IS ADDED KEY OFF MONITOR LOSS(0.0002GRAM)

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	0.2688	0	0.269	0.3	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2688	0	0.269	0.3	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	NTYX10068443	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	NTYX10068428	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	02/04/2021	Fuel	Gasoline
Fuel Batch ID	2G0-04	Fuel Calibration Number	3
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	5109	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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	0	--
FE BAG 1 (Bag 1 Fuel Economy)	999	999
CO2 BAG 2 (Bag 2 Carbon Dioxide)	0	--
FE BAG 2 (Bag 2 Fuel Economy)	999	999
CO2 BAG 3 (Bag 3 Carbon Dioxide)	0	--
FE BAG 3 (Bag 3 Fuel Economy)	999	999
MFR FE (Manufacturer Fuel Economy)	999	999
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0078958	--

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	0	--

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	0.008	0	0.01	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.008	0	0.01	0.01	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42						
Emission Data Vehicle Information									
Vehicle ID / Configuration	23-MA1C / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	PTYXV02.0P3C	Original Evaporative/Refueling Family	PTYXR0130P72						
Original Test Vehicle Model Year	2023								
Vehicle Model									
Represented Test Vehicle Make	TOYOTA	Represented Test Vehicle Model	COROLLA HACHBACK XSE						
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	9	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	169						
Displacement (liters)	1.987								
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, Front						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	3150	Equivalent Test Weight (pounds)	3500						
GVWR (lbs)	--	N/V Ratio	23.3						
Axle Ratio	3.79								
Transmission Type	Continuously Variable	# of Transmission Gears	1						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		VTYXV02.0E4B			Evaporative/Refueling Family		VTYXR0130P42	
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	25.318	0.28637	0.01714	9.197	0.09071	0.018478	11	
Cold CO	27.849	0.315	0.018854	3.447	0.07326	0.020239	N/A	
US06	25.318	0.28637	0.01714	9.197	0.09071	0.018478	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		Drive mode is SPORT.						

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX10077130	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	09/06/2022	Fuel	Gasoline
Fuel Batch ID	2B2A01	Fuel Calibration Number	5
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	3873	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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	0	--
FE BAG 1 (Bag 1 Fuel Economy)	999	999
CO2 BAG 2 (Bag 2 Carbon Dioxide)	0	--
FE BAG 2 (Bag 2 Fuel Economy)	999	999
CO2 BAG 3 (Bag 3 Carbon Dioxide)	0	--
FE BAG 3 (Bag 3 Fuel Economy)	999	999
METHANE (CH4 - Methane)	0.0087092	--
CO (Carbon Monoxide)	0.6729674	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.08	--
DT-EER (Drive Trace Energy Economy Rating)	1	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.42	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0046466	--
N2O (Nitrous Oxide)	0.0021809	--
HC-NM (Non-methane Hydrocarbon)	0.072366	--
HC-TOTAL (Total Hydrocarbon)	0.0804268	--

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	0	--

Page 15 of 37 CSI Submission/Revision Date: 04/06/2026 02:30:16 AM

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX91005267	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	12/14/2022	Fuel	Gasoline
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4189	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	272.1702271	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	275.1778564	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	245.503952	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0026118	--
CO (Carbon Monoxide)	0.0548279	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.2441019	--
DT-EER (Drive Trace Energy Economy Rating)	-0.6315044	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.6021405	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0044906	--
N2O (Nitrous Oxide)	0.0001525	--
HC-NM (Non-methane Hydrocarbon)	0.0023646	--
NMOG (Non-methane organic gases)	0.0025972	--
PM (Particulate Matter)	0.0001306	--
HC-TOTAL (Total Hydrocarbon)	0.0047831	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Certification Summary Information Report

Test Group		VTYXV02.0E4B				Evaporative/Refueling Family				VTYXR0130P42																				
<table><tr><td colspan="2">Test Result Name</td><td colspan="4">Unrounded Test Result</td><td colspan="3">Verify Calculated CO2</td></tr><tr><td colspan="2">Carbon dioxide</td><td colspan="4">266.4207458</td><td colspan="3">--</td></tr></table>													Test Result Name		Unrounded Test Result				Verify Calculated CO2			Carbon dioxide		266.4207458				--		
Test Result Name		Unrounded Test Result				Verify Calculated CO2																								
Carbon dioxide		266.4207458				--																								
Manufacturer Test Comments		None Unrounded Result for the following test results were modified by Verify: FE BAG 1, FE BAG 2, FE BAG 3, MFR FE																												
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	0.05	--	--	--	0.07	--	0.1	1.7	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.28	--	--	--	0.07	--	0.3	4.2	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	999	--	--	--	0.087	--	999	--	--																		
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0026	--	--	--	0.0125	--	0.015	0.030	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0002	--	--	--	0.0008	--	0.001	0.010	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0026	1	1.1	--	0.0047	--	0.007	999.999	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0071	1	1.1	--	--	--	0.016	0.050	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0154	1	1.03	--	0.0085	--	0.015	0.040	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0045	--	--	--	0.0038	--	0.008	999.999	Pass																		
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0001	--	--	--	0	--	0	0.001	Pass																		
CA	150,000 miles	California LEV-IV ULEV50	CO	0.05	--	--	--	0.07	--	0.1	1.7	Pass																		
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0026	1	1.1	--	0.0047	--	0.007	999.999	Pass																		
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0071	1	1.1	--	--	--	0.016	0.050	Pass																		
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0045	--	--	--	0.0038	--	0.008	999.999	Pass																		
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0001	--	--	--	0	--	0	0.001	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	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX91005266	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	12/14/2022	Fuel	Gasoline
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4200	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)	0.0018865	--
CO (Carbon Monoxide)	0.1043773	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.7469711	--
DT-EER (Drive Trace Energy Economy Rating)	-1.4939415	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.2596734	--
MFR FE (Manufacturer Fuel Economy)	44.6670647	--
NOX (Nitrogen Oxide)	0.0009071	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0000518	--
NMOG (Non-methane organic gases)	0.0000533	--
HC-TOTAL (Total Hydrocarbon)	0.0018956	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	193.9680939	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group		VTYXV02.0E4B				Evaporative/Refueling Family				VTYXR0130P42		
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	999	--	--	--	0.087	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0001	1	1.03	--	0.0047	--	0.005	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.001	1	1.03	--	--	--	0.01	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0009	--	--	--	0.0038	--	0.005	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0001	1	1.03	--	0.0047	--	0.005	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.001	1	1.03	--	--	--	0.01	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0009	--	--	--	0.0038	--	0.005	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	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX10077133	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/14/2022	Fuel	Gasoline
Fuel Batch ID	2F2A12	Fuel Calibration Number	3
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	3944	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)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	0	--	
FE BAG 1 (Bag 1 Fuel Economy)	999	999	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	0	--	
FE BAG 2 (Bag 2 Fuel Economy)	999	999	
METHANE (CH4 - Methane)	0.0018155	--	
CO (Carbon Monoxide)	0.401749	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.75	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.29	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.36	--	
MFR FE (Manufacturer Fuel Economy)	999	999	
NOX (Nitrogen Oxide)	0.0063878	--	
N2O (Nitrous Oxide)	0.0002051	--	
HC-NM (Non-methane Hydrocarbon)	0.010256	--	
NMOG (Non-methane organic gases)	0.0105637	--	
PM (Particulate Matter)	0.0002233	--	
HC-TOTAL (Total Hydrocarbon)	0.0119407	--	
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	0	--	

Certification Summary Information Report

Test Group		VTYXV02.0E4B				Evaporative/Refueling Family				VTYXR0130P42		
Manufacturer Test Comments		NMOG = HC-NM x 1.03										
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	0.0002	--	--	--	0	--	0	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.4	--	--	--	0.07	--	0.5	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0106	1	1.03	--	0.0047	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.017	1	1.03	--	--	--	0.026	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0064	--	--	--	0.0038	--	0.01	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0002	--	--	--	0	--	0	0.003	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX91005265	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	12/14/2022	Fuel	Gasoline
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4220	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	402.1273499	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	239.4813843	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0022867	--
CO (Carbon Monoxide)	0.4576001	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.3324416	--
DT-EER (Drive Trace Energy Economy Rating)	-1.7532737	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-5.3945227	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0027038	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0057702	--
NMOG (Non-methane organic gases)	0.0059433	--
HC-TOTAL (Total Hydrocarbon)	0.0080051	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	275.8713379	--

Manufacturer Test Comments

None Unrounded Result for the following test results were modified by Verify: FE BAG 1, FE BAG 2, MFR FE

Certification Summary Information Report

Test Group		VTYXV02.0E4B				Evaporative/Refueling Family				VTYXR0130P42		
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	0.46	--	--	--	0.07	--	0.5	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0059	1	1.03	--	0.0047	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0086	1	1.03	--	--	--	0.017	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0027	--	--	--	0.0038	--	0.006	999.999	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Test #	PTYX10077134	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2022	Fuel	Gasoline
Fuel Batch ID	2F2A12	Fuel Calibration Number	3
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	3838	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)	0.0017258	--	
CO (Carbon Monoxide)	0.1751226	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.94	--	
DT-EER (Drive Trace Energy Economy Rating)	0.27	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.32	--	
MFR FE (Manufacturer Fuel Economy)	999	999	
NOX (Nitrogen Oxide)	0.0034915	--	
N2O (Nitrous Oxide)	0	--	
HC-NM (Non-methane Hydrocarbon)	0.0017833	--	
NMOG (Non-methane organic gases)	0.0018368	--	
HC-TOTAL (Total Hydrocarbon)	0.0033806	--	
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	0	--	
Manufacturer Test Comments	NMOG = HC-NM x 1.03		

Certification Summary Information Report

Test Group		VTYXV02.0E4B				Evaporative/Refueling Family				VTYXR0130P42		
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	0.18	--	--	--	0.07	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0018	1	1.03	--	0.0047	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0053	1	1.03	--	--	--	0.014	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0035	--	--	--	0.0038	--	0.007	999.999	Pass

Certification Summary Information Report

Test Group	VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
Fuel Properties			
Fuel Batch ID	28637	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	08/26/2021
Fuel Batch Calibration Effective Date	08/26/2021	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.75
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17894
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	Weight Fraction CO2	--
Fuel Batch ID	1L6-07	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	11/12/2016
Fuel Batch Calibration Effective Date	01/07/2017	Fuel Batch Calibration Ineffective Date	01/31/2017
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.739
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17843
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	Weight Fraction CO2	--
Fuel Batch ID	2G0-04	Fuel Calibration Number	3
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/28/2020
Fuel Batch Calibration Effective Date	01/21/2021	Fuel Batch Calibration Ineffective Date	02/28/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.74
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17847
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	2B2A01	Fuel Calibration Number	5
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	02/27/2022
Fuel Batch Calibration Effective Date	09/01/2022	Fuel Batch Calibration Ineffective Date	09/30/2022

Certification Summary Information Report

Test Group		VTYXV02.0E4B	Evaporative/Refueling Family	VTYXR0130P42
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 (%)	9.7		Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17844
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	2F2A12		Fuel Calibration Number	3
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)		Fuel Batch Calibration Date	06/09/2022
Fuel Batch Calibration Effective Date	09/01/2022		Fuel Batch Calibration Ineffective Date	09/30/2022
Carbon Weight Fraction NMHC	--		Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--		Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--		Fuel Specific Gravity	0.74
Fuel Ethanol Volume Percent (%)	10		Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17820
Fuel Net Heat of Combustion (E10) (MJ/kg)	--		Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825		Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VTYXV02.0E4B			Evaporative/Refueling Family			VTYXR0130P42		
Consolidated List of Standards										
Exhaust Standards										
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	--	--	--	0.0047	999.999	
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0085	0.050	
150,000 miles	NOX	--	--	--	--	--	--	0.0038	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			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	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			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	--	--	--	--	--	--	--	1.0	
4,000 miles	HCHO	--	--	--	--	--	--	--	0.008	
4,000 miles	NMOG	--	1	1.1	--	--	--	--	999.999	
4,000 miles	NMOG+NOX	--	--	1.1	--	--	1	--	0.060	
4,000 miles	NOX	--	--	--	--	--	--	--	999.999	

Certification Summary Information Report

Test Group		VTYXV02.0E4B			Evaporative/Refueling Family			VTYXR0130P42	
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	--	--	--	--	--	--	0.02	10.0

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	--	--	--	--	--	--	0.087	999.9999
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0.0125	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0008	0.010
150,000 miles	NMOG	--	1	1.1	--	--	--	0.0047	999.999
150,000 miles	NMOG+NOX	--	1	1.1	--	--	--	0.0085	0.050
150,000 miles	NMOG+NOX-COMP	--	1	1.03	--	--	--	0.0085	0.040
150,000 miles	NOX	--	--	--	--	--	--	0.0038	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.001

Certification Summary Information Report

Test Group	VTYXV02.0E4B				Evaporative/Refueling Family			VTYXR0130P42	
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	NMOG	--	1	1.1	--	--	--	0.0047	999.999
150,000 miles	NMOG+NOX	--	1	1.1	--	--	--	0.0085	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0038	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.001

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	--	--	--	--	--	--	0.087	999.9999
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0047	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0085	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0038	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	--	--	--	0.0047	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0085	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0038	999.999

Certification Summary Information Report

Test Group		VTYXV02.0E4B			Evaporative/Refueling Family			VTYXR0130P42	
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	--	--	--	--	--	--	0.02	10.0
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.2

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	--	--	--	0.0047	999.999
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0085	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0038	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Evaporative/Refueling Standards

Evaporative/Refueling Family		VTYXR0130P42		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		

Evaporative/Refueling Family		VTYXR0130P42		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		

Certification Summary Information Report

Test Group		VTYXV02.0E4B		Evaporative/Refueling Family		VTYXR0130P42	
Evaporative/Refueling Family		VTYXR0130P42		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		
Evaporative/Refueling Family		VTYXR0130P42		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		
Evaporative/Refueling Family		VTYXR0130P42		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		
Evaporative/Refueling Family		VTYXR0130P42		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		
Evaporative/Refueling Family		VTYXR0130P42		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		

Certification Summary Information Report

Test Group	VTYXV02.0E4B		Evaporative/Refueling Family	VTYXR0130P42	
Evaporative/Refueling Family	VTYXR0130P42		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	VTYXR0130P42		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
Evaporative/Refueling Family	VTYXR0130P42		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
Evaporative/Refueling Family	VTYXR0130P42		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

Certification Summary Information Report

Test Group		VTYXV02.0E4B	Evaporative/Refueling Family		VTYXR0130P42
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		VTYXV02.0E4B	Evaporative/Refueling Family		VTYXR0130P42
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		VTYXV02.0E4B	Evaporative/Refueling Family		VTYXR0130P42
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		VTYXV02.0E4B	Evaporative/Refueling Family		VTYXR0130P42
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	